

PURPOSE

The purpose of this Chapter is to provide the Vocational School District and the Design Professional with the requirements and relationships for the Career-Technical School spaces identified in Chapter 2: Bracketing.

INTRODUCTION

This Chapter begins with an overall building diagram showing how the various areas of a Career-Technical school could be arranged. The diagram is meant only to demonstrate the relationships between various parts of the building.

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.

Following each program area diagram are representative space plates for each type of space in the program area. Each space plate includes a diagram of the room showing a possible layout and also gives other information about the space, including:

- a. Program Activities
- b. Spatial Relationships
- c. Environmental Considerations
- d. Finishes
- e. Loose Furnishings
- f. Features

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 the requirements of Finishes, Features, Plumbing, HVAC, Electrical, and Technology. 5% of floor area for natural light openings is a minimum and is considered to be the masonry or rough opening.

INTRODUCTION

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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.

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.

LOOSE EQUIPMENT

Loose equipment, although shown in some space plates, is not generally purchased through the classroom facilities assistance program (CFAP). This is the responsibility of the Career-Technical School.

FIXED EQUIPMENT

Fixed equipment which is defined as being attached to and therefore becoming a part of the building structure and having a useful life of greater than five years is provided by CFAP.

FEATURES

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

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

AREA

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

PROJECTORS

The location of overhead projectors in ceilings of spaces where required shall be carefully determined in relation to the projection surface.

OPTIONS

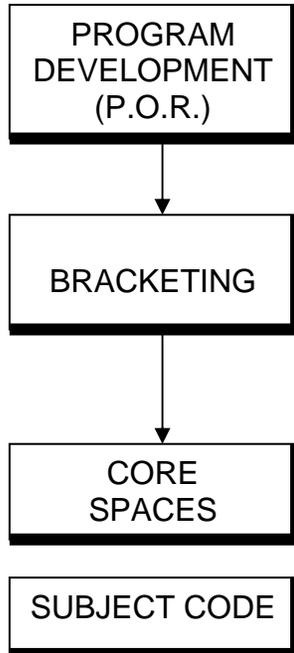
1. Some finishes and features have options noted on the space plates. Linoleum (spec.section 096516) or rubber sheet flooring is an option to resilient flooring or carpet. Steel stud and abuse-resistant wallboard partition is an option to concrete masonry between classrooms, labs, and other academic spaces.
2. The science lab layouts shown do not restrict or reflect the variety of arrangements available to the Design Professional.

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, astronomical time clock, **or temperature control system** to comply with ASHRAE 90.1. to automatically turn lighting off when sufficient daylight is available. **Interior and exterior lighting allowable power densities shall be in compliance with ASHRAE 90.1.**

ELECTRICAL

A room safety push-button (kill) switch capable of de-energizing room electrical power shall be provided in rooms where machines, tools, apparatus, etc. could cause physical harm to student. Button shall be connected to electrical circuits, panelboards, bus duct, etc. that serves such tools, apparatus, etc.

INSTRUCTIONS**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

Determined previous to this chapter between school district and design professional. Building program can be core spaces, Career-Technical subject codes, or a combination of both.

Determined in Volume One, Chapter 2 of the Design Manual.

Once building program is determined, Chapter 6 can be utilized to develop individual spaces. Core spaces are located at the beginning of Chapter 6. These spaces include Academic Core, Special Education/Student Service, Administrative, Media Center, Student Dining, Food Service, Custodial, General Service, and Building Service spaces.

The remainder of Chapter 6 describes the seven Program Types in which all ODE recognized subject codes are placed.

Once the architect knows which subject codes will be in the building program, those subject codes can be found in the index. An index of all subject codes, both by subject code name and subject code number, follows these instructions. As an example, the subject code, "Cosmetology", is in Program Type 4. Turning to the appropriate tab, one will find a general description, a program example, lab example, lab descriptions, and plates for all support spaces.

Since a subject code consists of a lab, possible program specific rooms, and typical support space, the design professional must review the entire Program Type section. Lab descriptions are in alphabetical order and follow the Lab example plate. These summaries describe the contents and systems needed for each specific lab (and only the lab). Following these lab summaries are plates and descriptions for the remaining support spaces.

Certain Program Types (3, 4, 6, and 7) require the addition of program specific spaces. These are rooms needed in addition to the lab and typical support spaces. The descriptions of these spaces can be found directly after the summary of a particular lab.

With sizes and descriptions of all spaces within a particular subject code known, the design professional can proceed with the design of the subject code. Graphic plates of the labs are not provided due to the wide variety of teaching philosophies throughout the Career-Technical system within the State of Ohio. Each design professional is permitted to locate all listed items and equipment at their discretion after consultation with the school district.

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INDEX BY PROGRAM NAME

The following tables, which are sorted by program name and number, relate the unique subject code for each specialized program and the Program Type space that would be most appropriate for that curriculum delivery. The page numbers locate the program space descriptions in this Design Manual Career-Technical Section.

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14.0100	1	Accounting	6311-7
04.1900	5	Acquisition and Logistics	6315-7
14.0300	1	Administrative <i>and Professional Support</i>	6311-8
01.0301	5	Agribusiness and Production Systems	6315-8
01.0201	6	Agriculture / Industrial Equipment	6316-7
17.0401	7	Aircraft Maintenance	6317-7
01.0150	2	Animal Bioscience	6312-8
01.0901	7	Animal Science and Management (Equine)	6317-11
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17.0200	5	Appliance Repair	6315-9
04.0115	4	Arts and Communications - Media Arts Pathway-Digital TV/Video	6314-53
04.0115	4	Arts and Communications - Media Arts Pathway-Journalism	6314-53
04.0115	4	Arts and Communications - Performing Arts Pathway-Dance	6314-51
04.0115	4	Arts and Communications - Performing Arts Pathway-Music	6314-51
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17.1011	5	Building & Property Maintenance	6315-12
17.1017	5	Building Technology	6315-12
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17.2810	4	Career Paths for the Law Profession	6314-20
17.1001	6	Carpentry	6316-16
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07.1100	4	Clinical Health Care Services	6314-36
17.0700	3	Commercial Art Occupations	6313-7
17.0900	3	Commercial Photography Occupations	6313-9
07.0906	2	Community Health Aide	6312-9
17.1805	6	Construction - Design/Build	6316-19
17.1806	6	Construction - Management	6316-19
17.2602	4	Cosmetology	6314-14
17.2802	4	Criminal Justice	6314-20
17.2815	2	Criminal Science Technology	6312-8
33.0005	4	Culinary and Food Service Operations	6314-23
09.0203	4	Culinary Arts and Food Service Management	6314-23
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07.0101	4	Dental Assistant	6314-26
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07.9960	1	Diversified Cooperative Health Occupations	6311-11
07.0998	4	Diversified Health Occupations	6314-29
17.0300	1	Drafting Occupations	6311-12
09.0201	3	Early Childhood Education and Care	6313-13
04.0820	3	E-Commerce Marketing	6313-27
17.1002	5	Electrical Trades	6315-15
17.1503	1	Electronics	6311-13
17.2811	2	Emergency Medical Technician	6312-11
17.1600	2	Energy Science	6312-7

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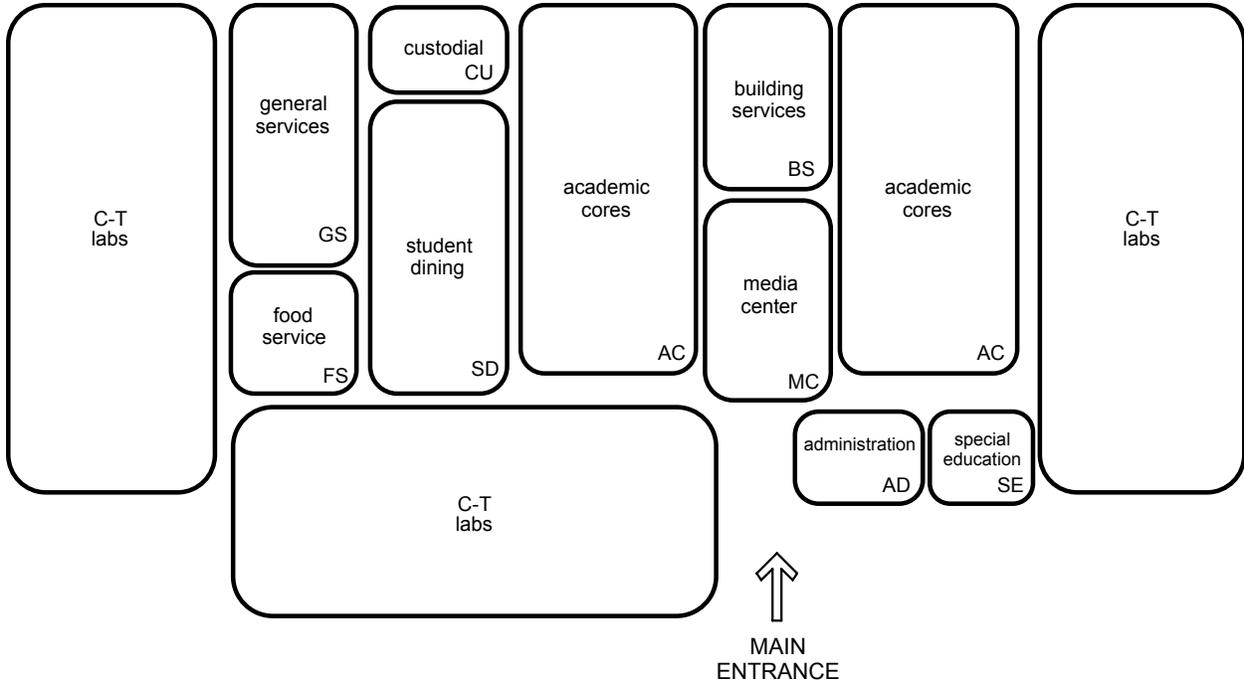
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01.0601	6	Horticulture	6316-27
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14.0320	1	Medical Management and Support	6311-18
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NOTES:

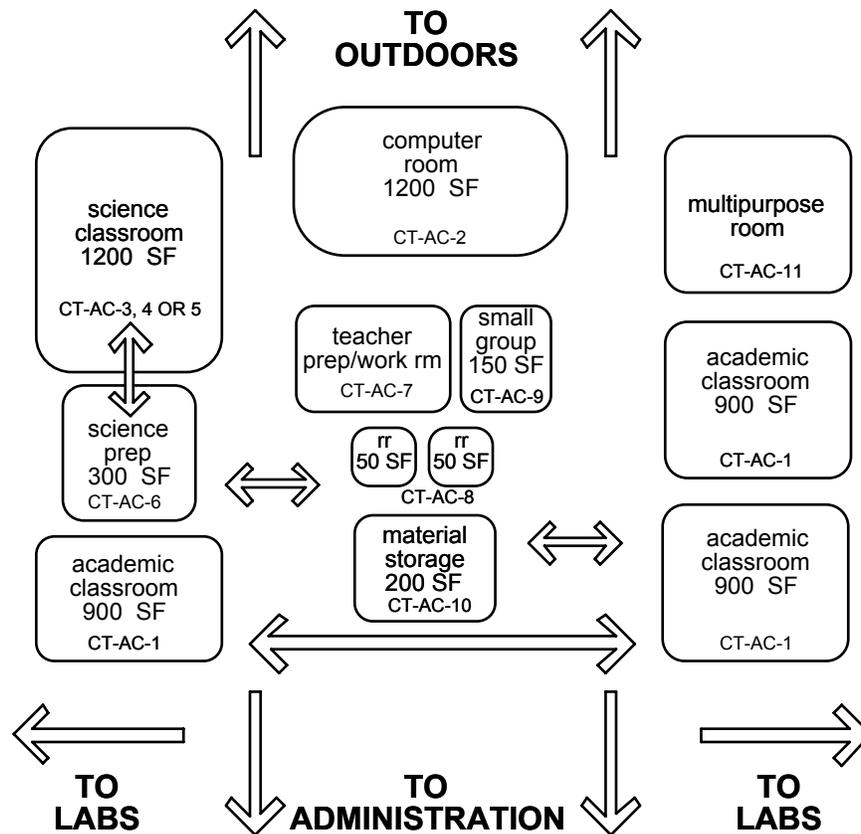
This is an example of how the spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

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NOTE:

This is an example of how the academic spaces in a career-technical school could be arranged. This is only meant to demonstrate the relationships between various areas of the building.

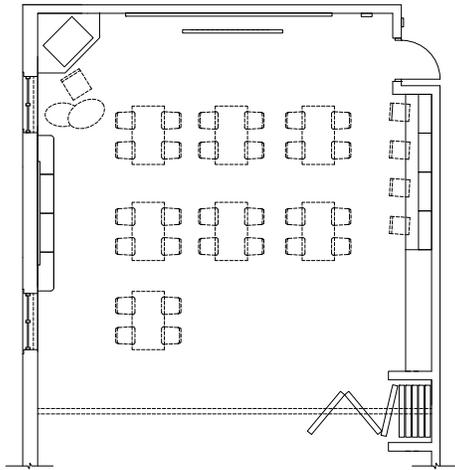
Following are the Academic core space:

- CT-AC-1 Academic Classroom
- CT-AC-2 Computer Room
- CT-AC-3 General Science / Physics
- CT-AC-4 Biology
- CT-AC-5 Chemistry
- CT-AC-6 Science Prep
- CT-AC-7 Teacher Prep / Workroom
- CT-AC-8 Individual Restroom
- CT-AC-9 Small Group Room
- CT-AC-10 Material Storage
- CT-AC-11 Multipurpose Room

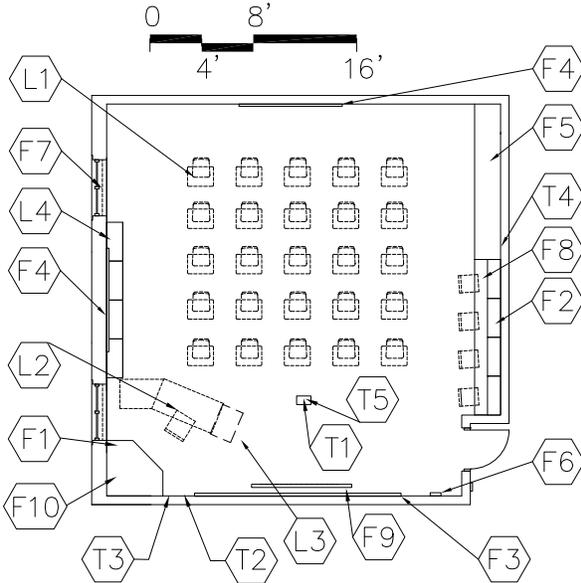
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ACADEMIC CLASSROOM CT-AC-1

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CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

CAPACITY:
SIZE:

25 students
900 SF

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

SPATIAL RELATIONSHIPS:

- Near other academic core classrooms
- Proximity to large group restrooms
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

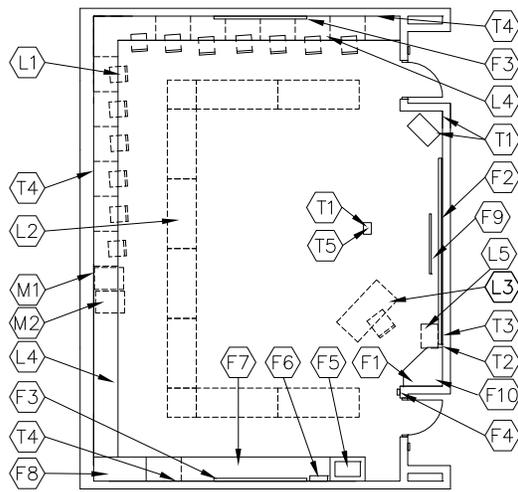
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**ACADEMIC CLASSROOM
CT-AC-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

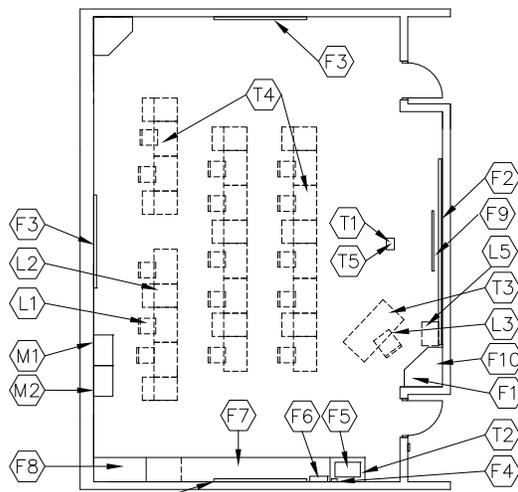
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 3' of tall wardrobe with file drawers	123550
Optional: Vinyl composition tile, linoleum, <i>ET</i> , sheet vinyl, or rubber	096516 096500	F2 Computer work surface (could be loose)	123550
		F3 10'-16' of chalk/marker board	101100
		F4 10'-16' of tack board	101100
<u>Base:</u>		F5 8'-12' of base & wall cabinets	123550
Resilient base	096500	F6 Pencil sharpener support	062000
		F7 Windows with integral blinds	085113
<u>Ceiling:</u>		F8 About 10' of wall cabinets	123550
Suspended, acoustical	095113	F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
		<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
L1 Student desks and chairs		<u>HVAC:</u>	
L2 Teacher desk or workstation/computer support and chair		Supply/return air system	Div. 23
L3 File cabinet		Independent temperature control	230923
L4 9' of low bookcases (fixed or mobile)		<u>Electrical:</u>	
Wastebasket		Fluorescent lighting:	265100
Pencil sharpener		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		M1 Operable partitions between classrooms are optional	102226

NOTES:

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



PERIMETER WORKSTATION LAYOUT



FREE-STANDING WORKSTATIONS



CAPACITY:
SIZE:

25 students
1,100 SF

PROGRAM ACTIVITIES:

- Individual computer instruction
- Group instruction
- Individual project work
- Media production
- Small group meetings

SPATIAL RELATIONSHIPS:

- Near academic core classrooms
- Near large group restrooms
- Near teacher prep area/workroom

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**COMPUTER ROOM
CT-AC-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

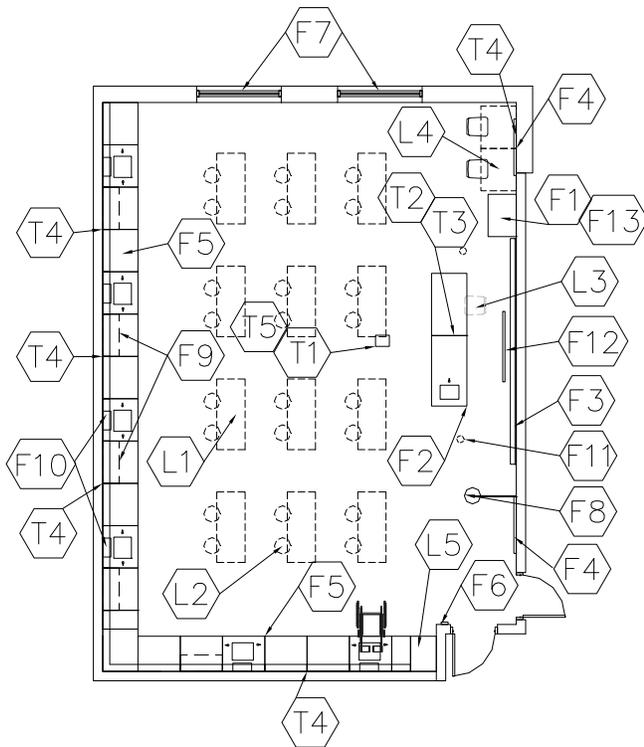
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 3' of tall wardrobe with file drawers	123550
Optional: vinyl composition tile, ET , sheet vinyl, linoleum, or rubber	096500 096516	F2 8'-16' of chalk/marker board	101100
		F3 8'-16' of tackboard	101100
		F4 Pencil sharpener support	062000
		F5 3' sink base cabinet (optional)	123550
<u>Base:</u>		F6 Towel dispenser (optional)	102813
Resilient base	096500	F7 4'-12' of base cabinets	123550
		F8 5'-8' of tall storage cabinets (optional)	123550
<u>Ceiling:</u>		F9 Projection screen (optional)	115213
Suspended, acoustical	095113	F10 Technology support casework	123550
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
		<u>Plumbing:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
L1 Student chairs		<u>HVAC:</u>	
L2 Work tables		Supply/return air system	Div. 23
L3 Teacher desk or workstation/computer support and chair		Independent temperature control	230923
L4 Computer workstation furniture		<u>Electrical:</u>	
L5 File cabinet		Fluorescent lighting: Parabolic lenses	265100
Wastebasket		Illumination level: See Table 8600-4	
Pencil sharpener		Multilevel switching	262726
		4 duplex receptacles	262726
L4 could be fixed casework.		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 Classroom area network (13 ports minimum)	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		The following items are to be funded by the school district:	
		M1 Classroom area network file server	
		M2 Printer	

NOTES:

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

**GENERAL SCIENCE/PHYSICS
CT-AC-3**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: 24 - 28 students
 SIZE: 1,200 SF
 ANCILLARY SPACES: Science Prep
 CT-AC-6

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Laboratory experimentation
- Data collection and analysis
- Demonstrations
- Project work

SPATIAL RELATIONSHIPS:

- Near other science classrooms
- Adjacent to science prep room
- Classrooms located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Proximity to large group restrooms
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control -
 wall minimum STC 50
 ceiling minimum CAC 35, NRC **0.70**
- Higher than normal ventilation requirements
- Moisture- and stain-resistant finishes
- Chemical-resistant counter tops

NOTES:

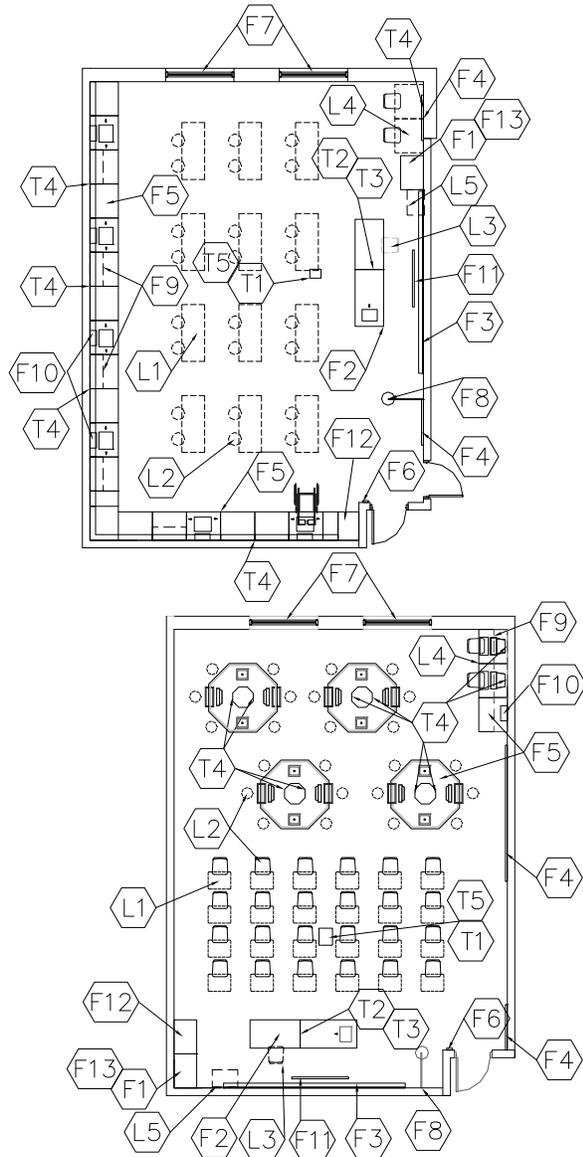
1. Loose furnishings shown represent one of many possible arrangements.
2. Science casework layout to be determined by the school district.
3. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.
4. The layouts shown do not restrict or reflect the variety of arrangements available to the Design Professional.

**GENERAL SCIENCE/PHYSICS
CT-AC-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Vinyl composition tile, linoleum, rubber, <i>ET</i> , sheet vinyl,	096500	F1 3' of tall wardrobe with file drawers	123553
<i>polished concrete finishing</i>	096516	F2 Demonstration table/teacher desk	123553
<i>or colored concrete finishing</i>	033510	F3 10'-16' of chalk/marker board	101100
	033519	F4 10'-16' of tack board	101100
		F5 40'-60' of lab casework with sinks	123553
		F6 Pencil sharpener support	062000
<u>Base:</u>		F7 Windows with integral blinds	085113
Resilient base	096500	F8 Emergency shower/eyewash	224000
		F9 18'-24' of wall cabinets	123553
<u>Ceiling:</u>		F10 Towel dispensers (optional)	102813
Suspended, acoustical	095113	F11 2 eye hooks for demonstrations(optional)	055000
		F12 Projection screen (optional)	115213
		F13 Technology support casework	123553
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units		Fire suppression system	211000
042000/099100		<u>Plumbing:</u>	
		Plumbing connections	
		224000/221116/221119	
<u>LOOSE FURNISHINGS:</u>		Emergency shower/eyewash connections	224000
L1 Student work tables		Gas connections (optional)	226313
L2 Student stools/chairs		Master shutoff for gas	226313
L3 Teacher chair or stool		Compressed air connections(optional)	221500
L4 Computer workstation furniture		<u>HVAC:</u>	
L5 File cabinet		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
Pencil sharpener		Manual exhaust	Div. 23
		<u>Electrical:</u>	
L4 could be fixed casework.		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		Duplex receptacles at perimeter workstations and teaching wall	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting	265100
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port at demonstration table	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. Master gas shutoff valve shall be clearly labeled, easily accessible, and immediately operable by staff.



CAPACITY: 24 - 28 students
SIZE: 1,200 SF
ANCILLARY SPACES: Science Prep
 CT-AC-6

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Laboratory experimentation
- Data collection and analysis
- Demonstrations
- Project work

SPATIAL RELATIONSHIPS:

- Near other science classrooms
- Adjacent to science prep room
- Classrooms located in academic “zone” that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Proximity to large group restrooms
- Flexibility of space
- Appropriate exterior exposure for “grow” window

ENVIRONMENTAL CONSIDERATIONS:

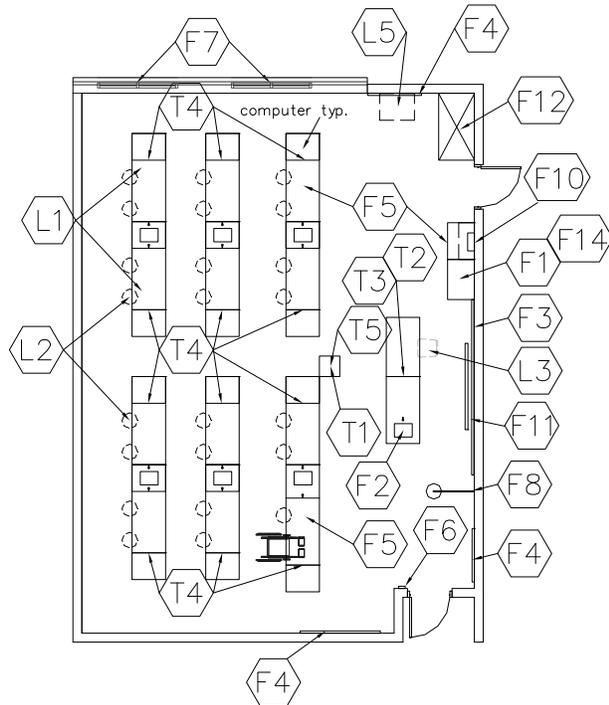
- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control - wall minimum STC 50 ceiling minimum CAC 35, NRC **0.70**
- Higher than normal ventilation requirements
- Moisture- and stain-resistant finishes
- Chemical-resistant counter tops

NOTES:

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

**BIOLOGY
CT-AC-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Vinyl composition tile, linoleum,	096500	F1 3' of tall wardrobe with file drawers	123553
Rubber, <i>ET</i> , sheet vinyl,	096516	F2 Demonstration table/teacher desk	123553
<i>polished concrete finishing, or</i>	<i>033510</i>	F3 10'-16' of chalk/marker board	101100
<i>colored concrete finishing</i>	<i>033519</i>	F4 10'-16' of tack board	101100
		F5 40'-60' of lab casework with sinks	123553
		F6 Pencil sharpener support	062000
		F7 Windows with integral blinds	085113
<u>Base:</u>		F8 Emergency shower/eyewash	224000
Resilient base	096500	F9 18'-24' of wall cabinets (total)	123553
		F10 Towel dispensers (optional)	102813
<u>Ceiling:</u>		F11 Projection screen (optional)	115213
Suspended, acoustical	095113	F12 Tall cabinets (optional)	123550
		F13 Technology support casework	123550
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
		<u>Plumbing:</u>	
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		Emergency shower/eyewash	224000
L1 Student work tables		connections	226313
L2 Student stools/chairs		Master shut-off for gas	226313
L3 Teacher chair or stool		Gas connections	221500
L4 Computer workstation furniture		Compressed air connections (optional)	221316
L5 File cabinet		Acid waste piping	221323
Wastebasket		Neutralization tank (optional)	
Pencil sharpener		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature ctrl	230923
		Manual exhaust	Div. 23
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		Duplex receptacles at perimeter	
		workstations and teaching wall	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		Emergency lighting	265100
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port at demonstration table	271513
		T4 4 data ports (minimum)for student use	271513
		Central sound system	275123
		Clock	275313
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>NOTES:</u>			
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. Master gas shutoff valve shall be clearly labeled, easily accessible, and immediately operable by staff.			

**CHEMISTRY
CT-AC-5**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Laboratory experimentation
- Data collection and analysis
- Demonstrations
- Project work

SPATIAL RELATIONSHIPS:

- Near other science classrooms
- Adjacent to science prep room
- Classrooms located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Proximity to large group restrooms
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control -
wall minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Higher than normal ventilation requirements
- Moisture- and stain-resistant finishes
- Chemical-resistant counter tops

CAPACITY: 24 - 28 students
SIZE: 1,200 SF
ANCILLARY SPACES: Science Prep
 CT-AC-6

NOTES:

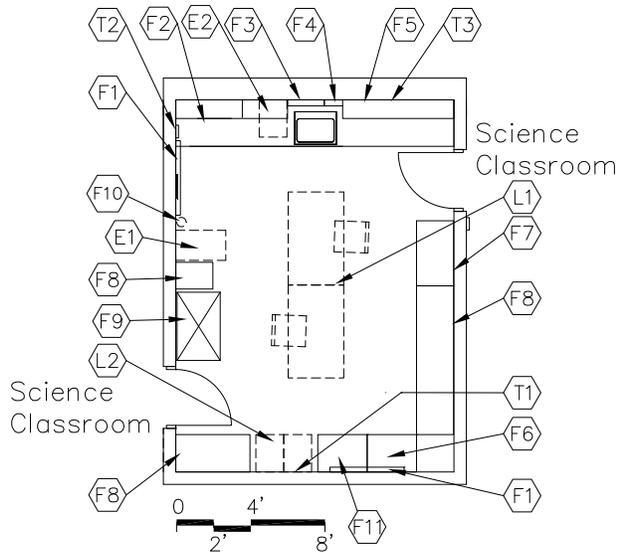
1. Loose furnishings shown represent one of many possible arrangements.
2. Science casework layout to be determined by the school district.
3. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.
4. The layouts shown do not restrict or reflect the variety of arrangements available to the Design Professional.

**CHEMISTRY
CT-AC-5**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Vinyl sheet flooring, linoleum, rubber, ET , vinyl composition tile, polished concrete finishing, or colored concrete finishing	096500 096516 033510 033519	F1 3' of tall wardrobe with file drawers F2 Demonstration table/teacher desk F3 10'-16' of chalk/marker board F4 10'-16' of tack board F5 40'-60' lab casework with sinks F6 Pencil sharpener support F7 Windows with integral blinds F8 Emergency shower/eyewash F9 18'-24' of wall cabinets (optional) F10 Towel dispensers (optional) F11 Projection screen (optional) F12 Fume hood F13 Tall cabinet for microscopes(optional) F14 Technology support casework	123553 123553 101100 101100 123553 062000 085113 224000 123553 102813 115213 115313 123550 123550
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Plumbing connections Emergency shower/eyewash connections Master shut-off for gas Gas connections Compressed air connections (optional) Acid waste piping Neutralization tank	224000/221116/221119 224000 226313 226313 221500 221316 221323
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system Independent temp control Manual exhaust Exhaust for fume hood	Div. 23 230923 Div. 23 Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Student work tables		Fluorescent lighting: Illumination level: See Table 8600-4 Multilevel switching Duplex receptacles at perimeter workstations and teaching wall Double duplex receptacle adjacent to each data and video port Emergency lighting Means of egress lighting per code	265100 262726 262726 262726 265100 265100
L2 Student stools/chairs		<u>Communications:</u>	
L3 Teacher chair or stool		T1 1 video port	271533/271543
L4 Computer workstation furniture		T2 1 voice port and phone	271513/273113
L5 File cabinet		T3 1 data port at demonstration table	271513
Wastebasket		T4 4 data ports (minimum) for student use	271513
Pencil sharpener		Central sound system	275123
L4 Could be fixed casework		Clock	275313
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. Master gas shutoff valve shall be clearly labeled, easily accessible, and immediately operable by staff.



CAPACITY: 1-3 Staff
 SIZE: 300 SF
 ANCILLARY SPACES: Science Classrooms
 CT-AC-3, CT-AC-4, CT-AC-5

PROGRAM ACTIVITIES:

- Teacher preparation
- Materials storage
- Laboratory experimentation
- Data collection and analysis
- Small group work

SPATIAL RELATIONSHIPS:

- Adjacent to science classrooms
- Shared by more than one science classroom
- Grouped with and have access to other classrooms

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -
 wall minimum **STC 45**
 ceiling minimum **CAC 35, NRC 0.70**
- Ventilation requirements
- Moisture- and stain-resistant finishes
- Chemical-resistant counter tops

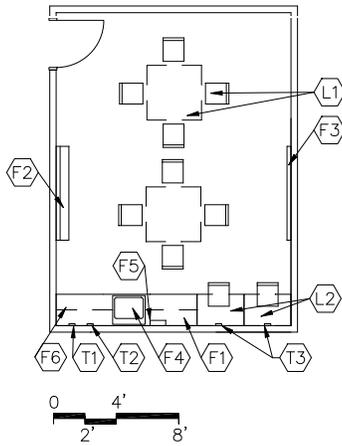
NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Science casework layout to be determined by the school district.
3. Depending upon the educational program of the district, a tall wardrobe may be placed in this science prep room or could be placed in a teacher prep area/workroom.
4. A separate chemical storage room may be created from the science prep room square footage.

**TEACHER PREP/WORKROOM
CT-AC-7**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

300 SF



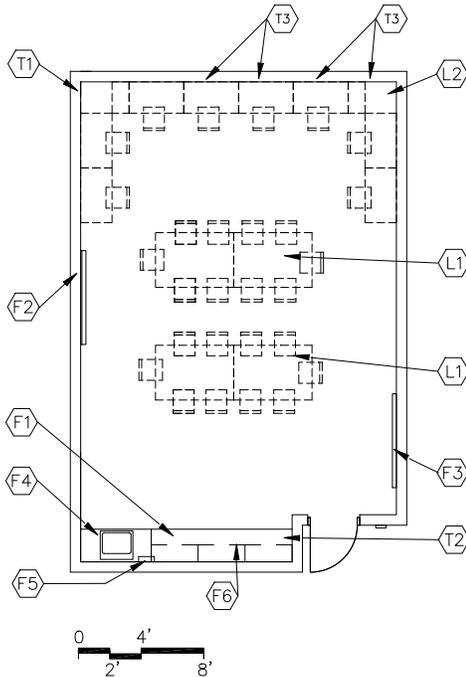
PROGRAM ACTIVITIES:

- 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

600 SF



ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 8 - 28 teachers
SIZE: 300 - 600 SF

NOTES:

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

**TEACHER PREP/WORKROOM
CT-AC-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

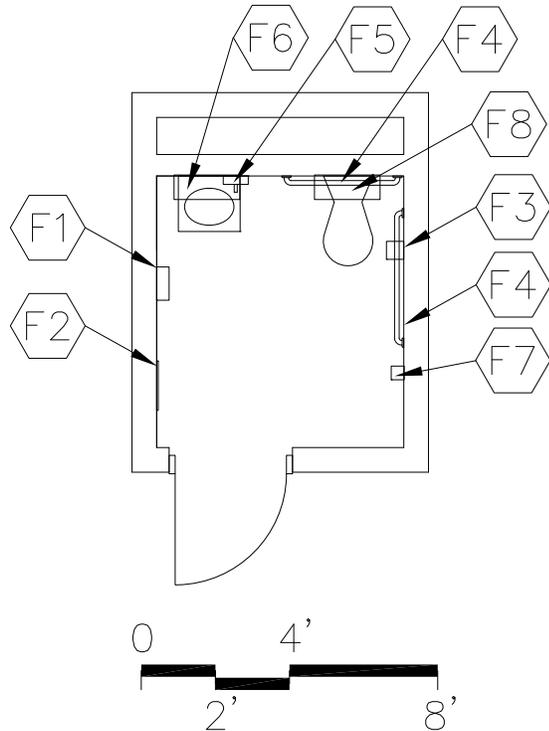
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items²:</u>	
Carpet, VCT, ET , linoleum, vinyl sheet, or rubber	096816 096500 096516	F1 6' - 9' of base cabinets (could be bookcases)	123550
<u>Base:</u>		F2 6'-8' of chalk/marker board	101100
Resilient base	096500	F3 4'-8' of tack board	101100
<u>Ceiling:</u>		F4 3' sink base cabinet	123550
Suspended, acoustical	095113	F5 Towel dispenser (optional)	102813
<u>Walls:</u>		F6 6' – 9' of wall cabinets	123550
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u>	
		Fire suppression systems	211000
		<u>Plumbing:</u>	
		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>	
L2 could be fixed casework.		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Duplex receptacles for office equipment	262726
		Receptacle for copier(if applicable)	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 2 – 8 data ports near workstations	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Copier by school district	

NOTES:

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

**INDIVIDUAL RESTROOM
CT-AC-8**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 person
 SIZE: 50 SF

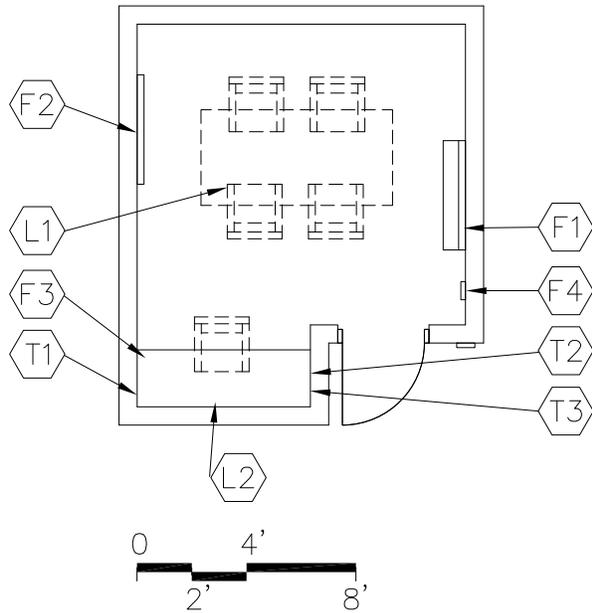
NOTES:

**INDIVIDUAL RESTROOM
CT-AC-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

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

**SMALL GROUP ROOM
CT-AC-9**
CHAPTER 6: CAREER-TECHNICAL SCHOOL


CAPACITY: 4 - 5 students
 SIZE: 150 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near academic core classrooms

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**SMALL GROUP ROOM
CT-AC-9**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 4'-6' of chalk/marker board	101100
Optional: vinyl composition tile, ET , sheet vinyl, linoleum, or rubber	096500 096516	F2 4' of tack board	101100
		F3 4'-6' of work surface (optional)	123550
		F4 Pencil sharpener support	062000
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Work tables and chairs		Fluorescent lighting:	265100
L2 Computer workstation furniture		Illumination level: See Table 8600-4	
Wastebasket		4 duplex receptacles	262726
Pencil sharpener		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port	271513/273113
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window(optional)	081113/088000

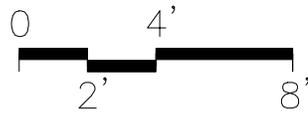
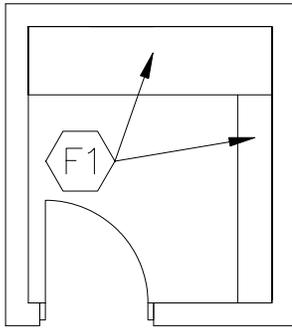
NOTES:

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

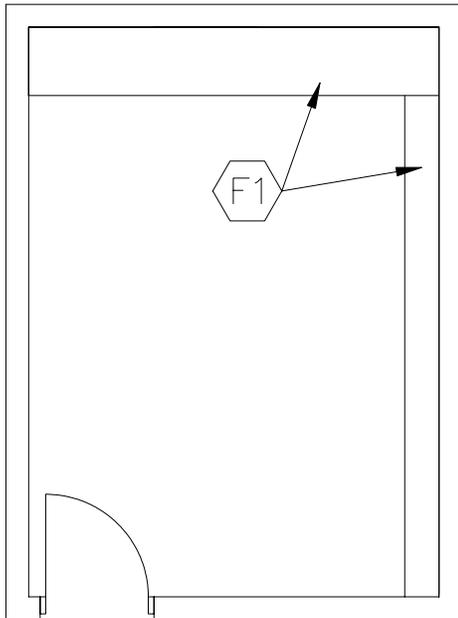
**MATERIAL STORAGE
CT-AC-10**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

50 SF



120 SF



PROGRAM ACTIVITIES:

- Storage of supplies, textbooks, and equipment

SPATIAL RELATIONSHIPS:

- Near teacher prep workroom

ENVIRONMENTAL CONSIDERATIONS:

N/A

CAPACITY:
SIZE:

N/A
50 - 120 SF

NOTES:

**MATERIAL STORAGE
CT-AC-10**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

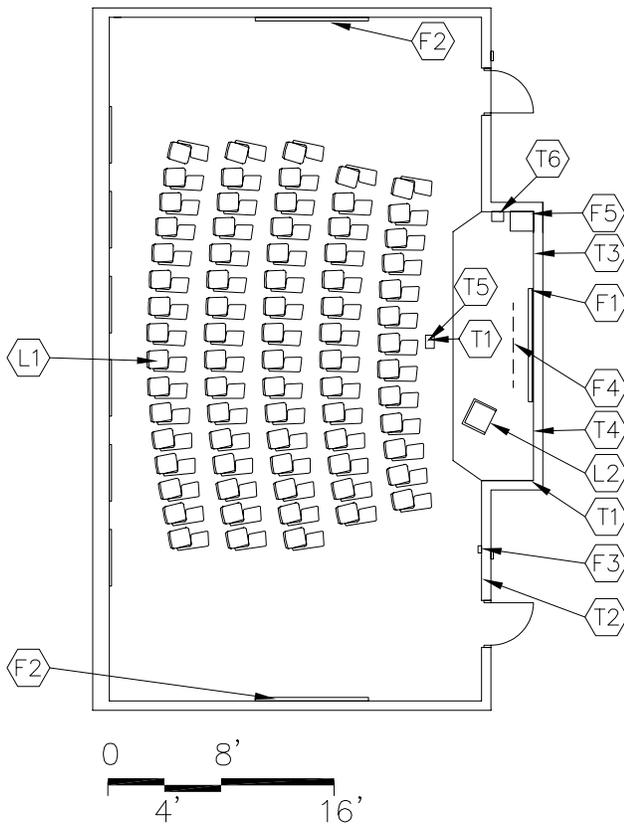
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Vinyl composition tile	096500	F1 30' of open shelving	
		depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500		
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry	042000/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
N/A		To be determined by Design Professional	
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**MULTIPURPOSE ROOM
CT-AC-11**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: 100 students
 SIZE: 1,200 - 1,500 SF

PROGRAM ACTIVITIES:

- Group instruction
- Presentations
- Testing
- Community use

SPATIAL RELATIONSHIPS:

- Near academic core classrooms
- Near large group restrooms
- Close to stage to serve as "green" room
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**MULTIPURPOSE ROOM
CT-AC-11**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

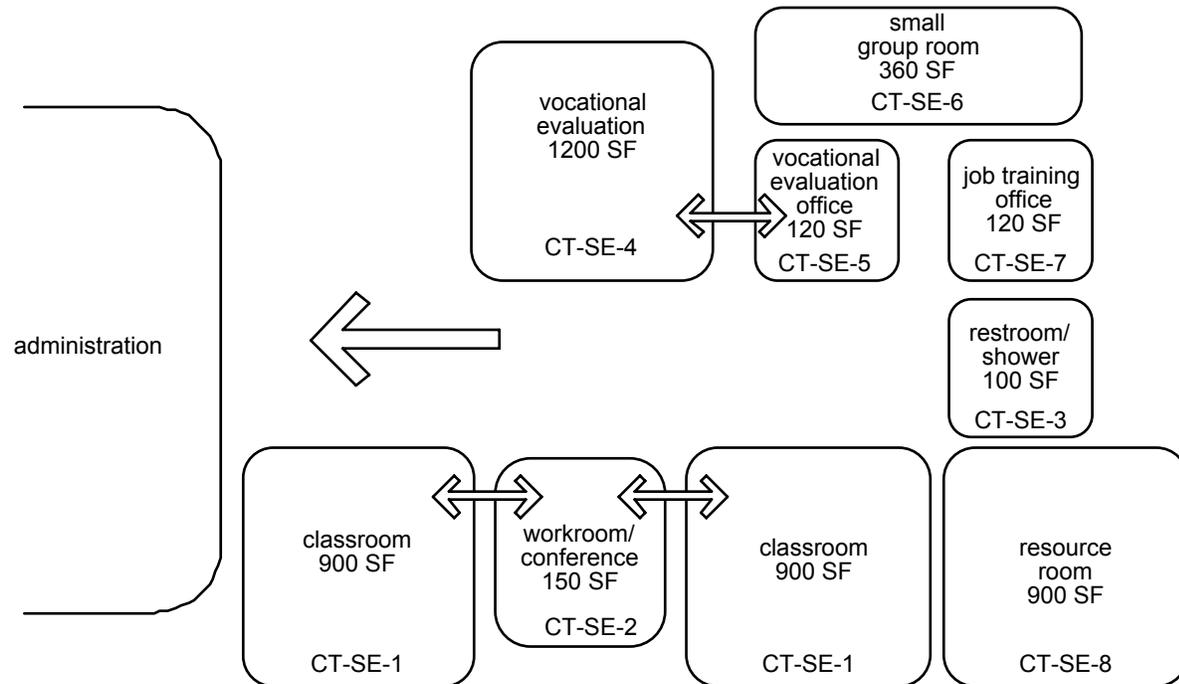
		Spec. Ref.#			Spec. Ref.#
<u>FINISHES¹:</u>			<u>FEATURES¹:</u>		
Flooring:			<u>Fixed Items:</u>		
Carpet		096816	F1	8'-12' of chalk/marker board	101100
			F2	8'-16' of tack board	101100
Base:			F3	Pencil sharpener support	062000
Resilient base		096500	F4	Projection screen (optional)	115213
			F5	Technology support casework	123550
Ceiling:			<u>Fire Suppression:</u>		
Suspended, acoustical		095113		Fire suppression system	211000
Walls:			<u>Plumbing:</u>		
Painted concrete masonry units				N/A	
		042000 /099100	<u>HVAC:</u>		
Acoustical wall treatment		098000		Supply/return air system	Div. 23
				Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>			<u>Electrical:</u>		
L1	Student desks and chairs			Fluorescent lighting:	265100
L2	Podium / console (optional)			Illumination level: See Table 8600-4	
	Portable risers			Multilevel switching	262726
	Wastebasket			6 duplex receptacles	262726
	Pencil sharpener			Double duplex receptacle adjacent to each data and video port	262726
				Emergency lighting per code	265100
				Means of egress lighting per code	265100
				Telecommunications Grounding	270526/260526
			<u>Communications:</u>		
			T1	2 video ports	271533/271543
			T2	1 voice port and phone	271513/273113
			T3	1 data port (minimum)	271513
			T4	1 port to input local computer to monitor	271513
				Clock	275313
				Central sound system	275123
			T5	Overhead projector	274119
			T6	Student Dining/Cafeteria sound reinforcement system	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. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.

SPECIAL EDUCATION/STUDENT SERVICES SPACES

CHAPTER 6: CAREER-TECHNICAL SCHOOL

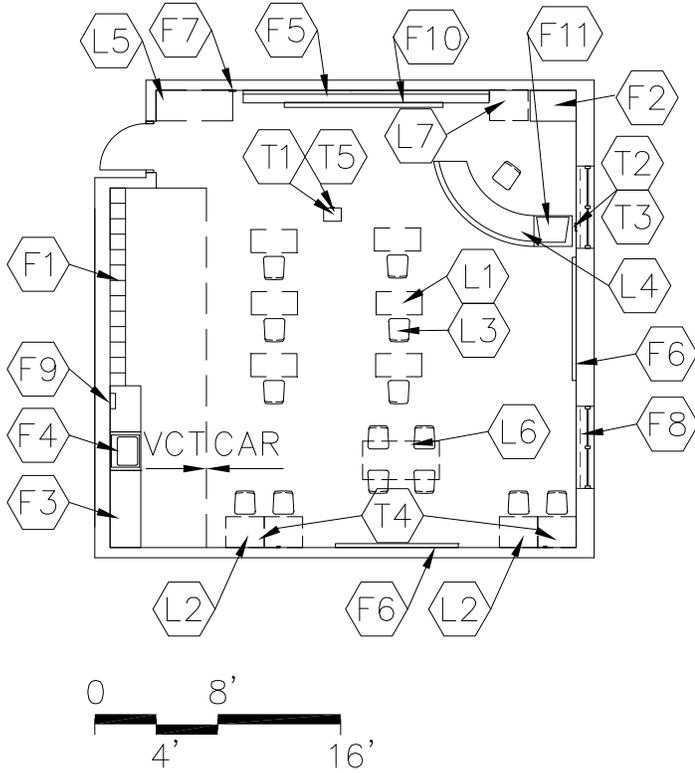
CT-SE**NOTES:**

This is an example of how the special education/student services spaces in a career-technical 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:

- CT-SE-1 Classroom
- CT-SE-2 Workroom/Conference
- CT-SE-3 Restroom/Shower
- CT-SE-4 Career Technical Evaluation
- CT-SE-5 Career Technical Evaluation Office
- CT-SE-6 Small Group Room
- CT-SE-7 Job Training Office
- CT-SE-8 Resource Room

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

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

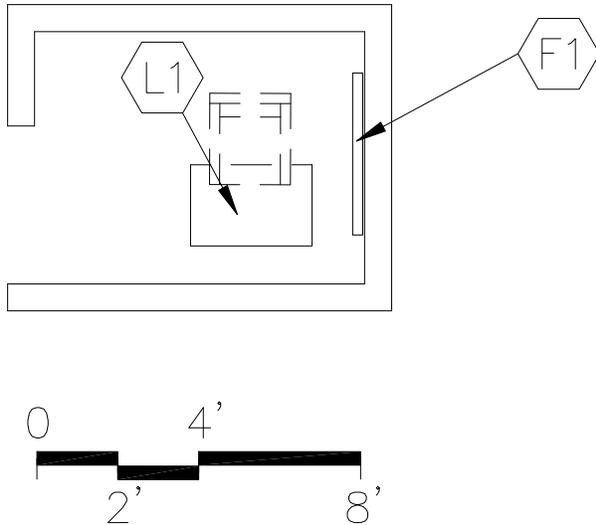
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this classroom or could be placed in a workroom/conference area.
3. See Chapter 1, page 1110-16 for specific areas needed for each disability.

**CLASSROOM
CT-SE-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet	096816	F1 Open casework – coats and personal items	123550
with resilient options	096500	with wall cabinets above	123550
Optional: All vinyl composition tile, <i>ET</i> , sheet vinyl, linoleum, or rubber	096516	F2 3' of tall wardrobe w/file drawers	123550
		F3 8'-10' of base & wall cabinets	123550
		F4 3' sink base cabinet	123550
		F5 12'-16' of chalk/marker board	101100
		F6 12'-16' of tack board	101100
		or tackable wall surface or combination	
<u>Base:</u>		F7 Pencil sharpener support	062000
Resilient base	096500	F8 Windows with integral blinds	085113
		F9 Towel dispenser (optional)	102813
<u>Ceiling:</u>		F10 Projection screen (optional)	115213
Suspended, acoustical	095113	F11 Technology support casework	123550
		F12 Mirror (optional)	102813
<u>Walls:</u>		F13 Tall storage cabinet(optional)	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>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	
		near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Sound reinforcement system	275127
		Central sound system	275123
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	
<u>LOOSE FURNISHINGS:</u>			
L1 Student desks/tables			
L2 Computer workstation furniture			
L3 Student chairs			
L4 Teacher workstations/computer support and chair			
L5 8'-10' of low bookcases (fixed or mobile)			
L6 Reading table			
L7 File cabinet			
Wastebasket			
Pencil sharpener			
<u>EQUIPMENT(optional)</u>			
E1 Washer and dryer			
E2 Small refrigerator			
E3 Range			
E4 Oven			
E5 Microwave			

NOTES:

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



CAPACITY: 1 - 2 persons
 SIZE: 150 SF

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 special education classroom or resource room

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. 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**CT-SE-2 (Quiet Area)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

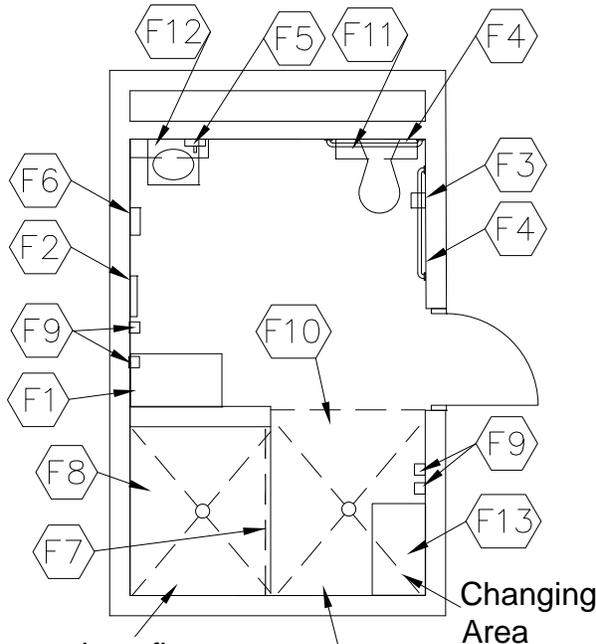
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, VCT, ET , linoleum, or sheet vinyl	096816 096500 096516	F1 4' of tack board (optional)	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Student desk and chair		Dimmable lighting	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Clock (optional)	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window with blinds (optional)	081113/088000

NOTES:

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

**RESTROOM/SHOWER
CT-SE-3**

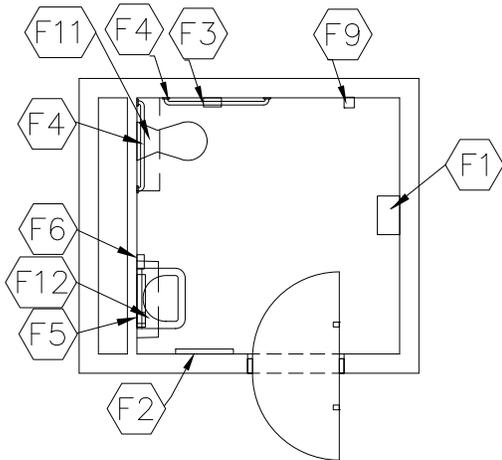
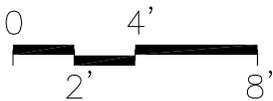
CHAPTER 6: CAREER-TECHNICAL SCHOOL



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

Drying Area;
5' x 5' sloped floor

Changing Area



CAPACITY: 1 - 2 persons
SIZE: 100 SF

PROGRAM ACTIVITIES:

- Changing area
- Toilet / shower needs

SPATIAL RELATIONSHIPS:

- Next to special education 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
CT-SE-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

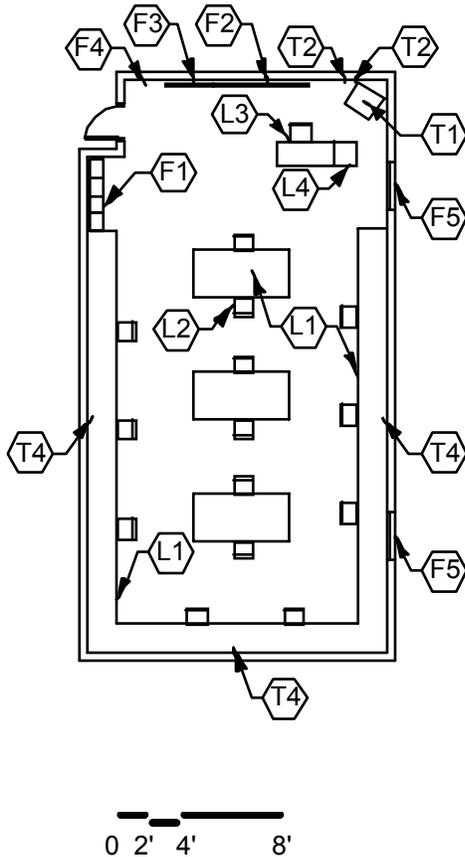
<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Restroom: Linoleum, <i>ET</i> , vinyl sheet, rubber sheet flooring,	096516 096500	F1 Base cabinets	123550 102813
Shower: Ceramic mosaic tile, or porcelain tile	093000	F2 24" x 60" mirror	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
		F6 Towel dispenser	102813
<u>Base:</u>		F7 Shower curtain and rod	102813
Restroom: Resilient base, or integral vinyl cove base	096500 093000	F8 ADA shower accessories	102813
Shower: Ceramic mosaic tile base, porcelain tile, or integral vinyl cove base		F9 (2) hooks	102813
		F10 Cubicle curtain (optional)	102813
		F11 8" deep wall cabinet above toilet	102813
		F12 Shelf (optional)	102813
<u>Ceiling:</u>		F13 <i>Changing station or fold-down adult changing station</i>	123550
Restroom: Suspended, acoustical	095113		
Shower: Painted portland cement plaster or interior finish system	092400/099100 092513	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Epoxy painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
or ceramic wall tile in shower	093000	Wall-mounted lavatory	224000
and latex paint in restroom	099100	ADA shower controls and head	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**CAREER TECHNICAL EVALUATION
CT-SE-4**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: Based on disability.
See Chapter 1, Section 1110.
SIZE: 1200 SF
ANCILLARY SPACES: Career Technical Office
CT-SE-5

PROGRAM ACTIVITIES:

- Testing of students' vocational interests and capabilities via physical aptitude exercises.

SPATIAL RELATIONSHIPS:

- Adjacent to career technical evaluation office
- Near workroom/conference
- Near administrative area

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

1. Loose furnishings 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.

**CAREER TECHNICAL EVALUATION
CT-SE-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

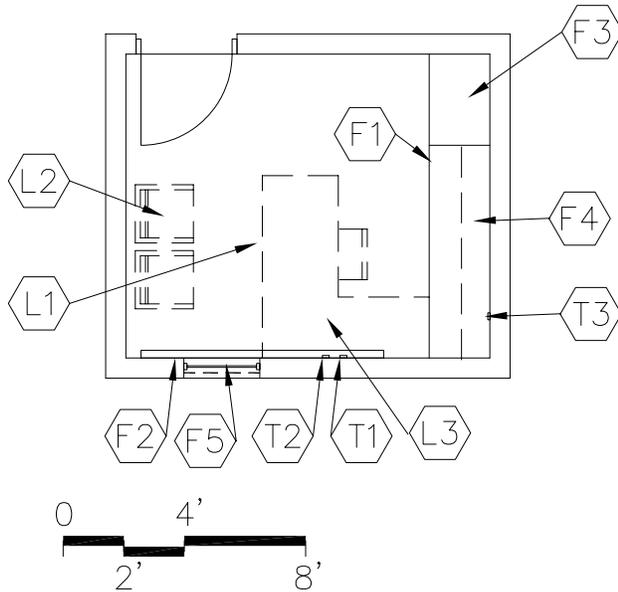
<u>FINISHES¹:</u>	<u>Spec. Ref.#</u>	<u>FEATURES¹:</u>	<u>Spec. Ref.#</u>
Flooring:		<u>Fixed Items:</u>	
Carpet	096816	F1 Open casework - coats	123550
		F2 4'-8' of chalk/marker board	101000
Base:		F3 About 4' of tack board	101000
Resilient base	096500	F4 Pencil sharpener support	062000
		F5 Windows with integral blinds	085113
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry units	042000 / 099100	N/A	
Optional: Gypsum drywall on metal studs	092116 / 099100	<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Student desk/tables		Fluorescent lighting	265100
L2 Student chairs		Illumination level: See Table 8600-4	
L3 Teacher desk and chair		Multilevel switching	262726
L4 Desk height file cabinet		4 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to	
Pencil sharpener		each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port and video display device	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	
		near teacher workstation	271513
		T4 6 data ports (minimum)	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.

**CAREER TECHNICAL EVALUATION OFFICE
CT-SE-5**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Private space for vocational evaluation coordinator
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near career technical evaluation room
- Near administrative area
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
 SIZE: 120 SF
 ANCILLARY SPACES: Career Technical Eval
 CT-SE-4

NOTES:

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

**CAREER TECHNICAL EVALUATION OFFICE
CT-SE-5**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

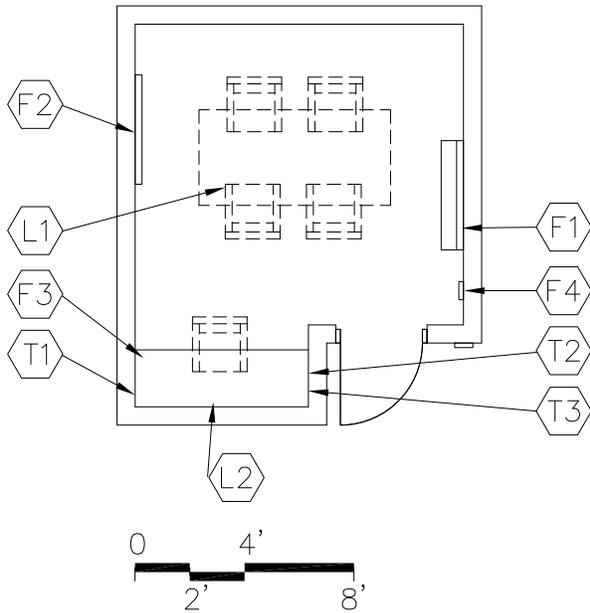
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	F5 Window with integral blind	085116
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**SMALL GROUP ROOM
CT-SE-6**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near special education classrooms

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 4 - 5 students
SIZE: 360 SF

NOTES:

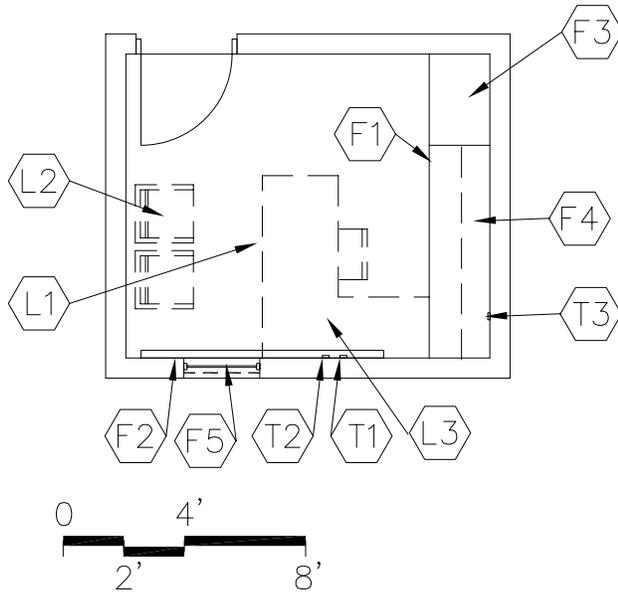
1. Loose furnishings shown represent one of many possible arrangements.

**SMALL GROUP ROOM
CT-SE-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 4'-6' of chalk/marker board	101100
Optional: vinyl composition tile, ET , sheet vinyl, linoleum, or rubber	096500 096516	F2 4' of tack board	101100
		F3 4'-6' of work surface (optional)	123550
		F4 Pencil sharpener support	062000
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Work tables and chairs		Fluorescent lighting:	265100
L2 Computer workstation furniture		Illumination level: See Table 8600-4	
Wastebasket		4 duplex receptacles	262726
Pencil sharpener		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port	271513/273113
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window(optional)	081113/088000

NOTES:

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



PROGRAM ACTIVITIES:

- Private space for job training coordinator
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near career technical evaluation room
- Near administrative area
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
 SIZE: 120 SF
 ANCILLARY SPACES:

NOTES:

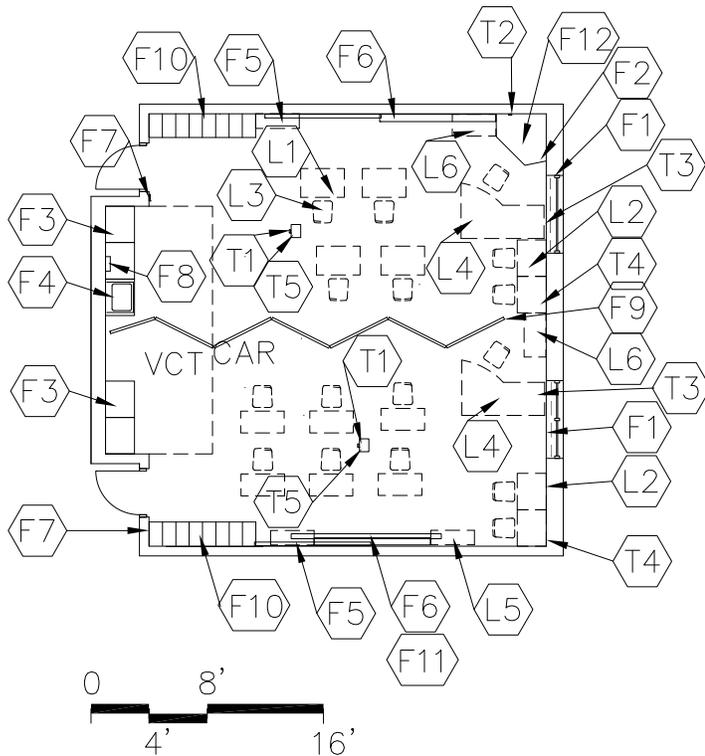
1. Loose furnishings shown represent one of many possible arrangements.

**JOB TRAINING OFFICE
CT-SE-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	F5 Window with integral blind	085116
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**RESOURCE ROOM
CT-SE-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL


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

SIZE: 900 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**RESOURCE ROOM
CT-SE-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

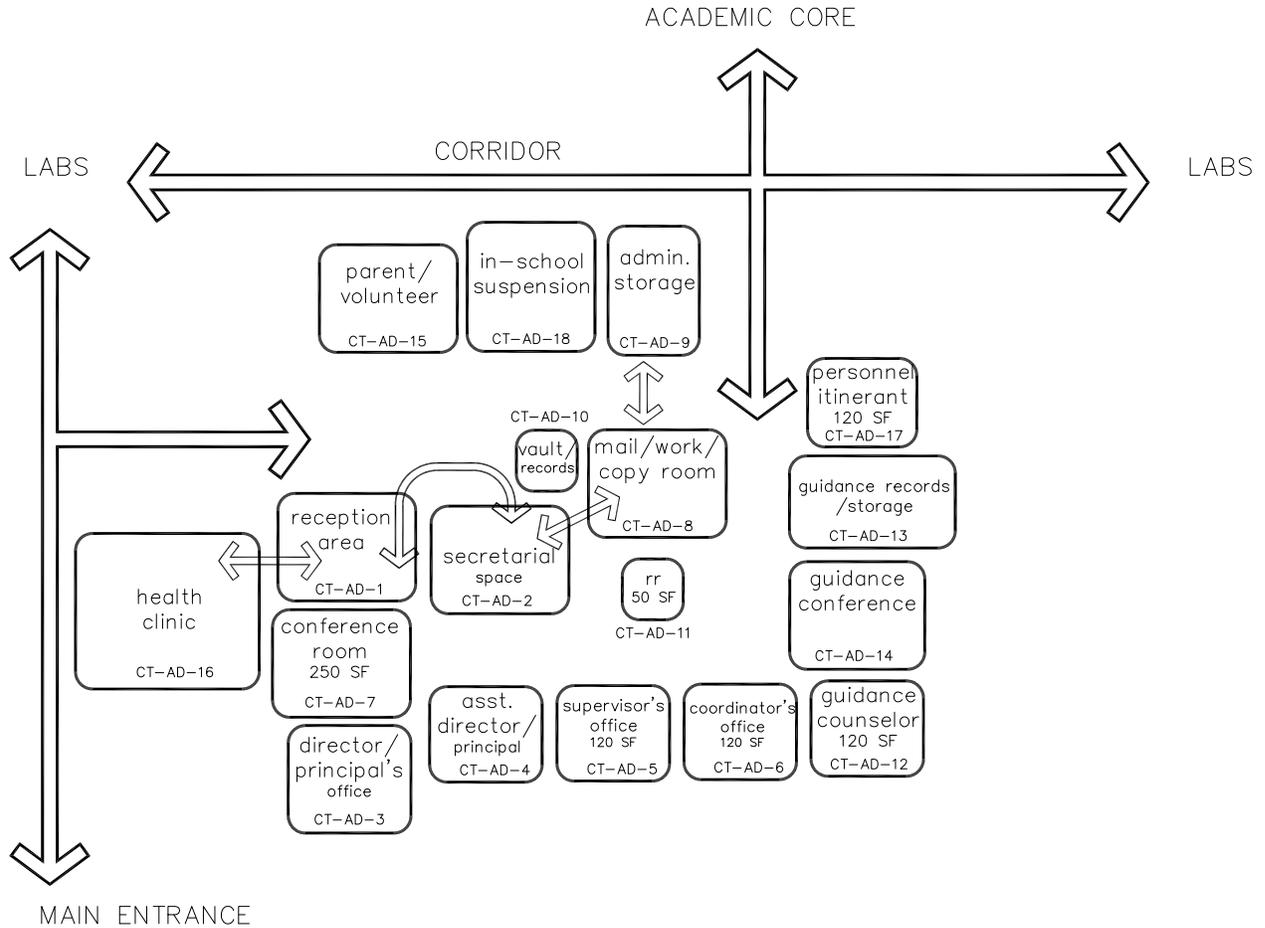
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet	096816	F1 Windows with integral blinds	085113
with resilient options	096500	F2 3' of tall wardrobe with file drawers	123550
Option: All vinyl composition tile, ET , sheet vinyl, linoleum, or rubber	096516	F3 8'-12' of base cabinets	123550
		F4 3' sink base cabinet	123550
		F5 10'-16' of chalk/marker board	101100
		F6 10'-16' of tack board	101100
		or tackable wall surface or combination	
<u>Base:</u>		F7 Pencil sharpener support	062000
Resilient base	096500	F8 Towel dispenser (optional)	102813
		F9 Operable partition (optional)	102226
<u>Ceiling:</u>		F10 Open casework coats and personal	
Suspended, acoustical	095113	storage w/wall cabinets above	123550
		F11 Projection screen (optional)	115213
<u>Walls:</u>		F12 Technology support casework	123550
Painted concrete masonry units	042000/099100	F13 Mirror (optional)	102813
		F14 Mobile storage cabinet (optional)	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks/tables		Fire suppression system	211000
L2 Computer workstation furniture		<u>Plumbing:</u>	
L3 Student chairs		Sink	224000
L4 Teacher desk /computer support and chair		Plumbing connections	224000/221116/221119
L5 Mobile bookcases or storage unit		<u>HVAC:</u>	
L6 File cabinet		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
Pencil sharpener		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	
		near each teacher workstation	271513
		T4 4 data ports (min.) for student use	271513
		Clock	275313
		Sound reinforcement system	275127
		Central sound system	275123
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

NOTES:

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

**ADMINISTRATIVE SPACES
CT-AD**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



NOTE:

This is an example of how the administrative spaces in a career-technical school could be arranged. This is only meant to demonstrate the relationships between various areas of the building.

Following are the Administrative space plates for the following rooms:

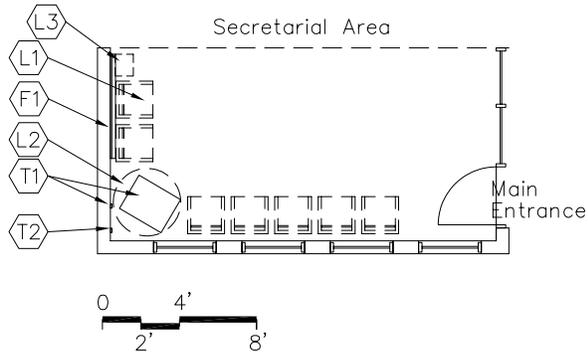
- | | | | |
|---------|---------------------------------------|----------|--|
| CT-AD-1 | Reception Area | CT-AD-10 | Vault/Records |
| CT-AD-2 | Secretarial Space | CT-AD-11 | Restroom |
| CT-AD-3 | Director/Principal's Office | CT-AD-12 | Guidance Counselor |
| CT-AD-4 | Assistant Director/Principal's Office | CT-AD-13 | Guidance Records/Storage |
| CT-AD-5 | Supervisor's Office | CT-AD-14 | Guidance Conference |
| CT-AD-6 | Coordinator's Office | CT-AD-15 | Parent/Volunteer |
| CT-AD-7 | Conference Room | CT-AD-16 | Health Clinic (<i>includes restroom</i>) |
| CT-AD-8 | Mail/Work/Copy room | CT-AD-17 | Itinerant Personnel |
| CT-AD-9 | Administrative Storage | CT-AD-18 | In-school Suspension |

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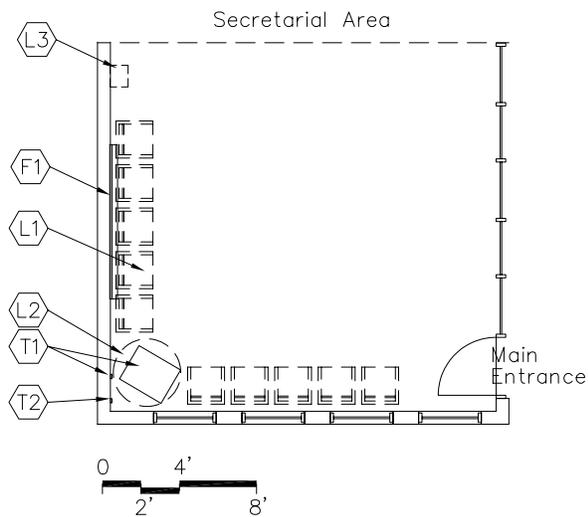
RECEPTION AREA CT-AD-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

200 SF



500 SF



CAPACITY: 6 - 8 or 8 - 10 visitors
 SIZE: 200 - 500 SF
 ANCILLARY SPACES: Secretarial Area
 CT-AD-2

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**RECEPTION AREA
CT-AD-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

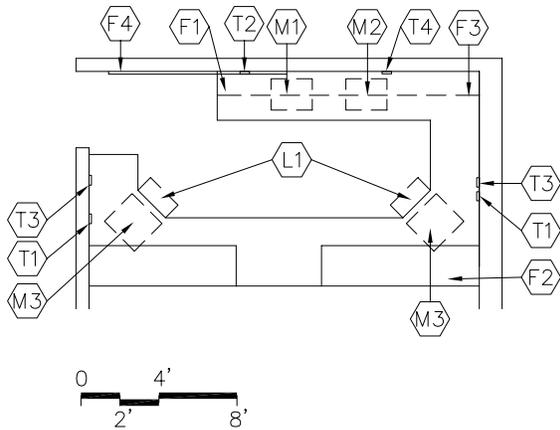
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 Tack board or tackable wall surface (optional)	101100
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted gypsum wallboard over metal studs	092116 /099100	Supply/return air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		Independent temperature control	230923
L1 Visitor chairs		<u>Electrical:</u>	
L2 End table		Single level switching	262726
L3 Racks for forms (optional)		Fluorescent lighting	265100
Wastebasket		Illumination level: See Table 8600-4	
		2 duplex receptacles	262726
		Double duplex receptacle adjacent to video port	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		T1 1 video port, monitor, and brackets	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior windows	081113/088000

NOTES:

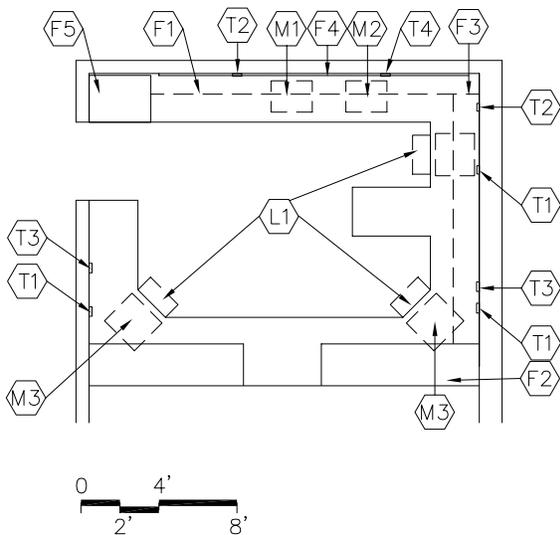
1. Finishes/Features: Refer to Chapter 9 for specification references.

CHAPTER 6: CAREER-TECHNICAL SCHOOL

200 SF ADA Compliant Approach



500 SF ADA Compliant Approach



CAPACITY: 1 - 2 or 2 - 3 staff
SIZE: 200 – 500 SF
ANCILLARY SPACES: Reception Area
 CT-AD-1

PROGRAM ACTIVITIES:

- Conduct administrative support duties, and receive and direct visitors

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**SECRETARIAL AREA
CT-AD-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

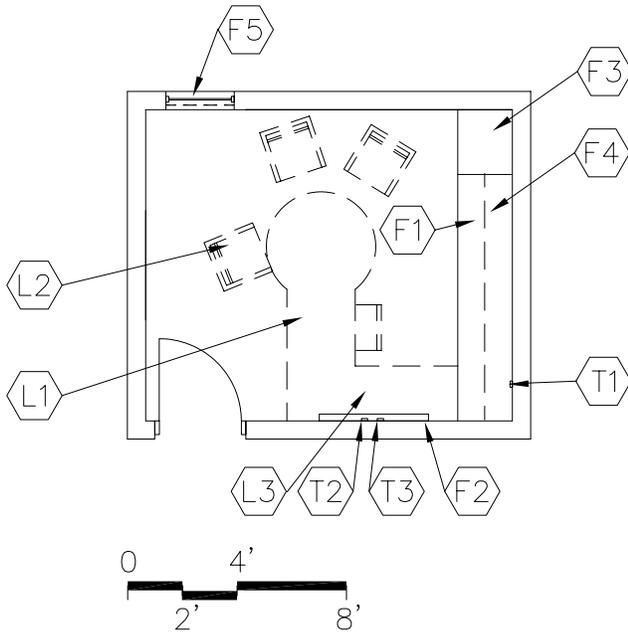
<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
Flooring:		<u>Fixed Items</u> ² :	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 24' - 60' of work surface with file drawers	123550
Base:		F2 42" high counter top with portion of counter 34" high or lower	123550
Resilient base	096500	F3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

NOTES:

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

**DIRECTOR / PRINCIPAL'S OFFICE
CT-AD-3**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 4 persons
SIZE: 150 SF

NOTES:

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

**DIRECTOR / PRINCIPAL'S OFFICE
CT-AD-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

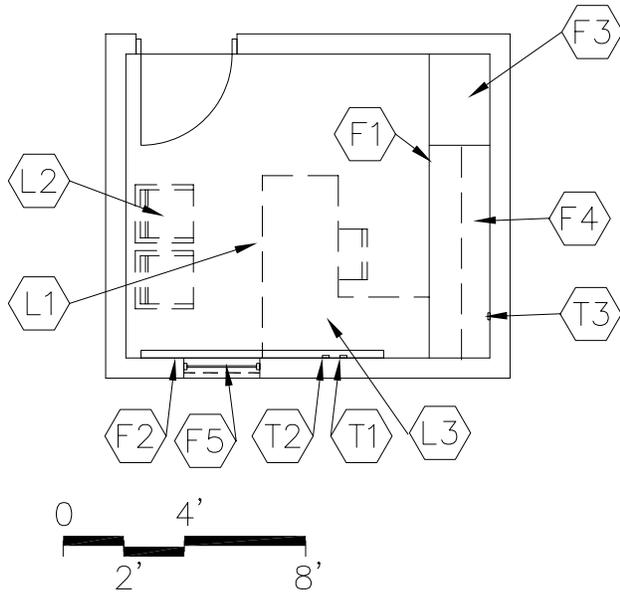
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or</i> Carpet Tile	096816 096813	<u>Fixed Items:</u>	
		F1 Work surface with file drawers	123550
		F2 4' of tack board	101100
		or tackable wall surface	
<u>Base:</u>		F3 2' of tall wardrobe (optional)	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
<u>Ceiling:</u>		F5 Window with integral blind	085116
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>	
		N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L3 Computer desk return Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**ASSISTANT DIRECTOR / PRINCIPAL'S OFFICE
CT-AD-4**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Assist director/principal in administrative tasks
- One-on-one conferences with academic instructors

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**ASSISTANT DIRECTOR / PRINCIPAL'S OFFICE
CT-AD-4**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

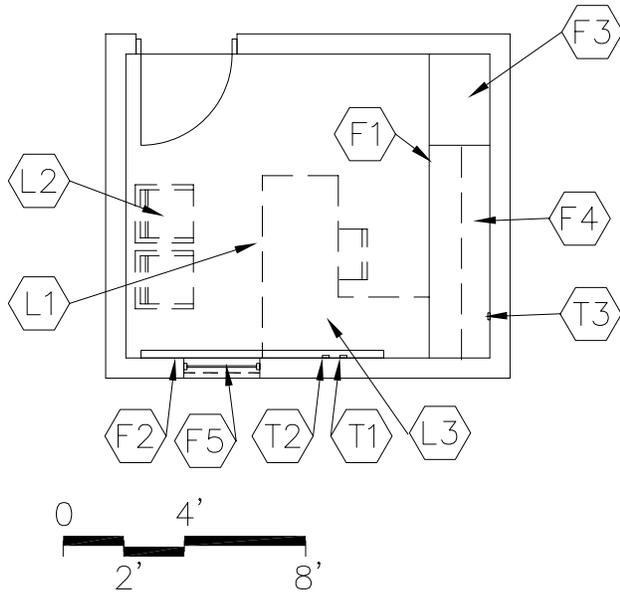
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	F5 Window with integral blind	085116
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**SUPERVISOR'S OFFICE
CT-AD-5**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Private space for program supervisor
- One-on-one conferences with academic instructors

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**SUPERVISOR'S OFFICE
CT-AD-5**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

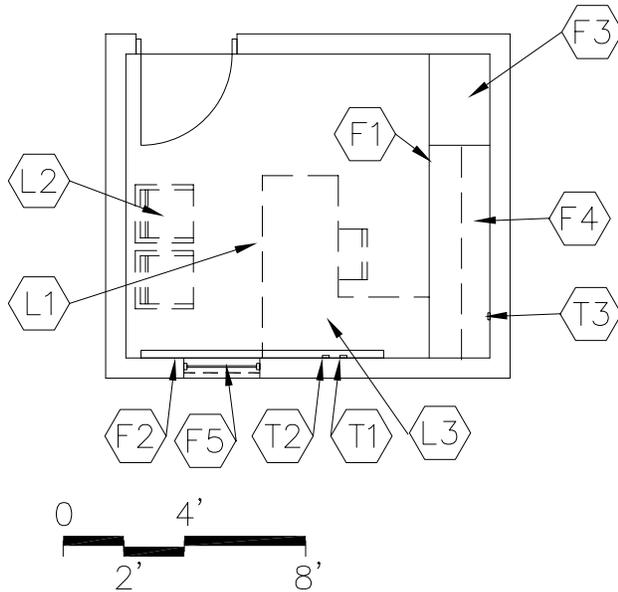
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	F5 Window with integral blind	085116
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	092116/099100	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

COORDINATOR'S OFFICE
CT-AD-6

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Private space for coordinator
- One-on-one conferences with academic instructors

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

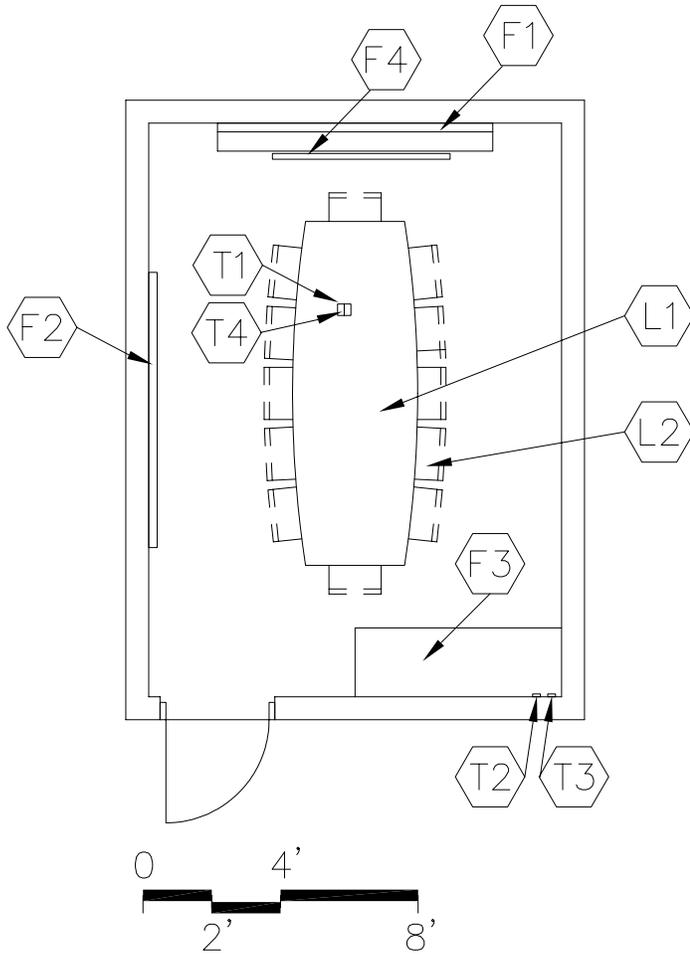
1. Loose furnishings shown represent one of many possible arrangements.

**COORDINATOR'S OFFICE
CT-AD-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board	101100
Resilient base	096500	or tackable wall surface	
Ceiling:		F3 2' of tall wardrobe	123550
Suspended, acoustical	095113	F4 Wall cabinets above work surface	123550
Walls:		F5 Window with integral blind	085116
Painted gypsum wallboard		<u>Fire Suppression:</u>	
over metal studs	092116/099100	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
		(coupled with similarly loaded adjacent spaces)	
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 12 – 15 persons
SIZE: 250 SF

NOTES:

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

**CONFERENCE ROOM
CT-AD-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or Carpet Tile</i>	096816 096813	<u>Fixed Items:</u>	
		F1 About 8' of chalk/marker board	101100
		F2 About 8' of tack board or tackable wall surface	101100
<u>Base:</u>			
Resilient base	096500	F3 4'-6' of base cabinets (optional)	123550
		F4 Projection screen (optional)	115213
<u>Ceiling:</u>			
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Walls:</u>			
Painted gypsum wallboard over metal studs	092116/099100	<u>Plumbing:</u>	
		N/A	
<u>LOOSE FURNISHINGS:</u>			
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 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port and video display device	
			271533/271543/274119
		T2 1 voice port and phone	271533/273113
		T3 1 data port	271513
		T4 Overhead projector	274119
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

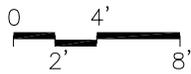
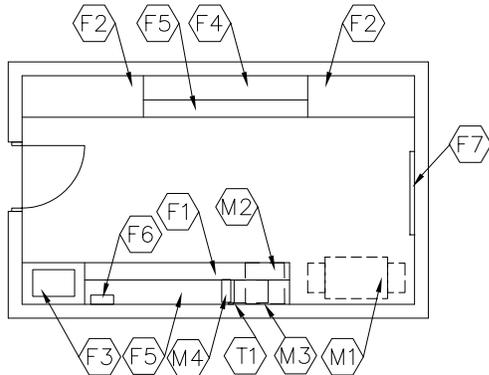
NOTES:

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

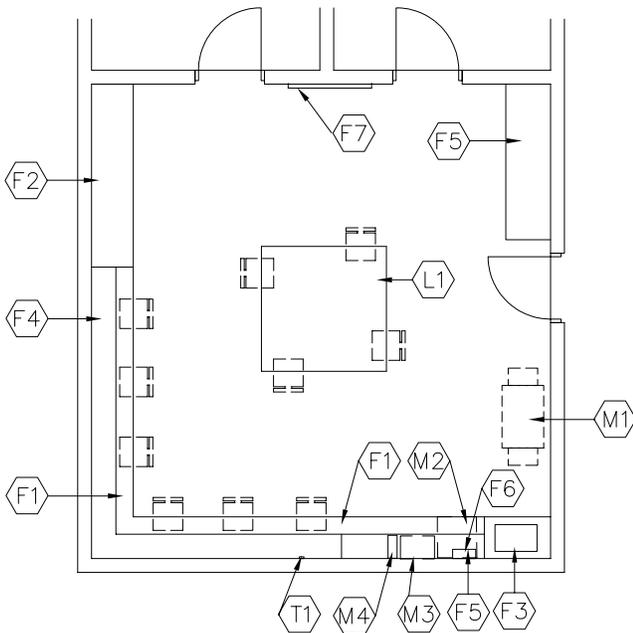
**MAIL/WORK/COPY ROOM
CT-AD-8**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

200 SF



500 SF



CAPACITY:
SIZE:

N/A
200 - 500 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near secretarial area

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**MAIL/WORK/COPY ROOM
CT-AD-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Vinyl composition tile	096500	F1 About 10' of base & wall cabinets	123550
Base:		F2 8'-12' of tall storage cabinets	123550
Resilient base	096500	or about 32' maximum of a combination storage cabinets	
Ceiling:		F3 3' sink base cabinet	123550
Suspended, acoustical	095113	F4 Mail cubicles for all staff	123200
Walls:		F5 10'-12' of wall cabinets	123550
Painted gypsum wallboard over metal studs	092116/099100	F6 Towel dispenser (optional)	102813
<u>LOOSE FURNISHINGS:</u>		F7 4' tack board (optional)	101100
L1 Work table and chairs (applicable in 300 SF space only)		<u>Fire Suppression:</u>	
Wastebasket		Fire suppression system	211000
		<u>Plumbing:</u>	
		Sink	224000
		Plumbing connections	224000/221116/221119
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 - 5 duplex receptacles	262726
		Receptacle for copier	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		The following items are to be funded by the school district:	
		M1 Copier	
		M2 Undercounter refrigerator	
		M3 Microwave	
		M4 Coffee maker	

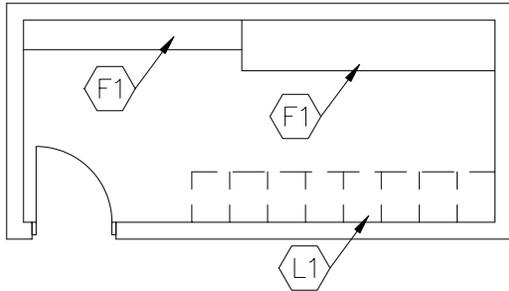
NOTES:

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

**ADMINISTRATIVE STORAGE
CT-AD-9**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

150 SF



CAPACITY: N/A
 SIZE: 150 - 200 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

N/A

NOTES:

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

**ADMINISTRATIVE STORAGE
CT-AD-9**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

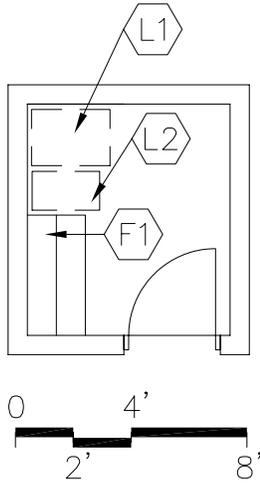
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Vinyl composition tile	096500	F1 10'-20' of open shelving	
		depth may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500		
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100	<u>HVAC:</u>	
		To be determined by Design Professional	
<u>LOOSE FURNISHINGS:</u>		Supplemental heat as required	Div. 23
L1 File cabinets		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

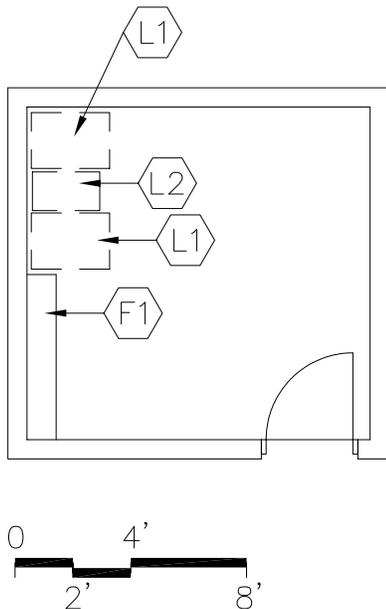
1. Finishes/Features: Refer to Chapter 9 for specification references.

CHAPTER 6: CAREER-TECHNICAL SCHOOL

50 SF



100 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

**CAPACITY:
SIZE:**

N/A
50 - 100 SF

NOTES:

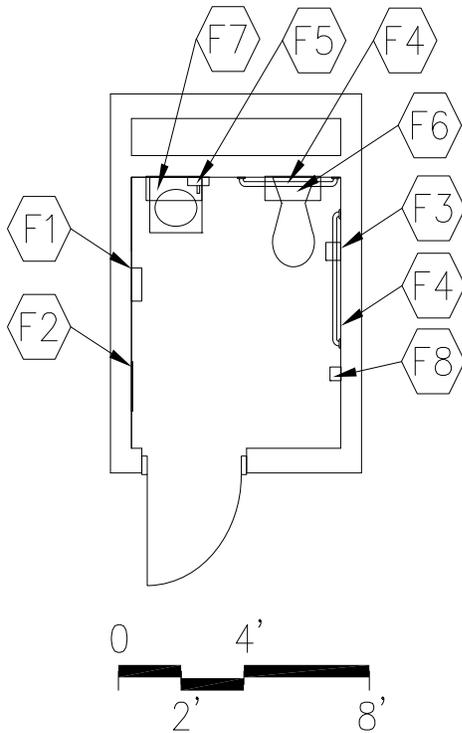
1. Loose furnishings shown represent one of many possible arrangements.

**VAULT/RECORDS
CT-AD-10**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Vinyl composition tile	096500	F1 3'-6' of open shelving, (depth may vary)(fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Rated 2-hour construction	---	<u>Plumbing:</u>	
Walls:		N/A	
Painted concrete masonry units or		<u>HVAC:</u>	
042000/099100		To be determined by Design Professional	
painted gypsum wallboard	092116/099100	<u>Electrical:</u>	
Rated 2-hour construction		Single level switching	262726
<u>LOOSE FURNISHINGS:</u>		Fluorescent lighting	265100
L1 File cabinet		Illumination level: See Table 8600-4	
L2 Safe (loose or fixed)		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		Wall, ceiling, and door construction to have a 2-hour fire rating	

NOTES:

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



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Located in the administrative area

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 person
 SIZE: 50 SF

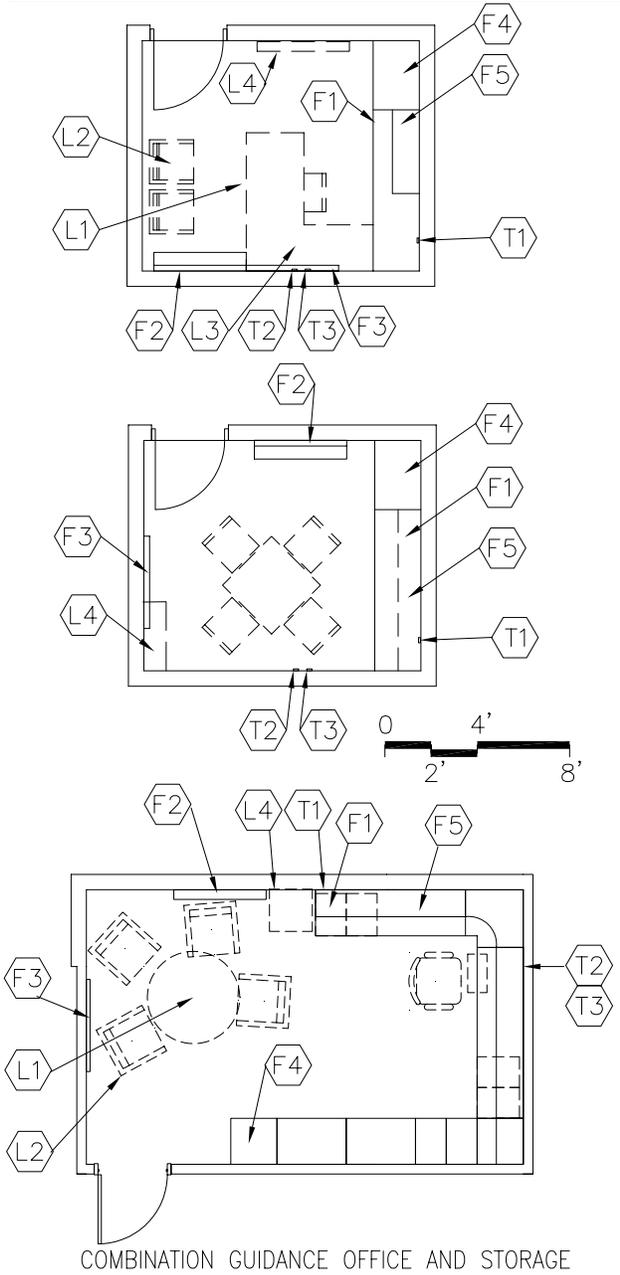
NOTES:

**RESTROOM
CT-AD-11**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
ET, linoleum, rubber, or sheet vinyl	096516	F1 Towel dispenser	102813
	096500	F2 24" x 60" mirror	102813
Optional: ceramic mosaic tile,	093000	F3 Toilet tissue holder	102813
porcelain tile, or	096723	F4 36" and 42" grab bar	102813
resinous flooring		F5 Soap dispenser	102813
		F6 8" deep wall cabinet above toilet for supplies (optional)	102813
<u>Base:</u>		F7 Stainless steel shelf (optional)	102813
Resilient base	096500	F8 Coat hook	102813
Optional: ceramic mosaic tile,	093000		
porcelain tile, resinous flooring,	096723	<u>Fire Suppression:</u>	
or integral vinyl cove base		Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closet	224000
<u>Walls:</u>		Wall-mounted lavatory	224000
Painted concrete masonry units		Plumbing connections	224000/221116/221119
	042000/099100		
Optional: moisture & abuse-resistant		<u>HVAC:</u>	
gypsum wall board	092116/099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



CAPACITY: 1 - 3 persons
SIZE: 120 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**GUIDANCE COUNSELOR
CT-AD-12**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or</i> Carpet Tile	096816 096813	<u>Fixed Items:</u>	
		F1 Work surface with file drawers	123550
		F2 4' of chalk/marker board (optional)	101100
		F3 4' of tack board	101100
		or tackable wall surface	
<u>Base:</u>		F4 Tall wardrobe	123550
Resilient base	096500	F5 Wall cabinets	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>			
L1 Desk or table, with chair		<u>HVAC:</u>	
L2 Visitor chairs		Supply/return air system	Div. 23
L3 Computer desk return		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L4 Bookcase (fixed or loose) Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

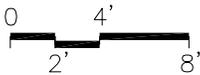
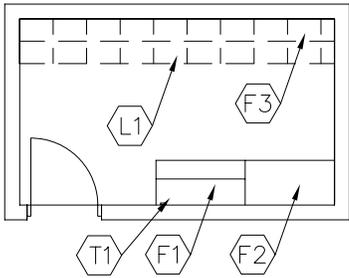
NOTES:

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

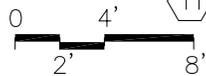
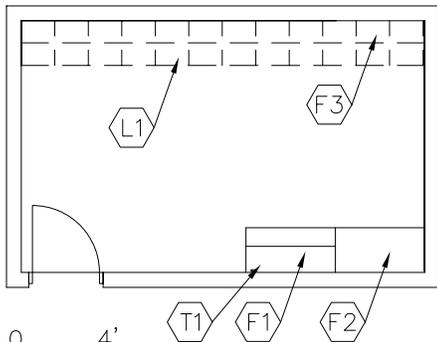
**GUIDANCE RECORDS/STORAGE
CT-AD-13**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

100 SF



150 SF



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

N/A

CAPACITY:
SIZE:

N/A
100 - 150 SF

NOTES:

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

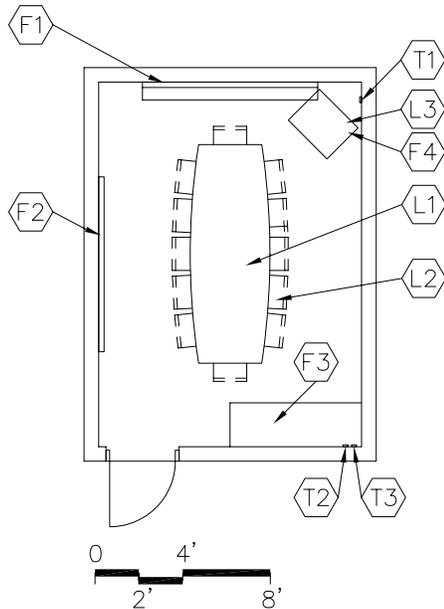
**GUIDANCE RECORDS/STORAGE
CT-AD-13**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Vinyl composition tile	096500	F1 3'-6' of base and wall cabinets	123550
<u>Base:</u>		F2 3'-4' of tall storage cabinets	123550
Resilient base	096500	Option: mobile storage shelving	105626
<u>Ceiling:</u>		F3 4'-10' shelving (optional)	123550
Rated 2-hour construction	---	<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted gypsum wallboard over metal studs or 092116/099100		<u>Plumbing:</u>	
Painted concrete masonry units 042000/099100		N/A	
Rated 2-hour construction		<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		To be determined by Design Professional	
L1 File cabinets		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		T1 1 data port (optional)	271513
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Wall, ceiling, and door construction to have a 2-hour fire rating	

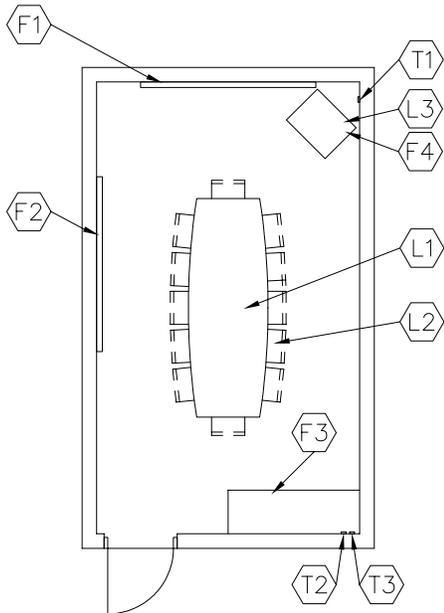
NOTES:

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

150 SF



250 SF



CAPACITY:
SIZE:

12 - 15 persons
150 - 250 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near guidance counselors office
- Near principal's office
- Near reception area
- Near guidance records/storage area

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

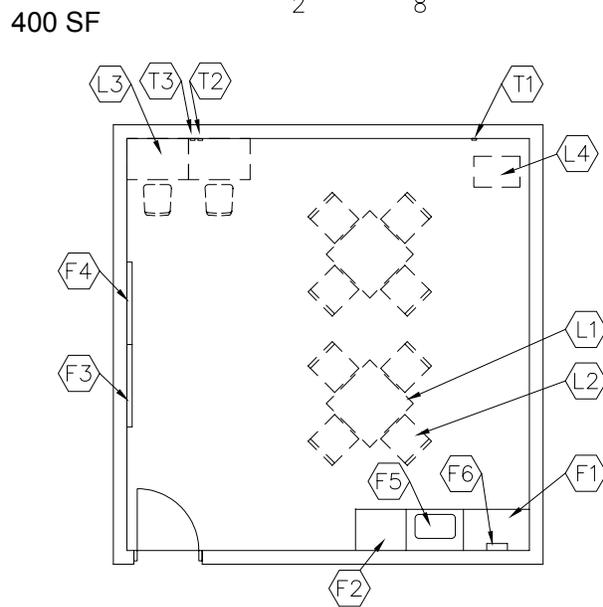
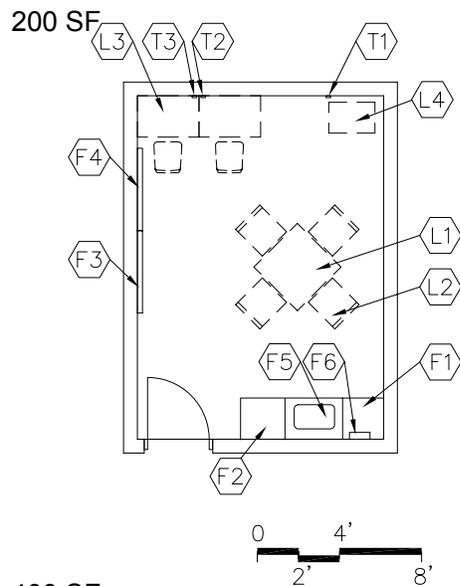
1. Loose furnishings shown represent one of many possible arrangements.

**GUIDANCE CONFERENCE
CT-AD-14**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 6'-8' of chalk/marker board	101100
		F2 4'-8' of tack board	101100
Base:		F3 4'-6' of base cabinets	123550
Resilient base	096500	F4 Technology support casework (optional)	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Conference table		Supply/return air system	Div. 23
L2 Chairs		Independent temperature control	230923
L3 Monitor cart or cabinet (could be fixed casework)		<u>Electrical:</u>	
Wastebasket		Multilevel switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port and video display device	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



CAPACITY: 2 - 8 persons
SIZE: 200 - 400 SF

PROGRAM ACTIVITIES:

- After school meetings, community, and small group meetings

SPATIAL RELATIONSHIPS:

- Near administrative area

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**PARENT/VOLUNTEER
CT-AD-15**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 About 3' of base cabinets	123550
Base:		F2 2' of tall wardrobe or coat cabinet (optional)	123550
Resilient base	096500	F3 4' of chalk/marker board (optional)	101100
Ceiling:		F4 4' of tack board or tackable wall surface	101100
Suspended, acoustical	095113	F5 3' sink base cabinet	123550
Walls:		F6 Towel dispenser	102813
Painted gypsum wallboard over metal studs	092116/099100	<u>Fire Suppression:</u>	
<u>LOOSE FURNISHINGS:</u>		Fire suppression system	211000
L1 Table		<u>Plumbing:</u>	
L2 Chairs		Sink	224000
L3 Computer workstation furniture		Plumbing connections	224000/221116/221119
L4 Monitor cart		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 15
Pencil sharpener		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port and video display device	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

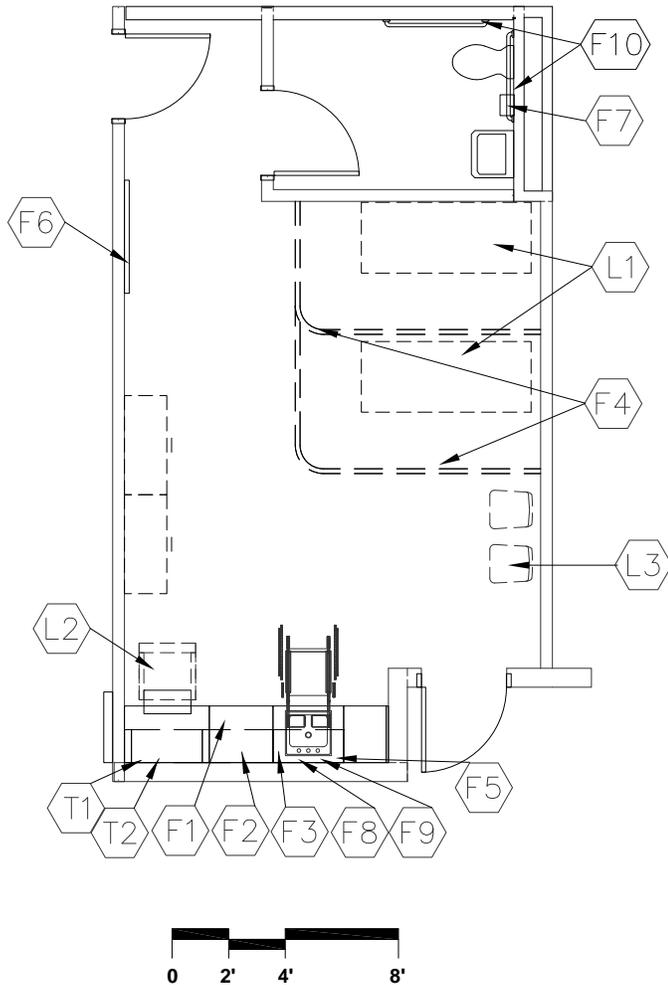
1. Finishes/Features: Refer to Chapter 9 for specification references.

HEALTH CLINIC (includes restroom)

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-AD-16

450 SF



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

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

NOTES:

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

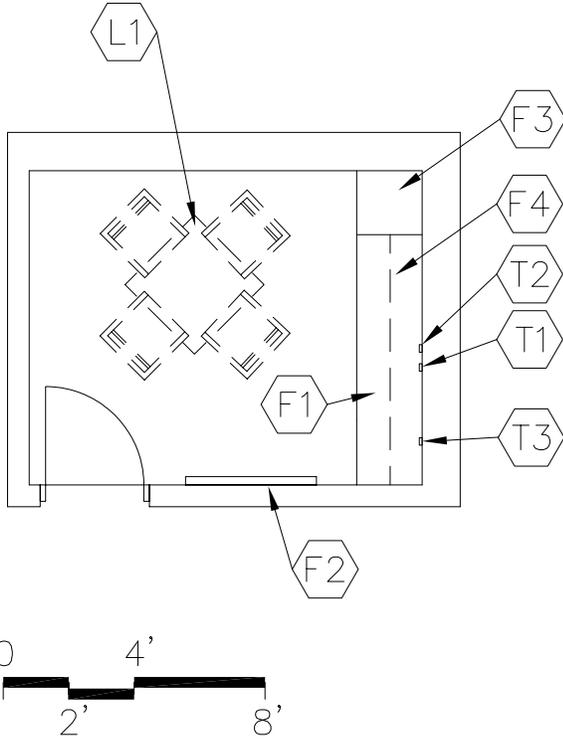
HEALTH CLINIC (includes restroom)
CT-AD-16

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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

NOTES:

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



APACITY: 1 - 3 persons
 SIZE: 120 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

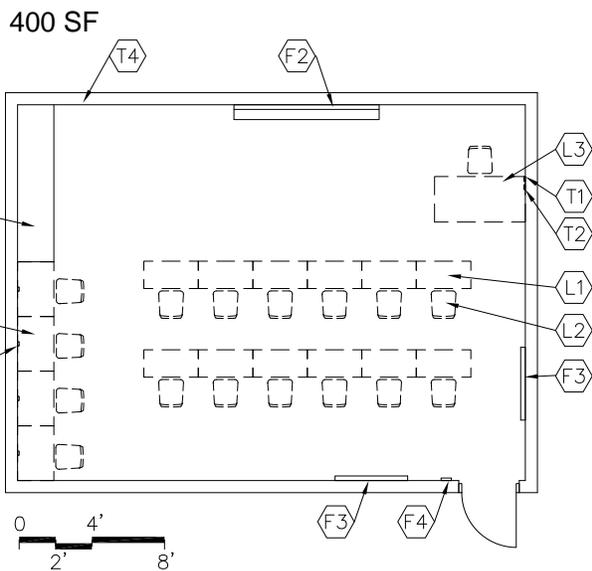
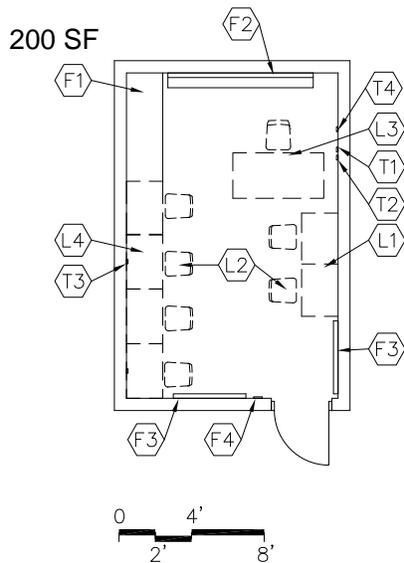
1. Loose furnishings shown represent one of many possible arrangements.

**ITINERANT PERSONNEL
CT-AD-17**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 Work surface with file drawers(optional)	123550
		F2 4' of tack board or tackable wall surface	101100
Base:		F3 2' of tall wardrobe (optional)	123550
Resilient base	096500	F4 Wall cabinets	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	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 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



CAPACITY: 5 - 8 students
SIZE: 200 - 400 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near principal's office
- Near secretarial area

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**IN-SCHOOL SUSPENSION
CT-AD-18**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

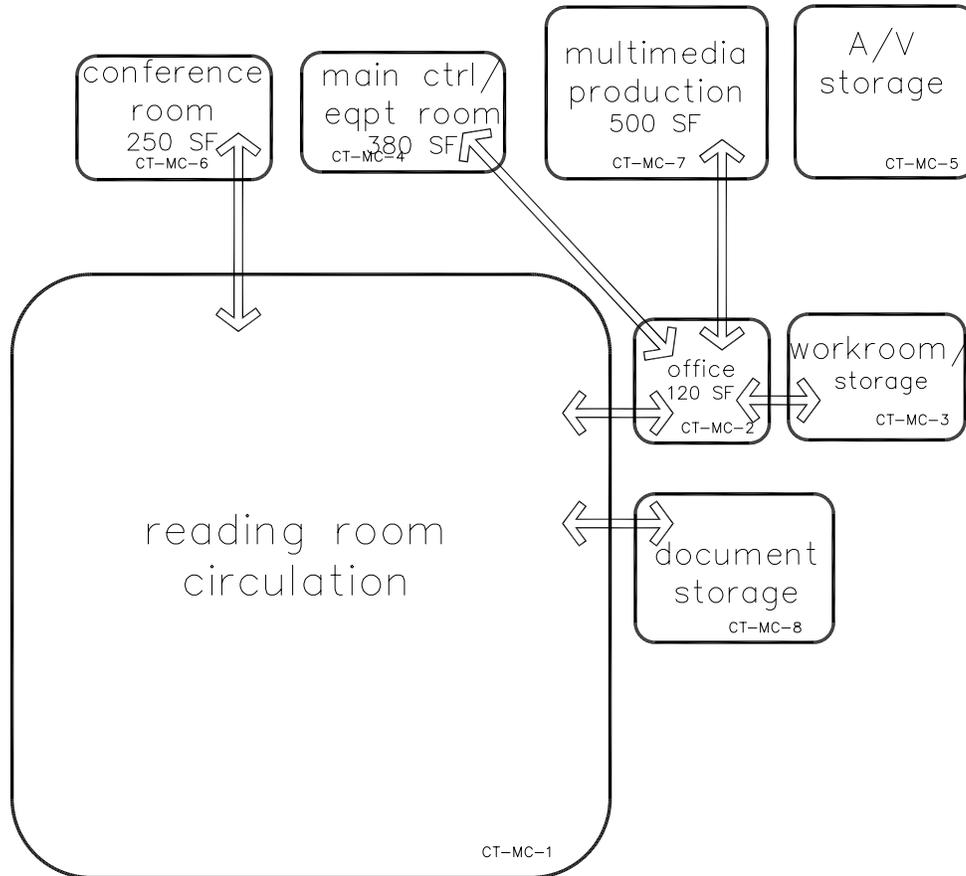
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet, VCT, ET , linoleum, sheet vinyl, or rubber	096816 096500 096516	<u>Fixed Items:</u>	
		F1 3'-4' of base cabinets (optional)	123550
		F2 6'-8' of chalk/marker board	101100
		F3 4'-8' of tack board	101100
		F4 Pencil sharpener support	062000
<u>Base:</u>			
Resilient base	096500	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Ceiling:</u>			
Suspended, acoustical	095113	<u>Plumbing:</u>	
		N/A	
<u>Walls:</u>			
Painted concrete masonry units	042000/092113	<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>			
L1 Student carrels and/or desks		<u>Electrical:</u>	
L2 Student chairs		Single level switching	262726
L3 Teacher workstation and chair		Fluorescent lighting	265100
L4 Computer workstation furniture		Illumination level: See Table 8600-4	
Wastebasket		4 duplex receptacles	262726
Pencil sharpener		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near teacher workstation	271513
		T3 2 data ports (minimum) for student use	271513
		T4 1 video port	271533/271543
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

MEDIA CENTER SPACES CT-MC

CHAPTER 6: CAREER-TECHNICAL SCHOOL



NOTE:

This is an example of how the media center spaces in a career-technical school could be arranged. This is only meant to demonstrate the relationships between various areas of the building.

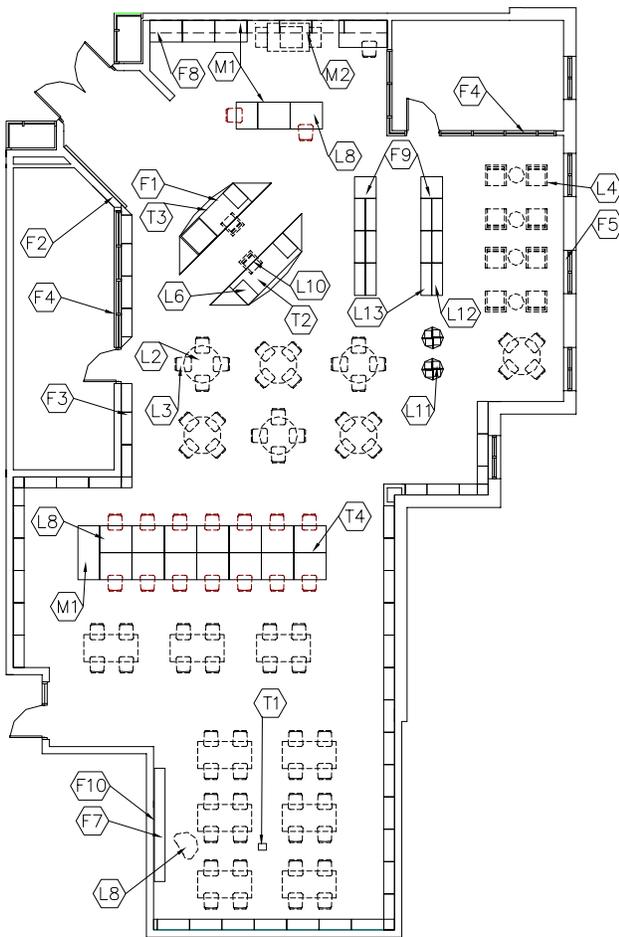
Following are the Media Center space plates:

- CT-MC-1 Reading Room/Circulation
- CT-MC-2 Media Specialist Office
- CT-MC-3 Workroom/Storage
- CT-MC-4 **Main Control/Equipment Room**
- CT-MC-5 A/V Storage
- CT-MC-6 Conference Room
- CT-MC-7 Multimedia Production Room
- CT-MC-8 Document Storage

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READING ROOM/CIRCULATION CT-MC-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL



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

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

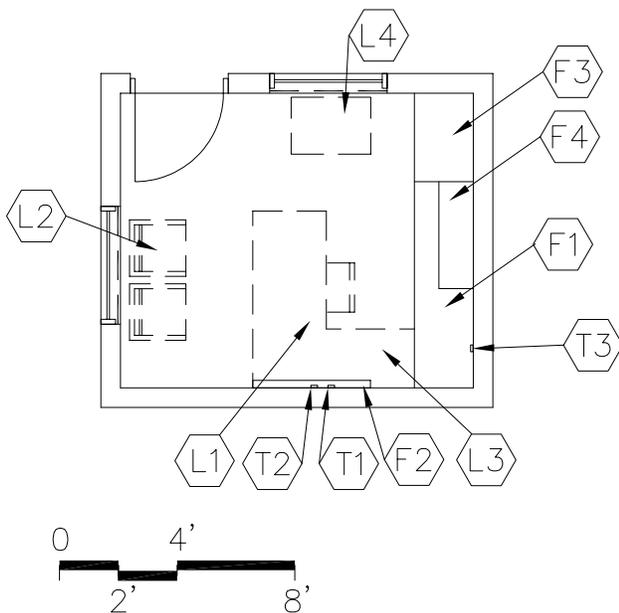
**READING ROOM/CIRCULATION
CT-MC-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet or Carpet Tile	096816 096813	F1 Circulation desk casework	123550
<u>Base:</u>		F2 6'-10' of tack board or tackable wall surface	101100
Resilient base	096500	F3 Library book shelving (see notes)	115123
<u>Ceiling:</u>		F4 Interior windows	081113/088000
Suspended, acoustical	095113	F5 Windows with integral blinds or shades	085113
<u>Walls:</u>		F6 Pencil sharpener support (optional)	062000
Painted concrete masonry units	042000/099100	F7 6'-10' of chalk/marker board	101100
Acoustical wall treatment	098000	F8 Technology support casework	123550
		F9 Search station terminals	123550
		F10 Projection screen (optional)	115213
		Roller window shades (optional)	122413
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		10 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting per code	265100
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		T1 1 video port and video display device	271533/271543/274119
		T2 1 voice port and phone at circulation desk	271513/273113
		T3 2 data ports for media center automation system	271513
		T4 4 data ports for student use	271513
		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 owner:	
		M1 2 printers: 1 at circulation desk and 1 in student work area	
		M2 Copier	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Circulation desks and library shelving can be loose furnishings.
3. Technology components maybe be placed in a separate small cabinet, or integrated in the other casework in the room.
4. **Fixed casework and loose furnishings can be interchangeable.**
5. **Up to 20% of book shelving can be moveable.**



CAPACITY: 1 - 3 persons
 SIZE: 120 SF

PROGRAM ACTIVITIES:

- Media specialist to conduct duties

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**MEDIA SPECIALIST OFFICE
CT-MC-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

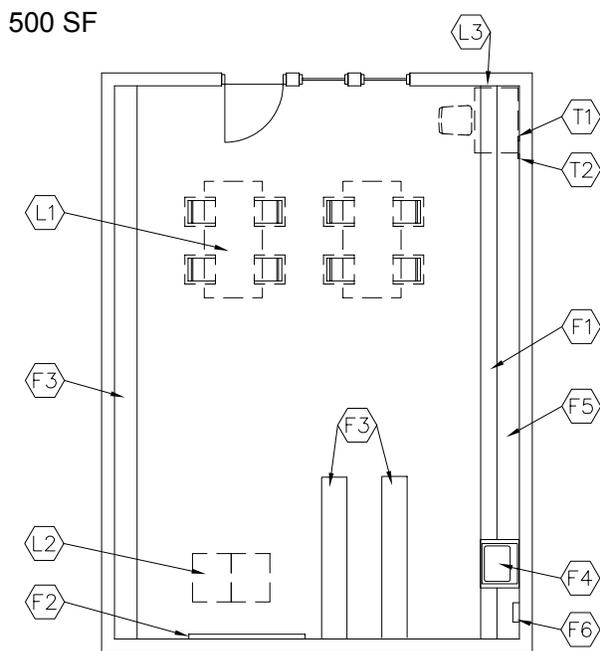
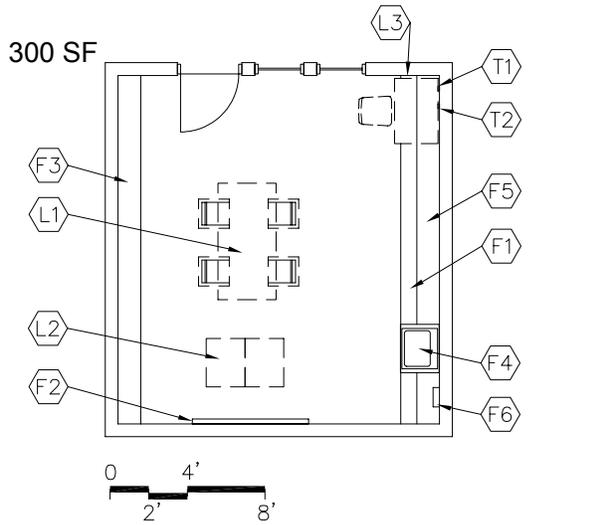
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or Carpet Tile</i>	096816 096813	<u>Fixed Items:</u> F1 Work surface with file drawers	123550
		F2 4' of tack board or tackable wall surface	101100
<u>Base:</u>			
Resilient base	096500	F3 2' of tall wardrobe	123550
		F4 Wall cabinets	123550
<u>Ceiling:</u>			
Suspended, acoustical	095113	F5 Bookcases (optional)	123550
<u>Walls:</u>			
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u> Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>			
L1 Desk and chair		<u>Plumbing:</u> N/A	
L2 Visitor chairs		<u>HVAC:</u> Supply/return air system	Div. 23
L3 Computer desk return		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L4 File cabinet		<u>Electrical:</u> Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u> T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u> Life safety devices per code	283111
		<u>Miscellaneous:</u> Interior window	081113/088000

NOTES:

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

**WORKROOM/STORAGE
CT-MC-3**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: 2 - 8 staff
SIZE: 300 - 500 SF

PROGRAM ACTIVITIES:

- Space for receiving, processing, and repairing media material

SPATIAL RELATIONSHIPS:

- Near reading room/circulation
- Near media specialist office

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**WORKROOM/STORAGE
CT-MC-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

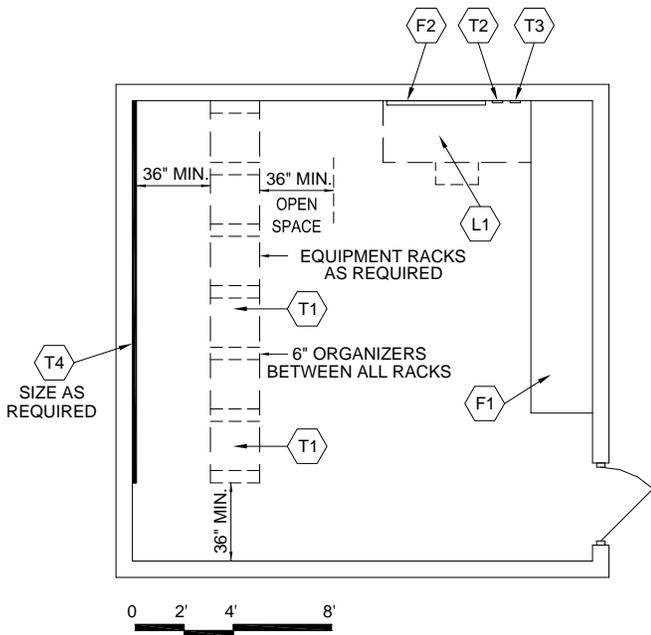
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items²:</u>	
Vinyl composition tile	096500	F1 13'-25' of base cabinets or combination with tall cabinets	123550
<u>Base:</u>		F2 4'-8' of tack board	101100
Resilient base	096500	F3 16'-60' of bookcases	123550
<u>Ceiling:</u>		F4 3' sink base cabinet	123550
Suspended, acoustical	095113	F5 13'-28' of wall cabinets	123550
<u>Walls:</u>		F6 Towel dispenser	102813
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Table and chairs		Sink	224000
L2 Book trucks		Plumbing connections	224000/221116/221119
L3 Computer workstation		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window	081113/088000

NOTES:

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

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

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

- Ventilation and cooling of heat-generating electronic equipment

CAPACITY: N/A
 SIZE: 300 - 400 SF

NOTES:

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

**MAIN CONTROL / EQUIPMENT ROOM
CT-MC-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Vinyl composition tile, <i>ET</i> , or sheet vinyl	096500	F1 8'-16' of open shelving, depth may vary (fixed or loose)	123550
Base:		F2 4' of tack board (optional)	101100
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		N/A	
Painted concrete masonry units	042000/099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Independent, packaged system	Div. 23
L1 Desk and chair		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Duplex receptacle for electronic systems	262726
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 Technology Equipment	
		Central sound system	275123
		Telephone wiring	271313/271513
		Integrated telephone system	273113
		Video wiring	271333/271533/271543
		Digital on demand delivery system	274125
		Local area network wiring	271513/271323
		Local area network electronics	272100
		Grounding & Infrastructure Equipment	270526/271100
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		T4 1/4" plywood back board	271313
		<u>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.	

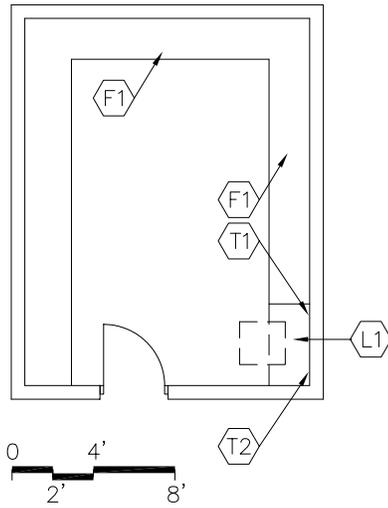
NOTES:

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

**A/V STORAGE
CT-MC-5**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

250 SF



PROGRAM ACTIVITIES:

- Storage of audio/video (A/V) equipment

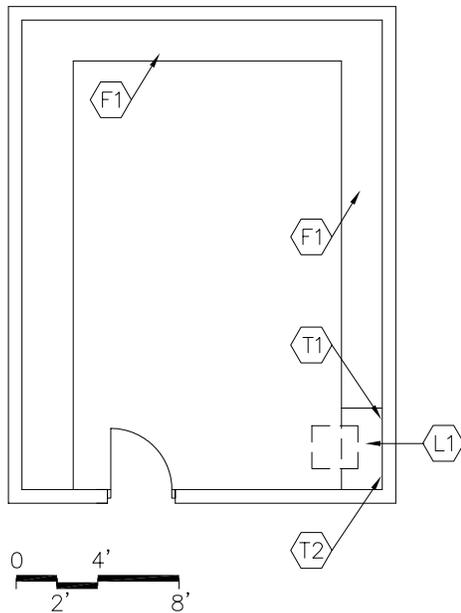
SPATIAL RELATIONSHIPS:

- Near media specialist office
- Near workroom/storage

ENVIRONMENTAL CONSIDERATIONS:

N/A

350 SF



CAPACITY:

N/A

SIZE:

250 - 350 SF

NOTES:

A/V STORAGE
CT-MC-5

CHAPTER 6: CAREER-TECHNICAL SCHOOL

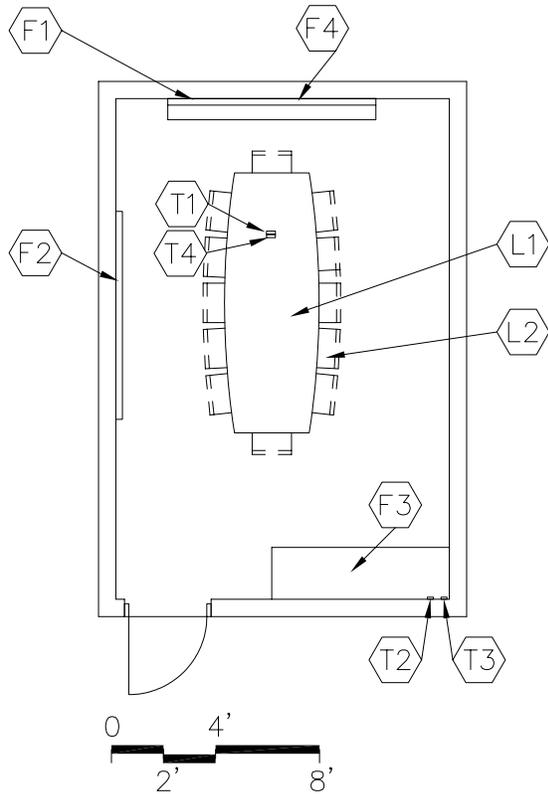
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items³:</u>	
Vinyl composition tile	096500	F1 8' – 26' of open shelving, depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		N/A	
Painted concrete masonry units	042000/099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		To be determined by Design Professional	
L1 Desk and chair		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles (minimum)	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		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.
2. Ranges shown indicate quantities for the smallest and largest possible room size.

**CONFERENCE ROOM
CT-MC-6**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: 8 - 12 persons
 SIZE: 250 SF

PROGRAM ACTIVITIES:

- Used primarily by students for group projects

SPATIAL RELATIONSHIPS:

- Near reading room/circulation

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**CONFERENCE ROOM
CT-MC-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

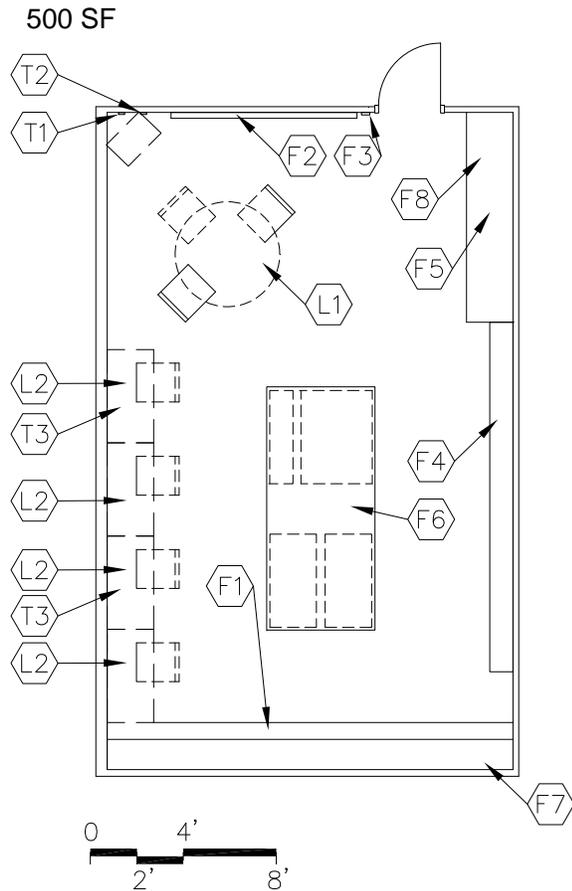
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Carpet <i>or</i> Carpet Tile	096816 096813	F1 8'-10' of chalk/marker board	101100
Base:		F2 6'-8' of tack board	101100
Resilient base	096500	F3 4'-6' of base cabinets (optional) (fixed or mobile)	123550
Ceiling:		F4 Projection screen (optional)	115213
Suspended, acoustical	095113	<u>Fire Suppression:</u>	
Walls:		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
		N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Conference table		Supply/return air system	Div. 23
L2 Chairs		Independent temperature control	230923
Wastebasket		<u>Electrical:</u>	
		Multilevel switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	271513
		T4 Overhead projector	274119
		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.
2. Ranges shown indicate quantities for the smallest and largest possible room size.
3. Fixed casework and loose furnishings can be also all fixed or all loose.

**MULTIMEDIA PRODUCTION ROOM
CT-MC-7**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY:
SIZE:

5 - 7 persons
500 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near workroom/storage
- Near media center

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

**MULTIMEDIA PRODUCTION ROOM
CT-MC-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

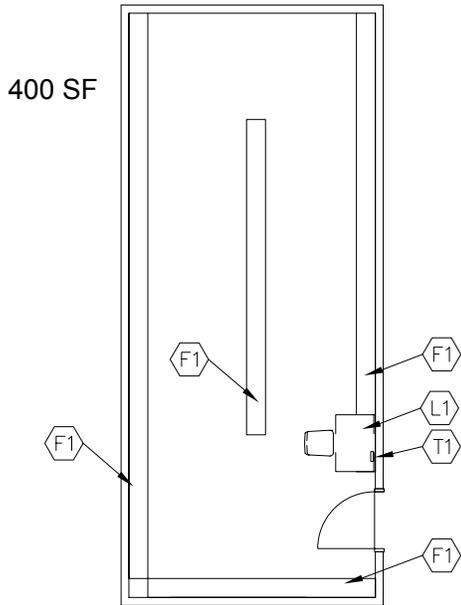
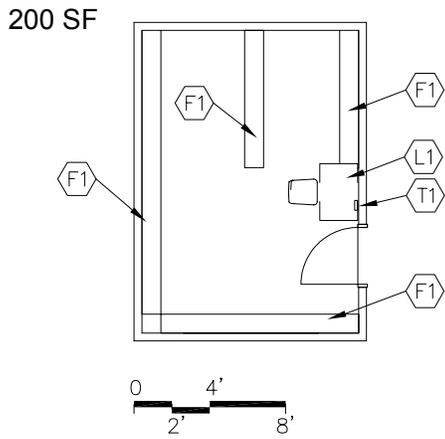
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items²:</u>	
Vinyl composition tile, linoleum, <i>ET</i> , sheet vinyl, or rubber	096500 096516	F1 6'-18' of base cabinets with different types of storage	123550
		F2 4'-8' of tack board	101100
<u>Base:</u>		F3 Pencil sharpener support (optional)	062000
Resilient base	096500	F4 4' - 16' of tall bookcases	123550
		F5 3' - 9' of tall cabinets	123550
<u>Ceiling:</u>		F6 Work surface	123550
Suspended, acoustical	095113	F7 6'-18' of wall cabinets	123550
		F8 Technology support casework (if applicable)	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 Tables and chairs/stools		N/A	
L2 Computer workstation furniture		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
Pencil sharpener (optional)		Independent temperature control	230923
		<u>Electrical:</u>	
		Multilevel switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port and video display device	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		T3 4 data ports	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior windows for supervision (optional)	
		081113/088000	
		The following items to be provided by the school district:	
		Copier, scanner, printers, binders, laminators	

NOTES:

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

**DOCUMENT STORAGE
CT-MC-8**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: N/A
 SIZE: 200 - 400 SF

PROGRAM ACTIVITIES:

- Secured storage for documents, including newspapers, periodicals, microfilm and microfiche

SPATIAL RELATIONSHIPS:

- Near reading room/circulation

ENVIRONMENTAL CONSIDERATIONS:

N/A

NOTES:

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

**DOCUMENT STORAGE
CT-MC-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

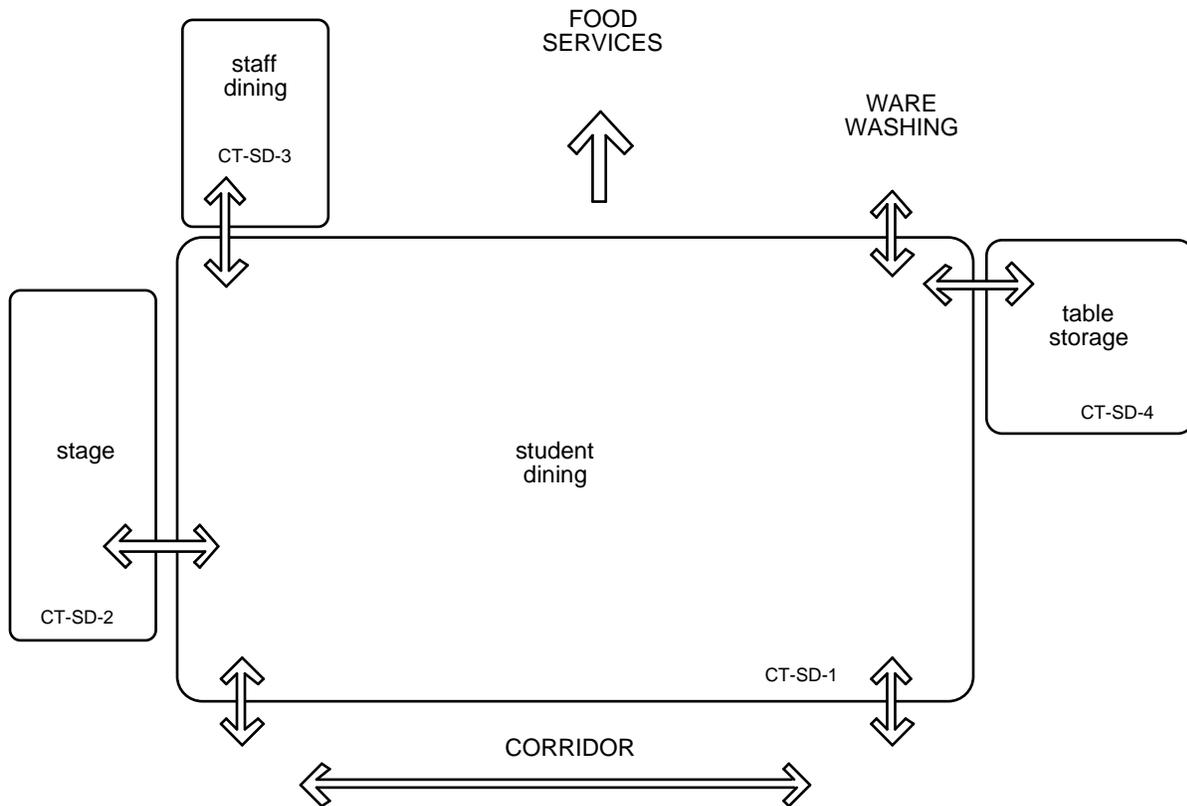
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES:</u>	
Flooring:		<u>Fixed Items²:</u>	
Vinyl composition tile	096500	F1 36' – 80' of open shelving (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500		
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Computer worksurface		To be determined by Design Professional	
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-10	
		Single level switching	262726
		2 duplex receptacles	262726
		<u>Communications:</u>	
		T1 1 data port (optional)	271523
		<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.

STUDENT DINING SPACES
CT-SD

CHAPTER 6: CAREER-TECHNICAL SCHOOL



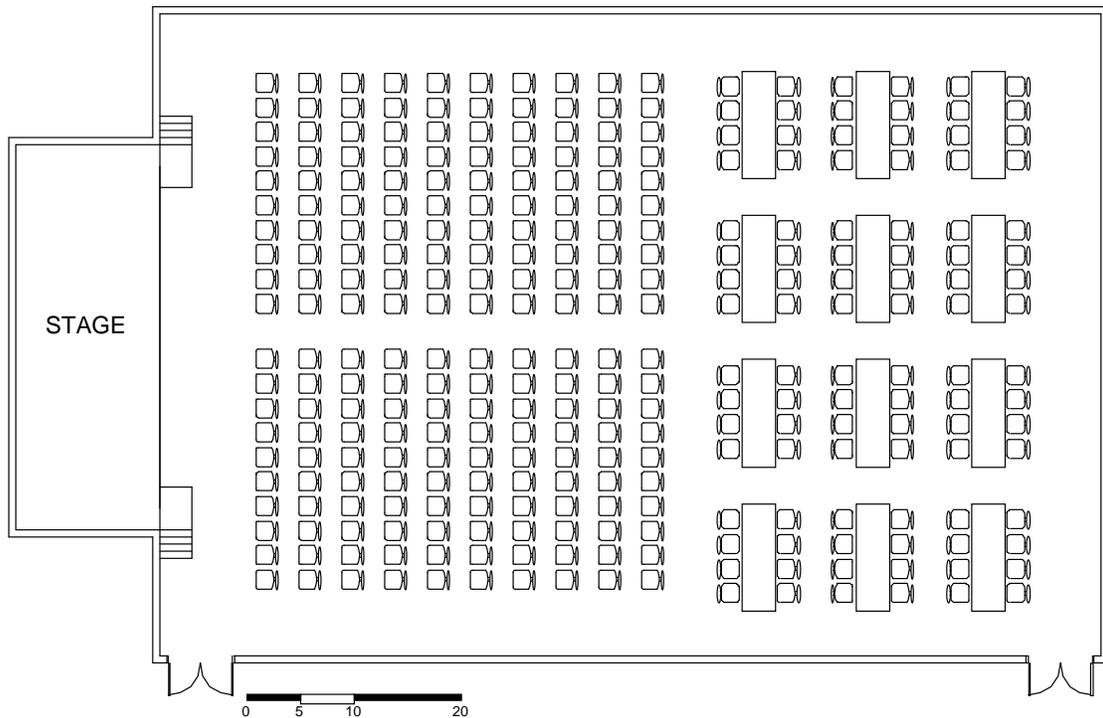
NOTE:

This is an example of how the student dining spaces in a career-technical school could be arranged. This is only meant to demonstrate the relationships between various areas of the building.

Following are the Administrative space plates for the following rooms:

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

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CAPACITY: 1/3 of student capacity
SIZE: 1/3 of student capacity multiplied
 by 17.5 SF per student or 3,000 SF
 whichever is greater
ANCILLARY SPACES: Kitchen, CT-FS-1
 Stage, CT-SD-2
 Staff Dining, CT-SD-3
 Table Storage, CT-SD-4

PROGRAM ACTIVITIES:

- Student dining
- Large group instruction, meetings and banquets
- Special activities
- Refreshment area for school activities

SPATIAL RELATIONSHIPS:

- Adjacent to kitchen

ENVIRONMENTAL CONSIDERATIONS:

- Uniform non-glare lighting
- Environmental sound control - walls and ceiling to be designed for auditorium-type acoustics sound system
- Flexibility of space
- Access capability
- Environmental sound control wall minimum **STC 60**

NOTES:

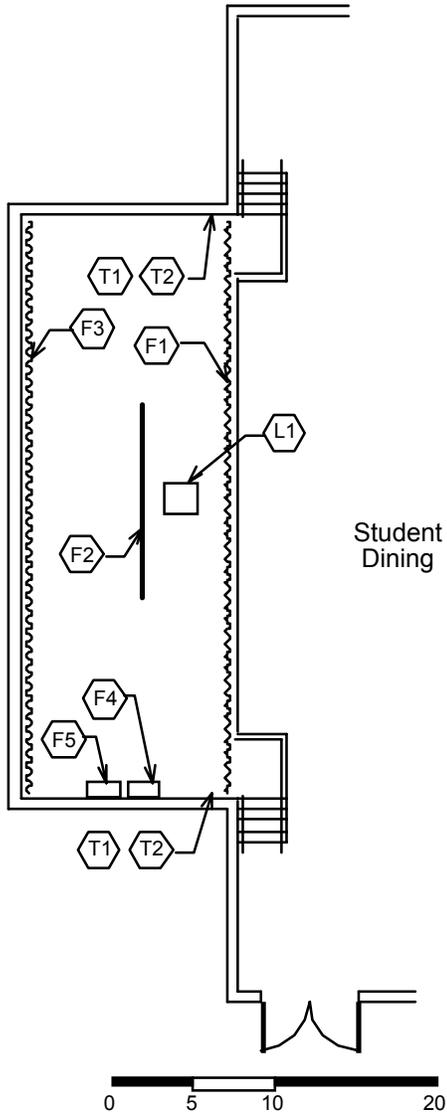
1. Loose furnishings shown represent one of many possible arrangements.

**STUDENT DINING
CT-SD-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
Flooring:		Fixed Items:	
Linoleum, rubber, VET,	096500	N/A	
sheet vinyl, porcelain tile,	096516		
terrazzo tile, VCTT,	096616	Fire Suppression:	
polished concrete	033510	Fire suppression system	211000
finishing, or colored	033519		
finishing		Plumbing:	
		N/A	
Base:		HVAC:	
Resilient base	096500	Supply/return air system	Div. 23
Option: Porcelain tile base	093000	Independent temperature control	230923
Ceiling³:		Electrical:	
Suspended, acoustical	095113	High intensity discharge lighting	265100
Painted exposed structure	099100	or fluorescent lighting	
Reflector panels	098000	Dimmable quartz lighting	265100
		illumination level: see table 8600-4	
Walls:		Multilevel switching with dimming	262726
Painted concrete masonry units	042000/099100	6 duplex receptacles	262726
Diffusing block on 2 walls		Double duplex receptacle adjacent to	
(minimum) or	042000	each data and video port	262726
Acoustic treatment	098000	Emergency lighting per code	265100
(varies with geometry of room)		Means of egress lighting per code	265100
		Telecommunications Grounding	270526/260526
LOOSE FURNISHINGS:		Communications:	
L1 Tables		T1 2 voice ports	271513/273113
L2 Folding or high-density stack chairs		T2 2 video ports	271533/271543
for large assembly use		T3 2 data ports (minimum)	271513
Waste receptacles		Clocks	275313
Recycling bins		Central sound system	275123
Carts for chairs		Student dining/auditeria sound system	275121
		T4 Overhead projector	274119
		Electronic Safety and Security:	
		Life safety devices per code	283111
		Miscellaneous:	
		N/A	
<p>Note: Cafeteria tables with attached stools shall be securely anchored to walls when not in use, or be kept in a secure storage area when not in use.</p>			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Other types of ceiling may be appropriate based on the actual facility design. High ceilings are appropriate for auditorium-type of acoustics.
3. Ceiling height to be 18'0" AFF minimum.



PROGRAM ACTIVITIES:

- Presentations

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Near food services

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Access capability
- Sound system

CAPACITY: N/A
SIZE: student capacity multiplied by 1.5 SF or 800 SF, whichever is larger

ANCILLARY SPACES:
 Student Dining, CT-SD-1

NOTES:

**STAGE
CT-SD-2**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES</u> ¹ :	Spec. Ref.#	<u>FEATURES</u> ¹ :	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Stage: Softwood or combination hardwood and softwood	096400	F1 Front curtain, track, and valance	116143
Stairs: Carpet, rubber, or wood		F2 Projection screen	116143
		F3 Rear curtain	116143
Base:		F4 Sound control console	275121
Ventilated resilient base	096400	F5 Lighting control console	265100
Ceiling:		<u>Fire Suppression:</u>	
Painted exposed structure	099100	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry units	042000 /099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Podium		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-10	
		Single level switching	262726
		6 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting per code	265100
		Means of egress lighting per code	265100
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 2 video ports	271533/271543
		T2 2 data ports	271513
		Student dining/auditeria sound system ²	275121
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

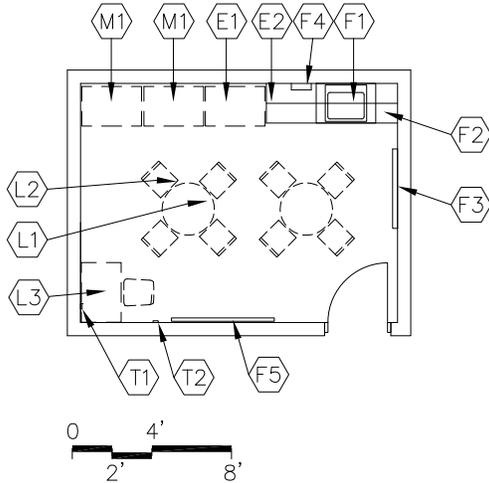
NOTES:

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

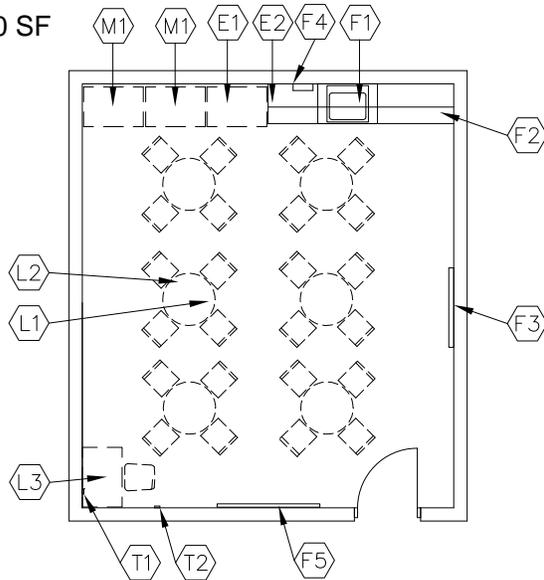
**STAFF DINING
CT-SD-3**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

450 SF



700 SF



CAPACITY: 8 – 24 staff
SIZE: 450 – 700 SF
ANCILLARY SPACES: Student Dining
 CT-SD-1

PROGRAM ACTIVITIES:

- Space for staff dining

SPATIAL RELATIONSHIPS:

- Near student dining
- Near food services

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

STAFF DINING
CT-SD-3

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET ,	096500	F1 3' sink base cabinet with wall cabinet	123550
sheet vinyl, porcelain tile,	096516	F2 About 8' of base and wall cabinets	123550
or terrazzo tile	093000	F3 4' of tack board	101100
	096616	F4 Towel dispenser	102813
<u>Base:</u>		F5 4'-6' of marker board (optional)	101100
Resilient base	096500	<u>Fire Suppression:</u>	
Optional: porcelain tile base	093000	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Sink	224000
<u>Walls:</u>		Plumbing connections	224000/221116/221119
Painted, concrete masonry units	042000/099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
L1 Tables		Independent temperature control	230923
L2 Chairs		<u>Electrical:</u>	
L3 Computer workstation		Single level switching	262726
Waste receptacle		Fluorescent lighting	265100
<u>EQUIPMENT:</u>		Illumination level: See Table 8600-4	
E1 Refrigerator		4 duplex receptacles	262726
E2 Microwave		Double duplex receptacle adjacent to	
		each video port	262726
		Receptacles for vending machines,	
		refrigerator, and microwave	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		The following items are to be funded by the school district:	
		M1 Vending machines	

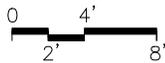
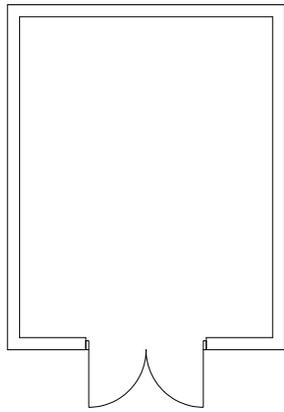
NOTES:

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

**TABLE STORAGE
CT-SD-4**

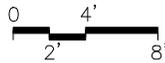
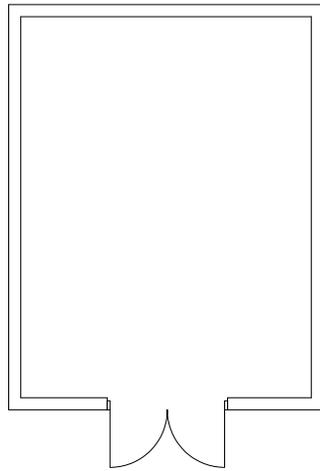
CHAPTER 6: CAREER-TECHNICAL SCHOOL

400 SF



Student Dining

550 SF



Student Dining

CAPACITY:

SIZE:

ANCILLARY SPACES:

N/A

400 - 550 SF

Student Dining

CT-SD-1

PROGRAM ACTIVITIES:

- Storage for tables and chairs

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Near food services

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

NOTES:

**TABLE STORAGE
CT-SD-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

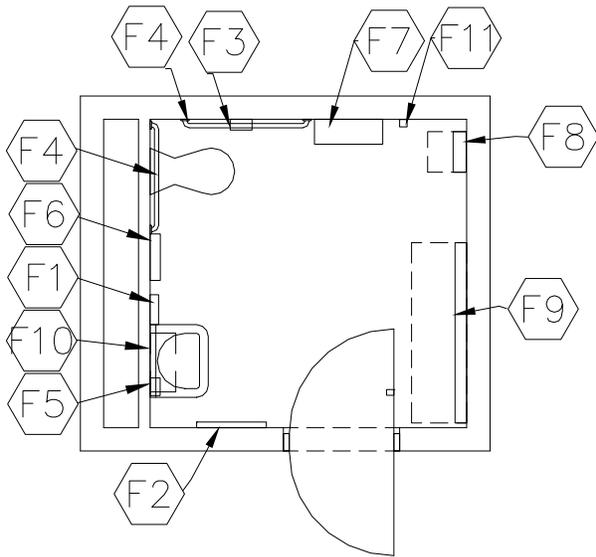
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	093000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Option: Rated gypsum wallboard	092116	<u>HVAC:</u>	
Walls:		Exhaust air system	Div. 23
Unpainted concrete masonry units	042000	Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

FAMILY RESTROOM
CT-SD-5

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 2 people
SIZE: 80 SF

NOTES:

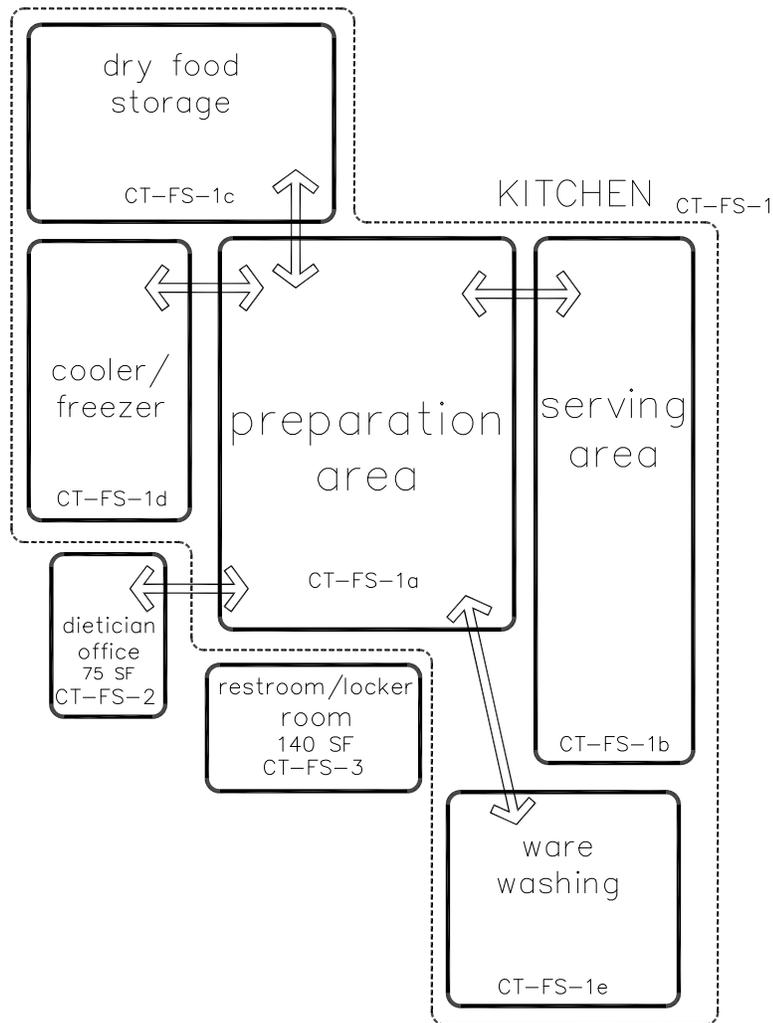
FAMILY RESTROOM
CT-SD-5

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, <i>ET</i> ,	096516	F1 Towel dispenser	102813
or 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 Sanitary napkin dispenser/disposal	102813
<u>Base:</u>		F7 Folding utility shelf	102813
Resilient base	096500	F8 Mounted child seat	102813
Optional: Ceramic mosaic tile,	093000	F9 Adult/child changing station	102813
porcelain tile, resinous flooring	096723	F10 16" x 24" mirror with shelf	102813
flooring, or integral vinyl cove base		F11 Coat hooks	102813
		<u>Fire Suppression:</u>	
<u>Ceiling:</u>		Fire suppression system	211000
Suspended, acoustical	095113		
		<u>Plumbing:</u>	
<u>Walls:</u>		Wall-mounted water closet	224000
Painted concrete masonry units	042000/099100	Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**NOTES:**

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

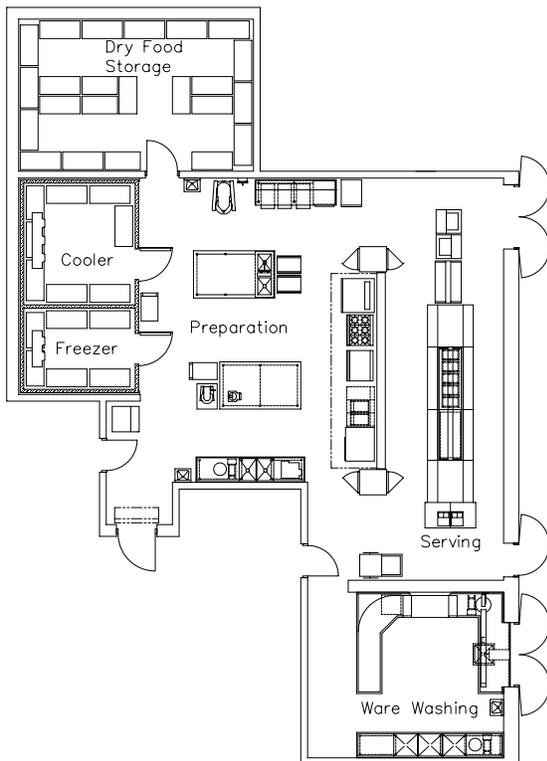
CT-FS-0	Warming Kitchen
CT-FS-1	Kitchen
CT-FS-1a	Preparation Area
CT-FS-1b	Serving Area
CT-FS-1c	Dry Food Storage
CT-FS-1d	Cooler/Freezer
CT-FS-1e	Ware Washing
CT-FS-2	Custodial Closet
CT-FS-3	Dietician Office
CT-FS-4	Restroom/Locker Room

KITCHEN CT-FS-1

This space consists of various areas:

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

A space plate follows for each of these areas.



CAPACITY: 3 – 10 persons
SIZE: Student capacity multiplied by 3.5 SF per student
ANCILLARY SPACES: Student Dining CT-SD-1
Loading/Receiving Area CT-GS-7

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
CT-FS-0**

CHAPTER 6: CAREER-TECHNICAL 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:

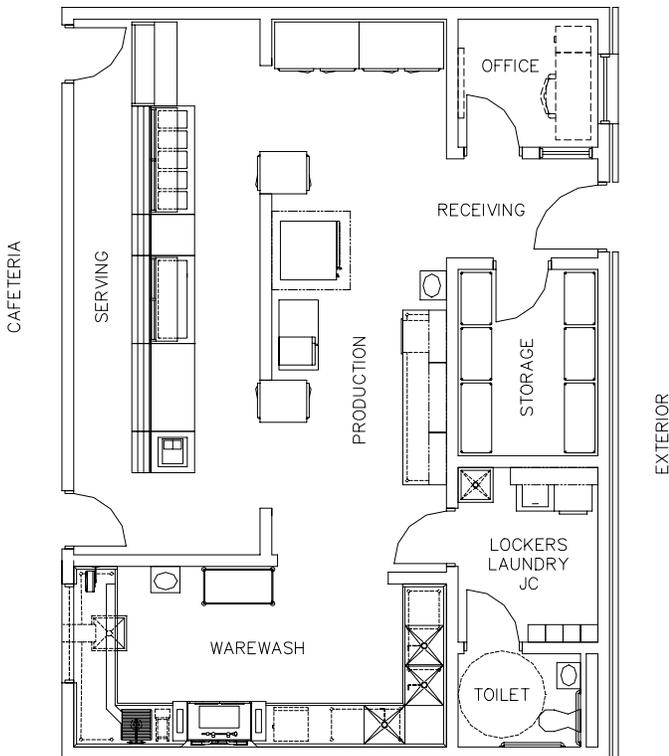
- Adjacent to student dining
- Near staff dining
- Near table storage
- Adjacent to loading/receiving area

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 CT-SD-1
 Loading/Receiving Area CT-GS-7

NOTES:

**WARMING KITCHEN
CT-FS-0**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

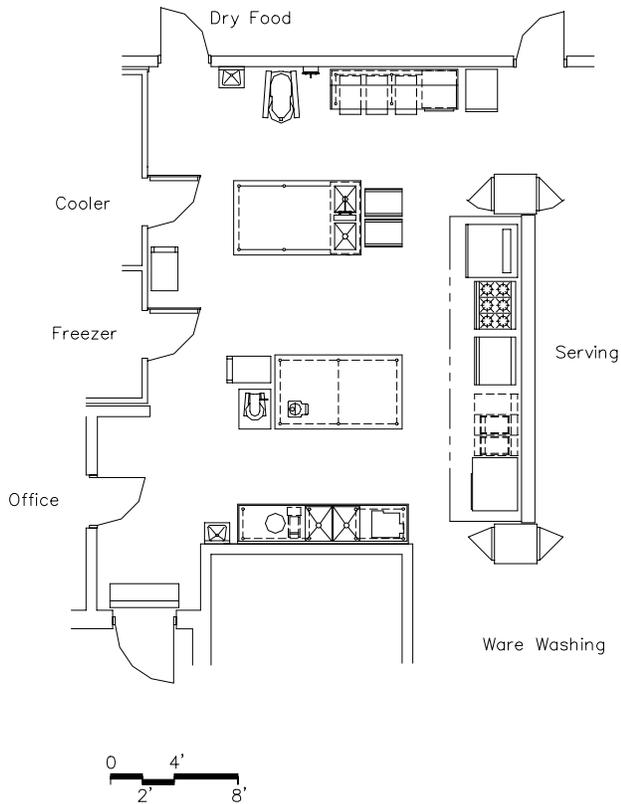
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service eqpt.	224000
Walls:		Plumbing connections	224000/221116/221119
Epoxy-painted concrete masonry units	042000 /099100	Hand washing lavatory	224000
Option: Ceramic wall tile or	093000	Gas connections	226313
latex paint	099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
N/A		Independent temperature control	230923
		Kitchen canopy exhaust system	233800
		<u>Electrical:</u>	
		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		10 duplex receptacles	262726
		Emergency lighting	265100
		Connections to food service eqpt.	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		1 voice port and phone	271513/273113
		1 data port at cash register(s)	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

KITCHEN - Preparation Area CT-FS-1a

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

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

NOTES:

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

KITCHEN - Preparation Area
CT-FS-1a

CHAPTER 6: CAREER-TECHNICAL SCHOOL

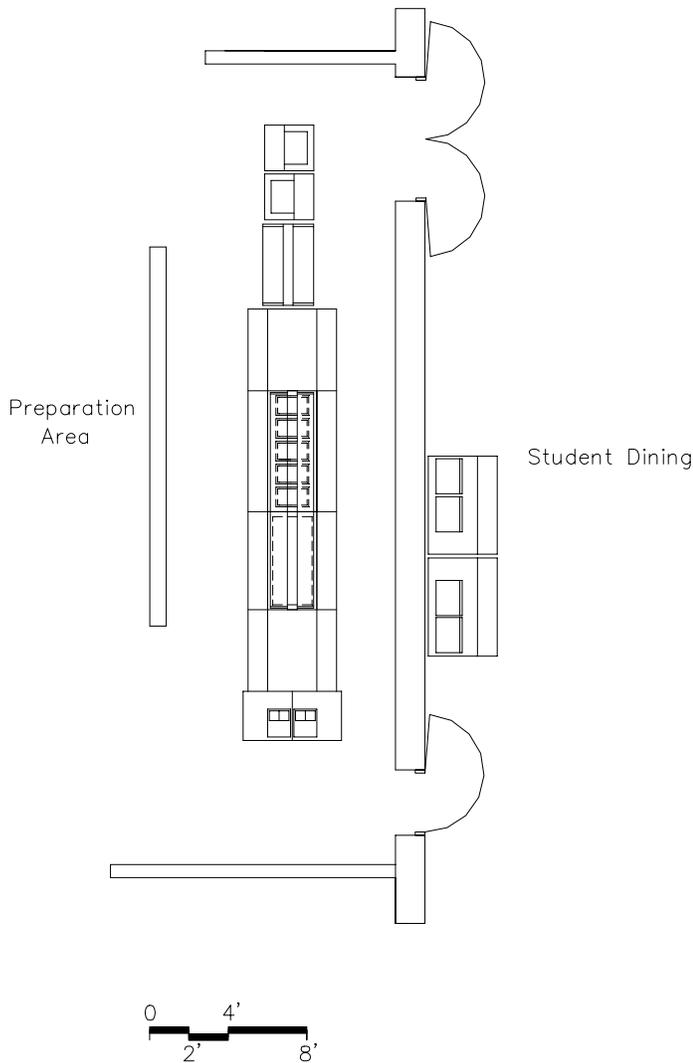
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
Walls:		Plumbing connections	224000/221116/221119
Epoxy-painted concrete masonry units	042000 /099100	Hand washing lavatory	224000
Option: ceramic wall tile	093000	Gas connections	226313
or latex paint	099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
N/A		Independent temperature control	230923
		Kitchen canopy exhaust system	233800
		<u>Electrical:</u>	
		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Emergency lighting	265100
		Connections to food service equipment	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	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
CT-FS-1b**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Space for serving of food

SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Adjacent to preparation area

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Cleanable building services

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

NOTES:

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

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

CHAPTER 6: CAREER-TECHNICAL SCHOOL

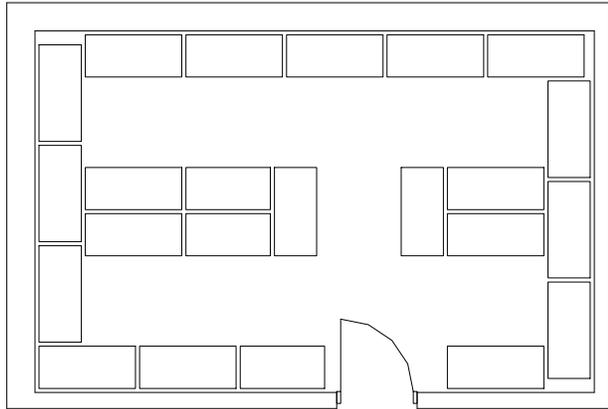
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		Fixed Equipment:	
Quarry tile	093000	Food service equipment	114000
Optional: porcelain tile			
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Optional: porcelain tile base			
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
Walls:		<u>HVAC:</u>	
Epoxy-painted concrete masonry units	042000 /099100	Supply/return air system	Div. 23
Ceramic wall tile	093000	<u>Electrical:</u>	
or latex paint	099100	Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
<u>LOOSE FURNISHINGS:</u>		4 duplex receptacles	262726
N/A		Connections to food service equipment	262726
		Emergency lighting	265100
		Means of egress lighting per code	265100
		Duplex receptacle at each cash register	262726
		<u>Communications:</u>	
		Data port(s) at cash register(s)	271513
		Clock	275313
		Central sound system	275123
		1 voice port and phone	271513/273113
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

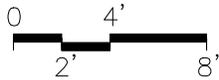
1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.

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

CHAPTER 6: CAREER-TECHNICAL 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:

- Uniform lighting
- 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
CT-FS-1c**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

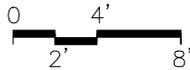
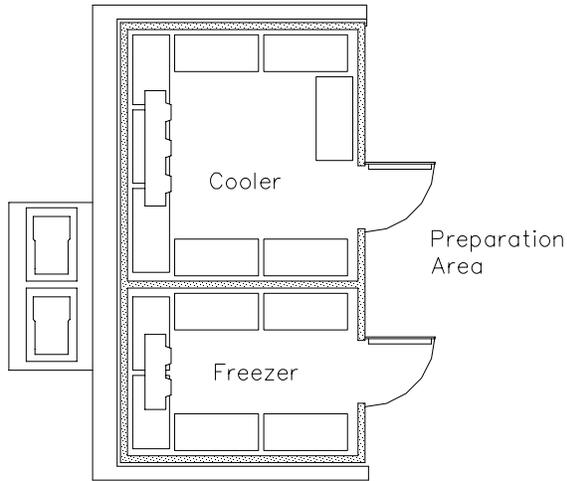
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , or sheet vinyl	096500	Food service equipment	114000
Option: Quarry tile	093000		
	096516	<u>Fire Suppression:</u>	
Base:		Fire suppression system	211000
Resilient base	096500		
Option: Quarry tile	093000	<u>Plumbing:</u>	
		N/A	
Ceiling:		<u>HVAC:</u>	
Cleanable, suspended, acoustical	095113	Exhaust air system	Div. 23
		Supply/return air system	Div. 23
Walls:		<u>Electrical:</u>	
Epoxy-painted concrete masonry units	042000/099100	Single level switching	262726
Option: Ceramic wall tile	093000	Fluorescent lighting	265100
or latex paint	099100	Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
N/A		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

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

CHAPTER 6: CAREER-TECHNICAL 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:

- Uniform lighting
- 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
CT-FS-1d**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

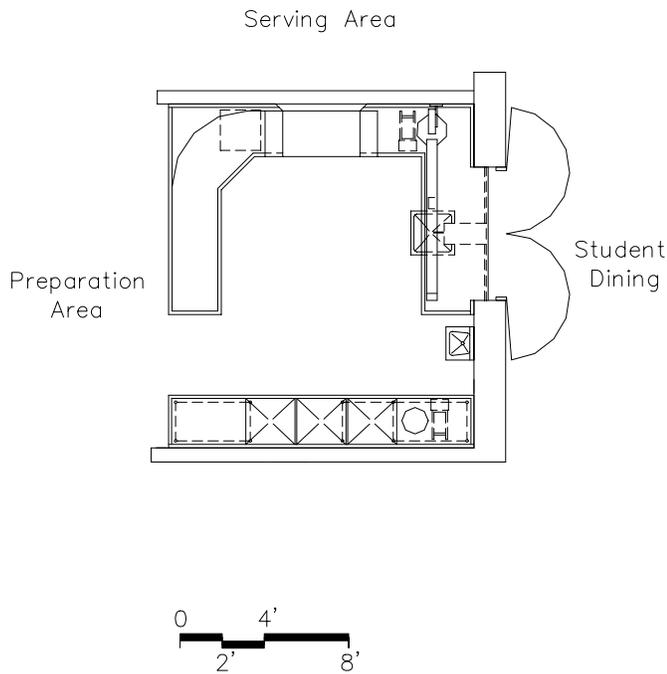
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Manufactured insulated panel	114000	N/A	
Walls: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

NOTES:

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

KITCHEN - Ware Washing CT-FS-1e

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Adjacent to student dining

ENVIRONMENTAL CONSIDERATIONS:

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

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

NOTES:

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

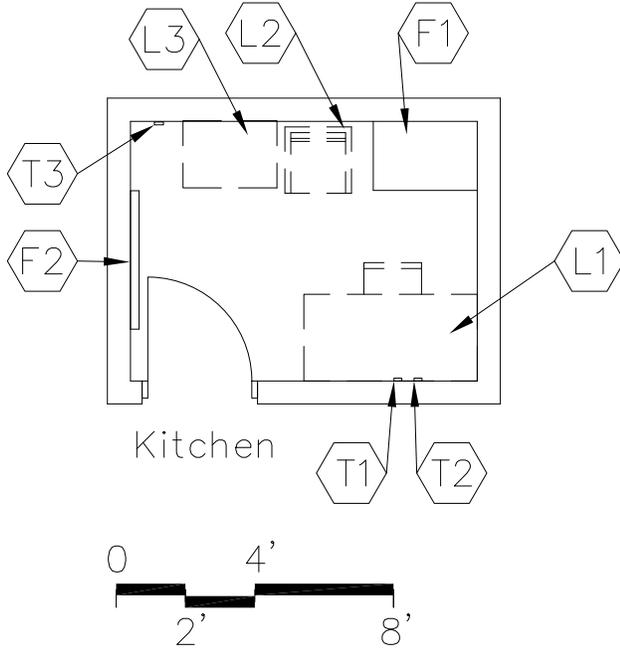
**KITCHEN - Ware Washing
CT-FS-1e**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Lavatory	224000
Walls:		Connections to food service equipment	224000
Epoxy-painted concrete masonry units	042000/099100	<u>HVAC:</u>	
Option: Ceramic wall tile	093000	Supply/return air system	Div. 23
or latex paint	099100	Independent temperature control	230923
		Exhaust hood system	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Connections to food service equipment	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Adjacent to kitchen

ENVIRONMENTAL CONSIDERATIONS:

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

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

NOTES:

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

**DIETICIAN'S OFFICE
CT-FS-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:			
Linoleum, <i>ET</i> , or sheet vinyl	096500	Fixed Items:	
	096516	F1 2' of tall wardrobe (optional)	123550
Option: Quarry tile	093000	F2 4' of tack board	101100
Base:			
Resilient base	096500	Fire Suppression:	
Option: Quarry tile	093000	Fire suppression system	211000
Ceiling:			
Suspended, acoustical	095113	Plumbing:	
N/A			
Walls:			
Painted concrete masonry units	042000/099100	HVAC:	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		(coupled with similarly loaded adjacent spaces)	
LOOSE FURNISHINGS:			
L1 Desk and chair		Electrical:	
L2 Visitor chair		Single level switching	262726
L3 File cabinet		Fluorescent lighting	265100
Wastebasket		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
Communications:			
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
Electronic Safety and Security:			
		Life safety devices per code	283111
Miscellaneous:			
		Interior window (optional)	081113/088000

NOTES:

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

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

CHAPTER 6: CAREER-TECHNICAL SCHOOL

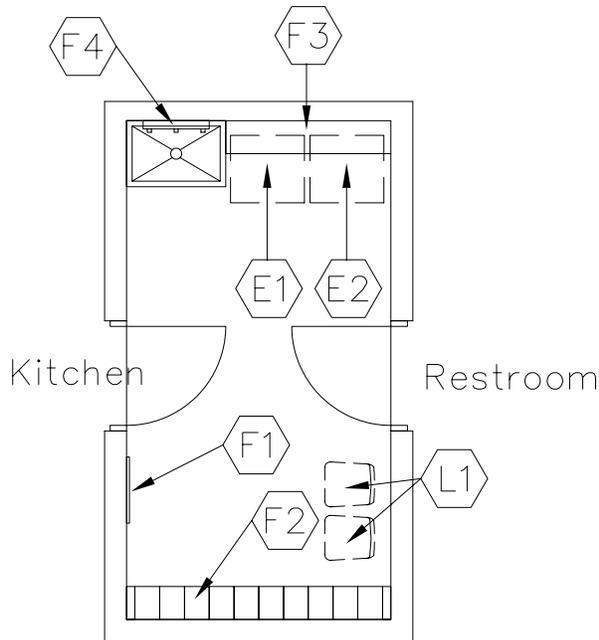
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , sheet vinyl,	096516	F1 Towel dispenser	102813
rubber, rubber tile	096500	F2 2 , 24" x 60" mirrors	102813
Optional: quarry tile	093000	F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Mirror with shelf above sink(optional)	102813
Resilient base	096500	F7 Coat hooks	102813
Optional: quarry tile, or	093000	F8 Lockers 12" x 12" x 60"	105113
integral vinyl cove base		F9 Mop holder	102813
		<u>Fire Suppression:</u>	
<u>Ceiling:</u>		Fire suppression system	211000
Suspended, acoustical	095113		
		<u>Plumbing:</u>	
<u>Walls:</u>		Wall-mounted water closet	224000
Painted concrete masonry units	042000/099100	Wall-mounted lavatory	224000
		Floor service sink	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Chairs		Exhaust air system	Div. 23
Wastebasket		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 duplex receptacles	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**LOCKER ROOM
CT-FS-4**

CHAPTER 6: CAREER-TECHNICAL 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:

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

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

NOTES:

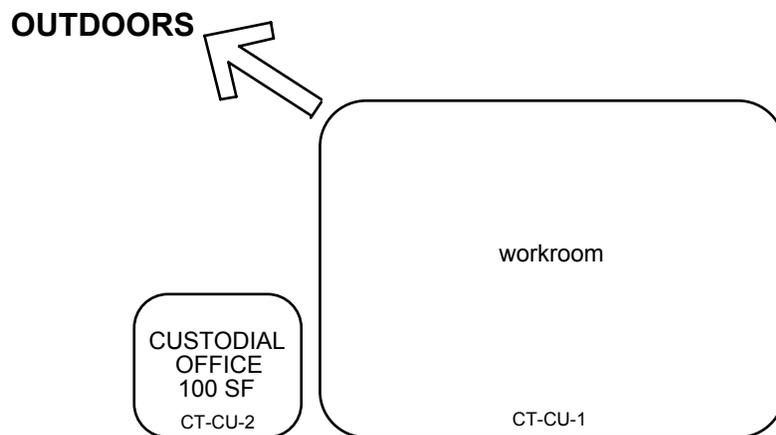
1. Loose furnishings shown represent one of many possible arrangements.

**LOCKER ROOM
CT-FS-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Sheet vinyl, rubber, rubber tile, or resinous flooring	096500 096723	F1 24" x 60" mirror (optional)	102813
		F2 Lockers 12" x 12" x 60"	105113
		F3 6' of wall cabinets or shelf (optional)	123550
		F4 Mop holder	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base, resinous flooring, or integral vinyl cove base	096500 096723	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high-impact, hold-down clips	095113	Plumbing connections	224000/221116/221119
Option: exposed, painted pre-cast units	099100	Floor service sink	224000
		Washer connection	224000
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Dryer vent system	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Chairs		Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Connections for washer and dryer	262726
<u>EQUIPMENT:</u>		<u>Communications:</u>	
E1 Washer		Central sound system	275123
E2 Dryer		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Provide storage cabinet for supplies if required by governing agency.	

NOTES:

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



NOTES:

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

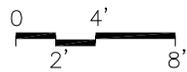
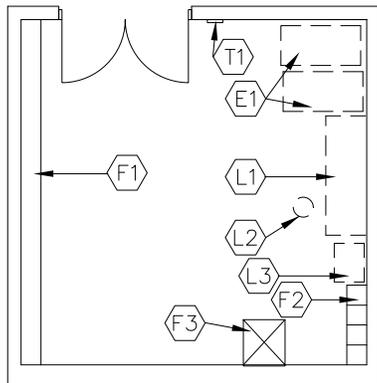
Following are the Custodial space plates:

- CT-CU-1 Workroom
- CT-CU-2 Custodial Office

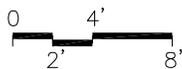
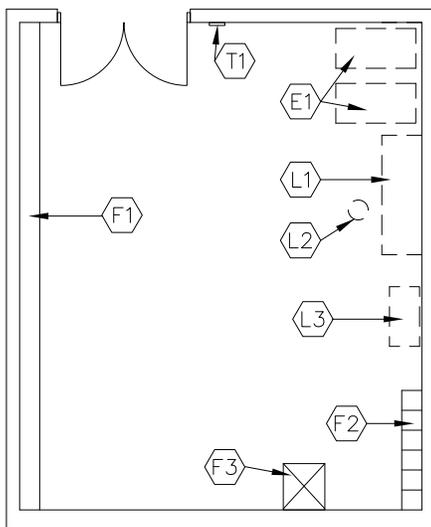
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CHAPTER 6: CAREER-TECHNICAL SCHOOL

200 SF



400 SF



CAPACITY:
SIZE:

N/A
200 - 400 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near central storage area
- Near custodial office

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

NOTES:

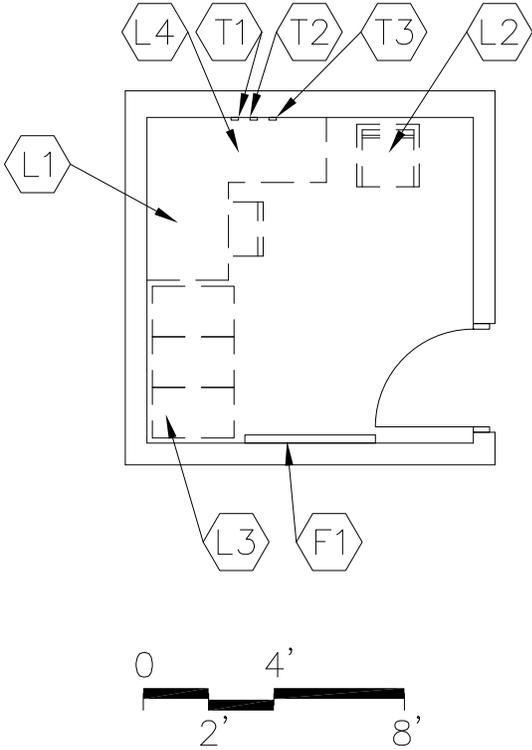
1. Loose furnishings shown represent one of many possible arrangements.

**WORKROOM
CT-CU-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. <u>Ref.#</u>	<u>FEATURES¹:</u>	Spec. <u>Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items²:</u>	
<i>Polished concrete finishing, or colored concrete finishing</i>	033510 033519	F1 10' - 24' of open shelving, depths can vary (fixed or loose)	123550 105113
<u>Base:</u>		F2 4 - 6 lockers	102813
Resilient base	096500	F3 Mop holder	102813
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	Floor service sink	224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Workbench		Supply/return air system	Div. 23
L2 Stool		Independent temperature control	230923
L3 Tool cabinet		<u>Electrical:</u>	
Waste receptacles		Fluorescent lighting	265100
<u>EQUIPMENT:</u>		Illumination level: See Table 8600-4	
E1 Recycling bins		Single level switching	262726
		4 duplex receptacles (minimum)	262726
		Electrical receptacles for custodial equipment	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

- Near custodial workroom

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY:
SIZE:

N/A
100 SF

NOTES:

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

**CUSTODIAL OFFICE
CT-CU-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Vinyl composition tile, linoleum, <i>ET</i> , sheet vinyl, or <i>polished concrete finishing, or</i> <i>colored concrete finishing</i>	096500 096516 033510 033519	F1 4' of tack board (optional)	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L1 Desk and chair		<u>Electrical:</u>	
L2 Visitor chair		Single level switching	262726
L3 File cabinets		Fluorescent lighting	265100
L4 Computer desk return		Illumination level: See Table 8600-4	
Wastebasket		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and modem port	262726
		<u>Communications:</u>	
		T1 Modem port for temperature controls computer	271523
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window (optional)	081113/088000

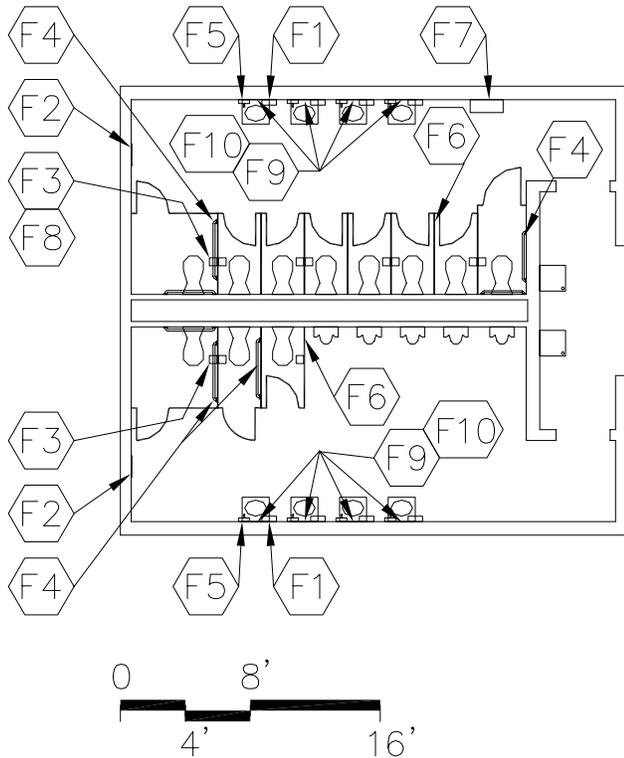
NOTES:

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

LARGE GROUP RESTROOMS CT-GS-1

CHAPTER 6: CAREER-TECHNICAL 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 general public
- Groups of restrooms should be located in several areas throughout the building

SPATIAL RELATIONSHIPS:

- Near student dining area
- Near public use areas, such as media center and gymnasium
- Near academic core area

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

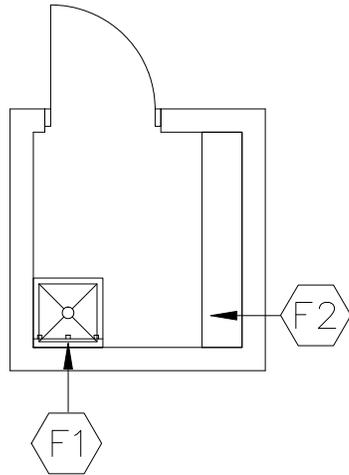
1. Where individual restrooms are provided in lieu of large group restrooms, refer to H-BS-10.

**LARGE GROUP RESTROOMS
CT-GS-1**
CHAPTER 6: CAREER-TECHNICAL 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,	093000	F2 24" x 60" mirror	102813
terrazzo tile, rubber, or	096616	F3 Toilet tissue holders	102813
resinous flooring	096723	F4 36" and 42" grab bar	102813
		F5 Soap dispensers	102813
<u>Base:</u>		F6 Toilet partitions	102113
Ceramic mosaic tile base	093000	F7 Sanitary product dispenser	102813
Optional: structural glazed tile,	096616	F8 Sanitary product receptacles	102813
porcelain tile base, or	093000	F9 16" x 24" mirrors with shelf (optional)	102813
resinous flooring	096723	F10 Shelves (optional)	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Option: Abuse resistant			
gypsum wallboard	092116	<u>Plumbing:</u>	
<u>Walls:</u>		Wall-mounted water closets	224000
Painted concrete masonry unit	042000/099100	Wall-mounted urinals	224000
		Wall-mounted lavatories	224000
		or wash fountains	
		Wall hydrants	224000
		Plumbing connections	224000/221116/221119
		Floor drains	Div. 22
		Drinking water cooler	224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Waste Receptacles		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Emergency lighting	265100
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

- Space for storage of custodial supplies throughout the building

SPATIAL RELATIONSHIPS:

- Near large group restrooms

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

CAPACITY:
SIZE:

N/A
50 SF

NOTES:

**CUSTODIAL CLOSET
CT-GS-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Cure and seal concrete	033000	F1 Mop holder	102813
Vinyl composition tile (optional)	096500	F2 Fixed or loose shelving (optional)	123550
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Service sink or floor drain sink	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
Shelving (optional)		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

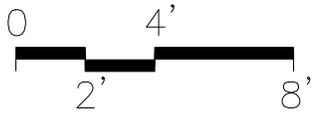
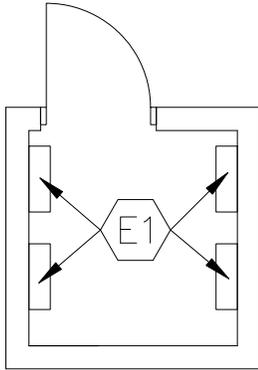
NOTES:

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

**ELECTRICAL CLOSET
CT-GS-3**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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



CAPACITY:
SIZE:

N/A
50 SF

PROGRAM ACTIVITIES:

- Space for electrical wiring and panels

SPATIAL RELATIONSHIPS:

N/A

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

NOTES:

**ELECTRICAL CLOSET
CT-GS-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

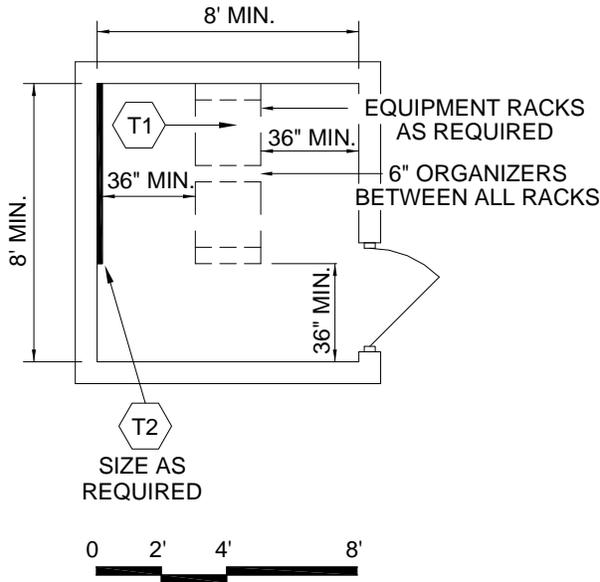
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<i>Cure and seal</i> concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete 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 8600-10	
		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
CT-GS-4**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Space for technology needs

SPATIAL RELATIONSHIPS:

N/A

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

CAPACITY:	N/A
SIZE:	64 SF
0-75,000 SF =	(?) 8 ft. x 8 ft. min.
75,00-150,000 SF =	(1) 8 ft. x 10 ft., and (?) 8 ft. x 8 ft.
150,000 SF plus =	(2) 8 ft. x 10 ft., and (?) 8 ft. x 8 ft.

NOTES:

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

**TELECOMMUNICATIONS ROOM
CT-GS-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

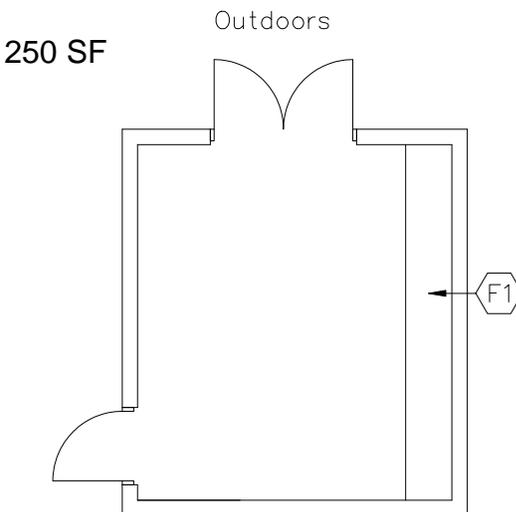
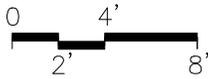
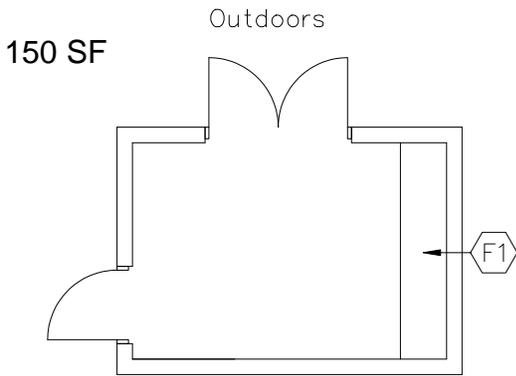
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<i>Polished concrete finishing, or</i>	033510	N/A	
<i>colored concrete finishing</i>	033519		
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	Exhaust air system	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Receptacles for data equipment	262726
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 Technology equipment	
		Central sound system	275123
		Telephone Wiring	271313/271513
		Integrated Telephone System	273113
		Video Wiring	271333/271533/271543
		Digital on Demand Delivery System	274125
		Local Area Network Wiring	271513/271323
		Local Area Network Electronics	272100
		Grounding & Infrastructure Equipment	270526/271100
		T2 1/4" plywood back board	271313
		<u>Electronic Safety and Security:</u>	
		Security System	281300/281600/282300
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**STORAGE AREA
CT-GS-5**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: N/A
 SIZE: 150 - 500 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
CT-GS-5**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

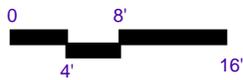
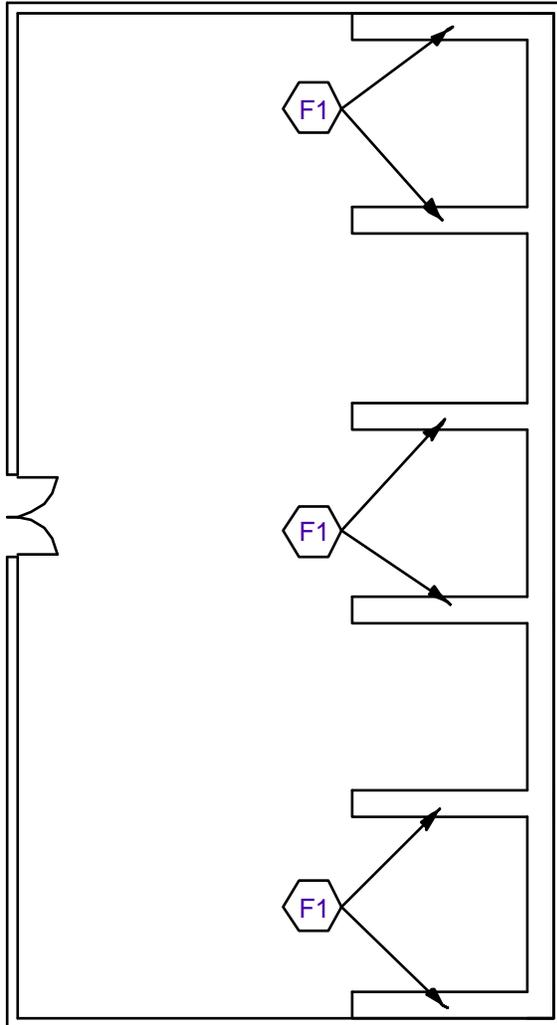
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Cure and seal concrete	033000	F1 8'-20' of open shelving , depths may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

CENTRAL STORAGE / DISTRIBUTION CENTER
CT-GS-6

CHAPTER 6: CAREER-TECHNICAL SCHOOL



CAPACITY: N/A
 SIZE: 1000 - 1667 SF

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

NOTES:

**CENTRAL STORAGE / DISTRIBUTION AREA
CT-GS-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items²:</u>	
Cure and seal concrete	033000	F1 26' - 32' of open shelving (total), depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
No base		<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Exposed structure	---	<u>Plumbing:</u>	
Walls:		N/A	
Unpainted concrete masonry units	042000	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Exhaust air system	Div. 23
N/A		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

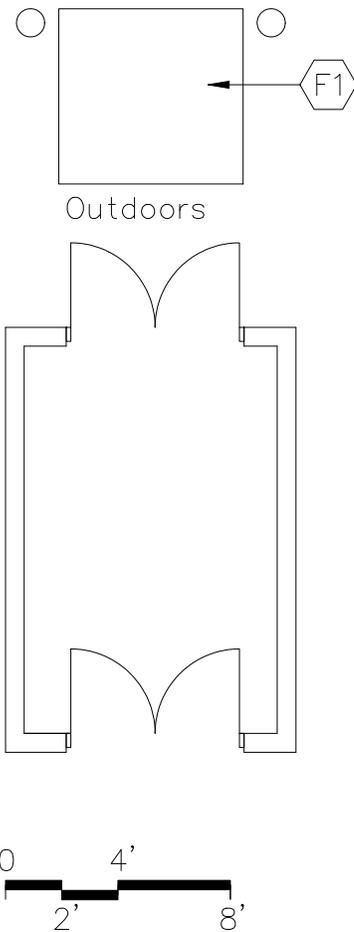
NOTES:

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

**LOADING/RECEIVING/WAREHOUSE AREA
CT-GS-7**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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



**CAPACITY:
SIZE:**

**N/A
120 SF**

PROGRAM ACTIVITIES:

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

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

N/A

MISCELLANEOUS:

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

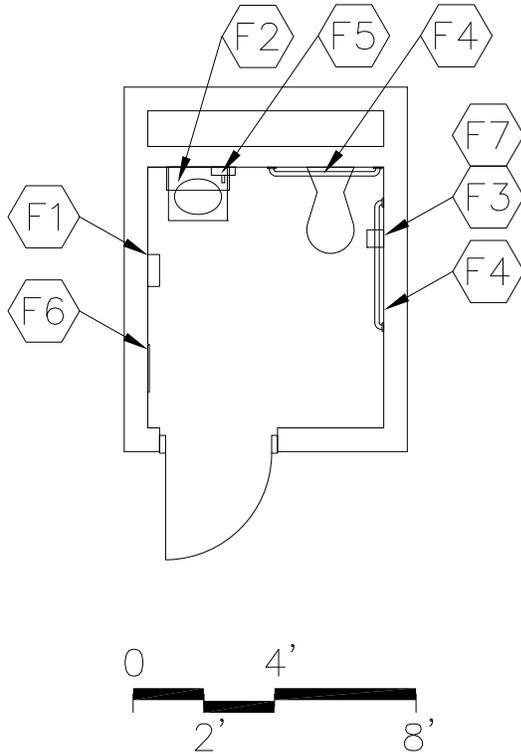
NOTES:

**LOADING/RECEIVING/WAREHOUSE AREA
CT-GS-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	F1 Loading dock leveler and dock bumpers	111300
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		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:

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

CAPACITY: 1 person
 SIZE: 50 SF
 ANCILLARY SPACES:

NOTES:

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

**RESTROOM
CT-GS-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, ET , sheet vinyl, or rubber	096516 096500	F1 Towel dispenser	102813 102813
Optional: quarry tile, or resinous flooring	093000 096723	F2 Mirror with shelf above sink(optional)	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Sanitary product dispenser	102813
Resilient base	096500	F7 Sanitary product receptacle	102813
Optional: quarry tile, resinous flooring, or integral vinyl cove base	093000 096723		
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-10	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

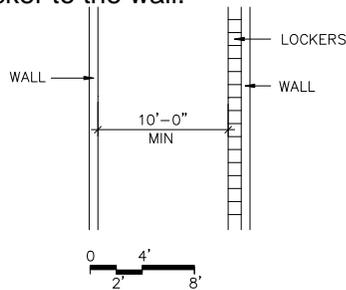
NOTES:

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

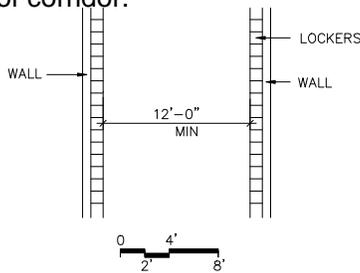
CORRIDORS CT-BS-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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



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



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

CAPACITY: Based on size of program area
 SIZE: See Chapter 2

PROGRAM ACTIVITIES:

- Circulation space

SPATIAL RELATIONSHIPS:

N/A

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

VESTIBULES

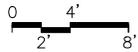
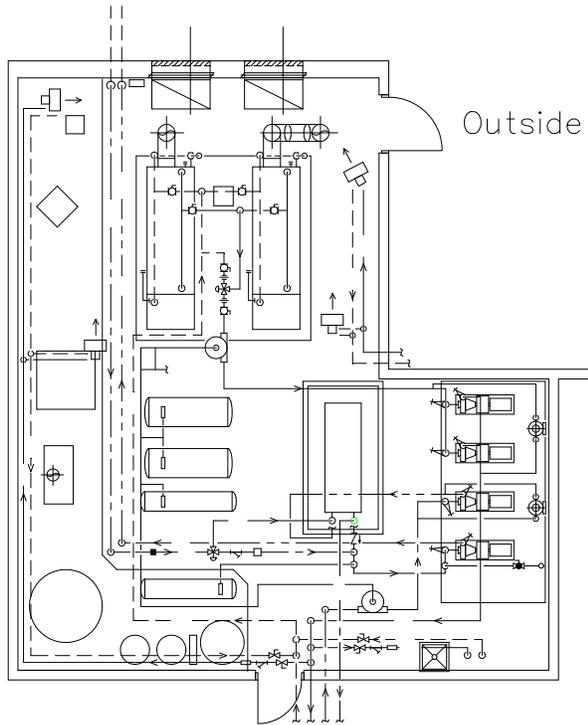
- Area of vestibules to be included within area allotted for corridors.
- Width of vestibules can be no less than minimum width of adjacent corridor.
- Minimum corridor length to be 8'-0" between doors.
- Vestibules are to be provided at major entrances/exits and may be eliminated at minor entrances/exits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

NOTES:

MECHANICAL/ELECTRICAL SPACE/DECKS
CT-BS-2

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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



CAPACITY: Based on size of program area

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

PROGRAM ACTIVITIES:

- Space for mechanical and electrical equipment

SPATIAL RELATIONSHIPS:

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

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

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

MECHANICAL/ELECTRICAL SPACE/DECKS
CT-BS-2

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	To be determined by Design Professional	
Base:		<u>Fire Suppression:</u>	
No base		To be determined by Design Professional	
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	To be determined by Design Professional	
Walls: (note 2)		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	To be determined by Design Professional	
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Others as determined by Design Professional	
		<u>Communications:</u>	
		Central sound system	275123
		Voice port and phone	271513/273113
		<u>Electronic Safety and Security:</u>	
		To be determined by Design Professional	
		<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.

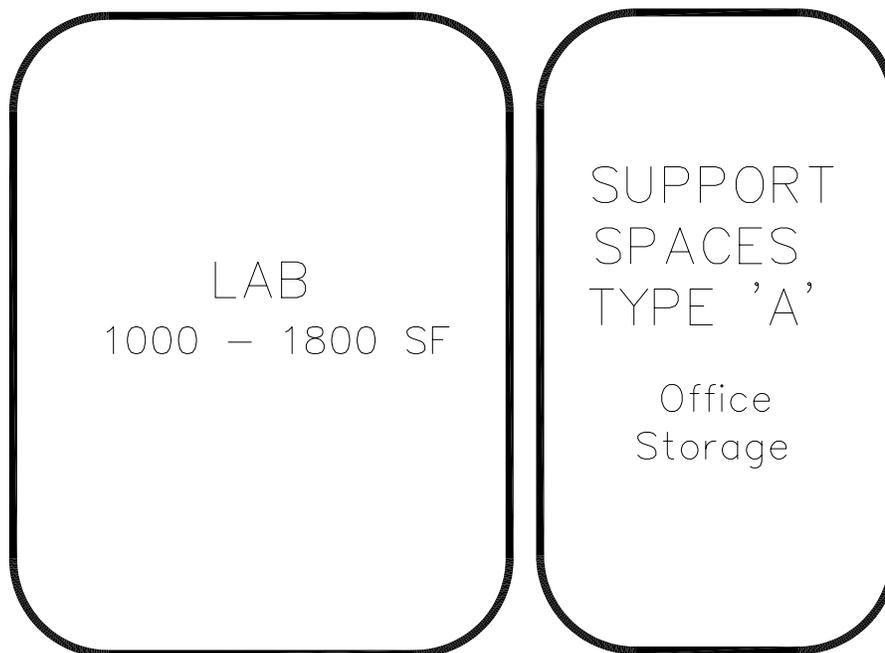
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E.	Office Plate	6311-21
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Program Type 1

Description: Small to medium sized lab space with typical support space. Lab and support space to have finished floor, painted walls, and suspended acoustical ceiling.

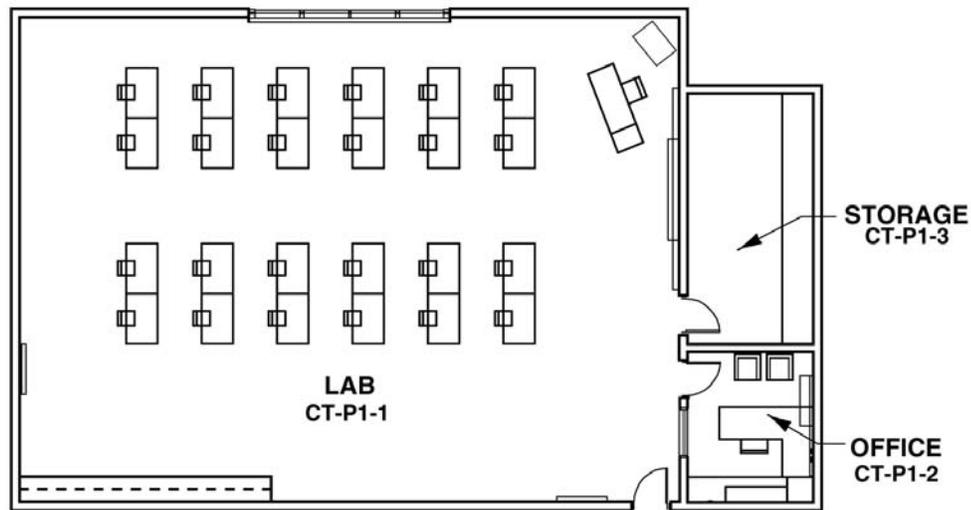
**NOTES:**

This is an example of how the Program Type 1 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 1 space plates:

- CT-P1-1 Lab
- CT-P1-2 Office
- CT-P1-3 Storage

**PROGRAM TYPE 1
EXAMPLE**

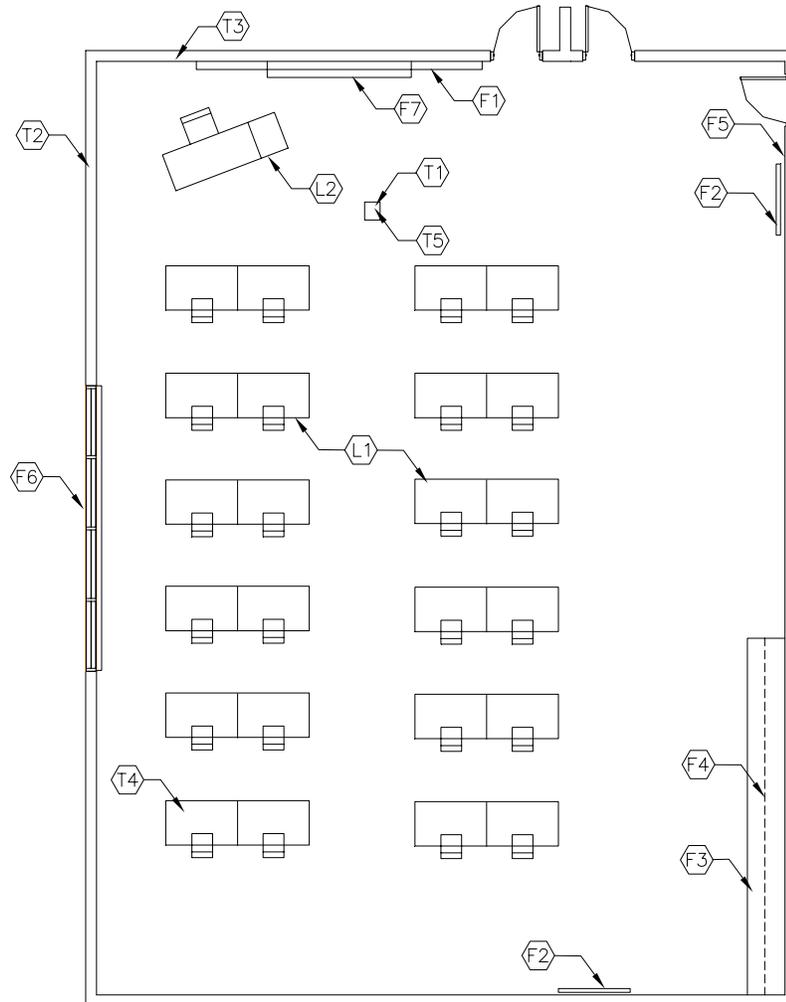


Program Type 1

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements for the storage room and office.



CAPACITY:	24 Students
SIZE:	1,000 – 1,800 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P1-2 and CT-P1-3

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P1-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**ACCOUNTING
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION: Planned learning experiences that include a combination of courses and practical experiences concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money.		FEATURES¹:		Spec.
Program Type: 1		<u>Fixed Items:</u>		<u>Ref.#</u>
Size Requirements: 1,200 SF Lab		F1	16' of chalk/marker board	101100
Lab Requirements:		F2	8' of tack board	101100
		F3	20' of base cabinets	123550
		F4	20' of wall cabinets	123550
		F5	Pencil sharpener support	062000
		F6	Windows with integral blinds	085113
		F7	Projection screen, 6'x8'	115213
		<u>Fire Suppression:</u>		
			Fire suppression system	211000
		<u>Plumbing:</u>		
		N/A		
<u>FINISHES:</u>		<u>HVAC:</u>		
Flooring:		Supply/return air system		Div. 23
Carpet		Independent temperature control		230923
Optional: vinyl composition tile, ET, sheet vinyl, or linoleum				
	Spec. Ref #	<u>Electrical:</u>		
	096816	Fluorescent lighting, parabolic lenses:		265100
	096500	Illumination level: See Table 8600-4		
	096516	Multilevel switching		262726
Base:		6 duplex receptacles		262726
Resilient	096500	Double duplex receptacle adjacent to each data and video port		262726
Ceiling:		<u>Communications:</u>		
Suspended acoustical	095113	T1	1 video port	271533/271543
Walls:		T2	1 voice port and phone	271513/273113
Painted concrete masonry units	042000/ 099100	T3	1 data port near teacher workstation	271513
		T4	26 data ports	271513
			Clock	275313
			Central sound system	275123
			Sound reinforcement system	275127
		T5	Overhead projector	274119
<u>LOOSE FURNISHINGS:</u>		<u>Electronic Safety and Security:</u>		
L1 (24) Computer workstation furniture & chairs		Life safety devices per code		283111
L2 (1) Teacher station & chair		<u>Miscellaneous:</u>		
Wastebasket		N/A		
Pencil sharpener				

NOTES:

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

**ADMINISTRATIVE and PROFESSIONAL SUPPORT
LEGAL MANAGEMENT and SUPPORT
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>PROGRAM DESCRIPTION: A&PS: An instructional program that prepares individuals to provide administrative support services in a variety of business settings. Services could be provided to various levels of management and may or may not be supervised. Instruction emphasis will include office technology, financial functions, records management, and support tasks. LM&S: Prepares students to work in the legal environment in occupations such as legal secretary, legal assistant, paralegal, real-time reporter, court reporter, legal office manager, or stenocaptionist.</p> <p>Program Type: 1</p> <p>Size Requirements: 1,200 SF Lab</p> <p>Lab Requirements:</p> <table border="0"> <tr> <td></td> <td style="text-align: right;">Spec. Ref #</td> </tr> <tr> <td>FINISHES:</td> <td></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td> Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td> Optional: vinyl composition tile, ET, sheet vinyl, or linoleum</td> <td style="text-align: right;">096500 096516</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td> Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td> Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td> Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td>LOOSE FURNISHINGS:</td> <td></td> </tr> <tr> <td>L1 (24) Computer workstation furniture & chairs</td> <td></td> </tr> <tr> <td>L2 (1) Teacher station & chair</td> <td></td> </tr> <tr> <td> Wastebasket</td> <td></td> </tr> <tr> <td> Pencil sharpener</td> <td></td> </tr> </table>		Spec. 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NOTES:

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

AVIATION OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P1-1

PROGRAM DESCRIPTION:

Classroom and practical experiences that include instruction relating to aircraft maintenance, operation, and ground support. Instructor and program must be certified by the Federal Aviation Administration (FAA).

Program Type: 1

Size Requirements: 1,500 SF Lab

Lab Requirements:**FINISHES:****Flooring:**

Vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	Spec. Ref # 096500 096516
---	------------------------------------

Base:

Resilient	096500
-----------	--------

Ceiling:

Suspended acoustical	095113
----------------------	--------

Walls:

Painted concrete masonry units	042000/ 099100
--------------------------------	-------------------

LOOSE FURNISHINGS:

- (12) 2-person work tables w/epoxy tops
and gas & electric connections
- (24) Student stools/chairs
- (1) Teacher chair or stool
- (4) Computer workstations
- Wastebasket
- Pencil sharpener

Miscellaneous:

N/A

NOTES:

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

FEATURES¹:**Fixed Items:**

16' of chalk/marker board	101100
8' of tack board	101100
Demonstration table/teacher desk	123550
60' of perimeter sink base cabinets with 5 sinks	123550
30' of wall cabinets	123550
Fume hood	115313
(5) Paper towel dispensers	102813
(1) Safety shower/eyewash	224000
Pencil sharpener support	062000
Windows with integral blinds	085113
Projection screen, 6'x8'	115213

Fire Suppression:

Fire suppression system	211000
-------------------------	--------

Plumbing:

Plumbing connections	221116/221119/224000
Safety shower/eyewash connections	224000
Master shut-off for gas	226313
Gas connections	226313
Compressed air connections	221500

HVAC:

Supply/return air system	Div. 23
Independent temperature control	230923
Manual exhaust	Div. 23
Fume hood exhaust	Div. 23

Electrical:

Fluorescent lighting	265100
illumination level: See Table 8600-4	
Multilevel switching	262726
6 duplex receptacles	262726
Double duplex receptacle adjacent to each data and video port	262726
Emergency lighting	265100
Means of egress lighting per code	265100

Communications:

1 video port	271533/271543
1 voice port and phone	271513/273113
1 data port near teacher workstation	271513
11 data ports	271513
Clock	275313
Central sound system	275123
Sound reinforcement system	275127
Overhead projector	274119

Electronic Safety and Security:

Life safety devices per code	283111
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**BUSINESS MANAGEMENT
CT-P1-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		FEATURES¹:	
An instructional program that generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in human resources management, strategic planning, managing technology, staffing functions, general office functions, financial functions, telecommunications, and supervisory functions.		<u>Fixed Items:</u>	
			Spec. Ref.#
Program Type:	1	F1	16' of chalk/marker board 101100
Size Requirements:	1,200 SF Lab	F2	8' of tack board 101100
Lab Requirements:		F3	20' of base cabinets 123550
		F4	20' of wall cabinets 123550
		F5	Pencil sharpener support 062000
		F6	Windows with integral blinds 085113
		F7	Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>	
			Fire suppression system 211000
		<u>Plumbing:</u>	
			N/A
		<u>HVAC:</u>	
			Supply/return air system Div. 23
			Independent temperature control 230923
		<u>Electrical:</u>	
			Fluorescent lighting, parabolic lenses:265100
			Illumination level: See Table 8600-4
			Multilevel switching 262726
			6 duplex receptacles 262726
			Double duplex receptacle adjacent to each data and video port 262726
		<u>Communications:</u>	
		T1	1 video port 271533/271543
		T2	1 voice port and phone 271513/273113
		T3	1 data port near teacher workstation 271513
		T4	26 data ports 271513
			Clock 275313
			Central sound system 275123
			Sound reinforcement system 275127
		T5	Overhead projector 274119
		<u>Electronic Safety and Security:</u>	
			Life safety devices per code 283111
		<u>Miscellaneous:</u>	
			N/A
FINISHES:			
Flooring:			
Carpet	Spec. Ref #	096816	
Optional: vinyl composition tile, ET, sheet vinyl, or linoleum		096500 096516	
Base:			
Resilient		096500	
Ceiling:			
Suspended acoustical		095113	
Walls:			
Painted concrete masonry units		042000/ 099100	
LOOSE FURNISHINGS:			
L1 (24) Computer workstation furniture & chairs			
L2 (1) Teacher station & chair			
Wastebasket			
Pencil sharpener			

NOTES:

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

DIVERSIFIED COOPERATIVE HEALTH OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P1-1

<u>PROGRAM DESCRIPTION:</u> A cooperative program in multi-occupational areas of health occupations.		<u>FEATURES¹:</u> <u>Fixed Items:</u>	Spec. <u>Ref.#</u>
Program Type:	1	16' of chalk/marker board	101100
Size Requirements:	1,500 SF Lab	8' of tack board	101100
Lab Requirements:		20' of sink base cabinets w/1 sink	123550
		20' of wall cabinets	123550
		Pencil sharpener support	062000
		Windows with integral blinds	085113
		Projection screen, 6'x8'	115213
		Paper towel dispenser	102813
<u>FINISHES:</u>	Spec. <u>Ref #</u>	<u>Fire Suppression:</u>	
Flooring:		Fire suppression system	211000
Vinyl composition tile, ET ,	096500	<u>Plumbing:</u>	
sheet vinyl, or linoleum	096516	Plumbing connections	221116/221119/224000
Optional: carpet	096816	<u>HVAC:</u>	
Base:		Supply/return air system	Div. 23
Resilient	096500	Independent temperature control	230923
Ceiling:		<u>Electrical:</u>	
Suspended acoustical	095113	Fluorescent lighting	265100
Walls:		Illumination level: See Table 8600-4	
Painted concrete masonry units	042000/ 099100	Multilevel switching	262726
<u>LOOSE FURNISHINGS:</u>		6 duplex receptacles	262726
(12) Two-person work tables		Double duplex receptacle adjacent to each data and video port	262726
(24) Computer workstation furniture & chairs		<u>Communications:</u>	
(1) Teacher station & chair		1 video port	271533/271543
Wastebasket		1 voice port and phone	271513/273113
Pencil sharpener		1 data port near teacher workstation	271513
		8 data ports	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

DRAFTING OCCUPATIONS
CT-P1-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		FEATURES¹:	
Specialized learning experiences that include theory, laboratory and shop work, as each relates to the gathering and translation of data or specifications; and the planning, preparation and interpretation of mechanical, and/or architectural drawings and sketches.		Fixed Items:	
Program Type:	1		Spec. Ref.#
Size Requirements:	1,500 SF Lab	F1	16' of chalk/marker board 101100
Lab Requirements:		F2	8' of tack board 101100
		F3	20' of base cabinets 123550
		F4	20' of wall cabinets 123550
		F5	Pencil sharpener support 062000
		F6	Windows with integral blinds 085113
		F7	Projection screen, 6'x8' 115213
		Fire Suppression:	
			Fire suppression system 211000
FINISHES:		Plumbing:	
Flooring:		N/A	
Carpet	Spec. Ref #	HVAC:	
Optional: vinyl composition tile,	096816	Supply/return air system Div. 23	
ET, sheet vinyl, or linoleum	096500	Independent temperature control 230923	
	096516	Electrical:	
Base:		Fluorescent lighting, parabolic lenses:265100	
Resilient	096500	Illumination level: See Table 8600-4	
Ceiling:		Multilevel switching 262726	
Suspended acoustical	095113	6 duplex receptacles 262726	
Walls:		Double duplex receptacle adjacent to each data and video port 262726	
Painted concrete masonry units	042000/ 099100	Communications:	
LOOSE FURNISHINGS:		T1 1 video port 271533/271543	
L1 (24) Computer workstation/drawing board furniture & chairs		T2 1 voice port and phone 271513/273113	
L2 (1) Teacher station & chair		T3 1 data port near teacher workstation 271513	
Wastebasket		T4 26 data ports 271513	
Pencil sharpener		Clock 275313	
		Central sound system 275123	
		Sound reinforcement system 275127	
		T5 Overhead projector 274119	
		Electronic Safety and Security:	
		Life safety devices per code 283111	
		Miscellaneous:	
		N/A	
		NOTES:	
		1. Finishes/Features: Refer to Chapter 9 for specification references.	

**ELECTRONICS
AUTOMATION & ROBOTICS
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		Spec. Ref.#																
<p>Electronics: Classroom, laboratory, and practical learning experiences that includes both theory and practice. Students learn construction, maintenance, and repair of digital, analog, and microprocessor circuits in applications such as communications equipment, consumer equipment, and industrial equipment.</p> <p>Automation & Robotics: Utilizing business and Industry, math, English, science and technology standards, introduces concepts in Automation and Robotics technologies: Computer Numerical Control (CNC), Data Acquisition and Analysis, Electrical/Electronic controls, Fluid Power, Robotics and Programmable Logic Controllers (PLC).</p>		<p>FEATURES¹:</p> <p><u>Fixed Items:</u></p>																
		<table> <tr><td>16' of chalk/marker board</td><td style="text-align: right;">101100</td></tr> <tr><td>8' of tack board</td><td style="text-align: right;">101100</td></tr> <tr><td>30' of base cabinets</td><td style="text-align: right;">123550</td></tr> <tr><td>30' of wall cabinets</td><td style="text-align: right;">123550</td></tr> <tr><td>12' of tall storage cabinets</td><td style="text-align: right;">123550</td></tr> <tr><td>Pencil sharpener support</td><td style="text-align: right;">062000</td></tr> <tr><td>Windows with integral blinds</td><td style="text-align: right;">085113</td></tr> <tr><td>Projection screen, 6'x8'</td><td style="text-align: right;">115213</td></tr> </table>	16' of chalk/marker board	101100	8' of tack board	101100	30' of base cabinets	123550	30' of wall cabinets	123550	12' of tall storage cabinets	123550	Pencil sharpener support	062000	Windows with integral blinds	085113	Projection screen, 6'x8'	115213
16' of chalk/marker board	101100																	
8' of tack board	101100																	
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Pencil sharpener support	062000																	
Windows with integral blinds	085113																	
Projection screen, 6'x8'	115213																	
<p>Program Type: 1</p> <p>Size Requirements: 1,800 SF Lab</p> <p>Lab Requirements:</p>		<p><u>Fire Suppression:</u></p> <table> <tr><td>Fire suppression system</td><td style="text-align: right;">211000</td></tr> </table>	Fire suppression system	211000														
		Fire suppression system	211000															
<p><u>Plumbing:</u></p> <p>N/A</p>																		
<p>FINISHES:</p> <p><u>Flooring:</u></p> <table> <tr><td>Carpet</td><td style="text-align: right;">096816</td></tr> <tr><td>Optional: vinyl composition tile,</td><td style="text-align: right;">096500</td></tr> <tr><td> ET, sheet vinyl, or linoleum</td><td style="text-align: right;">096516</td></tr> </table> <p><u>Base:</u></p> <table> <tr><td>Resilient</td><td style="text-align: right;">096500</td></tr> </table> <p><u>Ceiling:</u></p> <table> <tr><td>Suspended acoustical</td><td style="text-align: right;">095113</td></tr> </table> <p><u>Walls:</u></p> <table> <tr><td>Painted concrete masonry units</td><td style="text-align: right;">042000/ 099100</td></tr> </table>		Carpet	096816	Optional: vinyl composition tile,	096500	ET , sheet vinyl, or linoleum	096516	Resilient	096500	Suspended acoustical	095113	Painted concrete masonry units	042000/ 099100	<p><u>HVAC:</u></p> <table> <tr><td>Supply/return air system</td><td style="text-align: right;">Div. 23</td></tr> <tr><td>Independent temperature control</td><td style="text-align: right;">230923</td></tr> </table>	Supply/return air system	Div. 23	Independent temperature control	230923
		Carpet	096816															
Optional: vinyl composition tile,	096500																	
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Supply/return air system	Div. 23																	
Independent temperature control	230923																	
<p><u>LOOSE FURNISHINGS:</u></p> <p>(12) Two-person work tables w/storage below (24) Computer workstation furniture & chairs (1) Teacher station & chair Wastebasket Pencil sharpener</p>		<p><u>Electrical:</u></p> <table> <tr><td>Fluorescent lighting, parabolic lenses:</td><td style="text-align: right;">265100</td></tr> <tr><td> Illumination level: See Table 8600-4</td><td></td></tr> <tr><td>Multilevel switching</td><td style="text-align: right;">262726</td></tr> <tr><td>6 duplex receptacles</td><td style="text-align: right;">262726</td></tr> <tr><td>Double duplex receptacle adjacent to each data and video port</td><td style="text-align: right;">262726</td></tr> </table>	Fluorescent lighting, parabolic lenses:	265100	Illumination level: See Table 8600-4		Multilevel switching	262726	6 duplex receptacles	262726	Double duplex receptacle adjacent to each data and video port	262726						
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<p>NOTES:</p> <p>1. Finishes/Features: Refer to Chapter 9 for specification references.</p>		<p><u>Communications:</u></p> <table> <tr><td>1 video port</td><td style="text-align: right;">271533/271543</td></tr> <tr><td>1 voice port and phone</td><td style="text-align: right;">271513/273113</td></tr> <tr><td>1 data port near teacher workstation</td><td style="text-align: right;">271513</td></tr> <tr><td>26 data ports</td><td style="text-align: right;">271513</td></tr> <tr><td>Clock</td><td style="text-align: right;">275313</td></tr> <tr><td>Central sound system</td><td style="text-align: right;">275123</td></tr> <tr><td>Sound reinforcement system</td><td style="text-align: right;">275127</td></tr> <tr><td>Overhead projector</td><td style="text-align: right;">274119</td></tr> </table>	1 video port	271533/271543	1 voice port and phone	271513/273113	1 data port near teacher workstation	271513	26 data ports	271513	Clock	275313	Central sound system	275123	Sound reinforcement system	275127	Overhead projector	274119
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<p>NOTES:</p> <p>1. Finishes/Features: Refer to Chapter 9 for specification references.</p>		<p><u>Electronic Safety and Security:</u></p> <table> <tr><td>Life safety devices per code</td><td style="text-align: right;">283111</td></tr> </table>	Life safety devices per code	283111														
		Life safety devices per code	283111															
<p><u>Miscellaneous:</u></p> <p>N/A</p>																		

**ENTERTAINMENT MARKETING
CT-P1-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		FEATURES¹:	
An instructional program with organized subject matter and learning experiences designed to prepare individuals to perform marketing tasks in the areas of radio broadcasting, television broadcasting, performing arts, and related media.		<u>Fixed Items:</u>	
Program Type:	1	F1	16' of chalk/marker board 101100
Size Requirements:	1,000 SF Lab	F2	8' of tack board 101100
Lab Requirements:		F3	20' of base cabinets 123550
		F4	20' of wall cabinets 123550
		F5	Pencil sharpener support 062000
		F6	Windows with integral blinds 085113
		F7	Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>	
			Fire suppression system 211000
		<u>Plumbing:</u>	
		N/A	
FINISHES:	Spec. Ref #	<u>HVAC:</u>	
Flooring:		Supply/return air system Div. 23	
Carpet	096816	Independent temperature control 230923	
Optional: vinyl composition tile, ET, sheet vinyl, or linoleum	096500 096516	<u>Electrical:</u>	
Base:		Fluorescent lighting, parabolic lenses:265100	
Resilient	096500	Illumination level: See Table 8600-4	
Ceiling:		Multilevel switching 262726	
Suspended acoustical	095113	6 duplex receptacles 262726	
Walls:		Double duplex receptacle adjacent to each data and video port 262726	
Painted concrete masonry units	042000/ 099100	<u>Communications:</u>	
LOOSE FURNISHINGS:		T1 1 video port 271533/271543	
L1 (24) Computer workstation furniture & chairs		T2 1 voice port and phone 271513/273113	
L2 (1) Teacher station & chair		T3 1 data port near teacher workstation 271513	
Wastebasket		T4 26 data ports 271513	
Pencil sharpener		Clock 275313	
		Central sound system 275123	
		Sound reinforcement system 275127	
		T5 Overhead projector 274119	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code 283111	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

<u>PROGRAM DESCRIPTION:</u>		<u>FEATURES¹:</u>		Spec.
Planned learning experiences that include a combination of courses and practical experiences concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money.		<u>Fixed Items:</u>		<u>Ref.#</u>
Program Type:	1	F1	16' of chalk/marker board	101100
Size Requirements:	1,200 SF Lab	F2	8' of tack board	101100
Lab Requirements:		F3	20' of base cabinets	123550
		F4	20' of wall cabinets	123550
		F5	Pencil sharpener support	062000
		F6	Windows with integral blinds	085113
		F7	Projection screen, 6'x8'	115213
		<u>Fire Suppression:</u>		
			Fire suppression system	211000
		<u>Plumbing:</u>		
			N/A	
<u>FINISHES:</u>		<u>HVAC:</u>		
Flooring:			Supply/return air system	Div. 23
Carpet	Spec. 096816		Independent temperature control	230923
Optional: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	Ref # 096500 096516	<u>Electrical:</u>		
Base:			Fluorescent lighting, parabolic lenses:	265100
Resilient	096500		Illumination level: See Table 8600-4	
Ceiling:			Multilevel switching	262726
Suspended acoustical	095113		6 duplex receptacles	262726
Walls:			Double duplex receptacle adjacent to each data and video port	262726
Painted concrete masonry units	042000/ 099100	<u>Communications:</u>		
<u>LOOSE FURNISHINGS:</u>		T1	1 video port	271533/271543
L1 (24) Computer workstation furniture & chairs		T2	1 voice port and phone	271513/273113
L2 (1) Teacher station & chair		T3	1 data port near teacher workstation	271513
Wastebasket		T4	26 data ports	271513
Pencil sharpener			Clock	275313
			Central sound system	275123
			Sound reinforcement system	275127
		T5	Overhead projector	274119
		<u>Electronic Safety and Security:</u>		
			Life safety devices per code	283111
		<u>Miscellaneous:</u>		
			N/A	

NOTES:

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

**TRAVEL AND TOURISM
HOSPITALITY AND TOURISM
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
<u>T&T</u> - Educational programs in travel and tourism prepare learners for careers in management, marketing and operation of destination marketing organizations, attractions, meetings and events, transportation, and travel related services.		
<u>H&T</u> - Organized subject matter and learning experiences that prepare individuals to perform marketing functions in any business enterprise primarily engaged in travel services, lodging, leisure activities, food services, attraction and entertainment events, convention services, and transportation.		
Program Type:	1	
Size Requirements:	1,200 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Carpet	096816	
Optional: vinyl composition tile, ET , sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
L1 (24) Computer workstation furniture & chairs		
L2 (1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
F1 16' of chalk/marker board		101100
F2 8' of tack board		101100
F3 20' of base cabinets		123550
F4 20' of wall cabinets		123550
F5 Pencil sharpener support		062000
F6 Windows with integral blinds		085113
F7 Projection screen, 6'x8'		115213
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
N/A		
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
Fluorescent lighting, parabolic lenses:265100		
Illumination level: See Table 8600-4		
Multilevel switching		262726
6 duplex receptacles		262726
Double duplex receptacle adjacent to each data and video port		262726
<u>Communications:</u>		
T1 1 video port		271533/271543
T2 1 voice port and phone		271513/273113
T3 1 data port near teacher workstation		271513
T4 26 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
T5 Overhead projector		274119
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

**VISUAL DESIGN AND IMAGING ■ INFORMATION SUPPORT & SERVICES
PROGRAMMING and SOFTWARE DEVELOPMENT
NETWORK SYSTEMS ■ INTERACTIVE MEDIA**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P1-1

<p><u>PROGRAM DESCRIPTION:</u> <i>VD&I: Programs that focus on the creation, design, and execution of layouts and illustrations on various mediums including electronic media and the theory and processes of image transfer, including offset, flexography, lithography, photoengraving and other techniques. Communications, business principles and leadership skill development related to the industry are essential to the program. Specialization areas include commercial art and graphic occupations.</i></p> <p><u>IS&S:</u> An instructional program that provides training for careers in dealing in information technology deployment and information systems management.</p> <p><u>P&SD:</u> An instructional program that provides training for careers dealing with hardware and software programming, to design, development, and implementation computer systems and software.</p> <p><u>NS:</u> An instructional program that provides training for careers in communication network system planning, administration, and management. Skills for programs/pathways in this are taken from the itWORKS.OHIO Career Field Technical Content Standards.</p> <p><u>IM:</u> An instructional program that provides training in the area of interactive multi-media development that includes creating, designing, and producing interactive multimedia products and services and digitally-generated or computer-enhanced media.</p> <p>Program Type: 1 Size Requirements: 1,200 SF Lab Lab Requirements: Spec. <u>FINISHES:</u> Ref #</p> <p>Flooring:</p> <p>Carpet 096816 Optional: vinyl composition tile, 096500 <i>ET</i>, sheet vinyl, or linoleum 096516 Base: Resilient 096500</p> <p>Ceiling:</p> <p>Suspended acoustical 095113</p> <p>Walls:</p> <p>Painted concrete masonry units 042000/ 099100</p>	<p><u>FEATURES¹:</u> <u>Fixed Items:</u></p> <table> <tr><td>F1</td><td>16' of chalk/marker board</td><td>101100</td></tr> <tr><td>F2</td><td>8' of tack board</td><td>101100</td></tr> <tr><td>F3</td><td>20' of base cabinets</td><td>123550</td></tr> <tr><td>F4</td><td>20' of wall cabinets</td><td>123550</td></tr> <tr><td>F5</td><td>Pencil sharpener support</td><td>062000</td></tr> <tr><td>F6</td><td>Windows with integral blinds</td><td>085113</td></tr> <tr><td>F7</td><td>Projection screen, 6'x8'</td><td>115213</td></tr> </table> <p><u>Fire Suppression:</u></p> <table> <tr><td></td><td>Fire suppression system</td><td>211000</td></tr> </table> <p><u>Plumbing:</u> N/A</p> <p><u>HVAC:</u></p> <table> <tr><td></td><td>Supply/return air system</td><td>Div. 23</td></tr> <tr><td></td><td>Independent temperature control</td><td>230923</td></tr> </table> <p><u>Electrical:</u></p> <table> <tr><td></td><td>Fluorescent lighting, parabolic lenses:</td><td>265100</td></tr> <tr><td></td><td> Illumination level: See Table 8600-4</td><td></td></tr> <tr><td></td><td>Multilevel switching</td><td>262726</td></tr> <tr><td></td><td>6 duplex receptacles</td><td>262726</td></tr> <tr><td></td><td>Double duplex receptacle adjacent to each data and video port</td><td>262726</td></tr> </table> <p><u>Communications:</u></p> <table> <tr><td>T1</td><td>1 video port</td><td>271533/271543</td></tr> <tr><td>T2</td><td>1 voice port and phone</td><td>271513/273113</td></tr> <tr><td>T3</td><td>1 data port near teacher workstation</td><td>271513</td></tr> <tr><td>T4</td><td>26 data ports</td><td>271513</td></tr> <tr><td></td><td>Clock</td><td>275313</td></tr> <tr><td></td><td>Central sound system</td><td>275123</td></tr> <tr><td></td><td>Sound reinforcement system</td><td>275127</td></tr> <tr><td>T5</td><td>Overhead projector</td><td>274119</td></tr> </table> <p><u>Electronic Safety and Security:</u></p> <table> <tr><td></td><td>Life safety devices per code</td><td>283111</td></tr> </table> <p><u>Miscellaneous:</u> N/A</p> <p><u>LOOSE FURNISHINGS:</u></p> <table> <tr><td>L1</td><td>(24) Computer workstation furniture & chairs</td><td></td></tr> <tr><td>L2</td><td>(1) Teacher station & chair</td><td></td></tr> <tr><td></td><td>Wastebasket</td><td></td></tr> <tr><td></td><td>Pencil sharpener</td><td></td></tr> </table>	F1	16' of chalk/marker board	101100	F2	8' of tack board	101100	F3	20' of base cabinets	123550	F4	20' of wall cabinets	123550	F5	Pencil sharpener support	062000	F6	Windows with integral blinds	085113	F7	Projection screen, 6'x8'	115213		Fire suppression system	211000		Supply/return air system	Div. 23		Independent temperature control	230923		Fluorescent lighting, parabolic lenses:	265100		Illumination level: See Table 8600-4			Multilevel switching	262726		6 duplex receptacles	262726		Double duplex receptacle adjacent to each data and video port	262726	T1	1 video port	271533/271543	T2	1 voice port and phone	271513/273113	T3	1 data port near teacher workstation	271513	T4	26 data ports	271513		Clock	275313		Central sound system	275123		Sound reinforcement system	275127	T5	Overhead projector	274119		Life safety devices per code	283111	L1	(24) Computer workstation furniture & chairs		L2	(1) Teacher station & chair			Wastebasket			Pencil sharpener	
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	Pencil sharpener																																																																																				

NOTES:

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

**MEDICAL MANAGEMENT AND SUPPORT
CT-P1-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Prepares students for employment in office in a variety of medical and healthcare management settings. Sample occupations include medical billing specialist, medical office manager, benefits coordinator, admissions specialist, medical records technical, claims processor, and medical coding specialist.		
Program Type:	1	
Size Requirements:	1,200 SF Lab	
Lab Requirements:		
	Spec. Ref #	
<u>FINISHES:</u>		
Flooring:		
Vinyl composition tile, <i>ET</i> ,	096500	
sheet vinyl, or linoleum	096516	
Optional: carpet	096816	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work stables		
(24) Student chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
20' of sink base cabinets w/1 sink		123550
20' of wall cabinets		123550
Pencil sharpener support		062000
Windows with integral blinds		085113
Projection screen, 6'x8'		115213
Paper towel dispenser		102813
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
Fluorescent lighting:		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
6 duplex receptacles		262726
Double duplex receptacle adjacent to each data and video port		262726
<u>Communications:</u>		
1 video port		271533/271543
1 voice port and phone		271513/273113
1 data port near teacher workstation		271513
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
Overhead projector		274119
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

TELECOMMUNICATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

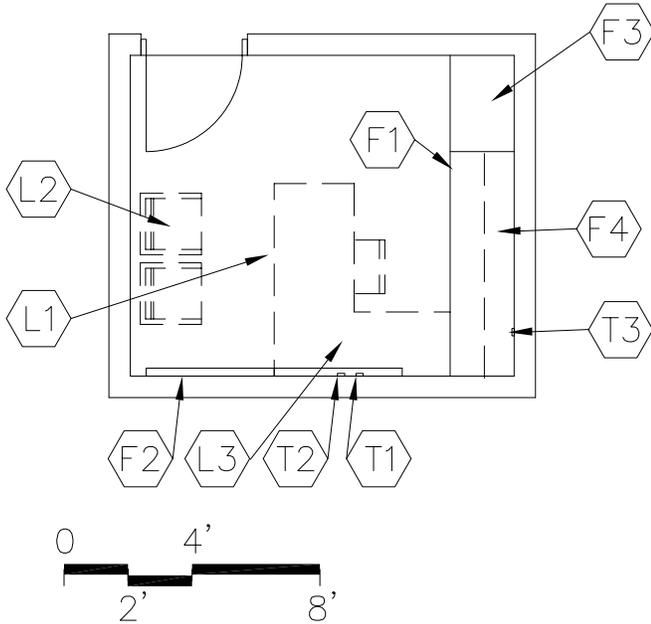
CT-P1-1

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Specialized classroom and practical experiences concerned with the assembly, installation, operation, maintenance, and repair of telephone equipment, which includes pole climbing, cable construction, cable splicing, cable pulling, job planning, equipment wiring, trouble-shooting procedures of PBX systems, and field repair of telephones.		
Program Type:	1	
Size Requirements:	1,200 SF Lab	
Lab Requirements:		
	Spec. <u>Ref #</u>	
<u>FINISHES:</u>		
Flooring:		
Carpet	096816	
Optional: vinyl composition tile, ET , sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
L1 (24) Computer workstation furniture & chairs		
L2 (1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
F1 16' of chalk/marker board		101100
F2 8' of tack board		101100
F3 20' of base cabinets		123550
F4 20' of wall cabinets		123550
F5 Pencil sharpener support		062000
F6 Windows with integral blinds		085113
F7 Projection screen, 6'x8'		115213
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
N/A		
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
Fluorescent lighting, parabolic lenses:	265100	
Illumination level: See Table 8600-4		
Multilevel switching	262726	
6 duplex receptacles	262726	
Double duplex receptacle adjacent to each data and video port	262726	
<u>Communications:</u>		
T1 1 video port		271533/271543
T2 1 voice port and phone		271513/273113
T3 1 data port near teacher workstation		271513
T4 26 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
T5 Overhead projector		274119
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

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PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P1-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or carpet tile</i>	096816 096813	F1 Work surface with file drawers	123550
		F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 2' of tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

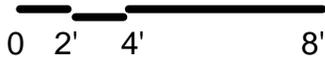
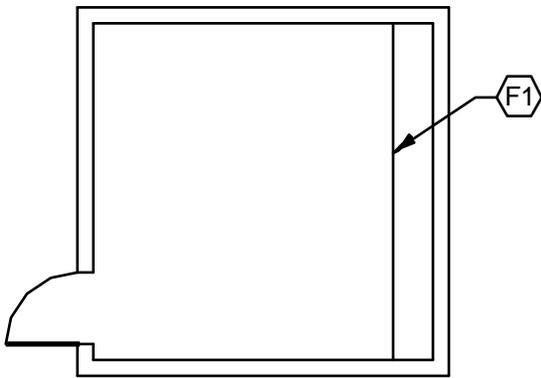
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

NOTES:

**STORAGE AREA
CT-P1-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

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Program Type 2

Description: Small to medium sized lab space with typical support space. This program is to utilize standard construction and be one-story (16' +/- tall). Lab and support space to have finished floor, painted walls, and suspended acoustical ceiling.

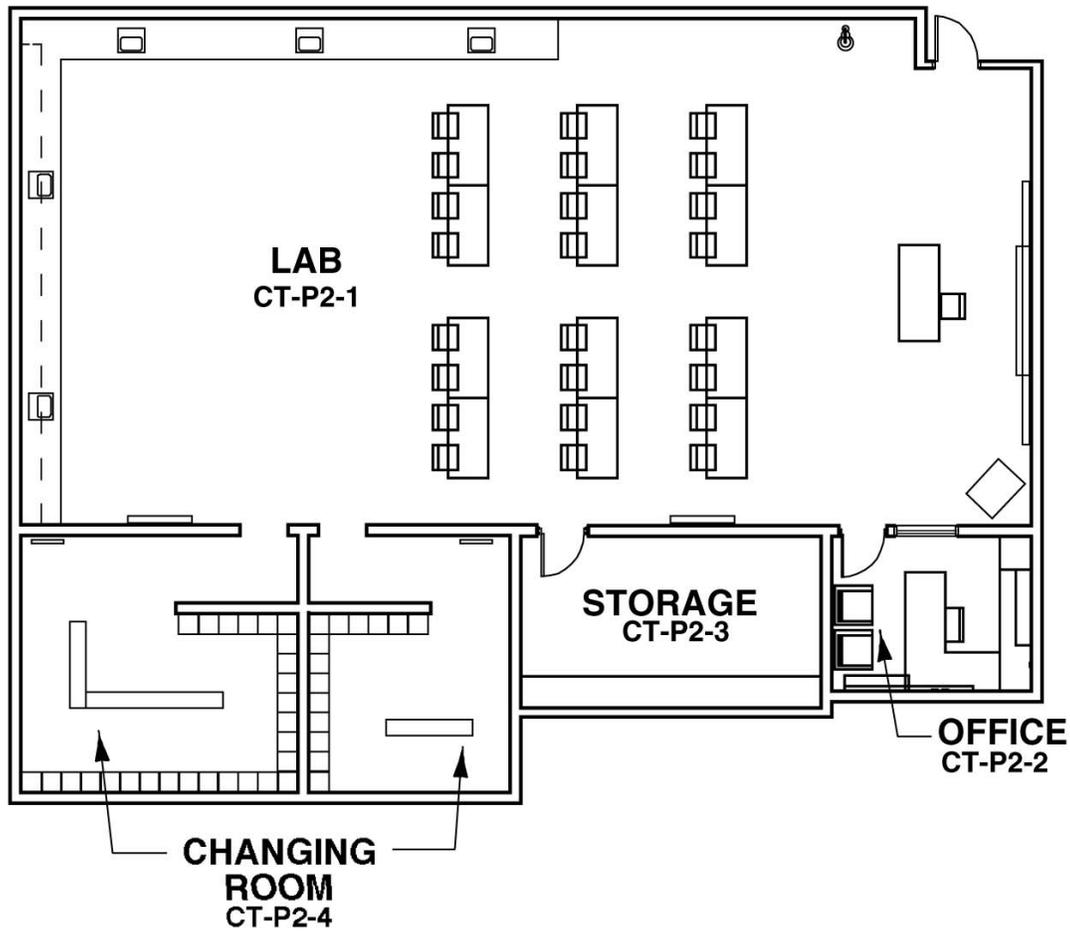
**NOTES:**

This is an example of how the Program Type 2 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 2 space plates:

- CT-P2-1 Lab
- CT-P2-2 Office
- CT-P2-3 Storage
- CT-P2-4 Changing Room

**PROGRAM TYPE 2
EXAMPLE**

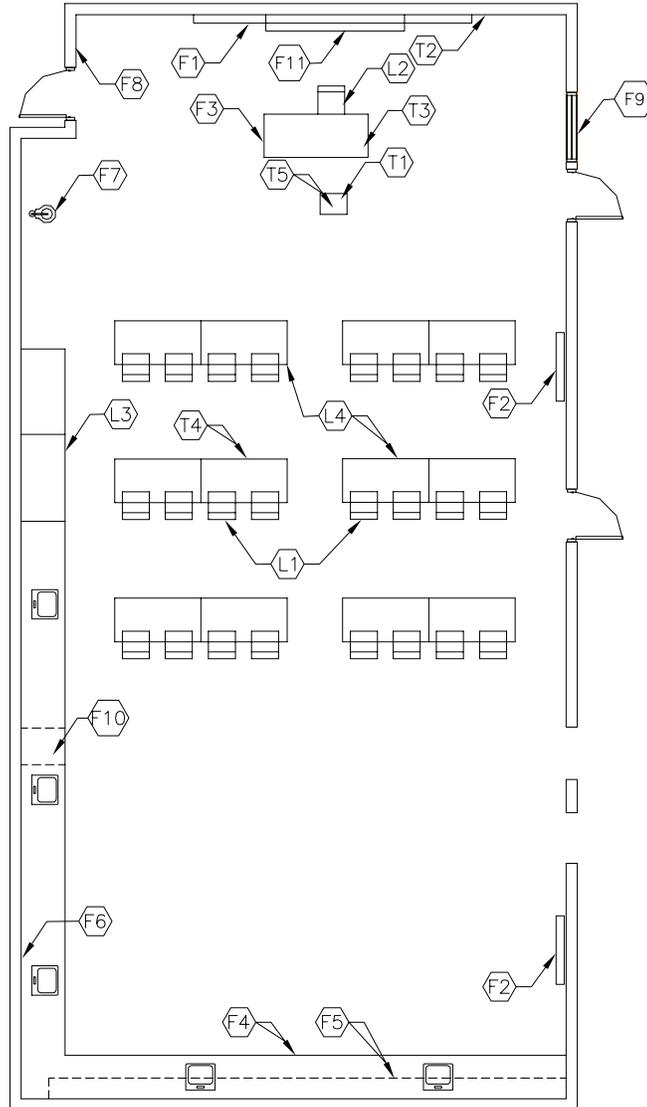


Program Type 2

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements for the office, storage room, and changing room.



CAPACITY:	24 Students
SIZE:	1,500 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P2-2 thru CT-P2-4

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P2-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**ENERGY SCIENCE
PHARMACY ASSISTING
BIOTECHNOLOGY
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	Spec. Ref.#
<u>Energy Science:</u> Utilizing industry standards and a math, science, ELA and a technology framework introduces concepts of solar, wind, fossil fuel, nuclear, geothermal, biomass, and fuel cell energy and leads to post-secondary.	
<u>Pharmacy Technician:</u> A combination of subject matter and experiences designed to prepare students to work in a pharmacy under the supervision of a pharmacist. Instruction includes pharmacy law and ethics, pharmaceutical calculations, pharmacy operations, compounding, and pharmacology.	
<u>Biotechnology:</u> A tech prep program that combines classroom and laboratory experiences in the bioprocesses of organisms, cells, or their components to create products or solve problems. Program concentrates on biomedical, environmental, pharmaceutical, bioinformatics, and bioethics.	
Program Type: 2	
Size Requirements: 1,500 SF Lab	
Lab Requirements:	
	Spec. Ref #
<u>FINISHES:</u>	
Flooring:	
Vinyl composition tile, ET ,	096500
rubber, sheet vinyl, linoleum,	096516
polished concrete finishing,	033510
or colored concrete finishing	033519
Optional: carpet	096816
Base: Resilient	096500
Ceiling:	
Suspended acoustical	095113
Walls:	
Painted concrete masonry units	042000/ 099100
<u>LOOSE FURNISHINGS:</u>	
(12) Two-person work tables w/epoxy tops	
(24) Students chairs/stools	
(1) Teacher station & chair	
(4) Computer workstations	
Wastebasket	
Pencil sharpener	
<u>FEATURES¹:</u>	
<u>Fixed Items:</u>	
16' of chalk/marker board	101100
8' of tack board	101100
20' of sink base cabinets w/2 sinks	123550
20' of wall cabinets	123550
8' of counter (retail area)	123550
8' of counter (nurse's station)	123550
Biohazard hood	123550
Pencil sharpener support	062000
Windows with integral blinds	085113
Projection screen, 6'x8'	115213
(2) Paper towel dispensers	102813
<u>Fire Suppression:</u>	
Fire suppression system	211000
<u>Plumbing:</u>	
Plumbing connections	221116/221119/224000
<u>HVAC:</u>	
Supply/return air system	Div. 23
Independent temperature control	230923
Biohazard hood exhaust	Div. 23
<u>Electrical:</u>	
Fluorescent lighting	265100
Illumination level: See Table 8600-4	
Multilevel switching	262726
6 duplex receptacles (minimum)	262726
Double duplex receptacle adjacent to each data and video port	262726
<u>Communications:</u>	
1 video port	271533/271543
1 voice port and phone	271513/273113
1 data port near teacher workstation	271513
8 data ports	271513
Clock	275313
Central sound system	275123
Sound reinforcement system	275127
Overhead projector	274119
<u>Electronic Safety and Security:</u>	
Life safety devices per code	283111
<u>Miscellaneous:</u> N/A	

NOTES:

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

BIOTECHNOLOGY FOR FOOD, PLANT, ANIMAL SCIENCES
ANIMAL BIOSCIENCE ▪ PLANT BIOSCIENCE
MEDICAL LABORATORY TECHNOLOGY ▪ CHEMICAL LABORATORY ASSISTING
INDUSTRIAL LABORATORY ASSISTING ▪ CRIMINAL SCIENCE TECHNOLOGY
CT-P2-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:

BFPAS: *Applies principles of chemistry, microbiology and genetics to plant and animal research. The focus of this research is to enhance the production and physical attributes of plants and animals, as well as to generate animal and plant products used today in transportation, manufacturing, medicine, food production and environmental protection.*

AB: *A life science course that applies basic animal physiology and anatomy, animal health, animal nutrition, reproductive physiology and breeding systems, genetics and animal improvement to agronomic animals, companion animals and wildlife species. This is an activity driven course with an inquiry approach, providing a meaningful and relevant application of animal biology to post-secondary fields of study and 21st century careers in agriculture, food and natural resources.*

PB: *A life science course focusing on plants, soils, and their interaction in the environment and economy. The course applies basic plant physiology and anatomy, plant protection and health, reproductive biology in plants, influences in bioengineering, plant nutrition and disorders to agronomic, horticultural, and native plant species. This is an activity driven course with an inquiry approach, providing a meaningful and relevant application of plant biology to post-secondary fields of study and 21st century careers in agriculture, food and natural resources.*

MLT, CLA, ILA: A combination of subject matter and experiences designed to prepare to work under the supervision of medical technologist, clinical pathologist, or physician to perform routine clinical laboratory procedures and specimen collection techniques including phlebotomy.

CST: Utilizing business and industry standards as framework for application of clinical and criminal laboratory science, evidentiary testing and analysis, study of society's formal control system, investigative techniques, criminal law, criminal process, administration of Justice System computer applications, record-keeping, and reconstruction techniques.

Program Type: 2

Size Requirements: 1,500 SF Lab

Lab Requirements:

FINISHES:

Flooring:

Vinyl composition tile, ET ,	096500
rubber, linoleum, sheet vinyl,	096516
polished concrete finishing,	033510
or colored concrete finishing	033519

Spec.
Ref #

Base:

Resilient	096500
-----------	--------

Ceiling:

Suspended acoustical	095113
----------------------	--------

Walls:

Painted concrete masonry units	042000/ 099100
--------------------------------	-------------------

LOOSE FURNISHINGS:

L1 (24) Student stools/chairs
 L2 (1) Teacher chair or stool
 L3 (4) Computer workstations
 L4 (12) 2-person work tables with epoxy tops
 with gas and electric
 Wastebasket
 Pencil sharpener

NOTES:

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

**BIOTECHNOLOGY FOR FOOD, PLANT, ANIMAL SCIENCES
ANIMAL BIOSCIENCE ▪ PLANT BIOSCIENCE
MEDICAL LABORATORY TECHNOLOGY ▪ CHEMICAL LABORATORY ASSISTING
INDUSTRIAL LABORATORY ASSISTING ▪ CRIMINAL SCIENCE TECHNOLOGY**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P2-1

	Spec. Ref.#
<u>FEATURES¹:</u>	
<u>Fixed Items:</u>	
F1 16' of chalk/marker board	101100
F2 8' of tack board	101100
F3 Demonstration table/teacher desk	123550
F4 60' of perimeter sink base cabinets with 5 sinks	123550
F5 30' of wall cabinets	123550
F6 (5) Paper towel dispensers	102813
F7 Safety shower/eyewash	224500
F8 Pencil sharpener support	062000
F9 Windows with integral blinds	085113
F10 Undercounter refrigerator	113100
F11 Projection screen, 6'x8'	115213
<u>Fire Suppression:</u>	
Fire suppression system	211000
<u>Plumbing:</u>	
Plumbing connections	221116/221119/224000
Safety shower/eyewash connections	224000
Master shut-off for gas	226313
Gas connections	226313
<u>HVAC:</u>	
Supply/return air system	Div. 23
Independent temperature control	230923
Manual exhaust	Div. 23
<u>Electrical:</u>	
Fluorescent lighting, parabolic lenses:	265100
Illumination level: See Table 8600-4	
Multilevel switching	262726
6 duplex receptacles (minimum)	262726
Double duplex receptacle adjacent to each data and video port	262726
Means of egress lighting per code	265100
<u>Communications:</u>	
T1 1 video port	271533/271543
T2 1 voice port and phone	271513/273113
T3 1 data port at demonstration table	271513
T4 11 data ports for student use	271513
Clock	275313
Central sound system	275123
Sound reinforcement system	275127
T5 Overhead projector	274119
<u>Electronic Safety and Security:</u>	
Life safety devices per code	283111
<u>Miscellaneous:</u>	
N/A	

**COMMUNITY HEALTH AIDE
HOME HEALTH
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
A combination of subject matter and experiences designed to prepare a person to serve as liaison between professional health workers and the recipients of health services. Instruction emphasizes basic understanding of biology, communicable diseases, environmental health, personal hygiene, infants, medicines, and family and community resources.		
Program Type:	2	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
	Spec. Ref #	
<u>FINISHES:</u>		
Flooring:		
Vinyl composition tile, <i>ET</i> ,	096500	
rubber, sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work tables		
(24) Students chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board	101100	
8' of tack board	101100	
30' of sink base cabinets w/2 sinks	123550	
30' of wall cabinets	123550	
Pencil sharpener support	062000	
Windows with integral blinds	085113	
Projection screen, 6'x8'	115213	
(2) Paper towel dispensers	102813	
<u>Fire Suppression:</u>		
Fire suppression system	211000	
<u>Plumbing:</u>		
Plumbing connections	221116/221119/224000	
<u>HVAC:</u>		
Supply/return air system	Div. 23	
Independent temperature control	230923	
<u>Electrical:</u>		
Fluorescent lighting	265100	
Illumination level: See Table 8600-4		
Multilevel switching	262726	
6 duplex receptacles	262726	
Double duplex receptacle adjacent to each data and video port	262726	
<u>Communications:</u>		
1 video port	271533/271543	
1 voice port and phone	271513/273113	
1 data port near teacher workstation	271513	
8 data ports	271513	
Clock	275313	
Central sound system	275123	
Sound reinforcement system	275127	
Overhead projector	274119	
<u>Electronic Safety and Security:</u>		
Life safety devices per code	283111	
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

**DENTAL LABORATORY TECHNOLOGY
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		Spec. Ref.#
A combination of subject matter and experiences to prepare a person to execute the work in producing restorative appliances required for the oral health of the patients as authorized by the dentist.		
Program Type:	2	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
FINISHES:	Spec. Ref #	
Flooring:		
Vinyl composition tile, ET ,	096500	
rubber, linoleum, sheet vinyl,	096516	
polished concrete finishing,	033510	
or colored concrete finishing	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
(24) Student stools/chairs		
(1) Teacher chair or stool		
(6) 4-person work tables with epoxy tops with gas and electric		
Wastebasket		
Pencil sharpener		
FEATURES¹:		
Fixed Items:		
16' of chalk/marker board		101100
8' of tack board		101100
40' of sink base cabinets with 6 sinks and natural gas		123550
40' of wall cabinets		123550
(6) Paper towel dispensers		102813
Pencil sharpener support		062000
Windows with integral blinds		085113
Projection screen, 6'x8'		115213
Fire Suppression:		
Fire suppression system		211000
Plumbing:		
Plumbing connections		221116/221119/224000
Safety shower/eyewash connections		224000
Master shut-off for gas		226313
Gas connections		226313
HVAC:		
Supply/return air system		Div. 23
Independent temperature control		230923
Grinding machine ventilation		Div. 23
Localized ventilation for specific lab-produced fumes		Div. 23
Electrical:		
Fluorescent lighting, parabolic lenses:		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
Communications:		
1 video port		271533/271543
1 voice port and phone		271513/273113
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
Overhead projector		274119
Electronic Safety and Security:		
Life safety devices per code		283111
Miscellaneous:		
N/A		

NOTES:

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

**EMERGENCY MEDICAL TECHNICIAN
CT-P2-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Specialized classroom and practical experiences concerned with the preparation of certified Emergency Medical Technicians. Modules of instruction include preparatory; patient assessment; airway and cardiac arrest management; trauma patient management; medical patient management; and clinical experiences. The training prepares for membership in fire departments or other agencies that are involved in the rescue and emergency treatment of people.		
Program Type:	2	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile, <i>ET</i> ,	096500	
rubber, sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Optional: carpet	096816	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work tables		
(24) Students chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
30' of sink base cabinets w/2 sinks		123550
30' of wall cabinets		123550
Pencil sharpener support		062000
Windows with integral blinds		085113
Projection screen, 6'x8'		115213
(2) Paper towel dispensers		102813
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
Fluorescent lighting		265100
illumination level: See Table 8600-4		
Multilevel switching		262726
6 duplex receptacles		262726
Double duplex receptacle adjacent to each data and video port		262726
<u>Communications:</u>		
1 video port		271533/271543
1 voice port and phone		271513/273113
1 data port near teacher workstation		271513
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
Overhead projector		274119
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

EXERCISE SCIENCE/SPORTS & RECREATION HEALTH CARE

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P2-1

PROGRAM DESCRIPTION:		Spec.
Utilizing business and industry technical standards and math, science, ELA, and technology framework in the study of organ systems, study of movement & associated functional response and adaptations, understanding scientific basis underlying exercise-induced physiological responses in athletic training, biomechanics, exercise physiology and nutrition for the prevention, diagnosis, and treatment of injuries.		Ref.#
Program Type:	2	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
FINISHES:	<u>Spec.</u>	
Flooring:	<u>Ref #</u>	
Vinyl composition tile, <i>ET</i> ,	096500	
rubber, sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Optional: carpet	096816	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
(10) Training tables		
(24) Students chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
		FEATURES¹:
		Fixed Items:
		16' of chalk/marker board 101100
		8' of tack board 101100
		30' of sink base cabinets w/2 sinks 123550
		30' of wall cabinets 123550
		Pencil sharpener support 062000
		Windows with integral blinds 085113
		Projection screen, 6'x8' 115213
		(2) Paper towel dispensers 102813
		Fire Suppression:
		Fire suppression system 211000
		Plumbing:
		Plumbing connections 221116/221119/224000
		HVAC:
		Supply/return air system Div. 23
		Independent temperature control 230923
		Electrical:
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		6 duplex receptacles 262726
		Double duplex receptacle adjacent to each data and video port 262726
		Communications:
		1 video port 271533/271543
		1 voice port and phone 271513/273113
		1 data port near teacher workstation 271513
		8 data ports 271513
		Clock 275313
		Central sound system 275123
		Sound reinforcement system 275127
		Overhead projector 274119
		Electronic Safety and Security:
		Life safety devices per code 283111
		Miscellaneous:
		N/A

NOTES:

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

**HEALTH SUPPORT PATHWAY
THERAPEUTIC PATHWAY
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	<u>FEATURES¹:</u>	Spec.
A combination of subject matter and experience designed to prepare a person to gain entry level experience in a Pre-Nursing program; includes a current knowledge of concepts, principles, processes, and skills relating to health, deviations from health, nutrition, pharmacology, communication, human development, teach learning principles, current technology, humanities, and biological, social, and behavioral sciences. This Tech Prep program of study prepares students for continued education in an approved nursing education program preparing for Licensure as a professional (registered) nurse.	<u>Fixed Items:</u>	<u>Ref.#</u>
	16' of chalk/marker board 8' of tack board 30' of sink base cabinets w/2 sinks 30' of wall cabinets Pencil sharpener support Windows with integral blinds Projection screen, 6'x8' (2) Paper towel dispensers	101100 101100 123550 123550 062000 085113 115213 102813
	<u>Fire Suppression:</u>	
	Fire suppression system	211000
	<u>Plumbing:</u>	
	Plumbing connections 221116/221119/224000	
	<u>HVAC:</u>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<u>Electrical:</u>	
	Fluorescent lighting	265100
	Illumination level: See Table 8600-4	
	Multilevel switching	262726
	6 duplex receptacles	262726
	Double duplex receptacle adjacent to each data and video port	262726
	<u>Communications:</u>	
	1 video port	271533/271543
	1 voice port and phone	271513/273113
	1 data port near teacher workstation	271513
	8 data ports	271513
	Clock	275313
	Central sound system	275123
	Sound reinforcement system	275127
	Overhead projector	274119
	<u>Electronic Safety and Security:</u>	
	Life safety devices per code	283111
	<u>Miscellaneous:</u>	
	N/A	
Program Type:	2	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. <u>Ref #</u>	
Flooring:		
Vinyl composition tile, ET , rubber, sheet vinyl, linoleum polished concrete finishing, or colored concrete finishing	096500 096516 033510 033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work tables (24) Students chairs/stools (1) Teacher station & chair Wastebasket Pencil sharpener		

NOTES:

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

**HEALTH INFORMATION MANAGEMENT SERVICES
HEALTH UNIT COORDINATOR**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P2-1

PROGRAM DESCRIPTION:

Health Information Management Services: targets three or more technician-level occupations within one or more of the following areas – rehabilitation services (including occupational or physical therapy); medical diagnostic and treatment services (including respiratory therapy, radiography, perfusion, nuclear medicine, surgical technology, cardiovascular, electrocardiogram, sonography); medical laboratory technologies (including hematology, cytology, blood bank, and histology); mental health services; pharmacy; and medical administrative services (including health information/medical records).

Health Unit Coordinator: This is the job exit for grade 12.

This clustered Tech Prep program of study prepares students for continued education and training for employment as an allied health technician.

Program Type: 2

Size Requirements: 1,500 SF Lab

Lab Requirements:

FINISHES:

	Spec. Ref #
Flooring:	
Vinyl composition tile, ET , rubber, linoleum, sheet vinyl,	096500 096516
polished concrete finishing, or colored concrete finishing	033510 033519
Base:	
Resilient	096500
Ceiling:	
Suspended acoustical	095113
Walls:	
Painted concrete masonry units	042000/ 099100

LOOSE FURNISHINGS:

L1 (24) Student stools/chairs	
L2 (1) Teacher chair or stool	
L3 (4) Computer workstations	
L4 (12) 2-person work tables with epoxy tops with gas and electric	
Wastebasket	
Pencil sharpener	

FEATURES¹:

	Spec. Ref.#
<u>Fixed Items:</u>	
F1 16' of chalk/marker board	101100
F2 8' of tack board	101100
F3 Demonstration table/teacher desk	123550
F4 60' of perimeter sink base cabinets with 5 sinks	123550
F5 30' of wall cabinets	123550
F6 (5) Paper towel dispensers	102813
F7 Safety shower/eyewash	224000
F8 Pencil sharpener support	062000
F9 Windows with integral blinds	085113
F10 Undercounter refrigerator	113100
F11 Projection screen, 6'x8'	115213
<u>Fire Suppression:</u>	
Fire suppression system	211000
<u>Plumbing:</u>	
Plumbing connections	221116/221119/224000
Safety shower/eyewash connections	224000
Master shut-off for gas	226313
Gas connections	226313
<u>HVAC:</u>	
Supply/return air system	Div. 23
Independent temperature control	230923
Manual exhaust	Div. 23
<u>Electrical:</u>	
Fluorescent lighting, parabolic lenses:	265100
Illumination level: See Table 8600-4	
Multilevel switching	262726
6 duplex receptacles (minimum)	262726
Double duplex receptacle adjacent to each data and video port	262726
Means of egress lighting per code	265100
<u>Communications:</u>	
T1 1 video port	271533/271543
T2 1 voice port and phone	271513/273113
T3 1 data port at demonstration table	271513
T4 11 data ports for student use	271513
Clock	275313
Central sound system	275123
Sound reinforcement system	275127
T5 Overhead projector	274119
<u>Electronic Safety and Security:</u>	
Life safety devices per code	283111
<u>Miscellaneous:</u> N/A	
<u>NOTES:</u>	
1. Finishes/Features: Refer to Chapter 9 for specification references.	

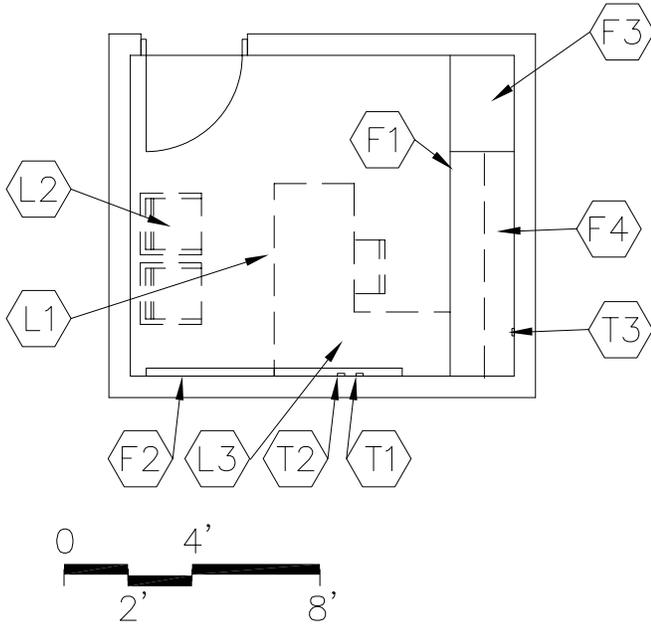
**PRACTICAL NURSING
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><u>PROGRAM DESCRIPTION:</u> A combination of subject matter and supervised clinical experiences designed to prepare a person to give direct nursing care under the supervision of a registered nurse, licensed physician, or dentist. Instruction includes safety and infection control, first-aid and CPR, legal and ethical responsibilities, coordinated care, goal-oriented care, environmental safety, treatments and procedures, physiological adaptation, mobility, comfort, basic care, psychosocial adaptation, growth and development, prevention and early treatment of disease, and reduction of risk potential.</p> <p>Program Type: 2</p> <p>Size Requirements: 1,500 SF Lab</p> <p>Lab Requirements:</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: right;">Spec. 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NOTES:

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



PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P2-2**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or carpet tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	<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 Desk and chair		<u>HVAC:</u>	
L2 Visitor chairs		Supply/return air system	Div. 23
L3 Computer desk return Wastebasket		Independent temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

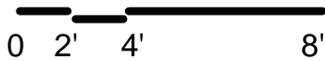
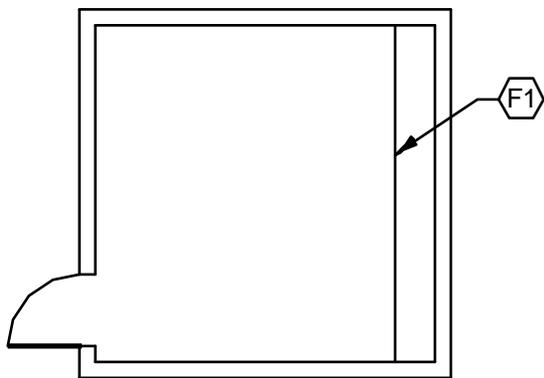
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

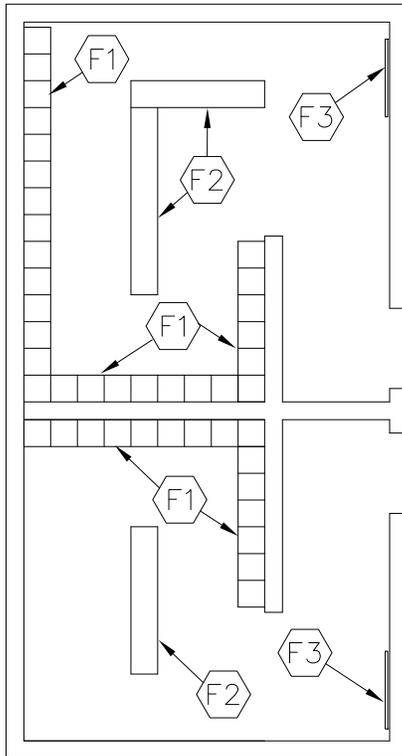
NOTES:

**STORAGE AREA
CT-P2-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



50 total lockers

CAPACITY:
SIZE:

N/A
450 SF

PROGRAM ACTIVITIES:

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
Wall minimum STC 40
Ceiling minimum CAC 35, NRC **0.70**

NOTES:

1. Large and small changing areas are interchangeable for either males or females. Determination based on male/female ratio within each program.

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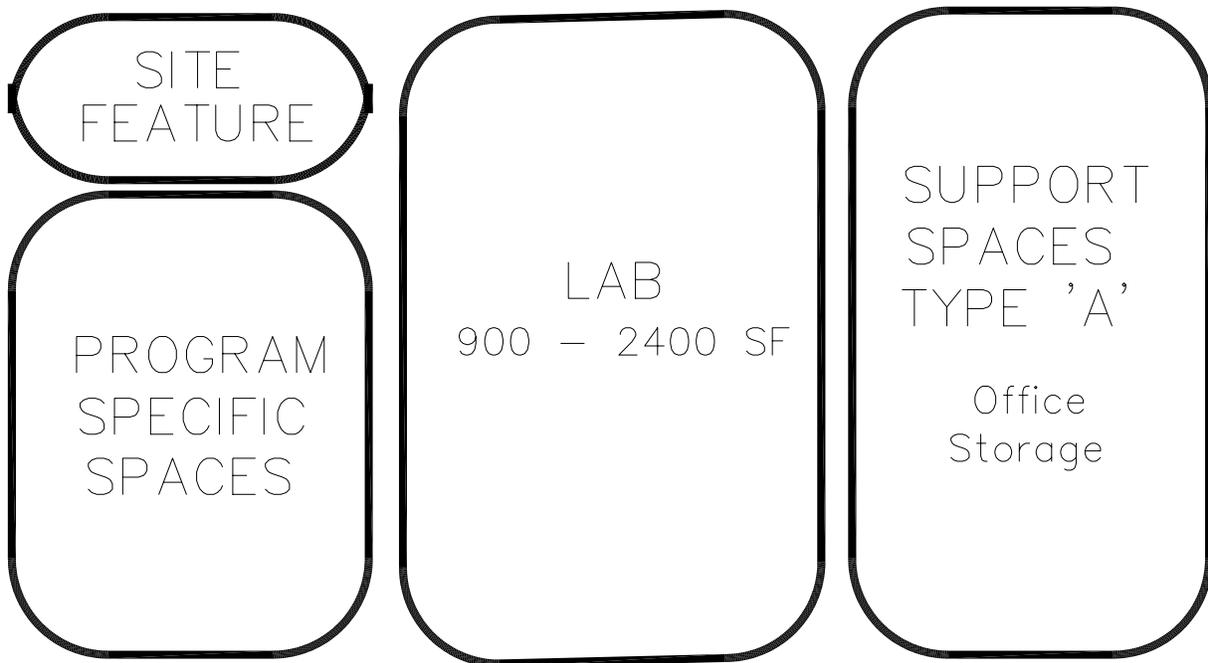
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Program Type 3

Description: Small to medium sized lab space with typical support space. Additionally, this program requires specialized auxiliary spaces and possible site features.

This program is to utilize standard construction and be one-story (16' +/- tall) tall. Lab, support, and specialty spaces to have finished floor, painted walls, and suspended acoustical ceiling.

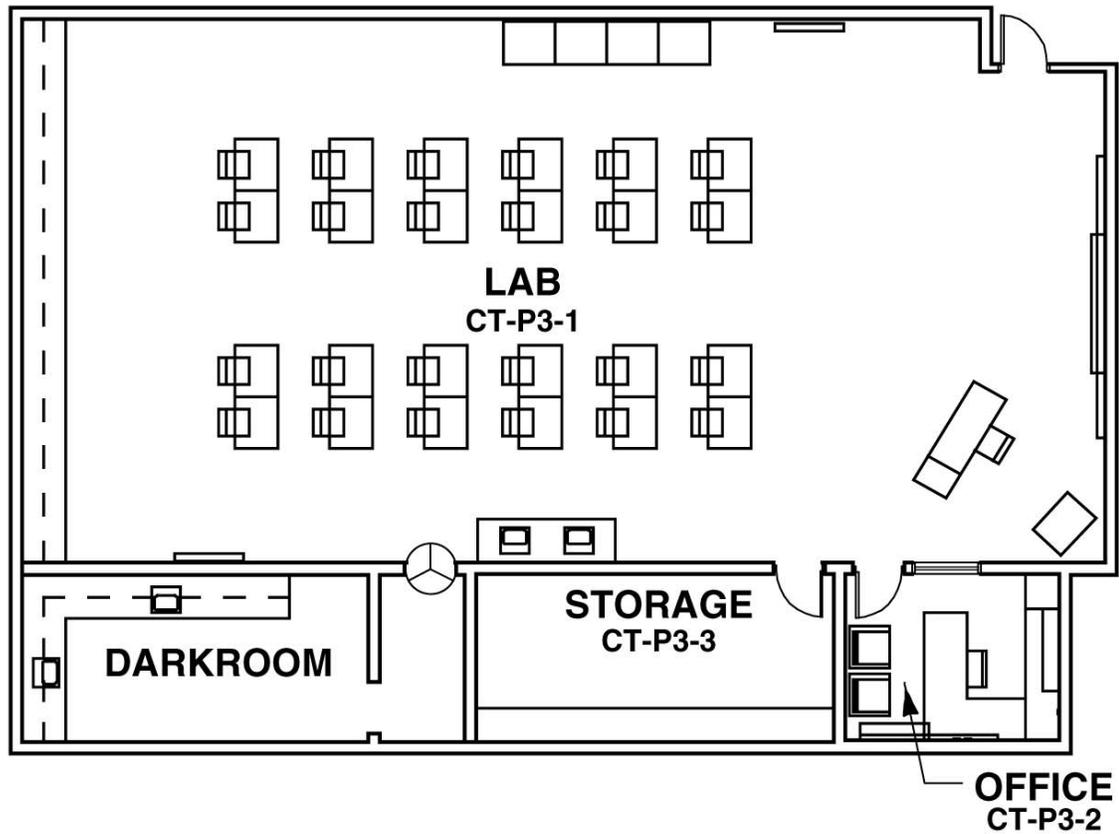
**NOTES:**

This is an example of how the Program Type 3 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 3 space plates:

- CT-P3-1 Lab
- CT-P3-2 Office
- CT-P3-3 Storage

**PROGRAM TYPE 3
EXAMPLE**

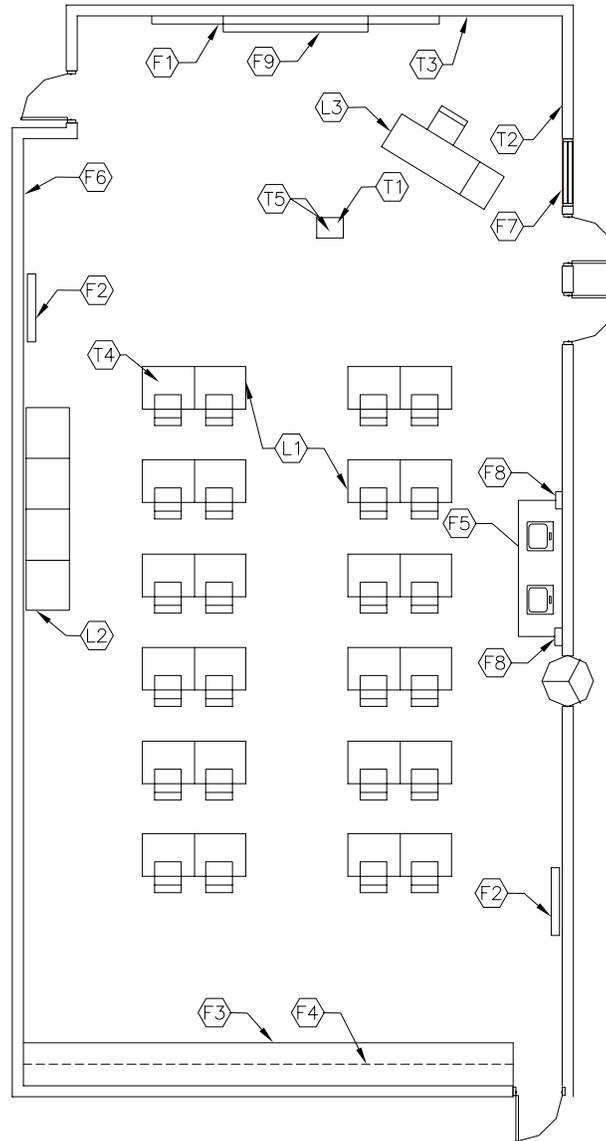


Program Type 3

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements, including program specific rooms.
2. See individual space plates at the end of this section for specific requirements for the storage room and office.



CAPACITY:	24 Students
SIZE:	900 – 2,400 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P3-2 and CT-P3-3

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P1-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

COMMERCIAL ART OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P3-1

PROGRAM DESCRIPTION:		FEATURES¹:	Spec. Ref.#	
<p>Organized specialized learning experiences that include theory, laboratory, and shop work as they relate to the design and execution of layouts and illustrations for advertising, display, and instructional manuals. Instruction includes advertising theory and preparation of copy, lettering, poster design, fashion illustration, silk-screen, air brush and touch-up, inks and color dynamics, package and product design, drawings for line and halftone reproduction, and other display devices and exhibits. Instruction leads to preparation for various types of employment, such as Fashion Illustrator, Technical Illustrator, Interior Decorator, and Advertising Artist.</p> <p>Program Type: 3</p> <p>Size Requirements: 1,500 SF Lab</p> <p>Lab Requirements:</p> <p>FINISHES:</p> <p>Flooring:</p> <p>Carpet 096816</p> <p>Optional: vinyl composition tile, 096500</p> <p><i>ET</i>, sheet vinyl, linoleum, 096516</p> <p>polished concrete finishing, 033510</p> <p>or colored concrete finishing 033519</p> <p>Base:</p> <p>Resilient 096500</p> <p>Ceiling:</p> <p>Suspended acoustical 095113</p> <p>Walls:</p> <p>Painted concrete masonry units 042000/ 099100</p> <p>LOOSE FURNISHINGS:</p> <p>L1 (24) Computer workstation furniture & chairs</p> <p>L2 (4) Computer scanning stations</p> <p>L3 (1) Teacher station & chair</p> <p>Wastebasket</p> <p>Pencil sharpener</p>		Fixed Items:		
		F1	16' of chalk/marker board	101100
		F2	8' of tack board	101100
		F3	30' of base cabinets	123550
		F4	30' of wall cabinets	123550
		F5	8' of sink base cabinets w/2 sinks	123550
		F6	Pencil sharpener support	062000
		F7	Windows with integral blinds	085113
		F8	(2) Paper towel dispensers	102813
		F9	Projection screen, 6'x8'	115213
		Fire Suppression:		
		Fire suppression system	211000	
		Plumbing:		
		Plumbing connections	221116/221119/224000	
		HVAC:		
		Supply/return air system	Div. 23	
		Independent temperature control	230923	
		Electrical:		
		Fluorescent lighting	265100	
		Illumination level: See Table 8600-4		
		½ cool white, ½ daylight lamps		
		Color rendering index=80 minutes		
		Kelvin=4,000 minutes		
		Multilevel switching	262726	
		20 duplex receptacles	262726	
		Double duplex receptacle adjacent to each data and video port	262726	
		Communications:		
		T1 1 video port	271533/271543	
		T2 1 voice port and phone	271513/273113	
		T3 1 data port near teacher workstation	271513	
		T4 34 data ports	271513	
		Clock	275313	
		Central sound system	275123	
		Sound reinforcement system	275127	
		T5 Overhead projector	274119	
		Electronic Safety and Security:		
		Life safety devices per code	283111	
		Miscellaneous:		
		N/A		

NOTES:

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

COMMERCIAL PHOTOGRAPHY OCCUPATIONS
Darkroom

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	250 SF	
Requirements:		
<u>FINISHES:</u>	<u>Spec. Ref #</u>	
Flooring:		
Vinyl composition tile, <i>ET</i> , sheet vinyl, polished concrete finishing, or colored concrete finishing	096500 033510 033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		20' of epoxy top base cabinets with 2 sinks 123550
		20' of wall cabinets 123550
		(2) Paper towel dispensers 102813
		Access via revolving darkroom door 083436
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		Eyewash 224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Keyed fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Darkroom lighting on keyed switch 265100
		Single level switching 262726
		6 duplex receptacles 262726
		<u>Communications:</u>
		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.

COMMERCIAL PHOTOGRAPHY OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P3-1

PROGRAM DESCRIPTION:		Spec.
FINISHES:		Ref.#
Organized specialized learning experiences that include theory, laboratory, and studio work as each relates to all phases of camera uses and photographic processing. Instruction includes composition and color dynamics; contact printing and enlarging; film development; airbrush and retouching; coloring; copying; utilization of camera, meters, and other photographic equipment. Areas of study include portrait, commercial, and industrial photography, leading to employment as a Commercial Photographer, Airbrush Artist, Camera person (offset printing), Audiovisual Projectionist, and Camera person (broadcasting).		
Program Type:	3	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
Flooring:		
Carpet	096816	
Optional: vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
(12) 2-person work tables with epoxy tops		
(24) Student stools/chairs		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
FEATURES¹:		
Fixed Items:		
16' of chalk/marker board		101100
16' of tack board		101100
30' of wall cabinets		123550
30' of sink base cabinets w/2 sinks		123550
Pencil sharpener support		062000
Windows with integral blinds		085113
(2) Paper towel dispensers		102813
Projection screen, 6'x8'		115213
Safety shower/eyewash		224000
Seamless cove built into one corner of lab		
Overhead metal pipe grid (48" o.c., both ways)		
to support studio lights & accessories		055000
Cyclorama curtain & track, min. of 2 walls		116143
Ceiling height 10' min., 12' preferred		
Fire Suppression:		
Fire suppression system		211000
Plumbing:		
Plumbing connections		221116/221119/224000
HVAC:		
Supply/return air system		Div. 23
Independent temperature control		230923
Electrical:		
Fluorescent lighting		265100
Illumination level: See Table 8600-4		
½ cool white, ½ daylight lamps		
Color rendering index=80 minutes		
Kelvin=4,000 minutes		
Track lighting		265100
Multilevel switching		262726
20 duplex receptacles		262726
Double duplex receptacle adjacent to		
each data and video port		262726
Communications:		
1 video port		271533/271543
1 voice port and phone		271513/273113
1 data port near teacher workstation		271513
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
Overhead projector		274119
Electronic Safety and Security:		
Life safety devices per code		283111
Miscellaneous:		
N/A		

NOTES:

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

COMMERCIAL PHOTOGRAPHY OCCUPATIONS
Print Darkroom

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	350 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile	096500	
Option:		
<i>polished concrete finishing, or</i>	<i>033510</i>	
<i>colored concrete finishing</i>	<i>033519</i>	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		30' of epoxy top base cabinets with 2 sinks 123550
		15' of wall cabinets 123550
		10' of epoxy shelving 123550
		(2) Paper towel dispensers 102813
		Access via revolving darkroom door 083436
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		Eyewash 224500
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Keyed fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Darkroom lighting on keyed switch 265100
		Single level switching 262726
		12 duplex receptacles 262726
		<u>Communications:</u>
		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.

COMMERCIAL PHOTOGRAPHY OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Film Darkroom

		Spec. Ref.#
Program Type:	3	
Size Requirements:	200 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile	096500	
Option:		
<i>Polished concrete finishing, or</i>	<i>033510</i>	
<i>colored concrete finishing</i>	<i>033519</i>	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		16' of epoxy top base cabinets with 2 sinks
		123550
		16' of wall cabinets
		123550
		(2) Paper towel dispensers
		102813
		Access via revolving darkroom door
		083436
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		Eyewash
		224500
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent temperature control
		230923
		Independent ventilation
		Div. 23
		<u>Electrical:</u>
		Keyed fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Darkroom lighting on keyed switch
		265100
		Single level switching
		262726
		12 duplex receptacles
		262726
		<u>Communications:</u>
		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.

COMMERCIAL PHOTOGRAPHY OCCUPATIONS
Film Loading Room(s)

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	80 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile	096500	
Option:		
<i>Polished concrete finishing, or 033510</i>		
<i>colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket (1 per room)		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		8' of plastic laminate countertop 123550
		Doors to receive light-tight perimeter seal
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Darkroom lighting on keyed switch 265100
		Single level switching 262726
		4 duplex receptacles 262726
		Warning light outside of room 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.

EARLY CHILDHOOD EDUCATION AND CARE

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P3-1

PROGRAM DESCRIPTION:		FEATURES¹:			
		Fixed Items:			
			Spec. Ref.#		
<p>Preparation for employment in child care and guidance. Includes instruction and experiences to develop competencies in teaching and guiding young children. Areas of study include promoting physical, intellectual, social, and emotional growth and development of children; creating a safe, healthy learning environment; program operations in early childhood education and care; promoting positive and productive relationships with families; law, regulations, and policies related to child care services and maintenance of child care environments.</p> <p>Program Type: 3</p> <p>Size Requirements: 1,500 SF Lab</p> <p>Lab Requirements:</p> <p>FINISHES:</p> <p>Flooring:</p> <p>30% Carpet 096816</p> <p>70% Vinyl composition tile, 096500</p> <p><i>ET</i>, sheet vinyl, or linoleum 096516</p> <p>Base:</p> <p>Resilient 096500</p> <p>Ceiling:</p> <p>Suspended acoustical 095113</p> <p>Walls:</p> <p>Painted concrete masonry units 042000/ 099100</p> <p>LOOSE FURNISHINGS:</p> <p>Wastebasket</p> <p>Pencil sharpener</p>		16' of chalk/marker board	101100		
		16' of tack board	101100		
		30' of wall cabinets	123550		
		30' of sink base cabinets with 1 sink	123550		
		10' of reception counter	123550		
		10' of toddler height sink base cabinets with 1 sink	123550		
		Pencil sharpener support	062000		
		Windows with integral blinds	085113		
		(2) Paper towel dispensers	102813		
		Projection screen, 6'x8'	115213		
				Fire Suppression:	
				Fire suppression system	211000
				Plumbing:	
		Plumbing connections	221116/221119/224000		
		Toddler height drinking fountain	224000		
		HVAC:			
		Supply/return air system	Div. 23		
		Independent temperature control	230923		
		Electrical:			
		Fluorescent lighting	265100		
		Illumination level: See Table 8600-4			
		Multilevel switching	262726		
		10 duplex receptacles	262726		
		Double duplex receptacle adjacent to each data and video port	262726		
		Communications:			
		1 video port	271533/271543		
		1 voice port and phone	271513/273113		
		8 data ports	271513		
		Clock	275313		
		Central sound system	275123		
		Sound reinforcement system	275127		
		Overhead projector	274119		
		Electronic Safety and Security:			
		Life safety devices per code	283111		
		Miscellaneous:			
		N/A			

NOTES:

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

SITE FEATURES:**Playground Area**

- Provide 60 SF per child served
- Follow applicable safety guidelines for different age groups.
- Plan for play activities that include rocking, swinging, balancing, climbing, and sliding.
- Locate equipment with moving parts, such as swings, at the perimeter of the play area. Use fence or planting beds to prevent children from inadvertently stepping into path of moving equipment.
- Surfacing is to be resilient and installed at a sufficient depth to meet current safety guidelines. It should be a nonsplintering surface where children may be crawling. Avoid using black surfacing.
- Provide edging to keep loose soft surfacing within bounds of the play area. Depress soft surfacing material below edging. Provide underground drain system and geotextile below soft surfacing.
- Increase the depth of soft surface material in areas of high use such as the base of swings and slides.
- Possible play equipment includes the following: swing set, modular play structure, tot track, four square, and hop scotch.
- Protect entire play area with fencing.

EARLY CHILDHOOD EDUCATION AND CARE

Infants Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	700 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Carpet	096816	
Vinyl composition tile, ET ,	096500	
Sheet vinyl, or linoleum at sink	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Staff chair		
12' of bookcases		
3 playpens		
12 cribs		
2 rocking chairs		
Table 18"x24"x18"		
Stool		
File cabinet		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		14' of base cabinets w/1 sink 123550
		4' of baby changing area 123550
		w/3" high edges and pad
		10' of wall cabinets 123550
		Interior window 088000/081113
		20' of tack board 101100
		8' of chalk/marker board 101100
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		Baby washing sink 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		10 duplex receptacles 262726
		Double duplex receptacle adjacent to each data and video port 262726
		<u>Communications:</u>
		1 video port 271533/271543
		1 voice port and phone 271513/273113
		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>
		N/A

NOTES:

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

**EARLY CHILDHOOD EDUCATION AND CARE
Work Room**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	150 SF	
Requirements:		
FINISHES:	Spec. Ref #	
Flooring:		
Vinyl composition tile, <i>ET</i> ,	096500	
sheet vinyl, or linoleum	096516	
Optional: carpet	096816	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
Wastebasket		
ENVIRONMENTAL CONSIDERATIONS:		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		Fixed Items:
		13' of base cabinets w/1 sink
		12' of tall storage cabinets
		10' of mail cubicles
		10' of wall cabinets
		10' of open base cabinets
		Paper towel dispenser
		123550 123550 123550 123550 123550 102813
		Fire Suppression:
		Fire suppression system
		211000
		Plumbing:
		Plumbing connections
		221116/221119/224000
		HVAC:
		Supply/return air system
		Independent temperature control
		Div. 23 230923
		Electrical:
		Fluorescent lighting
		Illumination level: See Table 8600-4
		Single level switching
		4 duplex receptacles
		265100 262726 262726
		Communications:
		1 voice port and phone
		Central sound system
		Clock
		271513/273113 275123 275313
		Electronic Safety and Security:
		Life safety devices per code
		283111
		Miscellaneous:
		N/A

NOTES:

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

**EARLY CHILDHOOD EDUCATION AND CARE
Toddler Restroom**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Program Type:	3	Spec. Ref.#
Size Requirements:	60 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Rubber, linoleum, <i>ET</i> , or	096500	
sheet vinyl	096516	
Optional: ceramic mosaic tile,	093000	
porcelain tile base, or	096723	
resinous flooring		
Base:		
Resilient	096500	
Optional ceramic mosaic tile base,	093000	
porcelain tile base, or	096723	
resinous flooring		
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		Paper towel dispenser 102813
		Soap dispenser 102813
		36" and 42" grab bars 102813
		24"x60" mirror 102813
		Toilet paper holder 102813
		Baby changing station 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Toddler height sink
		Toddler height toilet
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Exhaust air system Div. 23
		Supplemental heat as required Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 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.

EARLY CHILDHOOD EDUCATION AND CARE Reception

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	500 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Carpet	096816	
Vinyl composition tile in vestibule	096500	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Visitor chairs		
End table		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		Interior windows 088000/081113
		4' of tack board 101100
		Literary display cabinet 123550
		Doors with power assist 087100
		Windows with integral blinds 085113
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		2 duplex receptacles 262726
		Means of egress lighting per code 265100
		<u>Communications:</u>
		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.

GRAPHICS OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P3-1

<p><u>PROGRAM DESCRIPTION:</u> Specialized learning experiences that include theory, laboratory, and shop work as they relate to all phases of layout, composition, presswork, and binding, including flexography, lithography, photoengraving, and other techniques related to the printing industry. Emphasis is placed on camera and platemaking imposition, offset press makeup and operation, paper cutting, ink and color preparation, binding, and production by silk-screen process. Emphasis is placed on desktop publishing including digital image and electronic process procedures. Instruction leads to preparation for various types of employment, such as Compositor, Photographer, Platemaker, Cost Analyst, Expediter, Production Planner, and Computer Assisted Layout.</p> <p>Program Type: 3</p> <p>Size Requirements: 2,400 SF Lab</p> <p>Lab Requirements:</p> <p style="text-align: right;">Spec.</p> <p><u>FINISHES:</u> Ref #</p> <p>Flooring:</p> <p style="padding-left: 20px;">Vinyl composition tile, <i>ET</i>, 096500 sheet vinyl, linoleum, 096516 <i>polished concrete finishing,</i> 033510 <i>or colored concrete finishing</i> 033519</p> <p>Base:</p> <p style="padding-left: 20px;">Resilient 096500</p> <p>Ceiling:</p> <p style="padding-left: 20px;">Suspended acoustical 095113</p> <p>Walls:</p> <p style="padding-left: 20px;">Painted concrete masonry units 042000/ 099100</p> <p><u>LOOSE FURNISHINGS:</u> (24) Student stools/chairs (6) Work tables Wastebasket Pencil sharpener</p>	<p style="text-align: right;">Spec.</p> <p><u>FEATURES¹:</u> Ref.#</p> <p><u>Fixed Items:</u></p> <p style="padding-left: 20px;">16' of chalk/marker board 101100 8' of tack board 101100 30' of wall cabinets 123550 30' of sink base cabinets w/2 sinks 123550 Pencil sharpener support 062000 Windows with integral blinds 085113 (2) Paper towel dispensers 102813</p> <p><u>Fire Suppression:</u></p> <p style="padding-left: 20px;">Fire suppression system 211000</p> <p><u>Plumbing:</u></p> <p style="padding-left: 20px;">Plumbing connections 221116/221119/224000</p> <p><u>HVAC:</u></p> <p style="padding-left: 20px;">Supply/return air system Div. 23 Independent temperature control 230923</p> <p><u>Electrical:</u></p> <p style="padding-left: 20px;">Fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 20 duplex receptacles 262726 Double duplex receptacle adjacent to each data and video port 262726 220 volt service 262726 Overhead electrical drops for printing equipment Emergency shut-off for all equipment Safety lights over plate making area 265100</p> <p><u>Communications:</u></p> <p style="padding-left: 20px;">1 video port and video display system 271533/271543/274119 1 voice port and phone 271513/273113 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127</p> <p><u>Electronic Safety and Security:</u></p> <p style="padding-left: 20px;">Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

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

GRAPHICS OCCUPATION
Darkroom

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	200 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile	096500	
Option:		
<i>polished concrete finishing, or</i>	<i>033510</i>	
<i>colored concrete finishing</i>	<i>033519</i>	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		20' of epoxy top base cabinets with 2 sinks
		123550
		20' of wall cabinets
		123550
		(2) Paper towel dispensers
		102813
		Access via revolving darkroom door
		083436
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		Eyewash
		224000
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent temperature control
		230923
		Independent ventilation
		Div. 23
		<u>Electrical:</u>
		Keyed fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Darkroom lighting on keyed switch
		265100
		Single level switching
		262726
		6 duplex receptacles
		262726
		<u>Communications:</u>
		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.

GROUND OPERATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P3-1

<u>PROGRAM DESCRIPTION:</u>		<u>FEATURES¹:</u>		Spec.
Classroom and practical experiences concerned with the ground support of commercial aircraft (passenger and cargo). Experiences will include passenger service, including baggage handling, ticket agent, aircraft preflight/post-flight service, and ground traffic control.		<u>Fixed Items:</u>		<u>Ref.#</u>
		16' of chalk/marker board		101100
		8' of tack board		101100
		30' of wall cabinets		123550
		30' of sink base cabinets w/2 sinks		123550
		Pencil sharpener support		062000
		Windows with integral blinds		085113
		(2) Paper towel dispensers		102813
		Projection screen 6'x8'		115213
Program Type:	3	<u>Fire Suppression:</u>		
Size Requirements:	1,500 SF Lab	Fire suppression system		211000
Lab Requirements:		<u>Plumbing:</u>		
		Plumbing connections		221116/221119/224000
<u>FINISHES:</u>		<u>HVAC:</u>		
Flooring:		Supply/return air system		Div. 23
Carpet	Spec. Ref # 096816	Independent temperature control		230923
Option: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516	<u>Electrical:</u>		
Base:		Fluorescent lighting		265100
Resilient	096500	Illumination level: See Table 8600-4		
Ceiling:		Multilevel switching		262726
Suspended acoustical	095113	20 duplex receptacles		262726
Walls:		Double duplex receptacle adjacent to each data and video port		262726
Painted concrete masonry units	042000/ 099100	<u>Communications:</u>		
<u>LOOSE FURNISHINGS:</u>		1 video port		271533/271543
(24) Student stools/chairs		1 voice port and phone		271513/273113
(12) 2-person work tables w/epoxy tops		8 data ports		271513
Wastebasket		Clock		275313
Pencil sharpener		Central sound system		275123
		Sound reinforcement system		275127
		Overhead projector		274119
		<u>Electronic Safety and Security:</u>		
		Life safety devices per code		283111
		<u>Miscellaneous:</u>		
		N/A		

NOTES:

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

GROUND OPERATIONS
Reference Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	150 SF	
Requirements:		
<u>FINISHES:</u>	Spec. <u>Ref #</u>	
Flooring:		
Carpet	096816	
Option: vinyl composition tile, ET , sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Student chairs		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 40		
▪ Ceiling minimum CAC 35		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		34' of plastic laminate counter 062000
		27' of adjustable shelving 062000
		Interior window 088000/081113
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		2 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		6 data ports 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.

**LODGING
HOTELS AND RESORTS
CT-P3-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><u>PROGRAM DESCRIPTION:</u> <i>Lodging: Educational programs in lodging prepare learners for careers in the management, marketing and operations of lodging facilities.</i></p> <p><u>Hotels and Resorts:</u> Preparation for employment in service and management occupations in the areas of hospitality, lodging, and facility care. Includes instruction and experiences to develop competencies in hospitality management and services, lodging services, guest relations, hotel security, guest and room services, environmental services, meeting and banquet services, and laundry and linen services.</p> <p>Program Type: 3</p> <p>Size Requirements: 1,500 SF Lab</p> <p>Lab Requirements:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;"></td> <td style="width: 10%; text-align: center;">Spec.</td> <td style="width: 55%;"></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>Ref #</u></td> <td></td> </tr> </table> <p><u>FINISHES:</u></p> <p>Flooring:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">Carpet</td> <td style="width: 10%; text-align: center;">096816</td> <td style="width: 55%;"></td> </tr> <tr> <td>Optional: vinyl composition tile, <i>ET</i>, sheet vinyl, or linoleum</td> <td style="text-align: center;">096500 096516</td> <td></td> </tr> </table> <p>Base:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">Resilient</td> <td style="width: 10%; text-align: center;">096500</td> <td style="width: 55%;"></td> </tr> </table> <p>Ceiling:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">Suspended acoustical</td> <td style="width: 10%; text-align: center;">095113</td> <td style="width: 55%;"></td> </tr> </table> <p>Walls:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">Painted concrete masonry units</td> <td style="width: 10%; text-align: center;">042000/ 099100</td> <td style="width: 55%;"></td> </tr> </table> <p><u>LOOSE FURNISHINGS:</u></p> <ul style="list-style-type: none"> (8) Work stations (24) Student stools/chairs (1) Teacher station & chair Wastebasket Pencil sharpener 		Spec.			<u>Ref #</u>		Carpet	096816		Optional: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516		Resilient	096500		Suspended acoustical	095113		Painted concrete masonry units	042000/ 099100		<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><u>FEATURES¹:</u> <u>Fixed Items:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">16' of chalk/marker board</td> <td style="width: 20%; text-align: right;">101100</td> </tr> <tr> <td>8' of tack board</td> <td style="text-align: right;">101100</td> </tr> <tr> <td>24' of wall cabinets</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>24' of sink base cabinets w/2 sinks</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>14' of reception counter</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>Pencil sharpener support</td> <td style="text-align: right;">062000</td> </tr> <tr> <td>Windows with integral blinds</td> <td style="text-align: right;">085113</td> </tr> <tr> <td>(2) Paper towel dispensers</td> <td style="text-align: right;">102813</td> </tr> <tr> <td>(2) Garbage disposals</td> <td style="text-align: right;">113100</td> </tr> <tr> <td>(2) Dishwashers</td> <td style="text-align: right;">113100</td> </tr> <tr> <td>(2) Ovens</td> <td style="text-align: right;">113100</td> </tr> <tr> <td>(2) Refrigerators</td> <td style="text-align: right;">113100</td> </tr> <tr> <td>(2) Microwave ovens</td> <td style="text-align: right;">113100</td> </tr> <tr> <td>(1) Washer and Dryer</td> <td style="text-align: right;">113100</td> </tr> <tr> <td>Projection screen, 6'x8'</td> <td style="text-align: right;">115213</td> </tr> </table> <p><u>Fire Suppression:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Fire suppression system</td> <td style="width: 20%; text-align: right;">211000</td> </tr> </table> <p><u>Plumbing:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">1 Utility sink</td> <td style="width: 20%;"></td> </tr> <tr> <td>Plumbing connections</td> <td style="text-align: right;">221116/221119/224000</td> </tr> </table> <p><u>HVAC:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Supply/return air system</td> <td style="width: 20%; text-align: right;">Div. 23</td> </tr> <tr> <td>Independent temperature control</td> <td style="text-align: right;">230923</td> </tr> <tr> <td>Localized exhaust at laundry/ linen area and oven area</td> <td style="text-align: right;">Div. 23</td> </tr> </table> <p><u>Electrical:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Fluorescent lighting</td> <td style="width: 20%; text-align: right;">265100</td> </tr> <tr> <td>Illumination level: See Table 8600-4</td> <td></td> </tr> <tr> <td>Multilevel switching</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>20 duplex receptacles</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>Double duplex receptacle adjacent to each data and video port</td> <td style="text-align: right;">262726</td> </tr> </table> <p><u>Communications:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">1 video port</td> <td style="width: 20%; text-align: right;">271533/271543</td> </tr> <tr> <td>1 voice port and phone</td> <td style="text-align: right;">271513/273113</td> </tr> <tr> <td>1 data port near teacher workstation</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>8 data ports</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>Clock</td> <td style="text-align: right;">275313</td> </tr> <tr> <td>Central sound system</td> <td style="text-align: right;">275123</td> </tr> <tr> <td>Sound reinforcement system</td> <td style="text-align: right;">275127</td> </tr> <tr> <td>Overhead projector</td> <td style="text-align: right;">274119</td> </tr> </table> <p><u>Electronic Safety and Security:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Life safety devices per code</td> <td style="width: 20%; text-align: right;">283111</td> </tr> </table> <p><u>Miscellaneous:</u> N/A</p>	16' of chalk/marker board	101100	8' of tack board	101100	24' of wall cabinets	123550	24' of sink base cabinets w/2 sinks	123550	14' of reception counter	123550	Pencil sharpener support	062000	Windows with integral blinds	085113	(2) Paper towel dispensers	102813	(2) Garbage disposals	113100	(2) Dishwashers	113100	(2) Ovens	113100	(2) Refrigerators	113100	(2) Microwave ovens	113100	(1) Washer and Dryer	113100	Projection screen, 6'x8'	115213	Fire suppression system	211000	1 Utility sink		Plumbing connections	221116/221119/224000	Supply/return air system	Div. 23	Independent temperature control	230923	Localized exhaust at laundry/ linen area and oven area	Div. 23	Fluorescent lighting	265100	Illumination level: See Table 8600-4		Multilevel switching	262726	20 duplex receptacles	262726	Double duplex receptacle adjacent to each data and video port	262726	1 video port	271533/271543	1 voice port and phone	271513/273113	1 data port near teacher workstation	271513	8 data ports	271513	Clock	275313	Central sound system	275123	Sound reinforcement system	275127	Overhead projector	274119	Life safety devices per code	283111
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Multilevel switching	262726																																																																																											
20 duplex receptacles	262726																																																																																											
Double duplex receptacle adjacent to each data and video port	262726																																																																																											
1 video port	271533/271543																																																																																											
1 voice port and phone	271513/273113																																																																																											
1 data port near teacher workstation	271513																																																																																											
8 data ports	271513																																																																																											
Clock	275313																																																																																											
Central sound system	275123																																																																																											
Sound reinforcement system	275127																																																																																											
Overhead projector	274119																																																																																											
Life safety devices per code	283111																																																																																											

NOTES:

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

LODGING
HOTELS AND RESORTS
Banquet Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	800 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Carpet	096816	
Option: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
N/A		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		8' of base cabinets 123550
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		2 data ports 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.

E-COMMERCE MARKETING

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P3-1

<u>PROGRAM DESCRIPTION:</u>	Organized subject matter and learning experiences related to performing activities that direct the flow of goods and their utilization from producer to consumer. These activities include the marketing functions of distribution, financing, information management, production, product/service planning, pricing, purchasing, risk management, and selling. Also included is a foundation in the areas of human resources, economics, business, and marketing and management concepts.	<u>FEATURES¹:</u>	Spec.
Program Type:	3	<u>Fixed Items:</u>	<u>Ref.#</u>
Size Requirements:	900 SF Lab	16' of chalk/marker board 101100 16' of tack board 101100 30' of wall cabinets 123550 30' of sink base cabinets w/1 sink 123550 Pencil sharpener support 062000 Windows with integral blinds 085113 Paper towel dispenser 102813 Projection screen, 6'x8' 115213	
Lab Requirements:		<u>Fire Suppression:</u>	
		Fire suppression system 211000	
		<u>Plumbing:</u>	
		Plumbing connections 221116/221119/224000	
		<u>HVAC:</u>	
		Supply/return air system Div. 23 Independent temperature control 230923	
<u>FINISHES:</u>	Spec. <u>Ref #</u>	<u>Electrical:</u>	
Flooring:		Fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 10 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726	
Carpet	096816		
Optional: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516		
Base:		<u>Communications:</u>	
Resilient	096500	T1 1 video port 271533/271543 T2 1 voice port and phone 271513/273113 T3 1 data port near teacher workstation 271513 T4 26 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127 T5 Overhead projector 274119	
Ceiling:			
Suspended acoustical	095113		
Walls:		<u>Electronic Safety and Security:</u>	
Painted concrete masonry units	042000/ 099100	Life safety devices per code 283111	
<u>LOOSE FURNISHINGS:</u>		<u>Miscellaneous:</u>	
(24) Computer workstation furniture & chairs (1) Teacher station & chair Wastebasket Pencil sharpener		N/A	

NOTES:

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

**MARKETING COMMUNICATIONS ■ SPORTS MARKETING
MARKETING MANAGEMENT AND RESEARCH ■ MARKETING TECHNOLOGY
CT-P3-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>PROGRAM DESCRIPTION: MC: Preparation for careers that inform, remind, and/or persuade a target audience including advertising, public relations, and multimedia marketing communications. SP, MM&R: Organized subject matter and learning experiences designed for the systematic study of the management function in relation to marketing policies, organization, personnel, and financing. This instructional program generally prepares individuals to plan, organize, direct, and control the functions and activities of marketing in a variety of business and marketing related settings. Includes instruction in human resource management, strategic planning, managing technology, staffing functions, financial functions, telecommunications, and supervisory functions. MT: Preparation for marketing careers focused on product/service planning, financing, promotion, distribution, information management, pricing, and selling. Program Type: 3 Size Requirements: 1,000 SF Lab – Marketing Commun. 1,000 SF Lab – Sports Marketing 1,000 SF Lab – Marketing Technology 900 SF Lab – Marketing Management Lab Requirements:</p>	<p>FEATURES¹: Fixed Items: 16' of chalk/marker board 101100 16' of tack board 101100 30' of wall cabinets 123550 30' of sink base cabinets w/1 sink 123550 Pencil sharpener support 062000 Windows with integral blinds 085113 Paper towel dispenser 102813 Projection screen, 6'x8' 115213</p> <p>Fire Suppression: Fire suppression system 211000</p> <p>Plumbing: Plumbing connections 221116/221119/224000</p> <p>HVAC: Supply/return air system Div. 23 Independent temperature control 230923</p> <p>Electrical: Fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 10 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726</p> <p>Communications: T1 1 video port 271533/271543 T2 1 voice port and phone 271513/273113 T3 1 data port near teacher workstation 271513 T4 26 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127 T5 Overhead projector 274119</p> <p>Electronic Safety and Security: Life safety devices per code 283111</p> <p>Miscellaneous: N/A</p>																				
<p>FINISHES:</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: right;">Spec. Ref #</th> </tr> </thead> <tbody> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td>Optional: vinyl composition tile, <i>ET</i>, sheet vinyl, or linoleum</td> <td style="text-align: right;">096500 096516</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> </tbody> </table> <p>LOOSE FURNISHINGS: (24) Computer workstation furniture & chairs (1) Teacher station & chair Wastebasket Pencil sharpener</p>		Spec. Ref #	Flooring:		Carpet	096816	Optional: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<p>NOTES: 1. Finishes/Features: Refer to Chapter 9 for specification references.</p>
	Spec. Ref #																				
Flooring:																					
Carpet	096816																				
Optional: vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516																				
Base:																					
Resilient	096500																				
Ceiling:																					
Suspended acoustical	095113																				
Walls:																					
Painted concrete masonry units	042000/ 099100																				

**MARKETING COMMUNICATIONS
SPORTS MARKETING
MARKETING MANAGEMENT AND RESEARCH
MARKETING TECHNOLOGY**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Bookstore

<p>Program Type: 3</p> <p>Size Requirements: 800 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u></p> <p>Flooring:</p> <p style="padding-left: 20px;">Carpet 096816</p> <p style="padding-left: 20px;">Optional: vinyl composition tile, 096500</p> <p style="padding-left: 40px;"><i>ET</i>, sheet vinyl, or linoleum 096516</p> <p>Base:</p> <p style="padding-left: 20px;">Resilient 096500</p> <p>Ceiling:</p> <p style="padding-left: 20px;">Suspended acoustical 095113</p> <p>Walls:</p> <p style="padding-left: 20px;">Painted concrete masonry units 042000/ 099100</p> <p><u>LOOSE FURNISHINGS:</u></p> <p style="padding-left: 20px;">Stool</p> <p style="padding-left: 20px;">Wastebasket</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 48 ▪ Ceiling minimum CAC 35, NRC 0.70 ▪ Uniform lighting with 80% visual comfort probability level 	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES¹:</u></p> <p><u>Fixed Items:</u></p> <p style="padding-left: 20px;">8' of plastic laminate counter 062000</p> <p style="padding-left: 20px;">75' of base cabinet 123550</p> <p style="padding-left: 20px;">75' of adjustable display wall system 060565</p> <p style="padding-left: 20px;">Interior window 088000/081113</p> <p><u>Fire Suppression:</u></p> <p style="padding-left: 20px;">Fire suppression system 211000</p> <p><u>Plumbing:</u></p> <p style="padding-left: 20px;">N/A</p> <p><u>HVAC:</u></p> <p style="padding-left: 20px;">Supply/return air system Div. 23</p> <p style="padding-left: 20px;">Independent temperature control 230923</p> <p><u>Electrical:</u></p> <p style="padding-left: 20px;">Fluorescent lighting 265100</p> <p style="padding-left: 40px;">Illumination level: See Table 8600-4</p> <p style="padding-left: 20px;">Incandescent track lighting 265100</p> <p style="padding-left: 20px;">Multilevel switching 262726</p> <p style="padding-left: 20px;">6 duplex receptacles (minimum) 262726</p> <p style="padding-left: 20px;">Double duplex receptacle adjacent to each data port 262726</p> <p><u>Communications:</u></p> <p style="padding-left: 20px;">2 data ports 271513</p> <p style="padding-left: 20px;">Clock 275313</p> <p style="padding-left: 20px;">Central sound system 275123</p> <p><u>Electronic Safety and Security:</u></p> <p style="padding-left: 20px;">Life safety devices per code 283111</p> <p><u>Miscellaneous:</u></p> <p style="padding-left: 20px;">N/A</p>
---	---

NOTES:

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

MARKETING COMMUNICATIONS
SPORTS MARKETING
MARKETING MANAGEMENT AND RESEARCH
MARKETING TECHNOLOGY

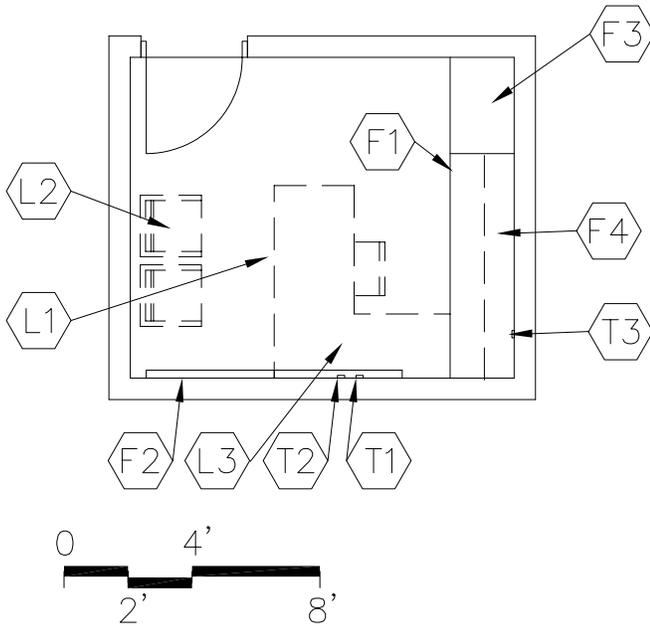
Display

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	3	
Size Requirements:	100 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile	096500	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
N/A		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		10' of adjustable shelving 062000
		Interior window 088000/081113
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		Incandescent track lighting 265100
		Track lighting 265100
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to data port 262726
		<u>Communications:</u>
		1 data port 271523
		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:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P3-2**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or carpet tile</i>	096816 096813	F1 Work surface with file drawers	123550
		F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 2' of tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271523
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

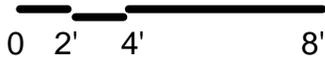
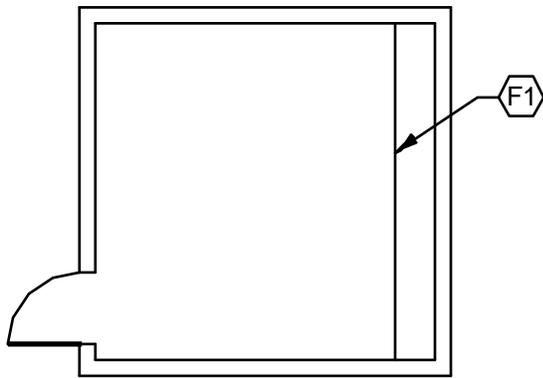
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

NOTES:

**STORAGE AREA
CT-P3-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

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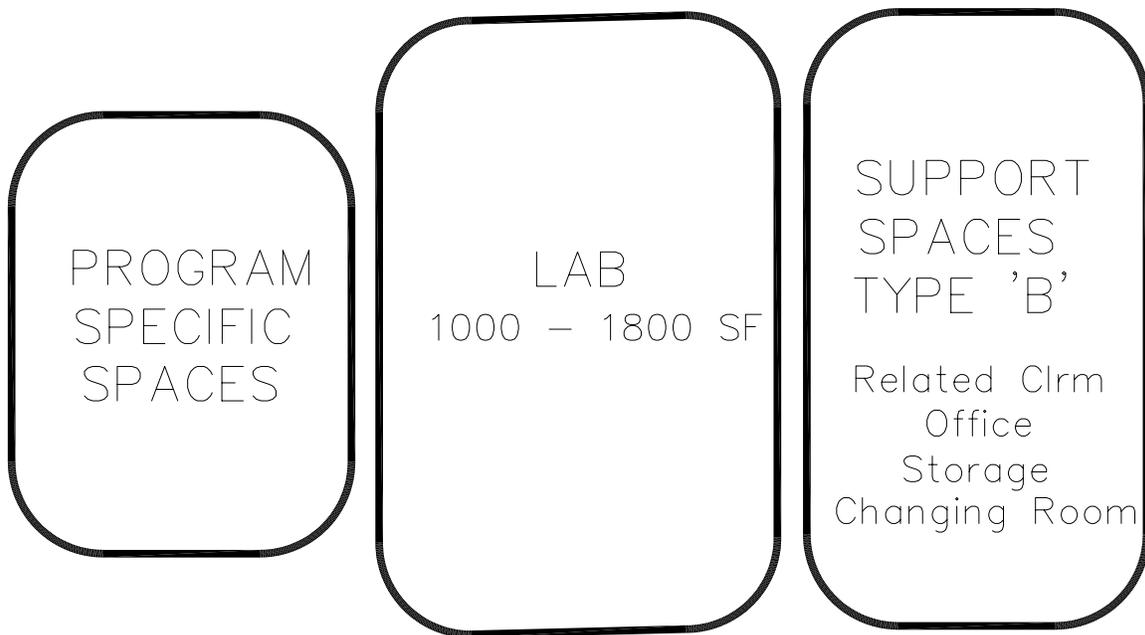
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Program Type 4

Description: Small to medium sized lab space with typical support space. Additionally, this program requires specialized auxiliary spaces. This program is to utilize standard construction and be one-story (**12'** +/-) tall. Lab, support, and specialized space to have finished floor, painted walls, and suspended acoustical ceiling.



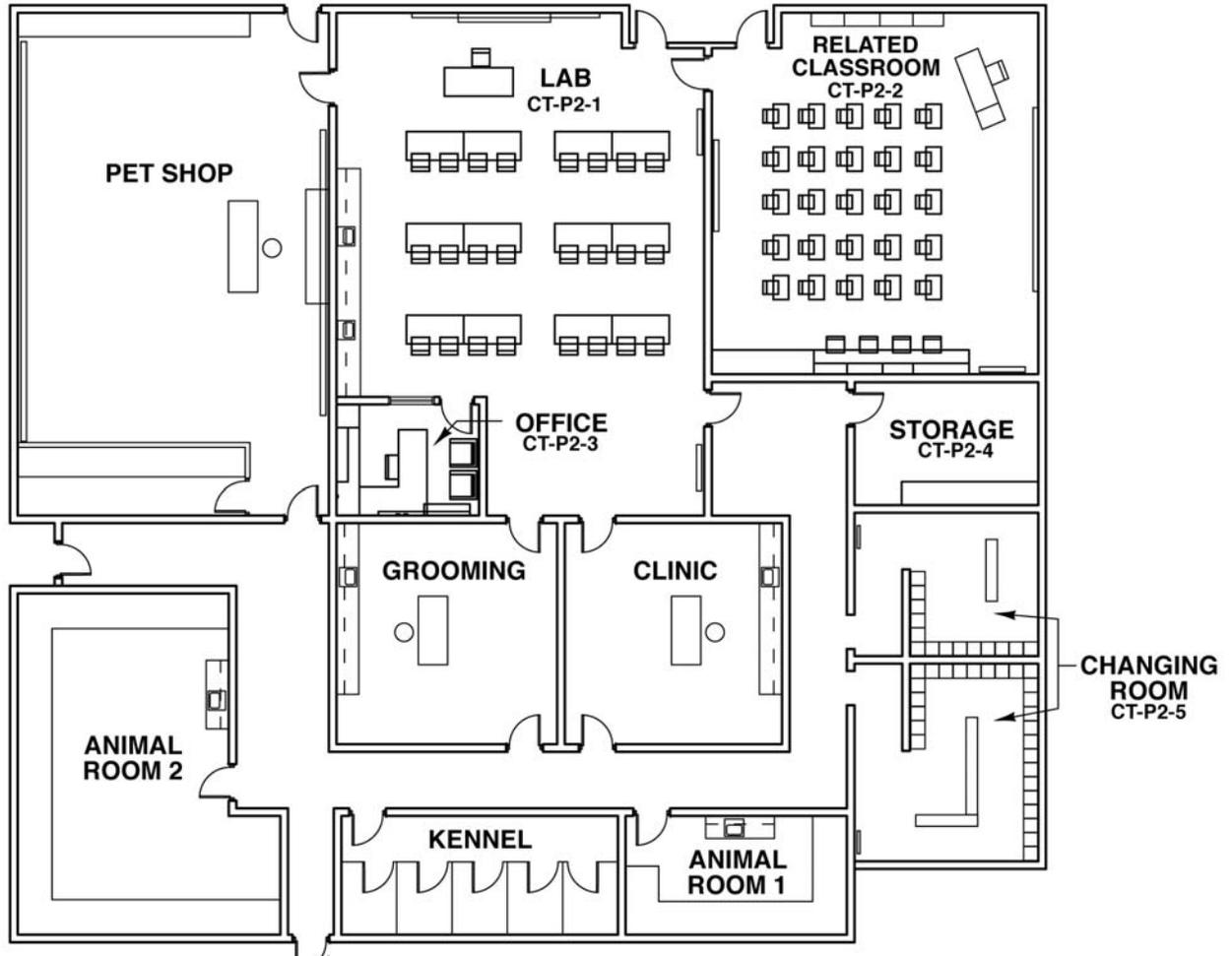
NOTES:

This is an example of how the Program Type 4 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 4 space plates:

- CT-P4-1 Lab
- CT-P4-2 Related Classroom
- CT-P4-3 Office
- CT-P4-4 Storage
- CT-P4-5 Changing Room

**PROGRAM TYPE 4
EXAMPLE**

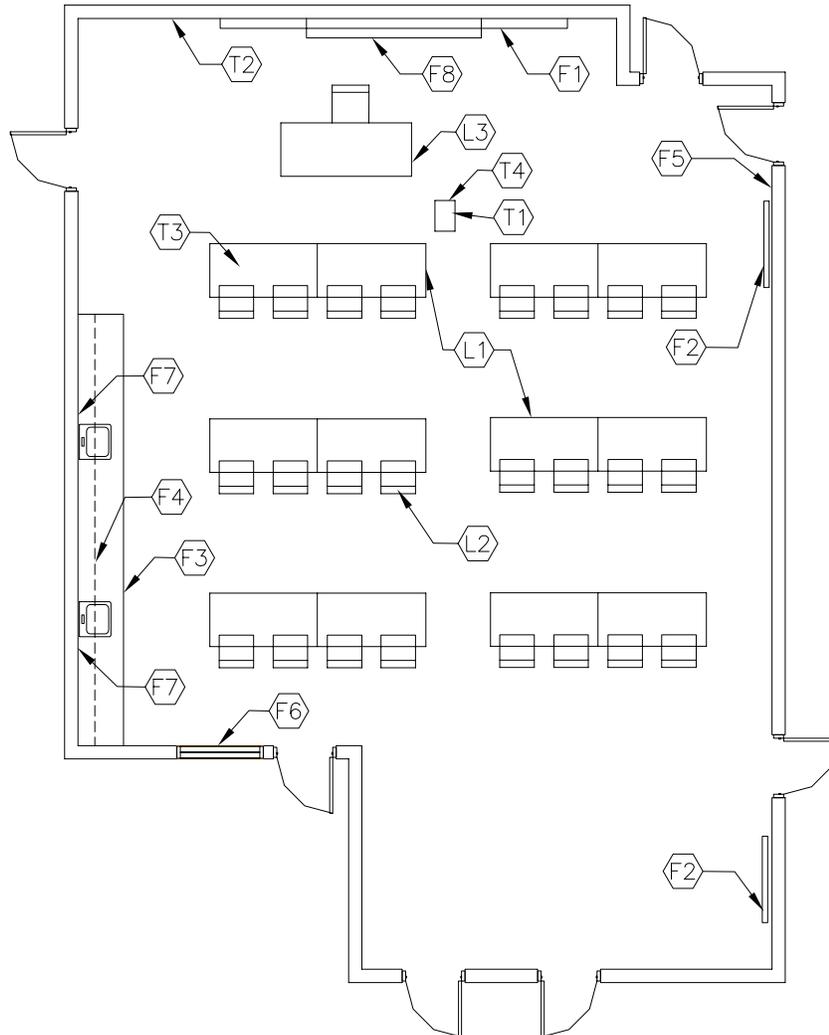


Program Type 4: Animal Science and Management (small animal)

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY: 24 Students
 SIZE: 1,000 – 1,800 SF
 (see lab summaries for exact sizes)
 ANCILLARY SPACES: CT-P4-2 thru CT-P4-5

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P4-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

ANIMAL SCIENCE AND MANAGEMENT (small animal)

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P4-1

<u>PROGRAM DESCRIPTION:</u>	<p>Programs provide instruction in the principles and practices of producing, caring for, and marketing domesticated non-food animals. Examples of careers for students completing this program include veterinary technicians, zoo keepers, kennel managers, grooming specialists, pet sales associates, horse trainers, and animal laboratory technicians. Animal Science and Management can also serve as a foundation program for careers requiring post-secondary education.</p>	<u>FEATURES¹:</u>	Spec.																								
Program Type:	4	<u>Fixed Items:</u>	<u>Ref.#</u>																								
Size Requirements:	1,000 SF Lab	<table border="0"> <tr><td>F1</td><td>16' of chalk/marker board</td><td>101100</td></tr> <tr><td>F2</td><td>8' of tack board</td><td>101100</td></tr> <tr><td>F3</td><td>20' of sink base cabinets w/2 sinks</td><td>123550</td></tr> <tr><td>F4</td><td>20' of wall cabinets</td><td>123550</td></tr> <tr><td>F5</td><td>Pencil sharpener support</td><td>062000</td></tr> <tr><td>F6</td><td>Windows with integral blinds</td><td>085113</td></tr> <tr><td>F7</td><td>(2) Paper towel dispenser</td><td>102813</td></tr> <tr><td>F8</td><td>Projection screen, 6'x8'</td><td>115213</td></tr> </table>	F1	16' of chalk/marker board	101100	F2	8' of tack board	101100	F3	20' of sink base cabinets w/2 sinks	123550	F4	20' of wall cabinets	123550	F5	Pencil sharpener support	062000	F6	Windows with integral blinds	085113	F7	(2) Paper towel dispenser	102813	F8	Projection screen, 6'x8'	115213	
F1	16' of chalk/marker board	101100																									
F2	8' of tack board	101100																									
F3	20' of sink base cabinets w/2 sinks	123550																									
F4	20' of wall cabinets	123550																									
F5	Pencil sharpener support	062000																									
F6	Windows with integral blinds	085113																									
F7	(2) Paper towel dispenser	102813																									
F8	Projection screen, 6'x8'	115213																									
Lab Requirements:		<u>Fire Suppression:</u>																									
		Fire suppression system	211000																								
		<u>Plumbing:</u>																									
		Plumbing connections 221116/221119/224000																									
		Handwashing lavatory	224000																								
		<u>HVAC:</u>																									
		Supply/return air system	Div. 23																								
		Independent temperature control	230923																								
<u>FINISHES:</u>	Spec.	<u>Electrical:</u>																									
Flooring:	<u>Ref #</u>	Fluorescent lighting	265100																								
Vinyl composition tile,	096500	Illumination level: See Table 8600-4																									
ET, sheet vinyl, linoleum,	096516	Multilevel switching	262726																								
polished concrete finishing,	033510	10 duplex receptacles	262726																								
or colored concrete finishing	033519	Double duplex receptacle adjacent to each data and video port	262726																								
Base:		<u>Communications:</u>																									
Resilient	096500	T1 1 video port	271533/271543																								
Ceiling:		T2 1 voice port and phone	271513/273113																								
Suspended acoustical	095113	1 data port near teacher workstation	271513																								
Walls:		T3 8 data ports	271513																								
Painted concrete masonry units	042000/ 099100	Clock	275313																								
		Central sound system	275123																								
		Sound reinforcement system	275127																								
		T4 Overhead projector	274119																								
		<u>Electronic Safety and Security:</u>																									
		Life safety devices per code	283111																								
<u>LOOSE FURNISHINGS:</u>		<u>Miscellaneous:</u>																									
L1 (12) Two-person work tables		N/A																									
L2 (24) Student chairs/stools																											
L3 (1) Teacher station & chair																											
Wastebasket																											
Pencil sharpener																											
		<u>SITE FEATURE:</u>																									
		Plan for a dog kennel if required by school curriculum requirements.																									

NOTES:

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

**ANIMAL SCIENCE AND MANAGEMENT (small animal)
Pet Shop**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	1,200 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Stool		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		8' of counter 123550
		30' of base cabinets 123550
		60' of adjustable wall display system 060565
		Glass enclosed animal display wall 084113
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		Handwashing lavatory 224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		Incandescent track lighting 265100
		9 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 voice port and phone 271513/273113
		2 data ports 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.

ANIMAL SCIENCE AND MANAGEMENT (small animal)

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Clinic

		Spec. Ref.#
Program Type:	4	
Size Requirements:	350 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Stool		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		15' of base cabinets w/1 sink
		123550
		15' of wall cabinets
		123550
		6' examination island
		123550
		Paper towel dispenser
		102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent temperature control
		230923
		Independent ventilation
		Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		4 duplex receptacles
		262726
		Double duplex receptacle adjacent to each data port
		262726
		<u>Communications:</u>
		2 data ports
		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.

ANIMAL SCIENCE AND MANAGEMENT (small animal)**Grooming**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	350 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Stool		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		15' of base cabinets w/1 sink 123550
		15' of wall cabinets 123550
		6' grooming island 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		2 data ports 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.

ANIMAL SCIENCE AND MANAGEMENT (small animal)

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Animal Room #1

		Spec. Ref.#
Program Type:	4	
Size Requirements:	200 SF	
Requirements:		
FINISHES:	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
polished concrete finishing,	033510	
or colored concrete finishing	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
Wastebasket		
ENVIRONMENTAL CONSIDERATIONS:		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		Fixed Items:
		6' of base cabinets w/1 sink
		123550
		6' of wall cabinets
		123550
		20' of animal cage shelving
		062000
		Paper towel dispenser
		102813
		Fire Suppression:
		Fire suppression system
		211000
		Plumbing:
		Plumbing connections
		221116/221119/224000
		Handwashing lavatory
		224000
		HVAC:
		Supply/return air system
		Div. 23
		Independent ventilation
		Div. 23
		Electrical:
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		4 duplex receptacles
		262726
		Communications:
		Central sound system
		275123
		Electronic Safety and Security:
		Life safety devices per code
		283111
		Miscellaneous:
		N/A

NOTES:

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

ANIMAL SCIENCE AND MANAGEMENT (small animal)**Animal Room #2**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	600 SF	
Requirements:		
FINISHES:	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
Stool		
Wastebasket		
ENVIRONMENTAL CONSIDERATIONS:		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		Fixed Items:
		6' of base cabinets w/1 sink 123550
		6' of wall cabinets 123550
		50' of animal cage shelving 062000
		Paper towel dispenser 102813
		Fire Suppression:
		Fire suppression system 211000
		Plumbing:
		Plumbing connections 221116/221119/224000
		Handwashing lavatory 224000
		HVAC:
		Supply/return air system Div. 23
		Independent ventilation Div. 23
		Electrical:
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Communications:
		Central sound system 275123
		Electronic Safety and Security:
		Life safety devices per code 283111
		Miscellaneous:
		N/A

NOTES:

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

ANIMAL SCIENCE AND MANAGEMENT (small animal)

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Kennel

Program Type: 4			FEATURES¹:	Spec.
			Fixed Items:	Ref.#
Size Requirements: 250 SF			60' of chain link fencing w/5 gates	323113
			(5) exterior animal access doors	323113
Requirements:			Fire Suppression:	
	Spec.		Fire suppression system	211000
	Ref #			
FINISHES:			Plumbing:	
Flooring:			Plumbing connections	
Cure and seal concrete		033000		221116/221119/224000
Base:			Keyed hose bibb	224000
Resilient		096500	Floor drain	224000
Ceiling:			HVAC:	
Suspended acoustical		095113	Supply/return air system	Div. 23
			Independent ventilation	Div. 23
Walls:			Electrical:	
Painted concrete masonry units		042000/ 099100	Fluorescent lighting	265100
			Illumination level: See Table 8600-4	
			Single level switching	262726
			4 duplex receptacles	262726
LOOSE FURNISHINGS:			Communications:	
Wastebasket			Central sound system	275123
ENVIRONMENTAL CONSIDERATIONS:			Electronic Safety and Security:	
▪ Wall minimum STC 50			Life safety devices per code	283111
▪ Ceiling minimum CAC 35, NRC 0.70			Miscellaneous:	
▪ Uniform lighting with 80% visual comfort probability level			N/A	

NOTES:

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

COSMETOLOGY
CT-P4-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		FEATURES¹:			
		Fixed Items:	Spec. Ref.#		
Classroom and practical learning experiences that are concerned with a variety of beauty treatments, including the care and beautification of hair, complexion, and hands. Instruction includes shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, and bleaching; permanent waving; facials; manicuring; and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management (including keeping records), and customer relations are emphasized. Instruction is designed to qualify completers for licensing examination.		8' of tack board	101100		
		12' of base cabinets	123550		
		12' of wall cabinets	123550		
		16' of reception counter	123550		
		8' of adjustable display shelving	062000		
		Pencil sharpener support	062000		
		Windows with integral blinds	085113		
		(24) Student hair stations (base cabinet, countertop, mirror, styling chair)	123550		
		Fire Suppression:		Fire suppression system	211000
		Plumbing:		6 Hair washing sinks	224000
Size Requirements: 1,600 SF Lab		Plumbing connections	221116/221119/224000		
Lab Requirements:		HVAC:			
	Spec. Ref #	Supply/return air system	Div. 23		
FINISHES:		Independent temperature control	230923		
Flooring:		Specialized ventilation for pedicure odors	Div. 23		
Vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500	Electrical:			
	096516	Fluorescent lighting	265100		
Base:		illumination level: See Table 8600-4			
Resilient	096500	Multilevel switching	262726		
Ceiling:		40 duplex receptacles (minimum)	262726		
Suspended acoustical	095113	Double duplex receptacle adjacent to each data and video port	262726		
Walls:		Communications:			
Painted concrete masonry units	042000/ 099100	1 video port and video display device	271533/271543/274119		
		1 voice port and phone	271513/273113		
LOOSE FURNISHINGS:		8 data ports	271513		
Portable demonstration table (8'x8')		Clock	275313		
Coat rack		Central sound system	275123		
Wastebasket		Sound reinforcement system	275127		
Pencil sharpener		Electronic Safety and Security:			
		Life safety devices per code	283111		
		Miscellaneous:			
		N/A			

NOTES:

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

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**COSMETOLOGY
Dispensary**

		Spec. Ref.#	
Program Type:	4		
Size Requirements:	175 SF		
Requirements:			
<u>FINISHES:</u>	Spec. Ref #		
Flooring:			
Vinyl composition tile,	096500		
ET , sheet vinyl, or linoleum	096516		
Base:			
Resilient	096500		
Ceiling:			
Suspended acoustical	095113		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
Wastebasket			
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			
▪ Wall minimum STC 45			
▪ Ceiling minimum CAC 35, NRC 0.70			
▪ Uniform lighting with 80% visual comfort probability level			
		<u>FEATURES¹:</u>	
		<u>Fixed Items:</u>	
		27' of adjustable shelving	062000
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent ventilation	Div. 23
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Single level switching	262726
		4 duplex receptacles	262726
		<u>Communications:</u>	
		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.

COSMETOLOGY
Laundry Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	150 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Clothes washer		
Electric clothes dryer		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		20' of base cabinets w/1 sink
		20' of adjustable shelving
		Paper towel dispenser
		123550
		062000
		102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		Washer/dryer connections
		224000
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent ventilation
		Div. 23
		Dryer vent system
		Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		4 duplex receptacles
		262726
		<u>Communications:</u>
		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.

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**COSMETOLOGY
Facial Room**

		Spec. Ref.#
Program Type:	4	
Size Requirements:	200 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 40		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		4' of base cabinets w/1 sink 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent ventilation Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		<u>Communications:</u>
		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.

COSMETOLOGY
Manicure Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	200 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET, sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		4' of base cabinets w/1 sink
		Paper towel dispenser
		123550
		102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent ventilation
		Div. 23
		Independent temperature control
		230923
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		4 duplex receptacles
		262726
		<u>Communications:</u>
		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.

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**COSMETOLOGY
Customer Toilet**

		Spec. Ref.#
Program Type:	4	
Size Requirements:	60 SF	
Requirements:		
<u>FINISHES:</u>	<u>Spec. Ref #</u>	
Flooring:		
Rubber, linoleum, <i>ET</i> , or	096500	
sheet vinyl	096516	
Option: ceramic mosaic tile,	093000	
porcelain tile base, or	096723	
resinous flooring		
Base:		
Resilient	096500	
Option: ceramic mosaic tile base,	093000	
porcelain tile base, or	096723	
resinous flooring		
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.40		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		Paper towel dispenser 102813
		Soap dispenser 102813
		36" and 42" grab bars 102813
		24"x60" mirror 102813
		Toilet paper holder 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Wall mounted water closet
		Wall mounted lavatory
		Plumbing connections
		221116/221119/224000
		<u>HVAC:</u>
		Exhaust air system Div. 23
		Supplemental heat as required Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		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.

**CAREER PATHS FOR THE LAW PROFESSION
CRIMINAL JUSTICE
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	Spec. Ref.#
<i>CPLP: Introduction of career major courses and application of knowledge and skills to prepare students for entry level, technical and professional career options within the law and public administration professions.</i>	
<i>CJ: Specialized classroom and practical learning experiences that are designed to supplement the training provided by officially designated law enforcement agencies. Instruction includes acquiring and maintaining the uniform; patrolling on foot or in an automobile during the day or night; dealing with misdemeanors, felonies, traffic violations, and accidents; making arrests; testifying in court; legal aspects; defensive tactics; private security; occupational and health safety; and civil emergencies.</i>	
Program Type: 4	
Size Requirements: 1,200 SF Lab	
Lab Requirements:	
<u>FINISHES:</u>	Spec. Ref #
Flooring:	
Carpet	096816
Option: Vinyl composition tile, ET , sheet vinyl, or linoleum	096500 096516
Base:	
Resilient	096500
Ceiling:	
Suspended acoustical	095113
Walls:	
Painted concrete masonry units	042000/ 099100
<u>LOOSE FURNISHINGS:</u>	
(12) Two-person work tables	
(24) Student chairs/stools	
(1) Teacher station & chair	
Wastebasket	
Pencil sharpener	
	FEATURES¹:
	<u>Fixed Items:</u>
	16' of chalk/marker board 101100
	16' of tack board 101100
	30' of sink base cabinets w/1 sink 123550
	30' of wall cabinets 123550
	Pencil sharpener support 062000
	Windows with integral blinds 085113
	Paper towel dispenser 102813
	Projection screen, 6'x8' 115213
	<u>Fire Suppression:</u>
	Fire suppression system 211000
	<u>Plumbing:</u>
	Plumbing connections 221116/221119/224000
	<u>HVAC:</u>
	Supply/return air system Div. 23
	Independent temperature control 230923
	<u>Electrical:</u>
	Fluorescent lighting 265100
	Illumination level: See Table 8600-4
	Multilevel switching 262726
	20 duplex receptacles (minimum) 262726
	Double duplex receptacle adjacent to each data and video port 262726
	<u>Communications:</u>
	1 video port 271533/271543
	1 voice port and phone 271513/273113
	1 data port near teacher workstation 271513
	8 data ports 271513
	Clock 275313
	Central sound system 275123
	Sound reinforcement system 275127
	Overhead projector 274119
	<u>Electronic Safety and Security:</u>
	Life safety devices per code 283111
	<u>Miscellaneous:</u>
	N/A

NOTES:

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

**CAREER PATHS FOR THE LAW PROFESSION
CRIMINAL JUSTICE
Weight Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>Program Type: 4</p> <p>Size Requirements: 800 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring: Vinyl composition tile, Spec. 096500 ET, sheet vinyl, or linoleum 096516 Option: Cure and seal concrete 033000</p> <p>Base: Resilient 096500</p> <p>Ceiling: Suspended acoustical 095113</p> <p>Walls: Painted concrete masonry units 042000/ 099100</p> <p><u>LOOSE FURNISHINGS:</u> N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 48 ▪ Ceiling minimum CAC 35, NRC 0.70 ▪ Uniform lighting with 80% visual comfort probability level 	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES</u>¹: <u>Fixed Items:</u> N/A</p> <p><u>Fire Suppression:</u> Fire suppression system 211000</p> <p><u>Plumbing:</u> N/A</p> <p><u>HVAC:</u> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><u>Electrical:</u> Fluorescent lighting 265100 Illumination level: See Table 8600-4 Single level switching 262726 4 duplex receptacles 262726</p> <p><u>Communications:</u> Clock 275313 Central sound system 275123</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

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

**CULINARY AND FOOD SERVICE OPERATIONS
CULINARY ARTS AND FOOD SERVICE MANAGEMENT**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P4-1

<u>PROGRAM DESCRIPTION:</u>	<u>FEATURES¹:</u>	Spec.
<i>CFSO: Educational programs in Culinary and Food Service Operations prepare learners for careers in the art and science of food preparation and presentation.</i>	<u>Fixed Items:</u>	<u>Ref.#</u>
<u>CAFSM:</u> Preparation for employment in managerial, production, and service jobs in a variety of food service and/or baking operations. Includes instruction and experiences to develop competencies in the selection, storage, purchase, preparation, and serving of quantity goods and food products, the production of bakery products, nutrition and special diets, safety and sanitation procedures, use and care of commercial equipment, serving techniques, and management of food establishments.	8' of tack board	101100
	Food service equipment	114000
	(3) Paper towel dispensers	102813
	<u>Fire Suppression:</u>	
	Fire suppression system	211000
	<u>Plumbing:</u>	
	Plumbing connections	
		221116/221119/224000
	Connections to food service eqpt	224000
	Gas connections	226313
	Hand washing lavatory	224000
	Quick release gas connections	226313
	Master gas shut-off valve	226313
	<u>HVAC:</u>	
Program Type: 4	Supply/return air system	Div. 23
	Independent temperature control	230923
Size Requirements: 1,800 SF Lab	Kitchen canopy exhaust system	Div. 23
Lab Requirements:	<u>Electrical:</u>	
	Fluorescent lighting	265100
	Illumination level: See Table 8600-4	
<u>FINISHES:</u>	Single level switching	262726
Flooring:	10 duplex receptacles (minimum)	262726
Quarry tile	Double duplex receptacle adjacent to	
	each data and video port	262726
Base:	Connections for food service eqpt	262726
Quarry tile base	Means of egress lighting per code	265100
	220V service	262726
Ceiling:	<u>Communications:</u>	
Cleanable, suspended acoustical	1 video port and video display device	
		271533/271543/274119
Walls:	1 voice port and phone	271513/273113
Epoxy painted concrete masonry units	4 data ports	271513
	Clock	275313
	Central sound system	275123
	Sound reinforcement system	275127
	<u>Electronic Safety and Security:</u>	
	Life safety devices per code	283111
<u>LOOSE FURNISHINGS:</u>	<u>Miscellaneous:</u>	
Wastebasket	N/A	

NOTES:

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

CULINARY AND FOOD SERVICE OPERATIONS
CULINARY ARTS AND FOOD SERVICE MANAGEMENT
Restaurant

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	1,500 SF	
Requirements:		
<u>FINISHES:</u>	<u>Spec.</u> <u>Ref #</u>	
Flooring:		
Carpet	096816	
Option: Vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		6' of base cabinets 123550
		6' of cashier's station 123550
		Interior window 088000/081113
		Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		Incandescent can lighting around perimeter of room 265100
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 voice port and phone 271513/273113
		2 data ports 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.

**CULINARY AND FOOD SERVICE OPERATIONS
CULINARY ARTS AND FOOD SERVICE MANAGEMENT**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Dry Storage

		Spec. Ref.#	
Program Type:	4		
Size Requirements:	150 SF		
Requirements:			
FINISHES:	Spec. Ref #		
Flooring:			
Linoleum, <i>ET</i> , or sheet vinyl	096500		
Option: Quarry tile	093000 096516		
Base:			
Resilient base	096500		
Option: Quarry tile	093000		
Ceiling:			
Cleanable, suspended, acoustical	095113		
Walls:			
Epoxy-painted concrete masonry units	042000/099100		
Option: Ceramic wall tile or latex paint	093000 099100		
LOOSE FURNISHINGS:			
20' Commercial grade kitchen shelving			
ENVIRONMENTAL CONSIDERATIONS:			
• Uniform lighting			
• Continuous conditioning of air			
• Cleanable building surfaces			
		FEATURES¹:	
		Fixed Items:	
		N/A	
		Fire Suppression:	
		Fire suppression system	211000
		Plumbing:	
		N/A	
		HVAC:	
		Exhaust air system	Div. 23
		Supply/return air system	Div. 23
		Electrical:	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Communications:	
		N/A	
		Electronic Safety and Security:	
		Life safety devices per code	283111
		Miscellaneous:	
		N/A	

NOTES:

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

**DENTAL ASSISTANT
CT-P4-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
A combination of subject matter and experiences designed to prepare a person to assist the dentist at the chair-side in the dentist operator, perform reception and clerical functions, and carry out selected dental laboratory work. Instruction includes infection control and hazards management, emergency procedures, preventive dental assisting procedures, chair-side assistance, dental specialties, dental laboratory procedures, office procedures, radiographic procedures, and professionalism.		
Program Type:	4	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/099100	
<u>LOOSE FURNISHINGS:</u>		
(6) 4-person epoxy-top student tables w/electric and gas		
(24) Student chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
40' of sink base cabinets w/6 sinks and natural gas		123550
40' of wall cabinets		123550
10' of reception counter		123550
Pencil sharpener support		062000
Windows with integral blinds		085113
(6) Paper towel dispensers		102813
Projection screen, 6'x8'		115213
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
Plumbing connections		221116/221119/224000
Natural gas connections		226313
Master gas shut-off valve		226313
Safety shower/eye wash		224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
Localized ventilation for specific lab-produced fumes		Div. 23
<u>Electrical:</u>		
Fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
<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.

**DENTAL ASSISTANT
X-ray Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>Program Type: 4</p> <p>Size Requirements: 80 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring: Vinyl composition tile, ET, sheet vinyl, or linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u> (1) Chair</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 48 ▪ Ceiling minimum CAC 35, NRC 0.70 ▪ Uniform lighting with 80% visual comfort probability level 	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES¹:</u> <u>Fixed Items:</u> N/A</p> <p><u>Fire Suppression:</u> Fire suppression system 211000</p> <p><u>Plumbing:</u> Plumbing connections 221116/221119/224000</p> <p><u>HVAC:</u> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><u>Electrical:</u> Fluorescent lighting 265100 Illumination level: See Table 8600-4 Single level switching 262726 4 duplex receptacles 262726</p> <p><u>Communications:</u> Central sound system 275123</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

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

**DENTAL ASSISTANT
Darkroom**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	80 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, linoleum,	096516	
<i>polished concrete finishing,</i>	033510	
<i>or colored concrete finishing</i>	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		FEATURES¹:
		<u>Fixed Items:</u>
		10' of base cabinets w/1 sink 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Dark room safelight 265100
		<u>Communications:</u>
		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.

DIVERSIFIED HEALTH OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P4-1

<u>PROGRAM DESCRIPTION:</u>	A combination of diversified subject matter and experiences designed to prepare a person for entry into the health field. Instruction includes emergency procedures, infection control and hazards management, legal, ethical, and professional responsibilities, basic personal care, medical database, medical/dental procedures, laboratory-related procedures, care of the elderly, home health care, restorative duties, and office procedures. Field trips and rotations through various health agencies are a part of the planned program.	<u>FEATURES¹:</u>	Spec.
Program Type:	4	<u>Fixed Items:</u>	<u>Ref.#</u>
Size Requirements:	1,200 SF Lab	16' of chalk/marker board 101100 8' of tack board 101100 40' of sink base cabinets w/6 sinks and natural gas 123550 40' of wall cabinets 123550 10' of reception counter 123550 Pencil sharpener support 062000 Windows with integral blinds 085113 (6) Paper towel dispenser 102813 Projection screen, 6'x8' 115213	
Lab Requirements:		<u>Fire Suppression:</u>	
		Fire suppression system 211000	
		<u>Plumbing:</u>	
		Plumbing connections 221116/221119/224000 Natural gas connections 226313 Master gas shut-off valve 226313	
<u>FINISHES:</u>		<u>HVAC:</u>	
Flooring:		Supply/return air system Div. 23 Independent temperature control 230923	
Vinyl composition tile, <i>ET</i> , sheet vinyl, or linoleum	Spec. <u>Ref #</u> 096500 096516	<u>Electrical:</u>	
Base:		Fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726	
Resilient	096500	<u>Communications:</u>	
Ceiling:		1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/273113 1 data port near teacher workstation 271513 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127	
Suspended acoustical	095113	<u>Electronic Safety and Security:</u>	
Walls:		Life safety devices per code 283111	
Painted concrete masonry units	042000/ 099100	<u>Miscellaneous:</u>	
<u>LOOSE FURNISHINGS:</u>		N/A	
(6) 4-person epoxy-top student tables with electric & natural gas (24) Student chairs/stools (1) Teacher station & chair Wastebasket Pencil sharpener			

NOTES:

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

**DIVERSIFIED HEALTH OCCUPATIONS
Exam Room(s)**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	200 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(1) Stool per room		
(1) Wastebasket per room		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		8' of sink base cabinets w/2 sinks 123550
		(2) Paper towel dispensers 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles per room 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data port per room 271513
		1 clock per room 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.

**FIRE FIGHTER TRAINING
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>		Spec. Ref.#
Specialized classroom and practical experiences concerned with the preparation of paid, full-time firefighters.		
Program Type:	4	
Size Requirements:	1,500 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Carpet	096816	
Option: Vinyl composition tile, ET , sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work tables		
(24) Student chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		16' of chalk/marker board 101100
		16' of tack board 101100
		30' of sink base cabinets w/1 sink 123550
		30' of wall cabinets 123550
		Pencil sharpener support 062000
		Windows with integral blinds 085113
		Paper towel dispenser 102813
		Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		20 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		<u>Communications:</u>
		1 video port 271533/271543
		1 voice port and phone 271513/273113
		1 data port near teacher workstation 271513
		8 data ports 271513
		Clock 275313
		Central sound system 275123
		Sound reinforcement system 275127
		<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.

**FIRE FIGHTER TRAINING
Weight Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#	
Program Type:	4		
Size Requirements:	800 SF		
Requirements:			
<u>FINISHES:</u>	Spec. Ref #		
Flooring:			
Vinyl composition tile,	096500		
ET , sheet vinyl, or linoleum	096516		
Option: Cure and seal concrete	033000		
Base:			
Resilient	096500		
Ceiling:			
Suspended acoustical	095113		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
N/A			
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			
▪ Wall minimum STC 48			
▪ Ceiling minimum CAC 35, NRC 0.70			
▪ Uniform lighting with 80% visual comfort probability level			
		<u>FEATURES¹:</u>	
		<u>Fixed Items:</u>	
		N/A	
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Single level switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data port	262726
		<u>Communications:</u>	
		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.

**MEDICAL ASSISTANT
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	<u>FEATURES¹:</u>	Spec.
A combination of subject matter and experiences designed to prepare a person to perform functions and follow procedures concerned with the diagnosis and treatment of patients under the supervision of a physician in a physician's office or clinic. Instruction covers physical examinations, laboratory tests, infection control and hazard material management, quality assurance, medical ethics, patient education, medical emergencies, general office procedures, insurance, and medications.	<u>Fixed Items:</u>	<u>Ref.#</u>
	16' of chalk/marker board	101100
	8' of tack board	101100
	30' of sink base cabinets w/2 sinks	123550
	30' of wall cabinets	123550
	10' of reception counter	123550
	Pencil sharpener support	062000
	Windows with integral blinds	085113
	(2) Paper towel dispensers	102813
	Projection screen, 6'x8'	115213
	100' of cubicle track and curtains	102123
	<u>Fire Suppression:</u>	
	Fire suppression system	211000
	<u>Plumbing:</u>	
	Plumbing connections	221116/221119/224000
	<u>HVAC:</u>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<u>Electrical:</u>	
	Fluorescent lighting	265100
	Illumination level: See Table 8600-4	
	Multilevel switching	262726
	20 duplex receptacles (minimum)	262726
	Double duplex receptacle adjacent to each data and video port	262726
	<u>Communications:</u>	
	1 video port and video display device	271533/271543/274119
	1 voice port and phone	271513/273113
	1 data port near teacher workstation	271513
	8 data ports	271513
	Clock	275313
	Central sound system	275123
	Sound reinforcement system	275127
	<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.

**MEDICAL ASSISTANT
Laundry Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>Program Type: 4</p> <p>Size Requirements: 120 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring: Vinyl composition tile, ET, sheet vinyl, or linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u> Clothes washer Electric clothes dryer Wastebasket</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 45 ▪ Ceiling minimum CAC 35, NRC 0.70 ▪ Uniform lighting with 80% visual comfort probability level 	<p>Spec. <u>Ref.#</u></p> <p><u>FEATURES</u>¹:</p> <p><u>Fixed Items:</u> 6' of base cabinets 6' of adjustable shelving</p> <p><u>Fire Suppression:</u> Fire suppression system</p> <p><u>Plumbing:</u> Plumbing connections Washer/dryer connection</p> <p><u>HVAC:</u> Exhaust air system Supplemental heat as required Dryer vent system</p> <p><u>Electrical:</u> Fluorescent lighting Illumination level: See Table 8600-4 Single level switching 4 duplex receptacles</p> <p><u>Communications:</u> Clock Central sound system</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code</p> <p><u>Miscellaneous:</u> N/A</p>	<p>123550 062000</p> <p>211000</p> <p>096500 096516</p> <p>096500</p> <p>095113</p> <p>042000/ 099100</p> <p>265100 262726 262726</p> <p>275313 275123</p> <p>283111</p>
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NOTES:

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

CLINICAL HEALTH CARE SERVICES
NURSE ASSISTING
CT-P4-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
A combination of subject matter and experiences designed to prepare a person to perform routine tasks involved in the care of individuals receiving nursing service under the supervision of a nurse.		
Program Type:	4	
Size Requirements:	1,200 SF Lab	
Lab Requirements:		
	Spec. Ref #	
<u>FINISHES:</u>		
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work tables		
(24) Student chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
40' of sink base cabinets w/3 sinks		123550
40' of wall cabinets		123550
10' of reception counter		123550
Pencil sharpener support		062000
Windows with integral blinds		085113
(3) Paper towel dispensers		102813
Projection screen, 6'x8'		115213
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
Fluorescent lighting		265100
illumination level: See Table 8600-4		
Multilevel switching		262726
20 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
1 data port near teacher workstation		271513
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
<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.

CLINICAL HEALTH CARE SERVICES
NURSE ASSISTING
Training Restroom

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	120 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Rubber, linoleum, <i>ET</i> , or	096500	123550
sheet vinyl	096516	102813
Option: ceramic mosaic tile,	093000	102813
porcelain tile base, or	096723	102813
resinous flooring		102813
Base:		
Resilient	096500	
Option: ceramic mosaic tile base,	093000	
porcelain tile base, or	096723	
resinous flooring		
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		3' vanity with sink
		Paper towel dispenser
		Soap dispenser
		36" and 42" grab bars
		16"x24" mirror
		Toilet paper holder
		Bathtub grab bars
		Bath curtain rod
		<u>Fire Suppression:</u>
		Fire suppression system
		<u>Plumbing:</u>
		Tank-type toilet
		Residential bathtub
		Plumbing connections
		<u>HVAC:</u>
		Exhaust air system
		Supplemental heat as required
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-4
		Single level switching
		2 duplex receptacles
		<u>Communications:</u>
		Central sound system
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		<u>Miscellaneous:</u>
		N/A

NOTES:

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

CLINICAL HEALTH CARE SERVICES
NURSE ASSISTING
Laundry Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	120 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Clothes washer		
Electric clothes dryer		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES</u> ¹ :
		<u>Fixed Items:</u>
		6' of base cabinets
		123550
		6' of adjustable shelving
		062000
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		Washer/dryer connections
		224000
		<u>HVAC:</u>
		Exhaust air system
		Div. 23
		Supplemental heat as required
		Div. 23
		Dryer vent system
		Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		4 duplex receptacles
		262726
		<u>Communications:</u>
		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.

OPTOMETRIC OCCUPATIONS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P4-1

PROGRAM DESCRIPTION:		Spec. Ref.#
A combination of subject matter and experiences designed to train a person to prepare, assemble, and/or fit corrective lenses prescribed by a physician or optometrist. These occupations may include optical surfacing, optical finishing, optical stylist, and/or optical dispensing.		
Program Type:	4	
Size Requirements:	1,200 SF Lab	
Lab Requirements:		
FINISHES:	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
(6) 4-person epoxy-top student tables with electric & natural gas		
(24) Student chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
		FEATURES¹:
		Fixed Items:
		16' of chalk/marker board 101100
		8' of tack board 101100
		30' of sink base cabinets w/2 sinks 123550
		30' of wall cabinets 123550
		Pencil sharpener support 062000
		Windows with integral blinds 085113
		(2) Paper towel dispensers 102813
		Projection screen, 6'x8' 115213
		Fume hood 115313
		Fire Suppression:
		Fire suppression system 211000
		Plumbing:
		Plumbing connections 221116/221119/224000
		12 Compressed air connections 221500
		Safety shower/eyewash 224000
		Master gas shut-off valve 226313
		HVAC:
		Supply/return air system Div. 23
		Independent temperature control 230923
		Fume hood exhaust Div. 23
		Electrical:
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		30 duplex receptacles 262726
		Double duplex receptacle adjacent to each data and video port 262726
		220V service 262726
		Communications:
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/273113
		1 data port near teacher workstation 271513
		8 data ports 271513
		Clock 275313
		Central sound system 275123
		Sound reinforcement system 275127
		Overhead projector 274119
		Electronic Safety and Security:
		Life safety devices per code 283111
		Miscellaneous:
		N/A

NOTES:

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

OPTOMETRIC OCCUPATIONS
Exam Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#	
Program Type:	4		
Size Requirements:	100 SF		
Requirements:			
<u>FINISHES:</u>	Spec. Ref #		
Flooring:			
Vinyl composition tile,	096500		
ET , sheet vinyl, or linoleum	096516		
Base:			
Resilient	096500		
Ceiling:			
Suspended acoustical	095113		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
2 stools			
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			
▪ Wall minimum STC 48			
▪ Ceiling minimum CAC 35, NRC 0.70			
▪ Uniform lighting with 80% visual comfort probability level			
		FEATURES¹:	
		<u>Fixed Items:</u>	
		4' of base cabinets	123550
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Single level switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data port	262726
		<u>Communications:</u>	
		1 data port	271513
		1 voice port and phone	271513/273113
		1 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.

**PATIENT CARE TECHNICIAN
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><u>PROGRAM DESCRIPTION:</u> Subject matter and laboratory experiences to provide students with the knowledge and skills in the care of patients of all ages under the direction and supervision of a registered nurse or licensed practical nurse and for advance nursing skills.</p> <p>Program Type: 4</p> <p>Size Requirements: 1,500 SF Lab</p> <p>Lab Requirements:</p> <p><u>FINISHES:</u></p> <p>Flooring: Vinyl composition tile, 096500 <i>ET</i>, sheet vinyl, or linoleum 096516</p> <p>Base: Resilient 096500</p> <p>Ceiling: Suspended acoustical 095113</p> <p>Walls: Painted concrete masonry units 042000/ 099100</p> <p><u>LOOSE FURNISHINGS:</u> (12) Two-person work tables (24) Student chairs/stools (1) Teacher station & chair Wastebasket Pencil sharpener</p>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES¹:</u></p> <p><u>Fixed Items:</u></p> <p>16' of chalk/marker board 101100 8' of tack board 101100 30' of sink base cabinets w/2 sinks 123550 30' of wall cabinets 123550 10' of reception counter 123550 Pencil sharpener support 062000 Windows with integral blinds 085113 (2) Paper towel dispensers 102813 Projection screen, 6'x8' 115213 100' of cubicle track and curtains 102123</p> <p><u>Fire Suppression:</u></p> <p>Fire suppression system 211000</p> <p><u>Plumbing:</u></p> <p>Plumbing connections 221116/221119/224000</p> <p><u>HVAC:</u></p> <p>Supply/return air system Div. 23 Independent temperature control 230923</p> <p><u>Electrical:</u></p> <p>Fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 20 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726</p> <p><u>Communications:</u></p> <p>1 video port, monitor, and brackets 271533/271543/274119 1 voice port and phone 271513/273113 1 data port near teacher workstation 271513 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127 Overhead projector 274119</p> <p><u>Electronic Safety and Security:</u></p> <p>Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

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

**PATIENT CARE TECHNICIAN
Training Restroom**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	120 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Rubber, linoleum, <i>ET</i> , or	096500	123550
sheet vinyl	096515	102813
Option: ceramic mosaic tile,	093000	102813
porcelain tile base, or	096723	102813
resinous flooring		102813
Base:		
Resilient	096500	102813
Option: ceramic mosaic tile base,	093000	102813
porcelain tile base, or	096723	102813
resinous flooring		102813
Ceiling:		
Suspended acoustical	095113	102813
Walls:		
Painted concrete masonry units	042000/ 099100	102813
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		3' vanity with sink
		Paper towel dispenser
		Soap dispenser
		36" and 42" grab bars
		16"x24" mirror
		Toilet paper holder
		Bathtub grab bars
		Bath curtain rod
		<u>Fire Suppression:</u>
		Fire suppression system
		<u>Plumbing:</u>
		Tank-type toilet
		Residential bathtub
		Plumbing connections
		<u>HVAC:</u>
		Exhaust air system
		Supplemental heat as required
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-4
		Single level switching
		2 duplex receptacles
		<u>Communications:</u>
		Central sound system
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		<u>Miscellaneous:</u>
		N/A

NOTES:

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

**PATIENT CARE TECHNICIAN
Laundry Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Program Type: 4		FEATURES¹:	Spec.
Size Requirements: 120 SF		Fixed Items:	Ref.#
		6' of base cabinets	123550
		6' of adjustable shelving	062000
Requirements:		Fire Suppression:	
		Fire suppression system	211000
FINISHES:		Plumbing:	
Flooring:		Plumbing connections	221116/221119/224000
Vinyl composition tile,		Washer/dryer connections	224000
ET, sheet vinyl, or linoleum			
		HVAC:	
Base:		Exhaust air system	Div. 23
Resilient		Supplemental heat as required	Div. 23
		Dryer vent system	Div. 23
Ceiling:		Electrical:	
Suspended acoustical		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
Walls:		Single level switching	262726
Painted concrete masonry units		4 duplex receptacles	262726
		Communications:	
		Clock	275313
		Central sound system	275123
LOOSE FURNISHINGS:		Electronic Safety and Security:	
Clothes washer		Life safety devices per code	283111
Electric clothes dryer			
Wastebasket		Miscellaneous:	
		N/A	
ENVIRONMENTAL CONSIDERATIONS:			
<ul style="list-style-type: none"> ▪ Wall minimum STC 45 ▪ Ceiling minimum CAC 35, NRC 0.70 ▪ Uniform lighting with 80% visual comfort probability level 			

NOTES:

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

**SURGICAL TECHNOLOGY
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	A combination of subject matter and experiences designed to prepare a person to serve as a general assistant on the surgical team in the operating unit.	<u>FEATURES¹:</u>	Spec.
Program Type:	4	<u>Fixed Items:</u>	<u>Ref.#</u>
Size Requirements:	1,000 SF Lab	16' of chalk/marker board 101100 8' of tack board 101100 20' of sink base cabinets w/1 sink 123550 20' of wall cabinets 123550 Pencil sharpener support 062000 Windows with integral blinds 085113 Paper towel dispenser 102813 Projection screen, 6'x8' 115213	
Lab Requirements:		<u>Fire Suppression:</u>	
		Fire suppression system 211000	
<u>FINISHES:</u>		<u>Plumbing:</u>	
Flooring:		Plumbing connections 221116/221119/224000	
Vinyl composition tile, ET , sheet vinyl, or linoleum	Spec. Ref # 096500 096516		
Base:		<u>HVAC:</u>	
Resilient	096500	Supply/return air system Div. 23 Independent temperature control 230923	
Ceiling:		<u>Electrical:</u>	
Suspended acoustical	095113	Fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 10 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726	
Walls:		<u>Communications:</u>	
Painted concrete masonry units	042000/ 099100	1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/273113 1 data port near teacher workstation 271513 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127	
<u>LOOSE FURNISHINGS:</u>		<u>Electronic Safety and Security:</u>	
(12) Two-person work tables (24) Student chairs/stools (1) Teacher station & chair Wastebasket Pencil sharpener		Life safety devices per code 283111	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**SURGICAL TECHNOLOGY
Instrument Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	700 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
ET , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		20' of base cabinets w/1 sink
		10' of wall cabinets
		Paper towel dispenser
		123550
		123550
		102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system
		Independent temperature control
		Div. 23 230923
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-4
		Single level switching
		6 duplex receptacles
		Double duplex receptacle adjacent to data port
		265100
		262726
		262726
		262726
		<u>Communications:</u>
		1 data port per room
		Clock
		Central sound system
		271513
		275313
		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.

**SURGICAL TECHNOLOGY
Scrub Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	500 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Sheet vinyl or linoleum	096500	
	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
▪ Uniform lighting with 80% visual comfort probability level		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		6' of base cabinets
		123550
		6' of wall cabinets
		123550
		Paper towel dispenser
		102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		2 scrub sinks
		224000
		Plumbing connections
		221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent temperature control
		230923
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		6 duplex receptacles
		262726
		<u>Communications:</u>
		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.

**DIAGNOSTIC PATHWAY
CT-P4-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
A Diagnostic Pathway targets three or more technician-level occupations within one or more of the following areas – rehabilitation services (including occupational and physical therapy); medical diagnostic and treatment services (including respiratory therapy, radiography, perfusion, nuclear medicine, surgical technology, cardiovascular, electrocardiogram, sonography); medical laboratory technologies (including hematology, cytology, blood bank, and histology); mental health services; pharmacy; and medical administrative services (including health information/medical records). This clustered Tech Prep program of study prepares students for continued education and training for employment as an allied health technician.		
Program Type:	4	
Size Requirements:	1,200 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile,	096500	
<i>ET</i> , sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Two-person work tables		
(24) Student chairs/stools		
(1) Teacher station & chair		
Wastebasket		
Pencil sharpener		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board	101100	
8' of tack board	101100	
20' of sink base cabinets w/1 sink	123550	
20' of wall cabinets	123550	
10' of reception counter	123550	
Pencil sharpener support	062000	
Windows with integral blinds	085113	
(1) Paper towel dispenser	102813	
Projection screen, 6'x8'	115213	
<u>Fire Suppression:</u>		
Fire suppression system	211000	
<u>Plumbing:</u>		
Plumbing connections	221116/221119/224000	
Safety shower/eyewash	224500	
<u>HVAC:</u>		
Supply/return air system	Div. 23	
Independent temperature control	230923	
<u>Electrical:</u>		
Fluorescent lighting	265100	
Illumination level: See Table 8600-4		
Multilevel switching	262726	
20 duplex receptacles (minimum)	262726	
Double duplex receptacle adjacent to each data and video port	262726	
<u>Communications:</u>		
1 video port and video display device	271533/271543/274119	
1 voice port and phone	271513/273113	
1 data port near teacher workstation	271513	
8 data ports	271513	
Clock	275313	
Central sound system	275123	
Sound reinforcement system	275127	
<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.

**DIAGNOSTIC PATHWAY
Exam Room(s)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>Program Type: 4</p> <p>Size Requirements: 200 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring: Vinyl composition tile, <i>ET</i>, sheet vinyl, or linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u> (1) stool per room (1) wastebasket per room</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 48 ▪ Ceiling minimum CAC 35, NRC 0.70 ▪ Uniform lighting with 80% visual comfort probability level 	<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><u>FEATURES¹:</u> <u>Fixed Items:</u> 4' of base cabinets w/1 sink per room 123550 Paper towel dispenser 102813</p> <p><u>Fire Suppression:</u> Fire suppression system 211000</p> <p><u>Plumbing:</u> Plumbing connections 221116/221119/224000</p> <p><u>HVAC:</u> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><u>Electrical:</u> Fluorescent lighting 265100 Illumination level: See Table 8600-4 Single level switching 262726 4 duplex receptacles per room 262726 Double duplex receptacle adjacent to each data port 262726</p> <p><u>Communications:</u> 1 data port per room 271513 1 clock per room 275313 Central sound system 275123</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

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

DIAGNOSTIC PATHWAY
Exam Room(s)

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PERFORMING ARTS
ARTS AND COMMUNICATIONS - PERFORMING ARTS PATHWAY
Dance • Music • Theater
CT-P4-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	<u>Spec. Ref #</u>	<u>FEATURES¹:</u>	<u>Spec. Ref.#</u>
Integrated learning experience in performing arts consisting of dance, theater, and music.		<u>Fixed Items:</u>	
		8' of tack board	101100
		16' length of 60" high mirrors	088300
		16' of ballet bars	116615
Program Type: 4		<u>Fire Suppression:</u>	
Size Requirements:		Fire suppression system	211000
1,500 SF Dance/Music Room		<u>Plumbing:</u>	
		Drinking water cooler	224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Track lighting	265100
		Multilevel switching	262726
		10 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		1 video port	271533/271543
		1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275125
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	
<u>FINISHES:</u>	<u>Spec. Ref #</u>		
<u>Flooring:</u>			
Hardwood	096000		
<u>Base:</u>			
Resilient	096500		
<u>Ceiling:</u>			
Painted, exposed structure	099100		
<u>Walls:</u>			
Painted concrete masonry units	042000/ 099100		
Acoustical wall treatment	098000		
<u>LOOSE FURNISHINGS:</u>			
(25) Student stools/chairs			

NOTES:

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

PERFORMING ARTS
ARTS AND COMMUNICATIONS - PERFORMING ARTS PATHWAY
Practice Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	150 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile, ET ,	096500	
sheet vinyl, or linoleum	096516	
Optional: carpet	096816	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Absorptive 25%, reflective 25%, diffusive		
50%		
Walls:		
Painted concrete masonry units	042000/ 099100	
Acoustical wall treatment		
(varies with geometry of room)	098000	
<u>LOOSE FURNISHINGS:</u>		
L1 Music Stands		
L2 Music chairs		
		<u>FEATURES</u> ¹ :
		<u>Fixed Items:</u>
		N/A
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		<u>Communications:</u>
		1 voice port and phone 271513/273113
		Central sound system 275123
		Clock 275313
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		Interior window 081113/088000

NOTES:

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

MEDIA ARTS
ARTS AND COMMUNICATIONS - MEDIA ARTS PATHWAY
Digital TV/Video • Journalism
CT-P4-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><u>PROGRAM DESCRIPTION:</u> Integrated learning experience in media arts consisting of digital TV/video, journalism, and photography.</p> <p>Program Type: 4</p> <p>Size Requirements: 1,500 SF Lab</p> <p>Studio Requirements:</p> <p><u>FINISHES:</u></p> <p>Flooring: Sheet vinyl, VCT, linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Pipe grid – 14' to bottom</p> <p>Walls: Painted concrete masonry units Acoustical wall treatment</p>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES¹:</u></p> <p><u>Fixed Items:</u> Overhead metal pipe grid (48" o.c., both ways) to support studio lights & accessories 055000 Cyclorama curtain & track, min. of 2 walls 116143</p> <p><u>Fire Suppression:</u> Fire suppression system 211000</p> <p><u>Plumbing:</u> N/A</p> <p><u>HVAC:</u> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><u>Electrical:</u> Fluorescent lighting 265100 Track lighting 265100 Multilevel switching 262726 20 duplex receptacles 262726 Double duplex receptacle adjacent to each data and video port 262726 Emergency lighting 265100</p> <p><u>Communications:</u> 1 video port 271533/271543 1 voice port and phone 271513/273113 2 data ports 271513 Clock 275313 Cable management system Special A/V Cabling Conveyance Special A/V Cabling</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> N/A</p>
---	---

NOTES:

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

MEDIA ARTS**ARTS AND COMMUNICATIONS – MEDIA ARTS PATHWAY****MEDIA ARTS CONTROL ROOM / EDIT**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	4	
Size Requirements:	450 SF	
<u>FINISHES</u> ¹ :	Spec. Ref.#	
Flooring:		
Vinyl composition tile, linoleum, <i>ET</i> , or sheet vinyl	096516 096500	
Base:		
Resilient base	096500	
Ceiling:		
Suspended, acoustical (9'-0" high)	095113	
Walls:		
Painted gypsum wallboard	092116/099100	
Acoustical wall treatment	098000	
<u>LOOSE FURNISHINGS</u> :		
(6) Chairs		
Wastebasket		
		<u>FEATURES:</u>
		<u>Fixed Items:</u>
		10'-20' of equipment/work surface
		6'-8' of tack board
		Window
		6'-8' marker board
		8' of base cabinet
		<u>Fire Suppression:</u>
		Fire suppression system
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system
		Independent temperature control
		<u>Electrical:</u>
		Fluorescent lighting: overhead
		Illumination level: See Table 8600-4
		Dimmable incandescent task
		lighting on work surface
		Single level switching
		8 duplex receptacles
		Provisions for hard-wired equipment
		260519/260533
		Studio dimming system
		control panel
		Telecommunications Grounding
		270526/260526
		<u>Communications:</u>
		1 voice port and phone
		2 video port
		6 data ports
		Clock
		Central sound system
		Specialized A/V equipment
		<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.

MEDIA ARTS
ARTS AND COMMUNICATIONS - MEDIA ARTS PATHWAY
Vestibule

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Program Type: 4			FEATURES¹:	Spec.
Size Requirements: 84 SF			Fixed Items:	Ref.#
Requirements:			Doors to receive light-tight perimeter seal	
			4' of tack board	101100
FINISHES:		Spec.	Fire Suppression:	
Flooring:		Ref #	Fire suppression system	211000
Vinyl composition tile, ET ,		096500	Plumbing:	
Sheet vinyl, or linoleum		096516	N/A	
Base:			HVAC:	
Resilient		096500	Supply/return air system	Div. 23
Ceiling:			Electrical:	
Suspended acoustical (9'-0" high)		095113	Fluorescent lighting	265100
Walls:			Illumination level: See Table 8600-4	
Painted concrete masonry units		042000/ 099100	Single level switching	262726
Acoustical wall treatment		098000	1 duplex receptacle	262726
			Warning light to control room	265100
			Communications:	
			Central sound system	275123
			Electronic Safety and Security:	
			Life safety devices per code	283111
			Miscellaneous:	
			N/A	
ENVIRONMENTAL CONSIDERATIONS:				
<ul style="list-style-type: none"> ▪ Wall minimum STC 50 ▪ Ceiling minimum CAC 35, NRC 0.70 				

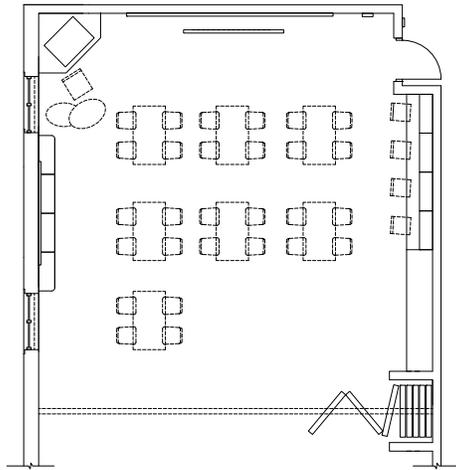
NOTES:

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

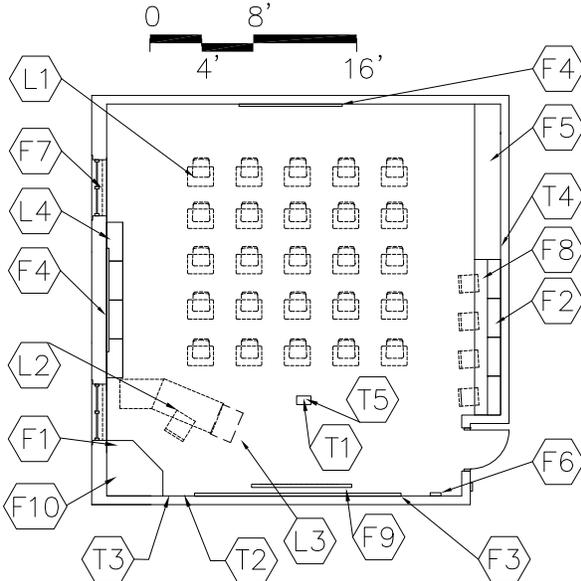
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RELATED CLASSROOM CT-P4-2

CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

CAPACITY:
SIZE:

25 students
900 SF

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

SPATIAL RELATIONSHIPS:

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

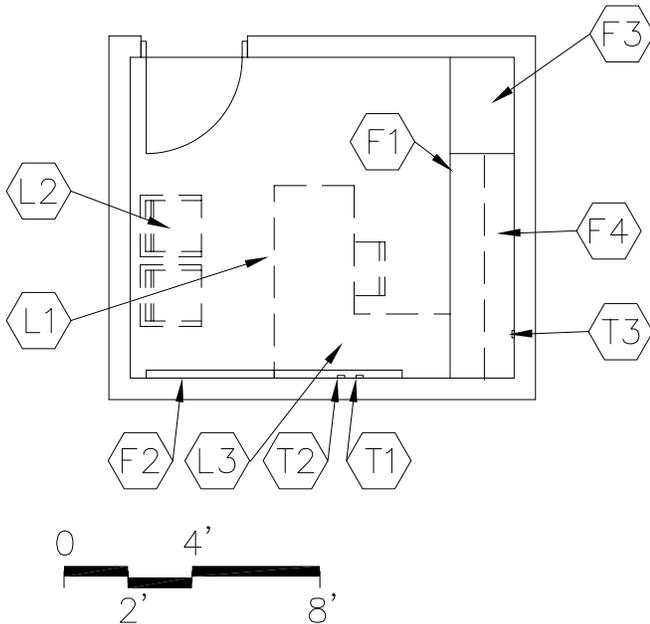
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM
CT-P4-2**
CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 3' of tall wardrobe with file drawers	123550
Optional: Vinyl composition tile, linoleum, ET , or sheet vinyl	096516 096500	F2 Computer work surface (could be loose)	123550
<u>Base:</u>		F3 10'-16' of chalk/marker board	101100
Resilient base	096500	F4 10'-16' of tack board	101100
<u>Ceiling:</u>		F5 8'-12' of base & wall cabinets	123550
Suspended, acoustical	095113	F6 Pencil sharpener support	062000
<u>Walls:</u>		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 About 10' of wall cabinets	123550
		F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks and chairs		Fire suppression system	211000
L2 Teacher desk or workstation/computer support and chair		<u>Plumbing:</u>	
L3 File cabinet		N/A	
L4 9' of low bookcases (fixed or mobile)		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
Pencil sharpener		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		M1 Operable partitions between classrooms are optional	102226

NOTES:

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



PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P4-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or carpet tile</i>	096816 096813	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	<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 Desk and chair		<u>HVAC:</u>	
L2 Visitor chairs		Supply/return air system	Div. 23
L3 Computer desk return Wastebasket		Independent temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

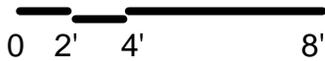
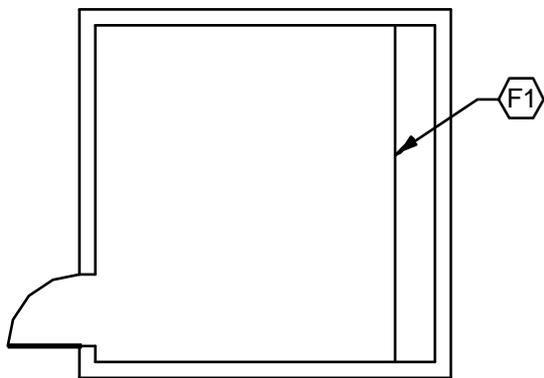
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

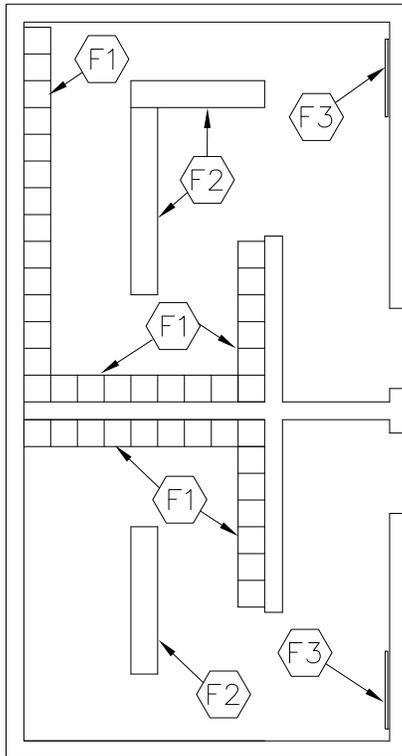
NOTES:

**STORAGE AREA
CT-P4-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



50 total lockers

CAPACITY:
SIZE:N/A
450 SF

PROGRAM ACTIVITIES:

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
Wall minimum STC 40
Ceiling minimum CAC 35, NRC **0.70**

NOTES:

1. Large and small changing areas are interchangeable for either males or females. Determination based on male/female ratio within each program.

**CHANGING ROOM
CT-P4-5**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u> <i>Polished concrete finishing, or colored concrete finishing</i> Optional: Vinyl composition tile, linoleum, or rubber	033510 033519 096500 096516	<u>Fixed Items¹:</u> F1 Student lockers F2 Locker benches F3 24" x 60" mirror	105113 062000 102813
<u>Base:</u> Resilient base	096500	<u>Fire Suppression:</u> Fire suppression system	211000
<u>Ceiling:</u> Suspended, acoustical with high impact hold down clips	095113	<u>Plumbing:</u> N/A	
<u>Walls:</u> Painted concrete masonry units 042000 / 099100		<u>HVAC:</u> Supply/Return air system Exhaust air system Supplemental heat as required Individual temperature control	Div. 23 Div. 23 Div. 23 230923
<u>LOOSE FURNISHINGS</u> Wastebaskets		<u>Electrical:</u> Single level switching Fluorescent lighting Illumination level: See Table 8600-4 2 Duplex receptacles Means of egress lighting per code	262726 265100 262726 265100
		<u>Communications:</u> Clock Central Sound System	275313 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.

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Program Type 5

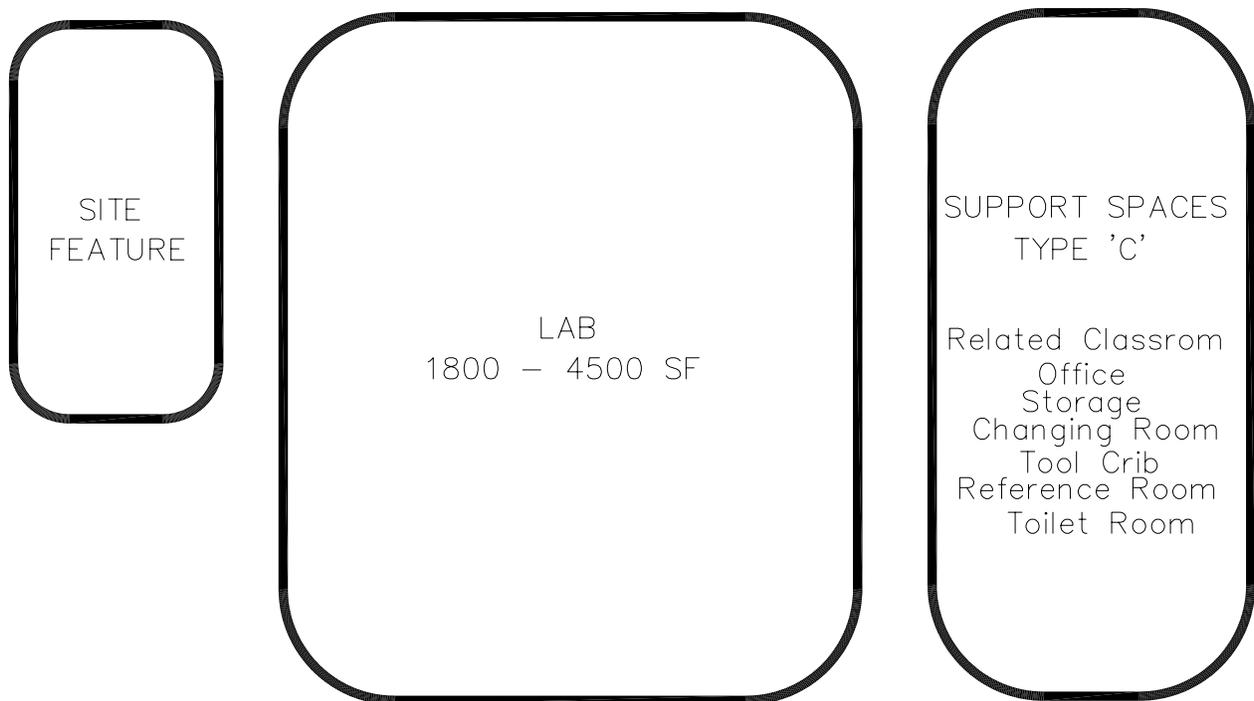
Description: Medium to large sized lab space with enhanced support space.

Lab space to be “high-bay” (**18'** min. clearance) with exposed building structure.

Lab to utilize standard construction with the following exception – lab floor slab to be 8” thick.

Support space to be finished with sealed concrete or vinyl composition tile, paint, and suspended acoustical ceiling. Lab may have possible site feature.

No air-conditioning of any spaces within Program Type 5.

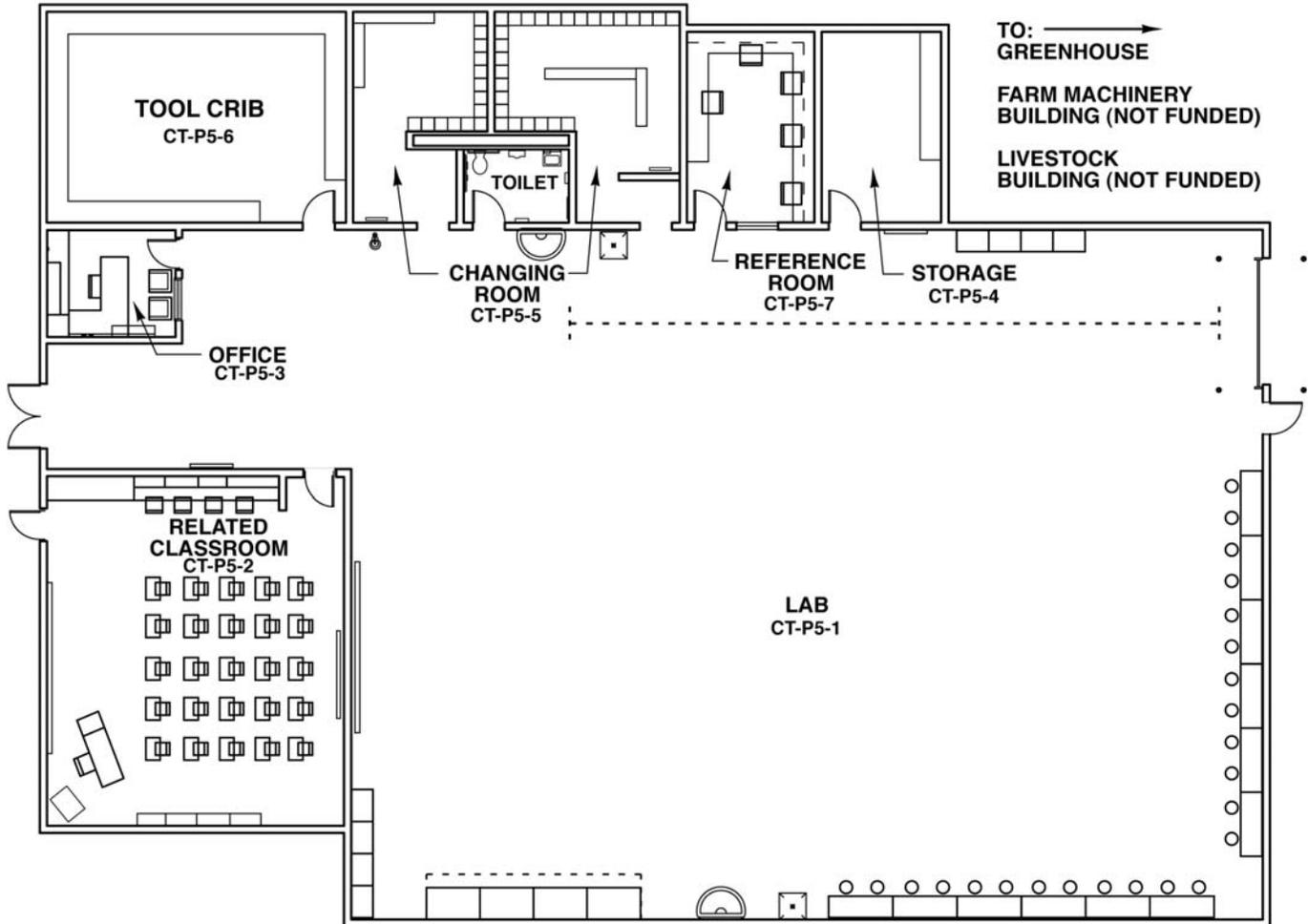
**NOTES:**

This is an example of how the Program Type 5 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 5 space plates:

CT-P5-1	Lab
CT-P5-2	Related Classroom
CT-P5-3	Office
CT-P5-4	Storage
CT-P5-5	Changing Room
CT-P5-6	Tool Crib
CT-P5-7	Reference Room
CT-P5-8	Toilet Room

**PROGRAM TYPE 5
EXAMPLE**

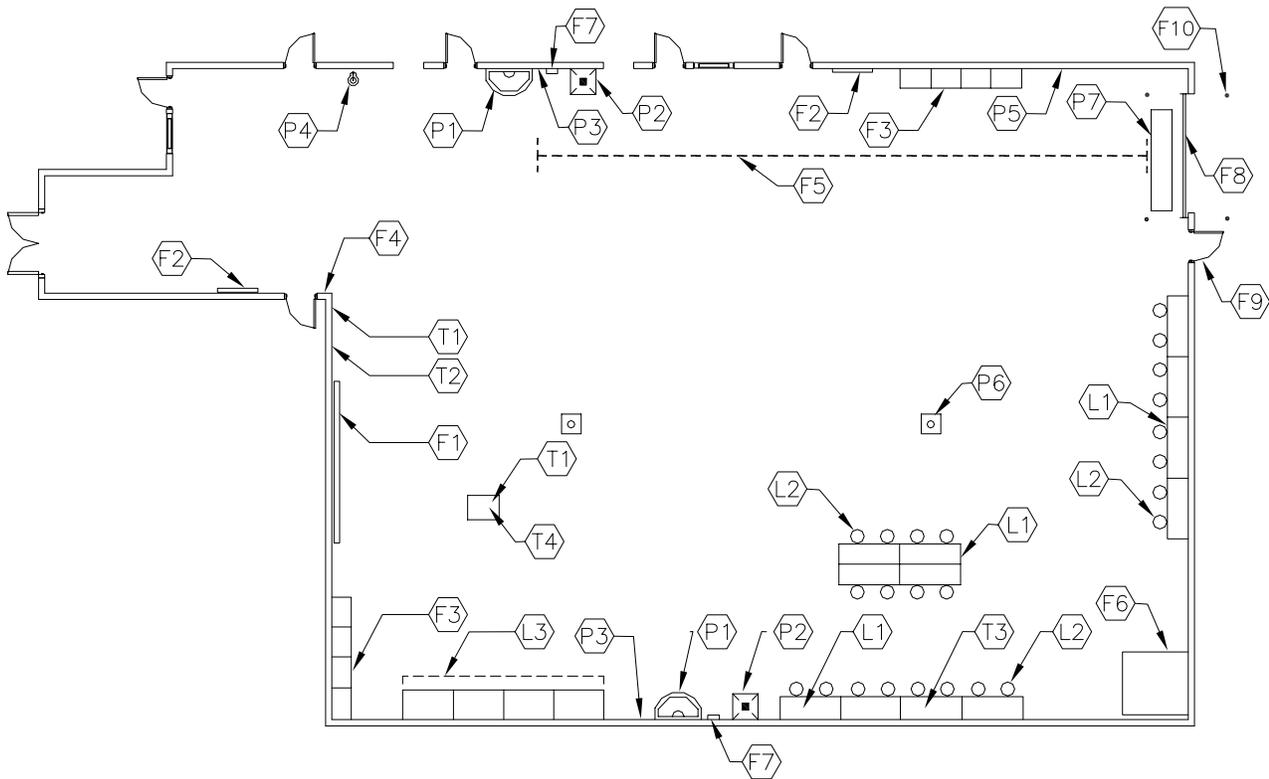


Program Type 5

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY:	24 Students
SIZE:	1,800 – 4,500 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P5-2 thru CT-P5-8

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P5-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

ACQUISITION AND LOGISTICS

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P5-1

<u>PROGRAM DESCRIPTION:</u>		<u>FEATURES¹:</u>	Spec.
Organized subject matter and learning experiences related to the physical distribution of products including freight transportation and public warehousing. Also included are tasks performed by employees and management in places of business that are engaged primarily in the selling of goods to retailers, and to industrial, commercial, institutional, and professional users, or bringing buyers and sellers together.		<u>Fixed Items:</u>	<u>Ref.#</u>
Program Type:	5	16' of chalk/marker board	101100
Size Requirements:	3,000 SF Lab	8' of tack board	101100
Lab Requirements:		24' of tall storage cabinets	123550
		Pencil sharpener support	062000
		(3) Paper towel dispensers	102813
		40' of high-bay pallet storage system/shelving	105613
		12'x14' motorized overhead sectional door to exterior	083613
		3'x7' hollow metal service door to exterior	081113
		Steel bollards at overhead door, both sides	055000
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		1 washfountain (minimum)	224000
		2 utility sinks (minimum)	224000
		2 hose bibbs (minimum)	224000
		Safety shower/eyewash	224000
		2 floor drains	224000
		1 trench drain	224000
		Plumbing connections	221116/221119/224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		High intensity lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		30 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data and video port	262726
		(2) 220 volt receptacles	262726
		<u>Communications:</u>	
		1 video port and video display device	271533/271543/274119
		1 voice port and phone	271513/273113
		4 data ports	271523
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>FINISHES:</u>	<u>Spec. Ref #</u>		
Flooring:			
<i>Cure and seal</i> concrete	033000		
Ceiling:			
Painted, exposed structure	099100		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
(6) Workbenches with heavy-duty metal tops			
(24) Stools or chairs			
Wastebasket			
Pencil sharpener			
<u>Miscellaneous:</u>			
N/A			

NOTES:

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

**AGRIBUSINESS AND PRODUCTION SYSTEMS
CT-P5-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		Spec.
Programs provide instruction on the principles and practices of food production allowing students to develop careers in agriculture engineering, crop production and consultation, agricultural journalism, livestock production and consultation, and agricultural supply and sales. The learning activities focus on resource analysis, accounting, financing, resource acquisition, performance records, marketing, crop and animal production, agricultural engineering, and leadership.		Ref.#
Program Type:	5	
Size Requirements:	4,500 SF Lab	
Lab Requirements:		
FINISHES:	Spec.	
	Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
L1 (12) Workbenches with heavy-duty metal tops		
L2 (24) Stools or chairs		
L3 (4) Welding tables		
Wastebasket		
Pencil sharpener		
SITE FEATURES:		
Greenhouse - 1000 SF	133413	
Concrete flooring (with drains)		
Minimum of one 8'x10' overhead door		
Provide electrical, plumbing, and heating/ventilation systems as per greenhouse manufacturer's recommendations		
Minimum of 2 hose bibs		
Fire suppression system if required		
Plan for the following if required by school curriculum requirements:		
Farm machinery building		
Livestock building		
FEATURES¹:		
Fixed Items:		
F1 16' of chalk/marker board		101100
F2 8' of tack board		101100
F3 24' of tall storage cabinets		123550
F4 Pencil sharpener support		062000
F5 Overhead chain hoist		412223
F7 (4) Paper towel dispensers		102813
F8 12'x14' motorized overhead sectional door to exterior		083613
F9 3'x7' hollow metal service door to exterior		081113
F10 Steel bollards at overhead door, both sides		055000
Fire Suppression:		
Fire suppression system		211000
Plumbing:		
P1 2 washfountains (minimum)		224000
P2 2 utility sinks (minimum)		224000
P3 2 hose bibbs (minimum)		224000
P4 Safety shower/eyewash		224500
P5 6 compressed air connections		221513
P6 2 floor drains		224000
P7 1 trench drain		224000
Plumbing connections		221116/221119/224000
HVAC:		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood exhaust		Div. 23
Electrical:		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(6) 220 volt receptacles		262726
Communications:		
T1 1 video port and video display device		271533/271543/274119
T2 1 voice port and phone		271513/273113
T3 4 data ports		271513
Clock		275313
Central sound system		275123
Electronic Safety and Security:		
Life safety devices per code		283111
Miscellaneous:	N/A	

NOTES:

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

**APPLIANCE REPAIR
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	<u>FEATURES¹:</u>	Spec. Ref.#
Classroom and shop learning experiences concerned with the theory of electrical circuitry, simple gearing, linkages, and lubrication in the operation, maintenance, and repair of components, including relays, time switches, pumps, and agitators, used in appliances such as washers, dryers, vacuum cleaners, toasters, water heaters, and stoves. Related training is provided in the use of tools, test equipment, service manuals, and in making cash estimates for repairs.	<u>Fixed Items:</u>	
	16' of chalk/marker board	101100
	8' of tack board	101100
	24' of tall storage cabinets	123550
	Pencil sharpener support	062000
	(4) Paper towel dispensers	102813
	12'x14' motorized overhead sectional door to exterior	083613
	3'x7' hollow metal service door to exterior	081113
	Steel bollards at overhead door, both sides	055000
	<u>Fire Suppression:</u>	
	Fire suppression system	211000
	<u>Plumbing:</u>	
	2 washfountains (minimum)	224000
	2 utility sinks (minimum)	224000
	2 hose bibbs (minimum)	224000
	Safety shower/eyewash	224000
	2 floor drains	224000
	1 trench drain	224000
	6 compressed air connections	221513
	Plumbing connections	221116/221119/224000
	<u>HVAC:</u>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<u>Electrical:</u>	
	High intensity lighting or fluorescent lighting	265100
	Illumination level: See Table 8600-4	
	Multilevel switching	262726
	30 duplex receptacles (minimum)	262726
	Double duplex receptacle adjacent to each data and video port	262726
	(2) 220 volt receptacles	262726
	<u>Communications:</u>	
	1 video port and video display device	271533/271543/274119
	1 voice port and phone	271513/273113
	4 data ports	271513
	Clock	275313
	Central sound system	275123
	<u>Electronic Safety and Security:</u>	
	Life safety devices per code	283111
PROGRAM DESCRIPTION:		
Program Type: 5		
Size Requirements: 1,800 SF Lab		
Lab Requirements:		
	Spec. Ref #	
<u>FINISHES:</u>		
Flooring:		
Cure and seal concrete		033000
Ceiling:		
Painted, exposed structure		099100
Walls:		
Painted concrete masonry units		042000/ 099100
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

BRICK, BLOCK, and CEMENT MASONRY

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P5-1

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Specialized classroom and laboratory experiences concerned with the cutting, chipping, and fixing in position of brick and concrete block. Included is instruction in the care and use of tools, equipment, and materials for the preparation and performance of masonry construction; the selection and preparation of materials used in the laying of brick and block; and training in blueprint reading, record keeping, estimating, and safety.		
Program Type:	5	
Size Requirements:	3,500 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
<i>Cure and seal</i> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
4 compressed air connections		221500
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(2) 220 volt receptacles		262726
<i>Room safety push-button</i>		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111

NOTES:

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

**BUILDING AND PROPERTY MAINTENANCE
BUILDING TECHNOLOGY
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		FEATURES¹:		Spec.
		Fixed Items:		Ref.#
Organized learning experiences in the classroom and laboratory concerned with the skills necessary to keep the physical structure of an office building, factory, apartment building, house, or similar structure in good repair. Included is instruction in carpentry; roofing application and repair; ceramic tile and masonry application and repair; electrical installation and repair; painting and wallpapering; and plumbing.		16' of chalk/marker board		101100
		8' of tack board		101100
		24' of tall storage cabinets		123550
		Pencil sharpener support		062000
		(3) Paper towel dispensers		102813
		12'x14' motorized overhead sectional door to exterior		083613
		3'x7' hollow metal service door to exterior		081113
		Steel bollards at overhead door, both sides		055000
Program Type:	5	Fire Suppression:		
Size Requirements:	3,000 SF Lab	Fire suppression system		211000
Lab Requirements:		Plumbing:		
		1 washfountain (minimum)		224000
		2 utility sinks (minimum)		224000
		2 hose bibbs (minimum)		224000
		Safety shower/eyewash		224000
		2 floor drains		224000
		1 trench drain		224000
		6 compressed air connections		221500
		2 natural gas connections		226313
		Master gas shut-off valve		226313
		Plumbing connections	221116/221119/224000	
		HVAC:		
		Supply/return air system		Div. 23
		Independent temperature control		230923
		Welding hood and exhaust		Div. 23
		Electrical:		
		High intensity lighting or fluorescent lighting		265100
		illumination level: See Table 8600-4		
		Multilevel switching		262726
		30 duplex receptacles (minimum)		262726
		Double duplex receptacle adjacent to each data and video port		262726
		(2) 220 volt receptacles		262726
		(2) 277 volt receptacles		262726
		(2) 408 volt receptacles		262726
		Room safety push-button		262726
		Communications:		
		1 video port and video display device		271533/271543/274119
		1 voice port and phone		271513/273113
		4 data ports		271513
		Clock		275313
		Central sound system		275123
FINISHES:				
Flooring:				
	Cure and seal concrete		033000	
Ceiling:				
	Painted, exposed structure		099100	
Walls:				
	Painted concrete masonry units	042000/ 099100		
LOOSE FURNISHINGS:				
	(12) Workbenches with heavy-duty metal tops			
	(24) Stools or chairs			
	(2) Welding tables			
	Wastebasket			
	Pencil sharpener			
Electronic Safety and Security:				
	Life safety devices per code		283111	
Miscellaneous:				
	N/A			

NOTES:

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

**CUSTODIAL SERVICES
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><u>PROGRAM DESCRIPTION:</u> Organized learning experiences in the classroom and laboratory concerned with the skills necessary to provide all phases of care and cleaning of buildings; including fixtures, furnishings, and building interiors. Included is instruction in the care and maintenance of such materials as linoleum, plastic, terrazzo, tile, and wood floors; rugs and carpet; plastic, wood panel, paint, and synthetic wall coatings; and the use and care of hand and power tools. Additional emphasis is placed on (1) characteristics of various cleaning agents and protective coatings – including their reactions on surfaces – and procedures for applying them; (2) sanitation and disinfectants; (3) work scheduling; and (4) purchase of custodial supplies.</p> <p>Program Type: 5</p> <p>Size Requirements: 2,500 SF Lab</p> <p>Lab Requirements:</p>		<p>Spec. Ref.#</p>
<p><u>FINISHES:</u> Flooring: Cure and seal concrete</p>	<p>Spec. Ref #</p> <p>033000</p>	<p><u>FEATURES¹:</u> <u>Fixed Items:</u> 16' of chalk/marker board 101100 8' of tack board 101100 24' of tall storage cabinets 123550 Pencil sharpener support 062000 (3) Paper towel dispensers 102813 12'x14' motorized overhead sectional door to exterior 083613 3'x7' hollow metal service door to exterior 081113 Steel bollards at overhead door, both sides 055000 <u>Fire Suppression:</u> Fire suppression system 211000 <u>Plumbing:</u> 1 washfountain (minimum) 224000 2 utility sinks (minimum) 224000 2 hose bibbs (minimum) 224000 Safety shower/eyewash 224000 2 floor drains 224000 1 trench drain 224000 Plumbing connections 221116/221119/224000</p>
<p>Ceiling: Painted, exposed structure</p>	<p>099100</p>	<p><u>HVAC:</u> Supply/return air system Div. 23 Independent temperature control 230923</p>
<p>Walls: Painted concrete masonry units</p>	<p>042000/ 099100</p>	<p><u>Electrical:</u> High intensity lighting or fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726 (6) 220 volt receptacles 262726</p>
<p><u>LOOSE FURNISHINGS:</u> (12) Workbenches with heavy-duty metal tops (24) Stools or chairs Wastebasket Pencil sharpener</p>		<p><u>Communications:</u> 1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/273113 4 data ports 271513 Clock 275313 Central sound system 275123</p>
		<p><u>Electronic Safety and Security:</u> Life safety devices per code 283111</p>
		<p><u>Miscellaneous:</u> N/A</p>

NOTES:

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

ELECTRICAL TRADES
CT-P5-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Specialized classroom and laboratory experiences concerned with the layout, assembly, installation, testing, and maintenance of electrical fixtures and apparatus, and the wiring used in electrical systems. Instruction is provided in worksite safety; electrical principles; the application of codes and standards; residential, commercial, and industrial installations including motors and specialized systems; and the reading, interpretation, and application of blueprints and wiring diagrams. A one year program option is available with an exit in residential wiring, or with an exit in commercial/industrial wiring upon the recommendation of the local advisory committee and the approval of the local board of education.		
Program Type:	5	
Size Requirements:	3,000 SF Lab	
Lab Requirements:		
	Spec. Ref #	
<u>FINISHES:</u>		
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty non-conductive tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Electronic Safety and Security:</u>		
Life safety devices per code	283111	
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
208v 3-phase service		262726
480v 3-phase service		262726
100 amp 208v 3-phase bus duct		262726
100 amp 480v 3-phase bus duct		262726
Fiber optic service		262726
Cat 5 service		262726
Room safety push-button		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123

NOTES:

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

ENVIRONMENTAL CONTROLS TECHNOLOGIES

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P5-1

PROGRAM DESCRIPTION:		FEATURES¹:		Spec.
		<u>Fixed Items:</u>		<u>Ref.#</u>
Classroom and laboratory experiences that enable the student to become proficient in the installation, repair, and maintenance of residential, commercial, and industrial air-conditioning systems. Included is instruction related to electrical principles; electric motors; controls; refrigeration, heating and air-conditioning principles and practices; and piping systems.		16' of chalk/marker board		101100
		8' of tack board		101100
		24' of tall storage cabinets		123550
		Pencil sharpener support		062000
		(3) Paper towel dispensers		102813
		12'x14' motorized overhead sectional door to exterior		083613
		3'x7' hollow metal service door to exterior		081113
		Steel bollards at overhead door, both sides		055000
		<u>Fire Suppression:</u>		
		Fire suppression system		211000
		<u>Plumbing:</u>		
		1 washfountain (minimum)		224000
		2 utility sinks (minimum)		224000
		2 hose bibbs (minimum)		224000
		Safety shower/eyewash		224000
		2 floor drains		224000
		1 trench drain		224000
		6 natural gas connections		226313
		Master gas shut-off valve		226313
		Plumbing connections		221116/221119/224000
		<u>HVAC:</u>		
		Supply/return air system		Div. 23
		Independent temperature control		230923
		Welding hood and exhaust		Div. 23
		<u>Electrical:</u>		
		High intensity lighting or fluorescent lighting		265100
		llumination level: See Table 8600-4		
		Multilevel switching		262726
		30 duplex receptacles (minimum)		262726
		Double duplex receptacle adjacent to each data and video port		262726
		(2) 220 volt receptacles		262726
		(2) 227 volt receptacles		262726
		(2) 408 volt receptacles		262726
		<u>Communications:</u>		
		1 video port and video display device		271533/271543/274119
		1 voice port and phone		271513/273113
		4 data ports		271513
		Clock		275313
		Central sound system		275123
Program Type: 5				
Size Requirements: 3,000 SF Lab				
Lab Requirements:				
		Spec.		
		<u>Ref #</u>		
<u>FINISHES:</u>				
Flooring:				
Cure and seal concrete		033000		
Ceiling:				
Painted, exposed structure		099100		
Walls:				
Painted concrete masonry units		042000/ 099100		
<u>LOOSE FURNISHINGS:</u>				
(8) Workbenches with heavy-duty metal tops				
(24) Stools or chairs				
(4) Welding tables				
Wastebasket				
Pencil sharpener				
<u>Electronic Safety and Security:</u>				
Life safety devices per code		283111		
<u>Miscellaneous:</u>				
N/A				

NOTES:

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

HEAVY EQUIPMENT (Construction)
CT-P5-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Classroom and practical work experiences concerned with the operation, maintenance, and repair of heavy-duty construction equipment, such as bulldozers, backhoes, cranes, graders, tractors, concrete mixers, crawler-mounted shovels, trailer-mounted compressors, and the gasoline or diesel engines powering the equipment.		
Program Type:	5	
Size Requirements:	4,500 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(8) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
6 compressed air connections		221500
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(2) 220 volt receptacles		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111

NOTES:

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

INTEGRATED SYSTEMS TECHNOLOGY

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P5-1

PROGRAM DESCRIPTION:		FEATURES¹:	Spec. Ref.#
Organized learning experiences in the classroom and shop concerned with the maintenance of machinery and mechanical equipment of an industrial plant or factory. Inspection, disassembly, repair, and reassembly of machines and equipment is included in the training experience. Skill training in the use of tools in several trades is also included.		Fixed Items:	
		16' of chalk/marker board	101100
		8' of tack board	101100
		24' of tall storage cabinets	123550
		Pencil sharpener support	062000
		(4) Paper towel dispensers	102813
		12'x14' motorized overhead sectional door to exterior	083613
		3'x7' hollow metal service door to exterior	081113
		Steel bollards at overhead door, both sides	055000
		Fire Suppression:	
		Fire suppression system	211000
		Plumbing:	
		2 washfountains (minimum)	224000
		2 utility sinks (minimum)	224000
		2 hose bibbs (minimum)	224000
		Safety shower/eyewash	224000
		2 floor drains	224000
		1 trench drain	224000
		6 compressed air connections	221500
		Plumbing connections	221116/221119/224000
		HVAC:	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		Welding hood and exhaust	Div. 23
		Electrical:	
		High intensity lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		30 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data and video port	262726
		(4) 220 volt receptacles	262726
		208v 3-phase service	262726
		480v 3-phase service	262726
		Room safety push-button	262726
		Communications:	
		1 video port and video display device	271533/271543/274119
		1 voice port and phone	271513/273113
		4 data ports	271513
		Clock	275313
		Central sound system	275123
		Electronic Safety and Security:	
		Life safety devices per code	283111
PROGRAM DESCRIPTION:			
Program Type:	5		
Size Requirements:	3,500 SF Lab		
Lab Requirements:			
FINISHES:		Spec. Ref #	
Flooring:			
Cure and seal concrete		033000	
Ceiling:			
Painted, exposed structure		099100	
Walls:			
Painted concrete masonry units		042000/ 099100	
LOOSE FURNISHINGS:			
(12) Workbenches with heavy-duty metal tops			
(24) Stools or chairs			
(4) Welding tables			
Wastebasket			
Pencil sharpener			
Miscellaneous:			
N/A			

NOTES:

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

INTERIOR DESIGN AND APPLICATION
CT-P5-1
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Specialized classroom and laboratory experiences concerned with the preparation and finishing of exterior and interior surfaces by the application of protective or decorative coating materials, such as lacquer, paint, and wallpapers. Included is instruction in the scraping, burning, or sanding surfaces; making, mixing, and matching paints and colors; applying coatings with brush, roller, or spray-gun; and by cutting, pasting, and hanging wallpaper. Emphasis is on the selection, use, and storage of materials in compliance with all state and federal environmental regulations.		
Program Type:	5	
Size Requirements:	3,000 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. <u>Ref #</u>	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111

NOTES:

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

**MANUFACTURING OPERATIONS
MANUFACTURING DESIGN AND DEVELOPMENT
MANUFACTURING OCCUPATIONS**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P5-1

PROGRAM DESCRIPTION:	Spec. Ref.#
<u>Mfg Operations:</u> Utilizing business and industry, math, English, science and technology standards, introduces the concepts of Manufacturing Operations; management, process and product quality assurance, logistics, maintenance, manufacturing costs, marketing and safety and health.	
<u>Mfg Design & Development:</u> Specialized learning experiences that include theory and laboratory work as each relates to the planning, preparation, and interpretation of mechanical, and/or architectural drawings and sketches using various CAD software.	
<u>Mfg Occupations:</u> Specialized learning experiences to prepare a semi-skilled worker to run only one machine; e.g., lathe, grinder, drill press, milling machine, or shaper. Could include metal fabrication and assembly. Instruction could include layout; sequencing of operating fabricating machines; positioning, alignment, fitting, and welding.	
Program Type: 5	
Size Requirements: 4,500 SF Lab	
Lab Requirements:	
FINISHES:	Spec. Ref #
Flooring:	
Cure and seal concrete	033000
Ceiling:	
Painted, exposed structure	099100
Walls:	
Painted concrete masonry units	042000/ 099100
<u>LOOSE FURNISHINGS:</u>	
(12) Workbenches with heavy-duty metal tops	
(24) Stools or chairs	
Wastebasket	
Pencil sharpener	
<u>Electronic Safety and Security:</u>	
Life safety devices per code	283111
<u>Miscellaneous:</u> N/A	
	FEATURES¹:
	Fixed Items:
16' of chalk/marker board	101100
8' of tack board	101100
24' of tall storage cabinets	123550
Pencil sharpener support	062000
(3) Paper towel dispensers	102813
12'x14' motorized overhead sectional door to exterior	083613
3'x7' hollow metal service door to exterior	081113
Steel bollards at overhead door, both sides	055000
	Fire Suppression:
Fire suppression system	211000
	Plumbing:
1 washfountain (minimum)	224000
2 utility sinks (minimum)	224000
2 hose bibbs (minimum)	224000
Safety shower/eyewash	224000
2 floor drains	224000
1 trench drain	224000
6 compressed air connections	221500
Plumbing connections	221116/221119/224000
	HVAC:
Supply/return air system	Div. 23
Independent temperature control	230923
	Electrical:
High intensity lighting or fluorescent lighting	265100
Illumination level: See Table 8600-4	
Multilevel switching	262726
30 duplex receptacles (minimum)	262726
Double duplex receptacle adjacent to each data and video port	262726
(4) 220 volt receptacles	262726
208v 3-phase service	262726
480v 3-phase service	262726
Room safety push-button	262726
	Communications:
1 video port and video display device	271533/271543/274119
1 voice port and phone	271513/273113
4 data ports	271513
Clock	275313
Central sound system	275123

NOTES:

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

**NATURAL RESOURCE MANAGEMENT
CT-P5-1**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		Spec.
PROGRAM DESCRIPTION:		Ref.#
Programs provide instruction in the theories, principles, and practices of conserving, improving, and productively managing natural resources including air, water, soil, and wildlife. Program specialization areas include forestry and natural resources.		
Program Type:	5	
Size Requirements:	3,000 SF Lab	
Lab Requirements:		
	Spec.	
FINISHES:	Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
(2) Welding tables		
Wastebasket		
Pencil sharpener		
Miscellaneous:	N/A	
SITE FEATURES:		
Greenhouse – 1,000 SF	133413	
▪ ½ earth flooring, ½ concrete flooring (with floor drains)		
▪ Minimum of one 8'x10' overhead door		
▪ Provide electrical, plumbing, and heating/ventilation systems as per greenhouse manufacturer's recommendations.		
▪ Minimum of 4 hose bibbs		
▪ Fire suppression system if required		
FEATURES¹:		
Fixed Items:		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
Fire Suppression:		
Fire suppression system		211000
Plumbing:		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
6 compressed air connections		221500
4 natural gas connections		226313
Master gas shut-off valve		226313
Plumbing connections		221116/221119/224000
HVAC:		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood and exhaust		Div. 23
Electrical:		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(4) 220 volt receptacles		262726
Communications:		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123
Electronic Safety and Security:		
Life safety devices per code		283111

NOTES:

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

**PLUMBING AND PIPEFITTING
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>		<u>FEATURES¹:</u>	Spec.
Specialized classroom and laboratory experiences concerned with layout, assembly, installation, alteration, and repair of piping systems and related fixtures and fittings. Included is instruction in the use of pipe-cutting, bending, grooving, and threading tools; the maintenance and use of welding, soldering, and brazing equipment; the care and safe use of hand and power tools and equipment; and the reading, interpretation, and application of blueprints and piping diagrams.		<u>Fixed Items:</u>	<u>Ref.#</u>
Program Type:	5	16' of chalk/marker board	101100
Size Requirements:	3,000 SF Lab	8' of tack board	101100
Lab Requirements:		24' of tall storage cabinets	123550
		Pencil sharpener support	062000
		(3) Paper towel dispensers	102813
		12'x14' motorized overhead sectional door to exterior	083613
		3'x7' hollow metal service door to exterior	081113
		Steel bollards at overhead door, both sides	055000
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		1 washfountain (minimum)	224000
		2 utility sinks (minimum)	224000
		2 hose bibbs (minimum)	224000
		Safety shower/eyewash	224000
		2 floor drains	224000
		1 trench drain	224000
		6 compressed air connections	221500
		6 natural gas connections	226313
		Master gas shut-off valve	226313
		Plumbing connections	221116/221119/224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		Welding hood and exhaust	Div. 23
		Individual exhaust system for each gas-fired piece of equipment	Div. 23
		<u>Electrical:</u>	
		High intensity lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		30 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data and video port	262726
		(6) 220 volt receptacles	262726
		Room safety push-button	262726
		<u>Communications:</u>	
		1 video port and video display device	271533/271543/274119
		1 voice port and phone	271513/273113
		4 data ports	271513
		Clock	275313
		Central sound system	275123
<u>FINISHES:</u>	<u>Spec. Ref #</u>		
Flooring:			
Cure and seal concrete	033000		
Ceiling:			
Painted, exposed structure	099100		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
(12) Workbenches with heavy-duty metal tops			
(24) Stools or chairs			
(4) Welding tables			
Wastebasket			
Pencil sharpener			
<u>Electronic Safety and Security:</u>			
Life safety devices per code	283111		
<u>Miscellaneous:</u>			
N/A			

NOTES:

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

**POWER EQUIPMENT TECHNOLOGY
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Classroom and shop experiences concerned with maintaining and repairing a variety of portable power equipment, e.g., lawnmowers, outbound motorboats, chainsaws, and rototillers. Instruction includes principles of internal-combustion engine operation, reading technical manuals, and customer relations. One year specialization program may be approved in small engine repair and servicing under this course code.		
Program Type:	5	
Size Requirements:	3,500 SF Lab	
Lab Requirements:		
	Spec. <u>Ref #</u>	
<u>FINISHES:</u>		
Flooring:		
<i>Cure and seal</i> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
(2) Welding tables		
Wastebasket		
Pencil sharpener		
<u>Electronic Safety and Security:</u>		
Life safety devices per code	283111	
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
4 floor drains		224000
1 trench drain		224000
6 compressed air connections		221500
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood and exhaust		Div. 23
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(6) 220 volt receptacles		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123

NOTES:

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

**POWER TRANSMISSION
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	<u>FEATURES¹:</u>	Spec. Ref.#
Specialized classroom and laboratory experiences concerned with erecting and maintaining power lines and circuits for transmission and distribution of electrical power, and assembling and erecting related equipment and structures.	<u>Fixed Items:</u>	
	16' of chalk/marker board	101100
	8' of tack board	101100
	24' of tall storage cabinets	123550
	Pencil sharpener support	062000
	(4) Paper towel dispensers	102813
	12'x14' motorized overhead sectional door to exterior	083613
	3'x7' hollow metal service door to exterior	081113
	Steel bollards at overhead door, both sides	055000
	Provide (6) holes in floor to accommodate utility poles. Provide removable metal covers when not in use.	
Program Type: 5	<u>Fire Suppression:</u>	
	Fire suppression system	211000
Size Requirements: 3,500 SF Lab	<u>Plumbing:</u>	
	1 washfountain (minimum)	224000
	2 utility sinks (minimum)	224000
	2 hose bibbs (minimum)	224000
	Safety shower/eyewash	224000
	2 floor drains	224000
	1 trench drain	224000
	6 compressed air connections	221500
	Plumbing connections	221116/221119/224000
	<u>HVAC:</u>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<u>Electrical:</u>	
	High intensity lighting or fluorescent lighting	265100
	Illumination level: See Table 8600-4	
	Multilevel switching	262726
	30 duplex receptacles (minimum)	262726
	Double duplex receptacle adjacent to each data and video port	262726
	<u>Communications:</u>	
	1 video port and video display device	271533/271543/274119
	1 voice port and phone	271513/273113
	4 data ports	271513
	Clock	275313
	Central sound system	275123
	<u>Electronic Safety and Security:</u>	
	Life safety devices per code	283111
<u>FINISHES:</u>		
Flooring:		
Cure and seal concrete		033000
Ceiling:		
Painted, exposed structure		099100
Walls:		
Painted concrete masonry units		042000/ 099100
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Miscellaneous:</u>		
N/A		

NOTES:

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

**WELDING and CUTTING
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

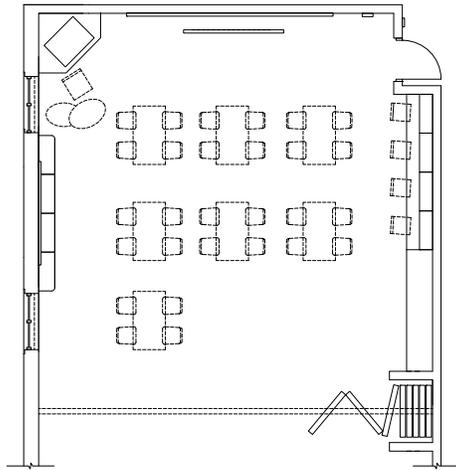
PROGRAM DESCRIPTION:		Spec.
		Ref.#
Specialized classroom and shop-learning experiences that are concerned with all types of metal welding, brazing, and flame cutting. Instruction emphasizes properties of metals, blueprint reading, electrical principles, welding symbols, and mechanical drawing.		
Program Type:	5	
Size Requirements:	3,500 SF Lab	
Lab Requirements:		
FINISHES:	Spec.	
	Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
LOOSE FURNISHINGS:		
(20) Welding tables with heavy-duty metal tops		
(24) Stools or chairs		
(4) 4'x4' metal worktables		
(1) Steel tube storage rack		
(1) Sheet steel storage rack		
Wastebasket		
Pencil sharpener		
Electronic Safety and Security:		
Life safety devices per code	283111	
Miscellaneous: N/A		
FEATURES¹:		
Fixed Items:		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
Overhead hoist crane		412223
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
Fire Suppression:		
Fire suppression system		211000
Plumbing:		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
6 compressed air connections		221500
Plumbing connections		221116/221119/224000
HVAC:		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood and exhaust		Div. 23
Electrical:		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(6) 220 volt receptacles		262726
480v 3-phase service		262726
Room safety push-button		262726
Communications:		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123

NOTES:

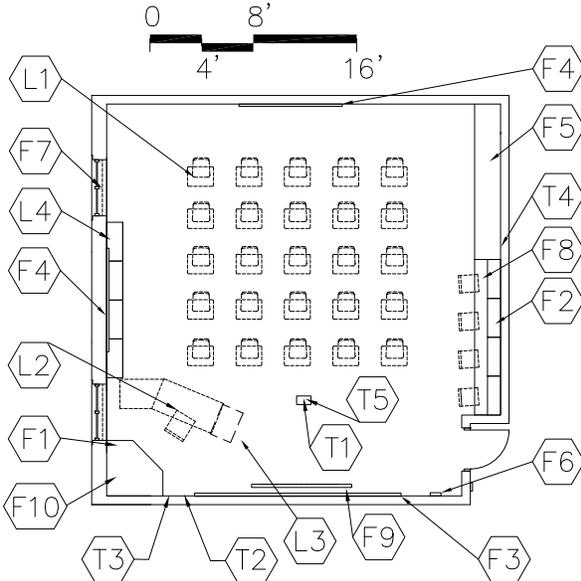
1. Finishes/Features: Refer to Chapter 9 for specification references.

RELATED CLASSROOM CT-P5-2

CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

CAPACITY:
SIZE:

25 students
900 SF

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

SPATIAL RELATIONSHIPS:

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

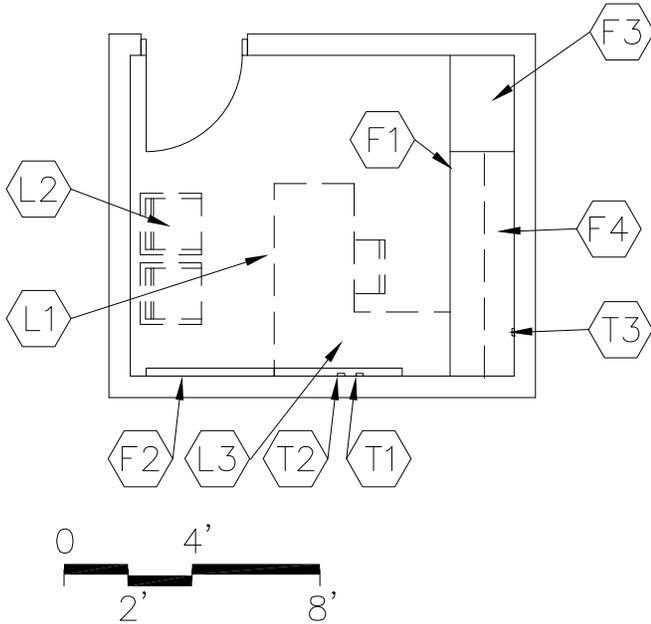
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM
CT-P5-2**
CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 3' of tall wardrobe with file drawers	123550
Optional: Vinyl composition tile, linoleum, ET , or sheet vinyl	096516 096500	F2 Computer work surface (could be loose)	123550
<u>Base:</u>		F3 10'-16' of chalk/marker board	101100
Resilient base	096500	F4 10'-16' of tack board	101100
<u>Ceiling:</u>		F5 8'-12' of base & wall cabinets	123550
Suspended, acoustical	095113	F6 Pencil sharpener support	062000
<u>Walls:</u>		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 About 10' of wall cabinets	123550
		F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks and chairs		Fire suppression system	211000
L2 Teacher desk or workstation/computer support and chair		<u>Plumbing:</u>	
L3 File cabinet		N/A	
L4 9' of low bookcases (fixed or mobile)		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
Pencil sharpener		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		M1 Operable partitions between classrooms are optional	102226

NOTES:

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



PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P5-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 2' of tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<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			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

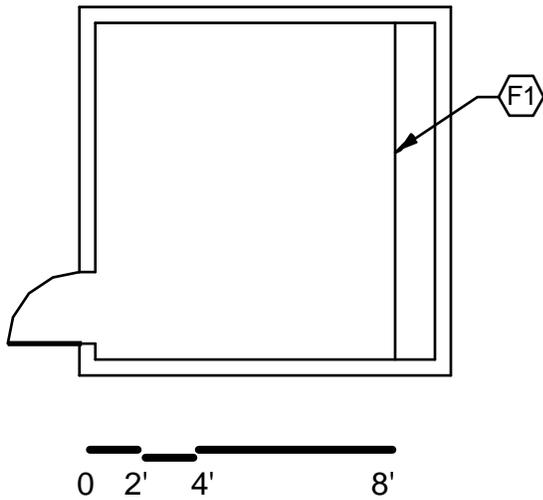
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

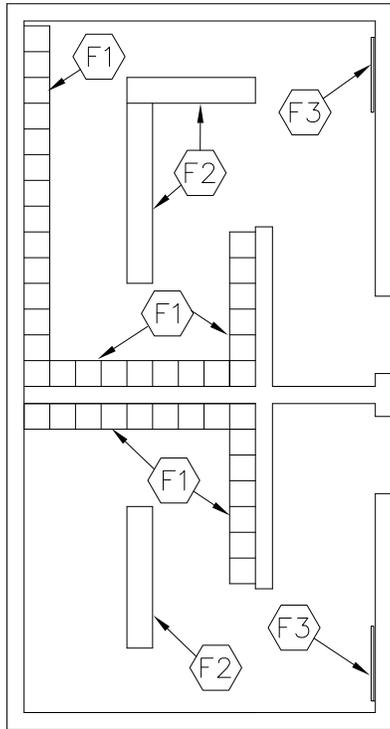
NOTES:

**STORAGE AREA
CT-P5-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**PROGRAM ACTIVITIES:**

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
Wall minimum STC 40
Ceiling minimum CAC 35, NRC 0.70

CAPACITY: N/A
 SIZE: 9 SF per student (see Note 2)

NOTES:

1. Large and small changing areas are interchangeable for either males or females.
Determination based on male/female ratio within each program.
2. Student count determined by total number of approved program spaces Types 5, 6, and 7 times 30.

**CHANGING ROOM
CT-P5-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

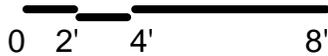
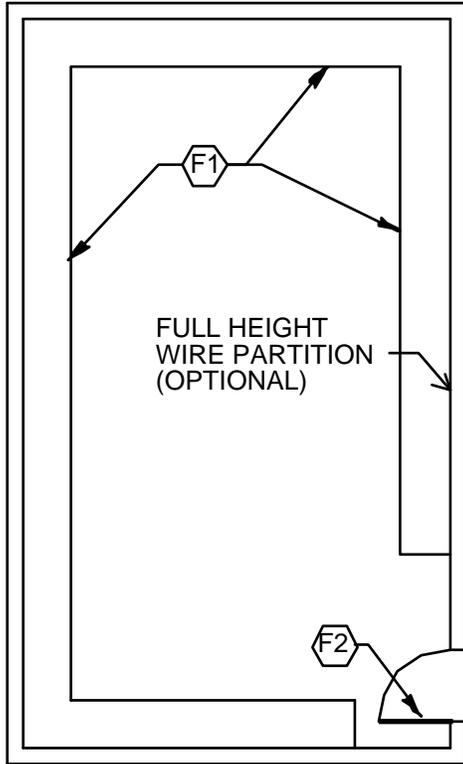
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u> <i>Polished concrete finishing, or colored concrete finishing</i> Optional: Vinyl composition tile, linoleum, or rubber	033510 033519 096500 096516	<u>Fixed Items¹:</u> F1 Student lockers F2 Locker benches F3 24" x 60" mirror	105113 062000 102813
<u>Base:</u> Resilient base	096500	<u>Fire Suppression:</u> Fire suppression system	211000
<u>Ceiling:</u> Suspended, acoustical with high impact hold down clips	095113	<u>Plumbing:</u> N/A	
<u>Walls:</u> Painted concrete masonry units 042000 / 099100		<u>HVAC:</u> Supply/Return air system Exhaust air system Supplemental heat as required Individual temperature control	Div. 23 Div. 23 Div. 23 230923
<u>LOOSE FURNISHINGS</u> Wastebaskets		<u>Electrical:</u> Single level switching Fluorescent lighting Illumination level: See Table 8600-4 2 Duplex receptacles Means of egress lighting per code	262726 265100 262726 265100
		<u>Communications:</u> Clock Central Sound System	275313 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.

**TOOL CRIB
CT-P5-6**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Storage of program related tools and instruments.
- Storage of students' tools.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes

CAPACITY:
SIZE:
ANCILLARY SPACES:

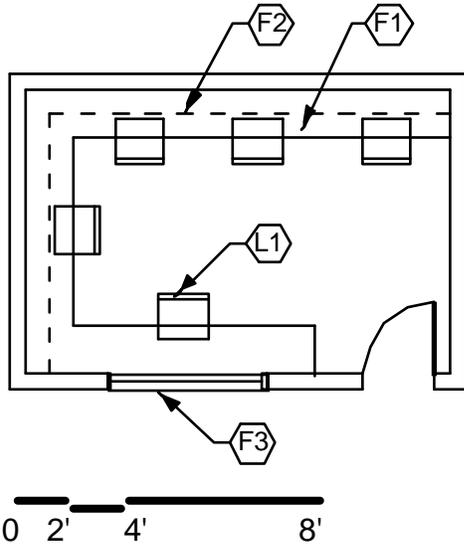
N/A
550 SF

**TOOL CRIB
CT-P5-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES</u> ¹ :		<u>FEATURES</u> ¹ :	
Flooring:		<u>Fixed Items</u> ¹ :	
Cure and seal concrete	033000	F1 80' of open metal shelving (total), Depth may vary (fixed or loose)	105613
Optional: Vinyl composition tile, linoleum, or rubber	096500 096516	F2 Dutchdoor	105613
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>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

- Individual computer research.
- Reference program specific manuals.
- Small group meetings.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes
- Environmental sound control
Wall minimum STC 45
Ceiling minimum CAC 35, NRC 0.70

CAPACITY:
SIZE:

N/A
200 SF

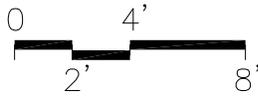
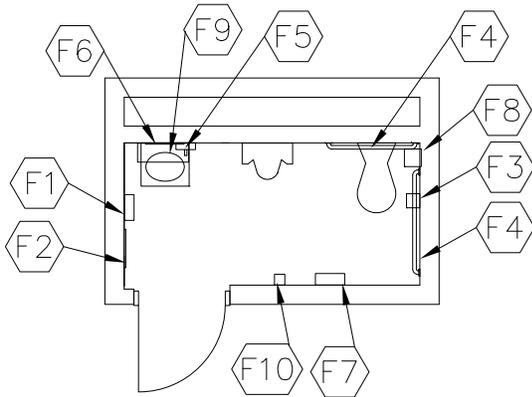
NOTES:

**REFERENCE ROOM
CT-P5-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
<i>Cure and seal</i> concrete	033000	F1 34' of plastic lam. counter	062000
Optional: Vinyl composition tile,	096500	F2 27' of adjustable shelving	062000
		F3 Interior window	081113/088000
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		Supply/return air system	Div. 23
	042000 / 099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
L3 Student chairs		Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 Duplex receptacles	262726
		Duplex receptacle adjacent to	
		Each data and video port	262726
		<u>Communications:</u>	
		T1 6 data ports	271513
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



CAPACITY:
SIZE:

N/A
68 SF

PROGRAM ACTIVITIES:

- Personal and health needs for the program
- Specific users
- Changing of clothes and/or uniforms.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
 - Wall minimum STC 48
 - Ceiling minimum CAC 35, NRC 0.70

NOTES:

**TOILET ROOM
CT-P5-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Sealed concrete	033000	<u>Fixed Items:</u>	
Optional: Vinyl composition tile	096500	F1 Towel dispenser	102813
		F2 24" x 60" mirror	102813
Base:		F3 Toilet tissue holder	102813
Resilient base	096500	F4 36" and 42" grab bars	102813
		F5 Soap dispenser	102813
Ceiling:		F6 16" x 24" mirror	102813
Suspended, acoustical	095113	F7 Sanitary product dispenser	102813
		F8 Sanitary product receptacle	102813
Walls:		F9 Stainless steel shelf (optional)	102813
Painted concrete masonry units	042000 / 099100	F10 Coat hook	102813
<u>LOOSE FURNISHINGS</u>		<u>Fire Suppression:</u>	
Wastebaskets		Fire suppression system	211000
		<u>Plumbing:</u>	
		Plumbing connections	221116/221119/224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		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.

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PROGRAM TYPE 6**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

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Program Type 6

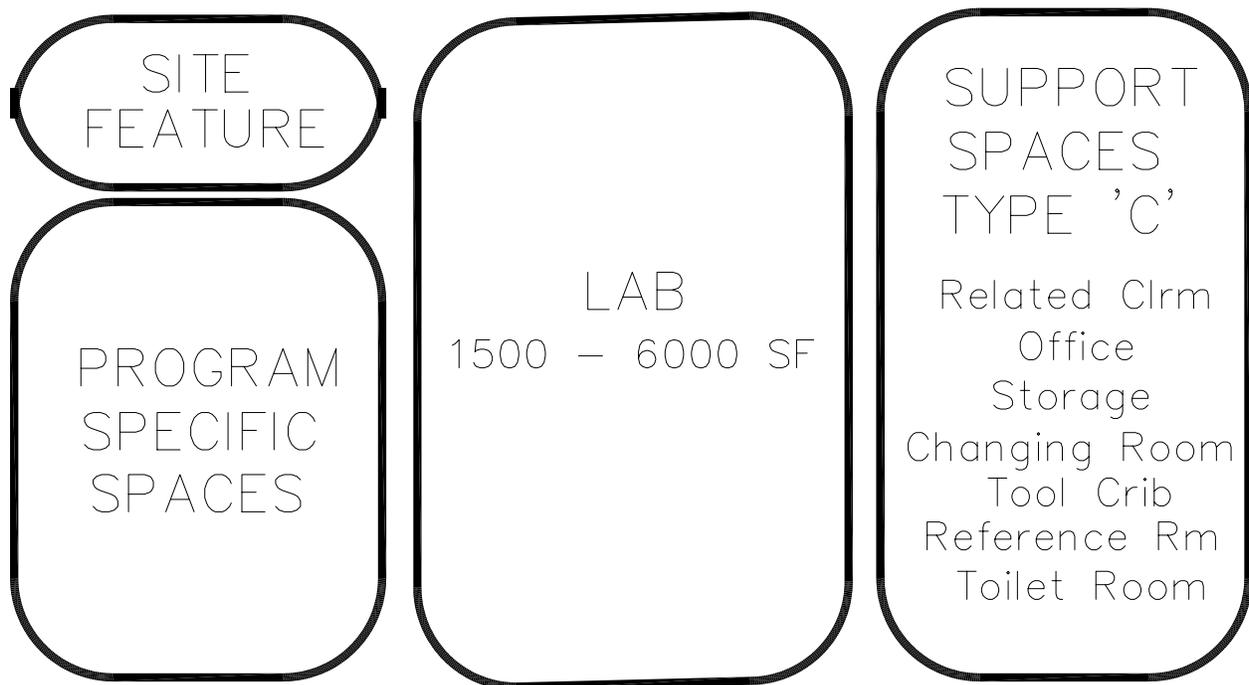
Description: Medium to large sized lab space with enhanced support space.

Lab space to be “high-bay” (**18'** min. clearance) with exposed building structure.

Lab to utilize standard construction with the following exception – lab floor slab to be 8” thick.

Support space to be finished with sealed concrete or vinyl composition tile, paint, and suspended acoustical ceiling. Lab may have possible site feature.

No air-conditioning of any spaces within Program Type 6.

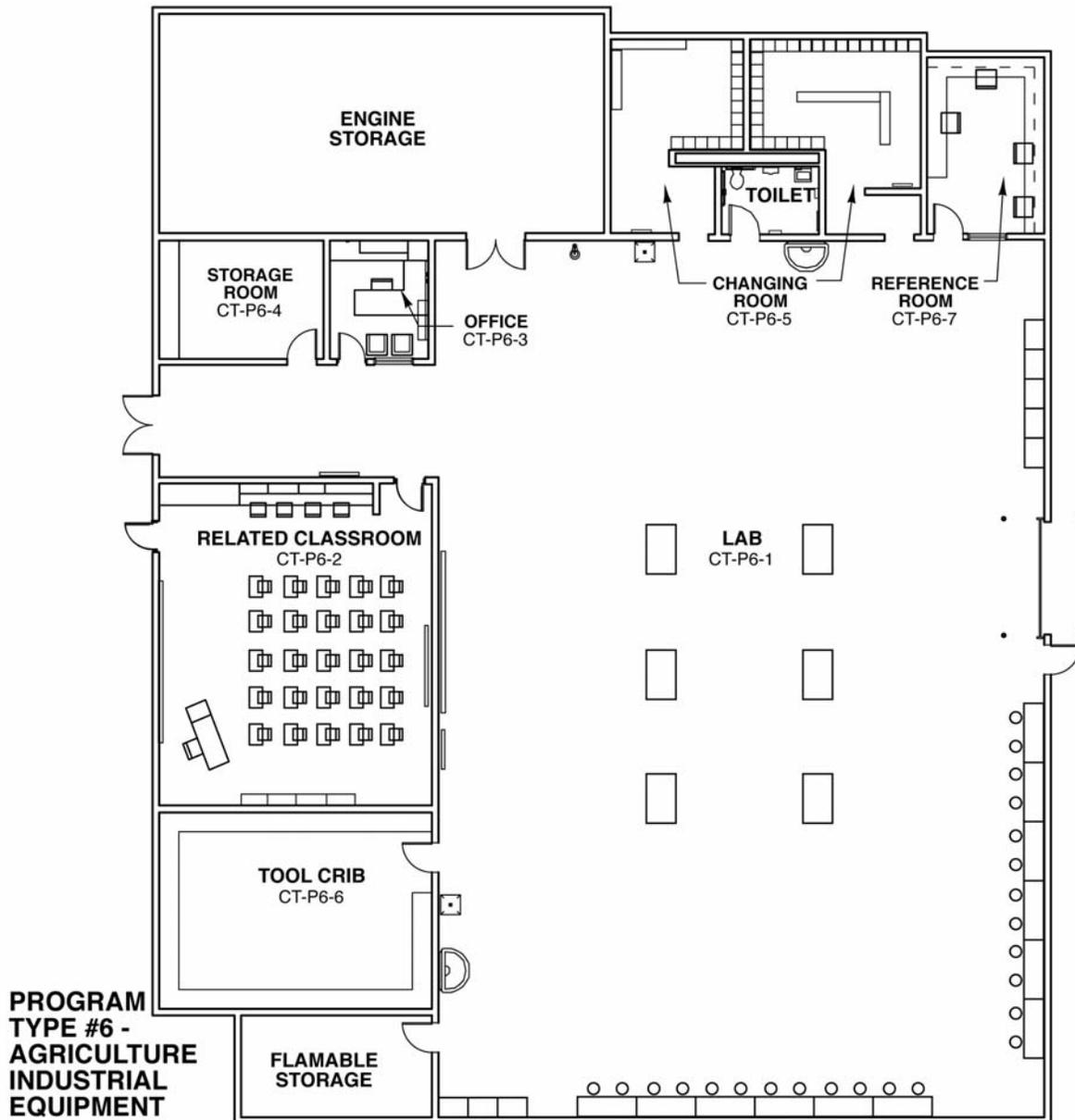
**NOTES:**

This is an example of how the Program Type 6 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 6 space plates:

CT-P6-1	Lab
CT-P6-2	Related Classroom
CT-P6-3	Office
CT-P6-4	Storage
CT-P6-5	Changing Room
CT-P6-6	Tool Crib
CT-P6-7	Reference Room
CT-P6-8	Toilet Room

**PROGRAM TYPE 6
EXAMPLE**

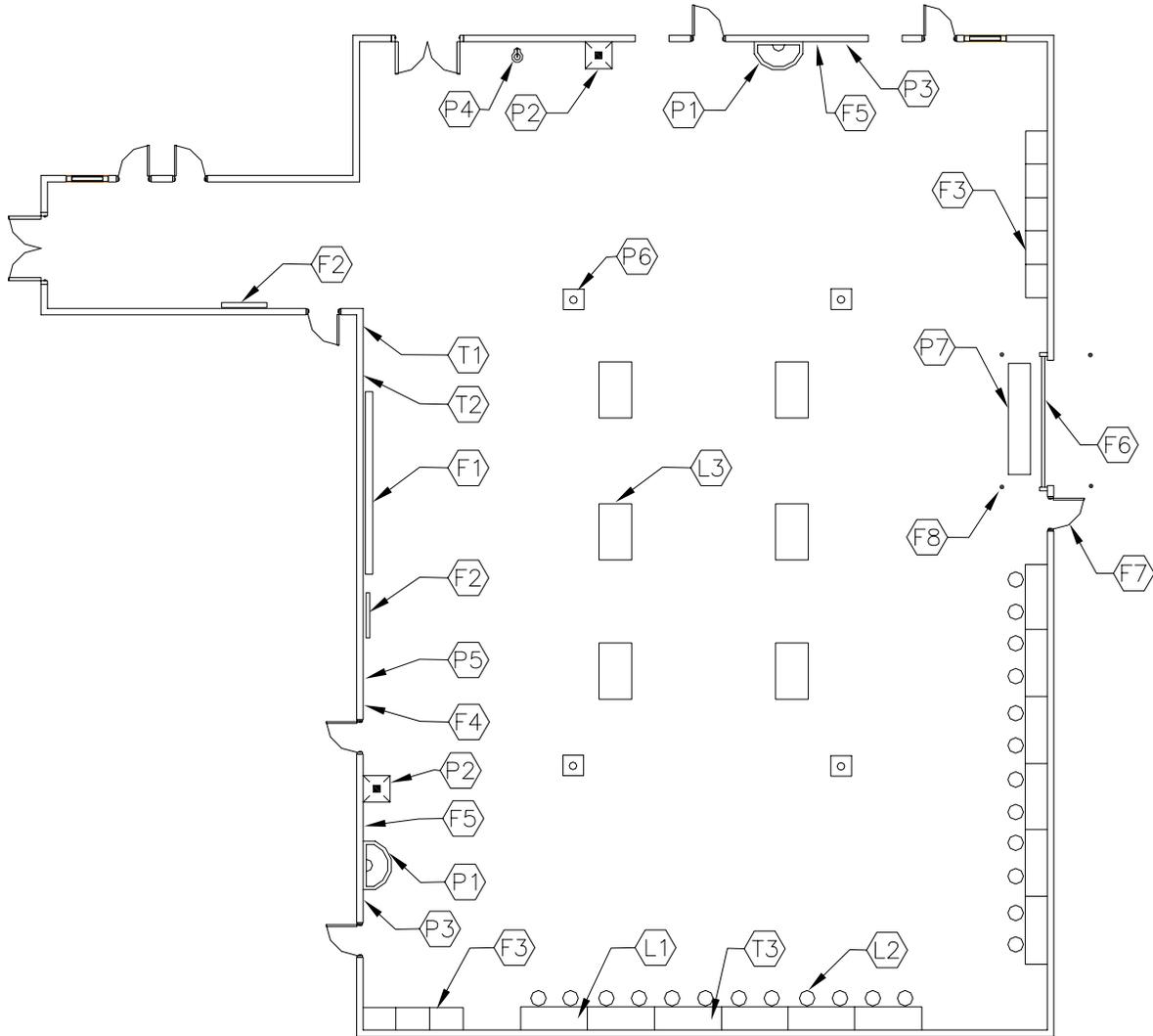


Program Type 6

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY: 24 Students
 SIZE: 1,500 – 6,000 SF
 (see lab summaries for exact sizes)
 ANCILLARY SPACES: CT-P6-2 thru CT-P6-8

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P6-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

AGRICULTURE / INDUSTRIAL EQUIPMENT

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P6-1

<u>PROGRAM DESCRIPTION:</u>		<u>FEATURES¹:</u>		Spec.
Programs provide instruction in the operations or processes concerned with the selection, operation maintenance, and use of agricultural power, agricultural machinery and equipment, structures and utilities, soil and water management.		<u>Fixed Items:</u>		<u>Ref.#</u>
Program Type:	6	F1	16' of chalk/marker board	101100
Size Requirements:	5,000 SF Lab	F2	8' of tack board	101100
Lab Requirements:		F3	24' of tall storage cabinets	123550
		F4	Pencil sharpener support	062000
		F5	(4) Paper towel dispensers	102813
		F6	12'x14' motorized overhead sectional door to exterior	083613
		F7	3'x7' hollow metal service door to exterior	081113
		F8	Steel bollards at overhead door, both sides	055000
<u>FINISHES:</u>	<u>Spec. Ref #</u>	<u>Fire Suppression:</u>		
Flooring:		Fire suppression system		211000
Cure and seal concrete	033000	<u>Plumbing:</u>		
Ceiling:		P1	2 washfountains (minimum)	224000
Painted, exposed structure	099100	P2	2 utility sinks (minimum)	224000
Walls:		P3	2 hose bibbs (minimum)	224000
Painted concrete masonry units	042000/ 099100	P4	Safety shower/eyewash	224000
		P5	6 compressed air connections	221500
		P6	4 floor drains	224000
		P7	1 trench drain	224000
		Plumbing connections		221116/221119/224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>		
L1 (12) Workbenches with heavy-duty metal tops		Supply/return air system		Div. 23
L2 (24) Stools or chairs		Independent temperature control		230923
L3 (6) Welding tables		Welding hood and exhaust		Div. 23
Wastebasket		Vehicle exhaust system		Div. 23
Pencil sharpener		<u>Electrical:</u>		
		High intensity lighting or fluorescent lighting		265100
		Illumination level: See Table 8600-4		
		Multilevel switching		262726
		30 duplex receptacles (minimum)		262726
		Double duplex receptacle adjacent to each data and video port		262726
		(6) 220 volt receptacles		262726
<u>Electronic Safety and Security:</u>		<u>Communications:</u>		
Life safety devices per code	283111	T1	1 video port and video display device	271533/271543/274119
<u>Miscellaneous:</u>		T2	1 voice port and phone	271513/273113
N/A		T3	4 data ports	271513
			Clock	275313
			Central sound system	275123

NOTES:

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

**AGRICULTURE / INDUSTRIAL EQUIPMENT
Flammable Material Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Program Type: 6			<u>FEATURES¹:</u>	Spec.
Size Requirements: 200 SF			<u>Fixed Items:</u>	<u>Ref.#</u>
			N/A	
Requirements:			<u>Fire Suppression:</u>	
			Fire suppression system	211000
	Spec.			
<u>FINISHES:</u>	<u>Ref #</u>		<u>Plumbing:</u>	
Flooring:			N/A	
Cure and seal concrete	033000		<u>HVAC:</u>	
			Supplemental heat as required	Div. 23
Ceiling:			Independent ventilation	Div. 23
Fire-rated gypsum wallboard	092113			
Walls:			<u>Electrical:</u>	
Painted concrete masonry units	042000/ 099100		Fluorescent lighting	265100
			Illumination level: See Table 8600-4	
			Single level switching	262726
			2 duplex receptacles	262726
<u>LOOSE FURNISHINGS:</u>			<u>Communications:</u>	
N/A			Central sound system	275123
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			<u>Electronic Safety and Security:</u>	
▪ Wall minimum STC 45			Life safety devices per code	283111
▪ This room to be one-story (14'+/-) tall, located within high-bay program.			<u>Miscellaneous:</u>	
			N/A	

NOTES:

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

AUTO COLLISION REPAIR
Auto Parts Storage

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Program Type: 6			FEATURES¹:	Spec. Ref.#
Size Requirements: 300 SF			Fixed Items: 30' of heavy duty adjustable steel shelving	105613
Requirements:			Fire Suppression: Fire suppression system	211000
FINISHES:		Spec. Ref #	Plumbing: N/A	
Flooring: Cure and seal concrete		033000	HVAC: Supplemental heat as required	Div. 23
Ceiling: Suspended, acoustical		095113	Electrical: Fluorescent lighting	265100
Walls: Painted concrete masonry units		042000/ 099100	Illumination level: See Table 8600-4	
LOOSE FURNISHINGS: N/A			Single level switching	262726
			4 duplex receptacles	262726
ENVIRONMENTAL CONSIDERATIONS:			Communications: Central sound system	275123
▪ Wall minimum STC 45			Electronic Safety and Security: Life safety devices per code	283111
▪ This room to be one-story (14'+/-) tall, located within high-bay program.			Miscellaneous: N/A	

NOTES:

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

**AUTO TECHNOLOGY
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION: Learning experiences concerned with the components of the vehicle, including engine, transmissions, steering, suspension, brakes, and electrical/electronic systems. Included is training in the use of diagnostic and testing equipment and tools used in the repair process.		FEATURES¹:	Spec. Ref.#
Program Type: 6		Fixed Items:	
Size Requirements: 5,000 SF Lab		16' of chalk/marker board	101100
		8' of tack board	101100
		24' of tall storage cabinets	123550
		Pencil sharpener support	062000
		(4) Paper towel dispensers	102813
		12'x14' motorized overhead sectional door to exterior	083613
		3'x7' hollow metal service door to exterior	081113
		Steel bollards at overhead door, both sides	055000
Lab Requirements:		Fire Suppression:	
	Spec. Ref #	Fire suppression system	211000
FINISHES:		Plumbing:	
Flooring:		2 washfountains (minimum)	224000
Cure and seal concrete	033000	2 utility sinks (minimum)	224000
		2 hose bibbs (minimum)	224000
Ceiling:		Safety shower/eyewash	224000
Painted, exposed structure	099100	8 compressed air connections	221500
		4 floor drains	224000
Walls:		1 trench drain	224000
Painted concrete masonry units	042000/ 099100	Plumbing connections	221116/221119/224000
		HVAC:	
LOOSE FURNISHINGS:		Supply/return air system	Div. 23
(6) Workbenches with heavy-duty metal tops		Independent temperature control	230923
(24) Stools or chairs		Vehicle exhaust system	Div. 23
Wastebasket		Electrical:	
Pencil sharpener		High intensity lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
Electronic Safety and Security:		Multilevel switching	262726
Life safety devices per code	283111	30 duplex receptacles (minimum)	262726
Miscellaneous:		Double duplex receptacle adjacent to each data and video port	262726
N/A		(6) 220 volt receptacles	262726
		Communications:	
The following items are to be funded by the School District:		1 video port and video display device	271533/271543/274119
Car lifts		1 voice port and phone	271513/273113
Frame racks		6 data ports	271513
		Clock	275313
		Central sound system	275123

NOTES:

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

**AUTO TECHNOLOGY
Engine Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>Program Type: 6</p> <p>Size Requirements: 800 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring: Cure and seal concrete</p> <p>Ceiling: Suspended, acoustical Option: painted, exposed structure</p> <p>Walls: Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u> N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 45 ▪ This room to be one-story (14'+/-) tall, located within high-bay program. 	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES¹:</u> <u>Fixed Items:</u> Pair of doors</p> <p><u>Fire Suppression:</u> Fire suppression system</p> <p><u>Plumbing:</u> N/A</p> <p><u>HVAC:</u> Supplemental heat as required Independent ventilation</p> <p><u>Electrical:</u> Fluorescent lighting Illumination level: See Table 8600-4 Single level switching 4 duplex receptacles</p> <p><u>Communications:</u> Central sound system</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

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

**AUTO TECHNOLOGY
Machine Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	900 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Option: painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(4) Work tables		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		16' of tall cabinets 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Utility sink 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supplemental heat as required Div. 23
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		220 v service 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.

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**AUTO TECHNOLOGY
Flammable Material Storage**

		Spec. Ref.#
Program Type:	6	
Size Requirements:	60 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Fire-rated gypsum drywall	092113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
N/A		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		3' of heavy duty adjustable steel shelving
		105613
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required
		Div. 23
		Independent ventilation
		Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		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.

**CARPENTRY
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
Classroom and laboratory experiences involving the layout, construction, and repair of residential and commercial structures. Included is instruction in the care and use of power tools, equipment, and materials used in the construction process; floor, wall, ceiling, and roof framing; the installation of insulation and roofing; and interior and exterior finish detail.		
Program Type:	6	
Size Requirements:	4,000 SF Lab	
Lab Requirements:		
	Spec. <u>Ref #</u>	
<u>FINISHES:</u>		
Flooring:		
<i>Cure and seal</i> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty wooden tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
(2) Lumber storage racks		061000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
6 compressed air connections		221500
2 floor drains		224000
1 trench drain		224000
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
Dust collection system		233513
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
<i>Room safety push-button</i>		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111

NOTES:

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

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CARPENTRY
Finishing Room

		Spec. Ref.#
Program Type:	6	
Size Requirements:	500 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(2) Work tables		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		FEATURES¹:
		<u>Fixed Items:</u>
		16' of pegboard
		Pair of doors
		<u>Fire Suppression:</u>
		Fire suppression system
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required
		Independent ventilation
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-4
		Single level switching
		4 duplex receptacles
		<u>Communications:</u>
		Central sound system
		Clock
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		<u>Miscellaneous:</u>
		N/A

NOTES:

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

CONSTRUCTION (2 clusters)
Design/Build - Management
CT-P6-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<u>PROGRAM DESCRIPTION:</u>		
In this program students master mathematical and scientific principles and technical skills in support of the design, development, and use of integrated industrial manufacturing systems and processes; includes problem solving in design, integration, and prototype testing, systems logistics and material flow, calibration and maintenance of instruments, statistical process control and production coordination, operational and maintenance procedures, as well as operation diagnosis and repair.		
Program Type:	6	
Size Requirements:	3,000 SF Lab	
Lab Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
(2) Welding tables		
Wastebasket		
Pencil sharpener		
<u>Electronic Safety and Security:</u>		
Life safety devices per code	283111	
<u>Miscellaneous:</u>		
N/A		
<u>FEATURES¹:</u>		
<u>Fixed Items:</u>		
16' of chalk/marker board		101100
8' of tack board		101100
24' of tall storage cabinets		123550
Pencil sharpener support		062000
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
6 compressed air connections		221500
2 floor drains		224000
1 trench drain		224000
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood and exhaust		233515
<u>Electrical:</u>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
480v 3-phase service		262726
<u>Communications:</u>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123

NOTES:

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

CONSTRUCTION
CADD Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	400 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile, <i>ET</i> ,	096500	
rubber, sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(10) 2-person tables		
(20) Student chairs		
(1) Teacher station & chair		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		6' of chalk/marker board 101100
		8' of tall storage cabinets 123550
		Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting, parabolic lenses:265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data port near teacher workstation 271513
		22 data ports 271513
		Central sound system 275123
		Overhead projector 274119
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

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

ENGINEERING TECHNOLOGY
ENGINEERING TECHNOLOGIES – Design
ENGINEERING TECHNOLOGIES – Process
ENGINEERING TECHNOLOGIES – Product / Service
CT-P6-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION:		FEATURES¹:		Spec.
		<u>Fixed Items:</u>		<u>Ref.#</u>
A combination of subject matter and experiences designed to prepare a person to gain entry level experiences in an engineering technology cluster program, with the option of pursuing a two-year Associate's Degree. The program will follow an approved TCAP and will identify related employment positions locally available for students exiting Tech-Prep after high school.		16' of chalk/marker board		101100
		8' of tack board		101100
Program Type: 6		24' of tall storage cabinets		123550
		Pencil sharpener support		062000
Size Requirements: 1,500 SF Lab		(3) Paper towel dispensers		102813
		12'x14' motorized overhead sectional door to exterior		083613
Lab Requirements:		3'x7' hollow metal service door to exterior		081113
		Steel bollards at overhead door, both sides		055000
FINISHES:		<u>Fire Suppression:</u>		
		Fire suppression system		211000
Flooring: Cure and seal concrete		<u>Plumbing:</u>		
		1 washfountain (minimum)		224000
Ceiling: Painted, exposed structure		2 utility sinks (minimum)		224000
		2 hose bibbs (minimum)		224000
Walls: Painted concrete masonry units		Safety shower/eyewash		224000
		6 compressed air connections		221500
		2 floor drains		224000
		1 trench drain		224000
		Plumbing connections		221116/221119/224000
LOOSE FURNISHINGS:		HVAC:		
(12) Workbenches with heavy-duty metal tops		Supply/return air system		Div. 23
(24) Stools or chairs		Independent temperature control		230923
(4) Welding tables		Welding hood and exhaust		233515
Wastebasket		Electrical:		
Pencil sharpener		High intensity lighting or fluorescent lighting		265100
		Illumination level: See Table 8600-4		
		Multilevel switching		262726
		30 duplex receptacles (minimum)		262726
		Double duplex receptacle adjacent to each data and video port		262726
		(6) 220 volt receptacles		262726
		Communications:		
		1 video port and video display device		271533/271543/274119
		1 voice port and phone		271513/273113
		4 data ports		271513
		Clock		275313
		Central sound system		275123
Electronic Safety and Security:				
Life safety devices per code				283111
Miscellaneous: N/A				

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. This program has the option of being located in high bay or low bay (Type 3) space with associated features adjusted for the needs of the space, building type, and curriculum with OSFC approval.

**ENGINEERING TECHNOLOGIES
CADD Room**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	400 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile, <i>ET</i> ,	096500	
rubber, sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(10) 2-person tables		
(20) Student chairs		
(1) Teacher station & chair		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		6' of chalk/marker board 101100
		8' of tall storage cabinets 123550
		Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting, parabolic lenses:265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data port near teacher workstation 271513
		22 data ports 271513
		Central sound system 275123
		Overhead projector 274119
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

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

FOOD SCIENCE AND TECHNOLOGY

CHAPTER 6: CAREER-TECHNICAL SCHOOL

CT-P6-1

PROGRAM DESCRIPTION:		Spec. Ref.#
Food Science is a program area where the opportunities for program completers are limitless. Students may begin their study in agriculture's foundation program Agriscience. The following are areas of study specific to food science; Safety Precautions, Sanitation, Livestock Purchasing, Slaughtering, Carcass Grading, Wholesale Processing, Retail Meat Processing, and Merchandising, Dairy and Poultry Products, Fish and Fish Products, Fruits and Vegetables, Grains, Preservation of Agricultural Products, Customer Service, Marketing, Product Handling, Business Management, Decision Making and Problem Solving, Work Ethic, Job-Seeking Skills, Technology in the Workplace, Economic Education, Citizenship in the Workplace, Leadership.		
Program Type:	6	
Size Requirements:	2,000 SF Lab	
Lab Requirements:		
FINISHES:	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Option: Epoxy, resinous flooring	096723	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
Option: Fiberglass reinforced plastic panels		
LOOSE FURNISHINGS:		
(8) Workbenches with heavy-duty stainless steel tops		
(24) Stools or chairs (stainless steel)		
Wastebasket		
Pencil sharpener		
FEATURES¹:		
Fixed Items:		
16' of chalk/marker board		101100
8' of tack board		101100
Pencil sharpener support		062000
(3) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
Overhead hoist system between lab, freezer, and cooler		412223
Fire Suppression:		
Fire suppression system		211000
Plumbing:		
1 washfountain (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
Plumbing connections		221116/221119/224000
HVAC:		
Supply/return air system		Div. 23
Independent temperature control		230923
Electrical:		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-4		
Multilevel switching		262726
20 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(2) 220 volt receptacles		262726
Communications:		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/273113
4 data ports		271513
Clock		275313
Central sound system		275123
Electronic Safety and Security:		
Life safety devices per code		283111
Miscellaneous:		
N/A		

NOTES:

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

FOOD SCIENCE AND TECHNOLOGY**Freezer**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	400 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Quarry tile	093000	
Ceiling:		
Quarry tile base	093000	
Walls:		
Manufactured insulated panel	114000	
<u>LOOSE FURNISHINGS:</u>		
N/A		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Uniform lighting		
▪ Ventilation for refrigeration machinery		
▪ Cleanable building surfaces		
▪ Floor to be flush with adjacent kitchen floor		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		Overhead hoist system
		412223
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Exhaust air system for compressors Div. 23
		<u>Electrical:</u>
		Incandescent lighting
		265100
		Illumination level: See Table 8600-4
		Single level switching
		262726
		Electrical connections to freezer
		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.

FOOD SCIENCE AND TECHNOLOGY

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Cooler

Program Type: 6	Spec. Ref #	<u>FEATURES¹:</u>	Spec.
Size Requirements: 400 SF		<u>Fixed Items:</u>	Ref.#
Requirements:		Overhead hoist system	412223
<u>FINISHES:</u>		<u>Fire Suppression:</u>	
Flooring:		Fire suppression system	211000
Quarry tile	093000	<u>Plumbing:</u>	
Ceiling:		N/A	
Quarry tile base	093000	<u>HVAC:</u>	
Walls:		Exhaust air system for compressors Div. 23	
Manufactured insulated panel	114000	<u>Electrical:</u>	
		Incandescent lighting 265100	
		Illumination level: See Table 8600-4	
		Single level switching 262726	
		Electrical connections to cooler	
		refrigeration equipment 262726	
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
N/A		N/A	
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		<u>Electronic Safety and Security:</u>	
<ul style="list-style-type: none"> ▪ Uniform lighting ▪ Ventilation for refrigeration machinery ▪ Cleanable building surfaces ▪ Floor to be flush with adjacent kitchen floor 		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

FOOD SCIENCE AND TECHNOLOGY**Retail**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	400 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile, <i>ET</i> , sheet	096500	
vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended, acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		12' of solid surface counter with storage below 062000
		Cashier's station 123550
		Paper towel dispenser 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		1 utility sink 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data ports 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.

**HORTICULTURE
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	<u>FEATURES¹:</u>	Spec. Ref.#
Programs focus on the culture of ornamental plants and vegetable crops. Completers have the opportunity for employment in floral design, landscape design, turfgrass management, garden and nursery product sales. The program area offers units of instruction in Greenhouse Production and Maintenance, Equipment Maintenance and Operation, Floral Design, Turf and Landscape Operations, Nursery and Garden Operations, Marketing and Sales, Merchandise Handling, and Business Management.	<u>Fixed Items:</u>	
	16' of chalk/marker board	101100
	8' of tack board	101100
	24' of tall storage cabinets	123550
	Pencil sharpener support	062000
	(3) Paper towel dispensers	102813
	12'x14' motorized overhead sectional door to exterior	083613
	3'x7' hollow metal service door to exterior	081113
	Steel bollards at overhead door, both sides	055000
Program Type: 6	<u>Fire Suppression:</u>	
	Fire suppression system	211000
Size Requirements: 2,000 SF Lab	<u>Plumbing:</u>	
Lab Requirements:	1 washfountain (minimum)	224000
	2 utility sinks (minimum)	224000
	2 hose bibbs (minimum)	224000
	Safety shower/eyewash	224000
	2 floor drains	224000
	1 trench drain	224000
	Plumbing connections	221116/221119/224000
	<u>HVAC:</u>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<u>Electrical:</u>	
	High intensity lighting or fluorescent lighting	265100
	Illumination level: See Table 8600-4	
	Multilevel switching	262726
	30 duplex receptacles (minimum)	262726
	Double duplex receptacle adjacent to each data and video port	262726
	<u>Communications:</u>	
	1 video port and video display device	271533/271543/274119
	1 voice port and phone	271513/273113
	4 data ports	271523
	Clock	275313
	Central sound system	275123
	<u>Electronic Safety and Security:</u>	
	Life safety devices per code	283111
	<u>Miscellaneous:</u>	
	N/A	
<u>FINISHES:</u>		
Flooring:		
Cure and seal concrete	Spec. Ref #	033000
Ceiling:		
Painted, exposed structure		099100
Walls:		
Painted concrete masonry units		042000/ 099100
<u>LOOSE FURNISHINGS:</u>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
Pencil sharpener		
<u>SITE FEATURES:</u>		
Greenhouse – 3,000 SF		133413
½ earth flooring, ½ concrete flooring (w/drains)		
Minimum of one 8'x10' overhead door		
Provide electrical, plumbing, and heating/ventilation systems as per greenhouse manufacturer's recommendations		
Minimum of 4 hose bibbs		
Fire suppression system if required		

NOTES:

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

HORTICULTURE
Retail

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	400 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Vinyl composition tile, <i>ET</i> , sheet	096500	
vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended, acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 40		
▪ Ceiling minimum CAC 35		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		10' of base cabinets
		4' of cashier's station
		Paper towel dispenser
		123550 123550 102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		1 utility sink
		Plumbing connections
		224000 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system
		Independent temperature control
		Div. 23 230923
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-4
		Single level switching
		4 duplex receptacles
		Double duplex receptacle adjacent to each data port
		265100 262726 262726 262726
		<u>Communications:</u>
		1 data port
		Clock
		Central sound system
		271513 275313 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.

**MEDIUM/HEAVY TRUCK TECHNICIAN
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><u>PROGRAM DESCRIPTION:</u> An instructional program that prepares individuals to engage in the service and repair of truck vehicles. Instruction is included in the diagnosis, maintenance, and repair of diesel engines, including fuel injection systems, the drive train, suspension, brakes, hydraulic units, cooling systems, and electrical/electronic systems. The program also includes the study and use of technical manuals, testing and diagnostic equipment, and a variety of hand and power tools.</p> <p>Program Type: 6</p> <p>Size Requirements: 6,000 SF Lab</p> <p>Lab Requirements:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right; vertical-align: top;"><u>Spec.</u> <u>Ref #</u></td> </tr> <tr> <td><u>FINISHES:</u></td> <td></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Cure and seal concrete</td> <td style="text-align: right;">033000</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Painted, exposed structure</td> <td style="text-align: right;">099100</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Painted concrete masonry units</td> <td style="text-align: right; vertical-align: top;">042000/ 099100</td> </tr> <tr> <td><u>LOOSE FURNISHINGS:</u></td> <td></td> </tr> <tr> <td colspan="2">(8) Workbenches with heavy-duty metal tops</td> </tr> <tr> <td colspan="2">(24) Stools or chairs</td> </tr> <tr> <td colspan="2">Wastebasket</td> </tr> <tr> <td colspan="2">Pencil sharpener</td> </tr> <tr> <td><u>Miscellaneous:</u></td> <td></td> </tr> <tr> <td colspan="2">N/A</td> </tr> <tr> <td colspan="2"><u>The following items are to be funded by the School District:</u></td> </tr> <tr> <td colspan="2">Truck lifts</td> </tr> <tr> <td colspan="2">Frame rack</td> </tr> </table>		<u>Spec.</u> <u>Ref #</u>	<u>FINISHES:</u>		Flooring:		Cure and seal concrete	033000	Ceiling:		Painted, exposed structure	099100	Walls:		Painted concrete masonry units	042000/ 099100	<u>LOOSE FURNISHINGS:</u>		(8) Workbenches with heavy-duty metal tops		(24) Stools or chairs		Wastebasket		Pencil sharpener		<u>Miscellaneous:</u>		N/A		<u>The following items are to be funded by the School District:</u>		Truck lifts		Frame rack		<table style="width: 100%; border: none;"> <tr> <td 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drain	224000	Plumbing connections	221116/221119/224000	<u>HVAC:</u>		Supply/return air system	Div. 23	Independent temperature control	230923	Vehicle exhaust system	Div. 23	<u>Electrical:</u>		High intensity lighting or fluorescent lighting	265100	Illumination level: See Table 8600-4		Multilevel switching	262726	30 duplex receptacles (minimum)	262726	Double duplex receptacle adjacent to each data and video port	262726	(6) 220 volt receptacles	262726	<u>Communications:</u>		1 video port and video display device	271533/271543/274119	1 voice port and phone	271513/273113	4 data ports	271513	Clock	275313	Central sound system	275123	<u>Electronic Safety and Security:</u>		Life safety devices per code	283111
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NOTES:

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

MEDIUM/HEAVY TRUCK TECHNICIAN Engine Storage

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#	
Program Type:	6		
Size Requirements:	800 SF		
Requirements:			
<u>FINISHES:</u>	Spec. Ref #		
Flooring:			
Cure and seal concrete	033000		
Ceiling:			
Suspended, acoustical	095113		
Option: painted, exposed structure	099100		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
N/A			
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			
▪ Wall minimum STC 45			
▪ This room to be one-story (14'+/-) tall, located within high-bay program.			
		<u>FEATURES¹:</u>	
		<u>Fixed Items:</u>	
		Pair of doors	081113
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supplemental heat as required	Div. 23
		Independent ventilation	Div. 23
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Single level switching	262726
		4 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.

**MEDIUM/HEAVY TRUCK TECHNICIAN
Flammable Material Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

Program Type: 6	Spec. Ref #	<u>FEATURES¹:</u>	Spec. Ref.#
Size Requirements: 60 SF		<u>Fixed Items:</u> 3' of heavy duty adjustable steel shelving	105613
Requirements:		<u>Fire Suppression:</u> Fire suppression system	211000
<u>FINISHES:</u>		<u>Plumbing:</u> N/A	
Flooring:		<u>HVAC:</u> Supplemental heat as required Independent ventilation	Div. 23 Div. 23
Cure and seal concrete	033000		
Ceiling:		<u>Electrical:</u> Fluorescent lighting Illumination level: See Table 8600-4 Single level switching 2 duplex receptacles	265100 262726 262726
Fire-rated gypsum drywall	092113		
Walls:		<u>Communications:</u> Central sound system	275123
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>		<u>Electronic Safety and Security:</u> Life safety devices per code	283111
N/A		<u>Miscellaneous:</u> N/A	
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			
<ul style="list-style-type: none"> ▪ Wall minimum STC 45 ▪ This room to be one-story (14'+/-) tall, located within high-bay program. 			

NOTES:

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

**PRECISION MACHINING
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	Specialized classroom and shop learning experiences that are concerned with all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling, feeds, and speeds of machining. Also emphasized is work on the bench, lathes, shapers, milling machines, grinders, and drills; the use of precision measuring instruments, such as layout tools, micrometers, and gauges; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares the learner to operate and repair all machines including those with computerized numerical controls (CNC). Programs will be certified by National Institute for Metalworking Skills (NIMS).	<u>FEATURES¹:</u>	Spec.
Program Type:	6	<u>Fixed Items:</u>	<u>Ref.#</u>
Size Requirements:	3,500 SF Lab	16' of chalk/marker board	101100
Lab Requirements:		8' of tack board	101100
<u>FINISHES:</u>	Spec.	24' of tall storage cabinets	123550
Flooring:	<u>Ref #</u>	Pencil sharpener support	062000
Cure and seal concrete	033000	(4) Paper towel dispensers	102813
Ceiling:		12'x14' motorized overhead	
Painted, exposed structure	099100	sectional door to exterior	083613
Walls:		3'x7' hollow metal service door	
Painted concrete masonry units	042000/ 099100	to exterior	081113
<u>LOOSE FURNISHINGS:</u>		Steel bollards at overhead door,	
(6) Workbenches with heavy-duty metal tops		both sides	055000
(24) Stools or chairs		<u>Fire Suppression:</u>	
Wastebasket		Fire suppression system	211000
Pencil sharpener		<u>Plumbing:</u>	
		2 washfountains (minimum)	224000
		2 utility sinks (minimum)	224000
		2 hose bibbs (minimum)	224000
		Safety shower/eyewash	224000
		20 compressed air connections	221500
		Flat floor – no floor drains	
		1 trench drain	224000
		Plumbing connections	
		221116/221119/224000	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		High intensity lighting or	265100
		fluorescent lighting	
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		30 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		220v 3-phase service	262726
		480v 3-phase service	262726
		Room safety push-button	262726
		<u>Communications:</u>	
		1 video port and video display device	
		271533/271543/274119	
		1 voice port and phone	271513/273113
		4 data ports	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		Miscellaneous: N/A	

NOTES:

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

**PRECISION MACHINING
CNC Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	900 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Option: painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(4) Chairs		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 50		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		20' of plastic laminate counter 123550
		20' of adjustable shelving 062000
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required Div. 23
		Independent ventilation (see note 2) Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		220v service 262726
		<u>Communications:</u>
		Central sound system 275123
		6 data ports 271513
		<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. **Room may be cooled from central HVAC system, but all air must be exhausted and not returned.**

**PRECISION MACHINING
Inspection Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	6	
Size Requirements:	150 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Option: painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(1) Work table		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		4' of tall storage 123550
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 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.

**WOOD PRODUCT TECHNOLOGIES
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

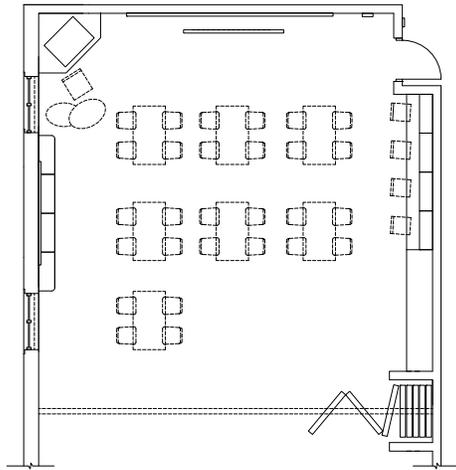
<u>PROGRAM DESCRIPTION:</u>	Utilizing business and industry, math, science, and technology standards, introduces concepts of wood product materials and technologies; design and production of window frames, molding, trims and panels; and wood crafting skills including the design and manufacture of wood products such as furniture, moldings, trim, fixtures, and cabinetry.	<u>FEATURES¹:</u>	Spec.
Program Type:	6	<u>Fixed Items:</u>	<u>Ref.#</u>
Size Requirements:	3,000 SF Lab	16' of chalk/marker board 101100 8' of tack board 101100 24' of tall storage cabinets 123550 Pencil sharpener support 062000 (3) Paper towel dispensers 102813 12'x14' motorized overhead sectional door to exterior 083613 3'x7' hollow metal service door to exterior 081113 Steel bollards at overhead door, both sides 055000	
Lab Requirements:		<u>Fire Suppression:</u>	
<u>FINISHES:</u>	Spec.	Fire suppression system 211000	
Flooring:	<u>Ref #</u>	<u>Plumbing:</u>	
<i>Cure and seal</i> concrete	033000	1 washfountain (minimum) 224000 2 utility sinks (minimum) 224000 2 hose bibbs (minimum) 224000 Safety shower/eyewash 224000 2 floor drains 224000 1 trench drain 224000 Plumbing connections 221116/221119/224000	
Ceiling:		<u>HVAC:</u>	
Painted, exposed structure	099100	Supply/return air system Div. 23 Independent temperature control 230923 Dust collection system 233513	
Walls:		<u>Electrical:</u>	
Painted concrete masonry units	042000/ 099100	High intensity lighting or fluorescent lighting 265100 Illumination level: See Table 8600-4 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726	
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
(12) Workbenches with heavy-duty wooden tops		1 video port and video display device 271533/271543/274119	
(24) Stools or chairs		1 voice port and phone 271513/273113	
Wastebasket		4 data ports 271513	
Pencil sharpener		Clock 275313	
		Central sound system 275123	
		<i>Room safety push-button</i> 262726	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code 283111	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

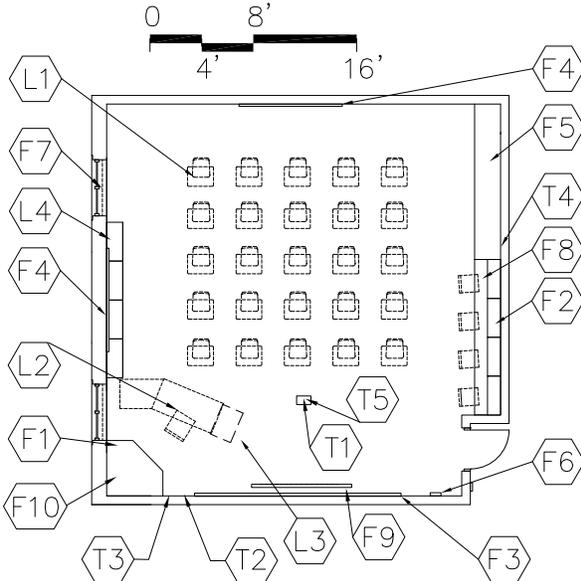
1. Finishes/Features: Refer to Chapter 9 for specification references.

RELATED CLASSROOM CT-P6-2

CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

CAPACITY:
SIZE:

25 students
900 SF

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

SPATIAL RELATIONSHIPS:

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

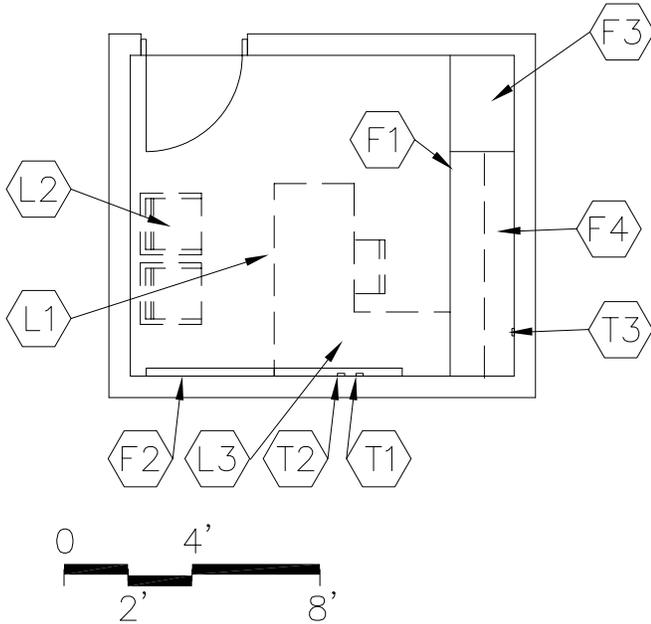
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM
CT-P6-2**
CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 3' of tall wardrobe with file drawers	123550
Optional: Vinyl composition tile, linoleum, ET , or sheet vinyl	096516 096500	F2 Computer work surface (could be loose)	123550
<u>Base:</u>		F3 10'-16' of chalk/marker board	101100
Resilient base	096500	F4 10'-16' of tack board	101100
<u>Ceiling:</u>		F5 8'-12' of base & wall cabinets	123550
Suspended, acoustical	095113	F6 Pencil sharpener support	062000
<u>Walls:</u>		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 About 10' of wall cabinets	123550
<u>LOOSE FURNISHINGS:</u>		F9 Projection screen (optional)	115213
L1 Student desks and chairs		F10 Technology support casework	123550
L2 Teacher desk or workstation/computer support and chair		<u>Fire Suppression:</u>	
L3 File cabinet		Fire suppression system	211000
L4 9' of low bookcases (fixed or mobile)		<u>Plumbing:</u>	
Wastebasket		N/A	
Pencil sharpener		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		M1 Operable partitions between classrooms are optional	102226

NOTES:

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



PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P6-3**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or carpet tile</i>	096816 096813	F1 Work surface with file drawers	123550
		F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 2' of tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

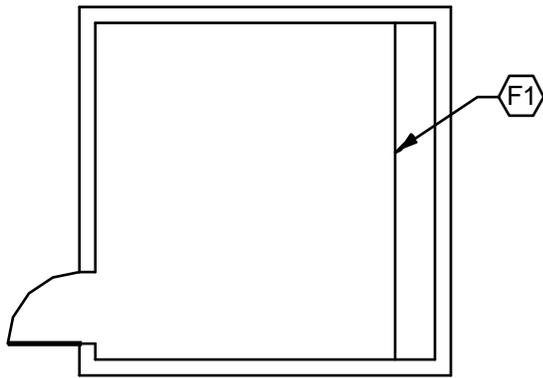
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

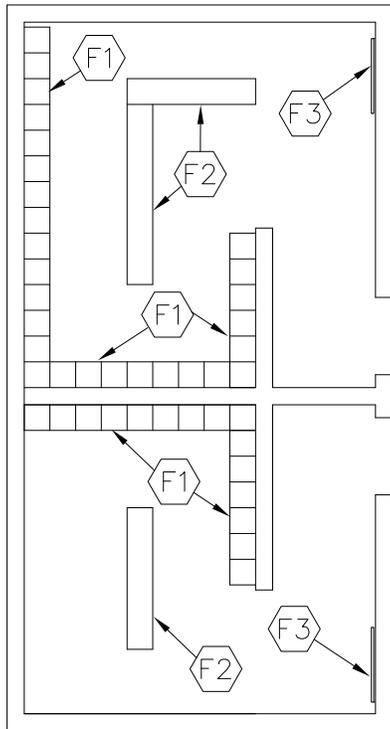
NOTES:

**STORAGE AREA
CT-P6-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**PROGRAM ACTIVITIES:**

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
Wall minimum STC 40
Ceiling minimum CAC 35, NRC **0.70**

CAPACITY: N/A
SIZE: 9 SF per student (see Note 2)

NOTES:

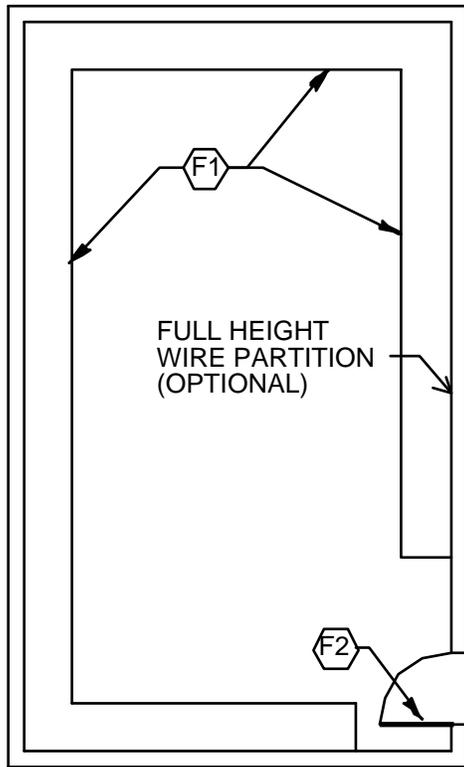
1. Large and small changing areas are interchangeable for either males or females.
Determination based on male/female ratio within each program.
2. Student count determined by total number of approved program spaces Types 5, 6, and 7 times 30.

**CHANGING ROOM
CT-P6-5**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u> <i>Polished concrete finishing, or colored concrete finishing</i> Optional: Vinyl composition tile, linoleum, or rubber	033510 033519 096500 096516	<u>Fixed Items¹:</u> F1 Student lockers F2 Locker benches F3 24" x 60" mirror	105113 062000 102813
<u>Base:</u> Resilient base	096500	<u>Fire Suppression:</u> Fire suppression system	211000
<u>Ceiling:</u> Suspended, acoustical with high impact hold down clips	095113	<u>Plumbing:</u> N/A	
<u>Walls:</u> Painted concrete masonry units 042000 / 099100		<u>HVAC:</u> Supply/Return air system Exhaust air system Supplemental heat as required Individual temperature control	Div. 23 Div. 23 Div. 23 230923
<u>LOOSE FURNISHINGS</u> Wastebaskets		<u>Electrical:</u> Single level switching Fluorescent lighting Illumination level: See Table 8600-4 2 Duplex receptacles Means of egress lighting per code	262726 265100 262726 265100
		<u>Communications:</u> Clock Central Sound System	275313 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.

**TOOL CRIB
CT-P6-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL


0 2' 4' 8'

CAPACITY:
SIZE:
ANCILLARY SPACES:

N/A
550 SF

PROGRAM ACTIVITIES:

- Storage of program related tools and instruments.
- Storage of students' tools.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes

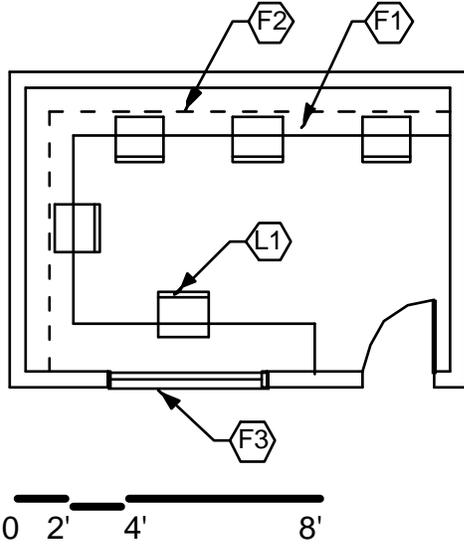
NOTES:

**TOOL CRIB
CT-P6-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES</u>¹:		<u>FEATURES</u>¹:	
Flooring:		<u>Fixed Items</u>¹:	
<i>Cure and seal</i> concrete	033000	F1 80' of open metal shelving (total), Depth may vary (fixed or loose)	105613
Optional: Vinyl composition tile, linoleum, or rubber	096500 096516	F2 Dutch door	105613
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		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 8600-4	
		4 Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

- Individual computer research.
- Reference program specific manuals.
- Small group meetings.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes
- Environmental sound control
Wall minimum STC 50
Ceiling minimum CAC 35, NRC **0.70**

CAPACITY:
SIZE:

N/A
200 SF

NOTES:

**REFERENCE ROOM
CT-P6-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

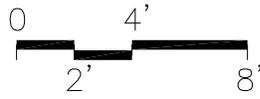
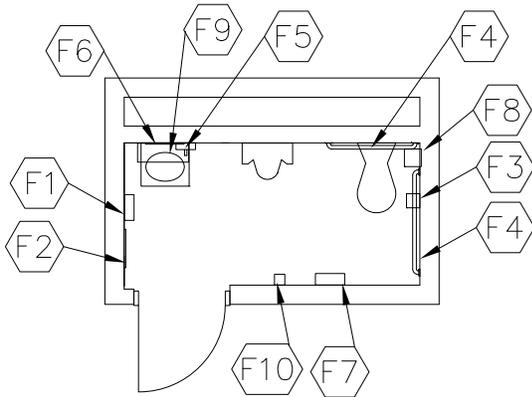
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
<i>Cure and seal</i> concrete	033000	F1 34' of plastic lam. counter	062000
Optional: Vinyl composition tile,	096500	F2 27' of adjustable shelving	062000
		F3 Interior window	081113/ 088000
Base:		<u>Fire Suppression:</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	Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
L3 Student chairs		Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 Duplex receptacles	262726
		Duplex receptacle adjacent to	
		Each data and video port	262726
		<u>Communications:</u>	
		T1 6 data ports	271513
		<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.

**TOILET ROOM
CT-P6-8**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Personal and health needs for the program
- Specific users
- Changing of clothes and/or uniforms.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
 Wall minimum **STC 48**
 Ceiling minimum **CAC 35, NRC 0.70**

CAPACITY:
SIZE:

N/A
68 SF

NOTES:

**TOILET ROOM
CT-P6-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
<i>Polished concrete finishing</i>	033510	<u>Fixed Items:</u>	
<i>or colored concrete finishing</i>	033519	F1 Towel dispenser	102813
Optional: Vinyl composition tile	096500	F2 24" x 60" mirror	102813
Base:		F3 Toilet tissue holder	102813
Resilient base	096500	F4 36" and 42" grab bars	102813
Ceiling:		F5 Soap dispenser	102813
Suspended, acoustical	095113	F6 16" x 24" mirror	102813
Walls:		F7 Sanitary product dispenser	102813
Painted concrete masonry units	042000 / 099100	F8 Sanitary product receptacle	102813
		F9 Stainless steel shelf (optional)	102813
		F10 Coat hook	102813
<u>LOOSE FURNISHINGS</u>		<u>Fire Suppression:</u>	
Wastebaskets		Fire suppression system	211000
		<u>Plumbing:</u>	
		Plumbing connections	221116/221119/224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		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.

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Program Type 7

Description: Large to very large-sized lab space with enhanced support space.

Lab space to be "high-bay" (**18'** min. clearance) with exposed building structure.

Lab to utilize standard construction with the following exception – lab floor slab to be 8" thick.

Support space to be finished with sealed concrete or vinyl composition tile, paint, and suspended acoustical ceiling. No air-conditioning of any spaces within Program Type 7.

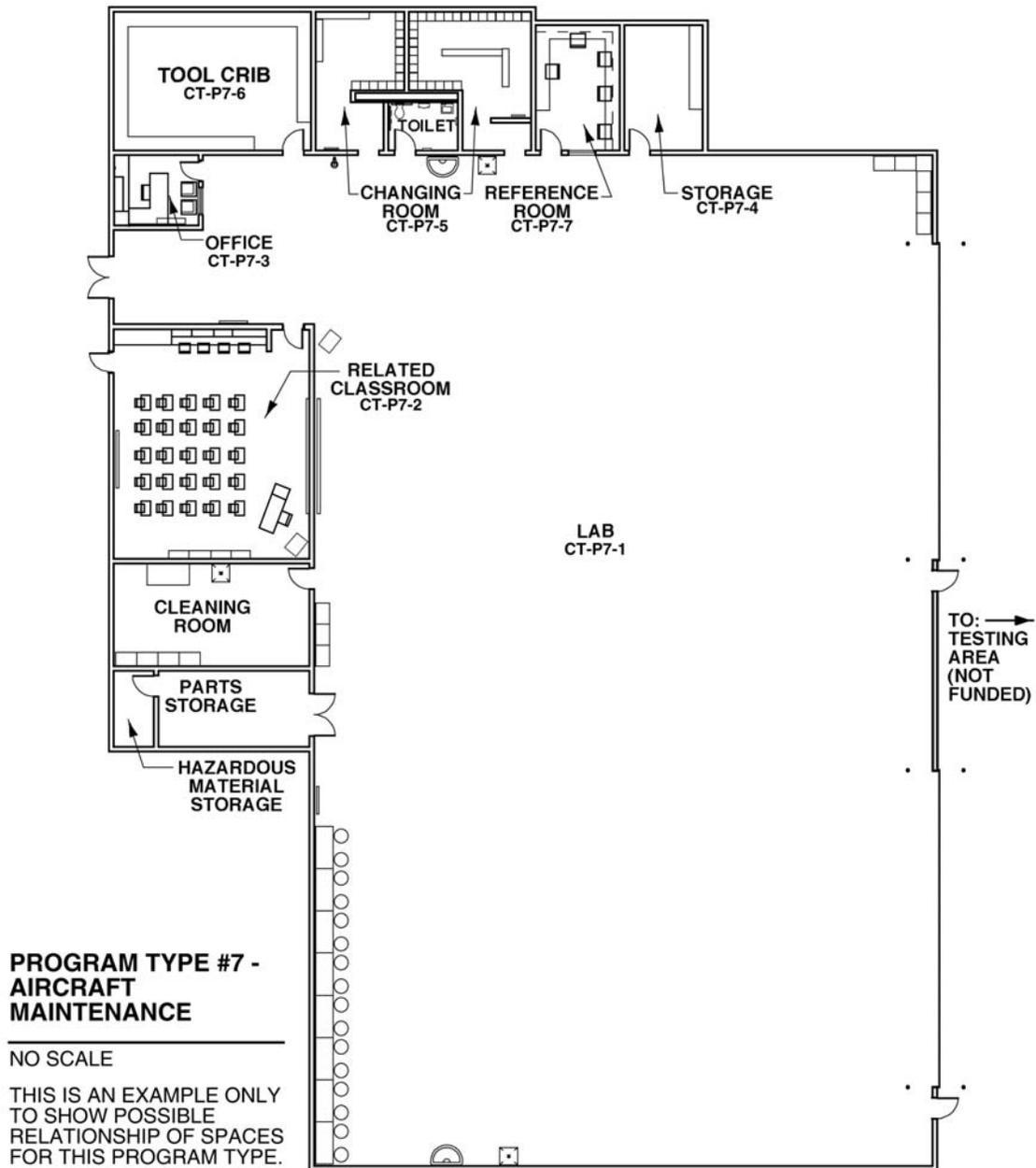
**NOTES:**

This is an example of how the Program Type 7 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 7 space plates:

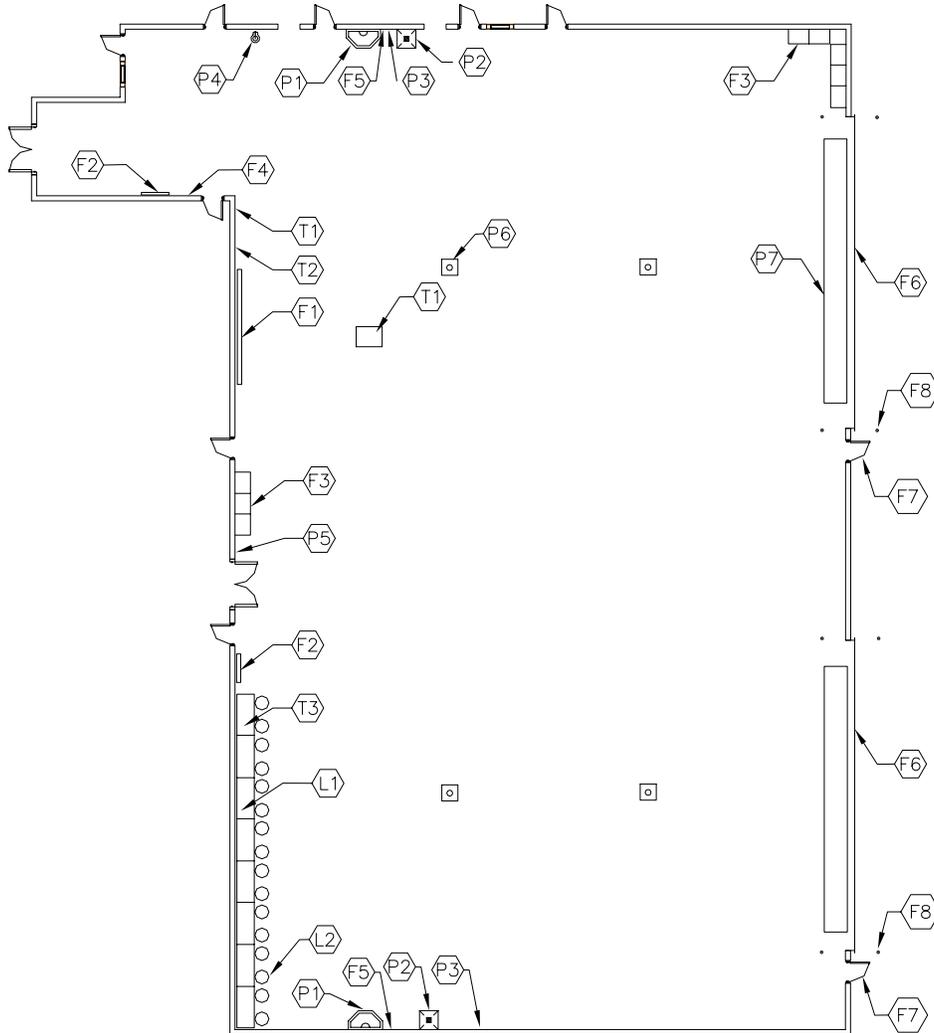
CT-P7-1	Lab
CT-P7-2	Related Classroom
CT-P7-3	Office
CT-P7-4	Storage
CT-P7-5	Changing Room
CT-P7-6	Tool Crib
CT-P7-7	Reference Room
CT-P7-8	Toilet Room

**PROGRAM TYPE 7
EXAMPLE**



NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY:	24 Students
SIZE:	8,000 – 13,000 SF (see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P7-2 thru CT-P7-8

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

LAB
CT-P7-1

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting with 80% visual comfort probability level.
- Optional: Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -
walls minimum STC 50
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**AIRCRAFT MAINTENANCE
CT-P7-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM DESCRIPTION: Classroom and lab learning experiences concerned with the inspection, repair, servicing, and overhauling of all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables and hydraulic units. Involves learning the use of technical manuals and various types of testing equipment.		FEATURES¹:	Spec. Ref.#
Program Type:	7	Fixed Items:	
Size Requirements:	13,000 SF Lab	F1 16' of chalk/marker board	101100
Lab Requirements:		F2 8' of tack board	101100
		F3 24' of tall storage cabinets	123550
		F4 Pencil sharpener support	062000
		F5 (4) Paper towel dispensers	102813
		F6 (2) 35'high x 45'long motorized overhead sectional doors to exterior	083613
		F7 (2) 3'x7' hollow metal service doors to exterior	081113
		F8 Steel bollards at overhead door, both sides	055000
		Fire Suppression:	
		Fire suppression system	211000
		Plumbing:	
FINISHES:	Spec. Ref #	P1 2 washfountains (minimum)	224000
Flooring:		P2 2 utility sinks (minimum)	224000
Cure and seal concrete	033000	P3 3 hose bibbs (minimum)	224000
		P4 Safety shower/eyewash	224000
Ceiling:		P5 14 compressed air connections	221500
Painted, exposed structure	099100	P6 2 floor drains	224000
		P7 1 trench drain	224000
Walls:		Plumbing connections	221116/221119/224000
Painted concrete masonry units	042000/ 099100	HVAC:	
		Supply/return air system	Div. 23
		Independent temperature control	230923
LOOSE FURNISHINGS:		Electrical:	
L1 (8) Workbenches with heavy-duty metal tops		High intensity lighting or fluorescent lighting	265100
L2 (24) Stools or chairs		Illumination level: See Table 8600-4	
Wastebasket		Multilevel switching	262726
Pencil sharpener		40 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data and video port	262726
Electronic Safety and Security:		220v service	262726
Life safety devices per code	283111	Communications:	
Miscellaneous:		T1 1 video port and video display device	271533/271543/274119
N/A		T2 1 voice port and phone	271513/273113
		T3 4 data ports	271513
The following items to be funded by the School District:		Clock	275313
Paint booth, paint prep station, paint mixing station		Central sound system	275123

NOTES:

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

AIRCRAFT MAINTENANCE
Cleaning Room

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
Program Type:	7	
Size Requirements:	400 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Option: painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(1) Work table		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		4' of tall storage cabinets 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Utility sink 224000
		Plumbing connections 221116/221119/224000
		Compressed air connections 221500
		<u>HVAC:</u>
		Supplemental heat as required Div. 23
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Single level switching 262726
		4 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.

AIRCRAFT MAINTENANCE
Parts Storage

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p>Program Type: 7</p> <p>Size Requirements: 300 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring: Cure and seal concrete</p> <p>Ceiling: Fire-rated gypsum drywall</p> <p>Walls: Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u> N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> ▪ Wall minimum STC 45 ▪ This room to be one-story (14'+/-) tall, located within high-bay program. 	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES¹:</u> <u>Fixed Items:</u> 30' of heavy duty steel adjustable shelving</p> <p><u>Fire Suppression:</u> Fire suppression system</p> <p><u>Plumbing:</u> N/A</p> <p><u>HVAC:</u> Supplemental heat as required Independent ventilation</p> <p><u>Electrical:</u> Fluorescent lighting Illumination level: See Table 8600-4 Single level switching 2 duplex receptacles</p> <p><u>Communications:</u> Central sound system</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code</p> <p><u>Miscellaneous:</u> N/A</p>	<p>105613</p> <p>211000</p> <p>033000</p> <p>092113</p> <p>042000/ 099100</p> <p>265100</p> <p>262726</p> <p>262726</p> <p>275123</p> <p>283111</p>
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NOTES:

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

**ANIMAL SCIENCE AND MANAGEMENT - EQUINE
CT-P7-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	Applies principles of anatomy and physiology, nutrition, reproduction, health, and genetics and behavior to the production, management, marketing, and training of domestic animals.	<u>FEATURES¹:</u>	Spec.
Program Type:	7	<u>Fixed Items:</u>	<u>Ref.#</u>
Size Requirements:	8,000 SF Lab	180' of metal pipe rail fencing	055000
Lab Requirements:	Spec. <u>Ref #</u>	12' x 14'motorized overhead	083613
<u>FINISHES:</u>	Flooring: Compacted earth	sectional door to exterior	081113
Ceiling:	Painted, exposed structure	3'x7' hollow metal service door to exterior	055000
Walls:	Painted exposed structure	<u>Fire Suppression:</u>	211000
<u>LOOSE FURNISHINGS:</u>	N/A	Fire suppression system	224000
<u>SITE FEATURE:</u>	Plan for the following if required by school curriculum requirements: Fenced riding area	<u>Plumbing:</u>	221116/221119/224000
		2 hose bibbs (minimum)	Div. 23 230923
		Plumbing connections	
		<u>HVAC:</u>	
		Supply/return air system	
		Independent temperature control	
		<u>Electrical:</u>	
		High intensity lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		12 duplex receptacles (minimum)	262726
		<u>Communications:</u>	
		1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

**ANIMAL SCIENCE AND MANAGEMENT - EQUINE
Stables**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

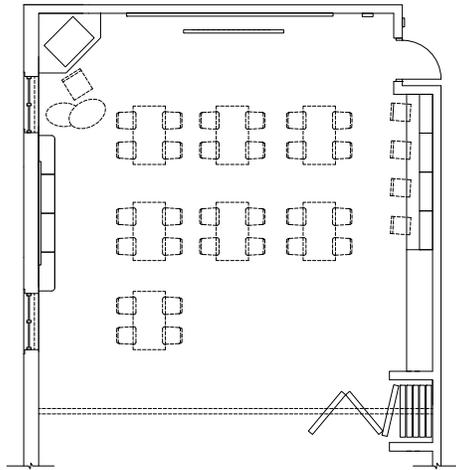
		Spec. Ref.#
Program Type:	7	
Size Requirements:	6,800 SF	
Requirements:		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Cure and seal concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Exposed wood	062000	
At wash stalls, provide fiberglass reinforced plastic panels		
<u>LOOSE FURNISHINGS:</u>		
Teacher desk and chair		
File cabinet		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ This room to be one-story (14'+/-) tall, adjacent to indoor riding area.		
▪ Building is to be of wood construction.		
▪ Optional: Provide loft space above stalls for storage.		
		<u>FEATURES¹:</u>
		<u>Fixed Items:</u>
		(4) Paper towel dispensers 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		6 frost-free hose bibbs 224000
		Plumbing connections 221116/221119/224000
		Floor drains with clean-out pits 224000
		<u>HVAC:</u>
		N/A
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-4
		Multilevel switching 262726
		12 duplex receptacles (minimum) 262726
		<u>Communications:</u>
		1 voice port and phone 271513/273113
		1 data port 271513
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

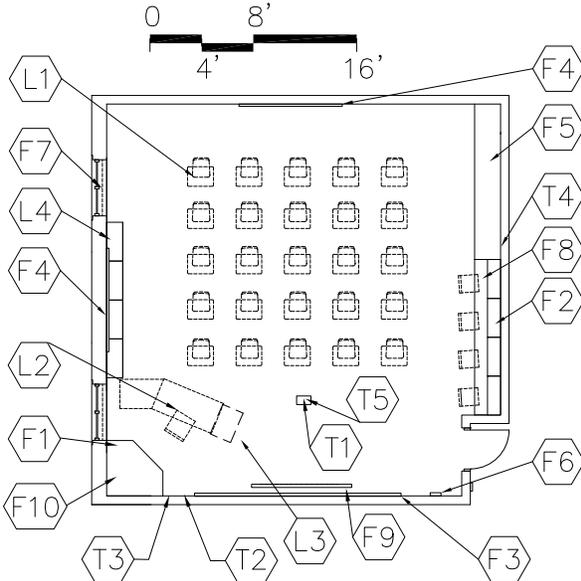
1. Finishes/Features: Refer to Chapter 9 for specification references.

RELATED CLASSROOM CT-P7-2

CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

CAPACITY:
SIZE:

25 students
900 SF

PROGRAM ACTIVITIES:

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

SPATIAL RELATIONSHIPS:

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

ENVIRONMENTAL CONSIDERATIONS:

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

NOTES:

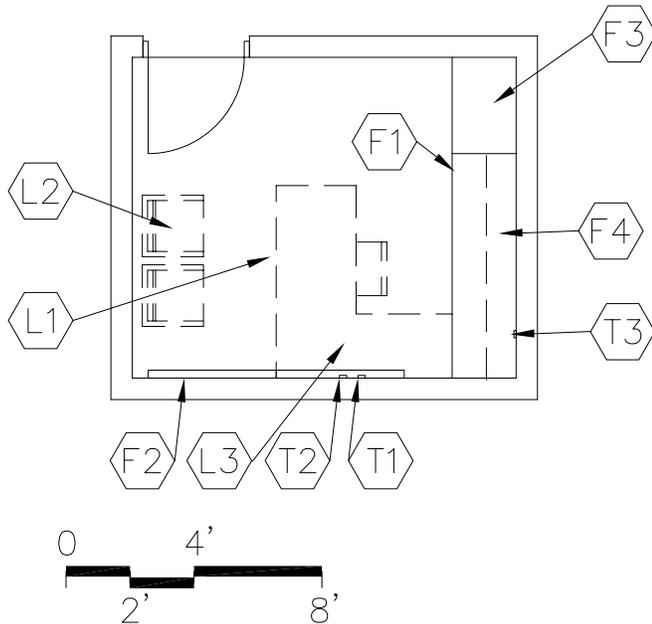
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM
CT-P7-2**
CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet	096816	F1 3' of tall wardrobe with file drawers	123550
Optional: Vinyl composition tile, linoleum, ET , or sheet vinyl	096516 096500	F2 Computer work surface (could be loose)	123550
<u>Base:</u>		F3 10'-16' of chalk/marker board	101100
Resilient base	096500	F4 10'-16' of tack board	101100
<u>Ceiling:</u>		F5 8'-12' of base & wall cabinets	123550
Suspended, acoustical	095113	F6 Pencil sharpener support	062000
<u>Walls:</u>		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 About 10' of wall cabinets	123550
		F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks and chairs		Fire suppression system	211000
L2 Teacher desk or workstation/computer support and chair		<u>Plumbing:</u>	
L3 File cabinet		N/A	
L4 9' of low bookcases (fixed or mobile)		<u>HVAC:</u>	
Wastebasket		Supply/return air system	Div. 23
Pencil sharpener		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		M1 Operable partitions between classrooms are optional	102226

NOTES:

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



PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

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

CAPACITY: 1 - 3 persons
SIZE: 120 SF

NOTES:

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

**OFFICE
CT-P7-3**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or carpet tile</i>	096816 096813	F1 Work surface with file drawers	123550
		F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 2' of tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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

PROGRAM ACTIVITIES:

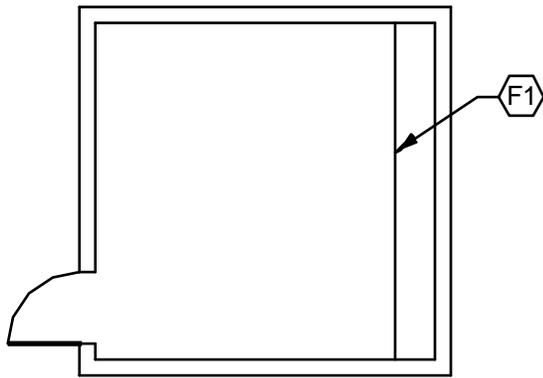
- Space for storage of lab equipment

SPATIAL RELATIONSHIPS:

- Near related lab

ENVIRONMENTAL CONSIDERATIONS:

N/A



CAPACITY:
SIZE:

N/A
200 SF

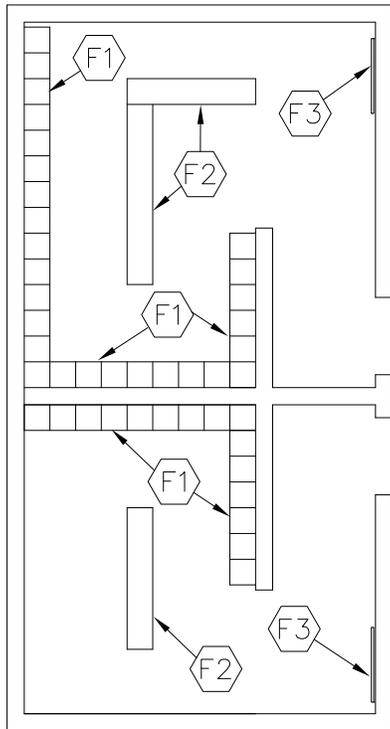
NOTES:

**STORAGE AREA
CT-P7-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items¹:</u>	
<i>Cure and seal</i> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	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 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
Wall minimum STC 40
Ceiling minimum CAC 35, NRC **0.70**

CAPACITY: N/A
SIZE: 9 SF per student (see Note 2)

NOTES:

1. Large and small changing areas are interchangeable for either males or females.
Determination based on male/female ratio within each program.
2. Student count determined by total number of approved program spaces Types 5, 6, and 7 times 30.

**CHANGING ROOM
CT-P7-4**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

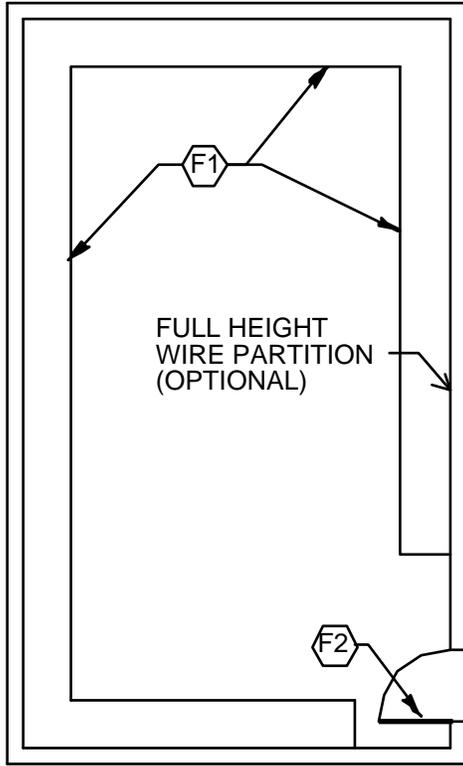
<u>FINISHES¹:</u>	Spec. Ref.#	<u>FEATURES¹:</u>	Spec. Ref.#
<u>Flooring:</u> <i>Polished concrete finishing, or colored concrete finishing</i> Optional: Vinyl composition tile, linoleum, or rubber	033510 033519 096500 096516	<u>Fixed Items¹:</u> F1 Student lockers F2 Locker benches F3 24" x 60" mirror	105113 062000 102813
<u>Base:</u> Resilient base	096500	<u>Fire Suppression:</u> Fire suppression system	211000
<u>Ceiling:</u> Suspended, acoustical with high impact hold down clips	095113	<u>Plumbing:</u> N/A	
<u>Walls:</u> Painted concrete masonry units 042000 / 099100		<u>HVAC:</u> Supply/Return air system Exhaust air system Supplemental heat as required Individual temperature control	Div. 23 Div. 23 Div. 23 230923
<u>LOOSE FURNISHINGS</u> Wastebaskets		<u>Electrical:</u> Single level switching Fluorescent lighting Illumination level: See Table 8600-4 2 Duplex receptacles Means of egress lighting per code	262726 265100 262726 265100
		<u>Communications:</u> Clock Central Sound System	275313 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.

**TOOL CRIB
CT-P7-6**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Storage of program related tools and instruments.
- Storage of students' tools.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes

CAPACITY: N/A
 SIZE: 550 SF
 ANCILLARY SPACES:

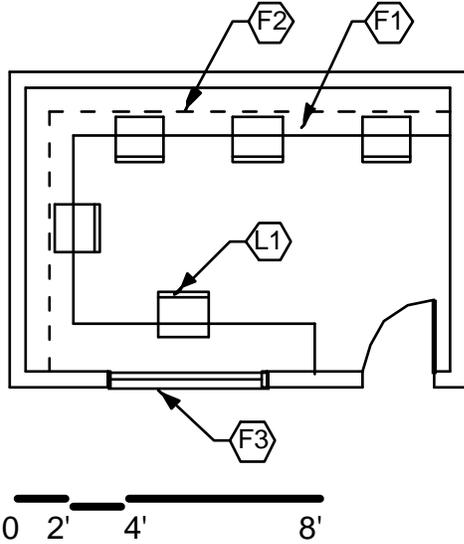
NOTES:

**TOOL CRIB
CT-P7-6**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES</u>¹:		<u>FEATURES</u>¹:	
Flooring:		<u>Fixed Items</u>¹:	
<i>Cure and seal</i> concrete	033000	F1 80' of open metal shelving (total),	
Optional: Vinyl composition tile,	096500	Depth may vary (fixed or loose)	105613
linoleum, or rubber	096516	F2 Dutch door	105613
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		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 8600-4	
		4 Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

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



PROGRAM ACTIVITIES:

- Individual computer research.
- Reference program specific manuals.
- Small group meetings.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes
- Environmental sound control
Wall minimum STC 50
Ceiling minimum CAC 35, NRC **0.70**

CAPACITY:
SIZE:

N/A
200 SF

NOTES:

**REFERENCE ROOM
CT-P7-7**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

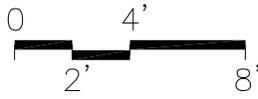
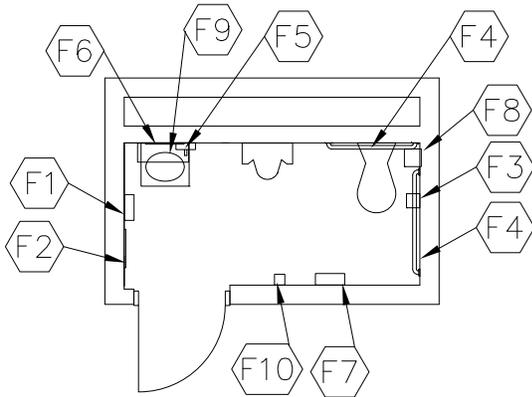
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
Flooring:		<u>Fixed Items:</u>	
<i>Cure and seal</i> concrete	033000	F1 34' of plastic laminate counter	062000
Optional: Vinyl composition tile,	096500	F2 27' of adjustable shelving	062000
		F3 Interior window	081113/ 088000
Base:		<u>Fire 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		Supply/return air system	Div. 23
	042000 / 099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
L3 Student chairs		Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 Duplex receptacles	262726
		Duplex receptacle adjacent to	
		Each data and video port	262726
		<u>Communications:</u>	
		T1 6 data ports	271513
		<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.

**TOILET ROOM
CT-P7-8**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



PROGRAM ACTIVITIES:

- Personal and health needs for the program
- Specific users
- Changing of clothes and/or uniforms.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Sanitary and durable finishes.
- Environmental sound control
Wall minimum STC **48**
Ceiling minimum CAC 35, NRC **0.70**

CAPACITY:
SIZE:

N/A
68 SF

NOTES:

**TOILET ROOM
CT-P7-8**
CHAPTER 6: CAREER-TECHNICAL SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES¹:</u>		<u>FEATURES¹:</u>	
<i>Polished concrete finishing</i>	033510	<u>Fixed Items:</u>	
<i>or colored concrete finishing</i>	033519	F1 Towel dispenser	102813
Optional: Vinyl composition tile	096500	F2 24" x 60" mirror	102813
Base:		F3 Toilet tissue holder	102813
Resilient base	096500	F4 36" and 42" grab bars	102813
Ceiling:		F5 Soap dispenser	102813
Suspended, acoustical	095113	F6 16" x 24" mirror	102813
Walls:		F7 Sanitary product dispenser	102813
Painted concrete masonry units		F8 Sanitary product receptacle	102813
	042000 / 099100	F9 Stainless steel shelf (optional)	102813
		F10 Coat hook	102813
<u>LOOSE FURNISHINGS</u>		<u>Fire Suppression:</u>	
Wastebaskets		Fire suppression system	211000
		<u>Plumbing:</u>	
		Plumbing connections	221116/221119/224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		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.