5.0 Community Based Outpatient Clinic (CBOC) Prototype Proposed Layouts

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5.1 One-PACT CBOC Prototype Proposed Layout

As discussed in Section 2, the One-PACT CBOC Prototype is based on One-PACT module. The module is complemented by other common components, such as Group Rooms and Pathology and Laboratory Medicine, to create a comprehensive care environment. Refer to Section 2 for an explanation of the services included in the prototype and Section 3 for a Prototype Program for Design.

The Entry component design allows for a police presence at the front door of the clinic, coupled with the vestibule and wheel chair storage. The lobby area, known as the Commons, holds combined waiting for the entire clinic. A variety of seating options allows patients choice and flexibility. The Commons is energized by the inclusion of vending and Patient Education space, encouraging movement and interaction, offering more than a typical passive waiting experience.

The Reception component is centrally located, providing two distinct entrances into the PACT area. Its location provides a clear check-in point for patients while affording staff visibility over the activity in the Commons. Kiosks are located near the patients' path from the Entry component to the Reception component, encouraging patient use within reach of both the Reception desk and Volunteer area, should a patient require assistance. This centralized node of the Reception component is immediately adjacent to the clinic waiting areas. This distance provides patients visual and auditory privacy while talking to staff at the desk.

The Group Room component, consisting of a Group Room and Shared Medical Appointment Room, has access directly from the Commons. This allows patients to attend appointments and group sessions without entering the clinic space. Its location lends itself to hosting evening and weekend appointments since it can be accessed from outside of the clinic. The Lab component is also directly accessed via the Commons. Often, patients need access to the Lab without entering the clinic area. These two components benefit from the shared access from the public side and clinic side. Patients can enter the spaces from the Commons and providers can enter from the clinic.

A corridor separates the front bar of components from the PACT components. Upon entering the controlled access points to the PACT area, there is a Heights and Weights alcove that serves all exam rooms in the PACT. Exam, Consult and Procedure components are located in two patient circulation corridors on either side of a centralized PACT + Extended Team Work Area component. Exam and procedure rooms have entrances on two sides, allowing direct access from both the patient corridors and team work area. Refer to Section 4 for more information on the Exam and Consult, Procedure and PACT + Extended Team Work Area components.

The rear corridor of the One-PACT CBOC Prototype is the primary staff and service access. This allows for possible secondary staff entrance points, as well as exterior access to building support spaces.

The One-PACT CBOC Prototype lends itself to expansion. The patient corridor at the front and the staff / support corridor at the rear of the PACT can easily connect to additional components. For an example, refer to Section 7 for a test fit of an actual program, where a General Mental Health component is added, as dictated by local need.

Engineering Assumptions

Electrical / Main Power:
(1) The incoming main power for the building will be from an outdoor, pad mounted transformer. This transformer will be located such that it adheres to AT/FP criteria and guidelines outlined in the Physical Security Design Manual for VA Facilities. (2) Back-up emergency power will be provided for the building via an outdoor, pad mounted generator installed in a weatherproof and soundproof enclosure. This generator will provide back-up power for life safety, critical, and essential electrical loads as required by the VA Electrical Design Manual.

Telecommunications / Security:
(1) Security systems hardware will not be housed inside the telecommunications rooms.

HVAC / Fire Protection / Plumbing:
(1) The mechanical and plumbing systems will follow the Sustainable Design Principles outlined in the VA Sustainable Design and Energy Reduction Manual (April 2010). (2) The mechanical systems will be based on the VA HVAC Design Manual for New, Replacement, Addition, and Renovation of Existing VA Facilities for Hospitals, Clinics (Outpatient and Inpatient), Emergency Care, Ambulatory Care, Animal Research and Holding, Laboratories, Energy Centers, and Warehouses (March 2011). (3) The plumbing systems will be based on the VA Plumbing Design Manual for New Hospitals, Replacement Hospitals, Ambulatory Care, Clinical Additions, Energy Centers, Outpatient Clinics, Animal Research Facilities, and Laboratory Buildings (April

2010). (4) The fire protection systems will be based on the VA Fire Protection Design Manual (Sept 2011).

Electrical

The main electrical room located at the perimeter of the building along the staff / support corridor will house the main switchgear fed from the outdoor pad mounted transformer. The facility is small enough that it will not require any additional electrical rooms, with a maximum branch circuit run is no more than 200 feet. Branch circuit panelboards, both 480Y/277V and 208Y/120V, and step down transformers (480V-208Y/120V) will be installed within the main electrical room.

Telecommunications and Security

The main telecommunications room and Entrance Facility (EF) is located along the perimeter of the building, adjacent to the main electrical room with access from the staff / support corridor. The size of the facility eliminates the need to have multiple telecommunication rooms throughout the building, as cable runs will not exceed 200 feet. Communication racks will be used within this room to serve the entire building along with other equipment as required by the VA Electrical Design Manual, December 2010, Chapter 7: Telecommunication System. The racks needed to accommodate CCTV and security systems hardware will be located in police areas due to security accessibility concerns.

HVAC

The clinic building will be provided with a mechanical space sized to accommodate the Heating, Ventilating, and Air Conditioning (HVAC) systems equipment. The major components of the HVAC systems are assumed to include rooftop air handling units, heating hot water boilers, air-cooled chillers, expansion tanks, air separators, water treatment system, and associated pumps and controls. A mechanical penthouse located at the roof of the clinic building will be utilized to accommodate the hot water boiler equipment. Ductwork from air handling units located on the roof will run through the ceiling spaces for distribution of supply and return air. Exhaust air from clinic spaces will be ducted to exhaust fans located at the roof level. Location of outside air intakes relative to building exhausts, and plumbing vents will require coordination review to adequate separation. In lieu of a roof hatch and ladder system, it is recommended that a stairwell be utilized to allow for easier maintenance accessibility. The penthouse space required to house two boilers sized at 100% of the building heating load, associated pumps, expansion tank, water treatment, domestic water heater, chilled water pumps and all controls for the air cooled chillers is approximately 800 SF.

Plumbing

Space will be provided in the new clinic building for installation of plumbing systems equipment. It is recommended that the building's domestic water backflow preventer assembly be located in a room on the ground floor level where the building water main enters the building. Typically local authorities want the backflow preventer at the building entrance to reduce the possibility of obtaining unmetered water or contamination from an unauthorized connection into the water main upstream of the backflow preventer. In addition, the backflow preventer assemblies have a large pressure drop and it is best to locate them at the entrance where the incoming water pressure is the highest. Ideally, the backflow preventer would be located in a separate room but may also be located in the fire valve room. In addition to the domestic backflow preventer, the plumbing systems will include sanitary drainage piping, rain water drainage piping, domestic cold water piping, water booster pump (where required) water softening/filter equipment (where required), domestic hot water systems including water heaters, expansion tanks, and pumps. It is assumed any medical/dental air and vacuum systems required will be point of use located within the clinic area. Space required for this equipment is estimated at approximately 200 SF. Aside from the backflow preventer, the equipment may be located at the penthouse level.

Fire Protection

The fire protection equipment required to serve the clinic building shall be installed in a separate room located at the perimeter of the ground floor level where the main water supply enters the building. The location of this room may also be subject to the requirements of the local jurisdiction authorities. The room shall contain the main fire protection valves and fire pumps if required. Usually, the use of fire pumps for a single story building is not necessary. However, the need for fire pumps is dependent on the available water pressure at the point of main water entry. Should fire pumps be necessary, the fire protection equipment room must also be accessible directly from the building exterior. If the required building supply water pressure is adequate for the fire suppression system, then fire pumps are not necessary and direct access to the building exterior is not required. The recommended size of this room, regardless of whether a fire pump is required, is approximately 120 SF.

One-PACT Community Based Outpatient Clinic Prototype

Module Overview

Refer to section-4 - planning components + modules for additional information on the outlined areas

Figure 5.1
One-PACT CBOC Prototype
Module Overview

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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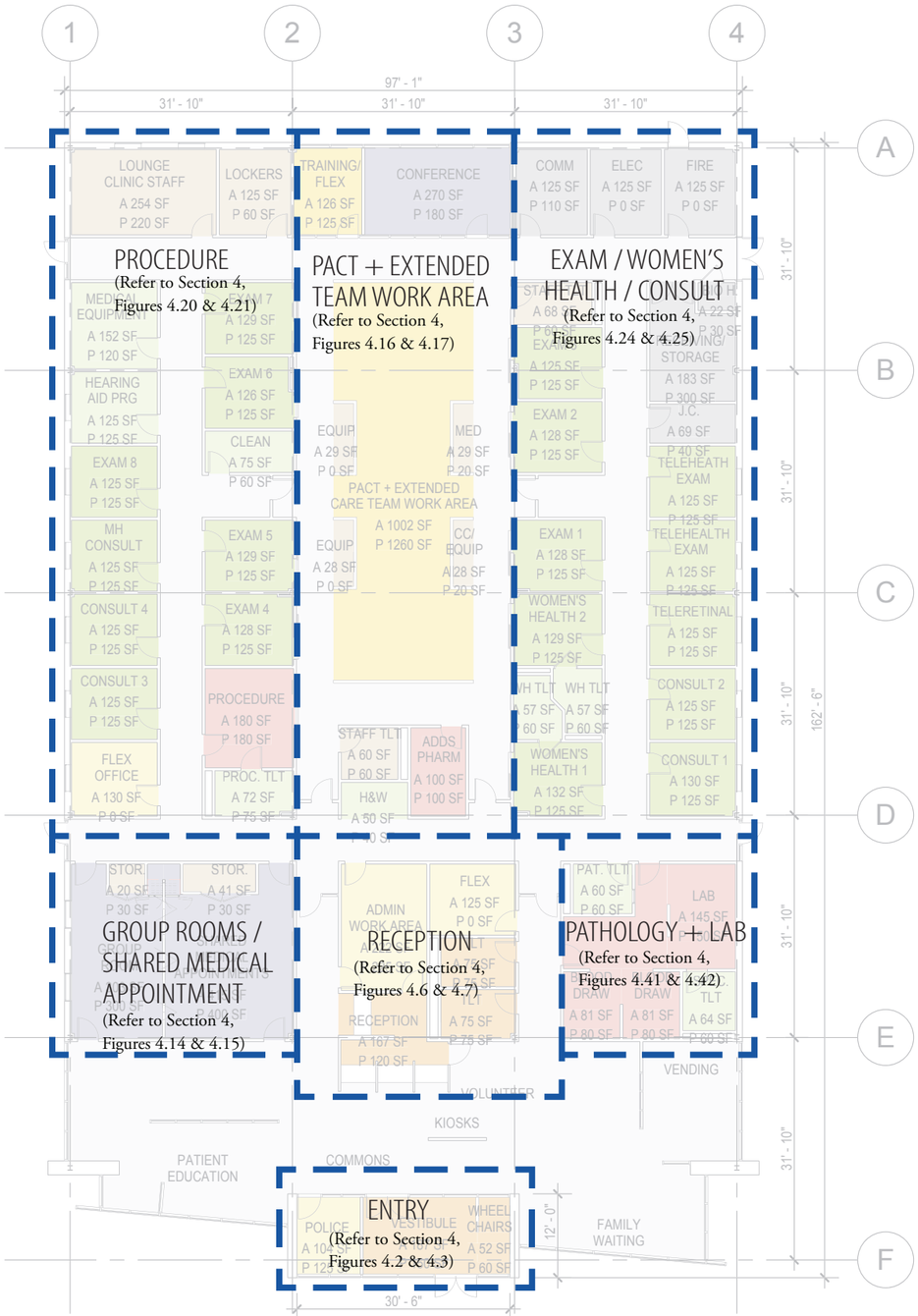
One-PACT Community Based Outpatient Clinic Prototype

Components Overview



Refer to section-4 - planning components + modules for additional information on the outlined areas

Figure 5.2
One-PACT CBOC Prototype
Component Overview

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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One-PACT Community Based Outpatient Clinic Prototype

Plan Overview

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

Figure 5.3
One-PACT CBOC Prototype

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.1.1 One-PACT CBOC Prototype Area Calculation Plan

In each of the prototype designs the net square feet (NSF) exceed the programs for design. This is due primarily to the inclusion of "flex" spaces. Inclusion of these spaces in the prototypes provides the flexibility to accommodate VBA, Veteran Service Organizations, and other functions that do not require full-time equivalent (FTE) personnel and may not be identified at the time a program for design is developed.

Refer to Section 3 - Program Space Comparison for additional information.

VA CBOC		Program for Design		Actual per prototype layouts		Delta
		Net SF NSF	Department DGSF	Net SF NSF	Department DGSF	DGSF Delta
One-PACT	Prototype	8,915	13,551	9,257	14,302	6%
	Maui Test Fit	11,387	17,308	11,937	18,370	6%
Two-PACT	L-SHAPED	29,550	44,916	31,189	49,302	10%
	Brooksville Test Fit**	N/A	N/A	31,933	48,204	N/A
Three-PACT	L-Shaped	48,544	73,787	51,158	79,416	8%
	Rapid City Test Fit	35,350	53,732	33,811	58,028	8%

** Updated Program for Design has not been received at time of this report.

VA CBOC		PFD	Actual per prototype layouts	Delta
		Building BGSF	Building * BGSF	BGSF Delta
One-PACT	Prototype	16,939	16,172	-5%
	Maui Test Fit	21,635	21,102	-2%
Two-PACT	L-SHAPED	56,145	56,063	0%
	Brooksville Test Fit**	N/A	55,996	N/A
Three-PACT	L-Shaped	92,234	88,874	-4%
	Rapid City Test Fit	72,538	68,243	-6%

* The mechanical component for of the SEPS BGSF factor is 6.00.

** Updated Program for Design has not been received at time of this report.

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One-PACT Community Based Outpatient Clinic Prototype

Area Calculation Plan

ONE PACT CBOC PROTOTYPE

- BOUNDARY OF DGSF
- DGSF
- MEP
- AREAS NOT INCLUDED IN NUSF/ LEASABLE

*Note: NUSF may vary. Area to be confirmed with VA Real Property Service at time of design.

DGSF	14,302
BGSF	16,172
*NUSF	13,014

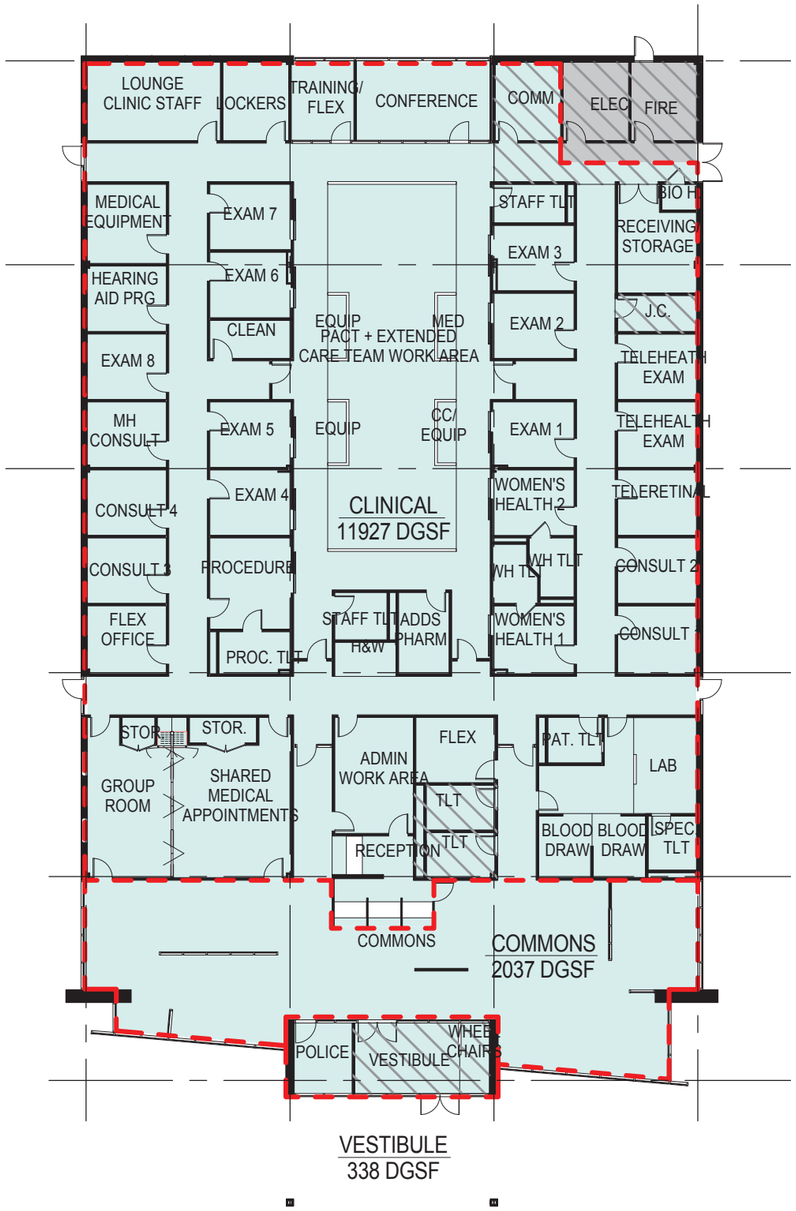

Figure 5.4
One-PACT CBOC Prototype
Area Calculation Plan

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.2 Two-PACT CBOC Prototype L-Shaped Layout

The Two-PACT CBOC Prototype follows the same criteria as the One-PACT Prototype, and expands to fulfill the larger space requirement. This clinic contains Two-PACT modules, a General Mental Health component and an Ancillary Services Diagnostic Module (ASDM). Refer to Section 2 for an explanation of the services included in the prototype and Section 3 for a Prototype Program for Design.

There are three proposed layouts for the Two-PACT CBOC Prototype: the L-Shaped Layout, the Linear Layout and the Flare Layout. Refer to Sections 5.3 and 5.4 for descriptions of the other Two-PACT CBOC Prototypes. A two story scheme was also developed through the course of this study. In discussions with key stakeholders, it was determined to be a non-optimal solution at the Two-PACT scale. The services prioritized for location on the first level amounted to far more square footage than the services that could be co-located on the second level. This made an inefficient multi-story building with uneven floorplates.

The Entry component is similar to the One-PACT CBOC Prototype, with a Police presence at the front door. Like the One-PACT CBOC Prototype, the Commons is a shared waiting area with a mix of seating areas, Patient Education, and Canteen services. The Canteen grows to accommodate the larger population served at the clinic. As discussed in Section 4, the Canteen is sized per business case model supported by the population at the CBOC. Also like the One-PACT CBOC Prototype, the Group Room components have access directly from the Commons.

Other components requiring adjacency to the Commons are the Lab and Pharmacy components. Pharmacy is located in close proximity to the Entry component and in the corner of the ASDM, creating a separation of the waiting function for this high volume service. There is also the possibility of adding another entrance / exit, allowing Veterans and family members to leave the CBOC directly after picking up their prescription(s).

Multiple flex offices located in the front bar between the public and clinical areas allow space for various functions utilized by Veterans and family members (Volunteers, Service Organizations, etc).

In the L-Shaped Two-PACT CBOC Prototype, two Reception components serve the clinic. One component is centrally located to serve the Two-PACT modules and a General Mental Health component. The three services have been co-located for patient convenience, to support the integration of care, and ease of sharing space, like the Group Room component nearby. There is also Mental Health embedded within the PACT modules.

The other Reception component serves the Ancillary Services Diagnostic Module. Combining Reception facilitates staff sharing and a single common front door serving all of the ASDM components. Within the Ancillary Services Diagnostic Module, the different services share multiple spaces: staff support areas, toilets, equipment storage, and team work areas designed in the PACT model. The services within this module will change based on local programmatic need, as evidenced in the test fit. The ASDM has been rotated to create an "L" shape. This scheme supports optimum patient flow while creating distinct check-in spots along the "L" to help prevent overcrowded waiting areas and bottleneck circulation patterns.

At the corner of the L-Shaped CBOC Prototype is the Lab component. This service is highly utilized by patients coming to the CBOC for PACT and Ancillary Service Diagnostic appointments. Locating this service adjacent to both legs of the "L" facilitates convenient access from the Commons and clinical areas.

The Radiology component in the L-Shaped Two-PACT CBOC Prototype is located along an exterior wall. This allows for direct access to a Mobile Technology Pad component, as required by local need. The Home Based Primary Care component is behind the Radiology component, providing direct exterior access for staff needing to come and go to provide care. This "soft" space also permits Radiology to expand in the future, if necessary.

The end bay in the L-Shaped Two-PACT CBOC Prototype holds the PMR + Prosthetics component. The gym within the PMR component benefits from the natural light afforded by an exterior wall. Prosthetics maintains presence along the Commons, for ease of dispensing to Veterans; while also sharing a storage area with PMR. Behind the PMR + Prosthetics component are staff support spaces. A shared lounge, locker and wellness area support the ASDM staff. There is also an additional Group Room, to be used by ASDM patients, visitors and staff.

Building support and mechanical spaces in the L-Shaped Two-PACT CBOC Prototype are located in the rear corner, at the end of the longer "L." This zone does not have hard boundaries, which allows the area to grow and shrink pending the mechanical and material storage needs of the specific location.

The L-Shaped Two-PACT CBOC Prototype is the scheme preferred by the study's stakeholders. The shape is expandable in several directions and offers flexibility while maintaining optimal adjacencies. There is more front bar space available for shared services. Wayfinding is simple and travel distances are reduced for patients. The building traffic is easily segregated between public, patient, staff, and materials. A flexible approach to mechanical and Logistics space allows locations to adapt the plan to their specific needs.

Engineering Assumptions

Electrical / Main Power:
(1) The incoming main power for the building will be from an outdoor, pad mounted transformer. This transformer will be located such that it adheres to AT/FP criteria and guidelines outlined in the Physical Security Design Manual for VA Facilities. (2) Back-up emergency power will be provided for the building via an outdoor, pad mounted generator installed in a weatherproof and soundproof enclosure. This generator will provide back-up power for life safety, critical, and essential electrical loads as required by the VA Electrical Design Manual.

Telecommunication / Security:
(1) Security systems hardware will not be housed inside the telecommunications rooms.

HVAC / Plumbing / Fire Protection design: (1) The mechanical and plumbing systems will follow the Sustainable Design Principles outlined in the VA Sustainable Design and Energy Reduction Manual (April 2010). (2) The mechanical systems will be based on the VA HVAC Design Manual For New, Replacement, Addition, and Renovation of Existing VA Facilities for Hospitals, Clinics (Outpatient and Inpatient), Emergency Care, Ambulatory Care, Animal Research and Holding, Laboratories, Energy Centers, and Warehouses (March 2011). (3) The plumbing systems will be based on the VA Plumbing Design Manual For New Hospitals, Replacement Hospitals, Ambulatory Care, Clinical Additions, Energy Centers, Outpatient Clinics, Animal Research Facilities, and Laboratory Buildings (April 2013). (4) The fire protection systems will be based on the VA Fire Protection Design Manual (Sept 2011).

Electrical

The main electrical room (approximately 200 SF) will be located at the perimeter of the building to house the main switchgear fed from the outdoor pad mounted transformer. A facility of this size will require two additional electrical rooms (approximately 125 SF each), strategically located to minimize the lengths of the longest branch circuit runs (200' or less). The two electrical rooms will contain branch circuit panelboards, both 480Y/277V and 208Y/120V, and step down transformers (480V-208Y/120V) to serve lighting, power and other electrical loads.

Telecommunications and Security

The main telecommunications room and Entrance Facility (EF) will be approximately 130 SF and is located along the perimeter of the building, in close proximity to the main electrical room. The facility will require two additional telecommunications rooms (approximately 125 SF each) to adequately support all of the data, voice, and video signal distributions required throughout the building. Racks will be installed within the each telecommunications room to serve the building along with other equipment as required by the VA Electrical Design Manual, December 2010, Chapter 7: Telecommunication System. The racks needed to accommodate CCTV and security systems hardware will be located in police areas due to security accessibility concerns.

Mechanical

The clinic building will be provided with mechanical space sized to accommodate the Heating, Ventilating, and Air Conditioning (HVAC) systems equipment. The major components of the HVAC systems are assumed to include rooftop air handling units, heating hot water boilers, water cooled chillers, cooling towers, expansion tanks, air separators, water treatment system, supporting pumps and controls. A mechanical room will be located at the perimeter of the ground floor level and a mechanical penthouse will be provided at the building roof level. The ground floor mechanical room will be utilized for hydronic equipment which includes two hot water heating boilers each sized at 100% of the building heating load, and associated pumping support equipment, controls, and water treatment. The mechanical penthouse located at the roof of the clinic building will be utilized to accommodate the chiller equipment and domestic water heaters. Ductwork from air handling units located on the

roof will run through the ceiling spaces for distribution of supply and return air. Exhaust air from clinic spaces will be ducted to exhaust fans located at the roof level. Location of outside air intakes relative to building exhausts, plumbing vents, and cooling tower plumes will require coordination to ensure adequate separation. In lieu of a roof hatch and ladder system, it is recommended that a stairwell be utilized to allow for easier maintenance accessibility. The estimated space required for the ground floor mechanical room serving the boilers is approximately 660 SF. The penthouse space required to house two chillers each sized for 100% of the building cooling capacity, associated chiller and cooling tower pumps, domestic water heater, expansion tanks, water treatment, and all controls is approximately 1000 SF.

Plumbing

Space will be provided in the new clinic building for installation of plumbing systems equipment. It is recommended that the building's domestic water backflow preventer assembly be located in a room on the ground floor level where the building water main enters the building. Typically local authorities want the backflow preventer at the building entrance to reduce the possibility of obtaining unmetered water or contamination from an unauthorized connection into the water main upstream of the backflow preventer. In addition, the backflow preventer assemblies have a large pressure drop and it is best to locate them at the entrance where the incoming water pressure is the highest. Ideally, the backflow preventer would be located in a separate room but may also be located in the fire valve room. In addition to the domestic backflow preventer, the plumbing systems will include sanitary drainage piping, rain water drainage piping, domestic cold water piping, water booster pump (where required) water softening/filter equipment (where required), domestic hot water systems including water heaters, expansion tanks, and pumps . It is assumed any medical/dental air and vacuum systems required will be point of use located within the clinic area. Space required for this equipment is estimated at approximately 200 SF. Aside from the backflow preventer, the equipment may be located at the penthouse level.

Fire Protection

The fire protection equipment required to serve the clinic building shall be installed in a separate room located at the perimeter of the ground floor level where the main water supply enters the building. The location of this room may also be subject to the requirements of the local jurisdiction authorities. The room shall contain the main fire protection valves and fire pumps if required. Usually, the use of fire pumps for a single story building is not necessary. However, the need for fire pumps is dependent on the available water pressure at the point of main water entry. Should fire pumps be necessary, the fire protection equipment room must also be accessible directly from the building exterior. If the required building supply water pressure is adequate for the fire suppression system, then fire pumps are not necessary and direct access to the building exterior is not required. The recommended size of this room, regardless of whether a fire pump is required, is approximately 120 SF.

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Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Modules Overview

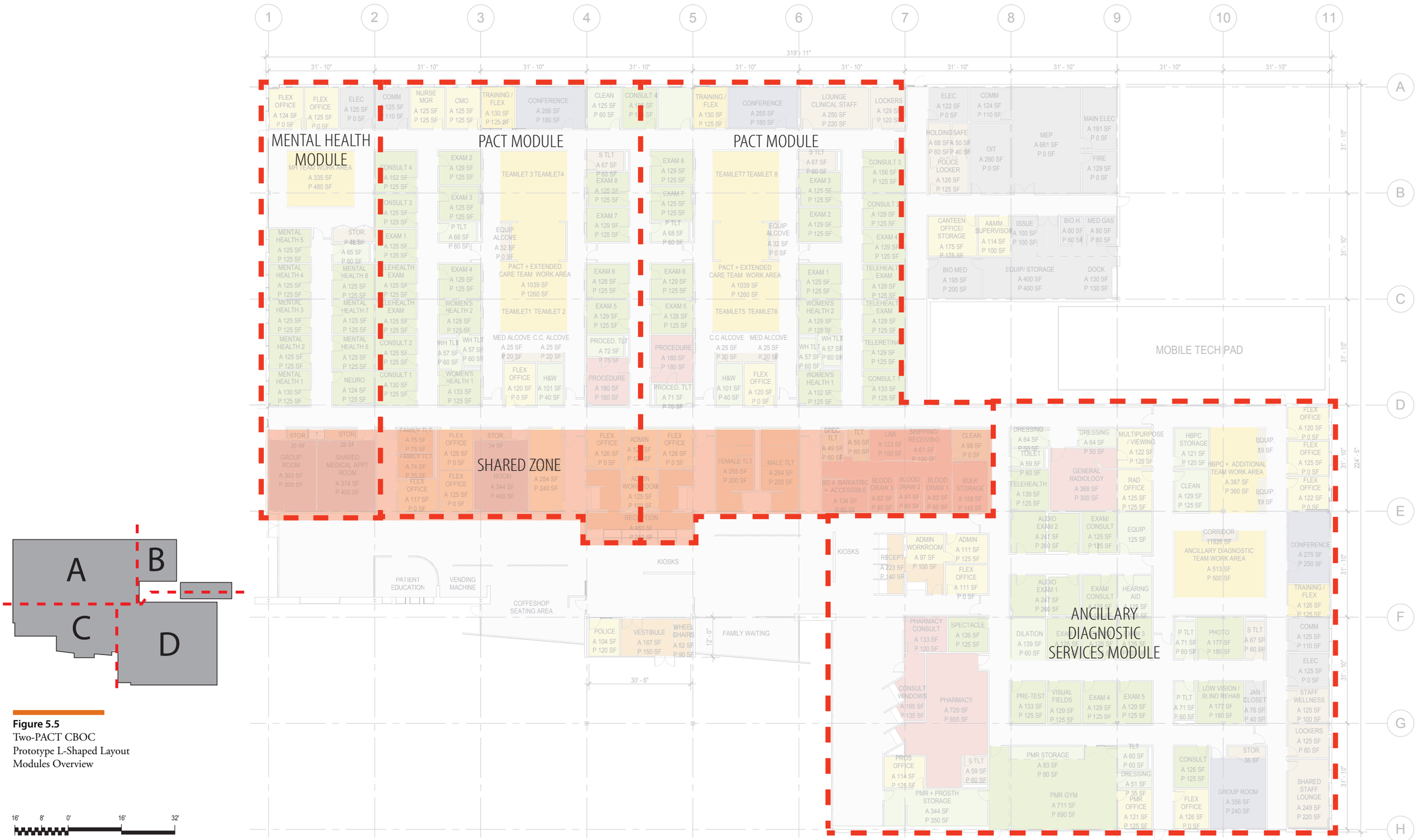

Figure 5.5
Two-PACT CBOC
Prototype L-Shaped Layout
Modules Overview

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Components Overview

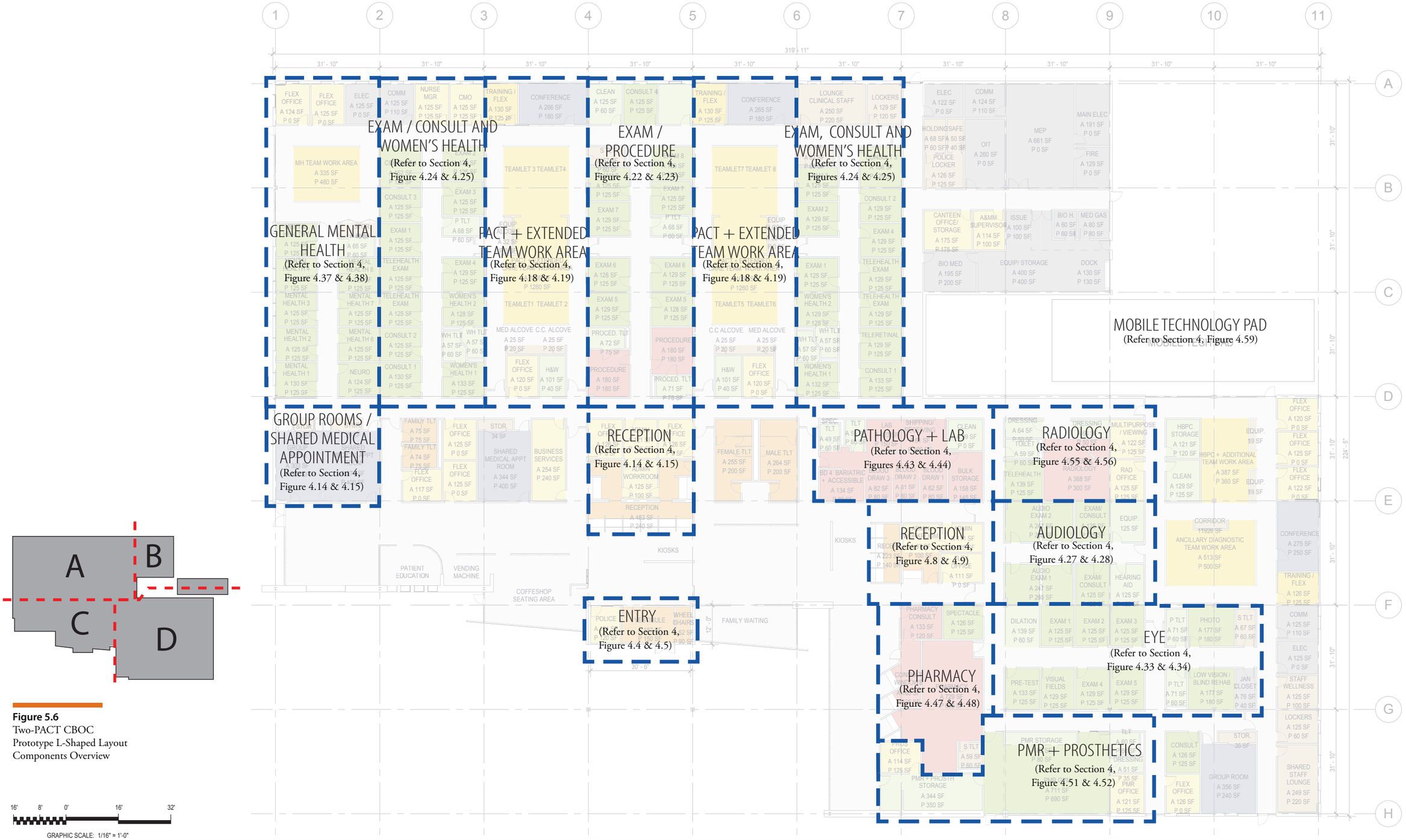

Figure 5.6
Two-PACT CBOC
Prototype L-Shaped Layout
Components Overview

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Plan Overview

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

Figure 5.7
Two-PACT CBOC
Prototype
L-Shaped Overview

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area A

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

Figure 5.8
Two-PACT CBOC Prototype
L-Shaped Layout
Area A

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area B

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

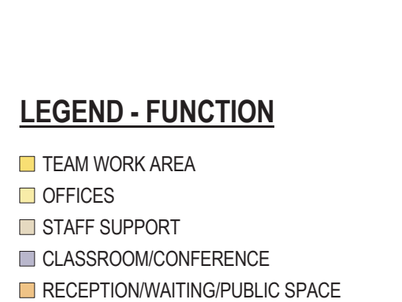

Figure 5.9
Two-PACT CBOC Prototype
L-Shaped Layout
Area B

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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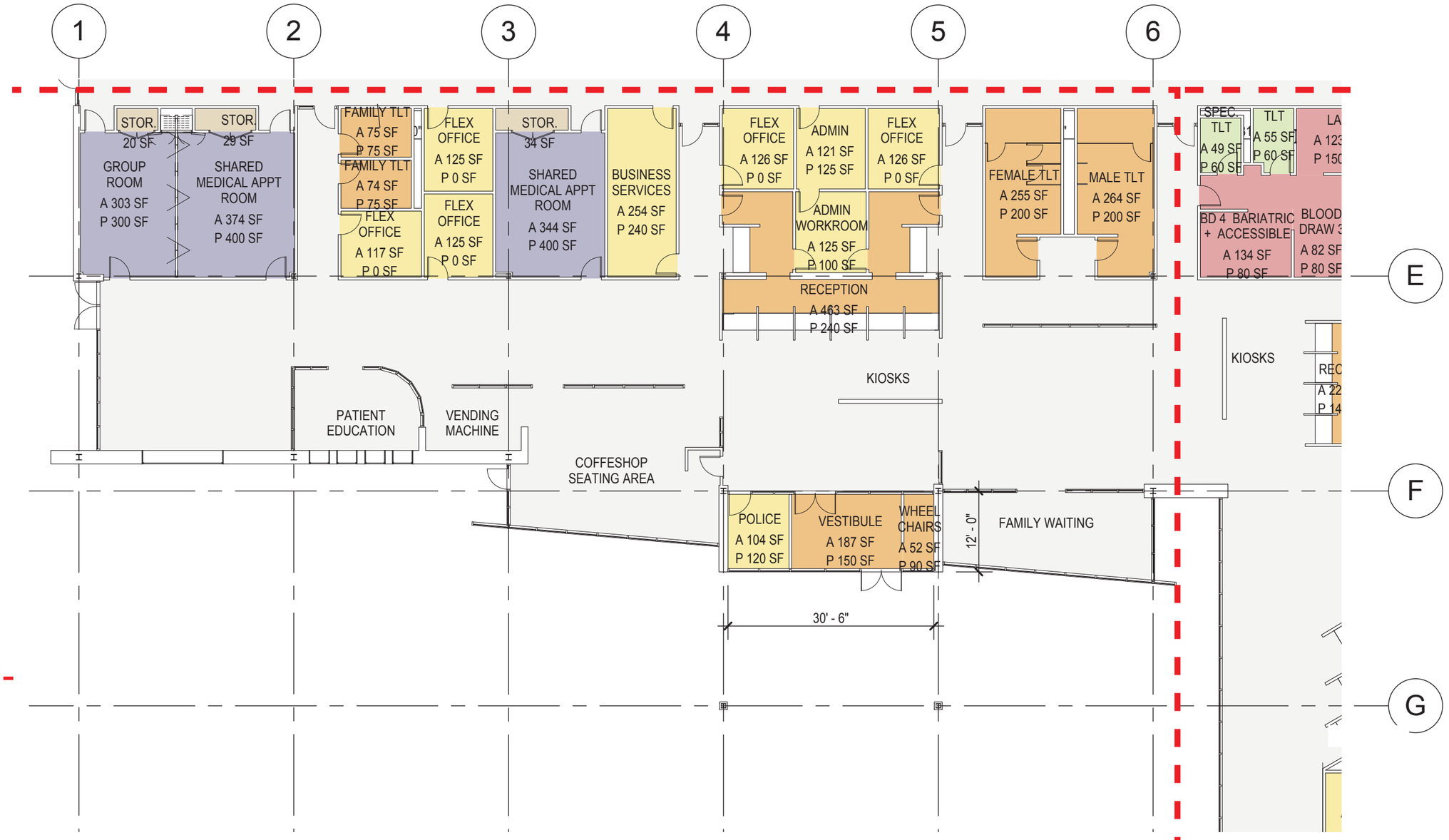
Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout – Area C

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



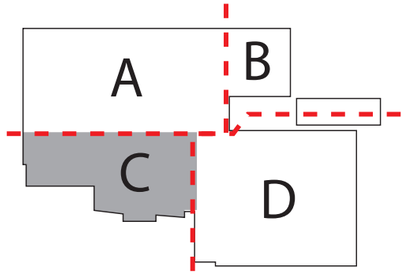


Figure 5.10
Two-PACT CBOC Prototype
L-Shaped Layout
Area C

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area D

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

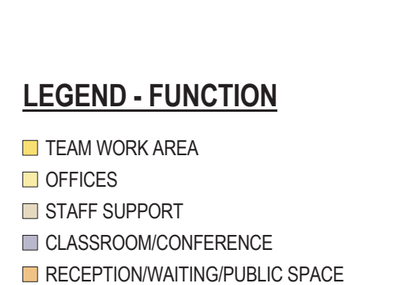

Figure 5.11
Two-PACT CBOC Prototype
L-Shaped Layout
Area D

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.2.1 Two-PACT CBOC L-Shaped Prototype Area Calculation Plan

In each of the prototype designs the net square feet (NSF) exceed the programs for design. This is due primarily to the inclusion of "flex" spaces. Inclusion of these spaces in the prototypes provides the flexibility to accommodate VBA, Veteran Service Organizations, and other functions that do not require full-time equivalent (FTE) personnel and may not be identified at the time a program for design is developed.

Refer to Section 3 - Program Space Comparison for additional information.

VA CBOC		Program for Design		Actual per prototype layouts		Delta
		Net SF NSF	Department DGSF	Net SF NSF	Department DGSF	DGSF Delta
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	Maui Test Fit	11,387	17,308	11,937	18,370	6%
Two-PACT	L-SHAPED	29,550	44,916	31,189	49,302	10%
	Brooksville Test Fit**	N/A	N/A	31,933	48,204	N/A
Three-PACT	L-Shaped	48,544	73,787	51,158	79,416	8%
	Rapid City Test Fit	35,350	53,732	33,811	58,028	8%

** Updated Program for Design has not been received at time of this report.

VA CBOC		PFD	Actual per prototype layouts	Delta
		Building BGSF	Building * BGSF	BGSF Delta
One-PACT	Prototype	16,939	16,172	-5%
	Maui Test Fit	21,635	21,102	-2%
Two-PACT	L-SHAPED	56,145	56,063	0%
	Brooksville Test Fit**	N/A	55,996	N/A
Three-PACT	L-Shaped	92,234	88,874	-4%
	Rapid City Test Fit	72,538	68,243	-6%

* The mechanical component for of the SEPS BGSF factor is 6.00.

** Updated Program for Design has not been received at time of this report.

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Two-PACT Community Based Outpatient Clinic Prototype

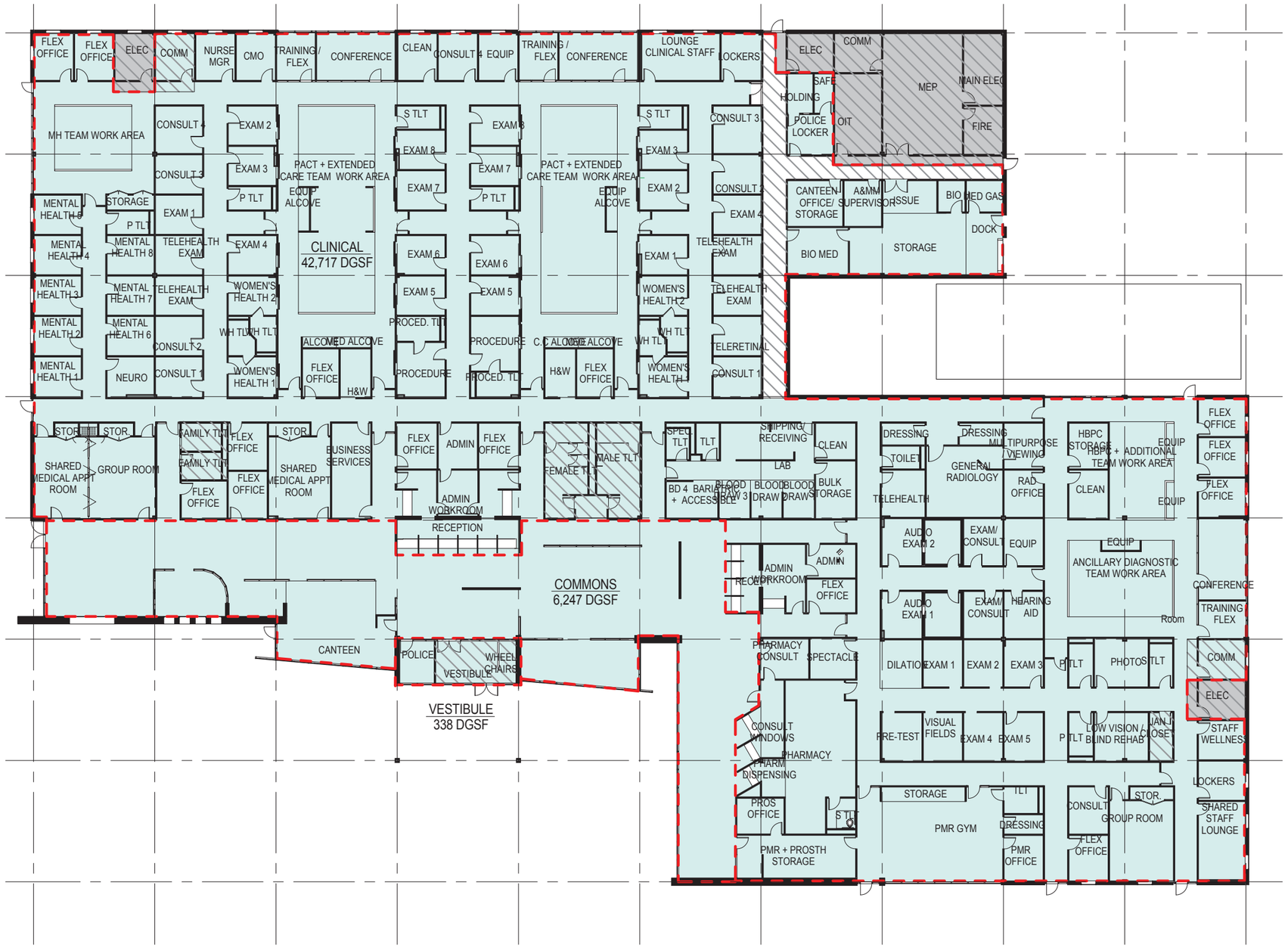
L-Shaped Layout - Area Calculation Plan

TWO PACT CBOC L PROTOTYPE

- BOUNDARY OF DGSF
- DGSF
- MEP
- AREAS NOT INCLUDED IN NUSF/ LEASABLE

* Note: NUSF may vary. Area to be confirmed with VA Real Property Service at time of design.

DGSF	49,302
BGSF	56,063
*NUSF	48,156



16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

Figure 5.12
Two-PACT CBOC Prototype
L-Shaped Layout
Area Calculation Plan

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5.3 Two-PACT CBOC Prototype Linear Layout

In the Linear Two-PACT CBOC Prototype, the component adjacencies are largely the same as the L-Shaped Two-PACT CBOC Prototype. All are organized in a single bar off a large, shared Commons area. One centrally-located Reception component serves the clinic.

To one side of the Reception component are the Two-PACT modules and General Mental Health. Again, the three services are co-located to support the integration of care as well as patient and staff convenience. There are also four large Group and Shared Medical Appointment Rooms for the clinic to share located along the front bar, adjacent to PACT and Mental Health. This allows patients to enter from the Commons and PACT and Mental Health staff to enter from the clinic side, if desired.

The Pharmacy component is located at one end of the Linear Two-PACT CBOC Prototype. It is adjacent PACT and Mental Health, but separated from the central Reception component. This creates a separated waiting zone for the high volume of patients.

The shared Reception component also serves the Ancillary Services Diagnostic Module (ASDM). Like the L-Shaped Two-PACT CBOC Prototype, the different services share multiple spaces: staff support areas, toilets, equipment storage, and team work areas designed in the PACT model. The clinics within this module change based on local programmatic need, as evidenced in the test fits.

The end bay in the Linear Two-PACT CBOC Prototype holds building support and the PMR + Prosthetics component. Both of these components benefit from being located along an exterior wall. Building support includes areas such as the loading dock, requiring exterior access. And the gym within the PMR component benefits from the natural light afforded by an exterior wall. Like the L-Shaped Two-PACT CBOC Prototype, Prosthetics and PMR are enabled to share storage space. However, Prosthetics dispensing is the opposite side of the building from the Pharmacy.

The Linear Two-PACT CBOC Prototype is a long, linear design with limited ability for services to have access at the front bar. Components have less access to exterior walls and natural light.

Refer to Section 5.2 for engineering design assumptions and considerations.

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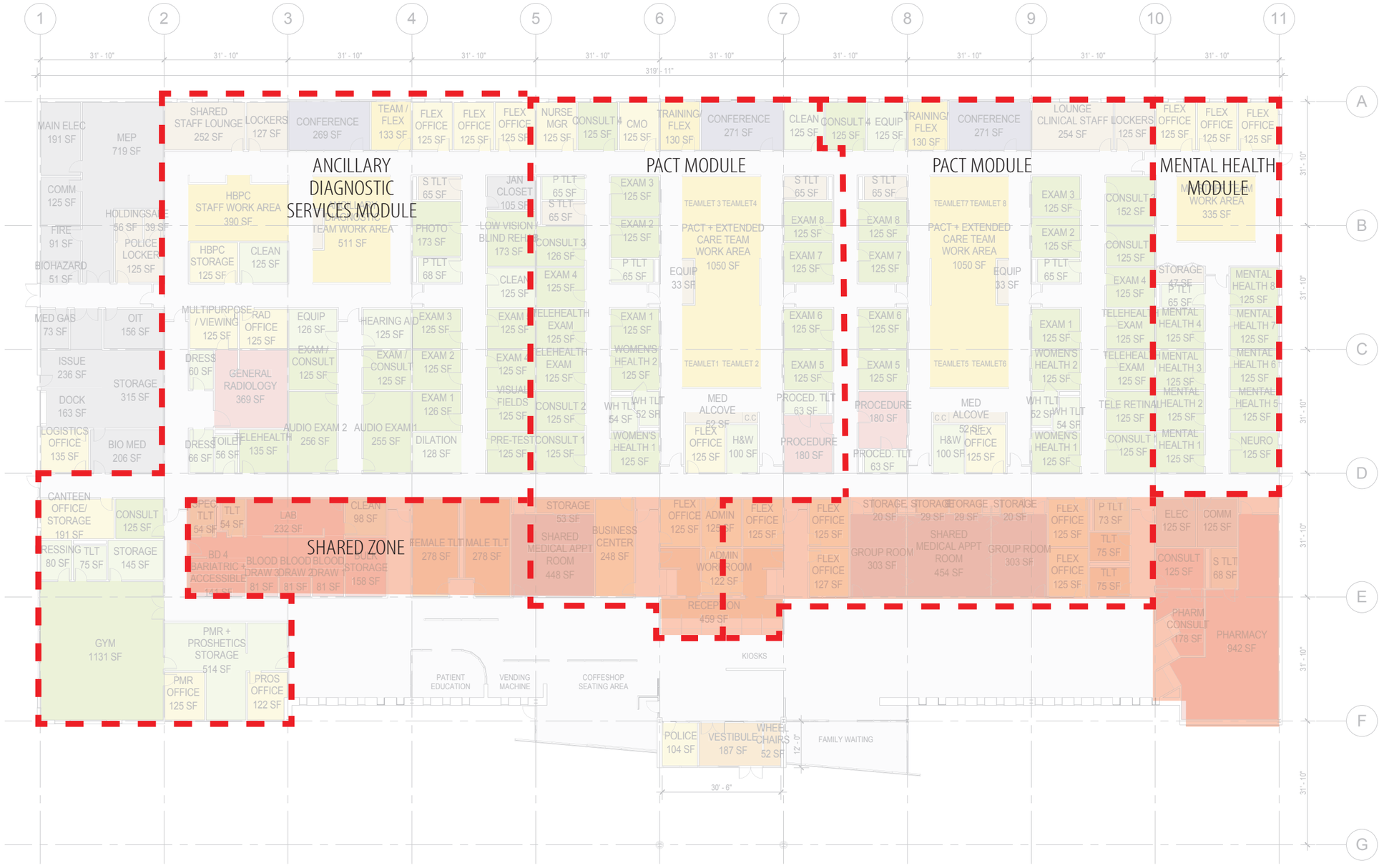
Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout - Modules Overview



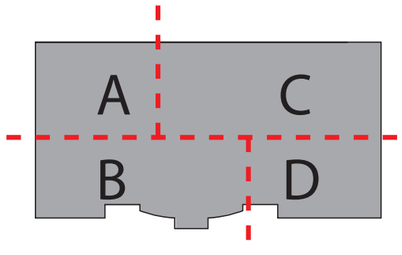


Figure 5.13
Two-PACT CBOC Prototype
Linear Layout
Modules Overview

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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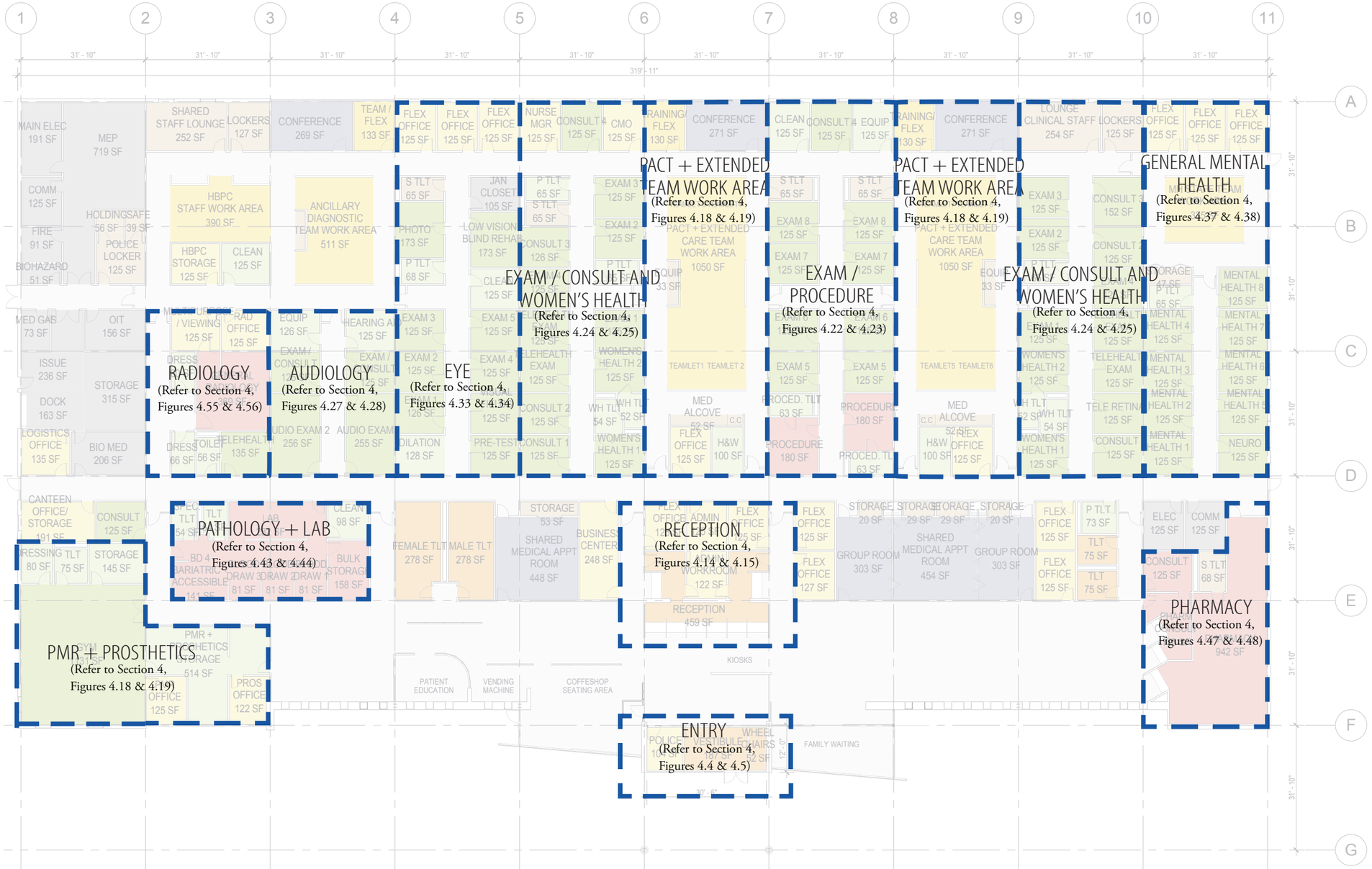
Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout – Component Overview



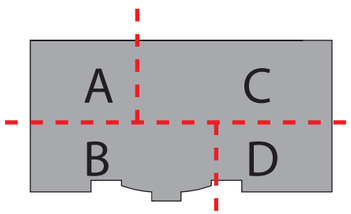


Figure 5.14
Two-PACT CBOC Prototype
Linear Layout
Component Overview

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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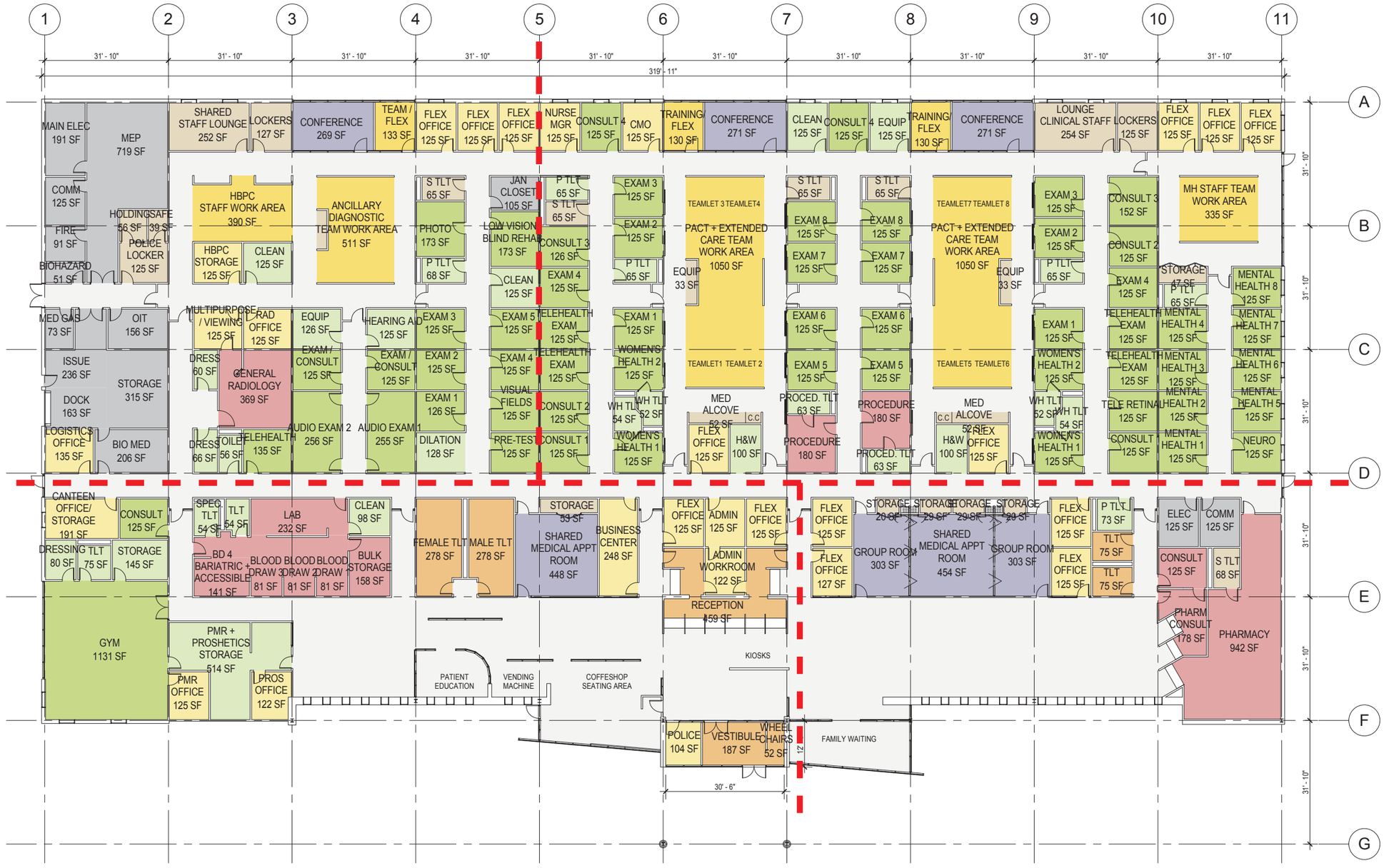
Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout - Plan Overview

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



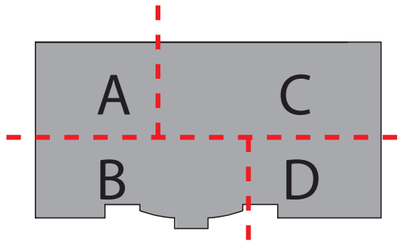


Figure 5.15
Two-PACT CBOC Prototype
Linear Layout
Plan Overview

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout – Area A

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

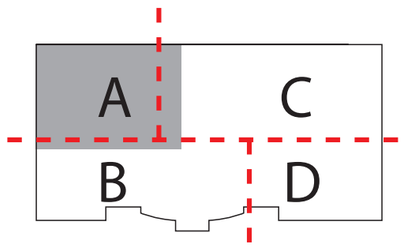

Figure 5.16
Two-PACT CBOC Prototype
Linear Layout
Area A

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout – Area B

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

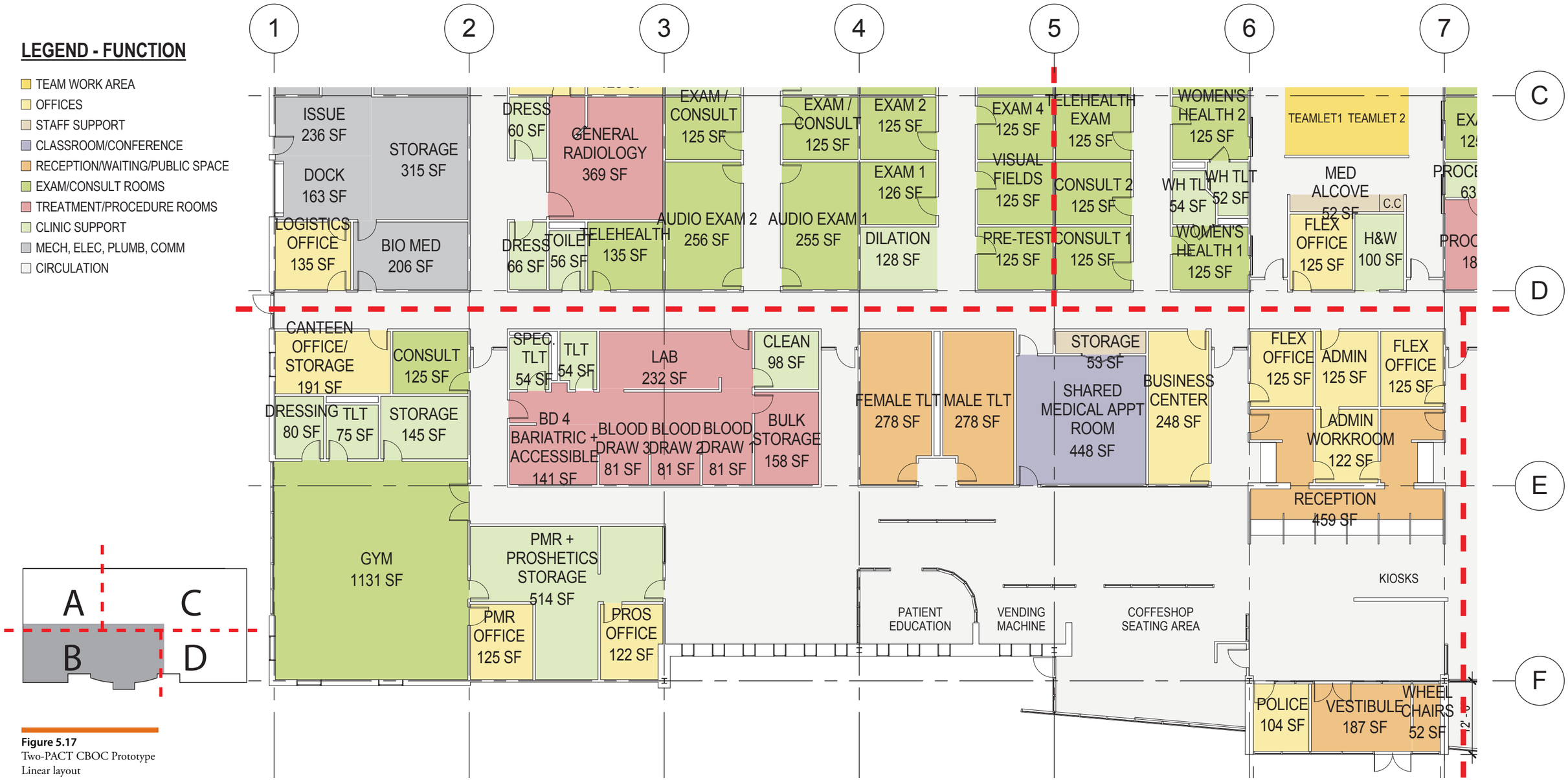

Figure 5.17
Two-PACT CBOC Prototype
Linear layout
Area B

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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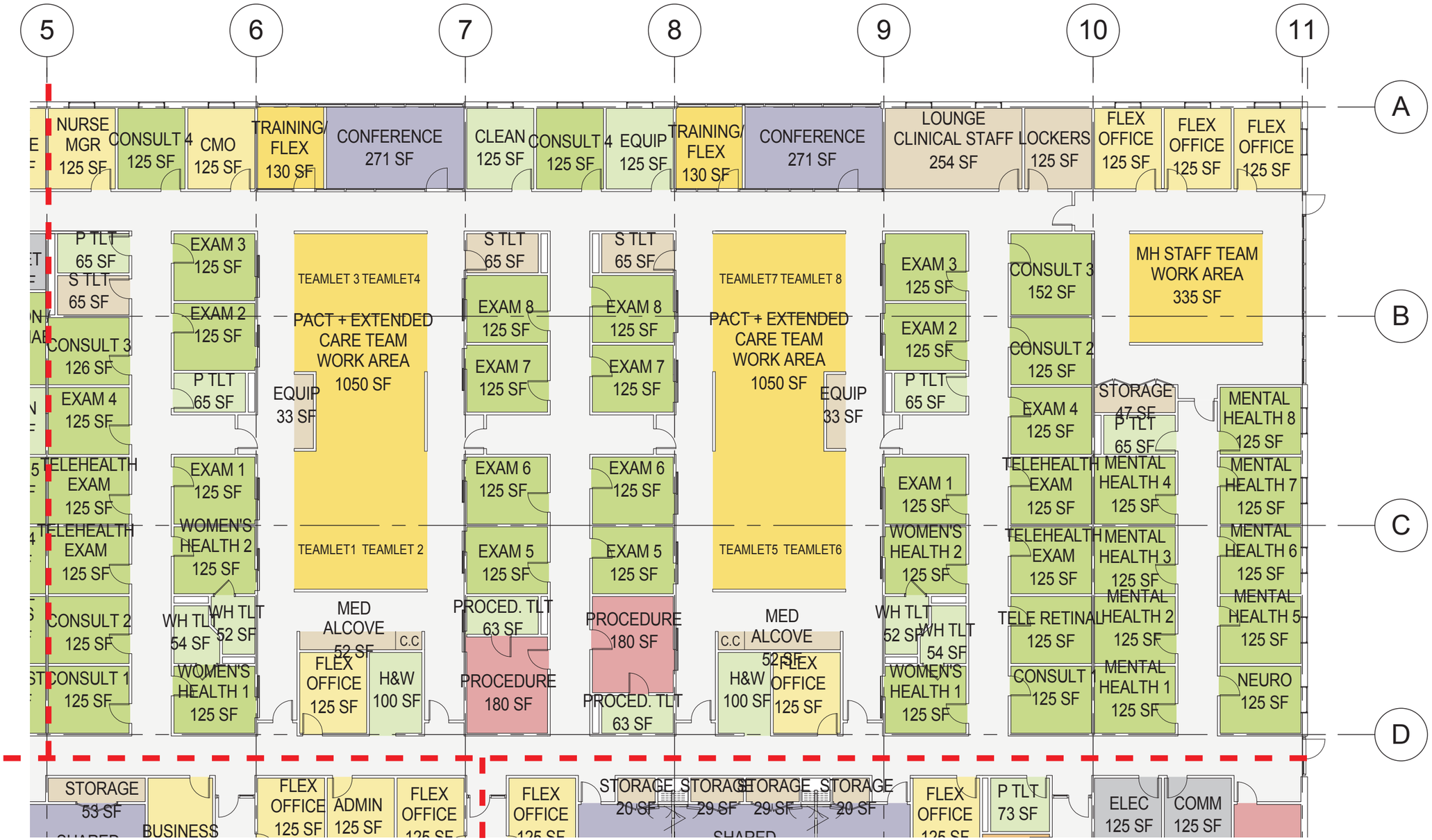
Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout – Area C

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



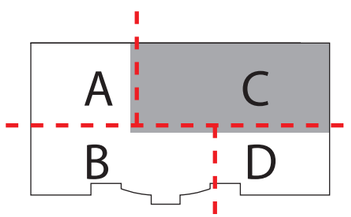


Figure 5.18
Two-PACT CBOC Prototype
Linear Layout
Area C

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Linear Layout – Area D

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

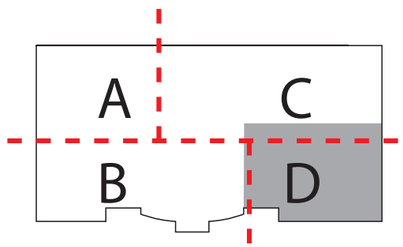

Figure 5.19
Two-PACT CBOC Prototype
Linear Layout
Area D

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.4 Two-PACT CBOC Prototype Flare Layout

The Flare Two-PACT CBOC Prototype differs from the other two floor plans. In this prototype plan, the components are arranged off a central spine. This double-loaded public area holds the Commons, all waiting areas, and Canteen components. The clinic services are split across the spine: Two-PACT modules and the General Mental Health on one side, and the Ancillary Diagnostic Services Module (ASDM) opposite. Like the other two schemes, these are the optimum adjacency groupings for these services.

The largest Reception component serves the Two-PACT modules and the General Mental Health component. The front bar shared between the services holds public toilets, Flex Offices, and Group Room components.

Across the Commons, a Reception component is shared by the ASDM and Lab components. The services included are the same as the other two schemes. The PMR + Prosthetics component is located at the corner of the ASDM. The exterior wall brings ample natural light into the gym, while also creating direct access from the Commons to Prosthetics fitting and dispensing.

The ASDM Reception component separates the Lab and Pharmacy, creating separated patient traffic. Both are located in the front bar, allowing patients access from the Commons and staff access from the clinic side. The Pharmacy component is near the Entry component. This creates easy, convenient access for Veterans and family members.

The Flare Two-PACT CBOC Prototype floorplate creates many opportunities for services to have access to natural light. At the same time, the amount of glazing surface available to the Commons is greatly reduced in this double-loaded central spine concept. In a single story option, skylights could be added to gain natural light in the Commons. This scheme does not create the clear, segregated paths of travel between patients, staff, and materials that the other two schemes provide. Materials and providers would have to cross the public spine between PACT / Mental Health and the ASDM.

Refer to Section 5.2 for engineering design assumptions and considerations.

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Two-PACT Community Based Outpatient Clinic Prototype

Flare Layout - Modules Overview

Figure 5.20
Two-PACT CBOC Prototype
Flare Layout
Modules Overview

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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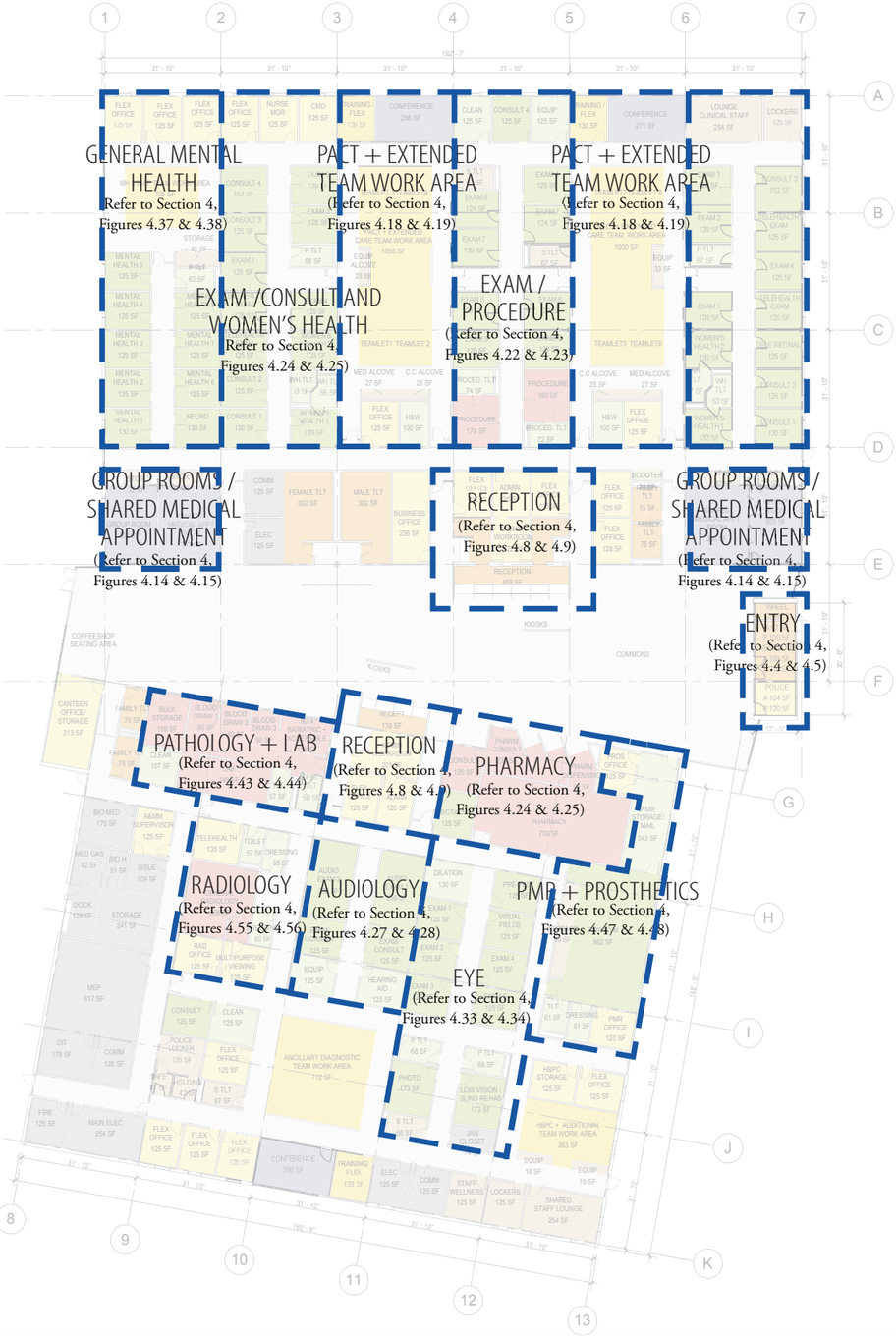
Two-PACT Community Based Outpatient Clinic Prototype

Flare Layout - Component Overview



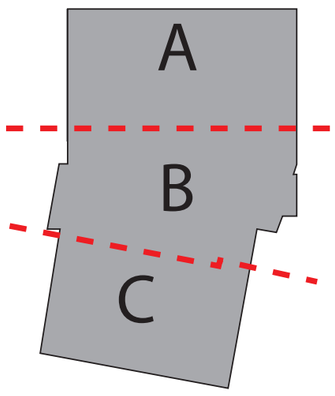


Figure 5.21
Two-PACT CBOC Prototype
Flare Components

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Flare Layout - Plan Overview

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

Figure 5.22
Two-PACT CBOC Prototype
Flare Layout
Plan Overview

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Flare Layout - Area A

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

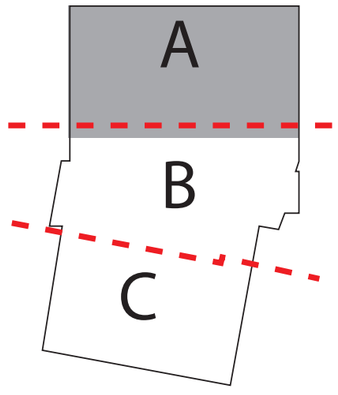

Figure 5.23
Two-PACT CBOC Prototype
Flare Layout
Area A

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Flare Layout – Area B

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

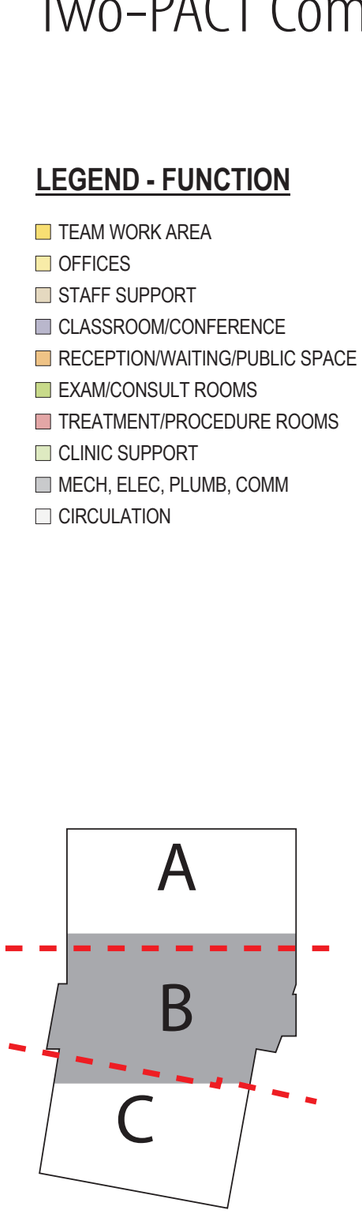

Figure 5.24
Two-PACT CBOC Prototype
Flare Layout
Area B

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Two-PACT Community Based Outpatient Clinic Prototype

Flare Layout – Area C

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

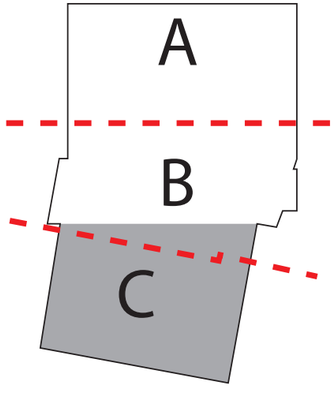

Figure 5.25
Two-PACT CBOC Prototype
Flare Layout
Area C

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.5 Three PACT CBOC Prototype L-Shaped Layout

The Three PACT Prototype follows the same criteria as the One and Two-PACT Prototypes. This clinic contains three PACT modules, a General Mental Health component, and an expanded Ancillary Diagnostic Services Module (ASDM). Refer to Section 2 for an explanation of the services included in the prototype and Section 3 for a Prototype Program for Design.

There are three proposed layouts for the Three PACT CBOC Prototype: the L-Shaped Layout, the Two Story Layout, and the Two Story Modified Layout. Refer to Sections 5.6 and 5.7 for descriptions of the other Three PACT CBOC Prototypes.

The L-Shaped Three PACT CBOC Prototype follows the same planning assumptions and criteria as the L-Shaped Two-PACT CBOC Prototype, but expands to meet the larger program requirements. The much larger Commons is still a mix of waiting spaces, patient education, and Canteen services. The Group Room components, Lab component, Pharmacy component, and PMR + Prosthetics component all have priority for the front bar space, allowing for patient access from the Commons and staff access from the clinic side. More Flex Offices have been added to the front bar to accommodate more additional services for Veterans and family members. The Pharmacy component is located similarly to the L-Shaped Two-PACT Prototype, again to prevent overcrowded waiting areas for high volume services. An additional exit could be located near the Pharmacy to increase the convenience for Veterans and family members. The Lab component is also located in a similar position as in the L-Shaped Two-PACT CBOC Prototype, at the corner of the "L." This allows adjacencies to the PACT modules and ASDM.

One leg of the "L" co-locates three PACT modules and the General Mental Health component. As in the Two-PACT CBOC Prototypes, these are co-located to support care integration. Cross corridors between the three PACT modules support staff sharing across the teamlets, if that is encouraged and/or required by specific locations. One centrally located Reception component serves this bar. Another benefit of co-locating Mental Health and PACT components is to anonymize the check-in and waiting areas. Patients coming for a Mental Health appointment will not be immediately recognizable as Mental Health patients, as they could also be checking in and waiting for a PACT appointment.

The other leg of the "L" is the expanded ASDM. This prototype PFD includes larger programs for ancillary services, and also adds a Dental component. All services share a large, centralized Reception component. The Radiology component is located along an exterior wall to enable access to a Mobile Technology Pad component, if required. The Multi-Specialty, Audiology, and Eye components share a team work area. The Dental component is located near the PMR + Prosthetics component, for acoustic issues. Both services tend to generate noise, which would affect Audiology located three patient corridors away. The PMR + Prosthetics component is again located at the end of the "L" to gain access to natural light. Prosthetics maintains connection to the Commons for its fitting and dispensing function.

This scheme is preferred for many of the same reasons explained in Section 5.2 for the L-Shaped Two-PACT CBOC Prototype. However, it is a single story and requires a large amount of land to build.

Refer to Section 4 - Planning Components + Modules for additional information.

Engineering Assumptions

Electrical / Main Power:
(1) The incoming main power for the building will be from an outdoor, pad mounted transformer. This transformer will be located such that it adheres to AT/FP criteria and guidelines outlined in the Physical Security Design Manual for VA Facilities. (2) Back-up emergency power will be provided for the building via an outdoor, pad mounted generator installed in a weatherproof and soundproof enclosure. This generator will provide back-up power for life safety, critical, and essential electrical loads as required by the VA Electrical Design Manual.

Telecommunications / Security:
(1) Security systems hardware will not be housed inside the telecommunications rooms.

HVAC / Plumbing / Fire Protection:
(1) The mechanical and plumbing systems will follow the Sustainable Design Principles outlined in the VA Sustainable Design and Energy Reduction Manual (April 2010). (2) The mechanical systems will be based on the VA HVAC Design Manual For New, Replacement, Addition, and Renovation of Existing VA Facilities for Hospitals, Clinics (Outpatient and Inpatient), Emergency Care, Ambulatory Care, Animal Research and Holding, Laboratories, Energy Centers, and Warehouses (March 2011). (3) The plumbing systems will

be based on the VA Plumbing Design Manual For New Hospitals, Replacement Hospitals, Ambulatory Care, Clinical Additions, Energy Centers, Outpatient Clinics, Animal Research Facilities, and Laboratory Buildings (April 2013). (4) The fire protection systems will be based on the VA Fire Protection Design Manual (Sept 2011).

Electrical

The main electrical room will be located at the perimeter of the building to house the main switchgear fed from the outdoor pad mounted transformer. The size of this facility will require three additional electrical rooms (approximately 125 SF each), strategically located to minimize the lengths of the longest branch circuit runs (200' or less). All electrical rooms will contain branch circuit panelboards, both 480Y/277V and 208Y/120V, and step down transformers (480V-208Y/120V) to serve lighting, power and other electrical loads throughout the building.

Telecommunications and Security

The main telecommunications room and Entrance Facility (EF) will be approximately 130 SF and is located along the perimeter of the building, in close proximity to the main electrical room. A facility of this size will require three additional telecommunications rooms (approximately 125 SF each) to adequately support all of the data, voice, and video signal distributions required throughout the building. Racks will be installed within the each telecommunications room to serve the building along with other equipment as required by the VA Electrical Design Manual, December 2010, Chapter 7: Telecommunication System. The racks needed to accommodate CCTV and security systems hardware will be located in police areas due to security accessibility concerns.

Mechanical

The clinic building will be provided with mechanical space sized to accommodate the Heating, Ventilating, and Air Conditioning (HVAC) systems equipment. The major components of the HVAC systems are assumed to include rooftop air handling units, heating hot water boilers, water cooled chillers, cooling towers, expansion tanks, air separators, water treatment system, and supporting pumps and controls. A mechanical room will be located at the perimeter of the ground floor level and a mechanical penthouse will be provided at the building roof level. The ground floor mechanical room will be utilized for hydronic equipment which includes two hot water heating boilers each sized at 100% of the building heating load, and associated pumping support equipment, controls, and water treatment. Estimated heating capacity required for the large prototype building is just below 2,700,000 Btuh, which is the threshold that the VA requires use of three boilers at 50% capacity. Should actual load exceed this requirement, additional mechanical room space may be required to accommodate the additional boiler equipment. The mechanical penthouse located at the roof of the clinic building will be utilized to accommodate the chiller equipment. Ductwork from air handling units located on the roof will run through the ceiling spaces for distribution of supply and return air. Exhaust air from clinic spaces will be ducted to exhaust fans located at the roof level. Location of outside air intakes relative to building exhausts, plumbing vents, and cooling tower plumes will require coordination to ensure adequate separation. In lieu of a roof hatch and ladder system, it is recommended that a stairwell be utilized to allow for easier maintenance accessibility. The estimated space required for the ground floor mechanical room serving the boilers is approximately 660 SF. The penthouse space required to house two chillers, each sized at 100% of the building cooling capacity, associated chilled water and cooling tower pumps, domestic water heater, expansion tanks, water treatment, and all controls is approximately 1200 SF.

Plumbing

Space will be provided in the new clinic building for installation of plumbing systems equipment. It is recommended that the building's domestic water backflow preventer assembly be located in a room on the ground floor level where the building water main enters the building. Typically local authorities want the backflow preventer at the building entrance to reduce the possibility of obtaining unmetered water or contamination from an unauthorized connection into the water main upstream of the backflow preventer. In addition, the backflow preventer assemblies have a large pressure drop and it is best to locate them at the entrance where the incoming water pressure is the highest. Ideally, the backflow preventer would be located in a separate room but may also be located in the fire valve room. In addition to the domestic backflow preventer, the plumbing systems will include sanitary drainage piping, rain water drainage piping, domestic cold water piping, water booster pump (where required) water softening/filter equipment (where required), domestic hot water systems including water heaters, expansion tanks, and pumps. It is assumed any medical/dental air and vacuum systems required will be point of use located within the clinic area. Space required for this equipment is estimated at approximately 200 SF. Aside

from the backflow preventer, the equipment may be located at the penthouse level. Mechanical space and equipment requirements will be reviewed further as prototype design continues.

Fire Protection

The fire protection equipment required to serve the clinic building shall be installed in a separate room located at the perimeter of the ground floor level where the main water supply enters the building. The location of this room may also be subject to the requirements of the local jurisdiction authorities. The room shall contain the main fire protection valves and fire pumps if required. Usually, the use of fire pumps for a single story building is not necessary. However, the need for fire pumps is dependent on the available water pressure at the point of main water entry. Should fire pumps be necessary, the fire protection equipment room must also be accessible directly from the building exterior. If the required building supply water pressure is adequate for the fire suppression system, then fire pumps are not necessary and direct access to the building exterior is not required. The recommended size of this room, regardless of whether a fire pump is required, is approximately 120 SF.

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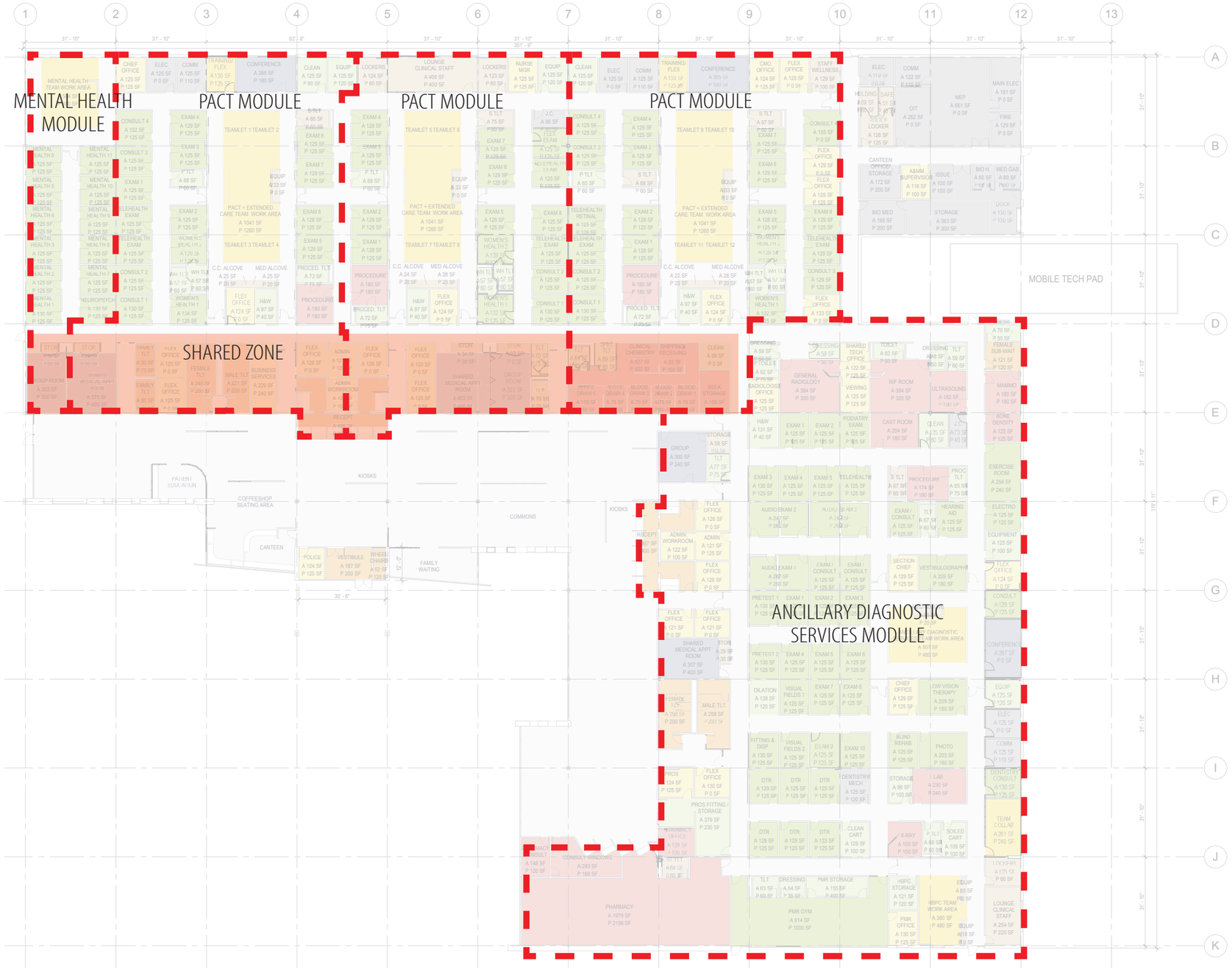
Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Modules Overview



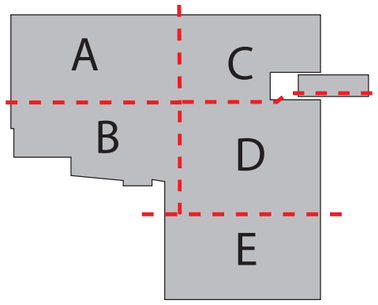


Figure 5.26
Three-PACT CBOC Prototype
L-Shaped Layout
Module Overview

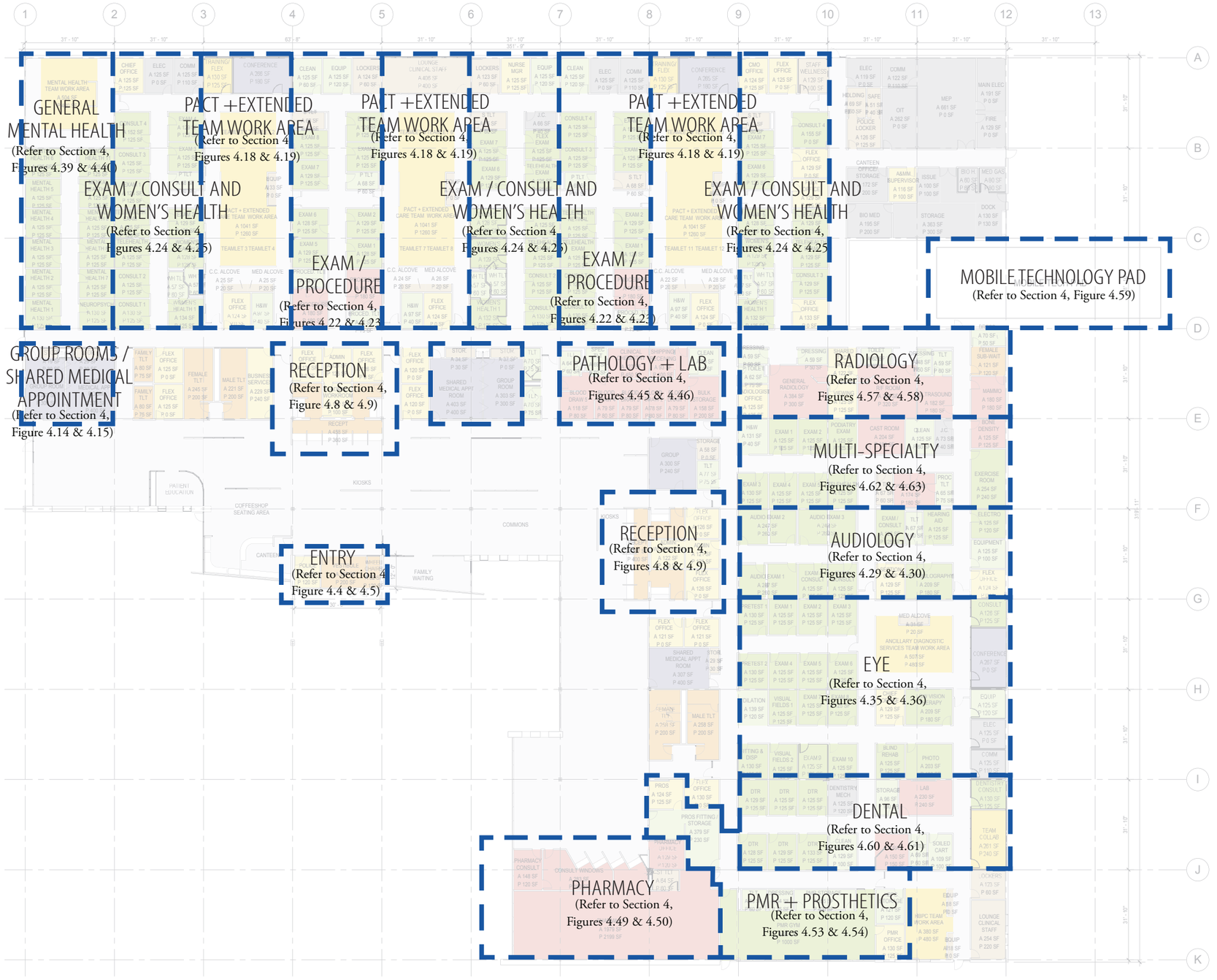
GRAPHIC SCALE: 1/16" = 1'-0"

Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Components Overview

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



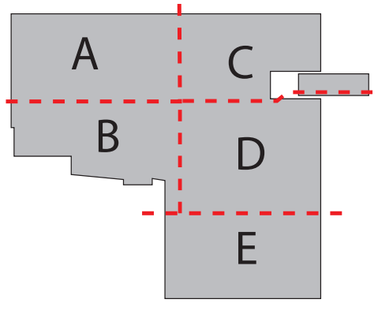


Figure 5.27
Three-PACT CBOC Prototype
L-Shaped Layout
Components Overview

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Plan Overview

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

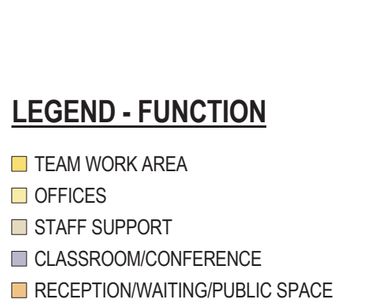

Figure 5.28
Three-PACT CBOC Prototype
L-Shaped Layout
Plan Overview

GRAPHIC SCALE: 1/16" = 1'-0"

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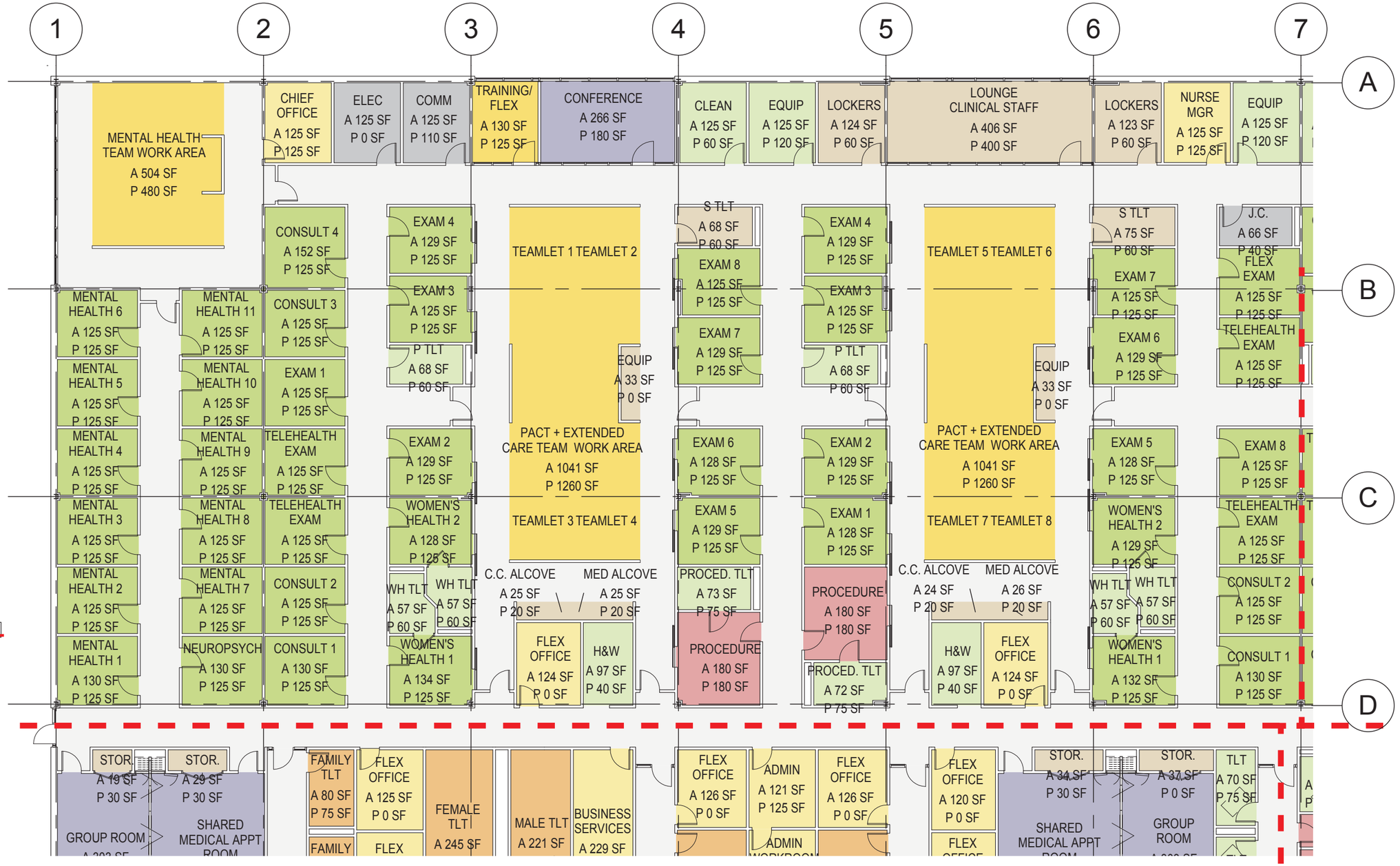
Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area A

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



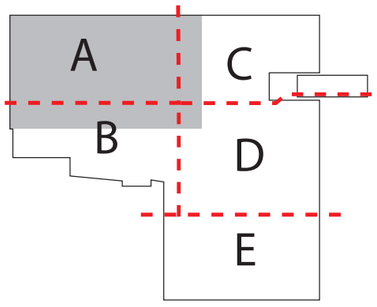


Figure 5.29
Three-PACT CBOC Prototype
L-Shaped Layout
Area A

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area B

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

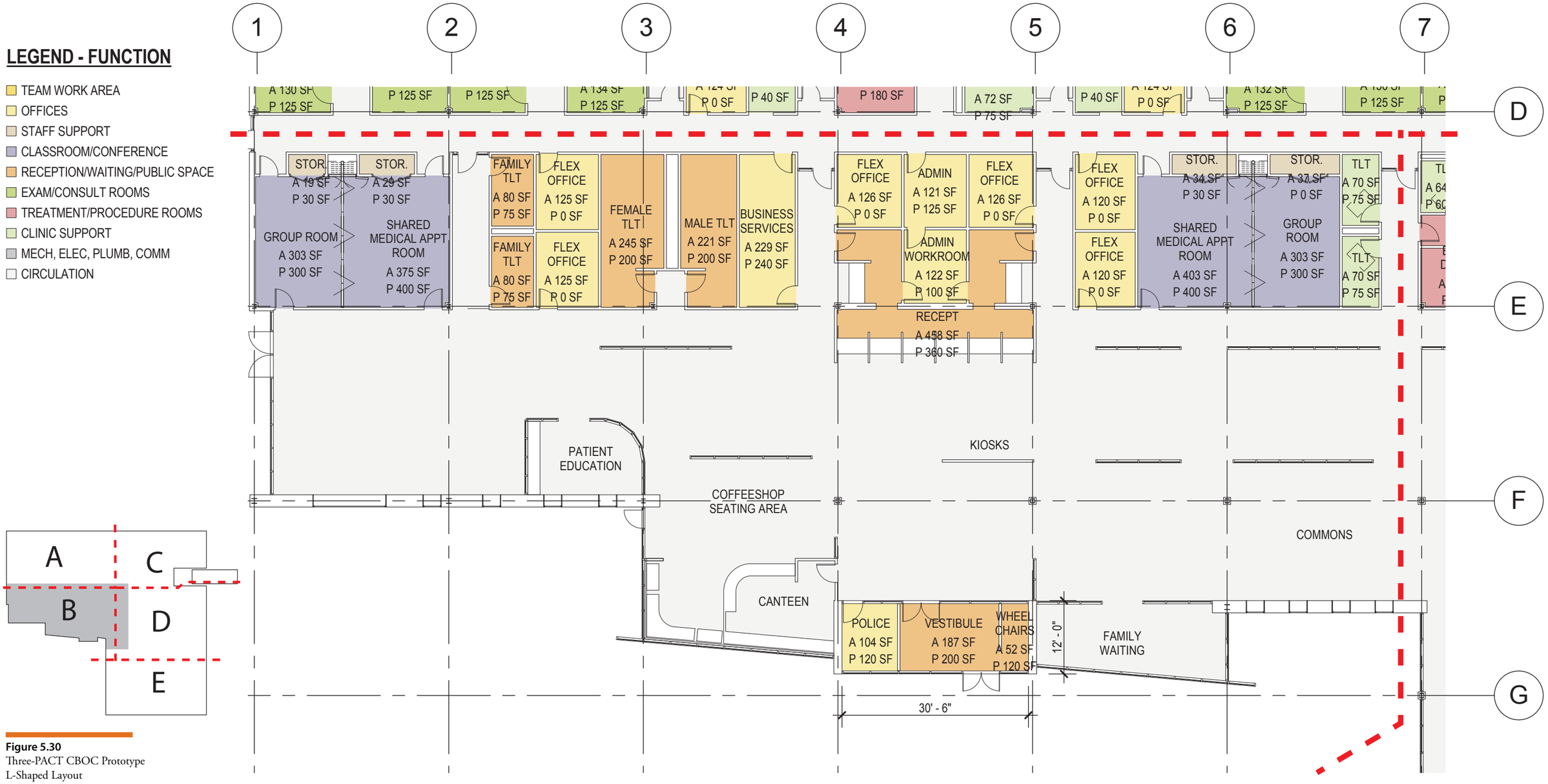

Figure 5.30
Three-PACT CBOC Prototype
L-Shaped Layout
Area B

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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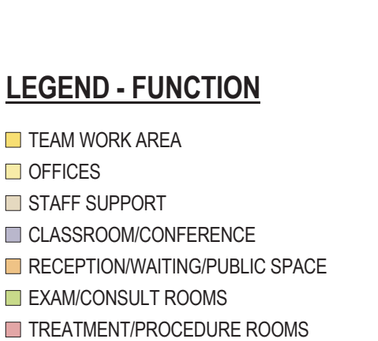
Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area C

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



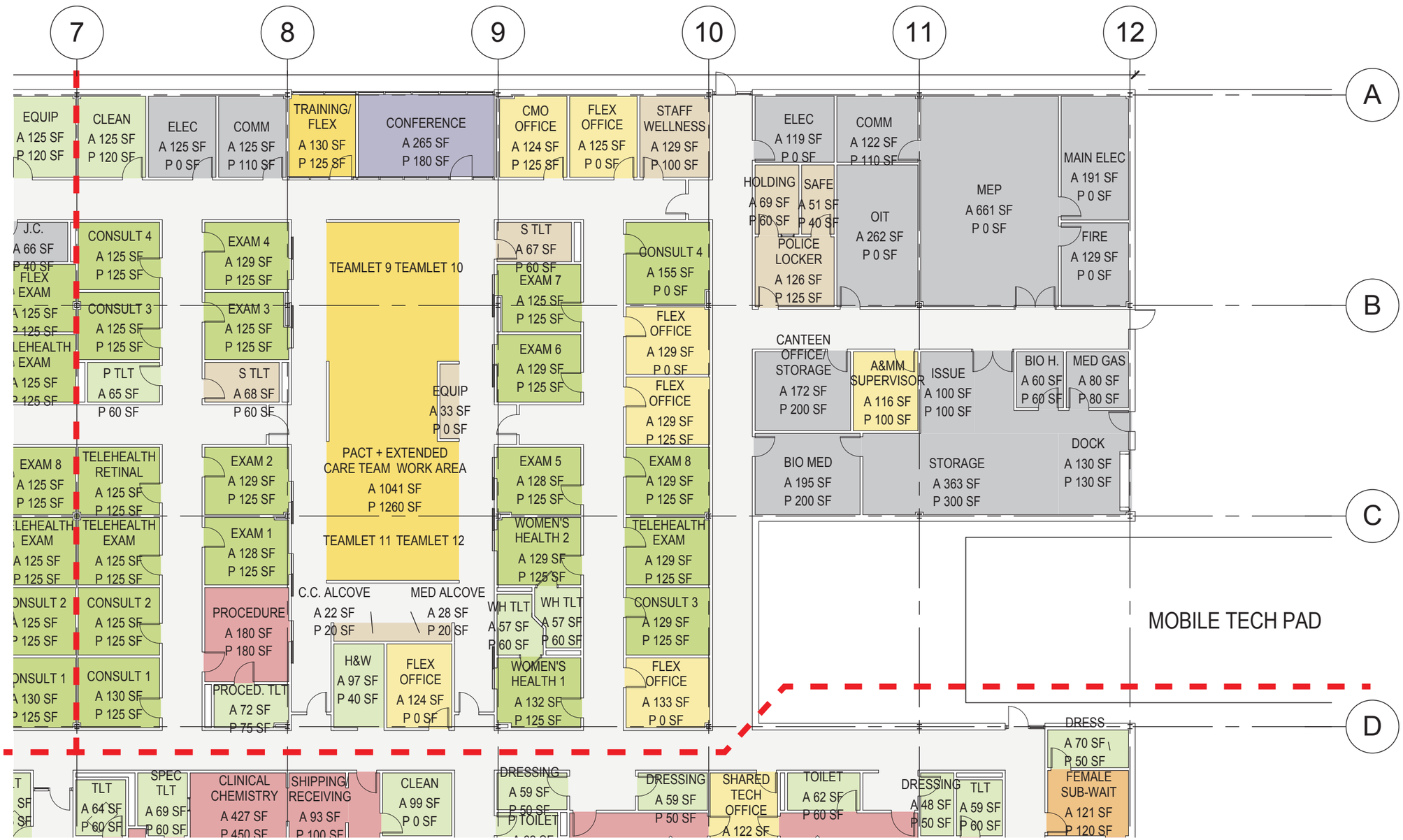


Figure 5.31
Three-PACT CBOC Prototype
L-Shaped Layout
Area C

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area D

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

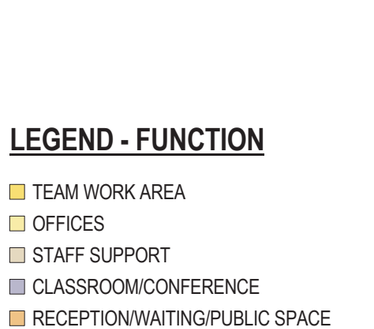

Figure 5.32
Three-PACT CBOC Prototype
L-Shaped Layout
Area D

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area E

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

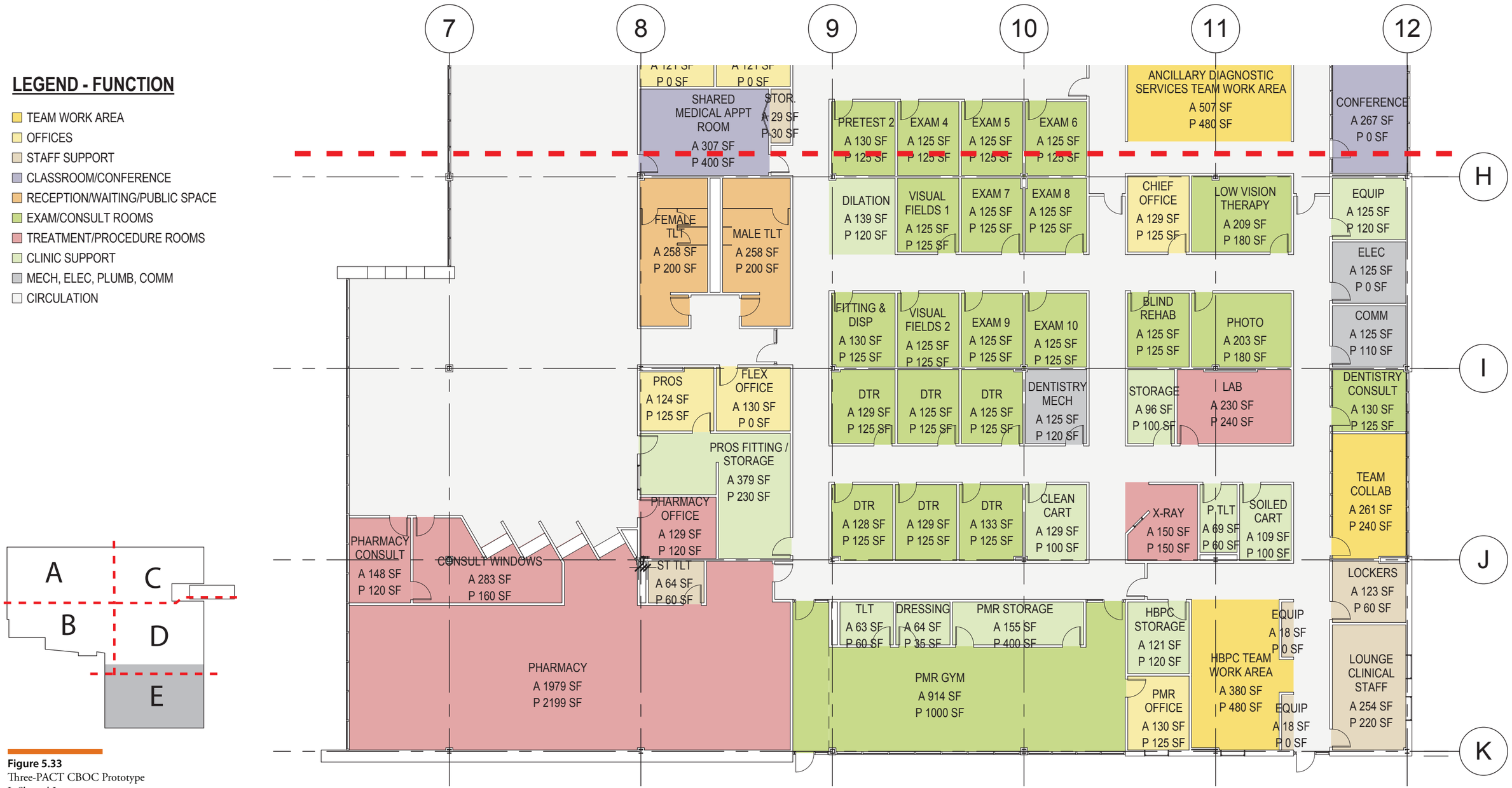

Figure 5.33
Three-PACT CBOC Prototype
L-Shaped Layout
Area E

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.5.1 Three-PACT CBOC L-Shaped Prototype Area Calculation Plan

In each of the prototype designs the net square feet (NSF) exceed the programs for design. This is due primarily to the inclusion of "flex" spaces. Inclusion of these spaces in the prototypes provides the flexibility to accommodate VBA, Veteran Service Organizations, and other functions that do not require full-time equivalent (FTE) personnel and may not be identified at the time a program for design is developed.

Refer to Section 3 - Program Space Comparison for additional information.

VA CBOC		Program for Design		Actual per prototype layouts		Delta
		Net SF NSF	Department DGSF	Net SF NSF	Department DGSF	DGSF Delta
One-PACT	Prototype	8,915	13,551	9,257	14,302	6%
	Maui Test Fit	11,387	17,308	11,937	18,370	6%
Two-PACT	L-SHAPED	29,550	44,916	31,189	49,302	10%
	Brooksville Test Fit**	N/A	N/A	31,933	48,204	N/A
Three-PACT	L-Shaped	48,544	73,787	51,158	79,416	8%
	Rapid City Test Fit	35,350	53,732	33,811	58,028	8%

** Updated Program for Design has not been received at time of this report.

VA CBOC		PFD	Actual per prototype layouts	Delta
		Building BGSF	Building * BGSF	BGSF Delta
One-PACT	Prototype	16,939	16,172	-5%
	Maui Test Fit	21,635	21,102	-2%
Two-PACT	L-SHAPED	56,145	56,063	0%
	Brooksville Test Fit**	N/A	55,996	N/A
Three-PACT	L-Shaped	92,234	88,874	-4%
	Rapid City Test Fit	72,538	68,243	-6%

* The mechanical component for of the SEPS BGSF factor is 6.00.

** Updated Program for Design has not been received at time of this report.

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Three-PACT Community Based Outpatient Clinic Prototype

L-Shaped Layout - Area Calculation Plan

THREE PACT CBOC L PROTOTYPE

- BOUNDARY OF DGSF
- DGSF
- MEP
- AREAS NOT INCLUDED IN NUSF/ LEASABLE

* Note: NUSF may vary. Area to be confirmed with VA Real Property Service at time of design.

DGSF	79,416
BGSF	88,874
*NUSF	78,133

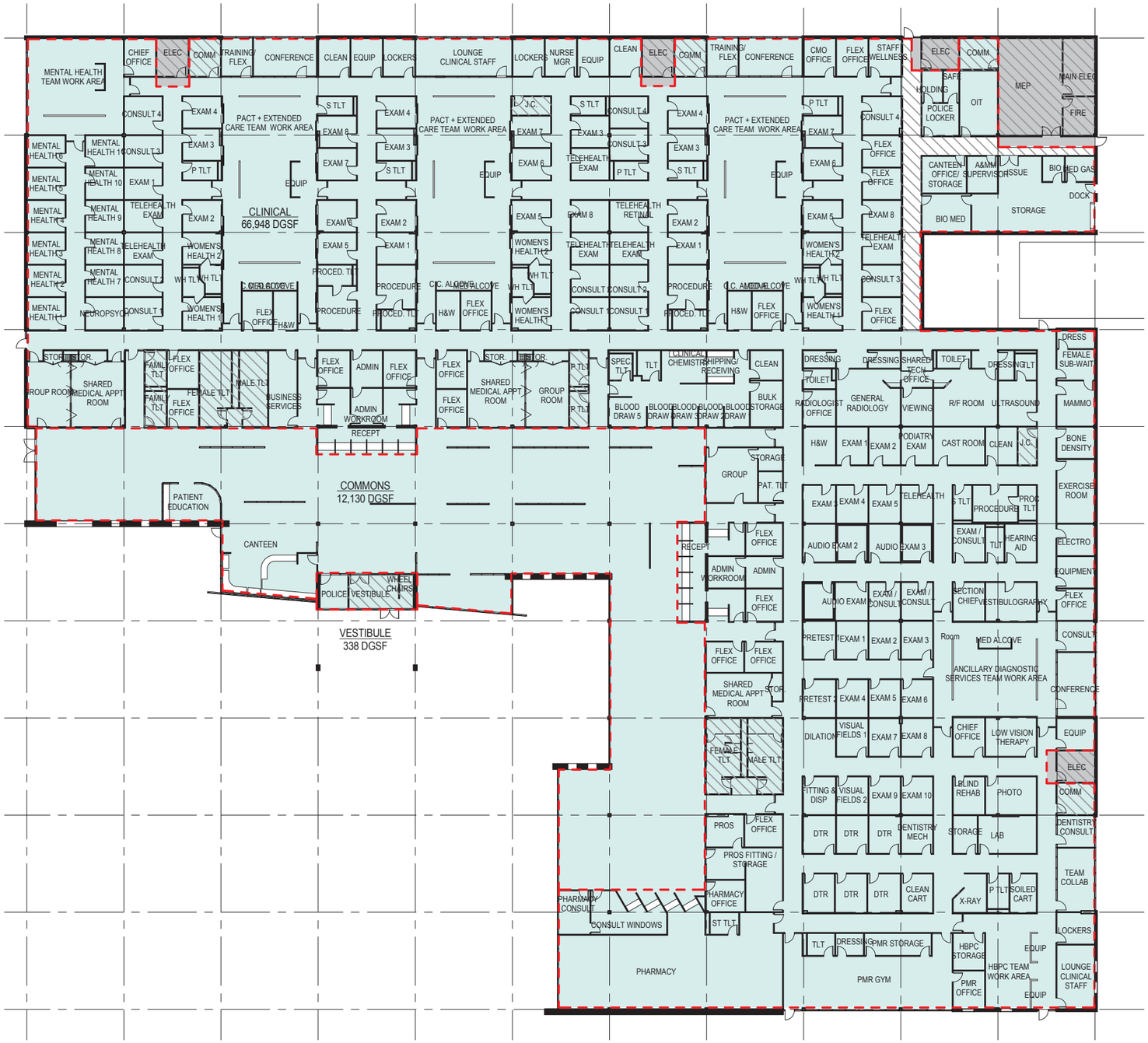

Figure 5.34
Three-PACT CBOC Prototype
L-Shaped Layout
Area Calculation Plan

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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5.6 Three PACT CBOC Prototype Two-Story Layout

As the prototypes are built in different locations, the site will not always allow for a single story building. As discussed in Section 5.2, a two level layout was explored for the Two-PACT CBOC Prototypes, but was determined to be sub-optimal. The larger square footage of the Three PACT CBOC is able to be broken into two floors. The single story, L-Shaped Three PACT CBOC Prototype is still optimal.

The first floor of this scheme contains Two-PACT modules, the PMR + Prosthetics component, the Radiology component, Lab component, Pharmacy component, and building support services. A centralized Entry component opens onto a large Commons area that contains Canteen services, shared waiting, and patient education. One Reception component serves the Two-PACT modules and one Reception component serves Radiology, PMR + Prosthetics, and Lab components. The Two-PACT modules are joined to allow for flexible patient encounter room use between teamlets, like the Two-PACT CBOC prototypes. In this scheme, PMR + Prosthetics does not have access to natural light. The priority service for the exterior wall is AMMS. Logistics needs exterior access for loading dock deliveries and mechanical needs exterior access for service entries and outside air requirements.

The Pharmacy component is to one side of the first floor. The shape of the floor plate allows for separate waiting and privacy for Veterans and family members while at the Pharmacy windows.

The second floor has One-PACT module, the General Mental Health component, and the remainder of the Ancillary Services Diagnostic Module (ASDM). The PACT module and Mental Health component share a Reception component to allow for integration of care and convenience for staff and patients. Another Reception component serves the ASDM services. The ASDM components on this floor share a team work area. Group Room components are located along the front bar as shared resources for the PACT, Mental Health, and ASDM components.

Refer to Section 4 - Planning Components + Modules for additional information.

Engineering Assumptions

Electrical / Main Power:
(1) The incoming main power for the building will be from an outdoor, pad mounted transformer. This transformer will be located such that it adheres to AT/FP criteria and guidelines outlined in the Physical Security Design Manual for VA Facilities. (2) Back-up emergency power will be provided for the building via an outdoor, pad mounted generator installed in a weatherproof and soundproof enclosure. This generator will provide back-up power for life safety, critical, and essential electrical loads as required by the VA Electrical Design Manual.

Telecommunications / Security:
(1) Security systems hardware will not be housed inside the telecommunications rooms.

HVAC / Plumbing / Fire Protection:
(1) The mechanical and plumbing systems will follow the Sustainable Design Principles outlined in the VA Sustainable Design and Energy Reduction Manual (April 2010). (2) The mechanical systems will be based on the VA HVAC Design Manual For New, Replacement, Addition, and Renovation of Existing VA Facilities for Hospitals, Clinics (Outpatient and Inpatient), Emergency Care, Ambulatory Care, Animal Research and Holding, Laboratories, Energy Centers, and Warehouses (March 2011). (3) The plumbing systems will be based on the VA Plumbing Design Manual For New Hospitals, Replacement Hospitals, Ambulatory Care, Clinical Additions, Energy Centers, Outpatient Clinics, Animal Research Facilities, and Laboratory Buildings (April 2013). (4) The fire protection systems will be based on the VA Fire Protection Design Manual (Sept 2011).

Electrical

The main electrical room (approximately 200 SF) will be located at the perimeter of the building to house the main switchgear fed from the outdoor pad mounted transformer. The size of this facility will require three additional electrical rooms (approximately 125 SF each), strategically located and stacked to minimize the lengths of the longest branch circuit runs (200' or less). All electrical rooms will contain branch circuit panelboards, both 480Y/277V and 208Y/120V, and step down transformers (480V-208Y/120V) to serve lighting, power and other electrical loads throughout the building.

Telecommunications and Security

The main telecommunications room and Entrance Facility (EF) will be approximately 130 SF and is located along the perimeter of the building, in close proximity to the main electrical room. A facility of this size will require three additional telecommunications rooms (approximately 125 SF each) to adequately support all of the data, voice, and video

signal distributions required throughout the building. Racks will be installed within the each telecommunications room to serve the building along with other equipment as required by the VA Electrical Design Manual, December 2010, Chapter 7: Telecommunication System. The racks needed to accommodate CCTV and security systems hardware will be located in police areas due to security accessibility concerns.

Mechanical

The clinic building will be provided with mechanical space sized to accommodate the Heating, Ventilating, and Air Conditioning (HVAC) systems equipment. The major components of the HVAC systems include equipment such as air handling units, boilers, chillers, expansion tanks, air separators, water treatment system, and supporting pumps and controls. A mechanical room will be located at the perimeter of the ground floor level and a mechanical penthouse will be provided on the building roof level. The ground floor mechanical room will be utilized for hydronic equipment such as heating boilers, chillers, and associated pumping support equipment. The mechanical penthouse located on the roof of the clinic building will be utilized to accommodate the air handling equipment. Ductwork from the air handling units located in the mechanical penthouse will run horizontally through the second floor ceiling space for distribution of supply and return air ductwork serving the second floor spaces. Vertical duct shafts that extend from the mechanical penthouse to the first floor level will be provided to accommodate ductwork serving the first floor spaces. Exhaust air from clinic spaces will be ducted to exhaust fans located at the roof level by way of both vertical shafts and horizontal ductwork mounted within the ceiling space. Location of outside air intakes relative to building exhausts, plumbing vents, and cooling tower plumes will require review to ensure exhaust air does not short circuit back into the air handling unit outside air intakes. In lieu of a roof hatch and ladder system, it is recommended that a stairwell be utilized to allow for easier maintenance accessibility. The estimated space required for the ground floor mechanical room is approximately 1200 SF and for the mechanical penthouse approximately 4000 SF.

Plumbing

The main plumbing/fire protection room shall be located along the building perimeter with access from the main staff/support corridor. It is recommended that the building's domestic water backflow preventer assembly be located in this room where the building water main enters the building. Typically local authorities want the backflow preventer where the building water main enters the building to reduce the possibility of obtaining unmetered water or contamination from an unauthorized connection into the water main upstream of the backflow preventer. In addition, the backflow preventer assemblies have a large pressure drop and it is best to locate them at the water service entrance where the incoming water pressure is the highest. In addition to the domestic backflow preventer, the plumbing systems will include sanitary drainage piping, rain water drainage piping, domestic cold water piping, water booster pump (where required) water softening/filter equipment (where required), domestic hot water systems including water heaters, expansion tanks and pumps , and medical/dental air and vacuum systems. Space required for this equipment is estimated at approximately 400 SF. Aside from the backflow preventer, the equipment may be located at the penthouse level.

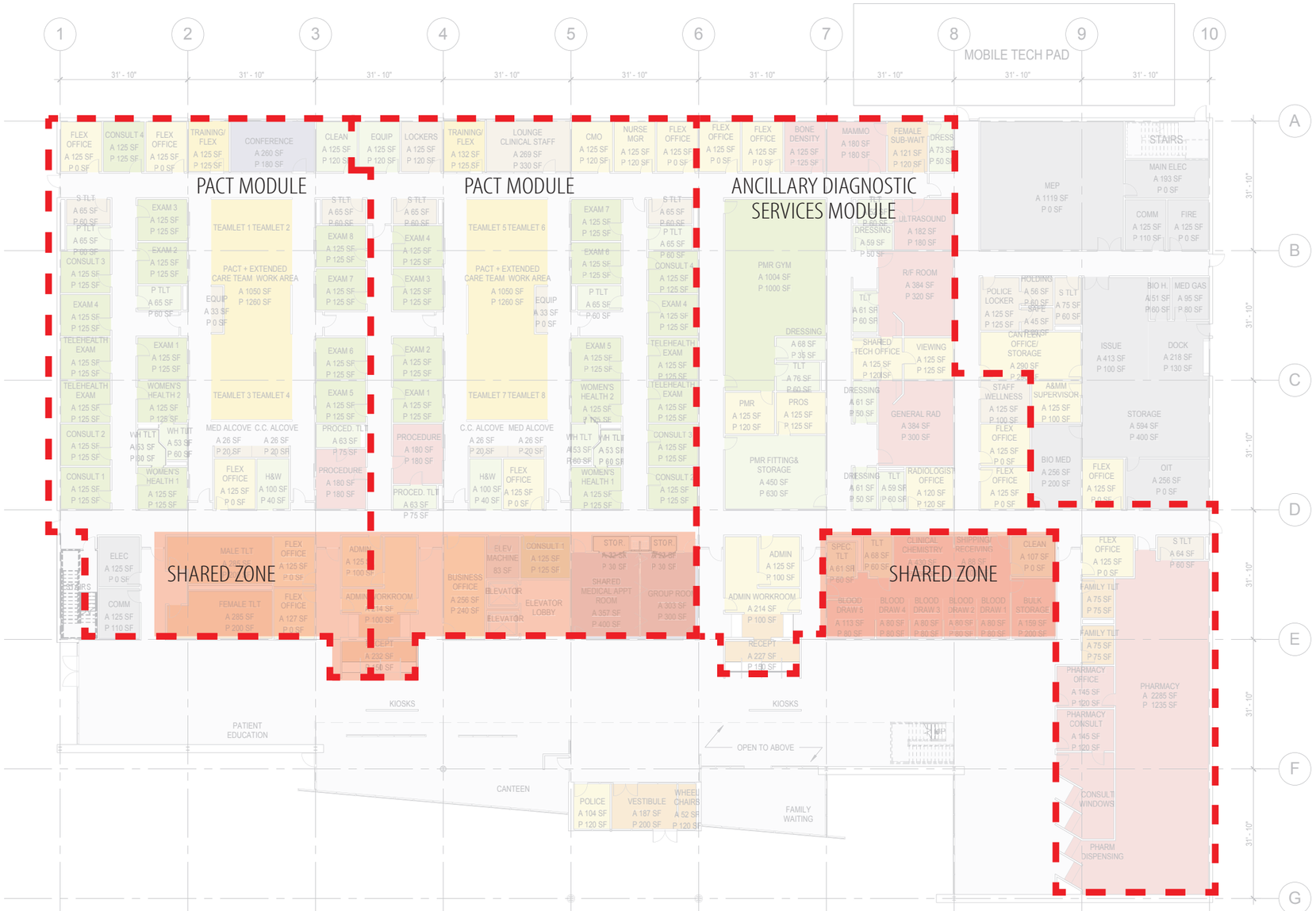
Fire Protection

The fire protection equipment required to serve the clinic building shall be installed in a separate room located at the perimeter of the ground floor level where the main water supply enters the building. The location of this room may also be subject to the requirements of the local jurisdiction authorities. The room shall contain the main fire protection valves and fire pumps if required. Usually, the use of fire pumps for a single story building is not necessary. However, the need for fire pumps is dependent on the available water pressure at the point of main water entry. Should fire pumps be necessary, the fire protection equipment room must also be accessible directly from the building exterior. If the required building supply water pressure is adequate for the fire suppression system, then fire pumps are not necessary and direct access to the building exterior is not required. The recommended size of this room, regardless of whether a fire pump is required, is approximately 120 SF.

Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout

Modules Overview – First Floor



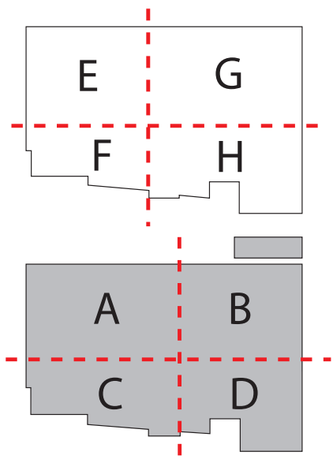


Figure 5.35
Three-PACT CBOC Prototype
Two Story Layout
Modules Overview - First Floor

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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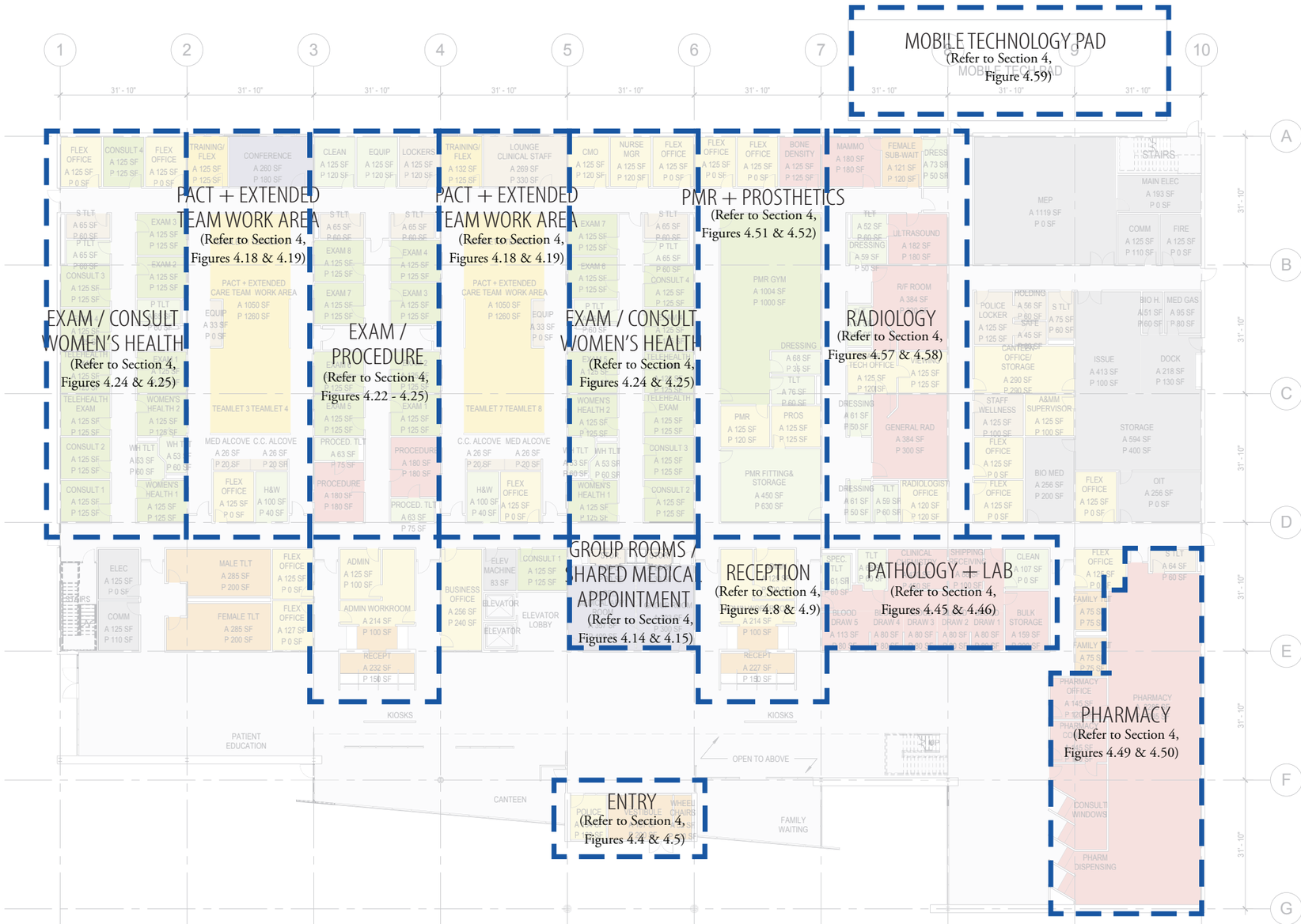
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout

Component Overview – First Floor



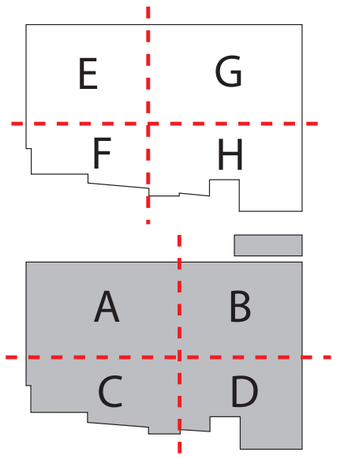


Figure 5.36
Three-PACT CBOC Prototype
Two Story Layout
Components Overview - First Floor

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout

Modules Overview - Second Floor

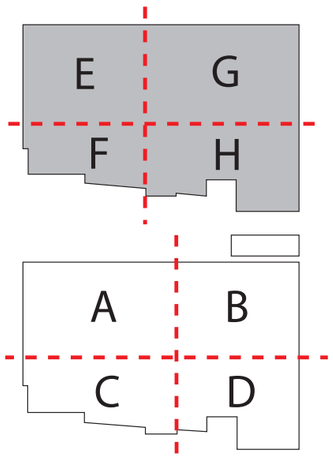

Figure 5.37
Three-PACT CBOC Prototype
Two Story Layout
Modules Overview - Second Floor

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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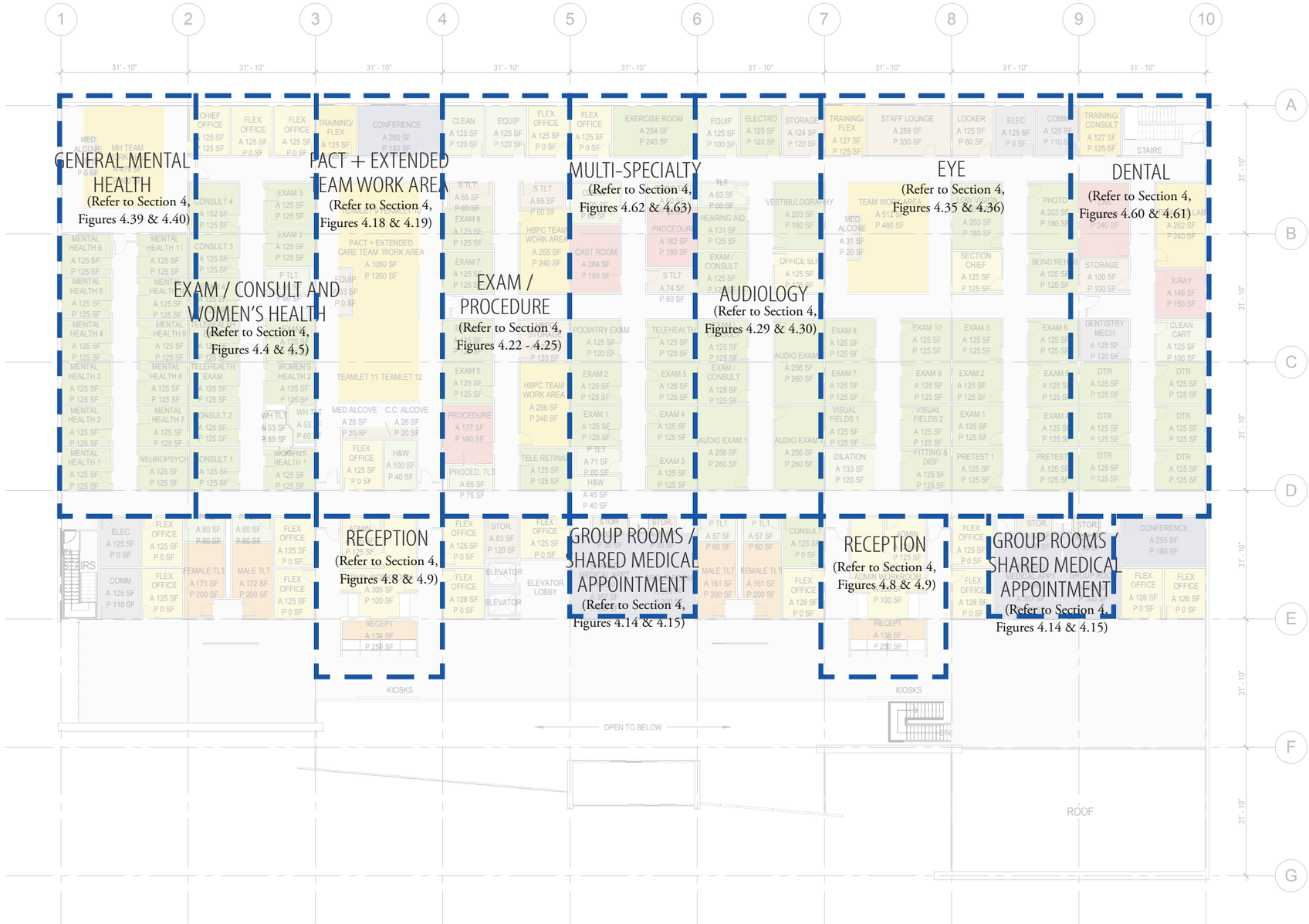
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout

Component Overview - Second Floor



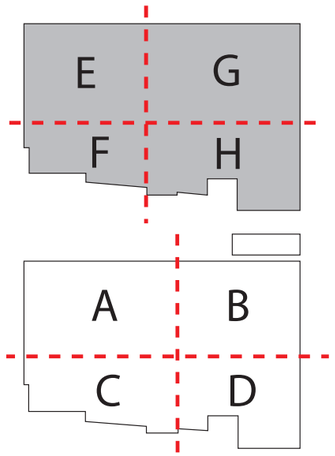


Figure 5.38
Three-PACT CBOC Prototype
Two Story Layout
Component Overview - Second Floor

16' 8' 0' 16' 32'
GRAPHIC SCALE: 1/16" = 1'-0"

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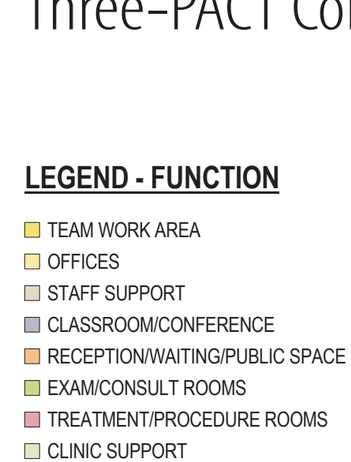
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout

Plan Overview - First Floor

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



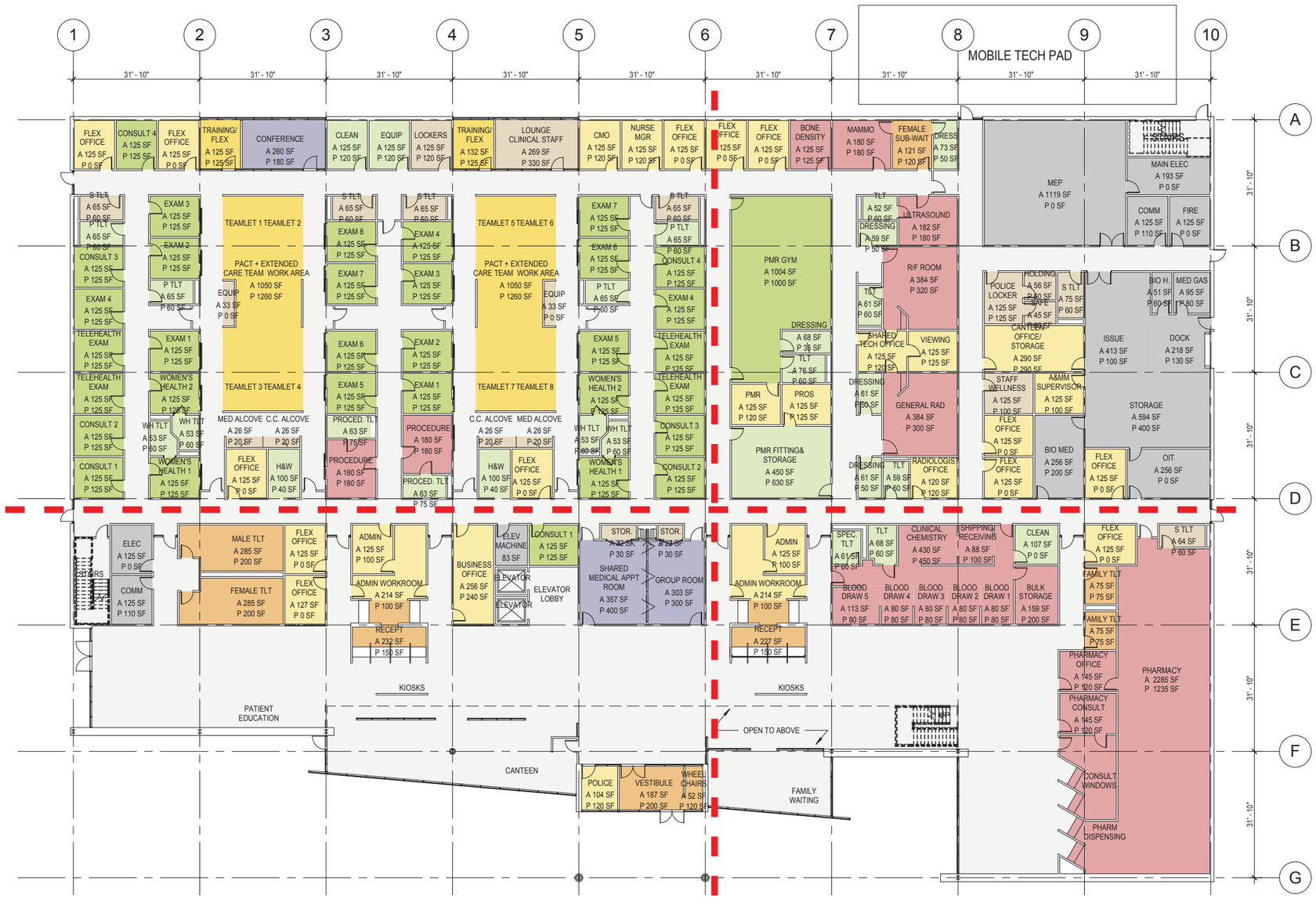


Figure 5.39
Three-PACT CBOC Prototype
Two - Story Layout
Plan Overview - First Floor

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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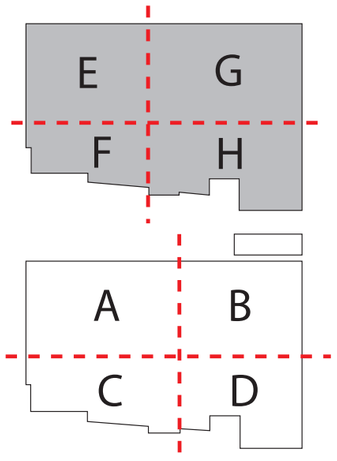
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout

Plan Overview - Second Floor

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



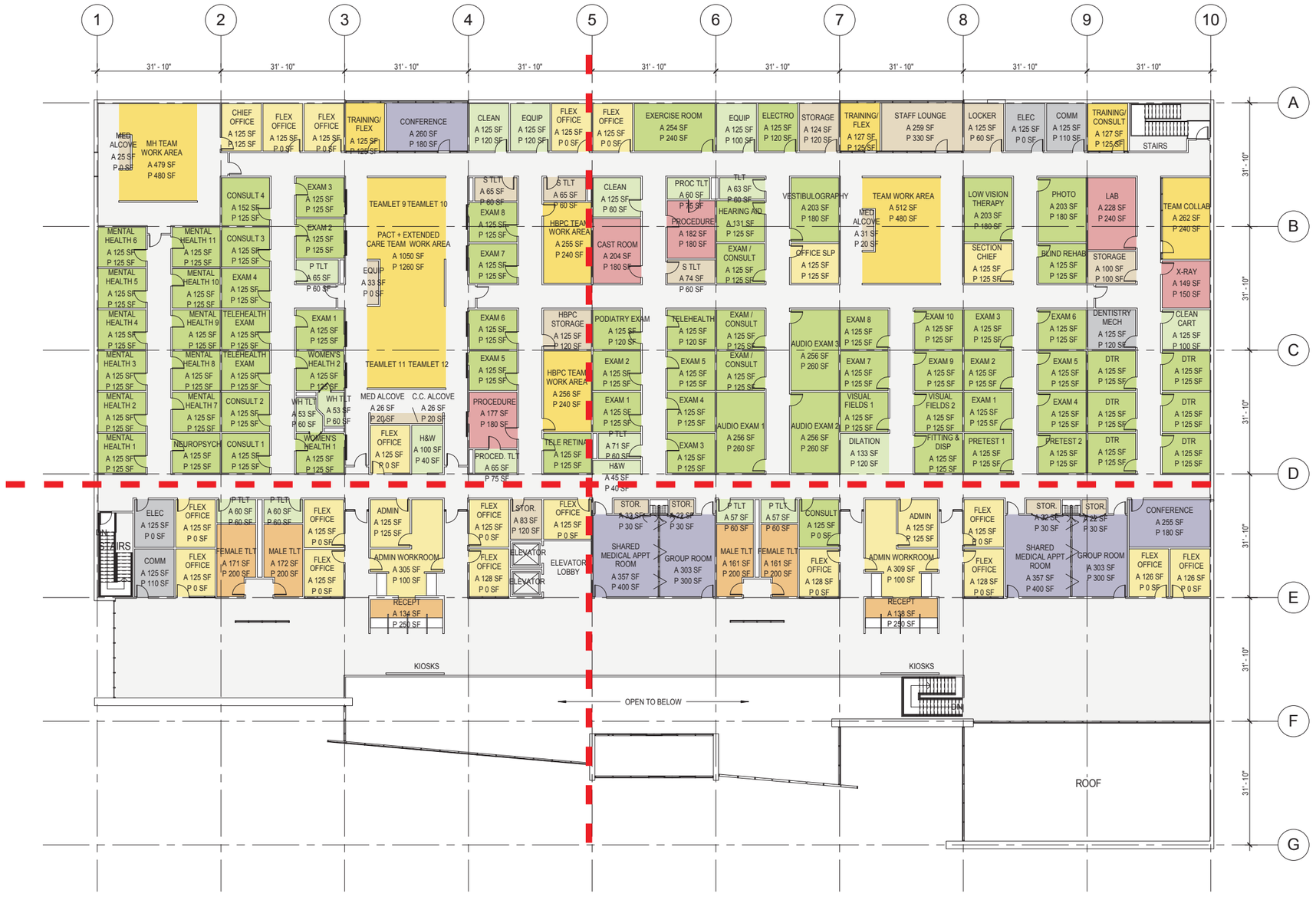


Figure 5.40
Three-PACT CBOC Prototype
Two - Story Layout
Plan Overview - Second Floor

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area A

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

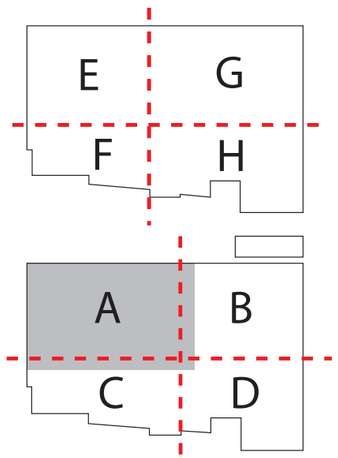

Figure 5.41
Three-PACT CBOC Prototype
Two - Story layout
Area A

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area B

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

Figure 5.42
Three-PACT CBOC Prototype
Two - Story layout
Area B

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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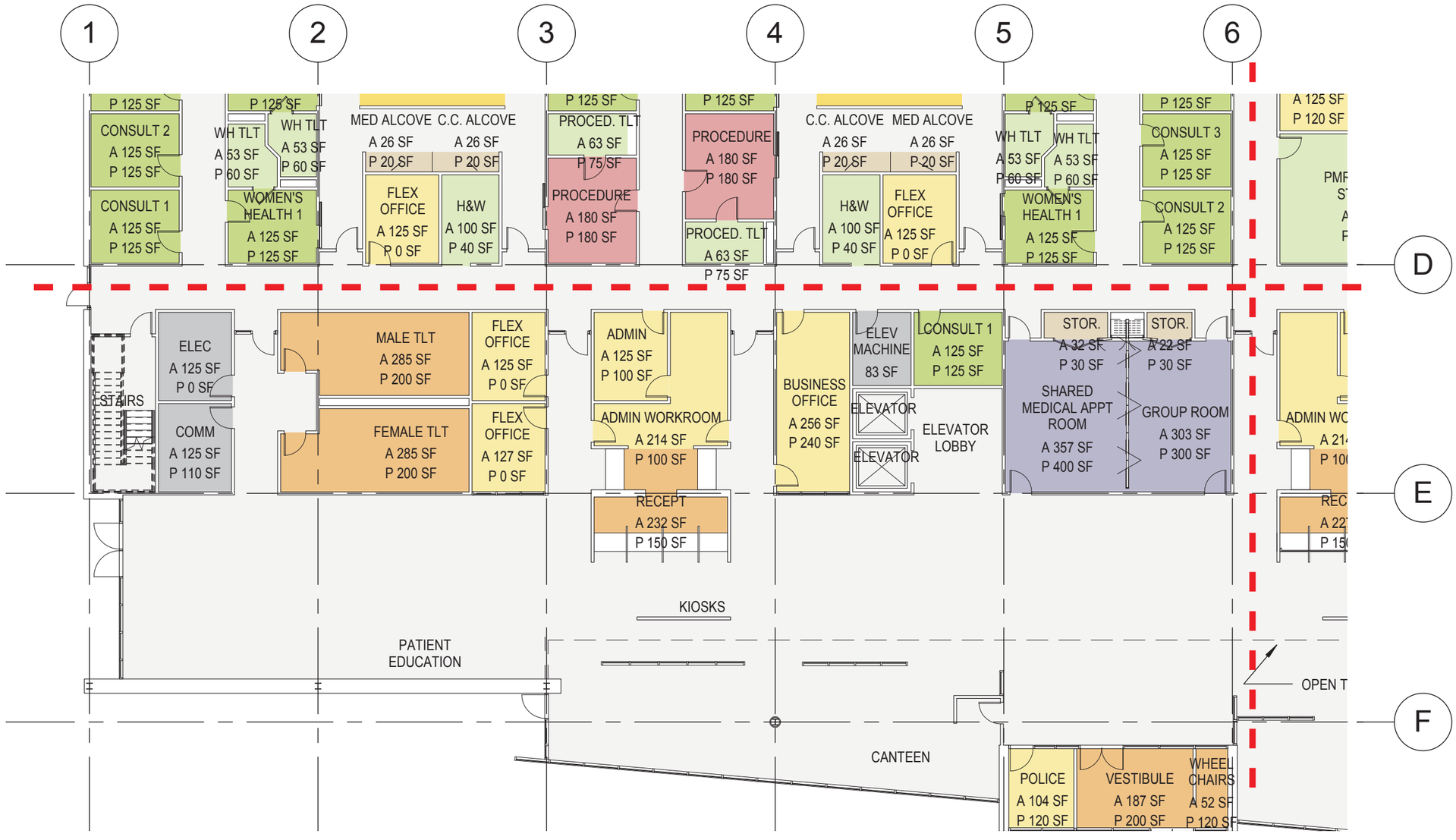
Three-PACT Community Based Outpatient Clinic Prototype

Two – Story Layout – Area C

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



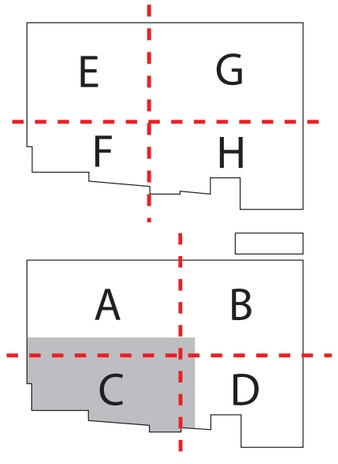


Figure 5.43
Three-PACT CBOC Prototype
Two - Story layout
Area C

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area D

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

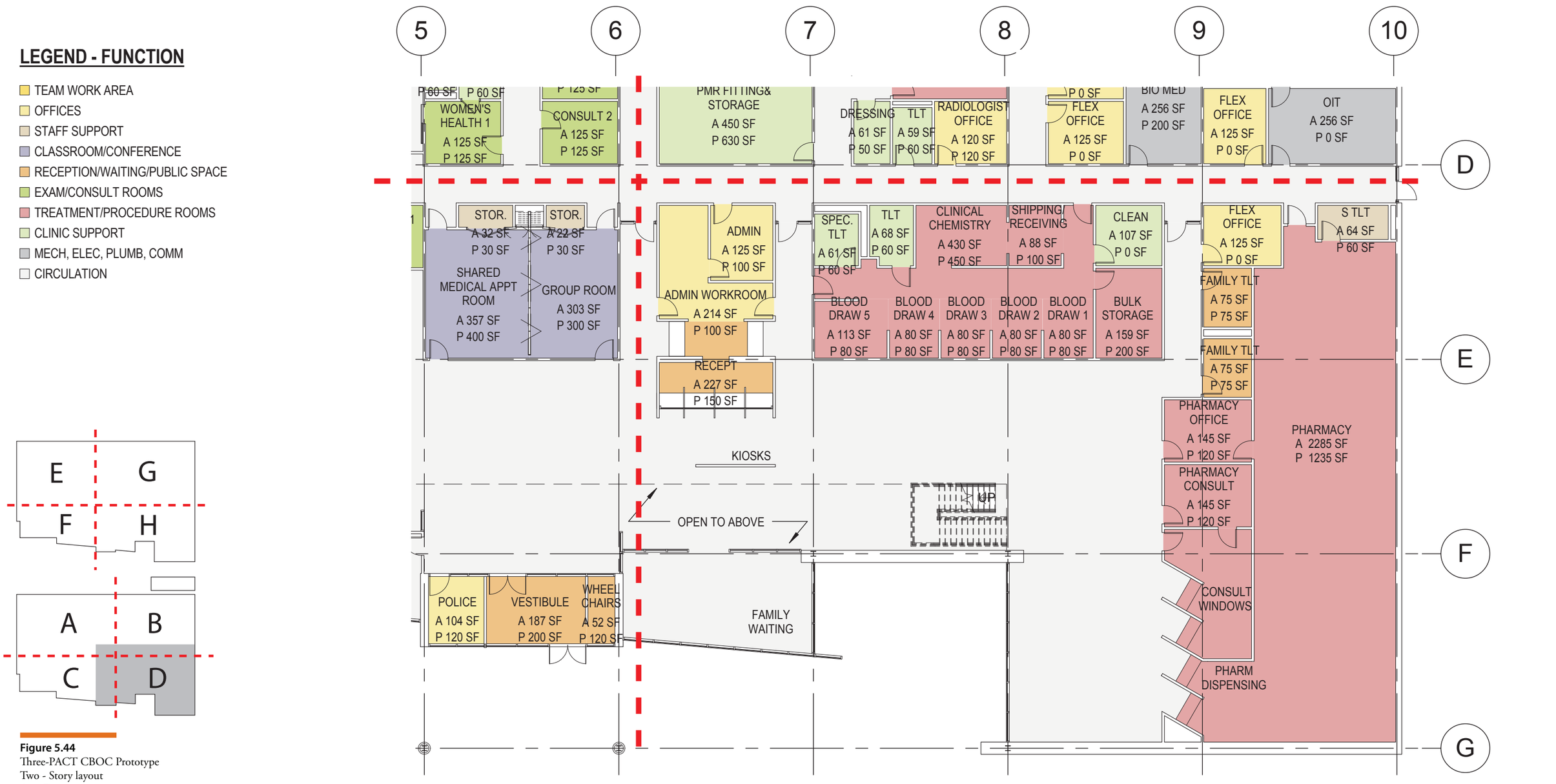

Figure 5.44
Three-PACT CBOC Prototype
Two - Story layout
Area D

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area E

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

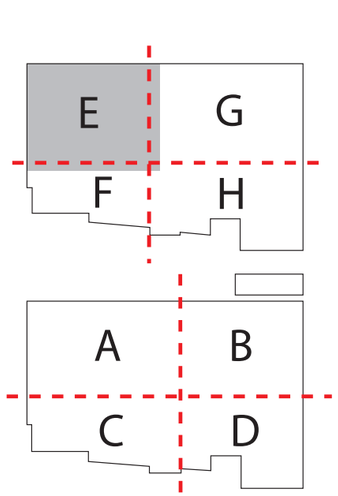

Figure 5.45
Three-PACT CBOC Prototype
Two - Story layout
Area E

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area F

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

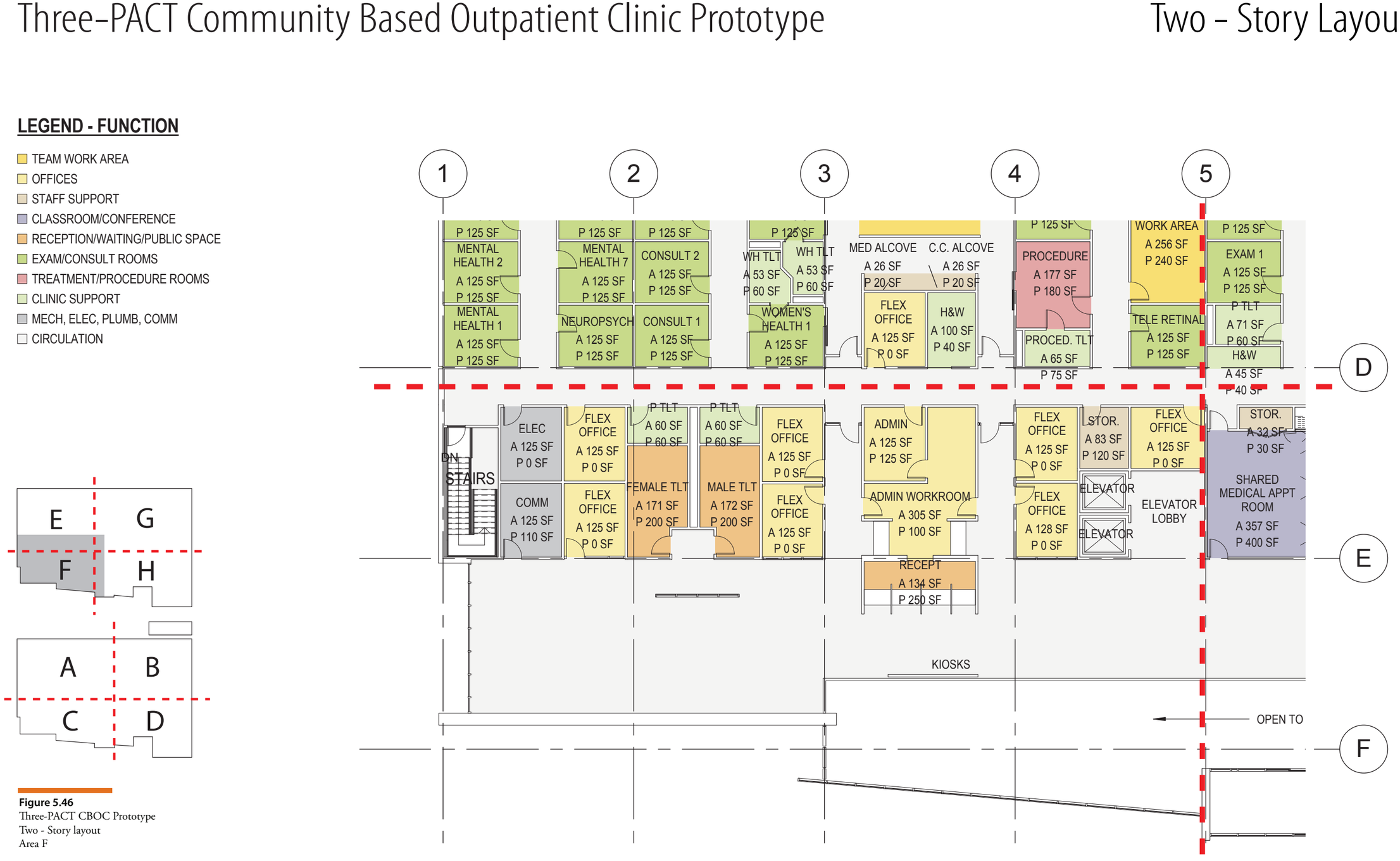

Figure 5.46
Three-PACT CBOC Prototype
Two - Story layout
Area F

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area G

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

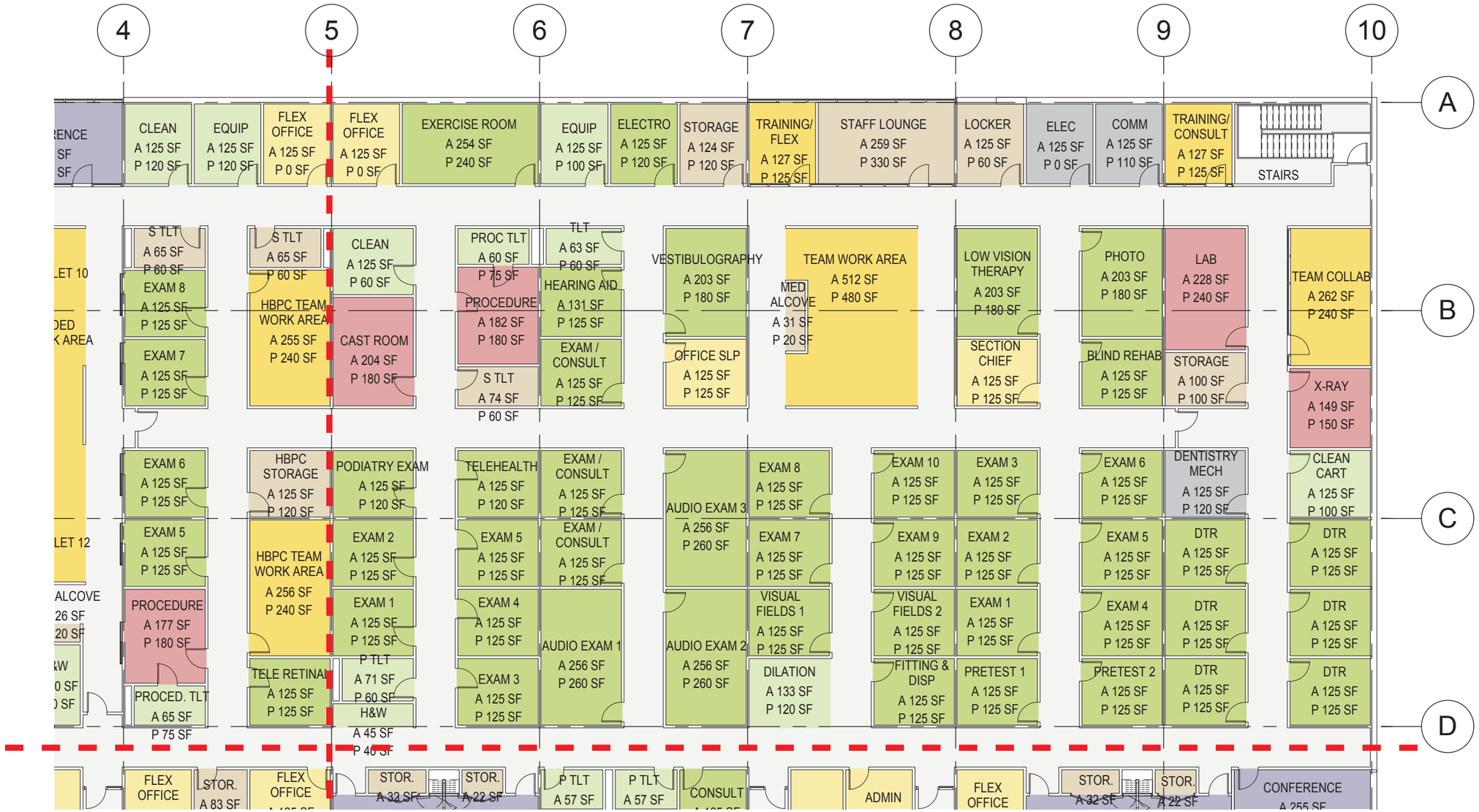

Figure 5.47
Three-PACT CBOC Prototype
Two - Story layout
Area G

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Layout - Area H

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

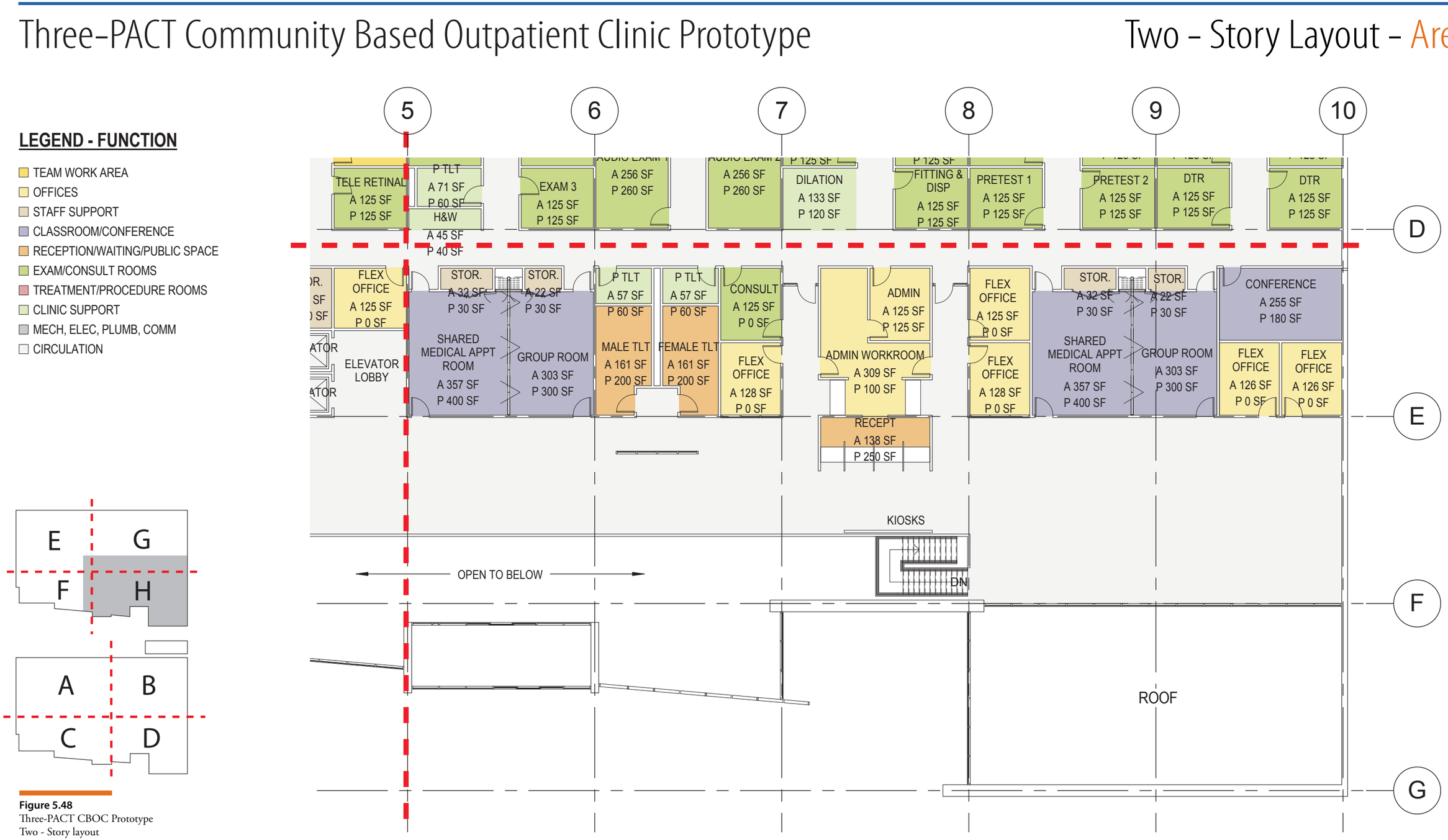

Figure 5.48
Three-PACT CBOC Prototype
Two - Story layout
Area H

16' 8' 0' 16' 32'

GRAPHIC SCALE: 1/16" = 1'-0"

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5.7 Three PACT CBOC Prototype Two-Story Modified Layout

In the Two Story Modified Three PACT CBOC Prototype, all three PACT modules and the General Mental Health module have been co-located on the first floor. This is the optimum adjacency for these services. They share a large, centralized Reception component and Group Room components along the front bar.

Like the L-Shaped schemes, the Lab component is located at the corner of this modified "L" shape. This capitalizes on adjacencies to PACT modules, the Commons, and other ancillary services. The Pharmacy component is pulled out from the other services, to create a separate waiting zone. This also allows the PMR + Prosthetics component ample exterior wall and natural light exposure. PMR + Prosthetics, Radiology, and Lab components share a Reception component as well as staff support and work areas.

The second floor contains the Multi-Specialty, Audiology, Eye, and Dental components. These services share a waiting area similar to the Commons, a centralized Reception component, and Group Room components along the front bar. A shared team work area supports all of these services, as well. Reception components are in similar locations on both floors, to make wayfinding easier for Veterans and family members.

While this two level scheme maintains many of the optimal component adjacencies, it does create a much larger first floor plate, as compared to the second floor plate.

Refer to Section 5.6 for engineering assumptions and considerations.

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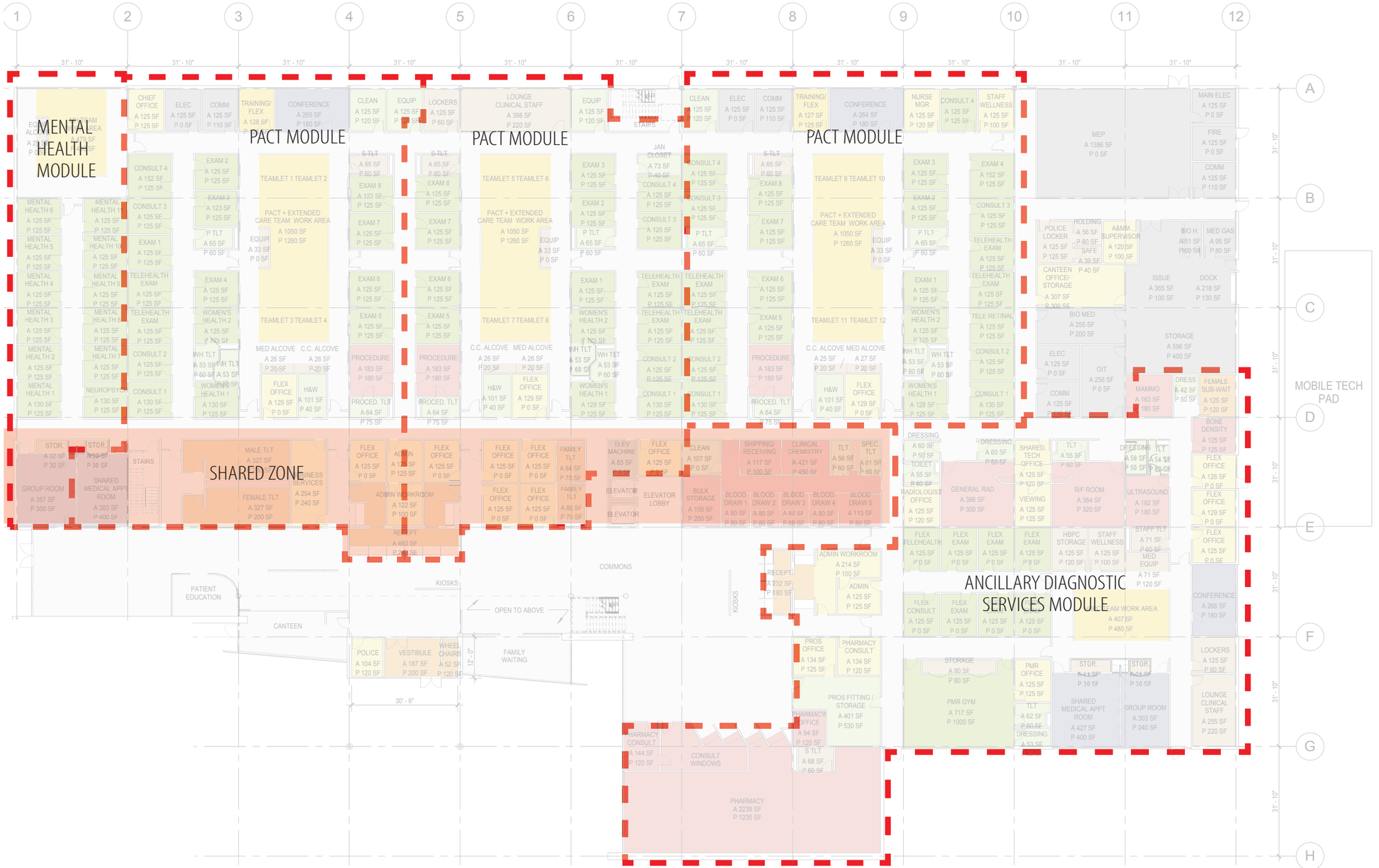
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout

Modules Overview - First Floor



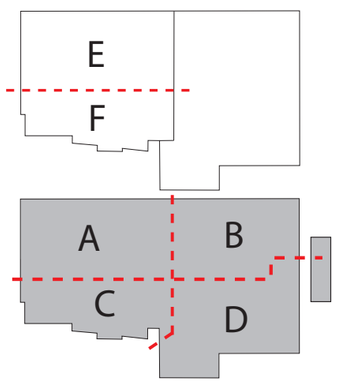


Figure 5.49
Three-PACT CBOC Prototype
Two - Story Modified Layout
Modules Overview - First Floor

GRAPHIC SCALE: 1/16" = 1'-0"

Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout

Component Overview - First Floor

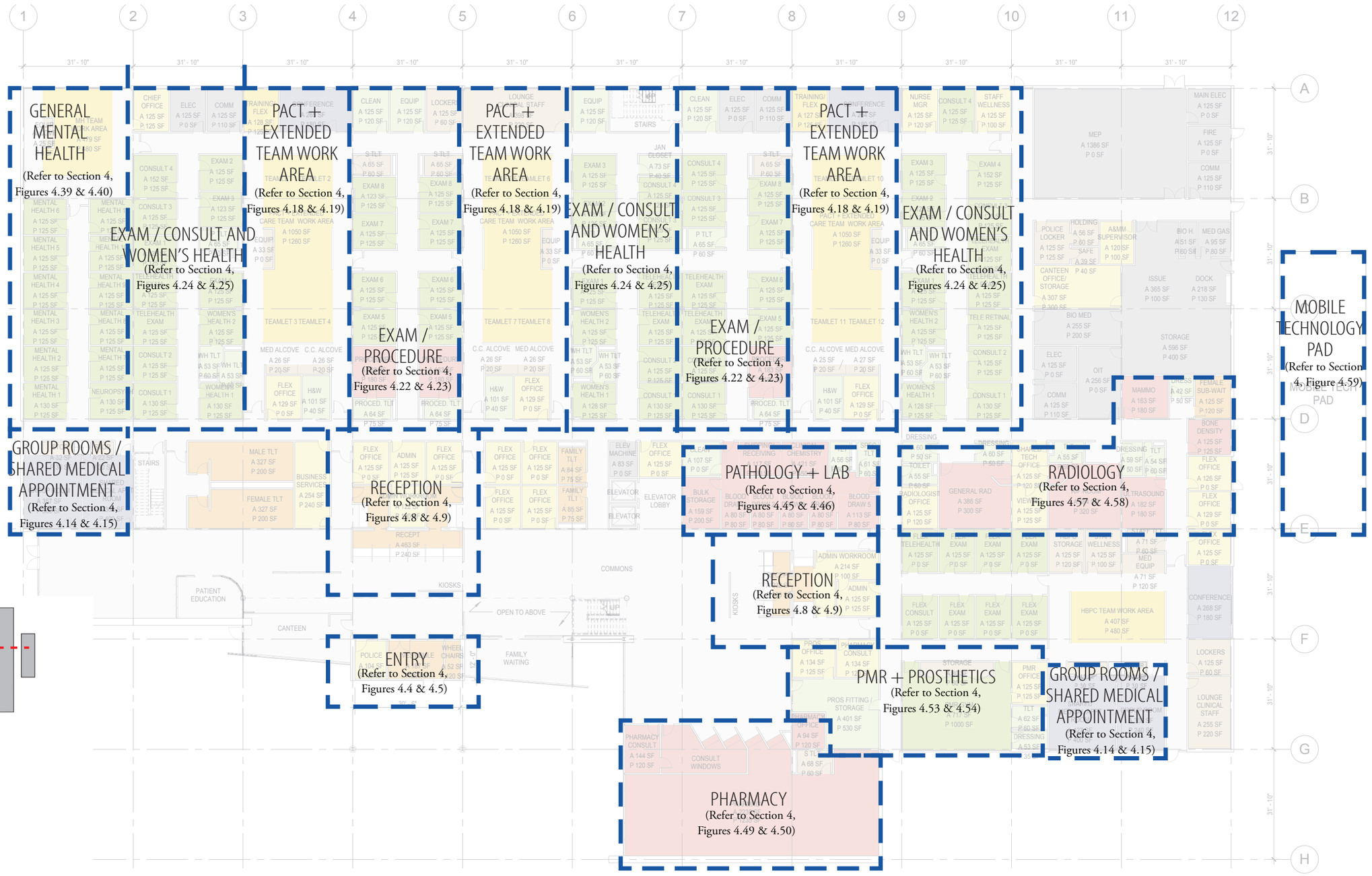


Figure 5.50
Three-PACT CBOC Prototype
Two - Story Modified Layout
Component Overview - First Floor

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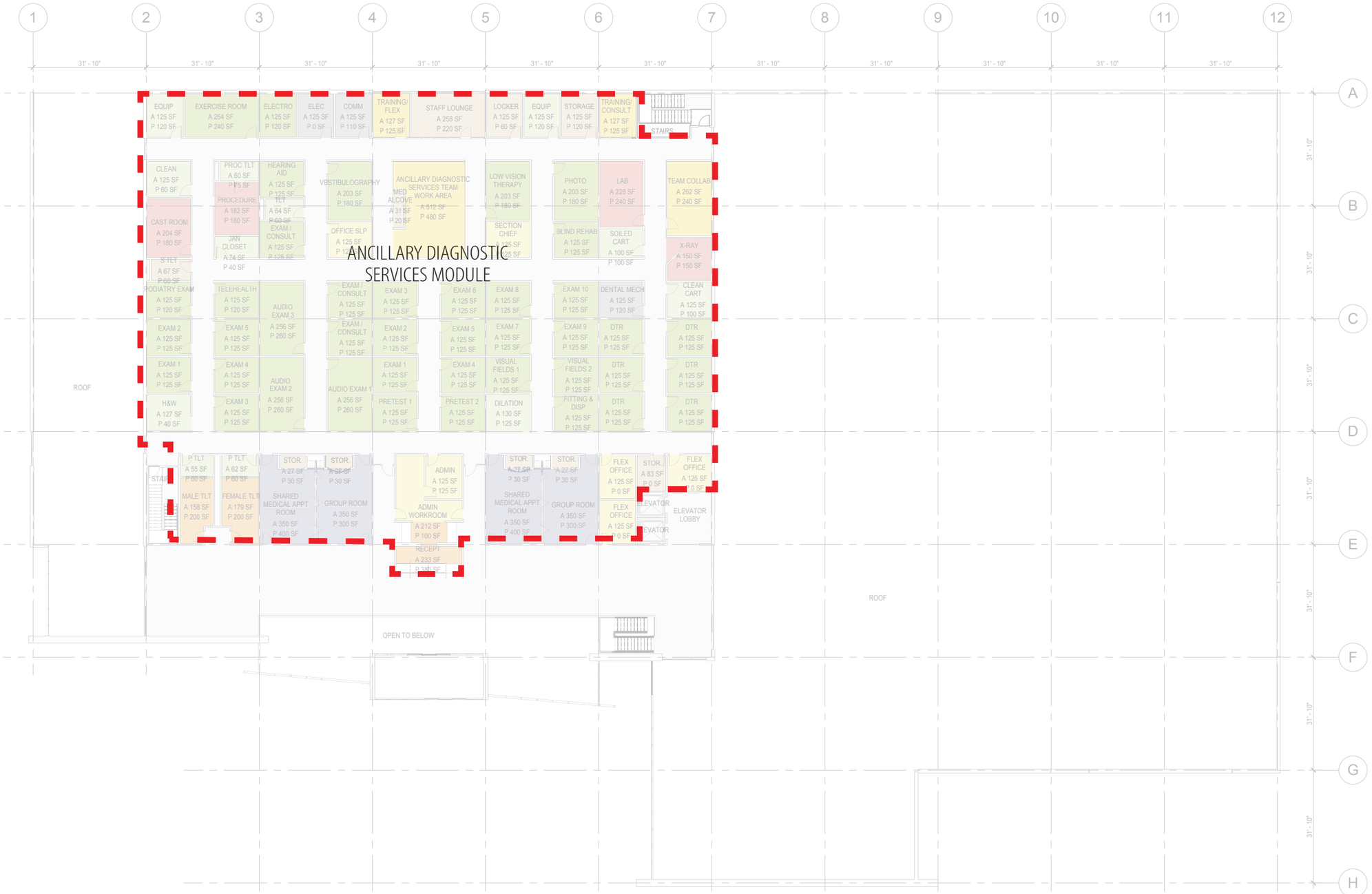
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout

Modules Overview - Second Floor



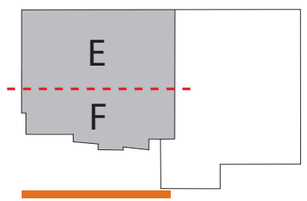


Figure 5.51
Three-PACT CBOC Prototype
Two - Story Modified Layout
Modules Overview - Second Floor

GRAPHIC SCALE: 1/16" = 1'-0"

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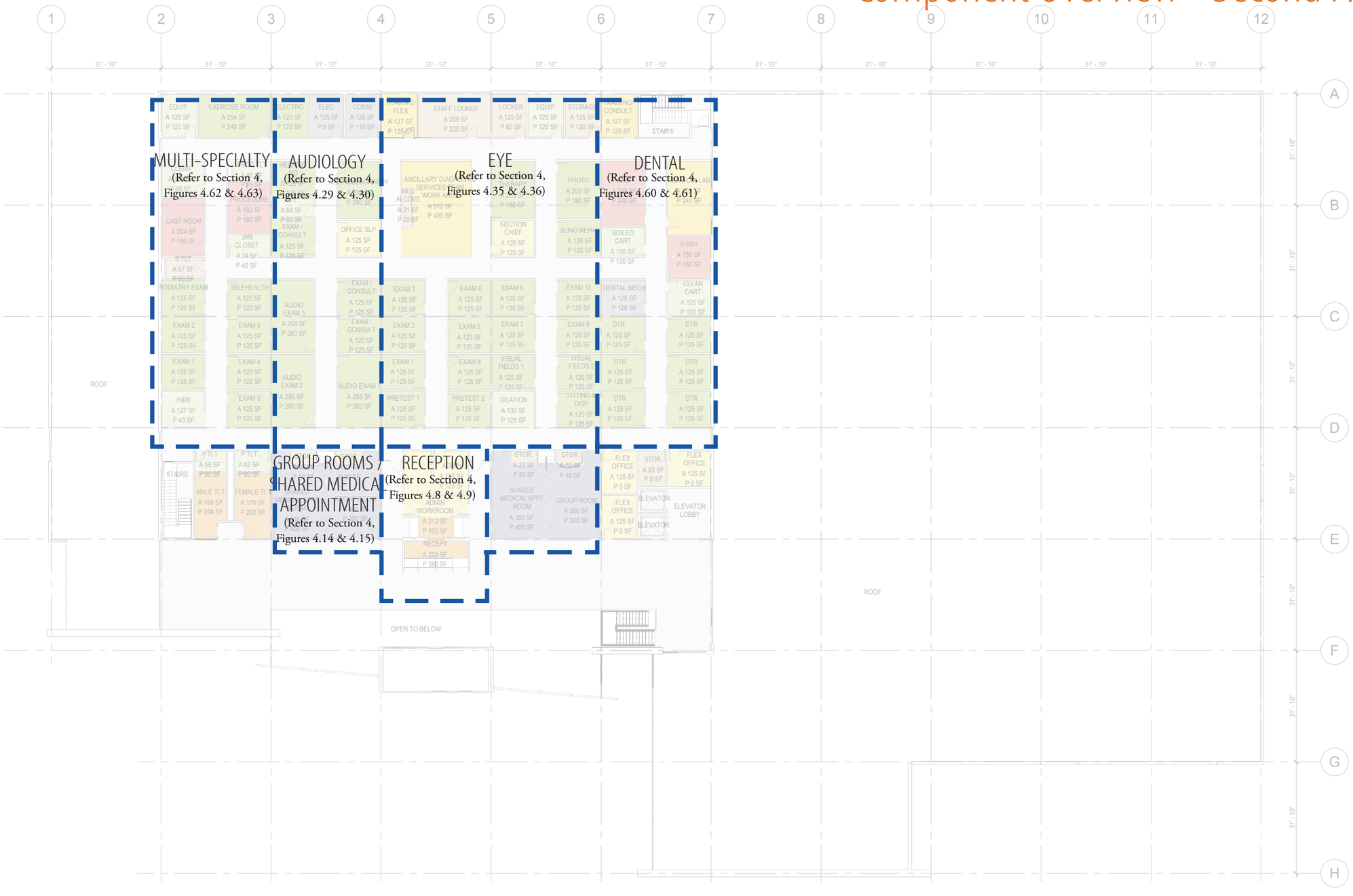
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout

Component Overview - Second Floor



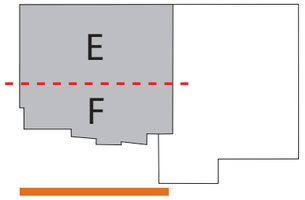


Figure 5.52
Three-PACT CBOC Prototype
Two - Story Modified Layout
Component Overview - Second Floor

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout

Plan Overview - First Floor

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

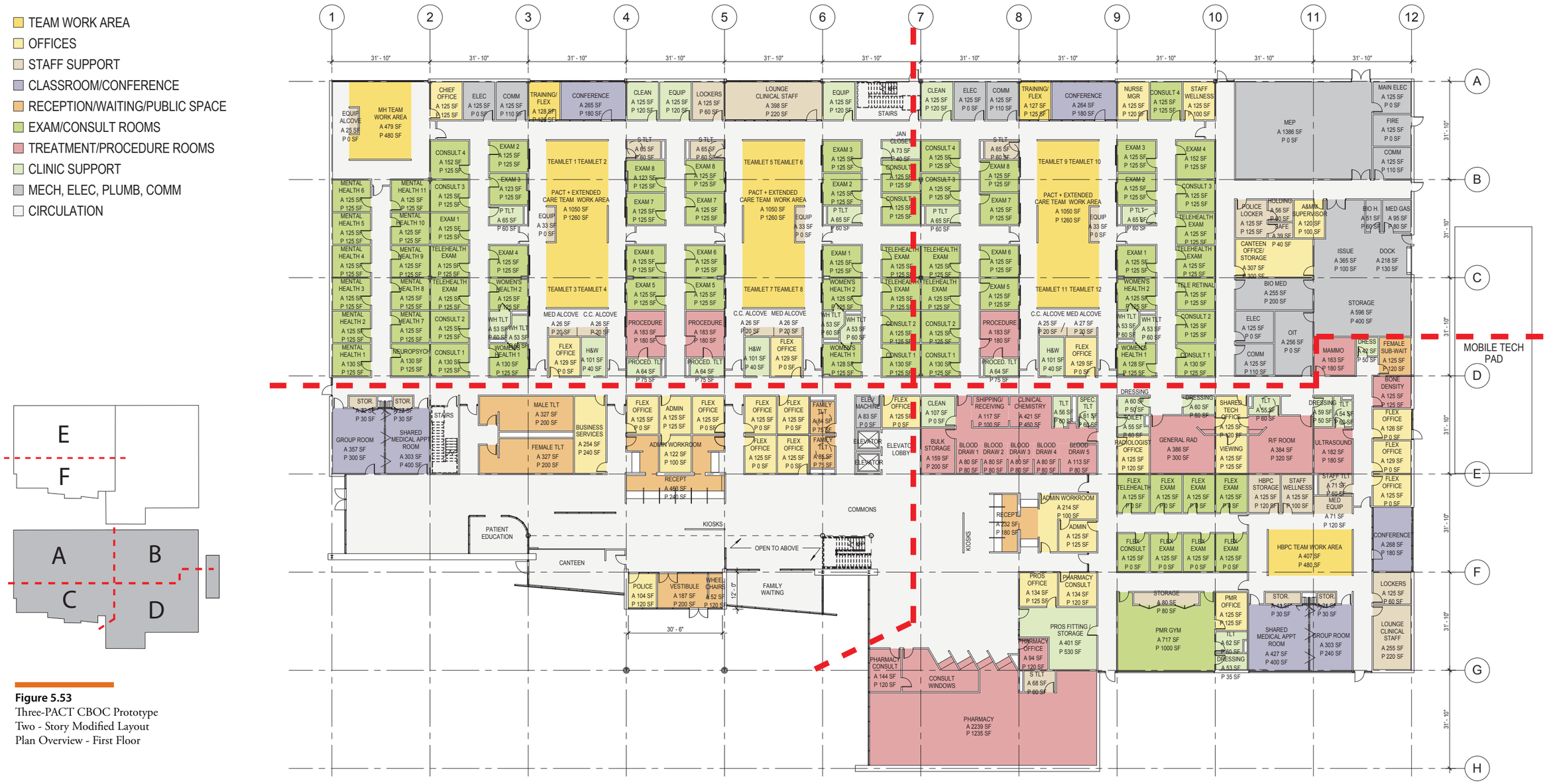

Figure 5.53
Three-PACT CBOC Prototype
Two - Story Modified Layout
Plan Overview - First Floor

GRAPHIC SCALE: 1/16" = 1'-0"

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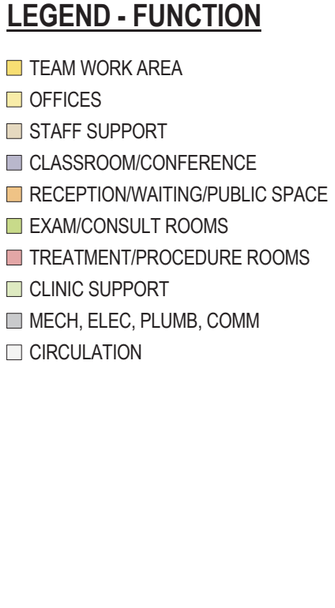
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout

Plan Overview - Second Floor

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



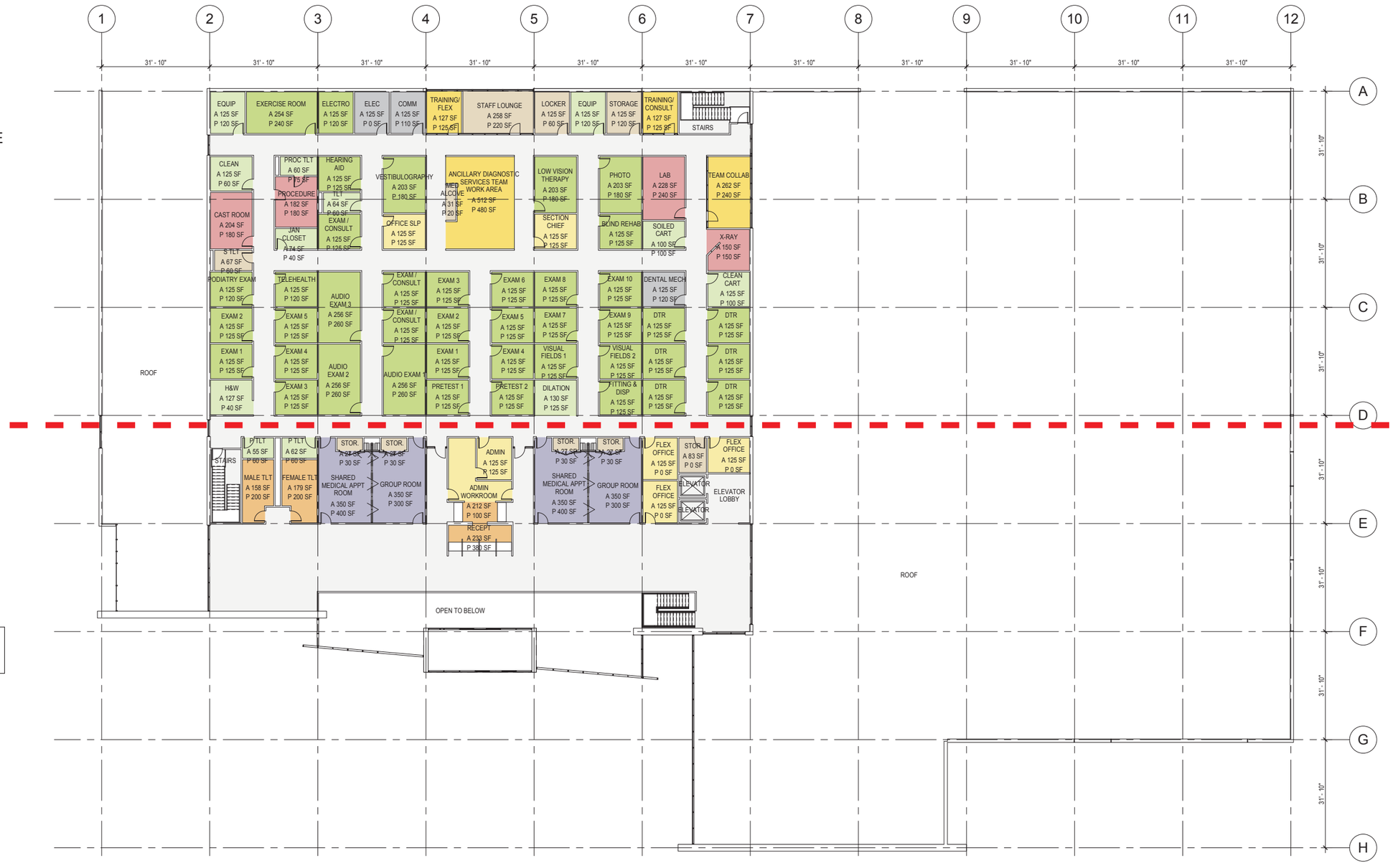


Figure 5.54
Three-PACT CBOC Prototype
Two - Story Modified Layout
Plan Overview - Second Floor

GRAPHIC SCALE: 1/16" = 1'-0"

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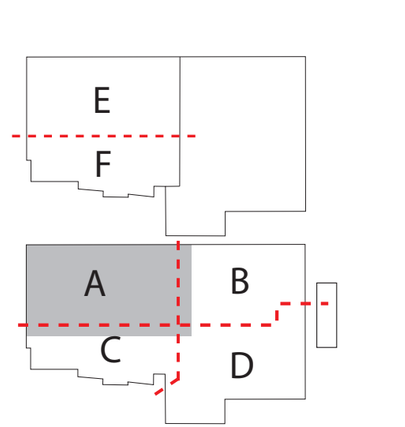
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout - Area A

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



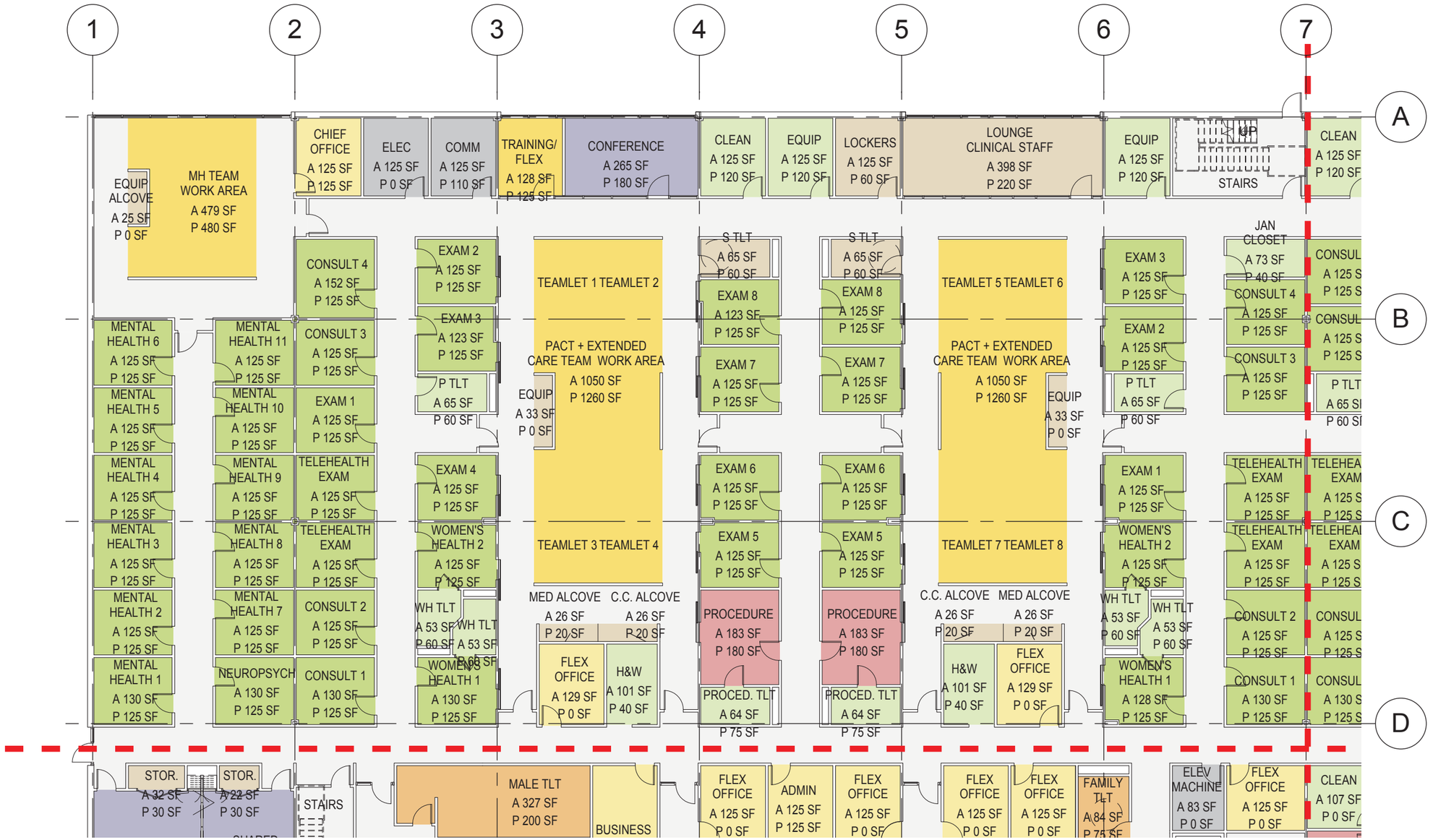


Figure 5.55
Three-PACT CBOC Prototype
Two - Story Modified Layout
Area A

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout - Area B

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

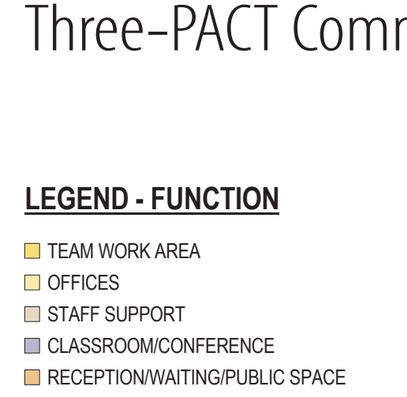

Figure 5.56
Three-PACT CBOC Prototype
Two - Story Modified Layout
Area B

GRAPHIC SCALE: 1/16" = 1'-0"

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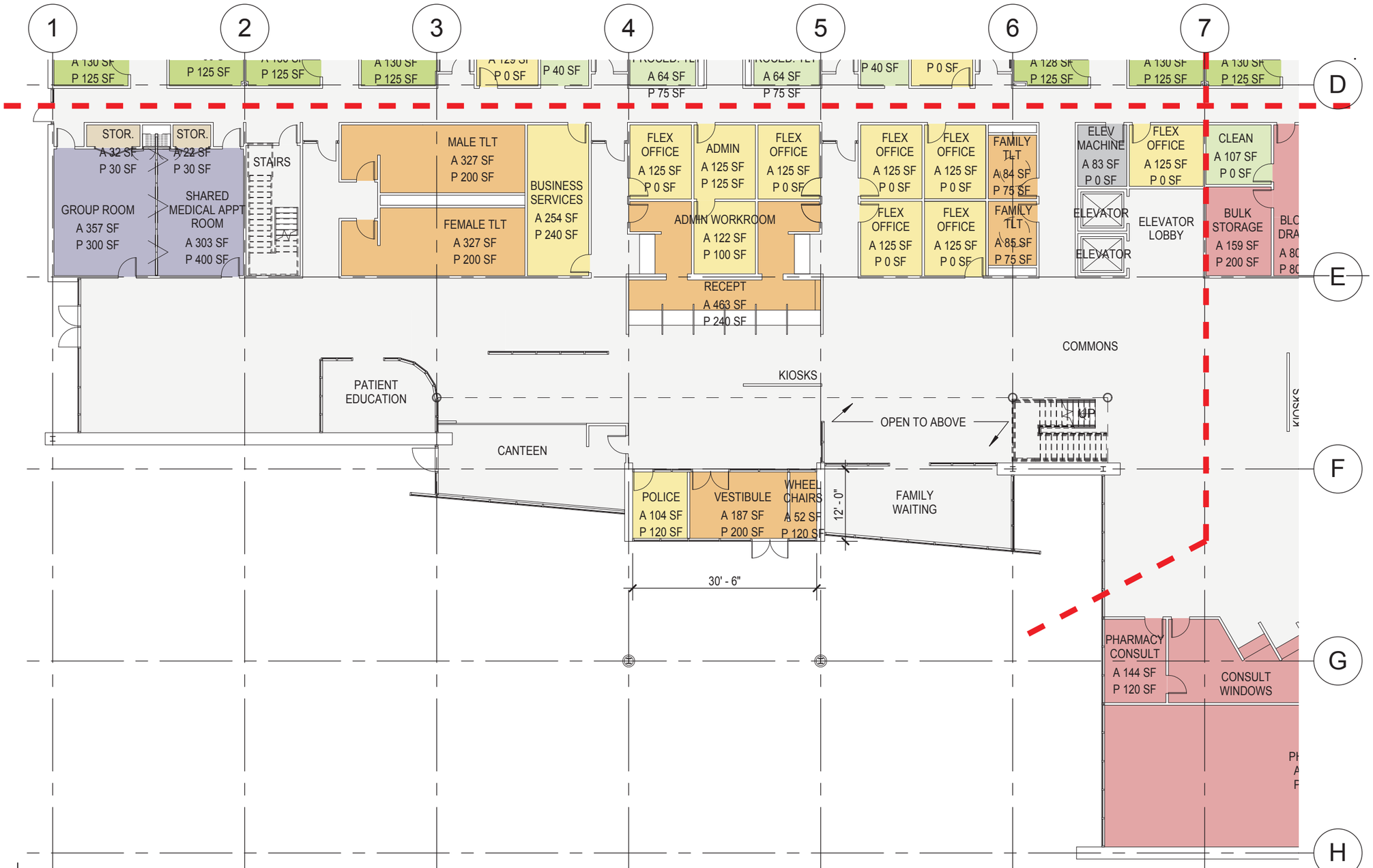
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout - Area C

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



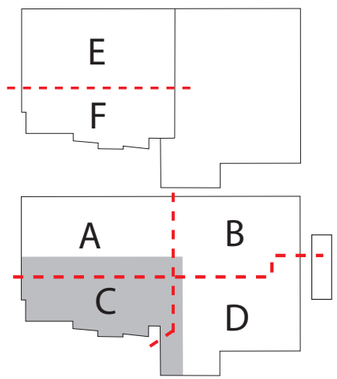


Figure 5.57
Three-PACT CBOC Prototype
Two - Story Modified Layout
Area C

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout - Area D

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

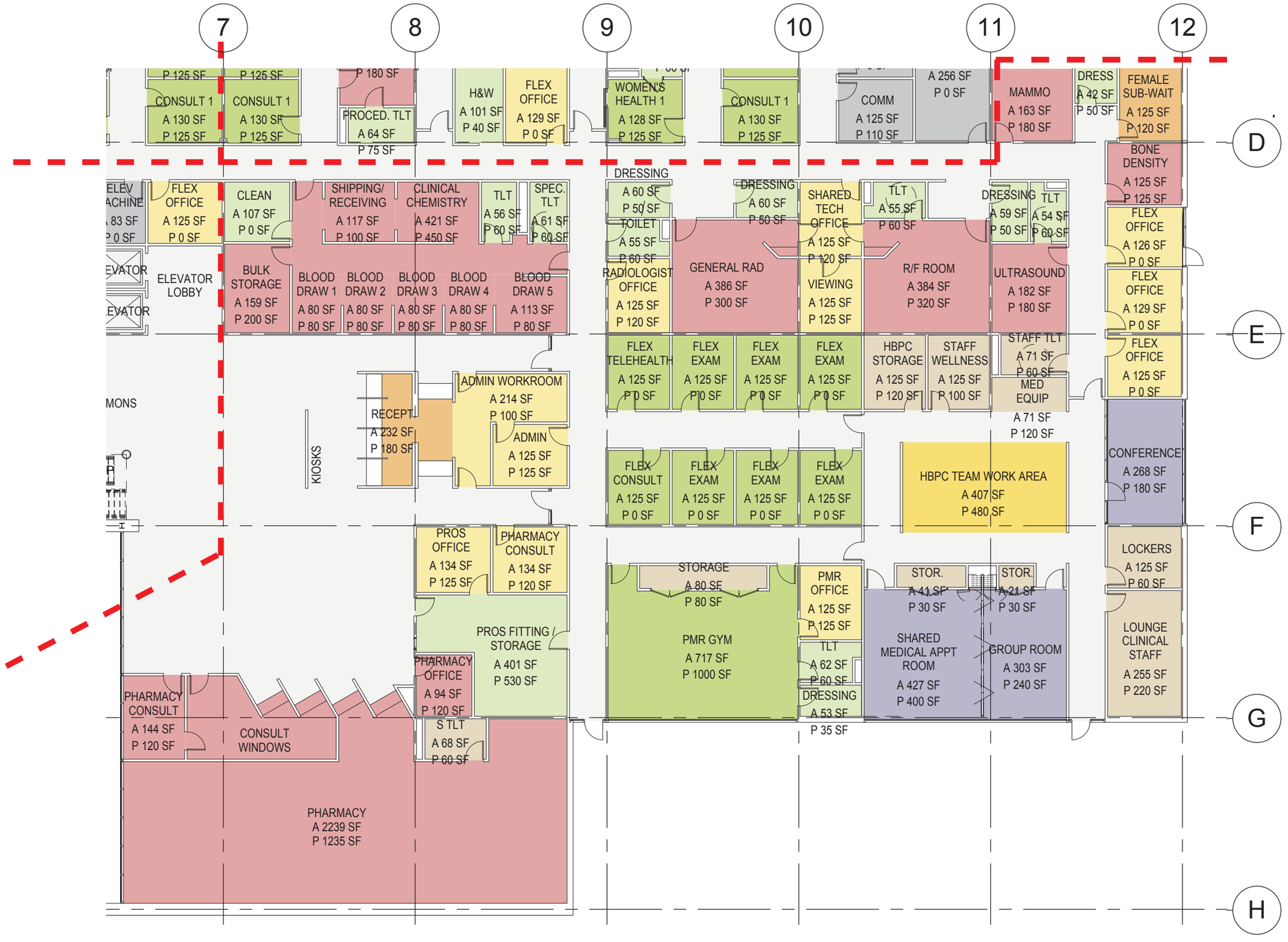

Figure 5.58
Three-PACT CBOC Prototype
Two - Story Modified Layout
Area D

GRAPHIC SCALE: 1/16" = 1'-0"

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Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout - Area E

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION

Figure 5.59
Three-PACT CBOC Prototype
Two - Story Modified Layout
Area E

GRAPHIC SCALE: 1/16" = 1'-0"

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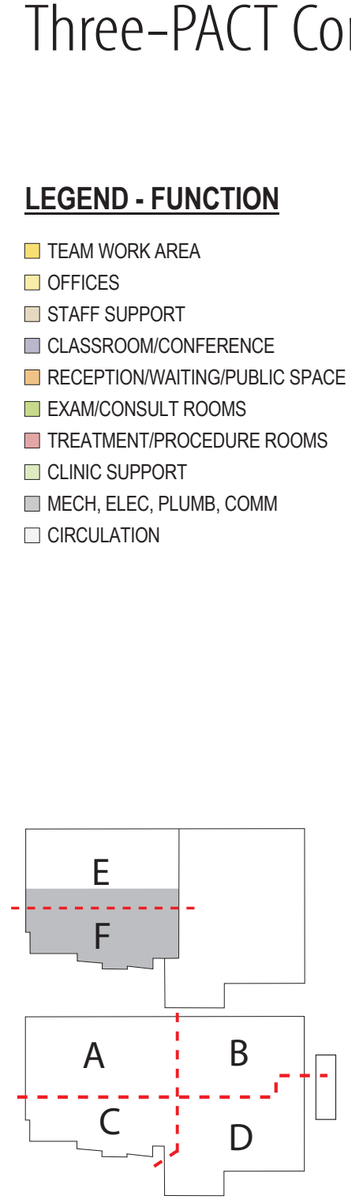
Three-PACT Community Based Outpatient Clinic Prototype

Two - Story Modified Layout - Area F

LEGEND - FUNCTION

- TEAM WORK AREA
- OFFICES
- STAFF SUPPORT
- CLASSROOM/CONFERENCE
- RECEPTION/WAITING/PUBLIC SPACE
- EXAM/CONSULT ROOMS
- TREATMENT/PROCEDURE ROOMS
- CLINIC SUPPORT
- MECH, ELEC, PLUMB, COMM
- CIRCULATION



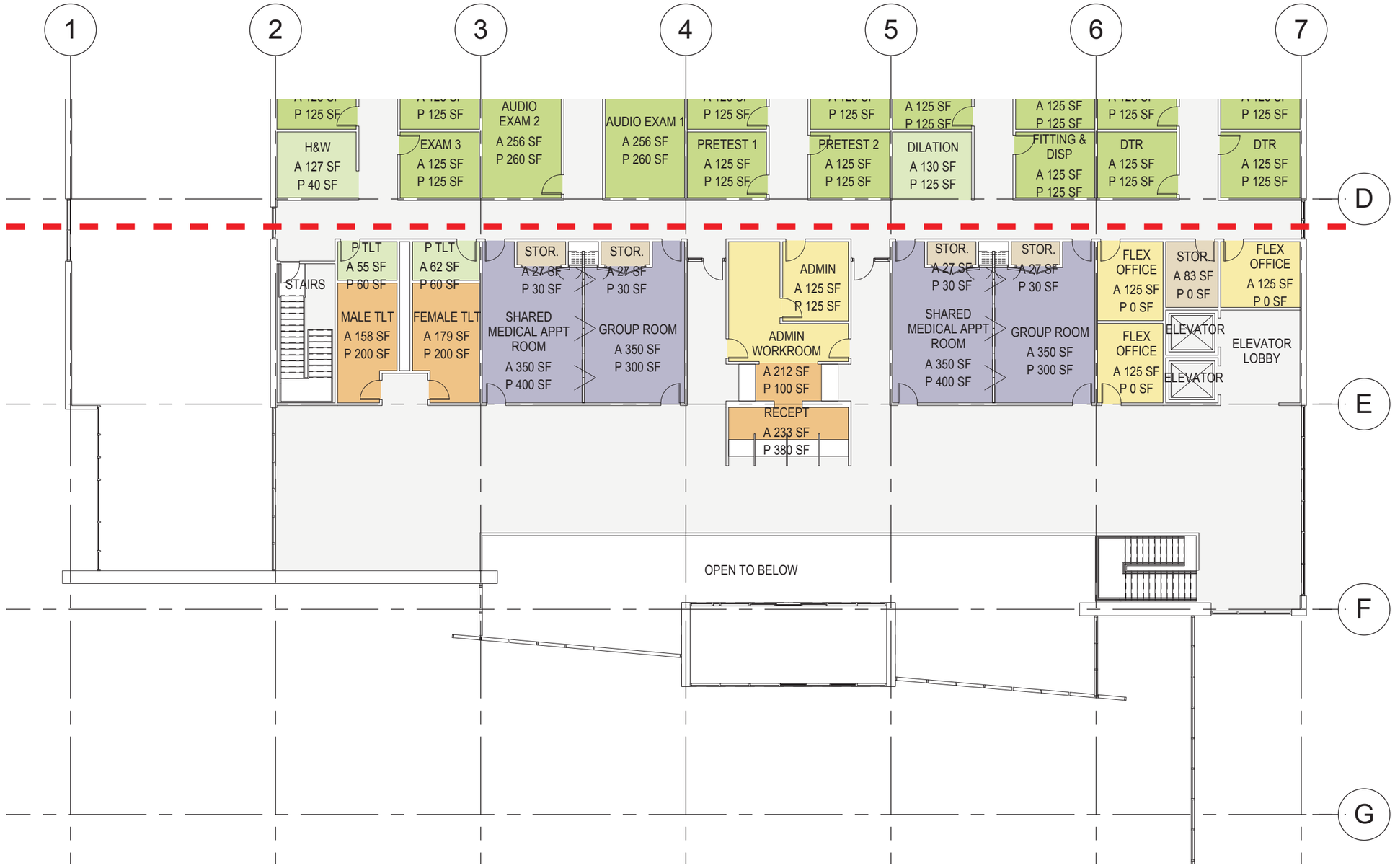


Figure 5.60
Three-PACT CBOC Prototype
Two - Story Modified Layout
Area F

GRAPHIC SCALE: 1/16" = 1'-0"

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