

Chapter 4: Elementary School

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	E-BS-11	Restroom Recycling Room

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.
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	Operable windows are optional in exterior window fenestration.
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.
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.

INTRODUCTION

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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.

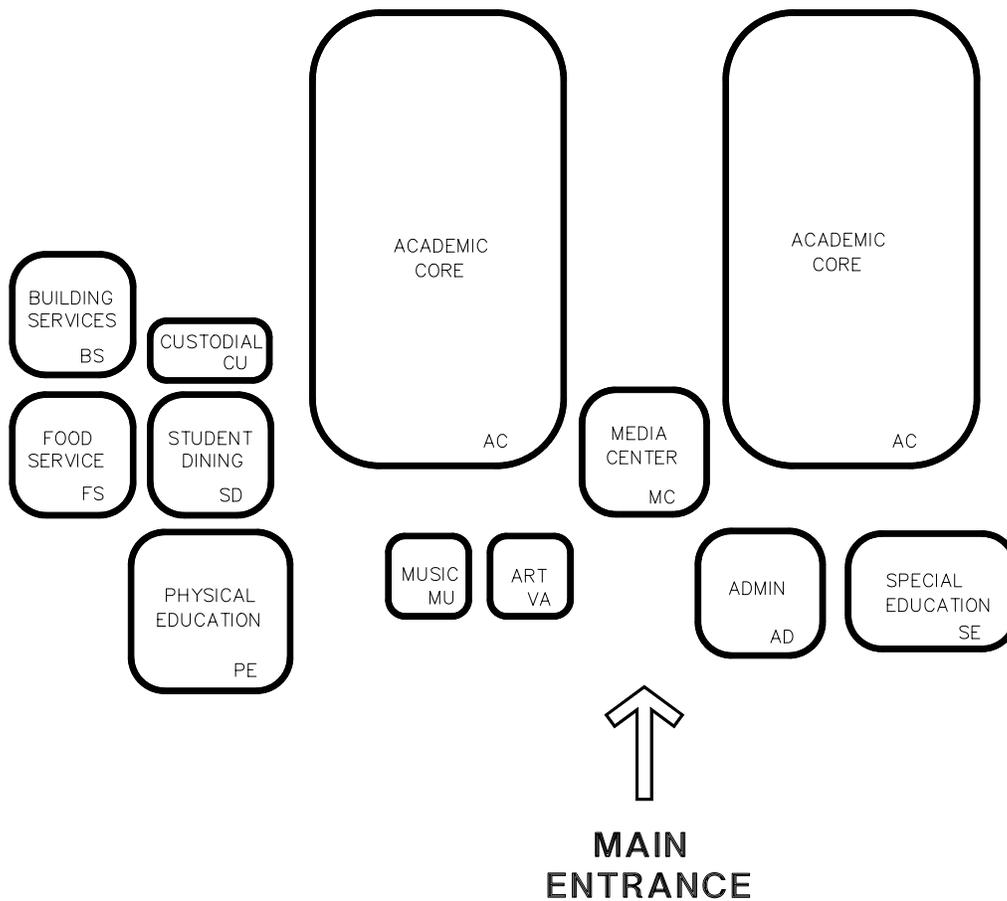
FEATURES

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.

TECHNOLOGY

The location of projectors, in spaces where required, shall be carefully coordinated between the Design Professionals in relation to the projection surface and ADA requirements. Note that classroom projectors are required to be ultra-short throw interactive projectors (refer to Section 274119). Classroom instructor AV interfaces and AV equipment are to be comprised of digital systems. Coordination is required between the Design Professionals to accommodate the digital solution that is selected by the District. Refer to Section 271543 and Figure 1, within that section, for a general overview of classroom equipment and interconnectivity requirements. The District's Digital Media Management System requires Design Professionals coordination for adequate dedicated rooftop space for current and potential future system antennas for incorporation of digital broadcast media sources as selected by the District (refer to Section 274125). Design Professionals should especially note that the classroom's dedicated 4 student data ports and associated work stations have been removed. A robust Wireless Local Area Network (WLAN), capable of supporting 1:1 and/or Bring Your Own Device (BYOD) throughout all educational areas is now required. Refer to Section 272133 for all of the new requirements for the District's WLAN.



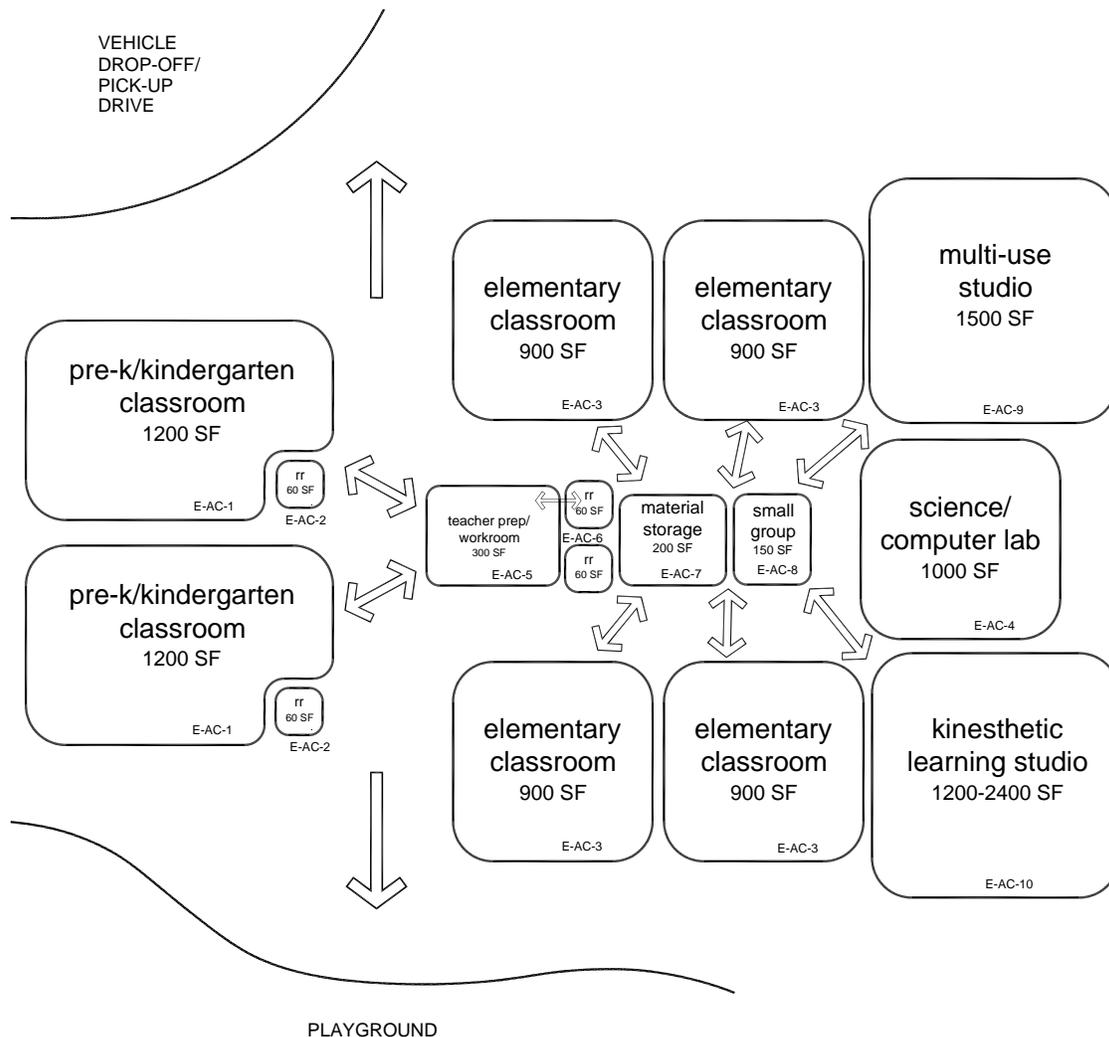
NOTES:

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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ACADEMIC CORE SPACES E-AC

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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.

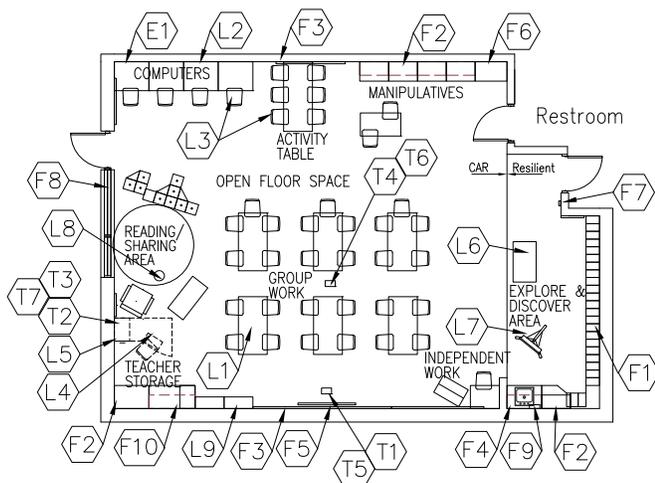
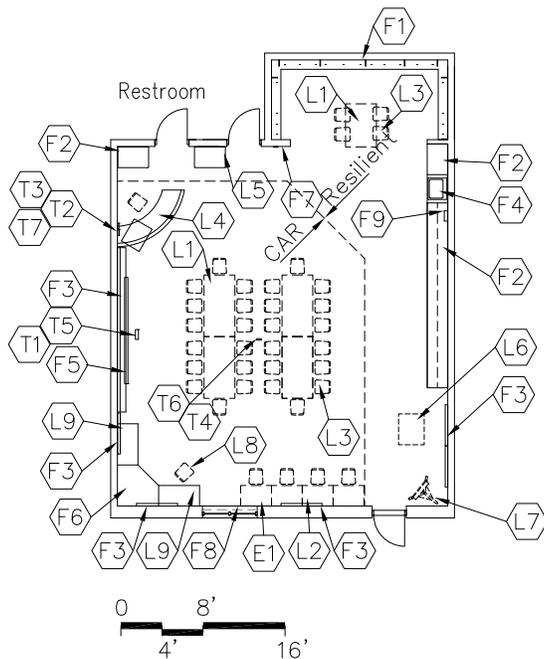
Following are the Academic Core space plates:

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
E-AC-8	Small Group Room
E-AC-9	Multi-Use Studio
E-AC-10	Kinesthetic Learning Studio

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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:

- Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.
 Recommended: Daylighting design with glazing area determined by design solution.
- Environmental sound control –
 wall only minimum STC 45
 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

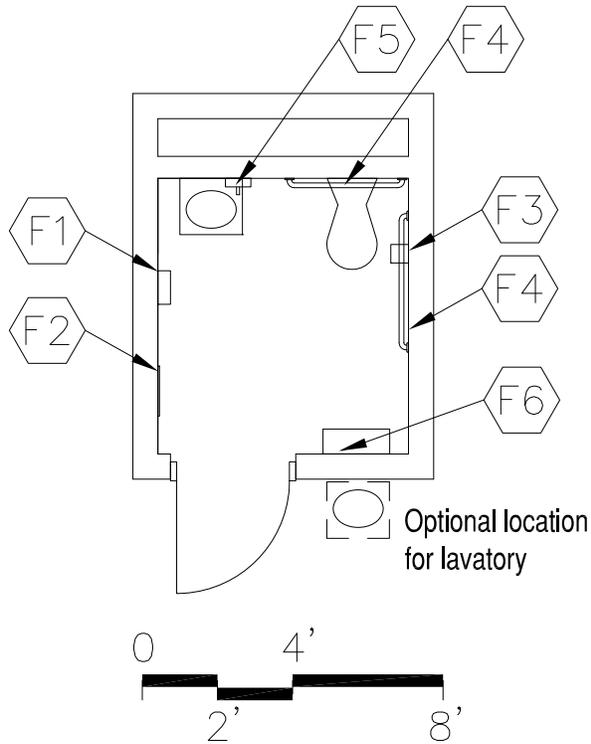
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile, with resilient options	096816 096500	F1 Open casework - student coats and personal items, (cubbies) (optional wall cabinets above)	123550
Optional: All linoleum, ET, sheet vinyl, or rubber	096516 096813	F2 18'-24' combination tall wardrobe, base and wall cabinets	123550
		F3 28'-36' combination marker board, tack board, & tackable surface	123550
<u>Base:</u>		F4 3' sink base cabinet	123550
Resilient base	096500	F5 Projection screen (optional)	115213
		F6 Technology support casework (could be mobile)	123550
<u>Ceiling:</u>		F7 Pencil sharpener support (optional)	062000
Suspended, acoustical	095113	F8 Window with integral blinds	085113
		F9 Towel dispenser (optional)	102813
<u>Walls:</u>		F10 36"- 42" high storage cabinet	123550
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		Sink with drinking fountain	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Student desks/tables		Supply/return air system	Div. 23
L2 Computer workstation furniture (fixed or mobile)		Independent temperature control	230923
L3 Student chairs		<u>Electrical:</u>	
L4 Teacher workstation/computer support and chair (fixed or mobile)		Fluorescent lighting	265100
L5 File cabinet		Illumination level: See Table 8600-5	
L6 Sand/water table		Multilevel switching	262726
L7 Children's painting easel		4 duplex receptacles	262726
L8 Teacher reading chair or stool		Double duplex receptacle adjacent to each data and video port	262726
L9 8'-10' of low bookcases (fixed or mobile)		Emergency lighting	265100
Loose carpet/rug (optional)		Means of egress lighting per code	265100
Wastebasket		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port near teacher workstation	271513
		T4 Wireless access point cable above ceiling	271513
		Central sound system	275123
		Clock	275313
		Sound reinforcement system	275127
		T5 Ultra-short throw interactive projector	274119
		T6 Wireless access point (WAP) as determined by design – refer to Note 4	272133
		T7 Classroom technology center videoport 271543, 274116, 274119, 275127	272133
<u>Electronic Safety and Security:</u>			
Life safety devices per code	283111		
<u>Miscellaneous:</u>			
Pencil sharpener (optional)			
E1 Duplex receptacle with dedicated circuit for wireless devices			

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.
4. **Baseline includes WAP cable per classroom. WAP device quantity/placement per 272133 requirements.**

**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:

- 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

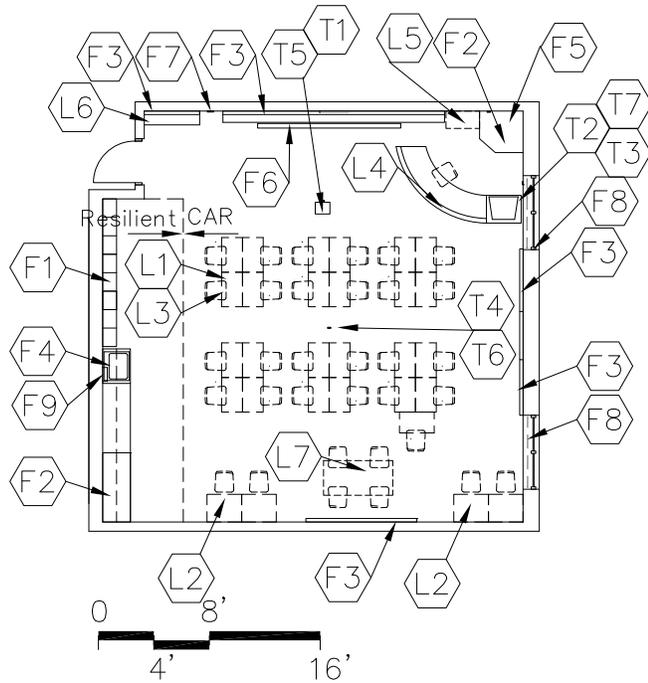
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET or	096516	F1 Towel dispenser	102813
sheet vinyl	096500	F2 24" x 60" mirror	102813
Optional: ceramic mosaic tile,	093000	F3 Toilet tissue holder	102813
porcelain tile, or	096723	F4 36" and 42" grab bar	102813
resinous flooring		F5 Soap dispenser	102813
		F6 Changing station (optional)	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Optional: ceramic mosaic tile,	093000		
porcelain tile, resinous flooring,	096723		
or integral vinyl cove base		<u>Plumbing:</u>	
		Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<u>Ceiling:</u>		<u>HVAC:</u>	
Suspended, acoustical	095113	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>Walls:</u>		<u>Electrical:</u>	
Painted concrete masonry units	042000/099100	Single level switching	262726
		Fluorescent lighting	265100
		illumination level: See Table 8600-5	
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
Wastebasket		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

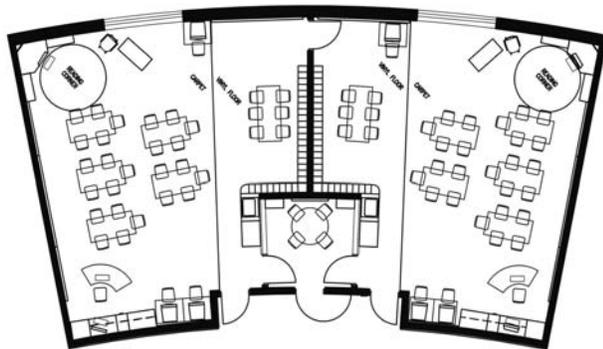
1. Finishes/Features: Refer to Chapter 9 for specification references.

**ELEMENTARY CLASSROOM
E-AC-3**

CHAPTER 4: ELEMENTARY SCHOOL



small group room
or tutor room -
part of classroom tolerance



CAPACITY: 25 students
SIZE: 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:

- Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.
Recommended: Daylighting design with glazing area determined by design solution.
- Environmental sound control –
wall only minimum STC 45
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

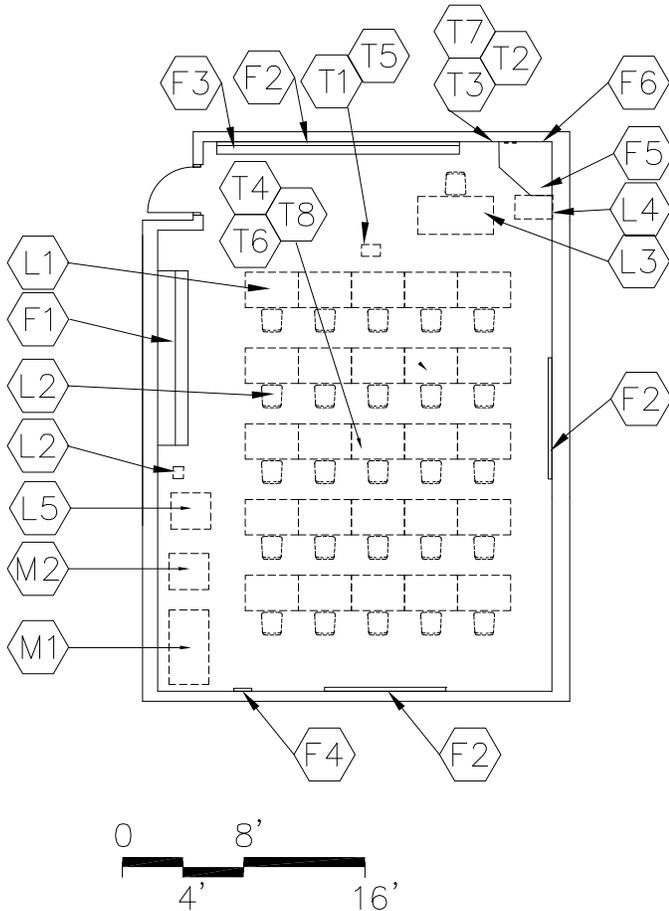
<u>FINISHES¹:</u>	<u>Spec. Ref.#</u>	<u>FEATURES¹:</u>	<u>Spec. Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile, with resilient options	096816 096500	F1 Open casework – student coats and personal items, “cubbies” for grades 1,2,3 (optional wall cabinets above)	123550 123550
Optional: All linoleum, ET, sheet vinyl, or rubber	096516 096813	F2 9'-12' combination tall wardrobe, base and wall cabinets	123550
<u>Base:</u>		F3 22'-36' combination marker board, tack board and tackable wall surface	123550
Resilient base	096500	F4 3' sink base cabinet	123550
<u>Ceiling:</u>		F5 Technology support casework	123550
Suspended, acoustical	095113	F6 Reserved	
<u>Walls:</u>		F7 Pencil sharpener support (optional)	062000
Painted concrete masonry units	042000/099100	F8 Windows with integral blinds	085113
		F9 Towel dispenser (optional)	102813
		F10 Projection screen (optional)	115213
<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 with drinking fountain	224000
L4 Teacher desk or workstation/computer support and chair		Plumbing connections	224000/221116/221119
L5 File cabinet		<u>HVAC:</u>	
L6 8'-10' of low bookcases (fixed or mobile)		Supply/return air system	Div. 23
Loose carpet/rug		Independent temperature control	230923
L7 Reading table		<u>Electrical:</u>	
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		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 projector video port	271543
• Mobile demonstration unit with portable water supply and sink		T2 1 voice port and phone	271513/273123
• (2)-(3) mobile storage cabinets for science equipment and materials		T3 1 data port	
		near teacher workstation	271513
		T4 Wireless access point cable above ceiling	271513
		Central sound system	275123
		Clock	275313
		Sound reinforcement system	275127
<u>Electronic Safety and Security:</u>		T5 Ultra-short throw interactive projector	274119
Life safety devices per code 283111		T6 Wireless access point (WAP) as determined by Design – refer to Note 5	272133
<u>Miscellaneous:</u>		T7 Classroom technology center video port	271543, 274116, 274119, 275127
M1 Pencil sharpener (optional)			
Operable partitions are optional between classrooms with tackboard/ markerboard surface	102226		
E1 Duplex receptacle with dedicated circuit for wireless devices			

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.
5. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**

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

CHAPTER 4: ELEMENTARY SCHOOL



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:

- Environmental sound control - wall only minimum STC 45
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.

CAPACITY: 25 students
SIZE: 1,000 SF

NOTES:

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

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

CHAPTER 4: ELEMENTARY SCHOOL

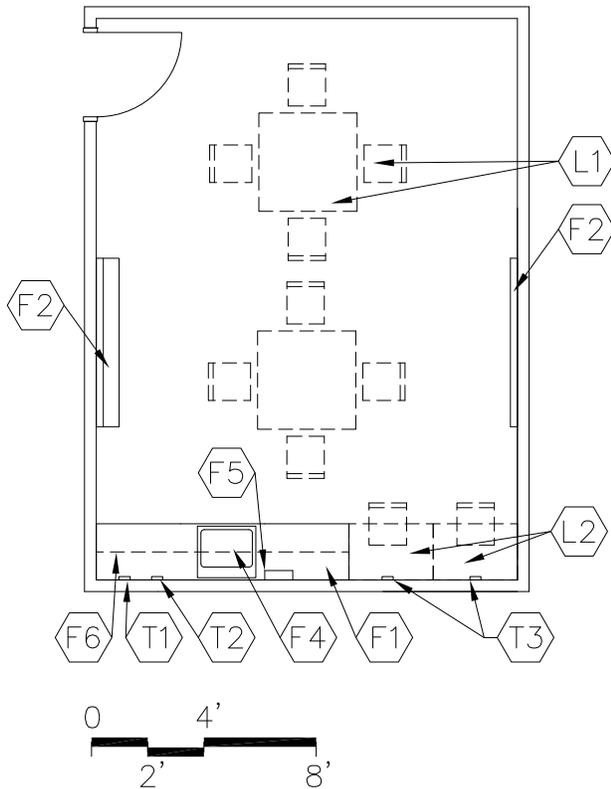
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, ET, sheet vinyl, or carpet tile	096816 096500 096813	F1 4'-16' of base & wall cabinets	123550
		F2 18'-28' combination marker board, tack board and tackable wall surface	101100
<u>Base:</u>		F3 Projection screen (optional)	115213
Resilient base	096500	F4 Pencil sharpener support (optional)	062000
<u>Ceiling:</u>		F5 3' of tall wardrobe with file drawers	123550
Suspended, acoustical	095113	F6 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 Computer workstation furniture (could be fixed)		N/A	
L2 Student chairs		<u>HVAC:</u>	
L3 Teacher desk/computer support and chair		Supply/return air system	Div. 23
L4 File cabinet		Independent temperature control	230923
L5 Printer / scanner stand		<u>Electrical:</u>	
Wastebasket		Fluorescent lighting with parabolic lenses	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		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 Ultra-short throw interactive projector	274119
		T6 Wireless access point (WAP) as determined by Design – refer to Note 3	272133
		T7 Classroom technology center video port	271543, 274116, 274119, 275127
		<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.
3. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**

TEACHER PREP AREA/WORKROOM E-AC-5

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: 6 - 8 teachers
 SIZE: 300 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**TEACHER PREP AREA/WORKROOM
E-AC-5**

CHAPTER 4: ELEMENTARY SCHOOL

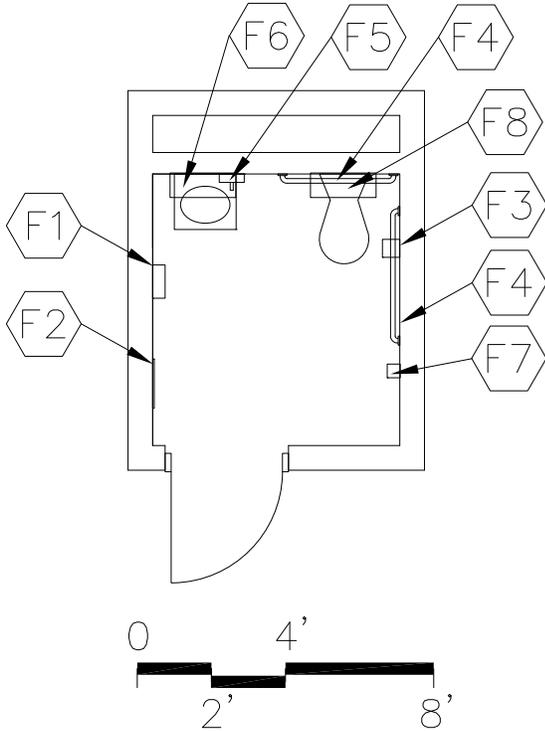
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile, ET, linoleum, sheet vinyl, or rubber	096816 096500 096516 096813	F1 About 6' of base cabinets	123550
		F2 10'-16' combination marker board, tack board and tackable wall surface	101100
		F3 Reserved	
<u>Base:</u>		F4 3' sink base cabinet	123550
Resilient base	096500	F5 Towel dispenser (optional)	102813
		F6 About 9' of wall cabinets	123550
<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	Sink	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Tables and chairs		Supply/return air system	Div. 23
L2 Computer workstation furniture		Independent temperature control	230923
Wastebasket		<u>Electrical:</u>	
		Single-level switching	262726
		Fluorescent lighting	265100
		illumination level: See Table 8600-5	
		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 projector video port	271543
		T2 1 voice port and phone	271513/273123
		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:

- 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

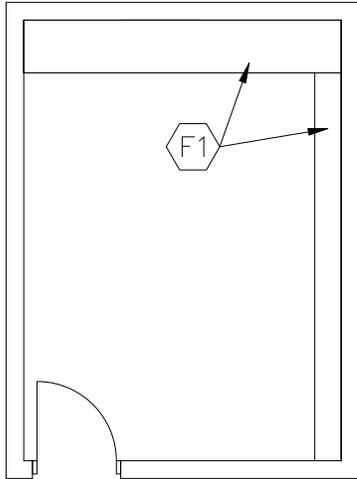
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, or		F1 Towel dispenser	102813
sheet vinyl	096500	F2 24" x 60" mirror	102813
Optional: Ceramic mosaic tile,	093000	F3 Toilet tissue holder	102813
porcelain tile, or	096723	F4 36" and 42" grab bar	102813
resinous flooring		F5 Soap dispenser	102813
		F6 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,	093000		
porcelain tile, resinous flooring,	096723		
or integral vinyl cove base			
		<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>			
Painted concrete masonry units	042000/099100		
		<u>HVAC:</u>	
		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 8600-5	
		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

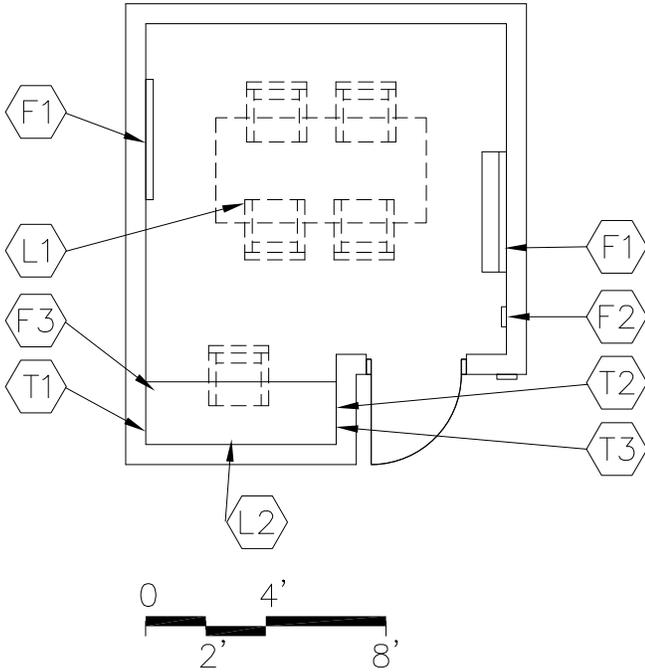
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber, <i>linoleum, ET, or sheet vinyl</i>	096500 096516	F1 10'-20' of open shelving, depths may vary (fixed or loose)	123550
		Option: mobile storage shelving	105626
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry	042000/099100	To be determined by Design Professional 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 8600-5	
		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.

**SMALL GROUP ROOM
E-AC-8**

CHAPTER 4: ELEMENTARY SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near academic core classrooms

ENVIRONMENTAL CONSIDERATIONS:

- Environmental sound control -
Wall only minimum STC 45
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 4 - 5 students
SIZE: 150 SF

NOTES:

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

**SMALL GROUP ROOM
E-AC-8**
CHAPTER 4: ELEMENTARY SCHOOL

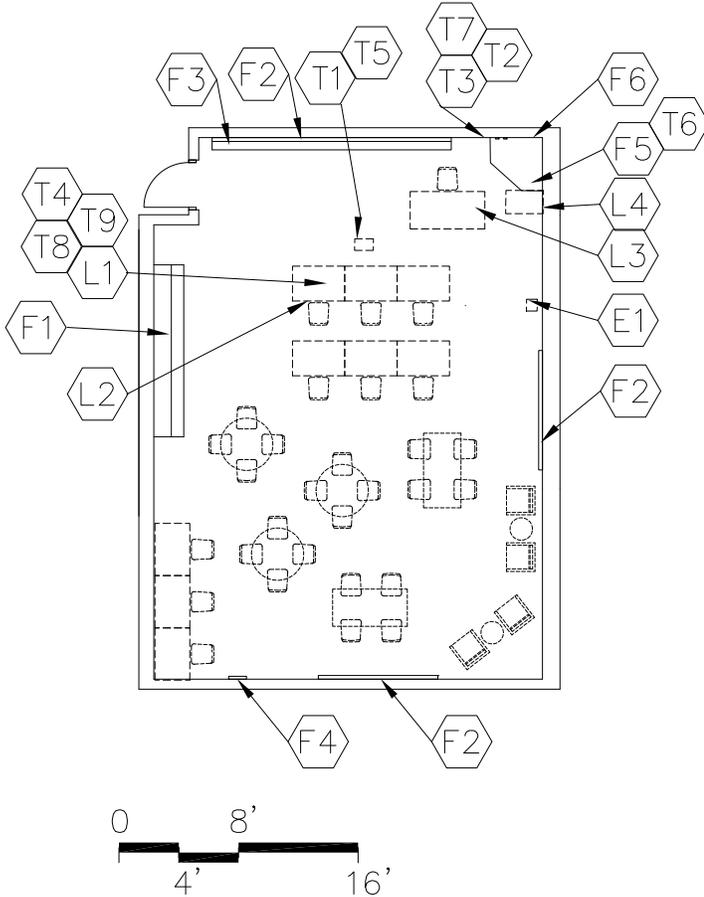
<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
Flooring:		<u>Fixed Items:</u>	
ET, sheet vinyl,	096500	F1 8'-10' combination of chalk/marker board,	
linoleum, or rubber	096516	tack board, or tackable wall surface	101100
Base:		F2 Pencil sharpener support (optional)	062000
Resilient base	096500	F3 4'-6' of work surface, loose or fixed	
Ceiling:		(optional)	123550
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
Walls:		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
L1 Work tables and chairs		<u>HVAC:</u>	
L2 Computer furniture		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
Pencil sharpener (optional)		(coupled with similarly loaded	
		adjacent spaces)	
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port	271513/273123
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior windows (optional)	081113/088000

NOTES:

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

**MULTI-USE STUDIO
E-AC-9**

CHAPTER 4: ELEMENTARY SCHOOL



CAPACITY: 25 students
 SIZE: 1,500 SF

PROGRAM ACTIVITIES:

- Group instruction and individual work
- Activities include instruction, production, and individual project work
- “Wet / Dry” activities

SPATIAL RELATIONSHIPS:

- Near kinesthetic studio
- Near academic core classrooms

ENVIRONMENTAL CONSIDERATIONS:

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

MISCELLANEOUS:

- Due to the changing nature of the activities anticipated, a multi-use studio is to be designed for flexibility of use.

NOTES:

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

**MULTI-USE STUDIO
E-AC-9**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, sheet vinyl, linoleum, rubber	096500	F1 4'-16' of base & wall cabinets	123550
	096516	F2 18'-28' combination marker board, tack board, or tackable wall surface	101100
<u>Base:</u>		F3 Projection screen (optional)	115213
Resilient base	096500	F4 Pencil sharpener support (optional)	062000
<u>Ceiling:</u>		F5 Tall wardrobe with file drawers	123550
Suspended, acoustical	095113	F6 Technology support casework	123550
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Flexible furniture		Fluorescent lighting with parabolic lenses	265100
L2 Student chairs		Illumination level: See Table 8600-5	
L3 Teacher desk and chair		Multilevel switching	262726
L4 File cabinet		6 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port near teacher workstation	271513
		T4 Classroom area network (10 ports minimum)	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Ultra-short throw interactive projector	274119
		T6 Combination i-Pod / CD Player unit and Mixer/Amp unit, located in the wardrobe, serving room overhead distributed speakers	
		T7 Classroom technology center video port 271543, 274116, 274119, 275127	
		T8 Wireless access point cable above ceiling	271513
		T9 Wireless access point (WAP) as determined by Design – refer to Note 3	272133
<u>Electronic Safety and Security:</u>			
Life safety devices per code	283111		
<u>Miscellaneous:</u>			
Pencil sharpener (optional)			
E1 Duplex receptacle with dedicated circuit for wireless devices			

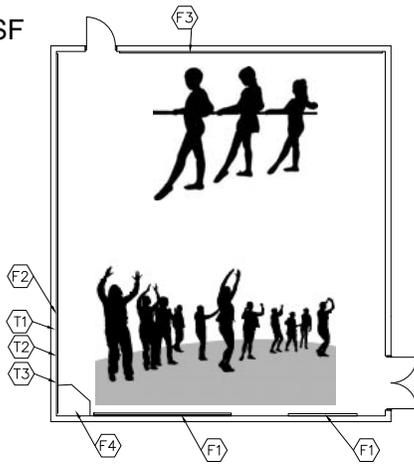
NOTES:

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. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**

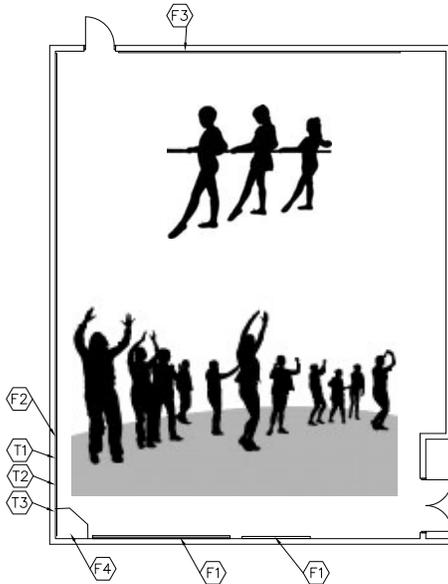
**KINESTHETIC LEARNING STUDIO
E-AC-10**

CHAPTER 4: ELEMENTARY SCHOOL

1,600 SF



2,400 SF



CAPACITY: 22-25 students
 SIZE: 1,200 – 2,400 SF

PROGRAM ACTIVITIES:

- Gross motor activities
- Dance
- Aerobics
- Gymnastics
- “Movement” activities

SPATIAL RELATIONSHIPS:

- Near multi-use studio
- Near academic core spaces

ENVIRONMENTAL CONSIDERATIONS:

- Environmental sound control -
 wall only minimum STC 45
 ceiling minimum CAC 35, NRC 0.70
- Flexibility of space

NOTES:

**KINESTHETIC LEARNING STUDIO
E-AC-10**

CHAPTER 4: ELEMENTARY SCHOOL

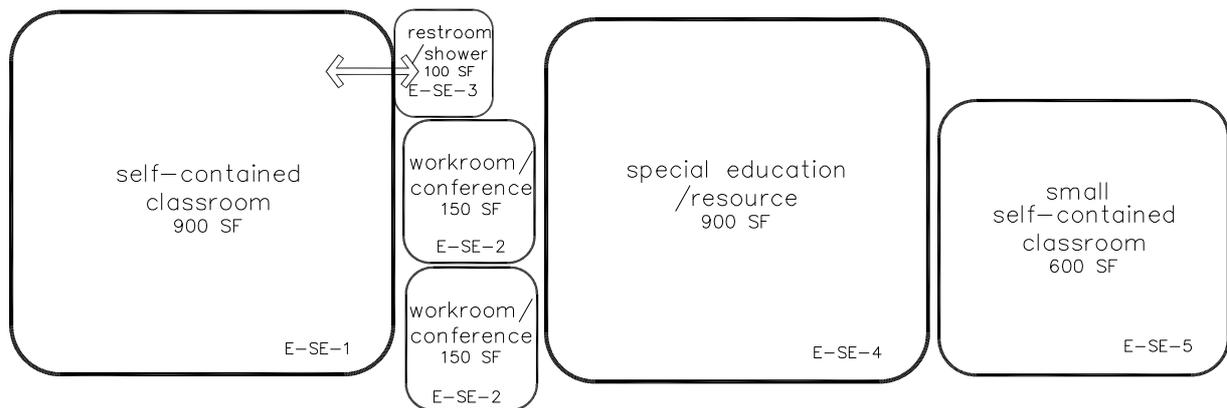
<u>FINISHES¹:</u>	<u>Spec. Ref.#</u>	<u>FEATURES:</u>	<u>Spec. Ref.#</u>
Flooring:		<u>Fixed Items:</u>	
Fluid applied athletic flooring	096766	F1 8'-24' combination marker board, tack board, or tackable wall surface	101100
Base:		F2 Mirrors	102813
Resilient base	096500	F3 Dance bars	116615
Ceiling:		F4 Tall wardrobe with file drawers	123550
Painted exposed structure	099100	<u>Fire Suppression:</u>	
Walls:		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Incandescent lighting (optional)	265100
		Multilevel switching	262726
		Dimmable lighting	262726
		6 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Means of egress lighting	265100
		Emergency lighting per code	265100
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port	271513
		Clock	275313
		Central sound system horns	275123
		T4 Combination i-Pod / CD Player unit and Mixer/Amp unit, located in the wardrobe, serving room overhead distributed speakers	
		<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.

SPECIAL EDUCATION SPACES
E-SE

CHAPTER 4: ELEMENTARY SCHOOL



NOTES:

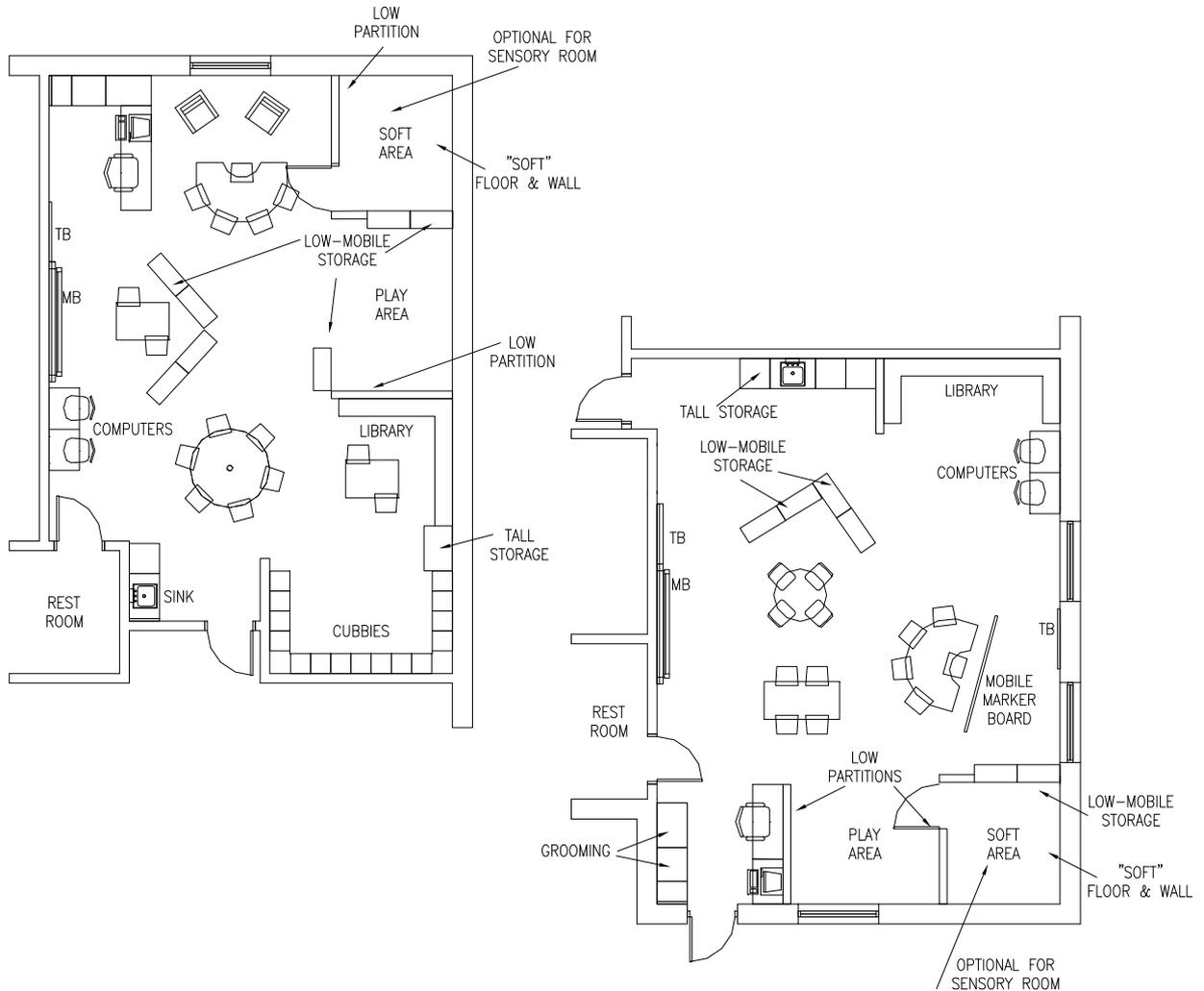
This is an example of how the special education spaces in an elementary school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

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

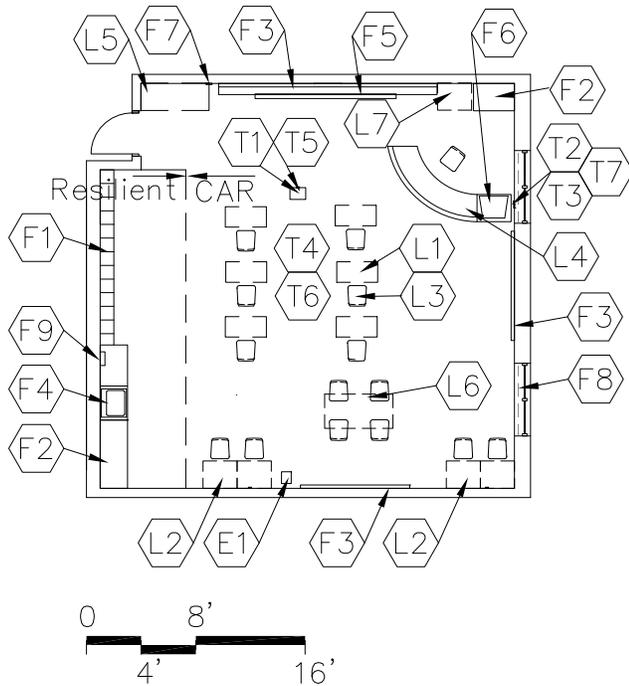


- Student capacity: 8-12 students
- Least restrictive environment
- ADA accessible
- Flexible or multiple displays
- Full-spectrum LED lighting
- Sound enhancement
- Age appropriate, moveable furniture with lock down features
- Adaptive equipment storage

- 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



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:

- Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.
Recommended: Daylighting design with glazing area determined by design solution.
- Environmental sound control -
wall only minimum STC 45
ceiling minimum CAC 35, NRC 0.70
- Resilient and stain-resistant floor covering
- Special consideration for wheelchair access and physical accessibility needs (ADA)

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

SIZE: 900 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 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

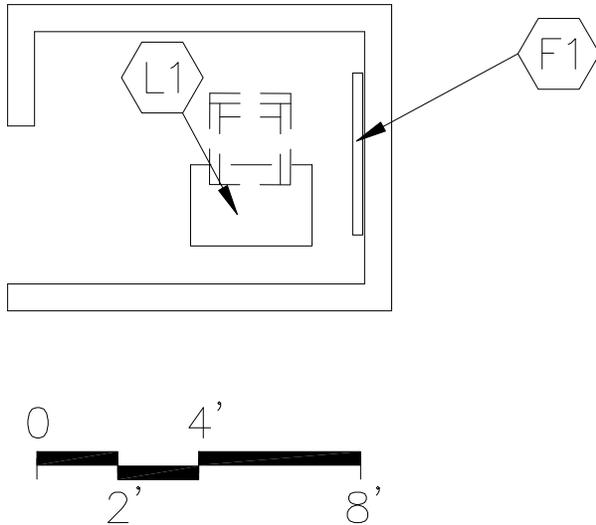
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile, with resilient options	096816 096500	F1 Open casework – student coats and personal items (optional wall cabinets above) (cubbies)	123550 123550
Optional: All ET, sheet vinyl, linoleum, or rubber	096516 096813	F2 9'-12' combination tall wardrobe, base & wall cabinets	123550
<u>Base:</u>		F3 24'-32' combination marker board, tackboard & tackable wall surface	123550
Resilient base	096500	F4 3' sink base cabinet	123550
<u>Ceiling:</u>		F5 Projection screen (optional)	115213
Suspended, acoustical	095113	F6 Technology support casework	123550
<u>Walls:</u>		F7 Pencil sharpener support (optional)	062000
Painted concrete masonry units		F8 Windows with integral blinds	085113
	042000/099100	F9 Towel dispenser (optional)	102813
<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 with drinking fountain	224000
L4 Teacher workstations/computer support and chair		Plumbing connections	224000/221116/221119
L5 8'-10' of low bookcases (fixed or mobile)		<u>HVAC:</u>	
L6 Reading table		Supply/return air system	Div. 23
L7 File cabinet		Independent temperature control	230923
Wastebasket		<u>Electrical:</u>	
<u>Electronic Safety and Security:</u>		Fluorescent lighting	265100
Life safety devices per code	283111	Illumination level: See Table 8600-5	
E1 Duplex receptacle with dedicated circuit for wireless devices		Multilevel switching	262726
<u>Miscellaneous:</u>		4 duplex receptacles	262726
Pencil sharpener (optional)		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port	
		near teacher workstation	271513
		T4 Wireless access point cable above ceiling	271513
		Clock	275313
		Sound reinforcement system	275127
		Central sound system	275123
		T5 Ultra-short throw interactive projector	274119
		T6 Wireless access point (WAP) as determined by Design – refer to Note 3	272133
		T7 Classroom technology center video port	271543, 274116, 274119, 275127

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. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**

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

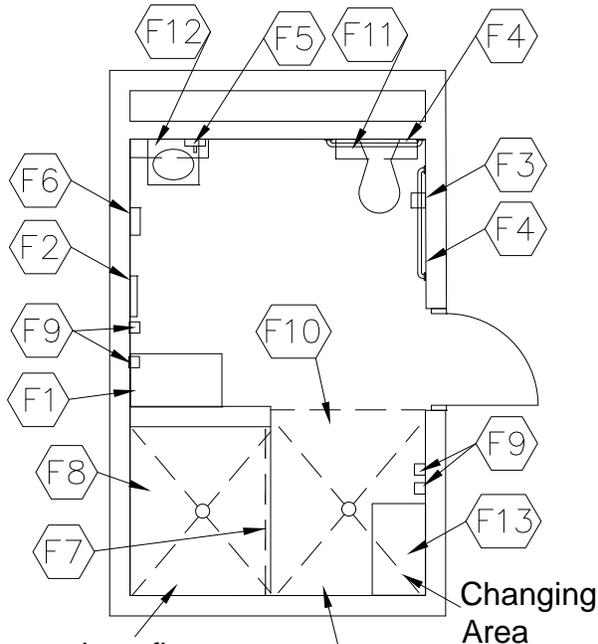
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile, ET, linoleum, or sheet vinyl	096816 096500 096516 096813	F1 4' of tack board or chalk board or marker board (optional)	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	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 8600-5	
		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**

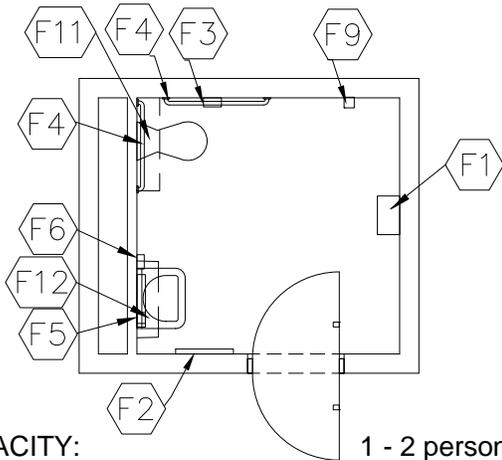
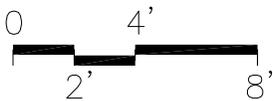
CHAPTER 4: ELEMENTARY SCHOOL



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

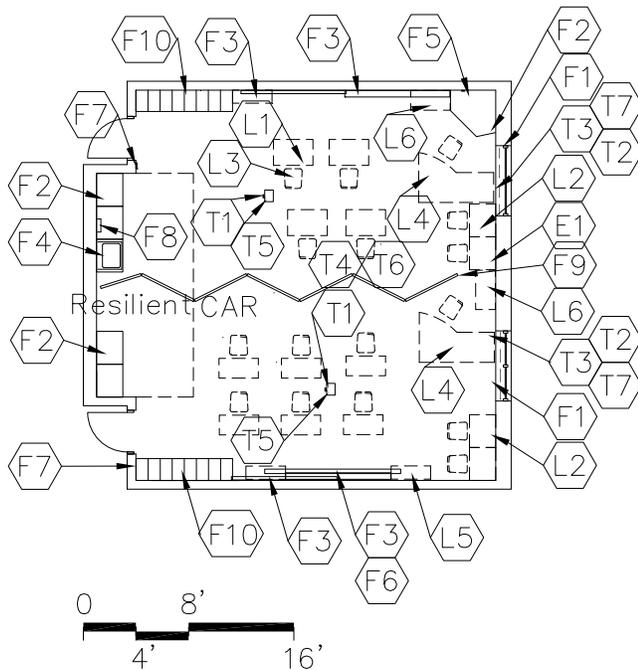
<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Restroom: ET, vinyl sheet, ceramic mosaic, porcelain tile	093000 096500	F1 Base cabinets	123550
Shower: Ceramic mosaic tile, or porcelain tile	093000	F2 24" x 60" mirror	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Towel dispenser	102813
Restroom: Resilient base, ceramic mosaic, porcelain tile, 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 (fixed or loose)	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>Walls:</u>		<u>Plumbing:</u>	
Epoxy painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
or ceramic wall tile in shower	093000	Wall-mounted lavatory	224000
and latex paint in restroom	099100	ADA shower controls and head	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		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:

- Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.
Recommended: Daylighting design with glazing area determined by design solution.
- Environmental sound control –
wall only minimum STC 45
ceiling minimum CAC 35, NRC 0.70

NOTES:

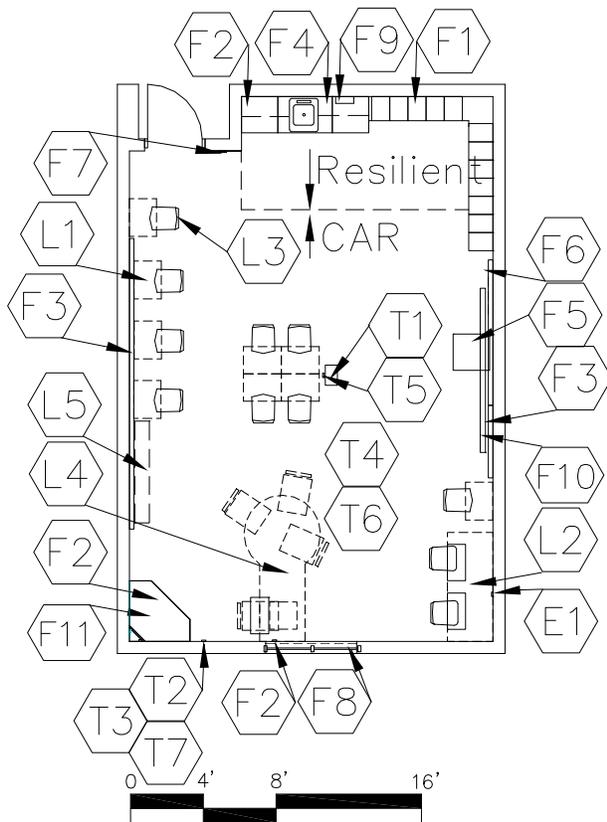
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this room or could be placed in a workroom/conference area.
3. See Chapter 1, page 1110-16 for specific areas needed for each disability.

**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 9'-12' combination tall wardrobe, base and wall cabinets	123550
		F3 24'-32' combination chalk/marker board tackboard & tackable wall surface	123550
<u>Base:</u>		F4 3' sink base cabinet	123550
Resilient base	096500	F5 Technology support casework	123550
		F6 Projection screen (optional)	115213
<u>Ceiling:</u>		F7 Pencil sharpener support (optional)	062000
Suspended, acoustical	095113	F8 Towel dispenser (optional)	102813
		F9 Operable partition (optional)	102226
<u>Walls:</u>		F10 Open casework coats and personal storage w/wall cabinets above	123550
Painted concrete masonry units	042000/099100	Mirror (optional)	102813
		Mobile storage cabinet (optional)	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks/tables		Fire suppression system	211000
L2 Computer workstation furniture		<u>Plumbing:</u>	
L3 Student chairs		Sink	224000
L4 Teacher desk /computer support and chair		Plumbing connections	224000/221116/221119
L5 Mobile bookcases or storage unit		<u>HVAC:</u>	
L6 File cabinet		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
		<u>Electrical:</u>	
<u>Electronic Safety and Security:</u>		Fluorescent lighting	265100
Life safety devices per code	283111	Illumination level: See Table 8600-5	
		Multilevel switching	262726
E1 Duplex receptacle with dedicated circuit for wireless devices		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
<u>Miscellaneous:</u>		<u>Communications:</u>	
Pencil sharpener (optional)		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
<u>Communications (cont'd):</u>		T3 1 data port near each teacher workstation	271513
T7 Classroom technology center video port 271543, 274116, 274119, 275127		T4 Wireless access point cable above ceiling	271513
		Clock	275313
		Sound reinforcement system	275127
		Central sound system	275123
		T5 Ultra-short throw interactive projector	274119
		T6 Wireless access point (WAP) as determined by Design – refer to Note 3	272133

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. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**



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:

- Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.
Recommended: Daylighting design with glazing area determined by design solution.
- Environmental sound control -
wall only minimum STC 45
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

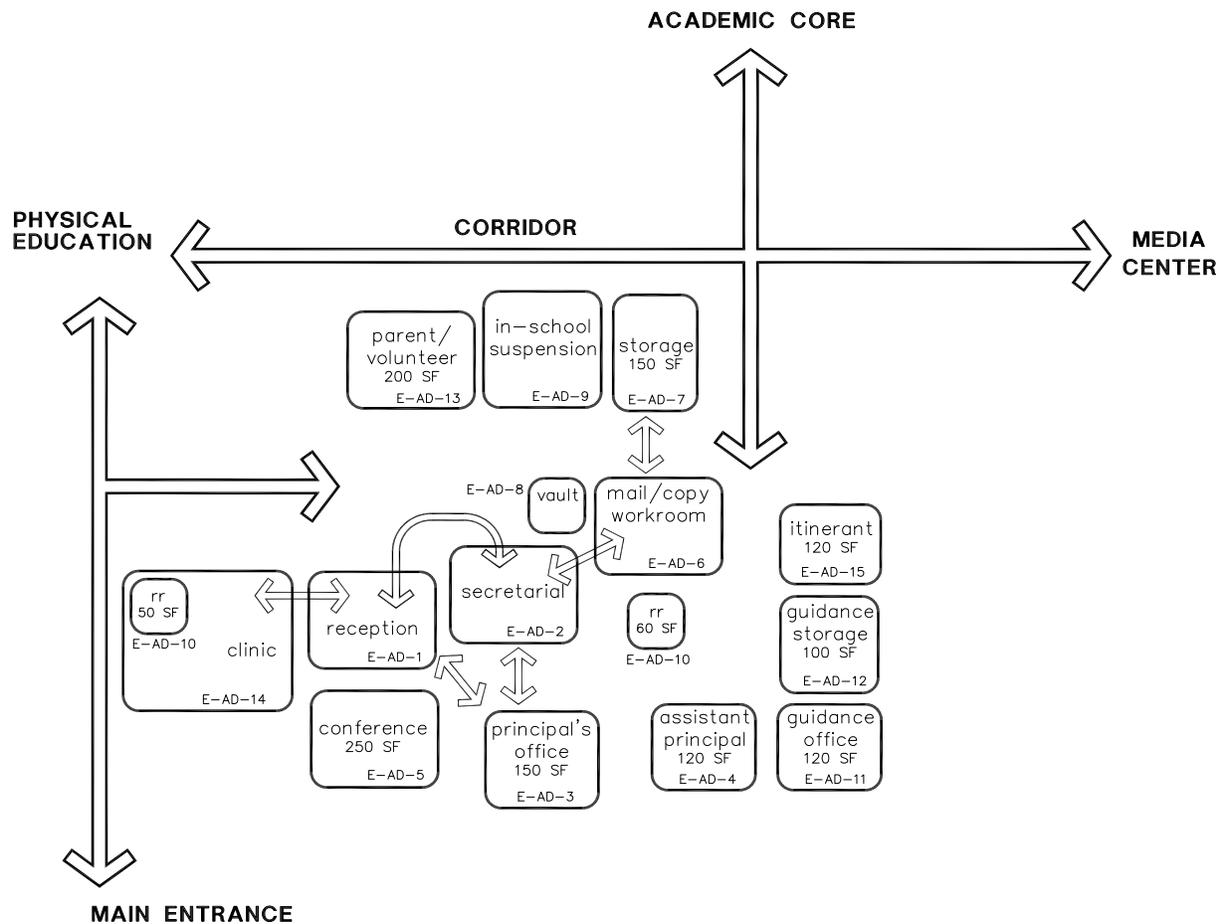
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, carpet tile, with resilient options	096816 096516	F1 Open casework – coats and personal items with wall cabinets above	123550
Option: All ET, sheet vinyl linoleum, or rubber	096500 096813	F2 Combination tall wardrobe, base and wall cabinets	123550
<u>Base:</u>		F3 20'-28' combination marker board, tackboard, tackable wall surface	123550
Resilient base	096500	F4 3' sink base cabinet	123550
<u>Ceiling:</u>		F5 Mobile storage cabinet (optional)	123550
Suspended, acoustical	095113	F6 Mirror (optional)	102813
<u>Walls:</u>		F7 Pencil sharpener support (optional)	062000
Painted concrete masonry units	042000/099100	F8 Windows with integral blinds	085113
		F9 Towel dispenser (optional)	102813
		F10 Projection screen (optional)	115213
		F11 Technology support casework	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 8600-5	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port near teacher workstation	271513
		T4 Wireless access point cable above ceiling	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Ultra-short throw interactive projector	274119
		T6 Wireless access point (WAP) as determined by Design – refer to Note 3	272133
		T7 Classroom technology center video port	271543, 274116, 274119, 275127
<u>LOOSE FURNISHINGS:</u>			
L1 Student desks/tables			
L2 Computer workstation furniture			
L3 Student chairs			
L4 Teacher workstations/computer support and chair			
L5 6' of low bookcases (fixed or mobile) Wastebasket			
<u>Electronic Safety and Security:</u>			
Life safety devices per code	283111		
E1 Duplex receptacle with dedicated circuit for wireless devices			
<u>Miscellaneous:</u>			
Pencil sharpener (optional)			

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. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**

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:

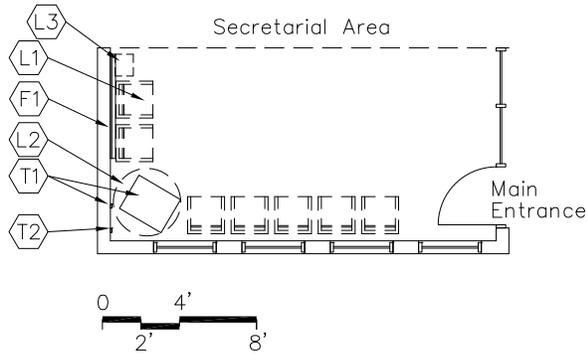
- E-AD-1 Reception Area
- E-AD-2 Secretarial Area
- E-AD-3 Principal's Office
- E-AD-4 Assistant Principal's Office
- E-AD-5 Conference Room
- E-AD-6 Mail/Work/Copy Room
- E-AD-7 Administrative Storage
- E-AD-8 Vault/Records Storage
- E-AD-9 In-school Suspension
- E-AD-10 Restroom
- E-AD-11 Guidance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

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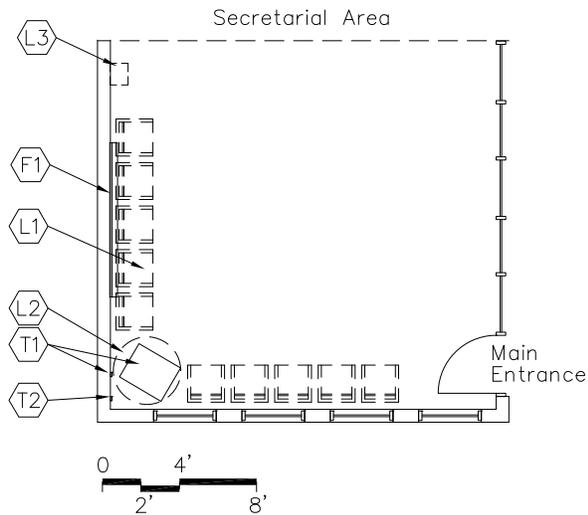
**RECEPTION AREA
E-AD-1**

CHAPTER 4: ELEMENTARY SCHOOL

200 SF



350 SF



CAPACITY: 6 - 8 or 8 - 10 visitors
SIZE: 200 - **350 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:

- 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

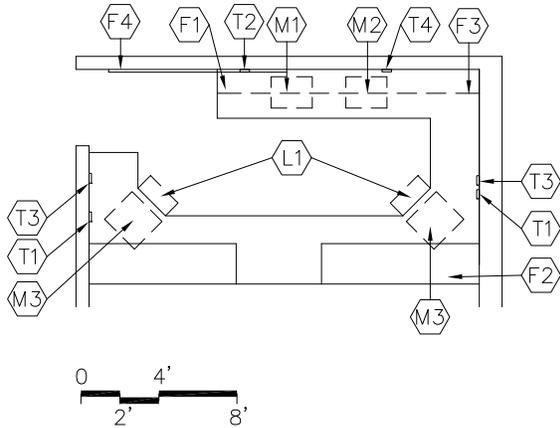
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 Tack board or tackable wall	
	096813	surface (optional)	101100
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted gypsum wallboard		Supply/return air system	Div. 23
over metal studs	092116/099100	Independent temperature control	230993
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Visitor chairs		Single level switching	262726
L2 End table		Fluorescent lighting	265100
L3 Racks for forms (optional)		Illumination level: See Table 8600-5	
Wastebasket		2 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to video port	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		T1 1 projector video port, monitor, and brackets	
			271543/274119
		T2 1 voice port and phone	271513/273123
		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:

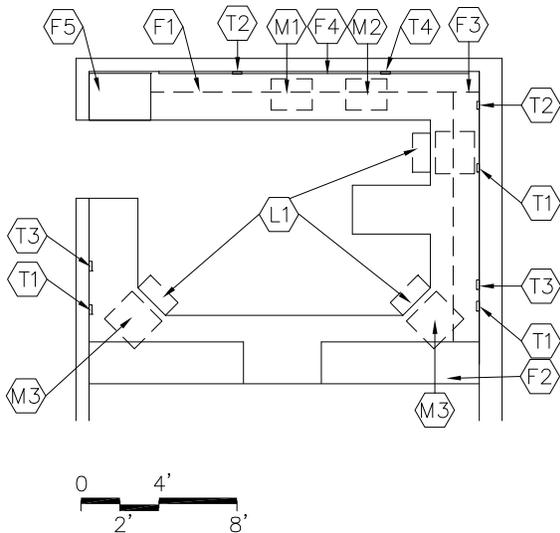
1. Finishes/Features: Refer to Chapter 9 for specification references.

CHAPTER 4: ELEMENTARY SCHOOL

200 SF ADA Compliant Approach



350 SF ADA Compliant Approach



CAPACITY: 1 - 2 or 2 - 3 staff
SIZE: 200 - **350** 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:

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

NOTES:

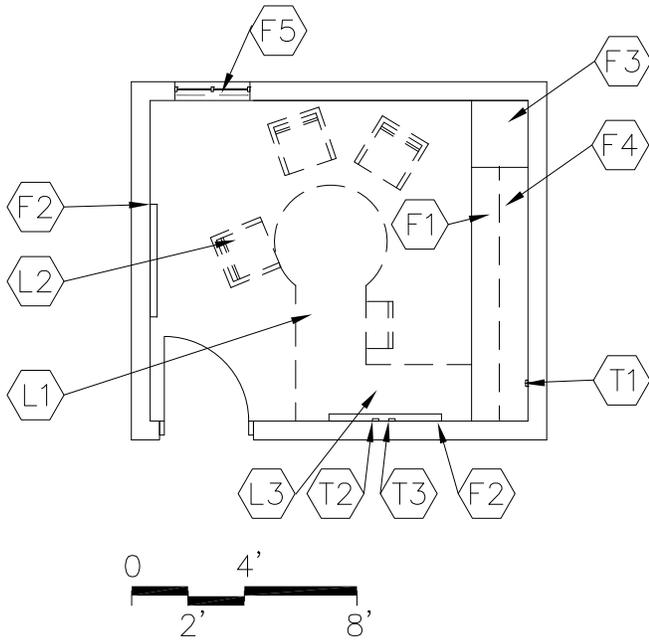
1. Loose furnishings shown represent one of many possible arrangements.

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

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring: Carpet <i>or</i> Carpet Tile	096816 096813	<u>Fixed Items²:</u> F1 24' - 60' of work surface with file drawers	123550
Base: Resilient base	096500	F2 42" high counter top with portion of counter 34" high or lower	123550
Ceiling: Suspended, acoustical	095113	F3 16'-24' of wall cabinets for forms, supplies, books, and manuals	123550
Walls: Painted gypsum wallboard over metal studs	092116/ 099100	F4 Tackable wall surface (optional) F5 Tall cabinet for coats (optional)	101100 123550
<u>LOOSE FURNISHINGS:</u> L1 Secretarial chairs Wastebasket		<u>Fire Suppression:</u> Fire suppression system	211000
		<u>Plumbing:</u> N/A	
		<u>HVAC:</u> Supply/return air system Temperature control with reception area (coupled with similarly loaded adjacent spaces)	Div. 23 230923
		<u>Electrical:</u> Single level switching Fluorescent lighting Illumination level: See Table 8600-5 3 duplex receptacles Double duplex receptacle adjacent to each data port Emergency lighting	262726 265100 262726 262726 265100
		<u>Communications:</u> T1 1 voice port and phone at each secretarial workstation T2 1 fax port T3 1 data port at each secretarial workstation T4 1 data port for printer Central sound system Clock	271513/ 273123 271513/273113 271513 271513 275123 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:

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

CAPACITY: 1 - 4 persons
SIZE: 150 SF

NOTES:

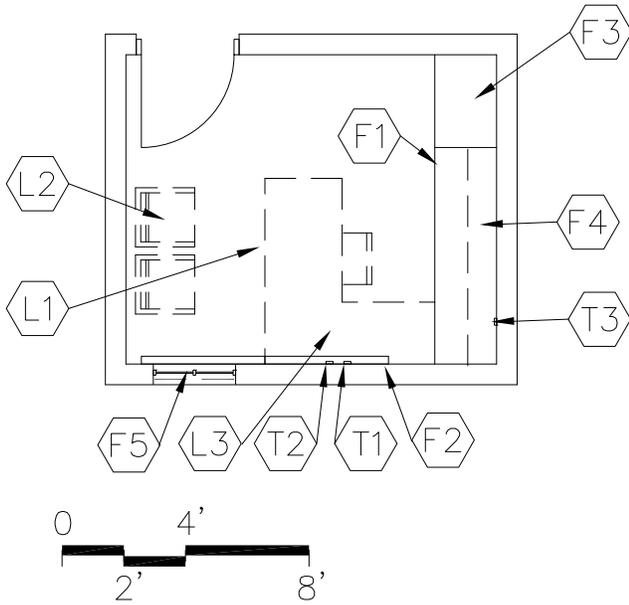
1. Loose furnishings shown represent one of many possible arrangements.

**PRINCIPAL'S OFFICE
E-AD-3**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet or Carpet Tile	096816 096813	<u>Fixed Items:</u>	
		F1 Work surface with file drawers	123550
		F2 4' of tack board, marker board, or tackable wall surface	101100
<u>Base:</u>			
Resilient base	096500	F3 Tall wardrobe	123550
		F4 Wall cabinets above work surface	123550
<u>Ceiling:</u>			
Suspended, acoustical	095113	F5 Window with integral blinds	085113
<u>Walls:</u>			
Painted gypsum wallboard over metal studs	092116/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>			
L1 Desk and chair		<u>Plumbing:</u>	
L2 Visitor chairs		N/A	
L3 Computer desk return Wastebasket		<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 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
<u>Communications:</u>			
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		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:

- 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

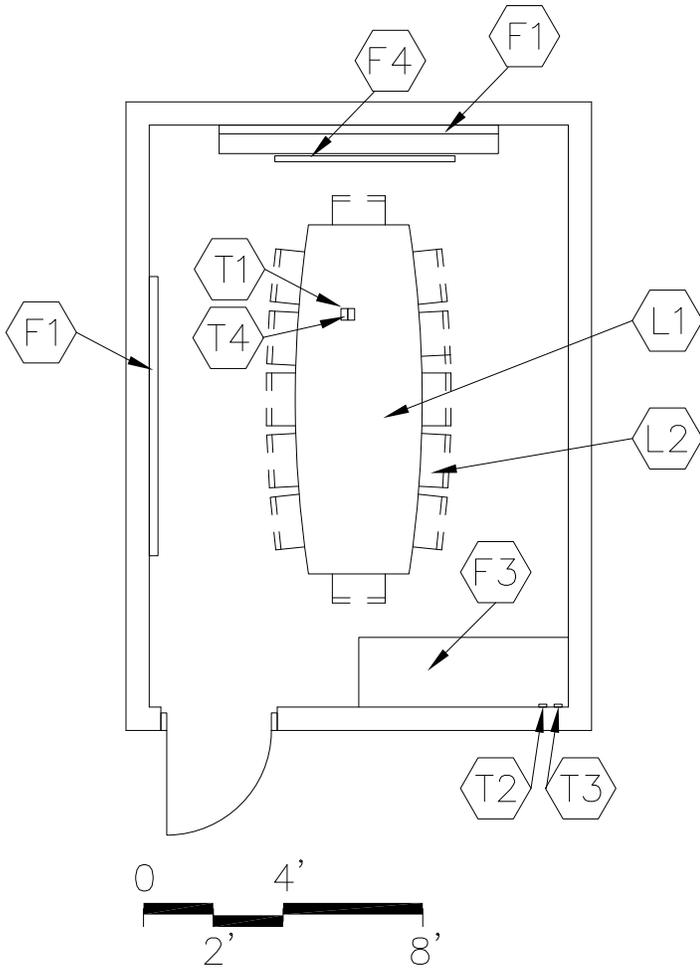
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board, marker board, or tackable wall surface	101100
<u>Base:</u>		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
<u>Ceiling:</u>		F5 Window with integral blind	085113
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted gypsum wallboard over metal studs	092116/099100	<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
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 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273123
		T2 1 data port near workstation	271513
		T3 1 projector video port	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:

- 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.#
Flooring:		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 16' combination of marker board, tackboard, tackable wall surface or media display cabinet	101100
Base:		F2 Reserved	
Resilient base	096500	F3 4'-6' of base cabinets (optional)	123550
Ceiling:		F4 Projection screen (optional)	115213
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
Walls:		Fire suppression system	211000
Painted gypsum wallboard over metal studs	092116/099100	<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
L1 Conference table		<u>HVAC:</u>	
L2 Chairs		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
		<u>Electrical:</u>	
		Multilevel switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		T4 Ultra-short throw interactive projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

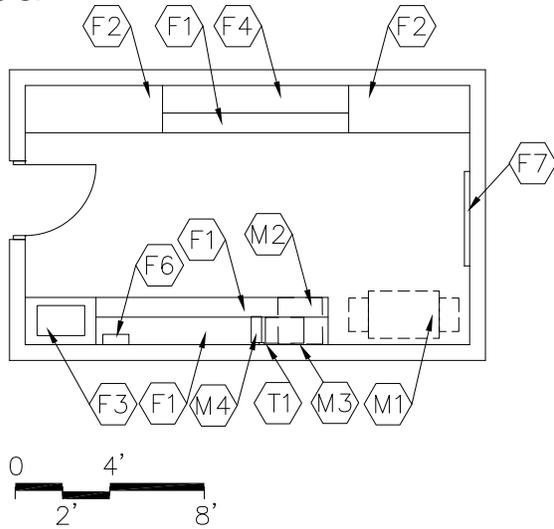
NOTES:

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.

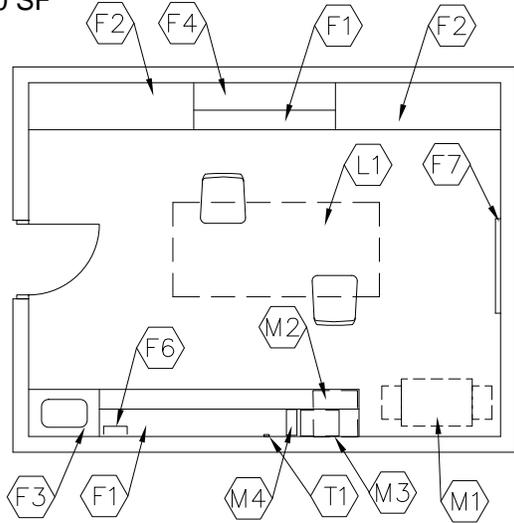
**MAIL/WORK/COPY ROOM
E-AD-6**

CHAPTER 4: ELEMENTARY SCHOOL

200 SF



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:

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

CAPACITY:
SIZE:

N/A
200 - 400 SF

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

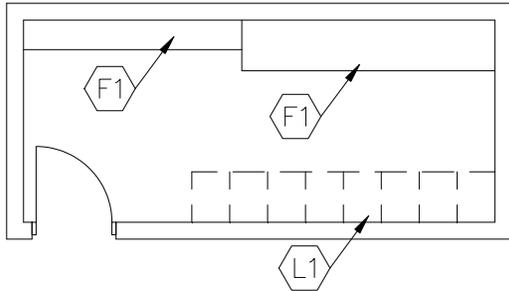
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet, carpet tile, linoleum, rubber, ET, or sheet vinyl	096500 096516 096816 096813	<u>Fixed Items:</u>	
		F1 20'-24' combination base and wall cabinets	123550
		F2 8'-12' of tall storage cabinets or about 32' maximum of a combination storage cabinets	123550
<u>Base:</u>		F3 3' sink base cabinet	123550
Resilient base	096500	F4 Mail cubicles for all staff	123200
<u>Ceiling:</u>		F5 Reserved	
Suspended, acoustical	095113	F6 Towel dispenser (optional)	102813
<u>Walls:</u>		F7 4' tack board or marker board (optional)	101100
Painted gypsum wallboard over metal studs	092116/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Work table and chairs (applicable in 300 SF space only)		Sink	224000
Wastebasket		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 8600-5	
		3 - 5 duplex receptacles	262726
		Receptacle for copier	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ 273123
		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



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

N/A

CAPACITY: N/A
 SIZE: 100 - 150 SF

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>	
Carpet, carpet tile, linoleum, rubber, ET, or sheet vinyl	096500 096816 096813 096516	F1 10'-20' of open shelving, depth may vary (fixed or loose)	123550
		Option: mobile storage shelving	105626
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	To be determined by Design Professional Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 File cabinets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

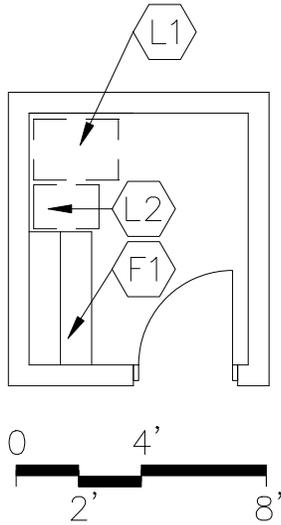
NOTES:

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

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

CHAPTER 4: ELEMENTARY SCHOOL

50 SF



PROGRAM ACTIVITIES:

- Storage of records and security files in a secure area

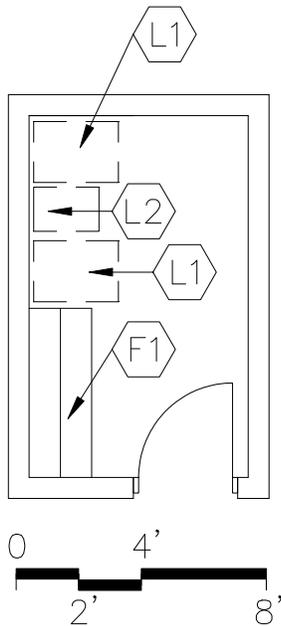
SPATIAL RELATIONSHIPS:

- Access to guidance area
- Access to secretarial personnel

ENVIRONMENTAL CONSIDERATIONS:

N/A

80 SF



CAPACITY:
SIZE:

N/A
80 – 115 SF

NOTES:

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

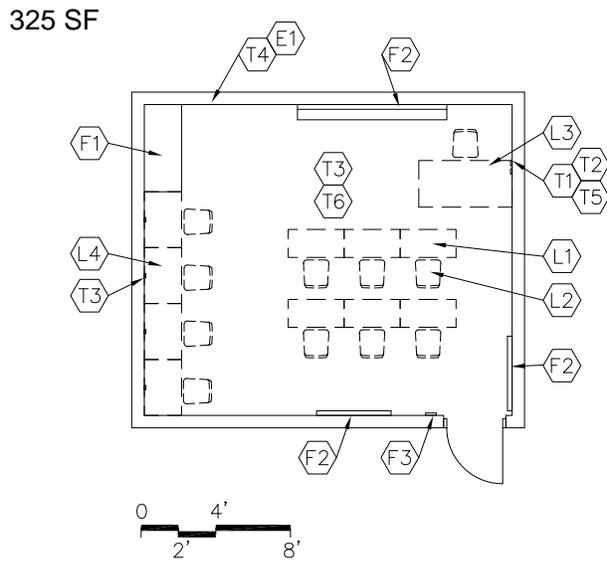
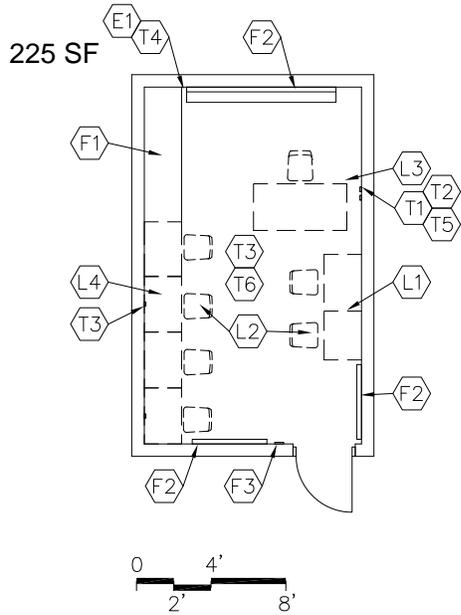
**VAULT/RECORDS STORAGE
E-AD-8**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet, carpet tile, linoleum, rubber, ET, or sheet vinyl	096500 096816 096813 096516	F1 Open sheving (width may vary), (depth may vary)(fixed or loose)	123550 105626
Option: mobile storage shelving			105626
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Rated 2-hour construction	---	N/A	
Walls:		<u>HVAC:</u>	
Rated 2-hour construction		To be determined by Design Professional	
Painted concrete masonry units or	042000/099100	<u>Electrical:</u>	
Painted gypsum wallboard on metal studs	092116/099100	Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		1 duplex receptacle	262726
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
L1 File cabinet (2 in 80 SF room)		N/A	
L2 Safe (loose or fixed)		<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.



CAPACITY: 5 - 8 students
SIZE: 225 - 600 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:

- 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.

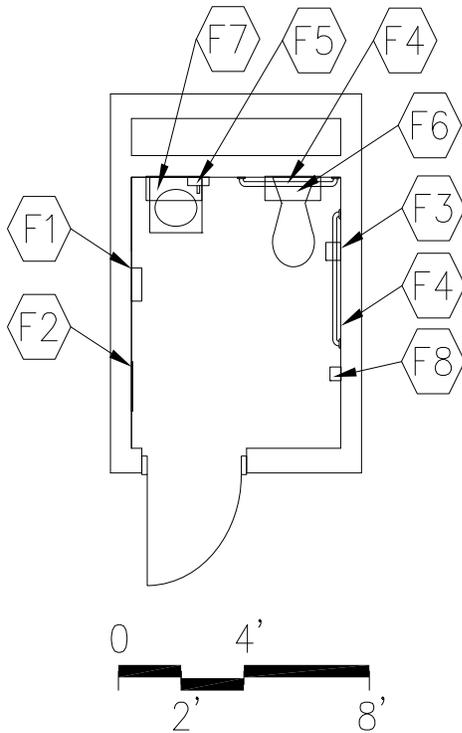
**IN-SCHOOL SUSPENSION
E-AD-9**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile,	096816	F1 3'-4' of base cabinets (optional)	123550
ET, linoleum,	096500	F2 10'-16' combination marker board,	101100
rubber, or sheet vinyl	096813	tackboard or tackable wall surface	
	096516	F3 Pencil sharpener support (optional)	062000
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Student carrels and/or desks		Single level switching	262726
L2 Student chairs		Fluorescent lighting	265100
L3 Teacher workstation and chair		Illumination level: See Table 8600-5	
L4 Computer workstation furniture		4 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273123
		T2 1 data port near teacher workstation	271513
		T3 Wireless access point cable above ceiling	271513
		T4 1 projector video port	271543
		Clock	275313
		Central sound system	275123
		T5 Classroom technology center video port	271543, 274116, 274119, 275127
		T6 Wireless access point (WAP) as determined by Design – refer to Note 2	272133
<u>Electronic Safety and Security:</u>			
Life safety devices per code	283111		
E1 Duplex receptacle with dedicated circuit for wireless devices			
<u>Miscellaneous:</u>			
Pencil sharpener (optional)			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Located in the administrative area

ENVIRONMENTAL CONSIDERATIONS:

- 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:

**RESTROOM
E-AD-10**
CHAPTER 4: ELEMENTARY SCHOOL

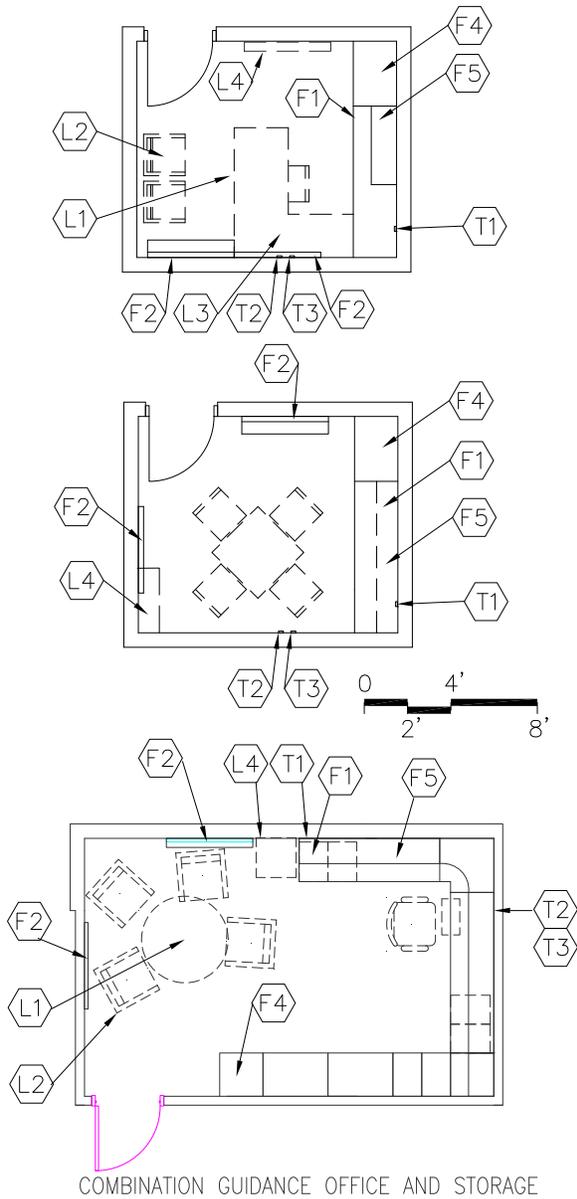
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, or sheet vinyl		F1 Towel dispenser	102813
Optional: ceramic mosaic tile,	096500	F2 24" x 60" mirror	102813
porcelain tile, or	093000	F3 Toilet tissue holder	102813
resinous flooring	096723	F4 36" and 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,	096723		
or integral vinyl cove base			
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units		Wall-mounted water closet	224000
	042000/099100	Wall-mounted lavatory	224000
Optional: moisture & abuse-resistant gypsum wall board	092116	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 8600-5	
		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: 100 - 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:

- 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

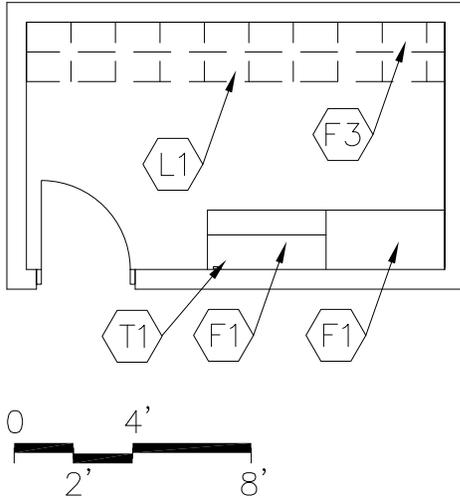
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' - 8' combination marker board, tack board, tackable wall surface	101100
<u>Base:</u>		F3 Reserved	
Resilient base	096500	F4 Tall wardrobe	123550
<u>Ceiling:</u>		F5 Wall cabinets	123550
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted gypsum wallboard over metal studs	092116/099100	<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
L1 Desk or table, with chair		<u>HVAC:</u>	
L2 Visitor chairs		Supply/return air system	Div. 23
L3 Computer desk return		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L4 Bookcase (fixed or loose) Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		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: N/A
 SIZE: 55 - 150 SF

NOTES:

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

**GUIDANCE RECORDS/STORAGE
E-AD-12**
CHAPTER 4: ELEMENTARY SCHOOL

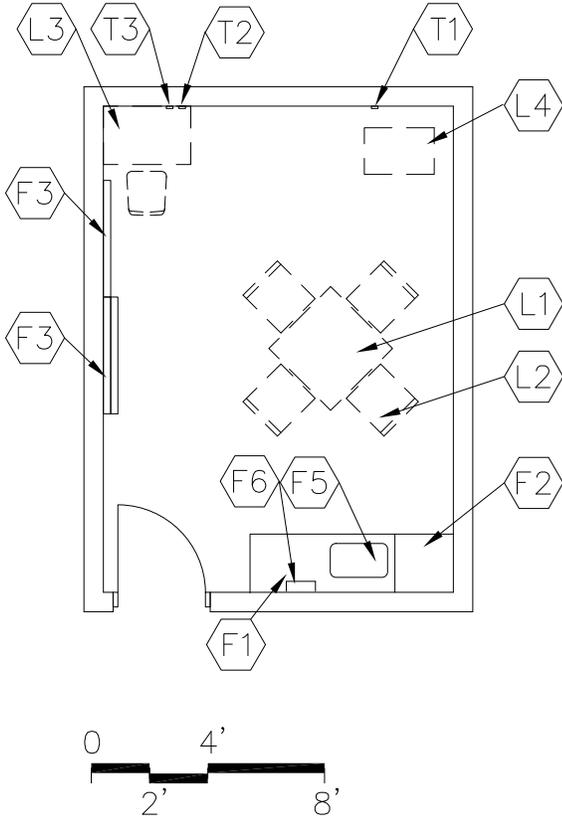
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile, linoleum, rubber, ET or sheet vinyl	096500 096813 096816 096516	F1 6'-10' combination base and wall cabinets or tall cabinets	123550
		Option: mobile storage shelving or file cabinets	105626
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Rated 2-hour construction	---	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Rated 2-hour construction		To be determined by Design Professional	
Painted gypsum wallboard over metal studs or	092116/099100		
Painted concrete masonry units	042000/099100	<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		1 duplex receptacle	262726
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
L1 File cabinets		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:

- 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 - 300 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 or Carpet Tile	096816	F1 About 3' of base cabinets	123550
	096813	F2 Tall wardrobe	123550
<u>Base:</u>		F3 4'-8' combination marker board, tack board, tackable wall surface	101100
Resilient base	096500	F4 Reserved	
<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 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port and video display device	271543/274119
		T2 1 voice port and phone	271513/273123
		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	

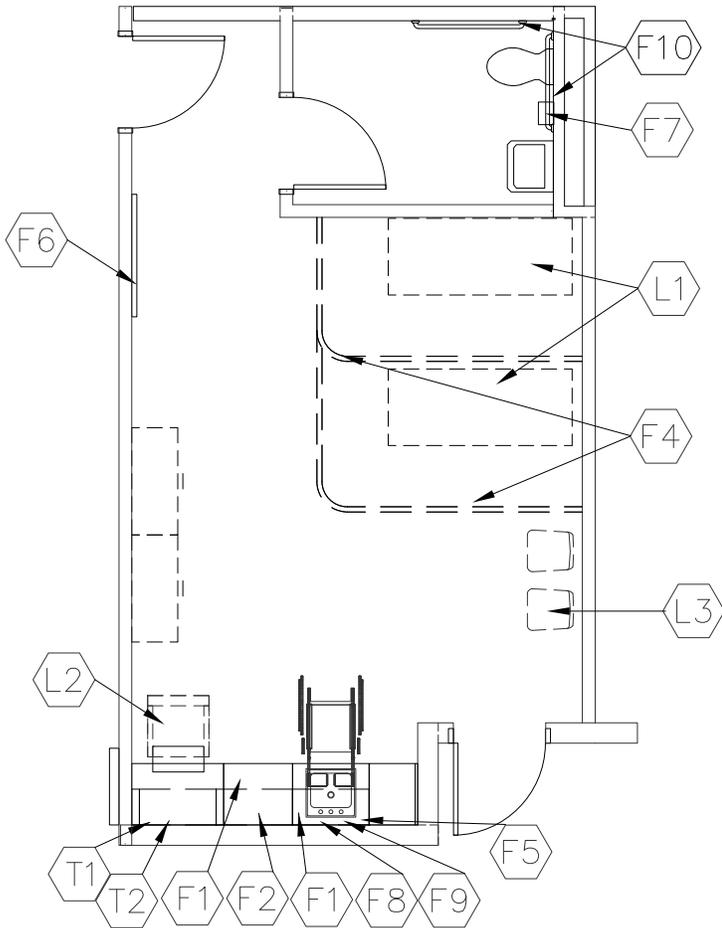
NOTES:

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 - 5 patients
 SIZE: Clinic.....240 - **740** 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:

- 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.

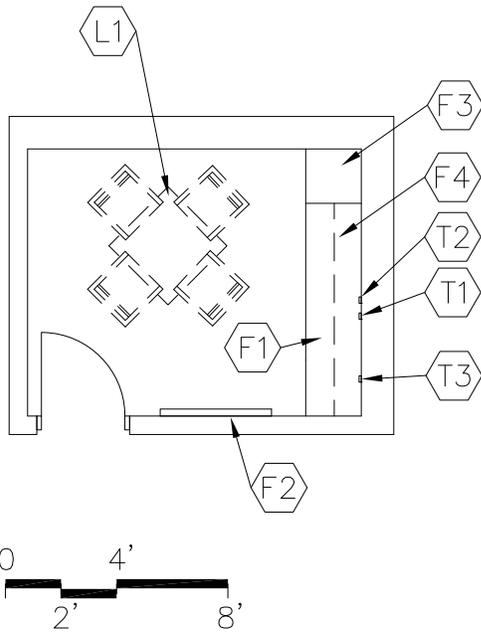
HEALTH CLINIC (includes restroom)
E-AD-14

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Linoleum, ET,	096516	F1 8'-18' combination base & lockable	123550
sheet vinyl, or	096500	wall cabinets	
resinous flooring	096723	F2 3' sink base cabinet	123550
Restroom: ET, sheet vinyl,	096500	F3 Reserved	
resinous flooring, ceramic	093000	F4 Cubicle curtain and track	102123
mosaic, or porcelain tile	096723	F5 Towel dispenser	102813
Base:		F6 4' of tack board	101100
Resilient base, resinous flooring,	096500	F7 Sanitary napkin dispenser/disposal	102813
integral vinyl cover base,	096723	F8 Soap dispenser	102813
ceramic mosaic tile, porcelain tile	093000	F9 24" x 60" mirror	102813
Ceiling:		F10 36" and 42" grab bars	102813
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
Walls:		Fire suppression system	211000
Painted gypsum wallboard		<u>Plumbing:</u>	
over metal studs	092116/099100	Wall-mounted water closet	224000
<u>LOOSE FURNISHINGS:</u>		Wall-mounted lavatory	224000
L1 Cots		Sink - with goose neck	224000
L2 Desk and chair		Plumbing connections	224000/221116/221119
L3 Chairs		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
<u>EQUIPMENT</u>		Independent temperature control	230923
E1 Refrigerator with ice making capabilities		Exhaust directly to exterior	
		<u>Electrical:</u>	
		Single level switching with dimmer	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		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/ 273123
		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.



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:

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

APACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

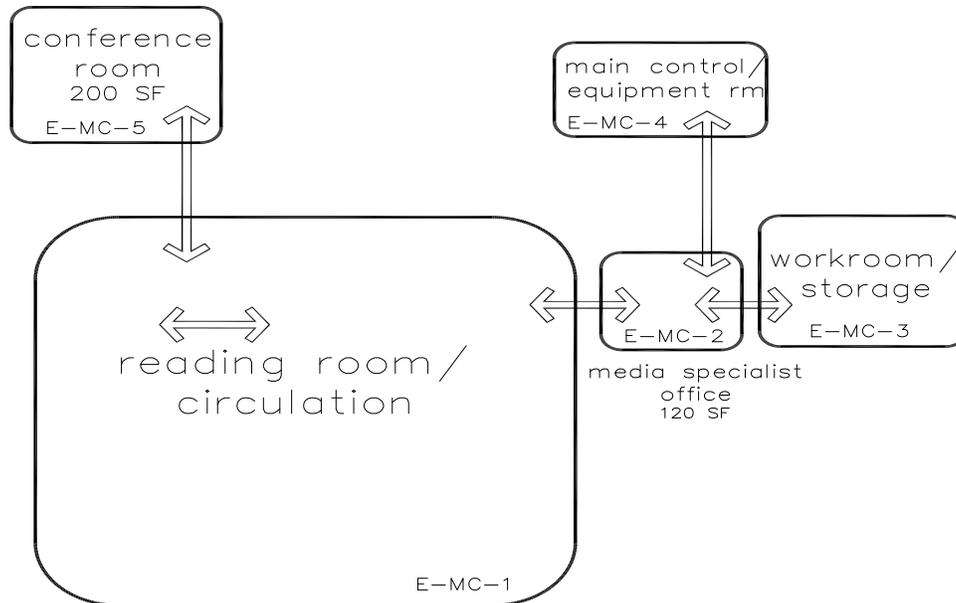
1. Loose furnishings shown represent one of many possible arrangements.

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

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 Work surface with file drawers(optional)	123550
	096813	F2 4'-8' of tack board, marker board or tackable wall surface	101100
<u>Base:</u>		F3 Tall wardrobe (optional)	123550
Resilient base	096500	F4 Wall cabinets	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Table and chairs		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273123
		T2 1 data port	271513
		T3 1 projector video port	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.

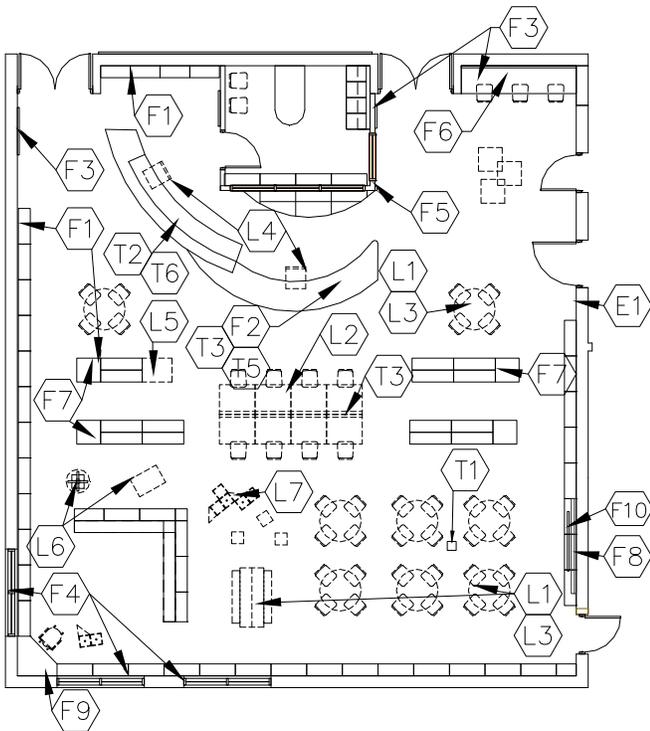
Following are the Media Center space plates:

- 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:

- Natural light opening with an operable vent
- Environmental sound control -
 wall only minimum STC 45
 ceiling minimum CAC 35, NRC 0.70

NOTES:

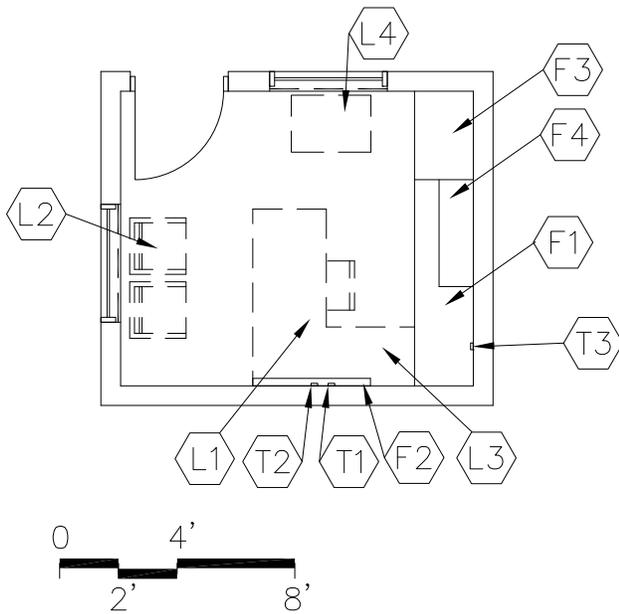
1. Loose furnishings shown represents one of many possible arrangements.

**READING ROOM/CIRCULATION
E-MC-1**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 Library book shelving (see notes)	115123
	096813	F2 Circulation desk casework	123550
<u>Base:</u>		F3 12'-16' of tack board or tackable wall surface (optional)	101100
Resilient base	096500	F4 Windows with integral blinds (optional)	085113
<u>Ceiling:</u>		F5 Pencil sharpener support (optional)	062000
Suspended, acoustical	095113	F6 Computer workstations (could be loose)	123550
<u>Walls:</u>		F7 Search terminal stations	123550
Painted concrete masonry units	042000/099100	F8 Marker board (optional)	101100
Acoustical wall treatment	098000	F9 Technology support casework	123550
		F10 Projection screen (optional)	115213
		Roller window shades (optional)	122413
<u>LOOSE FURNISHINGS³:</u>		<u>Fire Suppression:</u>	
L1 Student tables		Fire suppression system	211000
L2 Computer workstation furniture		<u>Plumbing:</u> N/A	
L3 Student chairs		<u>HVAC:</u>	
L4 Circulation desk task chair		Supply/return air system	Div. 23
L5 Atlas stand		Independent temperature ctrl	230923
L6 Paperback book rack		<u>Electrical:</u>	
L7 Modular picture book display		Multi-level switching	262726
Wastebaskets		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		6 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Means of egress lighting per code	265100
		Emergency lighting	265100
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Communications:</u>	
		T1 1 projector video ports and video display devices	271543/274119
		T2 1 voice port and phone	271513/273123
		T3 Wireless access point cable above ceiling	271513
		T4 1 data port for library automation system	271513
		Clock	275313
		Central sound system	275123
		T5 Wireless access point (WAP) as determined by Design – refer to Note 6	272133
<u>Miscellaneous:</u> Various sizes of casework for dictionaries, magazines, displays, card catalog, etc., may be required.			
Pencil sharpener (optional)			
E1 Duplex receptacle with dedicated circuit for wireless devices			
<u>Communications (cont'd):</u>			
T6 Classroom technology center video port 271543, 274116, 274119, 275127			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Fixed casework and loose furnishings can be interchangeable.
3. Circulation desk(s) and library shelving can be loose furnishings.
4. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
5. Up to 20% of book shelving can be movable.
6. **Baseline includes WAP cable. WAP device quantity / placement per 272133 requirements.**



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:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

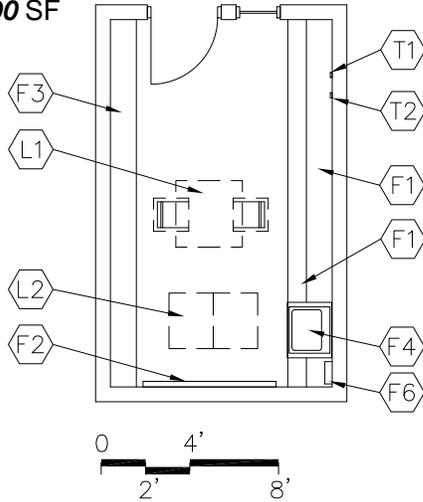
**MEDIA SPECIALIST OFFICE
E-MC-2**
CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board, marker board, or tackable wall surface	
<u>Base:</u>		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets	123550
<u>Ceiling:</u>		F5 Bookcases (optional)	123550
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
		N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return		(coupled with similarly loaded	
L4 File cabinet		adjacent spaces)	
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		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	271513/273123
		T2 1 data port near workstation	271513
		T3 1 projector video port	271543
		Central sound system	275123
		Clock	275313
		<u>Miscellaneous:</u>	
		Interior window	081113/088000

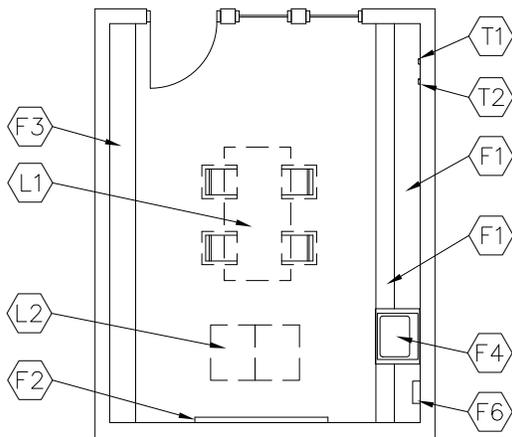
NOTES:

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.

190 SF



250 SF



CAPACITY:
SIZE:

1 - 3 staff
190 - 400 SF

PROGRAM ACTIVITIES:

- Receiving, processing, and repairing media material

SPATIAL RELATIONSHIPS:

- Near reading room/circulation
- Near media specialist office

ENVIRONMENTAL CONSIDERATIONS:

- 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.

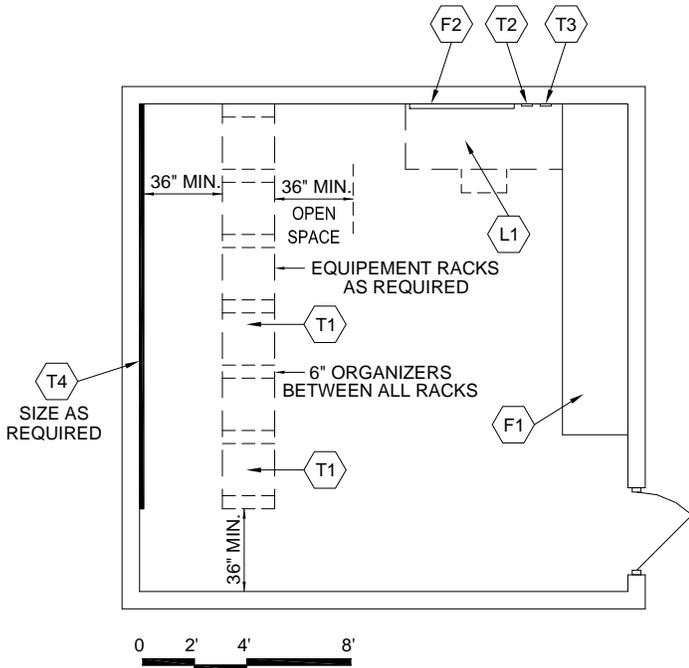
**WORKROOM/STORAGE
E-MC-3**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items²:</u>	
Carpet, carpet tile, ET or sheet vinyl, linoleum, rubber	096500 096813 096816 096516	F1 20'-30' combination base & wall cabinets	123550
		F2 4'-8' of tack board or marker board	101100
		F3 10' - 18' of bookcases (optional)	123550
		F4 3' sink base cabinet	123550
<u>Base:</u>		F5 Reserved	
Resilient base	096500	F6 Towel dispenser	102813
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	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 8600-5	
		3 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ 273123
		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.



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

Note: Technology designer shall confer with school district technology director to determine equipment and space needed and coordinate with project designer.

CAPACITY: N/A
 SIZE: **(Baseline) (Minimum)** 300 SF

ER Utilized as district N.O.C. – add minimum 150 SF

ER Utilized as building data center for central servers/thin client – add minimum 30 SF per 10 classrooms

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. **Verify and coordinate ER size and location with the technology designer during programming phase.**

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

CHAPTER 4: ELEMENTARY SCHOOL

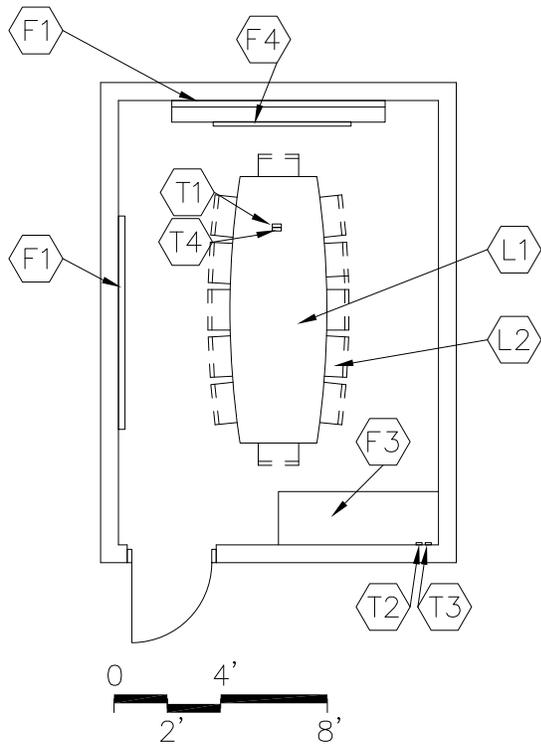
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
ET or sheet vinyl (static dissipative flooring)	096500	F1 8'-16' of open shelving, depth may vary, (fixed or loose)	123550
Base:		F2 4' of tack board or marker board	101100
Resilient base	096500	<u>Fire Suppression:</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 8600-5	
		3 duplex receptacles	262726
		Duplex receptacle for electronic systems	262726
		Telecommunications Grounding	
		270526/260526	
		Standby power	263213/263600
		<u>Communications:</u>	
		T1 Technology Equipment	
		Central sound system	275123
		Telephone wiring	271513/271313
		Integrated telephone system	273123
		Video wiring	271543
		Digital on demand delivery system	274125
		Local area network wiring	271513/271323
		Local area network electronics	272100/272133
		Grounding & Infrastructure Equipment	
		270526/271100	
		T2 1 voice port and phone	271513/273123
		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:

- 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.

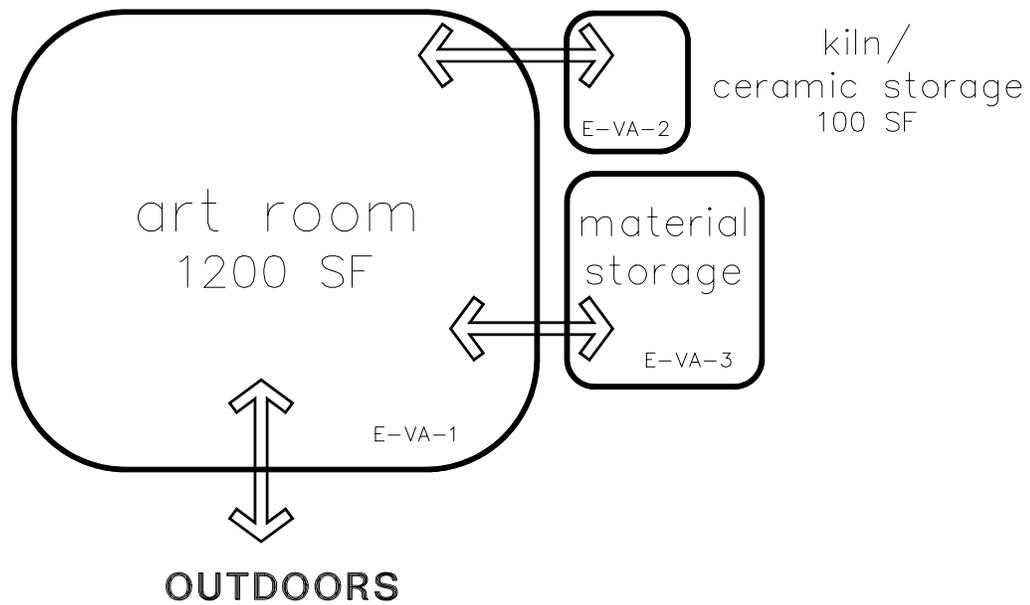
**CONFERENCE ROOM
E-MC-5**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816	F1 14'-18' combination marker board, tack board or tackable wall surface	101100
	096813	F2 Reserved	
<u>Base:</u>		F3 4'-6' of base cabinets (optional) (fixed or mobile)	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 concrete masonry units	042000/099100	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 8600-5	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port	271513
		T4 Ultra-short throw interactive 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.



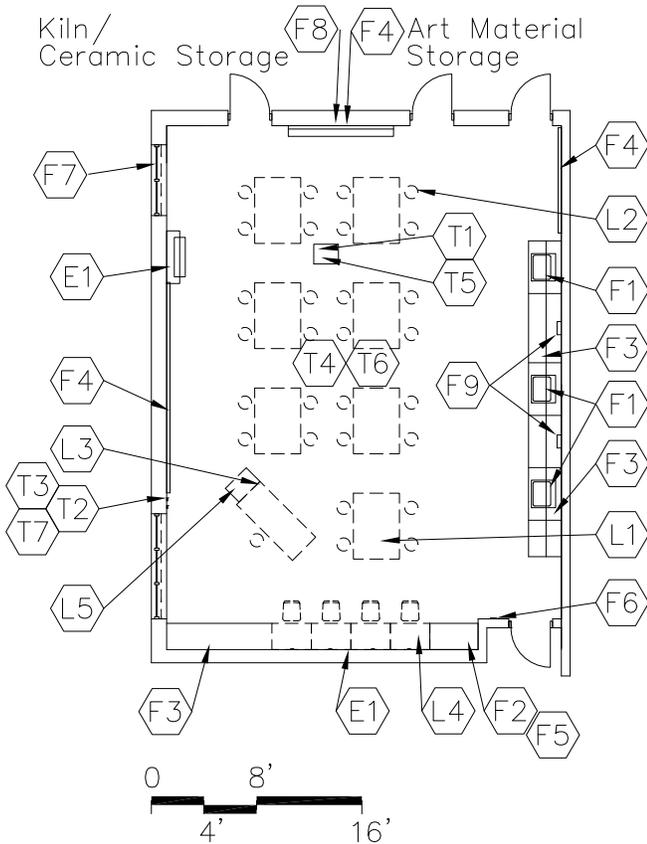
NOTES:

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:

- Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.
 Recommended: Daylighting design with glazing area determined by design solution.
- Environmental sound control -
 wall only minimum STC 45
 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

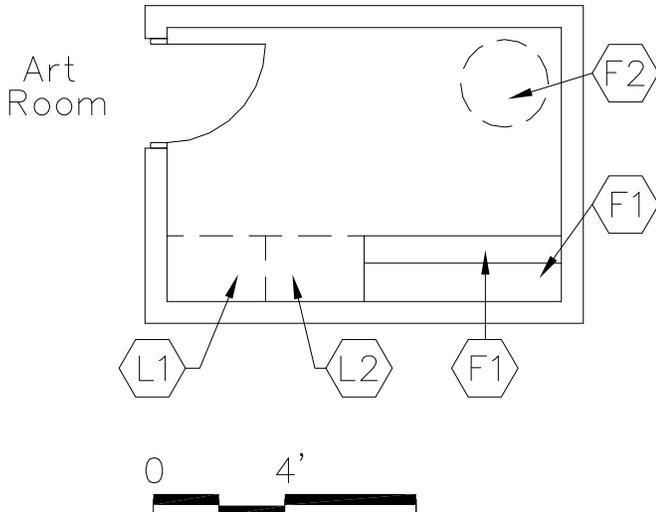
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, sealed concrete,	096500	F1 3'-4' sink base cabinet,	123550
sheet vinyl, rubber,	033000	or several wash fountains	
polished concrete finishing,	033510	F2 Tall wardrobe with file drawers	123550
or colored concrete finishing	033519	F3 26'-34' combination tall storage,	123550
		base and wall cabinets	
		F4 24'-32' combination marker	101100
		board, tackboard, tackable wall surface	
<u>Base:</u>		F5 Technology support casework	123550
Resilient base	096500	F6 Pencil sharpener support (optional)	062000
		F7 Windows with integral blinds	085113
<u>Ceiling:</u>		F8 Projection screen (optional)	115213
Suspended, acoustical	095113	F9 Towel dispenser (optional)	102813
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units		Fire suppression system	211000
	042000/099100	<u>Plumbing:</u>	
		Sinks with solids interceptor	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Student work tables		Supply/return air system	Div. 23
L2 Student chairs or stools		Independent temperature control	230923
L3 Teacher desk and chair/stool and teacher		Manually controlled general	
computer support		exhaust	Div. 23
L4 Computer workstation furniture		<u>Electrical:</u>	
L5 Desk height file cabinet		Fluorescent lighting	265100
Wastebasket		Illumination level: See Table 8600-5	
		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>EQUIPMENT:</u>		<u>Communications:</u>	
E1 Drying rack		T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
		T3 1 data port	
		near teacher workstation	271513
<u>Electronic Safety and Security:</u>		T4 Wireless access point cable above	
Life safety devices per code	283111	ceiling	271513
		Clock	275313
<u>Miscellaneous:</u>		Central sound system	275123
Pencil sharpener (optional)		Sound reinforcement system	275127
		T5 Ultra-short throw interactive projector	
E1 Duplex receptacle with dedicated			274119
circuit for wireless devices		T6 Wireless access point (WAP) as	
		determined by Design – refer to Note 2	272133
		T7 Classroom technology center video port	
			271543, 274116, 274119, 275127

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**

**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:

- 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>	
Sealed concrete,	033000	F1 6'-12' combination base and	123550
polished concrete finishing, or	033510	wall cabinets	
colored concrete finishing	033519	F2 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 8600-5	
L1 and L2 could be fixed casework.		1 duplex receptacle	262726
		Electrical connection for kiln	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

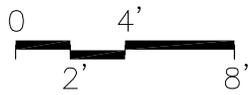
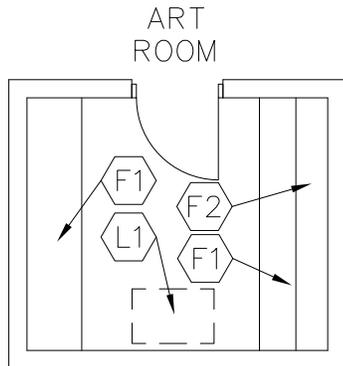
NOTES:

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

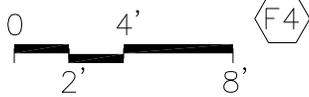
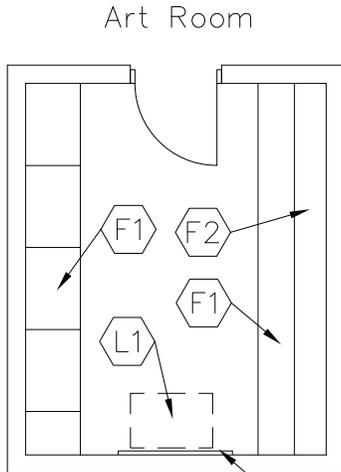
**ART MATERIAL STORAGE
E-VA-3**

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:

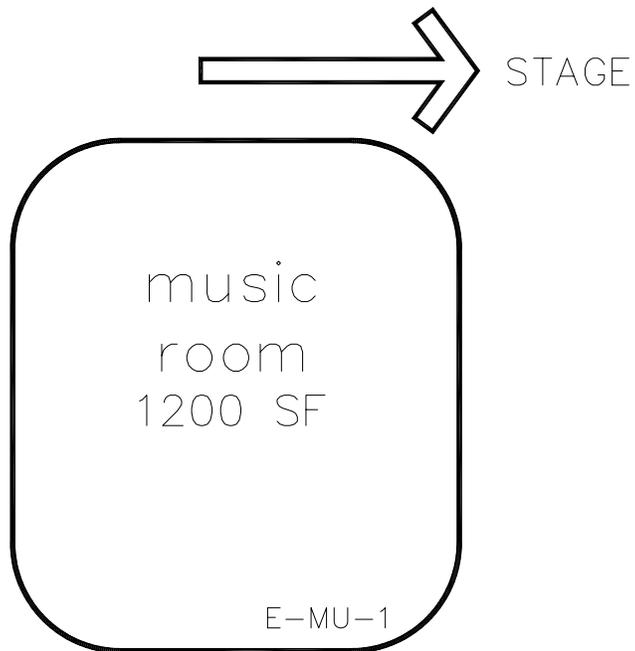
**ART MATERIAL STORAGE
E-VA-3**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
ET, sealed concrete, rubber,	096500	F1 16' – 28' combination tall storage	123550
sheet vinyl,	093000	cabinets and wall cabinets	
polished concrete finishing	033510	F2 8' - 14' base cabinets,	
or colored concrete finishing	033519	(depth for school's need)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	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 8600-5	
		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.



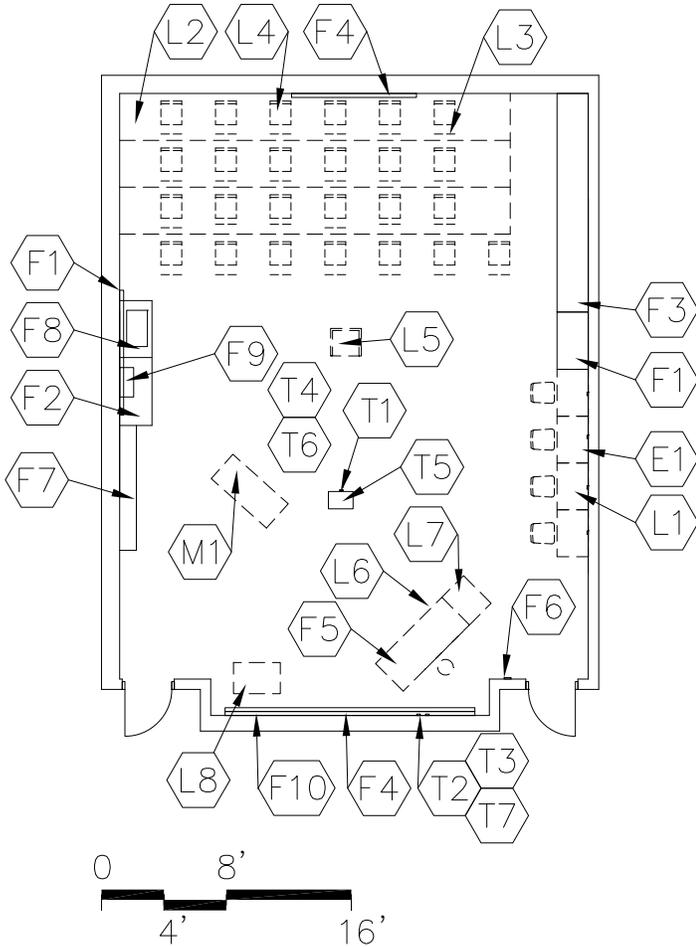
NOTES:

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: 25 students
 SIZE: 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:

- 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.

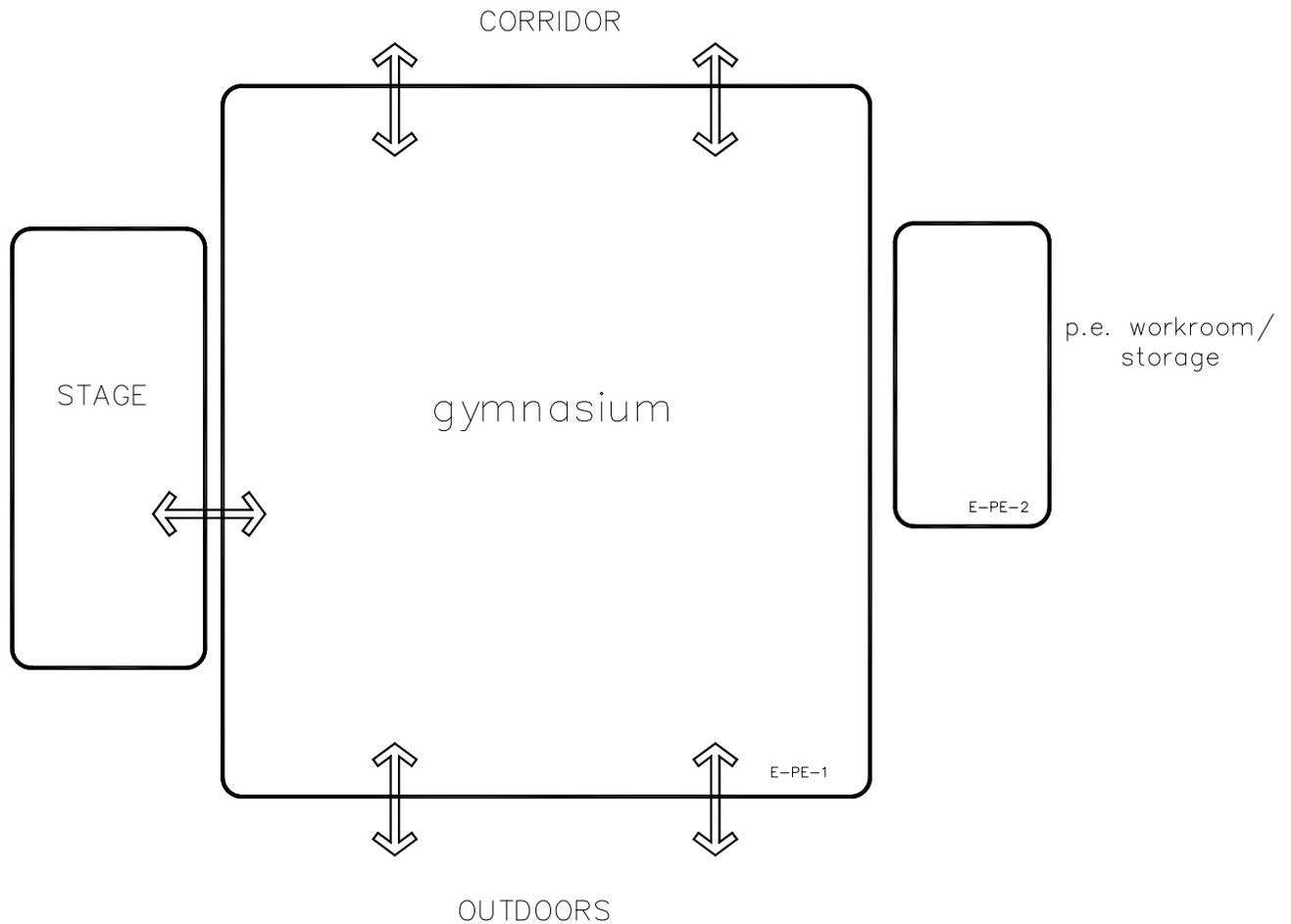
**MUSIC ROOM
E-MU-1**

CHAPTER 4: ELEMENTARY SCHOOL

	Spec. Ref.#		Spec. Ref.#
FINISHES¹:		FEATURES¹:	
Flooring:		Fixed Items:	
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 12'-32' combination marker board, tack board or tackable wall surface	101100
Base:		F5 Technology support casework	123550
Resilient base	096500	F6 Pencil sharpener support (optional)	062000
		F7 4'-9' of bookcases	123550
Ceiling:		F8 3' sink base cabinet	123550
Suspended, acoustical	095113	F9 Towel dispenser (optional)	102813
		F10 Projection screen (optional)	115213
Walls:		Fire Suppression:	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
Acoustical wall treatment	098000	Plumbing:	
		Sink with drinking fountain	240000
		Plumbing connections	24000/221116/221119
LOOSE FURNISHINGS:		HVAC:	
L1 Computer workstation furniture		Supply/return air system	Div. 23
L2 Risers		Independent temperature control	230923
L3 Music stands		Electrical:	
L4 Music chairs		Fluorescent lighting	265100
L5 Conductor podium		Illumination level: See Table 8600-5	
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 Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting	265100
Electronic Safety and Security:		Communications:	
Life safety devices per code	283111	T1 1 projector video port	271543
		T2 1 voice port and phone	271513/273123
Miscellaneous:		T3 1 data port	
Pencil sharpener (optional)		near teacher workstation	271513
The following item is to be funded by the school district: M1 Piano		T4 Wireless access point cable above ceiling	271513
		Clock	275313
		Central sound system	275123
E1 Duplex receptacle with dedicated circuit for wireless devices		T5 Ultra-short throw interactive projector	274119
		T6 Wireless access point (WAP) as determined by Design – refer to Note 3	272133
		T7 Classroom technology center video port	271543, 274116, 274119, 275127

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.
3. **Baseline includes WAP cable per classroom. WAP device quantity / placement per 272133 requirements.**



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 |

**PHYSICAL EDUCATION SPACES
E-PE**

CHAPTER 4: ELEMENTARY SCHOOL

GYMNASIUM SIZE

When designing spaces for physical education activities, it is important to consider the type of activities, the number of participants, equipment needed, and space allocation for each space. Consideration should also be given as to the size of the activity area and safety borders (run-outs). Adequate co-funded space for these design considerations, and others, should be provided in the square footage allowed for the gymnasium.

The table included below, illustrates the maximum gymnasium size for each of the student enrollment examples found in the Program of Requirements (POR). For example, a school with 550 students would have approximately 49 staff members indicating a total number of persons in the facility of 599. The maximum size of the gymnasium would be 4,700 sf. That value, 4,700 sf., would be inserted into the POR for the gym size.

Additional student enrollment examples (1,250 and 1,750 students) have been added to assist in planning and design of various sized gymnasiums. These examples are bolded in the table below.

SEATING

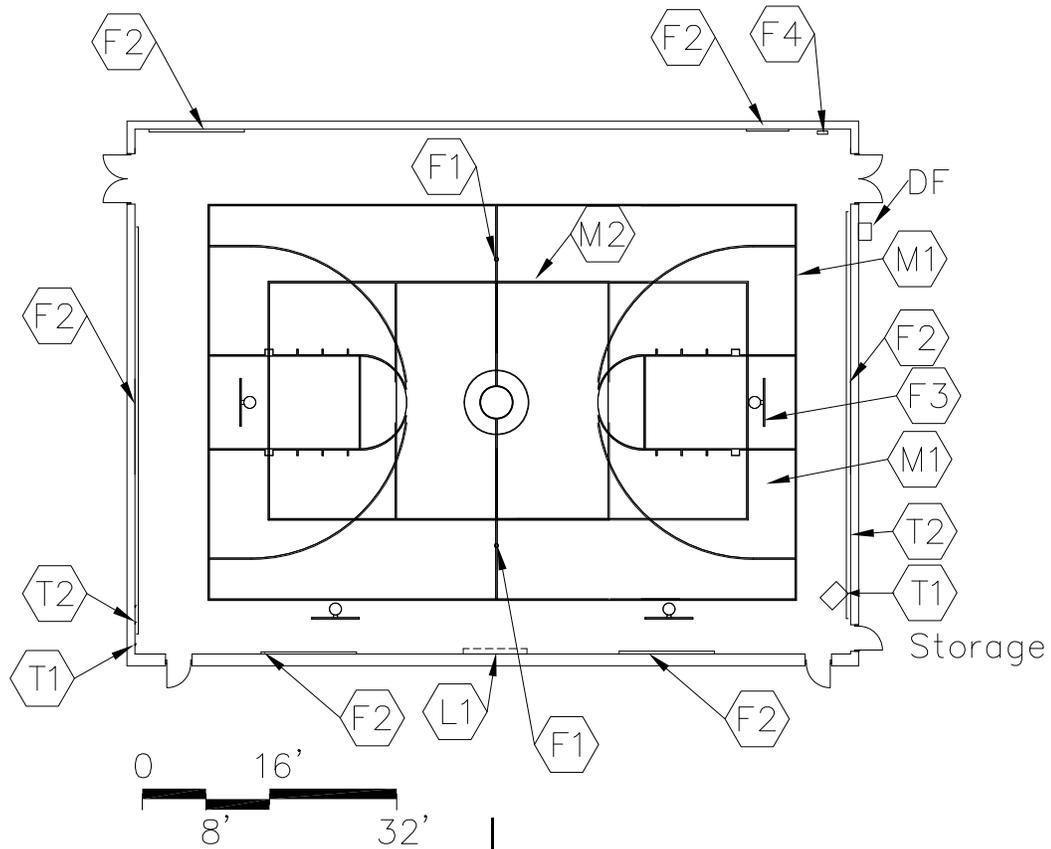
Regarding seating/bleachers, in elementary schools, space for seating in the gym is no co-funded. If desired, seating may be included at the district's expense.

FINAL LAYOUT

The actual Gym layout will be determined during the design process.

Elementary School Gymnasium Design Guidelines					
STN ENRL	Staff	Total Occup	Gym SF	Court Size	Approx. # Seats
400	36	436	3,500	As Marked	0
550	49	599	4,000	As Marked	0
700	62	762	4,700	As Marked	0
1,000	86	1,086	6,000	As Marked	0
1,250	106	1,356	6,500	As Marked	0
1,500	126	1,626	7,000	As Marked	0
1,750	145	1,895	8,500	As Marked	0
2,000	164	2,164	10,000	As Marked	0

Note: ES Gym bleachers are a district expense. 2011



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, **fixed** height of **21'** from floor to nearest obstruction

CAPACITY: varies
 SIZE: 3,500 - 10,000 SF
 ANCILLARY SPACES: P.E. Workroom/Storage
 E-PE-2

NOTES:

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

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES</u>¹:		<u>FEATURES</u>¹:	
Flooring:		<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	
Base:		(2 main court, 2 side practice)	116623
Resilient base	096566	F4 Ropes and climbing bars (optional)	116623
Ceiling:		<u>Fire Suppression:</u>	
Painted exposed structure	099100	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Paint	099100	Drinking fountain	224000
Acoustical wall treatment	098000	directly outside the entrance	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Portable markerboard		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Multi-level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		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 projector video ports, 1 monitor with cart	271543/274119
		T2 2 data ports	271513
		Clock with wire guards	275313
		Central sound system	275123
		Gymnasium sound system	275124
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
M1 Court markings (optional)			
74' x 50' basketball court			
30'x60' volleyball court			
Provide wire guards on light fixtures and wall-mounted electrical devices.			

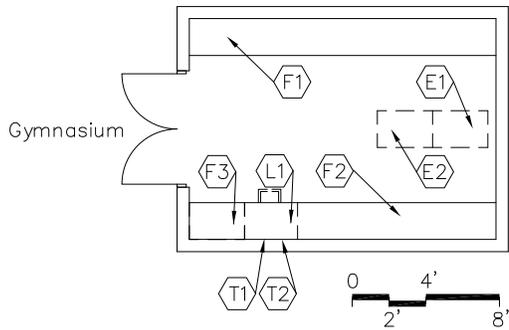
NOTES:

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.
3. The OSFC does not co-fund telescoping bleachers in elementary schools. District may provide telescoping bleachers in accordance with section 126600 at district's expense.

**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

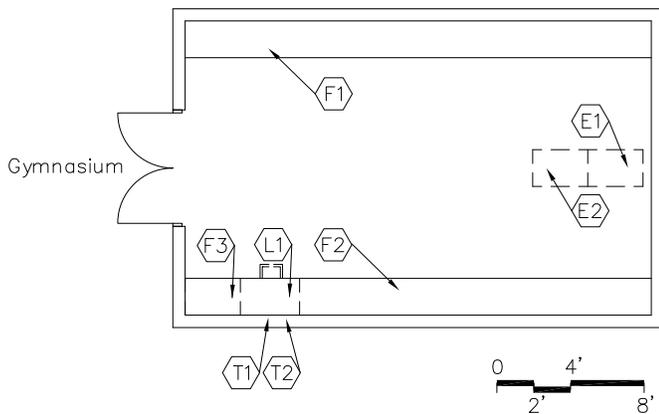
SPATIAL RELATIONSHIPS:

- Adjacent to gymnasium

ENVIRONMENTAL CONSIDERATIONS:

N/A

400 SF



CAPACITY: N/A
 SIZE: 200 - **600** SF
 ANCILLARY SPACES: Gymnasium
 E-PE-1

NOTES:

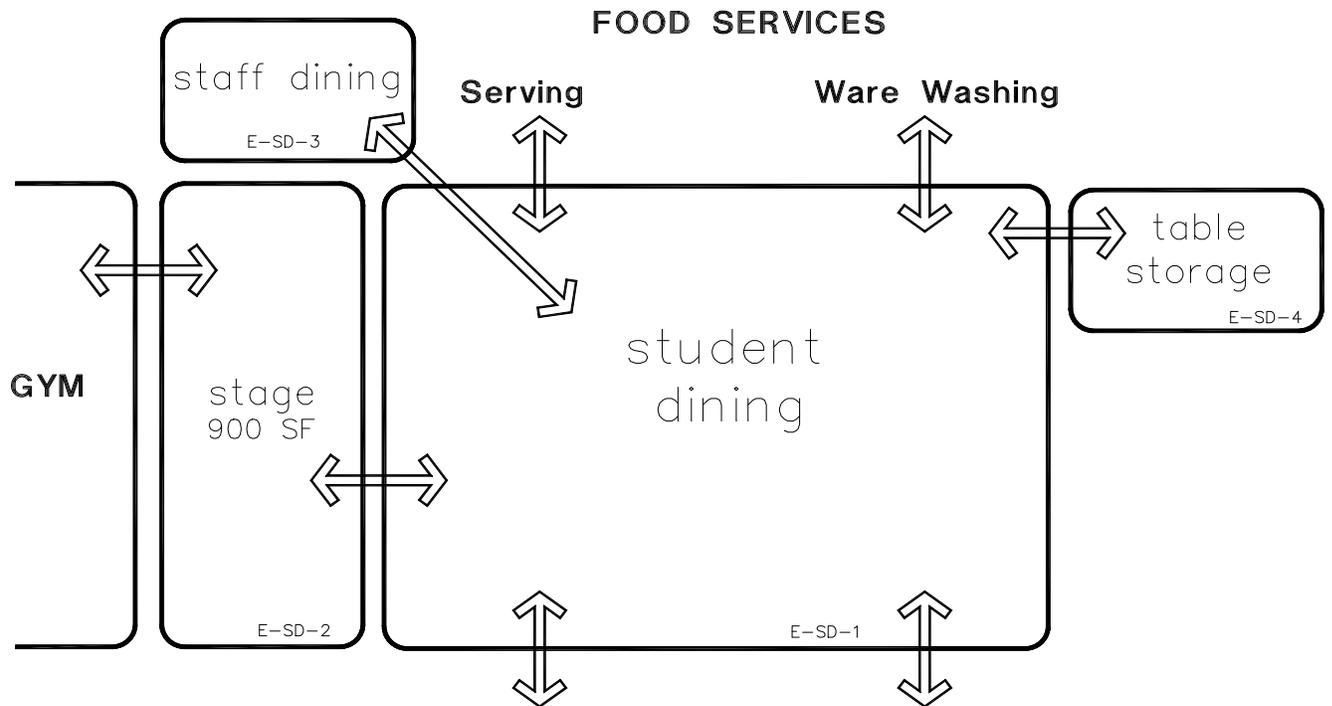
P.E. WORKROOM/STORAGE
E-PE-2

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Sealed 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		
Walls:		<u>Plumbing:</u>	
Unpainted concrete masonry units	042000	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Teacher desk and chair		Exhaust air system	Div. 23
Wastebasket		Supplemental heat as required	Div. 23
<u>EQUIPMENT:</u>		<u>Electrical:</u>	
E1 Tumbling mats on carts		Single level switching	262726
E2 Ball carts		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		1 duplex receptacle	262726
		Double duplex receptacle adjacent to data port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ 273123
		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.

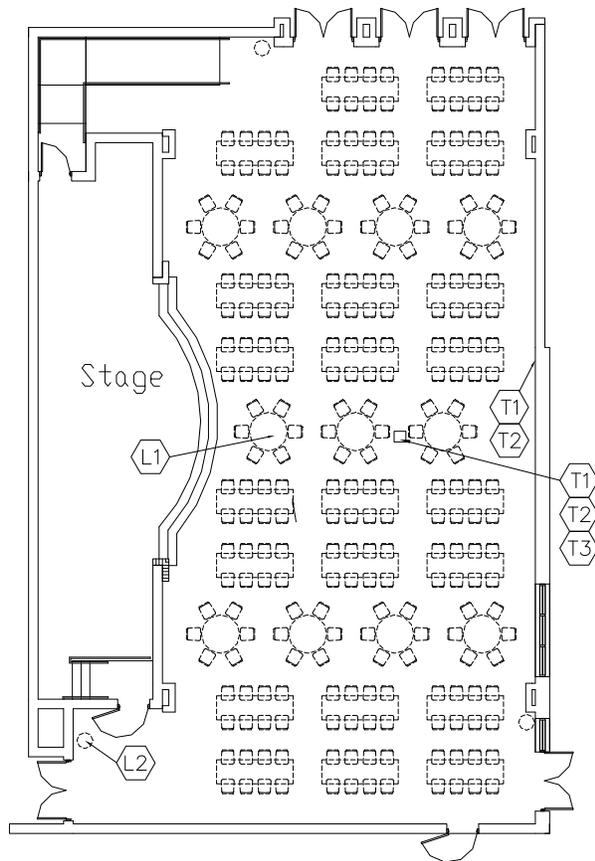
Following are the Student Dining space plates:

- 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:

- 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.

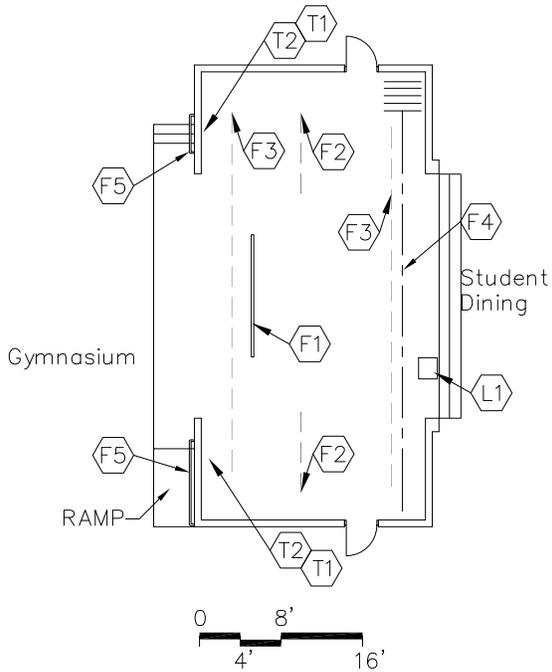
**STUDENT DINING
E-SD-1**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET,	096500	N/A	
sheet vinyl, porcelain tile,	096516		
polished concrete finishing,	033510	<u>Fire Suppression:</u>	
or colored concrete finishing	033519	Fire suppression system	211000
<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 8600-6	
Acoustical wall treatment	098000	Multilevel switching	262726
and diffusers		8 duplex receptacles	262726
		Double duplex receptacles adjacent to	
		each data and video port	262726
<u>LOOSE FURNISHINGS:</u>		Means of egress lighting per code	265100
L1 Tables and chairs or long tables with		Emergency lighting	265100
attached stools		Telecommunications Grounding	270526/260526
L2 Large waste receptacles			
Folding or high density stack chairs		<u>Communications:</u>	
for large assembly use		T1 2 projector video ports	271543
Carts for chairs		T2 2 data ports	271513
Recycling bins		Student dining/cafeteria sound system ²	275122
		Clock	275313
		Central sound system	275123
		T3 Ultra-short throw interactive 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.



PROGRAM ACTIVITIES:

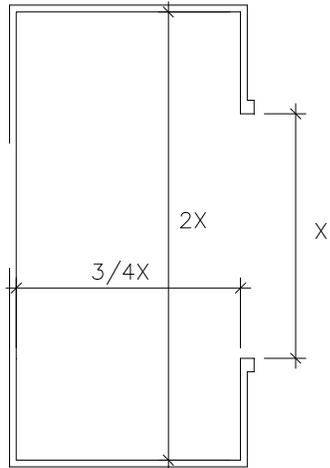
- Space for speakers, presentations, and performances

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)



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

NOTES:

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

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET,	096500	F1 Projection screen	116143
sheet vinyl, linoleum,	096516	F2 Curtain	116143
rubber or wood 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 8600-6	
		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 projector video ports (1 on each side of proscenium opening)	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	

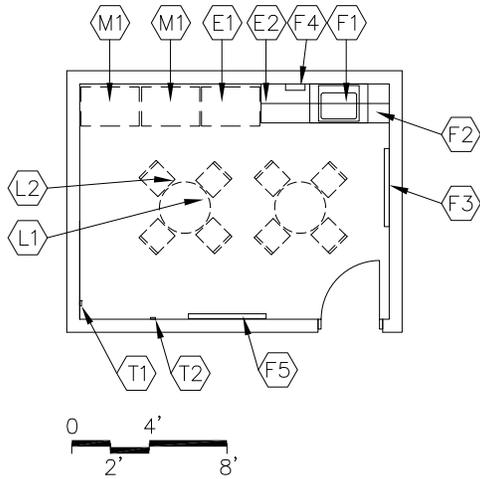
NOTES:

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

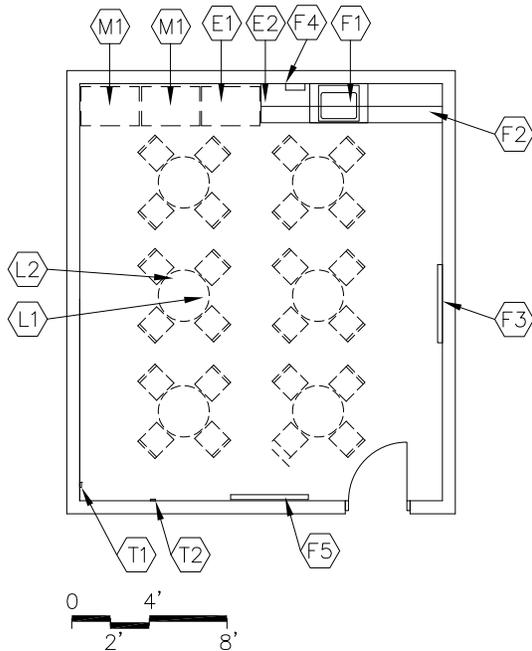
SPATIAL RELATIONSHIPS:

- Near student dining
- Near food services

ENVIRONMENTAL CONSIDERATIONS:

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

300 SF



CAPACITY: 8 - 24 staff
SIZE: 200 - **400** 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, or porcelain tile	096500 096516 093000	F1 3' sink base cabinet with wall cabinets above	123550
		F2 About 8' of base and wall cabinets	123550
		F3 4' of tack board	101100
		F4 Towel dispenser	102813
		F5 4'-6' marker board (optional)	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Optional: Porcelain tile base	093000		
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Sink	224000
		Plumbing connections	224000/221116/221119
<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 Tables		Single level switching	262726
L2 Chairs		Fluorescent lighting	265100
Waste receptacle		Illumination level: See Table 8600-6	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each video port	262726
		Receptacles for vending machines, refrigerator, and microwave	262726
<u>EQUIPMENT:</u>		<u>Communications:</u>	
E1 Refrigerator		T1 1 projector video port	271543
E2 Microwave		T2 1 voice port and phone	271513/273123
		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	

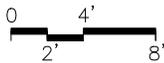
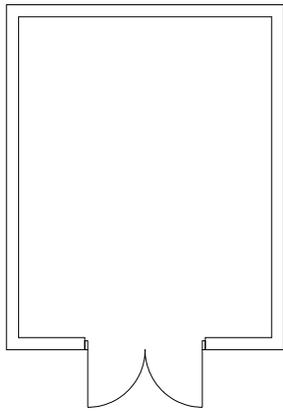
NOTES:

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

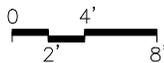
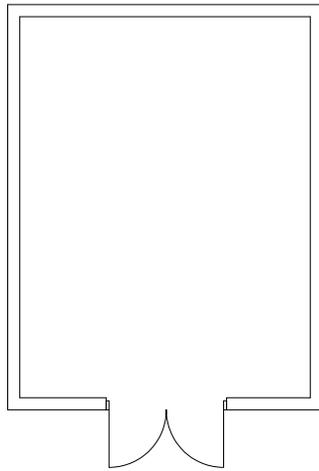
**TABLE STORAGE
E-SD-4**

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:

- Resilient floor covering

NOTES:

**TABLE STORAGE
E-SD-4**
CHAPTER 4: ELEMENTARY SCHOOL

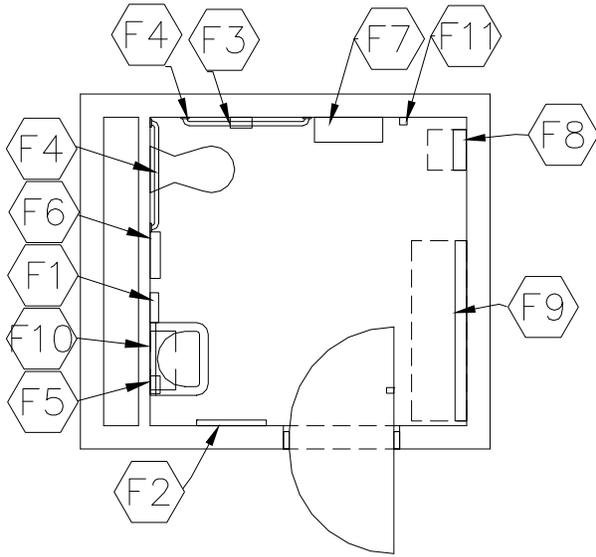
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Sealed concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Option: Rated gypsum wallboard	092116	<u>HVAC:</u>	
Walls:		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 8600-6	
		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:

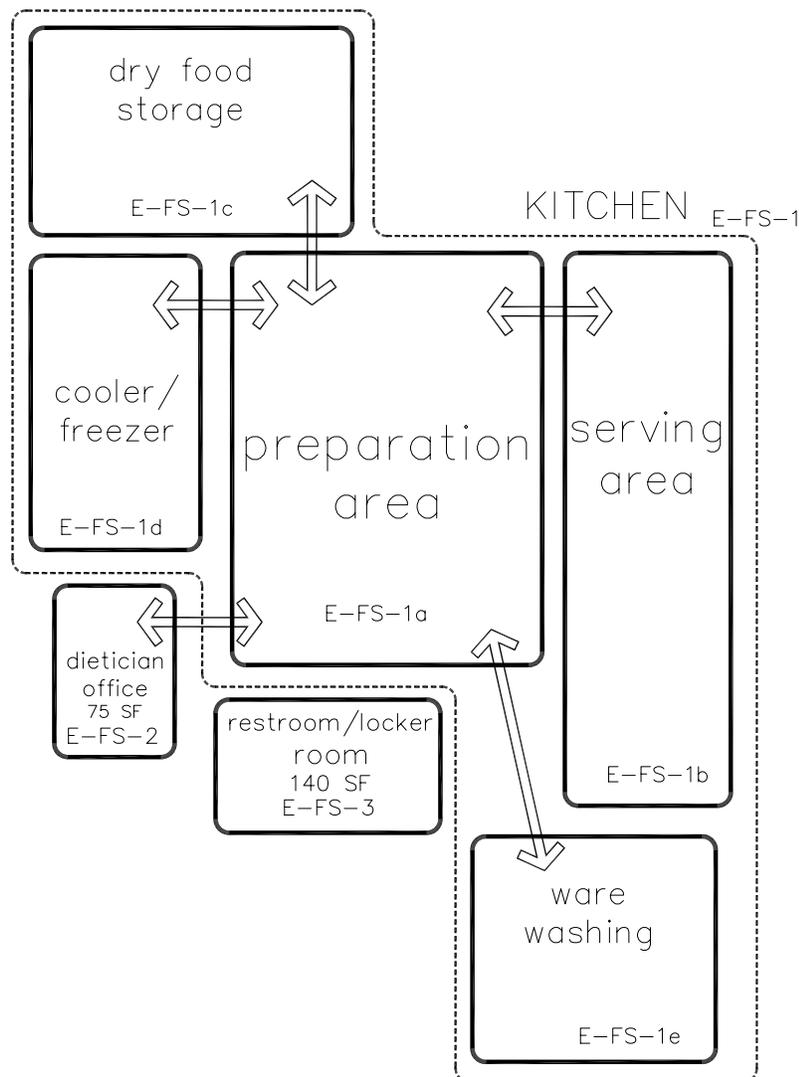
- Located where best accessible to all building occupants and the public

ENVIRONMENTAL CONSIDERATIONS:

- 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:

**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

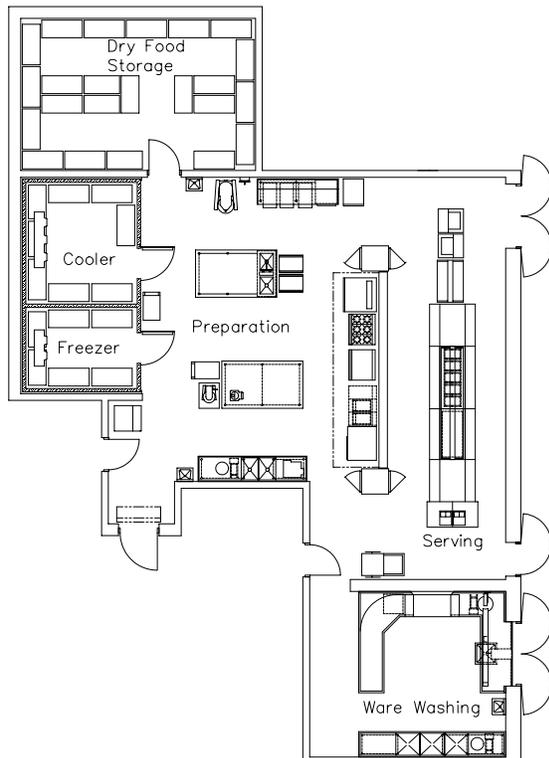
KITCHEN E-FS-1

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:

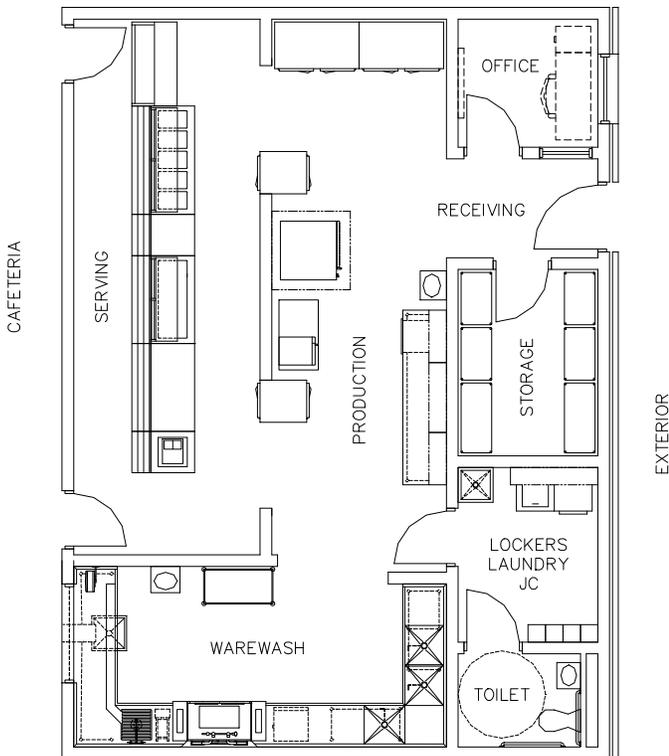
- Adjacent to student dining
- Near staff dining
- Near table storage
- Adjacent to loading/receiving area

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.

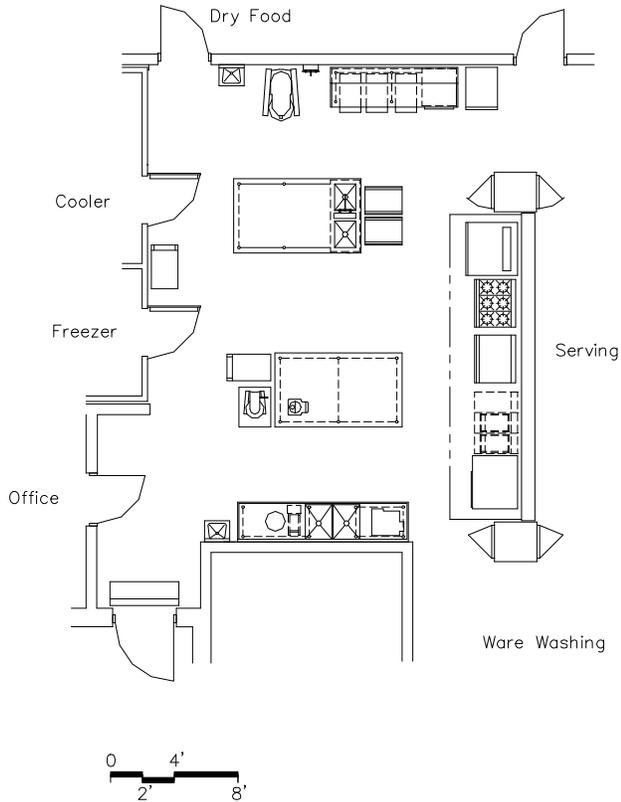


CAPACITY:	3 - 7 persons
SIZE:	Student capacity multiplied by 2.0 SF per student
ANCILLARY SPACES:	Student Dining E-SD-1 Loading/Receiving Area E-BS-1

NOTES:

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:

- 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

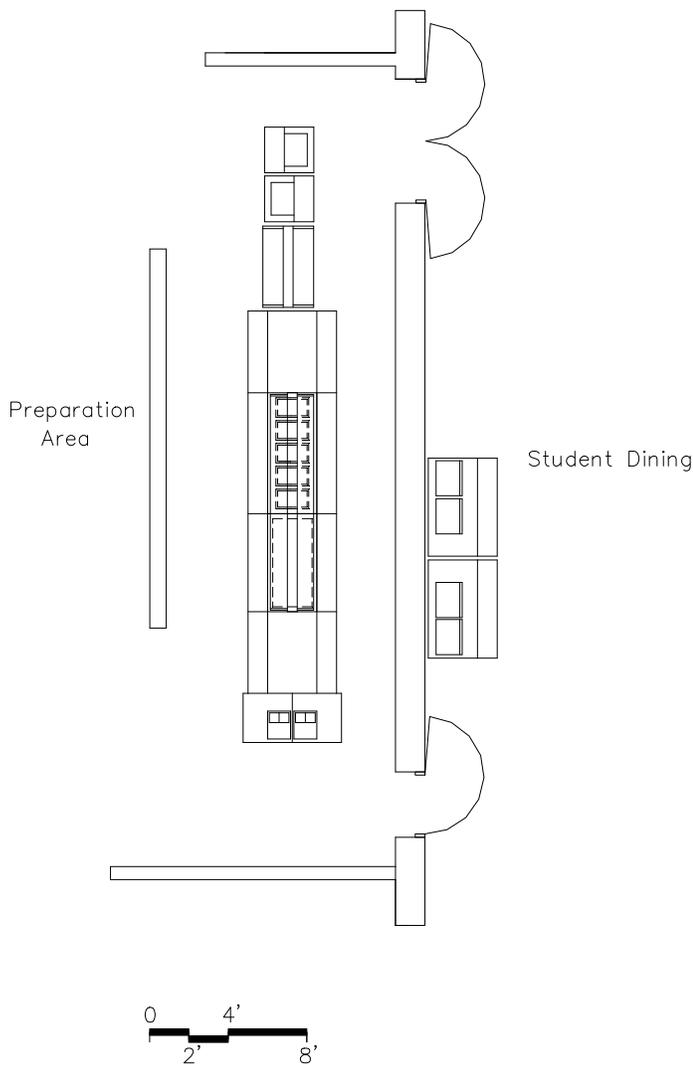
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile <i>or resinous flooring</i>	093000	Food service equipment	114000
	096723		
Base:		<u>Fire Suppression:</u>	
Quarry tile base or <i>integral base</i>	093000	Fire suppression system	211000
Ceiling:		<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>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
N/A		Supply/return air system	Div. 23
		Independent temperature control	230923
		Kitchen canopy exhaust system	Div. 23
		<u>Electrical:</u>	
		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		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/ 273123
		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



PROGRAM ACTIVITIES:

- Space for serving of food

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Adjacent to preparation area

ENVIRONMENTAL CONSIDERATIONS:

- Cleanable building services

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

NOTES:

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

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

CHAPTER 4: ELEMENTARY SCHOOL

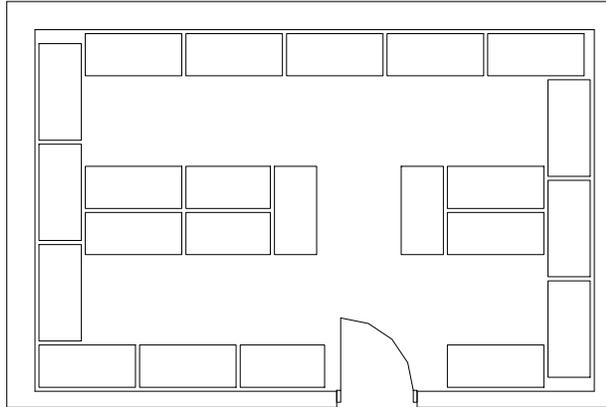
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Quarry tile or resinous flooring	093000	Food service equipment	114000
Optional: porcelain tile	096723		
<u>Base:</u>		<u>Fire Suppression:</u>	
Quarry tile base or integral base	093000	Fire suppression system	211000
Optional: porcelain tile base			
<u>Ceiling:</u>		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
<u>Walls:</u>		<u>HVAC:</u>	
Epoxy-painted concrete masonry units	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 8600-6	
		4 duplex receptacles	262726
		Connections to food service equipment	262726
		Emergency lighting	265100
		Means of egress lighting per code	265100
		Duplex receptacle at each cash register	262726
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
N/A		Data port(s) at cash register(s)	271513
		Clock	275313
		Central sound system	275123
		1 Voice port and phone	271513/ 273123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

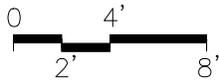
1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.

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

CHAPTER 4: ELEMENTARY SCHOOL



Preparation Area



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:

- Continuous conditioning of air
- Cleanable building surfaces

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

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

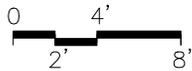
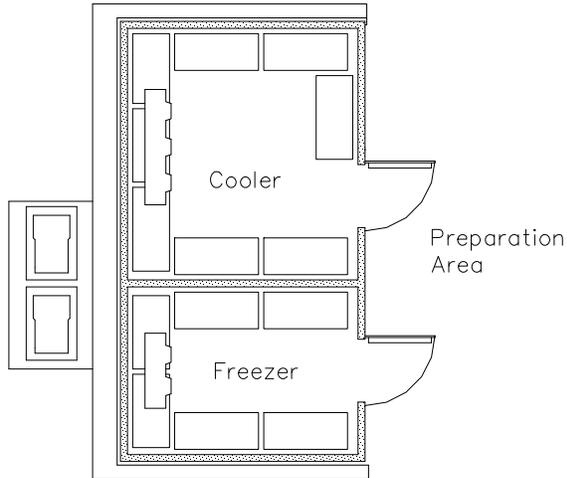
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Linoleum, ET, or sheet vinyl	096500 096516	Food service equipment	114000
Option: Quarry tile or resinous flooring	093000 096723	<u>Fire Suppression:</u>	
		Fire suppression system	211000
Base:		<u>Plumbing:</u>	
Resilient base	096500	N/A	
Option: Quarry tile or integral base	093000	<u>HVAC:</u>	
Ceiling:		Exhaust air system	Div. 23
Cleanable, suspended, acoustical	095113	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 or latex paint	093000 099100	Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		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



PROGRAM ACTIVITIES:

- Space for refrigerated storage of perishable products

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

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

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

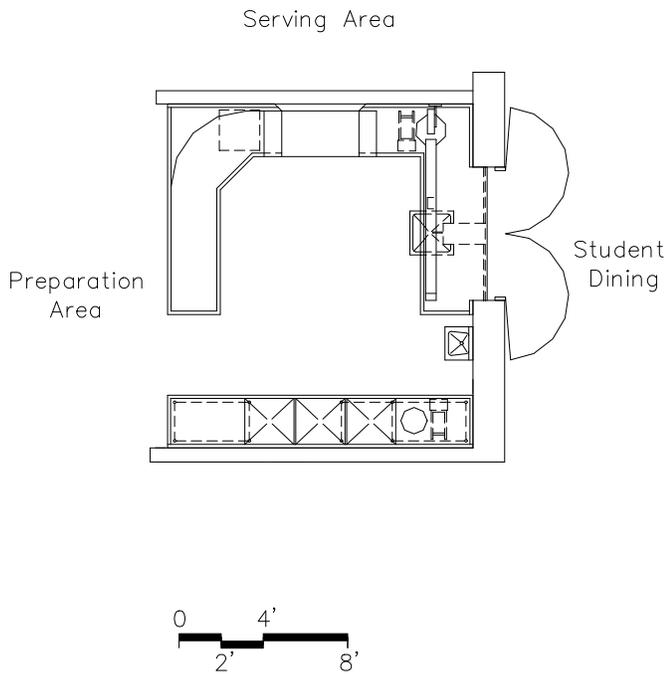
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile or resinous flooring	093000 096723	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base or integral base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
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 8600-6	
		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:

- 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.

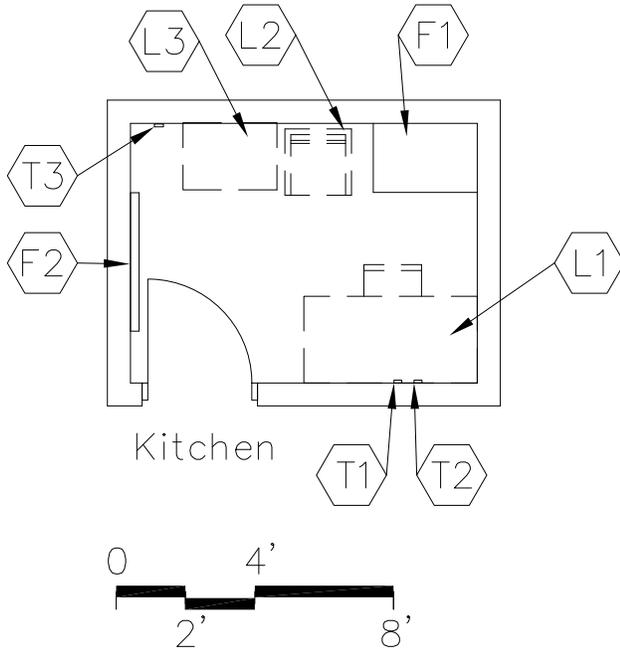
**KITCHEN - Ware Washing
E-FS-1e**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Quarry tile or resinous flooring	093000 096723	Food service equipment	114000
<u>Base:</u>		<u>Fire Suppression:</u>	
Quarry tile base or integral base	093000	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Lavatory	224000
<u>Walls:</u>		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 8600-6	
		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.



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Adjacent to kitchen

ENVIRONMENTAL CONSIDERATIONS:

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

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

NOTES:

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

**DIETICIAN'S OFFICE
E-FS-2**
CHAPTER 4: ELEMENTARY SCHOOL

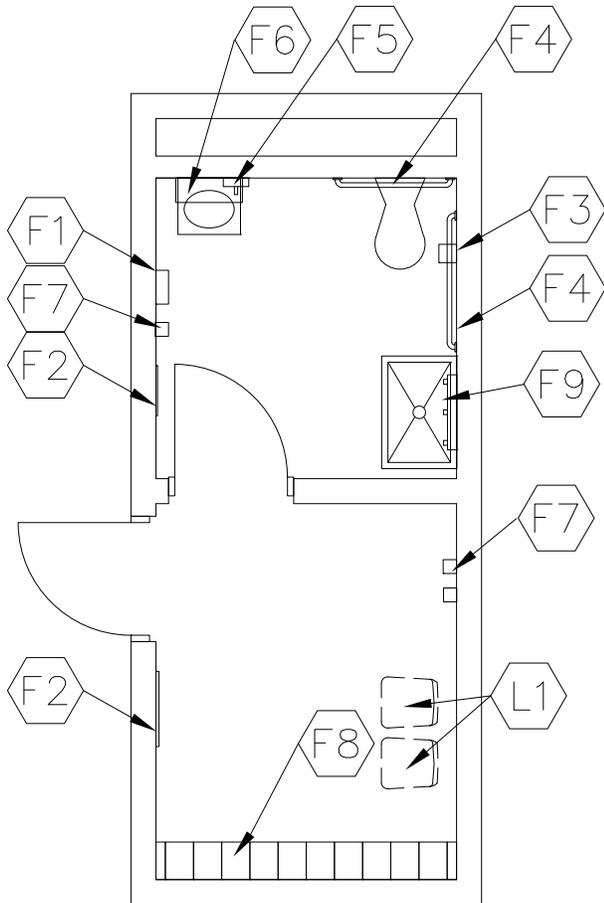
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Linoleum, ET, or sheet vinyl	096500	F1 Tall wardrobe (optional)	123550
	096516	F2 4' of tack board	101100
Option: Quarry tile or resinous flooring	093000	<u>Fire Suppression:</u>	
	096723	Fire suppression system	211000
<u>Base:</u>			
Resilient base	096500	<u>Plumbing:</u>	
Option: Quarry tile	093000	N/A	
<u>Ceiling:</u>			
Suspended, acoustical	095113	<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
<u>Walls:</u>			
Painted concrete masonry units	042000/099100	<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
<u>LOOSE FURNISHINGS:</u>			
L1 Desk and chair		<u>Communications:</u>	
L2 Visitor chair		T1 1 voice port and phone	271513/273123
L3 File cabinet		T2 1 data port near workstation	271513
Wastebasket		T3 1 projector video port	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



PROGRAM ACTIVITIES:

- Personal and health needs for food service staff

SPATIAL RELATIONSHIPS:

- Adjacent to ***kitchen***

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 2 persons
 SIZE: 140 SF
 ANCILLARY SPACES:

NOTES:

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

CHAPTER 4: ELEMENTARY SCHOOL

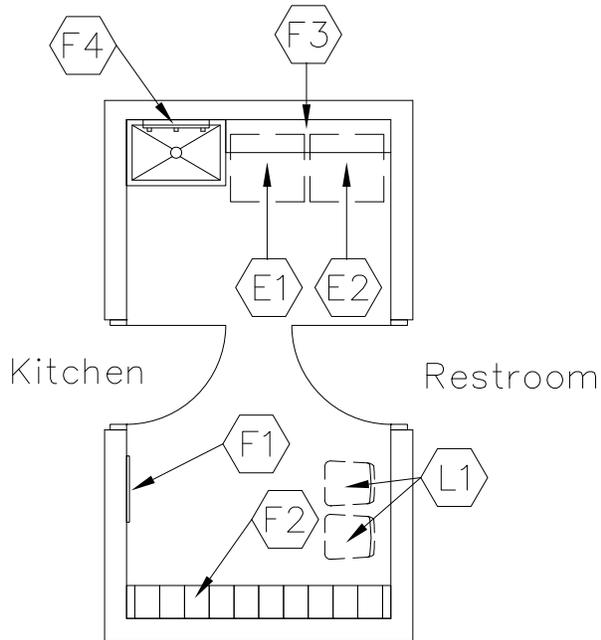
<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET or sheet vinyl	096500	F1 Towel dispenser	102813
Optional: quarry tile or resinous flooring	093000 096723	F2 2, 24" x 60" mirrors	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
<u>Base:</u>		F5 Soap dispenser	102813
Resilient base	096500	F6 Mirror with shelf above sink(optional)	102813
Optional: quarry tile, integral vinyl cove base, or integral resinous base	093000 096723	F7 Coat hooks	102813
		F8 Lockers 12" x 12" x 60"	105113
		F9 Mop holder	102813
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
		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 8600-6	
		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



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:

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

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

NOTES:

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

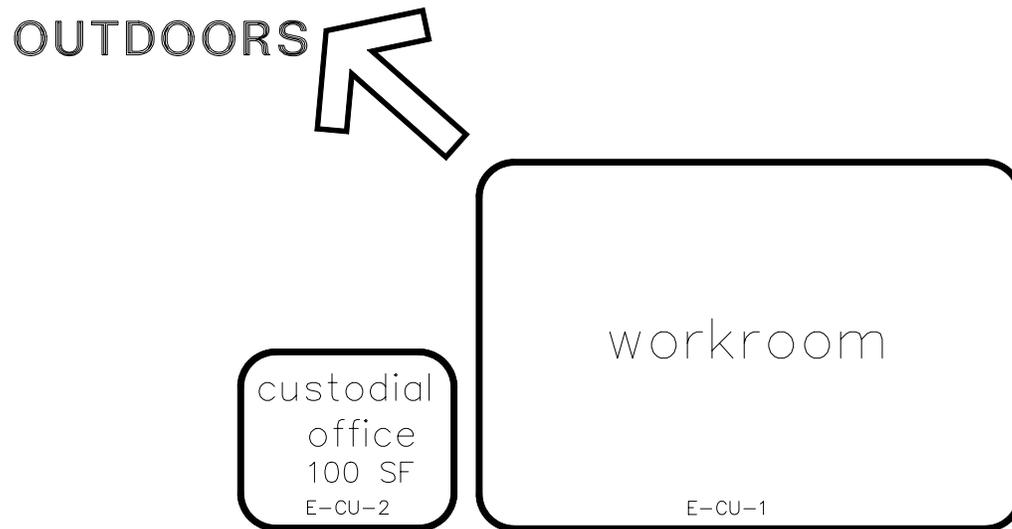
LOCKER ROOM
E-FS-4

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, quarry tile , or resinous flooring	096500 096723 093000	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, integral vinyl cove base, quarry tile or integral resinous base	096500 096723 093000	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 8600-6	
		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.

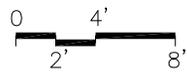
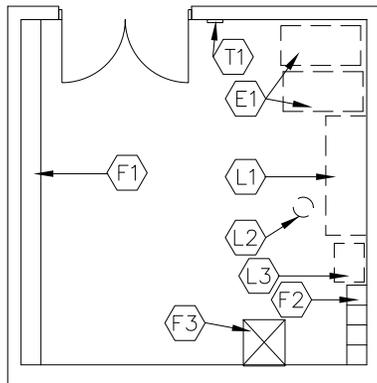
Following are the Custodial space plates:

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

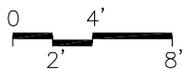
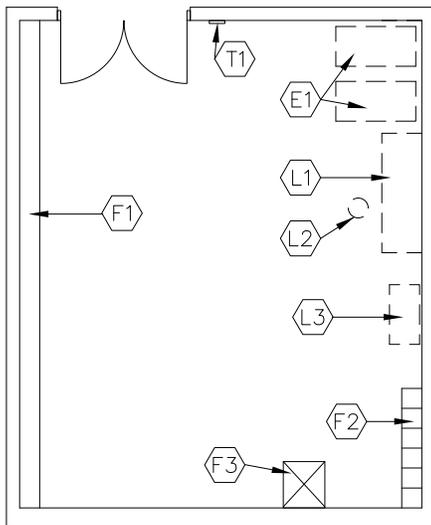
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CHAPTER 4: ELEMENTARY SCHOOL

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:

NOTES:

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

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

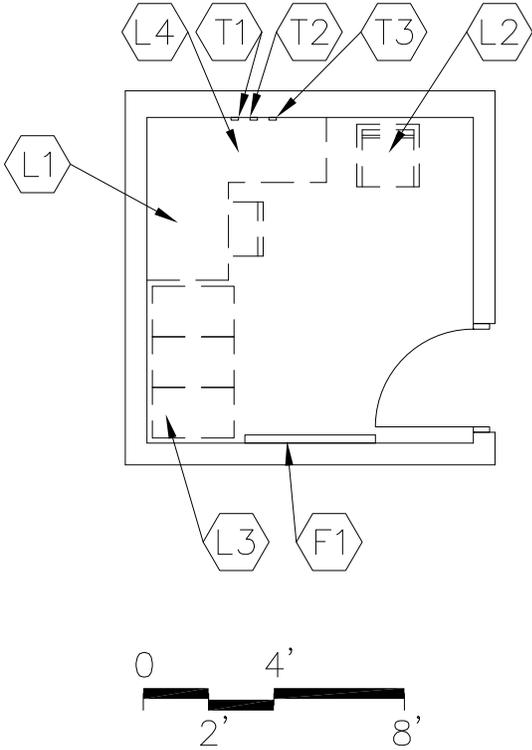
<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items²:</u>	
Sealed concrete,	033000	F1 10' - 24' of open shelving,	
polished concrete finishing	033510	depth may vary (fixed or loose)	123550
or colored concrete finishing	033519	F2 4 - 6 lockers	105113
		F3 Mop holder	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Floor service sink	224000
<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 Workbench		Fluorescent lighting	265100
L2 Stool		Illumination level: See Table 8600-6	
L3 Tool cabinet		Single level switching	262726
Waste receptacles		4 duplex receptacles (minimum)	262726
		Electrical receptacles for custodial equipment	262726
<u>EQUIPMENT:</u>		<u>Communications:</u>	
E1 Recycling bins		T1 1 voice port and phone	271513/ 273123
		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.

**CUSTODIAL OFFICE
E-CU-2**

CHAPTER 4: ELEMENTARY SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near custodial workroom

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: N/A
SIZE: 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
rubber,	096516		
sealed concrete,	033000	<u>Fire Suppression:</u>	
polished concrete finishing, or	033510	Fire suppression system	211000
colored concrete finishing	033519		
<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 8600-6	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and modem port	262726
		<u>Communications:</u>	
		T1 Modem port for temperature controls computer	271513
		T2 1 voice port and phone	271513/ 273123
		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>	
		Interior window (optional)	081113/088100

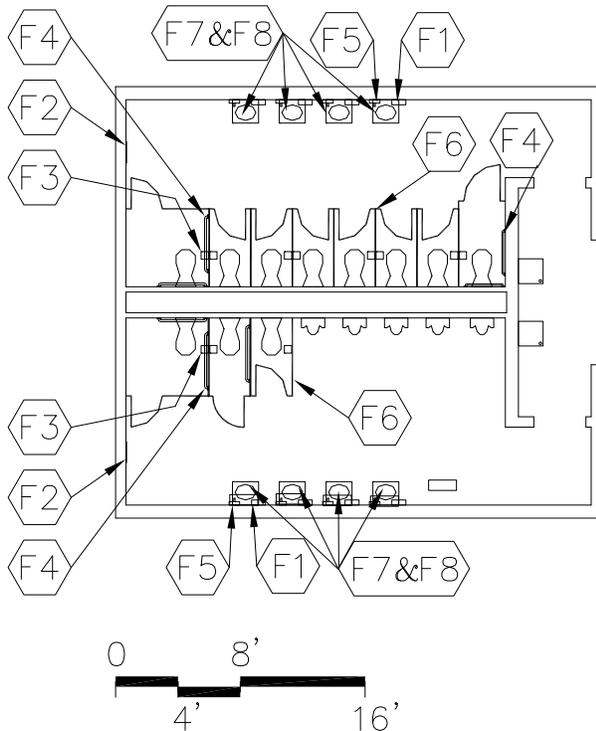
NOTES:

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:

- 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

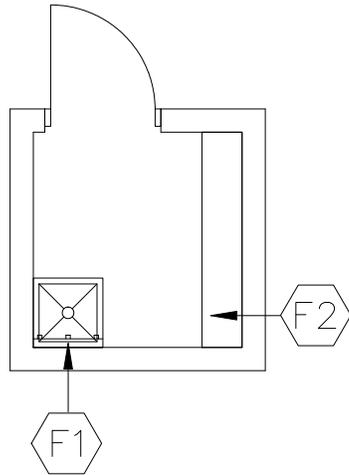
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Ceramic mosaic tile	093000	F1 Towel dispensers	102813
Optional: porcelain tile, unbacked sheet vinyl with welded seams, or resinous flooring	096723 096500	F2 24" x 60" mirror	102813
		F3 Toilet tissue holders	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, integral vinyl base	042000 096723		
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closets	224000
Optional: Abuse resistant gypsum wallboard	092116	Wall-mounted urinals	224000
		Wall-mounted lavatories or wash fountains	224000
<u>Walls:</u>		Wall hydrants	221119
Painted concrete masonry units	042000/099100	Plumbing connections	224000/221116/221119
		Drinking water coolers	224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Waste Receptacles		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		1 duplex receptacle	262726
		Emergency lighting	265100
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**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:

CAPACITY:
SIZE:

N/A
50 SF

NOTES:

**CUSTODIAL CLOSET
E-BS-2**

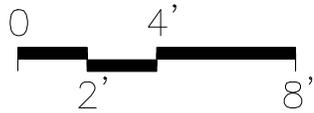
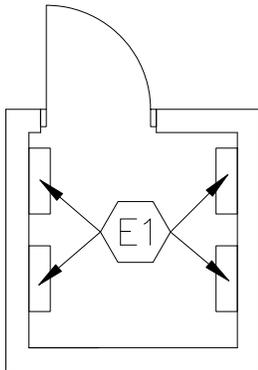
CHAPTER 4: ELEMENTARY SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
Sealed concrete	033000	F1 Mop holder	102813
Base:		F2 Fixed or loose shelving (optional)	123550
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Cleanable, suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		Service sink or floor drain sink	224000
Painted concrete masonry units	042000/099100	Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS</u>		<u>HVAC:</u>	
N/A		Exhaust air system	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		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.

**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:

NOTES:

**ELECTRICAL CLOSET
E-BS-3**

CHAPTER 4: ELEMENTARY SCHOOL

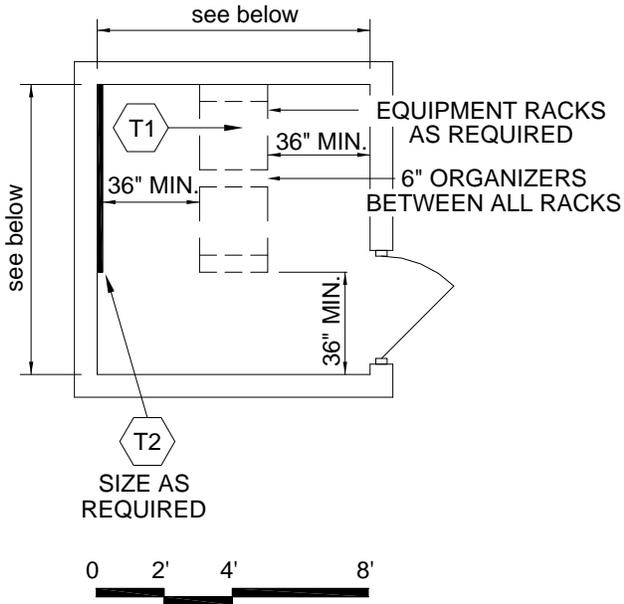
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Sealed concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	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 8600-6	
		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:

CAPACITY:

N/A

SIZE:

**TR Serving Zone > 188 ports:
minimum 10 ft. x 12 ft.**

**TR Serving Zone of 96-188 ports:
minimum 8 ft. x 10 ft.**

**TR Serving Zone of < 96 ports:
minimum 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.
2. **Verify and coordinate TR quantity, size and location with technology designer during programming phase.**
3. **Multiple TR's may be required.**

**TELECOMMUNICATIONS ROOM
E-BS-4**

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Sealed concrete,	033000	N/A	
polished concrete finishing, or	033510		
colored concrete finishing	033519	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Base:</u>		<u>Plumbing:</u>	
No base		N/A	
<u>Ceiling:</u>		<u>HVAC:</u>	
Exposed structure	---	Cooling and exhaust air system	Div. 23
<u>Walls:</u>		<u>Electrical:</u>	
Unpainted concrete masonry units	042000	Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		1 duplex receptacle	262726
		Telecommunications Grounding	
		270526/260526	
		Standby power	263213/263600
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
N/A		T1 Technology equipment	
		Central sound system	275123
		Telephone Wiring	271313/271513
		Integrated Telephone System	273123
		Video Wiring	271543
		Digital on Demand Delivery System	274125
		Local Area Network Wiring	271513/271323
		Local Area Network Electronics	272100/273123
		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.
- ***Lockers are not part of the construction factor, but are a part of the circulation/corridor factor.***

NOTES:

CORRIDORS
E-BS-5

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring²:</u>		<u>Fixed Items:</u>	
Linoleum, ET, sheet vinyl,	096500	Fire extinguishers and cabinets	104400
carpet, carpet tile, rubber,	096516	Recessed vinyl floor mats or	
polished concrete finishing, or	096816	surface mats	124813
colored concrete finishing	096813	Tack board or tackable wall surface	101100
	033510		
	033519	<u>Fire Suppression:</u>	
		N/A	
<u>Base:</u>		<u>Plumbing:</u>	
Resilient base	096500	Drinking water coolers	224000
Optional: Structural glazed tile	042000		
<u>Ceiling:</u>		<u>HVAC:</u>	
Suspended, acoustical	095113	Supply/return air system	Div. 23
Option in vestibules: Abuse resistant		Temperature control from	
gypsum wallboard	092116	adjacent instructional spaces	230923
<u>Walls:</u>		<u>Electrical:</u>	
Painted concrete masonry units		Dual level switching	262726
	042000/099100	Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
<u>LOOSE FURNISHINGS:</u>		Duplex receptacles	262726
Recycling bins and waste receptacles		Means of egress lighting per code	265100
Fixed or loose benches		Emergency lighting	265100
<u>NOTE:</u> At entries adjacent to dining/ commons		<u>Communications:</u>	
area, match dining/commons flooring.		Central sound system	275123
		Clocks	275313
		Wireless access points	
			271513/272100/272133
		Video ports	271543
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		Security System	281300/281600/282300
		<u>Miscellaneous:</u>	
		Display cases	
		Directory	

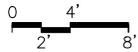
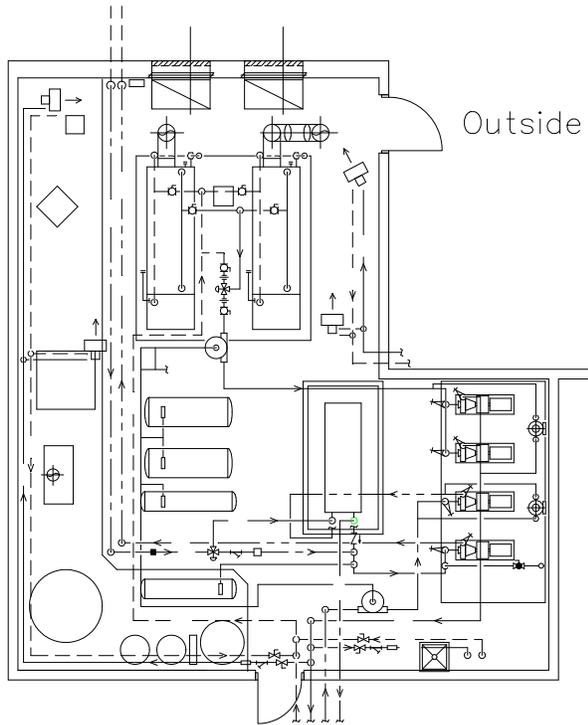
NOTES:

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:

- 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

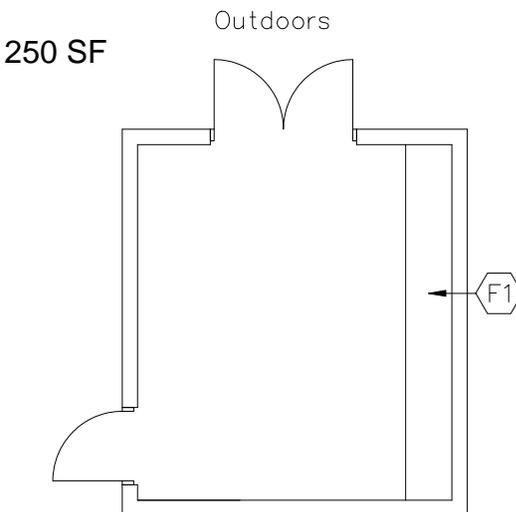
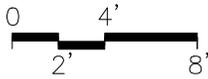
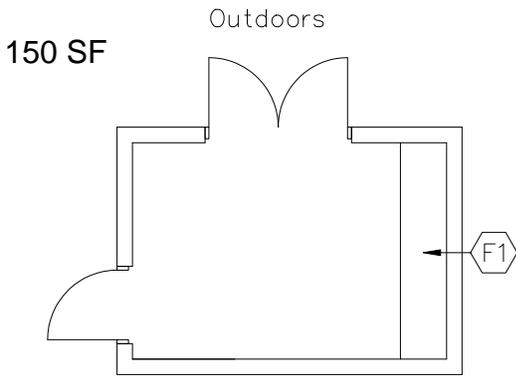
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Sealed concrete	033000	To be determined by Design Professional	
Base:		<u>Fire Suppression:</u>	
No base		To be determined by Design Professional	
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	To be determined 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 8600-6	
		Others as determined by Design Professional	
		<u>Communications:</u>	
		Central sound system	275123
		Voice port and phone	271513/ 273123
		<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 - **350** 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>	
Sealed 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 8600-6	
		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:

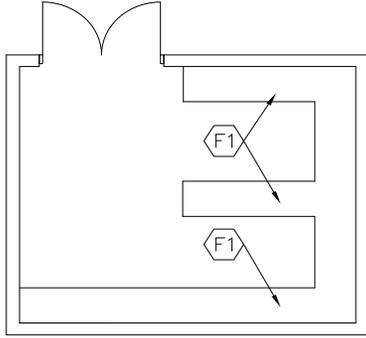
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.

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

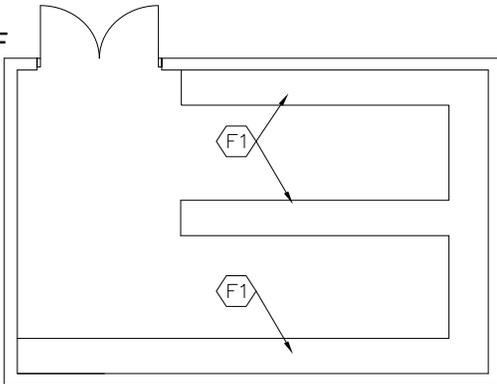
CHAPTER 4: ELEMENTARY SCHOOL

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

250 SF



400 SF



CAPACITY: N/A
 SIZE: **170 - 540 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:

N/A

NOTES:

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

CHAPTER 4: ELEMENTARY SCHOOL

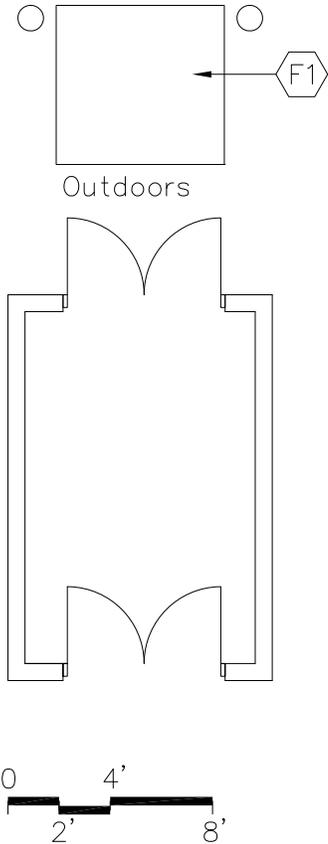
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Sealed concrete	033000	F1 26' - 32' of open tall shelving, depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
No base			
Ceiling:		<u>Fire Suppression:</u>	
Exposed structure	---	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 8600-6	
		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



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

CAPACITY:
SIZE:

N/A
120 SF

NOTES:

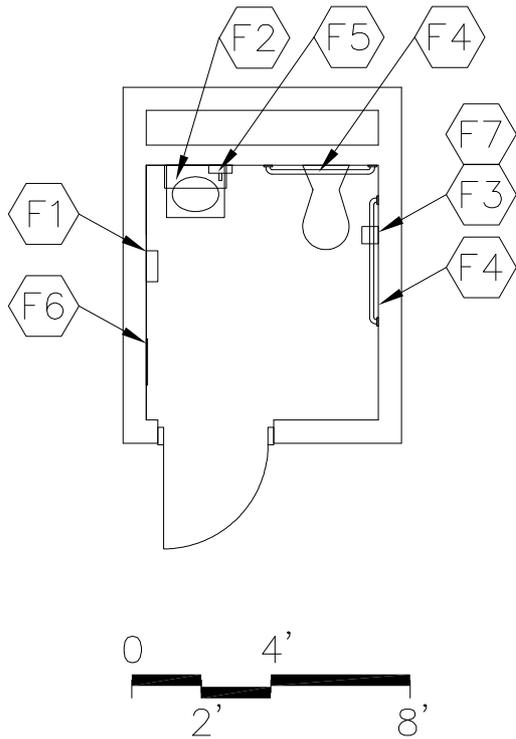
LOADING/RECEIVING AREA
E-BS-9

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Sealed 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 8600-6	
		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.



PROGRAM ACTIVITIES:

- Personal and health needs for the building occupants

SPATIAL RELATIONSHIPS:

- Near academic area

ENVIRONMENTAL CONSIDERATIONS:

- 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:

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

**RESTROOM
E-BS-10**

CHAPTER 4: ELEMENTARY SCHOOL

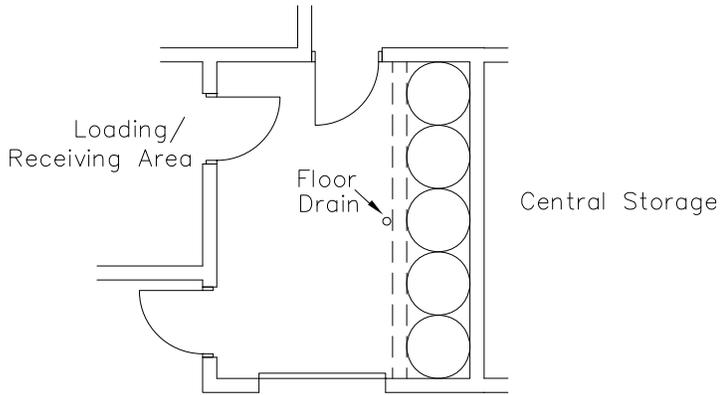
<u>FINISHES¹:</u>	<u>Spec. Ref.#</u>	<u>FEATURES¹:</u>	<u>Spec. Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, sheet vinyl	096516	F1 Towel dispenser	102813
	096500	F2 Mirror with shelf above sink(optional)	102813
Optional: quarry tile, or	093000	F3 Toilet tissue holder	102813
resinous flooring	096723	F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Sanitary product dispenser	102813
Resilient base	096500	F7 Sanitary product receptacle	102813
Optional: quarry tile, resinous	093000		
flooring, or integral vinyl cove base	096723	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
<u>Walls:</u>		Plumbing connections	224000/221116/221119
Painted concrete masonry units	042000/099100		
		<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Exhaust air system	Div. 23
Wastebasket		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

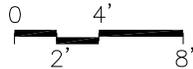
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. F6 and F7 required for female restroom only.

**RECYCLING ROOM
E-BS-11**

CHAPTER 4: ELEMENTARY SCHOOL



Direct access to loading dock, if possible



Direct access to loading dock, if possible.

CAPACITY: N/A
SIZE: 80 - 160 SF

PROGRAM ACTIVITIES:

- Provide recyclable collection for paper, cardboard, glass, plastics and metals

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. Contact local collection agency to see if co-mingling of materials is permitted. Design team should meet the LEED intent when designing the recycling area.

RECYCLING ROOM
E-BS-11

CHAPTER 4: ELEMENTARY SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Sealed 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>	
Epoxy-painted concrete masonry units		Exhaust air system	Div. 23
	042000 / 099100	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 8600-6	
		Duplex receptacles	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.