

BUILDING PROGRAM DOCUMENT



Signature Sheet

SOUTHWEST APPLIED TECHNOLOGY COLLEGE REVIEW SIGNATURES

We have reviewed the Program for the Southwest Applied Technology College Allied Health and Technology Building and warrant that it adequately represents our request for a program document and it fulfills our mission and program goals. The appropriate parties listed below have reviewed it for approval.

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Date

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01 Executive Summary

Project Goals/Mission and Vision

UCAT MISSION

The mission of the Utah College of Applied Technology is to provide, through its regional campuses, market-driven career and technical education to both secondary and adult students, which meets the demand by Utah employers for technically skilled workers. This is accomplished through competency-based education and training programs, which may be long term, short term, apprenticeship, or custom designed for individual employer needs. Most of the programs are offered in an open-entry, open-exit format providing flexibility for students and employers. Students are assisted in acquiring the basic skills necessary to succeed in these technical training programs. UCAT prepares students to enter, re-enter, upgrade, or advance in the workplace, which contributes to economic development, and improves the quality of life for communities it serves.

SWATC MISSION

Southwest Applied Technology College provides education and job skill training through individualized competency-based programs in response to the needs of students, employers and the communities it serves.

SWATC VISION

Southwest Applied Technology College will:

- Become the region's recognized leader in providing top-quality technical education
- Focus its efforts on meeting the needs of students and employers
- Treat students and employees with respect and dignity
- Work as a united team to accomplish its goals
- Set an example of hard work, enthusiasm and dedication
- Conduct its business in accordance with high ethical standards

PROJECT GOALS/MISSION AND VISION

The goal of the programming document is to provide justification for the Southwest Applied Technology College new building, to confirm preliminary budgetary amounts and to provide accurate space usage, adjacency and technical requirements to assist the future design of the building and site. The construction of this new building and site will further the UCAT and SWATC Mission. In addition to the pragmatic goals the SWATC steering committee identified the following visioning goals for the new building:

- Help the College meet regional workforce needs
- Maintain a strong visual connection to existing campus
- The technology classrooms and labs should augment existing programs and spaces
- Bold physical identity and pedestrian corridor between the new and old building
- Maximum flexibility and cost effective construction
- Include phasing for shared administrative functions
- Easy pedestrian and site access
- Maintain and respect the residential scale of the surrounding neighborhoods
- Maintain flexibility to respond to economic/employment market without losing quality
- Strong street presence
- As first building in the property master plan, be “Gateway” to new campus
- Attract and retain students
- Attract and retain qualified faculty
- Increase student success and placement
- Become a community “hub,” facilitate gathering
- Reflect the beautiful geographical surroundings in the building form, siting, artwork, and with durable interior and exterior finishes
- Provide clear way finding for students and visitors

01 Executive Summary

Project Justification

ALLIED HEALTH AND TECHNOLOGY BUILDING

The Southwest Applied Technology College (SWATC) Allied Health and Technology Building will provide critical technology training in response to regional workforce and economic development needs. This facility will include 77,200 square feet of state-of-the-art training space for Allied Health, Manufacturing, Culinary Arts and Welding programs. According to local industry leaders, the region is already experiencing shortages of skilled laborers in these key occupational clusters. State projections provide further evidence of the facility's criticality, showing that growth rates in these job sectors (see Appendix 1) will exceed the region's rapidly growing population (see Appendix 2).

The College's current main campus building is the former Cedar High School vocational building. After seven years of dramatic growth, adult student enrollment at the main campus reached capacity in fiscal year 2012, as is evidenced by flattening of the growth curve (see Appendix 3). The building does not provide adequate square footage to accommodate future enrollment growth and the current space was not specifically designed for current training programs and the related industry required equipment. To ensure that the Allied Health and Technology Building meets industry standards and needs, design input from industry partners and program advisory committees will be utilized.

The instructional space vacated by programs moving from the current facility to the new building will allow the remaining programs to expand enrollment capacity and increase instructional effectiveness. Overall, it is estimated that the new building will increase the College's capacity by 150%. At its current rate of enrollment growth, SWATC expects to reach maximum capacity in the new building within five to seven years.

Initially, the College investigated the possibility of reducing the building size to approximately 50,000 square feet. After input from business and community partners, it became apparent that even at 77,200 square feet, the building would not allow the College to add all of the programs needed to meet regional employers current needs. In addition, if the building size was reduced to 50,000 square feet, the cost per square foot would increase significantly due to economy of scale associated with heating, cooling, building infrastructure, parking and site preparation.

The SWATC Allied Health and Technology Building is the College's and the Utah College of Applied Technology (UCAT) Board of Trustees' top priority.

Building Program Summary

DESCRIPTION

The Southwest Applied Technology College Allied Health and Technology building will consist of the following major program elements: health science, technology training, culinary arts, administration, student services, book store and testing center, a large multi purpose room and building support spaces. Further explanation of the major programmed areas can be found in Section 4 in the Detailed Space Area Summary and in the Individual Space Summary, Sections 5-12. To meet the programmatic needs for the new SWATC building it has been sized to 77,200 gross square feet. A .25 grossing factor was applied to the net square footage to get to the final gross square footage amount. The gross factor is for circulation, wall thickness, shafts and ancillary spaces.

Description	Sq. Feet
HEALTH SCIENCE	15449
TECHNOLOGY TRAINING	20644
CULINARY ARTS	6500
ADMINISTRATION	5788
STUDENT SERVICES	3178
BOOKSTORE/TESTING CENTER	2740
MULTIPURPOSE	2651
BUILDING SUPPORT	4810
NSF Subtotal	61760
Circulation, access, exterior walls (25% NSF)	15440
TOTAL	77200

01 Executive Summary

Building Cost Summary

PROJECT ESTIMATE CONSTRUCTION CONTROL CORPORATION 8/20/2013
 PROJECT NAME.....SOUTHWEST APPLIED TECHNOLOGY COLLEGE
 ARCHITECT.....METHOD STUDIO Project Size 77,200 SF
 STAGE OF DESIGN.....PROGRAMMING

CSI #	DESCRIPTION	UNIT QTY	UNIT COST
BUILDING A COST SUMMARY			
02	SITWORK & DEMOLITION		\$ 22.15 \$ 1,709,711
03	CONCRETE		\$ 6.11 \$ 471,407
04	MASONRY		\$ 8.21 \$ 633,840
05	METALS		\$ 20.61 \$ 1,591,261
06	WOODS & PLASTICS		\$ 0.31 \$ 23,932
07	THERMAL & MOISTURE PROTECTION		\$ 11.29 \$ 871,596
08	DOORS & WINDOWS		\$ 7.19 \$ 554,921
09	FINISHES		\$ 17.99 \$ 1,389,111
10	SPECIALTIES		\$ 1.65 \$ 127,380
11	EQUIPMENT		\$ 6.34 \$ 489,460
12	FURNISHINGS		\$ 0.46 \$ 35,434
14	CONVEYING SYSTEMS		\$ 0.71 \$ 55,000
15	MECHANICAL		\$ 29.50 \$ 2,277,400
16	ELECTRICAL		\$ 18.85 \$ 1,455,220
SUBTOTAL			\$ 151.37 \$11,685,673
GENERAL CONDITIONS		6%	\$ 9.08 \$701,140
OVERHEAD & PROFIT		4%	\$ 6.05 \$467,427
DESIGN CONTINGENCY		15%	\$ 22.71 \$1,752,851
TOTAL CONSTRUCTION COST			\$ 189.21 \$ 14,607,091

ESCALATION HAS NOT BEEN FACTORED INTO THE COSTS OF THIS ESTIMATE.
 ESTIMATE IS FOR CONSTRUCTION COSTS ONLY, SOFT COSTS ARE NOT INCLUDED.

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	
02 SITEWORK & DEMOLITION				
	Demolition			
	Site Clearing	248292 SF	\$ 0.19	\$ 47,175
	Subtotal for Demolition			\$ 47,175
	Earthwork			
	Site Grading	196568 CY	\$ 0.31	\$ 60,936
	Site Excavation	36401 CY	\$ 9.65	\$ 351,274
	Building Excavation	11494 CY	\$ 4.00	\$ 45,977
	Backfill and Compaction w/ imported fills	11494 CY	\$ 12.65	\$ 145,402
	Building Grading	51724 SF	\$ 0.39	\$ 20,172
	Gravel under Slab	2054 TNS	\$ 28.00	\$ 57,502
	Subtotal for Earthwork			\$ 681,263
	Site Utilities			
	Sewer Service	1 LS	\$ 25,000.00	\$ 25,000
	Water Service	1 LS	\$ 30,000.00	\$ 30,000
	Storm Drainage	1 LS	\$ 45,000.00	\$ 45,000
	Electrical Feeder	1 LS	\$ 25,000.00	\$ 25,000
	Relocate Storm Drainage rout	1400 LF	\$ 50.00	\$ 70,000
	Subtotal for Site Utilities			\$ 195,000
	Site Improvements	196568 SF	\$ 4.00	\$ 786,272
	TOTAL SITEWORK & DEMOLITION			\$ 1,709,711
03 CONCRETE				
	Footings Continuous	149 CY	\$ 295.00	\$ 43,983
	Spot Footings	149 CY	\$ 305.00	\$ 45,474
	Foundation Wall	6038 SF	\$ 19.65	\$ 118,655
	Slab on Grade	51724 SF	\$ 3.55	\$ 183,620
	Topping Slab	23094 SF	\$ 3.45	\$ 79,674
	TOTAL CONCRETE			\$ 471,407

01 Executive Summary

Building Cost Summary

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	
04	MASONRY			
	CMU at Stair Enclosure	3840 SF	\$ 15.28	\$ 58,675
	Exterior Wall	31954 SF	\$ 18.00	\$ 575,165
	TOTAL MASONRY			\$ 633,840
05	METALS			
	Miscellaneous Steel	77200 SF	\$ 0.38	\$ 29,336
	Metal Floor Deck	23094 SF	\$ 1.85	\$ 42,724
	Metal Roof Deck	52924 SF	\$ 1.95	\$ 103,202
	Floor Structure	11#/SF 254034 LB	\$ 1.80	\$ 457,261
	Roof Structure-	7#/SF 370468 LB	\$ 1.80	\$ 666,842
	Decorative Stair	380 SF	\$ 89.00	\$ 33,820
	Decorative Railing	624 LF	\$ 300.00	\$ 187,200
	Concrete Filled Stair Pans	364 SF	\$ 59.00	\$ 21,476
	Free Standing Railing	260 LF	\$ 125.00	\$ 32,500
	Wall Mounted Handrail	260 LF	\$ 65.00	\$ 16,900
	TOTAL METALS			\$ 1,591,261
06	WOOD & PLASTICS			
	Carpentry:			
	Wood Plates & Blocking	77200 SF	\$ 0.31	\$ 23,932
	Subtotal for Carpentry			\$ 23,932
	Millwork	77200 SF	\$ 4.00	\$ 308,800
	TOTAL WOOD & PLASTICS			\$ 332,732

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	
07	THERMAL & MOISTURE PROTECTION			
	Batt Insulation at exterior wall	35504 SF	\$ 0.72	\$ 25,563
	3" Rigid at Building Exterior	35504 SF	\$ 2.95	\$ 104,737
	Rigid Roof Insulation	52924 SF	\$ 3.05	\$ 161,418
	Sound Batt	104220 SF	\$ 0.48	\$ 50,026
	Wall Sheathing	35504 SF	\$ 1.45	\$ 51,481
	Vapor Barrier	35504 SF	\$ 2.25	\$ 79,884
	Foundation Waterproofing	6038 SF	\$ 2.00	\$ 12,077
	Metal Wall Cap	1580 SF	\$ 7.65	\$ 12,087
	Metal Flashings	2500 SF	\$ 5.65	\$ 14,125
	Single Ply membrane	52924 SF	\$ 3.15	\$ 166,711
	Soffit	1200 SF	\$ 30.00	\$ 36,000
	Building Fireproofing	77200 SF	\$ 1.65	\$ 127,380
	Fire Stopping/ Caulking	77200 SF	\$ 0.18	\$ 13,896
	Caulking & Sealants	77200 SF	\$ 0.21	\$ 16,212
	TOTAL THERMAL & MOISTURE PROTECTION			\$ 871,596
08	DOORS & WINDOWS			
	Doors	77200 SF	\$ 1.95	\$ 150,540
	Exterior Glazing Aluminum (20% of Exterior)	7101 SF	\$ 38.50	\$ 273,381
	Shading Devices	800 SF	\$ 70.00	\$ 56,000
	Interior Glazing	2500 SF	\$ 30.00	\$ 75,000
	TOTAL DOORS & WINDOWS			\$ 554,921
09	FINISHES			
	Exterior Metal Stud Framing	35504 SF	\$ 3.20	\$ 113,613
	Interior Metal Stud Partitions	104220 SF	\$ 2.25	\$ 234,495
	5/8" Gypsum board	243944 SF	\$ 1.30	\$ 317,127
	Operable Wall	500 SF	\$ 52.00	\$ 26,000
	Moveable Partition Bulkhead	50 LF	\$ 49.00	\$ 2,450

01 Executive Summary

Building Cost Summary

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	
	Lab Area Ceiling	20644 SF	\$ 1.95	\$ 40,256
	Locker/ Restroom Ceiling	2411 SF	\$ 3.20	\$ 7,715
	Classroom Ceiling	15449 SF	\$ 2.25	\$ 34,760
	Culinary Arts Ceiling	4740 SF	\$ 3.75	\$ 17,775
	Office Area Ceiling	5788 SF	\$ 2.25	\$ 13,023
	Paint Exposed Structure	5200 SF	\$ 1.59	\$ 8,268
	Circulation area Ceiling	22968 SF	\$ 2.25	\$ 51,678
	Circulation area floorig	22968 SF	\$ 3.33	\$ 76,483
	Conference/ Board/ Reception Ceiling	5391 SF	\$ 3.75	\$ 20,216
	Conference/ Board/ Reception Flooring	5391 SF	\$ 12.00	\$ 64,692
	Lab Area Flooring	20644 SF	\$ 4.00	\$ 82,576
	Locker/ Restroom Flooring	2411 SF	\$ 7.00	\$ 16,877
	Classroom Flooring	15449 SF	\$ 4.00	\$ 61,796
	Culinary Arts Flooring	4740 SF	\$ 8.00	\$ 37,920
	Office Area Flooring	5788 SF	\$ 3.33	\$ 19,274
	Paint Gypsum Board Walls	243944 SF	\$ 0.42	\$ 102,456
	Sealed concrete	5200 SF	\$ 0.59	\$ 3,068
	Wall Coverings	243944 SF	\$ 0.15	\$ 36,592
	TOTAL FINISHES			\$ 1,389,111
10	SPECIALTIES	77200 SF	\$ 1.65	\$ 127,380
11	EQUIPMENT			
	Kitchen Equipment	1800 SF	\$ 165.00	\$ 297,000
	Health Science Equipment	1 LS	\$ 75,000.00	\$ 75,000
	Technology Training Equipment	1 LS	\$ 75,000.00	\$ 75,000
	Other Building Equipment	77200 SF	\$ 0.55	\$ 42,460
	TOTAL EQUIPMENT			\$ 489,460

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	
12	FURNISHINGS			
	Walk-Off Mats	120 SF	\$ 29.00	\$ 3,480
	Blinds	7101 SF	\$ 4.50	\$ 31,954
	TOTAL EQUIPMENT			\$ 35,434
14	CONVEYING SYSTEMS			
	Elevator 2 stop	1 EA	\$ 55,000.00	\$ 55,000
	TOTAL CONVEYING SYSTEMS			\$ 55,000
15	MECHANICAL			
	HVAC:	77200 SF	\$ 24.00	\$ 1,852,800
	Fire Protection:	77200 SF	\$ 1.85	\$ 142,820
	Plumbing	77200 SF	\$ 3.65	\$ 281,780
	TOTAL MECHANICAL			\$ 2,277,400
16	ELECTRICAL			
	Service & Distribution:	77200 SF	\$ 4.65	\$ 358,980
	Power:	77200 SF	\$ 2.65	\$ 204,580
	Lighting:	77200 SF	\$ 6.00	\$ 463,200
	Telecommunication System:	77200 SF	\$ 1.95	\$ 150,540
	Fire/Smoke System:	77200 SF	\$ 1.95	\$ 150,540
	Special Systems:	77200 SF	\$ 1.65	\$ 127,380
	TOTAL ELECTRICAL			\$ 1,455,220

02 Site Analysis

Overview

ANALYSIS

The Site Analysis portion of the program document identifies the impact of the site on the program, project budget and schedule. It identifies the physical characteristics of the direct building site and the surrounding geographical region. The analysis includes diagrams, maps and photographs to illustrate key features including: site topography, site climate, pedestrian and vehicular circulation, view corridors, key physical and visual adjacencies. The site analysis for the programming phase is intended to be a useful tool for the design phase of the project.

LOCATION

The Southwest Applied Technology College is located in Cedar City, Utah near the southern edge of Iron County. It is 250 miles from Salt Lake City, Utah and 53 miles from St. George, Utah. The College is located a short distance from several National and State Parks including Zion National Park, Cedar Breaks National Monument, Red Canyon, Bryce Canyon National Park, Great Basin National Park, Lake Powell, Sand Hollow State Park, Minersville State Park, Snow Canyon State Park, Quail Creek State Park, Fremont Indian State Park and Otter Creek State Park. Cedar City has numerous outdoor activities including the State and National Parks, it also is in close proximity to Brianhead Ski and Summer resort. The city also plays host to many festivals throughout the year including the world renown Shakespearean festival.

The new Southwest Applied Technology College main facility will be located directly across the street to the SouthWest of the previous campus headquarters. The old headquarters will be owned and operated by the school after the transition to the new facility has been made and will be used for additional classroom, shop and office space. Constant pedestrian and vehicle traffic will occur between the two sites. The new site is an 11.4 acre parcel located 200 meters from Main Street with 800 South bordering to the North end of the lot, 555 West to the East and 860 West to the West, the South side of the lot is irregular in shape and is bordered by various residential and commercial lots. Cedar City High School is located directly north of the site along 800 South. The main frontage of the site dissects the residential district to the West and the Commercial district to the East. Vehicle traffic to new building will be primarily along 800 South traveling West from Main Street with secondary traffic from 555 West and 860 West. Pedestrian traffic will primarily be between the existing campus building and Cedar City School from the north.



02 Site Analysis

02 Site Analysis

Site Location and Planning Principals

SITE SUMMARY

The building site slopes from a high point on the South East to the North West drainage ditch. See the Civil Design Criteria section for additional topographical information.

OUTDOOR SPACES

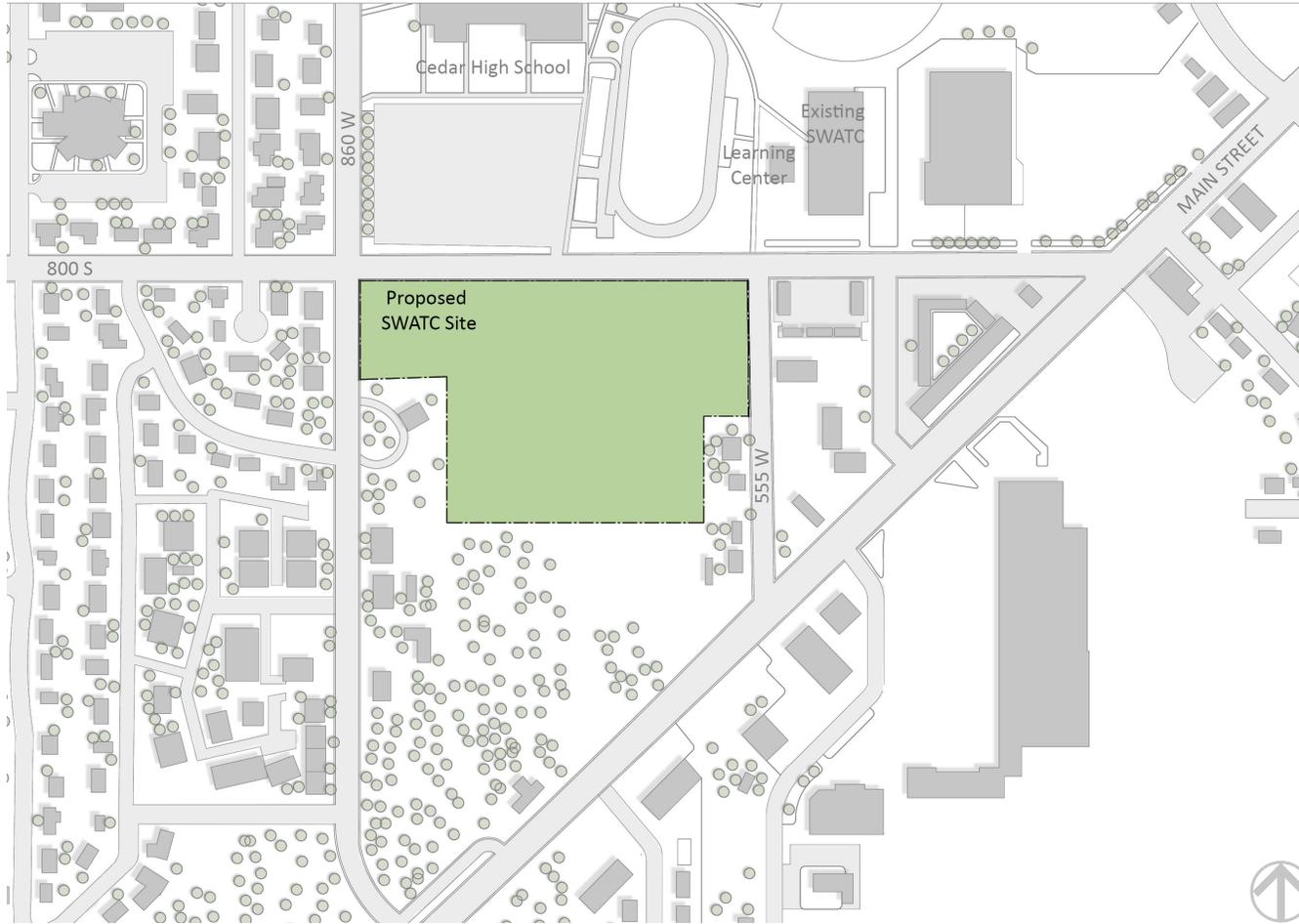
The 11.4 acre site affords many opportunities for outdoor space. The SWATC faculty has expressed the desire for an internal campus pedestrian path that will connect the new building with the future master planned buildings. This path should contain various sitting benches and landscape zones. The new building will have a plaza directly adjacent to the multipurpose room, this will function as spill over for events and will also serve as outdoor cafeteria space.

LANDSCAPE

The site will utilize regional and waterwise landscaping. Because the project will be LEED Silver V3.0, there will be opportunities to gain LEED credits for water efficient irrigation and plantings. See the Landscape Design Criteria for additional information.

PARKING

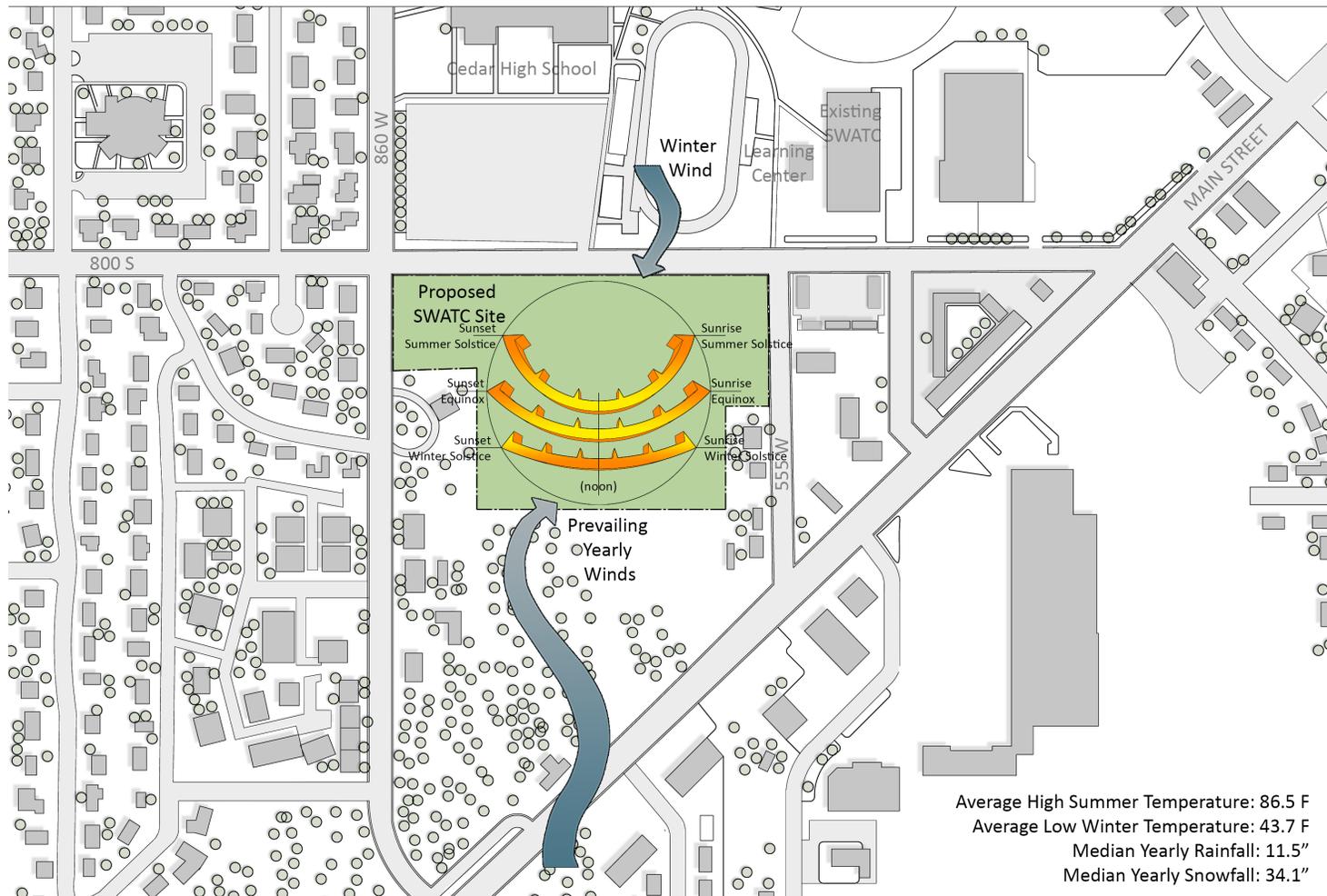
During discussions with the SWATC faculty it was determined that it is highly desired to have the building located along the 800 South Street Frontage, this will give the building prominence. This will shift the parking internal to the building site and place most of the parking to the back of the parcel.

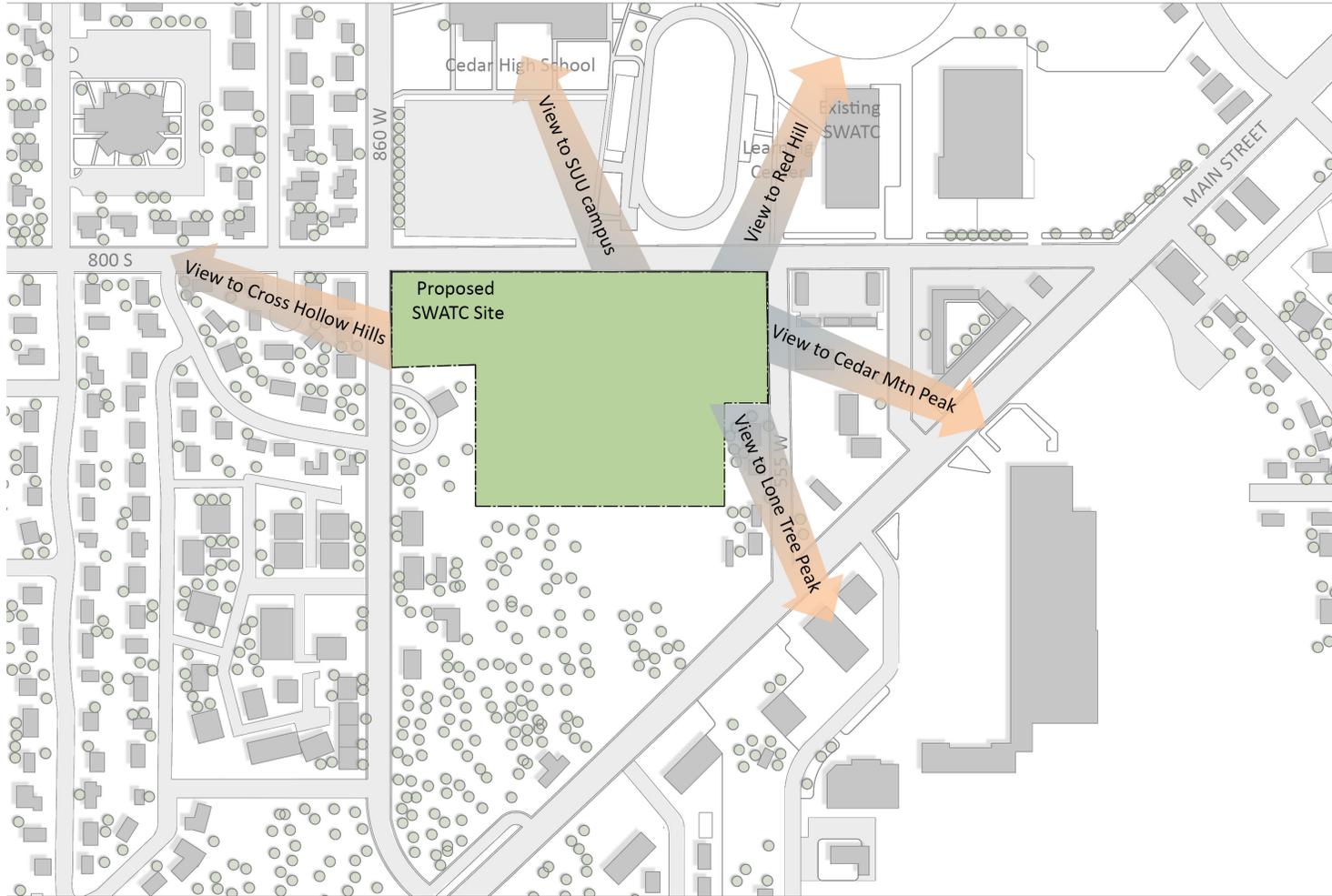


02 Site Analysis

02 Site Analysis

Site Climate/Orientation





02 Site Analysis

02 Site Analysis

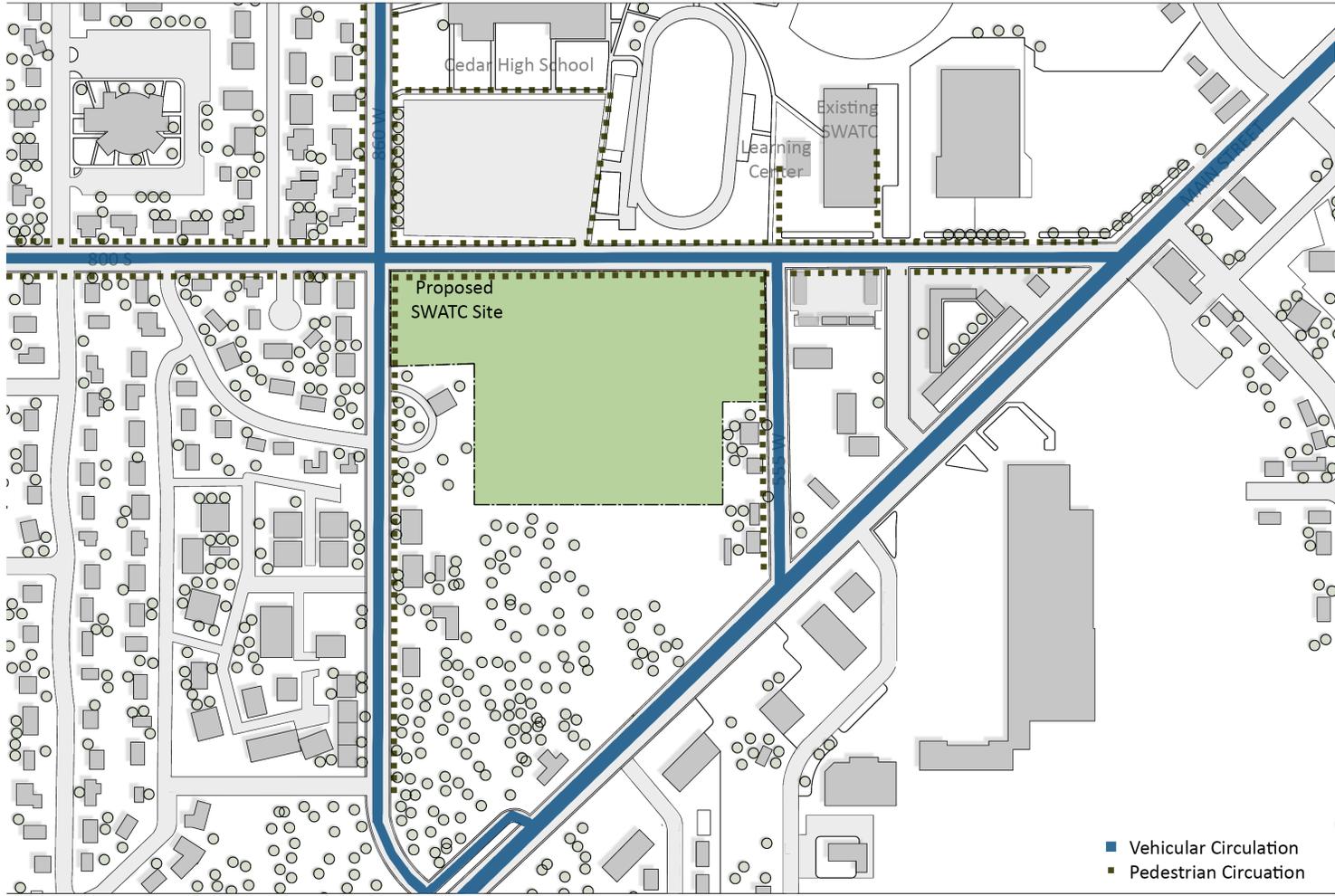
Site Circulation and Relationships

VEHICLE TRAFFIC FLOW

Primary vehicle traffic for the new SWATC building will occur along 800 South from Main Street. Although the new building will be within walking distance from the annex some faculty members and students may elect to drive, traffic flow for this should be anticipated. Cedar City High School is located directly north of the new campus, there are many programs that the SWATC teams with the High school and daily vehicle traffic between the High School and College should be anticipated along 800 South. Secondary vehicle traffic will occur along 555 West and 860 West. It is desired to limit building deliveries to the secondary paths and subsequent site entrances. The site has many potential entrances along 800 South with several hundred feet of frontage, however the college wants to keep driveways on the north to a minimum. Secondary entry points along 555 West and 860 West are available and encouraged. The south end of the site is land locked and can only be reached by internal site roadways. Internal site roads are anticipated for parking, deliveries and drop off zones.

PEDESTRIAN TRAFFIC FLOW

Primary pedestrian traffic will occur along 800 South with the majority of pedestrians coming from the SWATC annex building or from Cedar City High School. Secondary pedestrian traffic will occur along 555 West and 860 West. Tertiary pedestrian traffic will come from bus stops on Main Street and along 600 South funneling pedestrians along 800 South to the new building.



- Vehicular Circulation
- - - Pedestrian Circulation

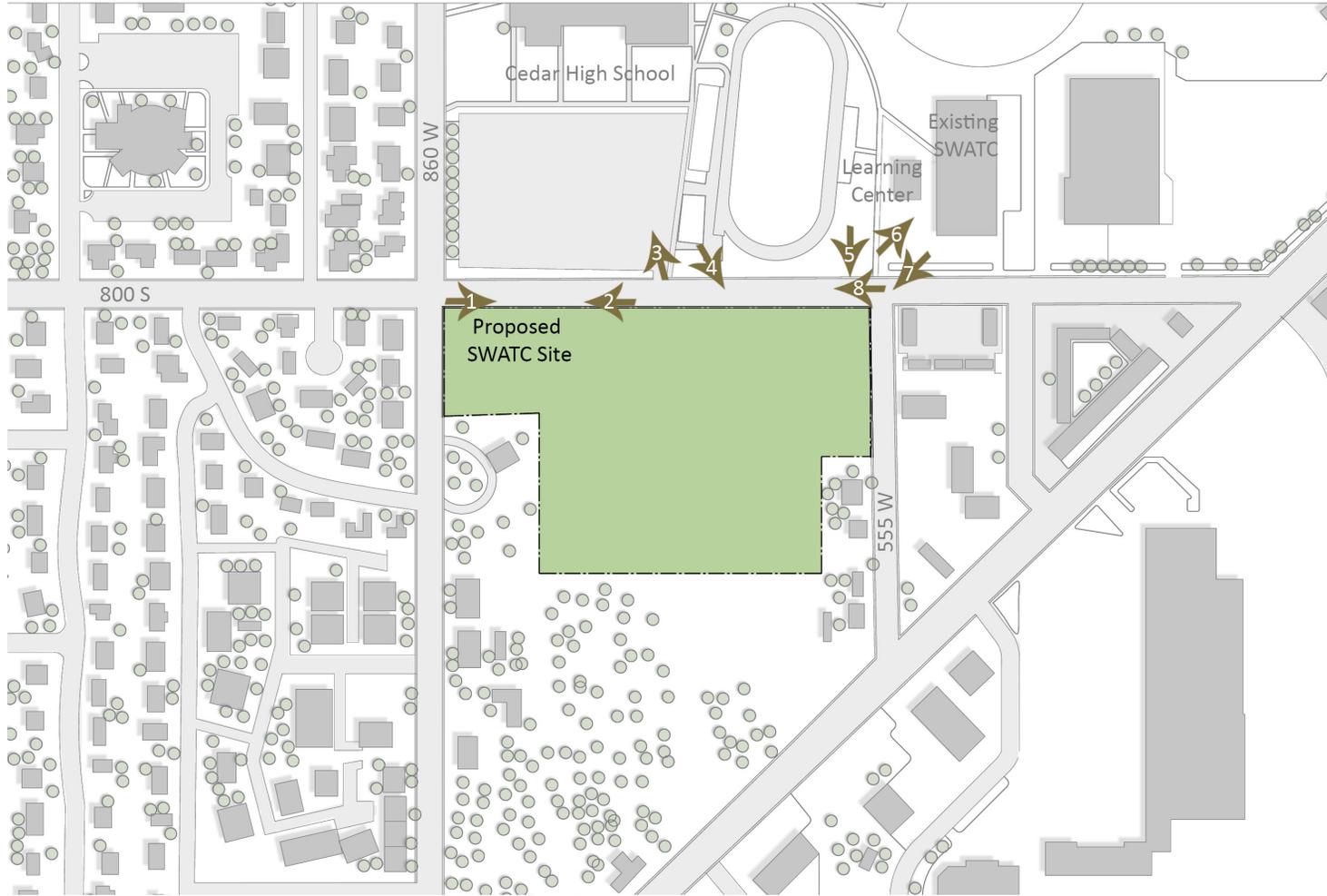


02 Site Analysis

02 Site Analysis

Site Views





02 Site Analysis

02 Site Analysis

Site Views





Site Views



02 Site Analysis

03 Building Requirements

Architectural Narrative/Vision

BUILDING DESIGN

Throughout the programming effort the architectural vision of the project was discussed at length with the SWATC Steering Committee. This new building will be the campus headquarters for all Southwest Applied Technology College buildings. The new building and in particular the administrative, student services and reception areas should have prominence on the site and act as a visual and physical corridor to the community and future students. The existing college headquarters will become an overflow building for various programs including; Information Technology, Business Technology, Custom Fit and Renewable Energy, it will need to maintain a strong visual and physical connection to the new campus headquarters building. The new building is envisioned to be a 2 story structure with a strong architectural presence that reflects and respects the contextual elements of Cedar City and the greater SouthWest Utah region while simultaneously establishing a contemporary higher education expression.

BUILDING MASSING

It is strongly encouraged that the design of the facility takes advantage of opportunities to break up the massing of the building and provide articulation to the facades. This can be done both horizontally and vertically with the massing or within the fenestration or architectural detail of the elevations. Consideration should also be given to stepping the building and breaking the massing up into wings to address scale. When massing consideration should be given to the campus master plan and the potential future buildings.

BUILDING ORIENTATION

The building should be oriented to not only meet the goal of serving as a gateway building to the community but should also take advantage of sustainable practices in response to solar orientation, wind, and take full advantage of views and

natural day lighting. Strong considerations must also be given to existing buildings that surround the site such as the existing SWATC headquarters to the North East, Cedar City High School to the North, the miscellaneous commercial buildings to the East and the residential homes to the West and South. Existing utility infrastructure, pedestrian & vehicular circulation, grading, and parking should also be carefully studied and considered as design of the facility moves forward. In addition, relationship and adjacency to outdoor amenities is an important element to the student experience on campus and must be considered in the development of the building location and orientation.

NATURAL LIGHT AND VIEWS

Every opportunity to utilize natural light to maintain and enhance view corridors should be considered strongly in the design of the facility. In particular all public spaces, offices, and classrooms must maintain access to natural light and views. This is critical element it affects both the comfort and well being of the occupants as well as the building's energy efficiency.

In an effort to achieve this goal the design could consider the use of large windows, clerestory windows, skylights, and other potential transparent or translucent materials. Window openings should be oriented to take advantage of soft northern sky or controlled southern exposure. Windows on the west and east sides of the building should also be controlled or minimized.

Additionally, considerations for the type of glass will be important to controlling and minimizing the amount of heat gain and harmful UV exposure. Balancing the type of glass with the size and orientation will be critical to meet the minimum quantities prescribed by the code and to achieve the goal of LEED Silver Certification and Utah State mandated high performance

EXTERIOR MATERIALS

The architectural response should consider the context of Cedar City and the surrounding area. Existing buildings utilize materials such as brick, stone, precast concrete elements, integral colored honed or split-faced CMU, metal panel, and glass elements. It is the desire of the College to explore a palette of materials that respects the regional context and creates a rich and welcoming expression in the architecture.

Generally, material selection should be easily maintained and durable. The building should be designed to be warm and inviting to students, faculty, the local community and all that interact with the College.

INTERIOR MATERIALS

The design of the interior spaces should create a welcoming learning environment that is warm, bright, inviting, and promotes good health. Selection of interior finishes and materials should be responsive to the use of each of the spaces as outlined in this program document. Consideration must be given to texture, color, acoustics, sustainability, and light reflectance. In regard to durability and maintenance, generally the selection of materials within reason should consider a 50-year building standard and should correspond to the amount of traffic and anticipated use of each space.

SUSTAINABLE DESIGN

The State of Utah has adopted the policy that all future State owned buildings are required to be designed to a minimum of LEED Silver Certification. With this in mind, the design of the facility must incorporate sustainable practices while balancing budget parameters.

LANDSCAPE

The landscape plan will be one of sustainability and durability. The plant materials will be native to the Cedar City area and Utah and once established will require low amounts of water to maintain. The vegetation that surrounds the building will consist of larger trees that will break up the building facade and allow for easy maintenance. All of the main entrances will have an identifying landscape that will help to create a warm welcome environment to the students, faculty, and visitors. These plant materials will also be low maintenance and will be small enough not to provide a security risk. All the vegetation will be positioned in a way to allow various views around the buildings and into the entry plaza to help maintain the overall security of the site. The irrigation system will be a high efficiency system. The planter beds and islands will utilize a drip system and the turf areas will use a combination of larger rotors and small pop-up spray heads. The new building site will use low trajectory nozzles in the sprinkler heads to help combat wind and provide the most efficient use of water. This use of drip and low trajectory nozzles will also assist in keeping the building from being sprayed and developing water stains.

03 Building Requirements

Codes, Regulations and Safety

For the Southwest Applied Technology College new Building the materials, design and construction will conform to the standards established by the Utah State Division of Facilities Construction and Management (DFCM). Furthermore, it will conform to all building, accessibility codes and requirements and the energy codes adopted by the State of Utah at the time of design and construction, whether or not they are specifically referenced in this document.

It is the Design Team and the Architect of Record's responsibility to verify and use all the latest revisions, editions and adopted version code documents. If there are conflicting standards, code provisions and/or regulations, the most stringent will govern unless such requirements are waived in writing by the Utah State Division of Facilities Construction and Management.

Partial list of applicable codes and standards:

- National Electric Code (NEC) w/ Utah Amendments 2011
- Life Safety Code NFPA 101 w/ Utah Amendments
- International Building Code (IBC) 2012 w/ Utah Amendments
- International Fire Code (IFC) 2009
- International Mechanical Code (IMC) 2009
- International Plumbing Code (IPC) 2009
- Laws, Rules, & Regulations of the Utah State Fire Marshal
- Americans w/ Disabilities Act Title III, 1991/1998 (ADA)
- Planning & Design Criteria to Prevent Architectural Barriers for Aged & Physically Handicapped (4th Revision, w/lever hardware amendment)
- International Energy Conservation Code 2009
- International Fuel Gas Code (IFGC)
- EIA/TIA, Electronics Industries Association / Telecommunications Industry Association
- IEEE 1100-1999, Recommended Practice for Power & Grounding Electronic Equipment
- IESNA, Illuminating Engineering Society of North America
- NFPA, National Fire Protection Association (applicable sections including but not limited to): NFPA 70, National Electrical Code & NFPA 72, National Fire Alarm Code
- ASHRAE Indoor Air Quality 62-2001 & Addendum 62
- Utah Code for Energy Conservation in New Building Construction (ASHRAE Standard 90.1-1989)
- American Society of Heating, Refrigeration & Air Conditioning (ASHRAE)
- Occupational Safety & Health Administration (OSHA)
- Sheet Metal & Air Conditioning Contractor National Association (SMACNA)
- Underwriters Laboratory (UL)
- American Society of Testing Materials (ASTM)

- American Standards Association (ASA)
- DFCM Design Criteria for Architects & Engineers
- DFCM Indoor Air Quality Criteria

OCCUPANCY CLASSIFICATION

The occupancy presented in this package is for preliminary programming and planning purposes. The occupancy determination must be confirmed by the Architect of Record with the State Building Official and the State Fire Marshall at the time of design.

ADA ACCESSIBILITY

The new Southwest Applied Technology College Building is required to be in compliance with the American with Disabilities Act, Title III, 1991/1998 (ADA). The Utah State Building Board has adopted the following additional requirements:

- All public entries to the building will be ADA compliant with automatic door operators including required vestibule doors.
- One set of accessible Rest room doors shall be equipped with automatic door operators including vestibule doors if applicable.
- ADA compliant parking shall be provided.

03 Building Requirements

2012 International Building Code Review

TYPE OF CONSTRUCTION

(Chapter 6) Type IIB

OCCUPANCY

(Chapter 3) Educational/university function	B	(section 304)
Cafeteria/Dining	A2	(section 304)
Large Classroom/ multipurpose room	A3	(section 304)
Shop areas- welding/manufacturing	F1	(section 304)
Occupancy Separation required	Yes	
Occupancy Separation		
(Table 508.4)	A to F-1 HR	
	A to B-1 HR	
	B to F-none	

FIRE SPRINKLERS Yes

FRONTAGE

(Section 506.2) Assume .75

STORIES ALLOW

(Table 503)

B -5 stories
A2 -3 stories
A3-3 stories
F1-4 stories

ALLOWABLE BUILDING AREA

Occupancy	B	A2/A3	F1	
Program area sf	52,635	3,901	20,664	77,200 total
Basic allowable area				
Table (503) per floor	37,500	15,500	25,000	
Frontage increase (506.2)	1.75	1.75	1.75	
Multi story increase (506.4.1)	x2	x2	x2	
Sprinkler increase (506.3)	131,250	54,250	87,500	
Actual/Allowable (506.41)	40%	7%	24%	

FIRE-RESISTIVE REQUIREMENTS

Structural Frame- including columns, girders, trusses	0 HR
Bearing Walls- Exterior walls	0 HR
Interior walls	0 HR
Non Bearing walls- interior/exterior	0 HR
Floor Construction-including supporting beams and joists	0 HR
Roof Construction- including supporting beams and joists	0 HR

The occupancy classification is determined by the IBC 2009 definition and confirmed by the Architect of Record and the State Fire Marshall.

The Southwest Applied Technology College is required to be in compliance with the American with Disabilities Act, Title III, 1991/1998 (ADA) and any applicable Utah State Building Board adopted amendments.

The Southwest Applied Technology Building will conform to the standards established by the Utah State Division of Facilities Construction and Management (DFCM) and it will conform to all building, accessibility codes and requirements, and the energy codes adopted by the State of Utah at the time of design and construction.

03 Building Requirements

Building Systems Design Criteria - Structural Systems

The structural design for this project should provide a building system which will integrate with the program requirements for space layout, as well as with the architectural and building service needs, while meeting current code standards for vertical and horizontal load carrying capacity. User needs in terms of current flexibility of the spaces and future adaptability of use should be considered. The level of user comfort as determined by the acoustic and vibration sensitivity of the structure also should be addressed.

The facility has a wide variety of program spaces that must be accommodated. Specialty areas such as the welding labs are best located in slab on grade spaces. Areas requiring the use of microscopes should be evaluated for enhanced floor vibration characteristics, or located on grade. Areas such as Culinary Arts spaces can be expected to have significant rooftop and suspended equipment weights that need to be considered such as grease hoods and exhaust fans.

SERVICE COORDINATION

Layout of the structural grid will need to respect the classroom, office, and public area spaces established for the various building functions. During the design phase, a completely integrated approach to building systems is recommended. Distribution of HVAC, plumbing and electrical services must be carefully coordinated with the structural elements, particularly at framing intersections and major crossover points. This close coordination must be achieved in order to avoid conflicts and limit penetrations of major structural members.

CODES AND STANDARDS

Codes and standards that apply to the design of this building are:

- 2009 International Building Code

- DFCM Design Criteria for Architects and Engineers, May 25, 2005
- American Institute of Steel Construction (AISC) with Commentary
- ACI 318 Building Code Requirements for Reinforced Concrete
- ACI 530 Building Code Requirements for Masonry Structures
- American Iron and Steel Institute (AISI) Specifications for the design of Cold-Formed Steel Structural Members
- American Welding Society (ANSI/AWS) D1.1 Structural Welding Code
- Steel Joist Institute (SJI) for open web Joists and Girders
- Steel Deck Institute (SDI) for Metal floor and roof Decks

GEOTECHNICAL CRITERIA

A site specific geotechnical investigation has not been completed at this time. The Cedar City area is known to encompass areas of collapsible soils. In some locations these collapsible layers can be up to 200' deep. The proposed site for this facility is not located in an area known to include deep collapsible soil layers, however, these poor soils are highly variable, and a detailed geotechnical investigation will need to be provided to adequately define the soil profile.

Once the final building size, configuration, structural system, number of levels above and below grade, and column loads

have been determined, the project geotechnical consultant shall review the following items to verify the assumptions in the geotechnical report conform with the final proposed design of the facility:

- Soil bearing capacity
- Structural fill requirements
- Potential differential settlements
- Potential for expansion or collapse of soils due to moisture changes
- Liquefaction potential
- Groundwater restrictions
- Seismic considerations, coefficients, fault traces, etc.
- Lateral bearing pressures – active and passive
- Alternate foundation systems
- Pavement sections

DESIGN CRITERIA

The structural systems in the facility shall be designed to meet the requirements of the 2009 International Building Code (IBC) and the Design Criteria Manual adopted by the Utah State Building Board. The following minimum requirements should be anticipated:

- Occupancy Category
Category III (Buildings and other structures with a capacity greater than 500 for colleges or adult education facilities)

- Wind Loads
 Wind Velocity: 90 mph, (3 second Gust)
 Exposure Type: "B" or "C", for the building structure, as appropriate to the site. Exposure "C" shall be used for elements and components including the exterior window wall systems
 Wind Importance Factor, Iw 1.15
- Seismic Loads
 Short Period Mapped Acceleration Ss = 0.70g
 Long Period Mapped Acceleration S1 = 0.22g
 Site Class D (Assumed, to be confirmed by geotechnical investigation)
 Seismic Design Category D
 Seismic Importance Factor, Ie 1.25
- Roof Loads
 Ground snow, pg 43psf
 Calculate roof snow load as specified in the Utah Uniform Building Standard Act Rules R156-56 issued January 1, 2002. Design for snowdrift where appropriate. Roof live loads shall not be less than that specified in IBC 1607.11.
 Snow Importance Factor, Is 1.10
- Floor Live Loads
 Floor design live loads shall be in accordance with the latest edition of the DFCM Design Criteria Manual and the 2009 International Building Code and as follows:
 1. 80 psf, unreduced, except for column and footing designs
 2. 15 psf movable partition load
 3. Areas of concentrated standard file storage - 125 psf
 4. Floor areas supporting high density rolling files – 225 psf, or actual load
 5. Paper storage areas – 250 to 350 psf as appropriate
 6. UPS Battery Storage areas – 250 to 450 psf as appropriate
 7. Mechanical Equipment Rooms – 125 psf minimum or as required by actual equipment

03 Building Requirements

Building Systems Design Criteria - Structural Systems

8. Laundry facilities – 125 psf or as required by actual equipment

Areas where heavy load concentrations exceed the normal loading requirements shall be designed for the specific load case. Structure supporting specialty equipment such as bridge cranes will be designed to the requirements of selected “basis of design” equipment.

Note: The more stringent requirement between the 2009 IBC, the DFCM Design Criteria Manual, and the loads given above shall govern.

FLOOR VIBRATION CRITERIA

Control of suspended floor and roof structure vibrations due to human and mechanically induced excitation forces shall be considered in the selection of the building structural floor and roof framing systems.

It is not anticipated that any activities or equipment that are sensitive to floor vibrations will be located within this facility. This should be verified as part of the final design. Areas where microscopes will be in frequent use should be considered for a higher vibration performance or these spaces should be located on grade. Consideration could also be given to providing isolation tables for microscopes. Should vibration sensitive activities or equipment become necessary within the facility then structural system compatibility should be carefully evaluated.

ANTICIPATED CONSTRUCTION

It is anticipated that the building will be supported on conventional reinforced concrete spread footings.

The welding lab will be located in two story space and will likely

consist of reinforced concrete masonry unit (CMU) bearing walls supporting open web joists and steel roof deck.

The second floor areas will consist of concrete on metal deck slabs supported by steel wide flange floor framing and steel columns. The floor framing will incorporate welded studs to make the floor slab composite with the beams. The roof framing above second floor spaces will consist of open web steel joist and wide flange beams supporting steel roof deck.

The lateral force resisting system will need to conform to the architectural configuration of the building and is likely to include reinforced CMU shear walls, braced frames, or steel moment resisting frames. A combination of these systems may be necessary to accommodate the architectural expression of the facility.

FUTURE BUILDING EXPANSION

The A/E designers of the building shall not consider potential future horizontal and/or vertical expansions because:

- Future vertical expansion is not anticipated.
- Future horizontal expansion of the structure is not anticipated.

TESTING AND INSPECTIONS

The Architect/Engineer, and the selected testing lab, shall perform periodic construction observations, testing, and special inspections, as outlined in the DFCM Design Criteria for Architects and Engineers. The design engineer shall list all required special inspections on the contract drawings, and perform periodic construction observations as required by the A/E agreement. Costs for special inspections and testing services will be paid for directly by the owner.

03 Building Requirements

Building Systems Design Criteria- Mechanical, Plumbing and Fire Protection Systems

Codes and Standards

- International Building Code, 2009
- International Mechanical Code, 2009
- International Plumbing Code, 2009
- International Fire Code, 2009
- International Energy Conservation Code, 2009
- International Fuel Gas Code, 2009
- NFPA 13
- Utah State Boiler Code
- National Electrical Code, 2009
- DFCM Design Criteria
- DFCM High Performance Building Rating System (June 2009 amendments)
 - o ASHRAE Std 55: Thermal Environmental Conditions for Human Occupancy
 - o ASHRAE Std 62: Ventilation for Acceptable Indoor Air Quality
 - o ASHRAE Std 90.1: Energy Standard for Buildings
 - o USGBC LEED 3.0 New Construction Criteria, Silver
- ASHRAE Guidelines and Standards

HIGH PERFORMANCE BUILDING REQUIREMENTS

This facility will conform to DFCM High Performance Building Rating System as detailed in the June 11, 2009 DFCM Design Requirements.

Basic Requirements:

- Fundamental Building Systems Commissioning. DFCM may engage a Commissioning Agent that is not an individual directly responsible for project design or employed by one of the designers. Commissioning Agent shall ensure that fundamental building components are installed and calibrated to operate as intended.
- Life Cycle Cost Analysis. Designers shall use life-cycle cost

analysis in making decisions about their investments in products, services, construction, and other projects to lower the State Government's costs and to reduce energy and water consumption.

- CFC Reduction in HVAC and Refrigeration Equipment. Designer shall select HVAC and refrigeration equipment without chlorofluorocarbons (CFC) based refrigerants.
- Ventilation Systems. Designer shall provide mechanical ventilation system according to ASHRAE Standard 62. Mechanical ventilation system shall have the capability to operate continuously during occupancy and designed not to be easily shut-down or otherwise defeated, such as blocked registers.
- Drainage Systems. Designer shall design surface grades, storm drainage system, HVAC system, and other systems to avoid accumulation of standing water around in the building.
- Mold Prevention during Construction. Contractor shall ensure porous type building materials, insulation, and fabric, is kept dry to prevent the growth of mold and bacteria. Materials that have been affected by mold shall be abated or replaced. Building insulation that is damp or wet for 72 hours shall be replaced.
- Filtration Media Replacement before Occupancy. Contractor shall ensure that filtration media is replaced before occupancy.
- Thermal Comfort. Designer shall ensure that thermal comfort requirements are according to ASHRAE Standard 55. Exceptions:
 - Winter humidification is not required; Summer dehumidification is not required; and Upper temperature limit in natural ventilated buildings is not required.

Energy Efficiency Requirements:

- Energy Performance. DFCM may select an integrated system of components to reduce source energy use 10% from what is required by ASHRAE Standard 90.1.

MECHANICAL UTILITIES

Sanitary Sewer: The sanitary sewer shall extend to existing utilities.

Storm Drainage: The building and site drainage will be retained on site.

Water: The existing culinary water supply will be connected in the street and extended to the building mechanical room.

Gas Heating: Building heating and domestic water heating will be accomplished using natural gas.

DESIGN TEMPERATURES

	Winter	Summer
Outdoor Temperature	-5°F	101° DB/68° WB
Indoor Temperature - Typ.	68°F (+/-)4°F	72°F (+/-)4°F
Mechanical Rooms	60°F	85°F (vent. only)
Phone/Data/Comm/Server	75°F	75°F
Unoccupied Spaces		95°F

ACOUSTICAL CRITERIA

HVAC related background sound in rooms will comply with the 2007 ASHRAE HVAC Applications Manual Table 42.

Offices	RC 25 to 35
Conference Rooms	RC 25 to 35
Open Plan Offices	RC 40
Corridors and Lobbies	RC 40 to 45
Classrooms	RC 25 to 30
Medical/Nursing Teaching Areas	RC 25 to 30
Larger Lecture Rooms	RC 25
Labs	RC 35
Cafeteria	RC 45
Automotive Technology/Welding Lab	RC 50

HEAT SOURCE

The heat source will be gas fired hot water boilers. There will be a minimum of two boilers for redundancy. Each boiler will be sized for 60% of the load. Consideration will be given to a low temperature (130°F) hot water system with high efficiency condensing boilers. Domestic hot water will be provided via a high efficiency domestic gas fired water heater.

COOLING SOURCE

The cooling source will be a water cooled chiller with cooling tower. The chiller will reject heat to the outdoors. The cooling tower will be utilized as the primary source of cooling when ambient temperatures permit. Chiller will have two compressors and two independent refrigerant circuits for redundancy. The chiller will utilize non-CFC refrigerants.

03 Building Requirements

Building Systems Design Criteria- Mechanical, Plumbing and Fire Protection Systems

VENTILATION

Ventilation will be provided in compliance with the ASHRAE Std 62.

Classrooms –	10 CFM/person + 0.12 CFM/sq.ft.
Office Space –	5 CFM/person + 0.06 CFM/sq.ft.
Lecture Classroom –	7.5 CFM/person + 0.06 CFM/sq.ft.
Cafeteria –	7.5 CFM/person + 0.18 CFM/sq.ft.
Laundry -	30 CFM/person
Labs -	6-10 AC/hr
Automotive Tech Shop -	1.75 CFM/sq.ft. + 100 CFM/vehicle
Welding Shop -	10 AC/hr + 200 CFM/welding-bench

An outside air flow measuring device will be provided at each air handler. A CO2 sensor will reset the outside air flow between minimum and maximum value.

HVAC SYSTEM

A central station variable air volume (VAV) reheat system is a good fit for this building. Air handlers will be located on the roof. VAV Boxes with hot water reheat coils will be provided for each zone. The air handler will be equipped with fan-wall fans to reduce sound levels and provide redundancy.

Thermal Zoning:

Corner Rooms	Individual Thermostat
Classrooms	Individual Thermostat
Teaching Labs	Individual Thermostat
Conference Rooms	Individual Thermostat
Offices	Offices with similar exterior exposure may be grouped together

EXHAUST AIR SYSTEMS

Toilet Rooms: Provide exhaust air system for toilet room ventilation. Exhaust fans to be rooftop Automotive & Welding labs: Provide independent exhaust air system with outlets near the floor and ceiling. The use of exhaust snorkels to provide point exhaust will be considered.

AIR DISTRIBUTION

The duct system will be oversized from traditional velocities in order to reduce noise and fan energy. The ducts from the air handler to VAV boxes should be medium velocity (2500 feet per minute maximum, 0.20 water gage/100 feet maximum pressure drop.) The ceiling space will be a return air plenum.

HEATING HOT WATER PIPING SYSTEM

Variable flow. Primary and standby pumps each sized at 100% flow. Variable Frequency drives on each variable flow pump. Perimeter radiation will be provided at each perimeter office, classroom, hallway, etc. with floor to ceiling glass.

REFRIGERATED CHILLED WATER PIPING SYSTEM

Constant flow primary loop; variable flow secondary loop, Primary and Standby pumps, each sized at 100% flow. Variable frequency drives on each variable flow pump.

EVAPORATIVE COOLING TOWER

Constant flow; drain back sump; Lakos model LS-710 Tower Cleaner Plus filtration system.

HIGH PERFORMANCE AIR-CONDITIONING

The central air-handler will be equipped with economizer cooling which utilizes outdoor air to provide free cooling during cool outdoor temperatures. The use of evaporative cooling (Direct, Indirect/Direct) will be considered to extend the use of the economizer.

Heat recovery to be considered on exhaust systems serving automotive labs, welding labs, and locker/toilet room. Split system air conditioning units will be used to reduce cooling airflow in rooms with high plug loads (server rooms, electrical rooms) and allow for fan shutdown during unoccupied hours.

AUTOMATIC TEMPERATURE CONTROLS

Direct Digital Controls (DDC) with electric damper and valve actuators. Approved manufacturers/installers to meet the requirements of DFCM.

FIRE SPRINKLING

Automatic wet-pipe sprinkler system. Piping will be standard weight black steel with mechanical couplings, threaded joints or welded joints. Provide Pre-Action System in Main Server Room.

PLUMBING

Provide high efficiency domestic hot water heater with domestic hot water storage tank. The domestic hot water system shall provide 130°F hot water to the building.

Water reduction will be utilized via dual flush water closets, low consumption urinal (quart/flush), and sensor faucets.

ENERGY AND ENVIRONMENTAL STRATEGIES

The HVAC and plumbing will utilize the following green building design methods

- NEMA Premium Efficient Motors
- Occupancy Sensors
- Economizer Cooling
- Variable Frequency Drives on all 3-Phase Motors with Varying Loads
- Oversized duct work and air handler cabinet to reduce fan energy
- Monitor and control CO2 levels in all densely occupied spaces.
- Water Cooled Chiller

HIGH PERFORMANCE DESIGN

The State of Utah require the building be designed and constructed so as to meet or exceed the requirements associated with a LEED 3.0 Silver rating. A high performance mechanical system must be utilized to achieve this rating. The building mechanical system must consider energy consumption, water consumption, and indoor air quality in order to achieve this goal. The complexity associated with high performance buildings requires that the building receive commissioning and measurement and verification during the construction process. Energy conservation will include computer modeling to verify compliance with ASHRAE 90.1 Energy Standard.

CHOICES FOR CONSIDERATION

The methods have not been considered in this report, but may be required to meet the LEED Silver rating.

- Ground source Wellfield Heat Pump System
- Thermal Displacement Ventilation
- Radiant Cooling
 - o Chilled Beam
 - o Radiant Cooling with Evaporative Cooling Sources

03 Building Requirements

Building Systems Design Criteria- Mechanical, Plumbing and Fire Protection Systems

- In-Floor Radiant Heating
- On-Site Renewable Energy
 - o Solar Water Heating
- Photovoltaic Panels
- Wind
- Fenestration Shading System

MECHANICAL SYSTEM NARRATIVE

Green Building: The HVAC and plumbing system must not only meet the varying demands of diverse occupancies, it must beat the 2007 ASHRAE 90.1 minimum energy requirements by 10% and meet DFCM LEED Silver Requirements. The 2007 version represents a much higher performance standard than the previous 2004 version that was required under the predecessor to LEED 3.0. For this reason, the following high performance methods will be utilized:

1. Air Conditioning:
 - a. Water cooled refrigerated air-conditioning will be utilized.
 - b. Economizer Cooling will be implemented when ambient temperatures permit.
 - c. 3-stage cooling will be implemented in the main building air-handler.
 - d. 2-stage cooling will be used in the Construction Technology, Welding and Auto Shops.
2. Heating: Condensing 90% efficient boilers.
3. Motors: Premium efficient. VFD's on all three phase variable demand motors.

Implementation of Teaching: The facility will be utilized for the instruction of green building technologies. For this reason, the facility will be equipped with two small high performance type system that would commonly be seen in light commercial and large residential project. The main building will be equipped with a large high performance system that would commonly be seen in large commercial facilities. The building will also

be equipped with a modern DDC control system, capable of displaying graphics and control points for teaching purposes. The building systems will be as follows:

1. Areas Served:
 - a. Classrooms
 - b. Admin (Partial)
 - c. Medical
 - d. Nursing
 - e. Phlebotomy
 - f. Information Technology
 - g. Multi-Purpose
 - h. Student Services
 - i. Cafe
 - j. Lobby
2. HVAC & Ventilation Distribution:
 - a. Custom Built Fan Wall Supply and Return Air-Handler.
 - b. Manufacturers: Hunt-Air, Temtrol, Climate Craft, or equivalent.
 - c. Airflow: 60,000 CFM.
 - d. Fan Type: Fan Wall
 - e. Heat: Glycol Pre-Heat Coil.
 - f. Cooling: 3-stage
 - i. 1st: Condenser Water Coil served by cooling tower. Connected via plate and frame heat exchanger.
 - ii. 2nd: Chilled Water Cooling served by chiller.
 - iii. 3rd: Direct evaporative media.
 - g. Cabinet Size: 400 FPM max velocity.
 - h. Zone Control: VAV boxes with re-heat coils. Manufacturers; Price, Titus, Carnes, or equivalent.
3. Heating:
 - a. 1st Stage: Perimeter Radiation Baseboard.
 - i. Manufacturers: Runtal, Panel Radiator, or equivalent.
 - b. 2nd Stage: VAV Box with reheat coils.
 - c. Source: Qty (2) 60% capacity Aerco Model BMK 2.0-million Btu/h low NOx boilers. Sealed combustion

intake connected directly to outdoors. Vent shall be stainless steel.

- i. Manufacturers: Aerco, Viessmann, Cleaver Brooks, or equivalent.

4. Air Conditioning:

a. Machinery Room:

- i. Chiller: Smart Model WA050.2BXX, 200 ton magnetic bearing water cooled chiller. Alternate manufacturers, McQuay magnetic bearing, Carrier magnetic bearing, or equivalent.
- ii. Ventilation: Fully automated machinery room emergency refrigerant detection system with exhaust within 12-inches of the floor and 12-inches from the ceiling. Make up-air to be provided on opposite side of room for cross flow ventilation. Room shall be equipped with horns and strobes as required. Yaskawa system or equivalent. Exhaust fan shall be Loren Cook model ACE-B or equivalent. Entire system shall be on emergency power.

b. Outdoor:

- i. Cooling Tower: Baltimore Air Coil model AT, 400-Ton cooling tower. Chemical free water treatment system.
- ii. Enclosure: By architect.

5. Hydraulic Distribution:

- a. Heating Pumps: Qty (2) TACO model FI 7.5 HP. VFD control.
- b. Glycol Pre-Heat Pump: Qty (2) TACO model FI 3 HP. VFD control.
- c. Chilled Water:
 - i. Chiller Circ Pump: Qty (2) TACO model FI 5-HP. Constant speed.
 - ii. Chilled Water Dist: Qty (2) TACO model FI 5-HP. VFD control.
 - iii. Cooling Tower: Qty (2) TACO model FI 5-HP. VFD control.

- iv. IDEC HTX Pump: Qty (2) TACO model FI 2-HP. VFD control.

- d. Single Phase Inline Pumps: 3/4 HP. Qty (4) serving glycol heating coils.
- e. Single Phase In line Pumps: 1/2 HP. Qty (3) serving specialty shop heat recovery.

6. Heat Exchangers:

- a. Glycol Heating: 600,000 Btu/h plate and frame HTX. Brazed connections.
- b. Condenser Economizer Cooling: 900,000 Btu/h plate and frame HTX. Brazed connections.
- c. Solar Water Heater: See High Performance Systems for Teaching Purposes below.

TECHNOLOGY LABS, PLUMBING AND ELECTRICAL APPRENTICESHIP

7. Construction Technology/Warehouse:

- a. Air Handler: Packaged constant volume ventilating and heating/cooling air handling unit. Complete with the following:
 - i. Manufacturers: Trane, Carrier, McQuay or equivalent.
 - ii. Airflow: 28,000 CFM.
 - iii. Fan Type: Forward Curved
 - iv. Heat: 2-stage.
 - 1. 1st: Glycol Run-Around Heat Recovery.
 - 2. 2nd: Glycol Pre-Heat.
 - v. Cooling: 2-stage
 - 1. 1st: Condenser Water Coil served by cooling tower. Connected via heat exchanger (see main building narrative above.)
 - 2. 2nd: Direct evaporative media.
 - vi. Cabinet Size: 450 FPM max velocity.
 - vii. Zone Control: Single Zone
- b. Heating:

03 Building Requirements

Building Systems Design Criteria- Mechanical, Plumbing and Fire Protection Systems

- i. Construction Technology:
 - 1. Qty (4) Unit Heaters. Ultra-Quiet. Manufacturers; Reznor, Hastings, Greenheck, or equivalent.
 - ii. Ware-House:
 - 1. Low-Intensity natural gas fired radiant tube heaters. Low sound.
 - a. Manufacturers; Corayvc, Infra-Red, or equivalent.
 - b. Exhaust: 28,000 CFM general exhaust fan with glycol run-around coil.
8. Welding:
- a. Air Handler: Packaged constant volume ventilating and heating/cooling air handling unit. Complete with the following:
 - i. Manufacturers: Trane, Carrier, McQuay or equivalent.
 - ii. Airflow: 20,520 CFM.
 - iii. Fan Type: Forward Curved
 - iv. Heat: 2-stage.
 - 1. 1st: Glycol Run-Around Heat Recovery.
 - 2. 2nd: Glycol Pre-Heat.
 - v. Cooling: 2-stage
 - 1. 1st: Condenser Water Coil served by cooling tower. Connected via heat exchanger (see main building narrative above.)
 - 2. 2nd: Direct evaporative media.
 - vi. Cabinet Size: 450 FPM max velocity.
 - vii. Zone Control: Single Zone
 - b. Heating:
 - i. Qty (4) Unit Heaters. Ultra-Quiet.
 - 1. Manufacturers; Reznor, Hastings, Greenheck, or equivalent.
 - c. Exhaust:
 - i. General: 10,520 CFM general exhaust fan with glycol run-around coil.
 - ii. Welding: Localized point of use exhaust benches with slotted exhaust grilles. 10,000 cfm.
9. Automotive Shop & Professional Truck Driving:
- a. Air Handler: Packaged constant volume ventilating and heating/cooling air handling unit. Complete with the following:
 - i. Manufacturers: Trane, Carrier, McQuay or equivalent.
 - ii. Airflow: 20,000 CFM.
 - iii. Fan Type: Forward Curved
 - iv. Heat: 2-stage.
 - 1. 1st: Glycol Run-Around Heat Recovery.
 - 2. 2nd: Glycol Pre-Heat.
 - v. Cooling: 2-stage
 - 1. 1st: Condenser Water Coil served by cooling tower. Connected via heat exchanger (see main building narrative above.)
 - 2. 2nd: Direct evaporative media.
 - vi. Cabinet Size: 450 FPM max velocity.
 - vii. Zone Control: Single Zone
 - b. Heating:
 - i. Low-Intensity natural gas fired radiant tube heaters. Low sound.
 - 1. Manufacturers; Corayvc, Infra-Red, or equivalent.
 - c. Exhaust:
 - i. General: 20,000 CFM general exhaust fan with glycol run-around coil.
 - ii. Vehicle: Localized vehicle exhaust system. CarMon type exhaust system with Qty (4) vehicle connections. On/Off wall control with automatic CO2 detection initiation.
- The purpose of the below two systems are for teaching purposes. See Mechanical System Narrative above and architectural narrative for further information.
10. Technology Lab Classrooms & Offices:
- a. Heating/Cooling:
 - i. Variable refrigerant flow heating and cooling system.

11. Administration 2nd Level Offices:
 - a. Heating/Cooling:
 - i. Variable refrigerant flow heating and cooling system.

12. Ventilation: The above two areas will be served by a single 100% outdoor air-handler with the following characteristics.
 - a. Airflow: 7,000 CFM.
 - b. Type: Variable Air Volume supply and exhaust. Plate & Frame heat exchanger.
 - c. Manufacturer: Venmar, Temtrol, Hunt-Air, Climate Craft, Haakon, or equivalent.

13. Solar Thermal Water Heaters:
 - a. Qty (2) Viessmann model Vitosol 200°F flat panel solar collectors with roof mounting system.
 - b. Qty (2) 1/6 HP variable speed pumps on emergency power.
 - c. Qty (2) 1/6 HP constant speed back-up pumps.
 - d. Glycol feed tank.
 - e. Double wall plate and frame heat exchanger suitable for potable water use. 100,000 Btu/h.
 - f. Domestic Water Storage Tank: 750 gallon.

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CODES AND STANDARDS

Codes, Standards, and Guidelines, which are applicable to the design of the electrical systems, are listed below. Comply with each of the latest adopted publications:

- ADA, Americans with Disabilities Act
- International Energy Conservation Code
- EIA/TIA, Electronics Industries Association/
Telecommunications Industry Association
- IBC 2009, International Building Code
- IEEE 1100-1999, Recommended Practice for Power and
Grounding Electronic Equipment
- IESNA, Illuminating Engineering Society of North America
- NFPA, National Fire Protection Association (applicable
sections including but not limited to):
 - NFPA 70, National Electrical Code
 - NFPA 72, National Fire Code
- UL, Underwriter's Laboratories
- Utah State Fire Marshal Laws, Rules and Regulations
- Division of Facilities Construction and Management,
Design Criteria

SITE UTILITIES

Building Electrical Service:

Coordinate electrical service to the building with the electrical utility. Provide all trenching, raceways, concrete pads and metering cabinets as required by the utility. The secondary voltage to the building is anticipated to be 277/480V equipment, but this shall be evaluated based on building loads and equipment requirements as the design develops.

Telecommunication Distribution:

Provide a minimum of four 4" conduits into the main telecommunications room. Locate a new telecommunications manhole on site that is coordinated with the telecommunications service providers. The design shall allow for multiple providers to serve the building.

ELECTRICAL DISTRIBUTION SYSTEMS

The main electrical room shall be constructed to house a 480/277 volt main distribution switchboard. This room should be located as close as possible to the pad-mounted high voltage transformer to reduce the length of feeder conduit and conductors.

The 480Y/277 volt main distribution switchboard is anticipated to have a rating of 2000 Amps. It shall have a main circuit breaker and shall be free-standing and equipped with a meter that meets SWATC requirements. This switchboard shall be utilized to provide power to lighting panel boards, step-down transformers, 480 volt motors, elevators, and large mechanical equipment such as air handlers, pumps, chillers, fans, etc.

120/208 volt distribution shall be served by a single step down transformer expected to be rated at 500kVA with a K-13 harmonic rating. It shall feed a 120/208V distribution switchboard with an anticipated rating of 2000 Amps.

Panelboards shall be provided in vertically stacked electrical rooms. Electrical rooms shall be centrally located as much as possible so that the conductor distance from any panel board to the most remote outlet is not greater than 150 feet. These rooms shall be dedicated to electrical distribution and shall not be used for storage or any other purposes. Consideration shall be given to the ease and accessibility of running new and future conduits out of each room; for example, do not locate the room between stairs, elevators, rest rooms, etc. that would make future work difficult. If inaccessible ceilings surround the room, then stub (5) spare 3 / 4" conduits from each panel board to accessible ceiling areas. Dedicate an area of each room for current and future riser conduits so that wall-mounted equipment will not impede vertical distribution. Electrical rooms shall have a minimum of 25% additional space for future growth. Panelboards and dry-type transformers serving normal lighting and appliance circuits shall be located on the same floor as the circuits they serve.

Main distribution switchboard, power distribution panels, and branch panel boards shall have 25% excess capacity for future growth and flexibility.

Feeder Distribution:

To the greatest extent possible, separate different types of loads onto different feeders and busses, such as HVAC equipment, vertical transportation, lighting, convenience power, and “clean” computer power. In general, large motors and equipment shall be served at 480V, 3 phase; lighting at 277V; outlets and small equipment at 120V.

480Y/277 volt lighting and appliance branch circuit panel boards shall be utilized to provide power for lighting, HVAC, and other electrical motor loads. Panel boards shall be dedicated to serve either lighting or HVAC loads but not both.

The 208Y/120 volt lighting and appliance branch circuit panel boards shall be utilized to provide power for low voltage lighting, computer equipment, owner furnished equipment, duplex outlets, small mechanical equipment, etc. Separate branch panel boards shall be installed to feed power to computer equipment. Computers and any sensitive equipment shall be fed from separate panel boards to isolate them from other equipment such as small mechanical equipment and general-purpose duplex outlets. All 208Y/120 volt lighting and appliance branch circuit panel boards shall have 200% neutral busses and feeders per DFCM requirements.

Transformers that are used to supply 208/120 volt panel boards shall comply with NEMA TP1 for energy efficiency and be designed for non-linear loads.

Provide motor control centers for areas where 3 or more motors are grouped. The capacity of motor control centers should be calculated in accordance with the load that is served with a minimum of 25% additional spare capacity. All 3-phase motor starters shall be provided with phase failure protection. Provide variable frequency drives with harmonic filtering

where required for mechanical equipment in compliance with DFCM requirements.

Conductors:

All conductors shall be copper. Conductors for branch circuits shall be sized to prevent voltage drop exceeding 3% at the farthest load. The total voltage drop on both feeders and branch circuits shall not exceed 5%. When calculating the voltage drop, the load shall be assumed to be 80% of the capacity of the branch circuit and feeder conductors.

Raceways:

Design all wiring in raceways, minimum ¾” conduit. Type MC is permitted for runs less than 30’ between outlet boxes but is not allowed for home runs. Conduits for telecommunications shall stub to the cable tray. Include pull strings in all empty conduits. Include raceway for all audio/visual and technology systems as defined in the project building requirements whether furnished as part of the construction contract or furnished by the Owner.

Equipment and Furniture:

Refer to the program equipment summary and space plan sheets for equipment requiring electrical rough-in and connections. All equipment and furniture identified in the program documents, whether it is furnished in this contract or a separate contract, shall be provided with power and raceway rough-in for complete operation.

Surge Suppression:

To provide protection against damage to sensitive electronic equipment, due to surges, provide transient voltage surge suppression (TVSS) devices at the main distribution switchboards and at branch circuit panel boards serving sensitive electronic equipment.

Fault Current, Coordination, and Arc Flash Study:

A fault current and coordination study shall be performed by a licensed electrical engineer to indicate available fault current at

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all points in the building distribution systems. New equipment shall be adequately rated for the amount of available fault current. System coordination shall be studied, and fuses or breakers selected to ensure minimum system outage due to overloads or fault currents. Breakers with adjustable long time, short time, instantaneous and / or ground fault settings shall be set at levels for optimum system coordination. In addition, an arc flash study shall be provided; electrical equipment shall be provided with labeling per all NEC requirements.

Branch Circuits:

Branch circuits shall be loaded to no more than 80% of what is allowed by NFPA 70. Where outlets are intended for a specific piece of equipment, the load of the outlet shall be based on the equipment nameplate. Otherwise, allow no more than 4 convenience outlets per circuit in instructional lab spaces and for computer workstations, and 6 convenience outlets per circuit for general purpose use. Outlets with dedicated branch circuits (one outlet per circuit) are required for vending machines, copy machines, break room counters, A/V cabinets and where the equipment nameplate requires it. Each branch circuit homerun shall have no more than 3 circuits per raceway.

Uninterruptible Power System (UPS):

No UPS systems are anticipated for the building.

Emergency Service and Distribution:

A diesel powered emergency generator should be considered for the new facility. The generator will be outdoors in a screened area with weather-protective, sound-attenuating housing. Power rating is expected to be 75kW at 480/277V. Fuel shall be contained in a skid-mounted, double-walled tank. Fuel supply shall be minimum 12 hours at full load. Provide at least two transfer switches: one for emergency and one for non-emergency (optional) loads. Annunciate alarms adjacent to fire alarm panel. The following shall be provided with emergency power:

- Emergency egress and exit lighting
- Fire Alarm

- Communications rooms - outlets, lights and air conditioning
- Electrical room - lights and outlets
- Security systems

LIGHTNING PROTECTION

A lightning protection system is recommended for the new building. The lightning protection system shall consist of air terminals, down conductors, ground rods, and a buried grounding conductor to surround and traverse the building. Engage an LPI-certified installer, designer and inspector for the system. Provide a UL Master Label and comply with NFPA 780.

OUTLETS

Refer to program and space plan sheets for basic requirements. Where requirements cannot be identified, the following shall be used as a general guideline. Each outlet location shall be coordinated with the design team and end user during the design.

Instructional Lab Areas: Outlets sufficient for programmed equipment, plus outlets along work benches or tables – no greater than 2' on center (unless otherwise identified in the space plan sheets).

Meeting Rooms and Instructional Spaces: Provide outlets for instructor's station, audio / visual equipment. Ensure that there is at least one outlet for each 10' of wall space. Provide floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space. Where tables are fixed in place, coordinate power outlets mounted directly into the millwork.

Machine and Mechanics Shops: Multiple outlets of various voltages. Coordinate with the Owner and the equipment to be supplied in the space.

Commons Areas, Lounges and Informal Gathering Areas: Provide power outlets for laptop computers, at least one duplex for each group of 4 seats, but no less than one outlet per each 12' of wall space. Provide floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space.

Offices: For each workstation, provide one outlet dedicated to computer terminals and one normal outlet, and one additional normal outlet for every 10' of wall space.

Conference and Board Rooms: One outlet for every 10' of wall space, plus one outlet dedicated to computer terminals on two walls. Provide combination power/communication floor outlets underneath conference room tables.

Lounges / Breakrooms / Kitchenettes: GFI Outlets on dedicated circuits every 4' on counter top plus dedicated outlets for refrigerator, microwave, and disposal (switched at counter top), plus one outlet for every 10' of other wall space in room.

Counter tops (in general): One outlet every 4'; GFI where within 8' of a sink.

Telephone / Data Closets: Provide one 208 volt outlet near the telecommunications rack on emergency power for a UPS – coordinate amperage requirements with SWATC. Provide two 120 volt quad outlets on emergency power on the telephone terminal board, plus one outlet on normal near the door.

Electrical Rooms: At least one outlet on emergency power.

Rest rooms / Shower Rooms: One GFI outlet near each lavatory counter top.

Corridors, Lobbies: Provide at least one outlet every 25', on alternating sides of the corridor or lobby.

Stairs: One outlet at the landing of each level.

Storage Rooms (small), Janitors Closets: One outlet.

Building Exterior: One WP/GFI receptacle near each building entrance/exit.

Grounding Conductors:

Grounding conductors shall be installed with all feeder and branch circuits. Provide an additional isolated grounding conductor to all 120/208-volt branch panel boards.

Provide a grounding riser system throughout the telecommunication rooms consisting of a grounding bus mounted on the wall in each room near the telecommunications boards and two grounding conductors (one extending to the main ground bus of the main distribution panel and the other extended to building steel).

INTERIOR LIGHTING

General Design Criteria:

Utilize standard fixtures to meet the illumination requirements while maintaining high efficiency and requiring minimal maintenance. Install fixtures in locations such that special equipment is not required for lamp replacement. Provide task lighting where practical to reduce the overall energy consumption. Lighting intensity and uniformity should provide shadow-free and glare-free illumination of work surfaces. Lighting intensity control using dimmers or multi-level switching should be incorporated in specialized instructional spaces where computer or other electronic equipment monitors are used. Pendant indirect or direct / indirect fixtures are ideally suited for the environments that will be encountered and should be used where ceiling heights will allow for suspension of 18 inches or more below the finished ceiling. If pendant fixtures are used in rooms with ceiling projectors, carefully coordinate the pendant fixtures with the projected image to eliminate any conflicts.

Task Illuminance:

Lighting levels shall be in accordance with the Recommended

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Illuminance Categories and Illuminance Values for Lighting Design, IES Lighting Handbook. Total lighting load for the facility should not exceed the calculated lighting power budget, minus 10%, as determined by ASHRAE 90.1-2007. The lighting levels listed below in footcandles should be used for design purposes. The values listed are average maintained illuminance levels using a maintenance factor of 75%. The numbers listed are target values and should be adjusted to meet the special requirements of individual areas.

Task lights shall be provided by the Construction Contract if part of the lab casework.

Function / Space	Illuminance(Avg. Footcandles)
Instructional Laboratories	50 (ambient) – 100 (task)
Offices	30 (ambient) – 50 (task)
Classrooms	50
Media Rooms	30
Conference / Meeting Spaces	50
Corridors / stairwells	20
Corridors / stairwells, Staff only	10
General Storage	30
Lab Equipment Rooms	30
Mechanical / Electrical Rooms	20

Lamps:

The number of different lamps that are used should be kept to a minimum so that replacement stock will be minimal and the opportunity for replacement errors will be reduced. The design should strive to utilize only one type of T8 or T5 fluorescent lamp and one type of compact fluorescent lamp; however, this requirement should not override the goals of maximizing energy efficiency and proper task illumination. T8 lamps characteristics should include rapid-start, low-mercury, minimum color rendering index of 82, 4100 K color temperature, and average rated life of 20,000 hours. T5 lamps characteristics should include programmed-start, low-mercury, minimum color rendering index of 85, 4100 K color temperature, and average rated life of 20,000 hours. Compact

fluorescent lamp characteristics should include minimum color rendering index of 80, 4100 K color temperature, 10,000 hours average rated life at 3 hours per start. All fluorescent lamps should comply with the Federal Toxic Characteristics Leaching Process (TCLP) test, and yield less than 0.2 mg of mercury per liter when tested according to NEMA LL 1.

Ballasts for linear fluorescent lamps should be electronic programmed start with not greater than 10% total harmonic distortion. Ballasts for compact fluorescent lamps should also be electronic and should operate at minimum 90% power factor.

Incandescent lamps should not be used, except for special cases where a CRI of 100 and / or a dimming range of 0% -100% is critical to the task involved. Incandescent lamps, if used, should be tungsten halogen IR type par lamps. LED light fixtures should be evaluated for suitability in place of incandescent fixtures.

Interior Lighting Control:

Occupancy sensors should be used in normally occupied enclosed areas such as offices, break rooms, conference rooms, and toilet rooms to shutdown lighting when the areas are not occupied. Lighting in common areas such as corridors and lobbies should be controlled by a programmable networked lighting relay control system with the capability of timed control, sensor inputs and building automation system integration. Low voltage wall station override switches are required in convenient locations throughout the facility to allow for on / off override to suit the specific needs of the building occupants.

Provide day lighting control in common areas where natural illumination alone provides sufficient lighting levels. Photoelectric sensors should be used to shutdown or dim the artificial lighting when it is not needed. In offices and instructional laboratories where day lighting control is used, utilize continuous dimming to negate the noticeable affects of

the on / off cycles of the artificial illumination.

As required by the room use, provide variable lighting levels by multiple level switching or dimming. In rooms with audio /visual (AV) equipment, provide variable and zoned lighting control, from front to back, to allow for flexibility in lighting scenes for the various room functions. Where central AV control systems are used, provide lighting control/dimming systems with an RS232 AV interface to allow the lights to be controlled from the AV system.

EXTERIOR LIGHTING

Design Criteria:

The exterior lighting fixtures should be selected to harmonize with the architectural style of the building. In general, all outdoor lighting shall have full cut-off optics as defined by the IESNA. Wall mounted decorative fixtures may be used to draw attention to main entry or circulation areas. Wall mounted fixtures at other locations should be non-decorative with cutoff optics that are designed for the intended use. Fixtures for parking surface areas and walkways are to be pole. A common metal halide lamp should be selected for use in all exterior fixtures to minimize the maintenance stock requirements where practical. All exterior light fixtures should be robust and suitable for the harsh exterior environment. Preference should be given to fixtures that have design features such as hinging reflectors and removable ballast trays that reduce the cost of lamp replacement and fixture repairs.

Illuminance:

Lighting levels should be in accordance with the Recommended Illuminance Categories and Illuminance Values for Lighting Design, IES Lighting Handbook. Total lighting load for the facility should not exceed the calculated lighting power budget as determined by ASHRAE 90.1 - 2007. The lighting levels listed below in footcandles should be used for design purposes. The values listed are average maintained illuminance levels using a

maintenance factor of 75%.

Function	Illuminance (Avg. Footcandles)
Parking	1
Walkways	1
Building Perimeter - Entrances	5

Emergency Illuminance:

Select standard building lighting as may be required to achieve the illuminance criteria set forth in the NFPA Life Safety Code, IBC, and local codes. Designate these fixtures as egress lighting fixtures. Where lamp sources of building lighting are not instant on, provide arc keeper devices or battery/inverter units to prevent lamp source from extinguishing until emergency power can be supplied. Provide dedicated branch circuiting from the emergency power branch. Emergency lighting shall be provided on all paths of egress including but not necessarily limited to corridors, large open office or instructional spaces, rest rooms, mechanical rooms, electrical rooms, and communication rooms.

Provide illuminated exit signs in locations as required by the NFPA Life Safety Code, IBC, and local codes. Exit sign shall be cast aluminum LED type. Provide dedicated branch circuiting from the emergency power branch.

FIRE ALARM SYSTEM

Fire alarm system shall be designed to comply with Utah State Fire Marshall's "Rules and Regulations" and SWATC Design Standards.

Design strobes visible from all locations except private offices. Horn installation shall comply with NFPA including for higher ambient noise requirements. Provide duct detectors and fan shutdown where required by NFPA and the IMC, including detection of smoke at all return air shafts servicing multiple floors. Provide smoke detectors in elevator lobbies and in

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machine rooms. Provide heat detectors in machine rooms. Coordinate location of the building fire alarm control panel and annunciator panel with the fire marshal.

TELECOMMUNICATION SYSTEM

General:

The voice and data system shall consist of two main categories:

1) Pathways and Spaces to support the voice and data system, and 2) The structured cabling system.

Pathways and Spaces:

There shall be one main communication room. This room shall house the main computer and phone equipment that serves the building. Each equipment room shall be a minimum of 150 square feet (10' x 15') in size. The room shall be located as close to the center of the building as possible.

The second floor shall also have a communication room that is 150 square feet (10' x 15') in size. Additional communication rooms of the same size may be required on each floor if the horizontal cable length to a telecommunications outlet exceeds 90 meters. (The standards set the maximum cable length at 100 meters. That includes the length in the communication room from the wall to the switches, and in the classrooms, from the wall to the computers.)

A minimum of two (2) 3" conduits shall be run from the communication room on level two to the roof of the building for roof mounted external wireless communications. All communication rooms shall be located in a stacked configuration and shall be interconnected with at least (4) 4" sleeves. There shall be no water (for example but not limited to rest rooms, drinking fountains or janitors sinks) adjacent to or above any of the communications rooms. All communications rooms shall have access directly from a hallway without needing to go through a classroom or office to enter the room.

Each floor shall have a cable tray system that covers each floor. The cable tray system shall connect communication rooms on the same floor. Generally, it shall be routed in corridors and coordinated with ducts, piping, and electrical conduits. It should also be extended into each lecture room or major area. Provide basket-type cable tray. It is anticipated that a 12" wide by 4" deep tray should be sufficient; however, this should be carefully evaluated during design. The tray should be trapeze-hung and seismically braced; center-hung trays are not allowed. The location of the tray should be coordinated with duct work and piping during design. Mechanical fire stop systems should be utilized where the cable tray passes through fire rated partitions to allow for moves, additions, and changes in a flexible and easy manner.

Wherever possible, each communication room should have cable tray entering the room from two directions to maximize flexibility and future moves, additions, and changes. The cable tray in communication rooms shall be a minimum of 18" wide with a 4" loading depth.

Each telephone/data outlet shall utilize a 4" square by minimum 2-1/8" deep junction box with a single-gang plaster ring. One 1" conduit with nylon pull rope shall be run from each junction box to the nearest cable tray and a protective bushing should be provided at the end of the conduit at the cable tray. Conduit to tray clamps shall be employed.

In small offices, provide one (1) telephone/data outlet. In larger offices where it is anticipated that there could be two (2) workstations or varying locations for a single workstation, provide at least two (2) telephone/data outlets and more as may be required.

STRUCTURED CABLING SYSTEM

General:

The structured cabling system shall be designed to support high-speed voice/data/video and future high bandwidth

applications. The system should be a Category 6 solution.

The building network service entrance cable and backbone cable shall be fiber-optic. Horizontal cabling to each telephone/data outlet shall be unshielded twisted pair. All backbone cables shall be terminated in a wall-mounted fiber break out enclosure. All horizontal cabling shall be terminated in patch panels located in a 7'-0" high, 19" floor-standing rack. Each communication rooms shall be provided with a floor-standing rack.

Each telephone/data outlet shall have at least three (3) Category 6 RJ-45 4-pair ports with a dedicated horizontal Category 6 cable ran from the respective communication room on that particular level to each port.

Provide telephone outlets for pay phones, ATM's, elevator panels, building automation system, wall phone and other required uses. Each telephone outlet shall have one Category 6 RJ-45 4-pair port with a dedicated horizontal Category 6 cable ran from the respective communication room on that particular level to each port.

Wireless:

The user desires that the building and all immediate adjacent outdoor areas, be provided with reliable wireless local area network coverage. Provide data outlets at owner designated location for wireless points to cover all interior areas, as well as to spill out into all immediate adjacent outdoor areas. Design wireless access point data outlet with one category 6, RJ-45 data jack mounted in a 4" square by minimum 2-1/8" deep junction box with a coverplate.

SECURITY SYSTEMS

All security systems will comply with established SWATC standards. Systems will annunciate alarm conditions to, and be

completely monitored.

Security System devices, cabling, control panels, monitors, terminations, etc. shall be furnished, installed, and connected by SWATC. The design build contractor shall provide all required raceways, outlet boxes, 120 volt power connections, etc.

The following is a description of the security systems planned for this building:

Card Access:

A complete access control system will control entry to all perimeter entry / exit points. Card readers will be the proximity type, and will comply with established Campus Standards. Card readers will report to a central door controller. Coordinate door hardware to minimize the aesthetic impact to the appearance of the building. Request-to-exit motion detectors will be installed on the secure side of each access-controlled door. Magnetic locks and/or electric strikes will be utilized to secure access-controlled door.

Student Attendance Recording:

A complete student attendance recording consisting of card readers and fixed surveillance cameras will monitor student attendance. Card readers will be the proximity type and report to central door controller. It is anticipated that card readers and cameras will be installed around perimeter entry / exit points only.

Video Surveillance:

A complete video surveillance system with control for visual monitoring of building perimeter, all building entry / exit points, at select main building thoroughfares, elevator lobbies, and at select sensitive interior areas. High mega pixel cameras will monitor exterior areas including the building perimeter. Fixed mega pixel cameras will monitor designated locations inside the building. Cameras will be installed in appropriately rated enclosures. Signals from cameras will be connected to

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a central switching / multiplexing system with minimum 13" video monitors for viewing. All camera images will be digitally recorded by DVR's that are local area network accessible. Additionally, cameras will be monitored and controlled at a remote location on campus with transmission via the campus network system.

Intrusion Detection:

A complete intrusion detection system will be installed for electronic monitoring and status reporting of all building entry / exit points, select building thoroughfares, and at select sensitive interior areas. Sensing devices will include door position switches and motion sensors. All sensing devices will report to a zoned monitoring panel for specific location identification of an alarm condition. The intrusion detection system will be integrated with the video surveillance system for priority viewing of security breach areas. Alarms shall be reported to the campus monitoring location via radio signal.

CLOCK SYSTEM

Provide 120 volt digital clocks in each classroom and instructional lab.

AUDIO AND VIDEO SYSTEMS

General:

It is recommended that audio and video systems will be specified for installation as part of the building construction work, to be completed with all building trades. This shall be coordinated with DFCM, SWATC and the budget as the design progresses. The following is a list of typical spaces that may need AV systems:

Classrooms:

Classrooms will be provided with fully integrated audio, video, and control systems (Crestron or equivalent). Audio

systems will amplify the spoken word from presenters, as well as amplify program audio originating from media source playback devices such as computers and DVD players. The spoken word originating from presenters will be captured using wireless, lapel microphones and lectern-mounted gooseneck microphones. Once captured, the audio signal will be processed and amplified to an appropriate speaker system. Design speaker systems to provide even sound pressure level throughout the entire seating area with + 2 dB at 2 KHz, with a frequency response of at least 150 Hz to 15 KHz + 2 dB, and with a maximum of 12% articulation loss of consonants. Include all audio system calculations on the construction drawings.

Several media source devices and inputs will be provided. These devices will include, but not be limited to, inputs for portable computing devices, inputs for computer systems resident in lecterns, DVD / VCR players, document cameras, and audio / video / data sources originating from outside the Seminar Room. Audio originating from these source devices will be selected, processed, and amplified to the above identified speaker system. Provide a wireless assisted listening system in compliance with the Americans with Disabilities Act.

Provide video systems for the large screen display of presenter subject matter. Size projection screens so that all viewers with average eyesight can read text from any seat. Use AV industry-wide accepted mathematical formulas to determine appropriate image sizes. Locate projection screens in close coordination with seating layouts to assure appropriate viewing sight lines. Provide projectors with a minimum native resolution of 1280 X 1024, or 1920 X 1080 depending upon the desired aspect ratio of the projected image as identified by the Owner during the design process.

Depending upon final room ceiling heights, provide tension cabled, electric roll up or fixed projection screens as directed by the Owner during the design process. As with screen sizing, utilize mathematical formulas to calculate the required light output for each projector to assure that images will not be

“washed out” by ambient room lighting. Specify appropriate screen surfaces based on calculations. Include all video system calculations in the construction drawings.

Provide two projectors and screens in the Large Seminar Rooms with the ability to display different images on the screens simultaneously. In addition, provide the ability to write electronically (annotate) over the displayed images independently.

The Large Seminar Rooms will be equipped with an integrated control panel for control of all audio and video system components, and lighting systems. To meet this need, a touch screen control panel will be provided. The touch screen control panel will serve as the control panel, lectern monitor, and the annotation input device. Specify control system manufacturers in compliance with established campus standards. The touch screen control panel will be programmed in full compliance with the end user’s desired button layout, configuration, and labeling. In addition, the control systems will be programmed with macros so that multiple events will occur when a button on the touch panel is engaged.

Conference Rooms:

Conference Rooms will be equipped with audio and video systems for media source device presentations, teleconferencing, and video conference capability. Tables in Conference Rooms will be permanently wired with microphones for the capture of meeting participant audio. All microphones will be mixed through automatic matrix mixers with individual echo cancellers for each microphone input. Design speaker systems to provide even sound pressure level throughout the entire seating area with + 2 dB at 2 KHz, with a frequency response of at least 150 Hz to 15 KHz + 2 dB, and a maximum of 12% articulation loss of consonants. Include all audio system calculations on the construction drawings.

Video systems will be provided for large screen display of meeting subject matter. Provide a 58” HDTV LED television.

Provide one CODEC and a minimum of two pan, tilt, zoom cameras for image capture of video conferencing participants in each conference room. Conference Room tables will be permanently wired with computer video, composite video and S-video inputs, along with their associated audio signals. This connectivity will be provided in a “hidden” connection panel that rises out of the table when needed. Basic source devices including a DVD / VCR player and document camera will also be provided.

Conference Rooms will be equipped with an integrated wireless control panel for control of all audio and video system components, lighting systems, and motorized window coverings (if applicable). To meet this need, a wireless WiFi touch screen control panel will be provided. The touch screen control panel will be programmed in full compliance with the end user’s desired button layout, configuration, and labeling. In addition, macros (multiple events) will occur when a button on the touch panel is engaged.

TV Distribution System:

An RF TV distribution system will be provided for distribution of audio and video signals throughout the building on coaxial cable. The TV distribution system will include all cable, amplifiers, splitters, couplers, terminators, outlets, and connectors. The system will be the broadband type, for distribution of low resolution, modulated audio and video signals onto a carrier frequency. A minimum 750 MHz bandwidth will be specified, and all outlets will be provided with between +5 and +10 dBu at each building television outlet. Television outlets shall be provided at each A/V system.

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Civil Design Criteria

SITE LOCATION

The site is located in Cedar City between 555 West and 860 West along 800 South Street. The site encompasses the entire frontage between these two streets along 800 South and forms a tee shape consisting of approximately 11.4 acres as it extends to the South between the adjacent residences. (See Figure 1)

ACCESS

Primary Vehicular access to the site will come off of 800 South itself with secondary accesses possible at 555 West and 860 West in the future. All accesses will be 24' minimum face of curb to face of curb in width with the access to 800 South possibly becoming larger to accommodate both a right and left turn lane. (See Figure 2)

The primary access from 800 South will likely be quite steep, somewhere in the 6% to 8% range based on an average slope of approximately 3.75% across the site from South to North and approximately 2.0% from East to West. Special attention should be paid when setting the elevation of the building such that this drive does not become hazardously steep and difficult to maintain in the winter, especially since it is north facing. These slopes will likely necessitate that ADA access to the site be handled separately from the drive aisles as they will likely exceed the maximum running slope for an ADA compliant sidewalk of 5%.

Access from 555 West and 860 West to the building will be less of a challenge from a slope standpoint but will likely conflict with the on site ditch currently being used as a storm drain by the adjacent businesses. Accesses here will likely require that the ditch be piped or otherwise re-routed across the property to the northwest corner. More information about this can be found in the storm drain section of this report.

Pedestrian access to the site will come off of sidewalks which



Figure 1



Figure 2



Figure 3



SITE PLAN

Figure 4

will have to be constructed along all frontages of the property with the exception of 555 West, which has existing sidewalk and curb and gutter. Sidewalks exist on opposite sides of all frontages to be developed which will likely require minimal off site work such as striping and construction of ADA ramps. In particular, access to the northeast towards the high school and current site of the SWATC should be carefully evaluated and designed to maintain pedestrian connectivity and ADA access. (See Figure 3)

OPEN SPACES

Currently planned open spaces on the North side of the building will work well to take up grade transition to the building finished floor; however the possibility that a retaining wall may be necessary is not out of the question depending on the type of building selected for the site and the layout of the building. Nearly all open spaces will have slope due to the naturally sloping nature of the site. All areas requiring level spaces, including outbuildings and possible future buildings should be carefully coordinated in the initial stages of the design of the building to maximize the comfort of the site and allow advanced planning for grading and drainage for those areas.

(See Figure 4)

FIRE ACCESS

Fire access will be possible from any of the entrances mentioned in the access portion of this report. A fire access route will also be provided through the parking lots so that in the event of a fire, facility will have adequate fire protection. Care should be taken in the initial stage of site layout to keep all points of the building within 150 feet of a fire apparatus access. Streets, entry ways and drive aisles will all be capable of handling a fire apparatus and the currently proposed layout in the northwest corner of the site should provide a good

03 Building Requirements

Civil Design Criteria

balance of fire protection, setback from the streets and grade transition space.

CONSTRUCTION ACCESS AND STAGING

The construction access and staging will most likely take place on the South side of the site just beyond the boundary of the proposed parking lot area while construction access will be from 555 South. A SWPPP will be developed to reduce construction debris from getting onto the roads and will also provide a dry location for material storage and for the construction trailer. (See Figure 5)

SOILS REPORT

No geotechnical study for this site is available at the time of this report. However, the findings of any future report shall be coordinated and become part of the design documents. The report should make paving requirements for asphalt as well as concrete, depths to water if found, indications of bearing capacities, maximum cut and fill recommendations and potential for any soil related building settlement problems, etc. Cedar City shows the site to be in a "Minimal" zone for relative hydro compaction susceptibility or collapsible soils based on the map available from the city dated January of 2011.

TOPOGRAPHICAL SURVEY

A detailed topographical survey for the site must be completed prior the design of the project. The site appears to be in Zone C according to FEMA FIRM maps.

SITE UTILITIES

Cedar City was contacted and they provided the following

information about utilities.

Sanitary sewer surrounds the site on the North, West and East sides. A new 8" sanitary sewer line and storm drain easement were allowed to pass thru the center of the site in the vehicular access road. (See figure 5). All of the sanitary sewer lines are 8" in size and when asked the city reported no known sewer capacity issues in the area. Less was known about downstream capacities for sewer. Access to the sewer and flow should be no problem for the proposed facility. (See Figure 6)

Water is also available on all three sides of the project with frontage to city streets. The Cedar City water model predicts anywhere from 68 to 73 psi static pressure in the area of the proposed development with the higher pressures and flows available from 860 West. The waterlines in the area are sized 12", 8" and a combination of 6 and 4" for the streets 860 West, 800 South and 555 West respectively.

The facility is in the upper end of a water system pressure zone for the city, which explains the lower than desirable pressures. These pressures will likely not change significantly but should work adequately for fire protection for the proposed development. Early flow testing of nearby hydrants



Figure 5



Figure 6

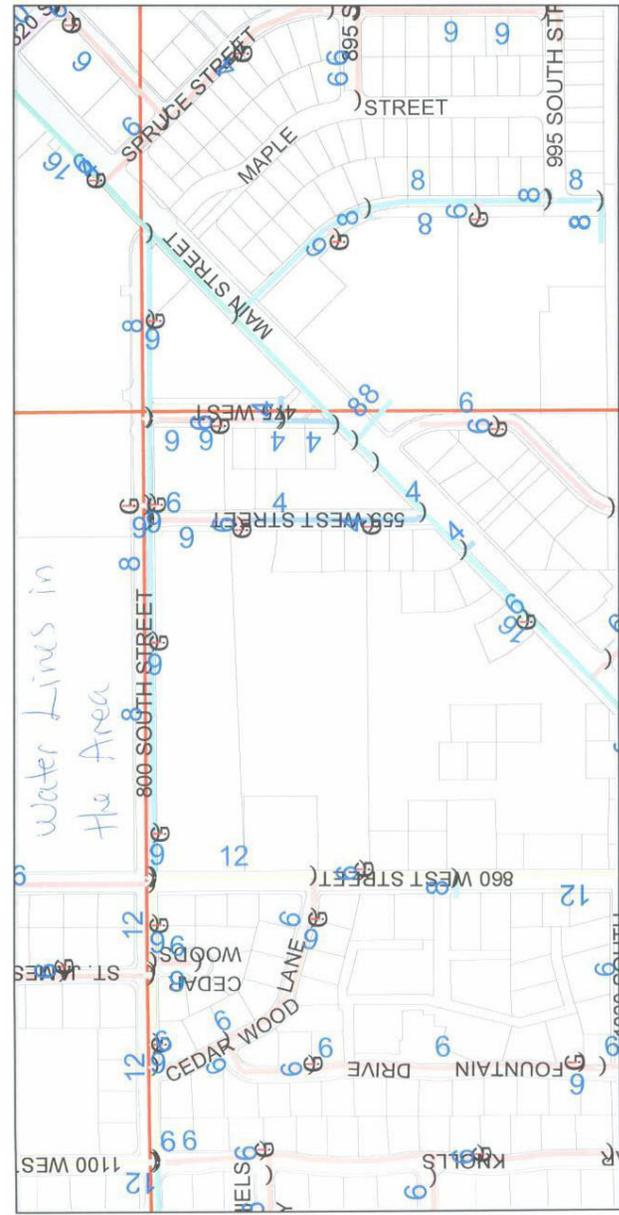


Figure 7

03 Building Requirements

Civil Design Criteria

is recommended to confirm these findings so the design may be based upon them. An 8" water main through the site which will loop the cities' existing system is anticipated at this time to make certain that the building is adequately protected from fire. (See Figure 7)

Currently the site has an adjacent property storm drain line dumping into an irrigation canal located at the center east side of the site. There are no easements or requirements to maintain this canal. The city is currently working on a solution to reroute the storm drain line and properly tie it in the existing city system. In general the storm drain system in Cedar City is relatively disconnected and appears to intermingle with irrigation at some points. The prevailing drainage of the site tends toward the northwest corner of the site which will be the optimal place for a detention basin to serve the campus.

The detention basin will need to be sized to meet city requirement for detention which appears to be the 25 year 24 hour storm. This should be confirmed with the city engineer as the city design requirements leave some question about the specifics of the design storm to the discretion of the engineer. It is highly recommended that the detention pond as developed be able to handle the anticipated future development for the campus to minimize future permitting efforts and make expansion economical and hassle free. On site storm drain will be composed of PVC, CP and RCP pipes and precast or cast in place catch basins to minimize sheet flows on site. This water will then be routed to the detention pond, detained and release to the historical discharge point. Use above ground grassy swales for conveyance is also a good option when available for cleaning the storm water prior to discharge from the detention pond.

The site utilities will be coordinated with the rest of the project team after the topographical survey has been done and utility connection points to the building are known.

LEED POINTS AND SUSTAINABLE DESIGN

This project will be required to get at least a silver rating. A sustainable design is a key part of this project. There are several LEED points that are typically assigned to the civil engineer. These include the storm water quality point and the storm water quantity point.

The site is now less than 50% imperviousness. As such, the quality point requires that the amount of storm water leaving the site be not more than the amount of water that currently leaves the site. To do this, a certain amount of the storm water must be percolated into the ground. The percolation will be enhanced with the use of swales to clean the storm water and reduce the flow prior to the percolation/detention pond. This must be coordinated with the geotechnical report and with the owner.

The other LEED point, storm water quality requires that the design be set so that 80% removal of total suspended solids takes place for 80% of the storm water leaving the site. This goal can be accomplished with the use bioswales, hydrodynamic separators, and filtration. The methods to clean the storm water will be coordinated with the design team early in the design process so that an economical solution that still works can be provided.

BUILDING ELEVATION

The building elevation will be based on the final site and building plan as previously mentioned should be carefully coordinated with the drive accesses and in particular the potential need for a dock. The dock if required and access to it would work best on the North, East or West faces of the building. South,

southeast or southwest facing docks will be very difficult to accommodate on a site as steep as this.

The need for a dock should be discussed early and careful consideration given to its location and proximity to the road from which it will be accessed.

STORM WATER ROUTING

The building and site will be graded such that positive drainage is sloped away from the building in all areas. This will begin with the finish grade being set adjacent to the building 6-inches below finish floor and then sloping away from the building. Routes for the 100-year storm will be reviewed so that the building is protected from the 100-year storm. The 100-year storm will also be routed through the parking lot to make sure that the depth in any portion of the parking lots is not more than 12-inches. Swales will be sized for the 100-year storm. Pipes and catch basins will be sized for the 10-year storm. A new storm drain and sanitary sewer easement was allowed to pass through the center of the site in the vehicular access road. (See figure 5). This new line may be used for the new building or future buildings depending on the storm drain design calculations. Cedar City has provided new storm water piping that will be utilized for this project, it extends from the middle of 555 West and along the entire SWATC site frontage at 800 South.

SITE PAVING

The site will have several types of asphalt paving. The personal vehicle parking areas will have asphalt paving. The section will be coordinated with the geotechnical report but is expected to be about 3-inches of asphalt over 6-inches of road base over properly prepared sub grade. Another paving section will be

the heavy duty asphalt paving area near the receiving area and heavy duty drive aisles. This will be where the large trucks enter the site, major deliveries, trash pickup and areas of high traffic. This paving section will also be coordinated with the geotechnical report but is expected to be about 4-inches of asphalt in two layers over 8-inches of road base, over properly prepared sub grade.

In addition to asphalt paving, sidewalks and some concrete paving will be provided. The sidewalks will be 5-inches thick over 4" of base to prepare the area to grade. Concrete paving at a potential dock will be 8-inches thick over 8-inches of road base over properly prepared sub grade. A garbage dumpster site will also have a heavy duty concrete pad and will be about 180 square feet. Other concrete slabs for mechanical units will be prepared. These will be coordinated with the mechanical and electrical engineer during the design process.

SITE PARKING

The site will have a number of parking stalls yet to be determined. There will be an appropriate number of ADA stalls dispersed throughout the site and based on the total number of stalls. Standard stalls will be 9' by 20' when not adjacent to landscaped areas and 9' by 18' when adjacent to a 6' or greater walk or landscaped area.

03 Building Requirements

Landscape Design Criteria

OUTDOOR SPACE DESIGN OF AMENITIES AND FEATURES

Primary objectives for outdoor space will be to enhance the surrounding mountain views and scenery, screen the big openness and expanse of the parking lot, create a strong connection from the new SWATC building to the existing Learning Center and existing SWATC building. One final objective will be to represent the design of the SWATC building as a symbol of the technological knowledge and skills needed to gain or keep well-paying employment by all of its past, present, and future students.

Lines and other important physical elements represented by the architectural material palette will be extruded out into the landscape to strengthen and enhance the lines and design of the architecture and to connect the surrounding landscape with the building and other site elements.

Curves may be used to soften the interface between the existing area surroundings with the hard lines of the architecture.

Native vegetation will play an important role as it fingers its way through the various outdoor spaces and creates interesting edges that juxtapose against the more refined elements of crushed rock and layered plant material.

Pedestrian links from 800 south street will be added to clarify routes of travel and to strengthen the connection between existing Learning Center and SWATC facilities.

The vehicular experience with respect to views and circulation patterns will be designed to promote efficiency of travel along designated pathways and also to focus attention of the great surrounding mountain vistas to the south and east and provided by the building and surrounding landscape. Safety of travel along these pathways will be addressed through sound design guidelines and queues from landscape and hardscape treatments in paving, walls, and plantings.

PLANT MATERIALS

Use of indigenous plant materials is encouraged and will be a majority of the plant palette and should be able to withstand drought tolerant conditions during the high heat of the summer months.

Deciduous trees are encouraged along pedestrian corridors and walkways and also in plaza areas to provide shade and relief from the hot sun and to reduce the “heat island effect” in parking lot areas.

Shrub plant massings will avoid creating a security hazard by obstructing views through the site, especially along pedestrian corridors, walkways, entries, etc.

Natural earth and turf berming with plant massings between roads and parking lots may be used to screen negative views of parking lot and focus attention onto the Architectural features of the SWATC Building.

Trees will be planted to provide shade and to enhance views of surrounding landscape features so as not to take away from the beautiful surrounding mountain vistas that one will enjoy from inside the building looking out.

IRRIGATION DESIGN

Irrigation System will be designed to deliver maximum watering efficiency while minimizing the use of water on the site. Native vegetation and more drought tolerant material will be designed and implemented on a majority of site. Colorful flora and textures of plant material will be intensified and massed at important pedestrian and vehicular pathways and at entry ways and around signage to enhance, delight, and direct users and travelers of the various outdoor spaces.

The irrigation system will not be the primary source of plant

sustainability. Other methods may be incorporated to ensure that plants get the necessary water requirements.

Use of native seed mixes and wildflower blends will be encouraged and options explored and will be incorporated where appropriate and where they can visually connect the beauty of the surrounding landscape flora into one cohesive arrangement.

Drought tolerant turf areas will be incorporated to give usable recreational spaces and visual contrast from native planting areas to more functional outdoor spaces. Water wise and Xeriscape irrigation design will be incorporated and coordinated between installing contractors and landscape maintenance providers.

SITE ACCESSIBILITY

Paths to building entrances shall meet ADA criteria for slope and landings. Wherever possible, all other site paths shall meet ADA criteria. If that is unfeasible in a particular location, provide elevator access within the SWATC Building that will allow wheelchair users to transition the non-compliant grade condition. All usable outdoor spaces shall be fully accessible.

03 Building Requirements

Food Services Criteria

OVERVIEW

The areas of the Southwest Applied Technology College culinary arts program that incorporate some aspect of Food Facilities Design include; Servery Kitchen, dual Culinary Foods Lab, Skullery, Demonstration Classroom, Refrigerated Storage, Storage, Dry Storage and Custodial-Linens.

DESIGN NARRATIVE BY AREA

Servery Kitchen:

This lab space was initially programmed at 600 NSF and is currently designed at 530 NSF. The function of the space is to teach commercial food service. This area is to be directly accessible to commons dining area, and adjacent to foods lab and scullery and proximate to pantry storage.

The area includes a cooking area requiring a Type I exhaust hood with cooking equipment including an four burner range top, flat top griddle, open face broiler, salamander broiler and triple fryer and a refrigerated grill stand. A cold food assembly table and hot food warmer, reach-in refrigerator and freezer, refrigerated display case and hand sink are to be provided. There will be a self serve beverage counter merchandising refrigerator, order area and a food pick-up area with a cashier stand at the entrance to the dining area.

Foods Lab:

This classroom/lab space was initially programmed at 1,800 NSF and is currently designed at 1,950 NSF. The function of the space is to teach commercial food preparation. The lab is split in two areas separated by a common wall but open between them. Each lab will include six stations oriented towards a demonstration/teaching cook line. This area is to be directly accessible to students and adjacent to servery kitchen, warewashing, storage and proximate to storage, refrigerated storage and demonstration classroom.

One of the classroom lab areas will include a cooking area

requiring a Type I exhaust hood with cooking equipment including four six burner ranges with oven base and two convection ovens. Two reach-in refrigerators and freezer, stainless steel prep sink, adjustable storage shelving and hand sinks are provided. This area will also include a bakery area with a 60 quart mixer, proof box and bakery deck oven requiring a Type II exhaust hood. Preparation equipment including slicers, food processors and blenders will be included.

One of the classroom lab areas will include a cooking area requiring a Type I exhaust hood with cooking equipment including one six burner ranges with oven base, convection oven, combi-oven, 25 gallon tilt kettle, steamer, dual fryer, flat top griddle and open face broiler. One reach-in refrigerator and freezer, stainless steel prep sink, adjustable storage shelving and hand sinks are provided. Preparation equipment including slicers, food processors and blenders will be included.

Skullery:

This support space was programmed at 250 NSF and is currently designed at 230 NSF. The function of the space is to wash utensils, pots and pans, plates, glasses, cups and flatware. This area is to be adjacent to the food lab and servery kitchen.

The area will include clean and dirty dish tables, dishwasher, pot sink, rinse sink, carts, hand sink and adjustable metal shelving.

Demonstration Classroom:

This classroom space was initially programmed at 750 NSF and is currently designed at 830 NSF. The function of the space is to demonstrate commercial food preparation. This area is to be directly accessible to students and adjacent to foods lab and skullery and proximate to storage and refrigerated storage.

The classroom includes a island demonstration counter incorporating small open face broilers, flat top griddles and open burners, requiring a Type I Exhaust hood. The space will also include a six burner range and convection oven with a

Type I hood located behind the demonstration island counter. The area will include reach-in refrigerators and freezer, a pot washing sink and a hand sink..

Refrigerated Storage: Freezer and Cooler:

This support space was programmed at 200 NSF and is currently designed at 230 NSF. The function of the space is to store refrigerated and frozen bulk food delivered to the facility.

This area will include a pre-fabricated walk-in cooler/freezer box with refrigeration systems, rust free storage shelving and an insulated floor system at the freezer and at the cooler if not slab on grade.

Storage:

This storage space was programmed at 201 NSF and is designed at 190 NSF. The function of the space is to store supplies including pots and pans, utensils, paper goods and other non-food items. This area is to be adjacent to the foods lab and proximate to the receiving area. The area will incorporate adjustable storage shelving.

Dry Storage:

This storage space was programmed at 139 NSF and is designed at 142 NSF. The function of the space is to store food item supplies. This area is to be adjacent to the foods lab and proximate to the receiving area. The area will incorporate adjustable storage shelving.

Custodial/Linens:

This storage space was programmed at 120 NSF and is designed at 120 NSF. The function of the space is to store chemicals and janitorial supplies and to wash linens used in the foods lab and server areas. This area is to be adjacent to the foods lab and proximate to the servery. The area will incorporate adjustable storage shelving, janitor's sink and residential washer and dryer.

03 Building Requirements

EQUIPMENT	DETAIL	QUANT	WATER	DRAIN	GAS	POWER	HVAC
SERVERY #C102							
4 Burner Range	Oven Base	1			3/4" NG, 270,000 BTU/Hr*	120/60/1, 9 amp*	
Salamander Broiler	Mount to Wall	1			3/4" NG, 60,000 BTU/Hr*		
Fridge Drawer Base	96"W	1				120/60/1, 10 amp	
Char-Grill	36" on Drawer Base	1			3/4" NG, 90,000 BTU/Hr*		
Planca Top	36" on Drawer Base	1			3/4" NG, 60,000 BTU/Hr*		
Fryer	Floor	3			3/4" NG, 120,000 BTU/Hr**	120/60/1, 5 amp**	
Reach-in Refrigerator	Full Size Reach In	1				120/60/1, 10 amp*	
Refrigerated Prep Table	6' Low Boy - Marble Top	1				120/60/1, 5 amp**	
Reach-in Freezer	2 Door	1				120/60/1, 15 amp*	
Turbo Oven	Amana	1				208/60/3, 30 amp*	
Panni Grill	Table Top	1				208/60/1, 16 amp*	
Beverage Station	6 Head Soda Fountain	1	1/2"CW				
	Espresso on Demand	1	1/2"CW				
	Slushie Machine	1	1/2"CW				
Merchandising Refrigerator	2 Door	1				120/60/1, 12 amp	
Serving Counter	Order/Pick-up	1		1" ID		120/60/1, 15 amp*	
Retail	R/T Display Box	1				120/60/1, 10 amp*	
Cashier	Dual Sided	1		1" ID		120/60/1, 15 amp	
Exhaust Hood	Type 1	1				(2) 120/60/1, 25 amp	8,000 CFM
Fire Protection System	For Type 1 Hood	1					
Hand Sink	Hand Wash Station	2	1/2" H&CW*	1-1/2" DD*			
KITCHEN LABS C103							
SS Work Table	6' with Undershelf	12				(2) 120/60/1, 180 watt*	
SS Work Table	6' with Undershelf w Locking Drawers	4				(2) 120/60/1, 180 watt*	
6 Burner Range	Convection Oven Base	5			3/4" NG, 270,000 BTU/Hr	120/60/1, 9 amp	
Salamander Broiler	Mount to Range	1			3/4" NG, 60,000 BTU/Hr		
Fryer	Floor	2			3/4" NG, 120,000 BTU/Hr	120/60/1, 5 amp	
Char-Grill	24" W	1			3/4" NG, 60,000 BTU/Hr		
Griddle	24" W	1			3/4" NG, 60,000 BTU/Hr		
SS Equipment Stand	4' - undershelf	1					
Combi-Oven	Full Size	1	1/2" CW	2" ID	3/4" NG, 120,000 BTU/Hr	208/60/1, 3.85 amp	
Convection Oven	Double Stack	3			3/4", 180,000 BTU/Hr	(2) 120/60/1, 9 amp	
Bakery Deck Oven	Doyon, w/ Proofer	1	1/2"CW		Verify*	208/60/3, 30 amp*	
Bakery Work Table	8' with Ingredient Bins	1				(2) 120/60/1, 180 watt*	
Proofer	Single Door	1	1/2"CW	1" ID		208/60/1, 11 amp	
Tilt Kettle	30 Gallon Electric	1	1/2" H&CW**		3/4" NG, 90,000 BTU/Hr	120/60/1, 3 amp	
Reach-in Refrigerator	Full Size Reach In	3				120/60/1, 10 amp	
Reach-in Freezer	Full Size Reach In	3				120/60/1, 12 amp	
Buffalo Chopper	With Attachemnts	1				120/60/1, 1 HP	
Mixers	60 Qt Floor w/ Grinder	1				200/60/1, 5 HP	
Grinder	Table Top	2					
Vacum Sealer	Table Top	2				120/60/1, 10 amp	
Blast Chiller	Self Contained	1		1" ID		208/60/3, 30 amp	
Slicer	Full Auto	2				120/60/1, 1/2 HP	

EQUIPMENT	DETAIL	QUANT	WATER	DRAIN	GAS	POWER	HVAC
KITCHEN LABS C103							
Microwave	Commercial	1				208/60/1, 1,800 watt*	
20 Qt. Mixer	Stands	1				120/60/1, 1/2 HP	
5 Qt. Mixer	Table Top	12				120/60/1, 1/6 HP	
Blender	Vita-Prep	2				120/60/1, 1,500 watt	
Food Processor	Bowl StyleR-2	2				120/60/1, 1/3 HP	
Immersion Blender	Large	2				120/60/1, 5 amp	
Immersion Blender	Small	6				120/60/1, 3 amp	
SS Shelving	Wall Mounted	Lot					
Hand Sink	Hand Wash Station	5	1/2" H&CW	1-1/2" DD			
Two Compartment Sink	Food Prep Sink with 1 Drainboard	2	1/2" H&CW	1-1/2" ID			
Floor Shelving	Metro	Lot					
Exhaust Hood	Type I	2				(2) 120/60/1, 25 amp	12,000 CFM
Exhaust Hood	Type II	1				120/60/1, 5 amp	3,000 CFM
Fire Protection System	For Type 1 Hoods	2					
Steam Cleaner	Wall Mounter Booster & Hose	1					
SCULLERY #C104							
Hand Sink	Hand Wash Station	1	1/2" H&CW	1-1/2" DD			
Dishwasher	Conveyor	1	1/2" H&CW	2" ID	58,000 BTU/Hr	208/60/1, 24 amp	
Booster Heater	Gas	1	1/2" HW	1" ID	200,000 BTU/Hr	120/60/1, 5 amp	
Dish Tables	Dirty and Clean	Lot					
Disposer	At Pre-Rinse Sink	1	1/2" CW	2" DD		208/60/3, 2 HP	
Three Compartment Sink	3 Compartment Pot 2 Drain Boards	1	(2) 1/2" H&CW	1-1/2" ID			
Shelving	Floor System - Metro	Lot					
Exhaust Hood	Type II	Lot					1,200 CFM
Steam Cleaner	Wall Mounter Booster & Hose	1	1/2" HW			120/60/1, 10 amp	
WALK-IN FREEZER #C-106							
Walk-in Freezer Box	Insulated Floor	1					
Refrigeration System	34 Degree F	1		1" ID		208/60/31, 12 amp	
Shelving	Rust Free	Lot					
WALK-IN COOLER #C-107							
Walk-in Cooler Box		1					
Refrigeration System	34 Degree F	1		1" ID		208/60/31, 12 amp	
Shelving	Rust Free	Lot					
STORAGE #C-108							
Shelving	Adjustable	Lot					
DRY STORAGE #C-109							
Shelving	Adjustable	Lot					
CUSTODIAL/LINEN #C-114							
Residential Clothes Washer		1	1/2" HCW	2" ID		120/60/1	
Residential Clothes Dryer	Gas	1			????	120/60/1	
Shelving	Adjustable	Lot					

03 Building Requirements

Sustainable Design Criteria

The new SWATC building and site design should incorporate industry and regional sustainable design practices. The building materials should use thermally broken windows, roof and general building shell materials to optimize energy performance and thermal transfer. The mechanical and electrical systems should utilize the latest energy efficient fixtures and equipment. The site should use regional plants and be graded to minimize storm water runoff and maximize on site water detention.

In addition to industry standard sustainable design principles the new building has specific design requirements including the State of Utah adopted policy that all future State owned buildings are required to be designed to a minimum of LEED Silver Certification. There are many paths available to meet LEED Silver certification the design team and client will navigate through the United States Green Building LEED points system to take advantage of the most desired and cost effective sustainable design options. All new Utah State owned and funded buildings also must meet the DFCM established high performance building criteria. There are several LEED requirements that need to be achieved to meet the high performance criteria including: WE credit 1.1 Water Efficient Landscape Reduction by 50%, EA Credit 3- Enhanced commissioning, EQ Credit 3.1- Construction IAQ Management Plan, EQ Credit 4.1-Low Emitting Materials, adhesives and sealants, EQ Credit 4.2 Low Emitting Materials, paints and solvents. An energy model is required to demonstrate that the building design will meet code energy requirements.

In addition a life cycle cost analysis will be provided by the design team. Enhanced building commission with envelope commissioning is typically contracted on large scale state projects to help insure many of the sustainable requirements are achieved. With this in mind, the design of the facility must incorporate sustainable practices while balancing budget parameters.

04 Building Planning

Space Area Summary

Description	HEALTH SCIENCE	TECHNOLOGY TRAINING	CULINARY ARTS	ADMIN.	STUDENT SERVICES	BOOKSTORE /TESTING CENTER	MULTI-PURPOSE	BUILDING SUPPORT	NSF Subtotal	Circulation, access, exterior walls (25% NSF)	TOTAL
Sq. Feet	15449	20644	6500	5788	3178	2740	2651	4810	61760	15440	77200

HEALTH SCIENCE	Room Number	Description	Area Suggestions	Comments/Rationale	
Nursing <i>Certified Nursing Assistant</i> <i>Licensed Practical Nursing</i>	H101 & H102	2 classrooms @ 750 sf	1500	20 students each 6 beds	
	H103	Nursing Patient bed lab	1850		
	H103a	Nursing Storage	100		
		H104	Patient restroom lab	124	
		H105 & H106	2 Simulation labs @ 175 sf	350	
		H107	Sim lab control station	157	
		H108	Classroom/lab storage	220	
		H109	Washer/dryer/dishwasher	100	
		H110	Mannequin storage	100	
			Subtotal	4501	
	Phlebotomy	H113	Classroom	750	
H114		Instructional lab	750		
H115		Lab storage	98		
		Subtotal	1598		
EMT/CPR <i>Emergency Medical Technician</i>	H117 & H117a	Classroom/Lab combination	872	36 students	
	H118	1 storage @ 148 sf	148		
			Subtotal	1020	
Medical Asst <i>Medical Asst</i> <i>Medical Coding & Billing</i> <i>Medical Clinical Asst</i> <i>Pharmacy Technician</i>	H120	Classroom (Medical Coding)	798	24 students	
	H121	Classroom (Medical Asst)	798		
	H122	Mock office/waiting room	504		
	H123 & H124	Exam rooms (2)	360		
	H125	Unisex lab restroom	75		
	H126	Procedure/Exam room	250		
	H127	Pharmacy lab (MA, Pharm Tech, LPN, Med Aide)	450		
	H128	Lab (clinical)	750		
	H129	Storage	240		
		Subtotal	4225		
	H130	Lockers/changing Rooms	180		
Health Science General Classrooms Instructor Office Open Offices Conference room	H131 & H132	2 Classrooms (1 @ 860 sf, 1 @ 860 sf)	1720		
	H133	Private office	130		
	H134	8 work stations	780		
	H140	Conference room	240		
Community Clinic	H 141	Waiting Room	375		
	H 142	Public Unisex Restroom	80		
	H 143	Examination Room (3)	450		
	H 144	Records Room	150		
			Subtotal	1055	
Total Health Science			15449		

TECHNOLOGY TRAINING	Room Number	Description	Area Suggestions	Comments/Rationale
Welding				
	T102	Instructor office	133	
	T103	Instructor office	133	
	T104	Library/Workroom/Adjunct	252	
	T105	College Classroom	650	1 w/ 22 students
	T106	High School Classroom	725	1 w/ 24 students
	T107	Lab with 31 work stations	7175	31 work stations
	T108	Secure storage room	279	
	T108a	Air Arc CAC Lab	212	
	T108b	Grinding Room	216	
	T109	Welding Locker Area	306	
	T110	2Restrooms	55	
	T111	Restrooms	55	
			Subtotal	10191
Industrial Maintenance/Manuf				
	T112 & T113	2 classrooms (1 @ 750 sf, 1 @ 750 sf)	1500	1 w/ 20 students, 1 w/ 24 students
<i>Industrial Maintenance</i>	T114	Instructional lab	3248	
<i>Manufacturing Operations</i>	T115	Classroom/lab storage	219	
	T116	Instructor Office	130	
	T117	Instructor Office	130	
			Subtotal	5227
<i>Industrial Training Space</i>	T 118	Ind Automation Lab	3246	
	T 119	Ind Automation Classroom	750	
	T 120	Ind Drafting Classroom	750	
	T 121	Ind Automation Storage	220	
	T 122-123	Ind Automation Office (2 @ 130 sf each)	260	
			Subtotal	5226
			Total Technology Training	20644

CULINARY ARTS	Room Number	Description	Area Suggestions	Comments/Rationale
	C101	Dining room	1250	
	C102	Servery	600	
	C103	Kitchen	1800	
	C104	Scullery	250	
	C105	Demonstration	750	
	C106	Freezer	100	
	C107	Cooler	100	
	C108	Storage	201	
	C109	Dry storage	139	
	C110	Lockers	180	
	C111 & C111a	Faculty Offices	260	
	C112	1 Classrooms/shared	750	
	C114	Custodial/linens	120	
			Total Culinary Arts	6500

04 Building Planning

Space Area Summary

ADMINISTRATION	Room Number	Description	Area Suggestions	Comments/Rationale
	A101	Board room	735	
	A102	Executive Conference room	270	
	A103	Reception/waiting	72	
	A104	Presidents office	252	
	A105	President's assistant office	130	
	A106	VP Academics office	204	
	A107	Academic assistant office	130	
	A108 & A109	2 - Program director offices	320	
	A110	Distance Ed/Curriculum Dev	130	
	A111	Distance Ed support office	130	
	A112	Development Director office	200	
	A113	Marketing Director/Employer Svcs office	200	
	A114	Marketing storage	150	
	A115	VP Finance office	200	
	A116	Finance staff shared office	170	
	A118	Finance/HR secure file storage	90	
	A119	Purchasing receiving area	100	
	A120	HR staff office	120	
	A121	HR staff open workstation	100	
IT Services	A122	IT Admin Office	130	
	A123	IT Storage	125	
	A124	Server	170	
	A125	Faculty workroom	280	
	A125a	Faculty Lounge	220	
	A127	Locker/Shower Room	140	
	A127a	Locker/Shower Room	140	
	A127b	Exercise	271	
	A128	Kitchen	130	
	A128a	Cashier	120	
	A128b	Reception	99	
	A128c	Spare office	130	
	A128d	Spare office	130	
		Total Administration	5788	

STUDENT SERVICES	Room Number	Description	Area Suggestions	Comments/Rationale
	A129	Service counter (3 stations)	174	
	A130	VP Student Services office	200	
	A131	4 - staff open workstation	320	
	A132	Classroom (with divider for SS course, remed)	1495	Divided - 24 computers, 24 students
	A133	Conference room	200	
	A134	Secure record storage	200	
	A135	2 -Online registration kiosk	39	
	A136 & 137	1 Counselor office 1 Data/Registrar	260	
	A138	Financial aid staff office	130	
	A139 & A140	2 - counselor/fin aid staff workstation	160	
		Total Student Services	3178	

TESTING CENTER	Room Number	Description	Area Suggestions	Comments/Rationale
Testing Center	A141	Testing room	300	6-8 stations
	A142	Computer testing room	600	12-16 computer stations
	A143	Director office	130	
	A144	Reception/sign-in/waiting area	175	
	A145	Secure storage	120	
	A146	Locker area	80	
			Subtotal	1405
Bookstore	A147	Bookstore sales	904	
	A148	Bookstore Manager/Safe room	131	
	A149	Receiving and storage	300	
			Subtotal	1335
Total Student Services			2740	

MULTIPURPOSE	Room Number	Description	Area Suggestions	Comments/Rationale
	A150 & A151	Classroom divideable in two smaller rooms	2499	
	A152	Tables and chairs storage	152	
Total Multipurpose			2651	

BUILDING SUPPORT SPACES	Room Number	Description	Area Suggestions	Comments/Rationale
	S101/S101a & 102/S102a	4 - Public restrooms	1200	
	S103 & S104	2 - Open vending areas	260	
	S105 & S106	2 - Custodial closets	160	
	S107	Mechanical room (5% NSF)	2600	
	S108	Electrical room	250	
	S109 & S110	Elevator/equipment room	200	
	S111	Electrical closet	60	
	S112	Telecommunications closet	80	
Total Building Support			4810	

04 Building Planning

Site Plan Diagram

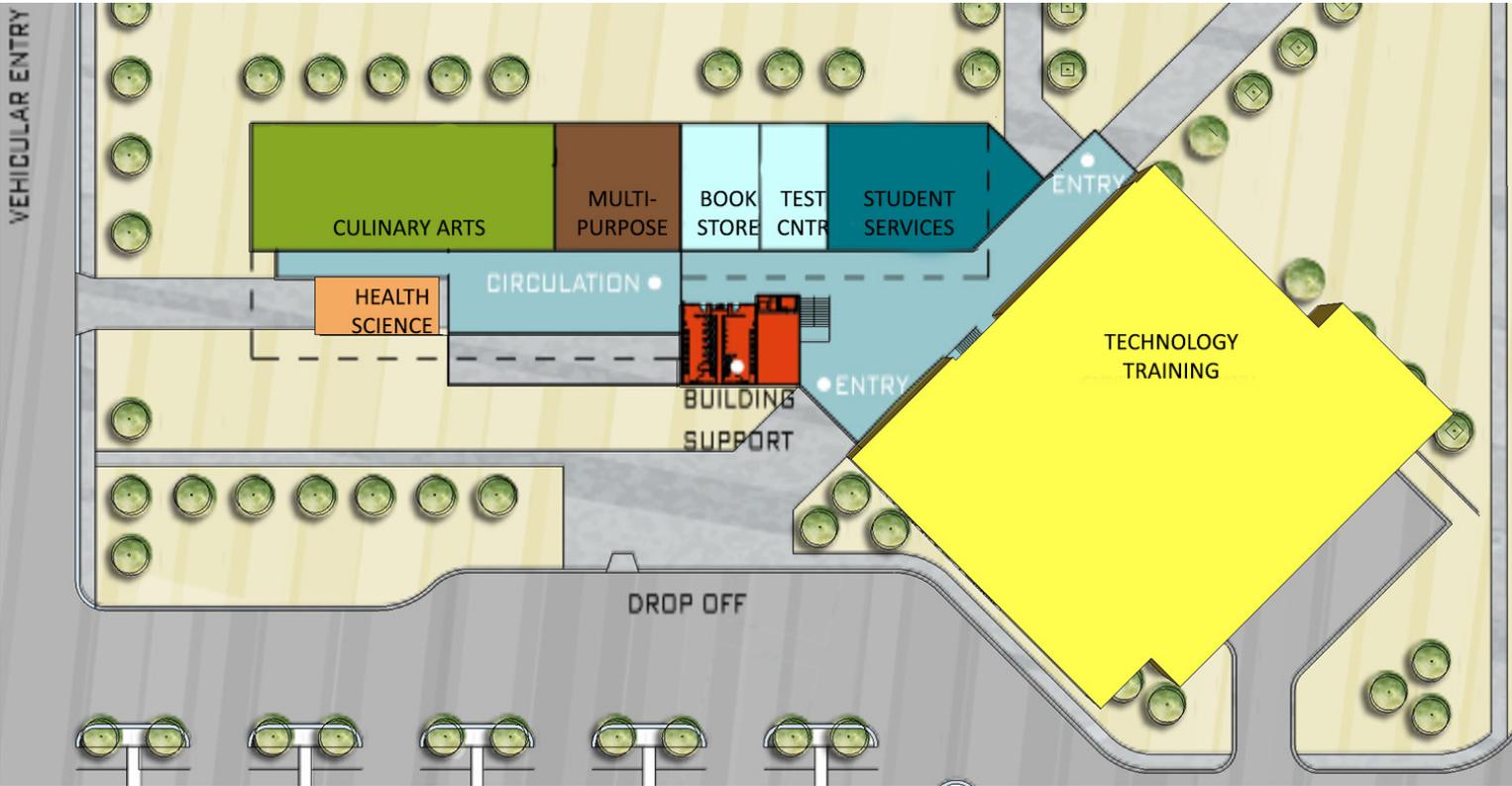


SITE PLAN

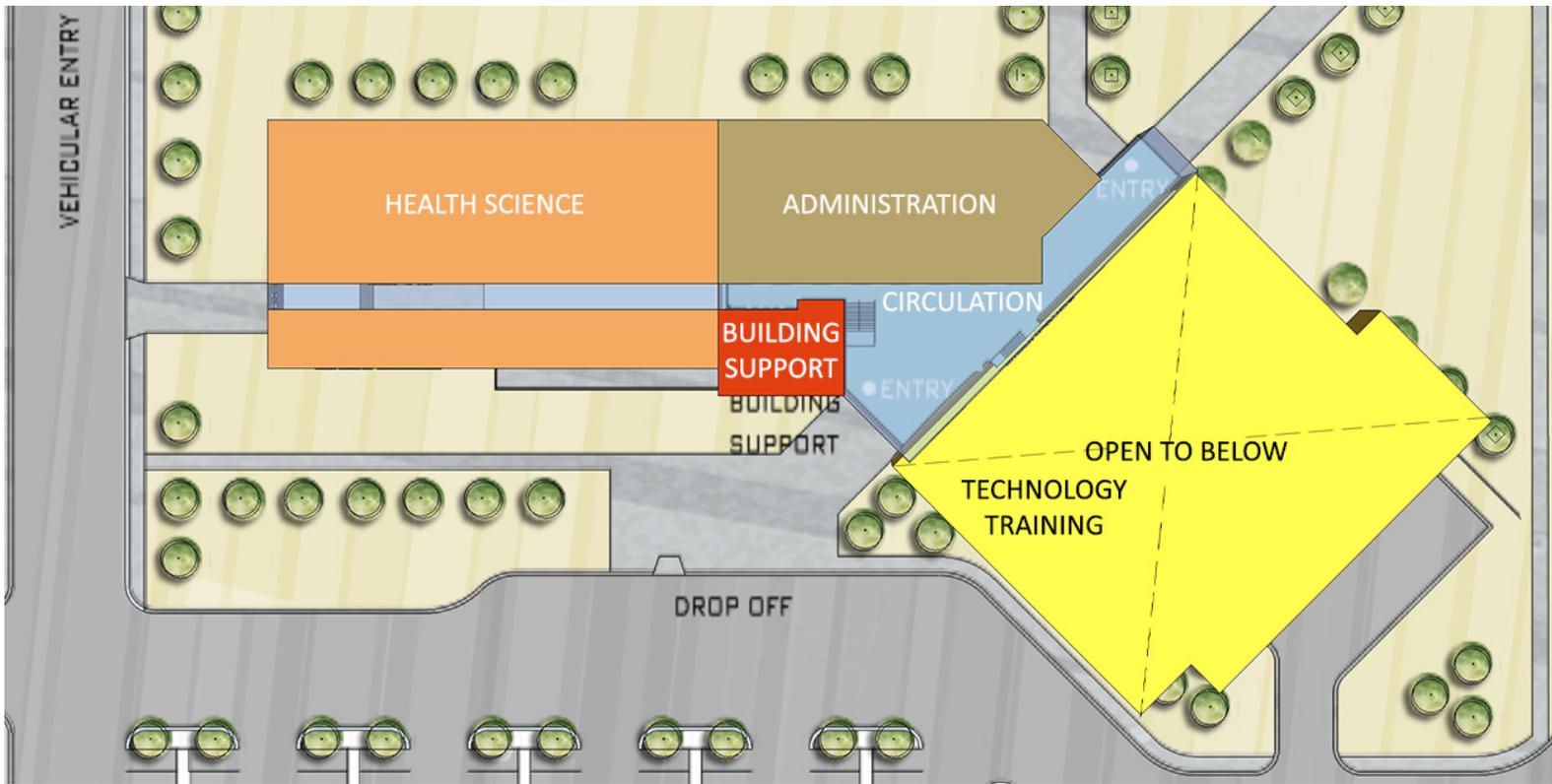
1 1.4 ACRES

04 Building Planning

Relationship Diagram



First Floor Relationship Diagram



Second Floor Relationship Diagram

04 Building Planning

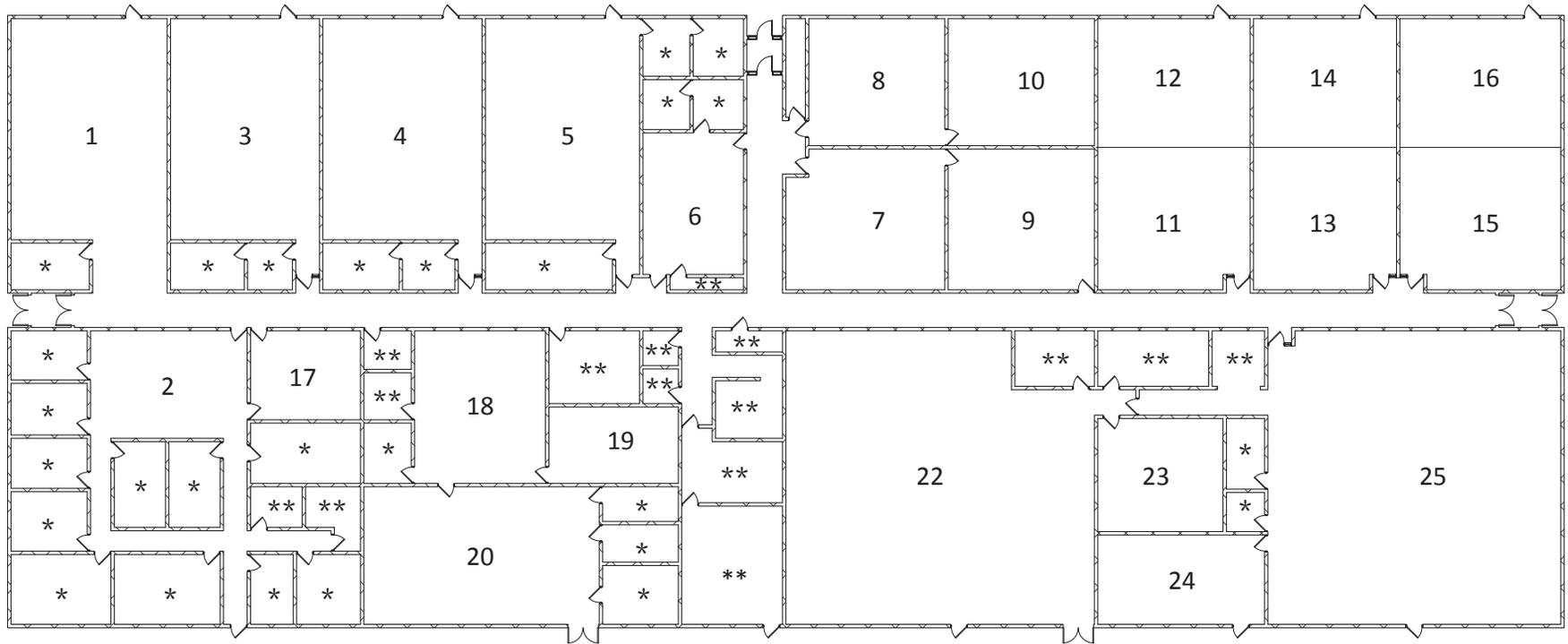
Stacking Diagrams





04 Building Planning

Existing Building Future Space Usage



- | | | | |
|--------------------------------|--|--------------------------------|--|
| 1 - Commons Area | (Commons Area) | 13 - Student Success Program | (Corporate Training) |
| 2 - Main Office | (Employment Development Center) | 14 - Multi-Use | (General Purpose Classroom) |
| 3 - Adult Education | (Iron S.D. Adult Education) | 15 - CNA / Multi-Use | (General Purpose Classroom) |
| 4 - Business Technology | (Business Technology) | 16 - Computer Lab | (Computer Lab) |
| 5 - Library | (Business Technology) | 17 - Board Room | (Corporate & Custom Fit Training) |
| 6 - VISTA | (Business Technology) | 18 - Business Tech / Multi-Use | (Information Technology) |
| 7 - Health Sciences | (SUU Business Res. Center, Incubation) | 19 - IT Lab | (Information Technology - Adult) |
| 8 - Health Sciences | (Iron S.D. Adult Ed Library) | 20 - Information Technology | (Information Technology - Secondary) |
| 9 - Health Sciences | (SUU Business Res. Center, Incubation) | 22 - Welding Lab | (Renewable Energy & Electrical Lab) |
| 10 - Health Sciences Lab | (Iron S.D. Adult Ed Library / Testing) | 23 - Welding Classroom | (Renewable Energy & Electrical Class) |
| 11 - Ed Net / Internships | (Distance Education) | 24 - Multi-Use Classroom | (Building Construction / Plumbing Class) |
| 12 - Health Science / Law Enf. | (VISTA) | 25 - Multi-Use Lab | (Building Construction / Plumbing Lab) |

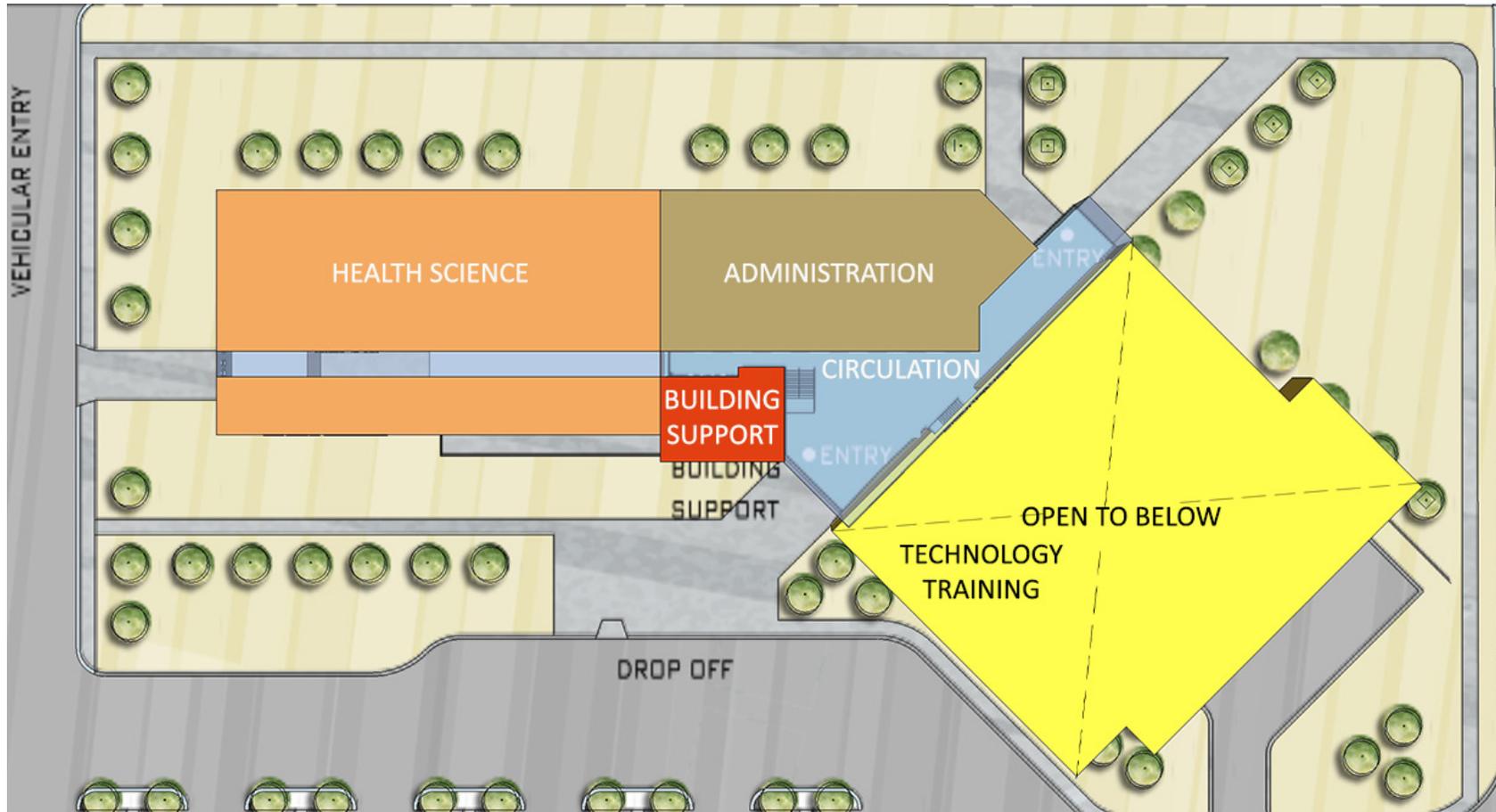


Black - Existing Use
 Red - Future Use
 * - Typical Office
 ** - Utility / Storage

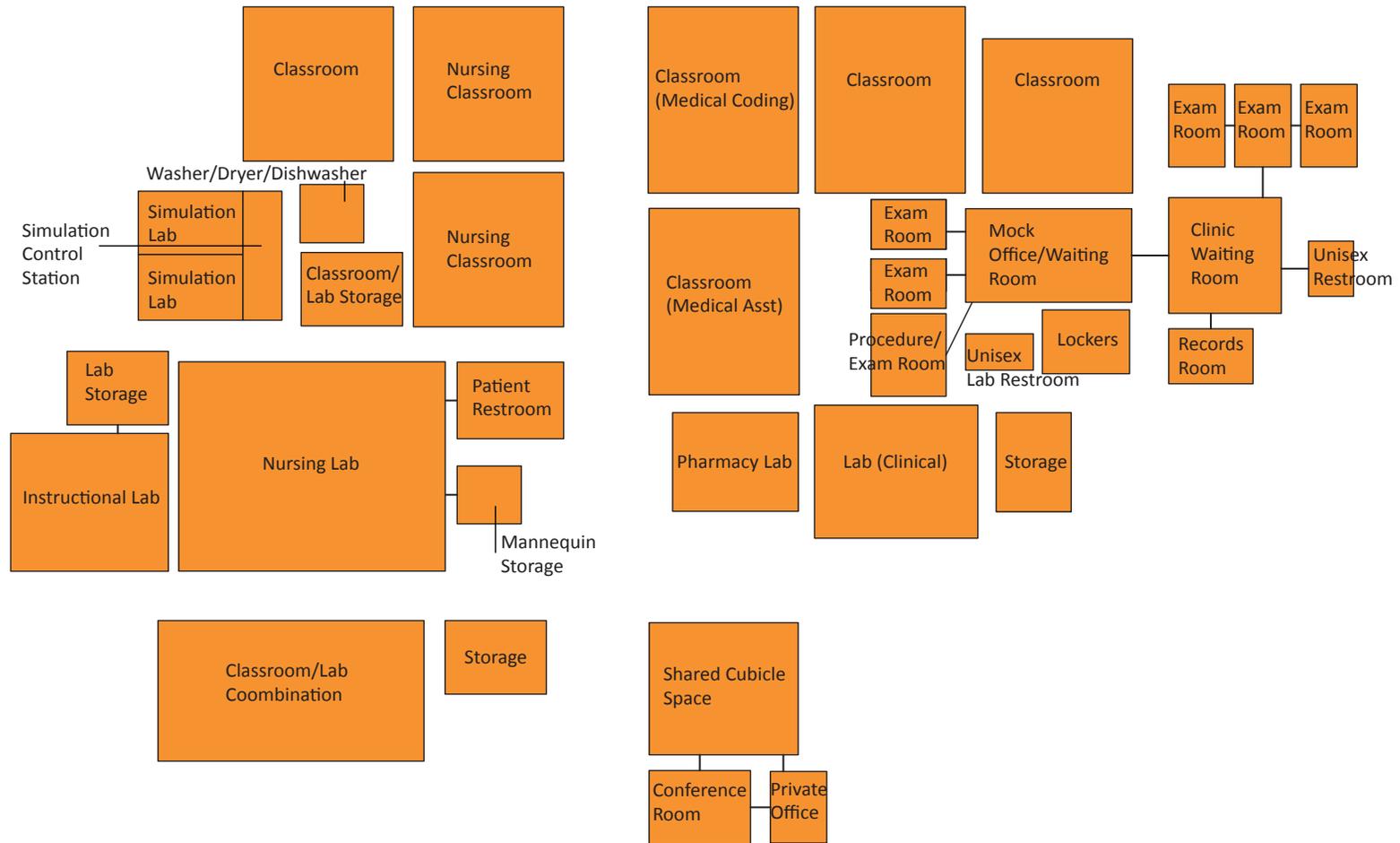
Southwest ATC - Planned use of Existing Space

05 Health Science

Second Floor Relationship Diagram



Adjacency Diagram



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	20-25
Area:	750 SF
Primary Function:	Instruction, Lecture, Demo, Basic

Relationships:

Location:	Second Level
Adjacencies:	Nursing Classroom; Lab/Storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

- Lockable wall cabinets
- Counter top

Moveable Furnishings:

- Tables, Chairs, Instructor desk

Equipment:

- Computer; Phone; Projector and Screen
- Whiteboard; Tack board

Technical Requirements

Mechanical:

Ventilation: 10CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall and at instructor station. 20-25 floor outlets. Additional capacity for equipment listed.

Data: 2 devices on opposing walls and at instructor station.

Phone: 2 devices on opposing walls and at instructor station

Video: A/V system with internet connection

Intercom: Ceiling speakers with volume control

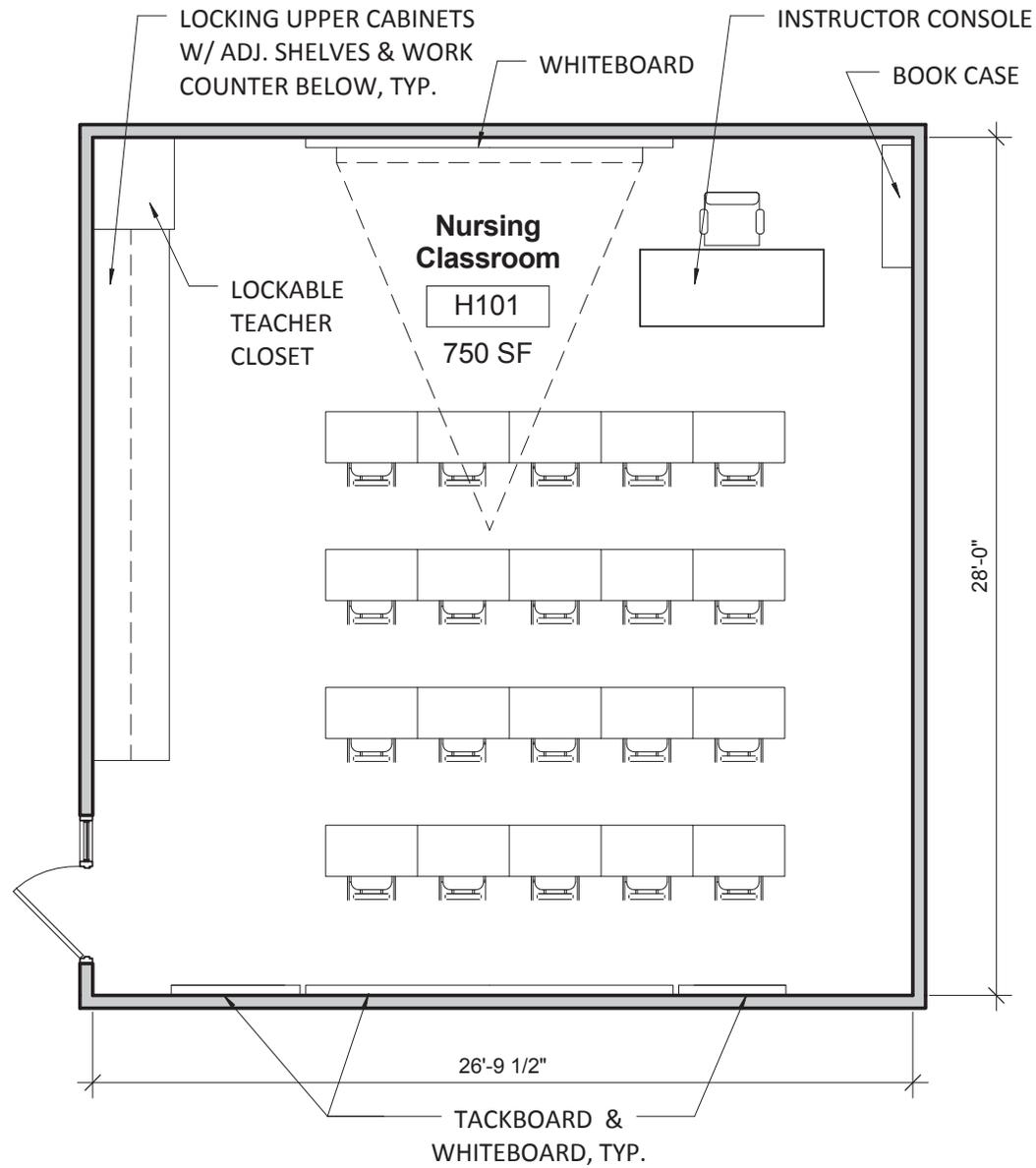
Lighting:

Fixture Type: T-5 HO linear indirect pendant, dimmable

Accent Lighting: None required

Foot Candles: 40-45

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	20-25
Area:	750 SF
Primary Function:	Classroom for a wide variety of classes, Terminology, anatomy, human diseases, etc.

Relationships:

Location:	Second Level
Adjacencies:	Nursing Classroom; Lab/ Storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Flexible, Inviting, Invigorating

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Interior window with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- Lockable wall cabinets; tall storage cabinets for models, etc.
- Counter top; Whiteboard; Tack board

Moveable Furnishings:

- Desks/tables with cord openings for 24 students; Chairs; Instructor desk

Equipment:

- Computer; Phone; Projector and Screen; A/V video; DVD; etc.
- Pencil Sharpener; trash can

Technical Requirements

Mechanical:

Ventilation:	10CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall and at Instructor station. 20-25 floor outlets. Additional capacity for equipment listed.

Data: 2 devices on opposing walls and at instructor station.

Phone: 2 devices on opposing walls and at instructor station

Video: A/V system with internet connection

Intercom: Ceiling speakers with volume control

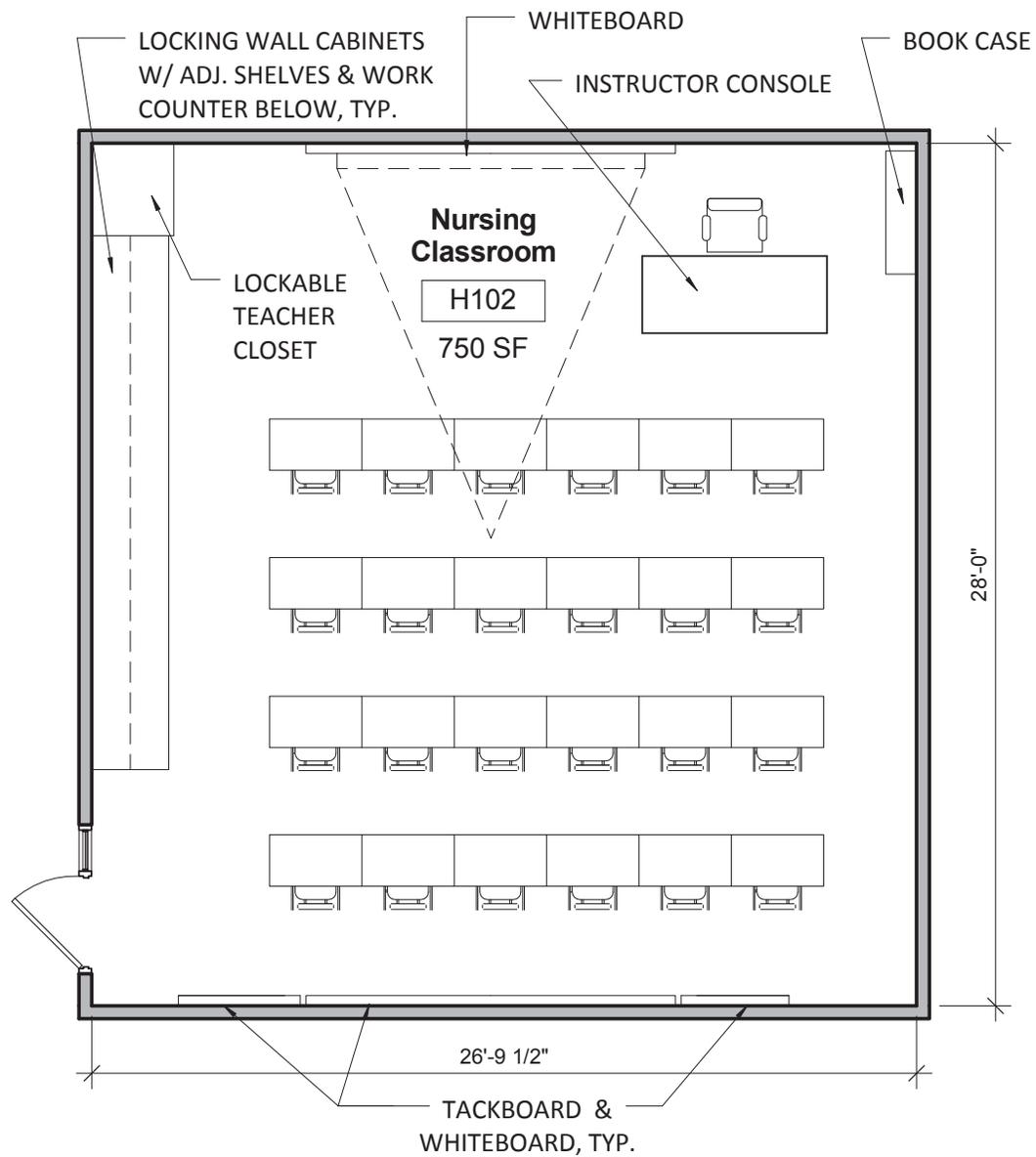
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect, dimmable

Accent Lighting: None required

Foot Candles: 40-45

Controls: Occupancy sensor; zoned lighting



Space Requirements

Space Summary:

Type of Space:	Nursing Patient Bed Lab
Number Required:	1
Total Number:	1
Occupants:	6-8
Area:	1850 SF
Primary Function:	Instruction, Demo, Practice

Relationships:

Location:	Second Level
Adjacencies:	Patient Rest room Lab, Mannequin Storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Windows to view patient lab

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: None required

Casework/Fixed Equipment:

- Lockable base cabinets; Counter top
- Curtain dividers; wall-mounted sharps container
- Whiteboard; Tack board

Moveable Furnishings:

- Rolling storage carts; Patient beds; bed-side cabinet

Equipment:

- Computer; clock; trash can; Biohazard waste receptacle; Sim-man

Technical Requirements

Mechanical:

Ventilation: 6-10 AC/hr (Per ANSI Z9.5)

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: Medical gas outlets and compressed air at stations

Plumbing: 9 Hand sinks, water, waste and vent

Electrical:

Power: 2 duplex receptacles per wall. 2 four-plex receptacles per station. 1 GFCI duplex receptacle above counter near sink. Outlets at bed head to comply with current hospital code requirements. Additional capacity for equipment listed.

Data: 2 devices on opposing walls. 1 device per station. Additional capacity for equipment listed.

Phone: 2 devices on opposing walls.

Video: Rough-in for future capacity

Intercom: Ceiling speakers with volume control

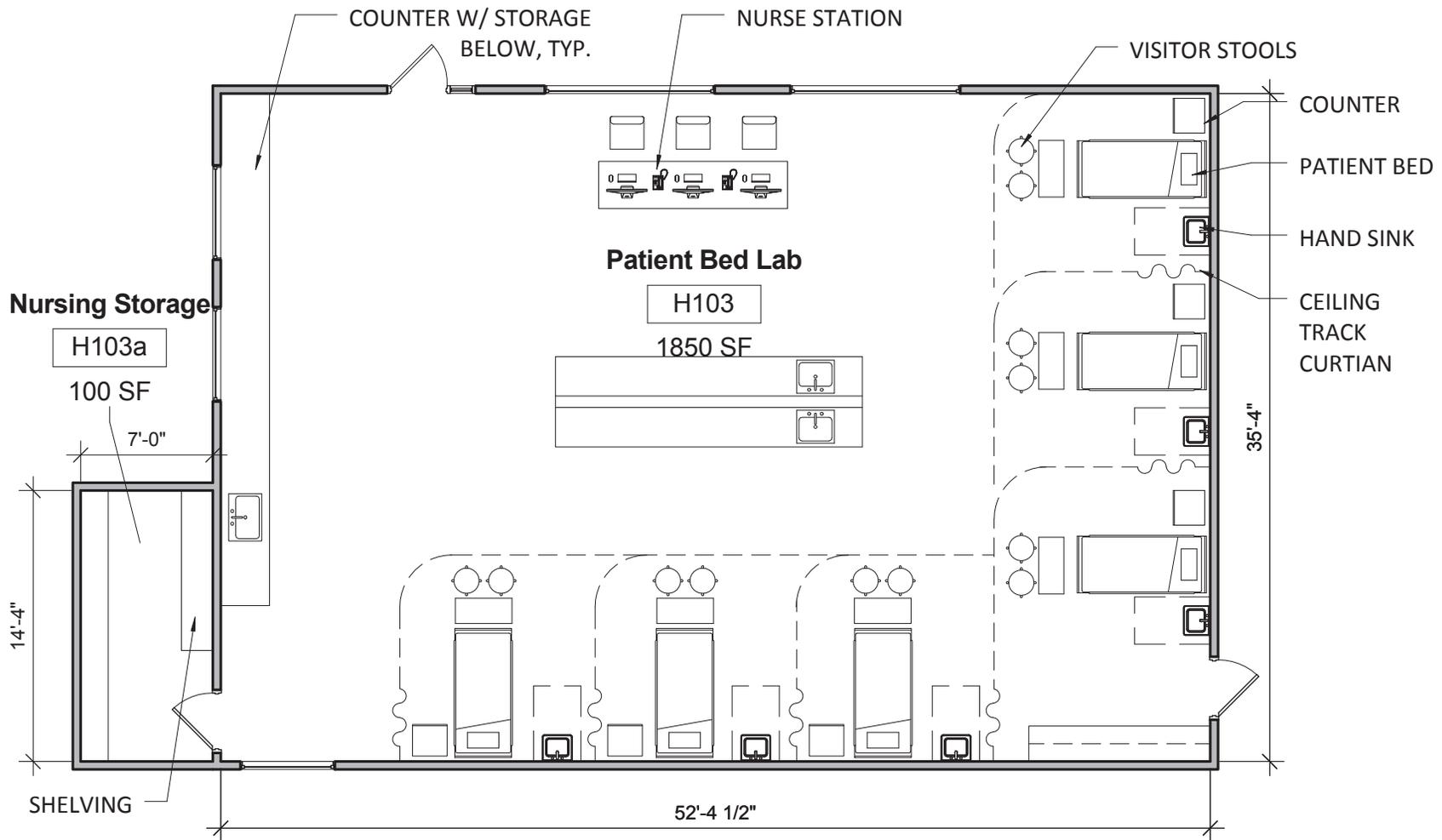
Lighting:

Fixture Type: T-8 Fluorescent lay-in

Accent Lighting: None required

Foot Candles: 40-45

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	1
Area:	100 SF
Primary Function:	Provide secure storage for teaching aids, equipment and supplies.

Relationships:

Location:	Second Level
Adjacencies:	Nursing Classroom; Nursing Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Lock on door

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Interior locking door

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Wall mounted shelving with adjustable shelves

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft

Summer Design Temp: 74 ° F

Winter Design Temp: 74 ° F

Controls: Individual direct digital controls

Sound Criteria: None required

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed. 1 GFCI duplex receptacle above counter near sink

Data: Rough-in for future capacity

Phone: Rough-in for future capacity

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

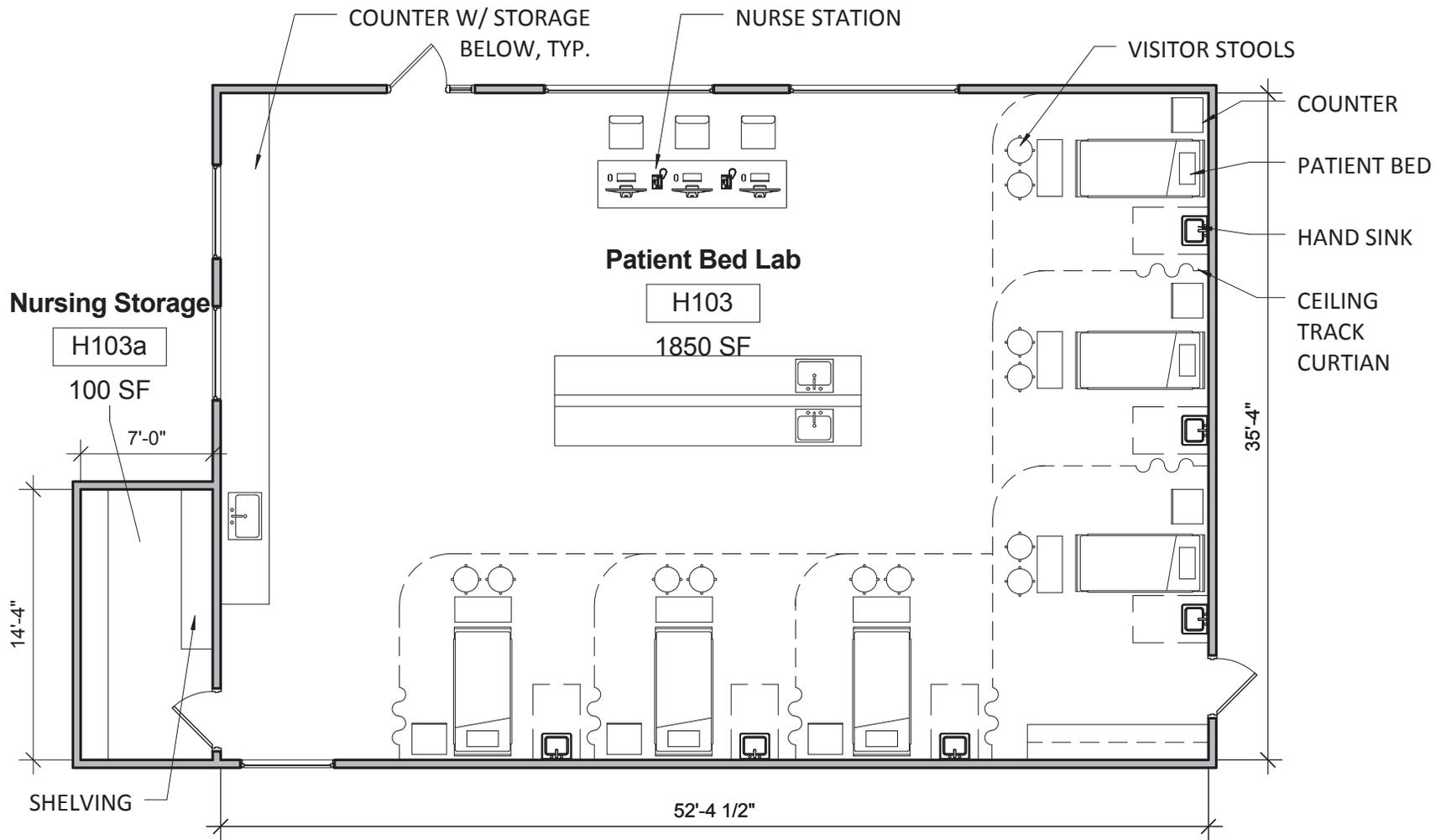
Lighting:

Fixture Type: T-8 Fluorescent lay-in

Accent Lighting: None required

Foot Candles: 30

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Rest room Lab
Number Required:	1
Total Number:	1
Occupants:	3-4
Area:	124 SF
Primary Function:	PT transfers to toilet and shower; equipment cleaning

Relationships:

Location:	Second Level
Adjacencies:	Nursing Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Ceramic tile
Walls:	Ceramic tile
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	Slip-proof floor
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Large window with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear glass
Natural Light:	None required

Casework/Fixed Equipment:

Grab bar; ADA Toilet; Mirror; Dispensers for paper towels, soap, toilet paper, sanitary napkins; Lavatory; ADA shower

Moveable Furnishings:

None required

Equipment:

Wheelchair; Shower chair; Oxygen

Technical Requirements

Mechanical:

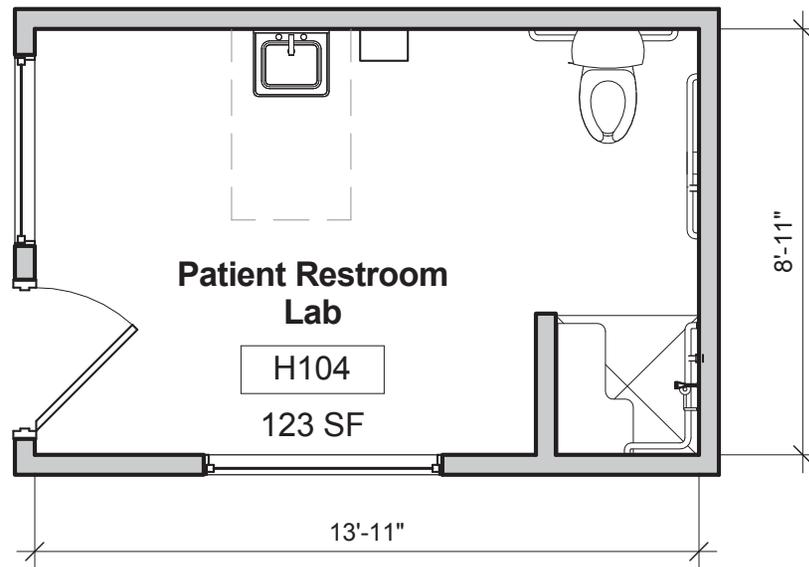
Ventilation:	1.0 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	40 (NC/RC)
Special Systems:	5 minute air changes (min.)
Plumbing:	Floor drain, water, waste and vent

Electrical:

Power:	1 GFCI duplex receptacle
Data:	None required
Phone:	None required
Video:	None required
Intercom:	Ceiling speakers with volume control

Lighting:

Fixture Type:	T-8 Fluorescent
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Simulation Lab
Number Required:	2
Total Number:	2
Occupants:	1-4
Area:	175 SF
Primary Function:	PT room for State Nursing Assistant skill evaluations; private PT room for instruction/practice
Relationships:	
Location:	Second Level
Adjacencies:	Nursing Lab; main corridor; Simulation Control Station; Classroom/Lab storage; Washer/Dryer/Dishwasher
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Professional, Modern, Quiet

Finishes:

Floor:	Ceramic tile
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound insulated walls and ceiling

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

2 doors into space, 1 from lab; 1 from main corridor; Window into main corridor

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation; Large door for bed

Windows:

Type:	Interior
Glazing:	Clear glass
Natural Light:	None required

Casework/Fixed Equipment:

- Lockable wall cabinets (upper and lower)
- Counter top

Moveable Furnishings:

- Hospital Bed; Overhead table; Bedside cabinet
- Desk; Chairs; Wheel chair

Equipment:

- Mannequin
- Trash can; Biohazard waste receptacle
- Computer for NA skills evaluation

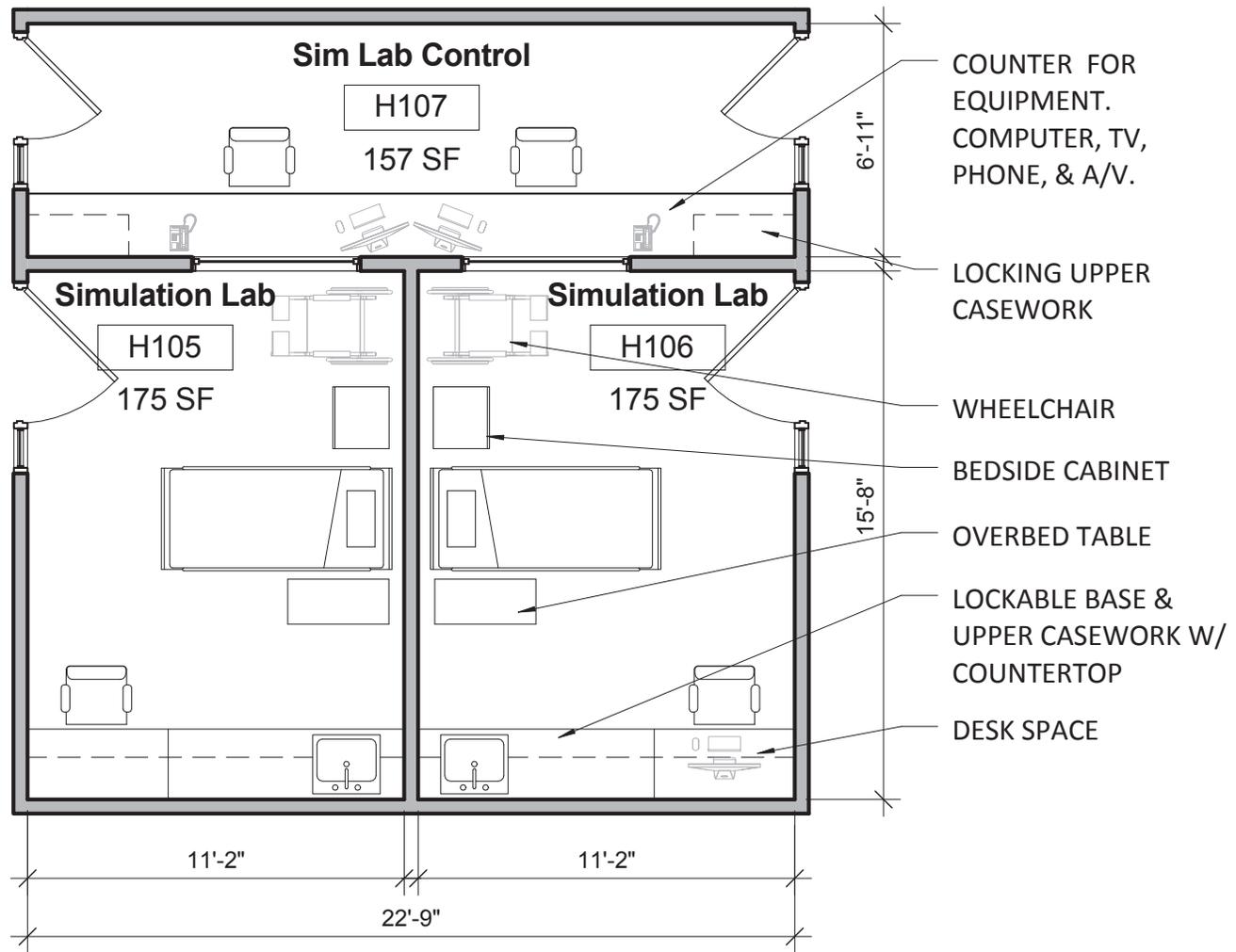
Technical Requirements

Mechanical:

Ventilation:	6-10 AC/hr (Per ANSI Z9.5)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	Medical gas; Comp. air
Plumbing:	Hand wash sink; water; waste and vent

Electrical:

Power:	1 duplex receptacle per wall; 2 four-plex receptacles at bed; outlets at bed head to comply with current hospital code requirements. Additional capacity for equipment listed. 1 GFCI duplex receptacle above counter near sink.
Data:	1 device at bed and 1 per wall
Phone:	1 device
Video:	PTZ Camera to control room
Intercom:	Ceiling speakers with volume control
Lighting:	
Fixture Type:	T-8 Fluorescent
Accent Lighting:	Zoned lighting at PT bedside
Foot Candles:	50
Controls:	Occupancy sensor/Dimmable



Space Requirements

Space Summary:

Type of Space:	Control Station
Number Required:	1
Total Number:	1
Occupants:	1-2
Area:	157 SF
Primary Function:	Control room for H106; Instructor use for testing, could be used for student intervention

Relationships:

Location:	Second Level
Adjacencies:	Simulation Labs; Nursing Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Window into H106; Vision into H105 unnecessary

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear glass
Natural Light:	None required

Casework/Fixed Equipment:

-Lockable wall cabinets; Counter top

Moveable Furnishings:

-Chairs

Equipment:

-Computer; Phone; TV

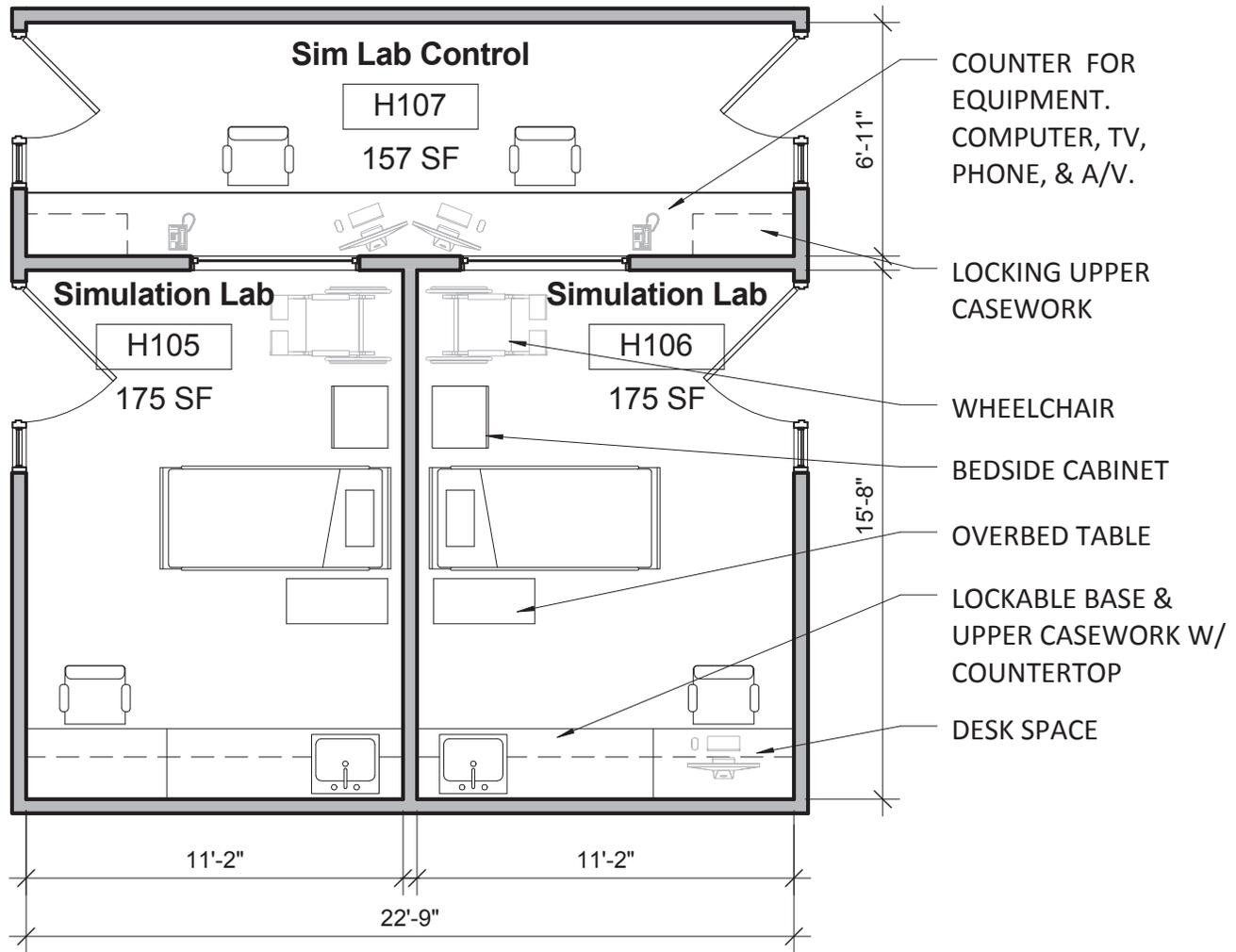
Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall. Additional capacity for equipment listed. 1 GFCI duplex receptacle above counter near sink.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Security Camera
Intercom:	Ceiling speakers with volume control
Lighting:	
Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	50
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom/Lab storage
Number Required:	1
Total Number:	1
Occupants:	2
Area:	220 SF
Primary Function:	Storage for bulky and smaller items/supplies

Relationships:

Location:	Second Level
Adjacencies:	Nursing Lab and Classroom
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	VCT with 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Locking Door

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	Interior Locking Door

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Cabinets with adjustable shelving

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

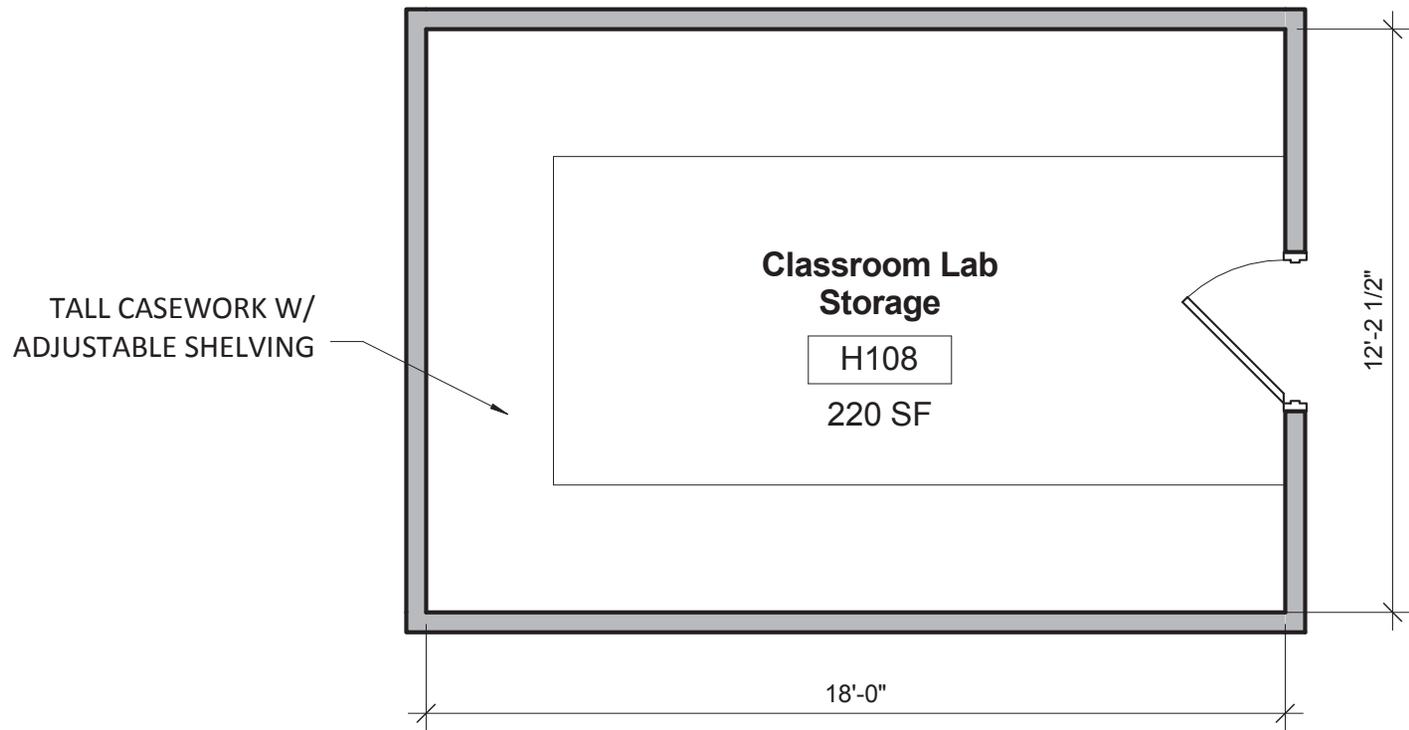
Ventilation	10 CFM/person + 0.12 CFM/sq.ft
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	None required
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	Rough-in for future capacity
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space: Laundry/Dishwasher
 Number Required: 1
 Total Number: 1
 Occupants: 1-2
 Area: 100 SF
 Primary Function: Cleaning linens and equipment

Relationships:

Location: Second Level
 Adjacencies: Nursing lab; Medical Asst lab
 Separation: None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor: VCT with 4" rubber base
 Walls: Painted gypsum board
 Ceiling: Suspended 2'x4' ACT
 Specialty Finishes: None required
 Sound: Sound insulated ceiling and walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required
 Glazing: None required
 Natural Light: None required

Casework/Fixed Equipment:

-Cabinets
 -Counter top

Moveable Furnishings:

None required

Equipment:

-Washer and Dryer (on pedestal);
 Dishwasher

Technical Requirements

Mechanical:

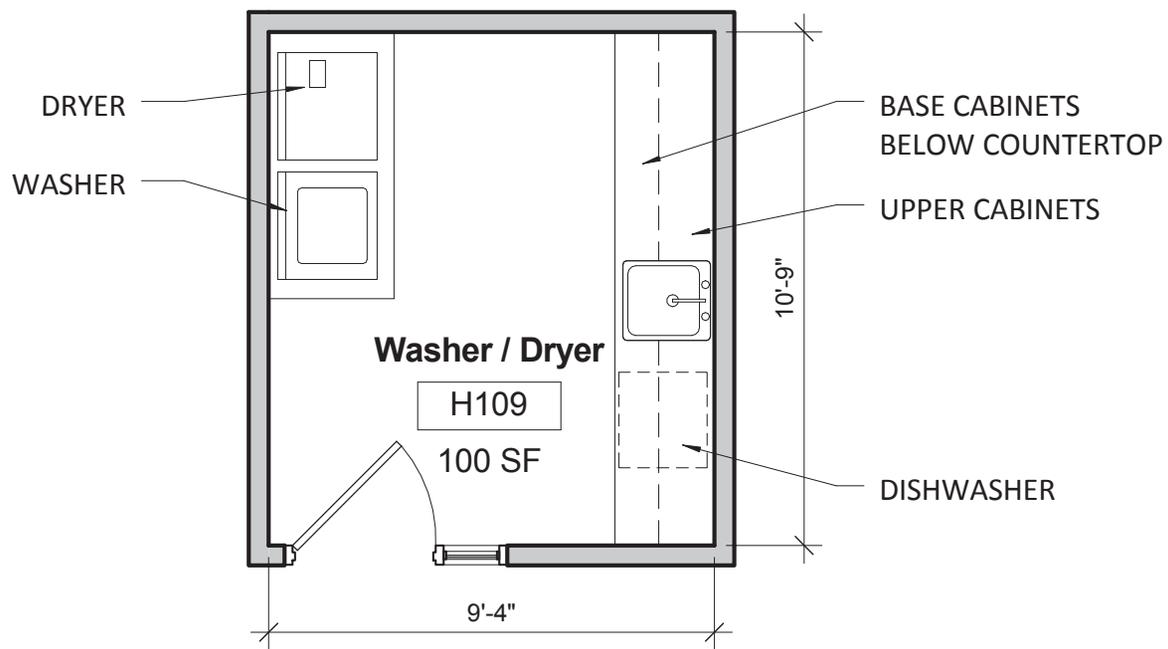
Ventilation: 7.5 CFM/person + 0.06 CFM/sq.ft
 Summer Design Temp: 74 ° F
 Winter Design Temp: 74 ° F
 Controls: Individual direct digital controls
 Sound Criteria: None required
 Special Systems: None required
 Plumbing: Sink, Gas, Water, Waste and Vent

Electrical:

Power: 1 duplex receptacle per wall. 1 GFCI duplex receptacle above counter near sink. Power to Washer and Dryer. Additional capacity for equipment listed.
 Data: Rough-in for future capacity
 Phone: Rough-in for future capacity
 Video: Rough-in for future capacity
 Intercom: Rough-in for future capacity

Lighting:

Fixture Type: T-8 Fluorescent lay-in
 Accent Lighting: None required
 Foot Candles: 30
 Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Secure Storage
Number Required:	1
Total Number:	1
Occupants:	1-2
Area:	100 SF
Primary Function:	Storage; Could be a space within lab, making it larger

Relationships:

Location:	Second Level
Adjacencies:	Nursing Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	VCT with 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Long, narrow, horizontal shelving

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

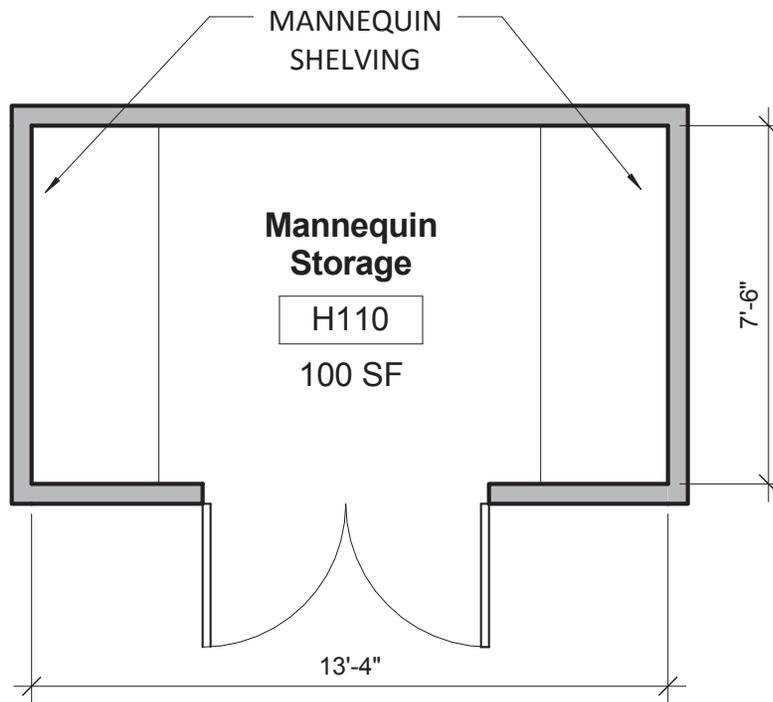
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	None required
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	Rough-in for future capacity
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	1
Total Number:	1
Occupants:	20
Area:	750 SF
Primary Function:	Teaching, intro to Clinical Lab, Med Asst, Clinical Procedures, etc.

Relationships:

Location:	Second Level
Adjacencies:	Nursing Classroom
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Inviting, flexible, invigorating,

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Windows with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Exterior; Interior
Glazing:	Insulated Low-E; Clear
Natural Light:	Desirable

Casework/Fixed Equipment:

- Hardwood veneer base cabinets
- Solid surface counter top
- Lockable wall cabinets
- Coat Closet

Moveable Furnishings:

- Tables/Desks
- Instructor desk and chair
- Waste can

Equipment:

- Computer; DVD; Projector and screen; TV; Elmo
- Magnetic bulletin board
- Pencil sharpener
- Anatomy models

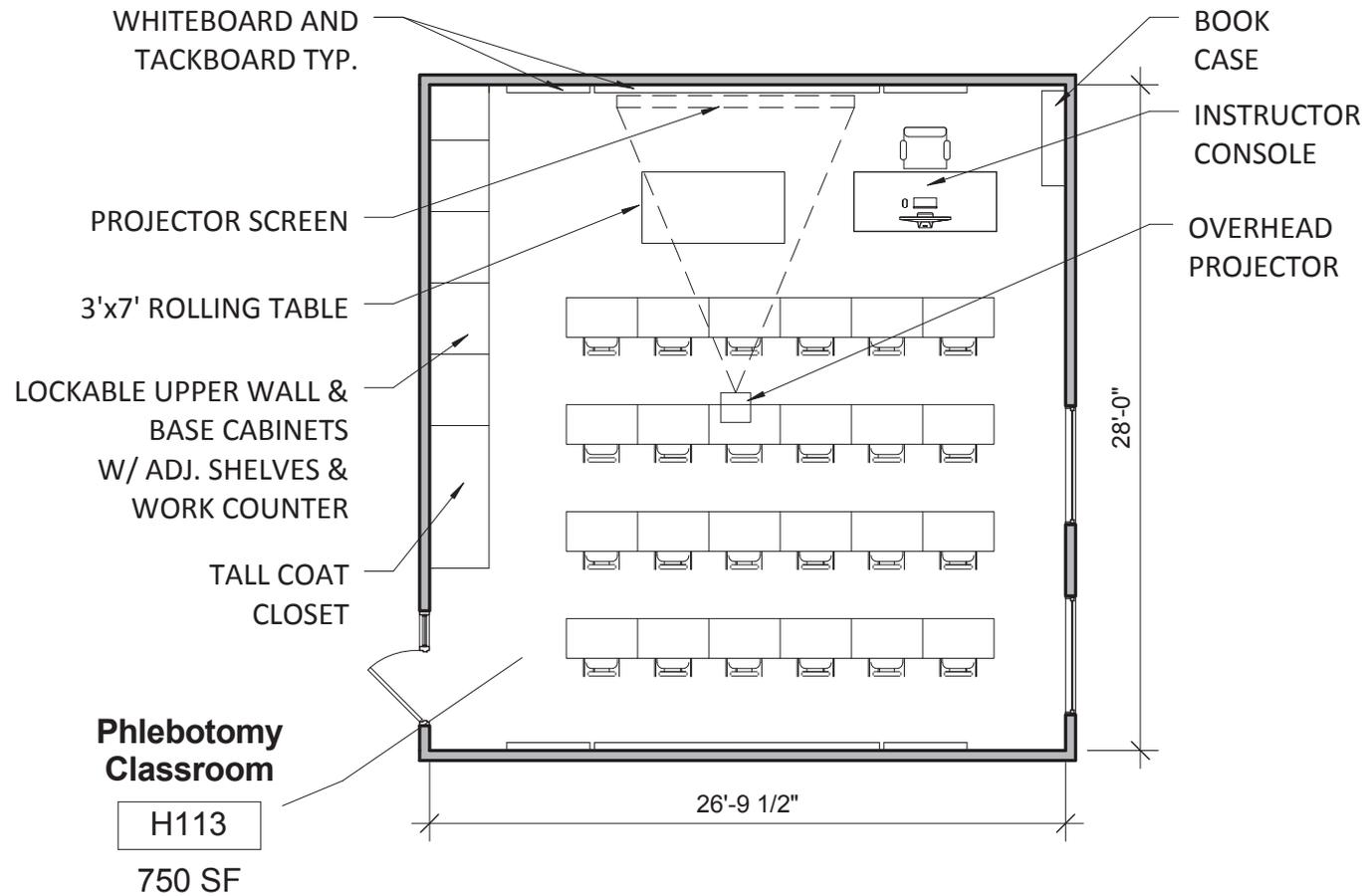
Technical Requirements

Mechanical:

Ventilation:	10 CFM/person + 0.12 CFM/sq.ft
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacle per wall and at instructor station. Floor outlets for student computers. Additional capacity for equipment listed.
Data:	2 devices on opposing walls, and at instructor station. 1 Wireless airport. Additional capacity for equipment listed.
Phone:	2 devices on opposing walls and at instructor station.
Video:	A/V system with internet connection
Intercom:	Ceiling speakers with volume control
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in direct, dimmable.
Accent Lighting:	Ability to dim one section at a time
Foot Candles:	40-45
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Laboratory
Number Required:	1
Total Number:	1
Occupants:	18
Area:	750 SF
Primary Function:	Phlebotomy, Clinical, Medical Assist Lab

Relationships:

Location:	Second Level
Adjacencies:	CNA Lab, Exam rooms, Lab storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Clean, Professional, Interesting

Finishes:

Floor:	Stain-resistant, washable linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	Easy to disinfect surfaces
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

No windows, or windows with blinds; Sharps

Doors:

Type: Solid core wood with clear finish
 Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: None required
 Glazing: None required
 Natural Light: None required

Casework/Fixed Equipment:

-Resin lab benches; coat closet
 -12 student lab stations with lockable storage for equipment; 1 sink for every 4 stations; 1 large sink at demo bench
 -Whiteboard; Lockable closet; Base cabinets

Moveable Furnishings:

-4 phlebotomy chairs and tables; 12 stools; 1 teacher stool

Equipment:

-Under counter fridge
 -Centrifuges; Eye-wash sink; Incinerator; Incubator; Microscopes
 -Brackets for gloves; Sharps container; Biohazard trash cans; trash can; Soap and paper towel dispenser

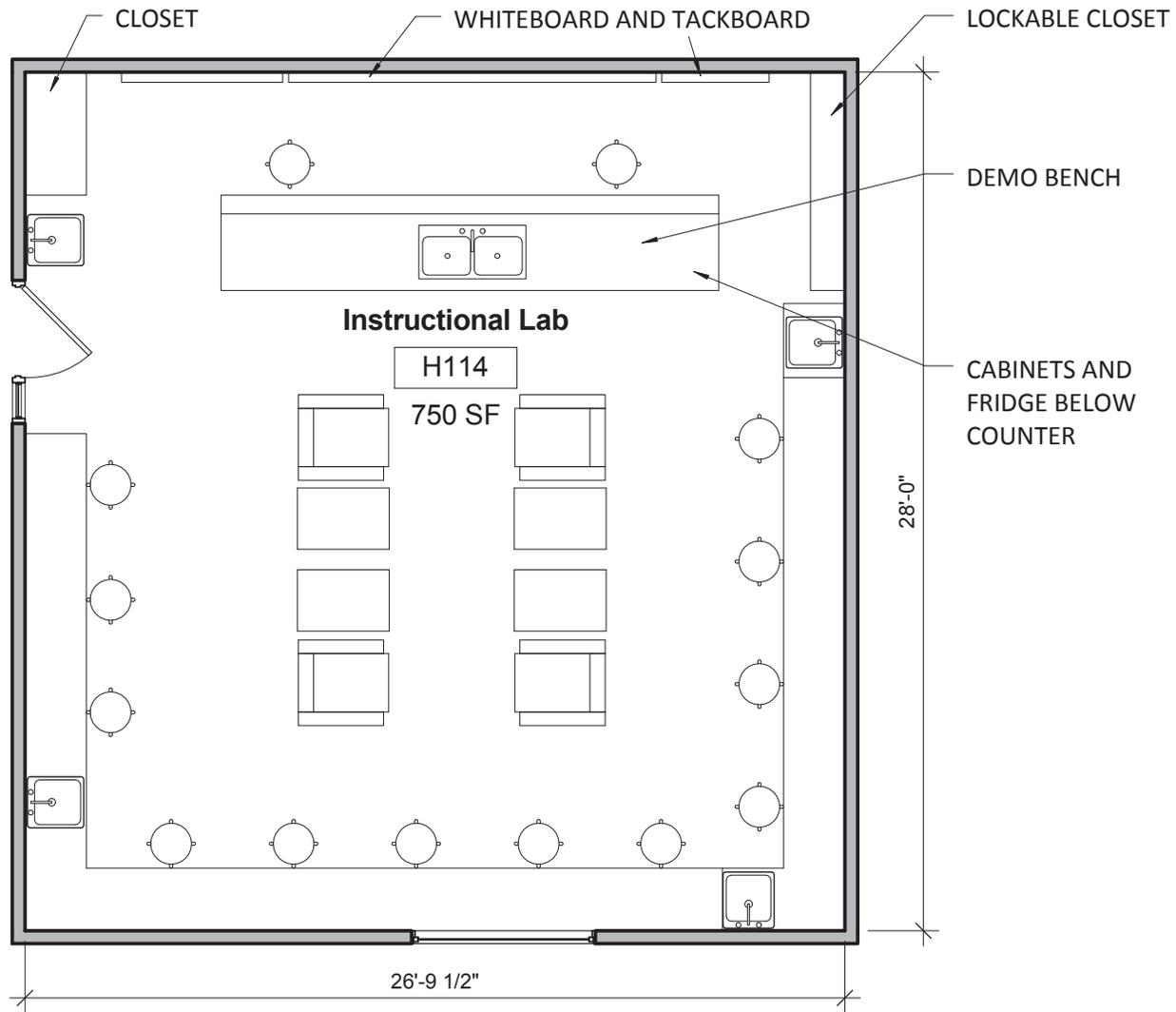
Technical Requirements

Mechanical:

Ventilation: 6-10 AC/hr (Per ANSI Z9.5)
 Summer Design Temp: 72 ° F
 Winter Design Temp: 72 ° F
 Controls: Individual direct digital controls
 Sound Criteria: 30 (NC/RC)
 Special Systems: Good ventilation
 Plumbing: 3 hand wash sinks, 1 large sink, Floor drain

Electrical:

Power: 2 duplex receptacle per wall and at instructor station. Wall outlets at every lab station. 1 GFCI duplex receptacle above counter near sink. Additional capacity for equipment listed.
 Data: 2 devices on opposing walls, and at instructor station. 1 Wireless airport. Additional capacity for equipment listed.
 Phone: 2 devices on opposing walls and at instructor station.
 Video: Rough-in for future capacity
 Intercom: Ceiling speakers with volume control
 Lighting:
 Fixture Type: T-8 Fluorescent lay-in
 Accent Lighting: Above each lab station and over phlebotomy area
 Foot Candles: 40-45
 Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Lab Storage
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	98 SF
Primary Function:	Storage for phlebotomy, Clinical Lab, and MA III supplies

Relationships:

Location:	Second Level
Adjacencies:	Phlebotomy Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Efficient storage

Finishes:

Floor:	VCT with 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

-Lockable storage; Lockable door

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	Lockable door

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Shelves with pull-out rollers; Counter with shelving below; 3 vertical filing cabinets
-Whiteboard

Moveable Furnishings:

-Rolling cart

Equipment:

-Fridge
-Coat hooks

Technical Requirements

Mechanical:

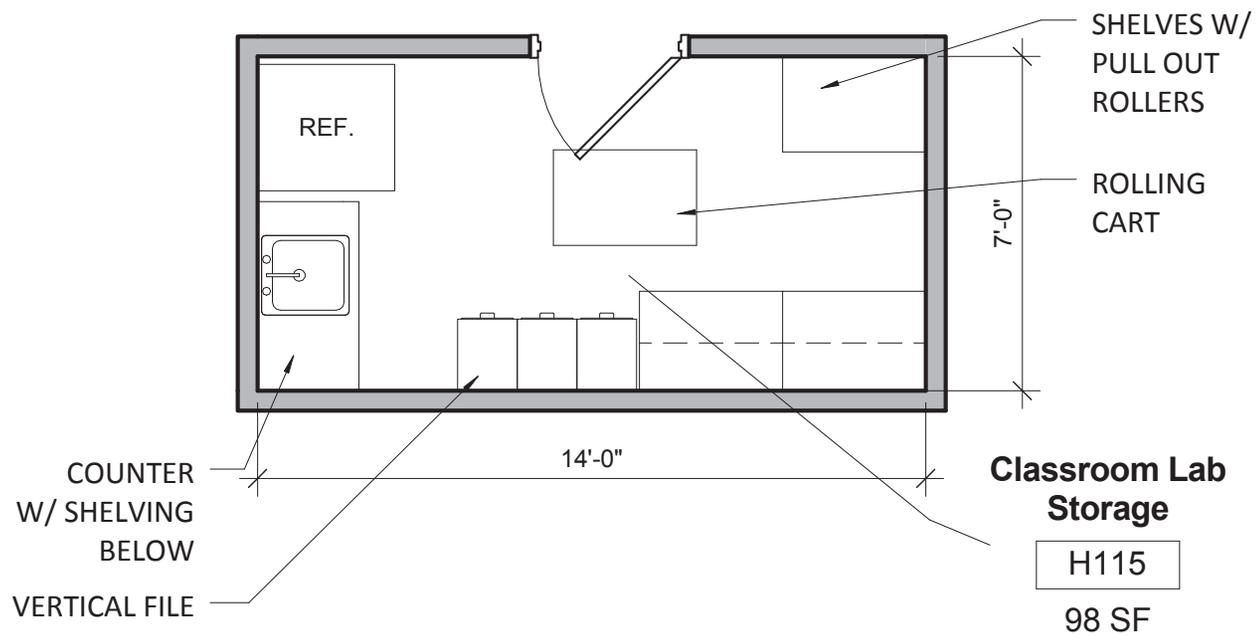
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	None required
Special Systems:	None required
Plumbing:	1 sink, supply, waste and vent

Electrical:

Power:	1 duplex receptacle per wall. 1 GFCI duplex outlet above counter near sink. Additional capacity for equipment listed.
Data:	Rough-in for future capacity
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	1
Total Number:	1
Occupants:	36
Area:	800 SF
Primary Function:	Flexible teaching, Lecture, PT Asst practice, scenario practice, skills pass-off, testing practical and written

Relationships:

Location:	Second Level
Adjacencies:	Storage Room; Break-out rooms; direct/wide hallway to elevator; exterior access, room to expand for EVO Certification
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Inviting, flexible, invigorating

Finishes:

Floor:	Carpet (static-free)
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Floor Finish (AFF): 9'-0"

Privacy/Security:

Windows with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- Instructor console with podium
- Solid surface counter top
- Lockable wall cabinets with adjustable shelving
- Bookcase

Moveable Furnishings:

- Tables, chairs
- Waste can

Equipment:

- Computers for testing, printer/scanner, Projector and screen
- Whiteboard, tack-board with frame
- Clock, Pencil sharpener

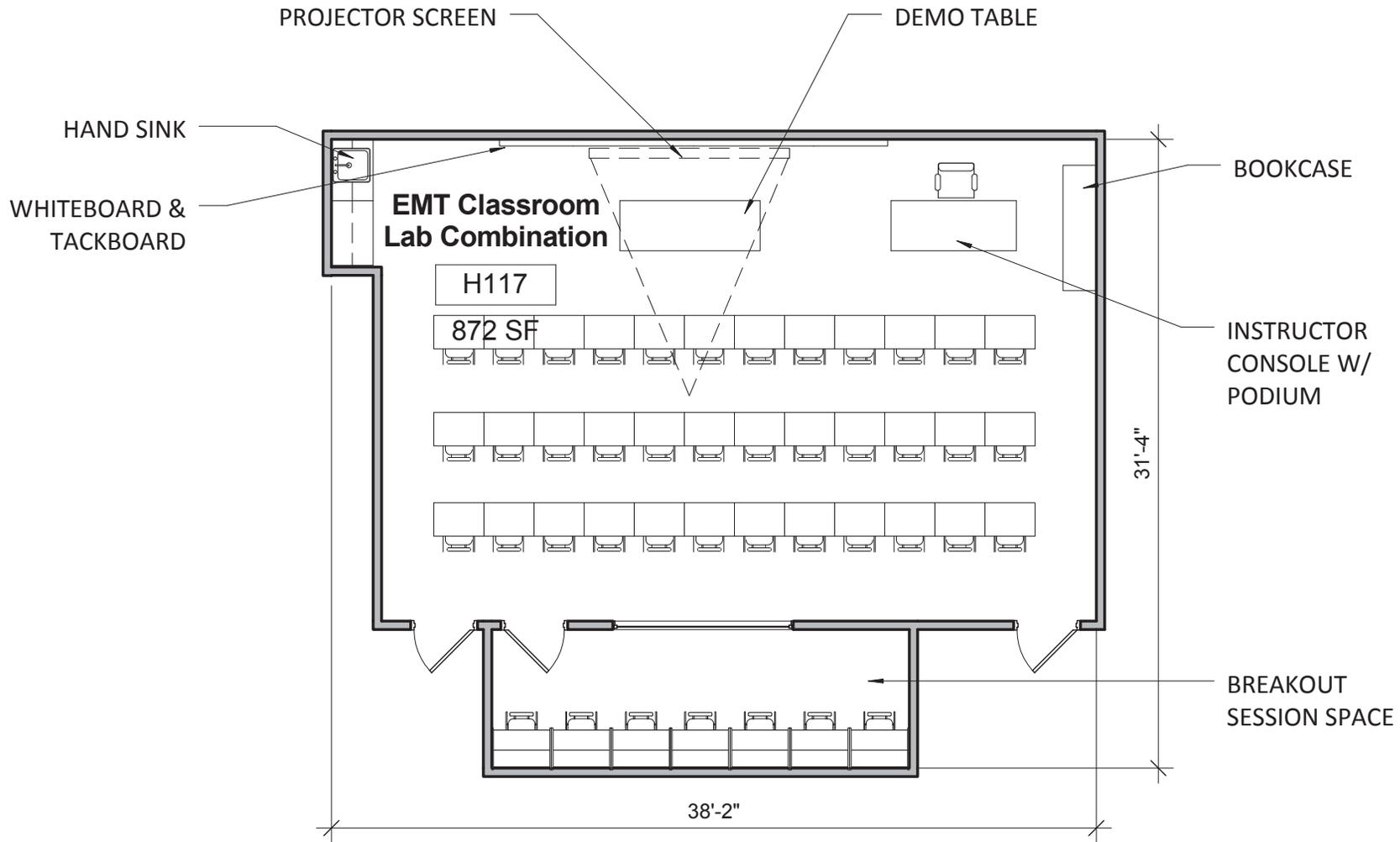
Technical Requirements

Mechanical:

Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	None required
Special Systems:	None required
Plumbing:	Hand sink, supply, waste and vent

Electrical:

Power:	1 duplex receptacle per wall and at instructor station. 36 Floor outlets for student computers. 1 GFCI duplex outlet above counter near sink. Additional capacity for equipment listed.
Data:	2 devices on opposing walls, and at instructor station. 1 Wireless airport. Additional capacity for equipment listed.
Phone:	Rough-in for future capacity
Video:	A/V system with internet connection
Intercom:	Rough-in for future capacity
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Secure Storage
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	148 SF
Primary Function:	Storage for equipment and supplies

Relationships:

Location:	Second Level
Adjacencies:	EMT classroom/lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Carpet (static-free)
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Floor Finish (AFF):	9'-0"
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Privacy/Security:

Lockable door

Doors:

Type:	Solid core wood with clear finish
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Frame:	Painted hollow metal with glazed sidelite
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Special:	Lockable door
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Windows:

Type:	None required
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Glazing:	None required
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Natural Light:	None required
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Casework/Fixed Equipment:

-Wall-mounted adjustable shelving; Roll-out shelving

Moveable Furnishings:

-Rolling transport cart

Equipment:

-Backboards; Splint; Bandaging; Medications; IV fluids; Needles; etc.

Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
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Summer Design Temp:	74 ° F
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Winter Design Temp:	74 ° F
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Controls:	Individual direct digital controls
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Sound Criteria:	None required
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Special Systems:	None required
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Plumbing:	None required
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Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
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Data:	Rough-in for future capacity
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Phone:	Rough-in for future capacity
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Video:	Rough-in for future capacity
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Intercom:	Rough-in for future capacity
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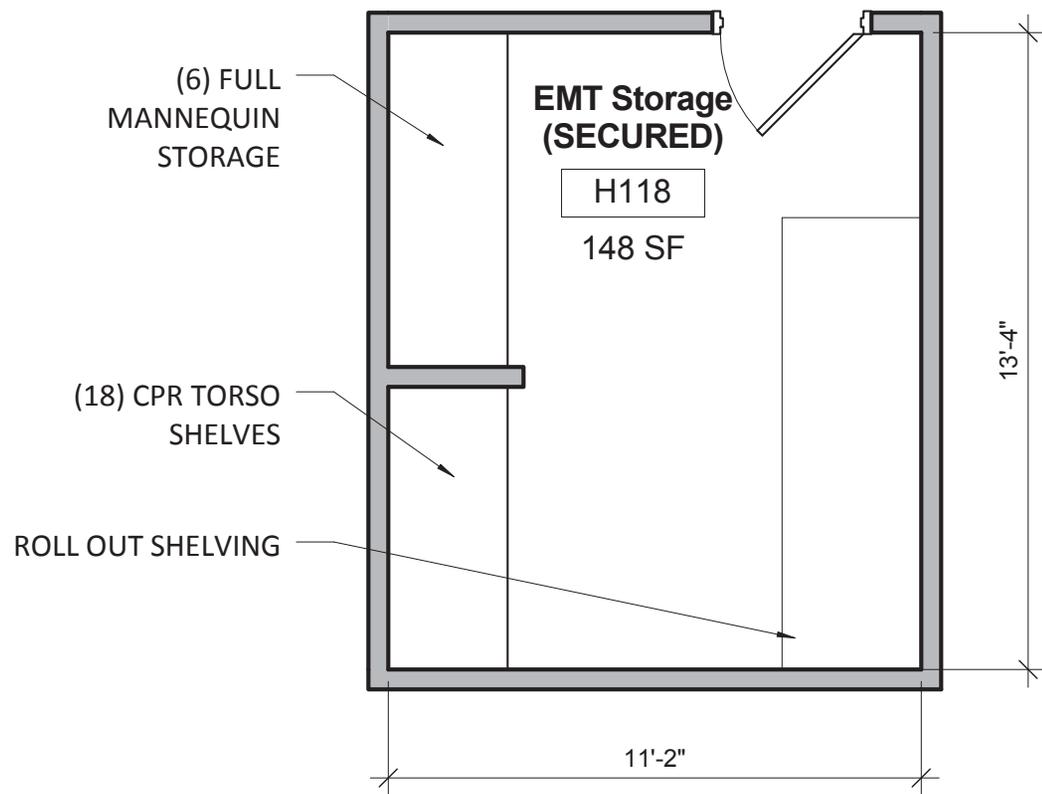
Lighting:

Fixture Type:	T-8 Fluorescent lay-in direct
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Accent Lighting:	None required
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Foot Candles:	30
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Controls:	Occupancy sensor
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Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	25
Area:	798 SF
Primary Function:	Teach coding, billing & Medical Office Administrative Procedures

Relationships:

Location:	Second Level
Adjacencies:	Mock office/Waiting room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Comfortable and non-crowded learning environment

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

- Lockable upper and lower cabinets; counter top
- Desks for 12 computers; Projector and screen
- Whiteboard, Tack board

Moveable Furnishings:

-24 chair and desks; Instructor desk and chair

Equipment:

-13 computers; 1 printer; TV; VCR/DVD player

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall and at instructor station. Additional capacity for equipment listed.

Data: 2 devices on opposing walls and at instructor station. 12 devices by computer stations

Phone: 2 devices on opposing walls and at instructor station.

Video: A/V system with internet connection

Intercom: Speakers with volume control

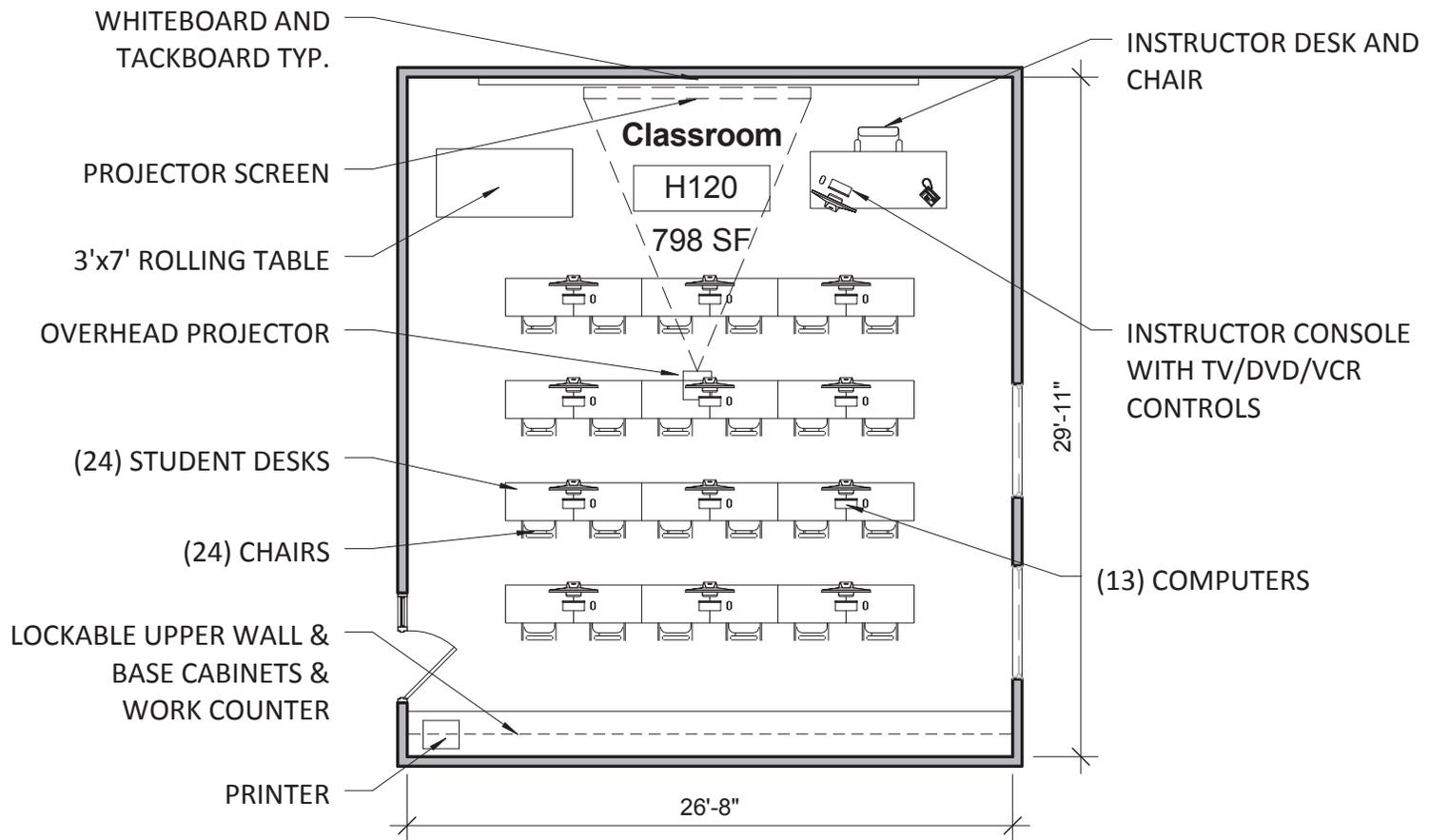
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 40-45

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	25
Area:	798 SF
Primary Function:	Teaching Medical Clinical and Medical Assistant courses

Relationships:

Location:	Second Level
Adjacencies:	Next to Clinical Lab. Exam rooms; Lab Rest room; Procedure/Exam room; Pharmacy Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Comfortable and non-crowded learning environment

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

- Lockable upper and lower cabinets; counter top
- Projector and screen
- Whiteboard, Tack board

Moveable Furnishings:

- 24 chair and desks; Instructor desk and chair

Equipment:

- TV; VCR/DVD player

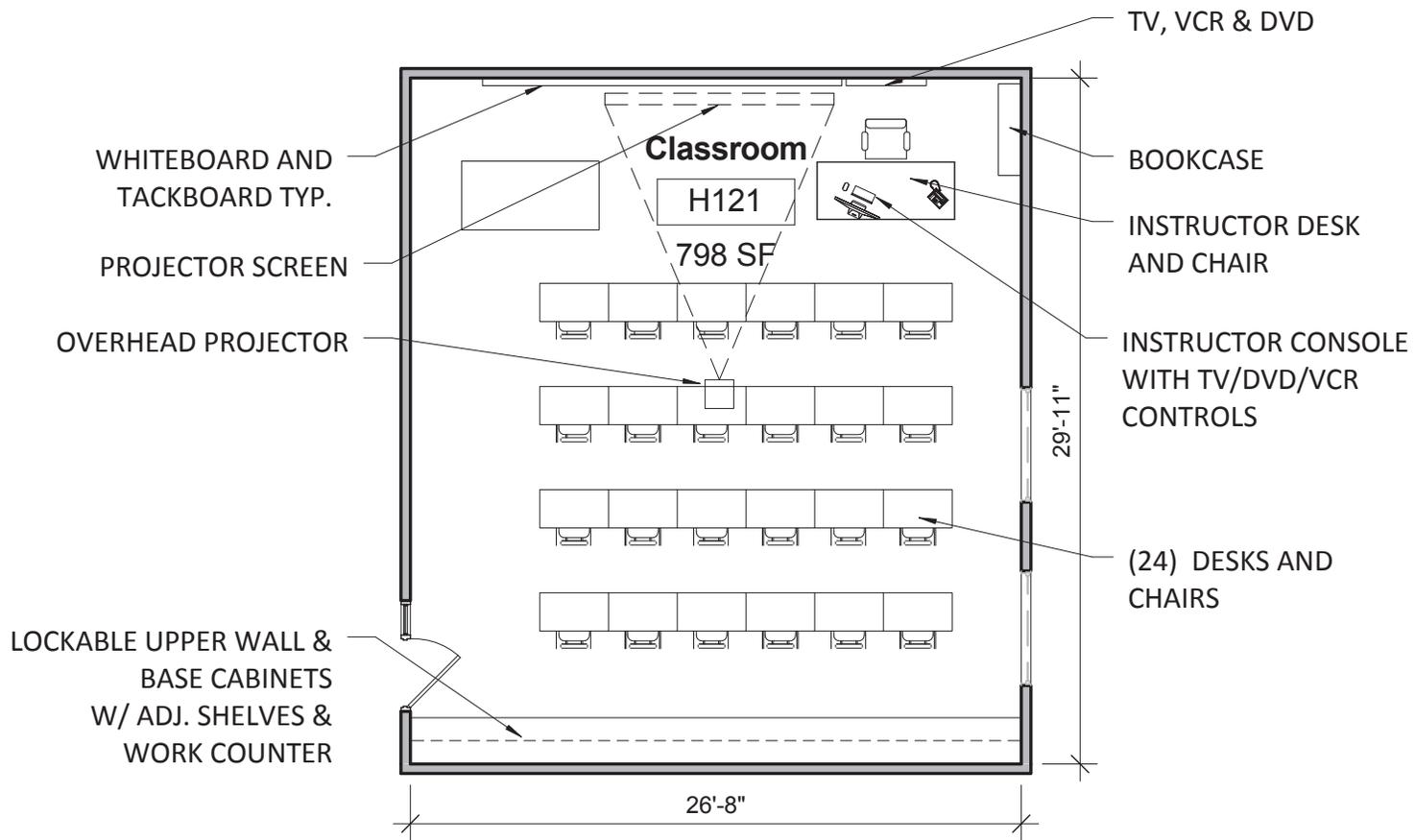
Technical Requirements

Mechanical:

Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall and at instructor station. Floor outlets for student lap tops. Additional capacity for equipment listed.
Data:	2 devices on opposing walls and at instructor station.
Phone:	2 devices on opposing walls and at instructor station.
Video:	A/V system with internet connection
Intercom:	Speakers with volume control
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	40-45
Controls:	Occupancy sensor and Dimmable



Space Requirements

Space Summary:

Type of Space:	Mock office/Waiting room
Number Required:	1
Total Number:	1
Occupants:	15
Area:	504 SF
Primary Function:	Waiting room for Medical Office and Phlebotomy scenarios; reception area

Relationships:

Location:	Second Level
Adjacencies:	Elevator; Main Corridor; entry to suite; Phlebotomy lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Welcoming and Professional. Efficient

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Large window with blinds to monitor area

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: Interior

Glazing: Clear glass

Natural Light: None required

Casework/Fixed Equipment:

-Front desk with 6 workstations
 -Shelving; Lateral files; Whiteboard; Tack board; Coat Rack

Moveable Furnishings:

-14 chairs

Equipment:

-6 computers; phones

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall, and at work stations. Additional capacity for equipment listed.

Data: 2 devices per wall and at work stations

Phone: 1 device per workstation

Video: Rough-in for future capacity

Intercom: None required

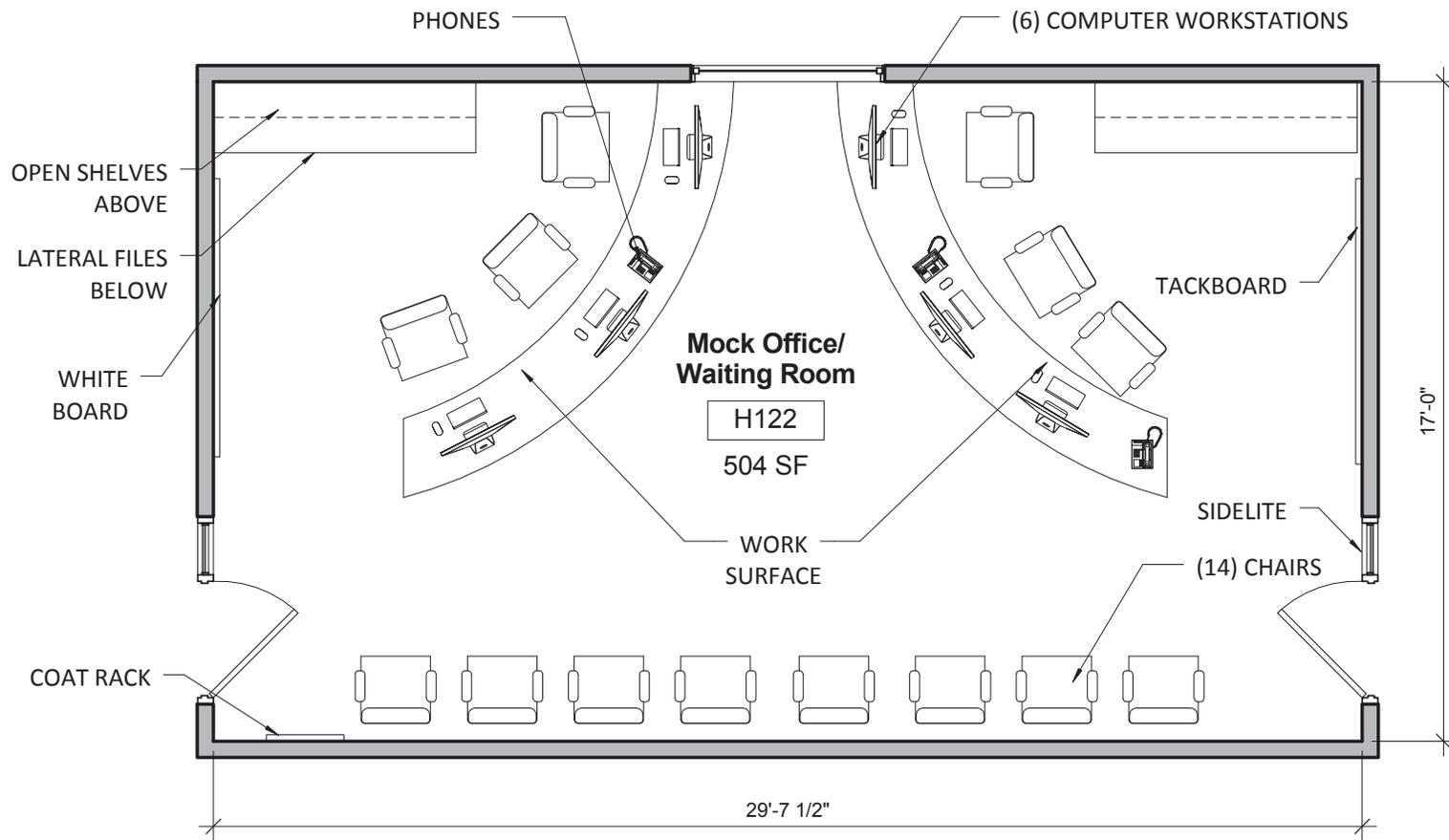
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Exam Room
Number Required:	2
Total Number:	2
Occupants:	2-6
Area:	180 SF
Primary Function:	Demonstrating, Teaching, Practicing, Exams

Relationships:

Location:	Second Level
Adjacencies:	Locate in "mock office" by waiting room.
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	All surfaces must be cleanable.
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Big interior window for observation

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: None required

Casework/Fixed Equipment:

- Hardwood veneer base and wall cabinet, solid surface counter top
- Lockable drawers and doors
- Exam table 30"x72"

Moveable Furnishings:

- Table
- 2 chairs
- Waste can
- Biohazard waste receptacle

Equipment:

- Computer
- Exam equipment

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Hand wash sink, water, waste and vent

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices

Phone: 1 device

Video: Rough-in for future capacity

Intercom: Speakers with volume control

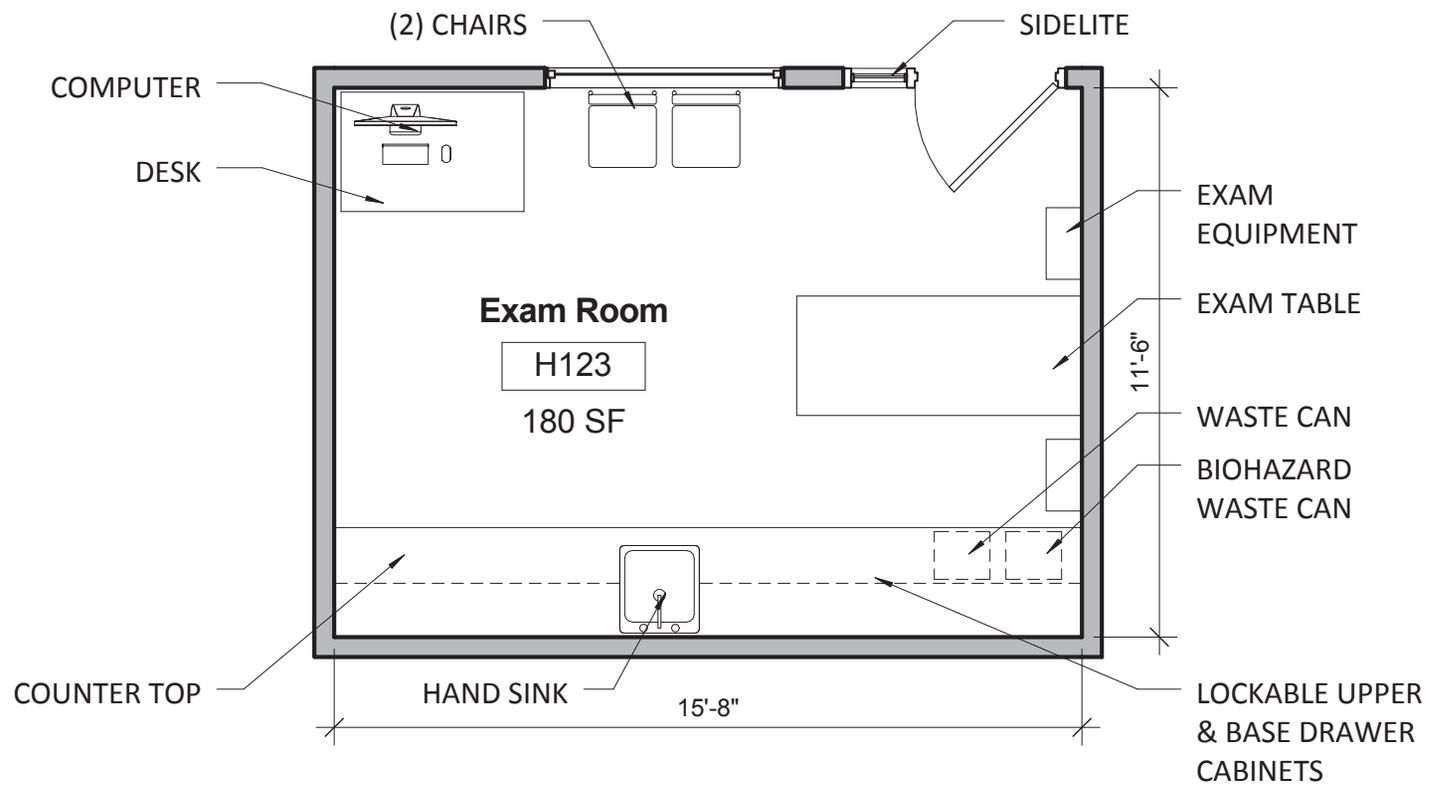
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Exam Room
Number Required:	2
Total Number:	2
Occupants:	2-6
Area:	180 SF
Primary Function:	Demonstrating, Teaching, Practicing, Exams

Relationships:

Location:	Second Level
Adjacencies:	Locate in "mock office" by waiting room.
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	All surfaces must be cleanable.
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Big interior window for observation

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: None required

Casework/Fixed Equipment:

- Hardwood veneer base and wall cabinet, solid surface counter top
- Lockable drawers and doors
- Exam table 30"x72"

Moveable Furnishings:

- Table
- 2 chairs
- Waste can and Biohazard waste receptacle

Equipment:

- Computer
- Exam equipment

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Hand wash sink, water, waste and vent

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices

Phone: 1 device

Video: Rough-in for future capacity

Intercom: Speakers with volume control

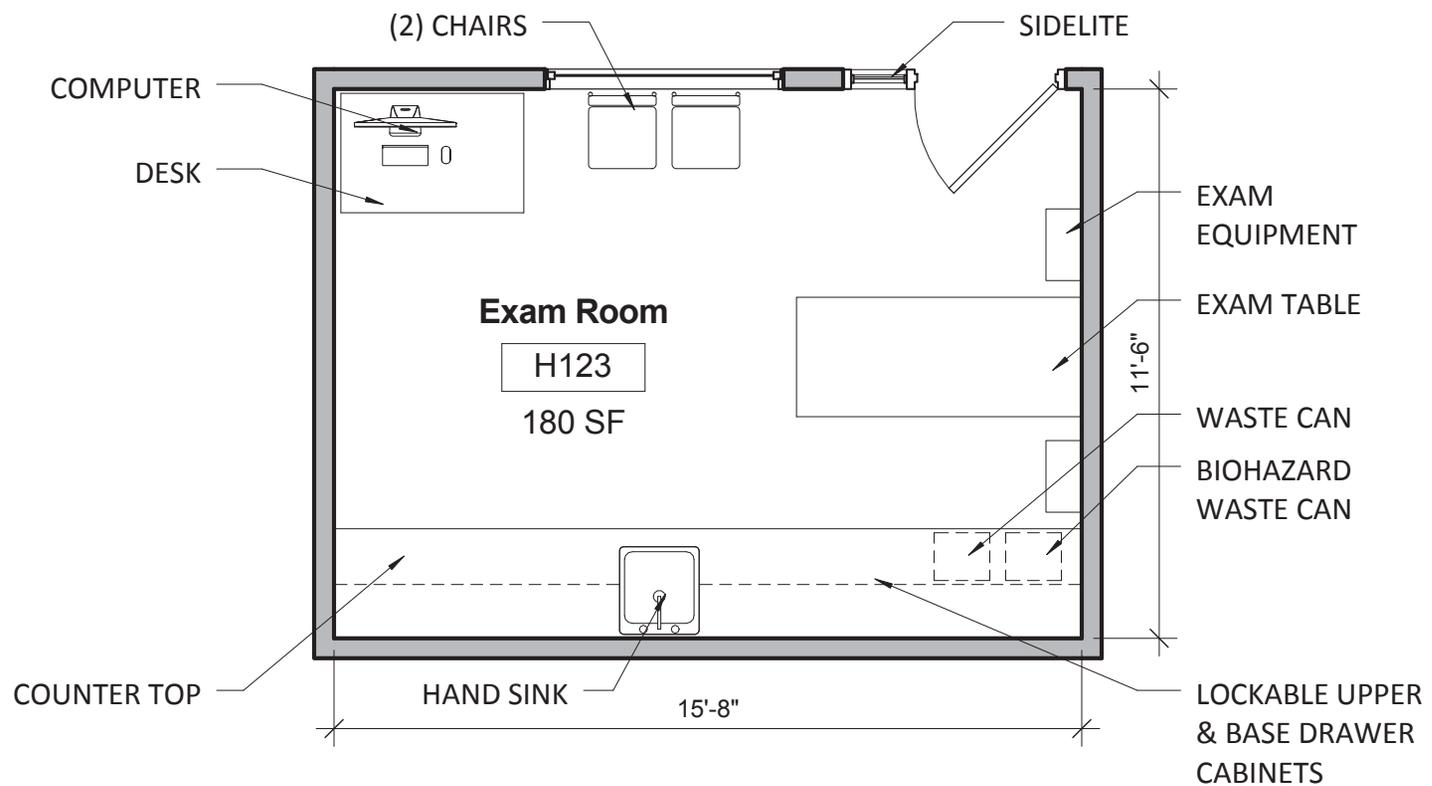
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Restroom
Number Required:	1
Total Number:	1
Occupants:	2-6
Area:	75 SF
Primary Function:	Provide a Restroom for gathering and disposing of urine samples

Relationships:

Location:	Second Level
Adjacencies:	Lockers/Changing Rooms; Procedure/Exam Room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Ceramic Tile
Walls:	Ceramic Tile
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Big interior window for observation

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

-Toilet; Lavatory; Mirror; Grab bars; Dispensers for paper towels, soap, toilet paper

Moveable Furnishings:

None required

Equipment:

-Trash can

Technical Requirements

Mechanical:

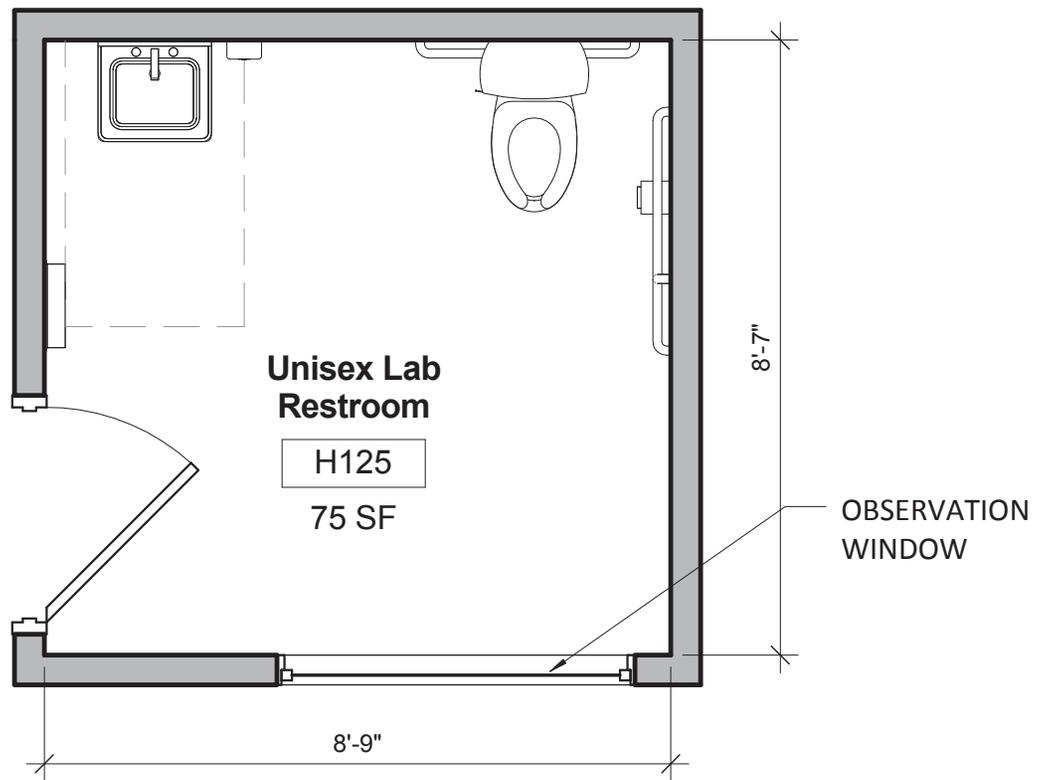
Ventilation:	1.0 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	40 (NC/RC)
Special Systems:	5 min. air changes (min..)
Plumbing:	Hand wash sink, Floor Drain, water, waste and vent

Electrical:

Power:	1 GFCI duplex receptacle
Data:	None required
Phone:	None required
Video:	None required
Intercom:	Ceiling Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Exam Room
Number Required:	1
Total Number:	1
Occupants:	10-12
Area:	250 SF
Primary Function:	Teaching procedures; Bariatric equipment sterilization

Relationships:

Location:	Second Level
Adjacencies:	In Medical Office Suite; Mock Office/Waiting Room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	All surfaces must be cleanable.
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor
(AFF): 9'-0"

Privacy/Security:

Big interior window with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- Hardwood veneer base and wall cabinet, solid surface counter top
- Lockable drawers and doors
- Exam table 30"x72"

Moveable Furnishings:

- Desk; 4 chairs; VL for Bariatric
- Waste can and Biohazard waste receptacle

Equipment:

- Computer
- Exam equipment; Autoclave

Technical Requirements

Mechanical:

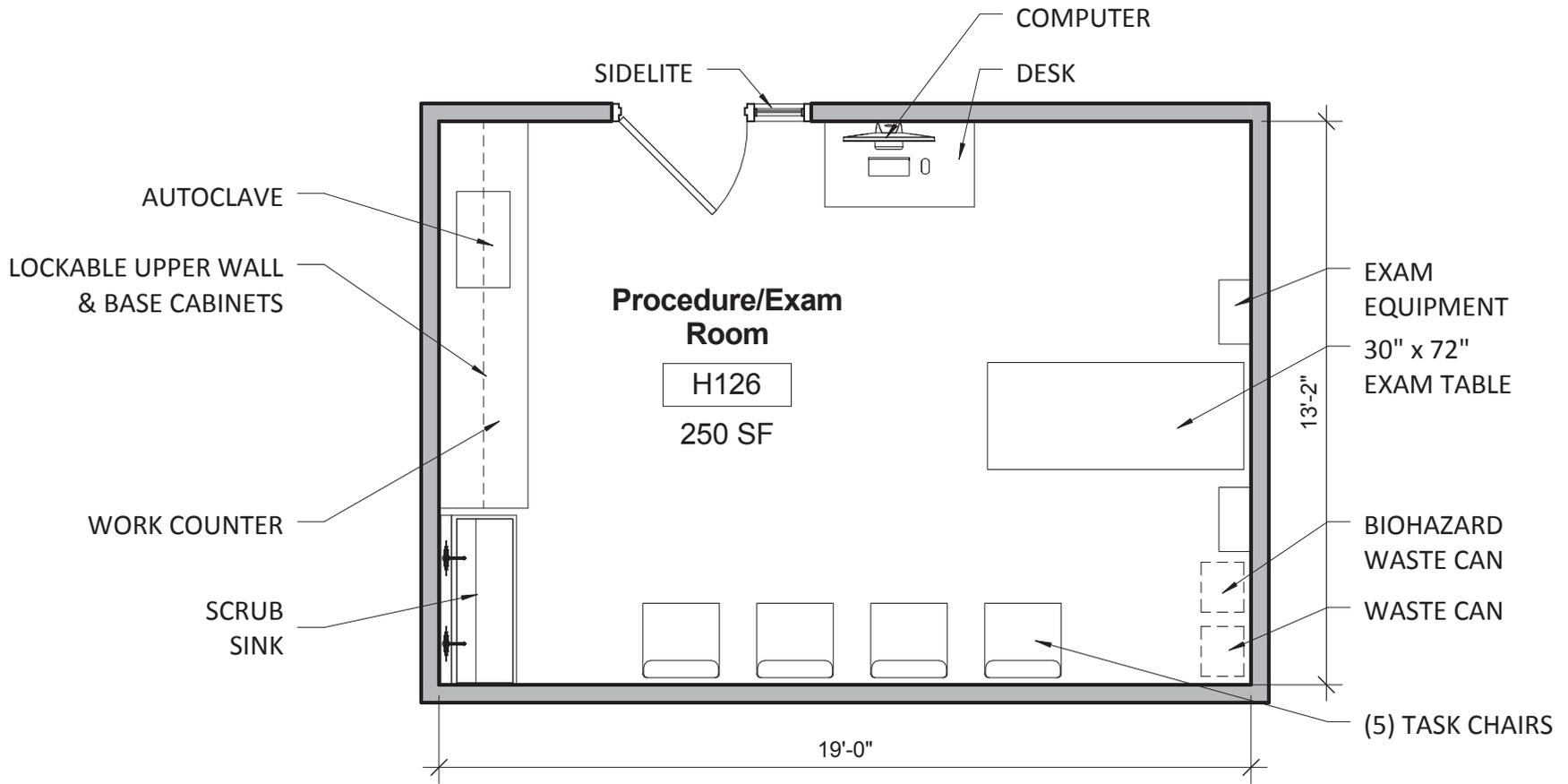
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	2 Hand wash sinks, water, waste and vent

Electrical:

Power:	2 duplex receptacle per wall. 1 GFCI duplex outlet above counter near sink. Additional capacity for equipment listed.
Data:	2 devices
Phone:	1 device; 1 device in hallway
Video:	Rough-in for future capacity
Intercom:	Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	Above exam table
Foot Candles:	50
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Lab
Number Required:	1
Total Number:	1
Occupants:	10-20
Area:	450 SF
Primary Function:	Teaching, practicing Pharm Tech classes; Pharmacology classes (MA, etc.) to simulate a pharmacy

Relationships:

Location:	Second Level
Adjacencies:	Clinical Lab; Medical Asst Classroom
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Professional, Efficient

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	All surfaces must be cleanable
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

- Abundant counter space; Lockable shelving
- Coat rack
- Lockable storage cabinets

Moveable Furnishings:

- Filing cabinet; tables; chairs

Equipment:

- 3 computers; printer; 2 Bunsen burners
- Under counter fridge
- Storage bins; Pencil sharpener; Trash can; Sharps; Scales; Counting equipment; Barcode readers; Cash register; Clock

Technical Requirements

Mechanical:

Ventilation: 6-10 AC/hr (Per ANSI Z9.5)

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Hand wash sink, water, waste and vent

Electrical:

Power: 2 duplex receptacles per wall. Additional capacity for equipment listed.

Data: 2 devices

Phone: 1 device

Video: Rough-in for future capacity

Intercom: None required

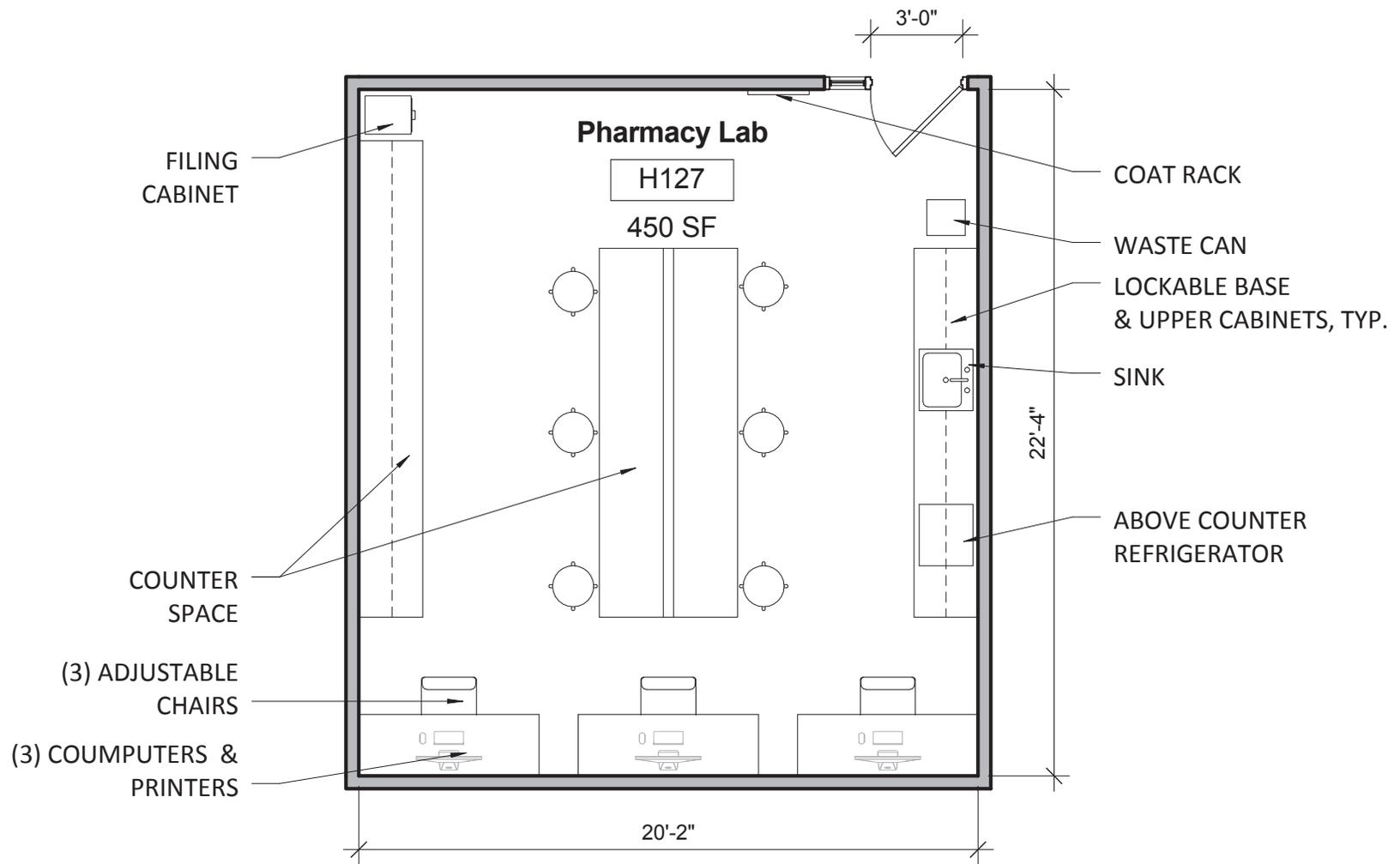
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Clinical Lab
Number Required:	1
Total Number:	1
Occupants:	25
Area:	750 SF
Primary Function:	Teaching and Practicing MA skills, CNA skills -including Bariatric equipment

Relationships:

Location:	Second Level
Adjacencies:	Medical Office; Storage room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	All surfaces must be cleanable.
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Lockable

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Lockable Door

Windows:

Type: Adjacent to supervisor

Glazing: Interior

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Counter top
-Whiteboard; Tack board

Moveable Furnishings:

-Small desk; Chairs; Exam table

Equipment:

-Scales (including Bariatric); Wheel chairs; Walkers; Crutches; Blood pressure cuffs; EKG; Eye charts; Baby scale
-Trash cans; Clock; Pencil sharpener

Technical Requirements

Mechanical:

Ventilation: 6-10 AC/hr (Per ANSI Z9.5)

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

35 (NC/RC)

Sound Criteria:

None required

Special Systems:

3 Hand wash sinks, water, waste and vent

Plumbing:

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices

Phone: 1 device

Video: Rough-in for future capacity

Intercom: Speakers with volume control

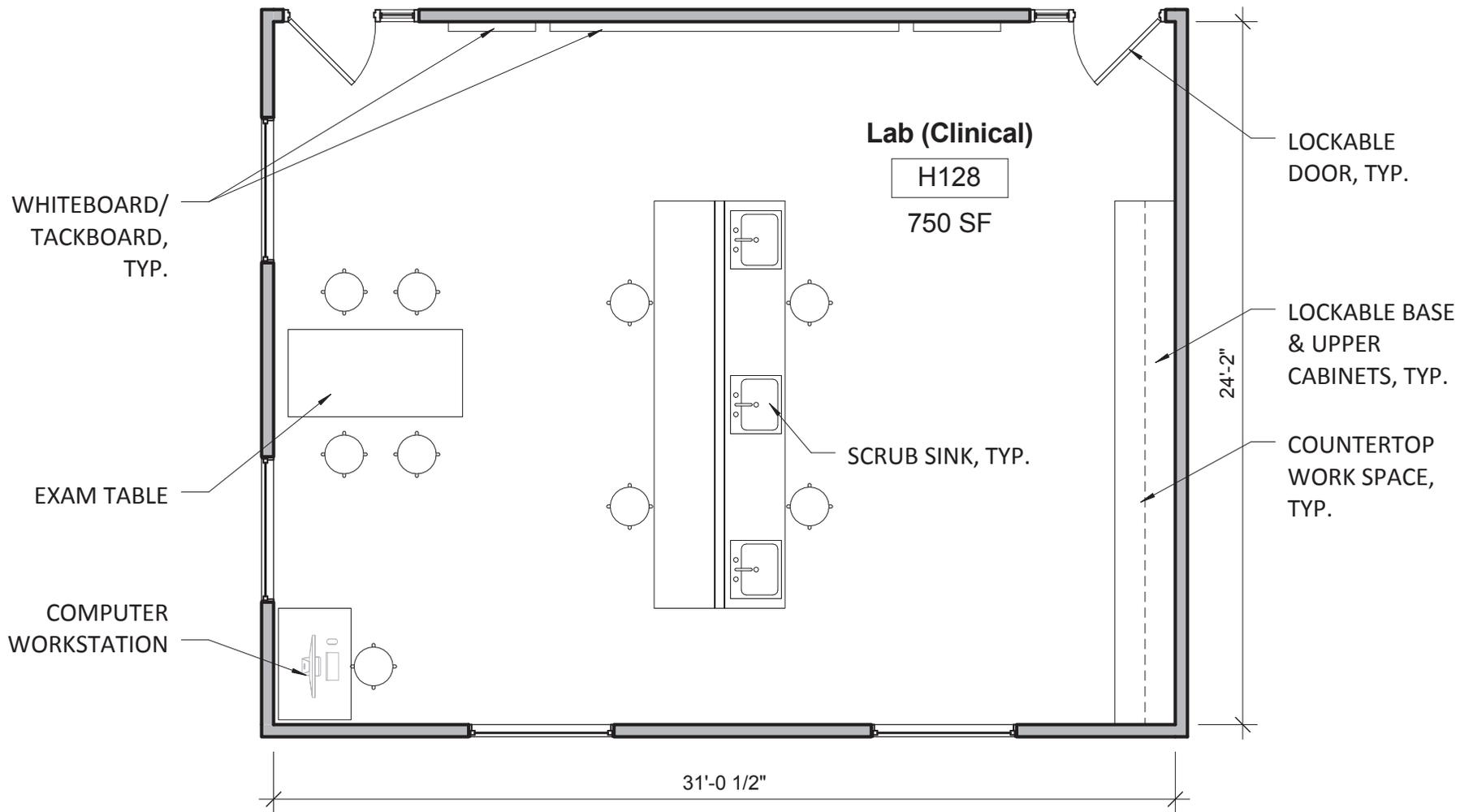
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Secure Storage
Number Required:	1
Total Number:	1
Occupants:	3-4
Area:	240 SF
Primary Function:	Storage for MA Clinical Lab

Relationships:

Location:	Second Level
Adjacencies:	Pharmacy Lab; Clinical Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Efficiency and accessibility

Finishes:

Floor:	VCT with 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Lockable door

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Lockable door

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Cabinets with adjustable shelving; Storage for wide variety of sizes and shapes
-Whiteboard

Moveable Furnishings:

-Small desk

Equipment:

-Computer; Trash can

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 74 ° F

Winter Design Temp: 74 ° F

Controls: Individual direct digital controls

Sound Criteria: None required

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 1 device

Phone: 1 device

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

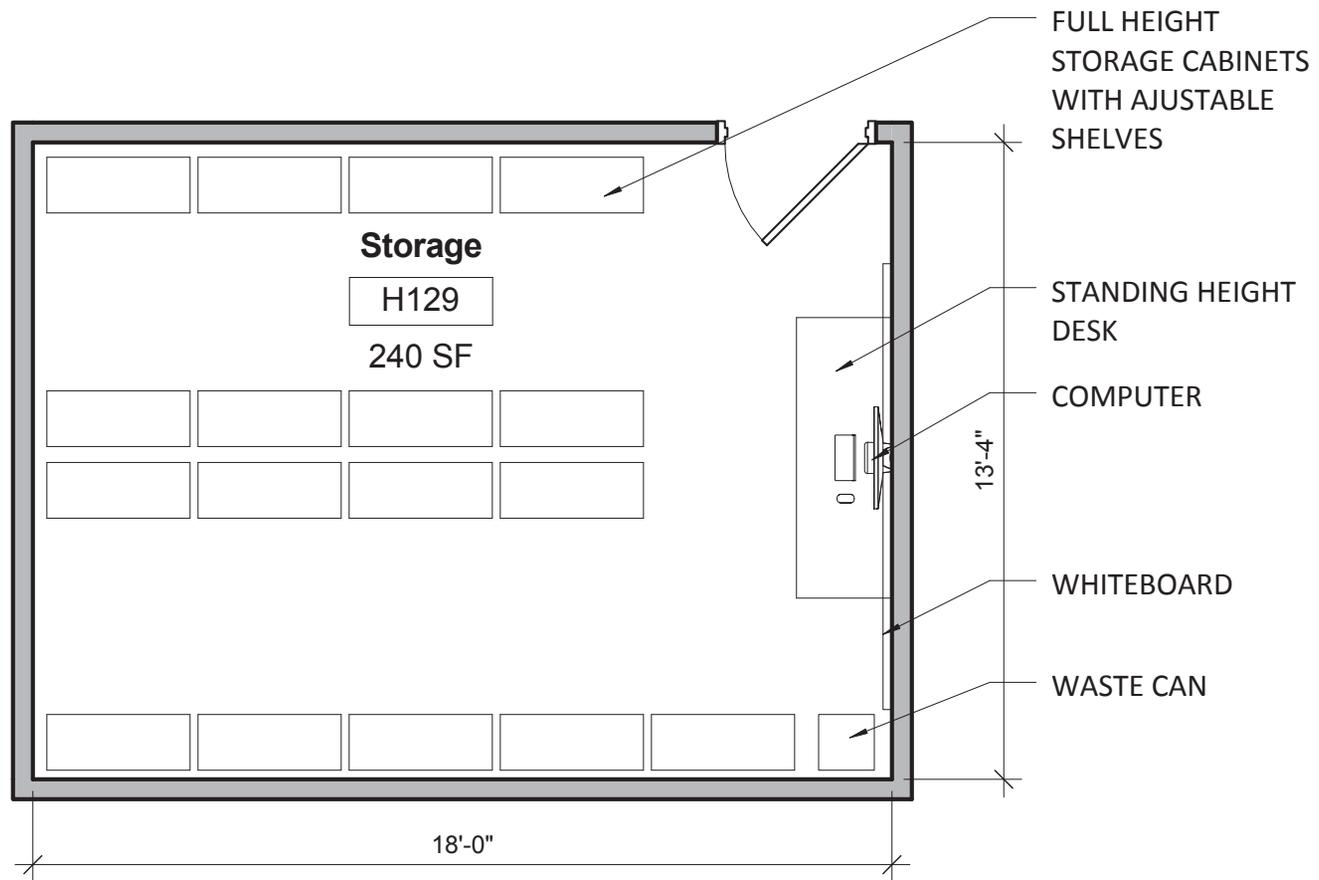
Lighting:

Fixture Type: T-8 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 30

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Locker/Changing rooms
Number Required:	1
Total Number:	1
Occupants:	10
Area:	180 SF
Primary Function:	Demonstrating, Teaching, Practicing, Exams

Relationships:

Location:	Second Level
Adjacencies:	Locate in "mock office" by waiting room.
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Linoleum
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	All surfaces must be cleanable.
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Separate area for men and women

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

- 10 full length lockers (5 men, 5 women)
- 1 Rest room for each gender
- Benches

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

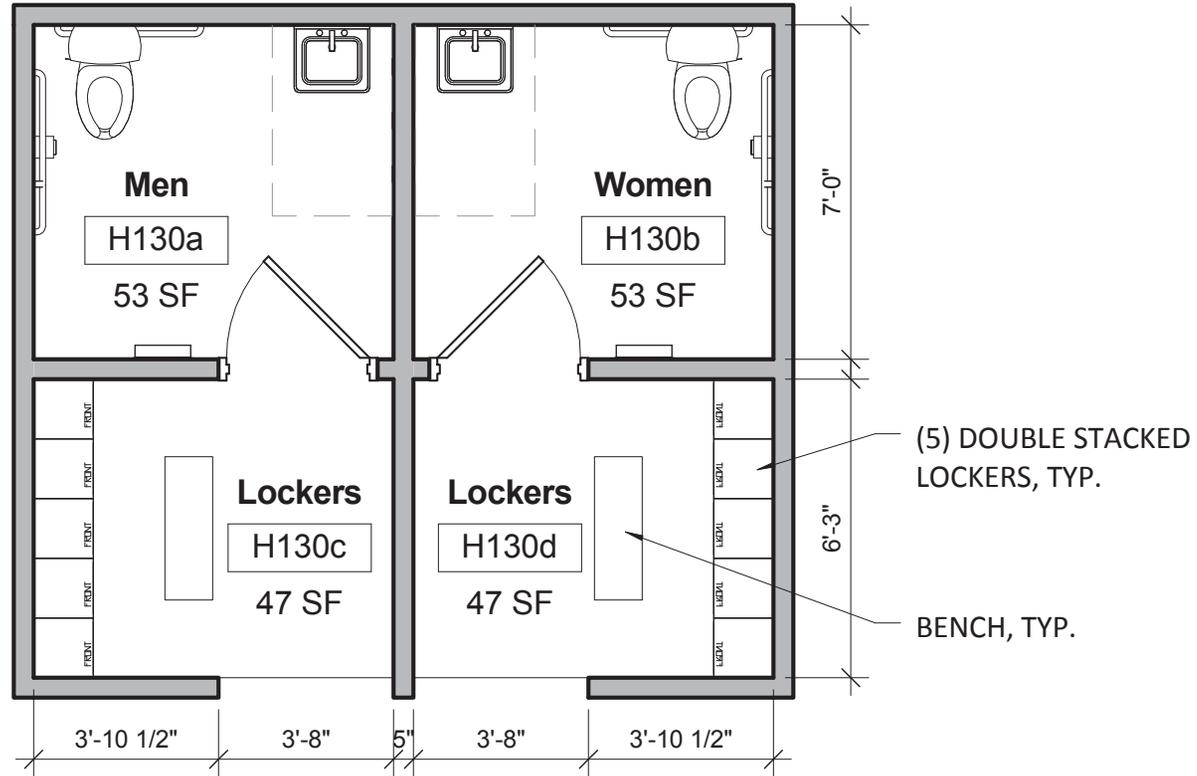
Ventilation:	0.5 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	100% Exhaust
Plumbing:	Hand wash sink, water, waste and vent

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	Rough-in for future capacity
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	50
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	31
Area:	860 SF
Primary Function:	Teaching/Learning wide range of Health Science classes

Relationships:

Location:	Second Level
Adjacencies:	In Health Science area
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Inviting, Invigorating, Flexible

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Big interior window with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- Lockable cabinets; tall storage; counter top
- Whiteboard; Tack board

Moveable Furnishings:

- 30 student desks/chairs; 1 instructor desk/chair

Equipment:

- 2 computers; TV; DVD
- Trash can; Pencil sharpener

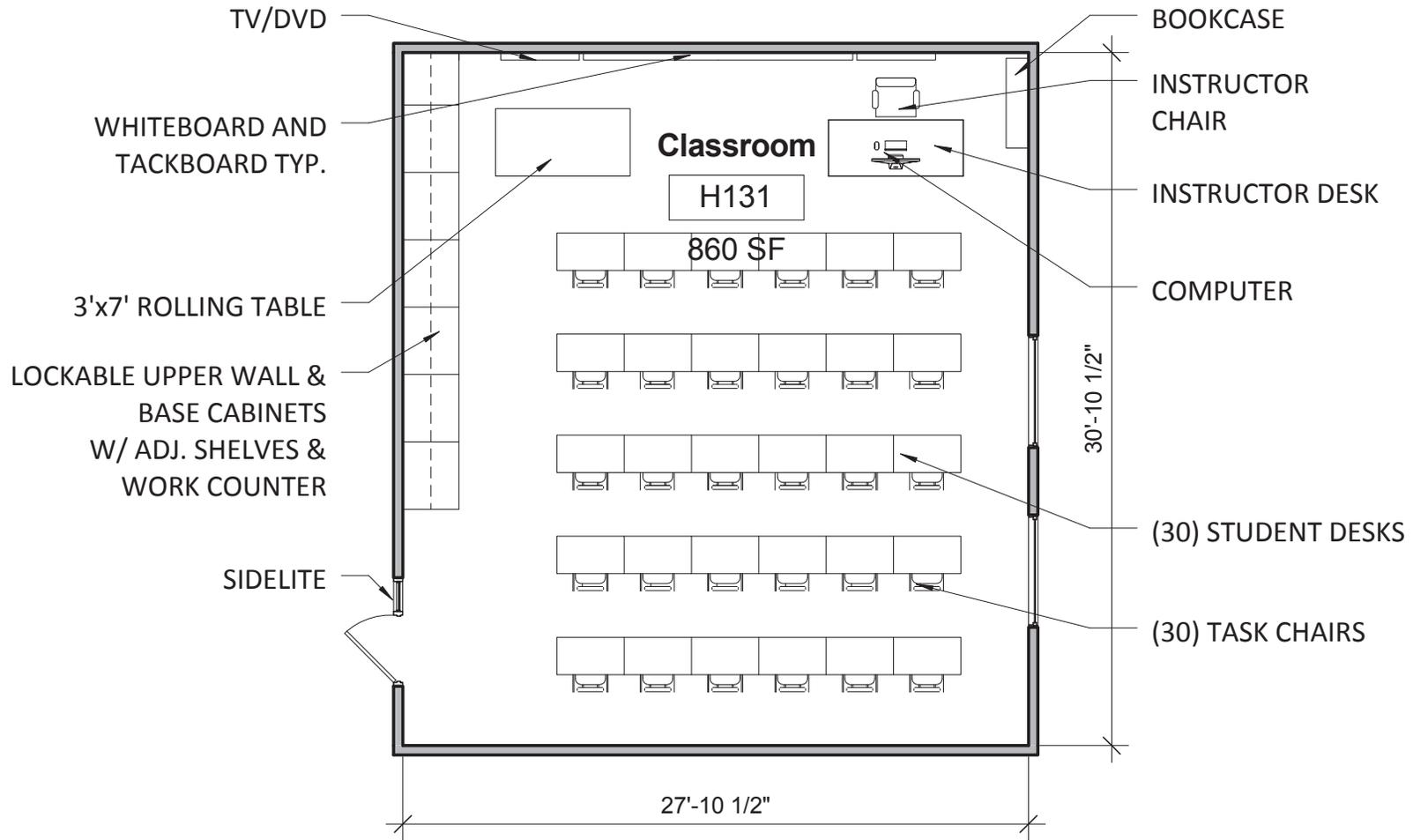
Technical Requirements

Mechanical:

Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall and at instructor station. Floor outlets at student desks. Additional capacity for equipment listed.
Data:	2 devices on opposing walls and at instructor station. 1 wireless airport. Additional capacity for equipment listed.
Phone:	2 devices on opposing walls and at instructor station
Video:	A/V system with internet connection
Intercom:	Speakers with volume control
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	40-45
Controls:	Occupancy sensor; Zoned; Dimmable



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	31
Area:	860 SF
Primary Function:	Teaching/Learning wide range of Health Science classes

Relationships:

Location:	Second Level
Adjacencies:	In Health Science area
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Inviting, Invigorating, Flexible

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x 4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Big interior window with blinds

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- Lockable cabinets; tall storage; counter top
- Whiteboard; Tack board

Moveable Furnishings:

- 30 student desks/chairs; 1 instructor desk/chair

Equipment:

- 2 computers; TV; DVD
- Trash can; Pencil sharpener

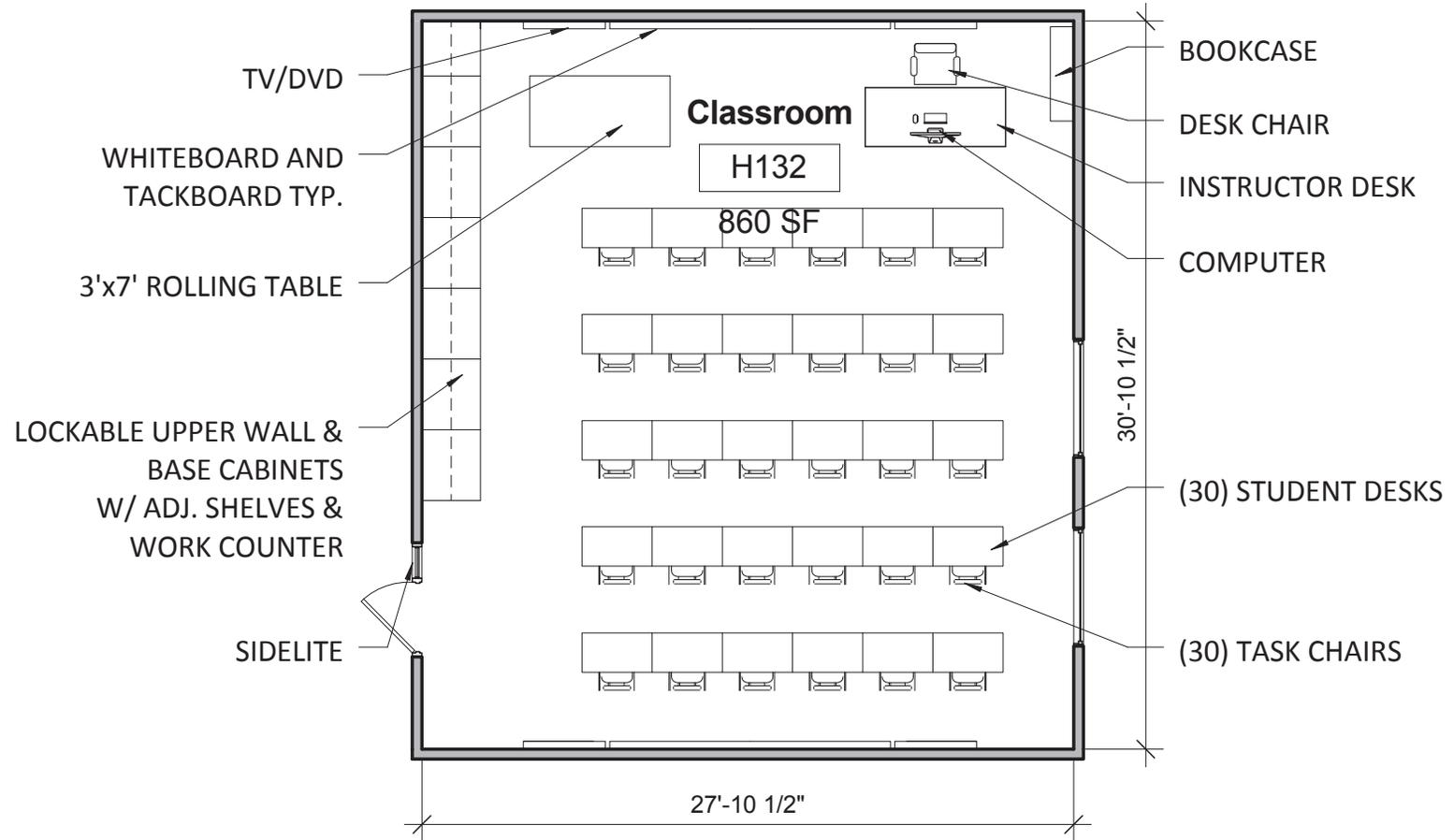
Technical Requirements

Mechanical:

Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall and at instructor station. Floor outlets at student desks. Additional capacity for equipment listed.
Data:	2 devices on opposing walls and at instructor station. 1 wireless airport. Additional capacity for equipment listed.
Phone:	2 devices on opposing walls and at instructor station
Video:	A/V system with internet connection
Intercom:	Speakers with volume control
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	40-45
Controls:	Occupancy sensor; Zoned; Dimmable



Space Requirements

Space Summary:

Type of Space:	Private Office
Number Required:	1
Total Number:	1
Occupants:	2-6
Area:	130 SF
Primary Function:	Demonstrating, Teaching, Practicing, Exams

Relationships:

Location:	Second Level
Adjacencies:	Medical Programs, Health Science work stations (H134), Conference Room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Blinds in windows, secured access to entire office suite, 2 doors on either side of suite.

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior

Glazing: Insulated Low-E

Natural Light: Desirable

Casework/Fixed Equipment:

- Base cabinets with workable surface
- Lateral Files
- Overhead Storage
- Coat Rack

Moveable Furnishings:

- 1 Adjustable chair
- 2 Fixed chairs for guests

Equipment:

- Whiteboard, Tack board, Computer

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speakers with volume control

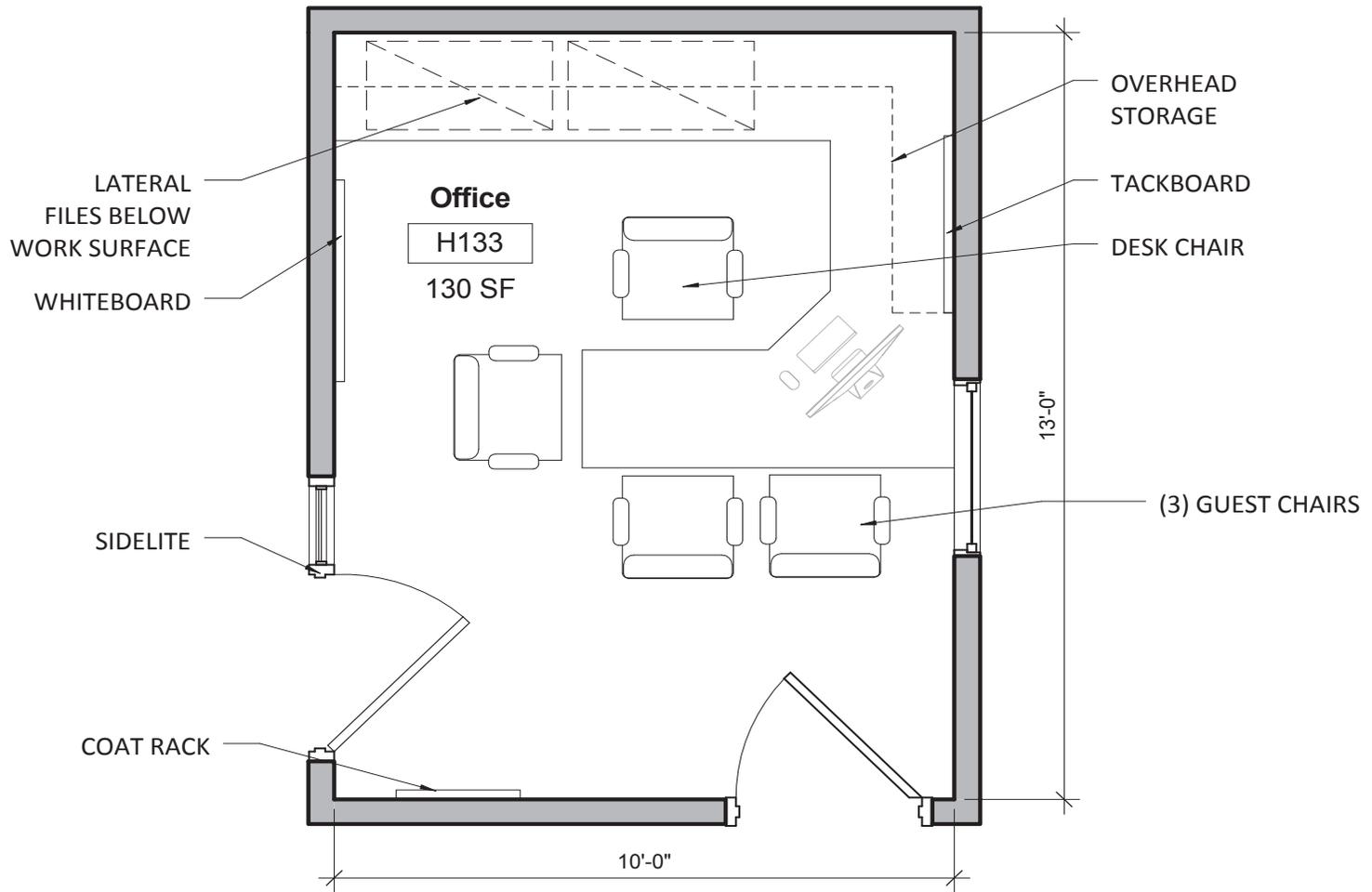
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task light at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Work Stations
Number Required:	8
Total Number:	8
Occupants:	10
Area:	780 SF
Primary Function:	Instructor Offices

Relationships:

Location:	Second Level
Adjacencies:	Medical Programs, Private Office, Conference Room
Separation:	Equipment and Mechanical rooms; Noisy public space and public gathering areas

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Blinds in windows, secured access to entire office suite, 2 doors on either side of suite.

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior
Glazing:	Insulated Low-E
Natural Light:	Desirable

Casework/Fixed Equipment:

- Base cabinets with workable surface
- Lateral Files
- Overhead Storage
- Coat Rack

Moveable Furnishings:

- 8 Adjustable chairs
- 2 Fixed chairs for guests
- Waste can

Equipment:

- Whiteboard, Tack board, 8 Computer

Technical Requirements

Mechanical:

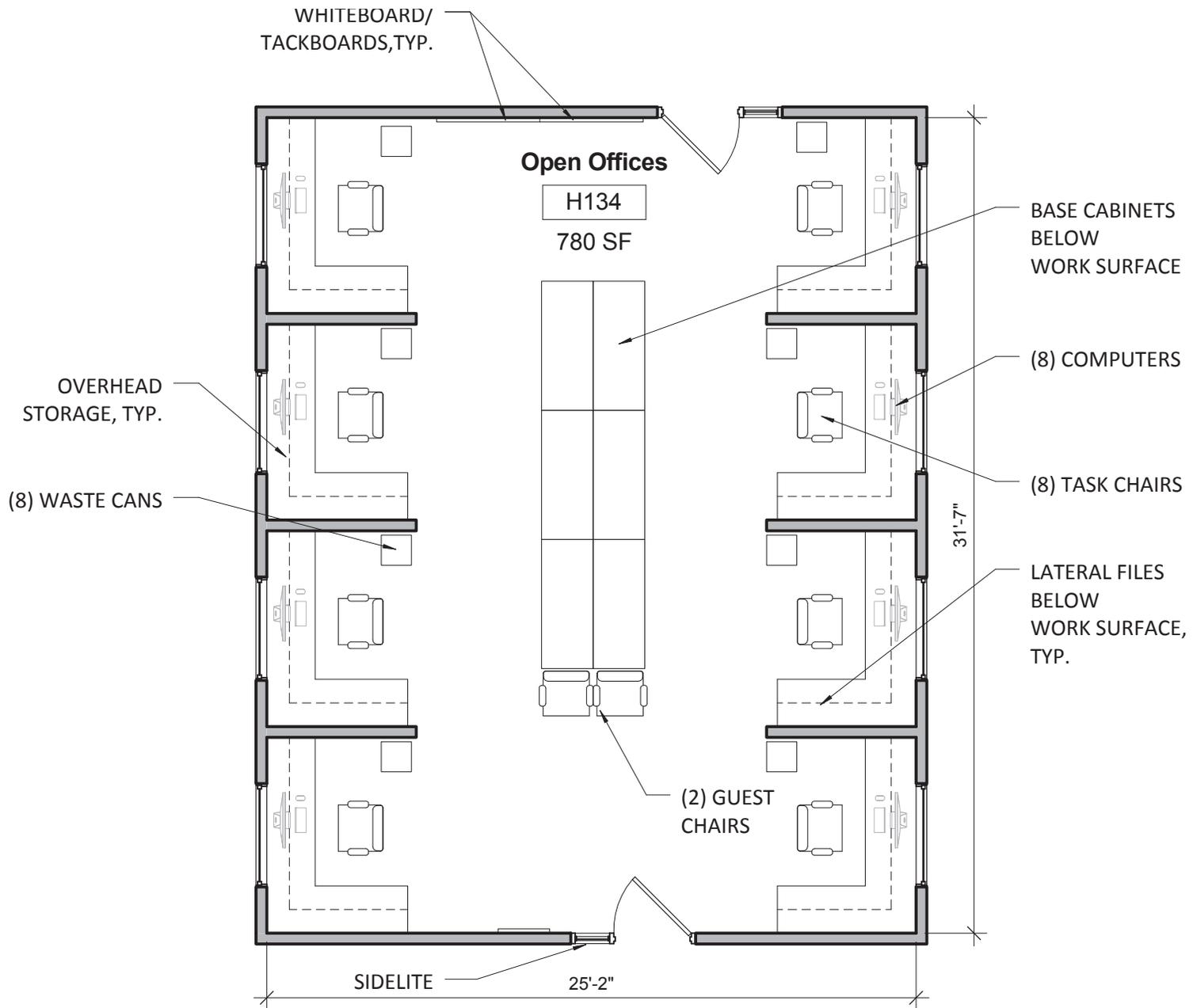
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall and 120V distributed to systems furniture. Additional capacity for equipment listed.
Data:	2 devices on opposing walls distributed to systems furniture.
Phone:	2 devices on opposing walls distributed to systems furniture.
Video:	Rough-in for future capacity
Intercom:	Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task light at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Conference Room
Number Required:	1
Total Number:	1
Occupants:	6-10
Area:	240 SF
Primary Function:	Meeting space/Student interventions
Relationships:	
Location:	Second Level
Adjacencies:	Medical Programs, Health Science work stations, Private Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Blinds in windows, secured access to entire office suite, 2 doors on either side of suite.

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Interior

Glazing: Clear glass

Natural Light: None required

Casework/Fixed Equipment:

-Whiteboard

Moveable Furnishings:

-Large table; 10 chairs

Equipment:

Flat panel television

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall, 1 four-plex floor box under table. Additional capacity for equipment listed.

Data: 1 device on opposing walls and 1 floor box under table

Phone: 1 device on opposing walls and 1 floor box under table

Video: Rough-in for future capacity

Intercom: None required

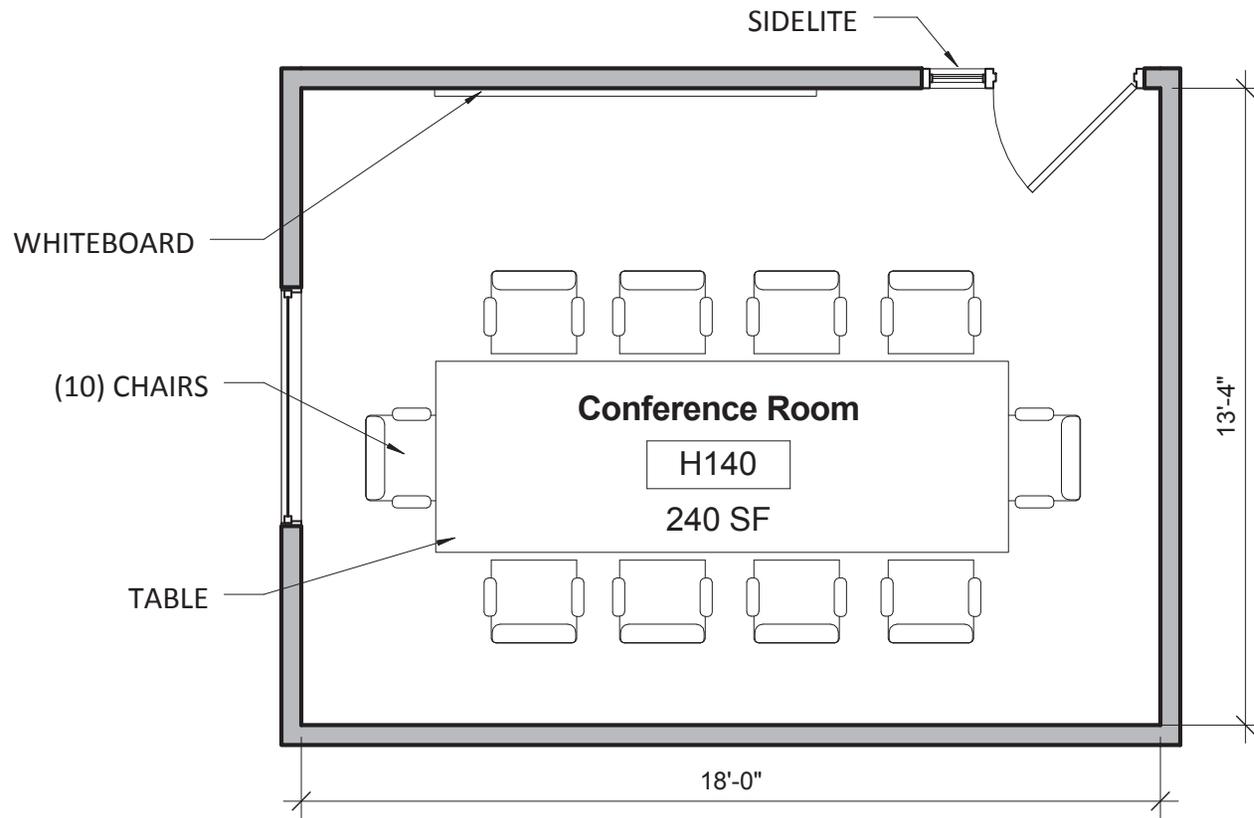
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: None required

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Waiting room
Number Required:	1
Total Number:	1
Occupants:	12-15
Area:	375 SF
Primary Function:	Waiting and reception space for the clinic
Relationships:	
Location:	First Level
Adjacencies:	Elevator; Main Corridor; entry to suite; Medical Office area; may share space with MA mock waiting room or separated by a retractable wall.
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting feel

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Needs to be insulated for sound control

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Reception desk with 2 workstations
 -Upper and lower cabinets for storage with counter top space

Moveable Furnishings:

-2 small magazine tables, comfortable chairs or couches for 12 people, 3-4 office chairs

Equipment:

-Computers and monitors; printer; label maker; copy machine; desktop speaker phone; shredder

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall, and at work stations. Additional capacity for equipment listed.

Data: 2 devices per wall and at work stations

Phone: 1 device per workstation

Video: Rough-in for future capacity

Intercom: None required

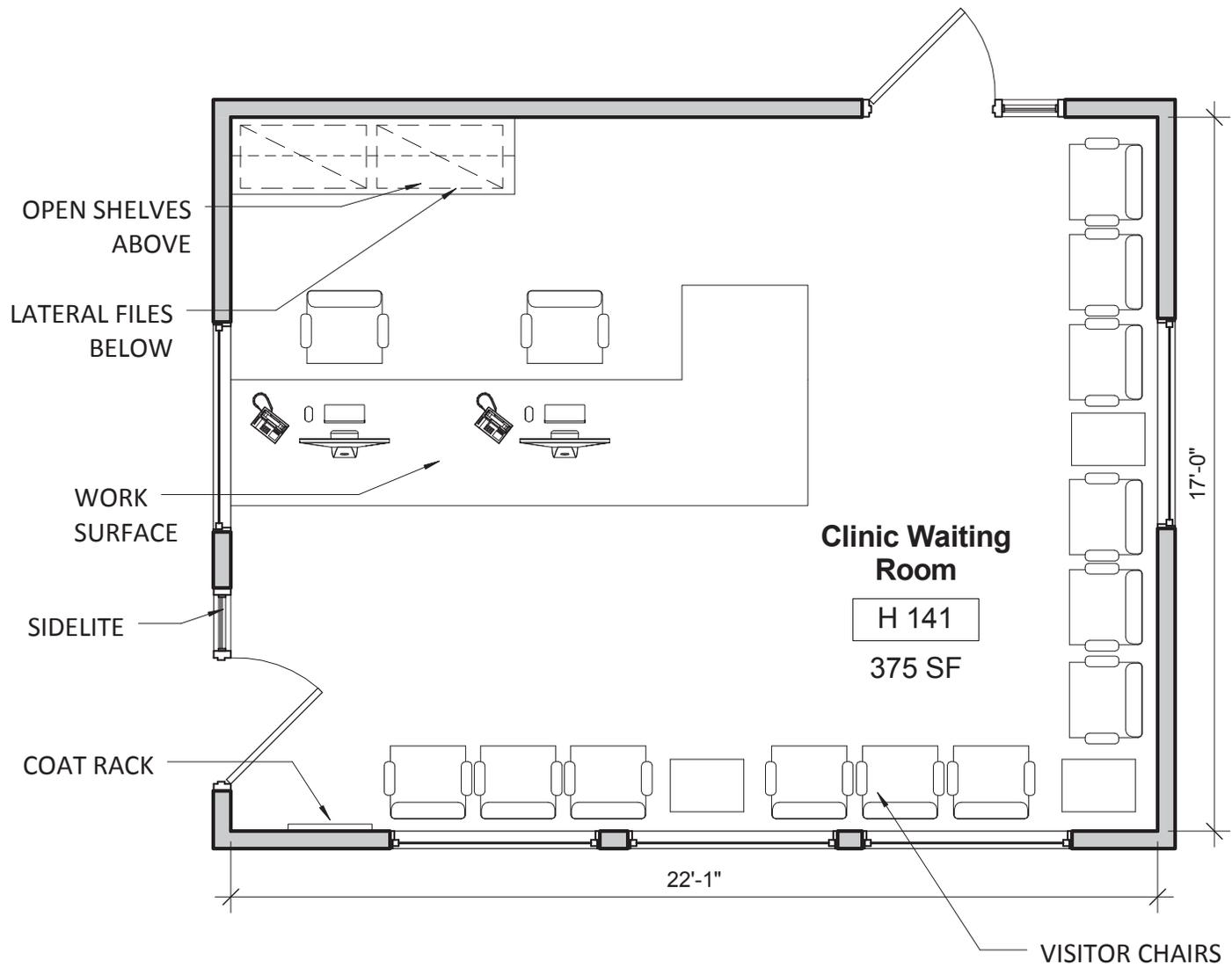
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Restroom
Number Required:	1
Total Number:	1
Occupants:	1
Area:	80 SF
Primary Function:	Accessible restroom for clinic patrons in the waiting room space

Relationships:

Location:	First Level
Adjacencies:	Clinic waiting room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural light feel

Finishes:

Floor:	Ceramic Tile
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Needs to be insulated for sound control

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal

Special: None required

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Toilet; Lavatory; Mirror; Grab bars; Dispensers for paper towels, soap, toilet paper; Baby changing station

Moveable Furnishings:

None required

Equipment:

-Trash can

Technical Requirements

Mechanical:

Ventilation: 1.0 CFM/sq.ft. (100% Exhaust)

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 40 (NC/RC)

Special Systems: 5 min. air changes (min..)

Plumbing: Hand wash sink, Floor Drain, water, waste and vent

Electrical:

Power: 1 GFCI duplex receptacle

Data: None required

Phone: None required

Video: None required

Intercom: Ceiling Speakers with volume control

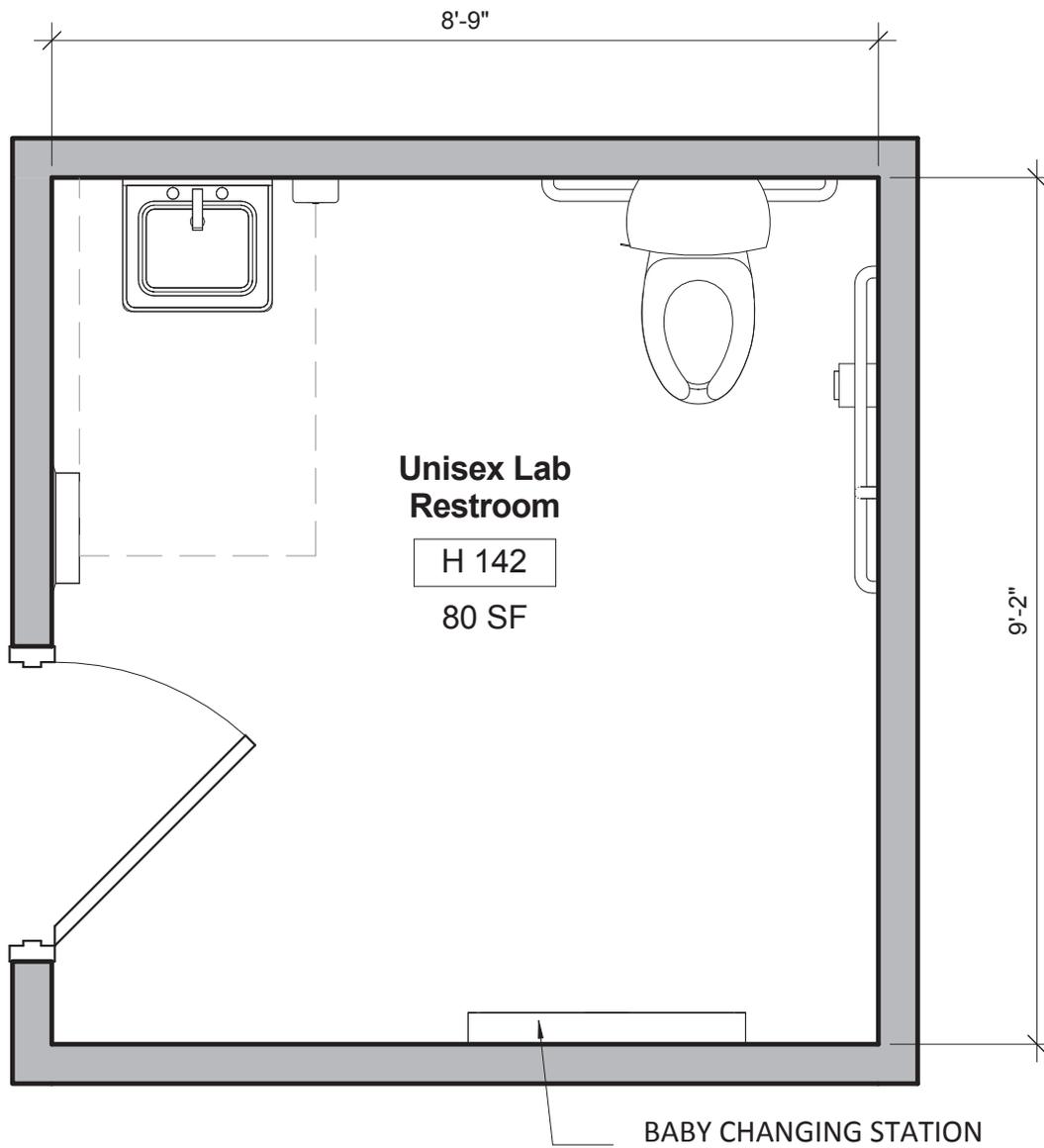
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 30

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Exam Room
Number Required:	3
Total Number:	3
Occupants:	2-4
Area:	150 SF
Primary Function:	Patient examination rooms

Relationships:

Location:	First Level
Adjacencies:	Clinic waiting room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting feel

Finishes:

Floor:	Tile or Linoleum
Walls:	Painted gypsum board
Ceiling:	Gypsum board
Specialty Finishes:	All surfaces must be cleanable.
Sound:	Needs to be insulated for sound control

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Patient privacy during examinations

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: None required

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

- Small upper and lower cabinet for storage with sink
- Wall mount computer and screen for electronic charting

Moveable Furnishings:

- Exam table 30"x72"
- Rolling stool
- 2 chairs

Equipment:

- Exam equipment

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Hand wash sink, water, waste and vent

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices

Phone: 1 device

Video: Rough-in for future capacity

Intercom: Speakers with volume control

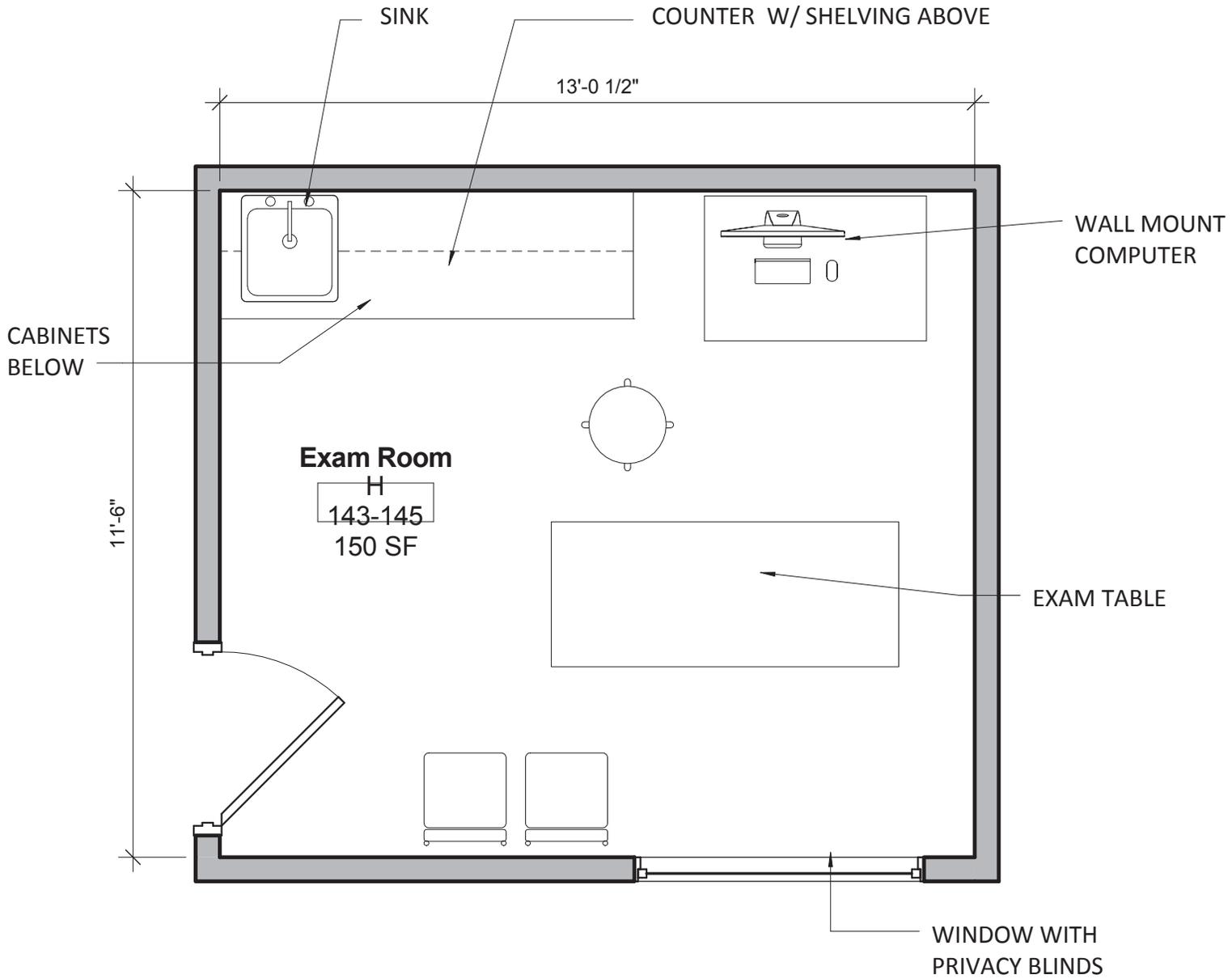
Lighting:

Fixture Type: T-5 Fluorescent lay-in direct

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Document storage
Number Required:	1
Total Number:	1
Occupants:	2-4
Area:	150 SF
Primary Function:	Document handling and secure patient record storage
Relationships:	
Location:	First Level
Adjacencies:	Clinic waiting room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Calm, Attractive, Professional

Finishes:

Floor:	Tile or Linoleum
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Needs to be insulated for sound control

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Locking Door

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	Interior Locking Door

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

None required

Moveable Furnishings:

-Locking records storage cabinets, table, 2 chairs

Equipment:

None required

Technical Requirements

Mechanical:

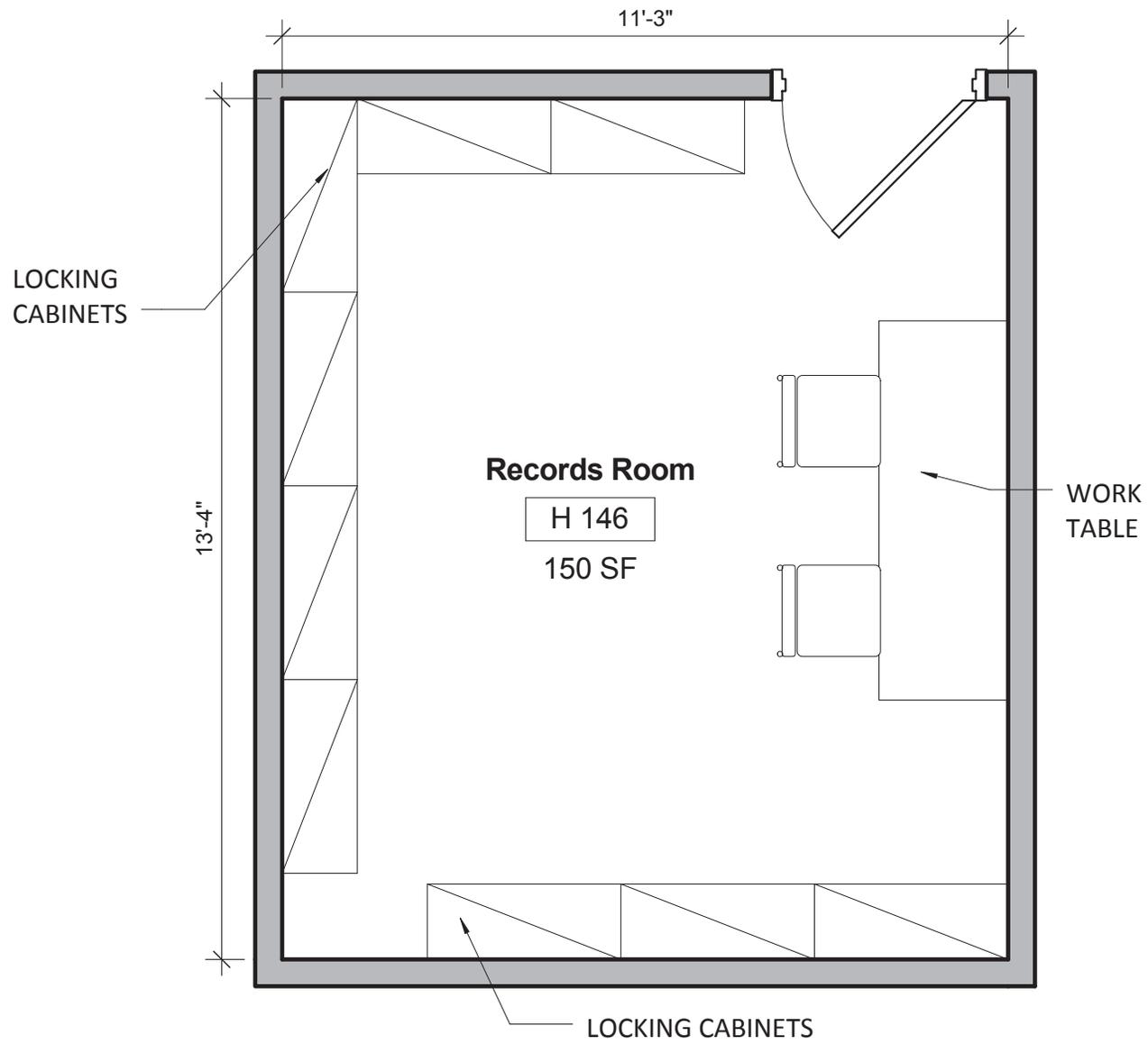
Ventilation	10 CFM/person + 0.12 CFM/sq.ft
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	None required
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	1 device
Phone:	1 device
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

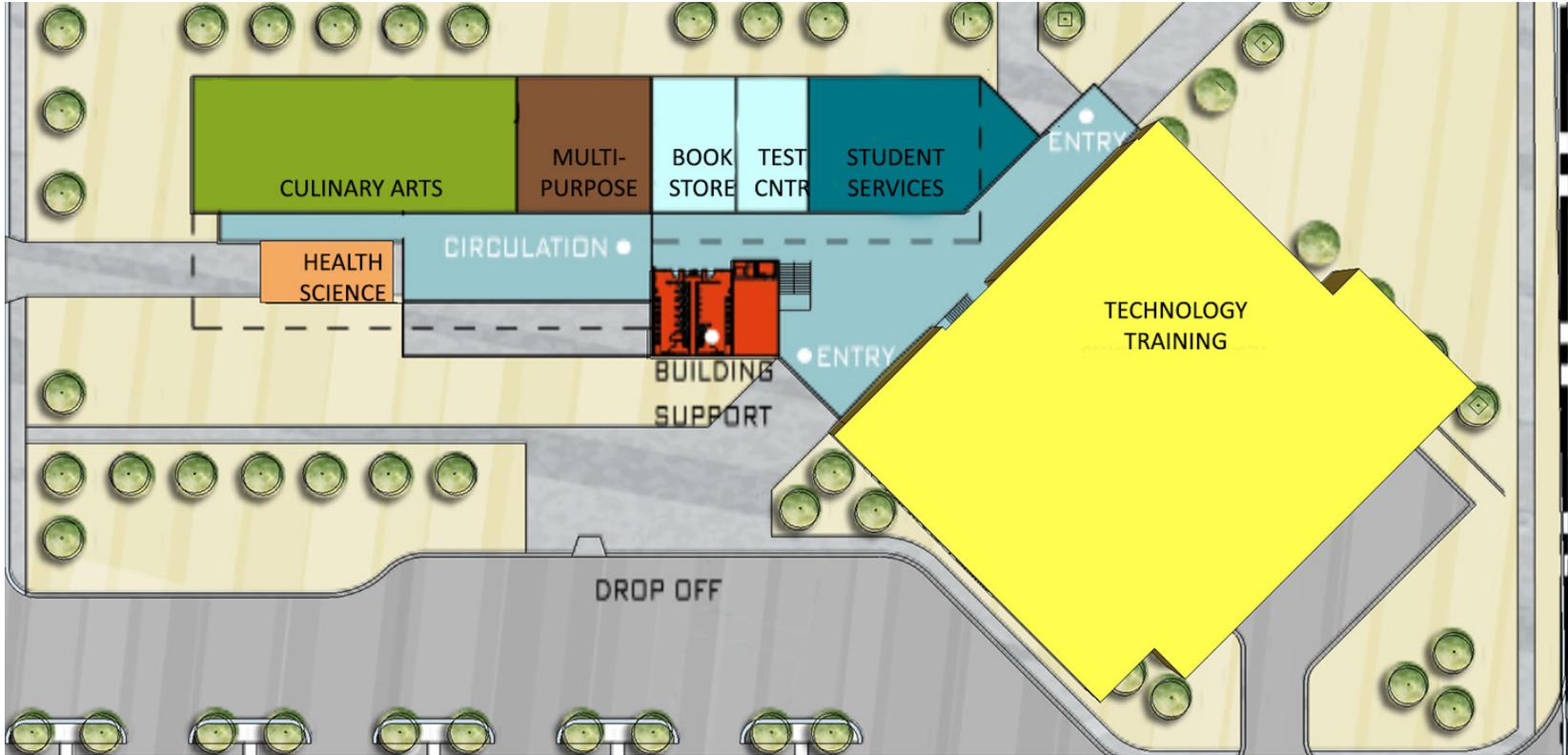
Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor

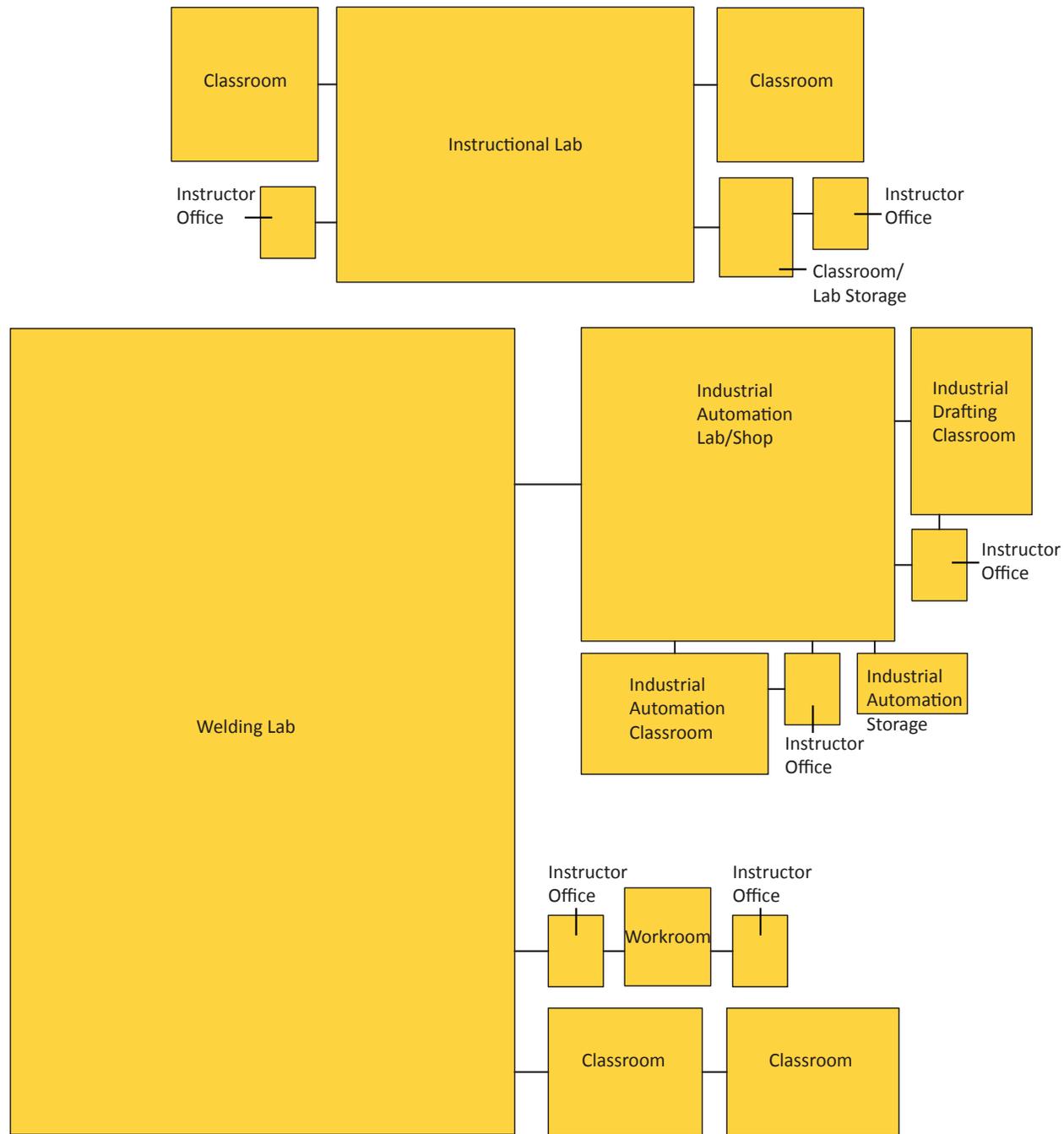


06 Technology Training

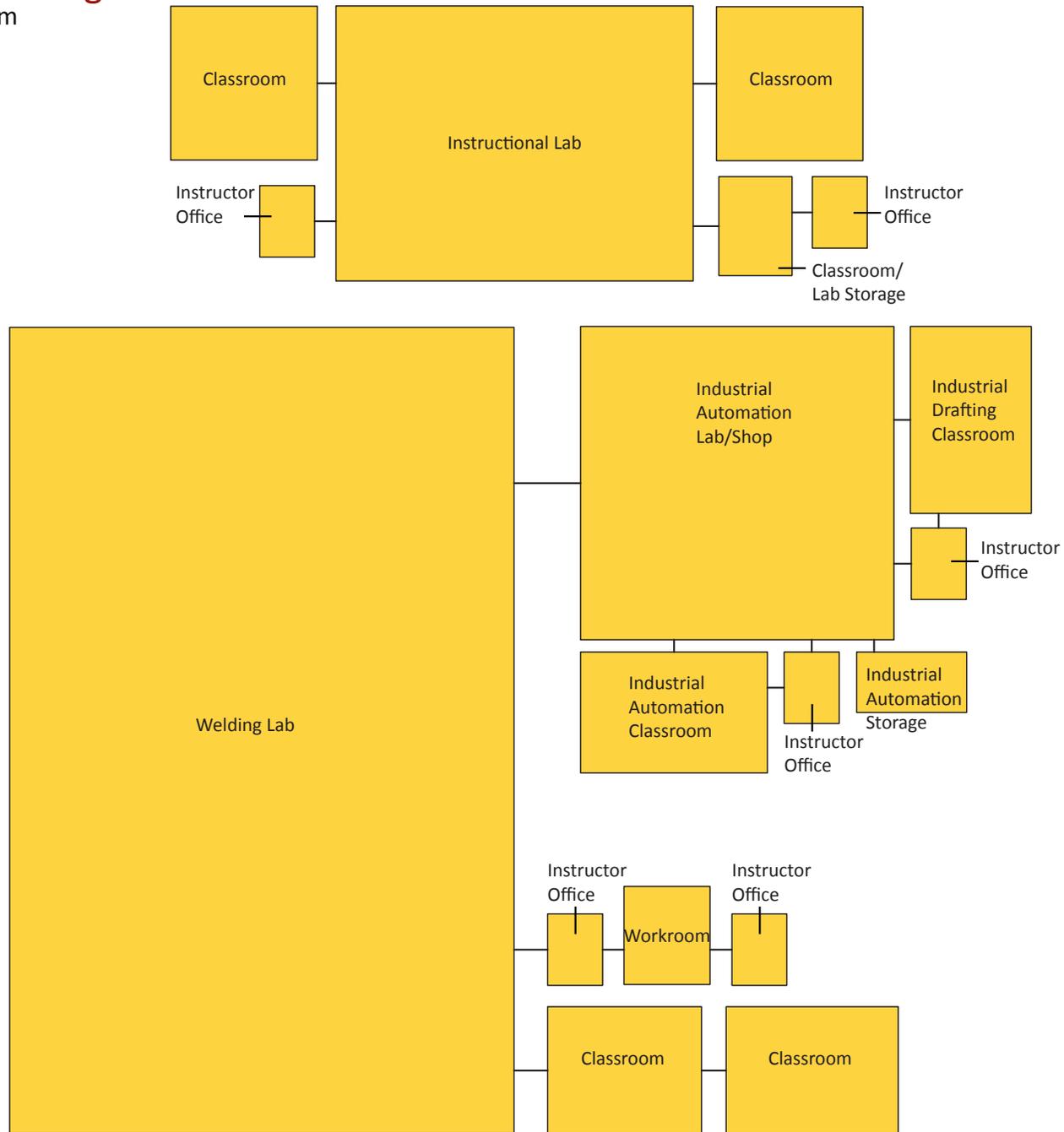
First Floor Relationship Diagram



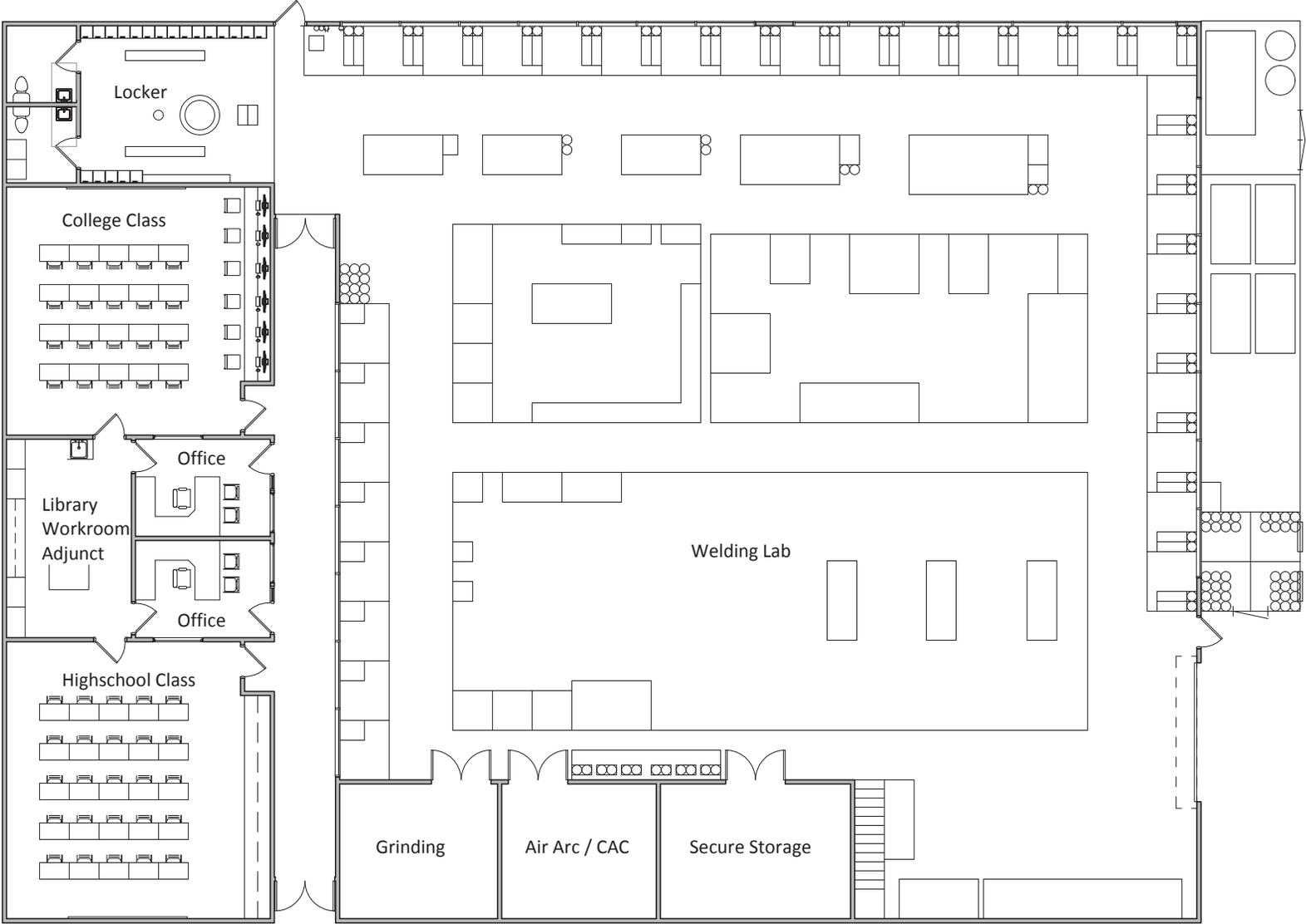
Adjacency Diagram



06 Technology Training Adjacency Diagram



Welding Suite Overall Diagram



Space Requirements

Space Summary:

Type of Space:	Instructor Office
Number Required:	2
Total Number:	2
Occupants:	2-3
Area:	133 SF
Primary Function:	Instructor work area for planning, writing, organizing, record keeping and general administration.

Relationships:

Location:	First Level
Adjacencies:	Classrooms, Workroom, Entrance Hallway
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Tile or polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Windows and doors into hallway and workroom/classroom. Needs to secure paper and computer based student records.

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- Base cabinets with workable surface
- Lateral Files
- Overhead Storage/Book Shelves
- Coat Rack

Moveable Furnishings:

- 1 Adjustable chair for Instructor
- 2 Fixed wheel mounted chairs for student/guest (Herman Miller WC410PMSLW5BK or similar)

Equipment:

- Computer, Whiteboard, Tack board

Technical Requirements

Mechanical:

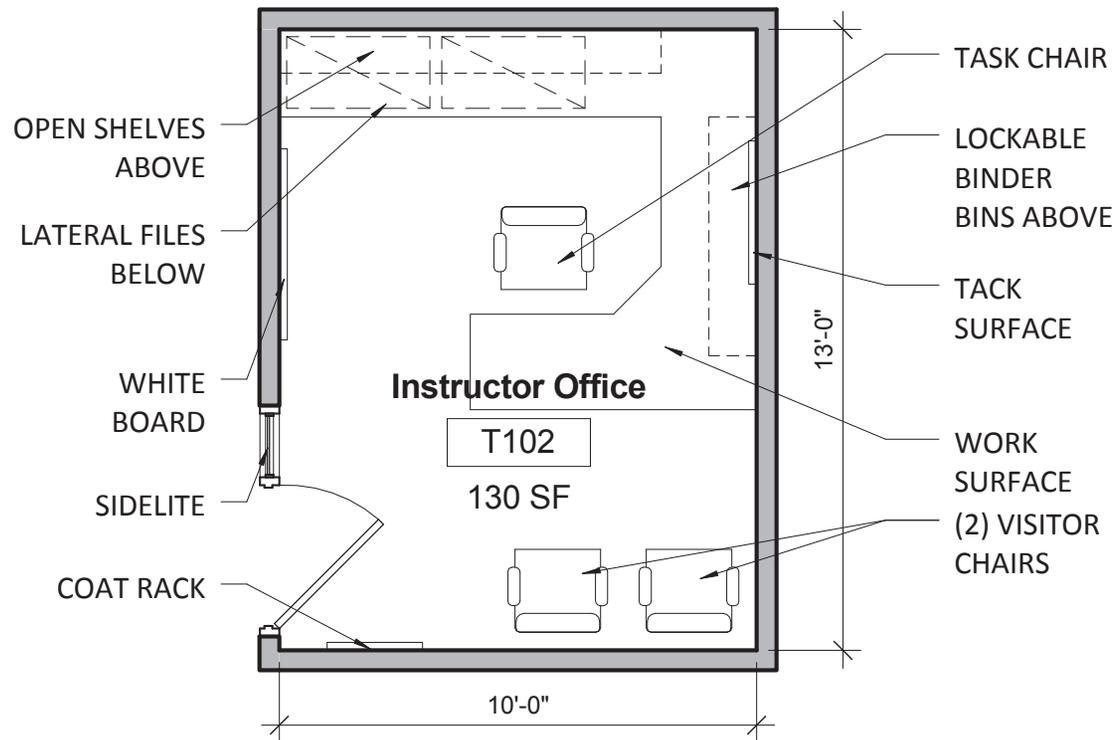
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. (2) Double duplex receptacles adjacent to desk. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Ceiling Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task light at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Instructor Workroom
Number Required:	1
Total Number:	1
Occupants:	6-8
Area:	279 SF
Primary Function:	Instructor work area for planning, writing, organizing, record keeping and general administration.

Relationships:

Location:	First Level
Adjacencies:	Classrooms, Instructor Offices
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Tile or polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

General security against unauthorized access

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

- Bookcase
- Storage cabinet
- Wardrobe
- Base cabinet, counter area and upper cabinet

Moveable Furnishings:

- 1 Large work table
- 8 Fixed wheel mounted chairs for student/guest (Herman Miller WC410PMSLW5BK or similar)

Equipment:

- Whiteboard & Tack board
- Refrigerator

Technical Requirements

Mechanical:

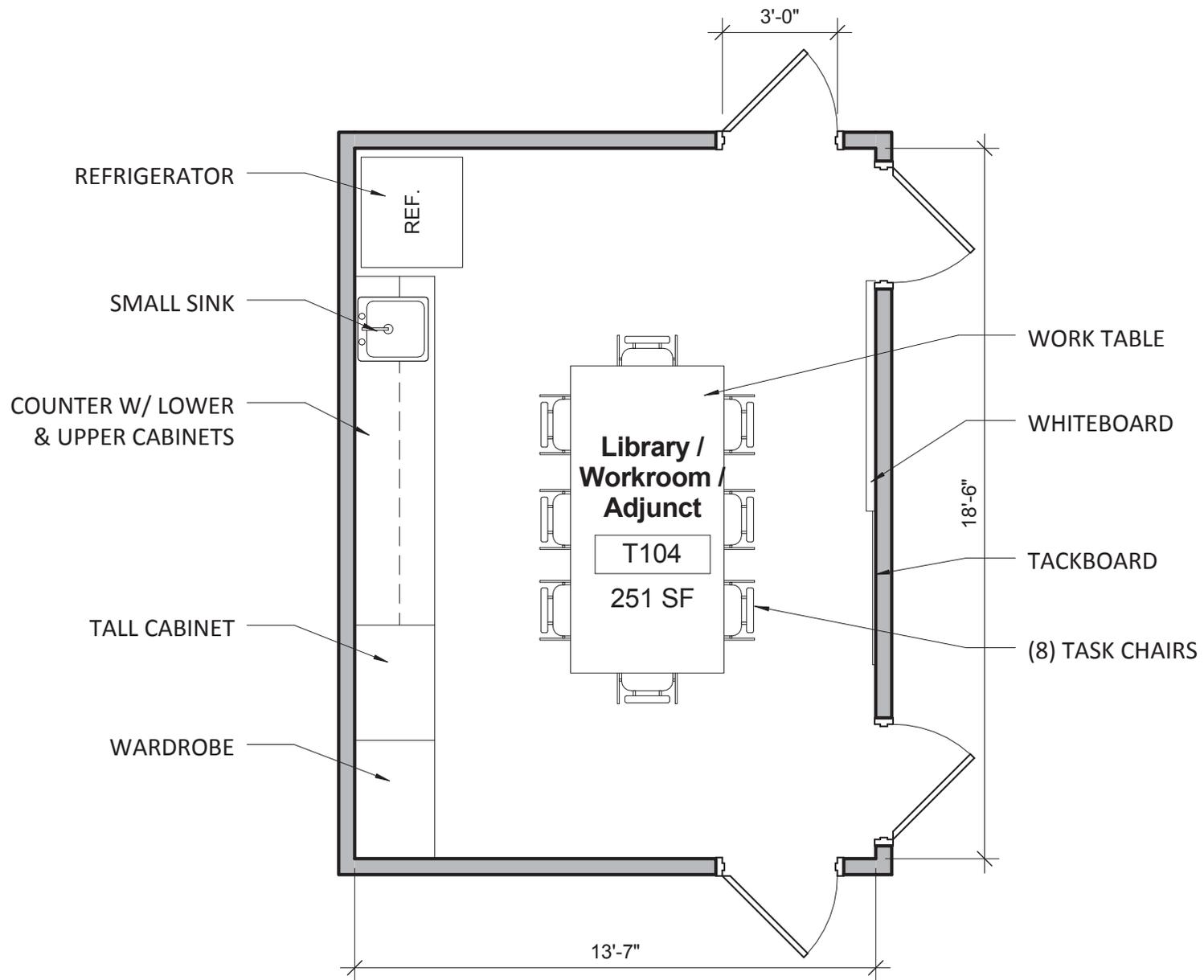
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	Small Sink

Electrical:

Power:	6 duplex receptacles throughout. 1 GFCI Double duplex outlet above counter near sink. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Ceiling Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task light at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	1
Total Number:	1
Occupants:	23
Area:	650 SF
Primary Function:	Instructing students in an academic classroom setting

Relationships:

Location:	First Level
Adjacencies:	Instructor Offices, Workroom, Entrance Hallway
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Tile or polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

General security considerations

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- 1 large LED TV
- Whiteboard
- Base cabinets and durable counter surface

Moveable Furnishings:

- 1 Adjustable chair for Instructor
- 24 Fixed wheel mounted chairs for student/guest (Herman Miller WC410PMSLW5BK or similar)
- 24 Student desks/tables
- 1 small desk
- 1 lectern (Safco Products Executive Mobile Lectern - 8918 or similar)
- 1 bookcase

Equipment:

- None required

Technical Requirements

Mechanical:

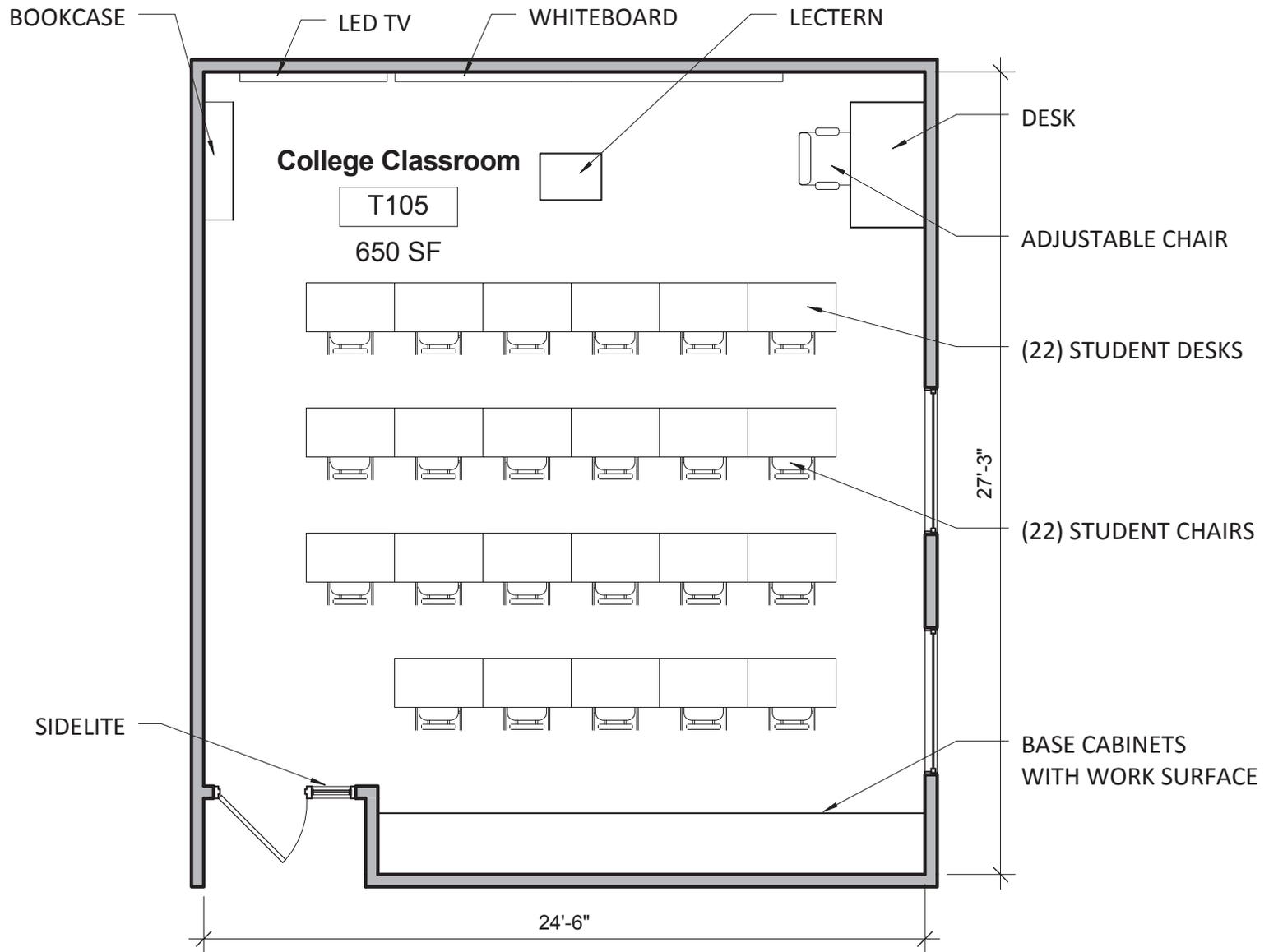
Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	Surround Sound
Plumbing:	None required

Electrical:

Power:	16 duplex receptacles. Additional capacity for equipment listed.
Data:	8 devices throughout space
Phone:	2 devices on opposing walls
Video:	Wall mounted LED TV
Intercom:	Ceiling Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task light at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	1
Total Number:	1
Occupants:	25
Area:	725 SF
Primary Function:	Instructing students in an academic classroom setting

Relationships:

Location:	First Level
Adjacencies:	Instructor Offices, Workroom, Entrance Hallway
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Tile or polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

General security considerations

Doors:

Type: Solid core wood with clear finish

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: None required

Casework/Fixed Equipment:

- 1 large LED TV
- Whiteboard
- Base cabinets and durable counter surface

Moveable Furnishings:

- 1 Adjustable chair for Instructor
- 24 Fixed wheel mounted chairs for student/guest (Herman Miller WC410PMSLW5BK or similar)
- 24 Student desks/tables
- 1 small desk
- 1 lectern (Safco Products Executive Mobile Lectern - 8918 or similar)
- 1 bookcase

Equipment:

- None required

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: Surround Sound

Plumbing: None required

Electrical:

Power: 16 duplex receptacles. Additional capacity for equipment listed.

Data: 8 devices throughout space

Phone: 2 devices on opposing walls

Video: Wall mounted LED TV

Intercom: Ceiling Speakers with volume control

Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Task light at work surface

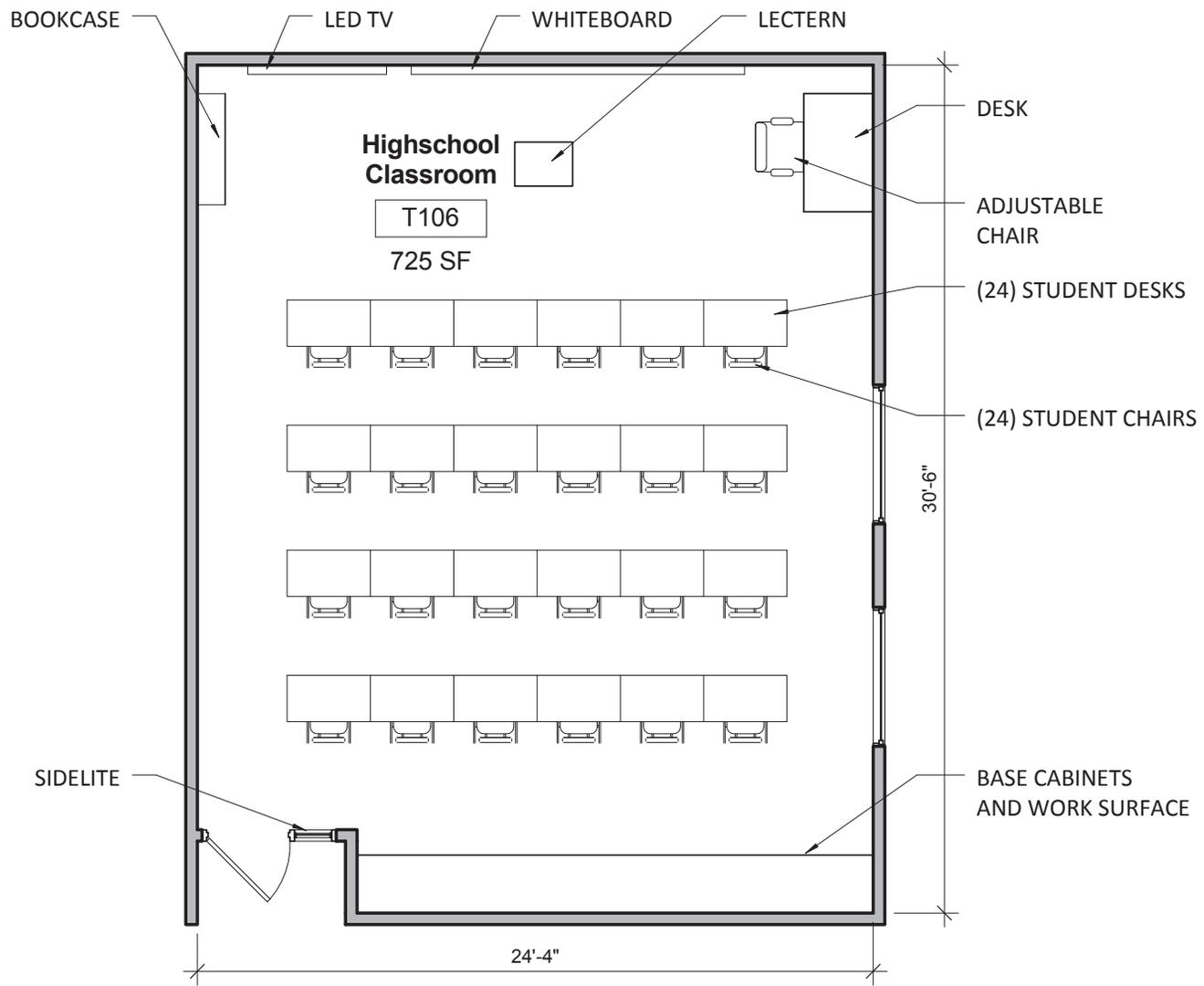
40

Accent Lighting:

Foot Candles:

Occupancy sensor

Controls:



Space Requirements

Space Summary:

Type of Space:	Welding Laboratory
Number Required:	1
Total Number:	1
Occupants:	31
Area:	7175 SF
Primary Function:	Specific instruction, demonstration, practice and evaluation of welding skills.

Relationships:

Location:	First Level
Adjacencies:	Grinding Room, Air Arc CAC Lab, Secure Storage, Locker Area
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Unfinished, fireproofed
Specialty Finishes:	None required
Sound:	Sound isolate floor and walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 19'-0"

Privacy/Security:

Windows from hallway into the lab and instructor office. Secure high cost equipment and tools.

Doors:

Type: Hollow metal and overhead rolling door

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior; Interior

Glazing: Low-E; Clear Glass

Natural Light: Desirable

Casework/Fixed Equipment:

- Lockable base storage cabinets

Moveable Furnishings:

-33 metal stools, 31 welding booths, 3 burn tables, CAD/CAM table, instructor table, 3 work tables, medial blast cabinets
-Storage cabinets/racks, work benches, work stands, quenching tanks, oxygen/fuel carts

Equipment:

- CAD/CAM, bend testers, tensile strength tester, benders, forge, anvil, chainfall A frame, vertical and horizontal band saw, megafab iron worker, unihydro iron worker, mill, lathe, high bay overhead crane, 5 welders, 2 spool guns

Technical Requirements

Mechanical:

Ventilation: 1.5 CFM/sq.ft. (100% Exhaust)

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: Smoke/fume recovery system connected to each welding booth and cutting table

Plumbing: Hand sink and quenching tanks, supply, waste and vent, floor drains

Electrical:

Power: Wall mounted 208VAC 3-phase buss system with drop cords for welding equip. with panic switches throughout lab, reenergize system, (16) 208VAC outlets/hanging cords with Metric decontactor. 110VAC, 20A duplex receptacle per welding booth. Electrical islands as need for equipment.

Data: 1 device at instructor station

Phone: 1 device at instructor station

Video: None required

Intercom: Ceiling Speakers with volume control

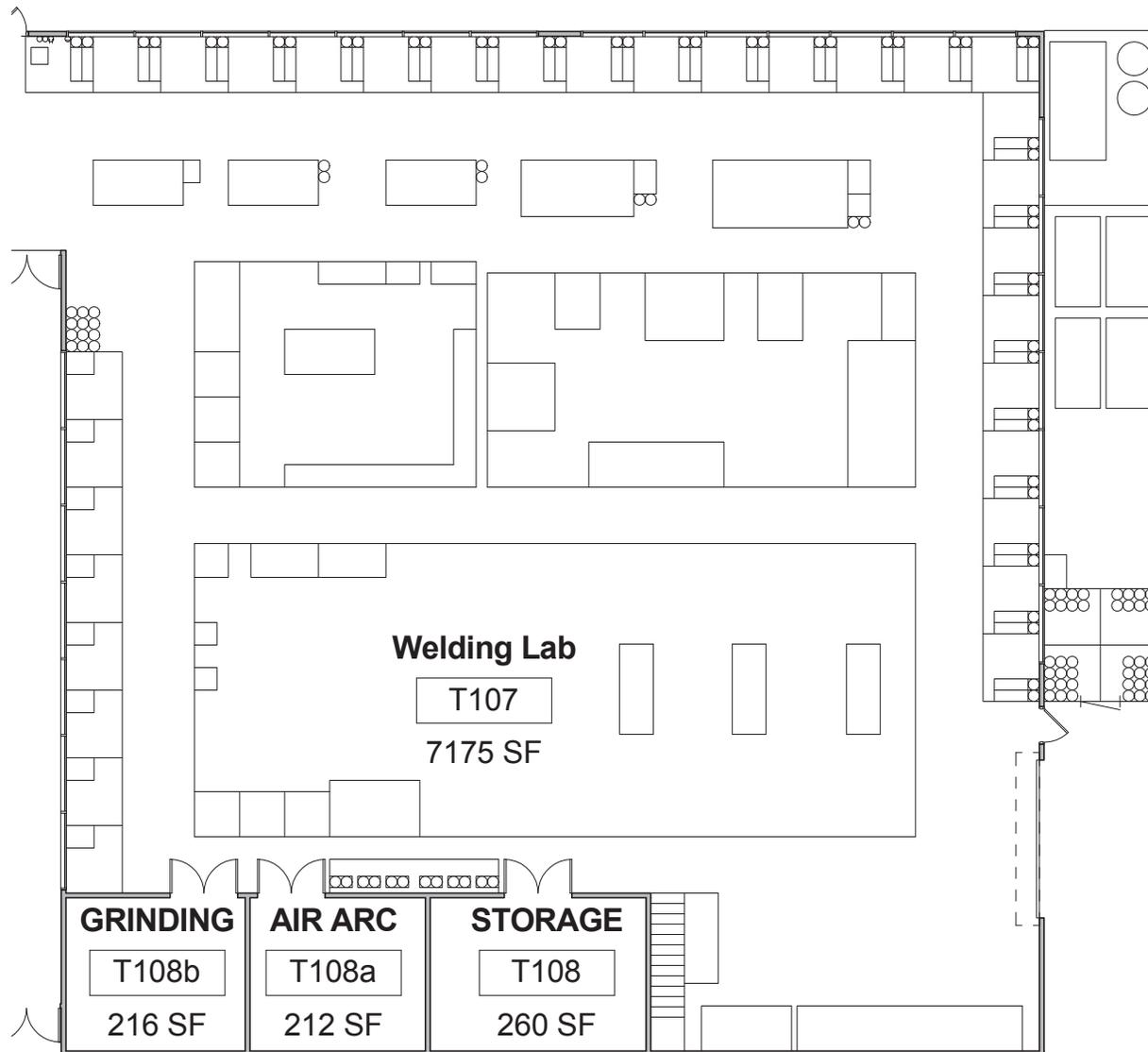
Lighting:

Fixture Type: LED or other high efficiency system

Accent Lighting: Task light at each work station and welding booth

Foot Candles: 100 in lab areas 140 in inspection areas

Controls: Switch or relay



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	2-3
Area:	279 SF
Primary Function:	General storage for welding supplies and work area for repairs.

Relationships:

Location:	First Level
Adjacencies:	Welding Laboratory
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable

Finishes:

Floor:	Polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Unfinished, load bearing
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

General security, locking door

Doors:

Type:	Double door, hollow metal
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-Storage racks and cabinets
-1 large work bench

Equipment:

-Shop air supply

Technical Requirements

Mechanical:

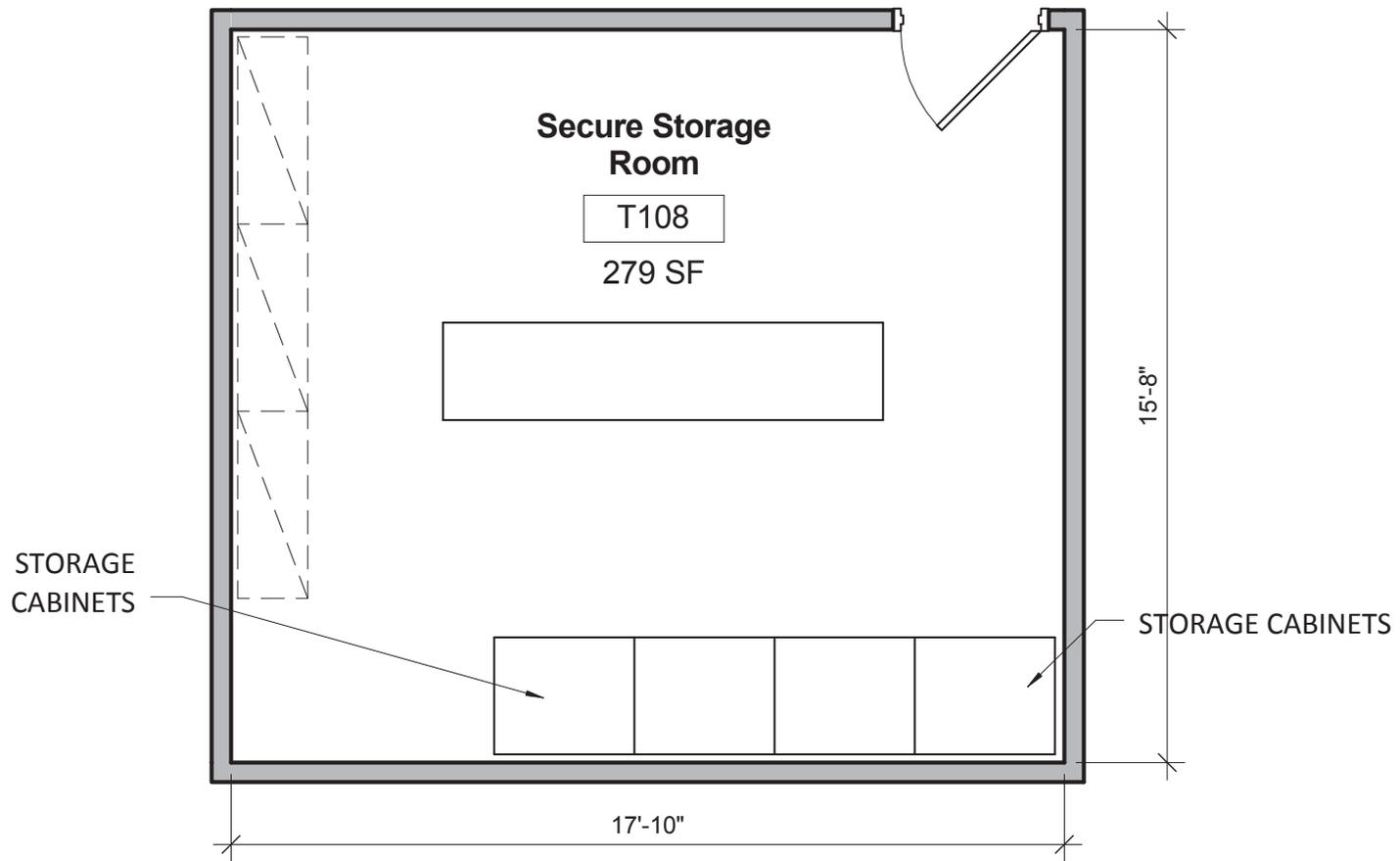
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 receptacle on each wall. 208VAC and 60A receptacle for each welder testing station. Additional capacity for equipment listed.
Data:	None required
Phone:	None required
Video:	None required
Intercom:	None required

Lighting:

Fixture Type:	LED or other high efficiency system
Accent Lighting:	Task light at work surface
Foot Candles:	140
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Air Arc Laboratory
Number Required:	1
Total Number:	1
Occupants:	2-8
Area:	212 SF
Primary Function:	Instructing students in a hands on laboratory environment.

Relationships:

Location:	First Level
Adjacencies:	Welding Laboratory
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, Fireproof

Finishes:

Floor:	Polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Unfinished, Fireproofed, load bearing for overhead storage
Specialty Finishes:	None required
Sound:	Sound isolate slab and walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Secure high cost equipment and tools.

Doors:

Type:	Hollow metal
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-2 work tables

Equipment:

-Shop air supply (main trunk line 2 outlets)

Technical Requirements

Mechanical:

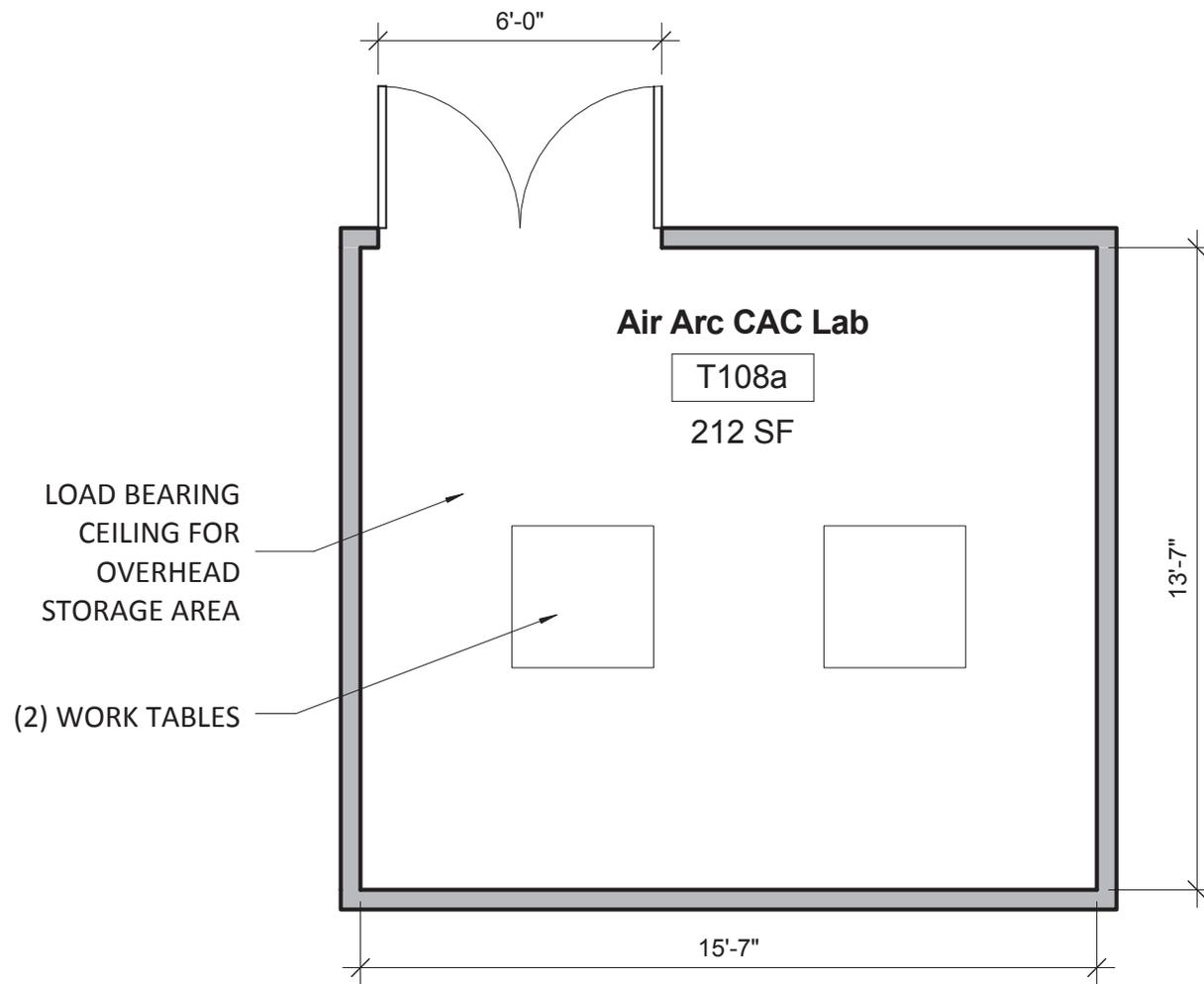
Ventilation:	1.5 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. 208VAC 3-phase for equipment, 4 outlets/hanging cords. Additional capacity for equipment listed.
Data:	None required
Phone:	1 device at entry
Video:	None required
Intercom:	Ceiling speakers with volume control

Lighting:

Fixture Type:	LED or other high efficiency system, armored
Accent Lighting:	Task light at work surface, armored
Foot Candles:	100
Controls:	Switch or relay



Space Requirements

Space Summary:

Type of Space:	Laboratory
Number Required:	1
Total Number:	1
Occupants:	2-8
Area:	216 SF
Primary Function:	Instructing students in a hands on laboratory environment.

Relationships:

Location:	First Level
Adjacencies:	Welding Laboratory
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable,

Finishes:

Floor:	Polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Unfinished, fireproofed, load bearing for storage
Specialty Finishes:	None required
Sound:	Sound isolate floor and walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Windows and doors from the lab. Secure high cost equipment and tools.

Doors:

Type:	Hollow metal
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation
Windows:	
Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

-Wall mounted storage racks

Moveable Furnishings:

-None required

Equipment:

-4 Ellis belt grinders

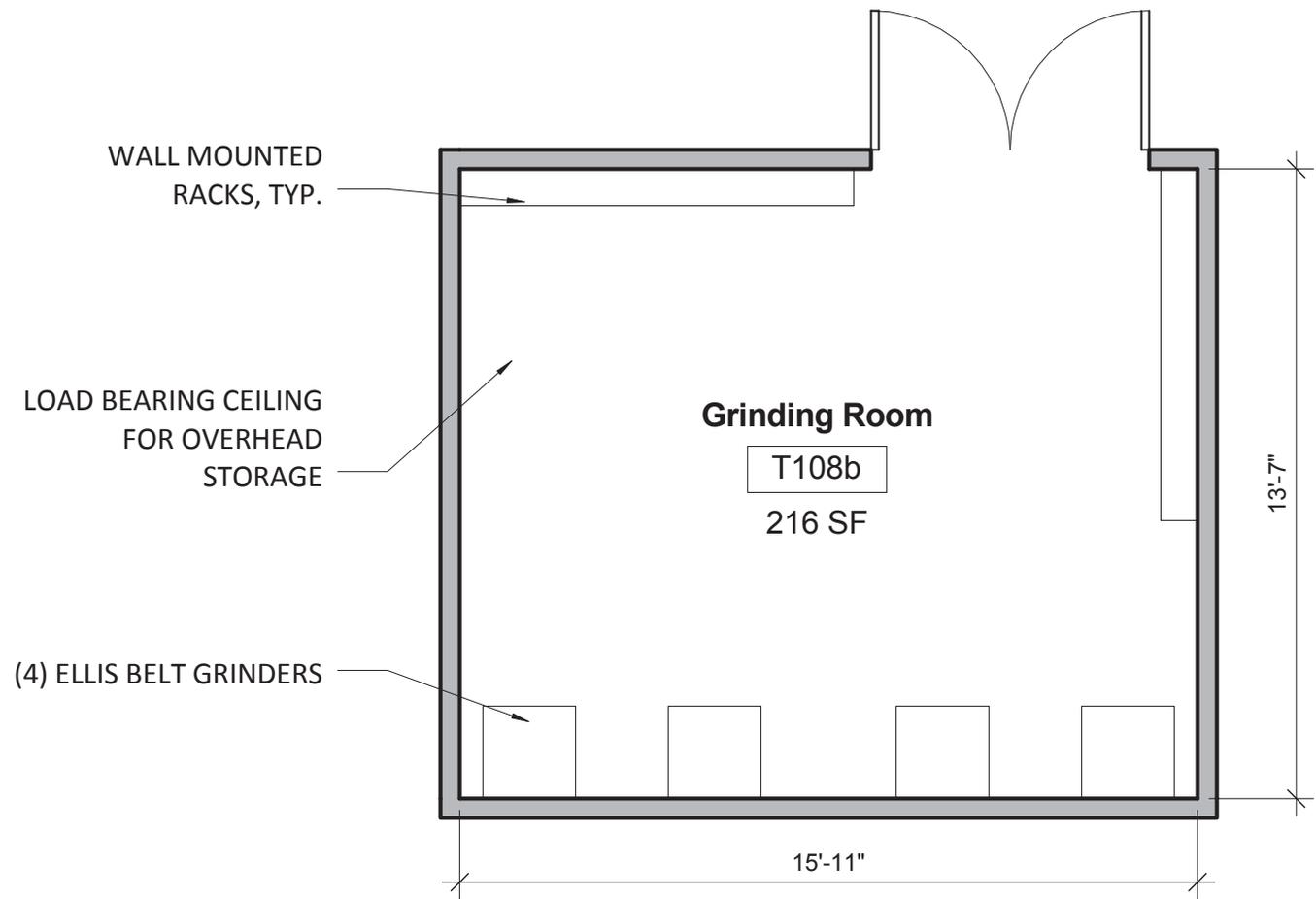
Technical Requirements

Mechanical:

Ventilation:	0.75 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	(1) 110VAC and 20A duplex receptacle per wall. Additional capacity for equipment listed.
Data:	None required
Phone:	1 device at entry
Video:	None required
Intercom:	Ceiling Speakers with volume control
Lighting:	
Fixture Type:	LED or other high efficiency system
Accent Lighting:	Task light at work surface
Foot Candles:	100
Controls:	Switch or relay



Space Requirements

Space Summary:

Type of Space:	Locker Area
Number Required:	1
Total Number:	1
Occupants:	24
Area:	306 SF
Primary Function:	Locker and storage area, personal washing area and safety eye wash station.

Relationships:

Location:	First Level
Adjacencies:	Welding Laboratory
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in"

Finishes:

Floor:	Tile or polished/sealed concrete, with floor drain
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Door into laboratory. Needs to be secure for safety reasons.

Doors:

Type:	Hollow metal
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

- 40 wall lockers stacked two high
- Coat rack and shelving
- Gang sink
- 1 Drinking fountain
- 1 Eye wash station

Moveable Furnishings:

- None required

Equipment:

- None required

Technical Requirements

Mechanical:

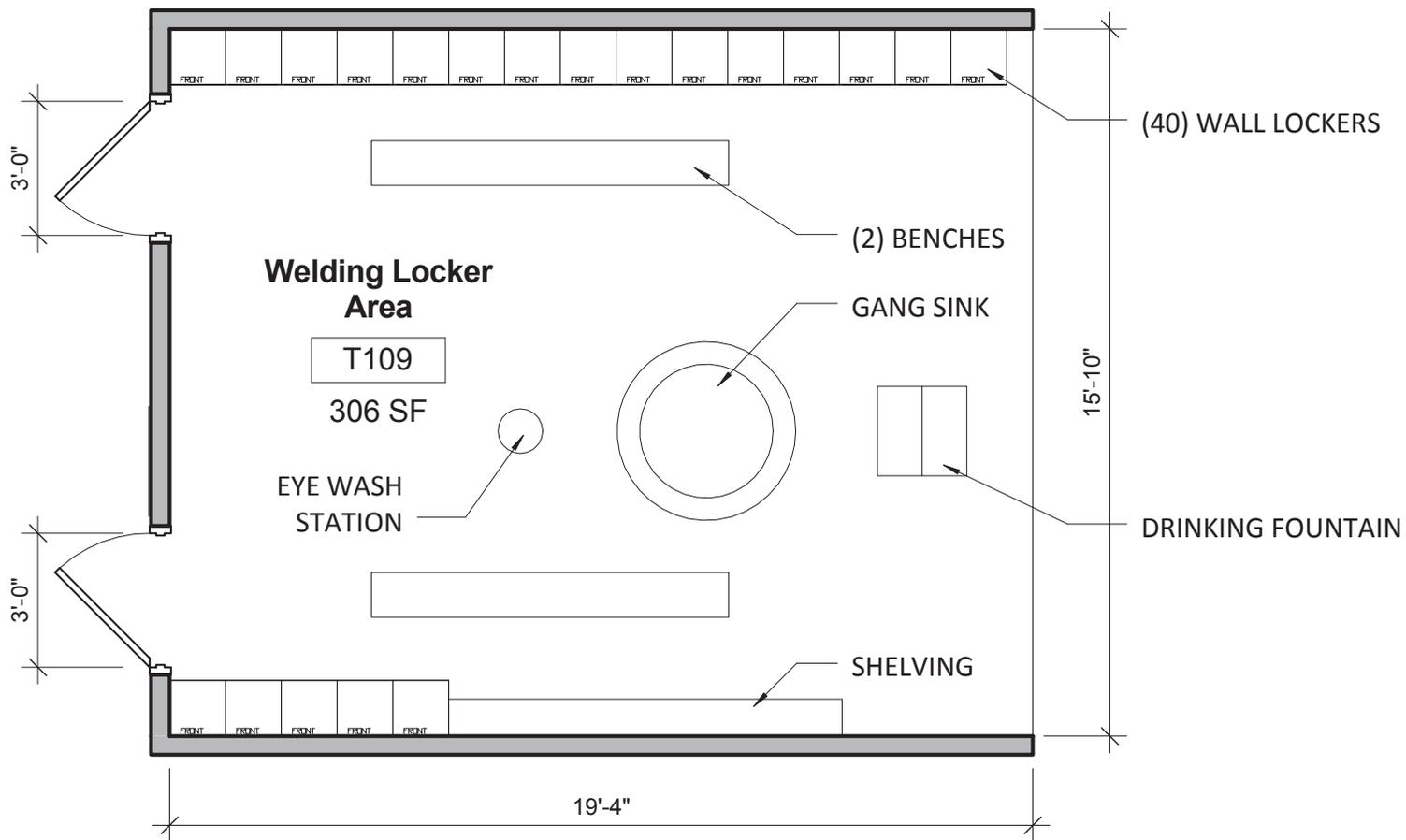
Ventilation:	0.5 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	100% Exhaust
Plumbing:	None required

Electrical:

Power:	2 duplex receptacle each wall
Data:	None required
Phone:	1 device at entry
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	LED or other high efficiency system
Accent Lighting:	Task light at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space: Rest rooms
 Number Required: 1 per gender
 Total Number: 2
 Occupants: 1
 Area: 55 SF
 Primary Function: Building Support Space

Relationships:

Location: First Level
 Adjacencies: Welding Locker Area
 Separation: None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable

Finishes:

Floor: Tile or polished/sealed concrete
 Walls: CMU, Concrete, or equiv. durable surface
 Ceiling: Suspended 2'x4' ACT
 Specialty Finishes: None required
 Sound: None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Privacy, Locked door from inside room.

Doors:

Type: Solid core wood with clear finish
 Frame: Painted hollow metal
 Special: Sound Isolation

Windows:

Type: None required
 Glazing: None required
 Natural Light: None required

Casework/Fixed Equipment:

-Toilet
 -Sink
 -Mirror

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

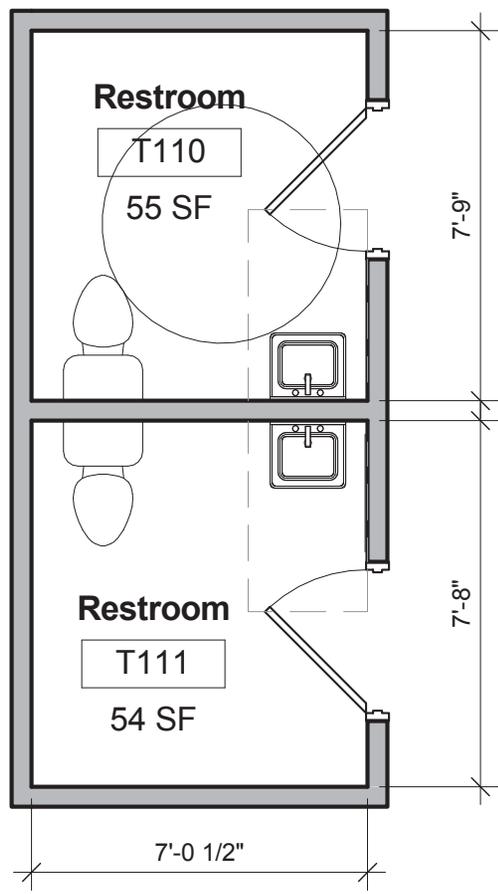
Ventilation: 1.0 CFM/sq.ft. (100% Exhaust)
 Summer Design Temp: 70 ° F
 Winter Design Temp: 70 ° F
 Controls: Individual direct digital controls
 Sound Criteria: 35 (NC/RC)
 Special Systems: None required
 Plumbing: Toilet and sink

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.
 Data: None required
 Phone: None required
 Video: None required
 Intercom: None required

Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect
 Accent Lighting: Task light at work surface
 Foot Candles: 40
 Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	20 Students; 1-3 Instructors
Area:	750 SF
Primary Function:	Provide instruction, training & demonstration to industrial maintenance and machining student

Relationships:

Location:	First Level
Adjacencies:	Welding; Instructor Offices and Industrial Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Hard, durable surface
Walls:	durable; painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	Sound dampening ACT to reduce noise from shop/lab

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Windows from classroom into the lab and instructor office.

Doors:

Type: Solid core wood with clear finish, Wide enough for equipment.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior; Interior

Glazing: Low-E; Clear Glass

Natural Light: Desirable

Casework/Fixed Equipment:

- Locking base cabinets with durable counters
- Fixed ceiling mount projector and screen

Moveable Furnishings:

- 10 24"x60" tables; 20 student chairs; 1 desk chair; 2 locking metal storage cabinets with heavy-duty casters; 1 teacher desk; 2 bookcases; 2 rolling steel tables

Equipment:

- Computer, Printer, Whiteboard, 2 small Bulletin Boards, Phone

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. 2 receptacles for industrial process trainers. Floor receptacles for student lap tops.

Data: 2 devices on opposing walls and at instructor station.

Phone: 2 devices on opposing walls and at instructor station.

Video: Rough-in for future capacity

Intercom: Ceiling speaker

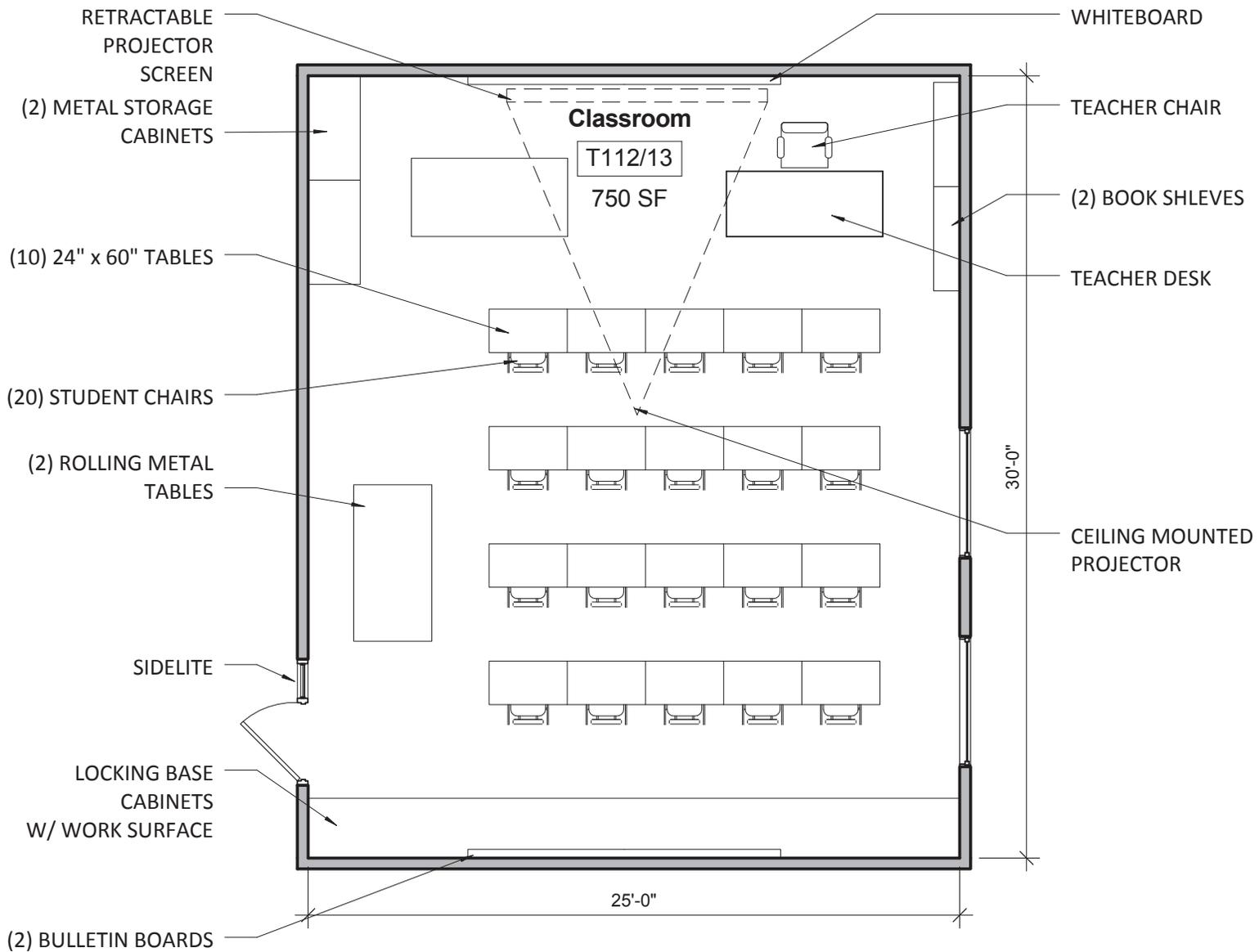
Lighting:

Fixture Type: T-5 Fluorescent lay-in

Accent Lighting: Zoned light bank over projection screen

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Laboratory
Number Required:	1
Total Number:	1
Occupants:	30 Students; 1-3 Instructors
Area:	3248 SF
Primary Function:	Provide training, demonstration, student work in industrial maintenance and machining.
Relationships:	
Location:	First Level
Adjacencies:	Welding; Instructor Offices and Industrial Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	VCT or hard, durable surface, reinforced
Walls:	durable; painted gypsum board
Ceiling:	Unfinished, fireproofed
Specialty Finishes:	None required
Sound:	Sound isolate floor and walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 19'-0"

Privacy/Security:

Windows from classroom into the lab and instructor office. Secure high cost equipment and tools.

Doors:

Type: Solid core wood with clear finish, Wide enough for equipment. Roll-up exterior door 10'x12'.

Frame: Painted hollow metal

Special: Sound Isolation

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: Desirable

Casework/Fixed Equipment:

-Industrial solvent wash station

Moveable Furnishings:

-4 metal shop tables with locking casters
 -10 shop stools
 -5 locking metal storage cabinets with heavy-duty casters

Equipment:

-4-6 modular industrial manufacturing process trainers
 -2 Machining lathes
 -2 CNC mills
 -Rolling tool cabinets with tools

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person - 0.18 CFM/sq.ft. (100% Exhaust)

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Industrial sink, solvent wash and eye wash, supply, waste and vent

Electrical:

Power: 1 duplex receptacle every 10ft along wall. (2) 208 VAC receptacles for industrial process trainers. Additional capacity for equipment listed.

Data: 1 device per wall

Phone: 1 device at entry

Video: Rough-in for future capacity

Intercom: Ceiling speaker

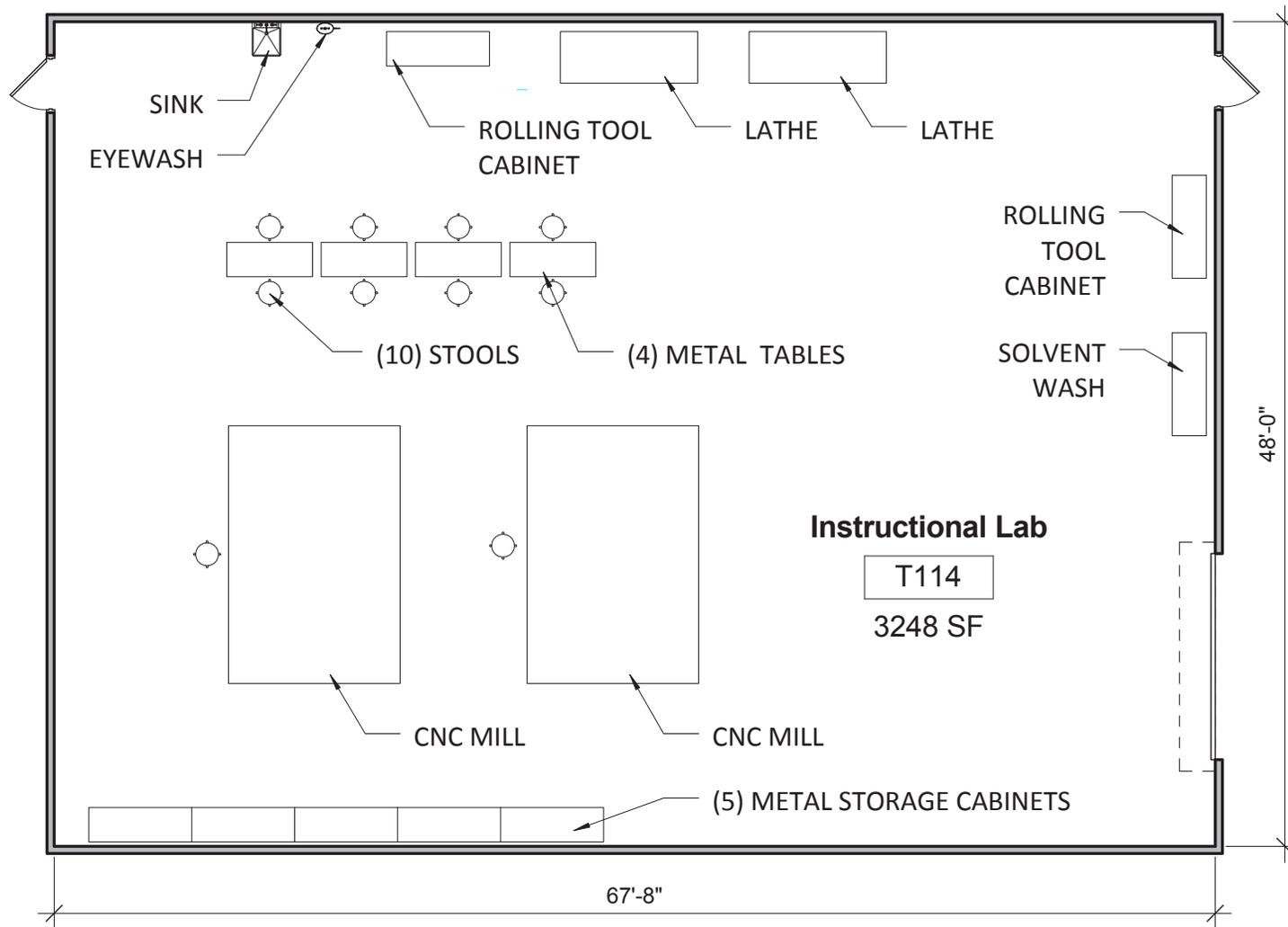
Lighting:

Fixture Type: Fluorescent

Accent Lighting: Task lighting at work station

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom/Storage
Number Required:	1
Total Number:	1
Occupants:	2-4
Area:	219 SF
Primary Function:	Secure storage space for Industrial Maintenance area

Relationships:

Location:	First Level
Adjacencies:	Instructor Offices and Industrial Lab
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Hard, durable surface
Walls:	Durable; painted gypsum board
Ceiling:	Gypsum board
Specialty Finishes:	None required
Sound:	Sound dampening ACT to reduce noise from shop/lab

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Secure high cost tools and equipment.

Doors:

Type:	Solid core wood with clear finish
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

- Locking cabinets for tool equipment
- Steel shelving storage
- 2 Fireproof chemical cabinet

Equipment:

-None required

Technical Requirements

Mechanical:

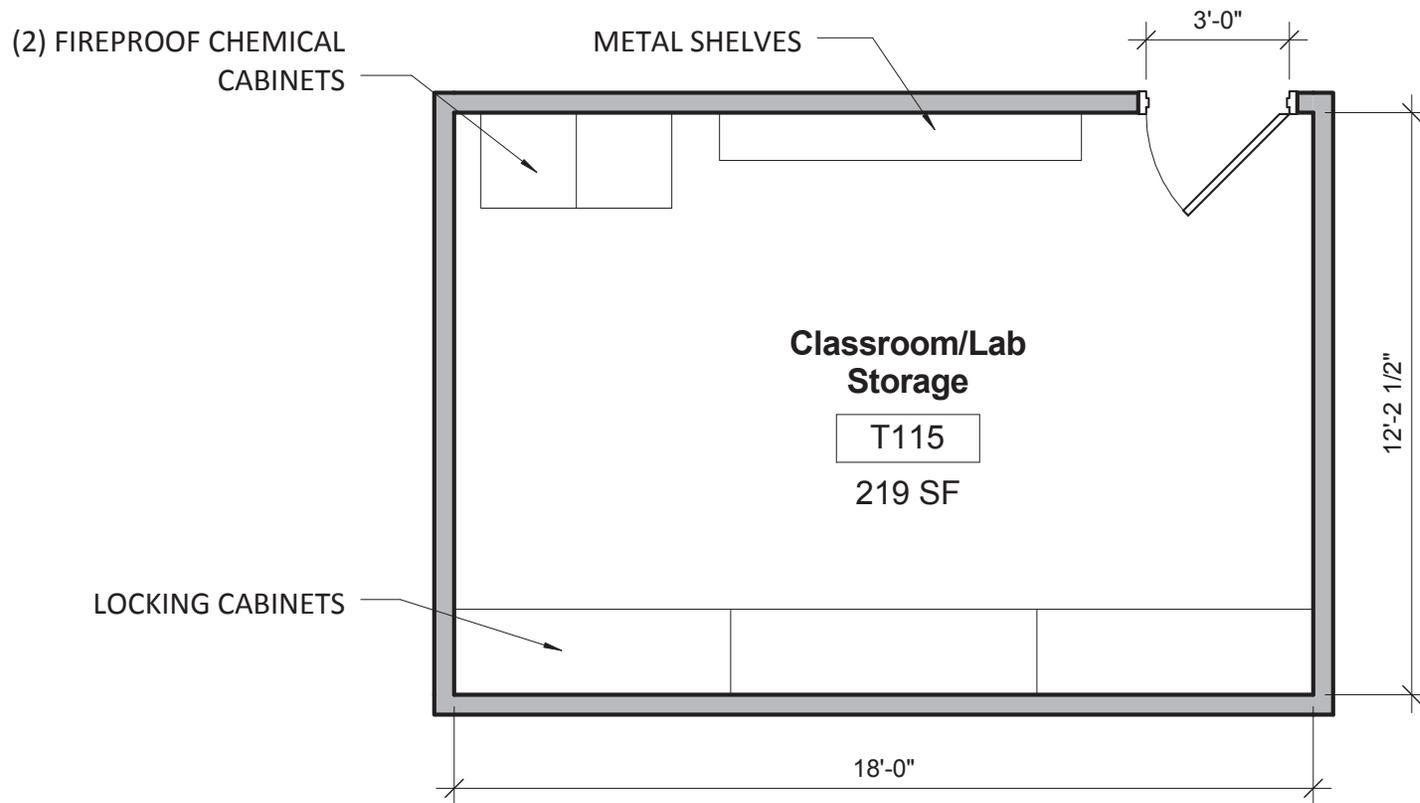
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall.
Data:	None required
Phone:	None required
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity.

Lighting:

Fixture Type:	Fluorescent
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	2
Total Number:	2
Occupants:	1-4
Area:	130 SF each
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communication

Relationships:

Location:	First Level
Adjacencies:	Industrial Lab and Industrial Maintenance classrooms
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visual accessibility, comfortable, natural light feel

Finishes:

Floor:	Hard, durable surface
Walls:	Durable; painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Sound dampening walls and ceiling to reduce noise from shop/lab

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Windows from classroom and the lab into instructor office.

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior; Interior
Glazing:	Low-E; Clear Glass
Natural Light:	Desirable

Casework/Fixed Equipment:

- Locking base cabinets with durable counters
- Fixed ceiling mount projector and screen

Moveable Furnishings:

- 2 Desks, 2 chairs, secure filing cabinets, bookshelves, and guest chairs

Equipment:

- Computer, 2 monitors, printer, desktop speaker phone, shredder, flip file and paper management system, 1 small whiteboard

Technical Requirements

Mechanical:

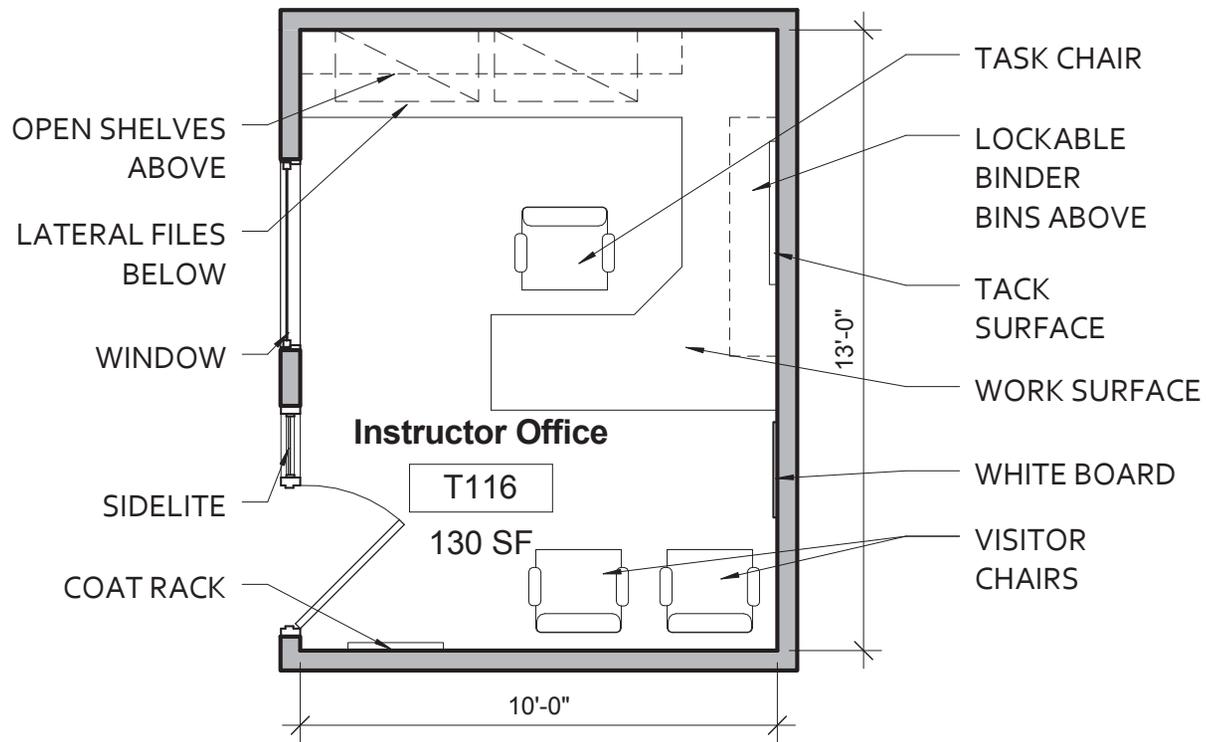
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls.
Phone:	2 devices on opposing walls.
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity.

Lighting:

Fixture Type:	Fluorescent
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space: High Ceiling Shop
 Number Required: 1
 Total Number: 1
 Occupants: 30+ students
 1-3 instructors
 Area: 3246 sq ft
 Primary Function: Daily use for demonstrations and student work, space for training

Relationships:

Location: First Level
 Adjacencies: Welding area, instructor offices, Industrial Maintenance/Industrial Automation Classrooms.
 Separation: None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor: Hard, durable surface
 Walls: Durable; painted gypsum board
 Ceiling: Open high bay
 Specialty Finishes: None required
 Sound: Sound isolate floor and walls from classrooms and offices

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 16'-0"

Privacy/Security:

Windows from classroom into the lab and instructor office. Secure high cost equipment and tools.

Doors:

Type: Solid core wood with clear finish, Wide enough for equipment. Roll-up exterior door 10' x 12'

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior; Interior
 Glazing: Low-E; Clear Glass
 Natural Light: Desirable

Casework/Fixed Equipment:

-Storage area for equipment

Moveable Furnishings:

-2 locking steel rolling cabinets, with heavy duty casters
 -4 metal shop tables with locking casters
 -10 Shop stools

Equipment:

-4-6 modular Industrial/Manufacturing process trainers
 -6 electronics/soldering stations
 -2 inspections/testing stations
 -5 rolling tool cabinets with tools (type/quantity TBD)

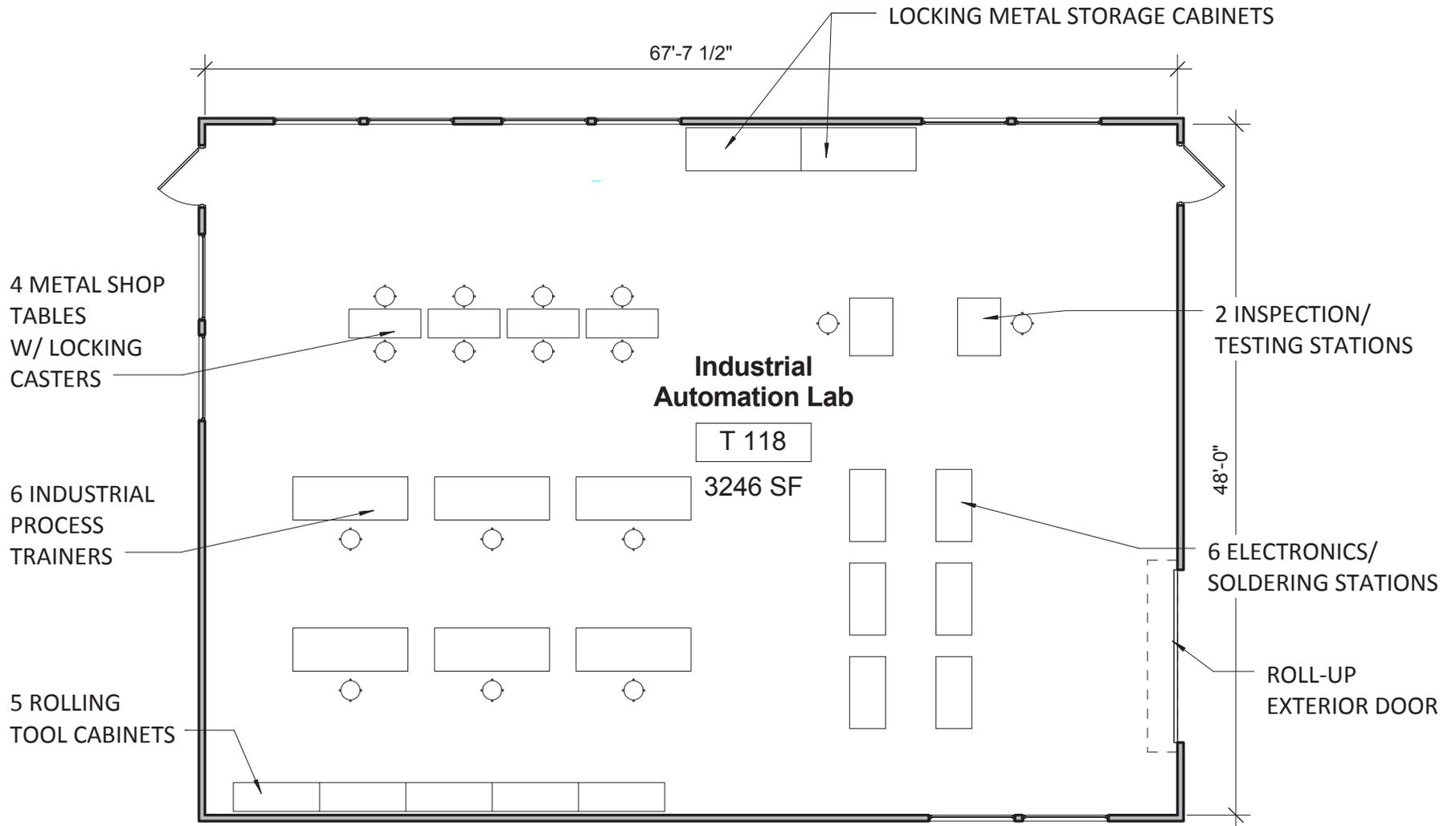
Technical Requirements

Mechanical:

Ventilation: 10 CFM/person - 0.18 CFM/sq.ft. (100% Exhaust)
 Summer Design Temp: 70 ° F
 Winter Design Temp: 70 ° F
 Controls: Individual direct digital controls
 Sound Criteria: 35 (NC/RC)
 Special Systems: None required
 Plumbing: None required

Electrical:

Power: 1 duplex receptacle every 10ft along wall. (2) 208 VAC receptacles for industrial process trainers. Additional capacity for equipment listed.
 Data: 1 device per wall
 Phone: 1 device at entry
 Video: Rough-in for future capacity
 Intercom: Ceiling speaker with volume control
Lighting:
 Fixture Type: Fluorescent
 Accent Lighting: None required
 Foot Candles: 40
 Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	1
Total Number:	1
Occupants:	20 students 1-3 instructors
Area:	750 sq ft
Primary Function:	Provide instruction, training & demonstration to industrial automation and manufacturing processes students

Relationships:

Location:	First Level
Adjacencies:	Welding area, instructor offices, Industrial Automation Lab.
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Hard, durable surface
Walls:	Durable; painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	Sound dampening ACT and walls to reduce noise from shop/lab

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Windows from classroom into the lab and instructor office.

Doors:

Type: Solid core wood with clear finish, Wide enough for equipment.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior; Interior

Glazing: Low-E; Clear Glass

Natural Light: Desirable

Casework/Fixed Equipment:

- 2 steel rolling storage cabinets, or locking built-in cabinets with durable counters
- Fixed ceiling mount projector and screen

Moveable Furnishings:

- 10 24"x60" tables; 20 student chairs; 1 desk chair; 2 locking metal storage cabinets with heavy-duty casters; 1 teacher desk; 2 bookcases

Equipment:

- 1 instructor computer connected to projector; 1 printer; 1 large white board; 2 small bulletin boards

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. 2 receptacles for industrial process trainers. Floor receptacles for student lap tops.

Data: 2 devices on opposing walls and at instructor station

Phone: 2 devices on opposing walls and at instructor station

Video: Rough-in for future capacity

Intercom: Ceiling speaker with volume control

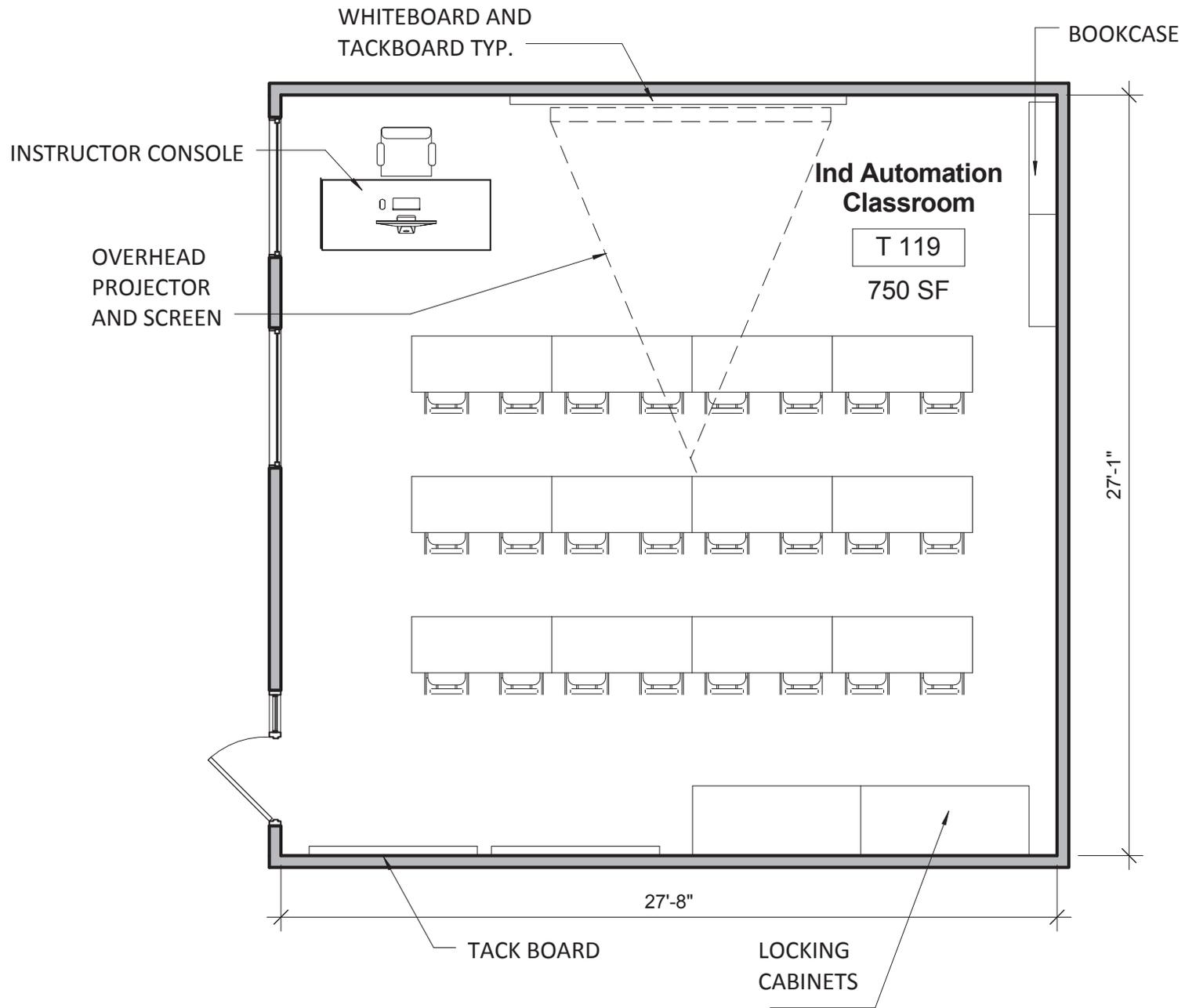
Lighting:

Fixture Type: T-5 Fluorescent lay-in

Accent Lighting: Zoned light bank over projection screen

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Drafting/Computer Classroom
Number Required:	1
Total Number:	1
Occupants:	20-24 students 1-3 instructors
Area:	750 sq ft
Primary Function:	Provide instruction, training & deomnstration to industrial drafting students
Relationships:	
Location:	First Level
Adjacencies:	Welding area, instructor offices, Industrial Automation Lab.
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Hard, durable surface
Walls:	Durable; painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	Sound dampening ACT and walls to reduce noise from shop/lab

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Windows from classroom into the lab and instructor office, if possible.

Doors:

Type: Solid core wood with clear finish, Wide enough for equipment.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: None required

Casework/Fixed Equipment:

- Locking built-in cabinets with durable counters
- Fixed ceiling mount projector and screen

Moveable Furnishings:

-10 24"x60" tables or 20-24 dedicated computer stations; 24 student chairs; 1 desk chair; 2 locking metal storage cabinets with heavy-duty casters; 1 teacher desk; 2 bookcases

Equipment:

-1 instructor computer connected to projector; 1 printer; 1 large white board; 2 small bulletin boards; 1 drafting printer/plotter; 1 3-D printer

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: Dedicated computer A/C units

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. 1 duplex receptacle per computer station. Additional capacity for equipment listed.

Data: 2 devices on opposing walls and at instructor station

Phone: 2 devices on opposing walls and at instructor station

Video: Security Camera

Intercom: Ceiling speaker with volume control

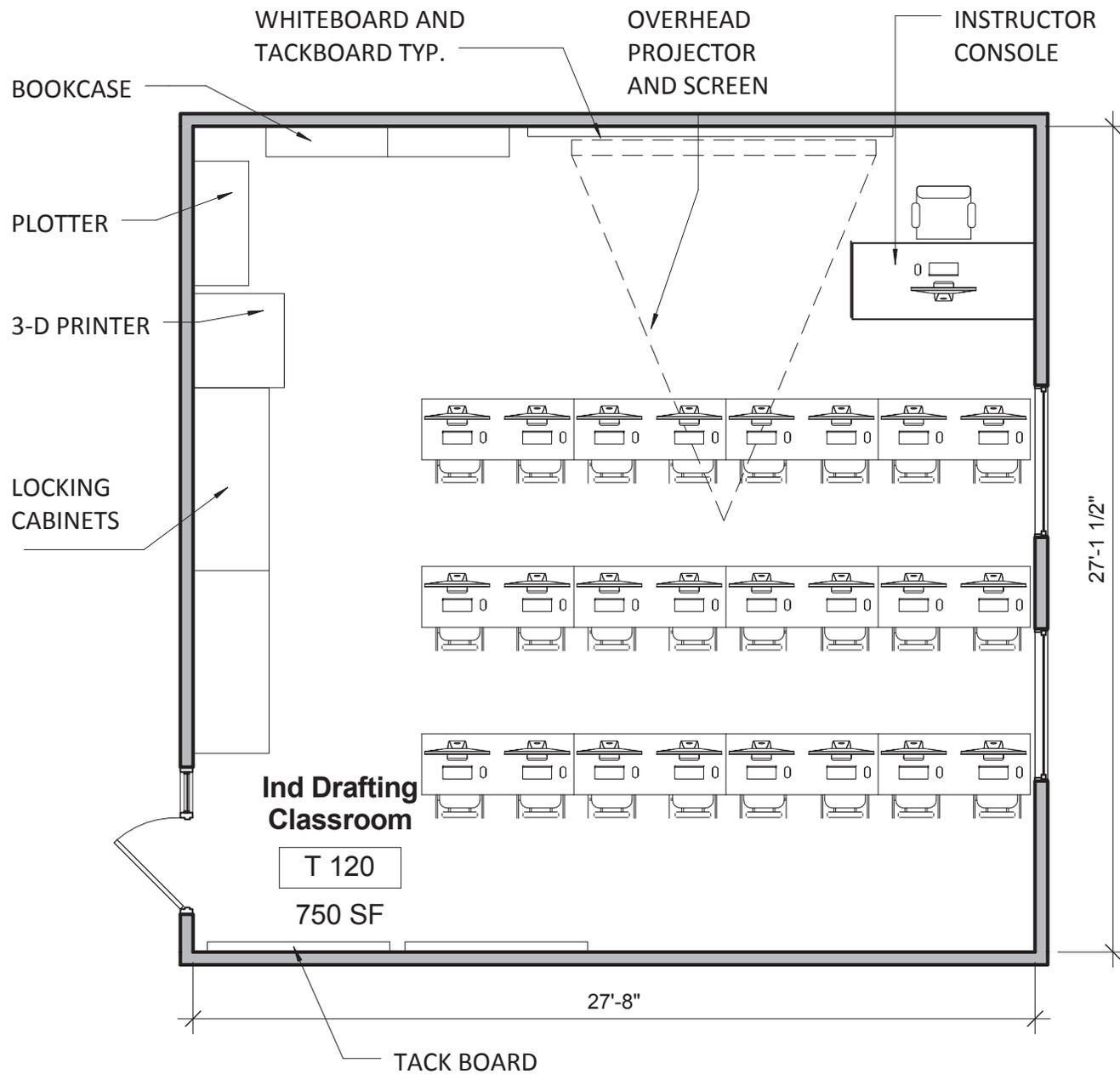
Lighting:

Fixture Type: T-5 Flourescent lay-in

Accent Lighting: Zoned light bank over projection screen

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space: Storage area
 Number Required: 1
 Total Number: 1
 Occupants: 2-4
 Area: 220 sq ft
 Primary Function: Secure storage space for Industrial Automation area to be accessed daily

Relationships:

Location: First Level
 Adjacencies: Instructor offices, Industrial Automation classroom, directly accessible from ab.
 Separation: None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor: Hard, durable surface
 Walls: Durable; painted gypsum board
 Ceiling: Durable; Painted gypsum board
 Specialty Finishes: None required
 Sound: None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Secure high cost equipment and tools

Doors:

Type: Solid core wood with clear finish, Wide enough for equipment.

Frame: Painted hollow metal

Special: Sound Isolation

Windows:

Type: None required
 Glazing: None required
 Natural Light: None required

Casework/Fixed Equipment:

-Locking built-in cabinets with durable counters

Moveable Furnishings:

-Locking cabinets for valuable tools equipment
 -Steel shelving

Equipment:

None required

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.
 Summer Design Temp: 70 ° F
 Winter Design Temp: 70 ° F
 Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

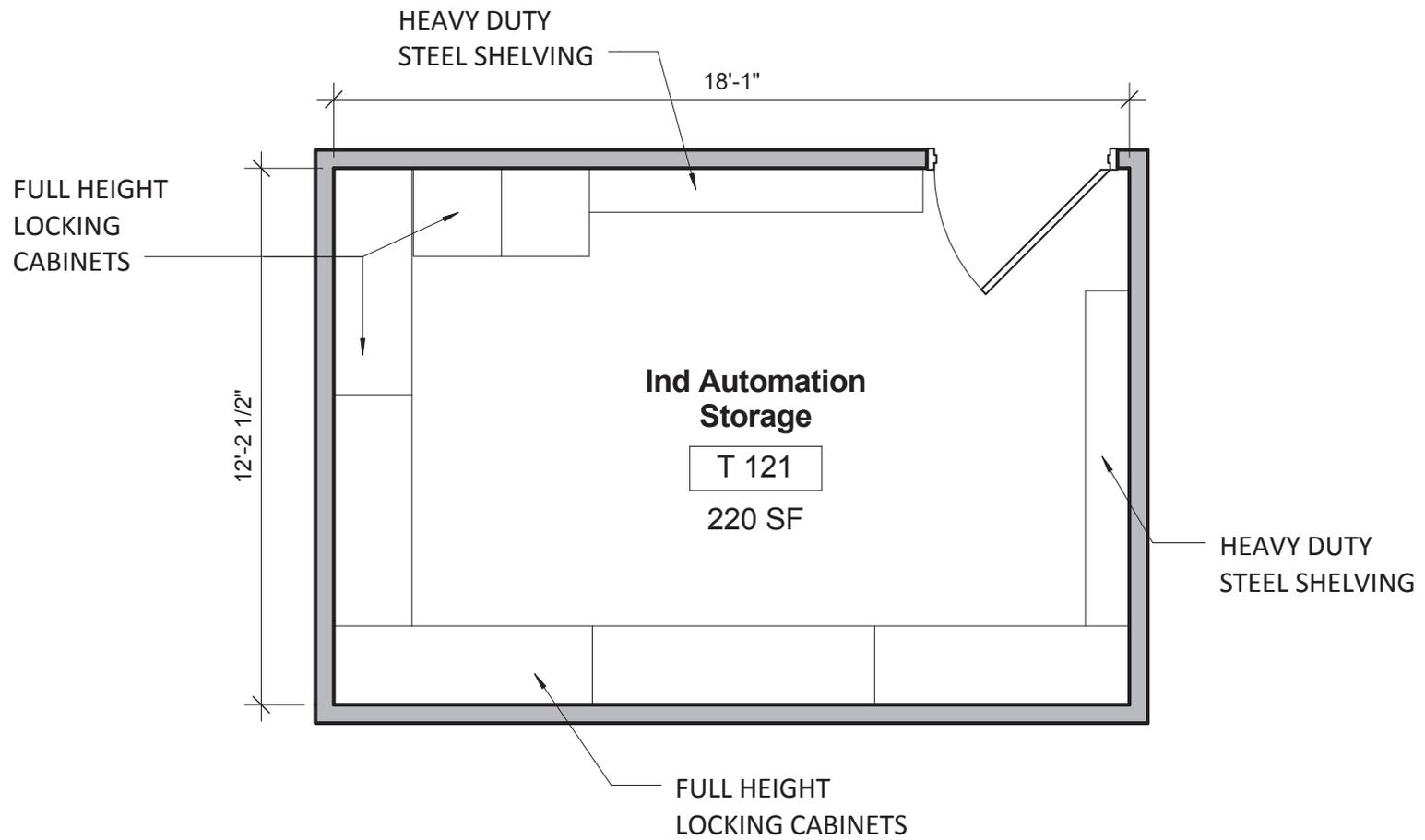
Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall.
 Data: None required
 Phone: None required
 Video: None required
 Intercom: None required

Lighting:

Fixture Type: T-5 Fluorescent lay-in
 Accent Lighting: None required
 Foot Candles: 40
 Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	2
Total Number:	2
Occupants:	1-4
Area:	130 SF each
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communication, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Industrial Lab and Industrial Maintenance classrooms
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visual accessibility, comfortable, natural light feel

Finishes:

Floor:	Hard, durable surface
Walls:	Durable; painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Sound dampening walls and ceiling to reduce noise from shop/lab

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior; Interior

Glazing: Low-E; Clear Glass

Natural Light: Desirable

Casework/Fixed Equipment:

- Locking base cabinets with durable counters
- Fixed ceiling mount projector and screen

Moveable Furnishings:

- Desk, Filing cabinets, book shelves, guest chairs

Equipment:

- Computer, 2 monitors, printer, desktop speaker phone, shredder, flip file and paper management system, 1 small whiteboard

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 70 ° F

Winter Design Temp: 70 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls.

Phone: 2 devices on opposing walls.

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity.

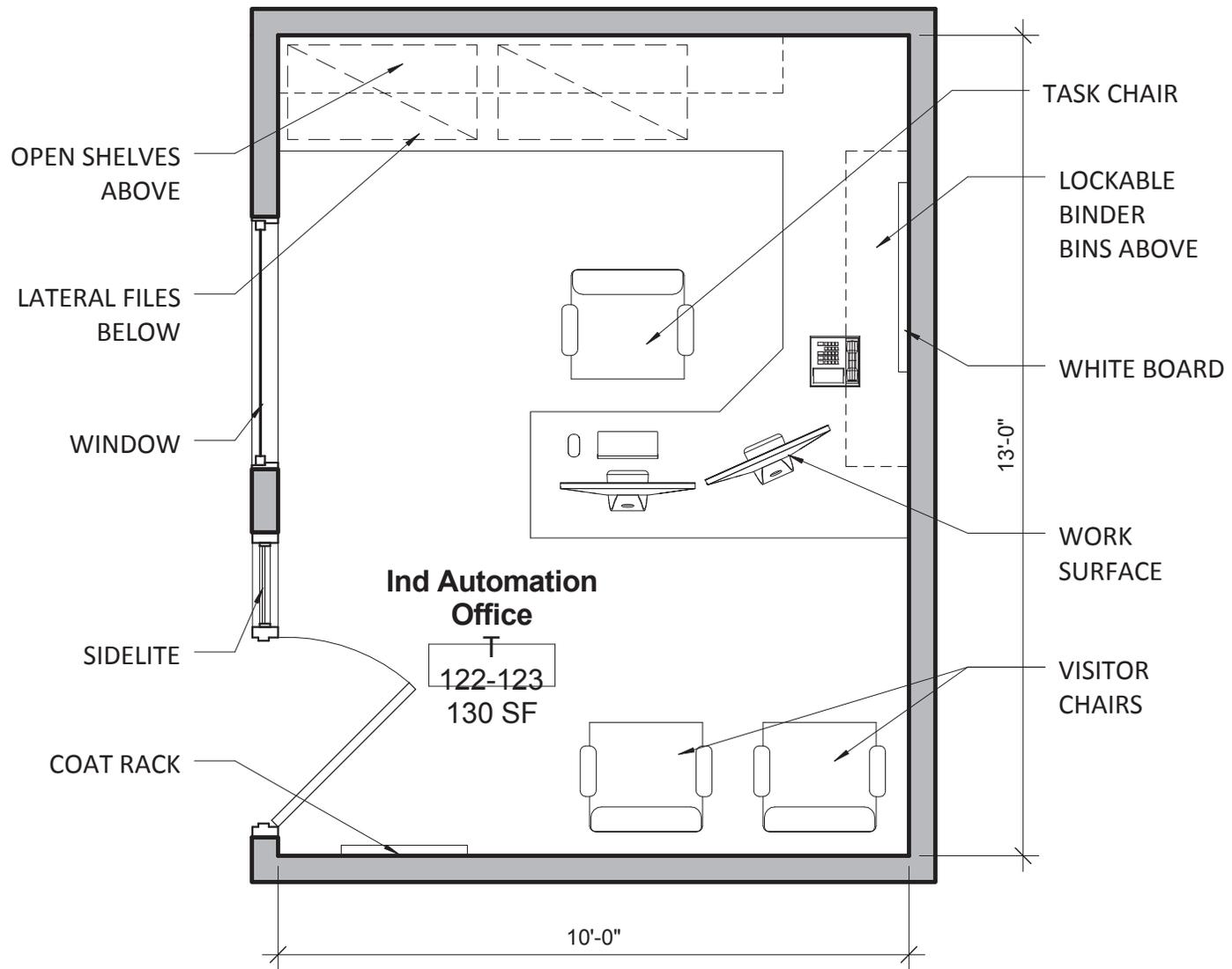
Lighting:

Fixture Type: Fluorescent

Accent Lighting: None required

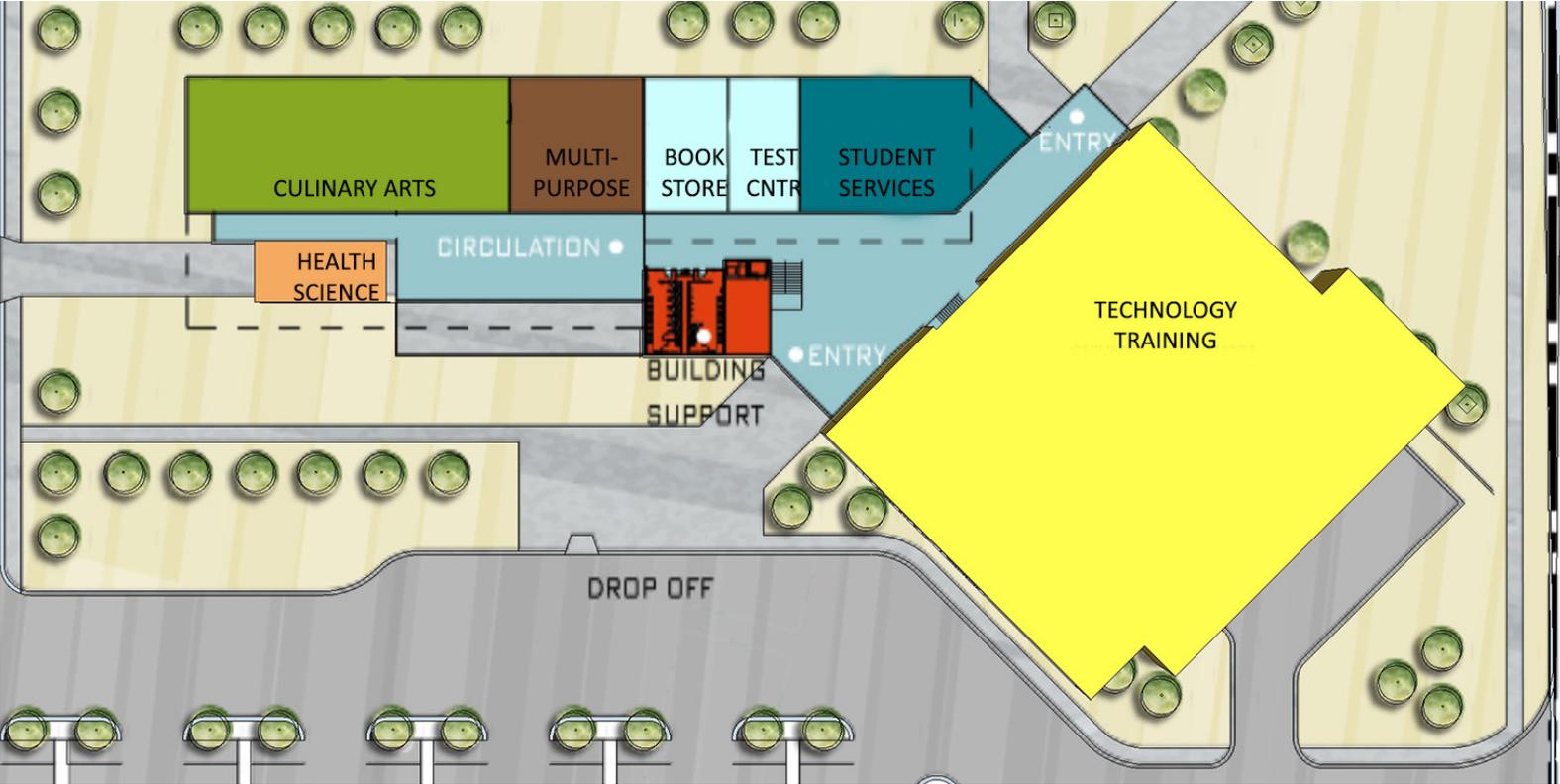
Foot Candles: 40

Controls: Occupancy sensor

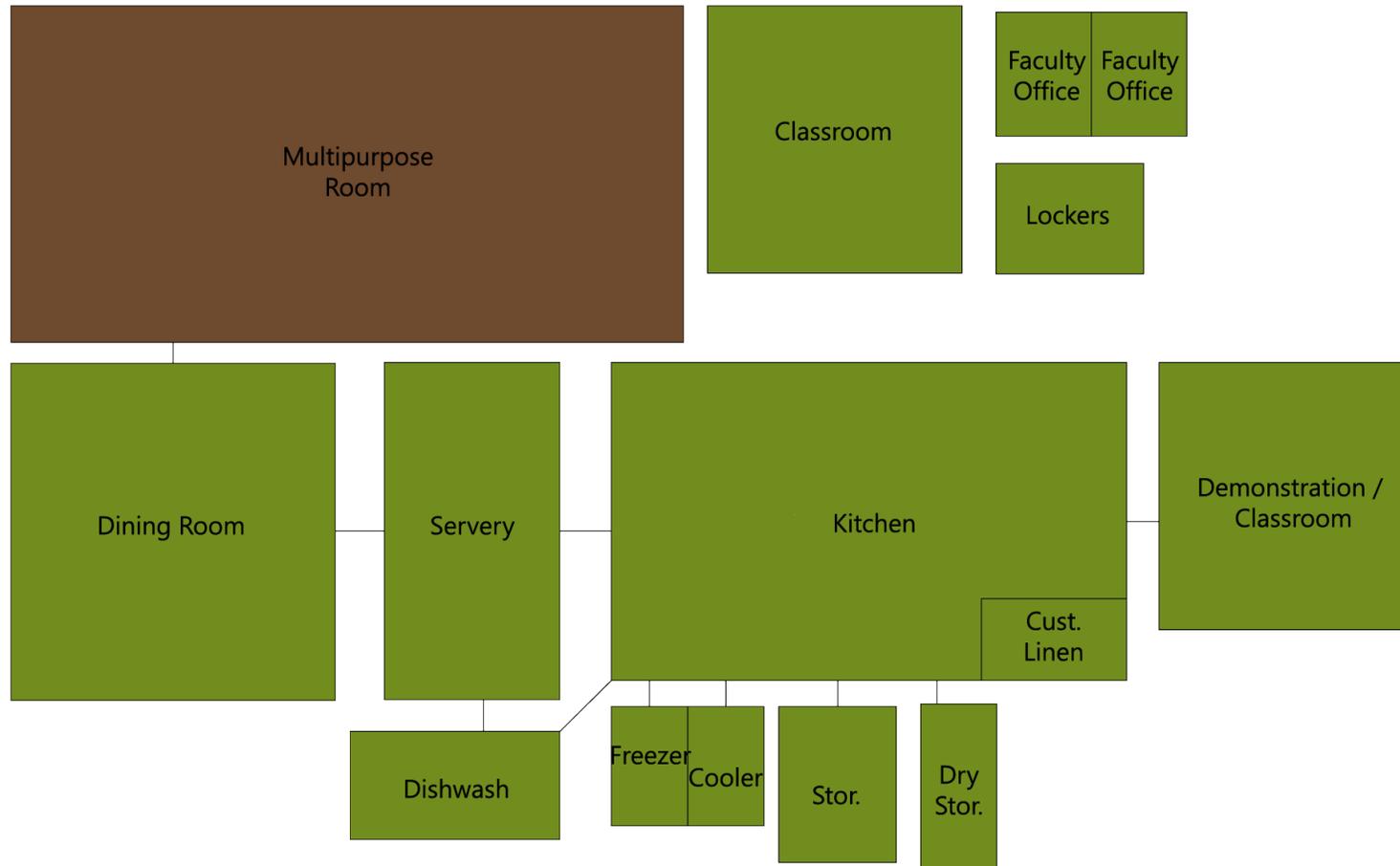


07 Culinary

First Floor Relationship Diagram



Adjacency Diagram



07 Culinary

Adjacency Diagram

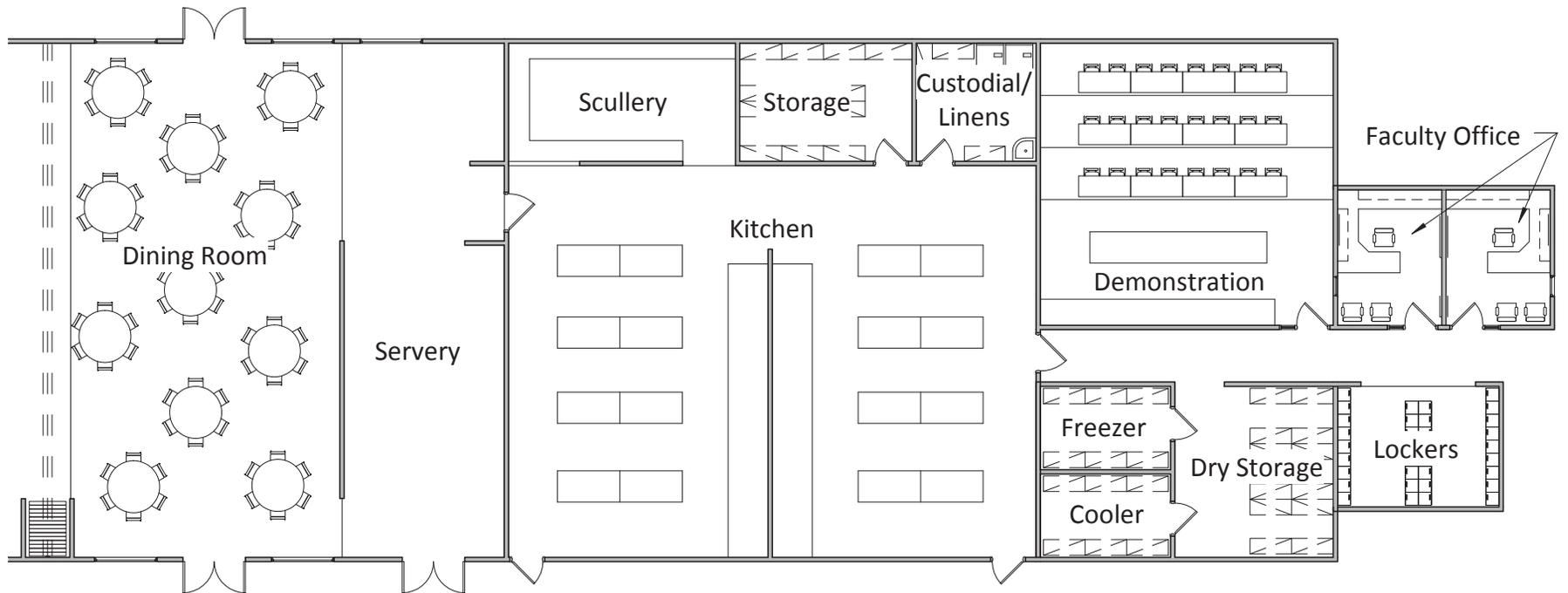
Space Requirements

Architectural Requirements

Technical Requirements



Culinary Suite Diagram



Space Requirements

Space Summary:

Type of Space:	Dining Room
Number Required:	1
Total Number:	1
Occupants:	1-150
Area:	1250 SF
Primary Function:	Provide an inviting and comfortable atmosphere for dining.

Relationships:

Location:	First Level
Adjacencies:	Multipurpose room, Dishwash, Servery
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Hard, durable surface
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

High visibility, no additional security required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior; Interior

Glazing: Insulated Low-E; Clear

Natural Light: Desirable

Casework/Fixed Equipment:

None required

Moveable Furnishings:

-12 Round tables
-4 stack able chairs per tables (48 Total)

Equipment:

None required

Technical Requirements

Mechanical:

Ventilation: 7.5 CFM/person + 0.18 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall. Additional capacity for equipment listed.

Data: 1 device per wall.

Phone: Rough-in for future capacity

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

Lighting:

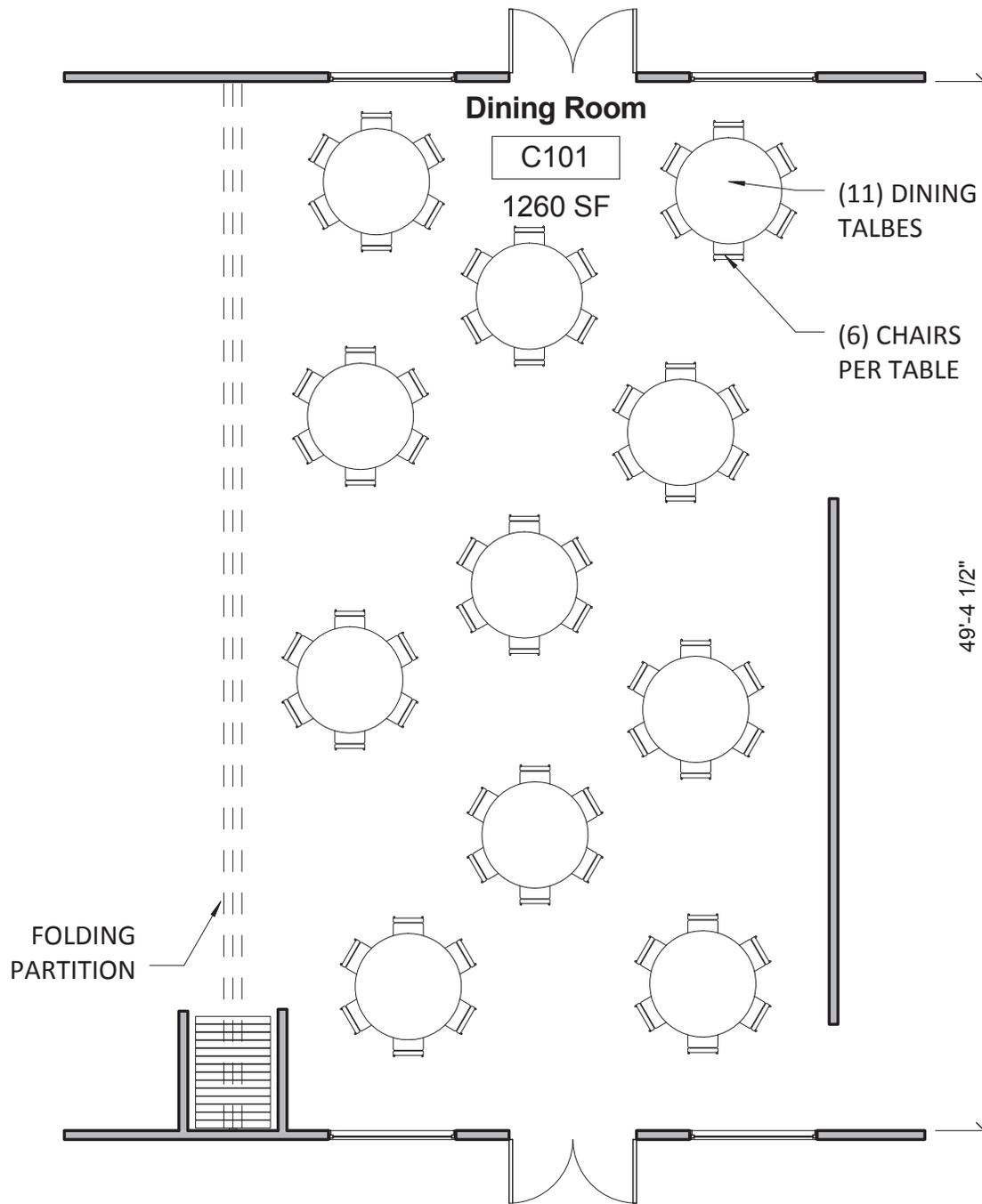
Fixture Type: T-5 Fluorescent electronic ballast

Accent Lighting: Incandescent

Foot Candles: 50

VCP: 70

Controls: Auto sensor with override and dimming



Space Requirements**Space Summary:**

Type of Space:	Servery
Number Required:	1
Total Number:	1
Occupants:	?
Area:	600 SF
Primary Function:	Receive orders, final food prep, cafeteria style customer line, short order/grill cooking

Relationships:

Location:	First Level
Adjacencies:	Dinning room
Separation:	None required

Architectural Requirements**Design/Aesthetic:**

Durable finishes, inviting feel

Finishes:

Floor:	Hard, durable surface
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements**Ceiling Height:**

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

No additional security required.

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Bar height counter area for beverage station, Counter area with base cabinets

Moveable Furnishings:

-None required

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements**Mechanical:**

Ventilation: 7.5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall. Additional capacity for equipment listed.

Data: 1 device per wall. Additional capacity for equipment listed.

Phone: Rough-in for future capacity

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

Lighting:

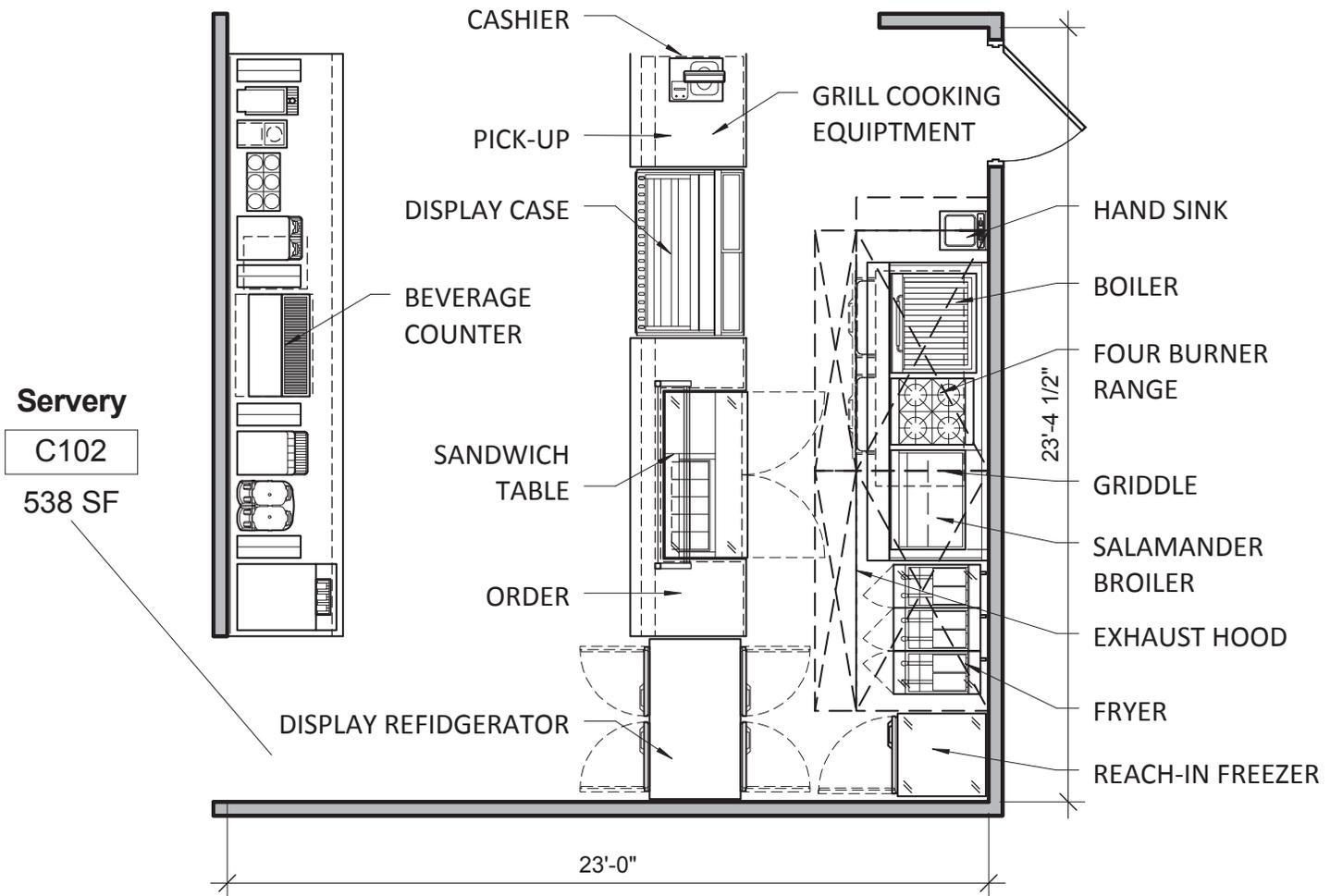
Fixture Type: T-5 HO linear indirect pendant

Accent Lighting: Non required

Foot Candles: 40-50

VCP: 70

Controls: Occupancy Sensor



Servery
C102
 538 SF

Space Requirements

Space Summary:

Type of Space:	Kitchen
Number Required:	1
Total Number:	1
Occupants:	12-14
Area:	1905 SF
Primary Function:	Provide a specialized instructional environment with commercial kitchen for teaching.

Relationships:

Location:	First Level
Adjacencies:	Servery, Demonstration, Cooler, Freezer, Storage, Dry Storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Ceramic tile or other hard, durable surface
Walls:	Ceramic tile or other hard, durable surface
Ceiling:	Vinyl faced suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Sealed off at closing with a moving partition or roll down door

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Possible rolling door

Windows:

Type:	Exterior; Interior
Glazing:	Insulated Low-E; Clear
Natural Light:	Desirable

Casework/Fixed Equipment:

- Hand sinks and Food Prep sinks
- Counter area with base cabinets

Moveable Furnishings:

- Prep tables; shelving

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

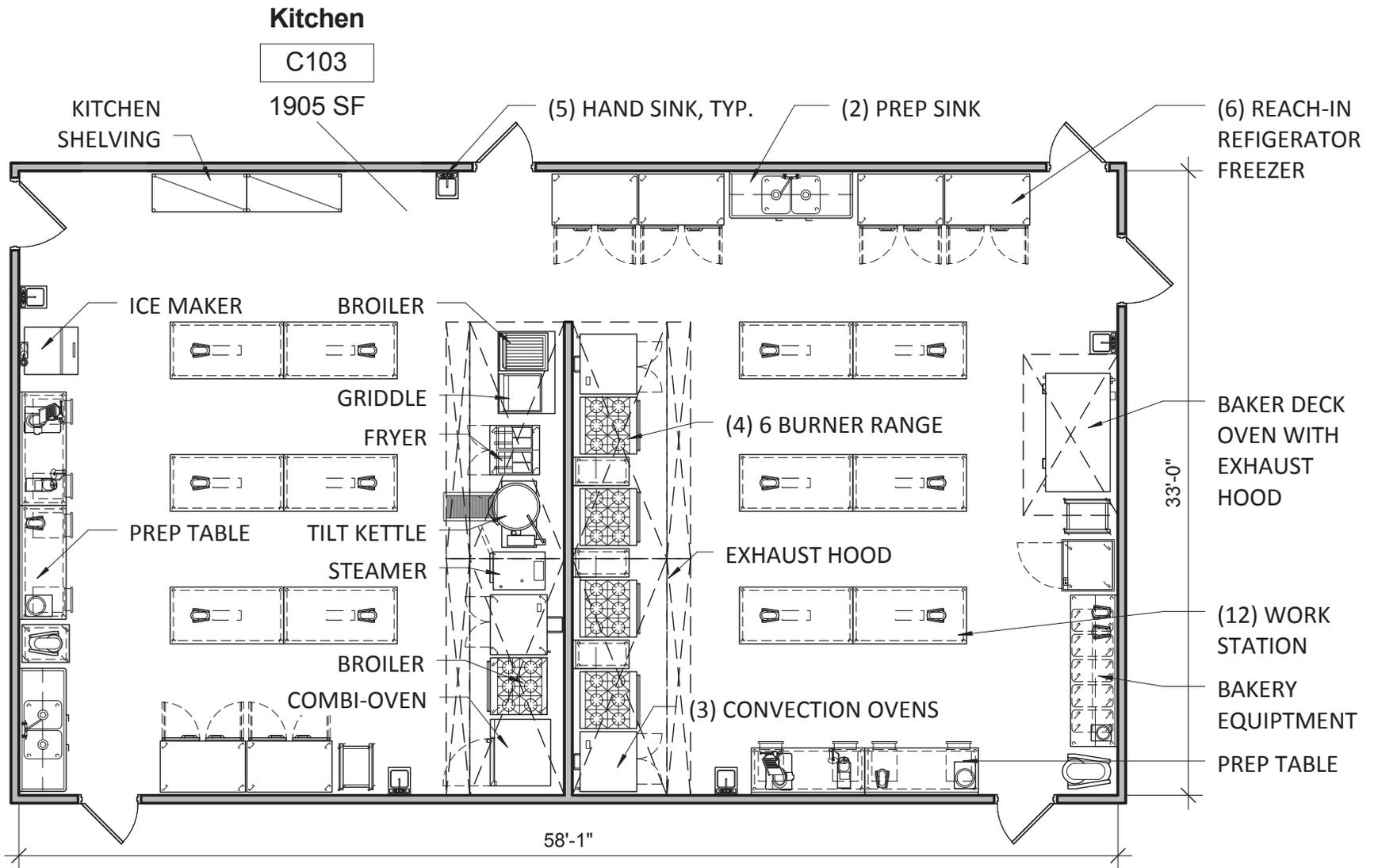
Ventilation:	0.7 CFM/sq.ft. Negative pressure
Summer Design Temp:	80 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	Grease hood exhaust and welded 16 GA exhaust duct.
Plumbing:	140° F hose to sinks and dishwasher, grease interceptor

Electrical:

Power:	Receptacles as required for equipment. GFI receptacles in food prep areas, floor dedicated receptacles as needed
Data:	None required
Phone:	1 device at entry
Video:	A/V system w/internet connection
Intercom:	Ceiling speaker

Lighting:

Fixture Type:	T-5 HO linear indirect pendant
Accent Lighting:	Task lighting at work surfaces
Foot Candles:	40-50
VCP:	70
Controls:	Switch or Relay



Space Requirements

Space Summary:

Type of Space:	Dishwasher
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	250 SF
Primary Function:	Provide a space for washing dining room dishes

Relationships:

Location:	First Level
Adjacencies:	Dining Room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Ceramic tile or other hard, durable surface
Walls:	Ceramic tile or other hard, durable surface
Ceiling:	Vinyl faced suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

No additional security required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	Exterior; Interior
Glazing:	Insulated Low-E; Clear
Natural Light:	Non required

Casework/Fixed Equipment:

- Counter area
- Wall mounted storage shelves
- Hand sink; 3 Compartment pot sink

Moveable Furnishings:

- Rolling storage shelves; dish tables

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

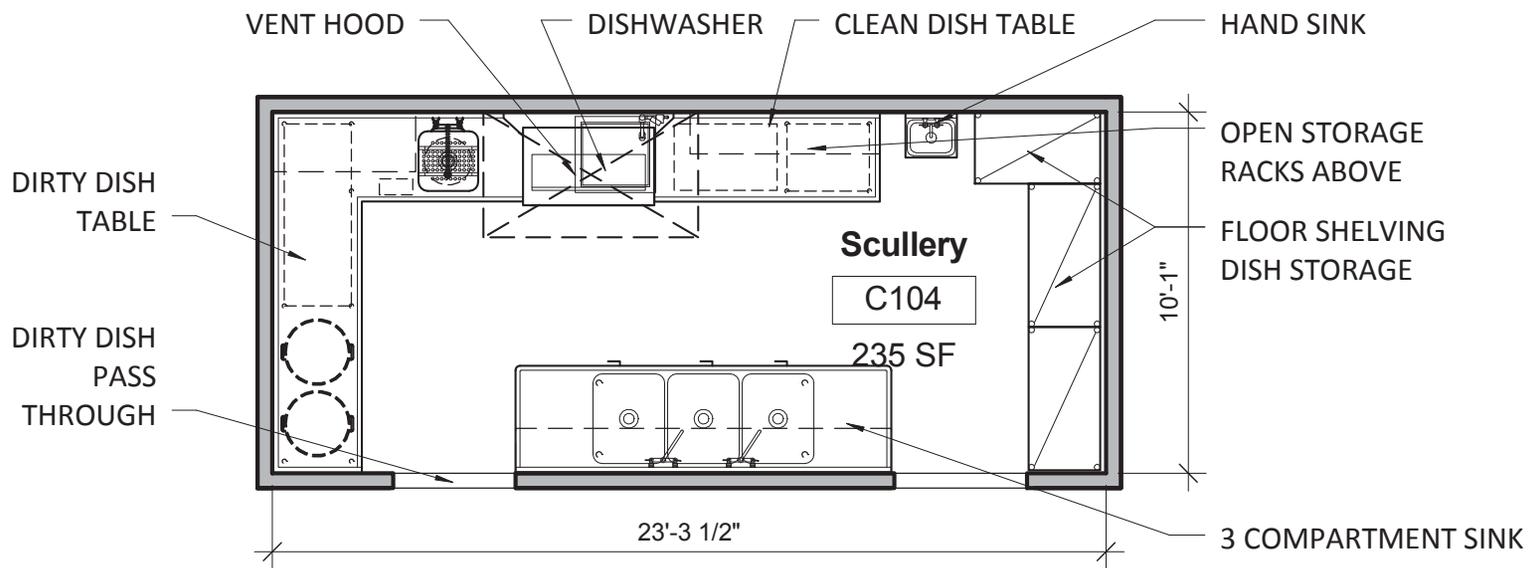
Ventilation:	0.7 CFM/sq. ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	Stainless steel exhaust duct and hood
Plumbing:	Dishwashers

Electrical:

Power:	2 duplex receptacles per wall (min) Additional capacity for equipment listed.
Data:	None required
Phone:	1 device in room
Video:	None required
Intercom:	None required

Lighting:

Fixture Type:	T-5 Fluorescent electronic ballast
Accent Lighting:	None required
Foot Candles:	50
VCP:	70
Controls:	Occupancy Sensor



Space Requirements

Space Summary:

Type of Space:	Laboratory
Number Required:	1
Total Number:	1
Occupants:	22-24
Area:	833 SF
Primary Function:	Provide a specialized instructional environment.

Relationships:

Location:	First Level
Adjacencies:	Kitchen
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Ceramic Tile or Sealed Concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

High visibility, no additional security required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear
Natural Light:	Non required

Casework/Fixed Equipment:

-Counter area with lockable base cabinets

Moveable Furnishings:

-None required

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

Ventilation:	6-10 AC/hr (Per ANSI Z9.5)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

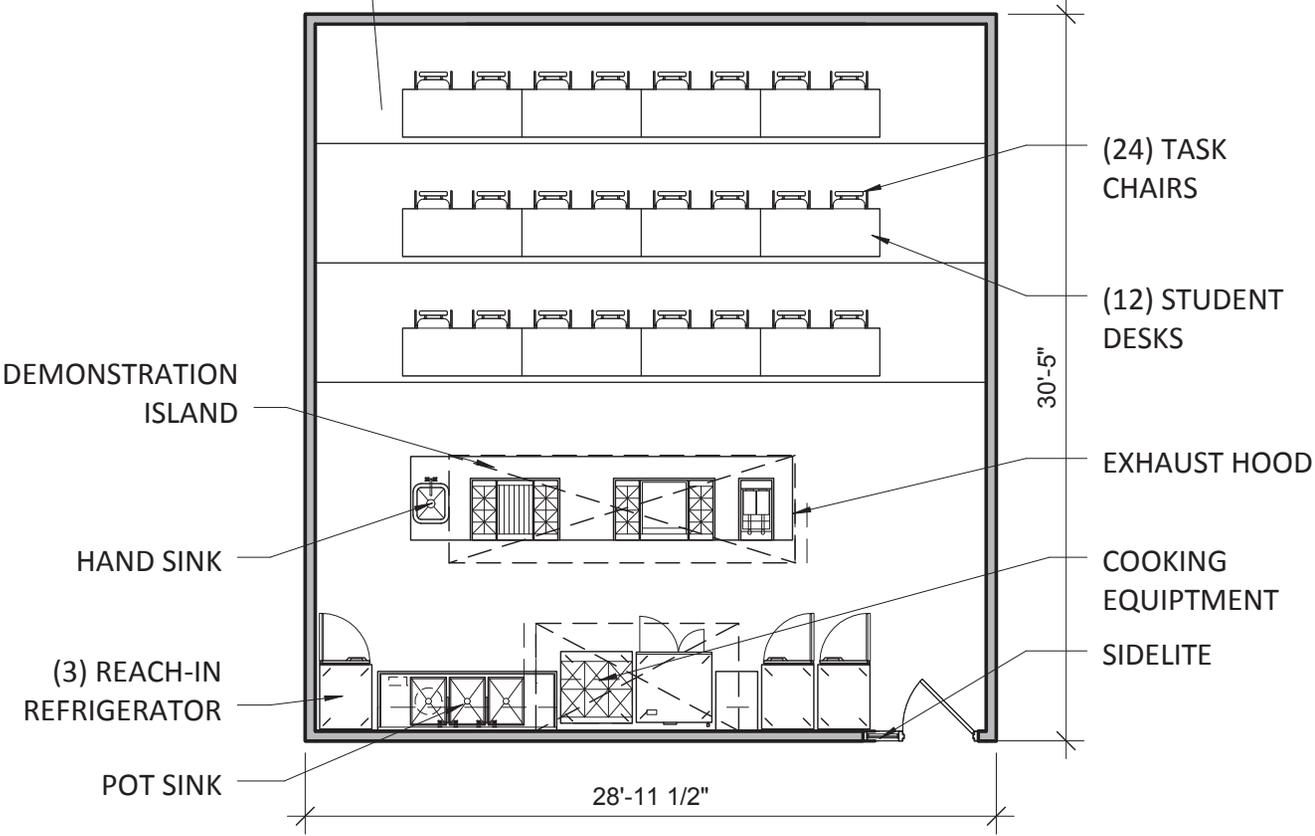
Power:	2 duplex receptacles per wall and at instructor station.
Data:	2 devices on opposing walls and at instructor station.
Phone:	1 device at instructor station.
Video:	A/V system w/internet connection
Intercom:	Ceiling speaker

Lighting:

Fixture Type:	T-5 Fluorescent electronic ballast
Accent Lighting:	None-required
Foot Candles:	40-45
VCP:	70
Controls:	Occupancy Sensor

Demonstration

C105
833 SF



Space Requirements

Space Summary:

Type of Space:	Freezer/Cooler
Number Required:	2
Total Number:	2
Occupants:	0
Area:	100 SF each
Primary Function:	Provide a space for storing frozen or perishable food.

Relationships:

Location:	First Level
Adjacencies:	Kitchen
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	Metal
Walls:	Metal
Ceiling:	Metal
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Auto locking door with emergency latch on interior

Doors:

Type:	Hollow metal
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Metal shelving

Moveable Furnishings:

- None required

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

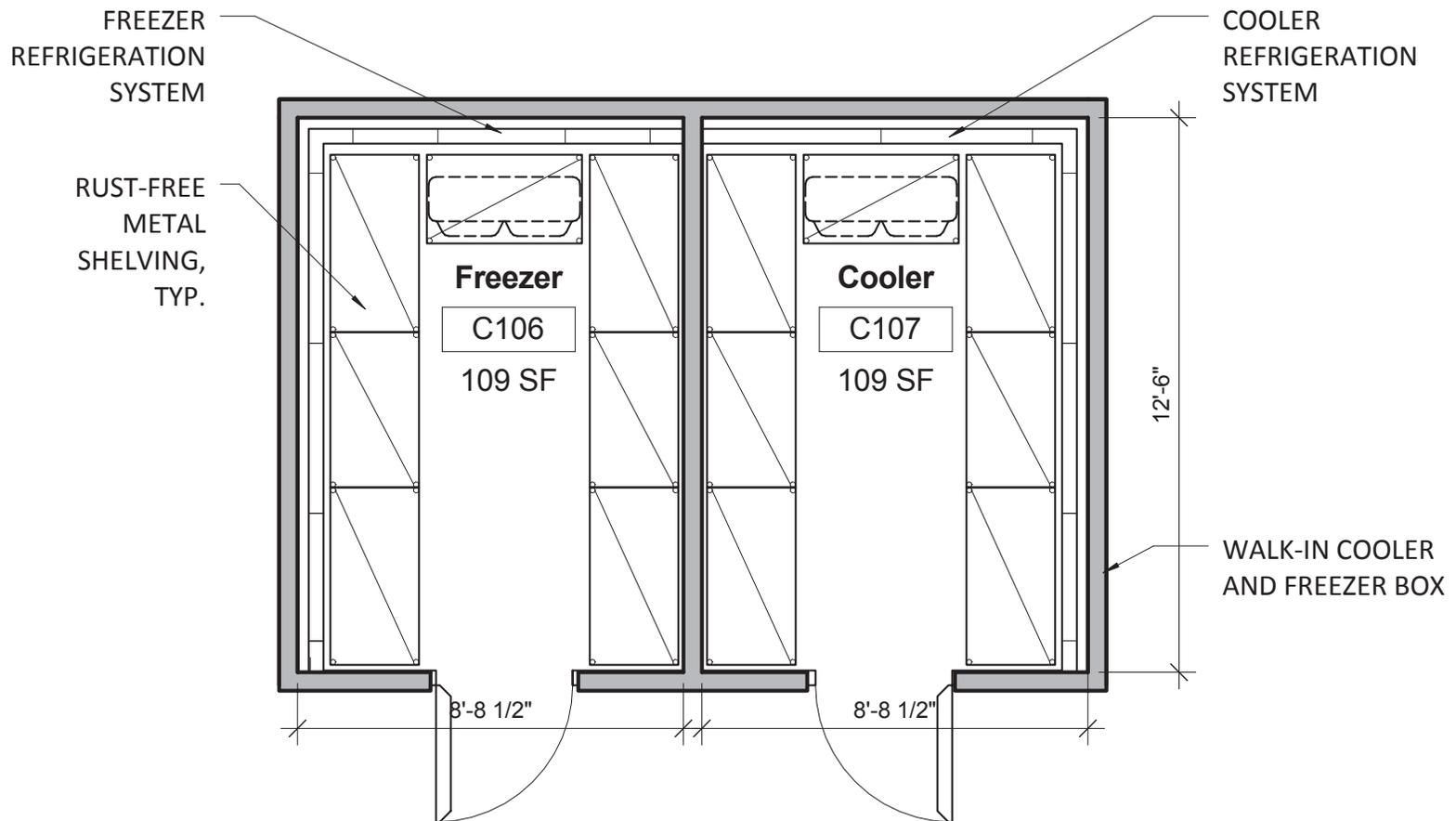
Ventilation:	None
Summer Design Temp:	35° F Cooler/ 0° F Freezer
Winter Design Temp:	35° F Cooler/ 0° F Freezer
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	Freezer
Plumbing:	Indirect floor sink

Electrical:

Power:	As required for equipment
Data:	None required
Phone:	None required
Video:	None required
Intercom:	None required

Lighting:

Fixture Type:	Fluorescent
Accent Lighting:	None required
Foot Candles:	50
VCP:	70
Controls:	Auto sensor



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	201 SF
Primary Function:	Provide a storage area for the culinary area

Relationships:

Location:	First Level
Adjacencies:	Kitchen
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes, inviting feel

Finishes:

Floor:	VCT or hard, durable surface, w/4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

No additional security required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Wall-mounted shelving

Moveable Furnishings:

-Metal shelving units
-Work bench

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

Ventilation:	20 CFM/person (min.) (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F

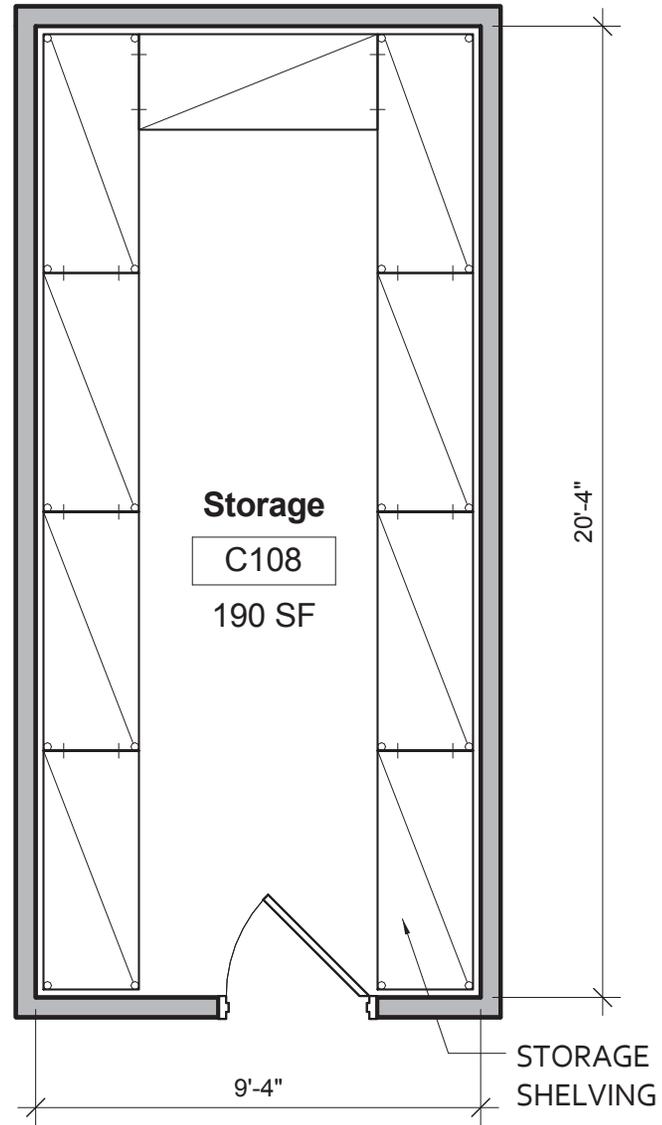
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 quad receptacles at workbench, 2 duplex receptacles on each wall
Data:	None required
Phone:	None required
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in direct
Accent Lighting:	None required
Foot Candles:	40
VCP:	70
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	139 SF
Primary Function:	Provide a space for storage of dry goods

Relationships:

Location:	First Level
Adjacencies:	Kitchen
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes

Finishes:

Floor:	VCT or hard, durable surface w/ 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

No additional security required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Wall-mounted shelving

Moveable Furnishings:

-None required

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

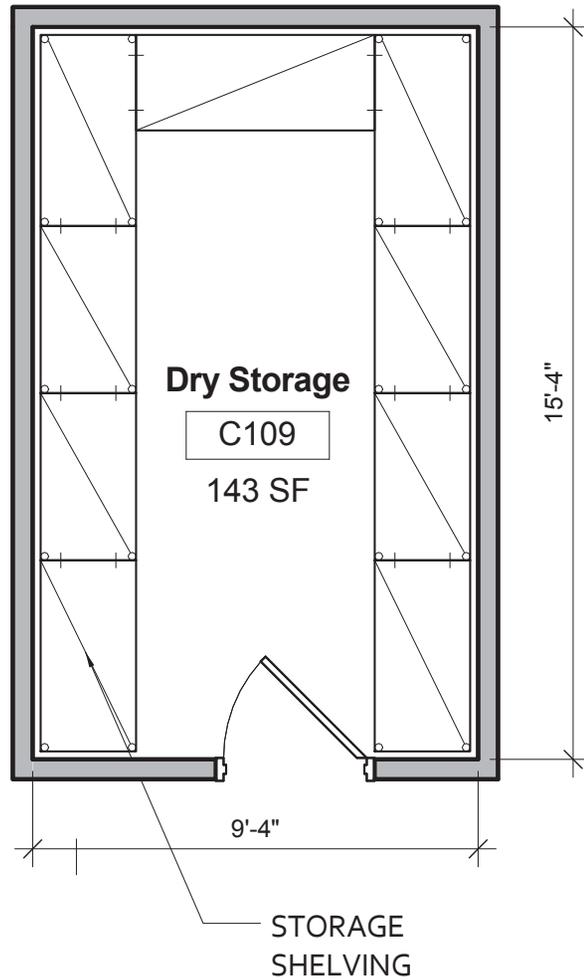
Ventilation:	0.12 CFM/person (min.) (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 quad receptacles at workbench, 2 duplex receptacles on each wall
Data:	None required
Phone:	None required
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
VCP:	70
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Locker
Number Required:	1
Total Number:	1
Occupants:	35
Area:	180 SF
Primary Function:	Provide an area for students storage

Relationships:

Location:	First Level
Adjacencies:	Multipurpose room, Dishwash, Servery
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in"

Finishes:

Floor:	Hard, durable surface
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Full sound construction

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF):	10'-0"
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Privacy/Security:

Open into laboratory. Needs to be secure for safety reasons.

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-40 wall lockers stacked two high
 -Coat rack and shelving
 -Gang sink, 1 Drinking fountain, 1 Eye wash station

Moveable Furnishings:

-None required

Equipment:

-None required

Technical Requirements

Mechanical:

Ventilation:	0.5 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	100% Exhaust
Plumbing:	None required

Electrical:

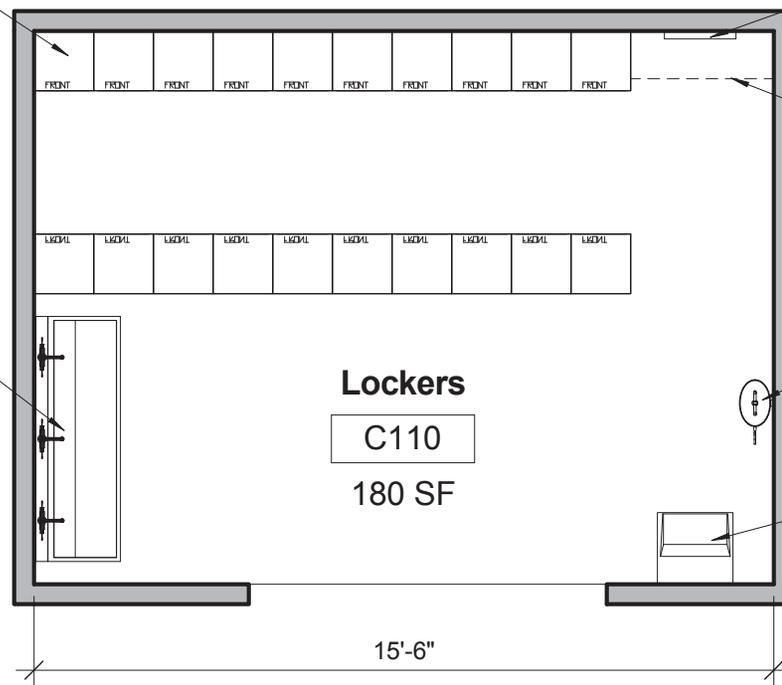
Power:	2 duplex receptacle each wall
Data:	None required
Phone:	1 device at entry
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	LED or other high efficiency system
Accent Lighting:	Task light at work surface
Foot Candles:	40
Controls:	Occupancy sensor

(40) LOCKERS,
STACKED 2 HIGH

GANG SINK



COAT RACK

SHELVING

EYE WASH
STATION

DRINKING
FOUNTAIN

Lockers
C110
180 SF

15'-6"

11'-7"

Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	2
Total Number:	2
Occupants:	1-3 each
Area:	130 SF each
Primary Function:	Instructor work area for planning, writing, organizing, record keeping and general administration.

Relationships:

Location:	First Level
Adjacencies:	Classroom
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Tile or polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF):	10'-0"
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Privacy/Security:

Private office with lockable door.

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear
Natural Light:	None required

Casework/Fixed Equipment:

- Base cabinets with workable surface
- Lateral Files
- Overhead Storage/Book Shelves
- Coat Rack

Moveable Furnishings:

- 1 Adjustable chair for Instructor
- 2 Fixed wheel mounted chairs for student/guest (Herman Miller WC410PMSLW5BK or similar)

Equipment:

- Computer, Whiteboard, Tack board

Technical Requirements

Mechanical:

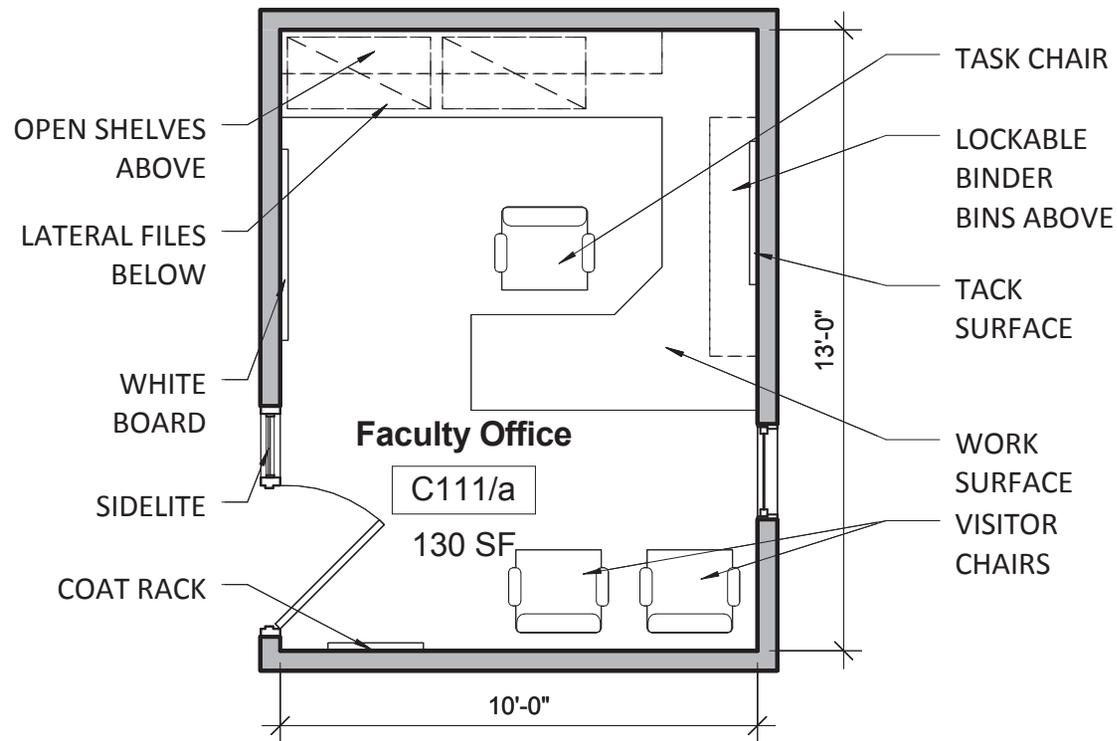
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Ceiling Speakers with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task light at work surface
Foot Candles:	40
VCP:	70
Controls:	Occupancy sensor



Space Requirements**Space Summary:**

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	25 each
Area:	750 SF each
Primary Function:	Instructing students in an academic classroom setting

Relationships:

Location:	First Level
Adjacencies:	Culinary Office
Separation:	None required

Architectural Requirements**Design/Aesthetic:**

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Tile or polished/sealed concrete
Walls:	CMU, Concrete, or equiv. durable surface
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements**Ceiling Height:**

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

No additional security required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior; Interior
Glazing:	Insulated Low-E; Clear
Natural Light:	Desirable

Casework/Fixed Equipment:

- Instructor console with podium
- Base cabinet with solid surface counter top
- Wall cabinet with lockable doors
- Bookcase with adjustable shelves

Moveable Furnishings:

- 25 student desks
- 26 task chairs armless, swivel adjustable

Equipment:

-Desktop computer, monitor, whiteboard, 2 small bulletin boards, phone, projector screen and mounting

Technical Requirements**Mechanical:**

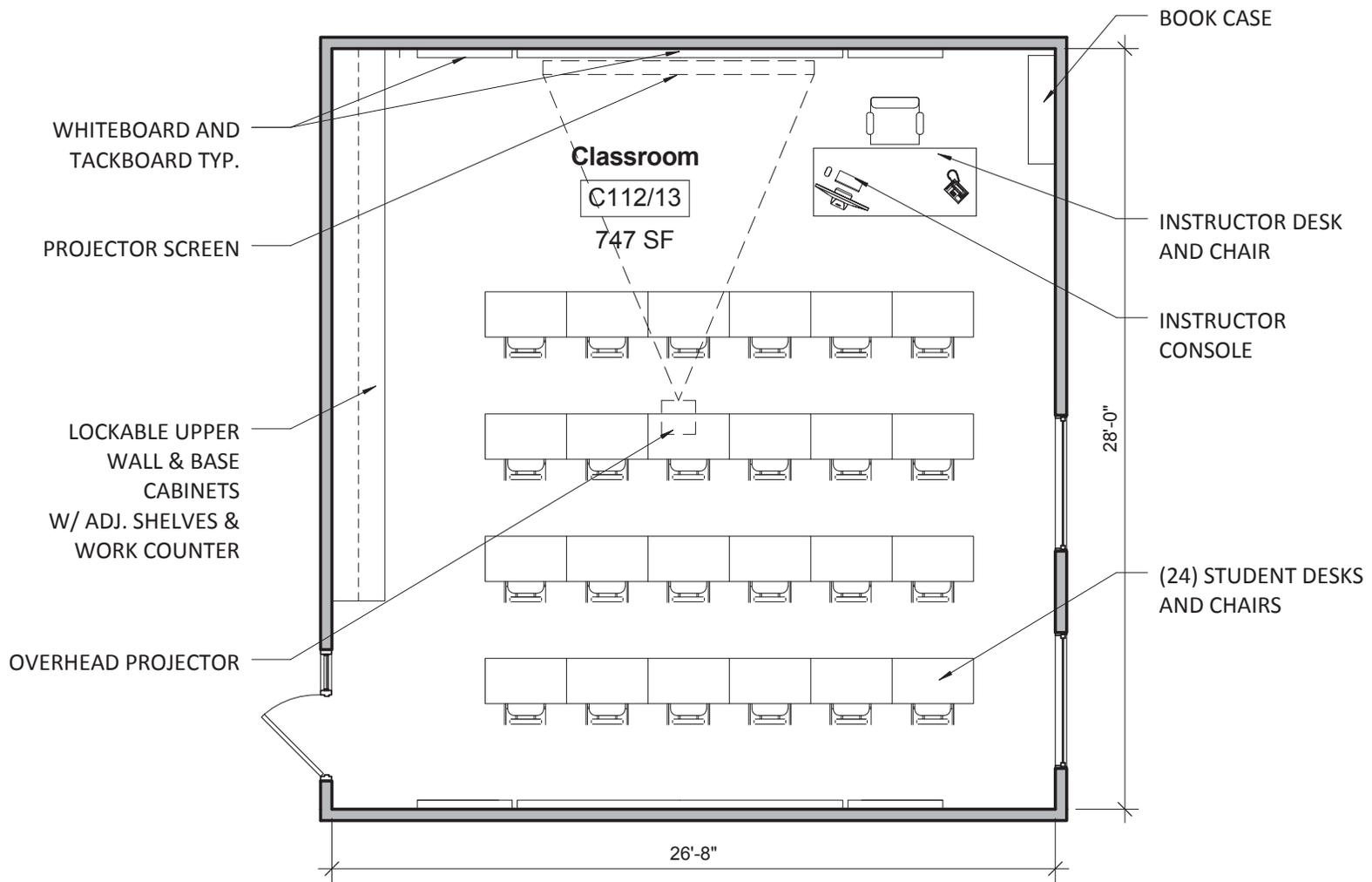
Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall and at instructor station. Additional capacity for equipment listed.
Data:	2 devices on opposing walls.
Phone:	1 devices at instructor station.
Video:	A/V system with internet connection
Intercom:	Ceiling speaker with volume controls

Lighting:

Fixture Type:	T-5 HO linear indirect pendant
Accent Lighting:	None required
Foot Candles:	40-45
VCP:	70
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Janitor Closet
Number Required:	1
Total Number:	1
Occupants:	1-2
Area:	120 SF
Primary Function:	Provide area for storage of cleaning supplies

Relationships:

Location:	First Level
Adjacencies:	None required
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Durable finishes

Finishes:

Floor:	Hard, durable surface
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF):	9'-0"
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Privacy/Security:

No additional security required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Wall mounted storage shelves

Moveable Furnishings:

-2 small bulletin boards, phone

Equipment:

-See the Food Services Design Criteria in Section 3 (Building Requirements) of this document for the extensive food services equipment list.

Technical Requirements

Mechanical:

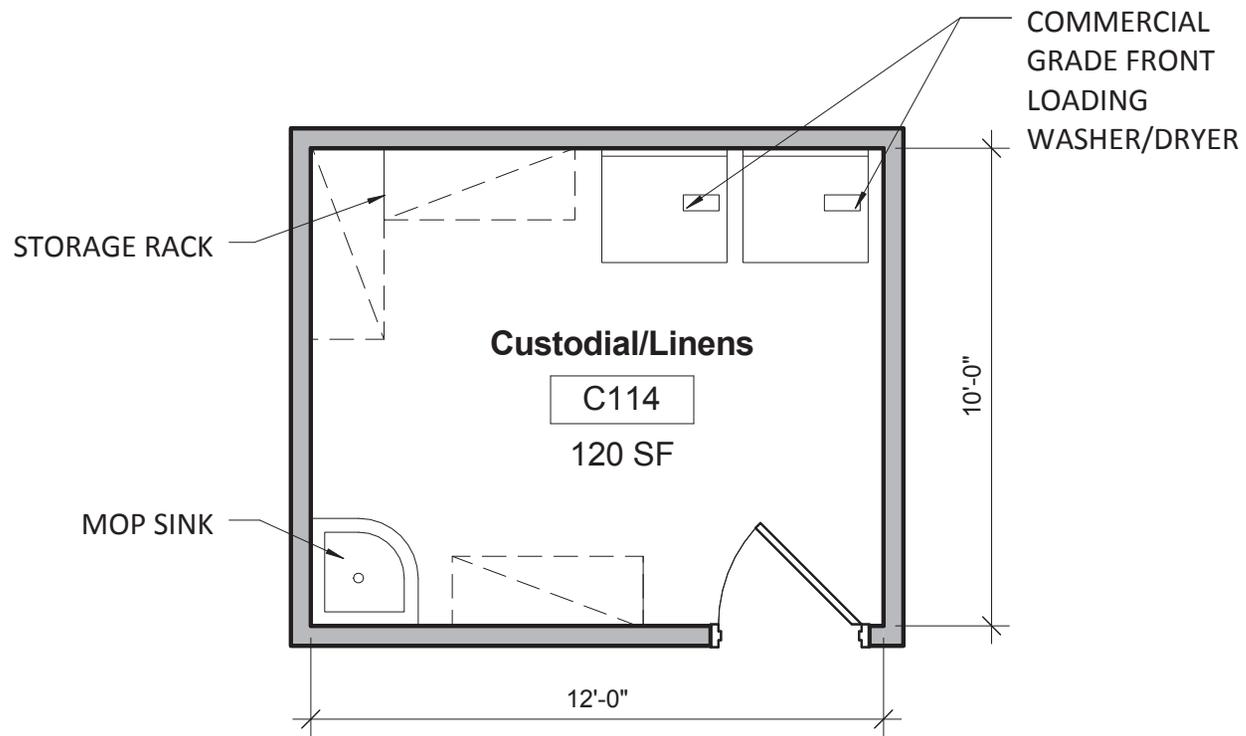
Ventilation:	1.0 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	Floor sink, wall sink, floor drain

Electrical:

Power:	2 GFCI duplex receptacles per wall. Additional capacity for equipment listed.
Data:	None required
Phone:	1 device at entry
Video:	Rough-in for future capacity
Intercom:	Ceiling Speaker with volume controls

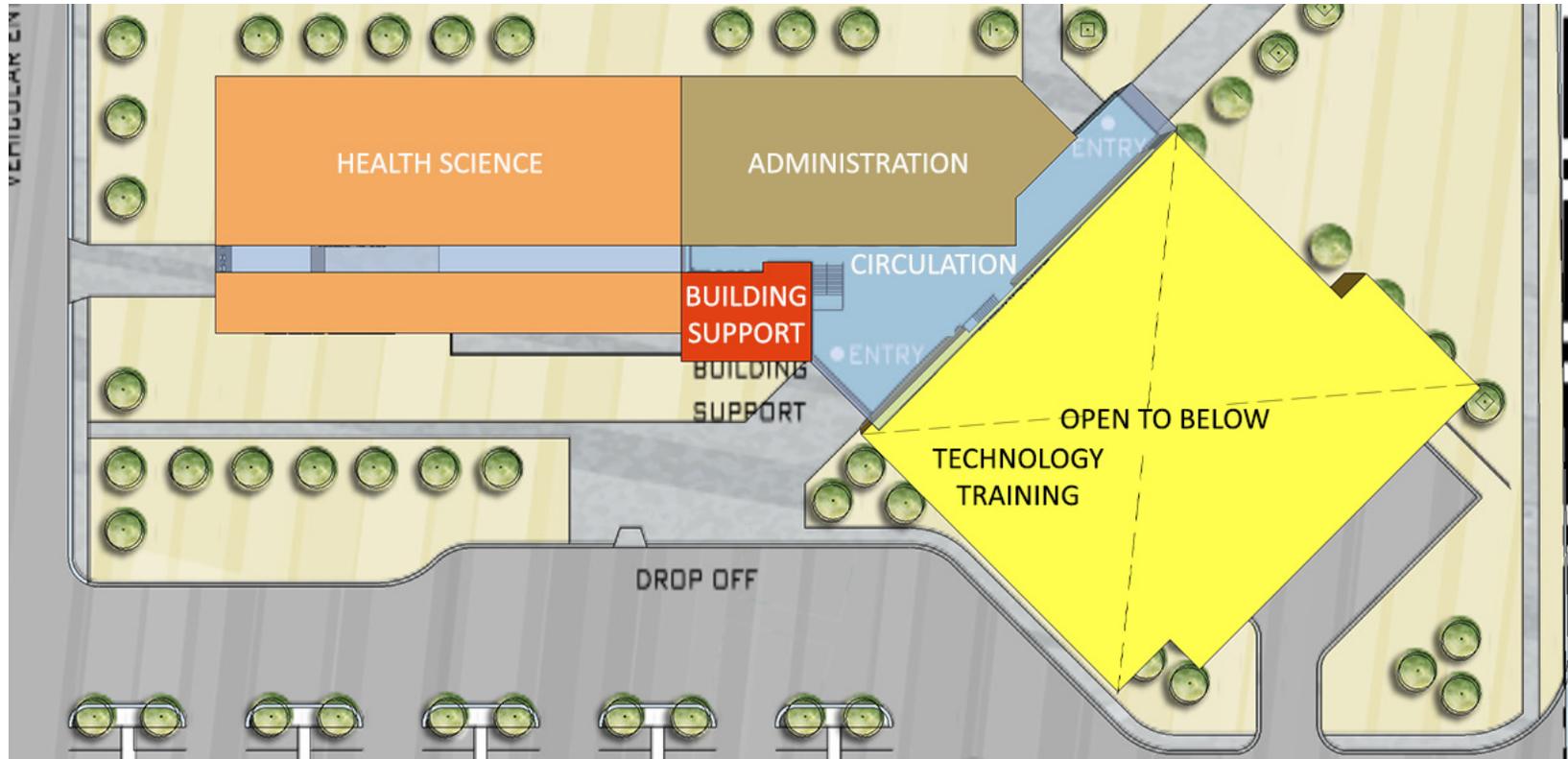
Lighting:

Fixture Type:	T-5 Fluorescent electronic ballast
Accent Lighting:	Task lighting at work surface
Foot Candles:	50
VCP:	70
Controls:	Occupancy sensor

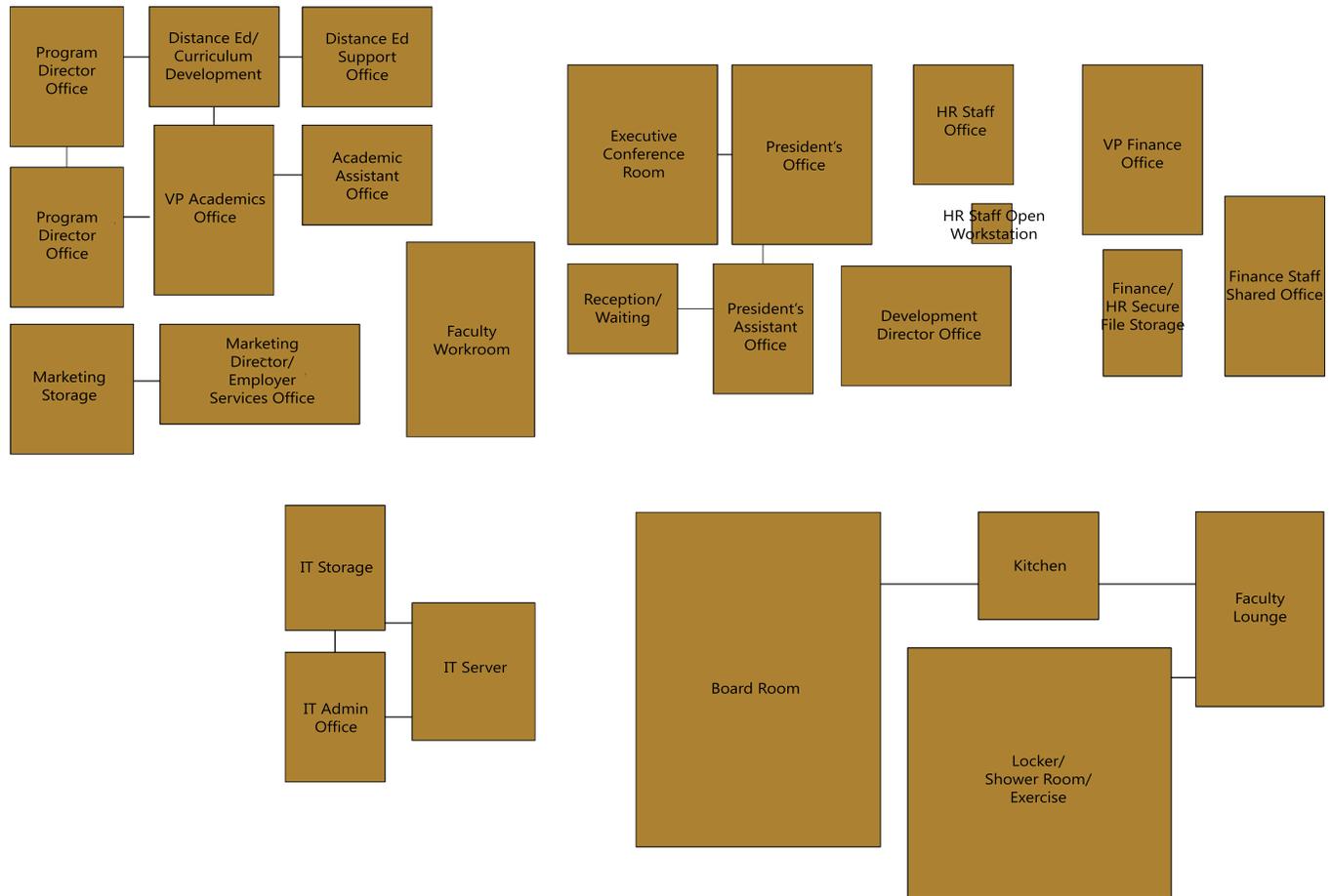


08 Administration

Second Floor Relationship Diagram



Adjacency Diagram



Space Requirements

Space Summary:

Type of Space:	Board Room
Number Required:	1
Total Number:	1
Occupants:	32
Area:	735 SF
Primary Function:	Provide a private and professional conference area, equipped to accommodate and display all current technology formats.

Relationships:

Location:	Second Level
Adjacencies:	Kitchen A128
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Lockable lower and upper cabinets; counter top; whiteboard

Moveable Furnishings:

-Large table; 32 chairs

Equipment:

-80" LCD TV, ICV system compatible, conference telephone

Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Sink, water, waste, and vent

Electrical:

Power: 1 duplex receptacle per wall. 2 four-plex floor box under table. Additional capacity for equipment listed.

Data: 1 device on opposing walls; 1 floor box under table

Phone: 1 device on opposing walls; 1 floor box under table

Video: A/V system with internet connection

Intercom: Speaker with volume control

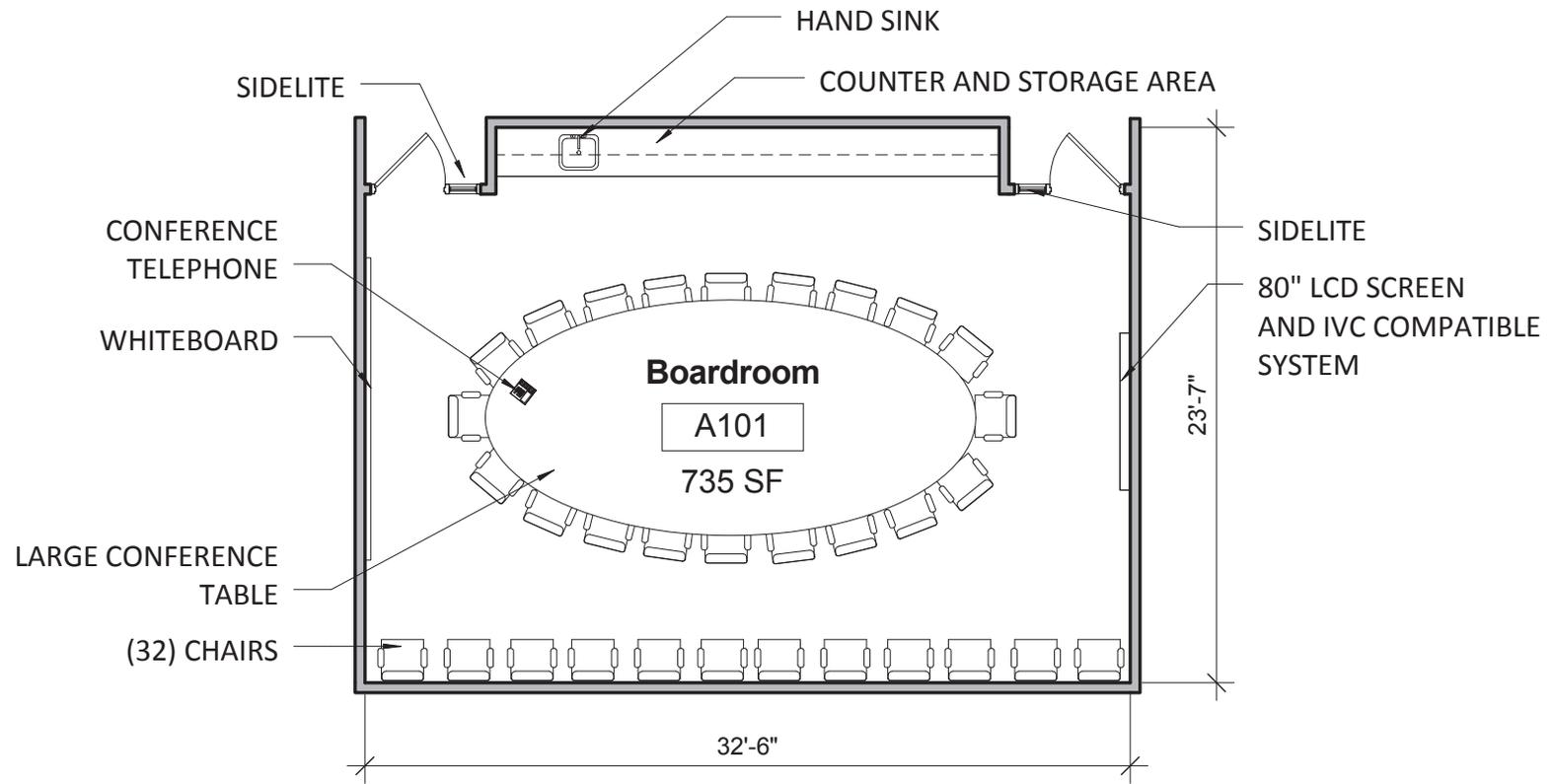
Lighting:

Fixture Type: T-8 Fluorescent video conference type with dimming ballast

Accent Lighting: MR16 or LED

Foot Candles: 50

Controls: Dimming control and relay



Space Requirements

Space Summary:

Type of Space:	Conference Room
Number Required:	1
Total Number:	1
Occupants:	10
Area:	270 SF
Primary Function:	Provide a private and professional conference area, equipped to accommodate and display all current technology formats.

Relationships:

Location:	Second Level
Adjacencies:	President's Office; Reception/Waiting
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior
Glazing:	Low-E
Natural Light:	Desirable

Casework/Fixed Equipment:

-Counter top with storage cabinets below, hand sink

Moveable Furnishings:

-Large table; 10 chairs, whiteboard, media chart

Equipment:

-60" LCD, conference telephone

Technical Requirements

Mechanical:

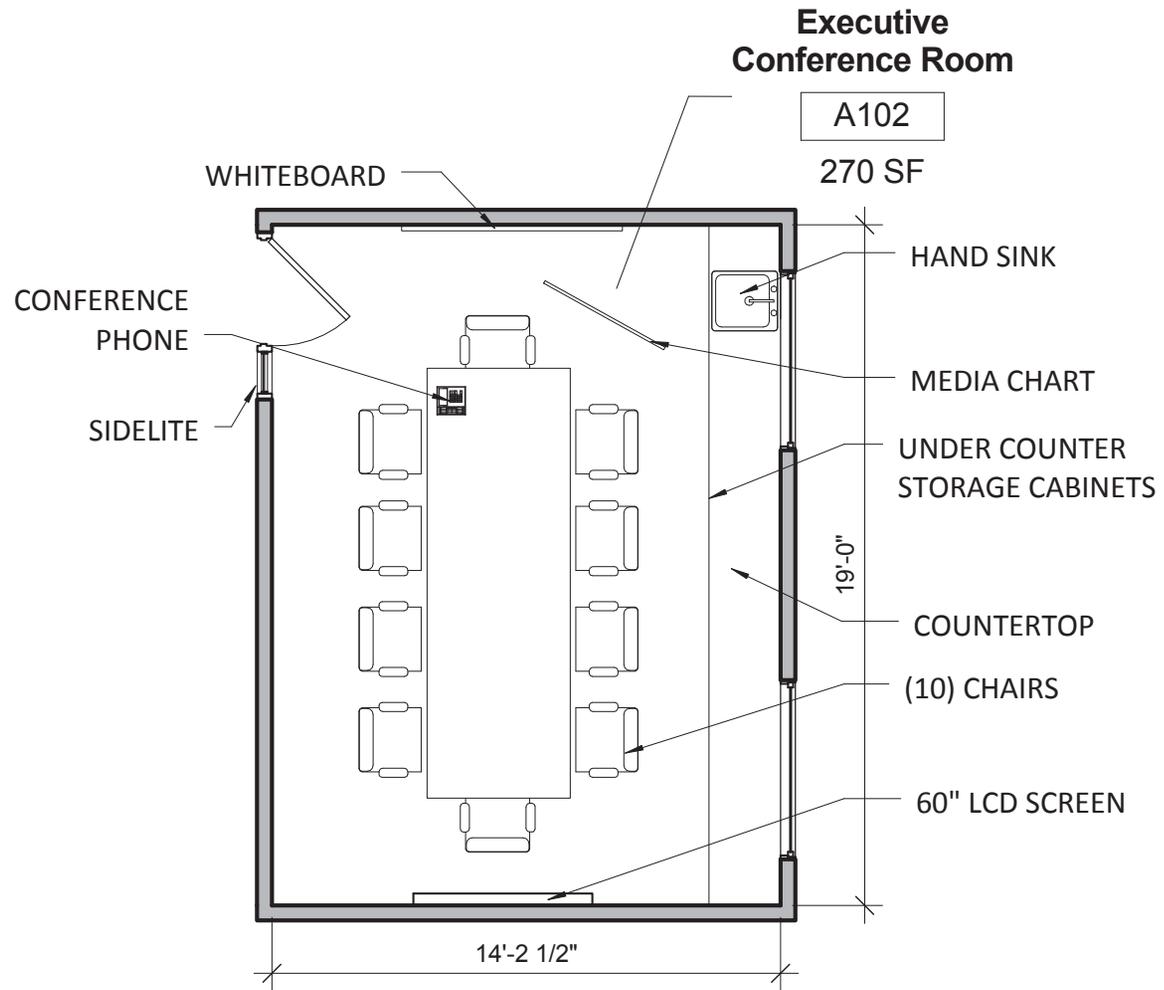
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	Hand sink, supply, waste and vent

Electrical:

Power:	1 duplex receptacle per wall. 1 four-plex floor box under table. Additional capacity for equipment listed.
Data:	1 device on opposing walls, 1 floor box under table
Phone:	1 device on opposing walls, 1 floor box under table
Video:	A/V system with internet connection
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent video conference type with dimming ballast
Accent Lighting:	MR16 or LED
Foot Candles:	50
Controls:	Dimming control and relay



Space Requirements

Space Summary:

Type of Space:	Reception/Waiting
Number Required:	1
Total Number:	1
Occupants:	4-6
Area:	72 SF
Primary Function:	Reception work area/ waiting room

Relationships:

Location:	Second Level
Adjacencies:	President's Office and Assistant Office; Executive Conference Room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor
(AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-Couch, comfortable chair, side table, coffee table

Equipment:

-Computer

Technical Requirements

Mechanical:

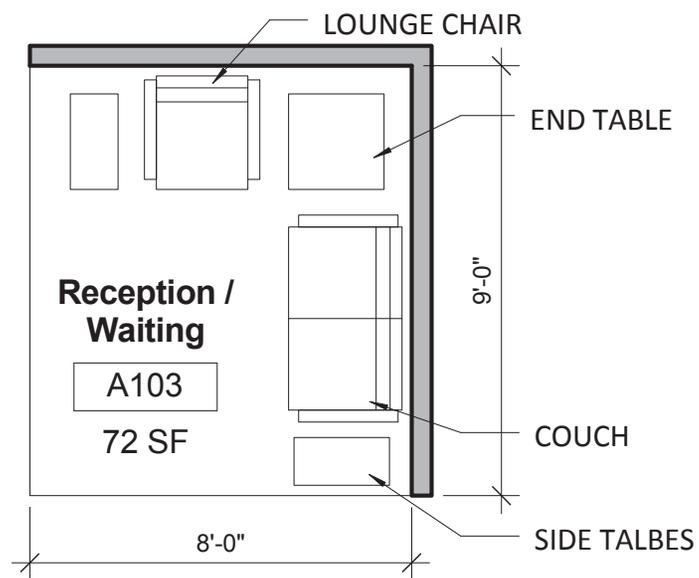
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	2 walls for pictures and certificates
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-6
Area:	252 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	Second Level
Adjacencies:	President's Assistant Office, Executive Conference Room
Separation:	Mechanical and Elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior
Glazing:	Low-E
Natural Light:	Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat closet; whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Loveseat and soft chair; Lamp table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

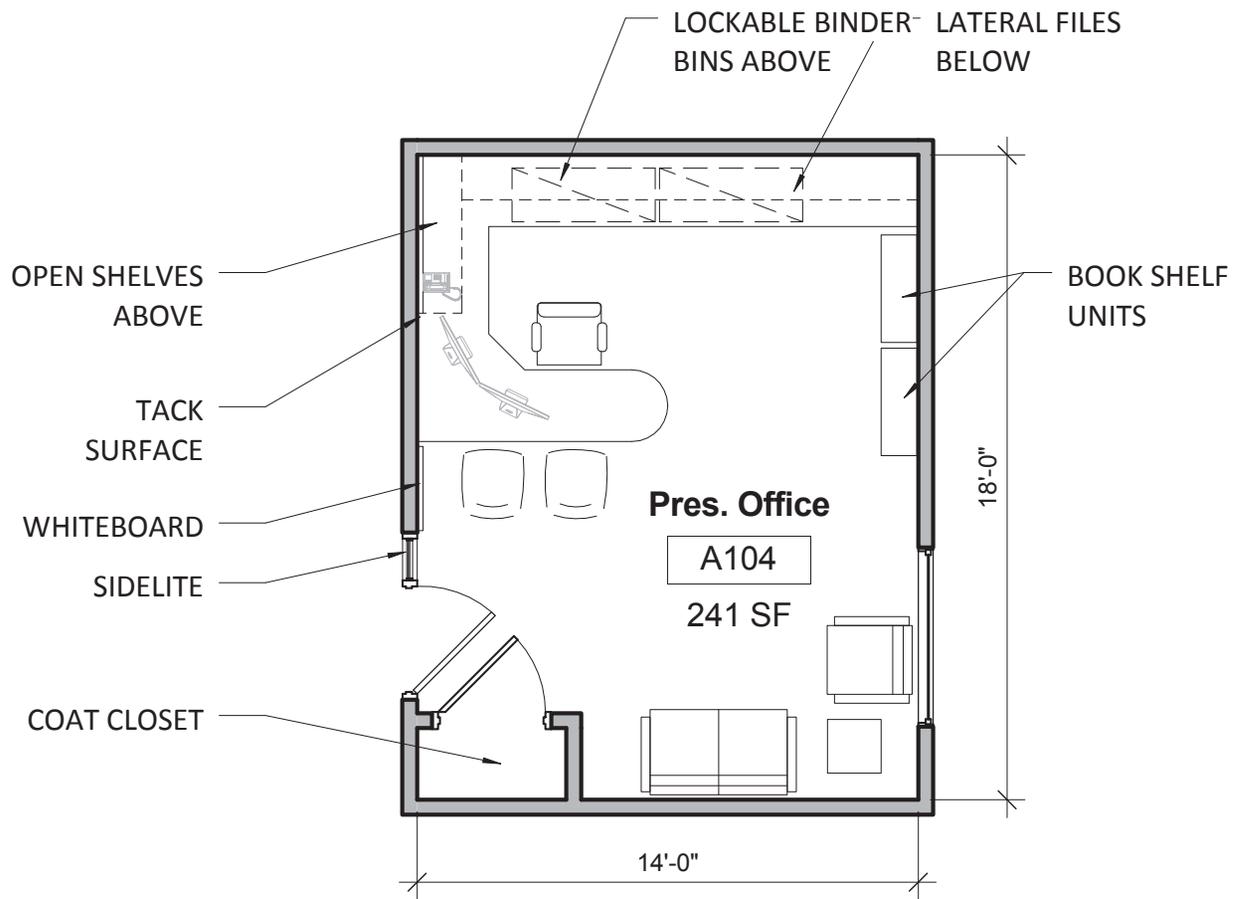
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	130 SF
Primary Function:	Day-to-day operations, written and verbal communications, daily document access.

Relationships:

Location:	Second Level
Adjacencies:	Reception/Waiting; President's Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack; whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Guest chairs

Equipment:

-Computer; printer; paper shredder; fax; copier

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

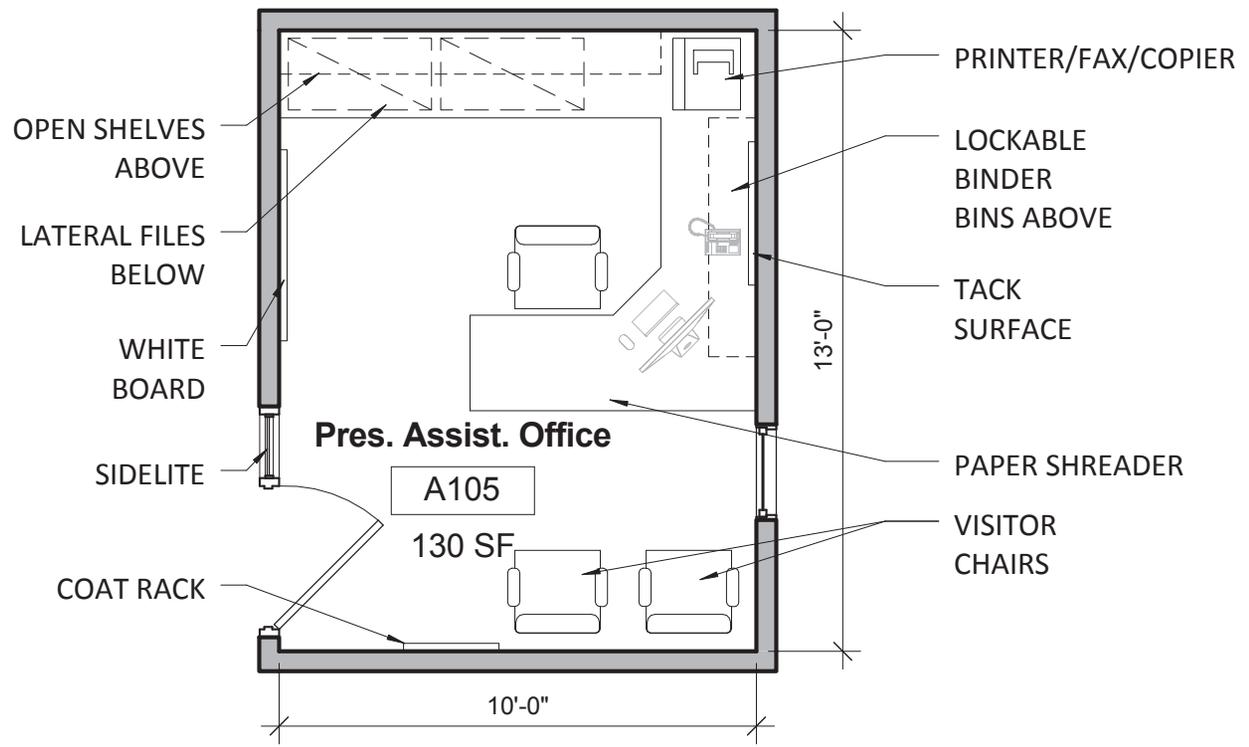
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	204 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Academic Assistant, Curriculum Development, Program Directors
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior
Glazing:	Low-E
Natural Light:	Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack; whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

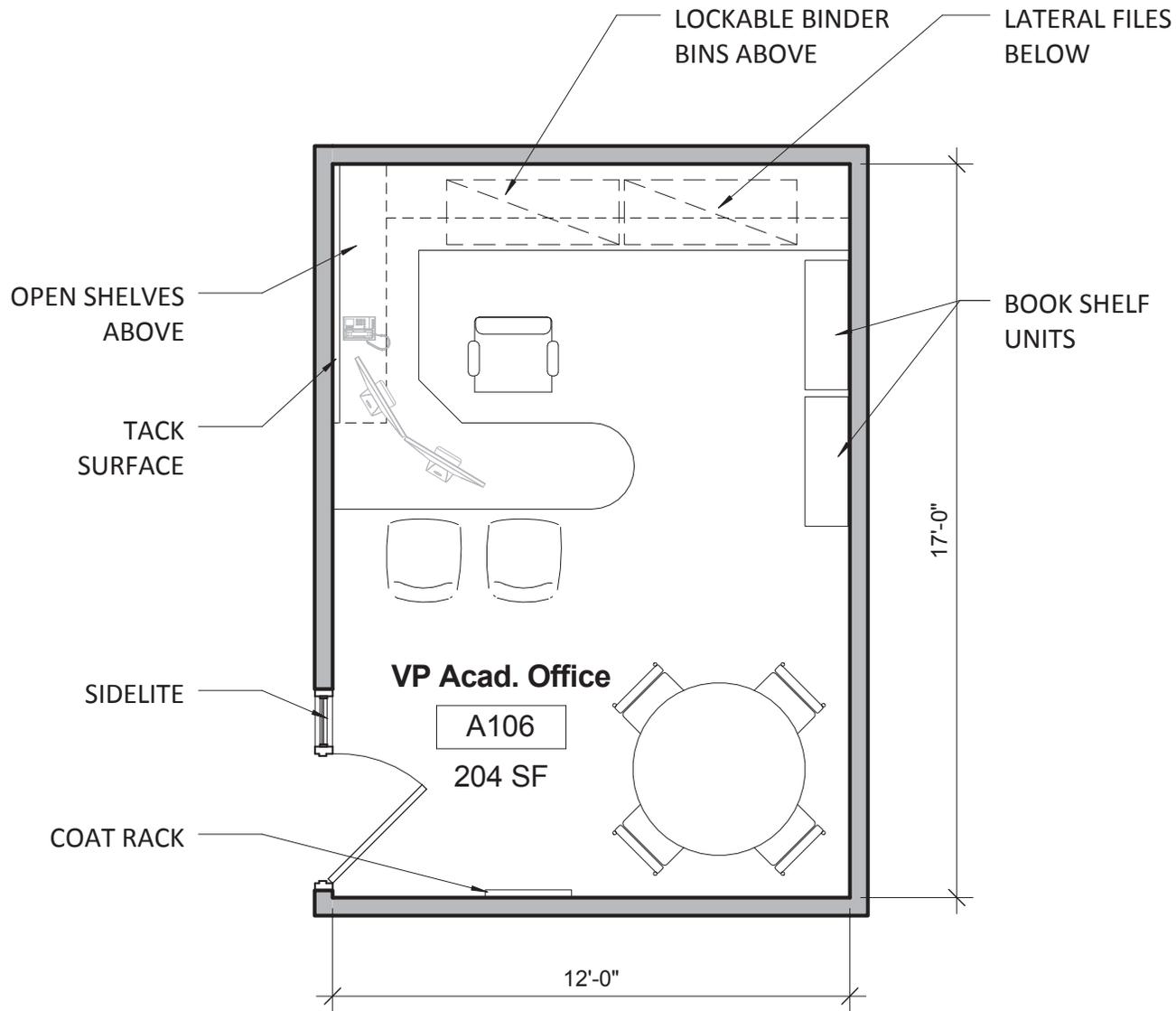
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Academic Assistant, Curriculum Development, Program Directors
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack; whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

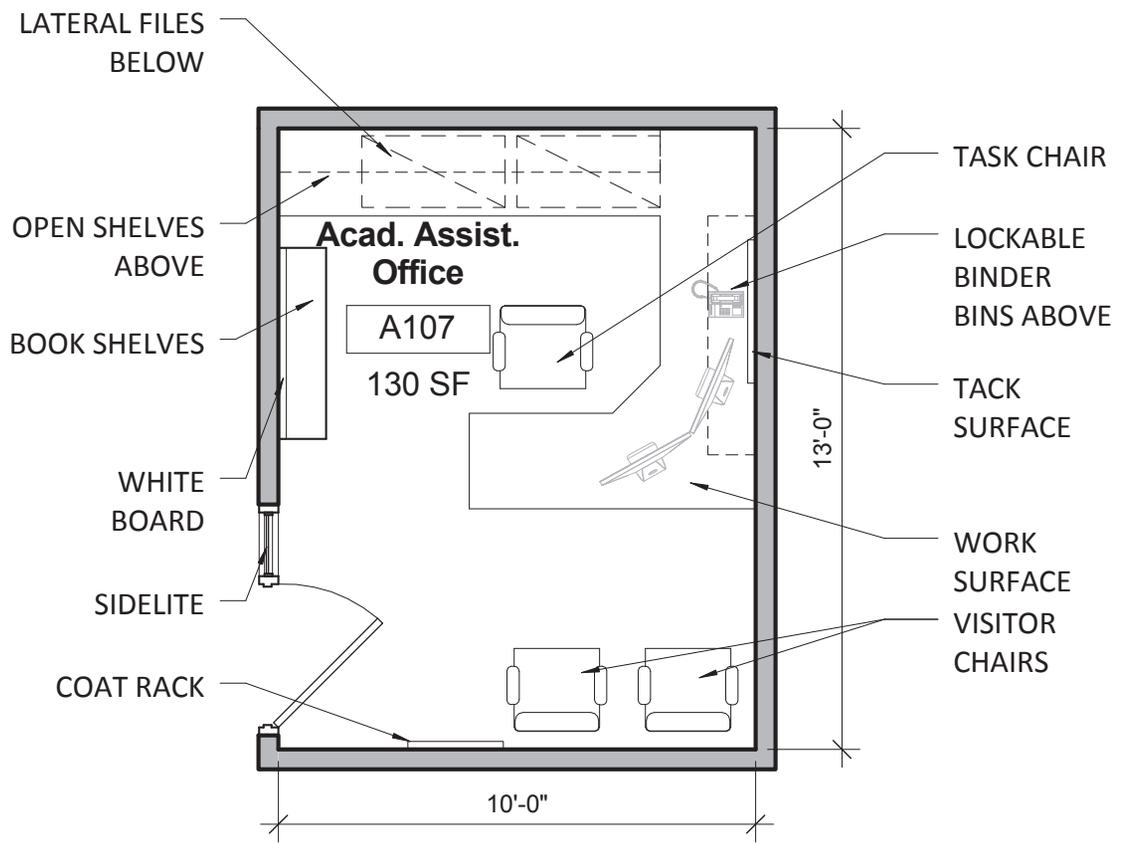
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	160 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	VP Academics; Curriculum Development
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack; whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

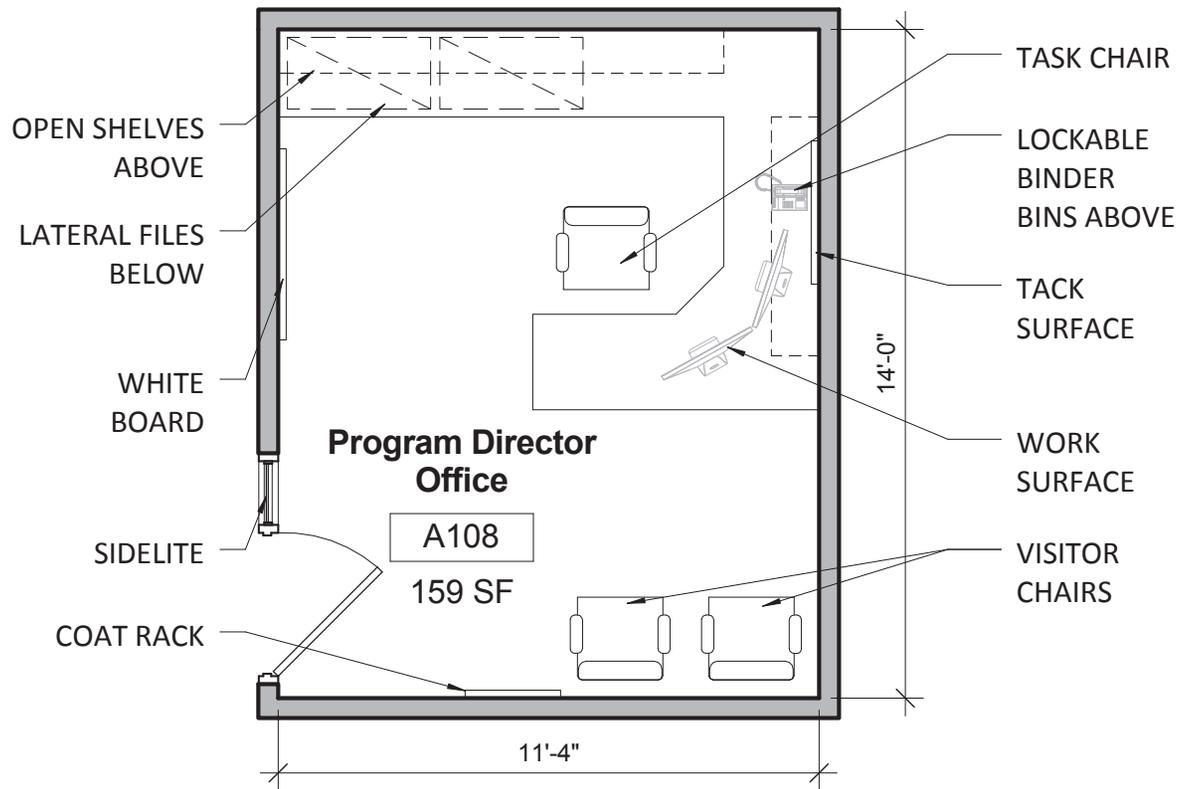
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	160 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	VP Academics; Curriculum Development
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

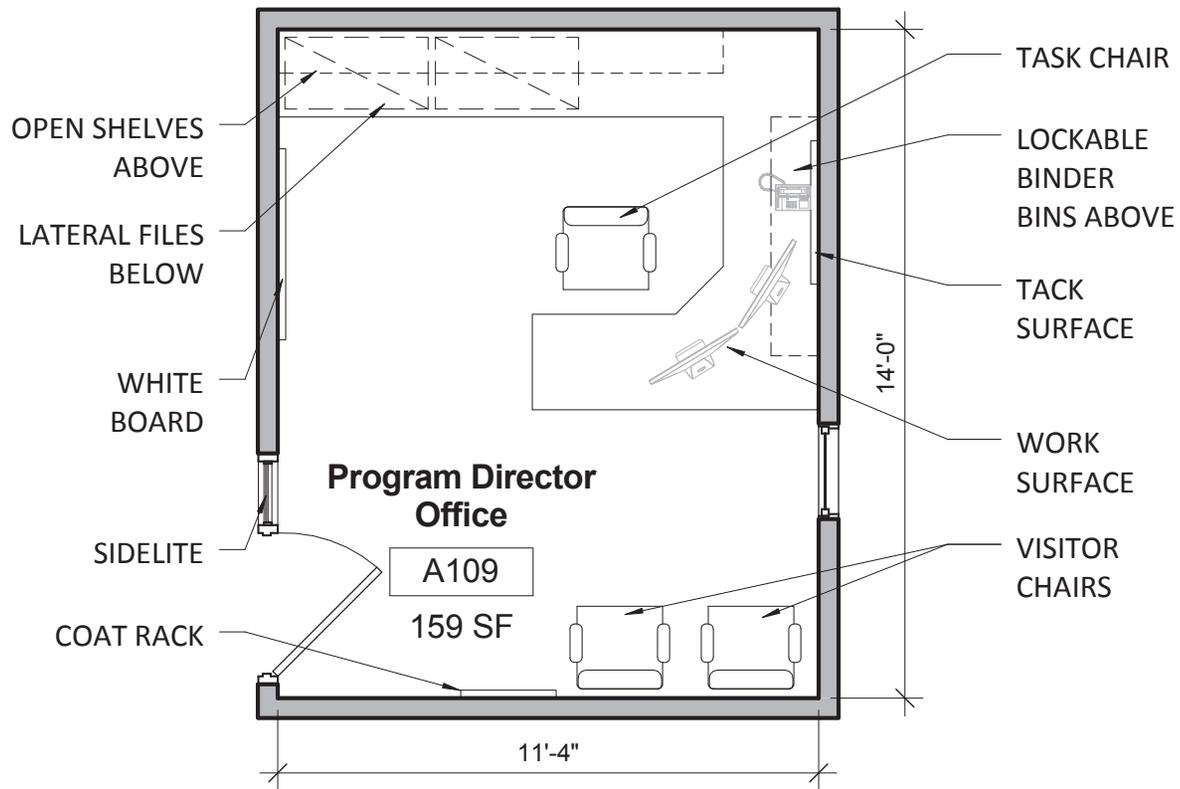
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	130 SF
Primary Function:	Workspace for distance Ed/curriculum director, frequent meetings

Relationships:

Location:	First Level
Adjacencies:	VP Academics, Program Directors
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Guest chairs

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

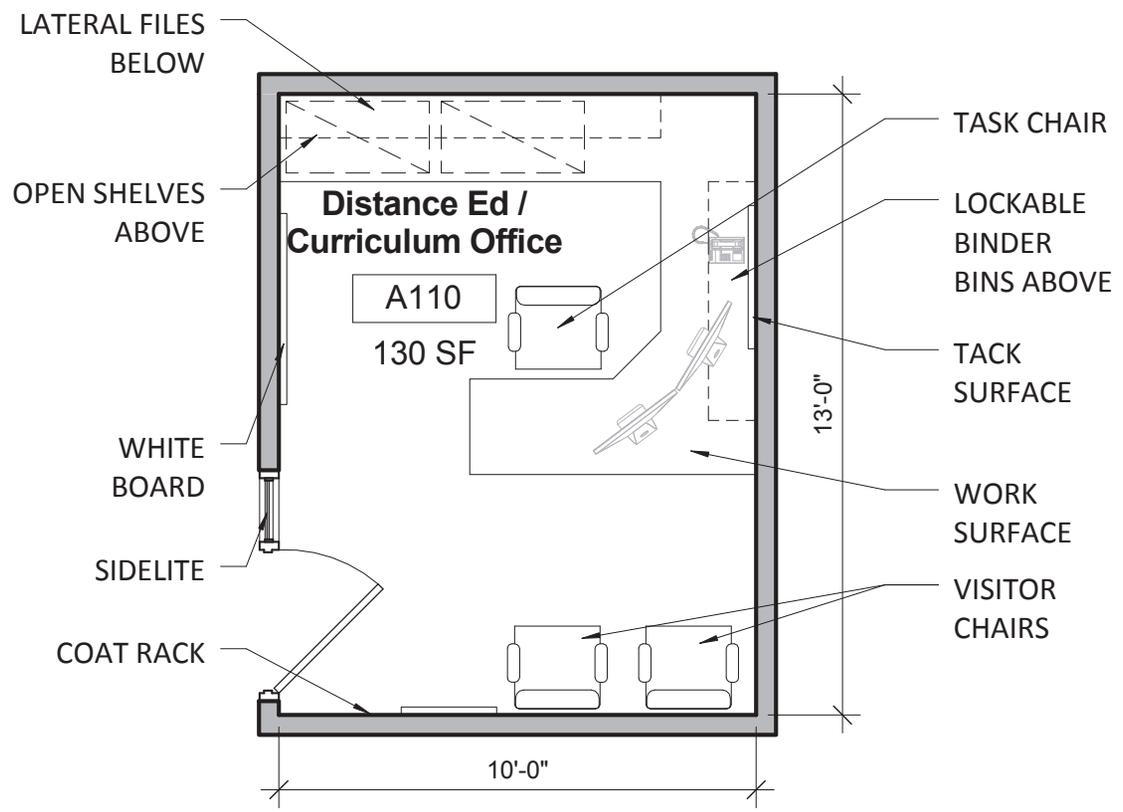
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access. Extensive computer use.

Relationships:

Location:	First Level
Adjacencies:	Distance Ed/Curriculum Director
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack; whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

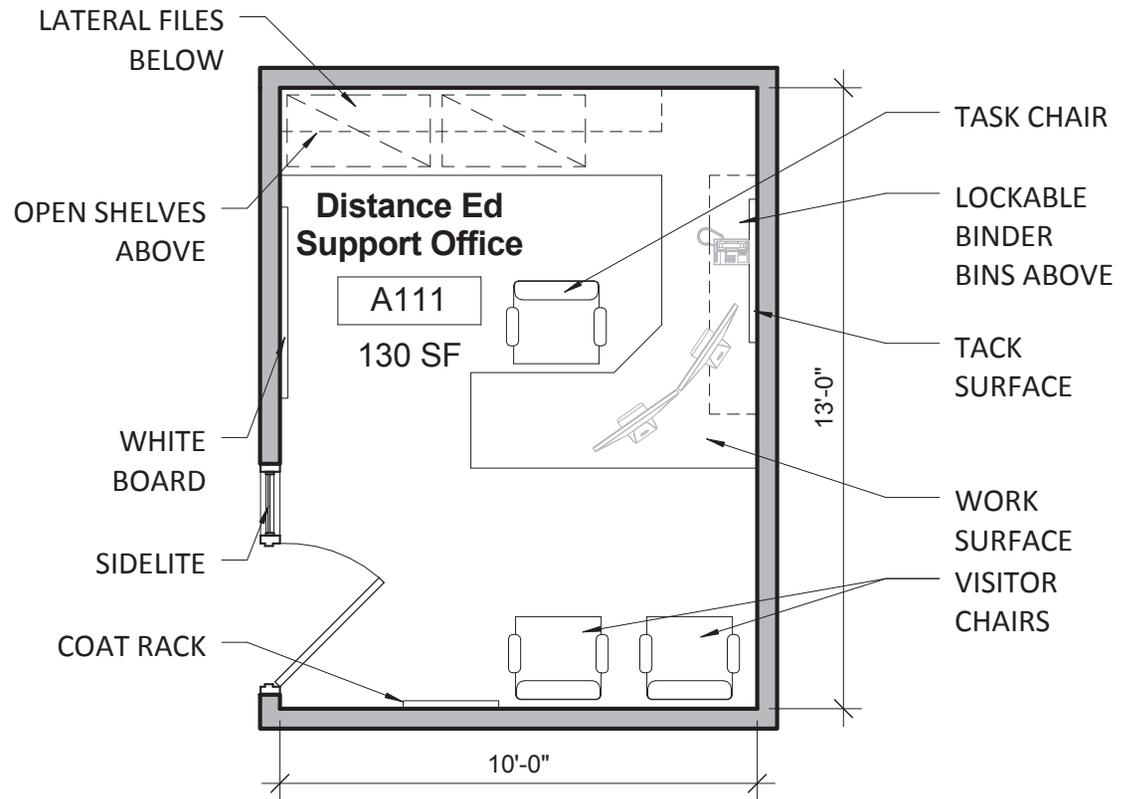
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	204 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	President's Office; HR Staff workstation; HR Staff Office
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Loveseat and chair; Lamp table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

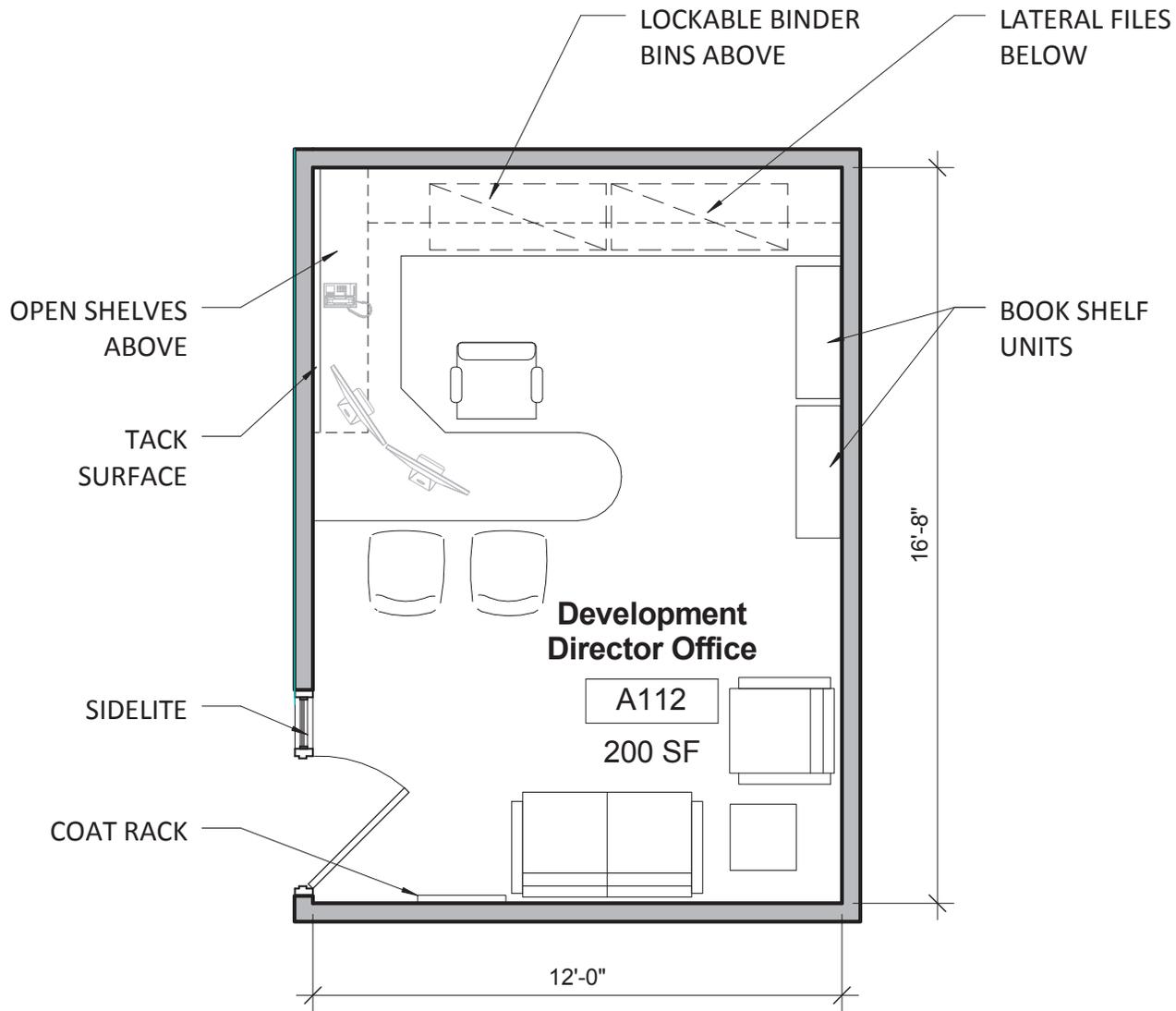
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	200 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Marketing Storage
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Flow/Learning; Higher Education feel

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Loveseat and chair; Lamp table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

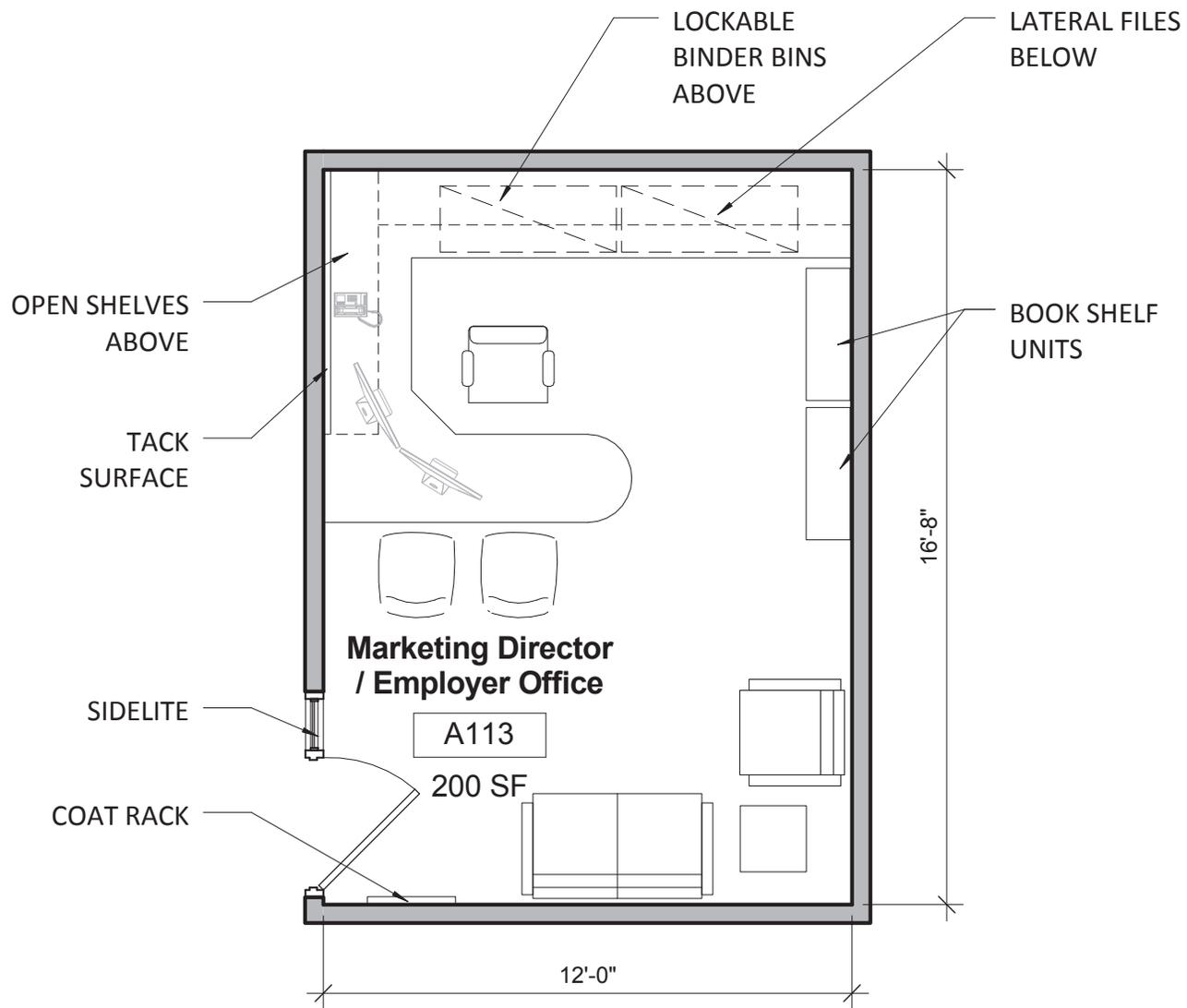
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Walk-in storage closet/ room
Number Required:	1
Total Number:	1
Occupants:	0
Area:	150 SF
Primary Function:	Storage for publications; Event preparation; Items; Banners; Signage; Shirts; Giveaways; etc.

Relationships:

Location:	First Level
Adjacencies:	Marketing Director/ Employer Services Office
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Flexible space

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	Low dust
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor
(AFF): 9'-0"

Privacy/Security:

Windows into other spaces; Not in main student
traffic areas; Anti-theft protection

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear glass
Natural Light:	None required

Casework/Fixed Equipment:

-Creative shelving for PR/Ads/Marketing Supplies
and signage
-Open shelving for publications; Trade show
booth; Rolled banners; Event equipment;
Speaker systems; Podiums; etc.

Moveable Furnishings:

-Work table/station (standing height)

Equipment:

-Storage bins for logo items (pens, lanyards, etc.)

Technical Requirements

Mechanical:

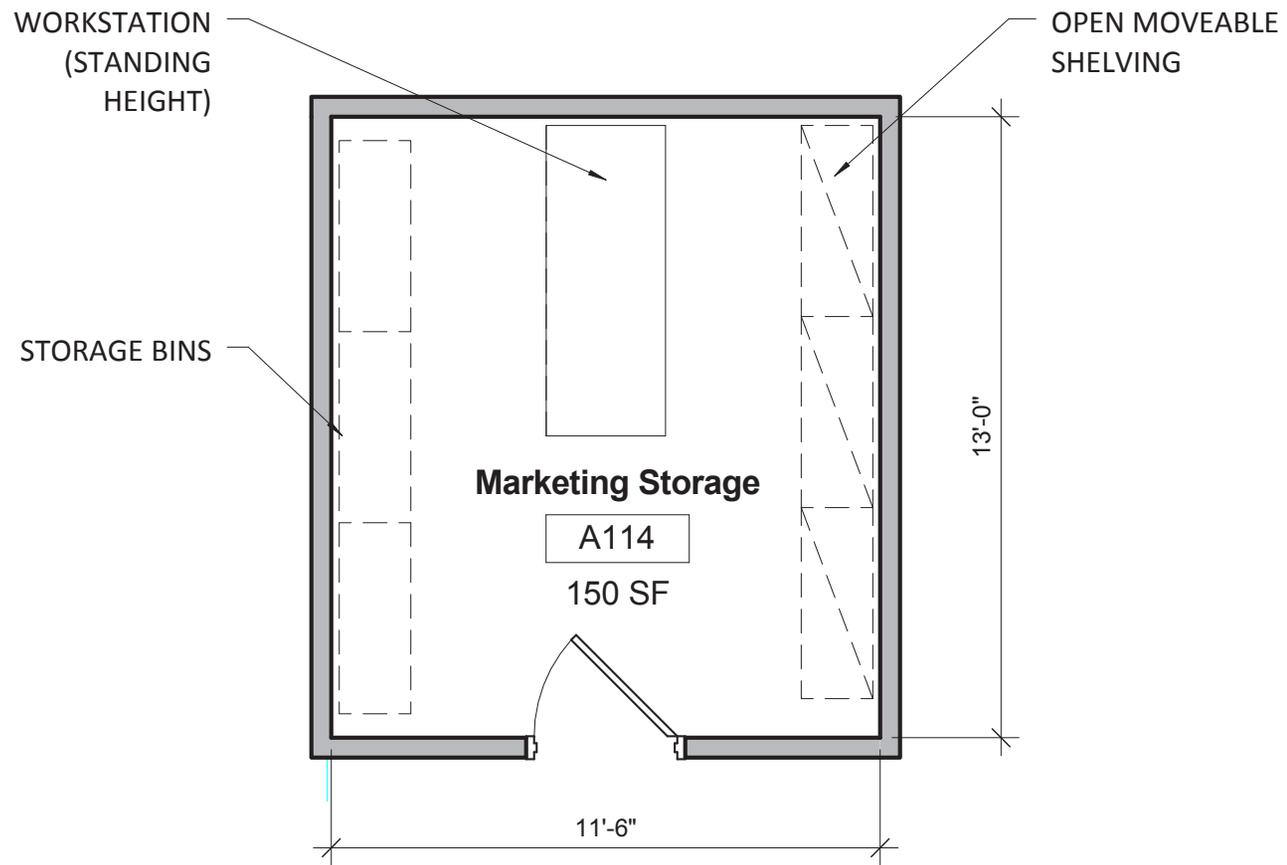
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space: Office
 Number Required: 1
 Total Number: 1
 Occupants: 2-3
 Area: 200 SF
 Primary Function: All accounting functions

Relationships:

Location: First Level
 Adjacencies: VP staff, Human resources
 Separation: Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Comfortable; Warm and peaceful; not boring; organized

Finishes:

Floor: Carpet
 Walls: Painted gypsum board
 Ceiling: Painted gypsum board
 Specialty Finishes: None required
 Sound: Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

-Lockable door and file drawers

Doors:

Type: Solid core wood with clear finish.
 Frame: Painted hollow metal with glazed sidelite
 Special: Sound Isolation; Lockable

Windows:

Type: Exterior
 Glazing: Low-E
 Natural Light: Desirable

Casework/Fixed Equipment:

-Lockable binder bins; 4 drawer vertical file cabinet; Coat rack
 -Whiteboard; Tack board
 -Desk; Shelves

Moveable Furnishings:

-Comfortable rolling chair with arms
 -Multiple/Lockable file drawers for accounting documents

Equipment:

-Computer; Phone; Printer/Copier; Shredder

Technical Requirements

Mechanical:

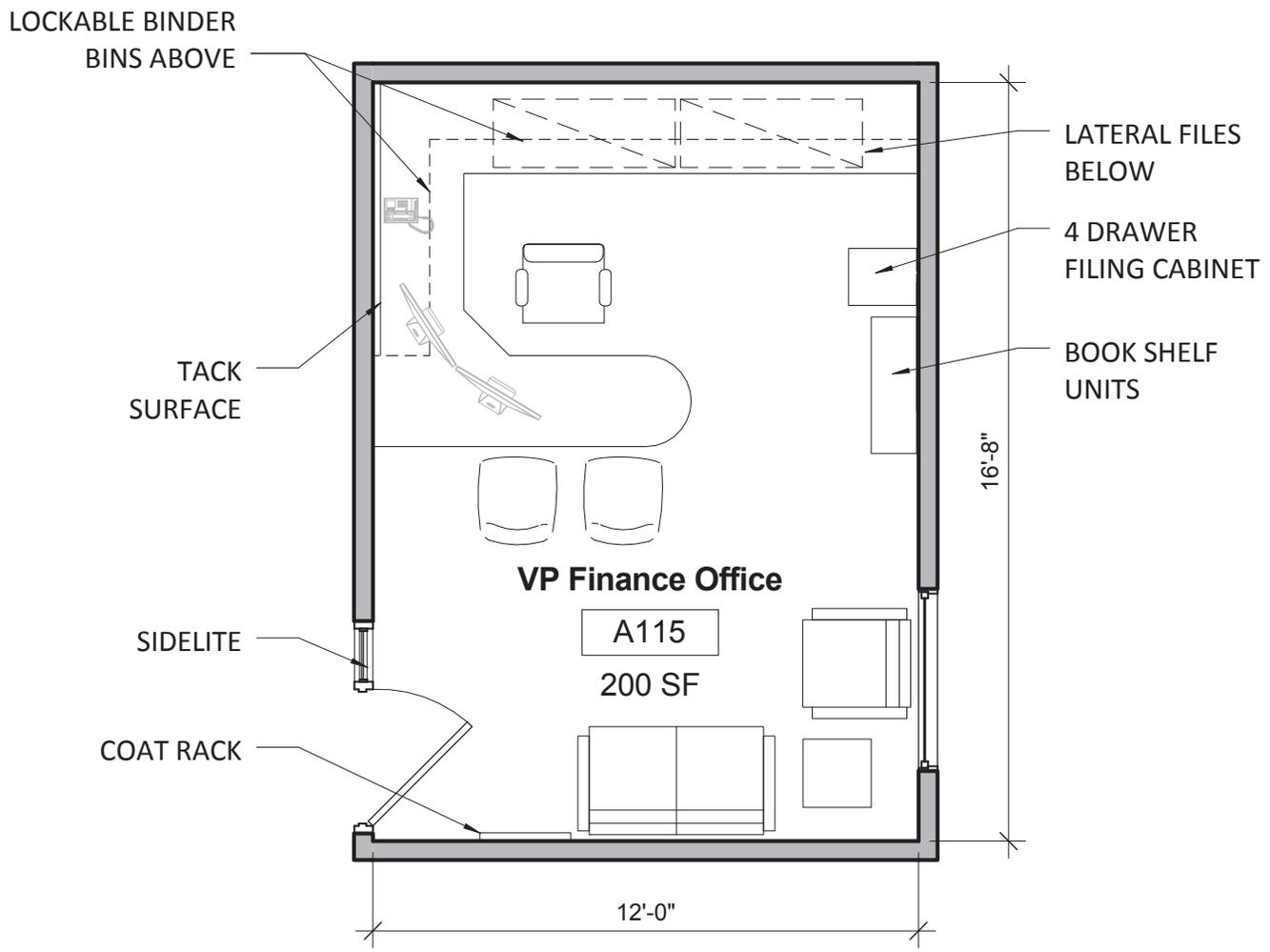
Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.
 Summer Design Temp: 72 ° F
 Winter Design Temp: 72 ° F
 Controls: Individual direct digital controls (no vent directly over head)
 Sound Criteria: 35 (NC/RC)
 Special Systems: None required
 Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.
 Data: 2 devices on opposing walls
 Phone: 2 devices on opposing walls
 Video: Rough-in for future capacity
 Intercom: Speaker with volume control

Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect
 Accent Lighting: Task lighting at work surface
 Foot Candles: 40
 Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	2-4
Area:	170 SF
Primary Function:	Miscellaneous accounting functions.

Relationships:

Location:	First Level
Adjacencies:	VP Finance Office
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Comfortable, warm and peaceful but not boring. Very organized

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable binder bins; Work area; 2 Tack boards

Moveable Furnishings:

-(2) 4 drawer lockable filing cabinets; Guest chairs

Equipment:

-2 computers; 2 monitors; printer; 2 phones; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

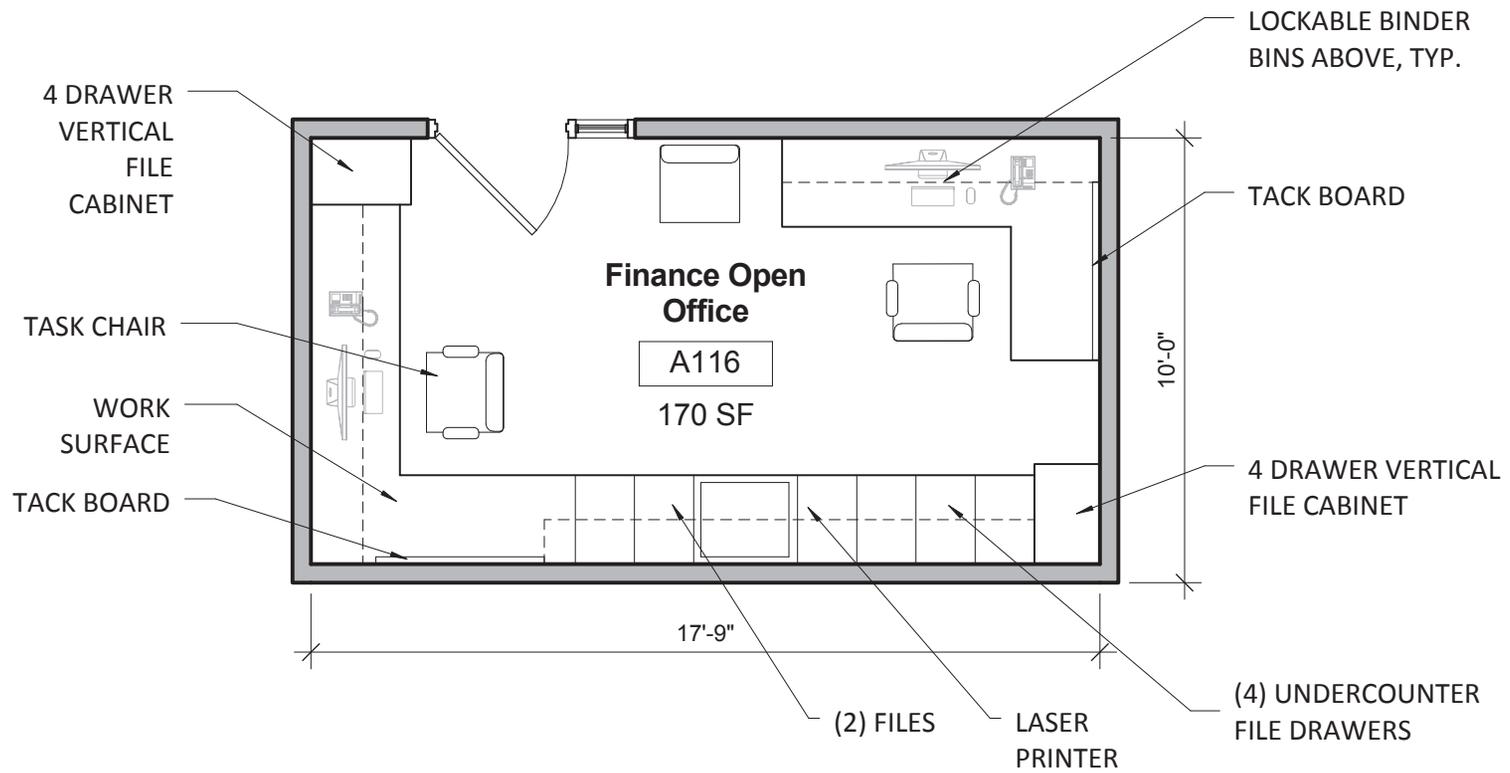
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Secure Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	90 SF
Primary Function:	Storage of accounting, payroll and personnel files

Relationships:

Location:	First Level
Adjacencies:	Finance and Human Resources
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Easily organized

Finishes:

Floor:	VCT with 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Finance staff should not have access to personnel files and HR staff should not have access to finance files. Room needs to remain locked. Access via security code.

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Electronic access lock

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Shelving for banker box storage; 24" safe

Moveable Furnishings:

-4 Drawer Lockable file drawers; table

Equipment:

None required

Technical Requirements

Mechanical:

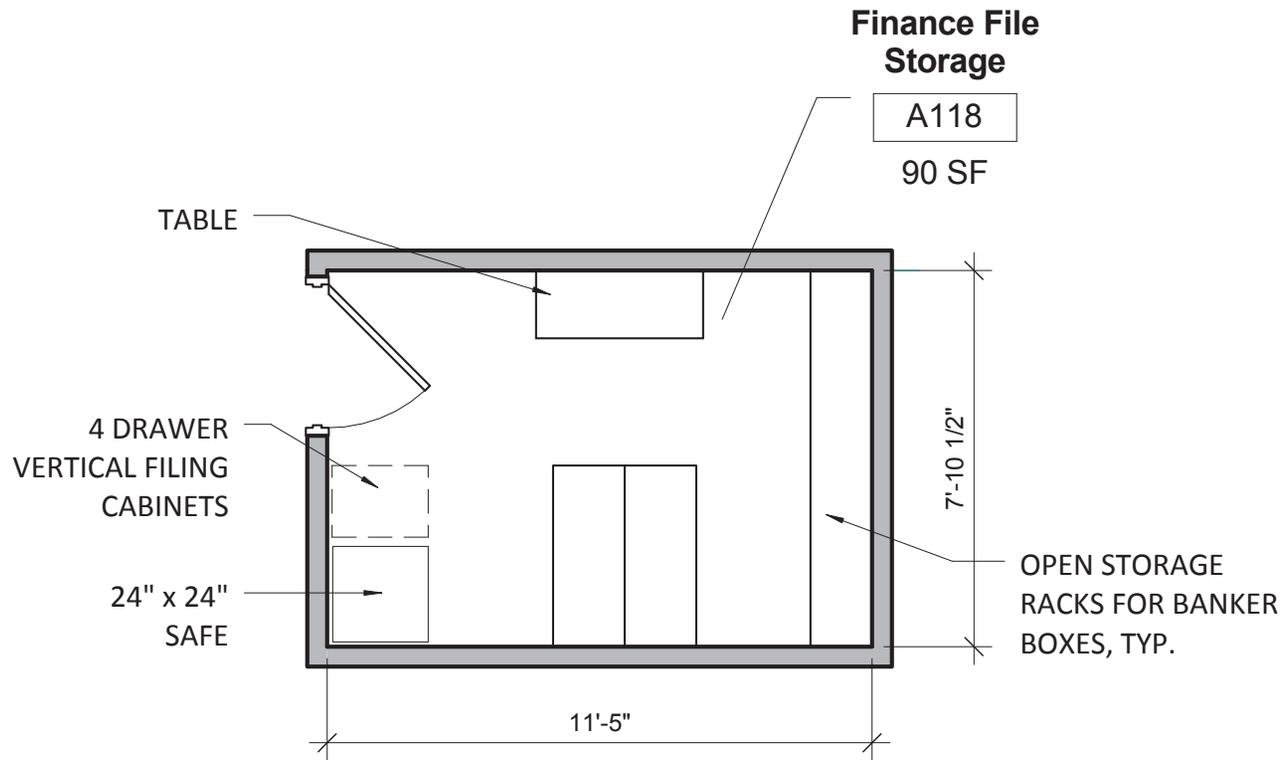
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	Rough-in for future capacity
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Purchasing Receiving Area
Number Required:	1
Total Number:	1
Occupants:	2
Area:	100 SF
Primary Function:	Storage and organization of incoming packages to be distributed to various departments

Relationships:

Location:	First Level
Adjacencies:	Accounting staff workstations; Finance office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Clean and organized

Finishes:

Floor:	Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Room to remain locked when not in use; Access via security code

Doors:

Type:	Exterior; Galvanized hollow core metal, insulated and painted
Frame:	Galvanized hollow metal, painted
Special:	Electronic access lock

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Counter top; Lockable cabinets; Small workstation; Adjustable shelving

Moveable Furnishings:

-Lateral files; Adjustable shelving

Equipment:

-Telephone

Technical Requirements

Mechanical:

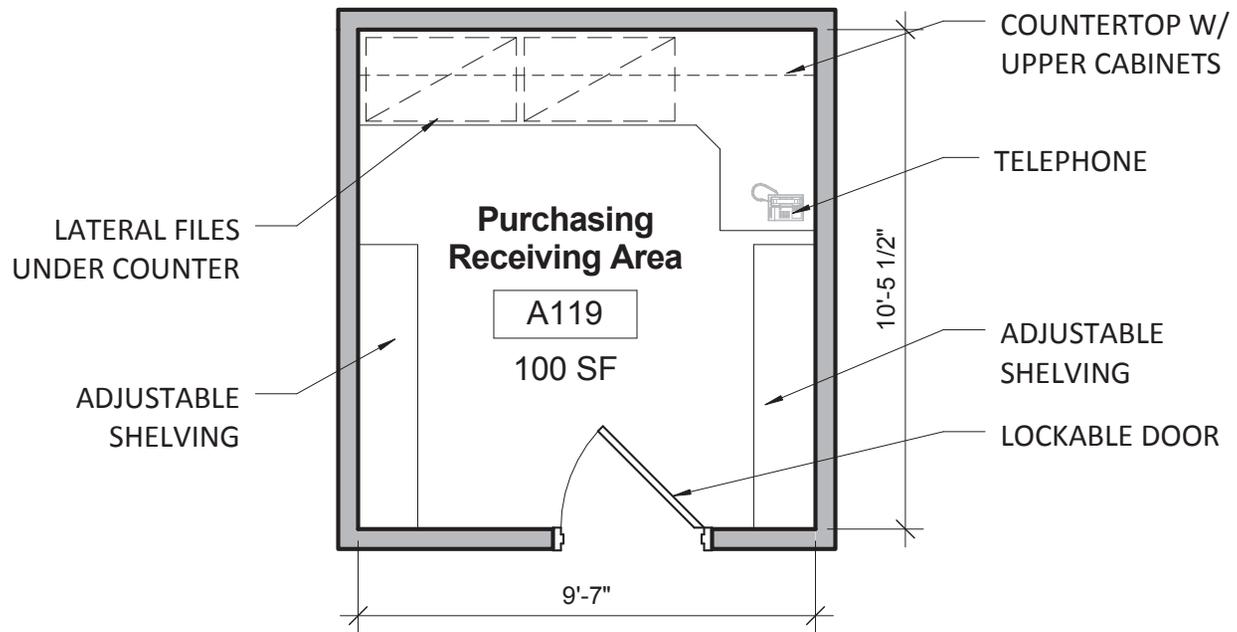
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	1 device
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	120 SF
Primary Function:	Preparation of personnel files; employment reports; Meetings with potential and current employees

Relationships:

Location:	First Level
Adjacencies:	Finance Office; Finance/HR secure storage
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Clean, organized, welcoming, calming and comfortable for visitors

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard, Tack board

Moveable Furnishings:

-Desk; Guest chairs; (2) 4 drawer vertical file cabinets

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

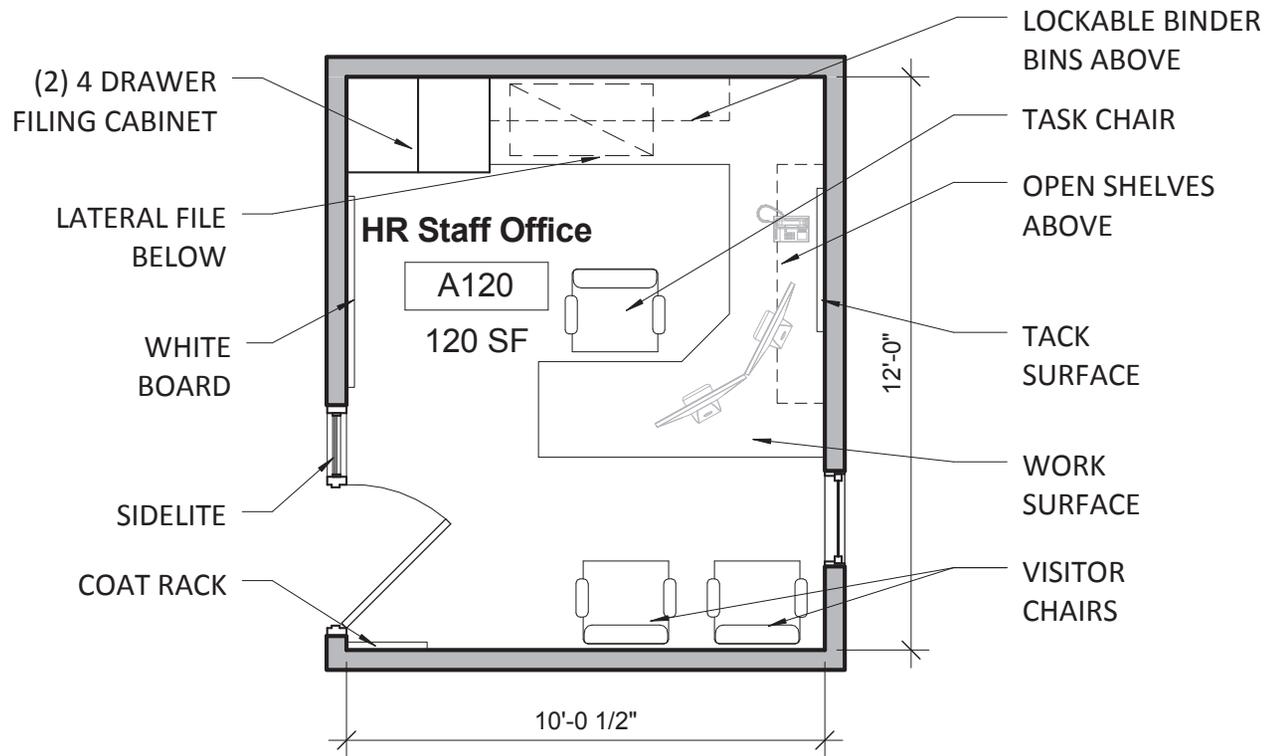
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Open workstation
Number Required:	1
Total Number:	1
Occupants:	1
Area:	100 SF
Primary Function:	Preparation of employment paperwork, on-line orientation

Relationships:

Location:	First Level
Adjacencies:	HR/Finance
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Clean, organized, welcoming and comfortable for new and potential employees

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Desk; Shelves and locking storage
-Large Tack board

Moveable Furnishings:

-Staff rolling chair; 2 stationary visitor chairs

Equipment:

-Computer; Monitor; Phone; Trash can

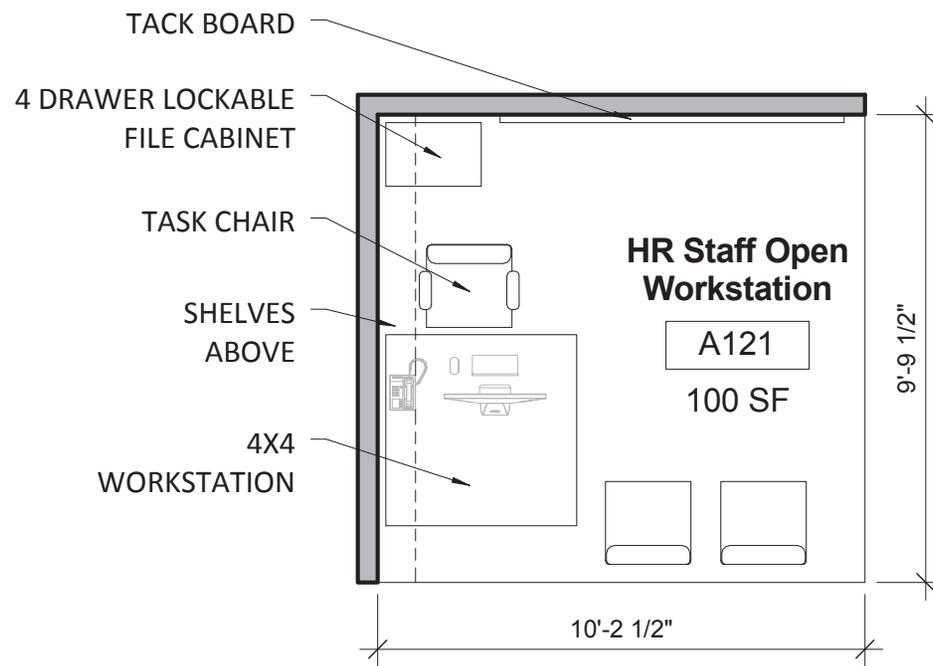
Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Provide an office space for IT administrator and work space.

Relationships:

Location:	First Level
Adjacencies:	Close to the MDF (server room); IT storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Authorized Personnel Only

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-3 Chairs

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall. Additional capacity for equipment listed.

Data: 1 device on each wall

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

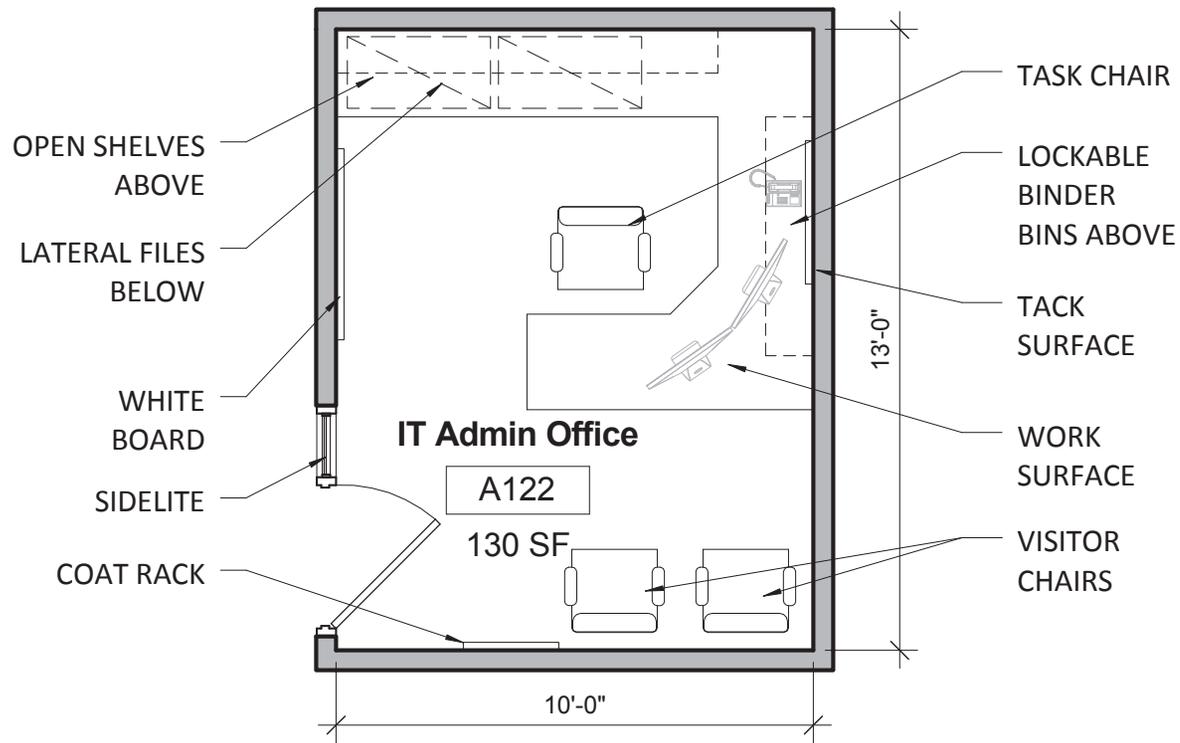
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor; Dimmable



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	125 SF
Primary Function:	Storage of hardware and software for IT department

Relationships:

Location:	First Level
Adjacencies:	The MDF (server room); IT Admin Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Security code access

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Electronic lock

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Fixed and adjustable shelving

Moveable Furnishings:

-3'x6' Work Bench

Equipment:

None required

Technical Requirements

Mechanical:

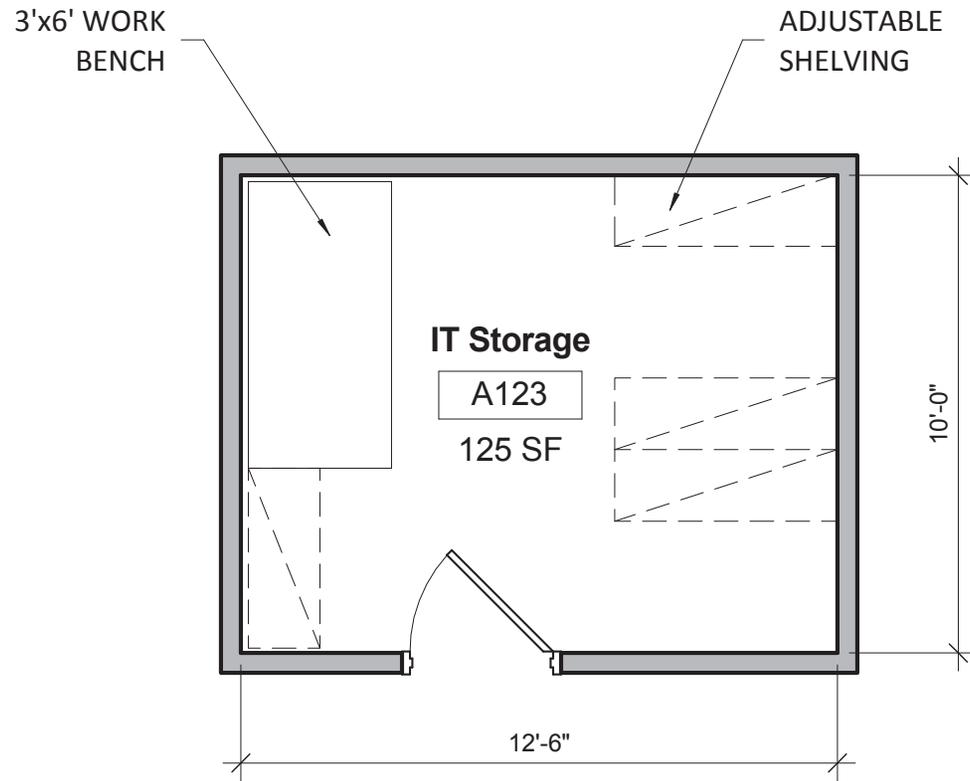
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall. 2 quad receptacles at work bench. Additional capacity for equipment listed.
Data:	1 device on each wall. 4 devices at work bench.
Phone:	1 device at workbench
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Server Room
Number Required:	1
Total Number:	1
Occupants:	0
Area:	170 SF
Primary Function:	MDF; End point for any and all data in the building; Home runs for data; Servers and switches MDF; D-Mark into building

Relationships:

Location:	First Level
Adjacencies:	IT Storage Room; IT Admin Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Provide secure MDF; No data loss

Finishes:

Floor:	3" raised computer floor
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Authorized Personnel Only; Security code access

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-6-8 Server/switch racks; rack-mounted server blades and switches
-Whiteboard

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

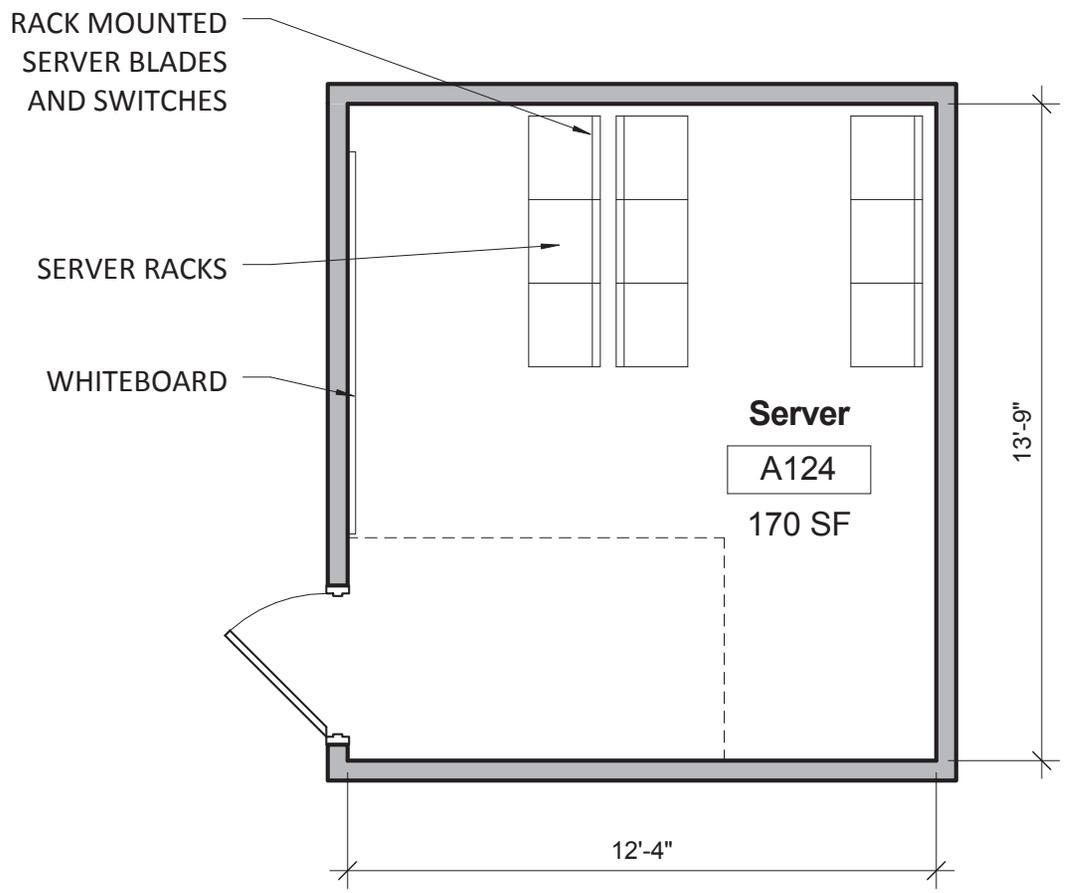
Ventilation:	None
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	Electric Humidifier
Plumbing:	None required

Electrical:

Power:	4 duplex receptacles per wall. Floor outlets evenly spaced under switch racks. (1) 208VAC phase 3 per rack. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Faculty Workroom
Number Required:	1
Total Number:	1
Occupants:	1-6
Area:	280 SF
Primary Function:	Faculty workroom. Adequate equipment and counter space for copying, document assembly and mail distribution.

Relationships:

Location:	First Level
Adjacencies:	Academic Assistant Office; Marketing Director/ Employer Services Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Upper and lower cabinets; counter top
-8' Whiteboard; Tack board; Built in or free-standing faculty/staff mail slots

Moveable Furnishings:

-Work table

Equipment:

-Computer; 2 monitors; printer; Label maker; Copy machine; Desktop speaker phone; paper shredder, Fax machine

Technical Requirements

Mechanical:

Ventilation: 0.5 CFM/sq.ft. (100% Exhaust)

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

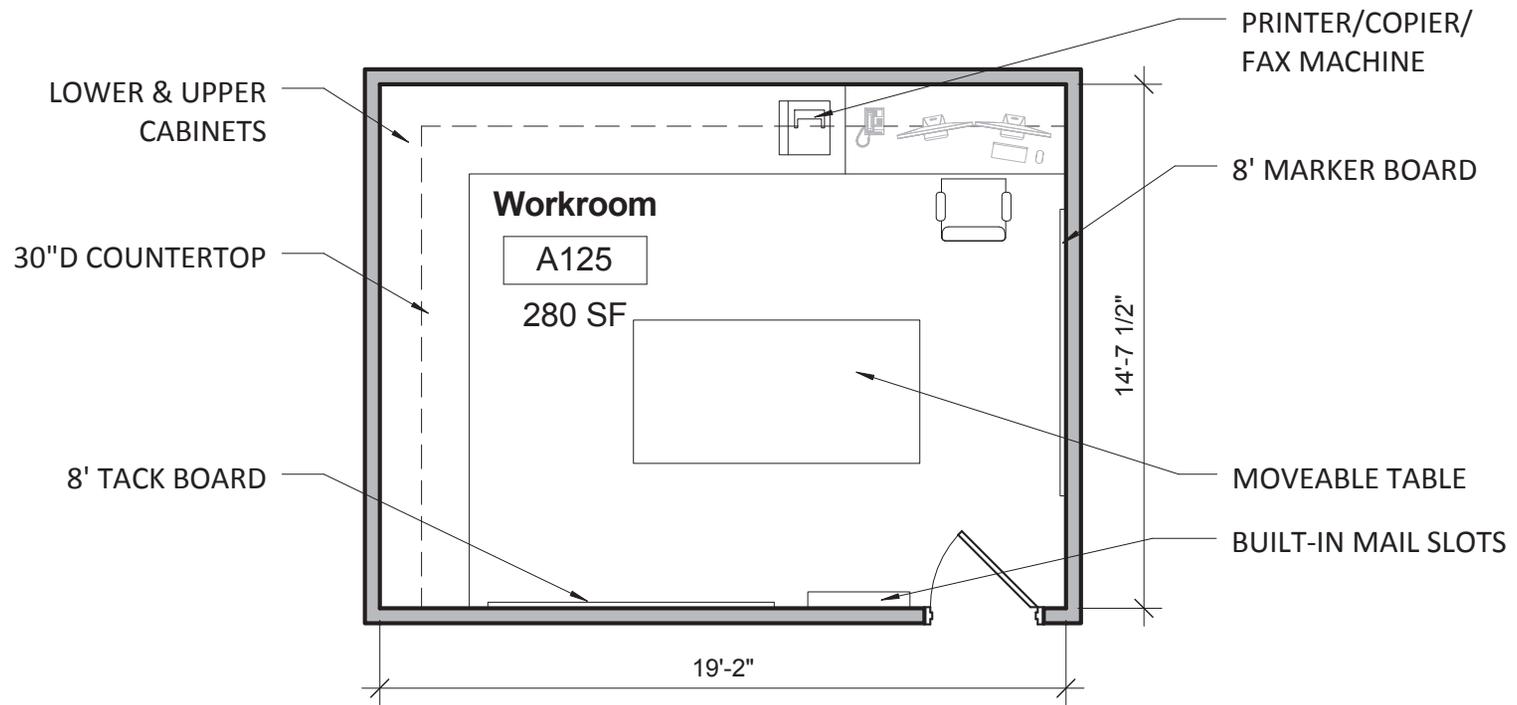
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Under upper cabinets

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Lounge/Dining
Number Required:	1
Total Number:	1
Occupants:	1-6
Area:	220 SF
Primary Function:	Provide furniture for dining and relaxing

Relationships:

Location:	First Level
Adjacencies:	Kitchen; Locker/Shower Room/Exercise
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

None required

Moveable Furnishings:

-3-4 lounge chairs; Couch; Coffee table; 48" round table with 4 chairs

Equipment:

None required

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

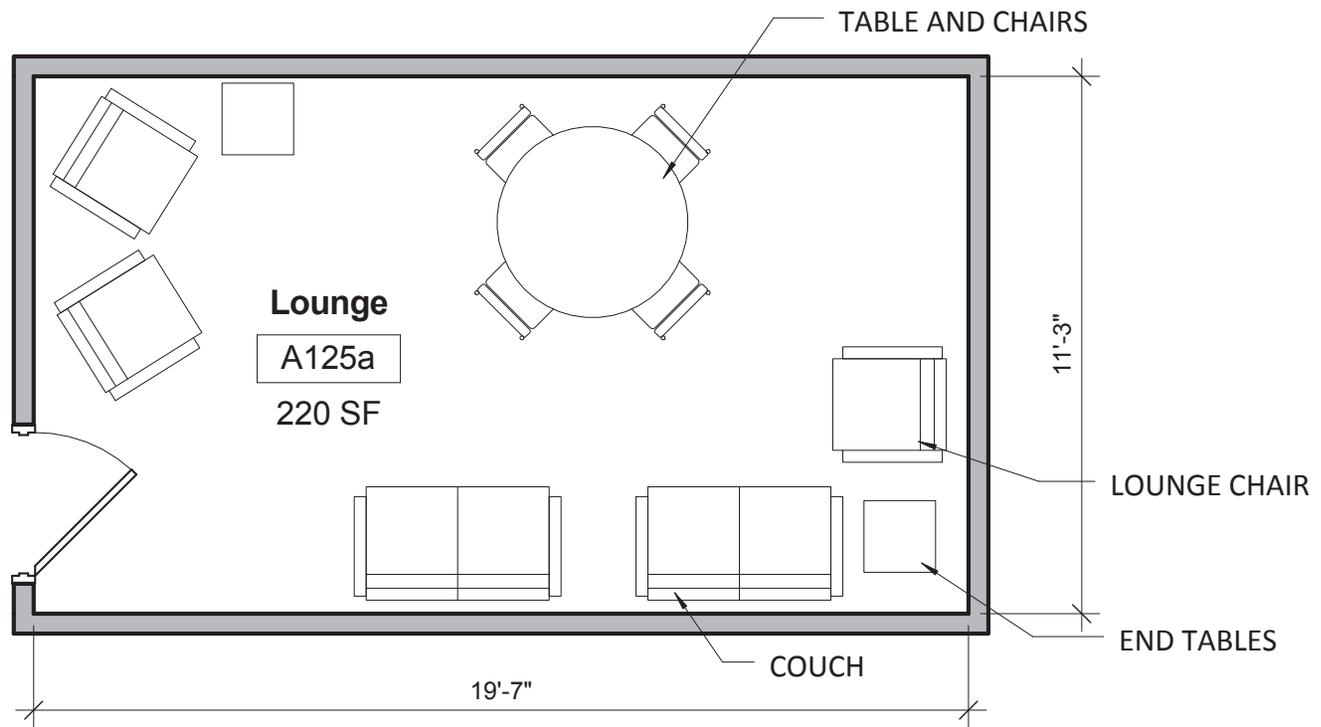
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: None required

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Locker/Shower Room
Number Required:	2
Total Number:	2
Occupants:	2-4
Area:	140 SF
Primary Function:	Space to shower, dress, store street clothes.

Relationships:

Location:	First Level
Adjacencies:	Faculty Lounge; Kitchen
Separation:	Quiet spaces

Architectural Requirements

Design/Aesthetic:

Functional, bright

Finishes:

Floor:	Ceramic Tile
Walls:	Ceramic Tile
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-4 lockers; sink; small counter

Moveable Furnishings:

-Bench

Equipment:

-Towel/Clothing rack or hooks

Technical Requirements

Mechanical:

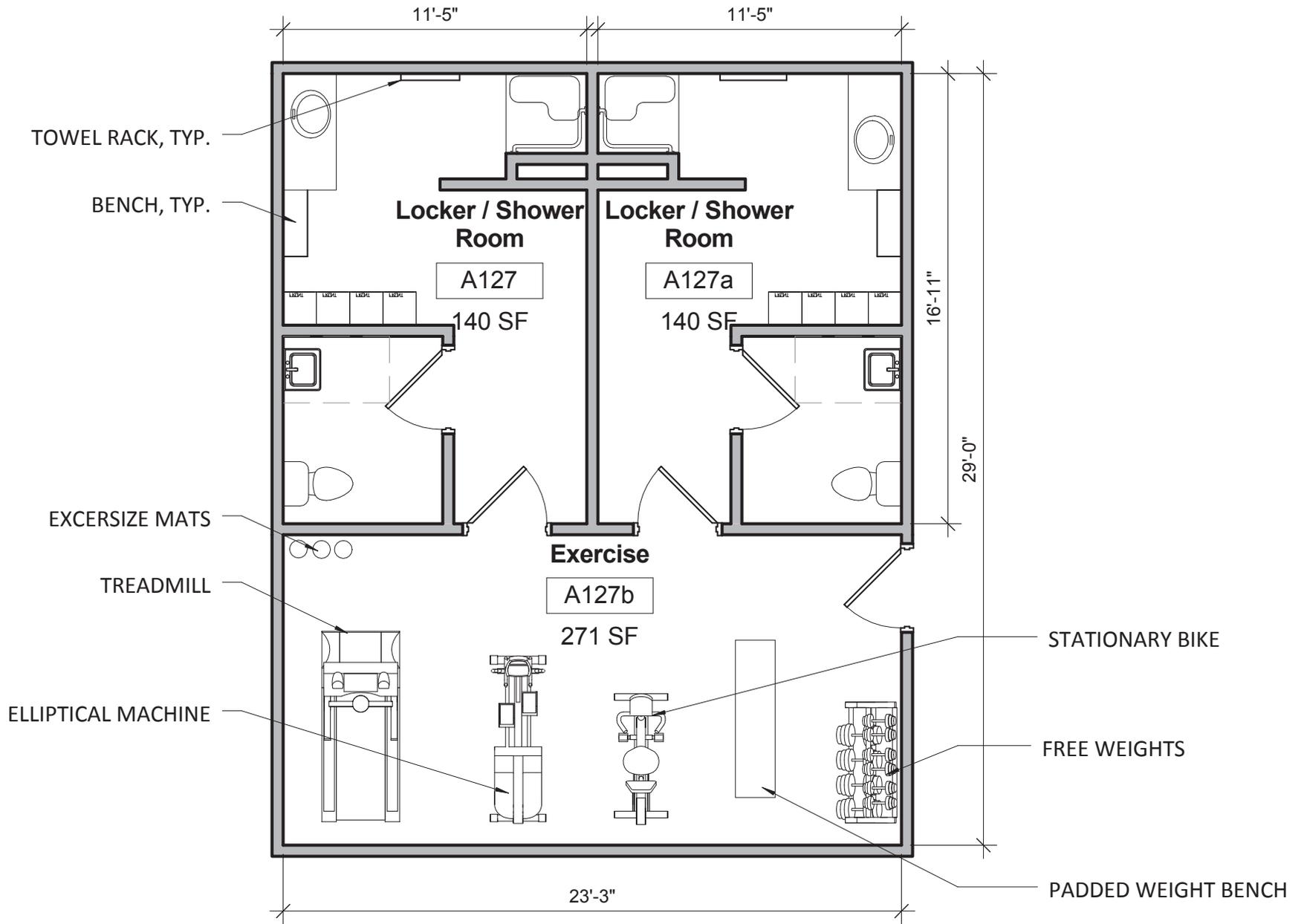
Ventilation:	0.5 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	5 min. air exchange exhaust
Plumbing:	Wall hung flush valve water closet; Wall hung lavatory; Floor drain; Shower; Water, waste and venting

Electrical:

Power:	1 GFCI duplex outlet per wall. Additional capacity for equipment listed.
Data:	None required
Phone:	None required
Video:	None required
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Exercise Room
Number Required:	1
Total Number:	1
Occupants:	2-4
Area:	271 SF
Primary Function:	Space for exercise/ stretching

Relationships:

Location:	First Level
Adjacencies:	Locker/Shower Room; Faculty Lounge; Kitchen
Separation:	Quiet spaces

Architectural Requirements

Design/Aesthetic:

Functional, bright

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board with ceiling mounted fan
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor
(AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Coat/Towel rack

Moveable Furnishings:

-2 chairs; padded weight bench; exercise mats

Equipment:

-Flat screen TV (wall mounted); Treadmill;
Stationary bike; Elliptical or Stair machine; Small
weight set

Technical Requirements

Mechanical:

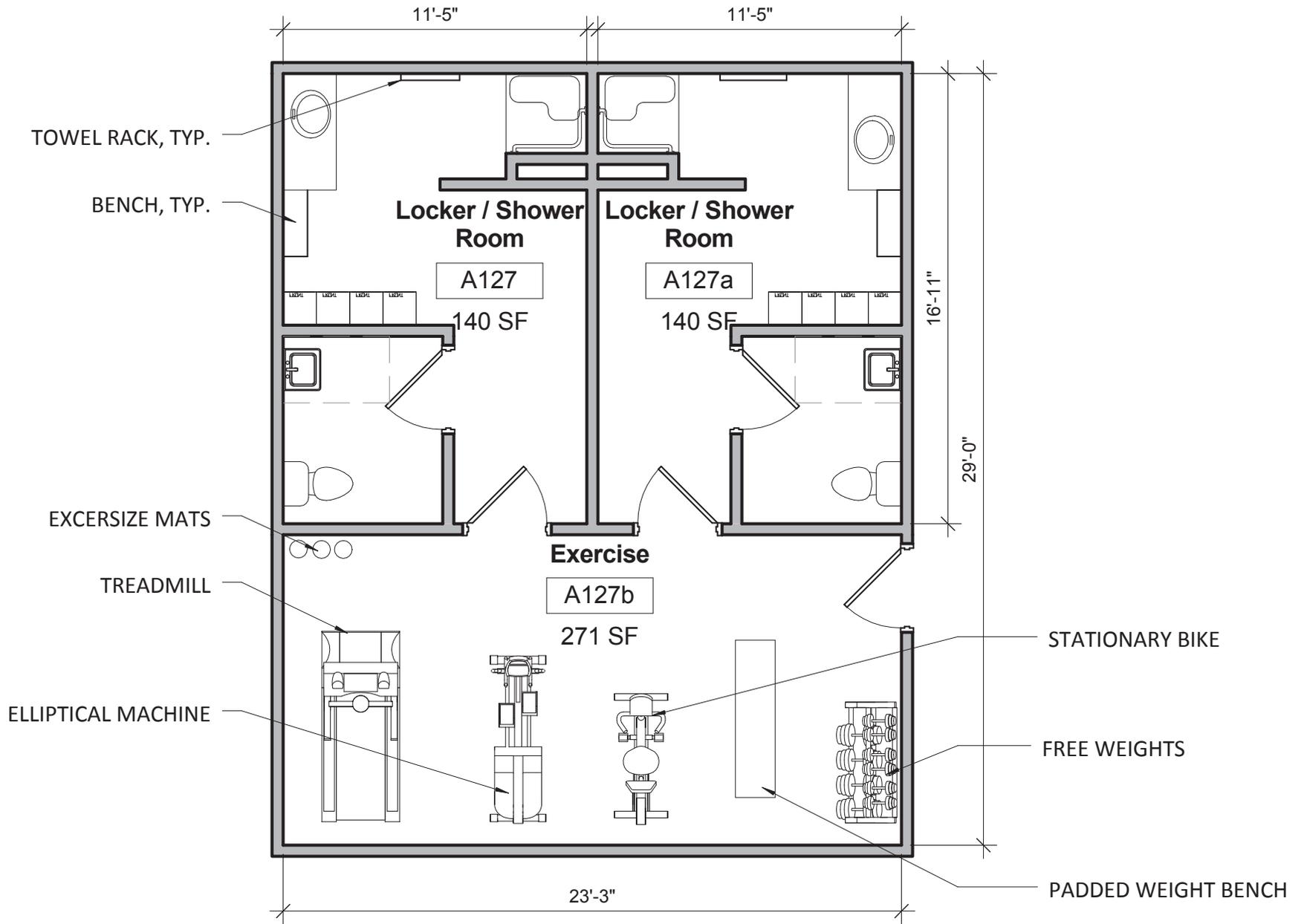
Ventilation:	20 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements**Space Summary:**

Type of Space:	Kitchen
Number Required:	1
Total Number:	1
Occupants:	2-8
Area:	130 SF
Primary Function:	Kitchen and food prep for faculty and small group functions

Relationships:

Location:	First Level
Adjacencies:	Faculty Lounge; Board Room; Locker/Shower Room
Separation:	None required

Architectural Requirements**Design/Aesthetic:**

Functional, bright

Finishes:

Floor:	Ceramic tile
Walls:	Painted gypsum board with backsplash at sink
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Insulated for sound control.

Architectural Requirements**Ceiling Height:**

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Upper and lower cabinets; counter top

Moveable Furnishings:

-1 48" round tables with chairs

Equipment:

-Microwave; large refrigerator with ice maker
-Small tack board; fire extinguisher

Technical Requirements**Mechanical:**

Ventilation: 20 CFM/person (min.)

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: Double sink; Water, waste and vent

Electrical:

Power: 1 duplex receptacle per wall. Outlets along counter, 2 per wall. 1 GFCI duplex receptacle above counter near sink. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

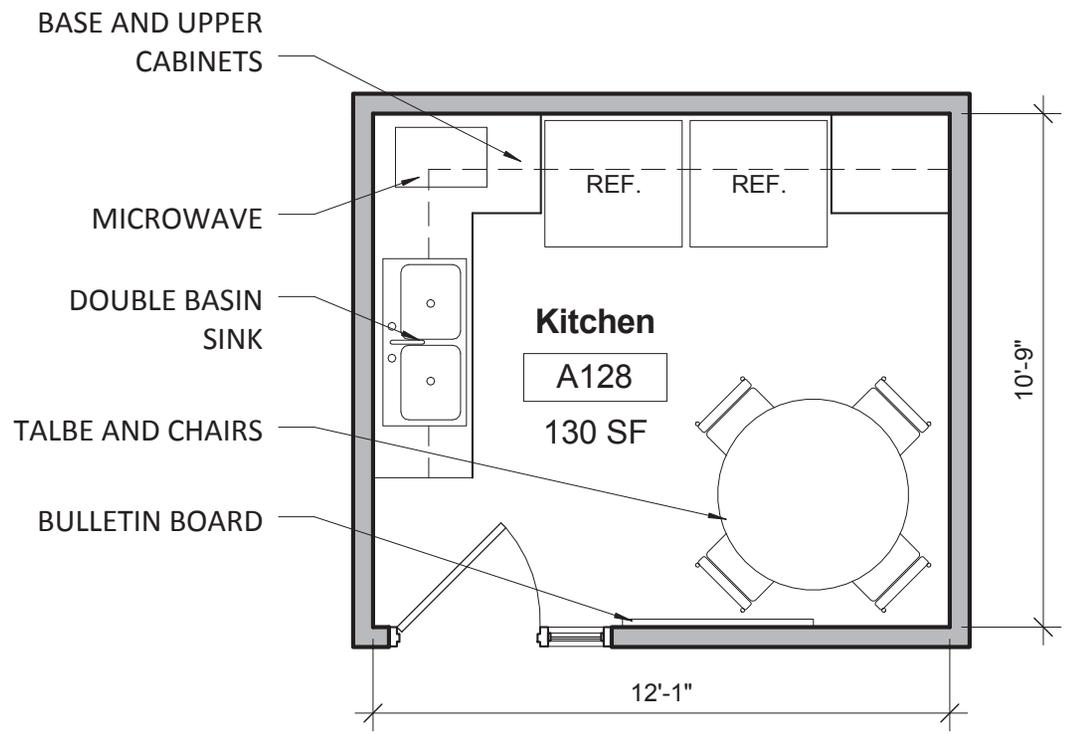
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: None required

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Cashier
Number Required:	1
Total Number:	1
Occupants:	1
Area:	120 SF
Primary Function:	Cash register for Bookstore

Relationships:

Location:	First Level
Adjacencies:	Bookstore Sales
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	Interior
Glazing:	Clear sliding
Natural Light:	None required

Casework/Fixed Equipment:

- Work surface; Lateral files
- Tack board; Whiteboard; Shelving

Moveable Furnishings:

- Chair

Equipment:

- Computer; Cash register; Telephone

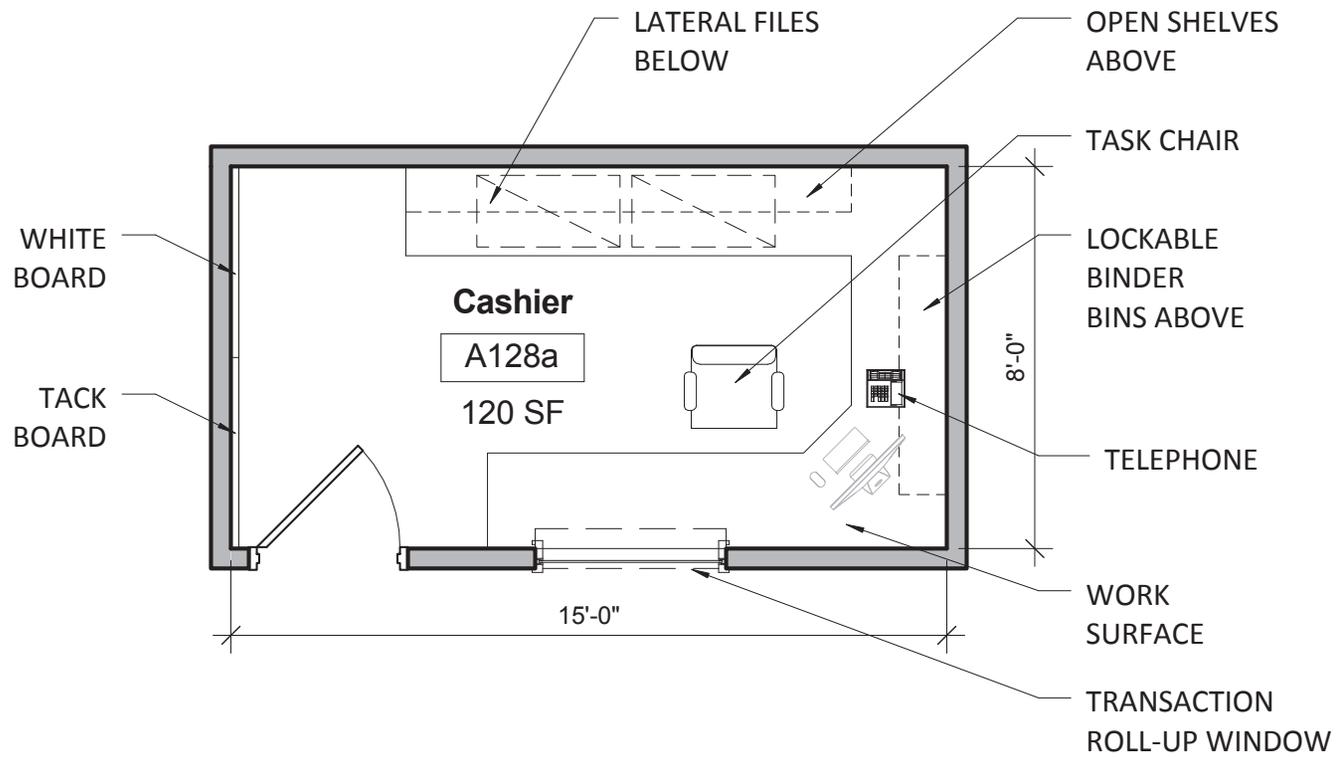
Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	1 device
Phone:	1 device
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control
Lighting:	
Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	99 SF
Primary Function:	Greet people as they enter building

Relationships:

Location:	First Level
Adjacencies:	Cashier; Bookstore Sales; Entrance into building
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Ability to secure equipment after hours

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Counter tops with locking under counter storage

Moveable Furnishings:

-Chairs; Tables

Equipment:

Computer; Telephone

Technical Requirements

Mechanical:

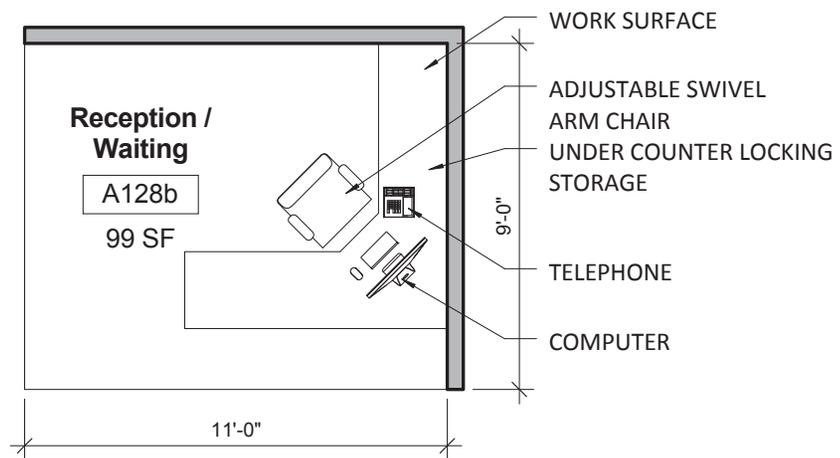
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Academic Assistant, Curriculum Development, Program Directors
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior

Glazing: Low-E

Natural Light: Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

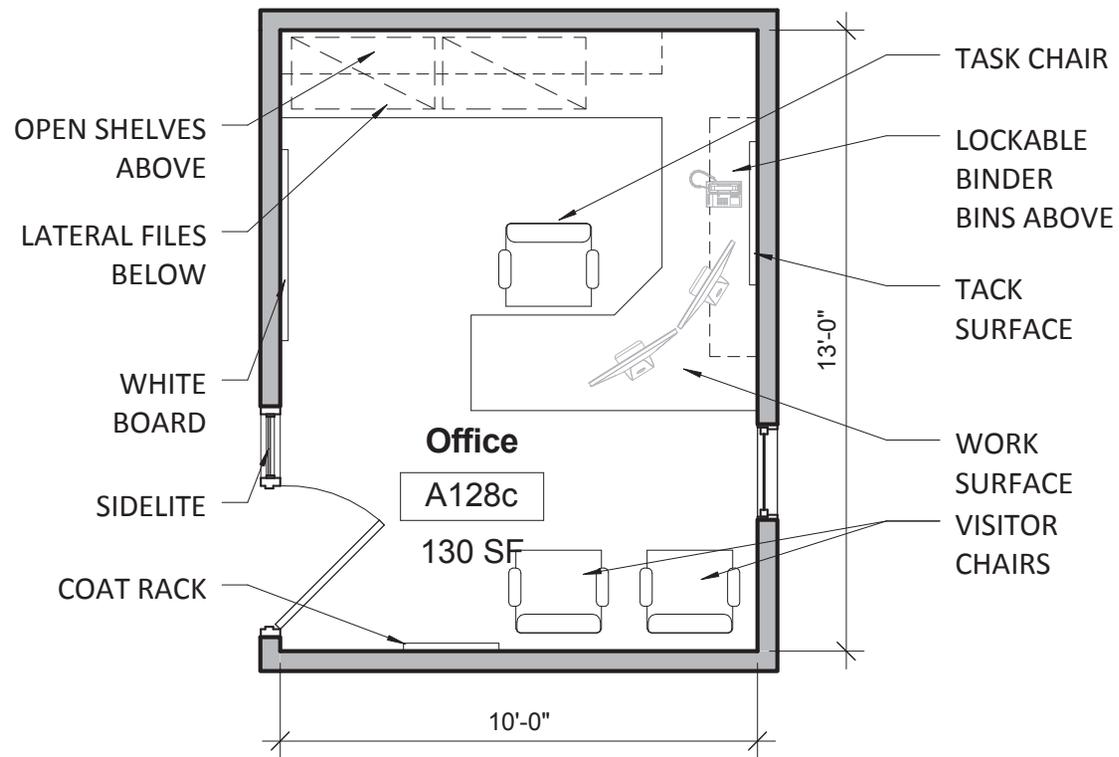
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-4
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Academic Assistant, Curriculum Development, Program Directors
Separation:	Mechanical and elevator rooms, Noisy public areas

Architectural Requirements

Design/Aesthetic:

Visually accessible, comfortable, natural lighting

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Exterior

Glazing: Low-E

Natural Light: Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack
-Whiteboard

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Speaker with volume control

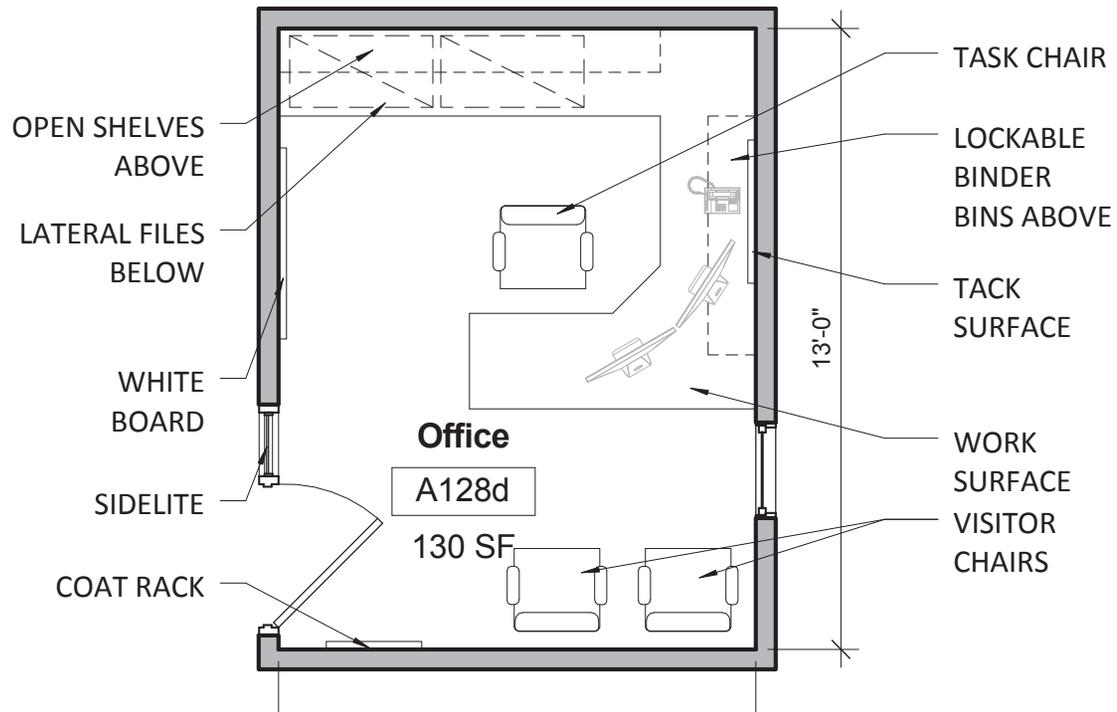
Lighting:

Fixture Type: T-5 Fluorescent lay-in indirect

Accent Lighting: Task lighting at work surface

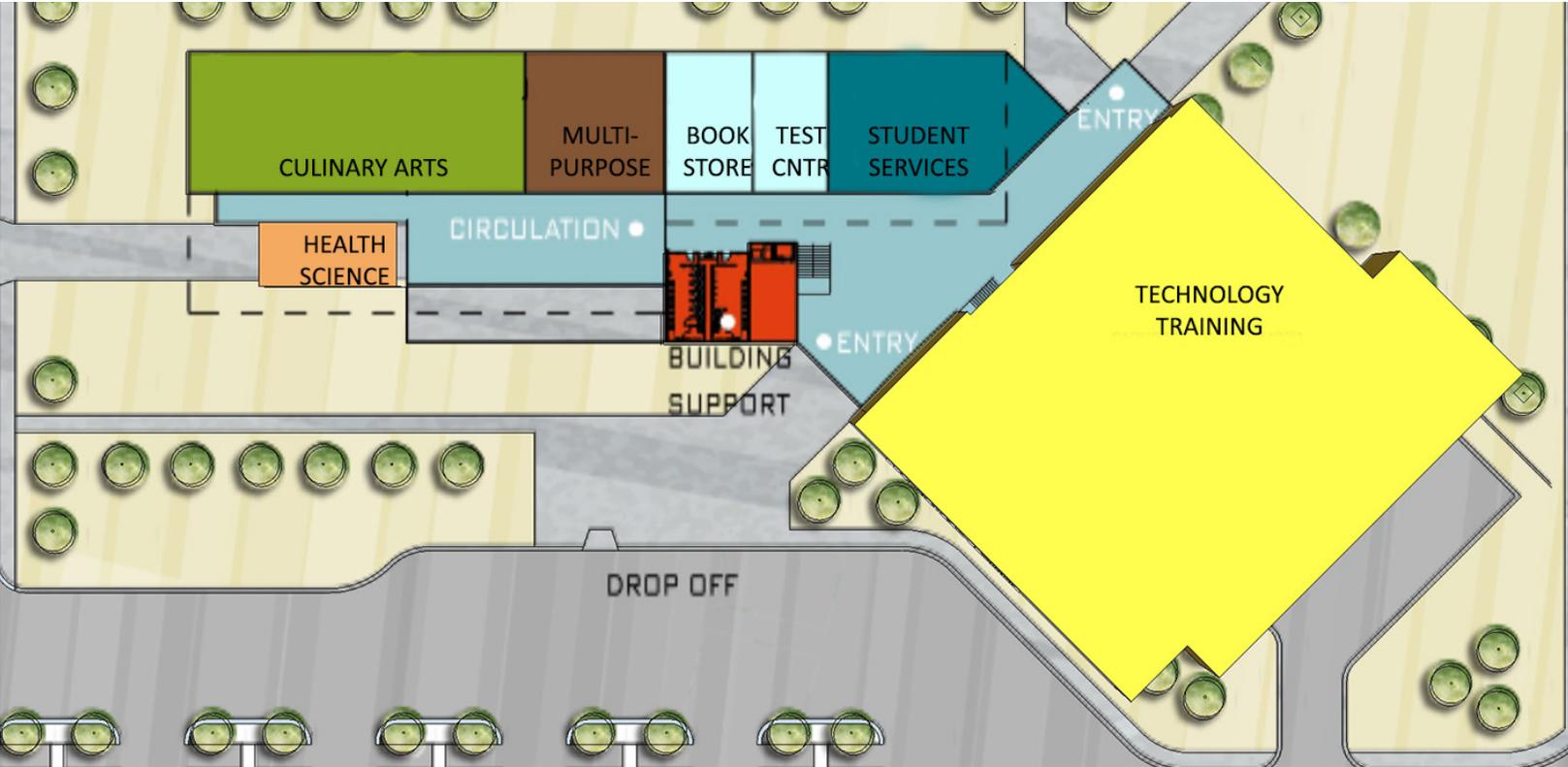
Foot Candles: 40

Controls: Occupancy sensor

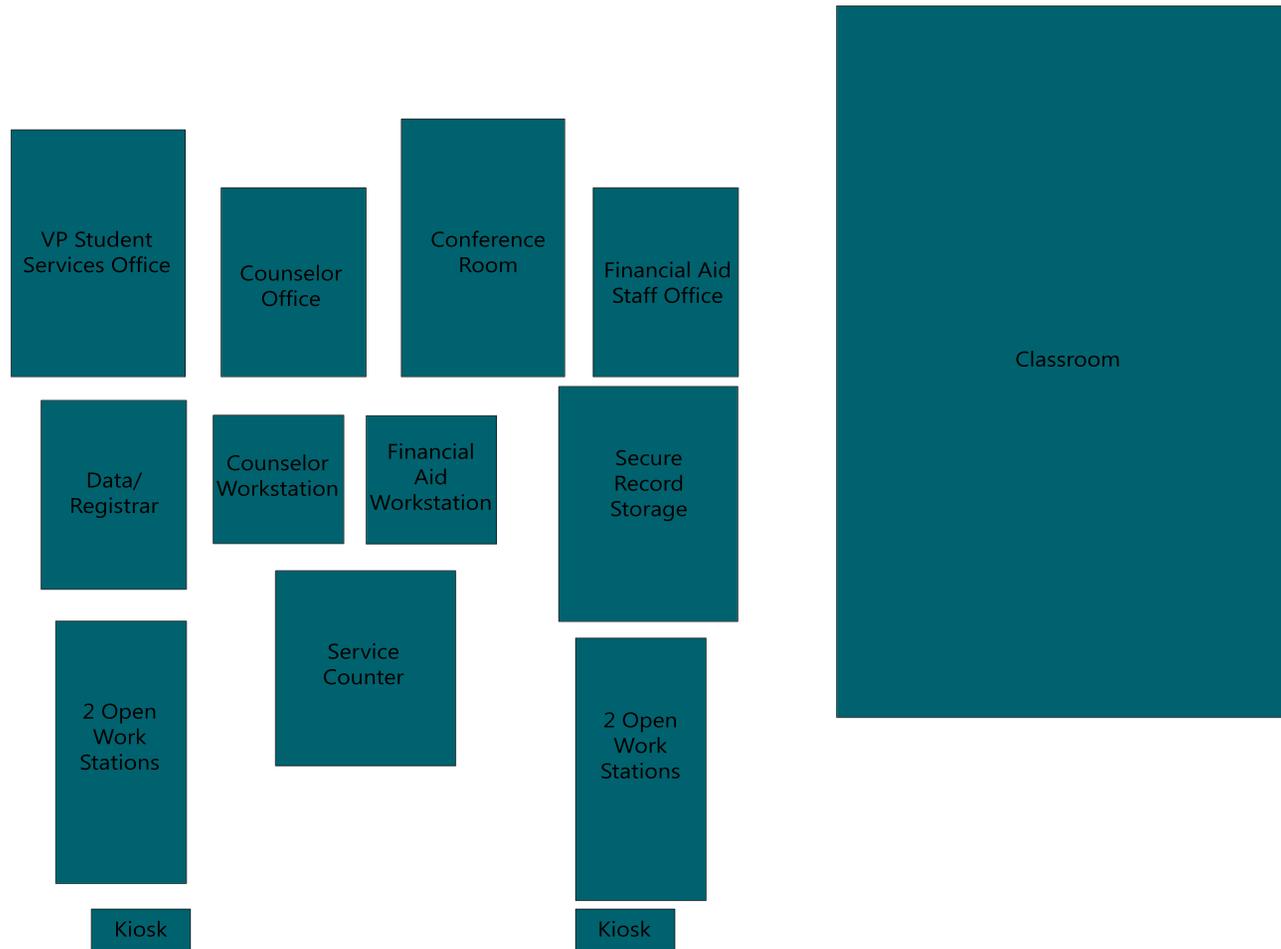


09 Student Services

First Floor Relationship Diagram



Adjacency Diagram



Space Requirements

Space Summary:

Type of Space:	Service Counter
Number Required:	3
Total Number:	3
Occupants:	1-3
Area:	174 SF
Primary Function:	Provide Administrative services to students

Relationships:

Location:	First Level
Adjacencies:	Open workstations
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Security cameras for cash register

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Work surface; Shelving; (6) 8.5"x11" storage slots

Moveable Furnishings:

-Chair

Equipment:

-2 Lateral files; Phone; Computer

Technical Requirements

Mechanical:

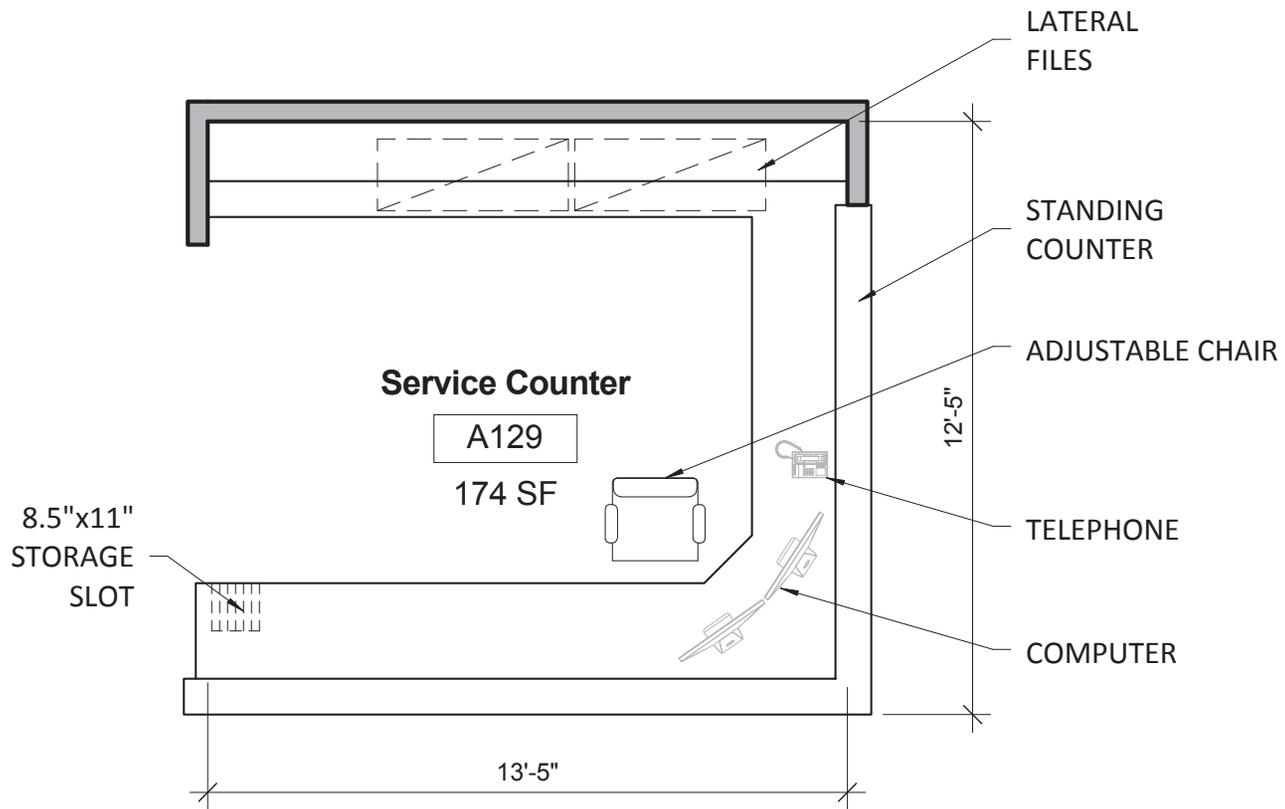
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	None required
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	1 device
Phone:	1 device
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay in
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-7
Area:	200 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Counselor Office, Data/Registrar, Counselor Workstation
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

As much privacy as possible

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior
Glazing:	Low-E
Natural Light:	Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

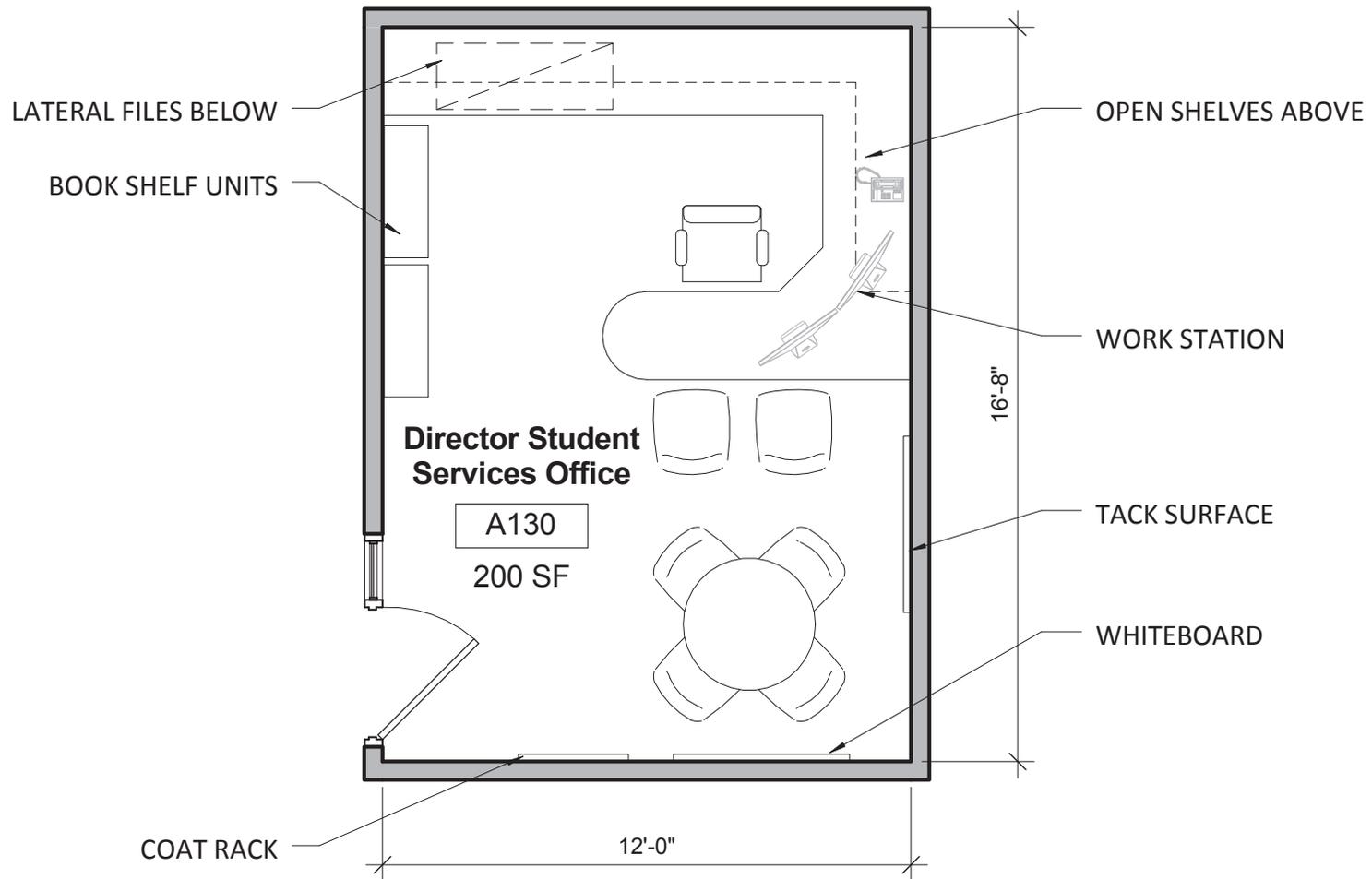
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	Dimmable Incandescent
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Open Workstations
Number Required:	4
Total Number:	4
Occupants:	1-2
Area:	320 SF
Primary Function:	Space to meet with students; general tasking

Relationships:

Location:	First Level
Adjacencies:	Kiosk; Service Counter
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Open with security

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack

Moveable Furnishings:

-Desk; Chair

Equipment:

-Computer; Phone

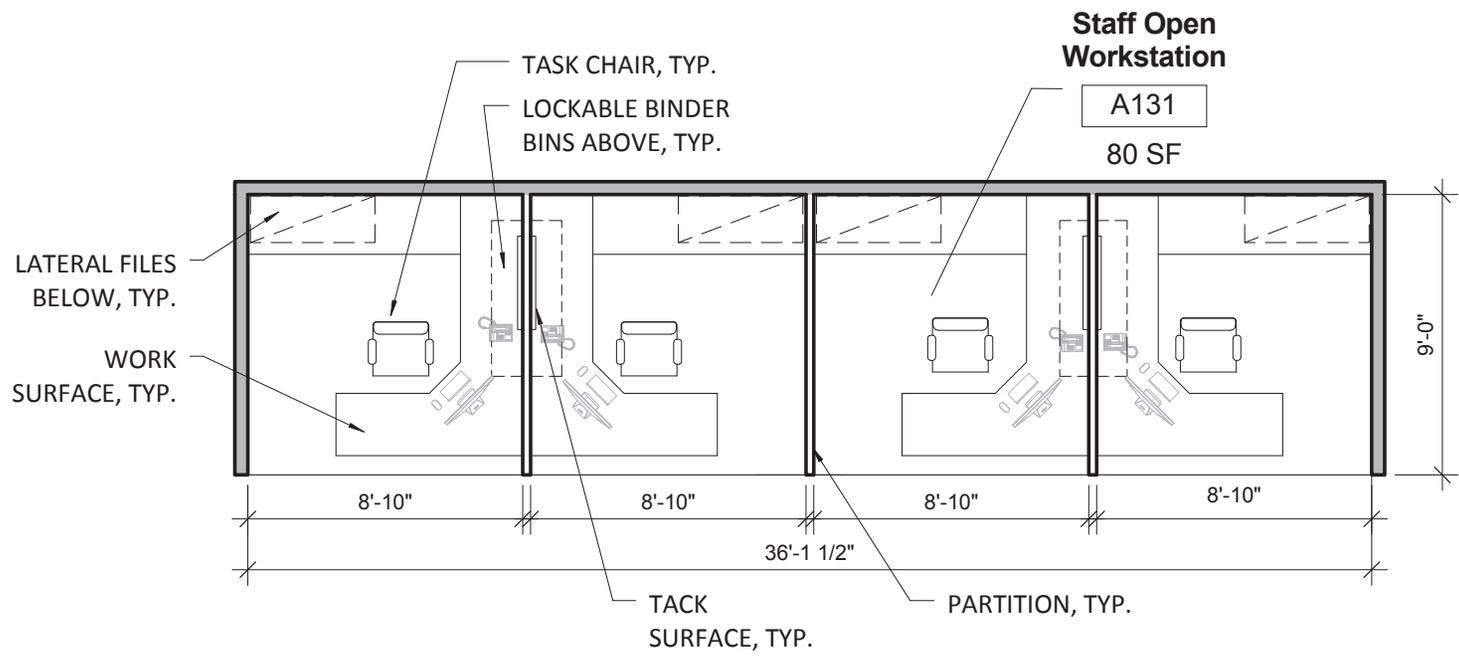
Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle each wall. 120V distributed to systems furniture. Additional capacity for equipment listed.
Data:	1 device per wall distributed to systems furniture
Phone:	1 device per wall distributed to systems furniture
Video:	None required
Intercom:	None required
Lighting:	
Fixture Type:	T-8 lay-in indirect
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Classroom
Number Required:	2
Total Number:	2
Occupants:	25
Area:	1495 SF
Primary Function:	Instruction of large groups in an academic environment

Relationships:

Location:	First Level
Adjacencies:	Bookstore; Secure Record Storage
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Dividable into two classrooms

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

- Cabinets with adjustable shelving
- Projector and screen

Moveable Furnishings:

- 24 Student tables and chairs
- Instructor desk and chair

Equipment:

- 24 computers

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall and at instructor station. 3 Floor outlets per table. Additional capacity for equipment listed.

Data: 2 devices on opposing walls and at instructor station

Phone: 2 devices on opposing walls and at instructor station

Video: A/V system with internet connection

Intercom: Ceiling speaker with volume control

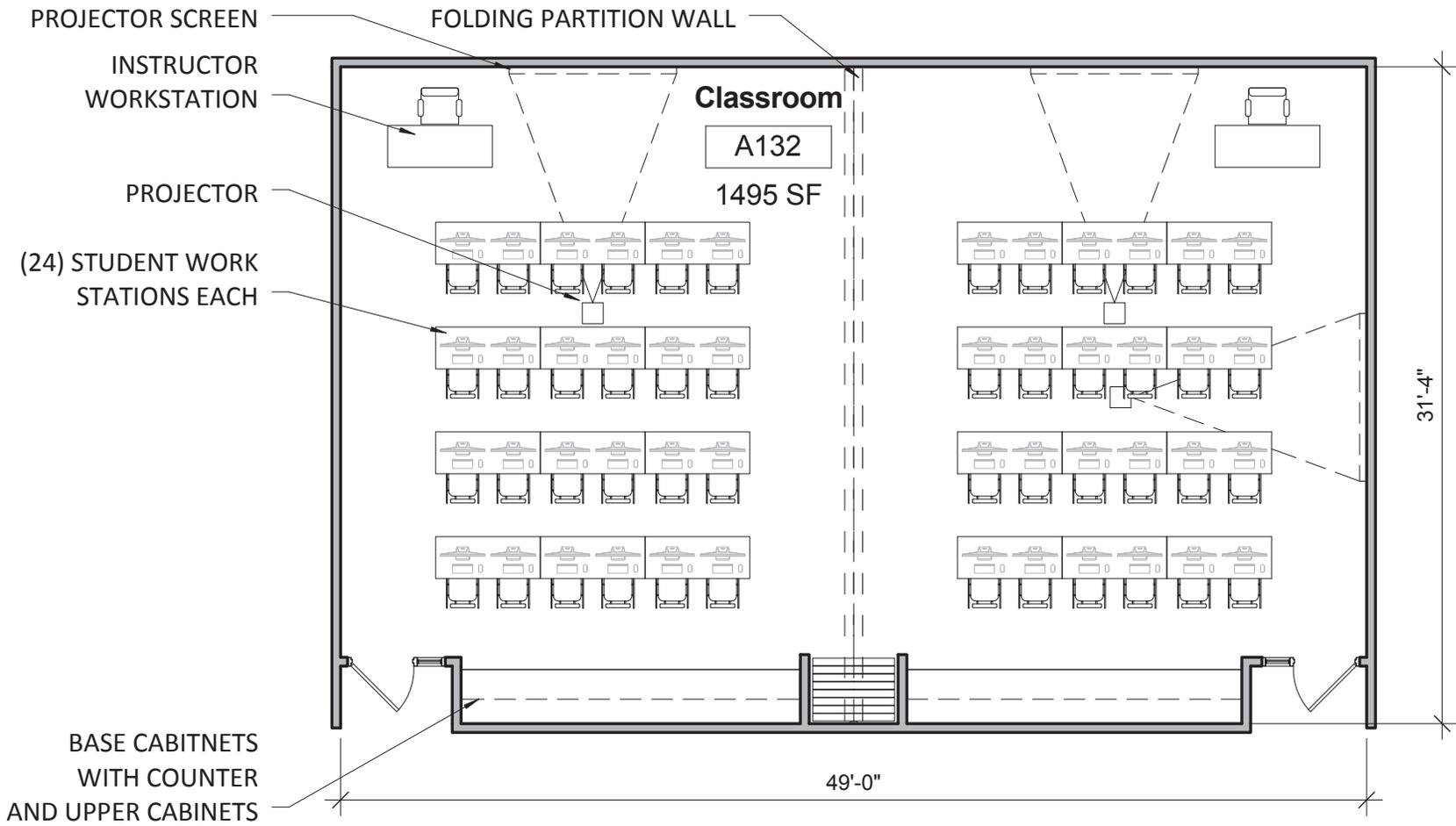
Lighting:

Fixture Type: T-5 HO linear indirect pendant

Accent Lighting: None required

Foot Candles: 40-45

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Conference room
Number Required:	1
Total Number:	1
Occupants:	10
Area:	200 SF
Primary Function:	Space for Faculty and Staff meetings and activities

Relationships:

Location:	First Level
Adjacencies:	Financial Aid Staff Office; Financial Aid Workstation; Counselor Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-Large table; 10 chairs

Equipment:

-60" LCD

Technical Requirements

Mechanical:

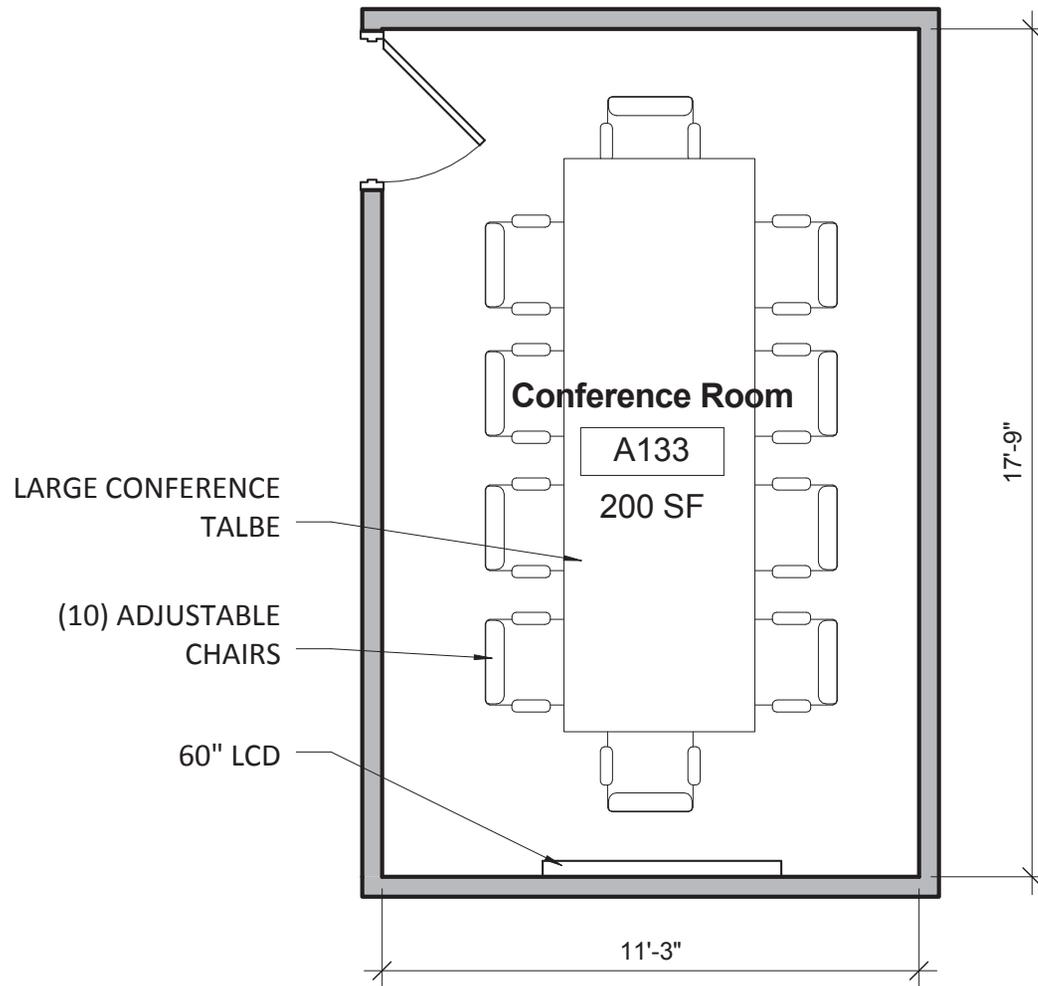
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. 1 four-plex floor box under table. Additional capacity for equipment listed.
Data:	1 device on opposing walls. 1 floor box under table.
Phone:	1 device on opposing walls. 1 floor box under table
Video:	A/V system w/ internet connection
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent video conference type with dimming ballast
Accent Lighting:	Incandescent task fixtures
Foot Candles:	50
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Secure Record Storage
Number Required:	1
Total Number:	1
Occupants:	1-7
Area:	200 SF
Primary Function:	To provide secure storage for records

Relationships:

Location:	First Level
Adjacencies:	Financial Aid Staff Office; Open Workstations
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	VCT with 4" rubber base
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x4' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-Lateral filing cabinets

Moveable Furnishings:

-None required

Equipment:

-None required

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 35 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall. Additional capacity for equipment listed.

Data: 2 devices on opposing walls

Phone: 2 devices on opposing walls

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

Lighting:

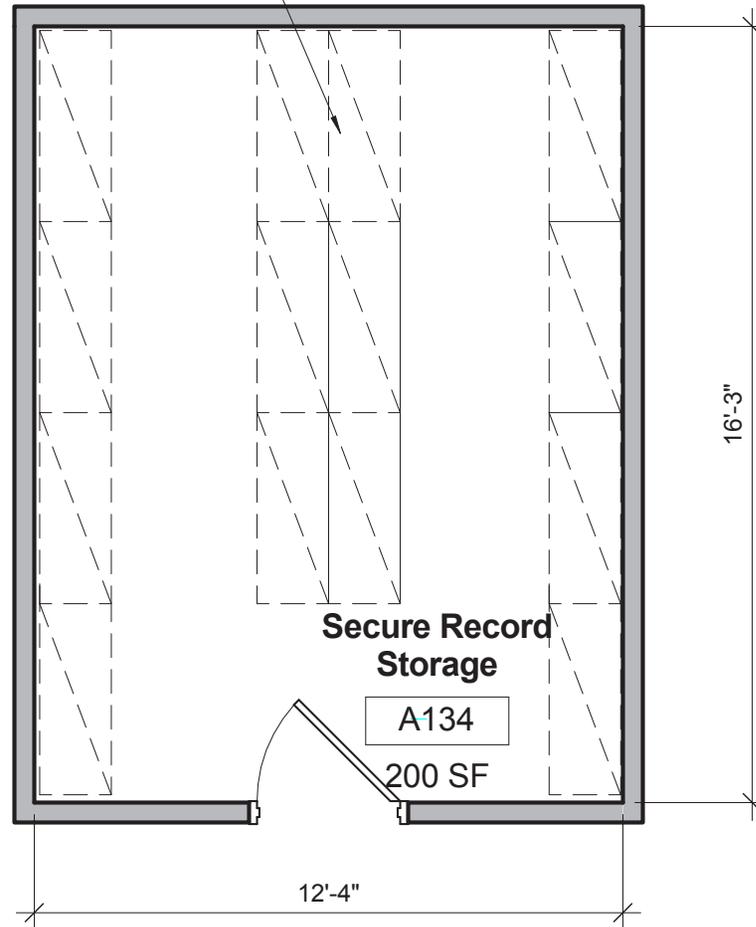
Fixture Type: T-8 Fluorescent lay-in

Accent Lighting: None required

Foot Candles: 50

Controls: Occupancy sensor

LATERAL FILING
CABINETS



Space Requirements

Space Summary:

Type of Space:	Online registration kiosk
Number Required:	1
Total Number:	1
Occupants:	0
Area:	39 SF
Primary Function:	A computer for students to use to check for information; Entrance into Student Services

Relationships:

Location:	First Level
Adjacencies:	Service Counter; Open Workstations
Separation:	None required

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Space for Kiosk

Moveable Furnishings:

-None required

Equipment:

-Kiosk

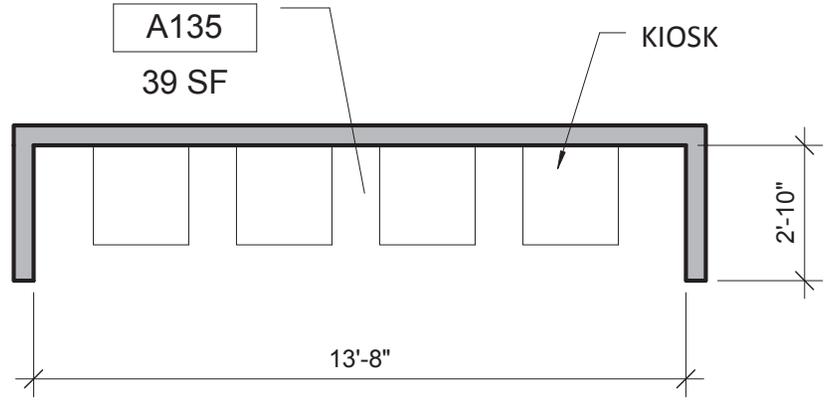
Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	None required
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle behind kiosk. Additional capacity for equipment listed.
Data:	1 device behind kiosk
Phone:	None required
Video:	None required
Intercom:	None required
Lighting:	
Fixture Type:	T-8 lay-in
Accent Lighting:	Task lighting/Theatre lighting at work station
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Counselor Office, Data/Registrar, Counselor Workstation
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

As much privacy as possible

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior; Interior
Glazing:	Low-E; Clear
Natural Light:	Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

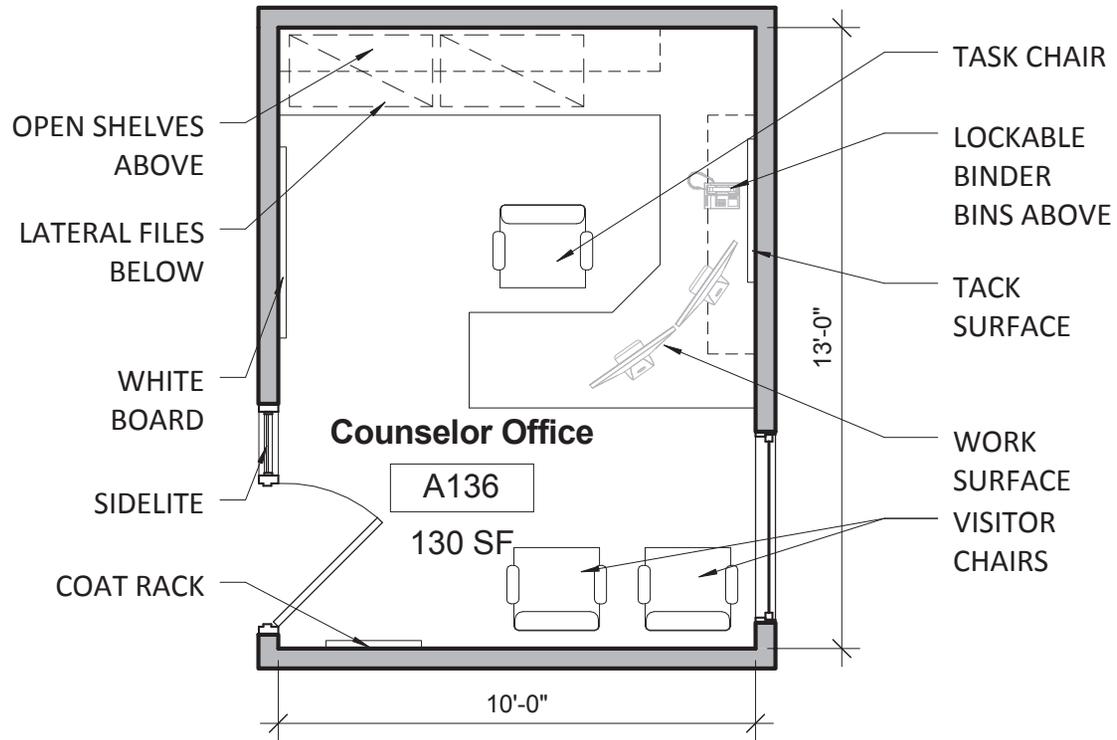
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	Dimmable Incandescent
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Counselor Office, Data/Registrar, Counselor Workstation
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

As much privacy as possible

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior; Interior
Glazing:	Low-E; Clear
Natural Light:	Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

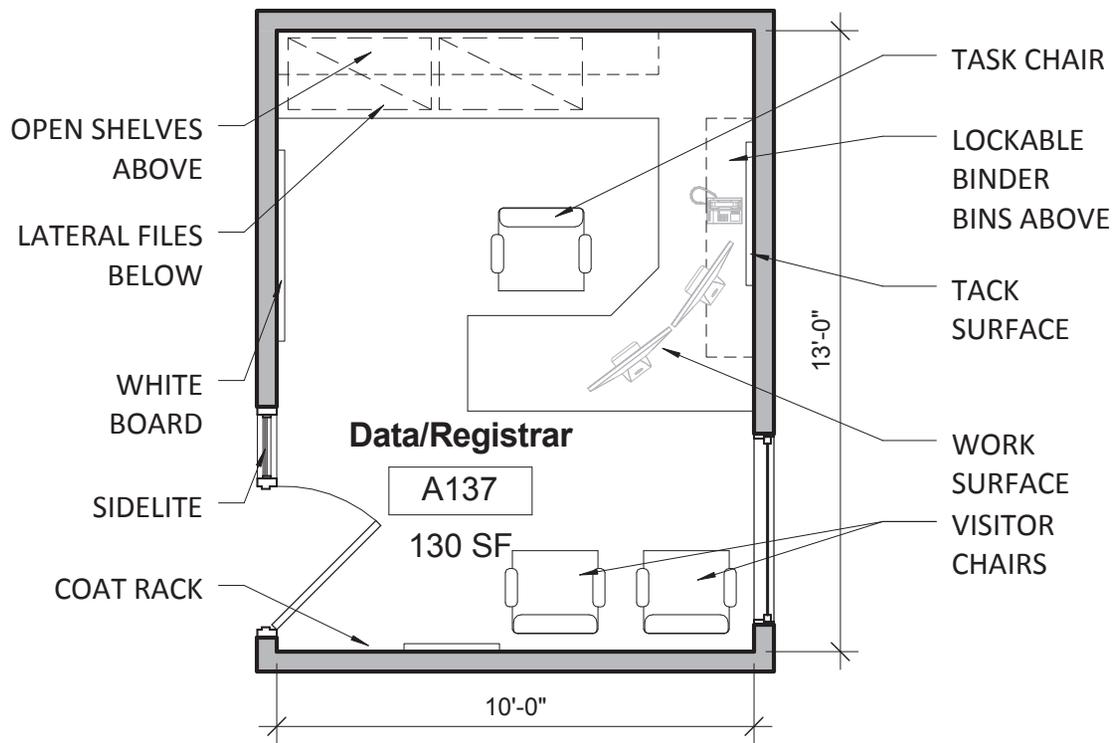
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	Dimmable Incandescent
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Day-to-day operations, individual and small group meetings, written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Counselor Office, Data/Registrar, Counselor Workstation
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

As much privacy as possible

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Exterior; Interior
Glazing:	Low-E; Clear
Natural Light:	Desirable

Casework/Fixed Equipment:

-Lockable cabinets; Lateral files; Coat rack

Moveable Furnishings:

-Desk; Filing cabinets; Book Shelves; Guest chairs; Small conference table

Equipment:

-Computer; 2 monitors; printer; conference phone; shredder; flip file and paper management system

Technical Requirements

Mechanical:

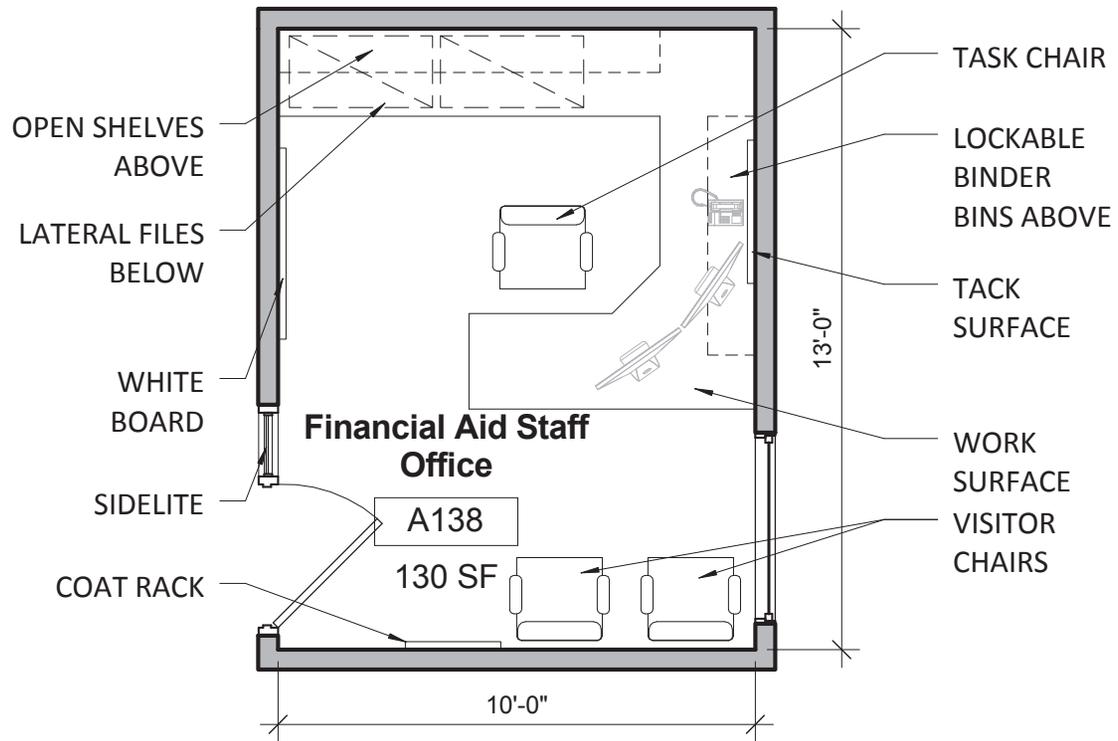
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	Dimmable Incandescent
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Open Office
Number Required:	1
Total Number:	1
Occupants:	1
Area:	80 SF
Primary Function:	Day-to-day operations, individual written and verbal communications, daily document access.

Relationships:

Location:	First Level
Adjacencies:	Counselor Office, Data/Registrar, Open Staff Workstations
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm; Clean lines; Strength; Open with security

Finishes:

Floor:	Carpet or Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

As much privacy as possible

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Lockable binder bins; Work surface

Moveable Furnishings:

-Desk; Filing cabinets; Task chair

Equipment:

-Computer; 2 monitors; printer; phone; shredder; whiteboard and paper management system

Technical Requirements

Mechanical:

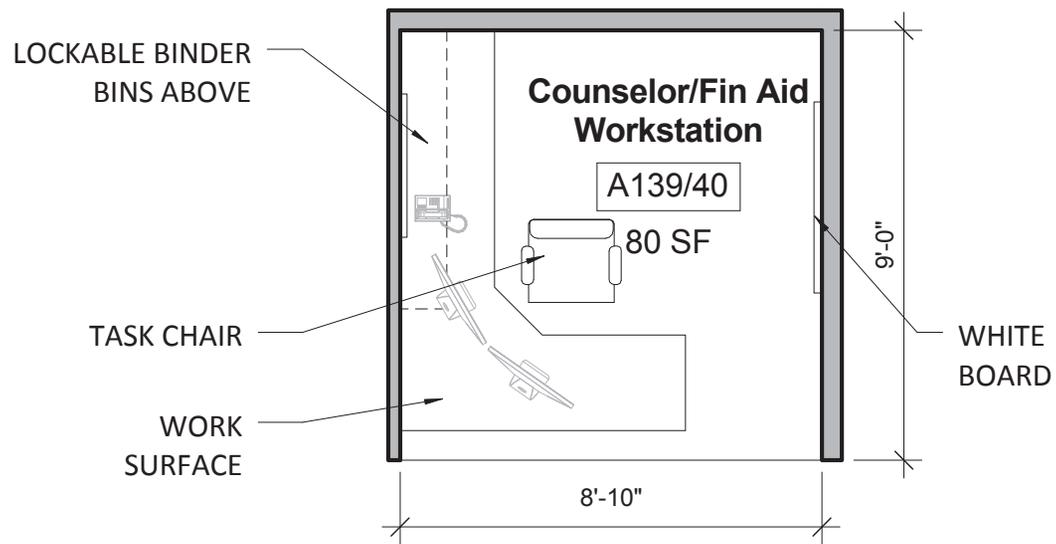
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	2 devices on opposing walls
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

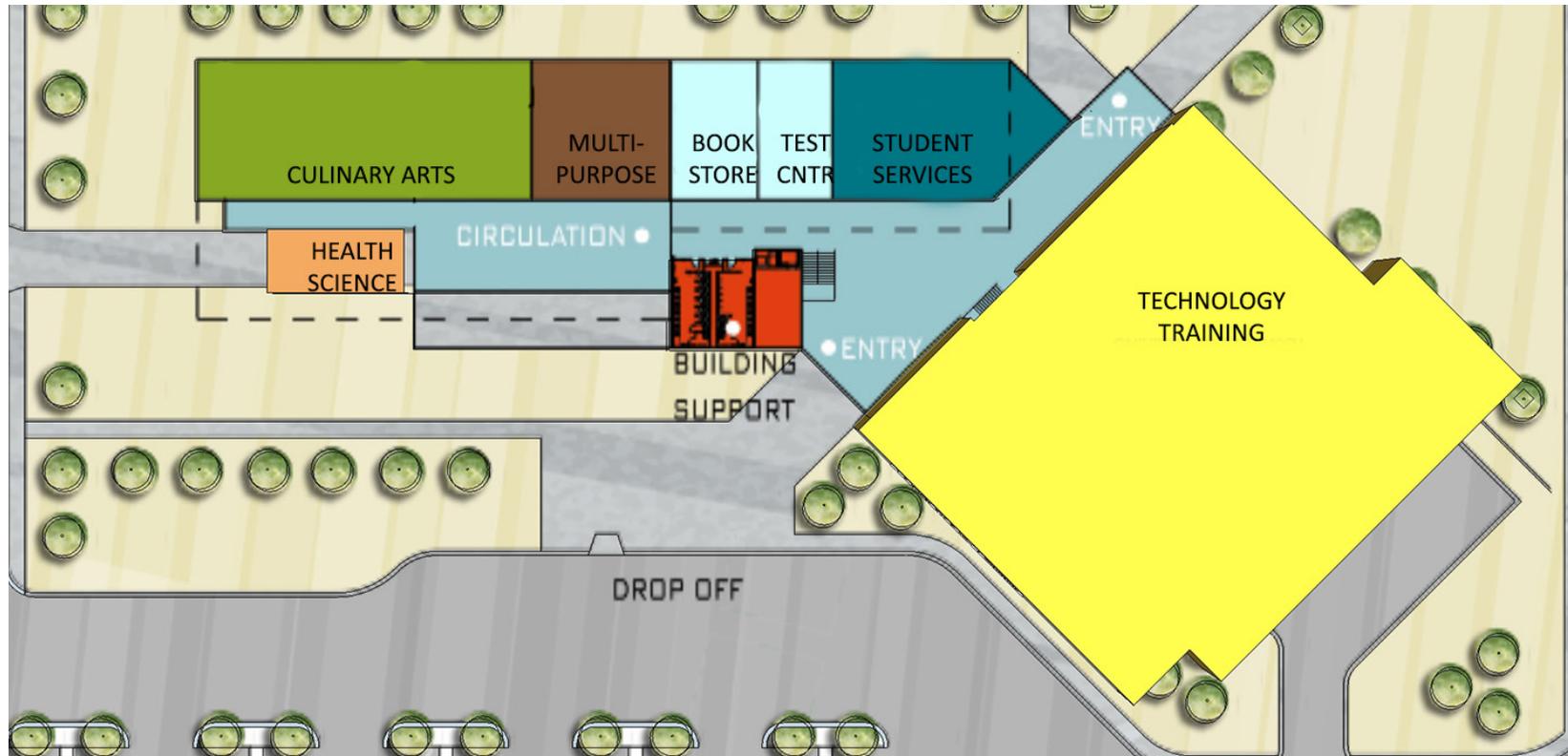
Lighting:

Fixture Type:	T-8 Fluorescent Lay-in
Accent Lighting:	Task lighting at work surface
Foot Candles:	40
Controls:	Occupancy sensor

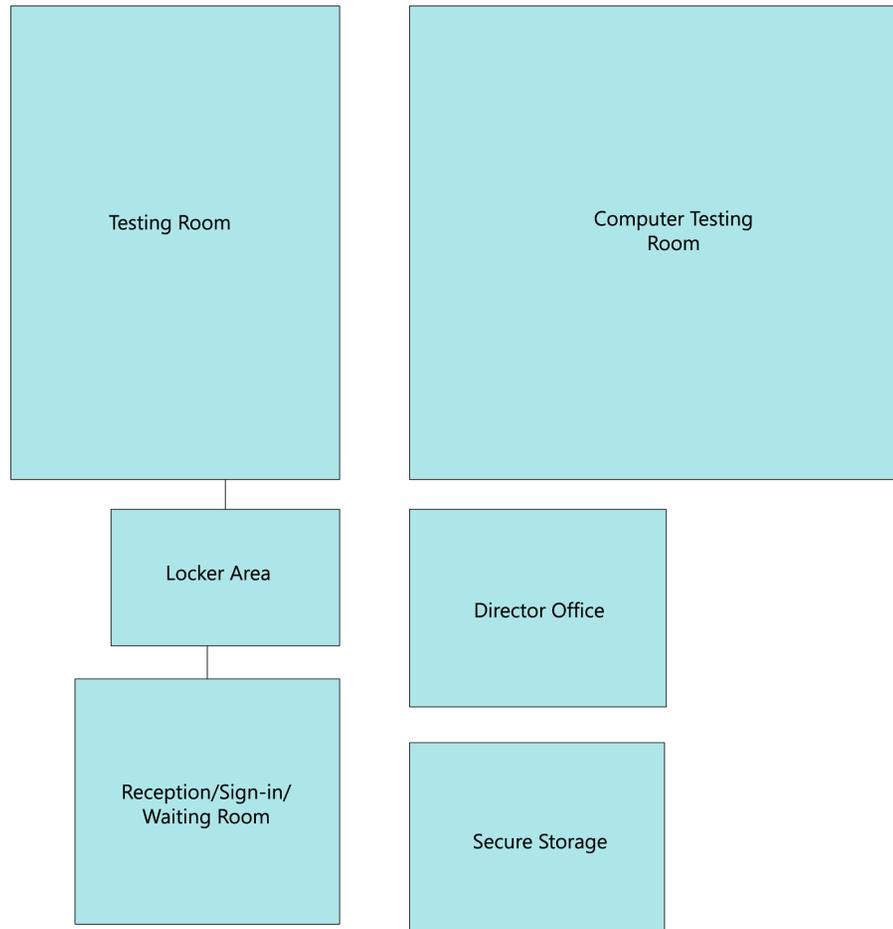


10 Testing Center/Bookstore

First Floor Relationship Diagram



Adjacency Diagram



Space Requirements

Space Summary:

Type of Space:	Monitored Testing Room
Number Required:	1
Total Number:	1
Occupants:	6-8
Area:	300 SF
Primary Function:	Provide monitored and quiet area for testing

Relationships:

Location:	First Level
Adjacencies:	Testing Room, Locker Area
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Secure Area with plenty of light

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Adequate privacy/Security for Testing room, Window for monitoring students.

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: Interior

Glazing: Clear Glass

Natural Light: None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-8 Desks and 8 Chairs

Equipment:

-Clock

Technical Requirements

Mechanical:

Ventilation: 10 CFM/person + 0.12 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: Dedicated computer A/C units

Plumbing: None required

Electrical:

Power: 2 duplex receptacles per wall.

Data: None required

Phone: 2 devices per wall

Video: Security Camera

Intercom: Ceiling speaker with volume control

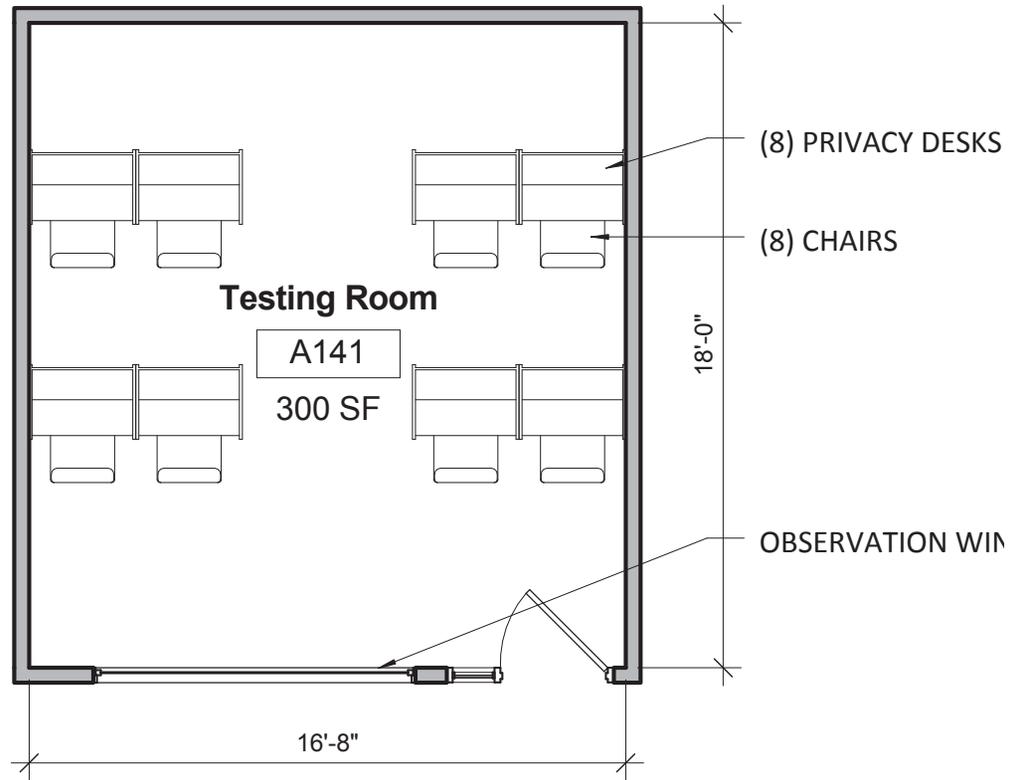
Lighting:

Fixture Type: T-5 HO linear indirect pendant

Accent Lighting: Task lighting at each testing station

Foot Candles: 40-45

Controls: Occupancy sensor



10 Testing Center/Bookstore

A142 COMPUTER TESTING ROOM

Space Requirements

Space Summary:

Type of Space:	Monitored Testing Room
Number Required:	1
Total Number:	1
Occupants:	12-16
Area:	600 SF
Primary Function:	Provide monitored and quiet area for testing at private computer stations

Relationships:

Location:	First Level
Adjacencies:	Testing Room, Locker Area
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Secure Area with plenty of light

Finishes:

Floor:	Carpet
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	Secure and sound proof ceiling, insulated for sound control.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Adequate privacy/Security for Testing room, Window for monitoring students.

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-18 Desks and Chairs

Equipment:

-18 Computers
-Clock

Technical Requirements

Mechanical:

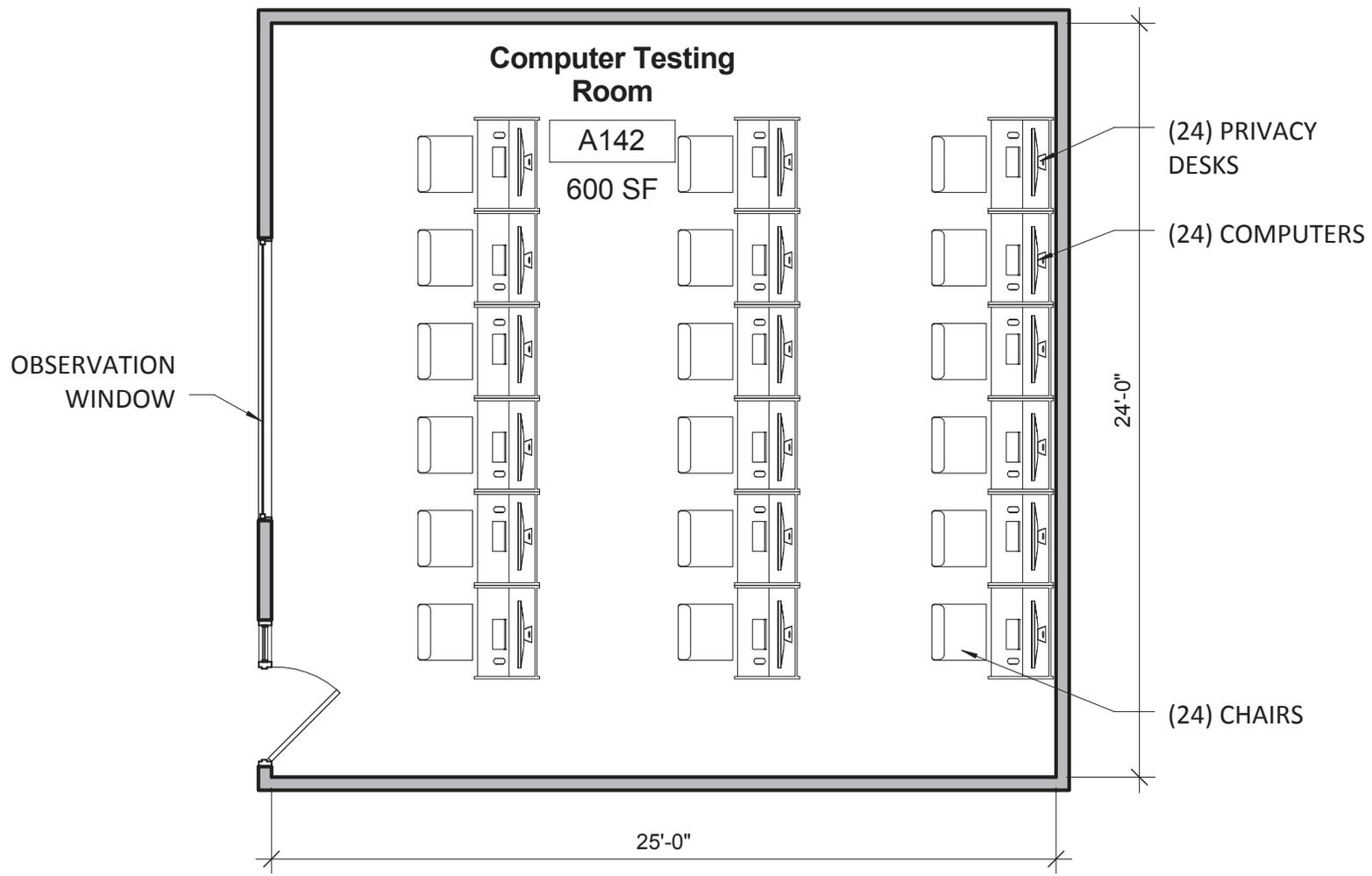
Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	Dedicated computer A/C units
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall. 1 duplex receptacle per computer station. Additional capacity for equipment listed.
Data:	2 devices per wall, 1 device per computer station
Phone:	2 devices per wall
Video:	Security Camera
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-5 HO linear indirect pendant
Accent Lighting:	Task lighting at each testing station
Foot Candles:	40-45
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Office
Number Required:	1
Total Number:	1
Occupants:	1-3
Area:	130 SF
Primary Function:	Instructor work area for planning, writing, organizing, record keeping and general administration.

Relationships:

Location:	First Level
Adjacencies:	Testing Room, Hallway
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, "Built-in", Comfortable, Openness, Greens/Browns/Creams

Finishes:

Floor:	Carpet or polished/sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Windows and doors into hallway and workroom/classroom. Needs to secure paper and computer based student records.

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	Interior
Glazing:	Clear Glass
Natural Light:	None required

Casework/Fixed Equipment:

-Base cabinets with work surface; Lateral Files; Overhead Shelves; Wall mounted lockable binder binds
-Coat Rack

Moveable Furnishings:

-1 Adjustable chair for Instructor
-2 Fixed wheel mounted chairs for student/guest

Equipment:

-Computer, Whiteboard, Tack board, Conference phone

Technical Requirements

Mechanical:

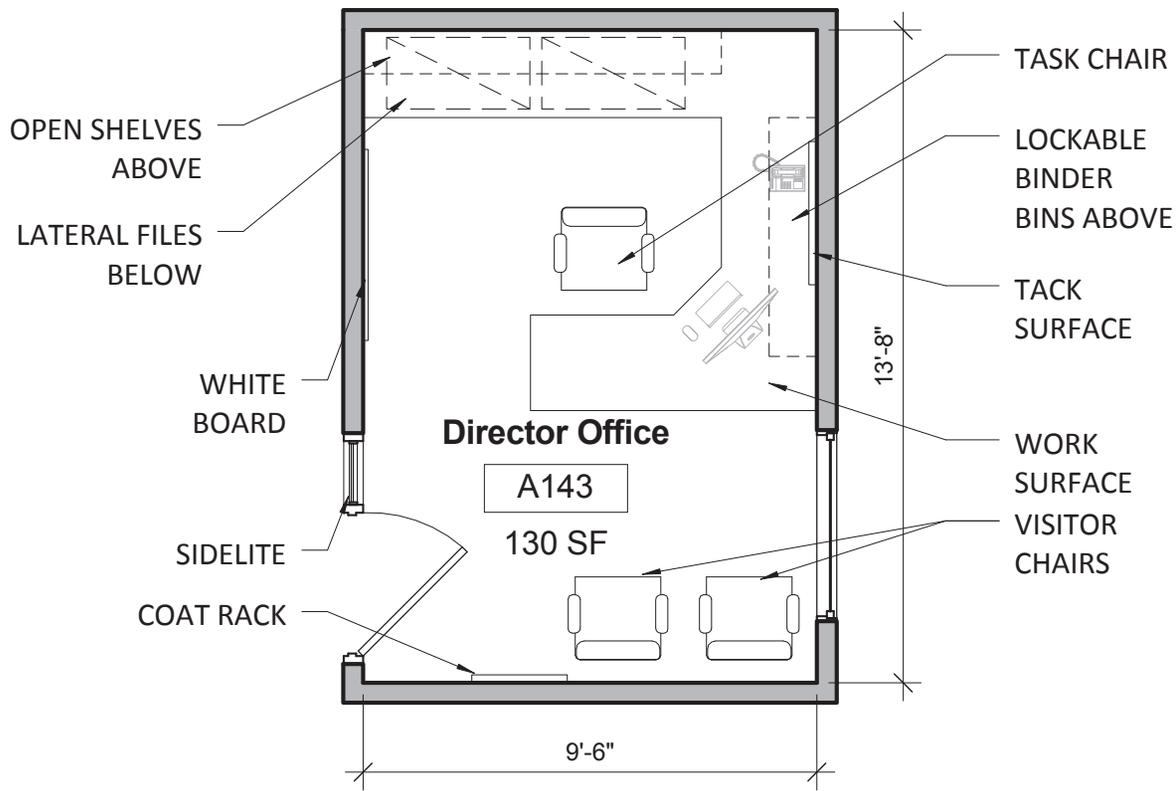
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle per wall. Additional capacity for equipment listed.
Data:	2 devices on opposing walls
Phone:	1 device at workstation
Video:	Rough-in for future capacity
Intercom:	Ceiling Speakers with volume control

Lighting:

Fixture Type:	T-5 HO linear indirect pendant
Accent Lighting:	Task lighting at workstation
Foot Candles:	40-45
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Open Workstation
Number Required:	1
Total Number:	1
Occupants:	1
Area:	175 SF
Primary Function:	Provide secure admittance and sign-in to testing center

Relationships:

Location:	First Level
Adjacencies:	Testing Room, Computer Testing Room
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable

Finishes:

Floor:	Carpet polished/sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Preliminary security for Testing room, roll down door above standing counter

Doors:

Type:	Metal rolling door.
Frame:	Painted hollow metal with glazed sidelite
Special:	Lockable

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

- Wall mounted shelving
- Lockable lateral files; Work surface

Moveable Furnishings:

- 1 Adjustable swivel task chair with arms

Equipment:

- Computers, printer, phone, white board

Technical Requirements

Mechanical:

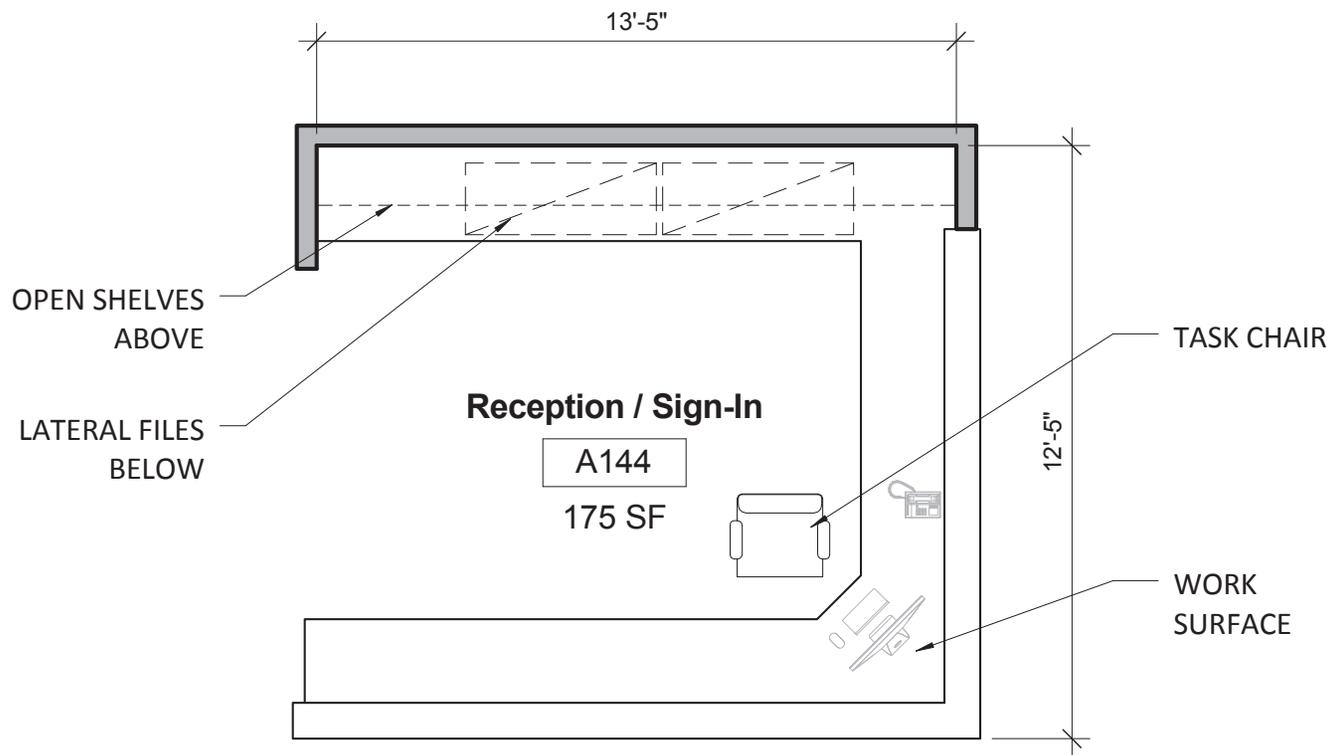
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacles per wall. 1 duplex receptacle per computer station.
Data:	1 device at computer station
Phone:	1 device at computer station
Video:	None required
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-5 Fluorescent lay-in indirect
Accent Lighting:	Task light at work surface
Foot Candles:	40-45
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	120 SF
Primary Function:	Provide record storage for testing center

Relationships:

Location:	First Level
Adjacencies:	Director Office
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable

Finishes:

Floor:	Carpet polished/sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Secure record storage

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Lockable

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-6 Lateral filing cabinets, lockable

Equipment:

-None required

Technical Requirements

Mechanical:

Ventilation: 5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: Dedicated computer A/C units

Plumbing: None required

Electrical:

Power: 1 duplex receptacles per wall.

Data: Rough-in for future capacity

Phone: Rough-in for future capacity

Video: Security Camera

Intercom: Rough-in for future capacity

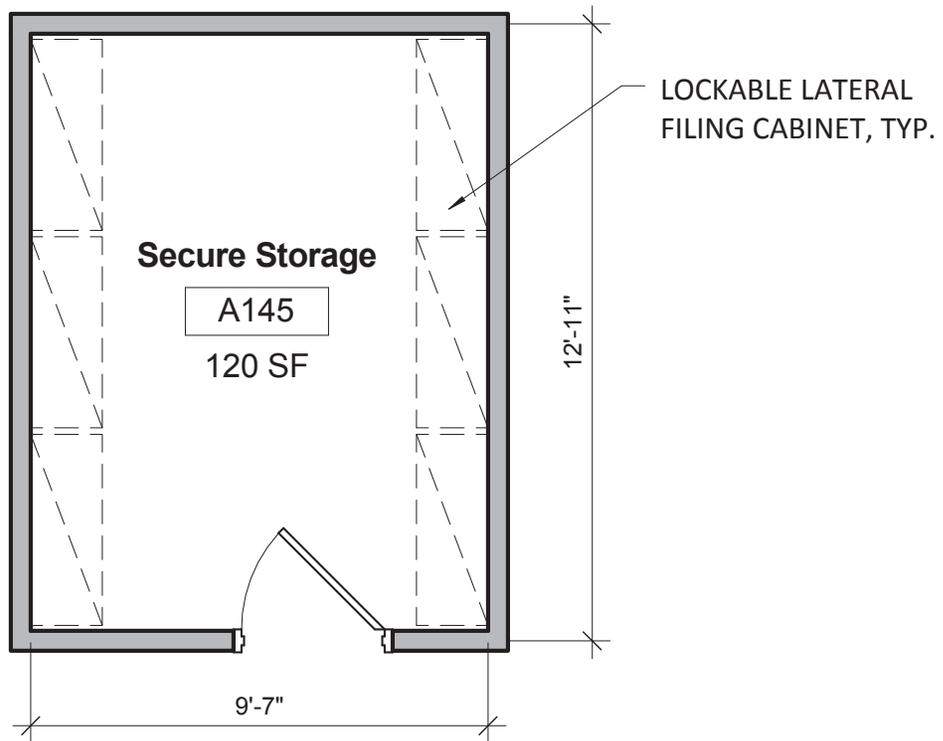
Lighting:

Fixture Type: T-8 Fluorescent lay-in

Accent Lighting: None required

Foot Candles: 30

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Locker Area
Number Required:	1
Total Number:	1
Occupants:	18
Area:	80 SF
Primary Function:	Provide individual storage for testing individuals

Relationships:

Location:	First Level
Adjacencies:	Testing Room, Reception Sign-In
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Secure Area with plenty of light

Finishes:

Floor:	Carpet or polished/sealed concrete
Walls:	Painted gypsum board
Ceiling:	Painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Moderate privacy

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-18 Lockers

Moveable Furnishings:

-None required

Equipment:

-Clock

Technical Requirements

Mechanical:

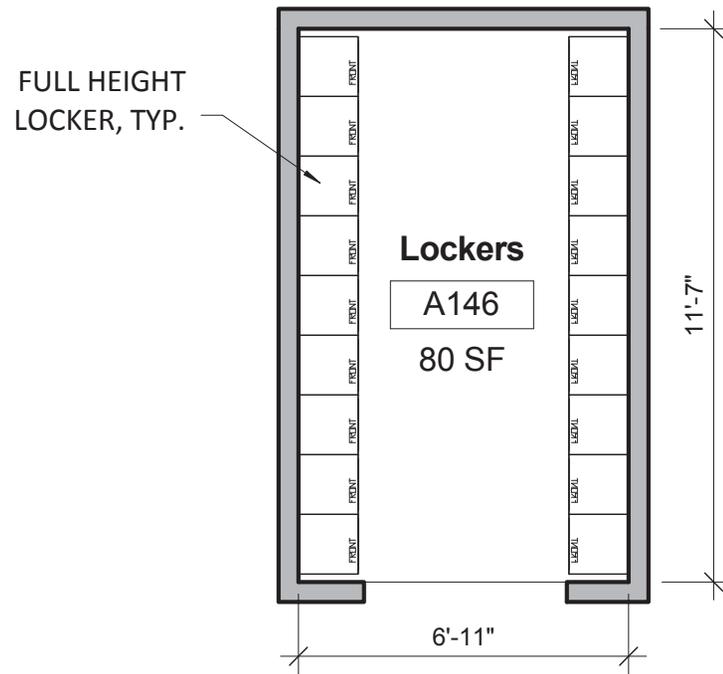
Ventilation:	0.5 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	1 duplex receptacles per wall.
Data:	Rough-in for future use
Phone:	Rough-in for future use
Video:	Rough-in for future use
Intercom:	Rough-in for future use

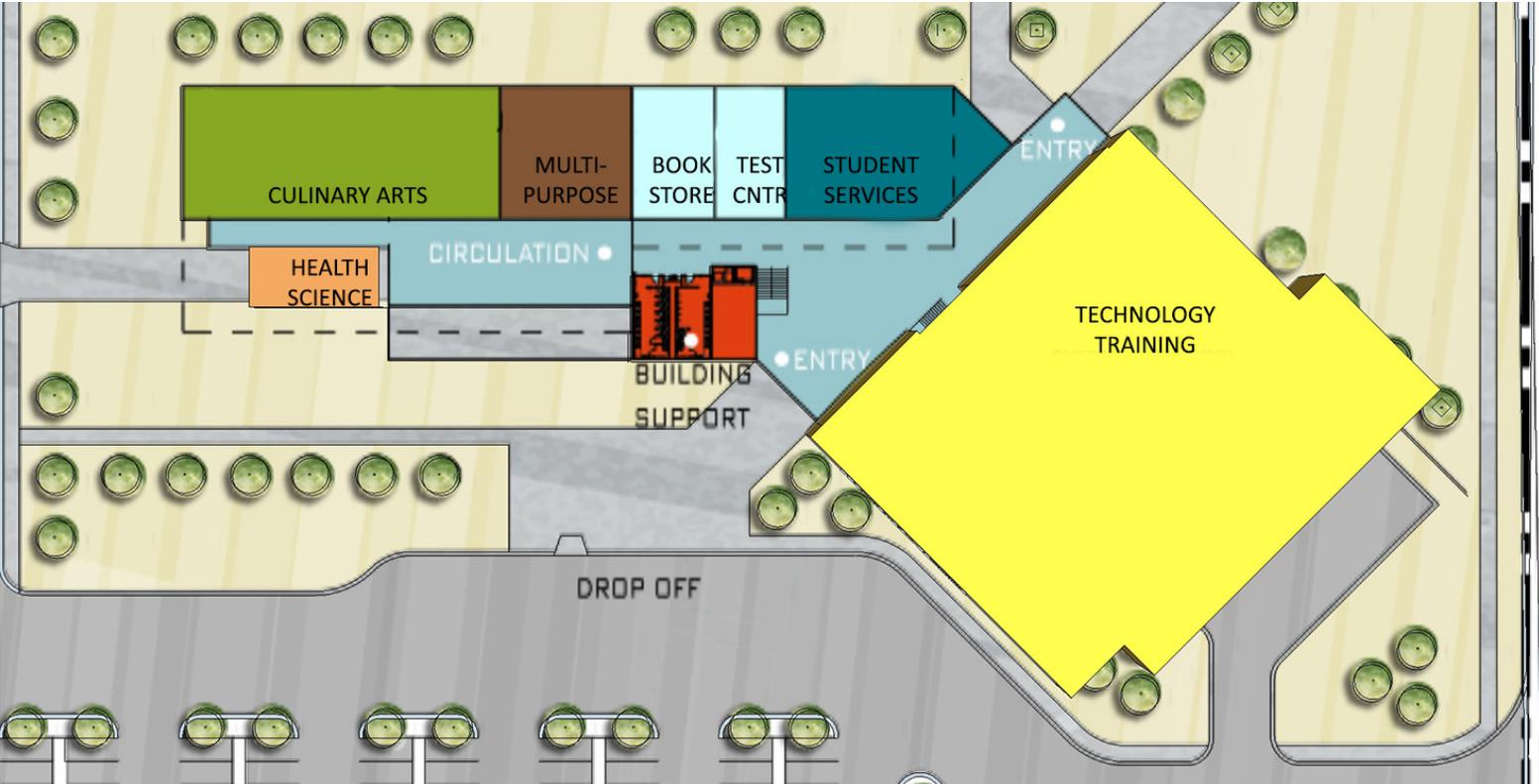
Lighting:

Fixture Type:	T-8 Florescent lay-in
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor

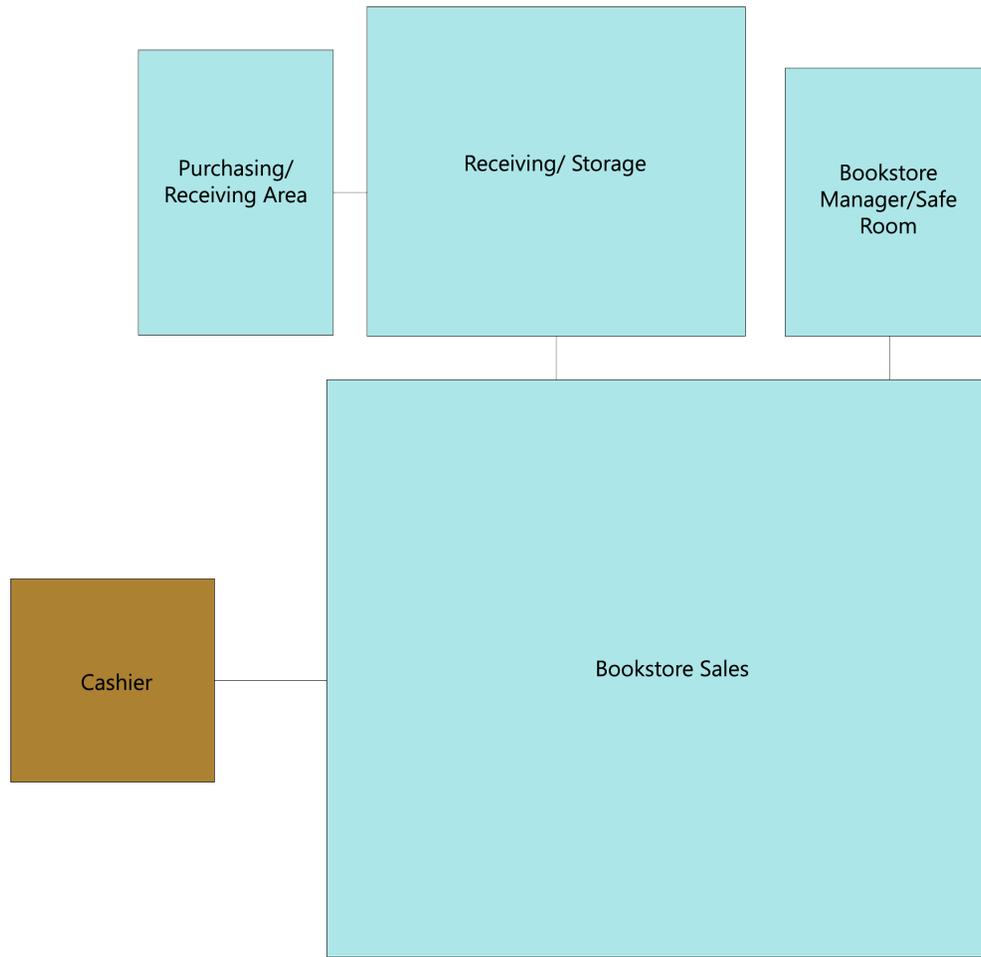


10 Testing Center/Bookstore

First Floor Relationship Diagram



Adjacency Diagram



Space Requirements

Space Summary:

Type of Space:	Bookstore
Number Required:	1
Total Number:	1
Occupants:	1-20
Area:	904 SF
Primary Function:	Provide a warm and friendly environment for retail sales

Relationships:

Location:	First Level
Adjacencies:	Cashier; Bookstore Manager/Safe Room; Receiving and Storage; Purchasing Receiving Area
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Warm and friendly environment

Finishes:

Floor:	Static-Free carpet
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Ability to lock doors during closing hours

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	Exterior
Glazing:	Low-E
Natural Light:	Desirable

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-Retail fixtures

Equipment:

-Computer; Printer/Scanner; Cash register; credit card reader

Technical Requirements

Mechanical:

Ventilation:	10 CFM/person + 0.12 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacle per wall. 2 four-plex receptacles at checkout. Additional capacity for equipment listed.
Data:	2 devices at checkout
Phone:	2 devices at checkout
Video:	Rough-in for future capacity
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	Track lighting at displays
Foot Candles:	40
Controls:	Occupancy sensor with dimming for track lighting



Space Requirements

Space Summary:

Type of Space:	Secure Safe Room
Number Required:	1
Total Number:	1
Occupants:	0
Area:	131 SF
Primary Function:	Provide safe to secure particular items.

Relationships:

Location:	First Level
Adjacencies:	Cashier; Bookstore Sales
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable, Secure

Finishes:

Floor:	Carpet or polished/sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Ability to lock doors when not in use

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	None required
Windows:	
Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Wall mounted shelving; Work surface

Moveable Furnishings:

-Task chair

Equipment:

-Safe, Telephone

Technical Requirements

Mechanical:

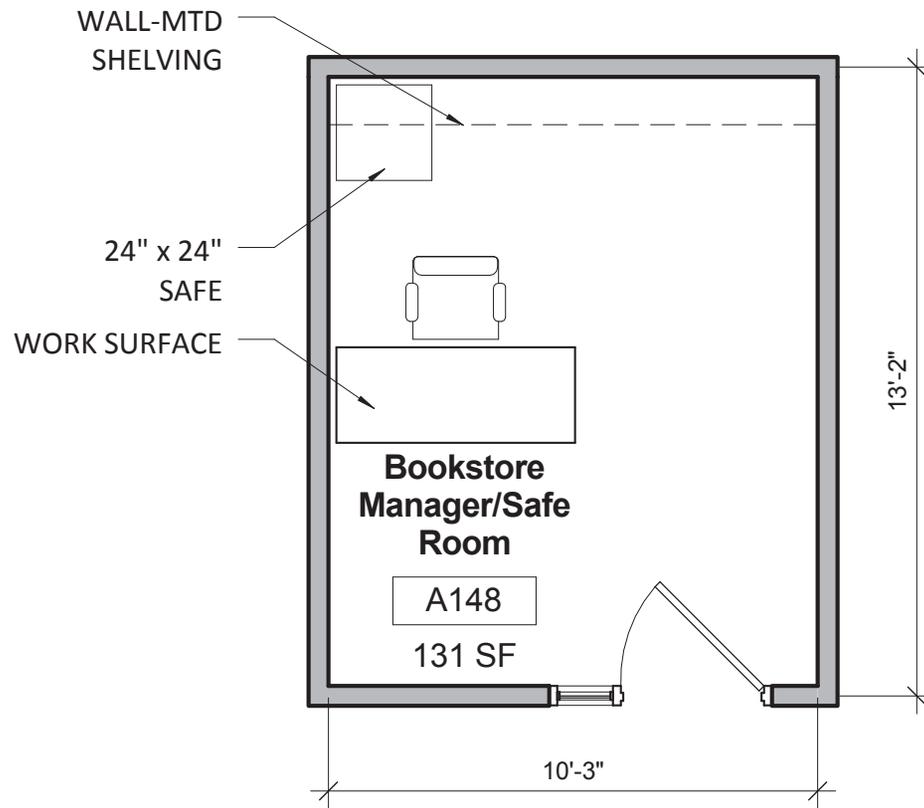
Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

Electrical:

Power:	2 duplex receptacle per wall.
Data:	Rough-in for future use
Phone:	1 device at workstation
Video:	Rough-in for future use
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	Task lighting at workstation
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Secure Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	300 SF
Primary Function:	Provide receiving and storage area for product overstock items

Relationships:

Location:	First Level
Adjacencies:	Bookstore Manager/Safe Room; Bookstore Sales
Separation:	None required

Architectural Requirements

Design/Aesthetic:

Practical, Serviceable, Durable

Finishes:

Floor:	Carpet or polished/sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Ability to lock doors during closing hours

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

- Wall mounted shelving
- Lateral filing cabinets

Moveable Furnishings:

- None required

Equipment:

- None required

Technical Requirements

Mechanical:

Ventilation:	5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	None required
Plumbing:	None required

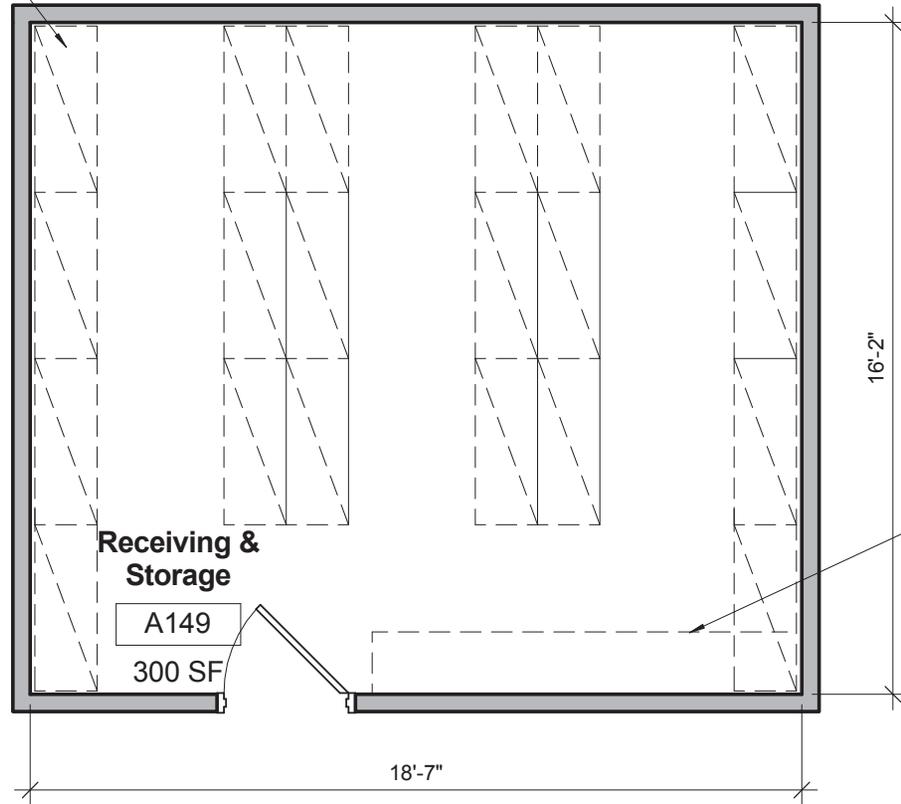
Electrical:

Power:	1 duplex receptacle per wall.
Data:	Rough-in for future use
Phone:	Rough-in for future use
Video:	Rough-in for future use
Intercom:	Rough-in for future use

Lighting:

Fixture Type:	T-8 Fluorescent lay-in
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor

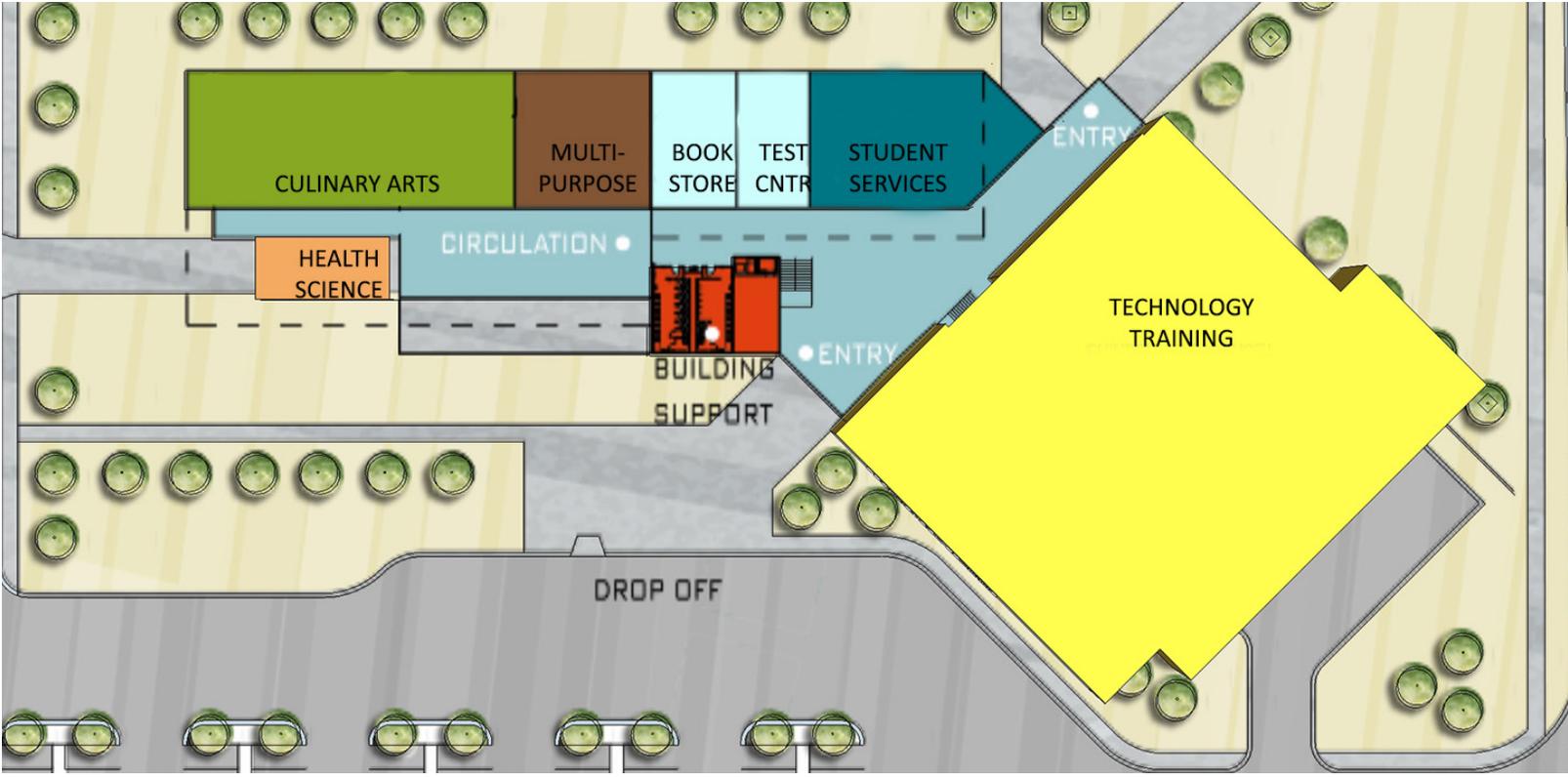
LATERAL FILING
CABINET, TYP.



WALL-MTD
SHELVING

11 Multipurpose

First Floor Relationship Diagram



Adjacency Diagram



11 Multipurpose

Space Requirements

Space Summary:

Type of Space:	Dividable classroom
Number Required:	1
Total Number:	1
Occupants:	30-200+
Area:	2499 SF
Primary Function:	Classroom use, occasional large presentation use, 4-6 times/year large group gatherings. Ideally opens to cafeteria/ common area.

Relationships:

Location:	First Level
Adjacencies:	Cafeteria
Separation:	Ability to separate space into two classrooms, and join spaces with cafeteria

Architectural Requirements

Design/Aesthetic:

Comfortable, natural lighting aura

Finishes:

Floor:	Static-Free carpet
Walls:	Painted gypsum board
Ceiling:	Gypsum board- sound proof
Specialty Finishes:	None required
Sound:	Sound proof wall divider; and wall opening into cafeteria.

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF):	10'-0"
---------------------------	--------

Privacy/Security:

Ability to lock doors during closing hours

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal with glazed sidelite
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Projector and screen in each room; Large (16ft) or multiple white boards; multiple bulletin boards; Lockable cabinets; storage for chairs and tables when not in use.

Moveable Furnishings:

-2 instructor desks; long, narrow tables to allow seating for up to 50 students (per room) comfortably; stack able chairs in theater-style arrangement.

Equipment:

-Computer; Doc cam; 1 Speaker phone per desk

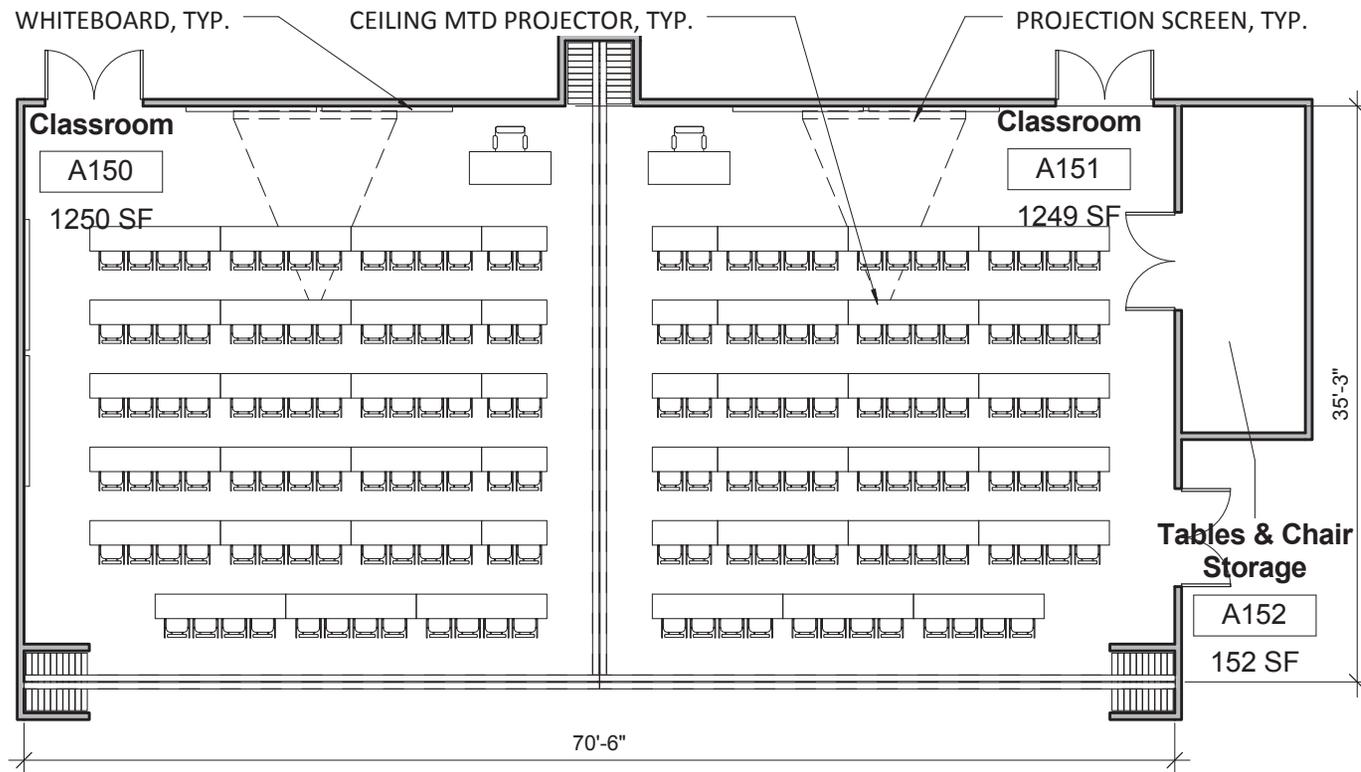
Technical Requirements

Mechanical:

Ventilation:	7.5 CFM/person + 0.06 CFM/sq.ft.
Summer Design Temp:	72 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	Theater-style sound system
Plumbing:	None required

Electrical:

Power:	2 duplex receptacle per wall and at instructor station, 10 floor outlets (per room). Additional capacity for equipment listed.
Data:	2 devices on opposing walls and at instructor station; 1 wireless airport
Phone:	2 devices on opposing walls and at instructor station, 10 devices (per room) for student speaker phones
Video:	A/V system with internet connection
Intercom:	Ceiling speaker with volume control
Lighting:	
Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	Where appropriate
Foot Candles:	40-45
Controls:	Occupancy sensor with zoned lighting, must be able to turn off light bank directly over the projector screens.



Space Requirements

Space Summary:

Type of Space:	Storage
Number Required:	1
Total Number:	1
Occupants:	0
Area:	150 SF
Primary Function:	Classroom chair and equipment storage.

Relationships:

Location:	First Level
Adjacencies:	Classroom
Separation:	Lockable storage area

Architectural Requirements

Design/Aesthetic:

Comfortable, natural lighting aura

Finishes:

Floor:	Static-Free carpet
Walls:	Painted gypsum board
Ceiling:	Gypsum board- sound proof
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

Ability to lock doors

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal with glazed sidelite

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-None required

Equipment:

-None required

Technical Requirements

Mechanical:

Ventilation: 7.5 CFM/person + 0.06 CFM/sq.ft.

Summer Design Temp: 72 ° F

Winter Design Temp: 72 ° F

Controls: None required

Sound Criteria: 30 (NC/RC)

Special Systems: None required

Plumbing: None required

Electrical:

Power: 1 duplex receptacle per wall.

Data: None required

Phone: None required

Video: None required

Intercom: None required

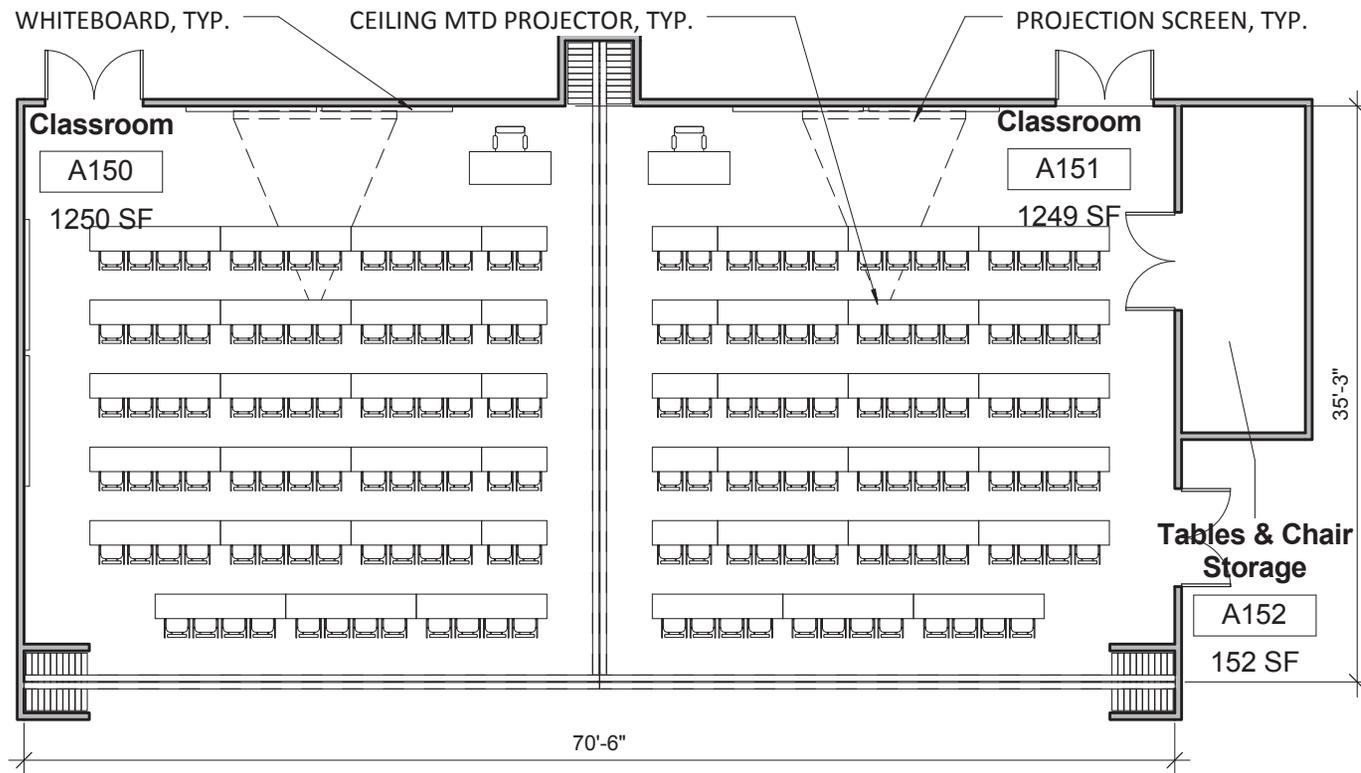
Lighting:

Fixture Type: T-8 Fluorescent lay-in indirect

Accent Lighting: None required

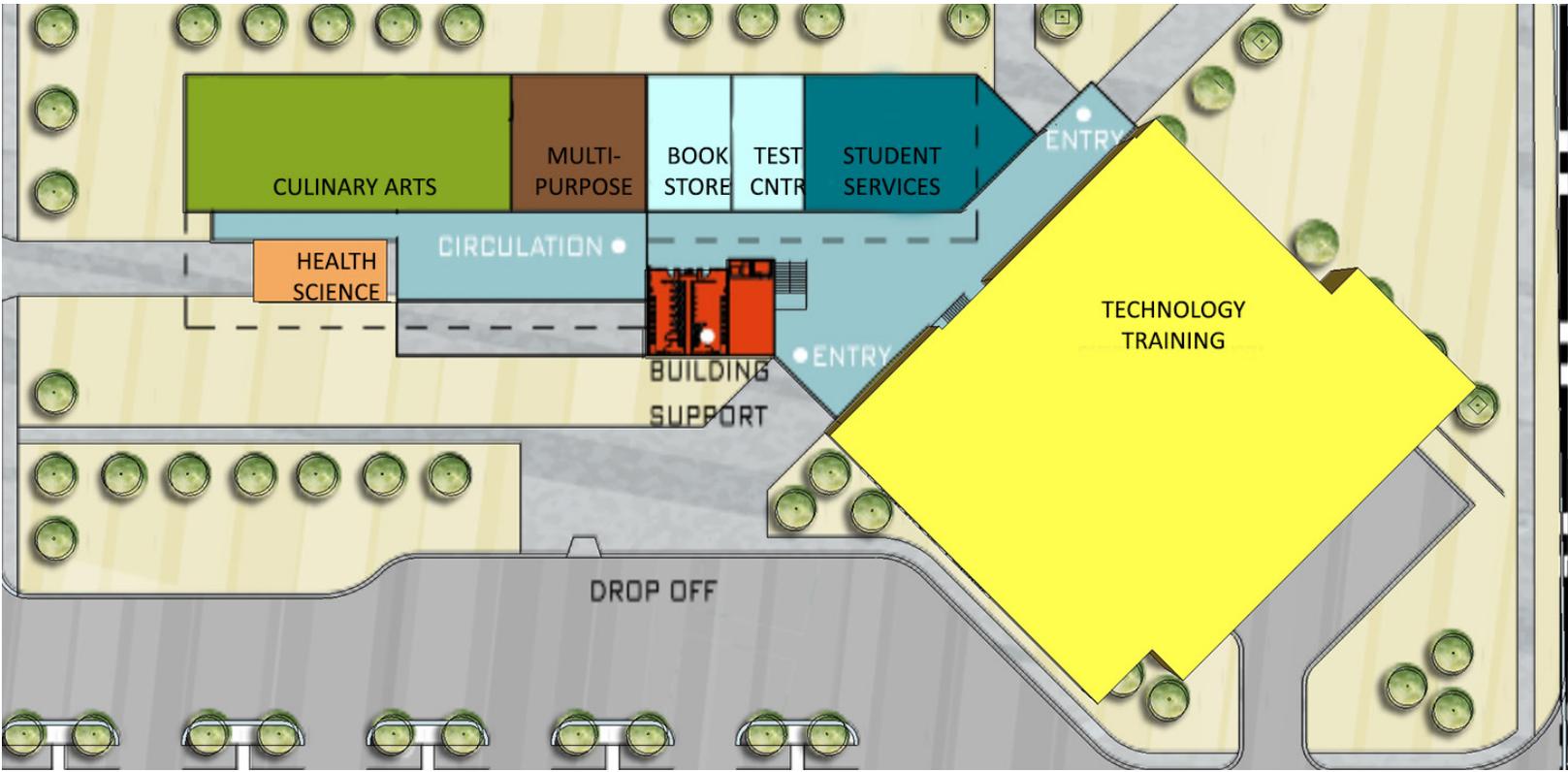
Foot Candles: 40-45

Controls: Occupancy sensor

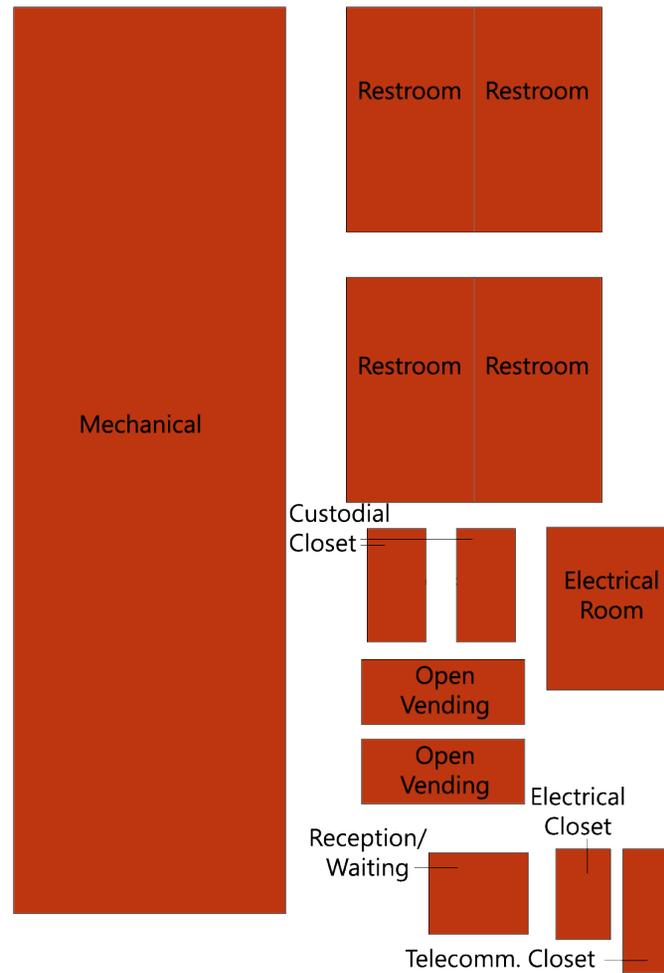


12 Building Support

First Floor Relationship Diagram



Adjacency Diagram



Space Requirements

Space Summary:

Type of Space:	Enclosed Public Rest room
Number Required:	2 per gender
Total Number:	4
Occupants:	3
Area:	600 SF
Primary Function:	Building Support Space

Relationships:

Location:	First Level and Second Level
Adjacencies:	None required
Separation:	Separation between stalls and genders

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Ceramic Tile, slope to floor drain
Walls:	Ceramic Tile
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Separated/private stalls

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Water closet; Urinal; Lavatory; Toilet Partition; Urinal Screen; Mirror; Grab Bars; Dispensers; Waste Receptacles

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

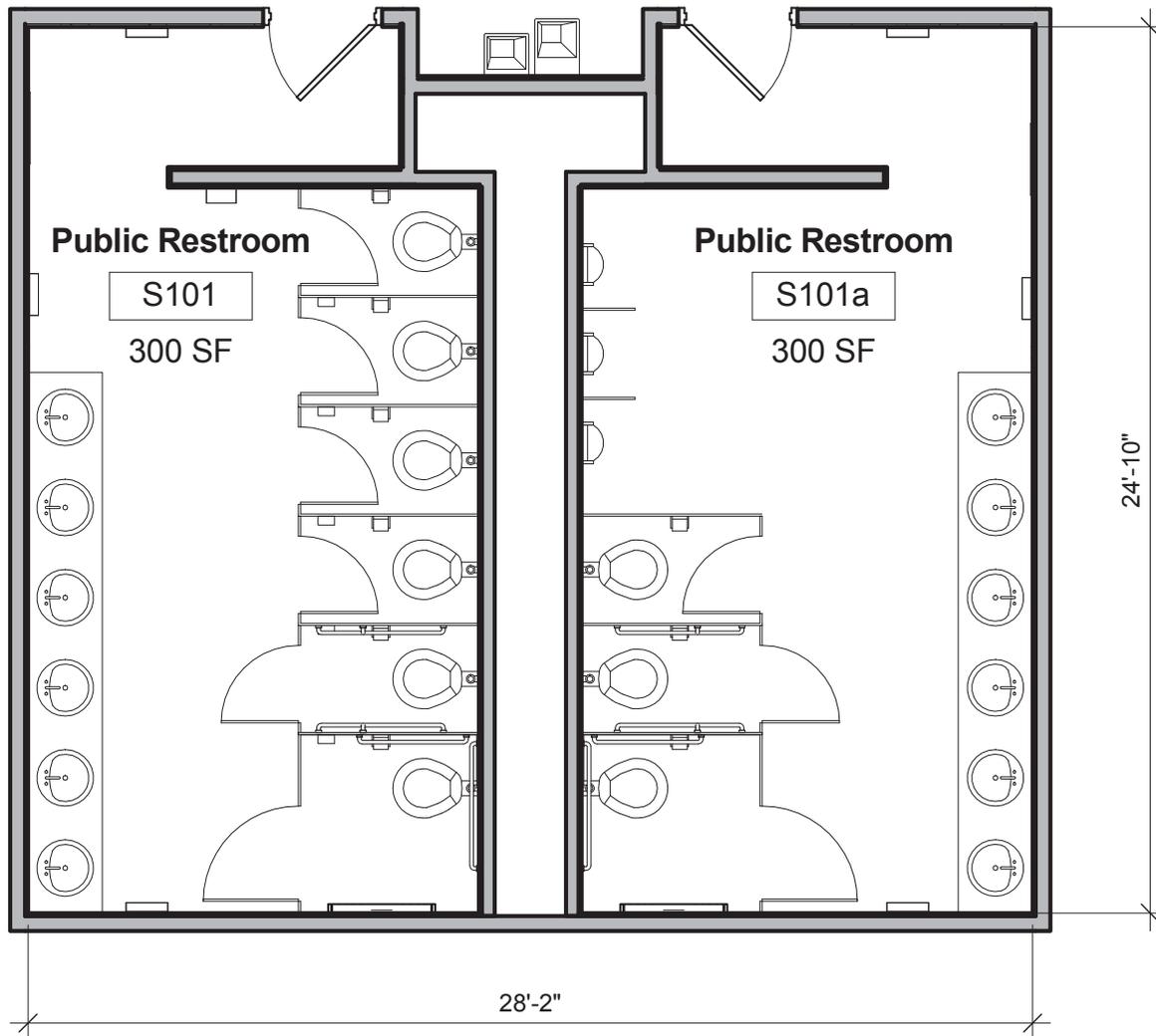
Ventilation:	1.0 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	40 (NC/RC)
Special Systems:	5 min. air exchange exhaust
Plumbing:	Wall hung flush valve water closets and urinals; wall hung lavatories; floor drains; water, waste & venting

Electrical:

Power:	1 GFCI duplex outlet per wall
Data:	None required
Phone:	None required
Video:	None required
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	Required at mirrors
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Enclosed Public Rest room
Number Required:	2 per gender
Total Number:	4
Occupants:	3
Area:	600 SF
Primary Function:	Building Support Space

Relationships:

Location:	First Level and Second Level
Adjacencies:	None required
Separation:	Separation between stalls and genders

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Ceramic Tile, slope to floor drain
Walls:	Ceramic Tile
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

Separated/private stalls

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Water closet; Urinal; Lavatory; Toilet Partition; Urinal Screen; Mirror; Grab Bars; Dispensers; Waste Receptacles

Moveable Furnishings:

None required

Equipment:

None required

Technical Requirements

Mechanical:

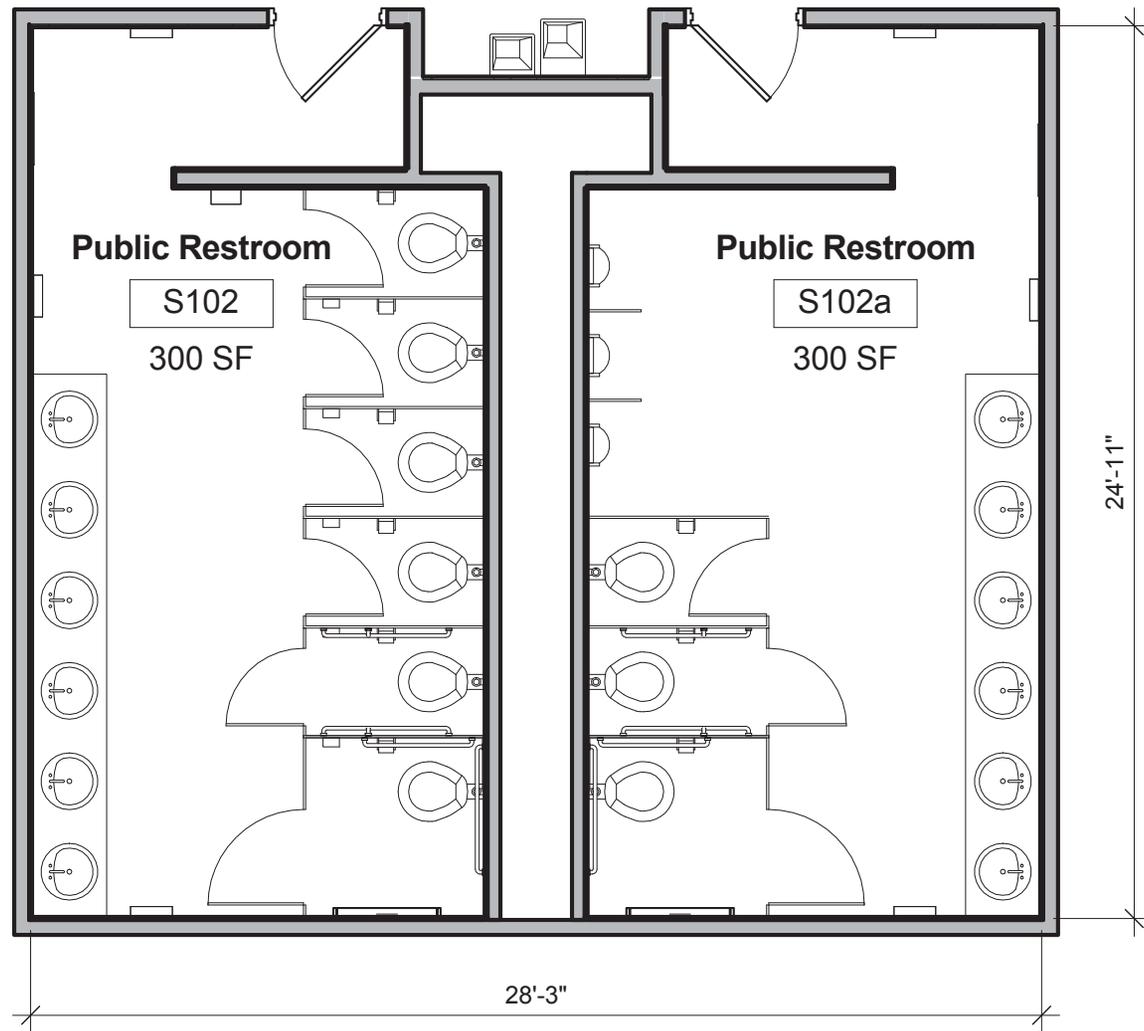
Ventilation:	1.0 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	72 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	40 (NC/RC)
Special Systems:	5 min. air exchange exhaust
Plumbing:	Wall hung flush valve water closets and urinals; wall hung lavatories; floor drains; water, waste & venting

Electrical:

Power:	1 GFCI duplex outlet per wall
Data:	None required
Phone:	None required
Video:	None required
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	Required at mirrors
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Open Vending Area
Number Required:	2
Total Number:	2
Occupants:	0
Area:	130 SF
Primary Function:	Provide space for vending machines

Relationships:

Location:	First Level and Second Level
Adjacencies:	None required
Separation:	None required

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Ceramic Tile
Walls:	Painted Gypsum Board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 10'-0"

Privacy/Security:

None required

Doors:

Type:	None required
Frame:	None required
Special:	None required

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

None required

Moveable Furnishings:

None required

Equipment:

-Vending machines

Technical Requirements

Mechanical:

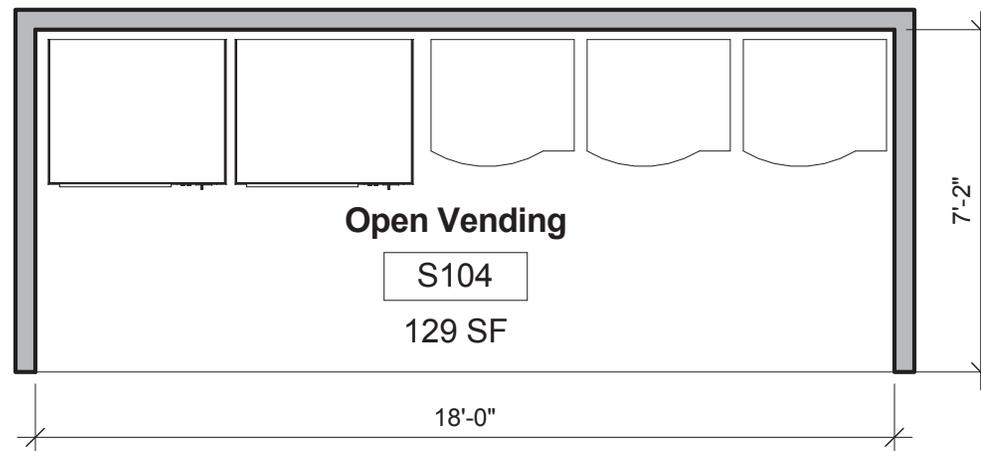
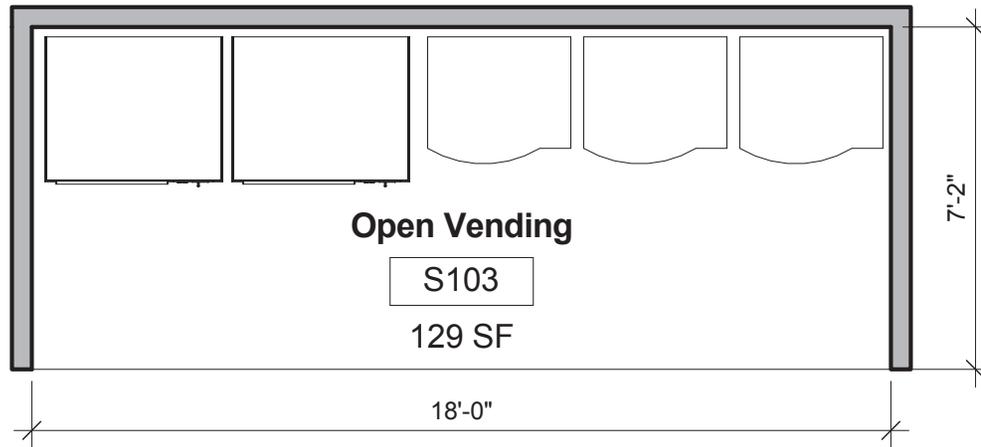
Ventilation:	.5 CFM/person (min.)
Summer Design Temp:	75 ° F
Winter Design Temp:	72 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	None required
Plumbing:	Floor drains; water, waste & venting

Electrical:

Power:	1 GFCI duplex outlet per machine
Data:	1 device per machine
Phone:	None required
Video:	None required
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Custodial Closet
Number Required:	2
Total Number:	2
Occupants:	0
Area:	80 SF
Primary Function:	Building Support Space

Relationships:

Location:	First Level and Second Level
Adjacencies:	None required
Separation:	High traffic public areas

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete; slope floor to drain
Walls:	Epoxy painted gypsum board
Ceiling:	Suspended painted gypsum board
Specialty Finishes:	None required
Sound:	None required

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-Mop/Broom rack; Wall mounted shelving

Moveable Furnishings:

-None required

Equipment:

-None required

Technical Requirements

Mechanical:

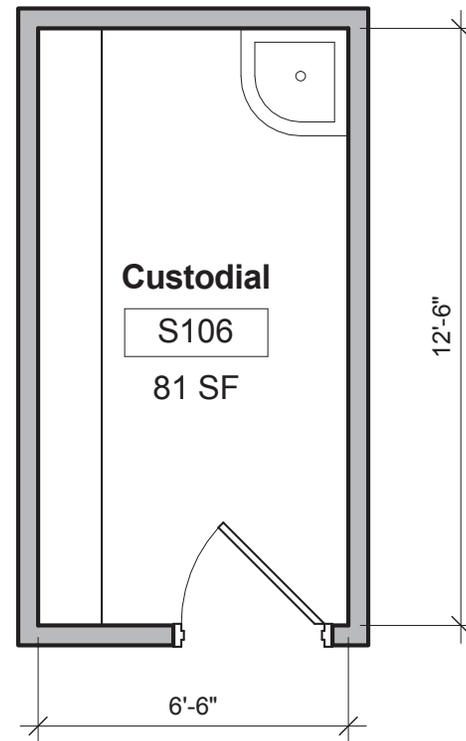
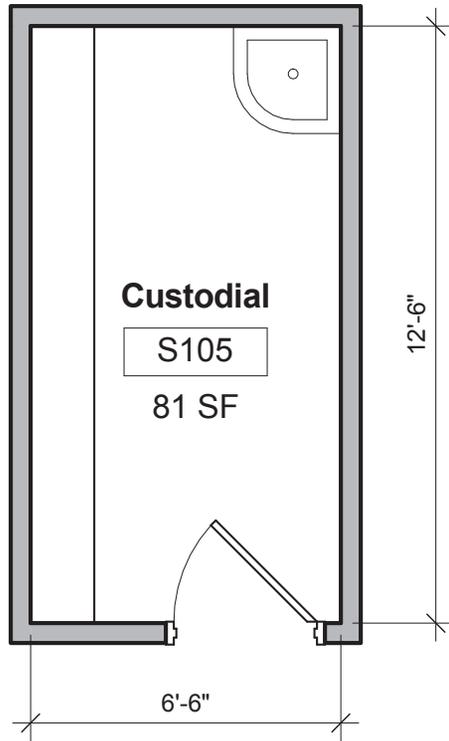
Ventilation:	1.0 CFM/sq.ft. (100% Exhaust)
Summer Design Temp:	78 ° F
Winter Design Temp:	68 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	10 min. air exchange exhaust
Plumbing:	Floor mounted mop sink; Floor drain; water, waste, and venting

Electrical:

Power:	1 GFCI duplex outlet per wall
Data:	Rough-in for future capacity
Phone:	Rough-in for future capacity
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Mechanical Room
Number Required:	1
Total Number:	1
Occupants:	0
Area:	2600 SF
Primary Function:	Accommodate mechanical equipment, piping, ducts and control systems

Relationships:

Location:	First Level and Second Level
Adjacencies:	Centrally located for piping/ducts
Separation:	Quiet areas; High traffic public areas

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete; slope floor to drains
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-None required

Equipment:

-See Mechanical Design Criteria in the Building Requirement Section of this document for Equipment list.

Technical Requirements

Mechanical:

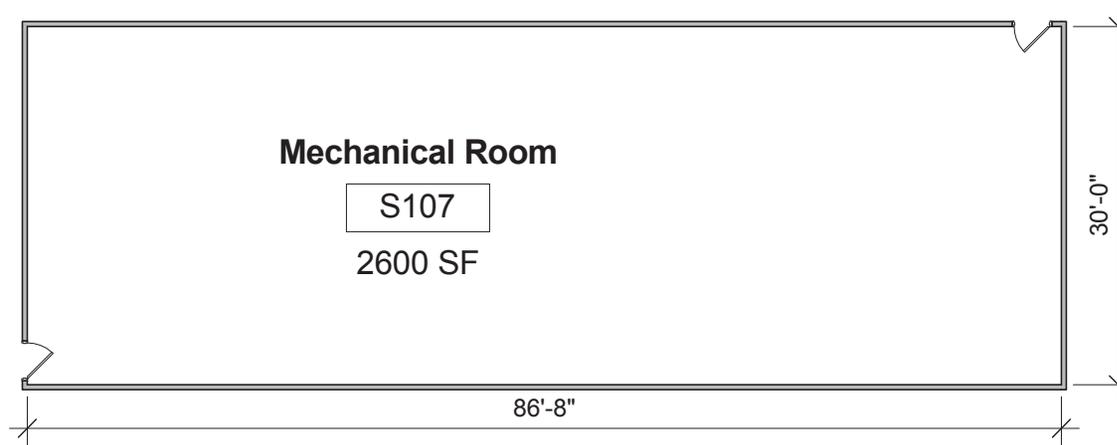
Ventilation:	.5 CFM/person (min.)
Summer Design Temp:	78 ° F
Winter Design Temp:	68 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	10 min. air exchange exhaust; provides summer cooling
Plumbing:	Hot and cold water hose bib floor drain; water, waste and venting

Electrical:

Power:	1 duplex outlet every 10'-0"
Data:	Data connection to DDC controls
Phone:	1 device minimum
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Electrical Room
Number Required:	1
Total Number:	1
Occupants:	0
Area:	250 SF
Primary Function:	Provide central distribution for building electrical systems

Relationships:

Location:	First Level and Second Level
Adjacencies:	Centrally located
Separation:	Quiet areas, Main telecommunications room and closets

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-None required

Equipment:

-See Electrical Design Criteria in the Building Requirement Section of this document for Equipment list.

Technical Requirements

Mechanical:

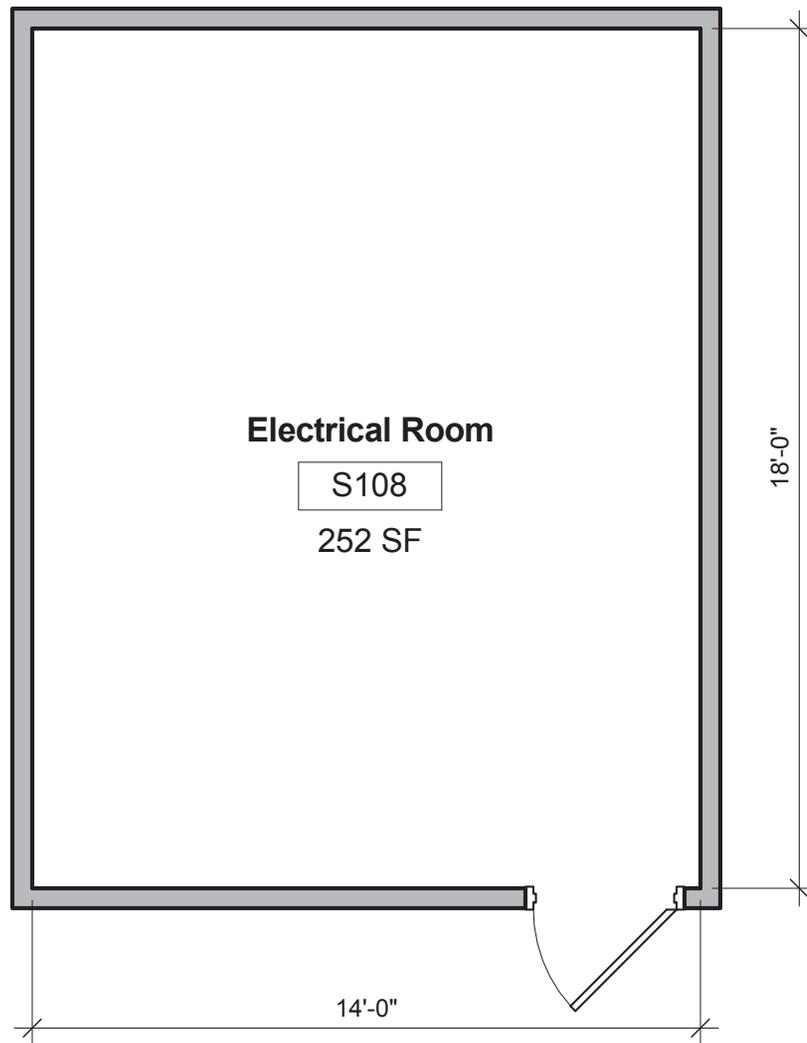
Ventilation:	.5 CFM/person (min.)
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	5 min. air exchange exhaust
Plumbing:	None required

Electrical:

Power:	1 duplex outlet every 10'-0"
Data:	1 device per wall
Phone:	1 device minimum
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	40
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Elevator/Equipment Room
Number Required:	2
Total Number:	2
Occupants:	0
Area:	200 SF
Primary Function:	Accommodate elevator equipment

Relationships:

Location:	First Level and Second Level
Adjacencies:	Elevator Shaft
Separation:	Quiet areas, high traffic public areas

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-There is to be nothing in this room except elevator related equipment. Duct work and piping are not to be run through this room.

Moveable Furnishings:

-None required

Equipment:

-See Electrical Design Criteria in the Building Requirement Section of this document for Equipment list.

Technical Requirements

Mechanical:

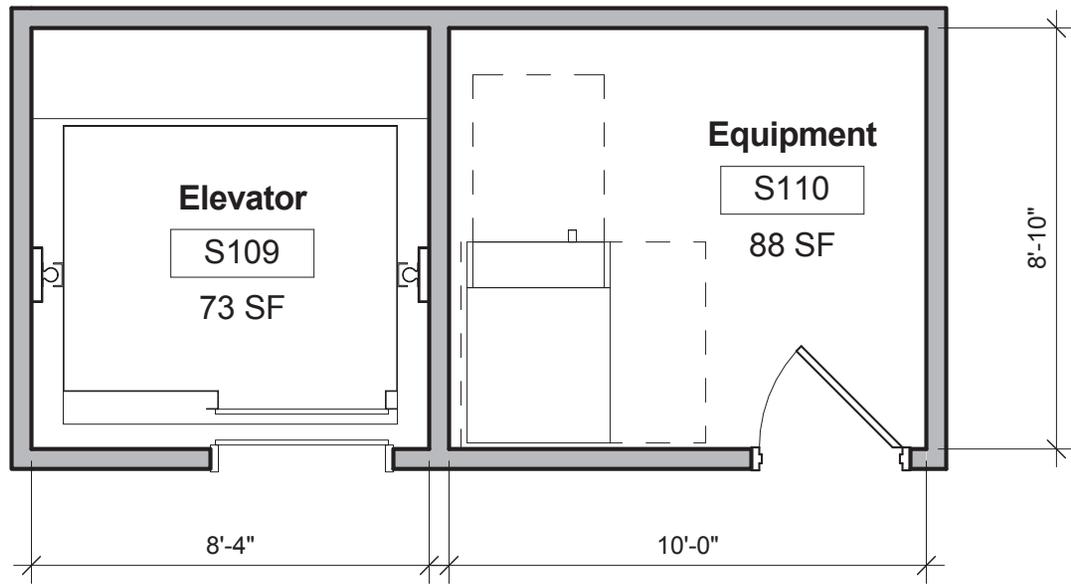
Ventilation:	100% Exhaust
Summer Design Temp:	74 ° F
Winter Design Temp:	74 ° F
Controls:	Individual direct digital controls
Sound Criteria:	30 (NC/RC)
Special Systems:	Independent Ventilation System (E-pwr)
Plumbing:	None required

Electrical:

Power:	1 GFCI duplex outlet per wall
Data:	1 device minimum
Phone:	1 device minimum
Video:	Rough-in for future capacity
Intercom:	Rough-in for future capacity

Lighting:

Fixture Type:	T-8 Fluorescent lay-in indirect
Accent Lighting:	None required
Foot Candles:	30
Controls:	Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Electrical Closet
Number Required:	1
Total Number:	1
Occupants:	0
Area:	60 SF
Primary Function:	Provide central distribution for building electrical.
Relationships:	
Location:	First Level and Second Level
Adjacencies:	Main Electrical Room
Separation:	Quiet areas, Main telecommunications room and closets

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type: Solid core wood with clear finish.

Frame: Painted hollow metal

Special: Sound Isolation

Windows:

Type: None required

Glazing: None required

Natural Light: None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-None required

Equipment:

-See Electrical Design Criteria in the Building Requirement Section of this document for Equipment list.

Technical Requirements

Mechanical:

Ventilation: .5 CFM/person (min.)

Summer Design Temp: 74 ° F

Winter Design Temp: 74 ° F

Controls: Individual direct digital controls

Sound Criteria: 30 (NC/RC)

Special Systems: 10 min. air exchange exhaust

Plumbing: None required

Electrical:

Power: 1 duplex outlet per wall

Data: Rough-in for future capacity

Phone: Rough-in for future capacity

Video: Rough-in for future capacity

Intercom: Rough-in for future capacity

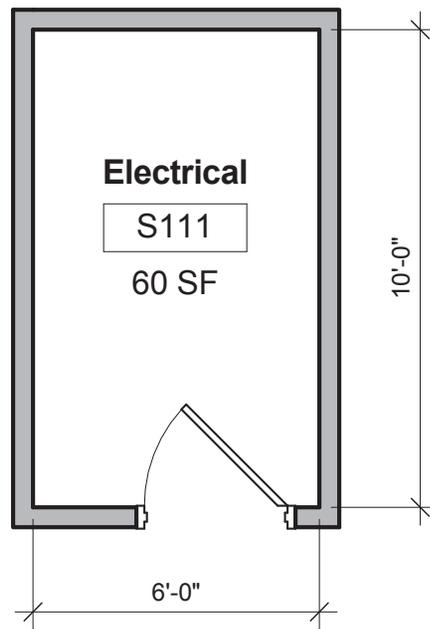
Lighting:

Fixture Type: T-8 Fluorescent lay-in indirect

Accent Lighting: None required

Foot Candles: 40

Controls: Occupancy sensor



Space Requirements

Space Summary:

Type of Space:	Telecomm Closet
Number Required:	1
Total Number:	1
Occupants:	0
Area:	80 SF
Primary Function:	Provide central distribution for building telecommunications and data systems

Relationships:

Location:	First Level and Second Level
Adjacencies:	Centrally located
Separation:	Quiet areas, Main electrical room and closet

Architectural Requirements

Design/Aesthetic:

None required

Finishes:

Floor:	Sealed concrete
Walls:	Painted gypsum board
Ceiling:	Suspended 2'x2' ACT
Specialty Finishes:	None required
Sound:	Sound proof insulated walls

Architectural Requirements

Ceiling Height:

Above Finish Floor (AFF): 9'-0"

Privacy/Security:

None required

Doors:

Type:	Solid core wood with clear finish.
Frame:	Painted hollow metal
Special:	Sound Isolation

Windows:

Type:	None required
Glazing:	None required
Natural Light:	None required

Casework/Fixed Equipment:

-None required

Moveable Furnishings:

-None required

Equipment:

-See Electrical Design Criteria in the Building Requirement Section of this document for Equipment list.

Technical Requirements

Mechanical:

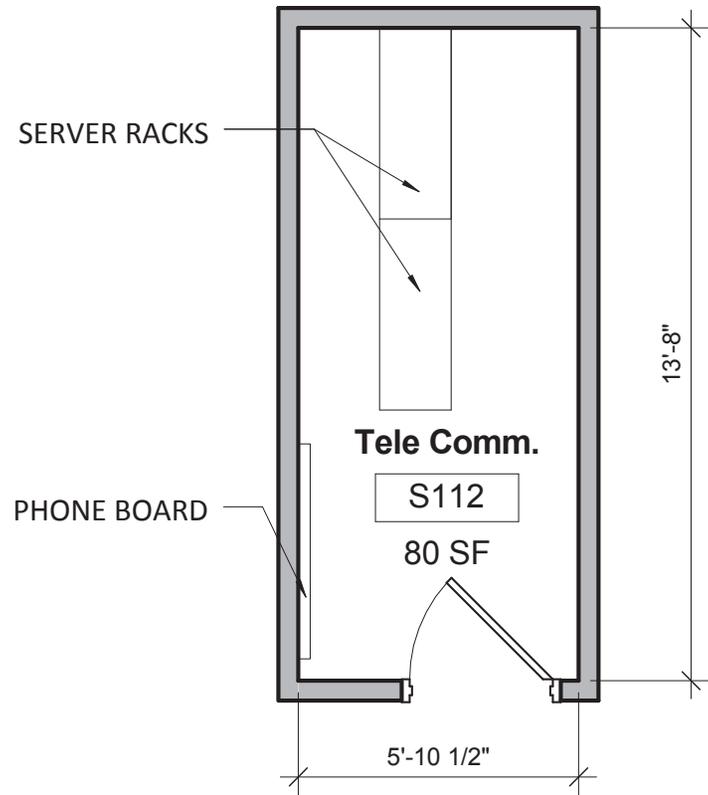
Ventilation:	None
Summer Design Temp:	70 ° F
Winter Design Temp:	70 ° F
Controls:	Individual direct digital controls
Sound Criteria:	35 (NC/RC)
Special Systems:	Dedicated computer A/C; 50% relative humidity; Pre-action fire sprinkling system
Plumbing:	None required

Electrical:

Power:	1 duplex receptacle every 10'-0"; minimum of 2 per wall; Dedicated duplex receptacle per data rack tied into emergency power system
Data:	Data head end equipment
Phone:	1 device minimum; D-mark for utility
Video:	Rough-in for future capacity
Intercom:	Ceiling speaker with volume control

Lighting:

Fixture Type:	Fluorescent electronic ballasts
Accent Lighting:	None required
Foot Candles:	50
Controls:	Occupancy sensor



13 Appendices

I. Employment Sector Growth Rate

Employment Projections by Industry

		2010	2020	2030	2040	2050
Beaver County	Manufacturing	80	130	189	262	339
Garfield County	Manufacturing	95	131	168	216	262
Iron County	Manufacturing	1855	2415	3064	3793	4385
Kane County	Manufacturing	221	277	336	398	449
	TOTAL	2251	2953	3757	4669	5435
	Increase over 2010		31.19%	66.90%	107.42%	141.45%
Beaver County	Health & Social Services	168	295	468	670	838
Garfield County	Health & Social Services	234	308	397	495	561
Iron County	Health & Social Services	2380	3711	5402	7376	9177
Kane County	Health & Social Services	131	176	229	297	344
	TOTAL	2913	4490	6496	8838	10920
	Increase over 2010		54.14%	123.00%	203.40%	274.87%
Beaver County	Accommodation & Food Services	297	493	744	1093	1535
Garfield County	Accommodation & Food Services	1053	1187	1335	1558	1818
Iron County	Accommodation & Food Services	2356	3254	4279	5605	7270
Kane County	Accommodation & Food Services	837	1019	1239	1532	1850
	TOTAL	4543	5953	7597	9788	12473
	Increase over 2010		31.04%	67.22%	115.45%	174.55%

Source: Governor's Office of Planning and Budget, 2008 Baseline Projections

II. Population Projections

2005 Baseline City Population Projections 2000-2050

Area	Population						
	Census 2000	2005	2010	2020	2030	2040	2050
Beaver County	6,005	6,335	7,575	11,549	13,761	15,535	17,373
Beaver city	2,454	2,606	3,116	4,750	5,660	6,390	7,146
Milford city	1,451	1,492	1,784	2,720	3,241	3,658	4,091
Minersville town	817	860	1,029	1,568	1,869	2,110	2,359
Balance of Beaver County	1,283	1,377	1,647	2,511	2,992	3,377	3,777
Garfield County	4,735	4,645	4,955	5,973	6,747	7,356	7,966
Antimony town	122	118	125	151	171	186	202
Boulder town	180	177	188	227	256	280	303
Cannonville town	148	163	173	209	236	257	279
Escalante city	818	824	880	1,060	1,198	1,306	1,414
Hatch town	127	121	129	155	175	191	207
Henrieville town	159	218	233	281	317	346	374
Panguitch city	1,623	1,579	1,685	2,031	2,294	2,501	2,708
Tropic town	508	490	523	630	712	776	840
Balance of Garfield County	1,050	955	1,019	1,229	1,388	1,513	1,639
Iron County	33,779	40,212	48,772	65,607	77,493	90,268	103,920
Brian Head town	118	125	151	203	240	280	322
Cedar City city	20,527	25,056	31,414	43,242	51,076	59,496	68,494
Enoch city	3,467	4,359	5,287	7,112	8,400	9,785	11,265
Kanarrville town	311	338	410	551	651	758	873
Paragonah town	470	515	624	840	992	1,155	1,330
Parowan city	2,565	2,835	3,438	4,625	5,463	6,364	7,326
Balance of Iron County	6,321	6,985	7,447	9,034	10,671	12,430	14,310
Kane County	6,046	6,093	6,618	8,359	9,783	11,033	12,327
Alton town	134	131	142	180	210	237	265
Big Water town	417	420	456	576	674	760	849
Glendale town	355	349	379	479	561	632	706
Kanab city	3,564	3,521	3,825	4,831	5,654	6,376	7,124
Orderville town	596	598	650	821	961	1,083	1,211
Balance of Kane County	980	1,074	1,166	1,473	1,724	1,944	2,172
TOTALS	50,565	57,285	67,920	91,488	107,784	124,192	141,586
GROWTH				34.70%	58.69%	82.85%	108.46%

Source: <http://governor.utah.gov/dea/demographics.html>
The State of Utah and Counties
Subcounty Population Projections (Total Population)

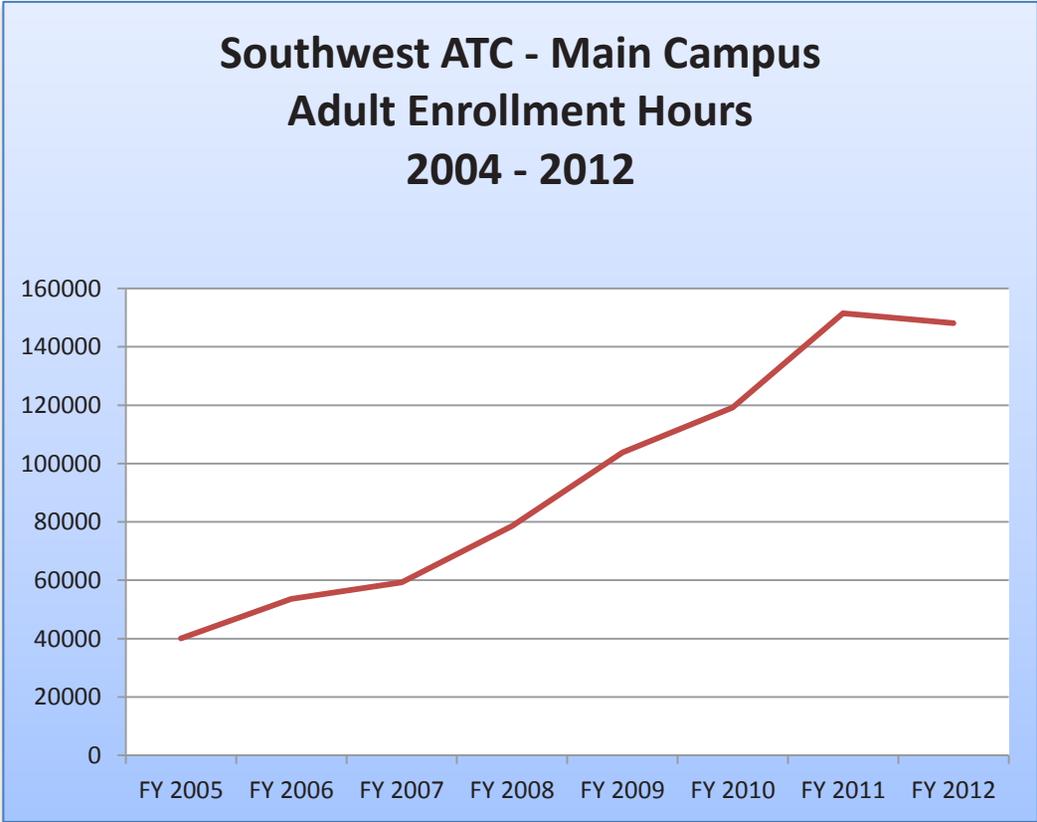
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III. Adult Membership History

SWATC Membership Hour History

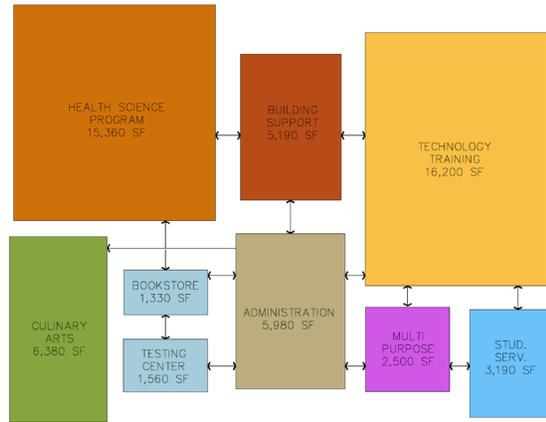
Year	Reg Adult
FY 2004	35872
FY 2005	40037
FY 2006	53574
FY 2007	59340
FY 2008	78593
FY 2009	103858
FY 2010	119245
FY 2011	151455
FY 2012	148066

III. Adult Membership History

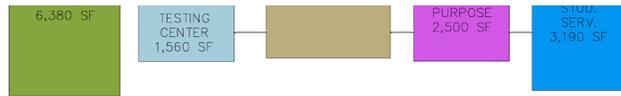


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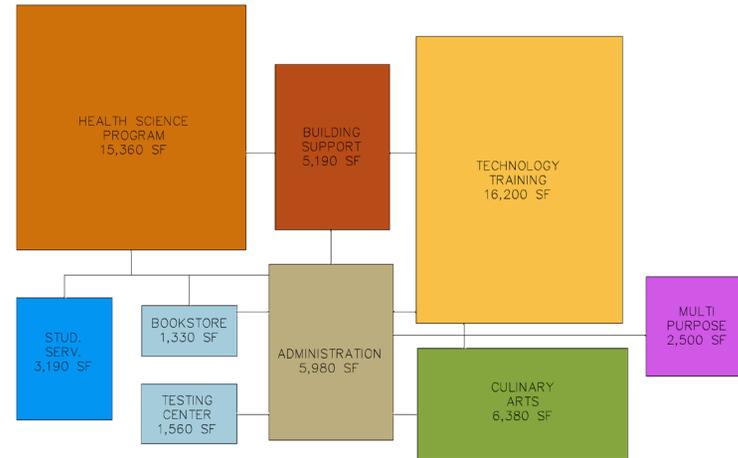
Adjacency Studies



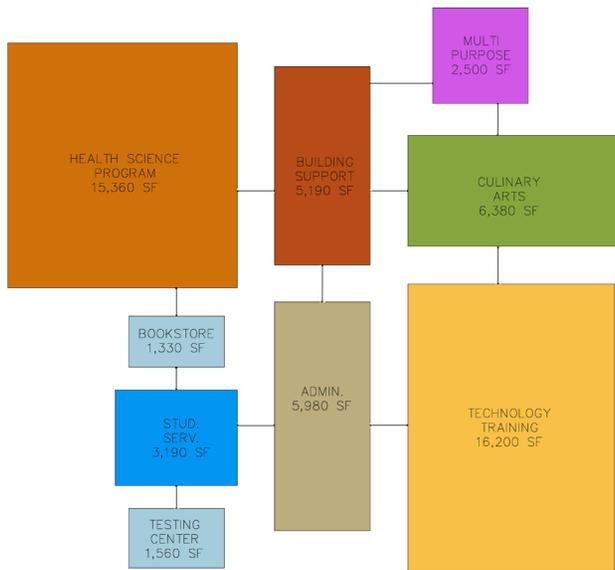
OPTION 1



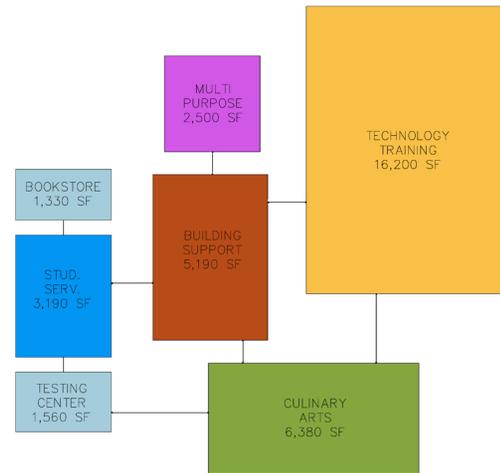
OPTION 1



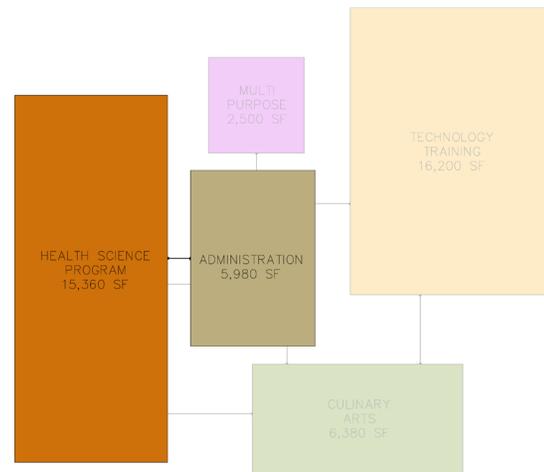
OPTION 2



OPTION 3



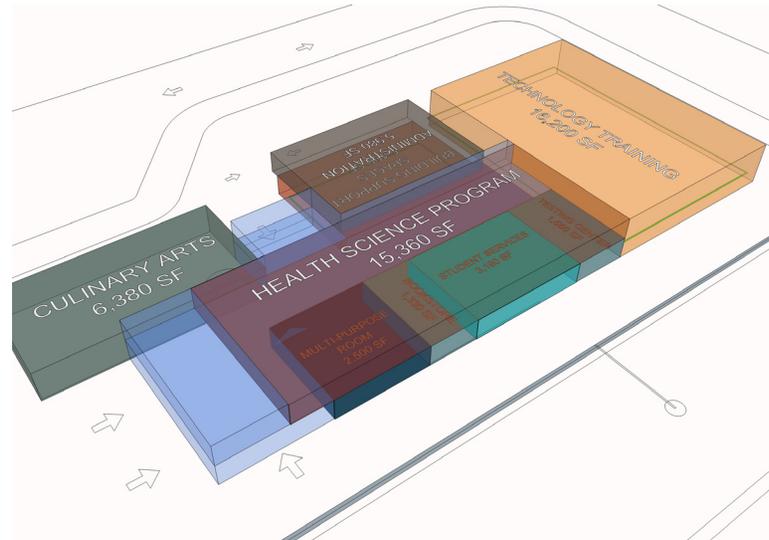
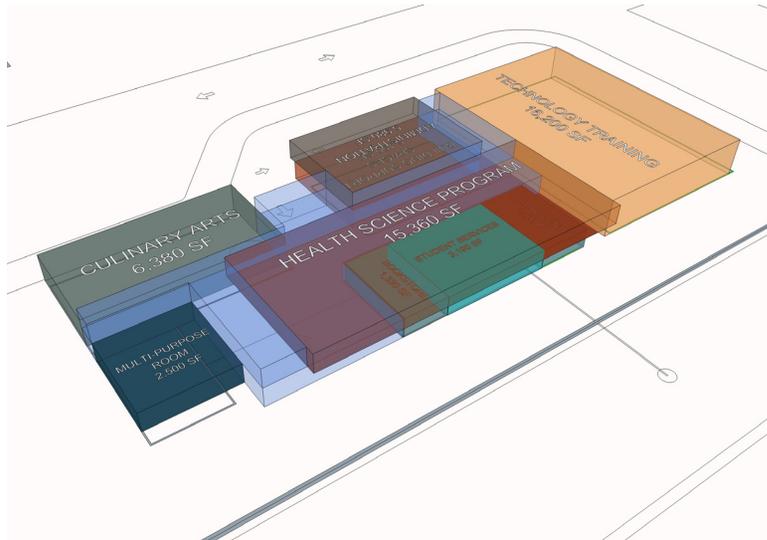
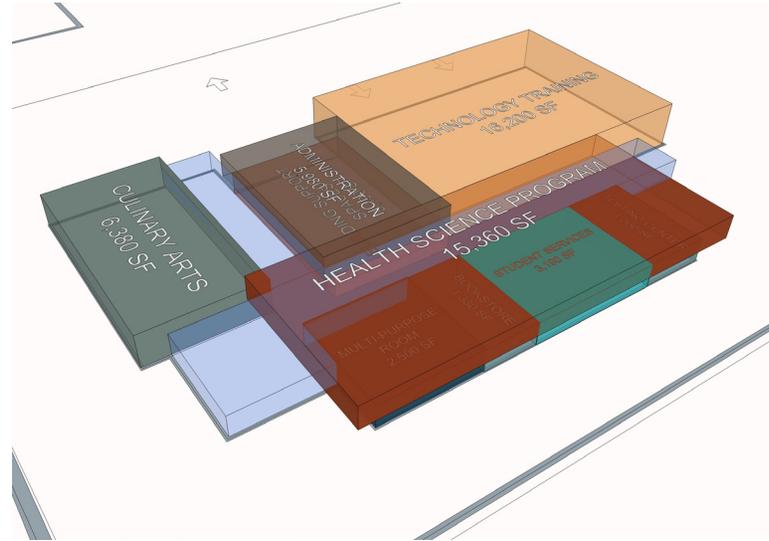
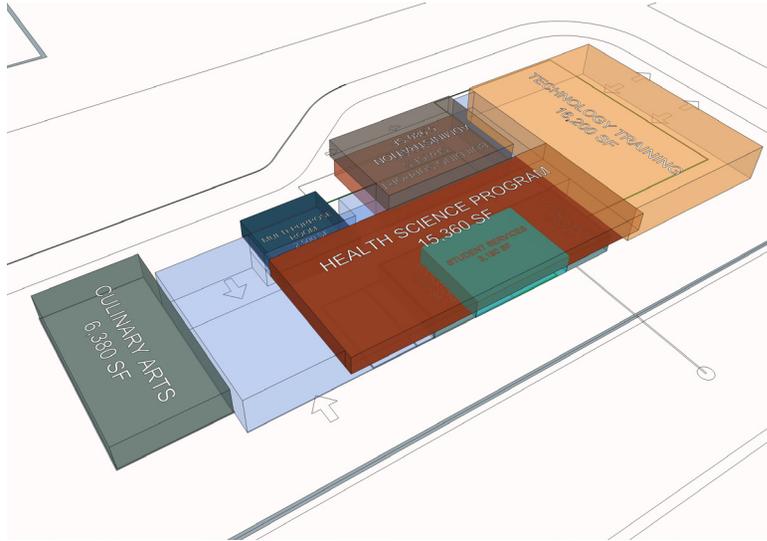
OPTION 4 LEVEL ONE

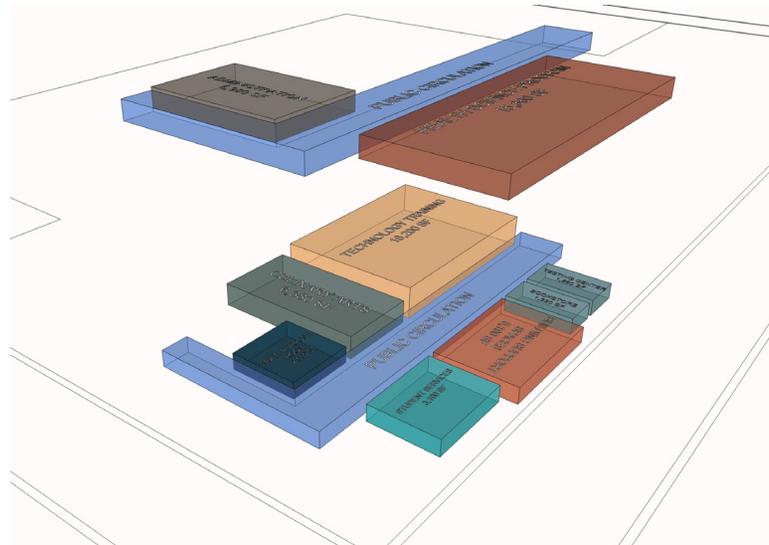
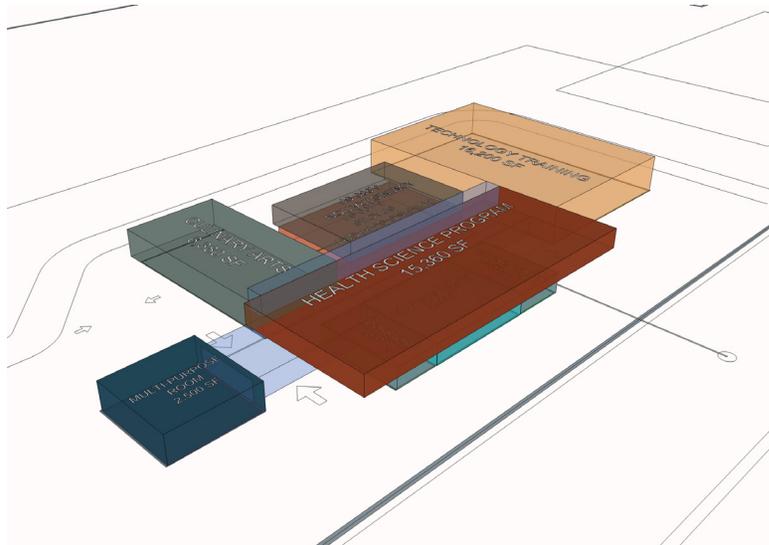
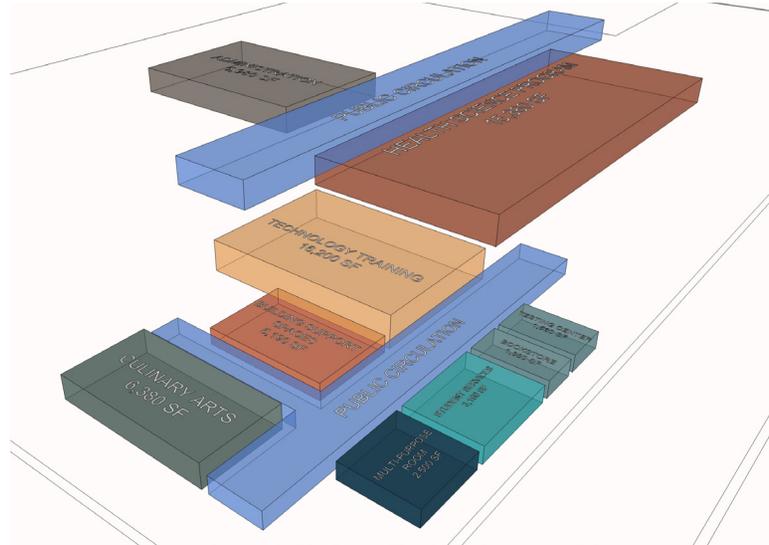
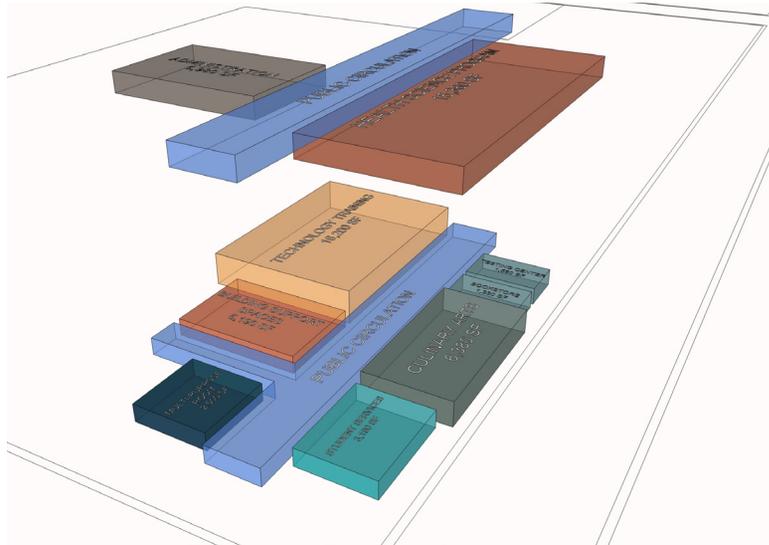


OPTION 4 LEVEL TWO

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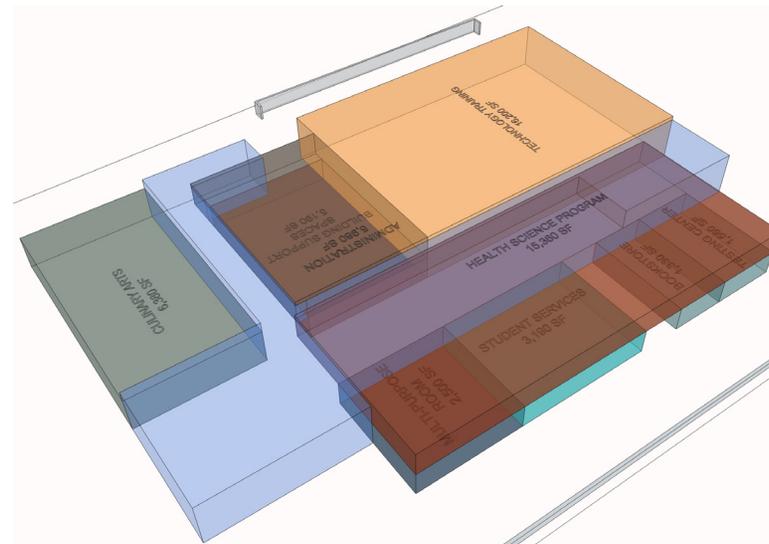
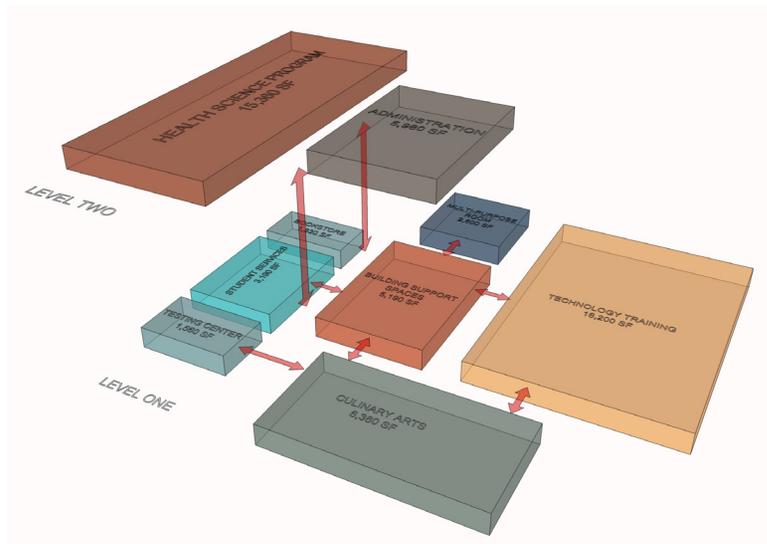
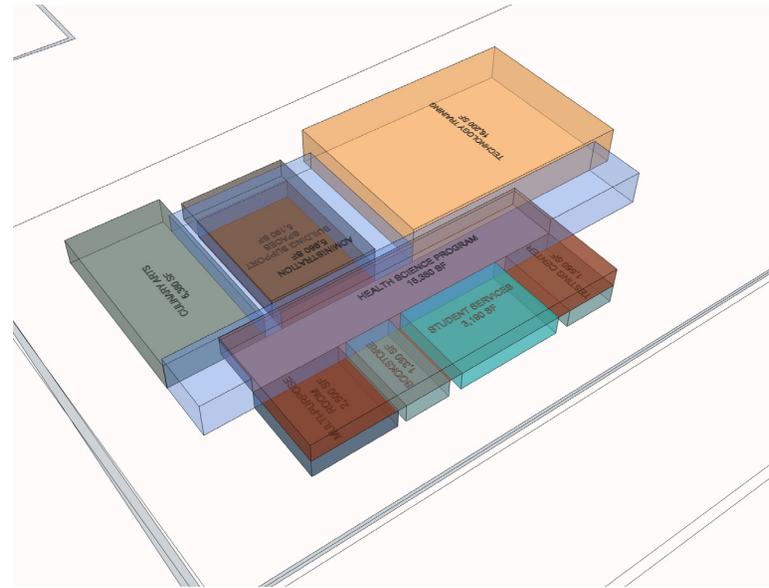
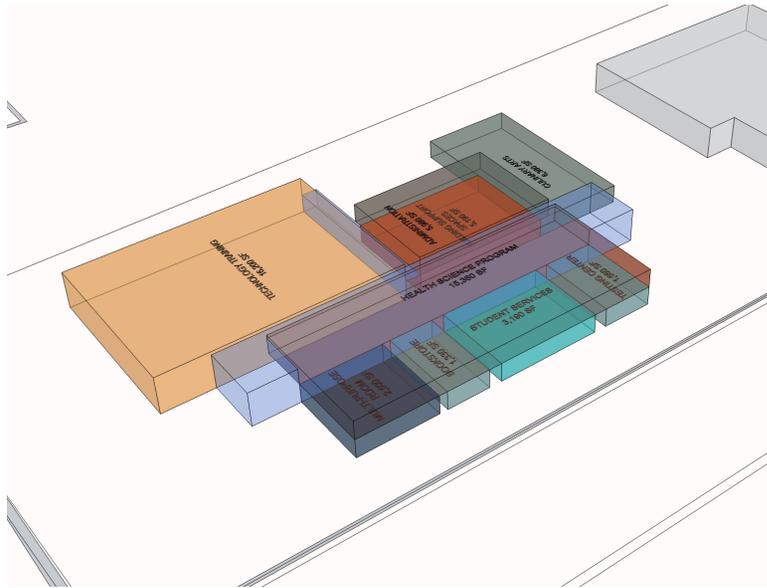
Stacking Diagram Studies

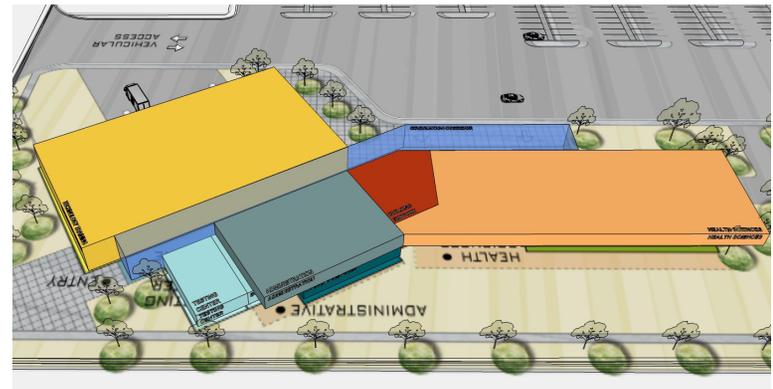




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Stacking Diagram Studies

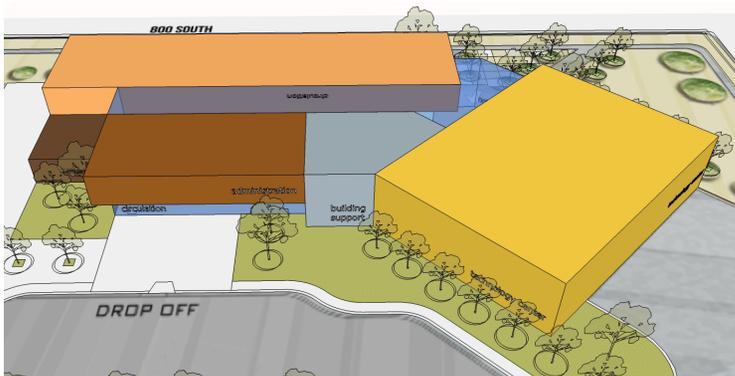




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Stacking Diagram Studies





13 Appendices

Alternate Plans



Option 1



Option 2

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Alternate Plans



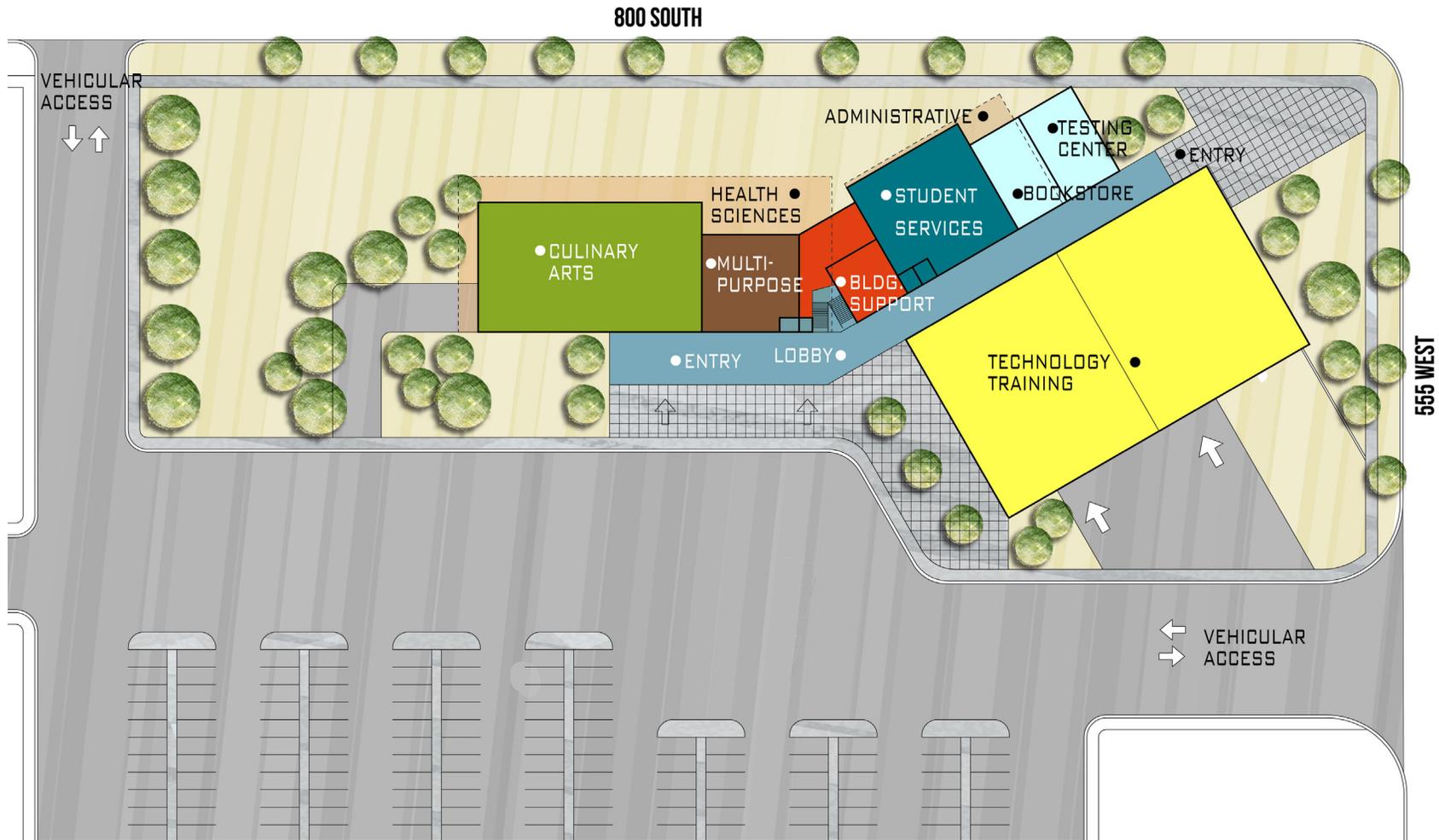
Option 3



Option A

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Alternate Plans



Option B



Option C

