

OHIO SCHOOL
FACILITIES
COMMISSION

2010
OHIO
SCHOOL
DESIGN
MANUAL



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 21st 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 21st 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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Business Management – 10

Electronics - 11

Financial Services - 12

Information Support & Services - 16

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Biotechnology for Food, Plant, Animal Sciences - 8

Community Health Aide - 10

Criminal Science Technology - 8

Dental Laboratory Technology - 11

Emergency Medical Technician - 12

Energy Science - 7

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Health Information Management Service - 15

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Health Unit Coordinator – 15

Home Health - 10

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Work Room / Toddler Restroom / Reception

Entrepreneurship – 15
Bookstore / Display

Ground Operations - 19
Reference Room

Lodging - 21
Banquet Room

Marketing Communications - 15
Bookstore/Display

Marketing Management and Research – 15
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CT-P3-2 Office

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Animal Science and Management (small animal) - 7
Pet Shop/Clinic/Grooming/Animal Room #1/Animal Room #2 /Kennel

Career Paths for the Law Profession - 14
Weight Room / Interrogation Room

Clinical Health Care Services - 17
Training Restroom / Laundry Room

Cosmetology - 20
Dispensary / Laundry Room / Facial Room / Manicure Room /
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Criminal Justice - 14
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- 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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10020	Loose Furnishings
10030	Food Service Equipment

Chapter 10: Miscellaneous (Career-Technical)

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PURPOSE	The purpose of this Chapter is to provide the school district and the Design Professional with the guidelines and relationships for the Elementary School spaces identified in Chapter 2: Bracketing.
INTRODUCTION	<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>
NO SMOKING SIGNS	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)
DIAGRAM	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.
PROGRAM ACTIVITIES	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.
SPATIAL RELATIONSHIPS	Relationships of a particular room to other spaces and activities have been identified to assist the Design Professional in the design of the facility.
ENVIRONMENTAL CONSIDERATIONS	Environmental considerations are items that may affect the educational program. They are the basis of some 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.
FINISHES	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.
OPERABLE WINDOWS	<i>Operable windows are optional in exterior window fenestration.</i>

INTRODUCTION

CHAPTER 4: ELEMENTARY 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

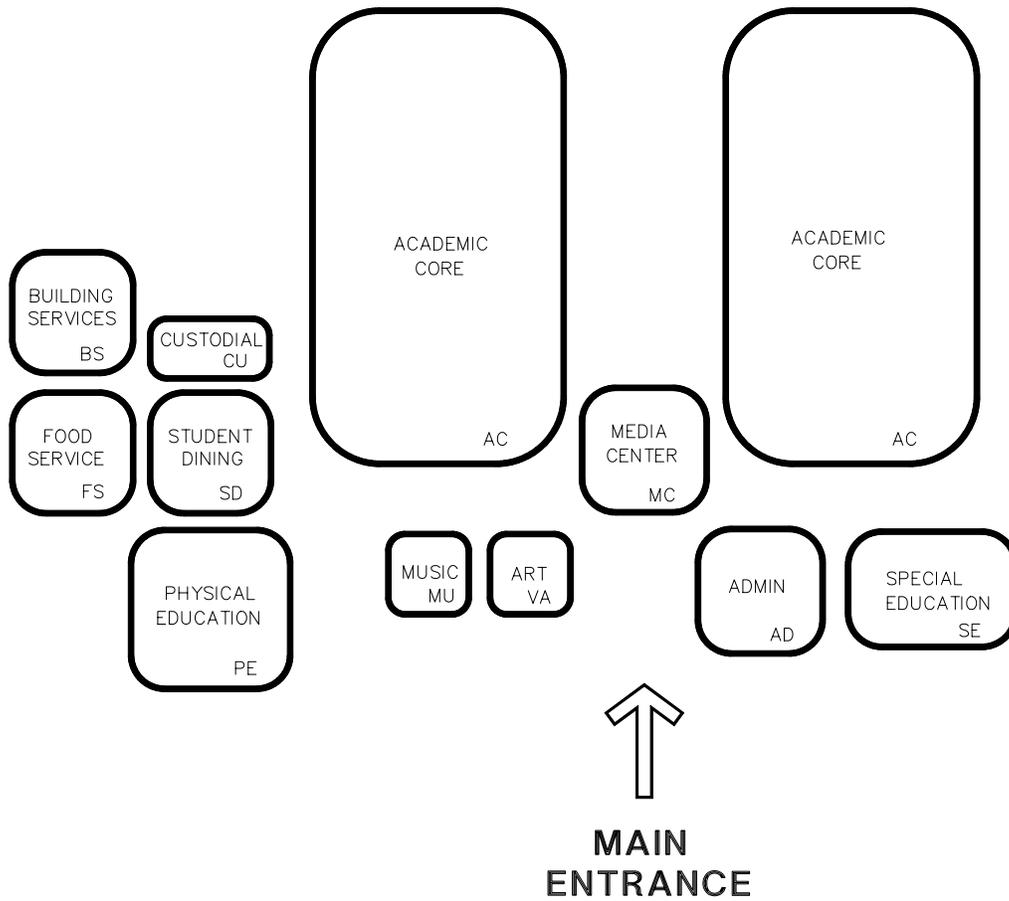
Square foot area given for the room is the necessary area. This area is given in net square feet – defined as the area within the walls of the room.

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 for printers in classrooms. For extended learning areas (ELA), access to the data network is required.**

LIGHTING

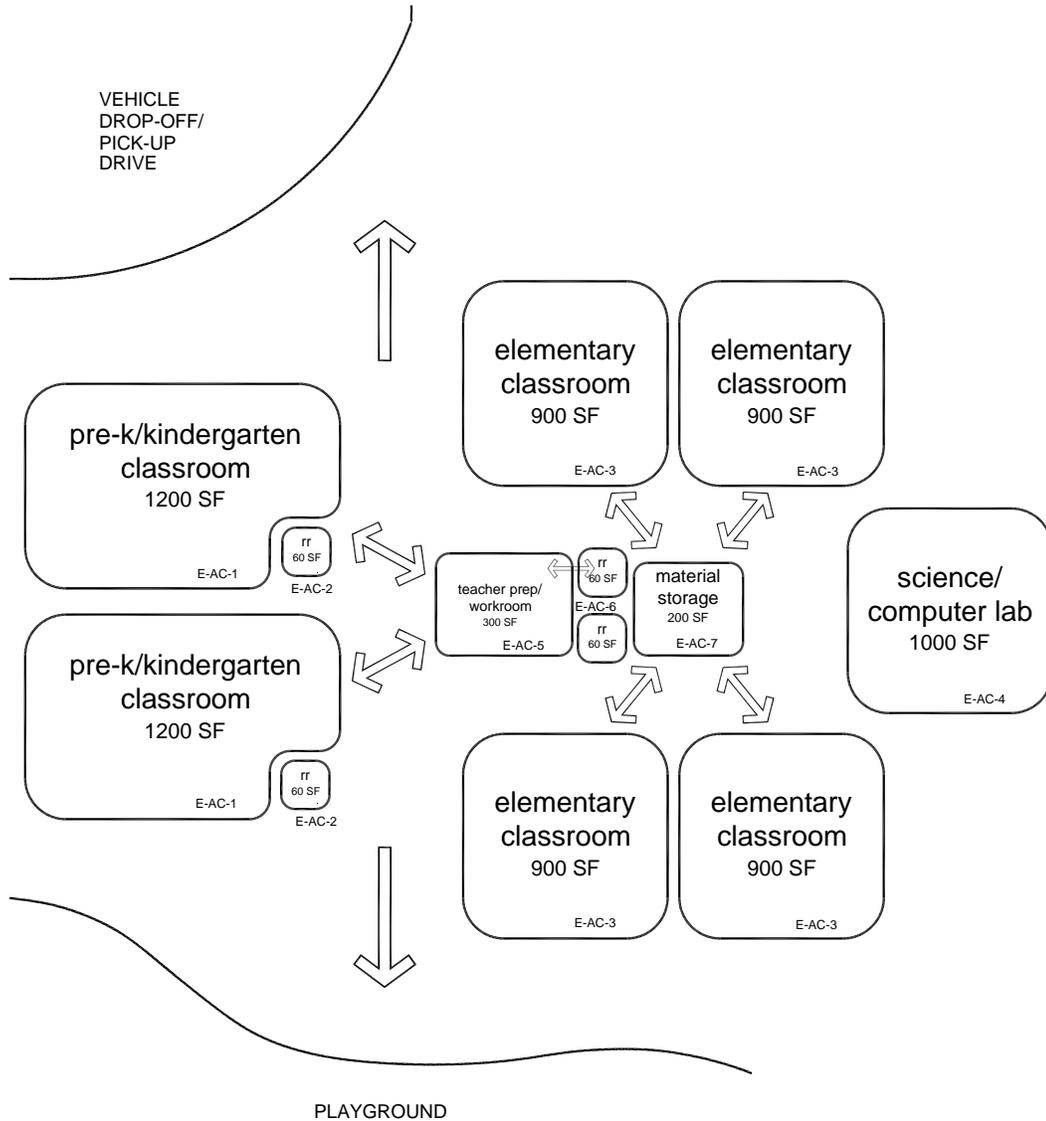
Interior lighting shall be controlled by occupancy sensors, automatic timed lighting controlled system or a combination of both to comply with ASHRAE 90.1. Exterior lighting shall be controlled by photosensor or astronomical time clock to comply with ASHRAE 90.1. to automatically turn lighting off when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



NOTES:

This is an example of how the spaces in an elementary school could be arranged. This is meant only to demonstrate the relationships between various areas of this building.

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NOTES:

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

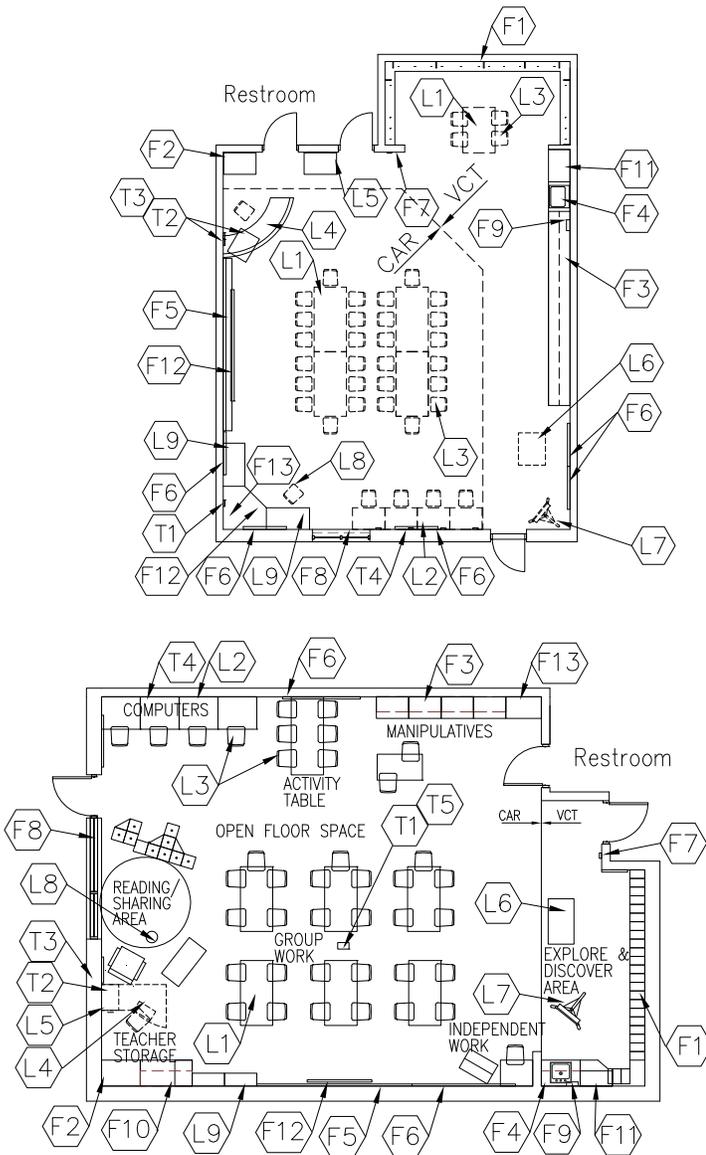
Following are the Academic Core space plates:

- E-AC-1 Pre-K/Kindergarten Classroom
- E-AC-2 Pre-K/Kindergarten Restroom
- E-AC-3 Elementary Classroom
- E-AC-4 Science/Computer Lab**
- E-AC-5 Teacher Prep Area/Workroom
- E-AC-6 Individual Restroom
- E-AC-7 Instructional Material Storage

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**PRE-K/KINDERGARTEN CLASSROOM
E-AC-1**

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: 25 students
SIZE: 1,200 SF
ANCILLARY SPACES: Pre-K/Kindergarten Restroom
 E-AC-2

PROGRAM ACTIVITIES:

- Kindergarten instruction through active exploration
- Children practice with tangible articles and are encouraged to develop learning skills, creativity, and imagination.
- Activities include, but are not limited to: group discussions, demonstrations, music activities, listening skills, gross motor skills, art and science projects, and small group activities.

SPATIAL RELATIONSHIPS:

- Near other pre-k/kindergarten classrooms
- Near teacher prep area/workroom
- Direct access to outdoor playground
or access through adjacent corridor
- Near vehicle drop-off/pick-up drive
- Adjacent to pre-k/kindergarten restroom

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
- Ergonomically appropriate furniture and equipment heights

NOTES:

1. Loose furnishings shown represent one of many possible configurations based on educational program.
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.
3. Second exit from space to meet code need not open to exterior.

**PRE-K/KINDERGARTEN CLASSROOM
E-AC-1**

CHAPTER 4: ELEMENTARY SCHOOL

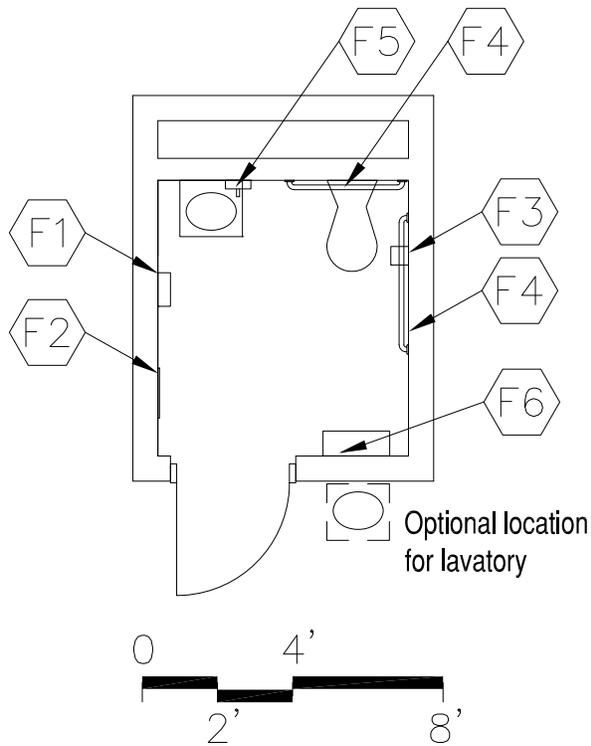
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile , with resilient options	096816 096500	F1 Open casework - student coats and personal items, (cubbies) with shelf above	123550
Optional: All linoleum, ET, sheet vinyl, or rubber	096516 096813	F2 3' of tall wardrobe w/file drawers, optional	123550
		F3 15'-18' of base & wall cabinets	123550
		F4 3' sink base cabinet	123550
		F5 12'-16' of chalk/marker board	101100
		F6 16'-20' of tack board or tackable wall surface or combination	101100
		F7 Pencil sharpener support	062000
		F8 Window with integral blinds	085113
		F9 Towel dispenser (optional)	102813
		F10 36"- 42" high storage cabinet	123550
		F11 3' of tall cabinets (could have tote trays, optional)	123550
		F12 Projection screen (optional)	115213
		F13 Technology support casework (could be mobile)	123550
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		Sink with drinking fountain	224000
		Plumbing connections	224000/221116/221119
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<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
		Emergency lighting	265100
		Means of egress lighting per code	265100
		<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
		Central sound system	275123
		Clock	275313
		Sound reinforcement system	275127
		T5 Overhead projector	274119
<u>LOOSE FURNISHINGS:</u>			
L1 Student desks/tables			
L2 Computer workstation furniture (fixed or mobile)			
L3 Student chairs			
L4 Teacher workstation/computer support and chair (fixed or mobile)			
L5 File cabinet			
L6 Sand/water table			
L7 Children's painting easel			
L8 Teacher reading chair or stool			
L9 8'-10' of low bookcases (fixed or mobile)			
Wastebasket			
Pencil sharpener			
<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.
3. **Where appropriate, some casework may be mobile to add flexibility and become part of loose furnishings.**

**PRE-K/KINDERGARTEN RESTROOM
E-AC-2**

CHAPTER 4: ELEMENTARY SCHOOL



PROGRAM ACTIVITIES:

- Personal and health needs for kindergarten students

SPATIAL RELATIONSHIPS:

- Adjacent to and only accessible from Pre-K/ Kindergarten Classroom

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 person
 SIZE: **60** SF
 ANCILLARY SPACES: Pre-K/Kindergarten Classroom
 E-AC-1

NOTES:

**PRE-K/KINDERGARTEN RESTROOM
E-AC-2**

CHAPTER 4: ELEMENTARY SCHOOL

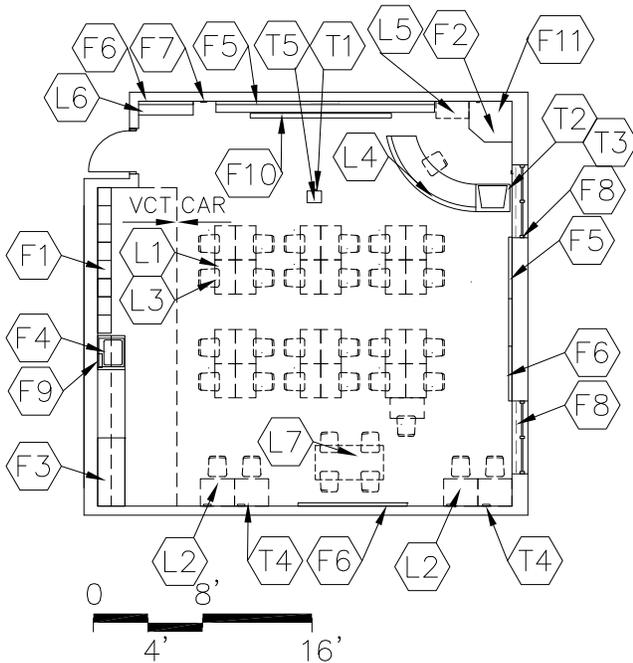
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET , or sheet vinyl	096516 096500	F1 Towel dispenser	102813 102813
Optional: ceramic mosaic tile, porcelain tile, or resinous flooring	093000 096723	F2 24" x 60" mirror	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
		F6 Changing station (optional)	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Optional: ceramic mosaic tile, porcelain tile, resinous flooring, or integral vinyl cove base	093000 096723		
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<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>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		<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:

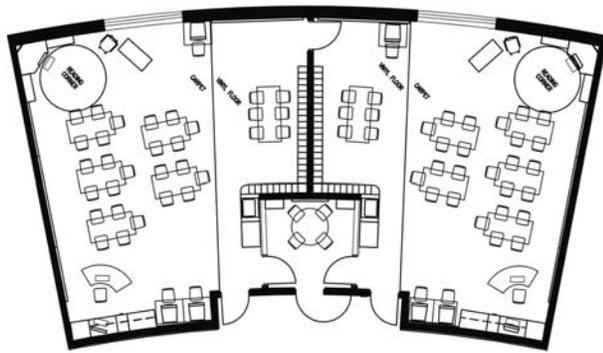
1. Finishes/Features: Refer to Chapter 9 for specification references.

**ELEMENTARY CLASSROOM
E-AC-3**

CHAPTER 4: ELEMENTARY SCHOOL



small group room
or tutor room -
part of classroom tolerance



classroom

classroom

CAPACITY:
SIZE:

25 students
900 SF

PROGRAM ACTIVITIES:

- Developmental experiences, technical skill building, and hands-on activities
- 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:

- Near other elementary classrooms
- Near large group restrooms
- Near teacher prep area/workroom
- Access to outdoor playground

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

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.

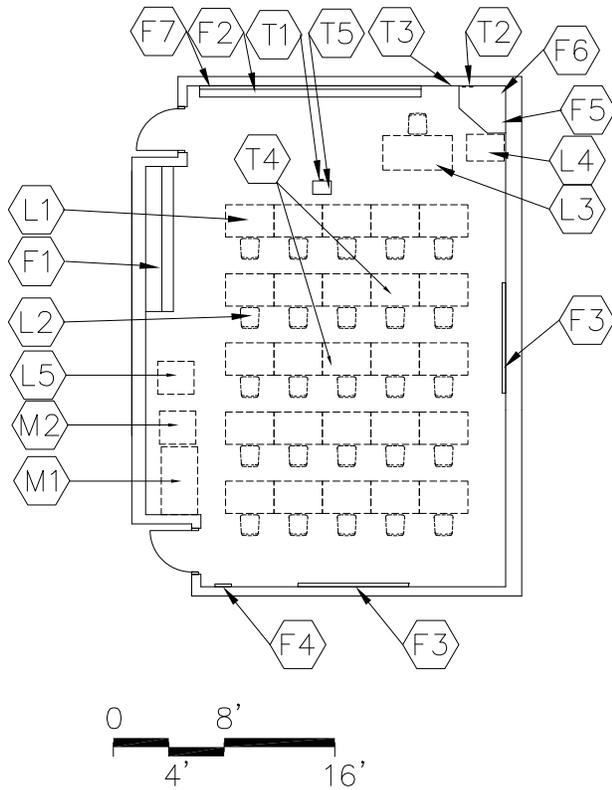
**ELEMENTARY CLASSROOM
E-AC-3**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile , with resilient options	096816 096500	F1 Open casework – coats and personal storage with shelf above, “cubbies” for grades 1,2,3	123550
Optional: All linoleum, ET, sheet vinyl, or rubber	096516 096813	F2 3' of tall wardrobe w/file drawers	123550
		F3 8'-9' of base & wall cabinets	123550
		F4 3' sink base cabinet	123550
		F5 12'-16' of chalk/marker board	101100
		F6 20' of tack board or tackable wall surface or combination	101100
		F7 Pencil sharpener support	062000
		F8 Windows with integral blinds	085113
		F9 Towel dispenser (optional)	102813
		F10 Projection screen (optional)	115213
		F11 Technology support casework	123550
<u>Base:</u>			
Resilient base	096500		
<u>Ceiling:</u>			
Suspended, acoustical	095113		
<u>Walls:</u>			
Painted concrete masonry units	042000/099100		
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks/tables		Fire suppression system	211000
L2 Computer workstation furniture			
L3 Student chairs		<u>Plumbing:</u>	
L4 Teacher desk or workstation/computer support and chair		Sink with drinking fountain	224000
L5 File cabinet		Plumbing connections	224000/221116/221119
L6 8'-10' of low bookcases (fixed or mobile)		<u>HVAC:</u>	
L7 Reading table		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>SCIENCE</u>		<u>Communications:</u>	
Optional items for science teaching center (in one of elementary classrooms):		T1 1 video port	271533/271543
• Mobile demonstration unit with portable water supply and sink		T2 1 voice port and phone	271513/273113
• (2)-(3) mobile storage cabinets for science equipment and materials		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Central sound system	275123
		Clock	275313
		Sound reinforcement system	275127
		T5 Overhead projector	274119
<u>Miscellaneous:</u>		<u>Electronic Safety and Security:</u>	
M1 Operable partitions are optional between classrooms with tackboard/ markerboard surface	102226	Life safety devices per code	283111

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Option for Features (F1): lockers in classroom or corridor for grades 4 and 5 only.
3. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
4. **Where appropriate, some casework may be mobile to add flexibility and could become part of loose furnishings.**



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.

**SCIENCE/COMPUTER LAB
E-AC-4**

CHAPTER 4: ELEMENTARY SCHOOL

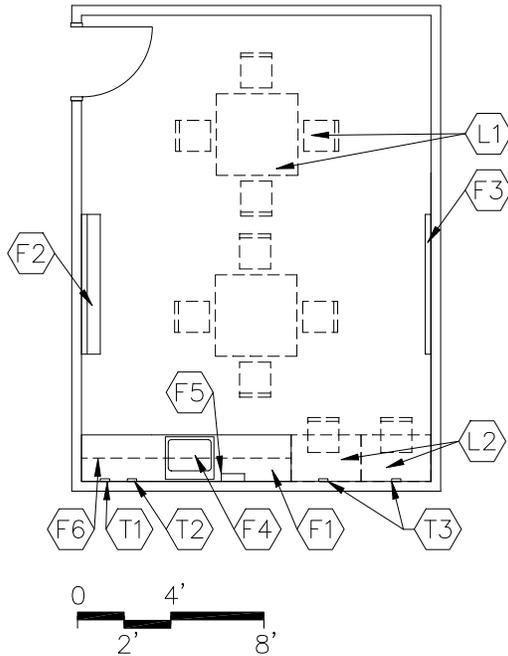
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet	096816	F1 4'-16' of base & wall cabinets	123550
Base:		F2 10'-16' of chalk/marker board	101100
Resilient base	096500	F3 8'-12' of tack board	101100
Ceiling:		or tackable wall surface	
Suspended, acoustical	095113	F4 Pencil sharpener support	062000
Walls:		F5 3' of tall wardrobe with file drawers	123550
Painted concrete masonry units		F6 Technology support casework	123550
	042000/099100	F7 Projection screen (optional)	115213
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Computer workstation furniture		Fire suppression system	211000
(could be fixed)		<u>Plumbing:</u>	
L2 Student chairs		N/A	
L3 Teacher desk/computer support and chair		<u>HVAC:</u>	
L4 File cabinet		Supply/return air system	Div. 23
L5 Printer / scanner stand		Independent temperature control	230923
Wastebasket		<u>Electrical:</u>	
Pencil sharpener		Fluorescent lighting with	
		parabolic lenses	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 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 E-AC-5

CHAPTER 4: ELEMENTARY SCHOOL



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

CAPACITY: 6 - 8 teachers
SIZE: 300 SF

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
E-AC-5**

CHAPTER 4: ELEMENTARY SCHOOL

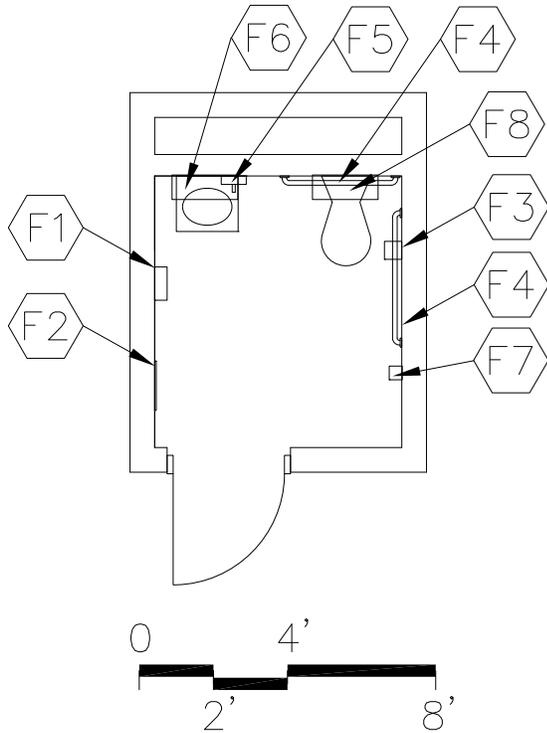
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet, ET, linoleum,	096816	F1 About 6' of base cabinets	123550
sheet vinyl, or rubber	096500	F2 6'-8' of chalk/marker board	101100
	096516	(optional)	
Base:		F3 4'-8' of tack board	101100
Resilient base	096500	F4 3' sink base cabinet	123550
		F5 Towel dispenser (optional)	102813
Ceiling:		F6 About 9' of wall cabinets	123550
Suspended, acoustical	095113		
		<u>Fire Suppression:</u>	
Walls:		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
		Sink	224000
<u>LOOSE FURNISHINGS:</u>		Plumbing connections	224000/221116/221119
L1 Tables and chairs		<u>HVAC:</u>	
L2 Computer workstation furniture		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	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 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
		Central sound system	275123
		Clock	275313
		<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.

**INDIVIDUAL RESTROOM
E-AC-6**

CHAPTER 4: ELEMENTARY SCHOOL



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: 1 person
 SIZE: **60 SF**

NOTES:

**INDIVIDUAL RESTROOM
E-AC-6**

CHAPTER 4: ELEMENTARY SCHOOL

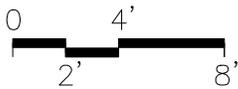
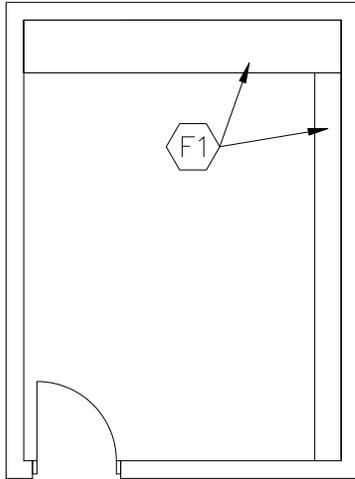
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET, or sheet vinyl	096516 096500	F1 Towel dispenser	102813 102813
Optional: Ceramic mosaic tile, porcelain tile, or resinous flooring	093000 096723	F2 24" x 60" mirror	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
		F6 Shelf above sink (optional)	102813
		F7 Coat hook	102813
		F8 Wall cabinet above toilet (optional)	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Optional: Ceramic mosaic tile, porcelain tile, resinous flooring, or integral vinyl cove base	093000 096723		
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<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>	
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.

INSTRUCTIONAL MATERIAL STORAGE
E-AC-7

CHAPTER 4: ELEMENTARY SCHOOL



PROGRAM ACTIVITIES:

- Storage of supplies, textbooks, and equipment

SPATIAL RELATIONSHIPS:

- Near teacher prep area/workroom

ENVIRONMENTAL CONSIDERATIONS:

N/A

CAPACITY:

N/A

SIZE:

200 SF

NOTES:

**INSTRUCTIONAL MATERIAL STORAGE
E-AC-7**
CHAPTER 4: ELEMENTARY SCHOOL

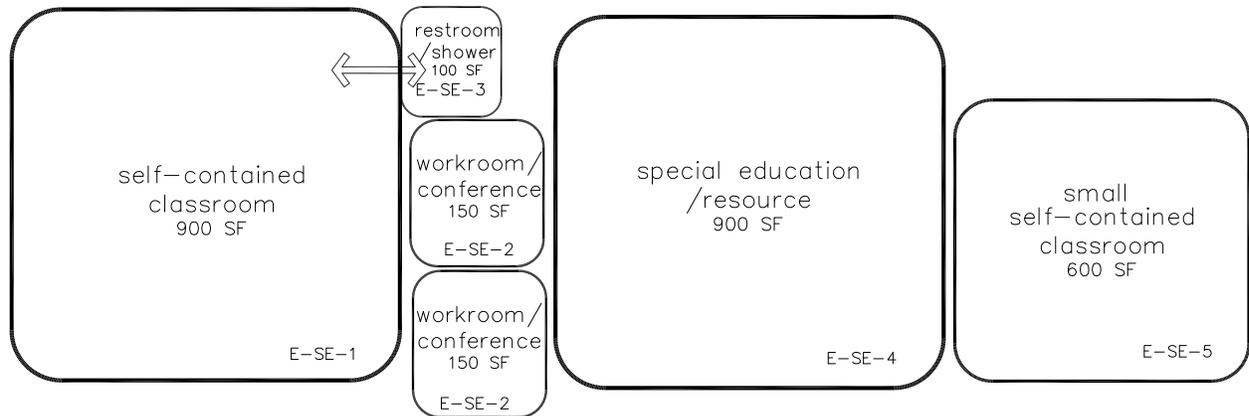
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber	096500	F1 10'-20' of open shelving, depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	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.

SPECIAL EDUCATION SPACES
E-SE

CHAPTER 4: ELEMENTARY SCHOOL



NOTES:

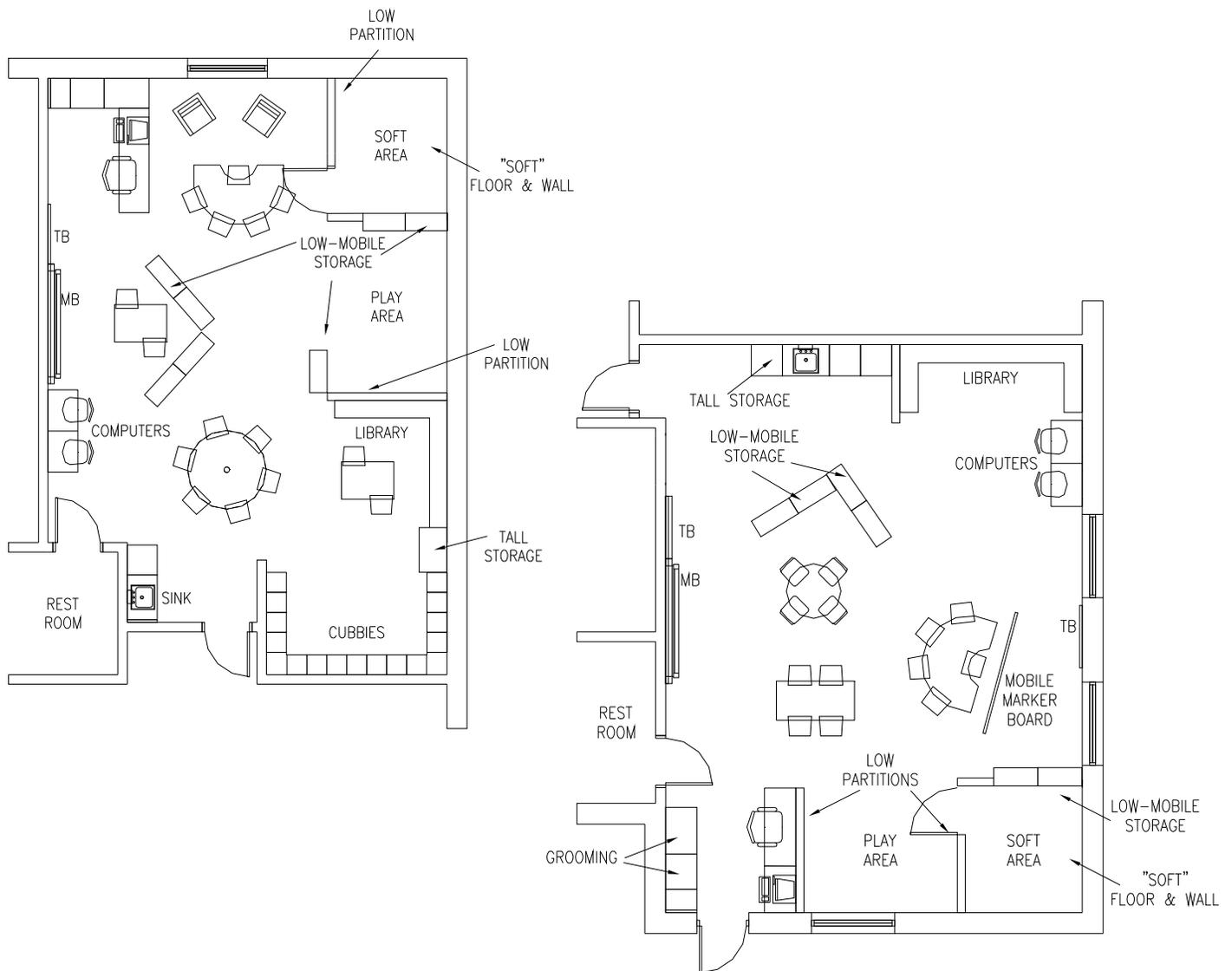
This is an example of how the special education spaces in an elementary school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Special Education space plates:

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

SPECIAL EDUCATION SPACES E-SE

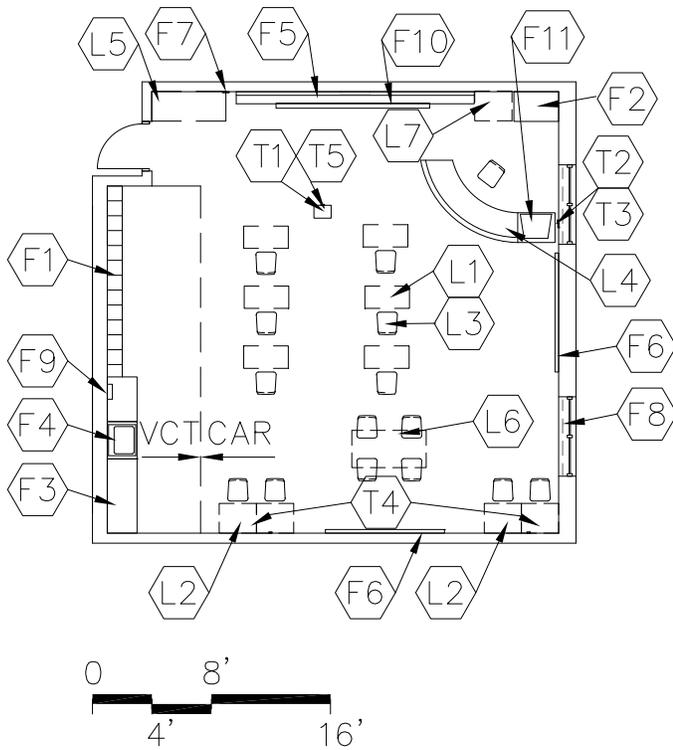
CHAPTER 4: ELEMENTARY SCHOOL



- Student capacity: 8-12 students
- Least restrictive environment
- ADA accessible
- Flexible or multiple displays
- Full-spectrum LED lighting
- Sound enhancement
- Age appropriate, moveable furniture with lock down features
- Adaptive equipment storage
- Adaptive computer equipment
- “Visual” barriers on windows as needed for disability
- Sound/acoustic treatment to reduce sensory/hearing difficulties
- “Messy” area for art projects
- Appropriate signage
- Adjacent to restroom
- Moveable/lock down partitions

SELF-CONTAINED CLASSROOM E-SE-1

CHAPTER 4: ELEMENTARY 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
E-SE-1**
CHAPTER 4: ELEMENTARY SCHOOL

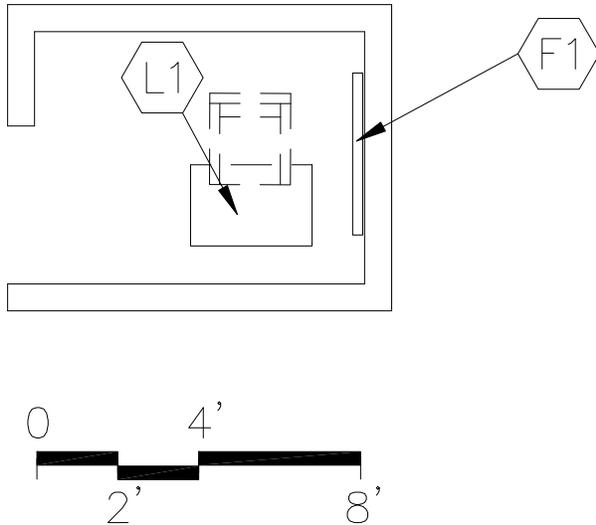
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile , with resilient options	096816 096500	F1 Open casework – coats and personal items with shelf above (cubbies)	123550 123550
Optional: All ET, sheet vinyl, linoleum, or rubber	096516 096813	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>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	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 8'-10' of low bookcases (fixed or mobile)		Supply/return air system	Div. 23
L6 Reading table		Independent temperature control	230923
L7 File cabinet			
Wastebasket		<u>Electrical:</u>	
Pencil sharpener		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 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.

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

CHAPTER 4: ELEMENTARY SCHOOL



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**E-SE-2 (Quiet Area)**

CHAPTER 4: ELEMENTARY SCHOOL

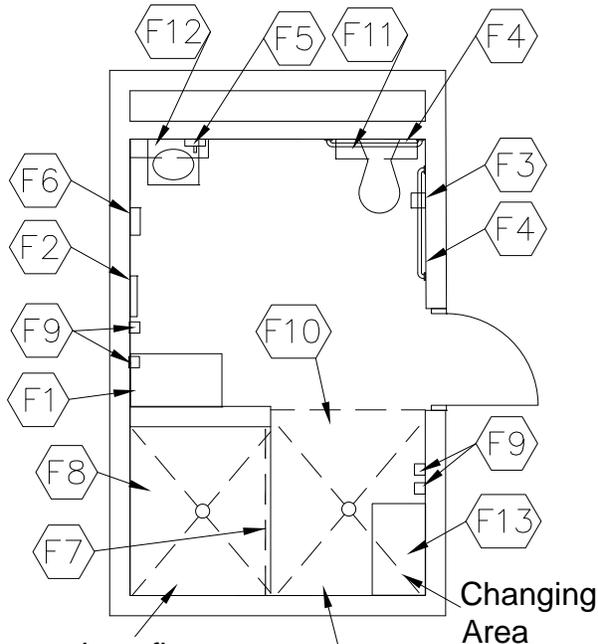
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile , ET, linoleum, or sheet vinyl	096816 096500 096516 096813	F1 4' of tack board (optional)	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	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
E-SE-3**

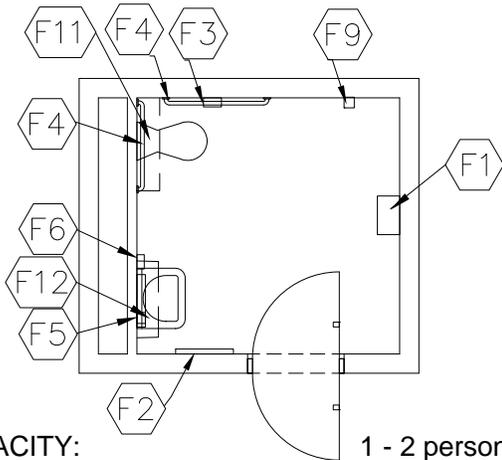
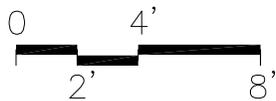
CHAPTER 4: ELEMENTARY SCHOOL



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

Drying Area;
5' x 5' sloped floor

Changing Area



CAPACITY:
SIZE: 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
E-SE-3**

CHAPTER 4: ELEMENTARY SCHOOL

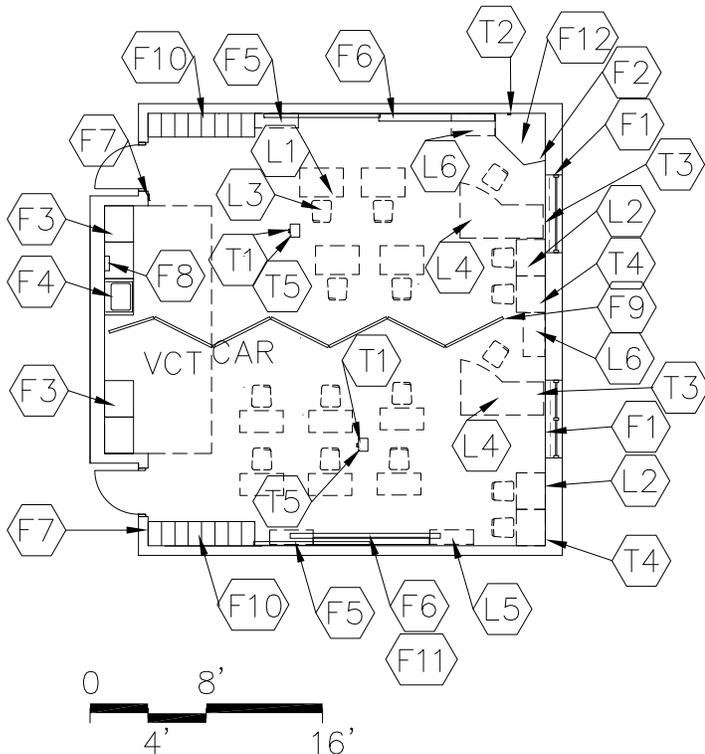
<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Restroom: Linoleum, <i>ET</i> , vinyl sheet, rubber sheet flooring	096516 096500	F1 Base cabinets	123550 102813
Shower: Ceramic mosaic tile, or porcelain tile	093000	F2 24" x 60" mirror	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Towel dispenser	102813
Restroom: Resilient base, or integral vinyl cove base	096500 093000	F7 Shower curtain and rod	102813
Shower: Ceramic mosaic tile base, porcelain tile, or integral vinyl cove base		F8 ADA shower accessories	102813
		F9 (2) hooks	102813
		F10 Cubicle curtain	102813
		F11 8" deep wall cabinet above toilet	102813
		F12 Shelf (optional)	102813
		F13 Changing station	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Restroom: Suspended, acoustical	095113	Fire suppression system	211000
Shower: Painted portland cement plaster or interior finish system	092400/099100 092513		
		<u>Plumbing:</u>	
<u>Walls:</u>		Wall-mounted water closet	224000
Epoxy painted concrete masonry units	042000/099100	Wall-mounted lavatory	224000
or ceramic wall tile in shower	093000	ADA shower controls and head	224000
and latex paint in restroom	099100	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
E-SE-4**

CHAPTER 4: ELEMENTARY 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:

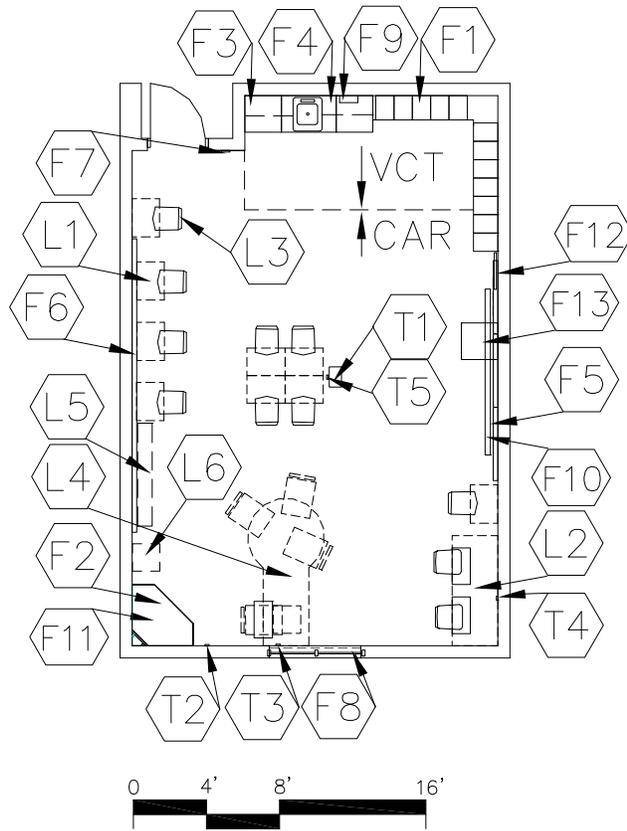
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this room or could be placed in a workroom/conference area.
3. See Chapter 1, page 1110-16 for specific areas needed for each disability.

**SPECIAL EDUCATION/RESOURCE
E-SE-4**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile , with resilient options	096816 096500	F1 Windows with integral blinds	085113
Option: All ET, sheet vinyl, linoleum, or rubber	096516 096813	F2 3' of tall wardrobe with file drawers	123550
		F3 8'-12' of base cabinets	123550
		F4 3' sink base cabinet	123550
		F5 12'-16' of chalk/marker board	101100
		F6 12'-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 storage w/wall cabinets above	123550
Suspended, acoustical	095113	F11 Projection screen (optional)	115213
		F12 Technology support casework	123550
<u>Walls:</u>		F13 Mirror (optional)	102813
Painted concrete masonry units	042000/099100	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			
L6 File cabinet		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
Pencil sharpener		Independent temperature control	230923
		<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(min.)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**E-SE-5** (Special Education)

CHAPTER 4: ELEMENTARY SCHOOL

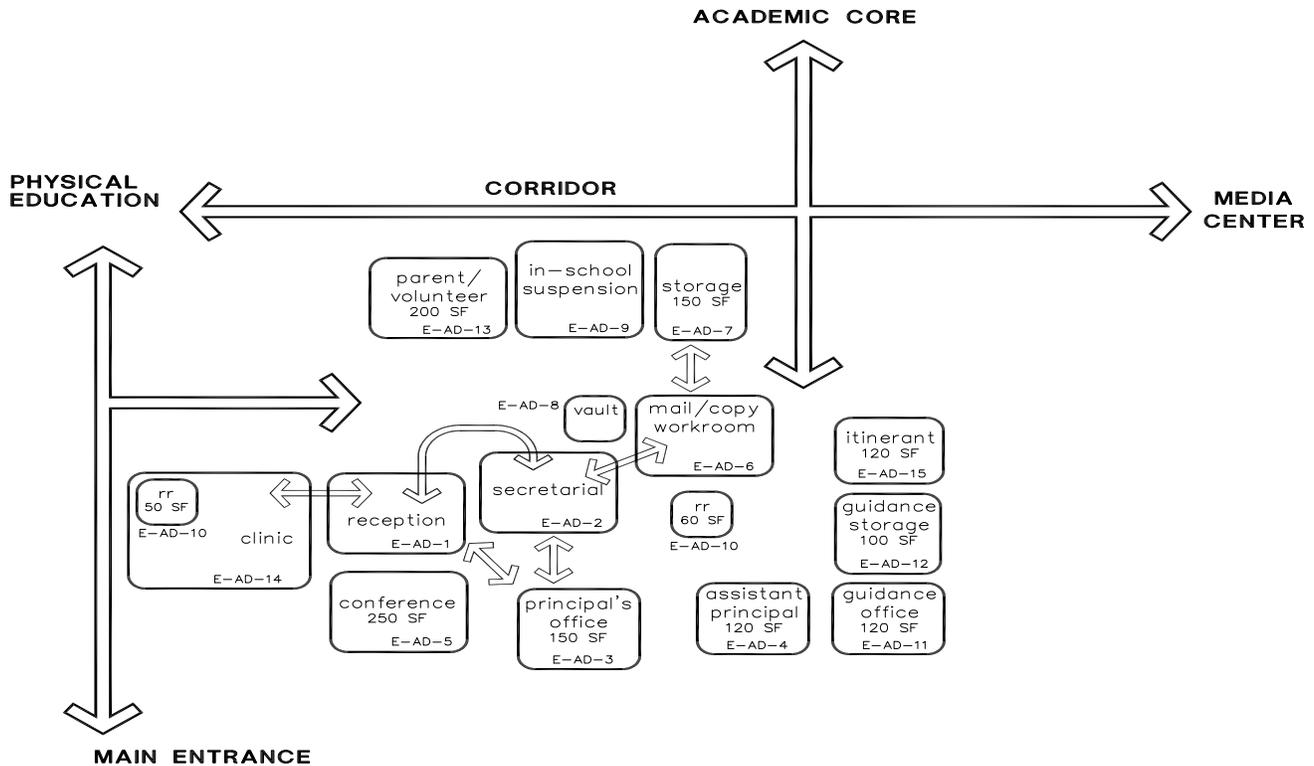
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile , with resilient options	096816 096516	F1 Open casework – coats and personal items with wall cabinets above	123550 123550
Option: All ET, sheet vinyl linoleum, or rubber	096500 096813	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 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.

ADMINISTRATIVE SPACES E-AD

CHAPTER 4: ELEMENTARY SCHOOL



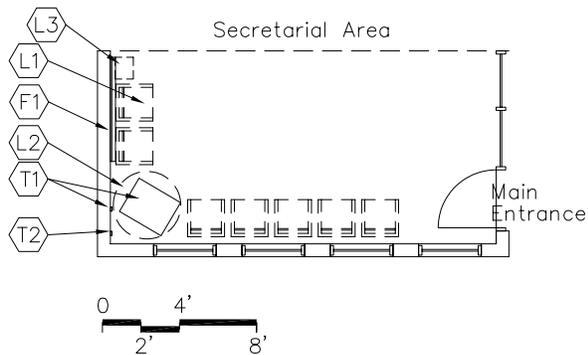
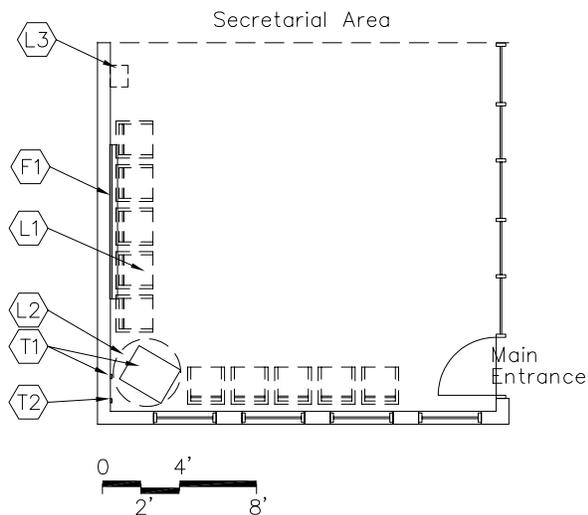
NOTES:

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

Following are the Administrative space plates:

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

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**RECEPTION AREA
E-AD-1**
CHAPTER 4: ELEMENTARY SCHOOL
200 SF

400 SF


CAPACITY: 6 - 8 or 8 - 10 visitors
SIZE: 200 - 400 SF
ANCILLARY SPACES: Secretarial Area
 E-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
E-AD-1**
CHAPTER 4: ELEMENTARY SCHOOL

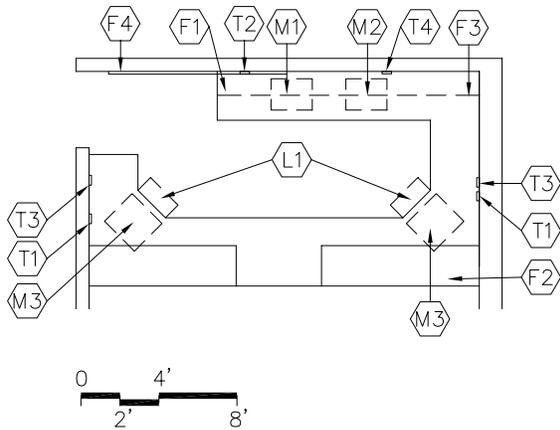
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 Tack board or tackable wall surface (optional)	101100
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted gypsum wallboard over metal studs	092116 /099100	Supply/return air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		Independent temperature control	230993
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:

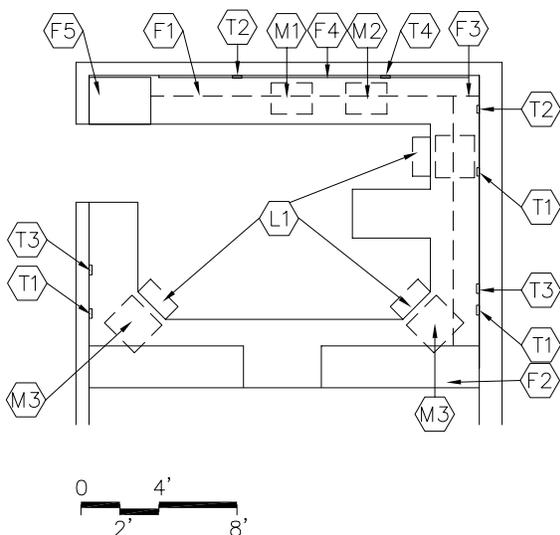
1. Finishes/Features: Refer to Chapter 9 for specification references.

CHAPTER 4: ELEMENTARY 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
 E-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:

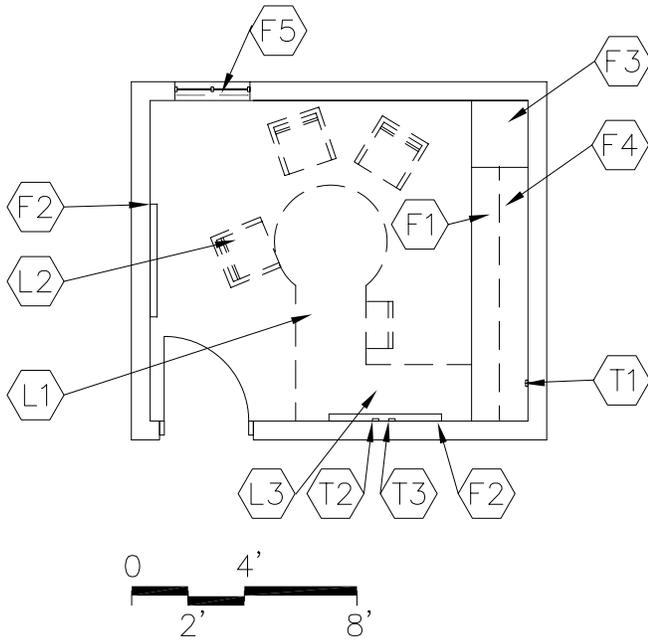
1. Loose furnishings shown represent one of many possible arrangements.

**SECRETARIAL AREA
E-AD-2**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
Flooring:		<u>Fixed Items</u> ² :	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 24' - 60' of work surface with file drawers	123550
Base:		F2 42" high counter top	123550
Resilient base	096500	with portion of counter 34" high or lower	
Ceiling:		F3 16'-24' of wall cabinets for forms, supplies, books, and manuals	123550
Suspended, acoustical	095113	F4 Tackable wall surface (optional)	101100
Walls:		F5 Tall cabinet for coats (optional)	123550
Painted gypsum wallboard over metal studs	092116/ 099100	<u>Fire Suppression:</u>	
		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	230923
		(coupled with similarly loaded adjacent spaces)	
		<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	271513/273113
		at each secretarial workstation	
		T2 1 fax port	271513/273113
		T3 1 data port	271513
		at each secretarial workstation	
		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.

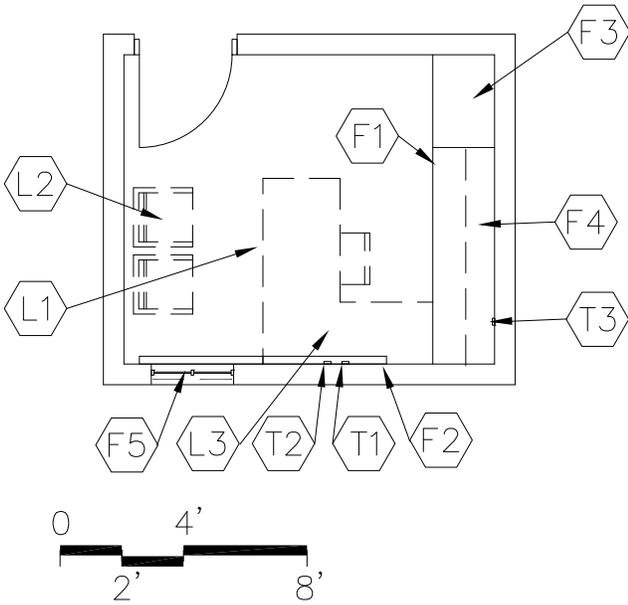
**PRINCIPAL'S OFFICE
E-AD-3**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	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	F5 Window with integral blinds	085113
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	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 be either 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
E-AD-4**
CHAPTER 4: ELEMENTARY SCHOOL

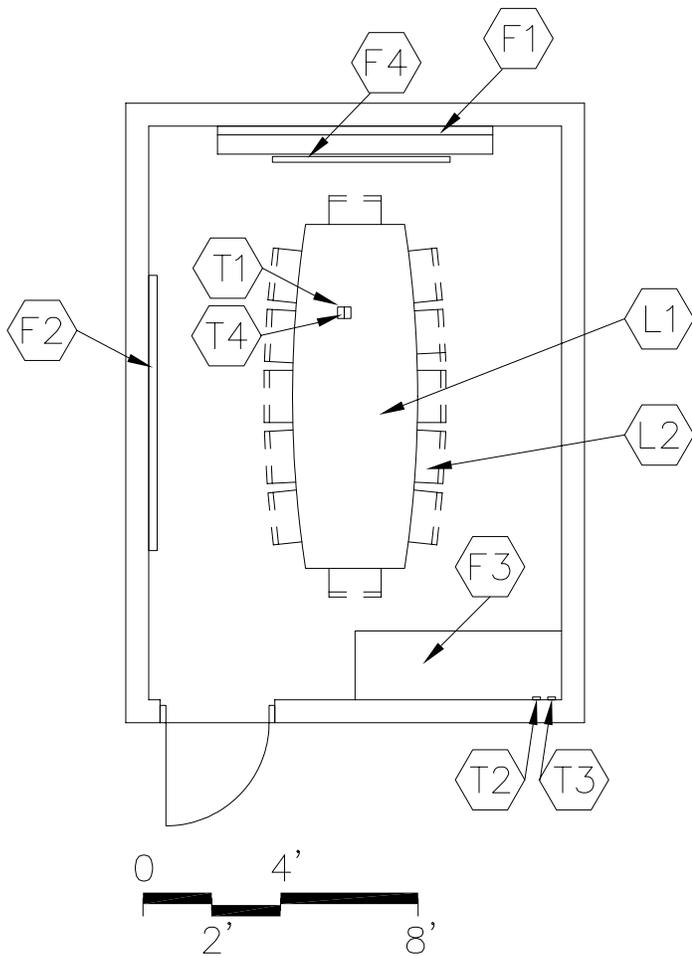
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or Carpet Tile</i>	096816 096813	<u>Fixed Items:</u>	
		F1 Work surface with file drawers	123550
		F2 4' of tack board or tackable wall surface	101100
<u>Base:</u>			
Resilient base	096500	F3 2' of tall wardrobe	123550
		F4 Wall cabinets above work surface	123550
<u>Ceiling:</u>			
Suspended, acoustical	095113	F5 Window with integral blind	085113
<u>Walls:</u>			
Painted gypsum wallboard over metal studs	092116/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Plumbing:</u>			
		N/A	
<u>LOOSE FURNISHINGS:</u>			
L1 Desk and chair		<u>HVAC:</u>	
L2 Visitor chairs		Supply/return air system	Div. 23
L3 Computer desk return 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 E-AD-5

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: 12 – 15 persons
 SIZE: 250 SF

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**

NOTES:

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

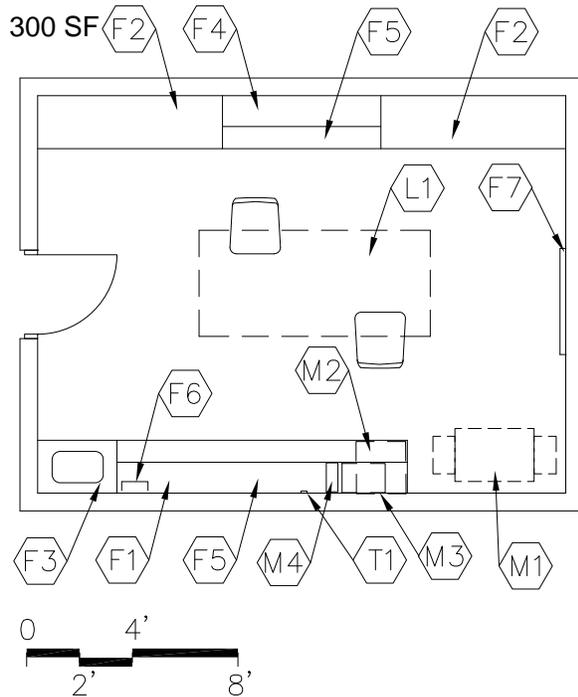
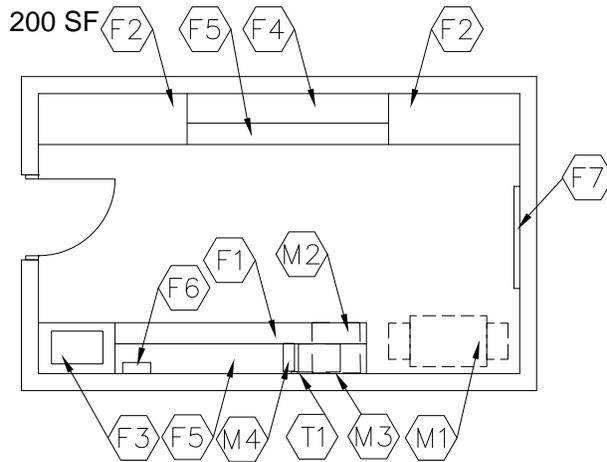
**CONFERENCE ROOM
E-AD-5**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 About 8' of chalk/marker board	101100
		F2 About 8' of tack board or tackable wall surface	101100
<u>Base:</u>		F3 4'-6' of base cabinets (optional)	123550
Resilient base	096500	F4 Projection screen (optional)	115213
<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	092116/099100	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 be either all fixed casework all loose furnishings.

CHAPTER 4: ELEMENTARY 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
E-AD-6**

CHAPTER 4: ELEMENTARY SCHOOL

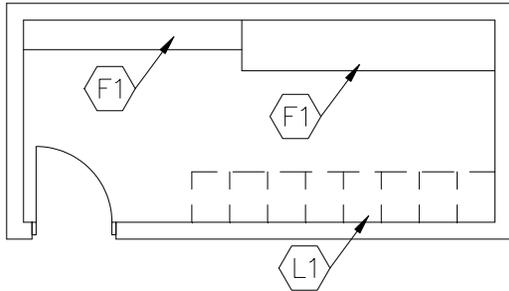
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber	096500	F1 About 10' of base & wall cabinets	123550
Base:		F2 8'-12' of tall storage cabinets	123550
Resilient base	096500	or about 32' maximum of a combination storage cabinets	
Ceiling:		F3 3' sink base 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 E-AD-7

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: N/A
 SIZE: 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
E-AD-7**

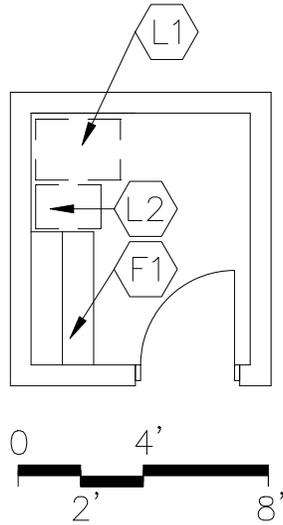
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber	096500	F1 10'-20' 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
Suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		N/A	
Painted gypsum wallboard over metal studs	092116/099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		To be determined by Design Professional	
L1 File cabinets		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.

50 SF



PROGRAM ACTIVITIES:

- Storage of records and security files in a secure area

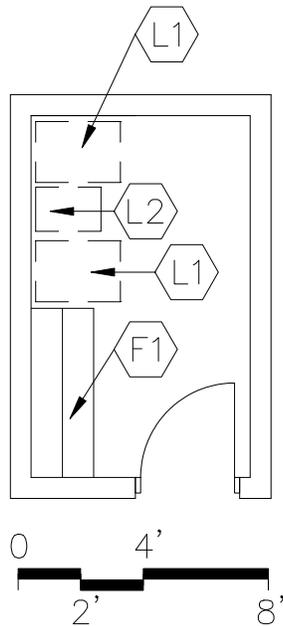
SPATIAL RELATIONSHIPS:

- 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
E-AD-8

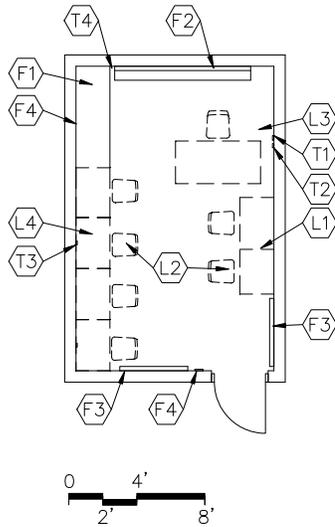
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber	096500	F1 4' 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 on metal studs	092116/099100	<u>Electrical:</u>	
<u>LOOSE FURNISHINGS:</u>		Single level switching	262726
L1 File cabinet (2 in 80 SF room)		Fluorescent lighting	265100
L2 Safe (loose or fixed)		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>	
		Wall, ceiling, and door construction to have a 2-hour fire rating	

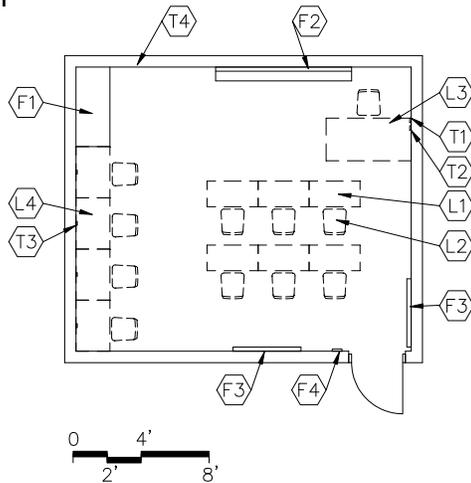
NOTES:

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.

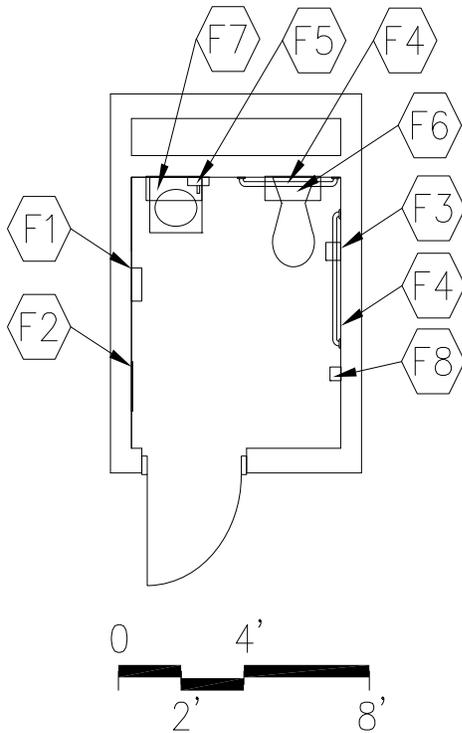
**IN-SCHOOL SUSPENSION
E-AD-9**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:			
Carpet, carpet tile ,	096816	Fixed Items:	
ET, linoleum,	096500	F1 3'-4' of base cabinets (optional)	123550
rubber, or sheet vinyl	096813	F2 6'-8' of chalk/marker board	101100
		F3 4'-8' of tack board	101100
		F4 Pencil sharpener support	062000
Base:			
Resilient base	096500	Fire Suppression:	
		Fire suppression system	211000
Ceiling:			
Suspended, acoustical	095113	Plumbing:	
		N/A	
Walls:			
Painted concrete masonry units	042000/099100	HVAC:	
		Supply/return air system	Div. 23
		Independent temperature control	230923
LOOSE FURNISHINGS:			
L1 Student carrels and/or desks		Electrical:	
L2 Student chairs		Single level switching	262726
L3 Teacher workstation and chair		Fluorescent lighting	265100
L4 Computer workstation 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
		Communications:	
		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
		Electronic Safety and Security:	
		Life safety devices per code	283111
		Miscellaneous:	
		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
E-AD-10**
CHAPTER 4: ELEMENTARY SCHOOL

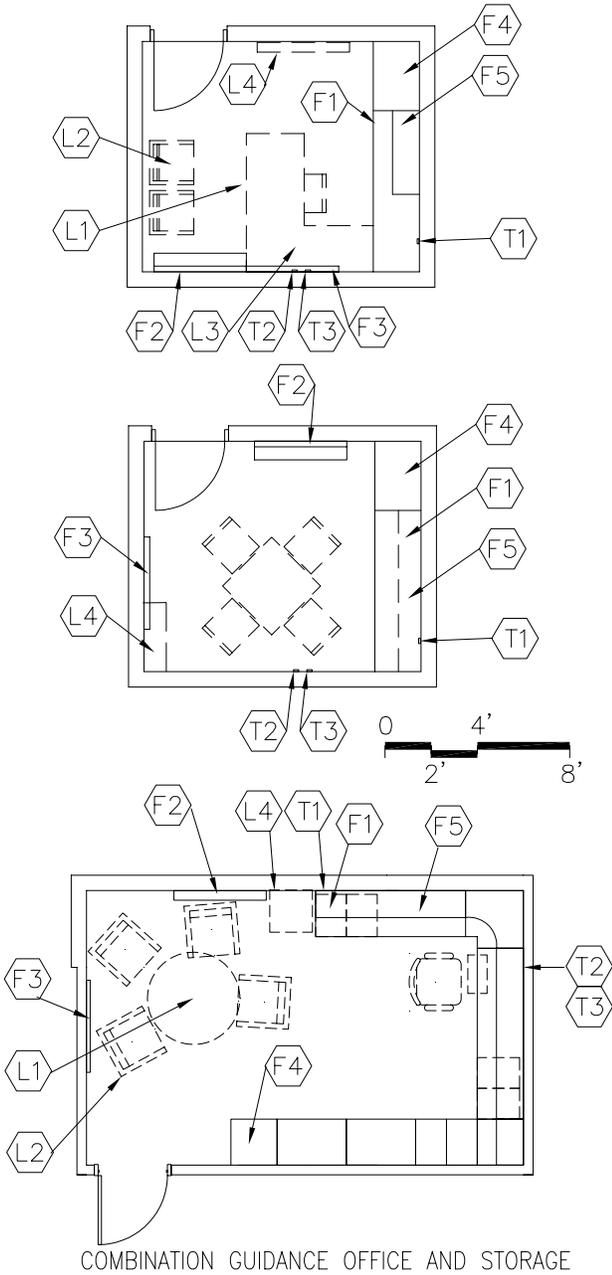
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET , linoleum, rubber, or sheet vinyl	096516	F1 Towel dispenser	102813
Optional: ceramic mosaic tile,	096500	F2 24" x 60" mirror	102813
porcelain tile, or	093000	F3 Toilet tissue holder	102813
resinous flooring	096723	F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 8" deep wall cabinet above toilet for supplies (optional)	102813
Resilient base	096500	F7 Stainless steel shelf (optional)	102813
Optional: ceramic mosaic tile,	093000	F8 Coat hook	102813
porcelain tile, resinous flooring, or integral vinyl cove base	096730		
<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
Optional: moisture & abuse-resistant gypsum wall board	092116	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.

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

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: 1 - 3 persons
SIZE: 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
E-AD-11**
CHAPTER 4: ELEMENTARY SCHOOL

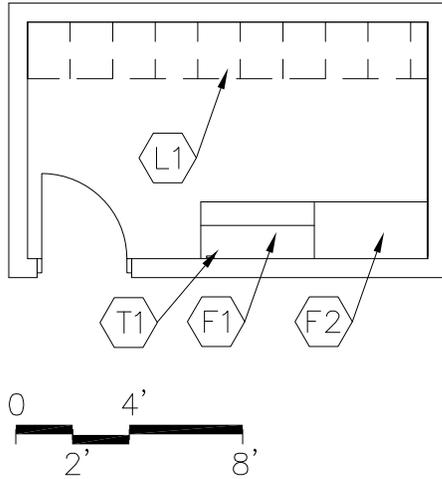
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 Work surface with file drawers	123550
		F2 4' of chalk/marker board (optional)	101100
<u>Base:</u>		F3 4' of tack board	101100
Resilient base	096500	or tackable wall surface	
		F4 Tall wardrobe	123550
<u>Ceiling:</u>		F5 Wall cabinets	123550
Suspended, acoustical	095113		
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk or table, with chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return		(coupled with similarly loaded adjacent spaces)	
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.

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

CHAPTER 4: ELEMENTARY SCHOOL



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
E-AD-12**
CHAPTER 4: ELEMENTARY SCHOOL

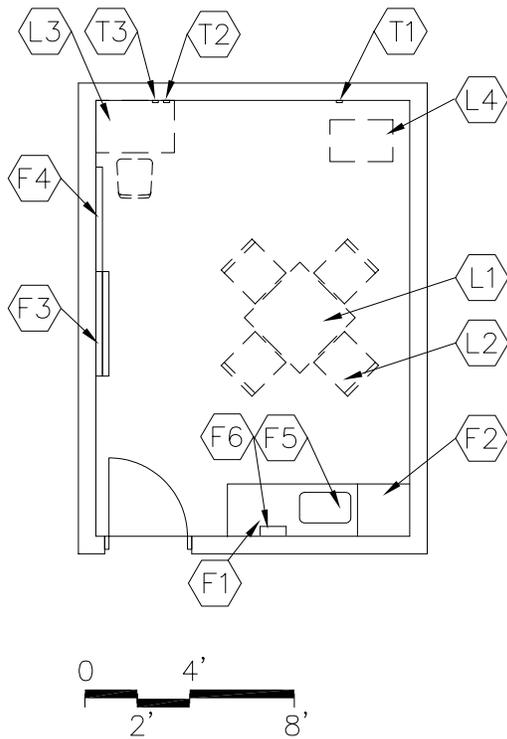
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber	096500	F1 3'-6' of base and wall cabinets	123550
Base:		F2 3'-4' of tall storage cabinets	123550
Resilient base	096500	Option: mobile storage shelving	105626
Ceiling:		<u>Fire Suppression:</u>	
Rated 2-hour 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>	
		1 data port (optional)	271523
		<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.

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

CHAPTER 4: ELEMENTARY SCHOOL



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
E-AD-13**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 About 3' of base cabinets	123550
		F2 2' of tall wardrobe	123550
<u>Base:</u>		F3 4' of chalk/marker board (optional)	101100
Resilient base	096500	F4 4' of tack board or tackable wall surface	101100
<u>Ceiling:</u>		F5 3' Sink base cabinet	123550
Suspended, acoustical	095113	F6 Towel dispenser	102813
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Table		Sink	224000
L2 Chairs		Plumbing connections	224000/221116/221119
L3 Computer workstation furniture			
L4 Monitor cart		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
		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 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
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

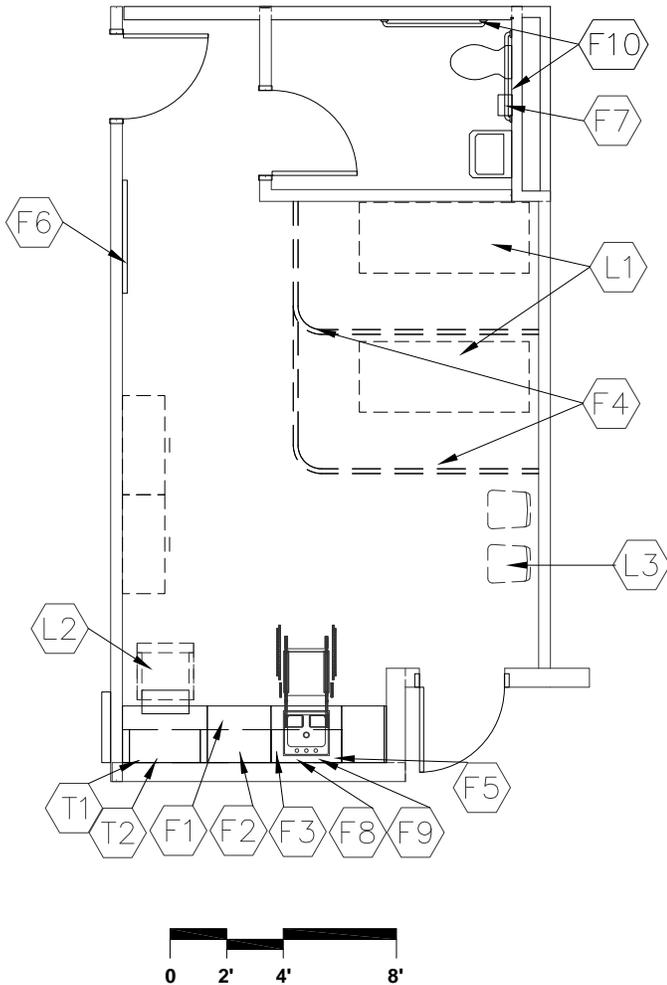
NOTES:

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

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

CHAPTER 4: ELEMENTARY SCHOOL

450 SF



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

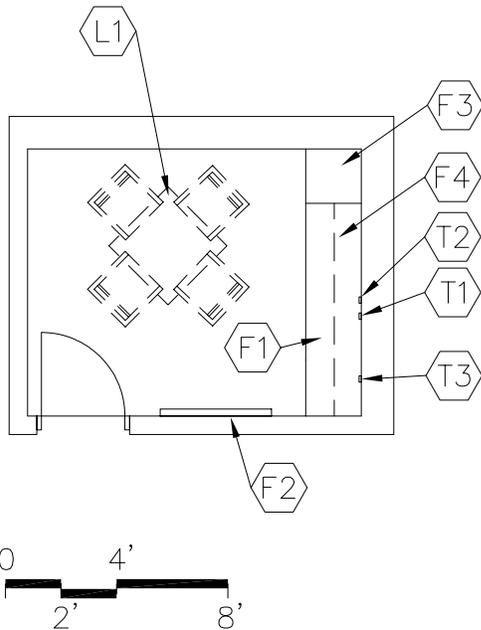
HEALTH CLINIC (includes restroom)
E-AD-14

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET,	096516	F1 4'-9' of base cabinets	123550
sheet vinyl, or	096500	F2 3' sink base cabinet	123550
resinous flooring	096723	F3 4'-9' of wall cabinets, lockable	123550
		F4 Cubicle curtain and track	102123
<u>Base:</u>		F5 Towel dispenser	102813
Resilient base, resinous flooring,	096500	F6 4' of tack board	101100
or integral vinyl cover base	096730	F7 Sanitary napkin dispenser/disposal	102813
		F8 Soap dispenser	102813
<u>Ceiling:</u>		F9 24" x 60" mirror	102813
Suspended, acoustical	095113	F10 36" and 42" grab bars	102813
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted gypsum wallboard		Fire suppression system	211000
over metal studs	092116/099100		
		<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		Wall-mounted water closet	224000
L1 Cots		Wall-mounted lavatory	224000
L2 Desk and chair		Sink - with goose neck	224000
L3 Chairs		Plumbing connections	224000/221116/221119
Wastebasket			
		<u>HVAC:</u>	
<u>EQUIPMENT</u>		Supply/return air system	Div. 23
E1 Refrigerator with ice making capabilities		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
		<u>Miscellaneous:</u>	
		N/A	

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:

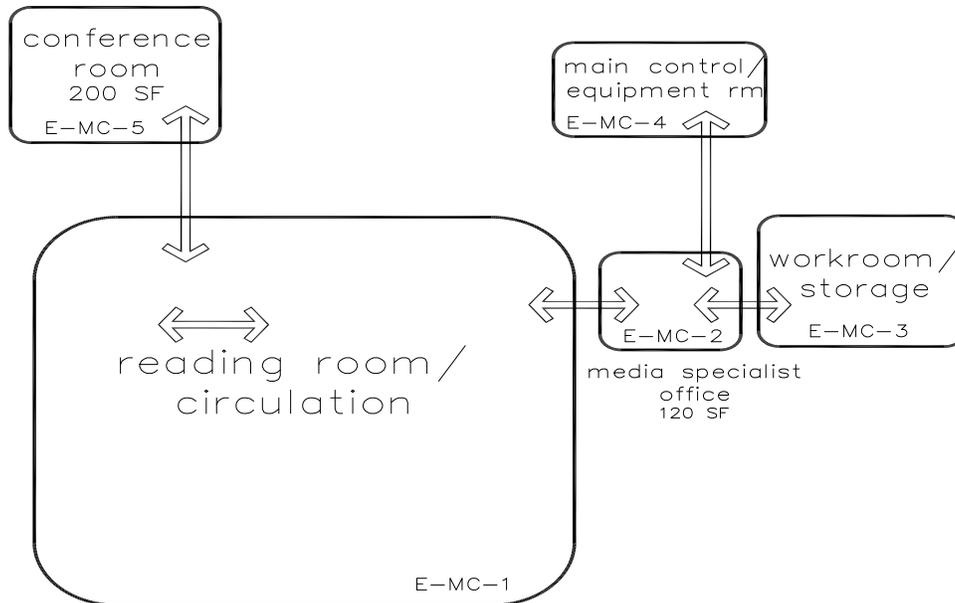
1. Loose furnishings shown represent one of many possible arrangements.

**ITINERANT PERSONNEL OFFICE
E-AD-15**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or</i> Carpet Tile	096816 096813	<u>Fixed Items:</u> F1 Work surface with file drawers(optional)	123550 101100
<u>Base:</u>			
Resilient base	096500	F2 4' of tack board or tackable wall surface	123550 123550
<u>Ceiling:</u>			
Suspended, acoustical	095113	F3 2' of tall wardrobe (optional)	123550
<u>Walls:</u>			
Painted gypsum wallboard over metal studs	092116/099100	F4 Wall cabinets	123550
<u>LOOSE FURNISHINGS:</u>			
L1 Table and chairs Wastebasket		<u>Fire Suppression:</u> Fire suppression system	211000
<u>Plumbing:</u> N/A			
<u>HVAC:</u>			
		Supply/return air system	Div. 23
		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 an elementary school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

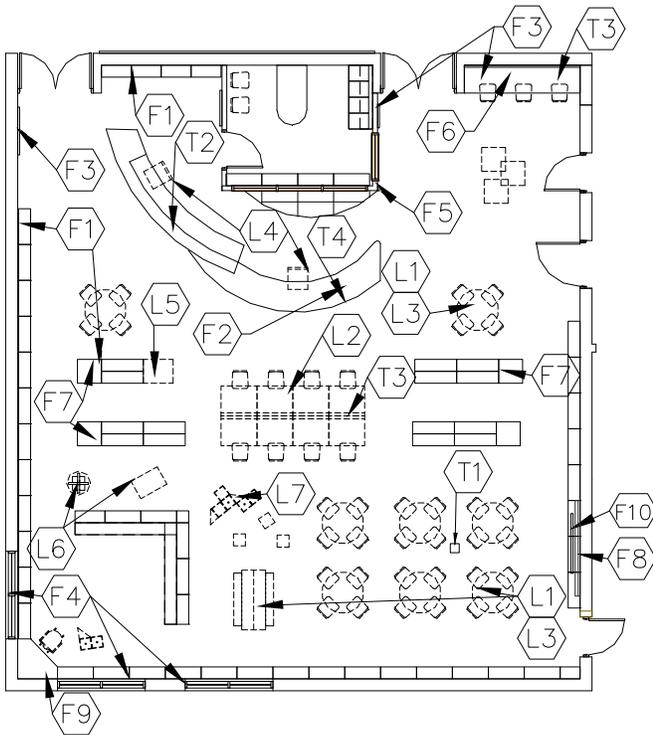
Following are the Media Center space plates:

- E-MC-1 Reading Room/Circulation
- E-MC-2 Media Specialist Office
- E-MC-3 Workroom/Storage
- E-MC-4 Main Control/Equipment Room
- E-MC-5** Conference Room

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READING ROOM/CIRCULATION E-MC-1

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: 10% of student capacity
SIZE: Based on the student capacity
 10% of student capacity multiplied
 by 30 SF per student

PROGRAM ACTIVITIES:

- Media center is an information laboratory that serves the instructional needs of the entire school.
- Provides students with access to information, technology, and multimedia materials in an area that will allow for individual, small group, and classroom research. Space should encourage development of positive attitudes toward reading and learning.

SPATIAL RELATIONSHIPS:

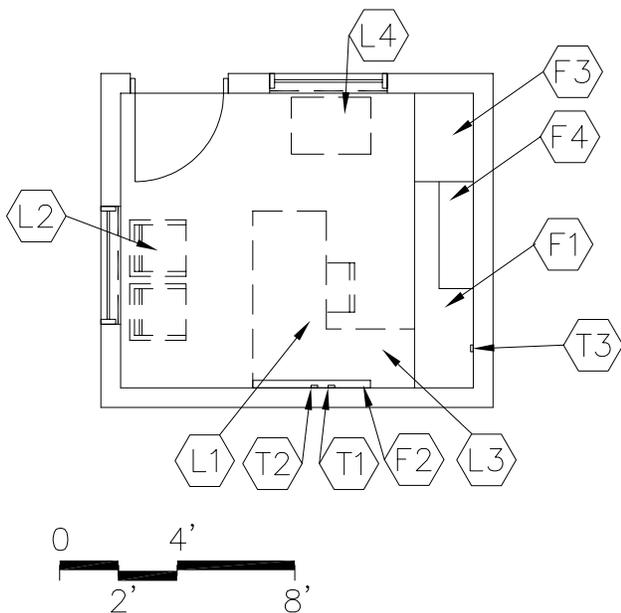
- Near academic center of the school
- Access to classrooms
- Easy access to public parking

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**

NOTES:

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



CAPACITY: 1 - 3 persons
 SIZE: 120 SF

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**

NOTES:

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

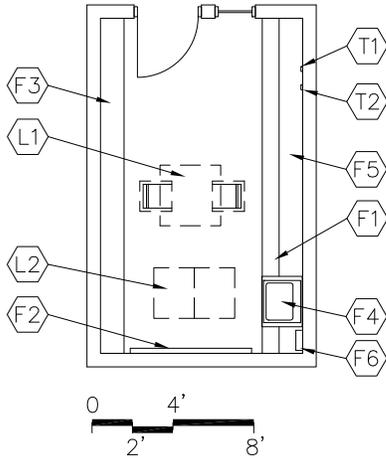
**MEDIA SPECIALIST OFFICE
E-MC-2**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	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	123550
Suspended, acoustical	095113	F5 Bookcases (optional)	123550
Walls:		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	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
L4 File cabinet		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
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 data and video port	262726
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<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>Miscellaneous:</u>	
		Interior window	081113/088000

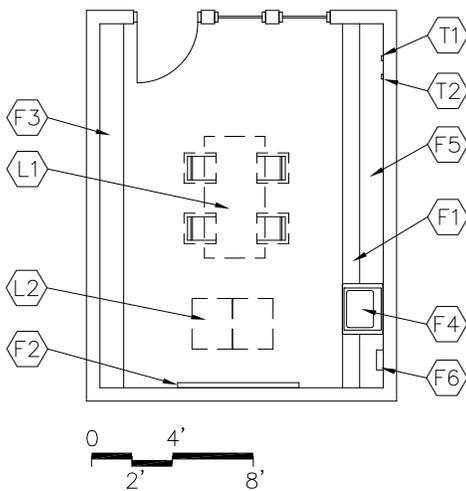
NOTES:

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.

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
E-MC-3**

CHAPTER 4: ELEMENTARY SCHOOL

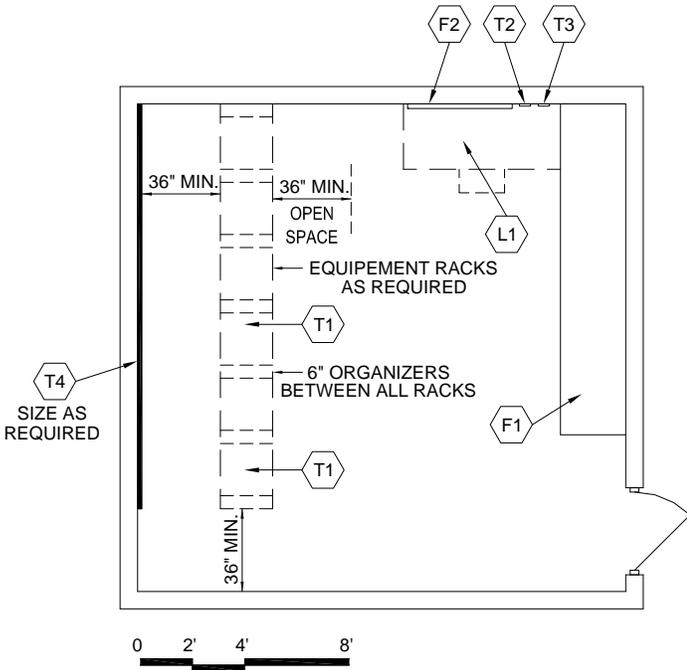
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items²:</u>	
<i>Rubber</i>	096500	F1 12' - 15' of base cabinets	123550
Base:		F2 4'-8' of tack board	101100
Resilient base	096500	F3 10' - 18' of bookcases (optional)	123550
Ceiling:		F4 3' sink base cabinet	123550
Suspended, acoustical	095113	F5 8' - 15' of wall cabinets	123550
Walls:		F6 Towel dispenser	102813
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		Sink	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Table and chairs		Supply/return air system	Div. 23
L2 Book trucks		Independent temperature control	230923
Wastebasket		<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	271523
		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
E-MC-4**

CHAPTER 4: ELEMENTARY SCHOOL



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

CAPACITY: N/A
 SIZE: 300 SF

NOTES:

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

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

CHAPTER 4: ELEMENTARY SCHOOL

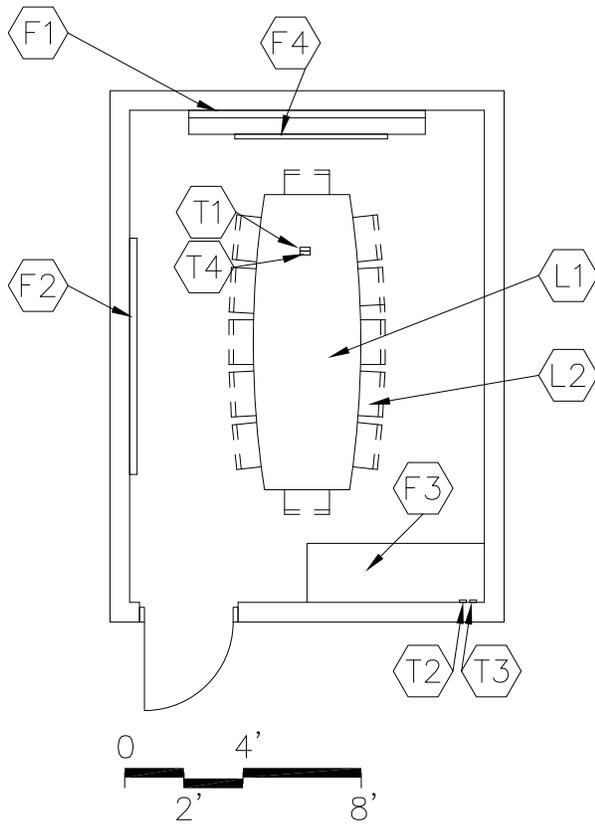
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
ET or sheet vinyl	096500	F1 8'-16' of open shelving, depth may vary, (fixed or loose)	123550
Base:		F2 4' of tack board (optional)	101100
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression 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	271513/271313
		Integrated telephone system	273113
		Video wiring	271333/271533/271543
		Digital on demand delivery system	274125
		Local area network wiring	271523/271323
		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>Electronic 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.

CONFERENCE ROOM
E-MC-5

CHAPTER 4: ELEMENTARY SCHOOL



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

CAPACITY: 8 - 12 persons
SIZE: 200 SF

NOTES:

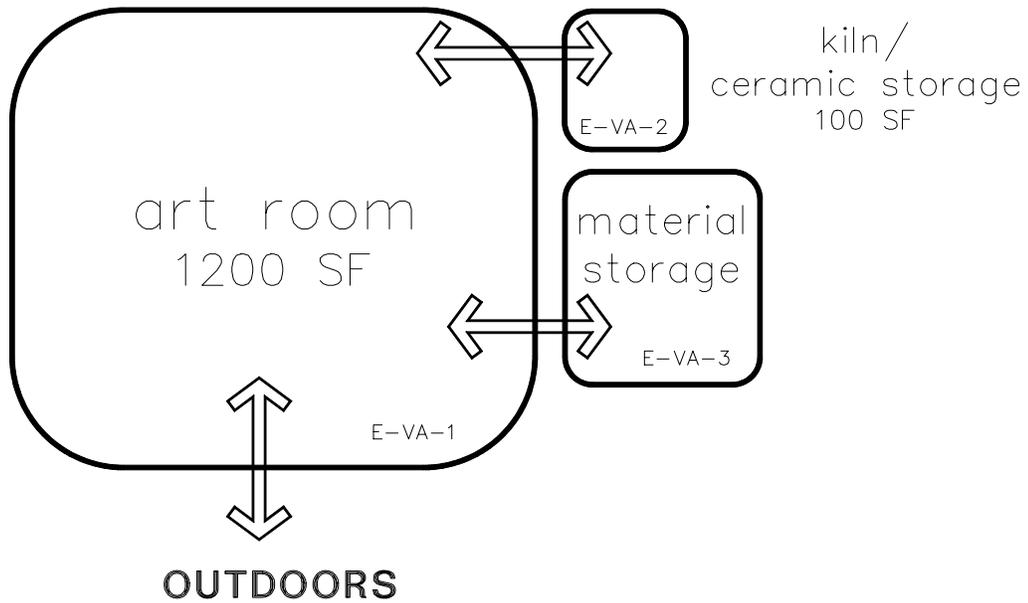
1. Loose furnishings shown represent one of many possible arrangements.

**CONFERENCE ROOM
E-MC-5**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet or Carpet Tile	096816	<u>Fixed Items:</u>	
	096813	F1 8'-10' of chalk/marker board	101100
		F2 6'-8' of tack board	101100
		or tackable wall surface	
<u>Base:</u>			
Resilient base	096500	F3 4'-6' of base cabinets (optional)	123550
		(fixed or mobile)	
<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>LOOSE FURNISHINGS:</u>			
L1 Conference table		<u>Plumbing:</u>	
L2 Chairs		N/A	
Wastebasket		<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	
		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 also be all fixed equipment or all loose furnishings.

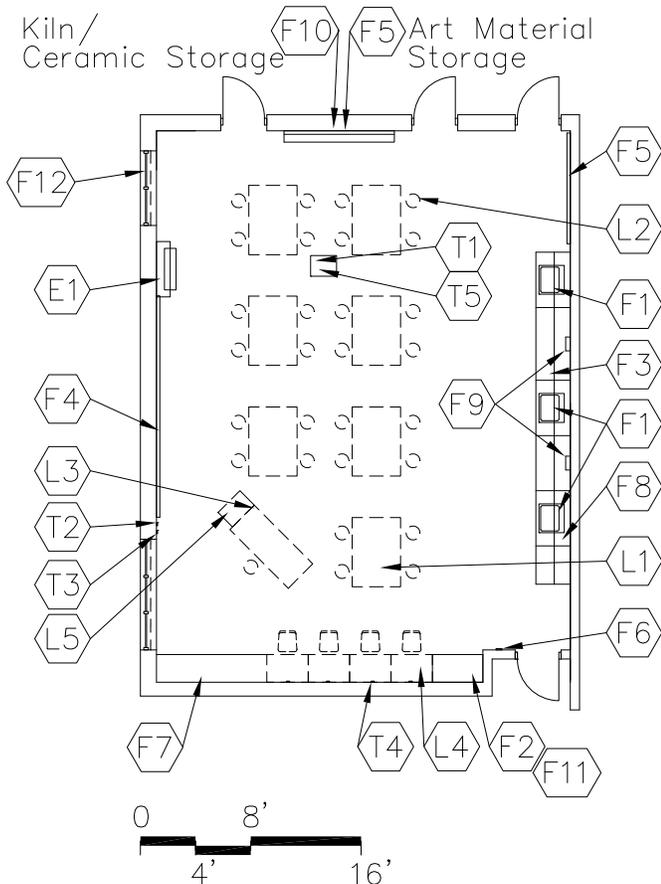
**NOTES:**

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

Following are the Visual Arts space plates:

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

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CAPACITY: 28 students
 SIZE: 1,200 SF
 ANCILLARY SPACES: Kiln/Ceramic Storage
 E-VA-2
 Art Material Storage
 E-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 adjacent 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
E-VA-1**
CHAPTER 4: ELEMENTARY SCHOOL

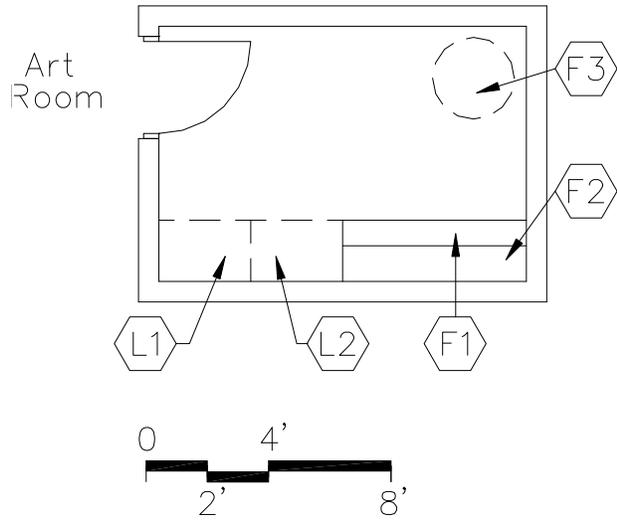
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET,	096500	F1 3'-4' sink base cabinet, or several wash fountains	123550
sheet vinyl, rubber,	033510	F2 3' of tall wardrobe with file drawers	123550
polished concrete finishing, or	033519	F3 10'-12' of base cabinets	123550
colored concrete finishing		F4 12'-16' of tack board or tackable wall surface	101100
<u>Base:</u>		F5 12'-16' of chalk/marker board	101100
Resilient base	096500	F6 Pencil sharpener support	062000
<u>Ceiling:</u>		F7 6'-10' of tall storage cabinets	123550
Suspended, acoustical	095113	F8 10'-12' of wall cabinets	123550
<u>Walls:</u>		F9 Towel dispenser (optional)	102813
Painted concrete masonry units	042000/099100	F10 Projection screen (optional)	115213
		F11 Technology support casework	123550
		F12 Windows with integral blinds	085113
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student work tables		Fire suppression system	211000
L2 Student chairs or stools		<u>Plumbing:</u>	
L3 Teacher desk and chair/stool and teacher computer support		Sinks with solids interceptor	224000
L4 Computer workstation furniture		Plumbing connections	224000/221116/221119
L5 Desk height file cabinet		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
Pencil sharpener		Independent temperature control	230923
<u>EQUIPMENT:</u>		Manually controlled general exhaust	Div. 23
E1 Drying rack		<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
		Track lighting	265100
		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 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
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

NOTES:

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

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

CHAPTER 4: ELEMENTARY 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 E-VA-1

NOTES:

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

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
<i>Polished concrete finishing or colored concrete finishing</i>	033510	F1 3'-6' of base cabinets	123550
	033519	F2 3'-6' of wall cabinets	123550
		F3 Kiln	119200
<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	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	
		1 duplex receptacle	262726
		Electrical connection for kiln	262726
L1 and L2 could be fixed casework.		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

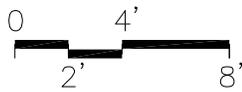
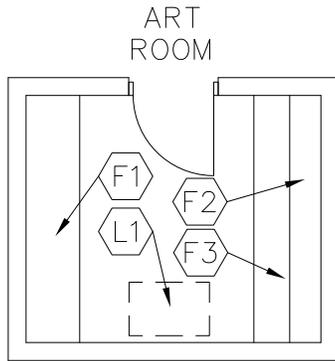
NOTES:

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

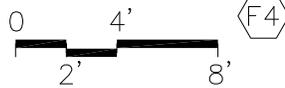
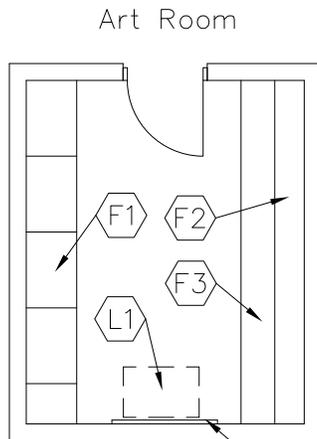
**ART MATERIAL STORAGE
E-VA-3**

CHAPTER 4: ELEMENTARY SCHOOL

100 SF



150 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 - 150 SF
 ANCILLARY SPACES: Art Room
 E-VA-1

NOTES:

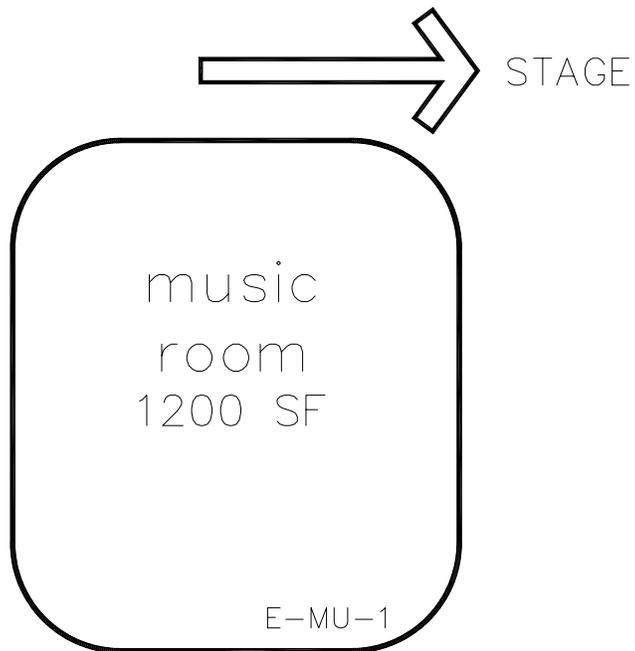
**ART MATERIAL STORAGE
E-VA-3**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items²:</u>	
ET,	096500	F1 8' - 14' tall storage cabinets	123550
sheet vinyl, polished concrete	033510	F2 8' - 14' base cabinets,	123550
finishing, or colored concrete	033519	(depth for school's need)	123550
finishing		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.



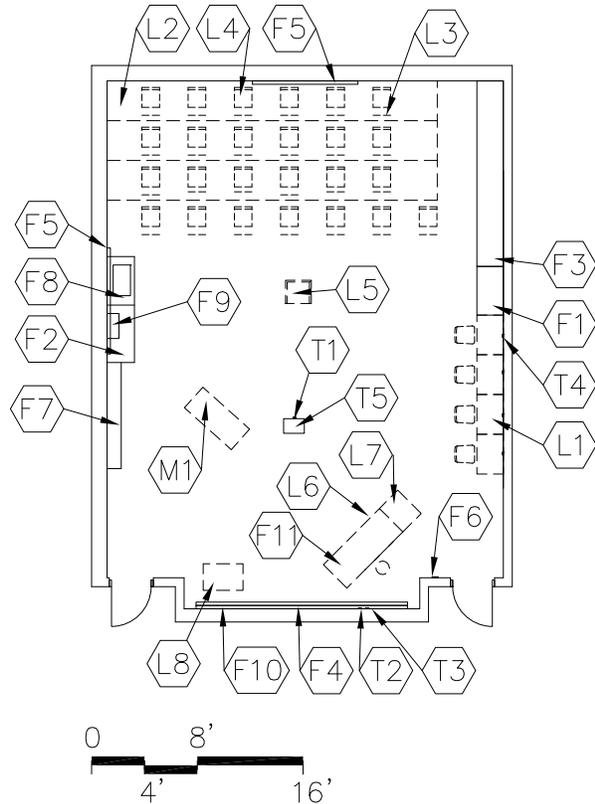
NOTES:

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

Following is the Music space plate:

E-MU-1 Music Room

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CAPACITY:
SIZE:

25 students
1,200 SF

PROGRAM ACTIVITIES:

- Music students will listen to, analyze, compose, and describe music; sing alone and with others; play instruments; participate in creative movement, dance, and mime; understand music in relation to history and culture, and in relation to the other arts and disciplines in the academic content area.

SPATIAL RELATIONSHIPS:

- Grouped with other noise producing activities
- Near stage

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

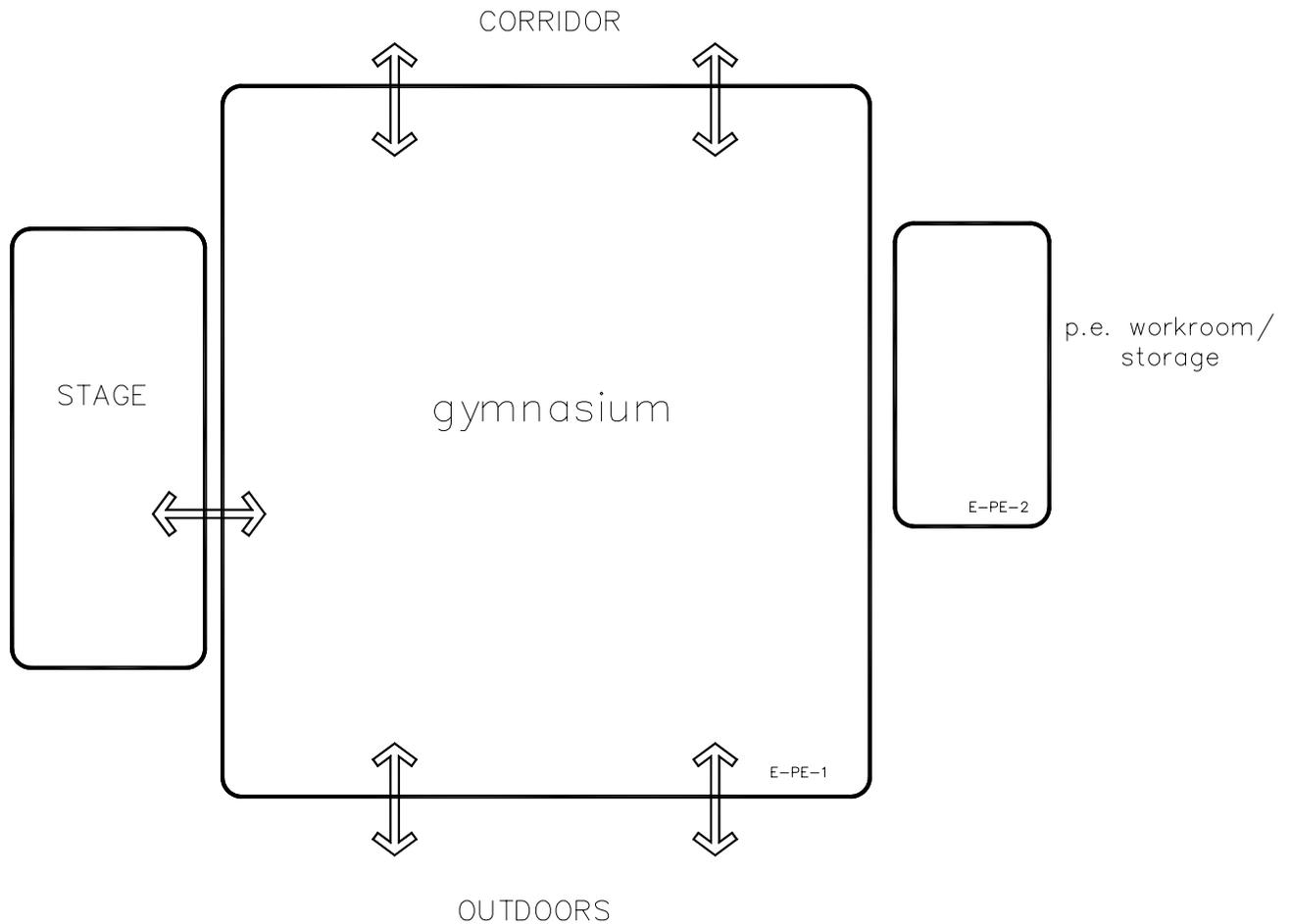
**MUSIC ROOM
E-MU-1**

CHAPTER 4: ELEMENTARY SCHOOL

	Spec. Ref.#		Spec. Ref.#
FINISHES¹:		FEATURES¹:	
Flooring:		<u>Fixed Items:</u>	
Carpet, carpet tile	096816	F1 Tall wardrobe with file drawers	123550
Optional: linoleum, ET, sheet vinyl, or rubber	096500 096516 096813	F2 Base cabinets	123550
		F3 Tall storage cabinets	123550
		F4 8'-16' of chalk/marker board	101100
		F5 4'-16' of tack board	101100
		or tackable wall surface	
Base:		F6 Pencil sharpener support	062000
Resilient base	096500	F7 4'-9' of bookcases	123550
		F8 3' sink base cabinet	123550
Ceiling:		F9 Towel dispenser (optional)	102813
Suspended, acoustical	095113	F10 Projection screen (optional)	115213
		F11 Technology support casework	123550
Walls:		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
Acoustical wall treatment	098000	<u>Plumbing:</u>	
		Sink with drinking fountain	224000
		Plumbing connections	224000/221116/221119
LOOSE FURNISHINGS:		<u>HVAC:</u>	
L1 Computer workstation furniture		Supply/return air system	Div. 23
L2 Risers		Independent temperature control	230923
L3 Music stands		<u>Electrical:</u>	
L4 Music chairs		Fluorescent lighting	265100
L5 Conductor podium		Illumination level: See Table 8600-4	
L6 Teacher desk and computer workstation support and chair		Multilevel switching	262726
L7 File cabinet		4 duplex receptacles	262726
L8 Folding mobile cart for ORFF instruments		Double duplex receptacle adjacent to each data and video port	262726
Wastebasket		Emergency lighting	265100
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
		Central sound system	275123
		T5 Overhead projector	274119
		<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 Piano	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Items F2 & F3: 16'-20' combination of base, wall, and tall storage cabinets to support music curriculum.



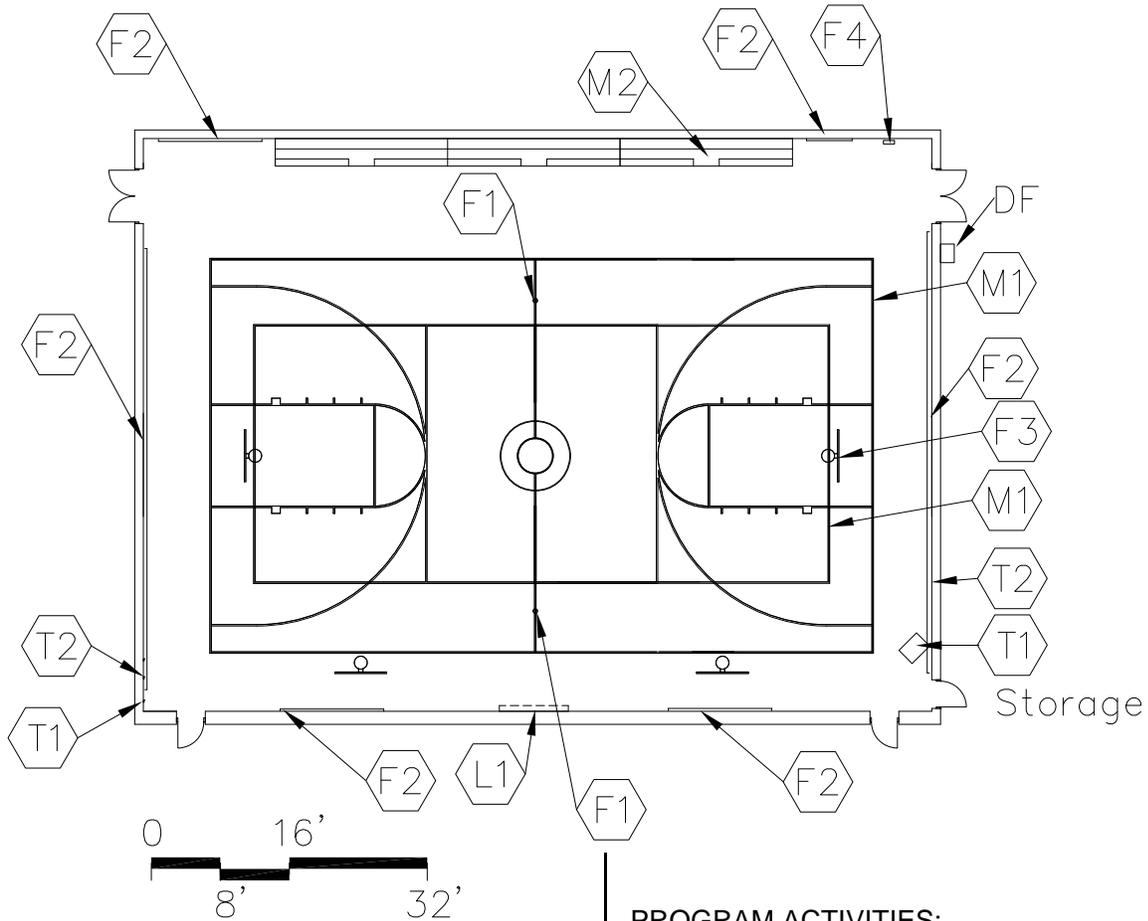
NOTES:

This is an example of how the physical education spaces in an elementary 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:

- | | |
|--------|-----------------------|
| E-PE-1 | Gymnasium |
| E-PE-2 | P.E. Workroom/Storage |

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CAPACITY: varies
 SIZE: 3,500-5,000 SF
 ANCILLARY SPACES: P.E. Workroom/Storage
 E-PE-2

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Direct access to outdoors
- Near student dining

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control - wall minimum STC 60
- Adequate sound control/acoustics
- Clear height of 20' from floor to nearest obstruction

NOTES:

**GYMNASIUM
E-PE-1**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Sheet vinyl,	096500	F1 Volleyball sleeves and standards	
resilient athletic flooring,	096516	with cart	116623
rubber, ET, fluid-applied	096566	F2 Safety wall wainscot (see note 2)	116623
athletic flooring, or linoleum	096766	F3 Basketball backstops, fiberglass,	
		adjustable height	116623
		F4 Ropes and climbing bars (optional)	116623
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096566	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Painted exposed structure	099100	Drinking fountain	224000
<u>Walls:</u>		directly outside the entrance	
Paint	099100	<u>HVAC:</u>	
Acoustical wall treatment	098000	Supply/return air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		Independent temperature control	230923
L1 Portable chalkboard		<u>Electrical:</u>	
		Multi-level switching	262726
		High intensity discharge lighting	265100
		or fluorescent lighting	
		Illumination level: See Table 8600-4	
		8 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		Means of egress lighting per code	265100
		Electrical connections to P.E.	
		equipment where necessary	262726
		Emergency lighting	265100
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 2 video ports, 1 monitor with cart	
			271533/271543/274119
		T2 2 data ports	271513
		Clock with wire guards	275313
		Central sound system	275123
		Gymnasium sound system	275124
<u>Miscellaneous:</u>		<u>Electronic Safety and Security:</u>	
M1 Court markings (minimum)		Life safety devices per code	283111
Appropriate sized basketball court			
Regulation volleyball court			
The following item is to be funded by the school district:			
M2 Telescoping stands	126600		

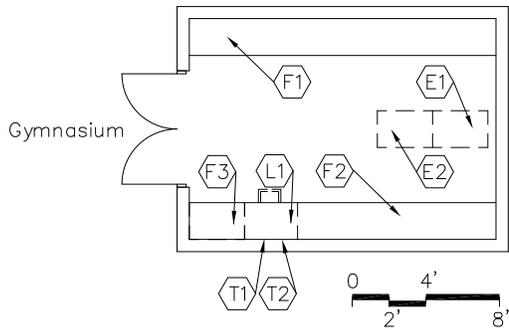
NOTES:

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.

**P.E. WORKROOM/STORAGE
E-PE-2**

CHAPTER 4: ELEMENTARY SCHOOL

200 SF



PROGRAM ACTIVITIES:

- Storage for P. E. equipment
- Workroom for P. E. teacher

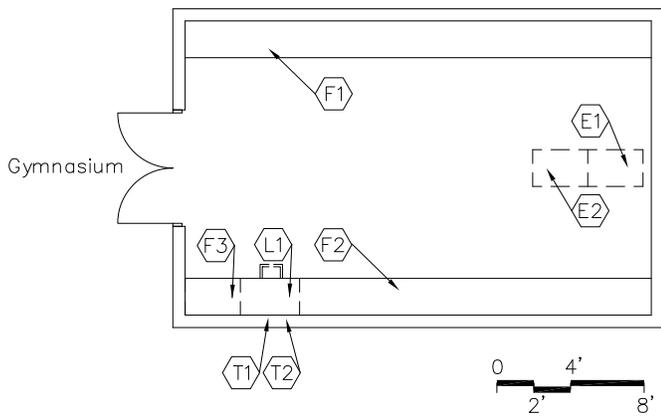
SPATIAL RELATIONSHIPS:

- Adjacent to gymnasium

ENVIRONMENTAL CONSIDERATIONS:

N/A

400 SF



CAPACITY: N/A
 SIZE: 200 - 400 SF
 ANCILLARY SPACES: Gymnasium
 E-PE-1

NOTES:

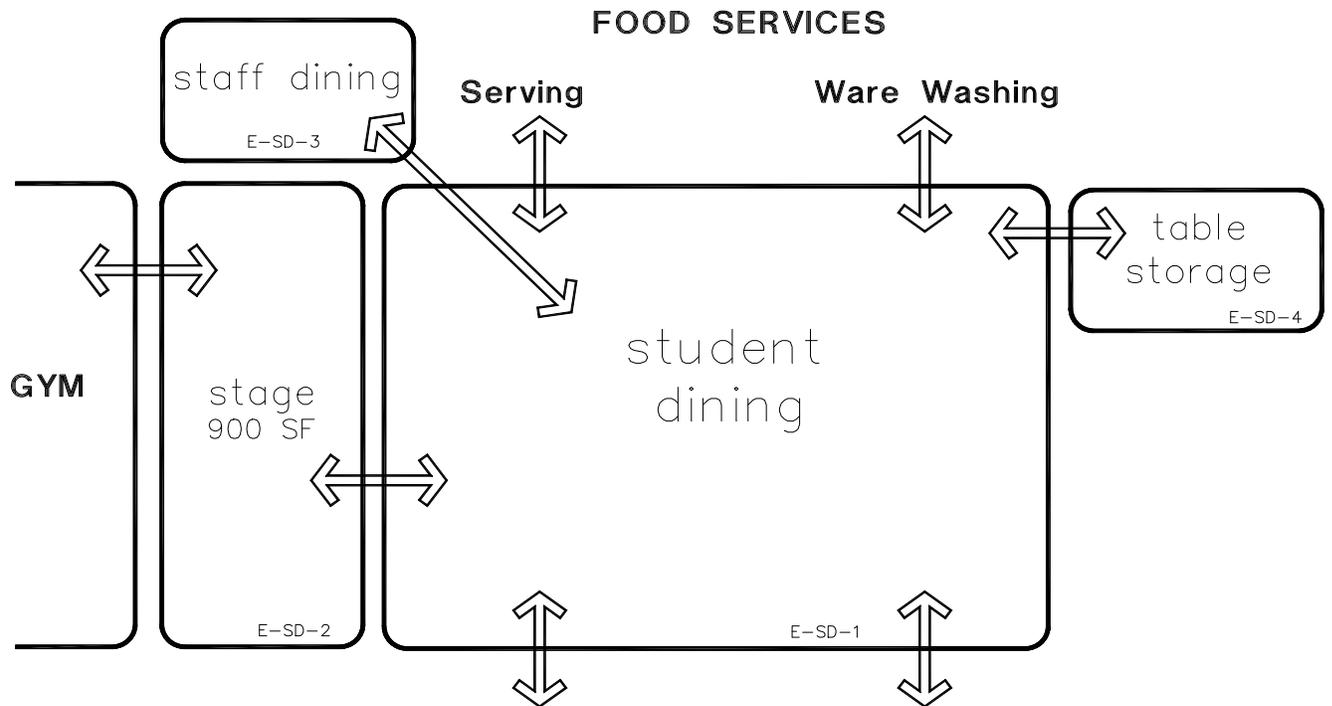
P.E. WORKROOM/STORAGE
E-PE-2

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Cure and seal concrete	033000	F1 18' – 30' of open shelving depth may vary (fixed or loose)	123550
Base:		F2 16' – 26' of tall storage cabinets	123550
No base		F3 Tall wardrobe	123550
Ceiling:		<u>Fire Suppression:</u>	
Exposed structure		Fire suppression system	211000
Option: Rated gypsum wallboard	092116	<u>Plumbing:</u>	
Walls:		N/A	
Unpainted concrete masonry units	042000	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Exhaust air system	Div. 23
L1 Teacher desk and chair		Supplemental heat as required	Div. 23
Wastebasket		<u>Electrical:</u>	
<u>EQUIPMENT:</u>		Single level switching	262726
E1 Tumbling mats on carts		Fluorescent lighting	265100
E2 Ball carts		Illumination level: See Table 8600-4	
		1 duplex receptacle	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 workstation	271513
		Central sound system	275123
		Gymnasium sound system	275124
		<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 student dining spaces in an elementary school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

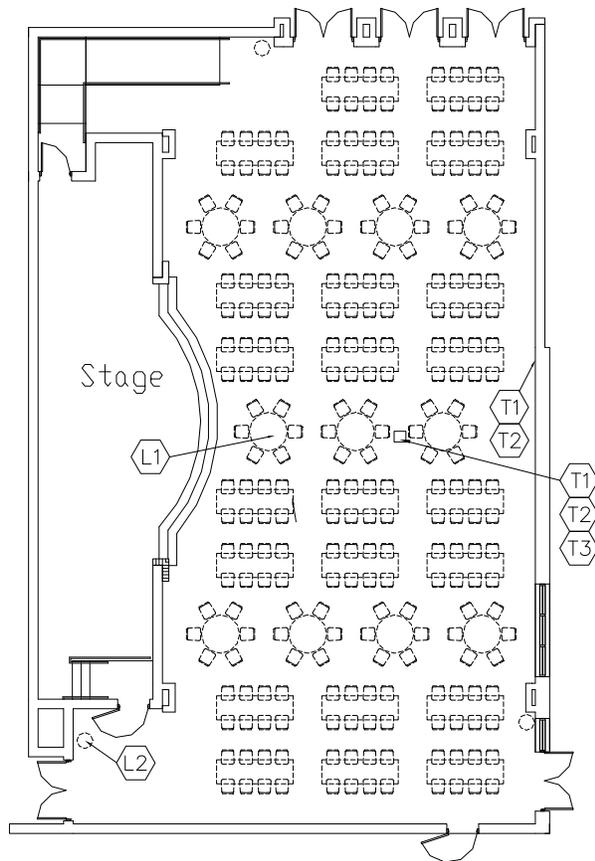
Following are the Student Dining space plates:

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

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STUDENT DINING E-SD-1

CHAPTER 4: ELEMENTARY SCHOOL



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
- Natural lighting
- 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.

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, E-SD-2
 Kitchen, E-FS-1

NOTES:

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

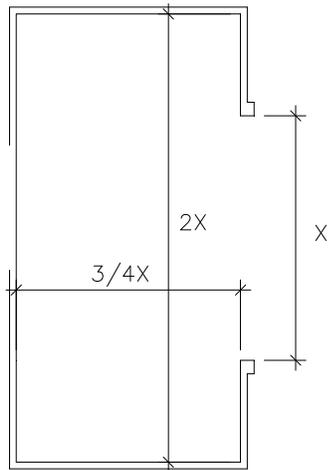
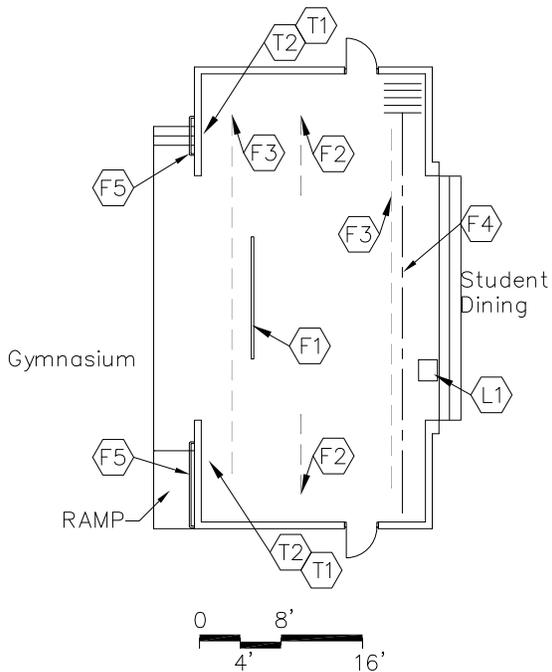
**STUDENT DINING
E-SD-1**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET,	096500	N/A	
sheet vinyl, porcelain tile ,	093000		
polished concrete finishing,	096516	<u>Fire Suppression:</u>	
or colored concrete finishing	033510	Fire suppression system	211000
	033519		
<u>Base:</u>		<u>Plumbing:</u>	
Resilient base	096500	Drinking water cooler	224000
Optional: Porcelain tile base	093000		
<u>Ceiling:</u>		<u>HVAC:</u>	
Suspended, acoustical	095113	Supply/return air system	Div. 23
		Independent temperature control	230923
<u>Walls:</u>		<u>Electrical:</u>	
Painted concrete masonry units	042000/099100	Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
Acoustical wall treatment	098000	Multilevel switching	262726
and diffusers		8 duplex receptacles	262726
		Double duplex receptacles adjacent to	
		each data and video port	262726
		Means of egress lighting per code	265100
		Emergency lighting	265100
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 2 video ports	271533/271543
		T2 2 data ports	271513
		Student dining/cafeteria sound system ²	275122
		Clock	275313
		Central sound system	275123
		T3 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<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.



ASPECT RATIO OF STAGE

Proportions are recommended – not mandatory.

CAPACITY: N/A
 SIZE: x = proscenium opening
 see diagram for dimensions
 ANCILLARY SPACES: Student Dining
 E-SD-1

PROGRAM ACTIVITIES:

- Space for speakers, presentations, and performances

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Near staff dining room
- Adjacent to gymnasium

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Resilient floor covering
- Area should be raised slightly above student dining floor
- Provide handicapped accessibility (ADA)

NOTES:

**STAGE
E-SD-2**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET,	096500	F1 Projection screen	116143
sheet vinyl, linoleum,	096516	F2 Curtain	116143
rubber stair accessories		F3 Front curtain and valance	116143
		F4 Operable partition (optional)	102226
		F5 Pipe handrail	055000
<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
		Temperature control with with student dining area	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Podium		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
		Emergency lighting	265100
		Means of egress lighting per code	265100
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 2 data ports (1 on each side of proscenium opening)	271513
		T2 2 video ports (1 on each side of proscenium opening)	271533/271543
		Student dining/cafeteria sound system ²	275122
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

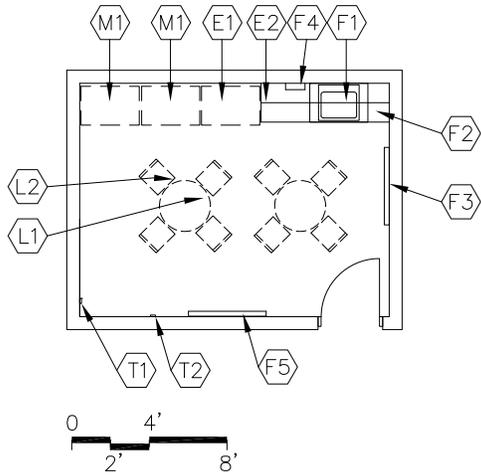
NOTES:

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

**STAFF DINING
E-SD-3**

CHAPTER 4: ELEMENTARY SCHOOL

200 SF



PROGRAM ACTIVITIES:

- Space for staff dining

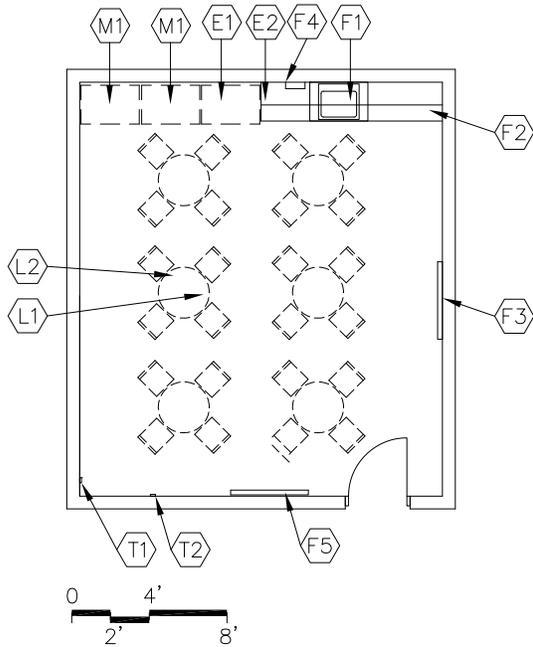
SPATIAL RELATIONSHIPS:

- Near student dining
- Near food services

ENVIRONMENTAL CONSIDERATIONS:

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

300 SF



CAPACITY: 8 - 24 staff
SIZE: 200 - 300 SF
ANCILLARY SPACES: Student Dining
 E-SD-1

NOTES:

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

STAFF DINING
E-SD-3

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, linoleum, rubber, sheet vinyl,	096500	F1 3' sink base cabinet	123550
Or porcelain tile	096516	with wall cabinets 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 base	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	224000/221116/221119
	042000/099100		
		<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
L1 Tables		Independent temperature control	230923
L2 Chairs			
Waste receptacle		<u>Electrical:</u>	
		Single level switching	262726
<u>EQUIPMENT:</u>		Fluorescent lighting	265100
E1 Refrigerator		Illumination level: See Table 8600-4	
E2 Microwave		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	

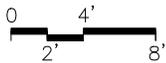
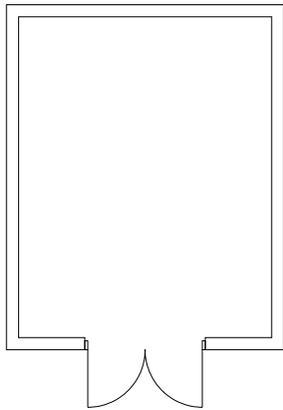
NOTES:

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

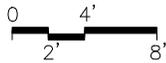
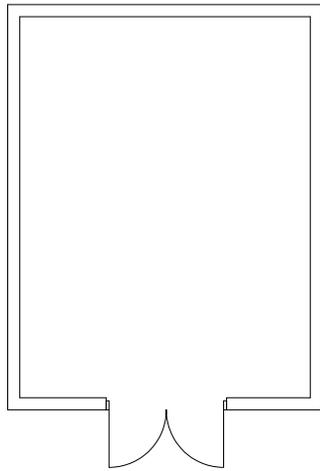
**TABLE STORAGE
E-SD-4**

CHAPTER 4: ELEMENTARY SCHOOL

200 SF



300 SF



CAPACITY: N/A
 SIZE: 200 - 300 SF
 ANCILLARY SPACES: Student Dining
 E-SD-1

PROGRAM ACTIVITIES:

- Storage for tables and chairs

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Near food services

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Resilient floor covering

NOTES:

**TABLE STORAGE
E-SD-4**

CHAPTER 4: ELEMENTARY SCHOOL

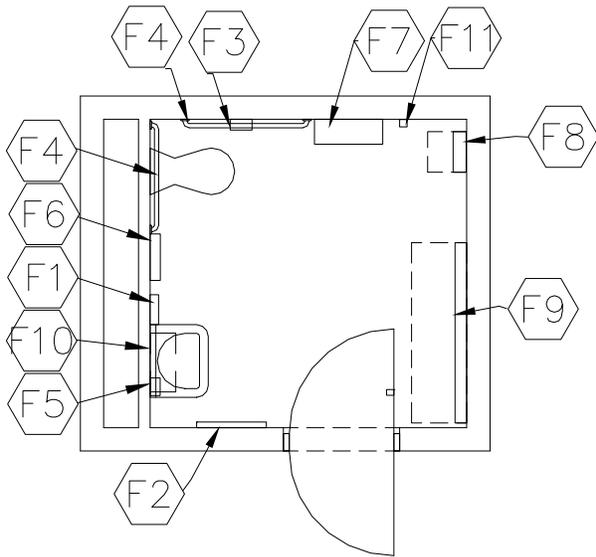
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<i>Cure and seal</i> concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Option: Rated gypsum wallboard	092116	<u>HVAC:</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.

FAMILY RESTROOM
E-SD-5

CHAPTER 4: ELEMENTARY SCHOOL



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: 2 people
SIZE: 80 SF

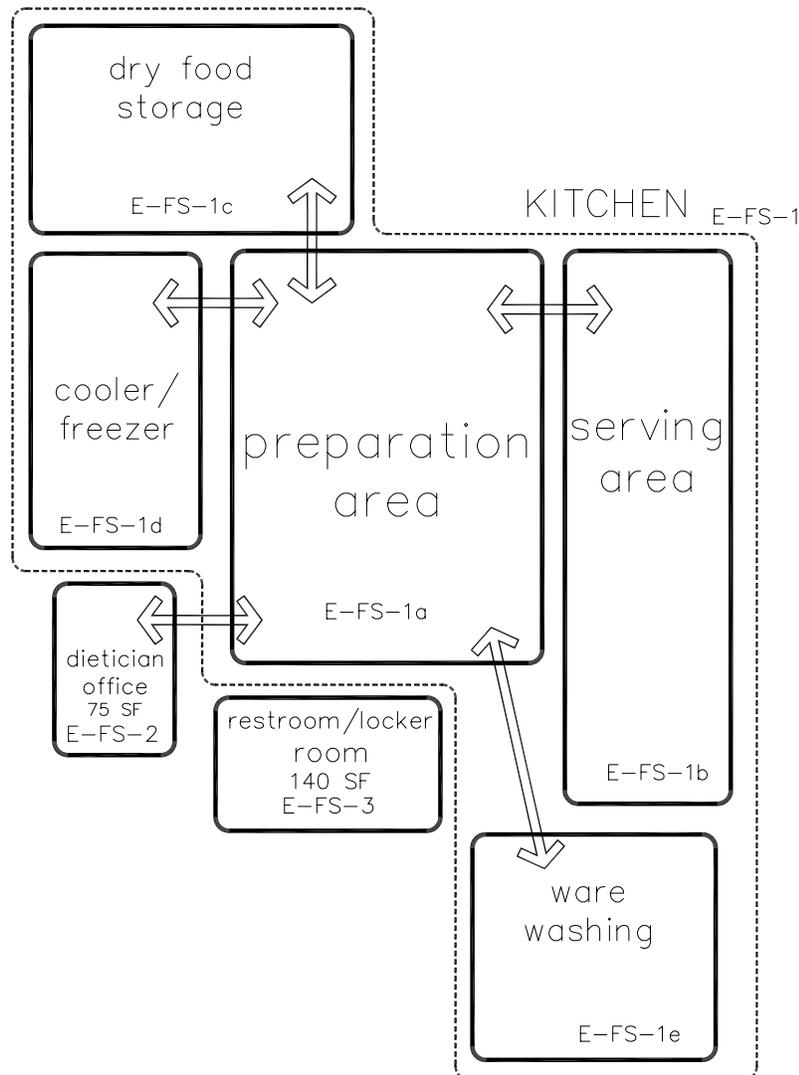
NOTES:

**FAMILY RESTROOM
E-SD-5**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET, sheet vinyl, or ceramic mosaic tile	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 Sanitary napkin dispenser/disposal	102813
		F7 Folding utility shelf	102813
		F8 Mounted child seat	102813
		F9 Adult/child changing station	102813
		F10 16" x 24" mirror with shelf	102813
		F11 Coat hooks	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Optional: Ceramic mosaic tile, porcelain tile, resinous flooring flooring, or integral vinyl cove base	093000 096723		
		<u>Plumbing:</u>	
<u>Ceiling:</u>		Wall-mounted water closet	224000
Suspended, acoustical	095113	Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
<u>LOOSE FURNISHINGS:</u>		Single level switching	262726
Wastebasket		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.

**NOTES:**

This is an example of how the food service spaces in an elementary 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:

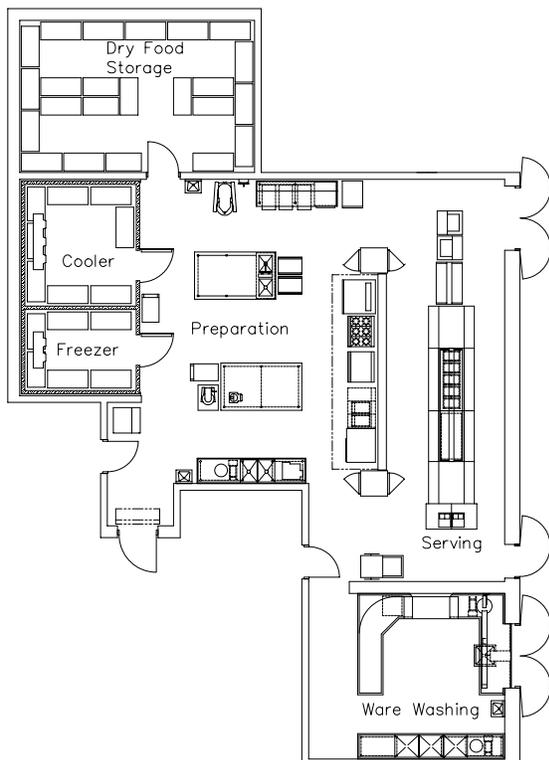
E-FS-0	Warming Kitchen
E-FS-1	Kitchen
E-FS-1a	Preparation Area
E-FS-1b	Serving Area
E-FS-1c	Dry Food Storage
E-FS-1d	Cooler/Freezer
E-FS-1e	Ware Washing
E-FS-2	Dietician Office
E-FS-3	Restroom/Locker Room

**KITCHEN
E-FS-1**
CHAPTER 4: ELEMENTARY SCHOOL

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
E-SD-1
Loading/Receiving Area
E-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 E-FS-0

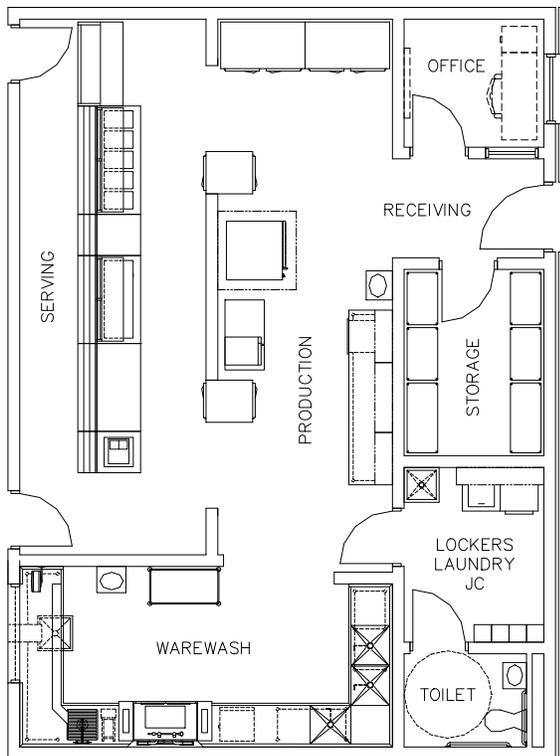
CHAPTER 4: ELEMENTARY SCHOOL

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



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.

CAPACITY: 3 - 7 persons

SIZE: Student capacity multiplied by 2.0 SF per student

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

NOTES:

**WARMING KITCHEN
E-FS-0**

CHAPTER 4: ELEMENTARY SCHOOL

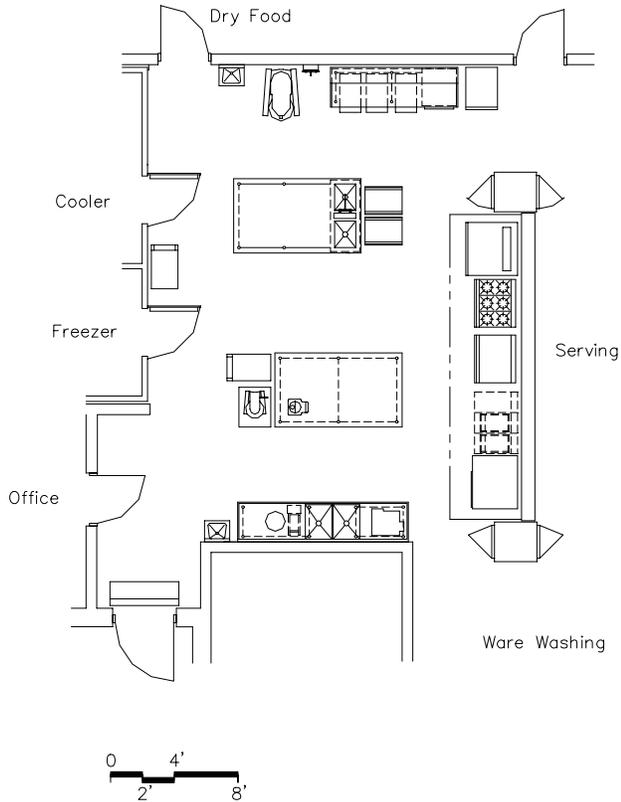
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service eqpt.	224000
		Plumbing connections	224000
Walls:		Gas connections	226313
Epoxy-painted concrete masonry units	042000/099100	Hand washing lavatory	224000
Option: Ceramic wall tile	093000	<u>HVAC:</u>	
or latex paint	099100	Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		Kitchen canopy exhaust system	Div. 23
N/A		<u>Electrical:</u>	
		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		10 duplex receptacles	262726
		Duplex receptacle at	262726
		each cash register	
		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 E-FS-1a

CHAPTER 4: ELEMENTARY 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
E-FS-1a**
CHAPTER 4: ELEMENTARY SCHOOL

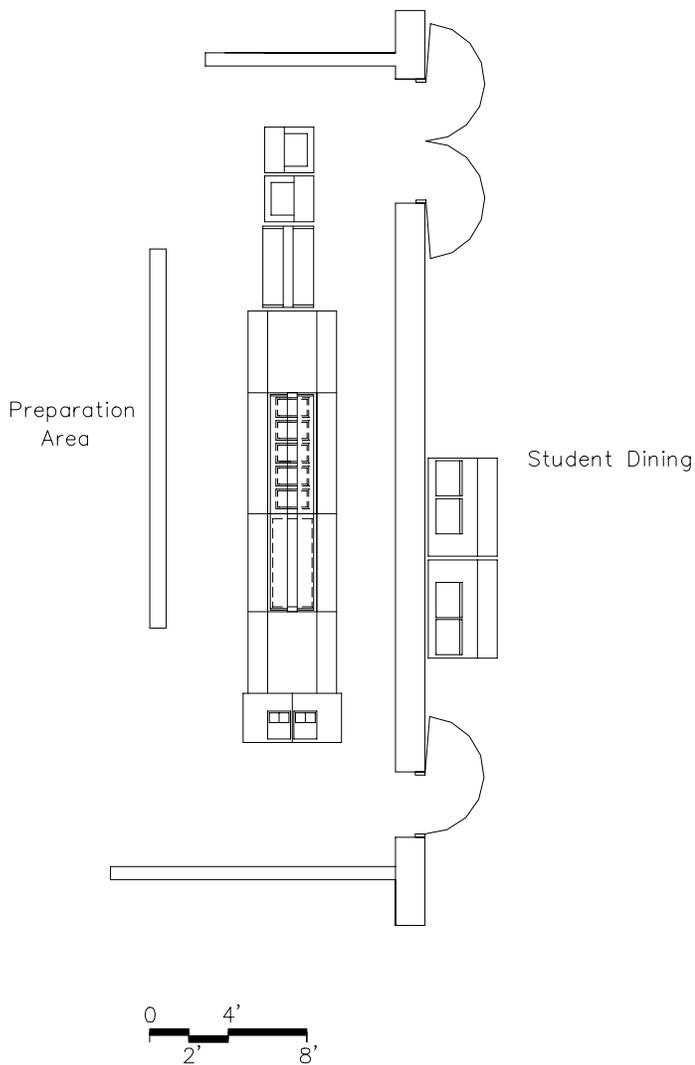
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
Walls:		Plumbing connections	224000
Epoxy-painted concrete masonry units	042000 /099100	Gas connections	226313
Option: Ceramic wall tile	093000	Hand washing lavatory	224000
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	Div. 23
		<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	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 - Serving Area E-FS-1b

CHAPTER 4: ELEMENTARY SCHOOL



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

PROGRAM ACTIVITIES:

- Space for serving of food

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Adjacent to preparation area

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Cleanable building services

NOTES:

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

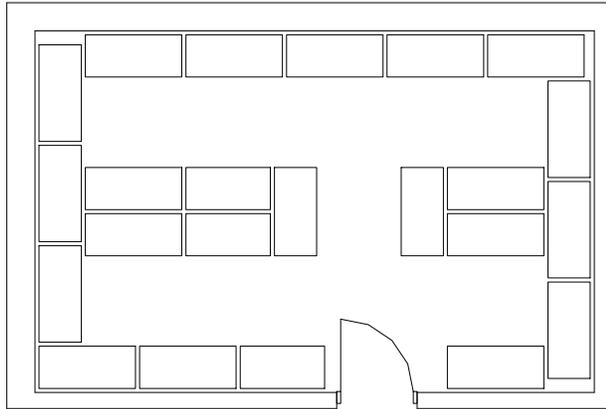
**KITCHEN - Serving Area
E-FS-1b**

CHAPTER 4: ELEMENTARY SCHOOL

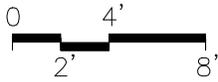
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Optional: porcelain tile	093000		
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Optional: porcelain tile base	093000		
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
Walls:		<u>HVAC:</u>	
Epoxy-painted concrete masonry units	042000 /099100	Supply/return air system	Div. 23
Option: Ceramic wall tile	093000	<u>Electrical:</u>	
or latex paint	099100	Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
<u>LOOSE FURNISHINGS:</u>		4 duplex receptacles	262726
N/A		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
E-FS-1c**

CHAPTER 4: ELEMENTARY SCHOOL

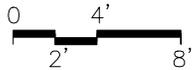
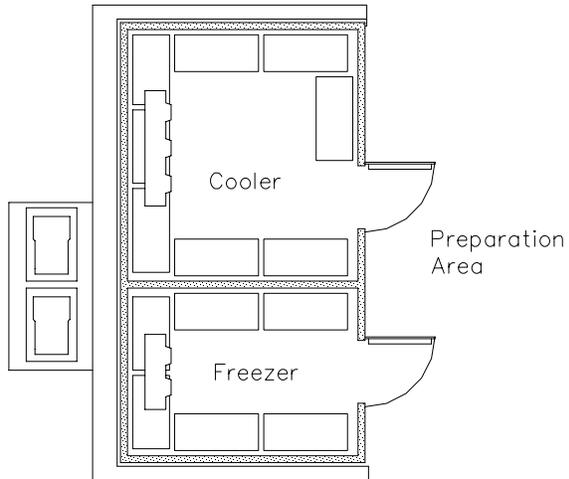
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES</u>¹:		<u>FEATURES</u>¹:	
Flooring:		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , or sheet vinyl	096500	Food service equipment	114000
Option: Quarry tile	093000		
	096516	<u>Fire Suppression:</u>	
Base:		Fire suppression system	211000
Resilient base	096500		
Option: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

CHAPTER 4: ELEMENTARY 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
E-FS-1d**

CHAPTER 4: ELEMENTARY SCHOOL

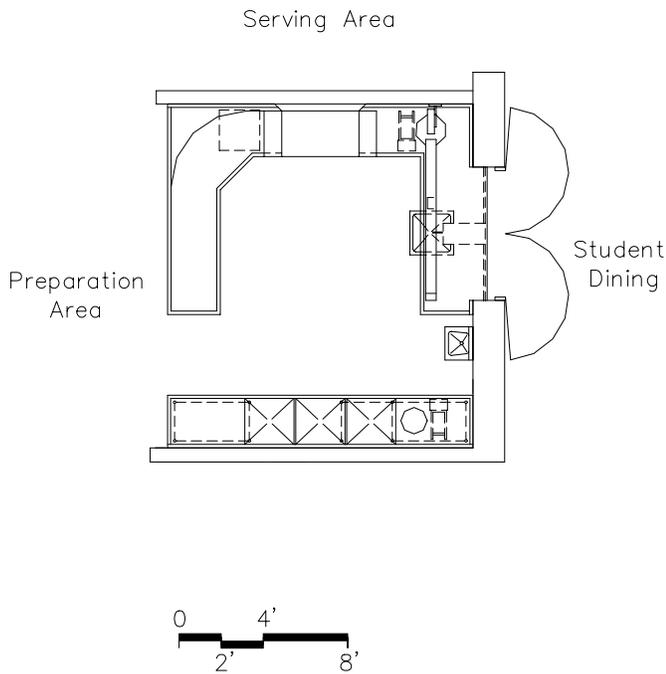
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Manufactured insulated panel	114000	N/A	
Walls:		<u>HVAC:</u>	
Manufactured insulated panel	114000	Exhaust air system for compressors Div. 23	
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Incandescent lighting	265100
		Illumination level: See Table 8600-4	
		Electrical connections to freezer/cooler refrigeration equipment	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 and refer to Chapter 10 for a list of possible food service equipment.

KITCHEN - Ware Washing
E-FS-1e

CHAPTER 4: ELEMENTARY 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.

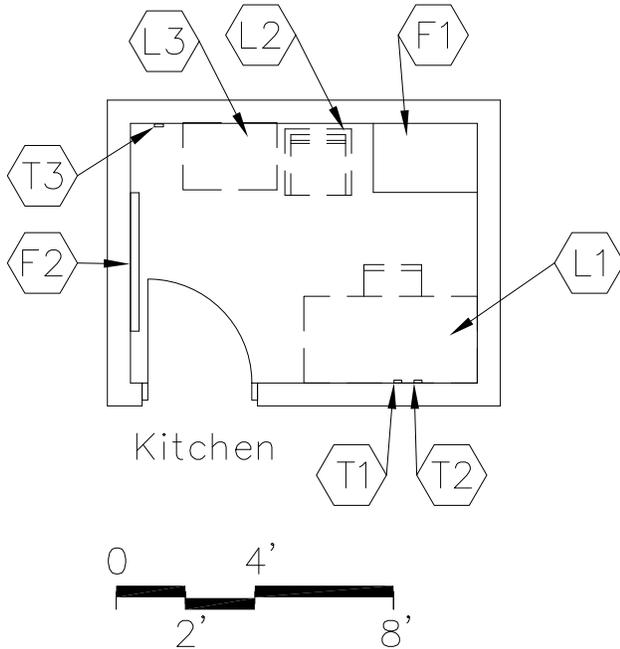
**KITCHEN - Ware Washing
E-FS-1e**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</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	042000 /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
 E-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
E-FS-2**
CHAPTER 4: ELEMENTARY SCHOOL

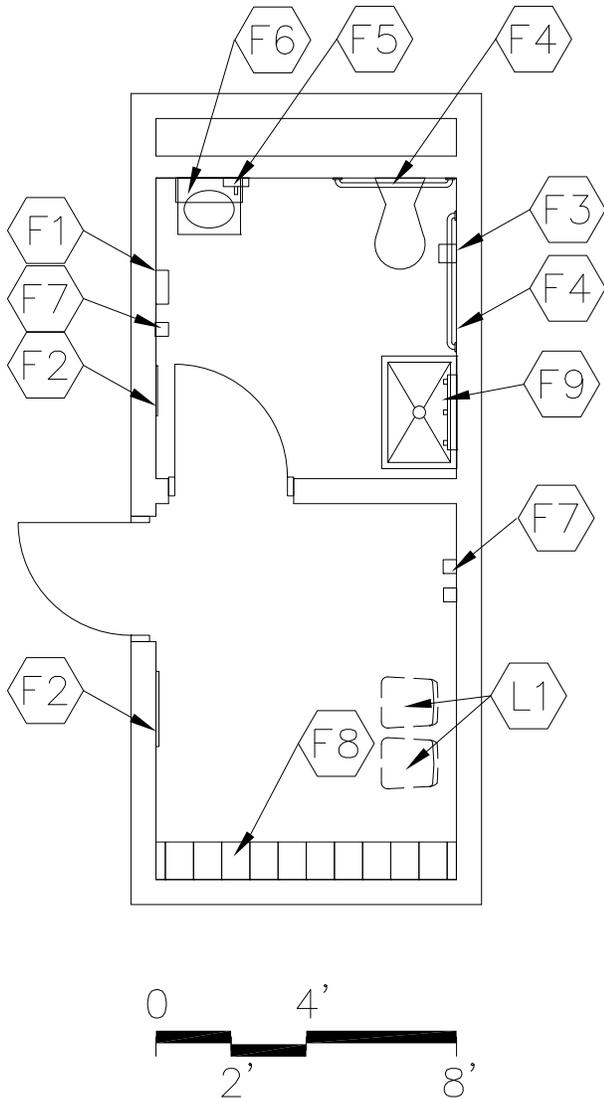
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , or sheet vinyl	096500	F1 2' of tall wardrobe (optional)	123550
Option: Quarry tile	096516 093000	F2 4' of tack board	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Option: Quarry tile	093000	<u>Plumbing:</u>	
<u>Ceiling:</u>		N/A	
Suspended, acoustical	095113	<u>HVAC:</u>	
<u>Walls:</u>		Supply/return air system	Div. 23
Painted concrete masonry units	042000/099100	Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 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 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 either be all fixed or all loose.

RESTROOM / LOCKER ROOM
E-FS-3

CHAPTER 4: ELEMENTARY 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:

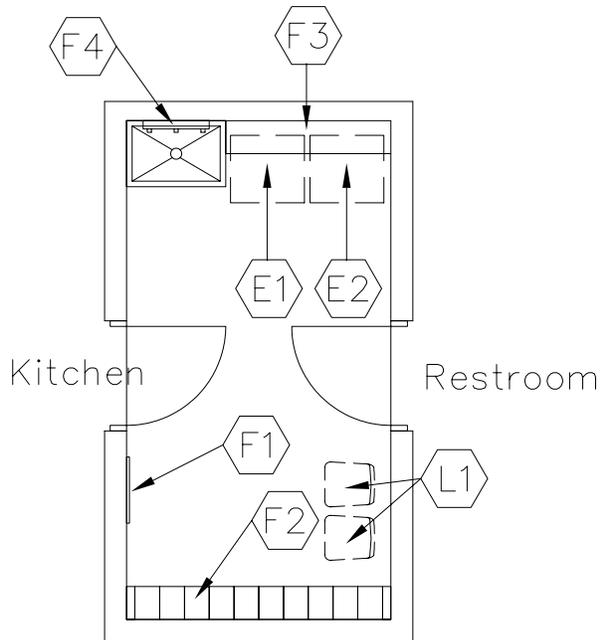
**RESTROOM / LOCKER ROOM
E-FS-3**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , sheet vinyl,	096516	F1 Towel dispenser	102813
rubber, rubber tile	096500	F2 2 , 24" x 60" mirrors	102813
Optional: quarry tile	093000	F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Mirror with shelf above sink(optional)	102813
Resilient base	096500	F7 Coat hooks	102813
Optional: quarry tile, or	093000	F8 Lockers 12" x 12" x 60"	105113
integral vinyl cove base		F9 Mop holder	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
		Floor service sink	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Chairs		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	
		2 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.

**LOCKER ROOM
E-FS-4**
CHAPTER 4: ELEMENTARY SCHOOL


CAPACITY: 2 persons
SIZE: 125 SF
ANCILLARY SPACES: Kitchen, E-FS-1
 Restroom, E-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.

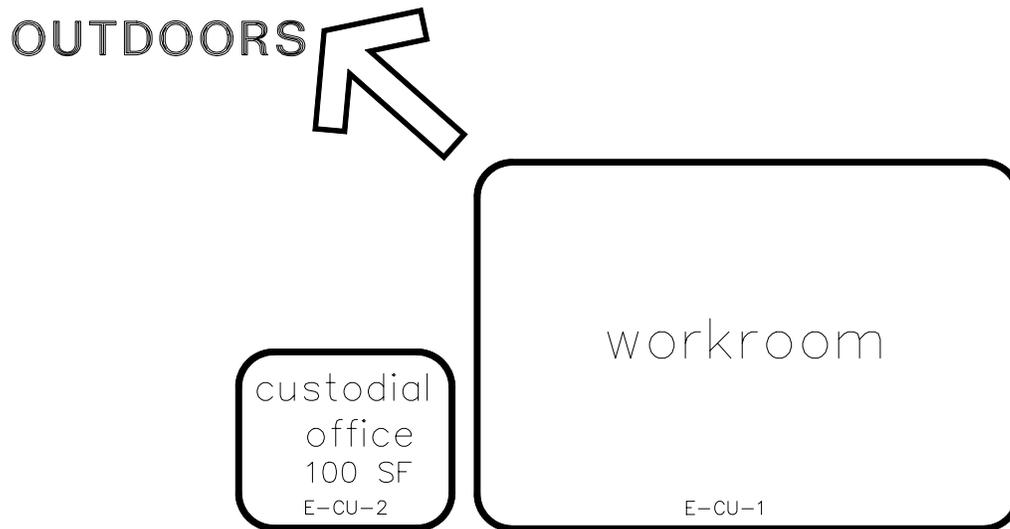
**LOCKER ROOM
E-FS-4**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</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	042000/099100	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 an elementary school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

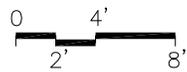
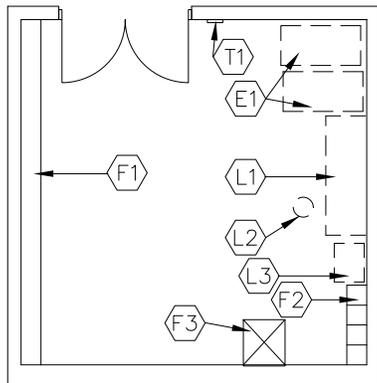
Following are the Custodial space plates:

E-CU-1	Workroom
E-CU-2	Custodial Office

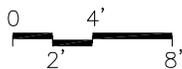
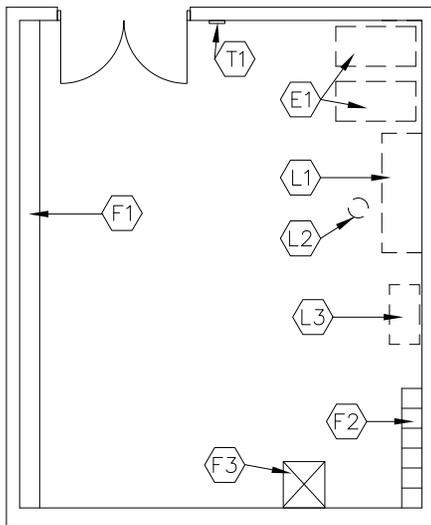
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CHAPTER 4: ELEMENTARY SCHOOL

200 SF



400 SF


**CAPACITY:
SIZE:**
**N/A
200 - 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

NOTES:

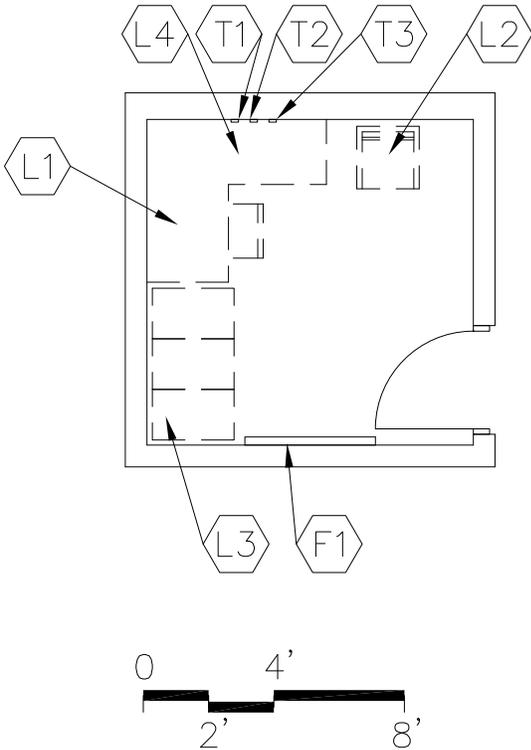
1. Loose furnishings shown represent one of many possible arrangements.

**WORKROOM
E-CU-1**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
Flooring:		<u>Fixed Items²:</u>	
<i>Polished concrete finishing, or colored concrete finishing</i>	033510 033519	F1 10' - 24' of open shelving, depth may vary (fixed or loose)	123550
Base:		F2 4 - 6 lockers	105113
Resilient base	096500	F3 Mop holder	102813
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<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
E-CU-2**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</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	271513
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)	081113/088100

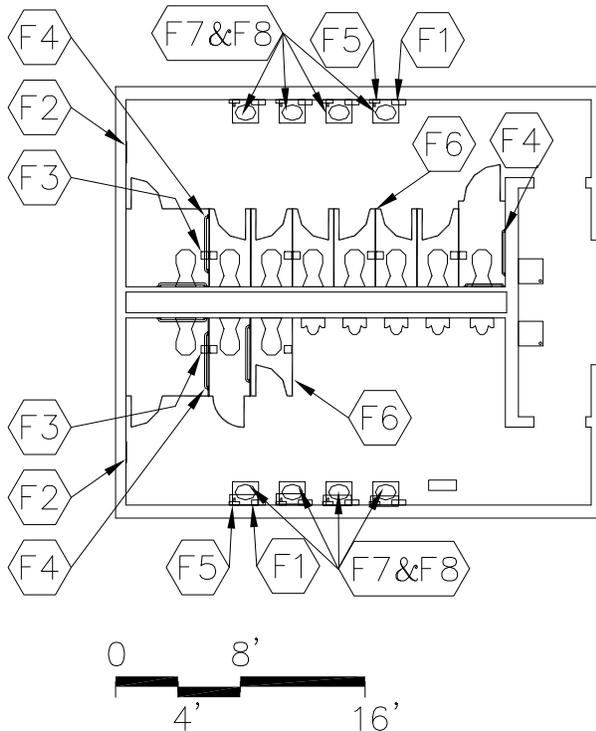
NOTES:

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 E-BS-1

CHAPTER 4: ELEMENTARY 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 E-BS-10.

**LARGE GROUP RESTROOMS
E-BS-1**

CHAPTER 4: ELEMENTARY SCHOOL

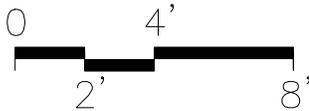
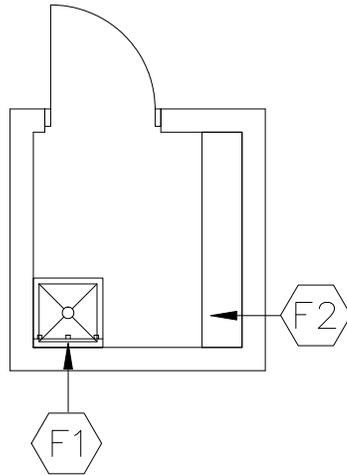
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Ceramic mosaic tile	093000	F1 Towel dispensers	102813
Optional: porcelain tile, rubber, or resinous flooring	096723	F2 24" x 60" mirror	102813
		F3 Toilet tissue holders	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispensers	102813
		F6 Toilet partitions	102113
		F7 16" x 24" mirrors with shelf (optional)	102813
		F8 Shelves (optional)	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Ceramic mosaic tile base	093000	Fire suppression system	211000
Optional: structural glazed tile, porcelain tile base, or resinous flooring	042000 096723		
		<u>Plumbing:</u>	
		Wall-mounted water closets	224000
		Wall-mounted urinals	224000
		Wall-mounted lavatories or wash fountains	224000
		Wall hydrants	221119
		Plumbing connections	224000/221116/221119
		Drinking water coolers	224000
		<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	
		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	
<u>Walls:</u>			
Painted concrete masonry units	042000/099100		
<u>LOOSE FURNISHINGS:</u>			
Waste Receptacles			

NOTES:

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

**CUSTODIAL CLOSET
E-BS-2**

CHAPTER 4: ELEMENTARY SCHOOL



PROGRAM ACTIVITIES:

- Space for storage of custodial supplies throughout the building

SPATIAL RELATIONSHIPS:

- Near large group restrooms

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

CAPACITY:
SIZE:

N/A
50 SF

NOTES:

**CUSTODIAL CLOSET
E-BS-2**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	F1 Mop holder	102813
		F2 Fixed or loose shelving (optional)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Service sink or floor drain sink	224000
Walls:		Plumbing connections	224000/221116/221119
Painted concrete masonry units	042000/099100	<u>HVAC:</u>	
		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
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

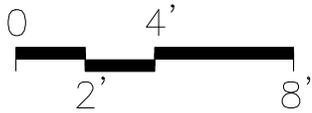
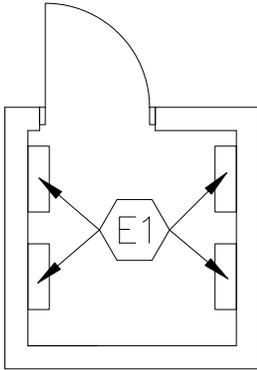
NOTES:

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

**ELECTRICAL CLOSET
E-BS-3**

CHAPTER 4: ELEMENTARY 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
E-BS-3**

CHAPTER 4: ELEMENTARY SCHOOL

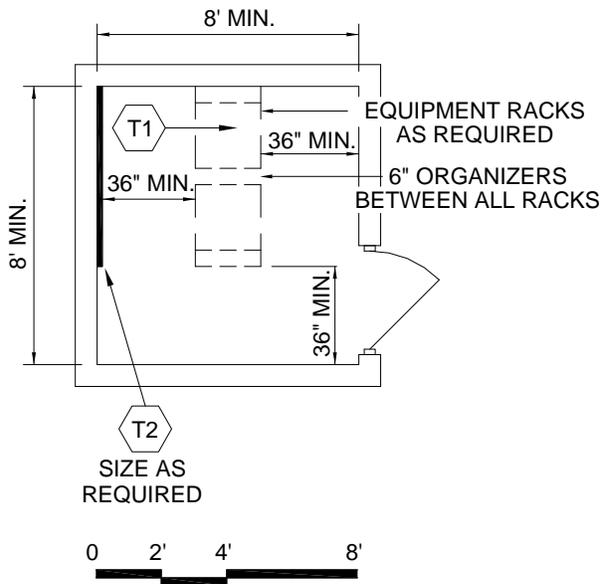
<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry 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
E-BS-4**

CHAPTER 4: ELEMENTARY 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
E-BS-4**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Polished concrete finishing, or	033510	N/A	
colored concrete finishing	033519		
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
		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.

CHAPTER 4: ELEMENTARY SCHOOL

- Corridors shall be a minimum of 8 feet wide.
- Instructional and activity areas shall be accessible by corridors without passing through another instructional or activity area.
- The corridors are to meet the egress 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
E-BS-5

CHAPTER 4: ELEMENTARY SCHOOL

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

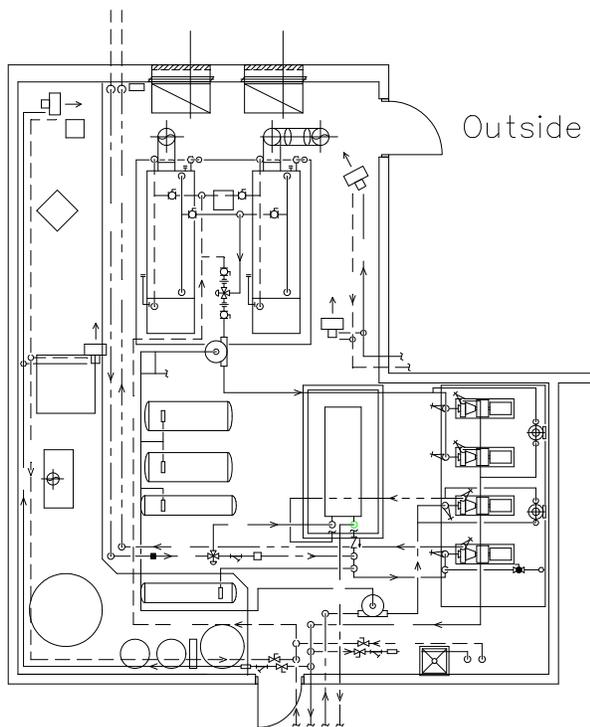
NOTES:

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
E-BS-6

CHAPTER 4: ELEMENTARY 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
E-BS-6

CHAPTER 4: ELEMENTARY SCHOOL

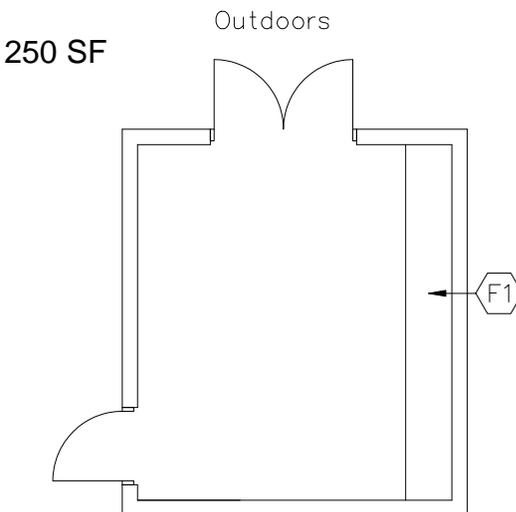
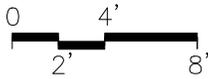
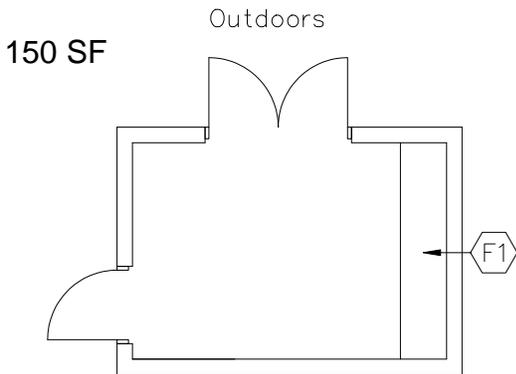
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	To be determined by Design Professional	
Base:		<u>Fire Suppression:</u>	
No base		To be determined by Design Professional	
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	To 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 8600-10	
		Others as determined by Design Professional	
		<u>Communications:</u>	
		Central sound system	275123
		Voice port and phone	271513/273113
		<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
E-BS-7**

CHAPTER 4: ELEMENTARY 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
E-BS-7**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Cure and seal concrete	033000	F1 10' - 16' of open tall shelving, depth 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
		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>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

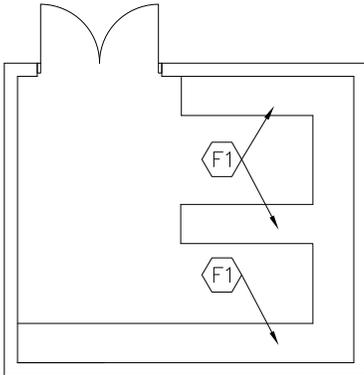
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.

**CENTRAL STORAGE AREA
E-BS-8**

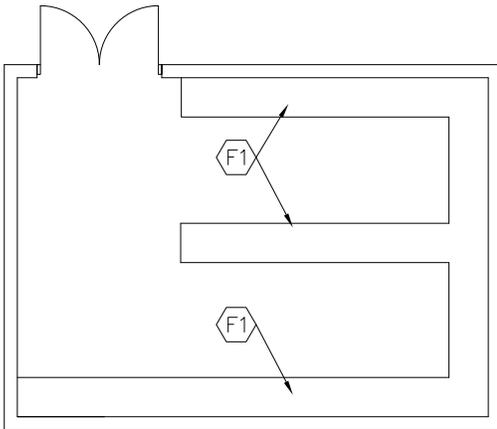
CHAPTER 4: ELEMENTARY SCHOOL

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

250 SF



400 SF



CAPACITY:

N/A

SIZE:

250 - 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
E-BS-8**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Cure and seal 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	

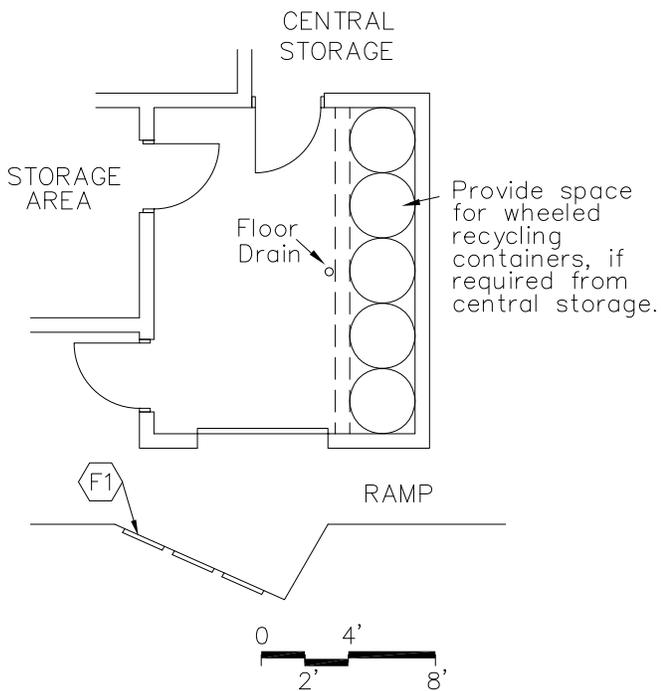
NOTES:

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
E-BS-9

CHAPTER 4: ELEMENTARY 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.

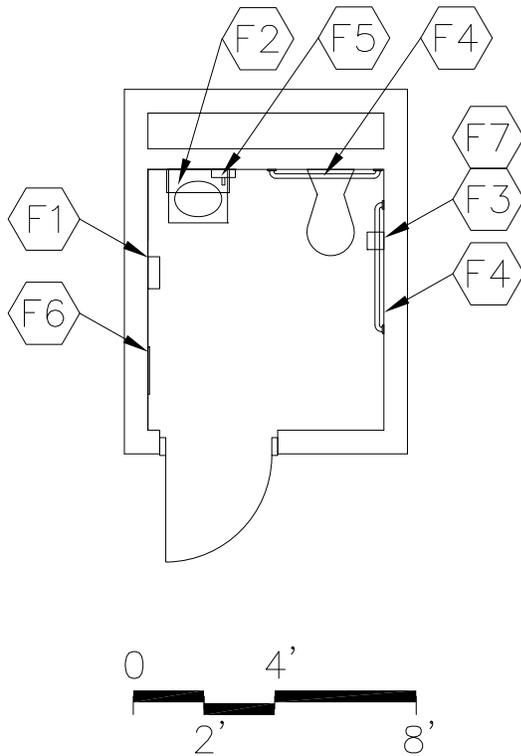
LOADING/RECEIVING AREA
E-BS-9

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</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>	
Epoxy-painted 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:
SIZE:

1 person
60 SF

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
E-BS-10**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</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 8600-4	
		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. F6 and F7 required for female restroom only.