(PRE-FINAL) PETERSON AIR FORCE BASE INSTALLATION FACILITIES STANDARDS (IFS)











Installation Elements

Site Development

Facilities Exteriors

Facilities Interiors

2017

Peterson Air Force Base IFS

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A. OVERVIEW

Comply with Air Force Corporate Standards for Overview: http://afcfs.wbdg.org/index.html

- Conformance to Air Force Corporate Facilities Standards (AFCFS) and Installation Facilities Standards (IFS) are required by Air Force Instruction (AFI) 32-1023 and Air Force Memorandum. Please refer to the AFCFS website for links to documentation on current policy.
- 2. The IFS is a component plan of the Installation Development Plan (IDP) per Air Force Instruction (AFI) 32-7062 (replacing the Architectural Compatibility Plan). All military construction projects and Non-Appropriated Funds (NAF) facilities are required to comply with the IDP and its IFS component plan by AFI 32-1023. The Base Civil Engineer (BCE) maintains and implements the IDP and its component plans, to include the IFS.
- 3. Please refer to the AFCFS website as a portal to reference materials and requirements documents for design and construction projects (via links). Specific references to current DOD memoranda and Air Force criteria are updated periodically to provide the most current guidance and requirements. Programming, design and contract documents should list "current edition" for all reference and requirements documents. The documents in force at the date of execution of the design and/or construction contract shall be the governing version.
- 4. Joint Bases shall implement IFS under their Joint-Base designation with volume numbers for individual installations following the IFS Development Tool template. For example, for Joint Base Langley-Eustis, provide: Vol. 1 Langley AFB and Vol. 2 Fort Eustis.

A.01. FACILITY HIERARCHY

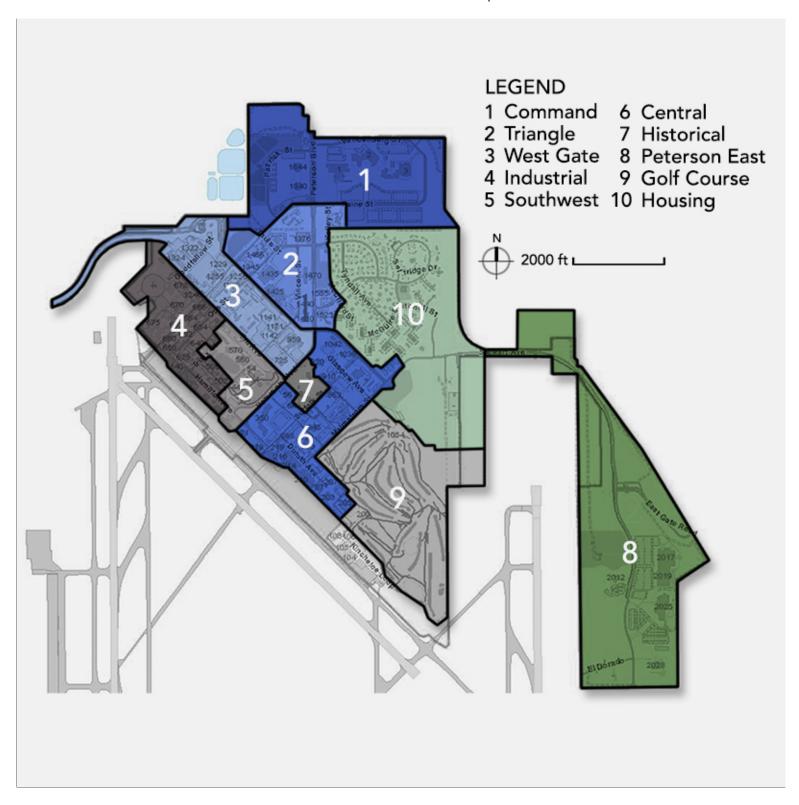
Comply with AF Corporate Standards for Facility Hierarchy (and subsections): http://afcfs.wbdq.org/facility-hierarchy/index.html

A.02. FACILITY QUALITY

Comply with AF Corporate Standards for Facility Quality (and subsections): http://afcfs.wbdq.org/facility-quality/index.html

A.03. FACILITY DISTRICTS

Comply with AF Corporate Standards for Facility Districts (and subsections): http://afcfs.wbdq.org/facility-districts/index.html



Note: Apply the <u>base-wide standards</u> in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related to the Facility District.

B. INSTALLATION ELEMENTS

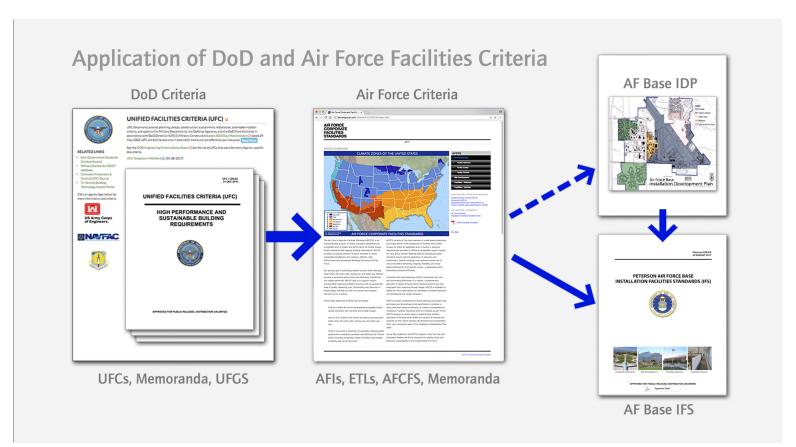
Comply with Air Force Corporate Standards for Installation Elements: http://afcfs.wbdg.org/installation-elements/index.html

B.01. COMPREHENSIVE PLANNING

Comply with Air Force Corporate Standards for Comprehensive Planning: http://afcfs.wbdg.org/installation-elements/comprehensive-planning/index.html

B01.1. Installation Development Plan (IDP)

○ Applicable ● N/A Has small graphics to include (250px x 188px)



Department of Defense, Department of the Air Force and Air Force Base Criteria

1. The Base Civil Engineer is responsible for developing, maintaining and implementing the installation's Comprehensive Planning documents and to ensure that the Installation Development Plan (IDP) is prepared, maintained, and implemented following AFI 32-7062.

B01.1.1. IFS Component Plan of IDP

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Maintain this Installation Facilities Standards (IFS) as a Component Plan of the installation's Installation Development Plan (IDP).

B01.1.2. Brief History of Base

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)







Peterson Air Field

Original Airport Terminal

HQ Air Force Space Command

1. Once the site of the City of Colorado Springs Municipal Airport, Peterson AFB was originally established as the Air Force Flight Training Center in 1941. It later became the Air Force Support Command Base and was renamed Peterson Air Field in tribute to Lt. Edward J. Peterson, a photo-reconnaissance pilot, who died after his P-38 crashed at the base in August 1942.

After World War II, the airport was returned to the jurisdiction of the City of Colorado Springs, and many of the military buildings were demolished. In 1948 the U.S. Government negotiated with the City to provide flying facilities at the airport in support of the 15th Air Force, then headquartered near downtown Colorado Springs at Ent Air Force Base. When the 15th Air Force relocated to March Air Force Base, California, the Air Force established the Air Defense Command at Peterson Field, and in 1976 the installation was renamed Peterson Air Force Base. Subsequently, jurisdiction of the installation was transferred again, this time to the Strategic Air Command, in 1979.

In September 1982 the Air Force Space Command was activated at Peterson AFB. This action was followed by the establishment of the 1st Space Wing on January 1, 1983. The base remained under command of the 1st Space Wing until activation of the 3rd Space Support Wing, the present host unit, in October 1986. At the present time, Peterson AFB maintains an amiable relationship with an expanding Colorado Springs Municipal Airport.

Several original Municipal Airport buildings, which remain on the base, have both military and civilian historical significance. These buildings are concentrated along Ent Avenue, east of Peterson Boulevard. This particular area contains the Base Museum and numerous historically significant aircraft in a large outdoor display area. Two of the original airport hangars are still in use, though their function has long since ceased to be directly associated with flight line activities. Several World War II era buildings are also located in this general vicinity. In addition, the "Spanish House" is located in this area. This house dates back to when this

part of the base was the original Colorado Springs Municipal Airport. The house is used for distinguished visitors when they stay in the area. This area is now an official Historical District with the National Registry of Historic Places.

Peterson AFB is now a part of the "Peterson Complex", a combined military/civilian defense-based community comprised of several activities located in the Colorado Springs area. This complex is home to a variety of agencies including the North American Aerospace Defense Command (NORAD), the United States Space Command, Air Force Space Command Headquarters, 21st Space Wing, 50 Space Wing, 302nd Tactical Airlift Wing (Air Force Reserves), and associated units. These agencies are located at Peterson Air Force Base, Cheyenne Mountain Air Station, Schriever Air Force Base (formerly Falcon Air Force Base), the Federal Building in downtown Colorado Springs, and other leased facilities in the greater Colorado Springs community. Peterson AFB has increasingly become the central hub around which these numerous activities revolve.

Up until this point in time, the United States Army Space Command (ARSPACE) was located in the Colorado Springs area. With the completion of their new facility in October 2002, a fourth, major member of the Headquarters Complex was in place on main base Peterson.

In May of 2002, The Department of Homeland Defense directed the location of a new headquarters command at the Peterson Complex. The United States Northern Command (USNORTHCOM) was soon established and disbursed throughout numerous existing facilities at main base Peterson, as well as, Cheyenne Mountain.

In August of that same year, the announcement that long term tenant United States Space Command (USSPACECOM) would be leaving the Peterson Complex in an effort to realign the space operations was made. The assets currently located in Colorado would be relocated and combined with United States Strategic Command (USSTRATCOM) in Nebraska. This realignment allowed USNORTHCOM to move into the vacated space and take a prominent position in the Headquarters Complex.

(Applicable (● N/A	Has large graphics to include (800px x 440px)
○ Applicable ● N/A	Has small graphics to include (250px x 188px)

- 1. Follow AFI 32-7062 for Air Force Comprehensive Planning, the Comprehensive Planning Process, Comprehensive Planning Requirements, and Geospatial Mapping.
- 2. Address all future development under the Installation Development Plan (IDP).

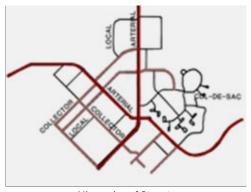
B02. STREET ENVELOPE STANDARDS

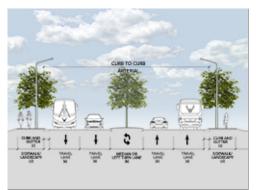
Comply with Air Force Corporate Standards for Installation Elements: http://afcfs.wbdg.org/installation-elements/index.html

Comply with AF Corporate Standards for Street Envelope Standards: http://afcfs.wbdq.org/installation-elements/street-envelope-standards/index.html

B02.1. Hierarchy of Streets

	Applicable ● N/A	Has large graphics to include (800px x 440px)
(A) (and include (1) (A) (1) (A) (1) Lac small graphics to include (1) (A) (2) (A)	♠ Applicable	Has small graphics to include (250px x 188px)







Hierarchy of Streets

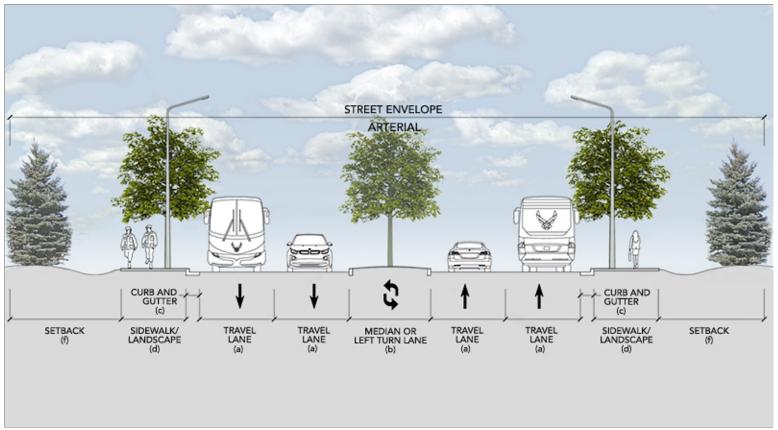
Street Envelope Section

Peterson Boulevard

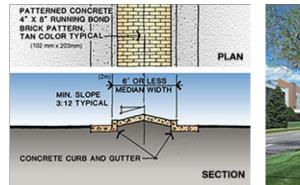
- 1. Develop and evolve a hierarchical transportation network of arterial, collector and local streets following UFC 3-201-01 and its industry references.
- 2. Provide consistent functionality throughout the installation and a level of visual quality relating to the adjacent Facility Group number.
- 3. Routes along facilities in Group 1 may have materials, finishes and features with a higher visual quality than Groups 2, 3 and 4. Reduce maintenance requirements by installing highly durable materials and finishes in routes along Group 3 industrial facilities.
- 4. Special routes may have a visual quality comparable to those along facilities in Group 1.
- 5. Create and maintain arterials with two lanes of traffic in each direction with landscaped or paved medians as applicable to the local climate and adjacent land use.
- 6. Minimize stops and turns along arterials. Eliminate on-street parking along arterials and collector streets.
- 7. Connect arterials to local streets with appropriately scaled collector streets.
- 8. Provide appropriate landscape setbacks and pedestrian buffers along all streets.
- 9. Minimize and consolidate curb cuts along streets.
- 10. Provide two basic types of lanes (travel and auxiliary) throughout the street system to accommodate continuous "through" traffic and to satisfy requirements for turning, parking, and emergency and service vehicles. Turning lanes may be used as either left-turn or right-turn lanes at intersections.
- 11. Define bicycle traffic routes in the Installation Development plan or its applicable component plans. Currently there is too little bicycle traffic to warrant designate bike lanes on streets. Bike trails with connections to off-installation trails should be considered.
- 12. Use consistent landscape treatment at all base entrances. Plant material massing, spacing, and height are characteristics that should visually reinforce the type of street.

B02.1.1. Arterial Streets

- ♠ Applicable ♠ N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)



Travel Lane (a): 12' Median (b): 12' Curb and Gutter (c): 2' Sidewalk / Landscape (d): 12') Setback (f): Min. 35' or per ATFP







Paved Median

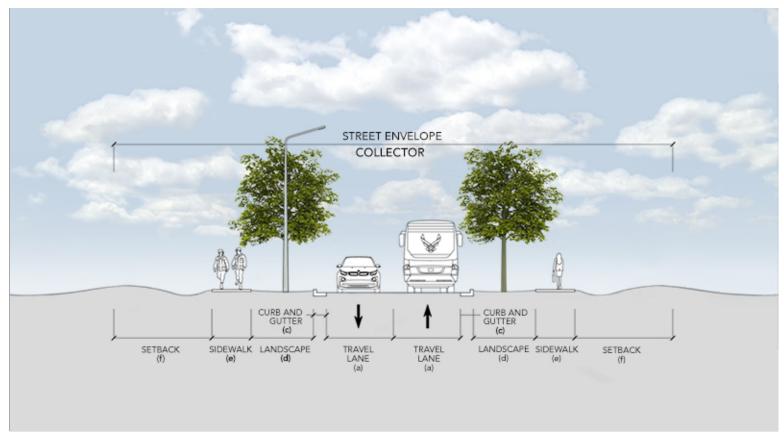
Landscaped Median

Landscape/Sidewalk

- 1. Maintain the following with this designation as arterial streets: Peterson Boulevard, Stewart Avenue, and the section of Paine Street from the Command Area to Stewart Avenue. Refer to the illustration for general dimensions that pertain to all base arterial streets.
- 2. The following specific requirements shall be incorporated into all arterial projects including roadway modifications/upgrades and associated building sites adjacent to the street.

B02.1.2. Collector Streets

- ♠ Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)

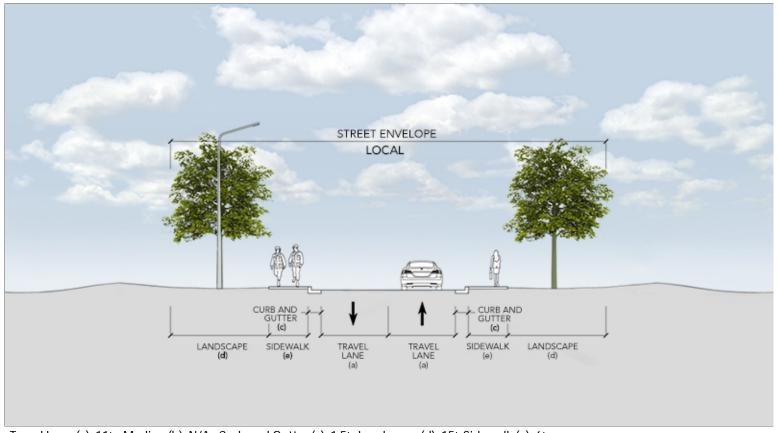


Travel Lane (a): 12' Median (b): N/A Curb and Gutter (c): 2' Landscape (d): 10' Sidewalk (e): 6' Setback (f): Min. 35' or per ATFP

- 1. Design collector streets less prominent than arterials.
- 2. Maintain the following as collector streets: Otis Street, Ent Avenue, Hamilton Avenue, Suffolk Street, Mitchell Street, Dover Avenue, Vandenberg Street, Vincent Street, Selfridge Street (between Peterson and Tyndall Street) and Paine Street (between Stewart Ave. and Hamilton Street).
- 3. Match the level of quality of street elements to the adjacent Facility Group number.

B02.1.3. Local Streets

- ♠ Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)



Travel Lane (a): 11' Median (b): N/A Curb and Gutter (c): 1.5' Landscape (d): 15' Sidewalk (e): 6'

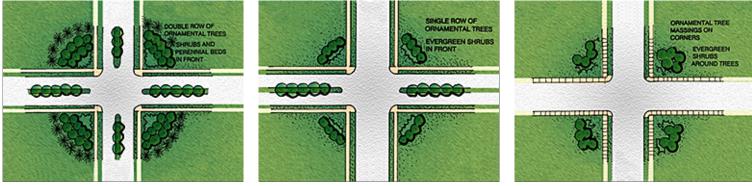
- 1. Design and maintain local streets in due proportion to the amount of traffic.
- 2. Generally encourage the development of street frontage of adjacent sites to positively contribute features such as landscaping.
- 3. Maintain consistent local streetscapes for visual and functional continuity

B02.1.4. Special Routes

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Develop all special routes consistently with those adjacent to Group 1 facilities.

B02.2. Hierarchy of Intersections

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)



- Arterial Intersection Arterial-Collector Intersection Collector Intersection
- 1. Provide a hierarchy of intersections to include arterial, arterial-collector, collector, collector-local and local following UFC 3-201-01 and its industry references.
- 2. Passive systems such as traffic circles are preferred to active systems such as signalized intersections. Aggressively pursue passive systems to lower maintenance requirements and reduce energy use.
- 3. Use the same level of visual quality found in the related streetscape, which corresponds to the adjacent Facility Group number.

B02.2.1. Arterials

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Provide a circular design that encompasses the four corners of the intersection with a double row of ornamental trees: a backdrop (outer row) of evergreen trees behind ornamental trees. In front of this, provide a large shrub bed made up of deciduous and evergreen shrubs. Provide a perennial flower bed in front of the shrubs.

B02.2.2. Arterial/Collector

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Provide a circular design including all four corners of the intersection. Use a single row of ornamental trees, with evergreen shrubs providing the foreground, and a perennial flower bed in the foreground.

B02.2.3. Coll	ectors	
Applicable	● N/A	Has large graphics to include (800px x 440px)
○ Applicable	● N/A	Has small graphics to include (250px x 188px)
1. Provide an ir	nformal gro	oup of small ornamental trees on each of the intersection four corners.
B02.2.4. Spe	cial Inter	sections
Applicable	● N/A	Has large graphics to include (800px x 440px)
Applicable	● N/A	Has small graphics to include (250px x 188px)
1. Develop all s	special inte	rsections consistently with those adjacent to Group 1 facilities.
B02.2.5. Stre	et Fronta	nge Requirements
Applicable	● N/A	Has large graphics to include (800px x 440px)
○ Applicable	● N/A	Has small graphics to include (250px x 188px)
1. Maintain op	en space b	uffers following B03.2.3. Preserves.
2. Refer to C06	.1.7. Streets	scape Landscaping for planting and screen wall requirements along street frontage.
		except in family housing areas) shall be screened from view from adjacent streets to a minimum height plantings and trees.
B02.2.6. Sigl	nt Lines	
Applicable	● N/A	Has large graphics to include (800px x 440px)
○ Applicable	● N/A	Has small graphics to include (250px x 188px)
		lines for an effective and safe traffic operation per American Association of State Highway and AASHTO) standards.

2. Sight lines will vary based on the speed and classification of the roadway or intersection. Plants and any related signage within the sight triangle should follow these rules:

- % hrubs may not exceed thirty inches (30") growing height within sight triangles.
- Trees may not be located in the sight line triangle unless there is a minimum clear understory of 6' in height. Evergreen trees will not be allowed in any sight triangles.
- %igns may not be placed in these triangles unless regulatory in nature and approved by the base traffic engineer.

B02.3. Street Elements

○ Applicable N/A	Has large graphics to include (800px x 440px)
○ Applicable ● N/A	Has small graphics to include (250px x 188px)

- 1. Emulate the streetscape area's pre-development hydrology using passive and active design features to help sustain the adjacent regionally appropriate landscape. Coordinate with the base Stormwater Management Plan.
- 2. Employ systems, materials and techniques to make streetscapes more sustainable. Consider pervious paving and reflectivity of surfaces appropriate for the local climate.
- 3. Install at-grade curbing and/or raised-profile curb and gutter as applicable to direct stormwater to bioswales and rain gardens as source water for vegetation. Do not paint concrete curbing.
- 4. Provide all on-site utility service lines and equipment below grade when adjacent to Facility Group 1. In routes along Group 2, 3 and 4, when mounting elements such as utility cabinets, communications equipment and water valves above grade is unavoidable, paint these consistently and provide visual screening following Installation Facilities Standards (IFS).
- 5. Provide traffic control devices including access control point/entry control facility signs, speed limit signs and street name signs following the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) per UFC 3-120-01. Refer to Exterior Signs also.
- 6. Follow UFC 3-120-01 for directional and wayfinding signs and address both vehicular and pedestrian traffic.
- 7. Reduce energy consumption and reduce maintenance requirements by providing street lighting only when functionally required to ensure safety and to address antiterrorism following UFC 4-010-01. Ensure the quality and quantities of lighting and fixtures are appropriate for the adjacent Facility Group number.
- 8. Replace line-hung traffic signals along Peterson Boulevard and Stewart Avenue with arm-mounted signal systems having enclosed wiring raceways.
- 9. Integrated the style of traffic signal systems with other related streetscape items such as signage, lighting, and site furnishings. All future traffic signal pole installations shall be dark bronze, steel, round poles. Avoid visual clutter at street intersections.
- 10. Incorporate the following guidelines and features for all traffic signals:
- % tandard regulation size traffic signals, one for each forward traffic lane, and one for each left-turn and/or right turn lane as necessary.
- Name of crossing street shall be mounted to horizontal arm. See Exterior Signs.
- Redestrian crosswalk sign with international human figure symbols for "walk" and "don't walk" functions shall be located on vertical pole.
- All poles and horizontals shall be steel, round, and dark bronze.
- All traffic signal pavement marking materials and installation shall meet the requirements of the latest edition of the Colorado Department of Transportation "Standard Specifications for Road and Bridge Construction", "Colorado Department of Transportation's M&S Standard", "Standard Plan No. S-614-40 dated (Feb 1, 1998)", the "Manual on Uniform Traffic Control Devices", the "National Electric Code" and all other ordinances which apply.
- **%** Pull boxes are to be concrete composite

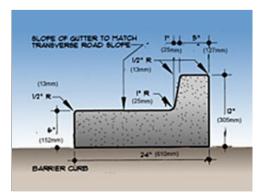
All signal poles shall have hand-holes at the base. All wire connections to be made in pole and be above ground level.

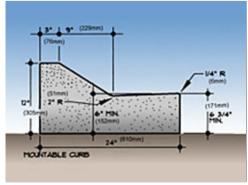
B02.3.1. Paving

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Pavement design shall comply with UFC 3-250-01. Ensure appropriate analysis and design of subgrade conditions to support low maintenance high performance pavements. Apply best practices from the Construction: Seasonal Frost Conditions section of the UFC.
- 2. Materials for pavements shall be specified in accordance with UFC 3-250-01 and must conform to requirements set forth in the Unified Facility Guide Specifications (UFGS) for concrete and asphaltic concrete.

B02.3.2. Curb and Gutter

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)





Standard Barrier Curb

Standard Mountable Curb

- 1. Continuous concrete curbs and gutters shall be provided at street edges areas of the installation to:
- %Help control drainage.
- Deter vehicles from leaving the pavement.
- %Protect pedestrians.
- Delineate the pavement edge.
- Present a more finished general appearance.
- % Assist in orderly and disciplined development of the street system.
- 2. Provide dimensions following the illustrations for Standard Mountable Curb, Standard Barrier Curb and Standard Header Curb.
- 3. Use the barrier curb design at arterial streets and at raised central medians. Use the mountable curb design at collector and local streets. Use the header curb design at locations where a permanent, finished edge is required, but where pavement drainage can flow onto adjacent areas such as bioswales and rain gardens.

B02.3.3. Utili	ity Servic	e Elements
Applicable	● N/A	Has large graphics to include (800px x 440px)
Applicable	● N/A	Has small graphics to include (250px x 188px)
		e lines below grade when streets are adjacent to Facility Group 1; when mounting elements (such as
		cations equipment and water valves) above grade is unavoidable, paint these consistently Dark Bron -luster finish) and provide visual screening following Site Development, Landscaping.
2. Overhead se	rvice lines	along streets adjacent to Facility Groups 2, 3 and 4 are prohibited.
B02.3.4. Traf	fic Signs	
Applicable	● N/A	Has large graphics to include (800px x 440px)
Applicable	● N/A	Has small graphics to include (250px x 188px)
1. Refer to Exte	rior Signs,	Colors and Types for Traffic Control Devices, which includes signs.
B02.3.5. Stre	et Liahtii	ηα
Applicable	•	Has large graphics to include (800px x 440px)
C III		
○ Applicable	● N/A	Has small graphics to include (250px x 188px)
1. Refer to the I	Lighting se	ection for appropriate applications along streets.
	5 5	
B02.3.6. Oth	er	
Applicable	● N/A	Has large graphics to include (800px x 440px)

Bronze

B03. OPEN SPACE / PUBLIC SPACE

○ Applicable N/A

Comply with Air Force Corporate Standards for Installation Elements: http://afcfs.wbdg.org/installation-elements/index.html

Has small graphics to include (250px x 188px)

Comply with AF Corporate Standards for Open Space / Public Space: http://afcfs.wbdg.org/installation-elements/open-space-public-space/index.html

B03.1. Plazas, Monuments and Static Displays

○ Applicable ○ N/A Has large graphics to include (800px x 440px)

♠ Applicable ♠ N/A Has small graphics to include (250px x 188px)



- 1. Natural features and culturally or historically significant features or events may be recognized and acknowledged with physical elements such as plazas, monuments and static displays. However, limit these elements on a base to ensure judicious use of resources and to reduce ongoing maintenance requirements.
- 2. Design highly durable plazas, monuments and static displays with a level of quality comparable to Facility Group 1.
- 3. Link plazas, monuments and static displays to the pedestrian circulation system. Install landscaping, site furnishings and lighting appropriate for the application and local climate following applicable sections of Installation Facilities Standards (IFS).
- 4. Select systems, products and materials for paving, walls, and structures following IFS.

B03.1.1. Paved Plazas

Applicable N/A Has large graphics to include (800px x 440px)

Applicable N/A Has small graphics to include (250px x 188px)





Tooled Control Joints

Varied Tile Patterns

- 1. Mitigate heat island by providing high-albedo, shaded plazas. Pervious pavers shall be used on all plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer shall incorporate appropriate expansion and construction joints.
- 2. Pavers shall match the color of pavers used on adjacent sidewalks using base standard range of beiges, tans, browns, or terra cotta. Bricks used on plazas shall typically be 4" x 8" size.

B03.1.2. Sculptures, Markers and Statuary

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)



Commemorative Plaque

- 1. Relate new sculpture, markers and statuary to Peterson AFB's aerospace and air defense design theme. Generally limit these elements to frequently used locations adjacent to Facility Group 1 and highly traveled community pedestrian spaces.
- 2. Consider entry gates as possible sites for new displays. The west gate shall be the initial area of focus.
- 3. All proposed memorials shall follow AFI 36-3108 and be limited to highly deserving individuals or groups as deemed appropriate by the installation leadership. Living memorials (tree plantings / etc) are discouraged due to added maintenance requirements.
- 4. When sculpture requires a base, match the materials and / or color palette of adjacent buildings.
- 5. Use direct or indirect lighting to accentuate features or enhance an intended effect.

6. Ensure that all sculpture, markers and statuary are honorable and inspiring, provide a sense of place, positively contribute to the base's visual quality, and encourage pride for the community and the US Air Force.

B03.1.3. Static Display of Aircraft

○ Applicable N/A Has large graphics to include (800px x 440px)

• Applicable N/A Has small graphics to include (250px x 188px)







Dynamic Mounting

Street Intersection Display

Interpretive Plaza

- 1. Follow IFS base-wide standards for all elements of the display area with specific attention to traffic sight lines, pedestrian circulation, site furnishings, signs, and lighting. Address requirements for the Facility District as well.
- 2. Generally locate concrete base/foundation structures for static displays below grade.
- 3. At static displays where pedestrian paths are provided, a minimum of one trash receptacle and one bench shall be provided. Receptacle and bench design must conform to IFS requirements.

B03.2. Grounds and Perimeters

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Provide formal spaces for parade and review functions, recreational areas and parks following the base's Installation Development Plan (IDP) and Installation Facilities Standards (IFS). Refer to the Site Furnishings topic for additional information.
- 2. Maintain preservation areas following the IDP and IFS.
- 3. Comply with UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings and UFC 4-022-03 Security Fences and Gates for all elements associated with the base's gates and perimeter fence.
- 4. Identify and describe base-wide utility corridors in the IDP.
- 5. Base-wide utility infrastructure shall be inconspicuous. Bury utility service lines below grade when adjacent to Facility Group 1 and when economically feasible for Facility Groups 2, 3 and 4. When service lines are located above grade, create an ordered, coordinated appearance.

- 6. Follow the requirements of this IFS regarding all utility structures and service lines located above grade that visually impact the installation.
- 7. Where screening of utility equipment and structures is provided, allow adequate and proper clearance for safety and maintenance.
- 8. Reduce visual clutter and visual impact of the following items through a combination of careful placement, screen walls, landscaping and painting:
- Ælectrical switch-stations.
- Sewage lift stations.
- %Water well pumps, storage tanks and/or related structures.
- % as piping, meters and similar incidental items.
- % bove ground fuel storage tanks.
- Any ground-mounted freestanding utility item exposed to view.
- 9. Larger structures such as electrical switch-stations, sewage lift stations, fuel storage tanks and mechanical/electrical equipment shall be screened from view, using materials, forms, and colors in the screen walls which match those respective design elements present at adjacent buildings.
- 10. Paint above-ground equipment and associated components such as electrical piping or exposed plumbing lines Dark Bronze to match FSC 30040 in a matte (low-luster) finish. Use standard Peterson Brown to match Federal Standard Color (FSC) 10091 in open space, parks and preserves.
- 11. Maintain currently buried utility service lines as a visual asset.
- 12. Bury the following exposed above-grade items in future projects when economically feasible:
- Ælectrical power grid and service lines.
- Telephone lines.
- %Cable TV lines.
- %Communications lines.
- Æxterior lighting service lines.
- Any similar system of above-ground lines serving Peterson AFB.
- 13. Consolidate and enclose service utility lines in underground utility corridors when feasible. Create routes along the inside edge of parking lot islands.

B03.2.1. Parade Grounds

○ Applicable N/A	Has large graphics to include (800px x 440px)
Applicable ● N/A	Has small graphics to include (250px x 188px)

- 1. Follow UFC 3-201-02, Appendix B for the planning and design process and criteria for parade grounds.
- 2. Establish and maintain parade grounds only where there is a confirmed need and provide landscape materials appropriate for the locale following IFS.
- 3. Bleachers may be installed only when there is a documented requirement at parade grounds. Nonferrous metals that do not require painting or going maintenance are preferred. The Base Civil Engineer shall determine quantities, sizes, and products on a case basis.

B03.2.2. Parks

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)



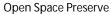
Park and Playground

- 1. Bleachers may be installed only when there is a documented requirement at parks and fields for recreational events. Follow guidance under Parade Grounds.
- 2. Picnic pavilions may be provided in parks where there is a documented need.
- 3. Prohibited picnic pavilion materials include wood, concrete masonry units (CMU) or metal pre-manufactured storage sheds.
- 4. When picnic pavilions are permitted near facilities, generally match the architecture of the adjacent facility and provide a level of quality of the adjacent facility group number.

B03.2.3. Preserves

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)







Integrated Force Protection



Natural Open Space

- 1. Preserve open space buffers along the installation's boundaries on the west, north and east to satisfy Force Protection requirements and to provide visual and physical relief from adjacent properties.
- 2. Preserve the following areas to prevent further development:
- The linear open space parallel to the Peterson Main east installation boundary, extending south to the golf course.
- The linear area of land connecting Peterson Main with the Peterson East area constrained by the new north-south runway for the Colorado Springs Municipal Airport.
- The steep hillside area along the east side of the Peterson East area parallel to Marksheffel Road.
- The linear space at the west end of Stewart Avenue, which connects to Powers Boulevard.
- The land along each side of Peterson Boulevard (referred to as the "Peterson Corridor Open Space Preserve") in the Command Area.
- 3. Peterson Boulevard, which has been designated as part of the Major Corridor Open Space Preserve, shall have varying overall widths as defined in the Installation Development Plan. The following specific buildings are listed as establishing setback lines:
- %Building 1 and Building 1840 north of Paine Street.
- Building 959 (Clinic) and Building 725 (Med Group Annex) along the west side of the street south of Stewart Avenue.
- The Building 920 on the east side of the street south of Stewart Avenue.
- %The MSF Building (350).
- 4. The following specific requirements shall be incorporated into all project designs within the Peterson Corridor Open Space Preserve:
- **Buildings** of any size or kind shall not encroach into the preserve at any point. Existing buildings in the preserve, such as Building 1470, may remain. Small additions onto existing buildings may be permitted, provided the overall square footage (footprint) does not exceed 2,000 square feet at each existing building, and providing that the open nature of the preserve is not compromised.
- All parking lots should be located outside the preserve, except that no part of any parking lot can be located less than fifty feet (50') from the curb at the adjacent street edge of Peterson Boulevard. Parking lots located in the preserve shall typically be located toward the outer edges (setback line) of the preserve, and must incorporate special landscaping and screen walls as described in Section 5.7 Parking Lot Landscape.
- % Along both sides of Peterson Boulevard, provide a row of Norway Emerald Queen Maple trees, spaced thirty feet (30') on center. The trees shall be lined up both along the street and laterally (across the street) to provide a uniform, rhythmic and formal visual effect. These trees shall be located in the divider strips or on the backside of the sidewalks if divider strip is too small or non-existent.
- %n the central median, provide a minimum of one (1) Honey Locust (If median is a minimum of 10' wide) for every one hundred feet (100'), and fraction thereof. Install low story shrub material not exceeding 30" in height throughout median. If central median is between 6-10' wide use only shrub material. If under 6' wide follow the stamped concrete detailing. Trees and shrubs may be grouped to accommodate Peterson Blvd. streetscape traffic safety requirements (sight visibility triangles). A concrete surface may also be used behind the curb as a splash plate to provide protection from snowplows and chemicals associated with snow removal.
- Kentucky Blue Grass is currently the principal ground plane material, but should be removed and renovated over time to low water shrubs in wood mulch beds. Rock mulch should also be added at narrow parkway areas & at median nose points where it is inefficient to maintain grass or plant material and to help break up planting beds.

5. Maintain the park-like appearance of the Major Boulevard corridor area. If there is an encroachment within the setback area, screening along the street frontage will be made up of a solid screen/ retaining wall, berming, and shrubbery.

The solid screen wall shall be at least four feet (4') high and shall be constructed using the predominant building materials of the character area.

Berming should cover at least three feet (3') of the solid screen wall and is intended to be gradual with slopes not exceeding 3:1.

% hrubbery located along the edge of the solid screen wall should be provided for additional softening and screening. Provide 1 shrub per 5 lineal feet of frontage. Shrubbery should be laid out in groupings or masses at the perimeter of the lot area. Shrubbery should not necessarily be evenly spaced or distributed along this edge. At least 60% of these plant materials must be evergreen.

In addition to these screening requirements, the balance of the parking area that encroaches into the open space preserve must meet more stringent requirements of increased interior area and parking lot tree quantities.

B03.2.4. Perimeter Fence

○ Applicable • N/A Has large graphics to include (800px x 440px)

♠ Applicable N/A Has small graphics to include (250px x 188px)





Entrance Control Facility

Facility at Perimeter Fence

- 1. Design, install and maintain the base's perimeter fence following UFC 4-022-03.
- 2. Stringently comply with AT / FP requirements following UFC 04-010-01 for all spaces adjacent to the base's perimeter fence and all gates.
- 3. Fencing, gates and other elements that are associated with the main gates shall be a level of quality equivalent to Facility Group 1.
- 4. Maintain a positive visual quality along the traffic corridor on both sides of the main gates and reinforce the base's aerospace visual theme in applicable elements and features. Specifically address pedestrian access, circulation and common areas.

C. SITE DEVELOPMENT

Comply with Air Force Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

C01. SITE DESIGN

Comply with Air Force Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Site Design / NEPA: http://afcfs.wbdg.org/site-development/site-design-nepa/index.html

C01.1. Site Design Considerations

♠ Applicable N/A Has small graphics to include (250px x 188px)



Group 1 Plaza



Plaza Alignment with Entrance



Pedestrian Access



Integrated Force Protection Measures

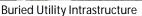


Rainwater Harvesting



Open Space Buffer







Adjacent Parking



Functional Paved Areas







Shared Open Space



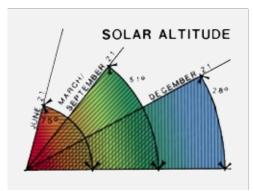
Internal Pedestrian Path

- 1. Collect documentation to validate approvals and completion of the NEPA process.
- 2. Ensure site design compliance with the Installation Development Plan (IDP) and its component plans and Installation Facilities Standards (IFS).
- 3. Promote integrated design with on-site solutions such as engineered small-scale hydrologic controls verses base-wide infrastructure; consider open space, natural features, bioswales, building roofs, streets, and paved surfaces.
- 4. Limit the impact of development on land and water resources. All site elements and infrastructure shall reinforce an image of sustainability, with reduced energy demand, renewable-energy usage, and water conservation.
- 5. Consider energy conservation during site design for the following categories: building and site lighting, auxiliary systems and equipment (refrigerators, elevators, etc.), building envelope, electric power and distribution, HVAC systems and equipment, service hot water, energy management (metering, EMCS).
- 6. Coordinate on-site renewable-energy systems and components to minimize area requirements and maximize efficiencies. Appropriately buffer and screen these and other mechanical systems and equipment.
- 7. New building projects should preserve open space and protect natural habitat.
- 8. Conform to existing topography to the greatest extent possible and use slopes to increase site and building efficiencies. Design sites to minimize irrigation and impacts to storm water runoff.
- 9. Carefully study new project sites to identify the character of adjacent buildings, streets, landscaping, and site design elements. Reinforce the existing character in new site design.
- 10. Consider relationships to adjacent facilities and district / centralized heating and cooling infrastructure and cost effectively connect building systems to harvest heat, grey water or other beneficial byproducts.
- 11. Minimize existing and planned obstructions from landscaping, structures, topography, and adjacent developments to preserve solar access and natural ventilation.

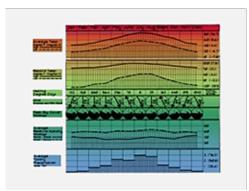
- 12. Purposefully integrate service access, receiving and storage areas to eliminate the need for visual screening.
- 13. Appropriately connect to the base network of streets, sidewalks and trails using drive aisles, parking areas, walkways, paths, and bicycle routes addressing both vehicles and pedestrians.
- 14. Applicably coordinate heat island mitigation in paving and roof designs when implementing an integrated approach to stormwater management.
- 15. Provide "Designated Tobacco Areas" at approved or waivered locations.

C01.2. Building Orientation

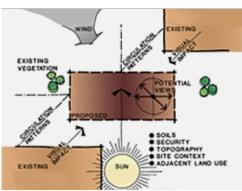
- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)



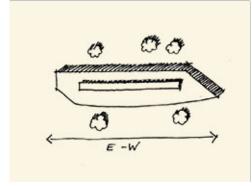




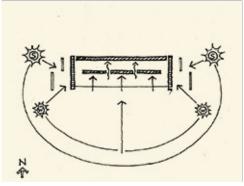
Local Climate Data



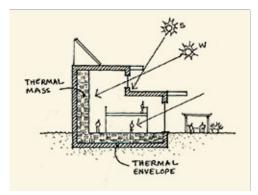








Optimum Solar Control



Maximized Southern Exposure

- 1. Ensure the site will accommodate optimum requirements for building orientation, which is with the long axis parallel to the east/west direction for rectilinear CONUS buildings.
- 2. Meet Installation Facilities Standards (IFS) requirements for locating the building's passive and renewable-energy systems—including geothermal and solar systems—and exterior shading systems.
- 3. Locate buildings and permitted ancillary structures to promote solar gain (winter), solar shading (summer), daylighting, natural ventilation, rainwater harvesting, wind buffering and other beneficial passive systems. Consider natural ventilation during the design of HVAC systems.

- 4. Limit the use of courtyards and restrict their use to Group 1 and 2 facilities. When provided, conform to the geometry of rectilinear narrow buildings developed along an east-west axis. Define space with a building's exterior wall and with supplementary screen walls matching facility materials and detailing. Locate these near the main entrance, align with view corridors, and provide appropriate landscaping, site furnishings and lighting.
- 5. At a minimum, a courtyard must have one trash receptacle, one bench, moveable or built-in planters, and one (1) picnic table with seating. Generally use concrete or brick paving at all courtyards following standards for plazas.
- 6. Consider relationships to adjacent sites and their facilities and infrastructure, and cost effectively integrate building systems to harvest heat, grey water or other beneficial byproducts.
- 7. Consider the "public side" of the building, its views and the location of the main entrance.

CO2. UTILITIES

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Utilities: http://afcfs.wbdg.org/site-development/utilities/index.html

C02.1. Utility Components

○ Applicable • N/A Has large graphics to include (800px x 440px)



Buried Utility Servies



Screened Utility Component



Finishes to Match Wall



Painted Utility Components



Buried Utility Lines



Components Painted to Match Wall

- 1. Provide all on-site utility service lines below grade for Facility Group 1; when mounting elements (such as utility cabinets, communications equipment and water valves) above grade is unavoidable, paint these consistently and provide visual screening following Installation Facilities Standards (IFS).
- 2. Overhead service lines to Facility Group 2, 3 and 4 are prohibited. Bury these lines to include: electrical power grid and service lines; telephone, cable TV, and communications lines; exterior lighting service lines; and any similar system serving Peterson AFB.
- Consolidate and enclose buried service lines in underground utility corridors and route these along the inside edge of parking lot islands.
- 4. Provide installation of utility infrastructure to support near term and future electric vehicle charging stations.
- 5. Define all service entry points into the building and route distribution below grade into an interior space within the facility; exposed conduits, cables and wires on exterior walls are not permitted for Facility Group 1.
- 6. Screen the following elements with screen walls integrated into the adjacent building design: storage sheds, pre-manufactured (temporary) buildings, wood gazebos, miscellaneous utility structures, transformer buildings and CONEX boxes.
- 7. Screen utility equipment and structures while allowing required clearance for safety and maintenance for the following: building-related mechanical/electrical equipment; gas piping, meters and similar incidental items; and any ground-mounted free-standing utility item exposed to view. (Note: window air conditioners are not permitted.)
- 8. Above-grade equipment, electrical piping and exposed plumbing lines shall be painted standard Peterson Brown (Federal Standard Color (FSC) 10091) or per Facility District requirements.
- 9. Include consideration of appropriate placement of meters in support of Automated Revenue Management Services (ARMS).
- 10. Limit exterior mechanical distribution systems such as exterior steam, chilled water, and hot water distribution to Group 3 facilities; when required for Group 1 and 2 facilities integrate with the architecture and provide visual screening following IFS.
- 11. Direct roof drainage to underground collection when feasible or provide splash blocks / paved channels to intercept roof drainage at grade.

C03. PARKING AREAS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdq.org/site-development/index.html

Comply with AF Corporate Standards for Parking Areas: http://afcfs.wbdg.org/site-development/parking-areas/index.html

C03.1. Configurations and Design

○ Applicable ● N/A	Has large graphics to include (800px x 440px)
♠ Applicable ○ N/A	Has small graphics to include (250px x 188px)



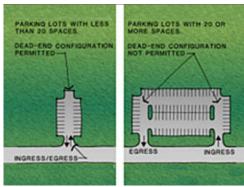
Appropriate Size and Configuration



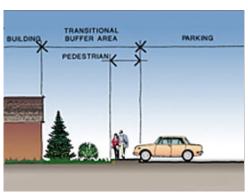
Adjacent Parking Area



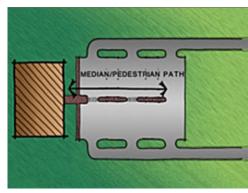
Residential Guest Parking



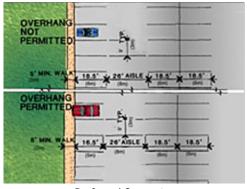
Internal Layout



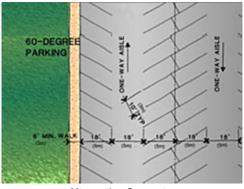
Appropriate Buffers



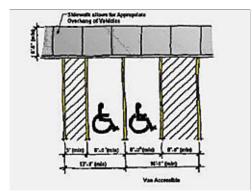
Defined Pedestrian Path



Preferred Geometry



Alternative Geometry



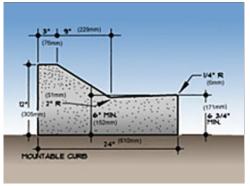
ADAG / ABA Parking

- 1. Evaluate adjacent sites and cost-effectively consolidate parking areas to maximize efficient use; ensure that all areas meet accessibility guidelines.
- 2. The preferred arrangement is off-street lots containing no more than seventy-five (75) to one hundred (100) full-car spaces. Facilities requiring more than one hundred (100) spaces shall have a series of lots connected by an external perimeter access drive.
- 3. Provide the number of spaces required for a facility on the site and meet design requirements for following Air Force Manual 32-1084. Allow sufficient space and potential future expansion.
- 4. Parking lots must accommodate all vehicles that will serve the facility. Provide access for fire apparatus according to NFPA.
- 5. Parking lot layouts that promote cross-traffic between parallel streets should be avoided for safety reasons.

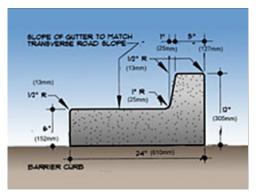
- 6. Generally envision on-site parking as a series of small connected singular areas selectively placed around the facility served, rather than a single large area; buffer parking areas from the facility main entrance with a transition space and provide drop-offs to decrease close-in parking.
- 7. Locate all parking lots outside required setbacks and preserves. Encroachments must be approved on a case basis and incorporate landscaping, berms, and screen walls as required by Installation Facilities Standards (IFS). Setback requirements from buildings shall be calculated from UFC 4-010-01 Antiterrorism Standoff Distances for Buildings.
- 8. Appropriately size loading and service dock areas based on operational requirements. Locate these areas to the rear or sides of a building, away from the main building entrance, related high visibility areas, or an incompatible adjacent land use. Clearly separate service areas from adjacent parking lots and access drives with curb and gutter and landscaped "divider strips."
- 9. Dead-end parking lots shall be avoided and two access drives provided for lots exceeding twenty (20) spaces. If additional access (ingress/egress) drives cannot be provided for larger lots, convenient interior circulation should allow for efficient maneuvering of vehicles.
- 10. Access drives, which serve parking lots, may be either two-way or one-way.
- 11. Two-way access drives shall be twenty-six feet (26') wide measured from back of curb to back of curb. One-way access drives shall be fifteen feet (15') wide measured from back of curb to back of curb.
- 12. Access drives shall be separated from street intersections by a minimum distance of: (a) one hundred feet (100') along arterial streets, (b) seventy-five feet (75') along collector streets, and (c) fifty feet (50') along local streets. To minimize conflicts with street traffic, parking lot ingress and egress access roads should be kept to the minimum necessary.
- 13. Access and service drives should accommodate the largest vehicle serving the facility.
- 14. 90-degree spaces and two-way traffic aisles shall typically be used. If required by site limitations or high rate of turnover, 60-degree spaces may be used with one-way traffic aisles. Use consistent and stall sizes throughout a parking area.
- 15. Parking space dimensions shall be nine feet (9') by eighteen feet (18'-0"); where vehicle overhang is permitted, provide stalls nine feet (9') by sixteen feet six inches (16'-6").
- 16. Motorcycles can be placed at 4 ½' width, thus two per standard vehicle space. Motorcycle parking must have concrete pavement surfaces to support motorcycle kick stands.
- 17. Provide parking spaces for disabled use in quantities, sizes and locations as prescribed in the Architectural Barriers Act (ABA).
- 18. Consider locations and requirements of near term and future electric vehicle charging stations.
- 19. Designate preferred parking for low-emitting and fuel-efficient vehicles (for 5% of the total vehicle parking capacity on site) and carpools near the main entrance.
- 20. Consider shading for parking lots following a LCCA. Consider cost-effectively integrating solar photovoltaic arrays into covered parking structures.
- 21. Reserved parking is discouraged except for Facility Group 1. The Base Security Forces Squadron shall determine the number of reserved parking spaces on an as-needed basis.
- 22. On-street parking is discouraged except in multi-use areas and family housing areas. When used, provide approved on-street parking configurations following UFC 3-201-01.
- 23. Drainage water from parking lots should be directed to adjacent landscaped areas to maximize rainfall and snowmelt benefits. In some cases, dry well and small retention ponds may be necessary to accommodate runoff from larger paved areas.
- 24. A principal factor in parking lot grading shall be to provide positive drainage away from buildings and to prevent ponding of water on pavement surfaces.

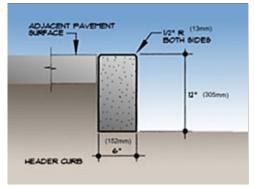
feet by the use of berms and/or plantings. A minimum of 50% of the affected parking lot perimeter must have the required screen.				
26. Signage used in conjunction with reserved parking must conform to AFCFS and IFS.				
C03.1.1. Paving and Striping Applicable N/A Has large graphics to include (800px x 440px)				
Applicat	ble N/A Has small graphics to include (250px x 18	88px)		
Facility Grou	ip 1 paving materials shall be as follows.	Facility Grou	p 3 paving materials shall be as follows.	
Primary:	Permeable pavers	Primary:	Asphalt	
Secondary:	Permeable asphalt	Secondary:	Concrete where operationally required	
Accent:	Concrete edging	Accent:	N/A	
Facility Grou	IP 2 paving materials shall be as follows.	Facility Grou	p 4 paving materials shall be as follows.	
Primary:	Asphalt	Primary:	Asphalt	
Secondary:	Permeable pavers	Secondary:	N/A	
Accent:	Concrete edging	Accent:	N/A	
1. Parking stall areas in Groups 1 and 2 shall be constructed of permeable brick pavers. Paver stall areas shall be separated from the asphalt drive aisles with a 6" wide by 12" deep at grade concrete edge barrier.				
2. Porous asphalt is not an acceptable product for the local climate at Peterson AFB; porous concrete may be considered on a case basis.				
3. Cost-effectively provide light-colored concrete to reduce heat island effect; otherwise install asphaltic concrete paving. Dirt, gravel, and grass lots are not allowed.				
4. Use consistent striping, angles and stall sizes in all parking areas.				
5. All parking shall be marked with white stripes of paint or applied vinyl coatings. Red or yellow markings shall only be used for safety purposes and must be kept to a minimum. All lines shall be four inches (4") wide.				
6. Disabled spaces shall be marked with signs following section C08.1.8.				
C03.1.2. C	Curbing			
Applicat	ble N/A Has large graphics to include (800px x 44	40рх)		
Applicat	ble N/A Has small graphics to include (250px x 18	88px)		

25. Screen open parking lots (except in family housing areas) from view from adjacent buildings with a minimum height of three



Concrete





Mountable Barrier Header

Facility Group 1 curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Primary:

Secondary: N/A

Accent: N/A Accent: N/A

Facility Group 2 curbing / edging materials shall be as follows.

Facility Group 4 curbing / edging materials shall be as follows.

Facility Group 3 curbing / edging materials shall be as follows.

Primary: Concrete Primary: Concrete

Secondary: N/A Secondary: N/A

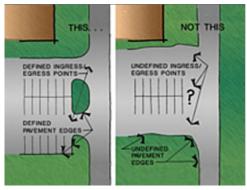
N/A Accent:

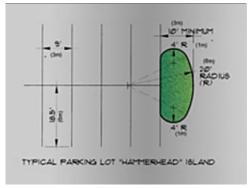
Accent: N/A

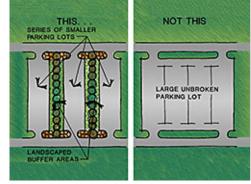
- 1. Define all parking lots edges with curbing to present a clean, orderly appearance, eliminate significant safety hazards, and to define and conserve transitional landscaped areas between parking lots and adjacent buildings. All curbs shall be the rolled (mountable) type.
- 2. Integrate curbing, permeable paved areas, and parking islands with the stormwater system and direct stormwater to bioswales and rain gardens as source water for regionally appropriate native vegetation.
- 3. Wheel stops are allowed on a case-by-case basis.

C03.1.3. Internal Islands and Medians

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable \(\cap \) N/A Has small graphics to include (250px x 188px)







Defined Entrance Internal Island Internal Median

- 1. Install landscape islands and medians as visual breaks and to reduce heat island effects with consideration for snow removal. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
- 2. When lighting is necessary, contain fixture bases within internal landscape islands.

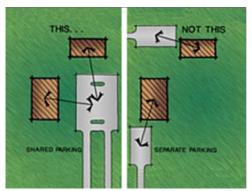
C03.2. Parking Structures

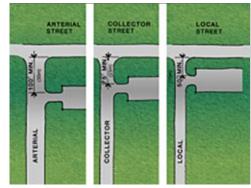
- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Parking structures are permitted in land-constrained locations when economically feasible.
- 2. Consider near term and future electric vehicle charging stations and renewable energy generation development during the analysis and design.
- 3. Consider opportunities for integrating parking structures into multi-use developments with pedestrian-oriented uses located on the ground floor and parking on upper levels.
- 4. Structures may be constructed below grade with roofs serving as vegetated areas or plazas.

C03.3. Connectivity

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)







Central Pedestrian Connection

Coordinated Arrangment

Appropriate Street Connectivity

- 1. Refer to the Installation Development Plan (IDP) for locations of transit stops and pedestrian and cycling networks; provide appropriately sized sidewalks and bike paths to connect facilities and users to these networks.
- 2. Provide amenities such as rain and shade shelters, trees, and benches to encourage and facilitate use of public transportation.
- 3. Evaluate the IDP for the current and planned network of roads and optimally develop vehicular access to and from the site.
- 4. Define pedestrian access with approved hardscape, provide shading, and provide safe, efficient travel from vehicles along the primary path from the parking area to the main entrance of the building. Emphasize building main entrances in the alignment of landscape median/pedestrian paths.

CO4. STORMWATER MANAGEMENT

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Stormwater Management: http://afcfs.wbdq.org/site-development/stormwater-management/index.html

C04.1. Stormwater Requirements

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)



Integrated Landscape



Roadway Landscaping



Roof Rainwater Surface Collection







Roof Rainwater Subsurface Collection

Trench Drain

Surface Swale with Rock Mulch

- 1. Sustainable site design shall include the application of stormwater management strategies. Configure project sites to minimize stormwater runoff where possible.
- 2. Design all stormwater systems including retention ponds, detention areas, channels, etc. as on-site amenities that are consistent with natural systems and drainage patterns, that help sustain the base landscape with beneficial functionality and that provide aesthetic appeal; coordinate with the base Stormwater Management Plan.
- 3. Incorporate bioswales into the design of all roadway, parking and facility roof systems to enhance water quality and support the overall stormwater system.
- 4. In order to reduce stormwater runoff & lower long-term infrastructure cost for parking lots, Peterson AFB now requires all new parking lots to utilize permeable pavers. Please refer to the Parking Areas section of this IFS.
- 5. Pervious paving shall be used on all sidewalks and low traffic parking lots to maintain natural stormwater flows and promote on-site infiltration. Address water quality systems that remove pollutants from the stormwater runoff such as vegetated swales.
- 6. When underground drainage systems are required establish a maintenance program to include removal of sediments and debris; inspect joints seasonally for alignment to prevent leakage and the development of voids and surface failures.
- 7. Cost-effectively integrate stormwater systems with ATFP measures.

CO5. SIDEWALKS, BIKEWAYS AND TRAILS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Sidewalks, Bikeways and Trails: http://afcfs.wbdg.org/site-development/sidewalks-bikeways-trails/index.html

C05.1. Circulation and Paving

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)



Efficient Geometry



Axial Approach to Facility



Trail Surface



Alignment of Architectural Feature



Detached Sidewalk at Street



Defined Crosswalk

Facility Group 1 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Pervious Pavers

Secondary: N/A

Accent: Concrete Edging

Facility Group 2 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Pervious Pavers

Secondary: N/A

Accent: Concrete Edging

Facility Group 3 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Permeable concrete

Secondary: N/A

Accent: N/A

Facility Group 4 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Permeable concrete

Secondary: N/A

Accent: N/A

- 1. Maintain efficient geometry and accessibility to connect building entrances to adjacent parking areas and activity areas and to the base transportation system following ATFP. Efficiently use materials to optimize life-cycle costs and to minimize maintenance.
- 2. Generally conform horizontal layouts of sidewalks to the geometric configuration of adjacent buildings, streets, parking lots, and other adjacent related site amenities. Occasional meanders and/or jogs may be included to capture views, to coordinate with landscaping or accommodate site constraints.
- 3. Walks in parking areas shall provide a direct path using "safe islands" and "peninsulas" to encourage safety. Walks parallel to streets shall follow streetscape guidelines. Clearly mark pedestrian crossings at vehicular routes.

- 4. Mitigate heat island by providing high-albedo, shaded sidewalks. Pervious pavers shall be used on all sidewalks, plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer shall incorporate appropriate expansion and construction joints.
- 5. Only experienced contractors will install pervious pavements.
- 6. Consider an integrated approach that could include stormwater management (permeable surfaces) and complement the design of the storm drainage system when appropriate.
- 7. Pedestrian paths should be at least 5' in width to allow for comfortable side-by-side walking.
- 8. Sidewalks leading to a building main entrance and at the interior of parking lots shall be a minimum width of 6'. Walks greater than 10' wide may be used at high-density pedestrian areas where volumes of traffic justify added material.
- 9. Where cars park adjacent and head-in to the sidewalk and wheel stops are not used, such perimeter walks shall be increased to a minimum width of 8' to accommodate overhangs of the parked vehicles.
- 10. Pavers shall conform to the color range of beiges, tans, browns, or terra cotta. Bricks used on walks shall typically be 4" x 8" size.
- 11. Connect to the bicycle circulation system and provide bicycle parking with a suitable means for securing bicycles following IFS. Consider changing/shower facilities for use by cyclists.
- 12. Refer to the Peterson AFB Pedestrian & Bicycle Circulation guide for development of future trails, bicycle paths, and sidewalks.

C05.1.1. Ramps and Stairs

- Applicable N/A Has large graphics to include (800px x 440px)
 Applicable N/A Has small graphics to include (250px x 188px)
- 1. Use ramps instead of steps for sidewalks, bikeways and trails and at all buildings. Where steps are unavoidable, the following shall apply:
- a. The minimum clear width of steps shall be five feet.
- b. Materials shall be limited to combinations of concrete and brick conforming to this IFS.
- c. Minimum riser height shall be 4" and a maximum of 7", and the minimum tread depth shall be 11".
- d. Open treads or recesses at nosings that may catch shoe toes shall not be used.
- e. Provide handrails at steps containing two (2) or more risers. Do not use a central rail unless steps are more than 88" wide.

C05.1.2. Lighting

- 1. Lighting shall be provided for all steps and landing areas where traffic warrants.
- 2. Refer to the Lighting section for path lighting along sidewalks, bikeways and trails.

CO6. LANDSCAPE

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Landscape: http://afcfs.wbdg.org/site-development/landscape/index.html

C06.1. Climate-based Materials

○ Applicable • N/A Has large graphics to include (800px x 440px)

Applicable N/A Has small graphics to include (250px x 188px)







Group 1 Facility Arrangement

Native Plant Species

Rock Mulch and Planting

- 1. Use only native, naturally occurring, drought tolerant indigenous plant species (including grasses) appropriate for the semi-arid region to promote energy efficiency and water conservation, preserve drainage patterns, inhibit erosion, improve air quality, lower maintenance, and add beauty.
- 2. Follow details and specifications of the American Standard for Nursery Stock (ANSI Z60.1–2004) or current edition.

C06.1.1. Landscape Design Concept

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)



Integral Force Protection Measures



Preserved Native Grasses



Internal Facility Landscaping

- 1. Create and maintain a well-landscaped image commensurate with a major Air Force Headquarters base. Preserve the existing landscape however for new development emulate the natural character of the prairie. Follow UFC 3-201-02 Landscape Architecture.
- 2. Landscaping is required for all newly developed sites and facilities; preserve existing native landscape where possible and avoid overplanting.
- 3. Concentrate landscaping in Facility Group 1 and along major thoroughfares and integrate these landscaped areas into the base's stormwater management plan. Refer to the Streetscape Envelope Standards in this IFS.
- 4. All Facility Group 1 and 4 sites shall be landscaped at their entire perimeter; limit formal planting arrangements to formal spaces typically associated with Group 1. Landscape public spaces near the main entrances of Group 1 facilities.
- 5. Facility Group 2 and 3 sites may have a native undisturbed landscape except at the main entrances of Group 2.
- 6. Provide open spaces as transitions between developed and native areas that promote quality of life and provide visual relief and allow walkable connections to the transportation system.
- 7. Return suitable areas to a natural state to minimize and, whenever possible, eliminate ground maintenance requirements; expand prairie areas where appropriate with native plants to eliminate mowing and maintenance requirements.
- 8. In tree clusters replace grass with naturalized shrub beds and leaf litter mulch to eliminate mowing requirements.
- 9. Use plantings in open spaces to reinforce the space as a visual asset.
- 10. Consider landscape windbreaks when suitable for the local climate per IFS.
- 11. Providing landscaping as visual screening is preferred to the construction of walls and fences; berming and mounding may supplement landscape screening.
- 12. Integrate security requirements into the landscape design. Coniferous trees and shrubs greater than 0-6" in height are prohibited within building clear zones. Plants with low growth habit may accent the building architecture. Plant materials will not be allowed adjacent to high security buildings.
- 13. Berms should be used as an integral part of the overall landscape strategy for screening, security and/or visual interest.
- 14. Streetscape and Intersection Landscaping: Refer to the Installation Elements section.
- 15. Base Entrance Landscaping: Refer to the Installation Elements section.

C06.1.2. Xeriscape Design Principles

Applicable ● N/A	Has large graphics to include (800px x 440px)
♠ Applicable	Has small graphics to include (250px x 188px)





Streetscape Adjacent to Facility Group 1

Xeric Planting Principles

- 1. Apply xeriscape principles following UFC 3-201-02, Appendix B; Air Force Corporate Facilities Standards; and the 2002 PAFB Xeriscape Study and Design Guidelines.
- 2. Facility plantings are encouraged to use native plant species and to consider specific microclimates created by the adjacent building: shadow areas, protected areas, zones adjacent to thermal mass, and availability of rainwater and/or grey water.

C06.1.3. Minimizing Water Requirements

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)



Reduced Water Demand



Native Materials

- 1. Reasonably reduce demand on potable water while seeking opportunities to increase alternative water sources for irrigation. Reduce or eliminate the use of potable/domestic water for purposes of landscape architecture maintenance, consistent with existing legal or contractual obligations, following the DoD Memorandum on Water Use dated March 10, 2017. The following actions must be undertaken at DoD Installations/Sites:
- a. Prohibit potable water use to irrigate new landscaping other than for plant establishment;
- b. Apply drought resistant, water smart, and/or xeriscaping landscape architectural design to all new and updated landscape architecture;
- c. Prohibit ornamental or potable water features in new landscape design;
- d. Phase out ornamental or potable water features in older landscape designs. Water features listed on the National Register of Historic Places are exempt;
- e. Assess irrigated turf grass areas and install non-water intensive native vegetation where reasonable;
- f. Assess existing landscape irrigation systems for leaks and system inefficiencies, and consider replacing, upgrading, or converting to an alternative water source when reasonable;

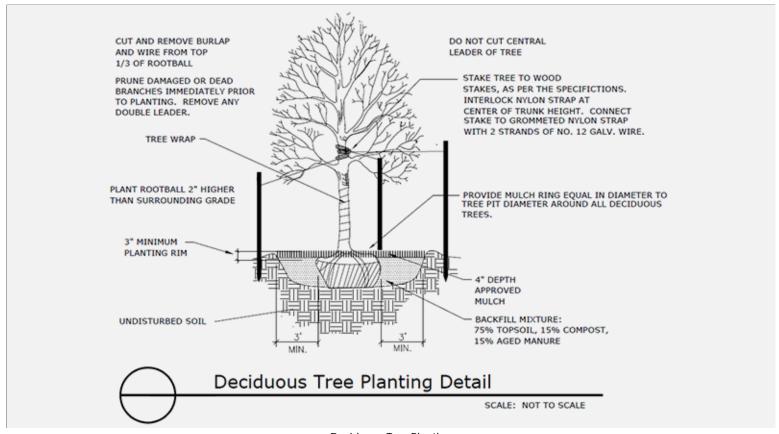
g. Make water conservation for golf courses a priority, and use alternative water in lieu of potable water if sources are available.

C06.1.4. Plant Material Selection

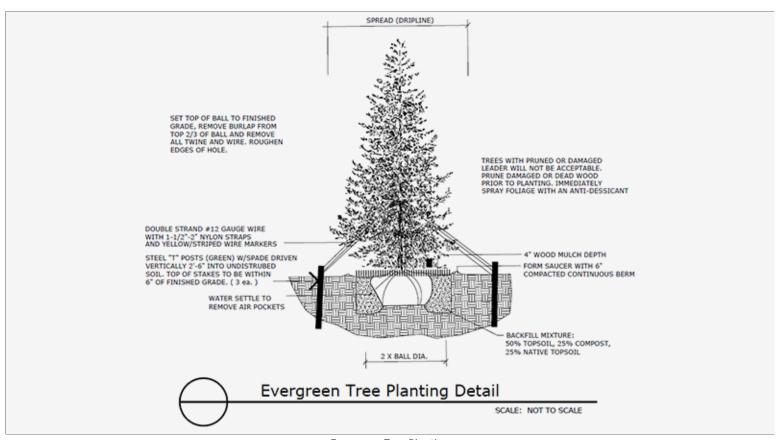
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○ Applicable

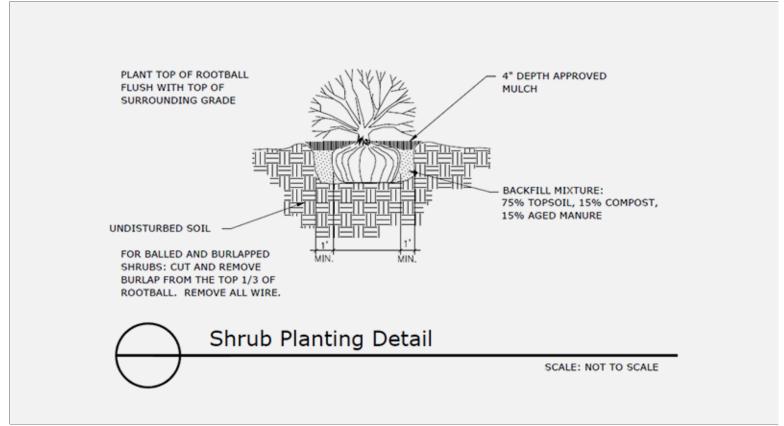
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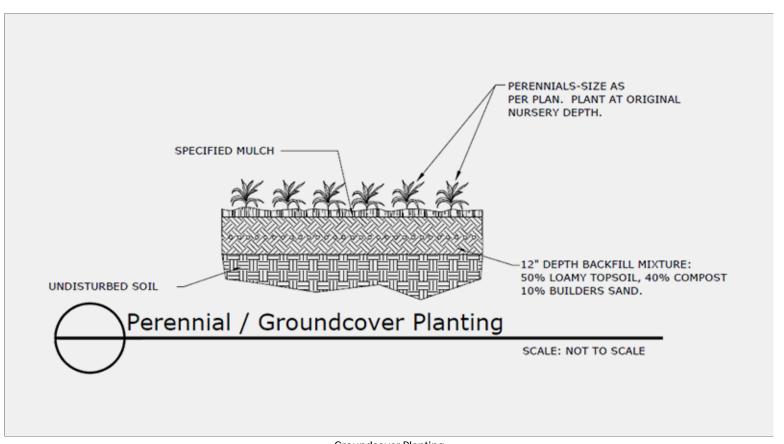
Deciduous Tree Planting



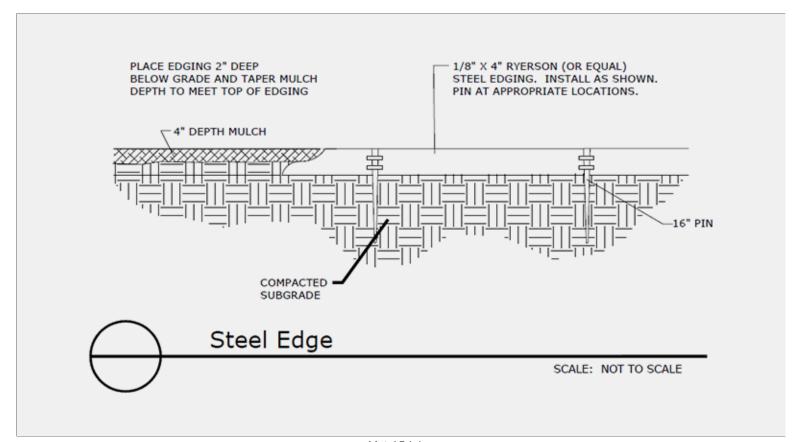
Evergreen Tree Planting



Shrub Planting



Groundcover Planting



Metal Edging

1. New facilities are encouraged to use native plant species as indicated on the following plant lists published by Colorado State University Extension for the Plains Region:

%Native Shrubs: http://extension.colostate.edu/topic-areas/yard-garden/native-shrubs-for-colorado-landscapes-7-422/

*Native Trees: http://extension.colostate.edu/topic-areas/yard-garden/native-trees-for-colorado-landscapes-7-421/

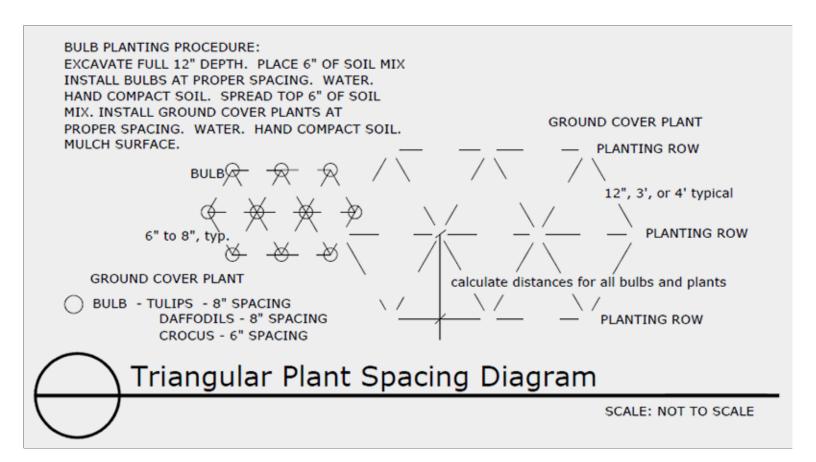
%Native Herbaceous Perennials: http://extension.colostate.edu/topic-areas/yard-garden/native-herbaceous-perennials-for-colorado-landscapes-7-242/

Refer also to Peterson AFB's Facilities Excellence Plan plant lists: http://fennellgroup.com/clients/AFCFS2016/pdf_files/Peterson %20AFB%20Plant%20List.pdf

- 2. Trees should be the focus of landscape plantings and, where possible, should be a mix of deciduous and evergreen species for variety; provide tree grates when appropriate and use tree guards on smaller trees.
- 3. Ground covers are only recommended when minimal maintenance is required.
- 4. Turf areas should be limited to those that can be sustained by natural rainfall or grey water (non-potable) irrigation systems; turf may be defined by at-grade concrete mow strips to lessen maintenance.
- 5. Analyze soils and provide organic amendments to as needed to improve plant growth and conserve water. The general rule is to add 3-4 cubic yards of organic matter per 1,000 square feet of area in addition to appropriate 2-4 inches of topsoil. The amendments should be well integrated into the soil at least 6-8 inches to encourage deep root growth.
- 6. All plant material shall have one-year warranty and is subject to approval by Base Landscape Architect.

C06.1.5. Water Budgeting (Hydrozones)

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Hydrozones Along Peterson Boulevard

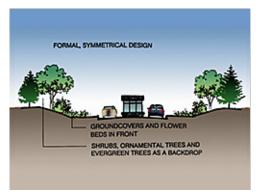
Drip Irrigation

Coordinated Colors for Valve Boxes

- 1. Comply with DoD Memorandum on Water Use dated March 10, 2017. Note that potable-water irrigation systems are prohibited per DoD Policy beyond the establishment period.
- 2. Provide irrigation systems in new construction to establish plant materials following "Water for Landscaping" in UFC 1-200-02. Note: Peterson AFB is in a semi-arid location with annual precipitation averaging approximately fifteen (15) inches.
- 3. New buildings shall cost-effectively integrate a grey-water reclamation system, which provides source water for an automatic drip irrigation system; connect adaptive plantings adjacent to facilities to a grey-water irrigation system when available and discontinue the use of potable water for irrigation after the establishment period.
- 4. Provide irrigation design following UFC 3-201-02. Install drip irrigation products and components following UFGS Section 32 84 24 Irrigation Sprinkler Systems. However, do not use automatic drains. Valve box lids shall be colored to match the adjacent ground plan treatment (i.e. green at turf & native seed areas, brown at wood mulch & rock areas).
- 5. Life cycle cost-effectively equip irrigation systems to sense soil moisture, rainfall and wind to minimize unnecessary watering; incorporate drip irrigation systems as the primary source.

C06.1.6. Base Entrance Landscaping

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable ♠ N/A Has small graphics to include (250px x 188px)

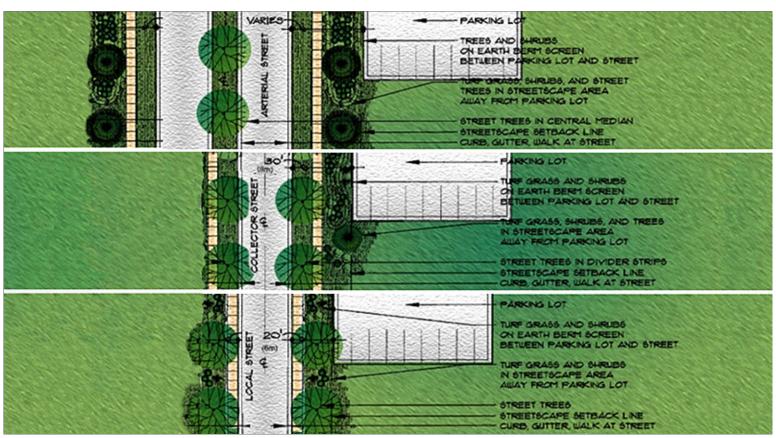


Main Gate Planting

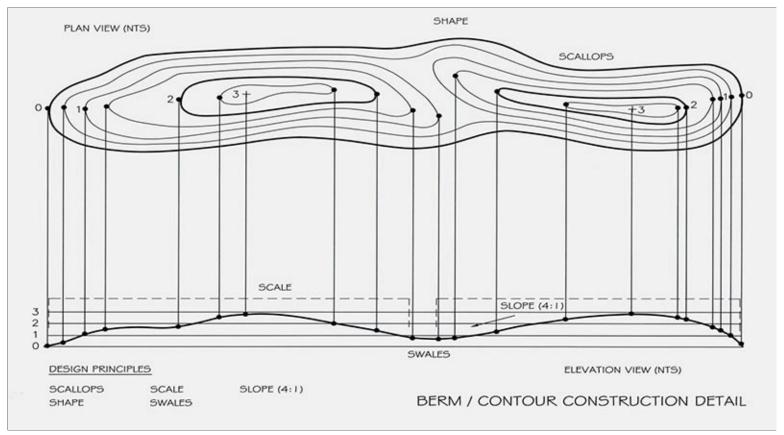
- 1. Reinforce a sense of arrival through landscape design elements with formal, symmetrical plant arrangements.
- 2. Concentrate landscaping adjacent to the guardhouse and the street to maximize visual effect at the North Gate on Peterson Boulevard, the West Gate on Stewart Avenue, the East Gate near Marksheffel Road and at future gates.
- 3. Ensure landscaping has seasonal interest with spring and fall color provided by deciduous shade trees. Complement these with evergreen trees and shrubs for winter interest.
- 4. Typically provide four levels of plants at each gate area:
- Nearest the street, shall be a low ground cover with perennial flower beds or well-manicured turf grass
- Behind this, low shrubs should provide a backdrop
- % Ornamental deciduous trees
- %Evergreen backdrop shall make up the vertical element at the rear of the planting, located farthest from the street
- 5. Xeriscape hydrozones and berming (to elevate and formalize plantings) may be used.
- 6. Integrate base signs whenever feasible.
- 7. North Gate / Peterson Blvd: Provide a minimum of fifty trees and one hundred shrubs. A minimum of one-half of the required trees and shrubs shall be evergreen. The base entrance landscaping shall be located on both sides of Peterson Boulevard, and shall be located within two hundred feet of the guardhouse. Ground covers shall be provided as a part of the entrance planting, and may include perennial flower beds.
- 8. East Gate / All Other Gates: The planting for these gates shall include a minimum of twenty-five trees and fifty shrubs. A minimum of one-half of the required trees and shrubs shall be evergreen. The base entrance landscaping shall be located on both sides of the entrance street, and shall be located within one hundred feet of the guardhouse. Ground covers and perennial flower beds may be provided as a part of the entrance planting.

C06.1.7. Streetscape Landscaping

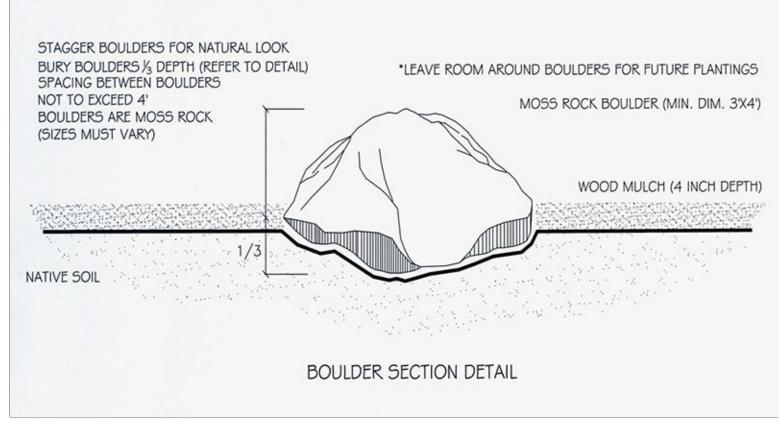
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Landscaping Application Based on Facility Group Number for Each Type of Street



Appropriately Designed Landscape Berm



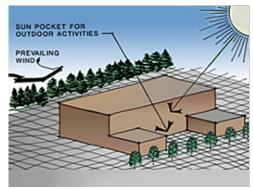
Appropriately Placed Accent Boulder

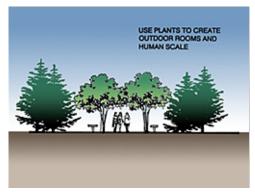
1. Provide landscape designs with plant materials appropriately representing the level of quality of the adjacent Facility Group number.

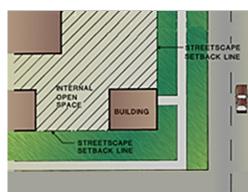
2. Select a variety of streetscape plantings and grading to create a visual interest.

C06.1.8. Pedestrian Circulation Landscaping

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable ♠ N/A Has small graphics to include (250px x 188px)







Wind Buffers and Shading

Reinforcing Human Scale

Appropriate Landscape Setbacks

- 1. Provide rest areas along the pedestrian circulation network with human-scaled deciduous shade trees. Define areas with finely textured shrubs.
- 2. Provide wind breaks where required.

C06.1.9. Parking Lot Landscaping

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)





Coordinated Tree Plantings

Island with Rainwater Ingress

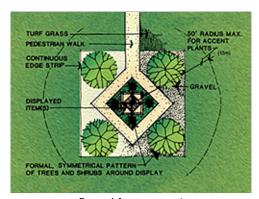
1. Integrate appropriate landscaping elements into parking areas to visually soften the appearance at a minimum rate of 10 percent of the total area.

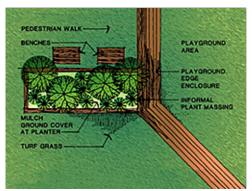
- 2. Avoid trees that drop sap, fruit, or seeds, and use long-lived species; keep trees trimmed, removing dead and dying trees or branches.
- 3. Provide planting islands within parking lots for shade and appeal following IFS and the base stormwater management plan.
- 4. Provide one tree of a type suitable to parking lots for every ten (10) open vehicular parking stalls in lots with fifteen (15) or more stalls.
- 5. Rain garden islands shall be designed with all new parking lots that allow rainwater runoff from adjacent impervious parking areas to be absorbed into the ground/planting bed. Native plants and groundcovers are recommended within the rain garden areas, which can survive without supplemental irrigation once established.

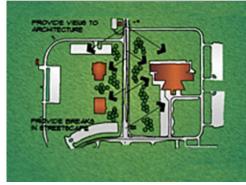
C06.1.10. Screen/Accent Landscaping

- Applicable

 N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)







Formal Arrangement

Informal Planting

Preserved and Defined Views

- 1. Provide complimentary accent landscaping at monuments and static displays as follows:
- % minimum of four (4) trees and eight (8) shrubs shall be provided for each displayed item. All plants shall be located within a maximum distance of fifty feet (50') radius of the displayed items.
- Required trees and shrubs shall be placed in groups which are arranged in rhythmic geometric patterns. Trees and shrubs shall be physically separated from turf grass areas.
- Turf grass shall be used as the principal ground plane landscape plant, and shall be located away from the displayed items and on the front viewing side.
- % imited amounts of perennial flowers, though not required by this guideline, are recommended to provide visual emphasis for these high profile "memorial" type areas.
- The plant palette emphasis for static display areas is to use deciduous trees and evergreen shrubs to provide year around color and texture with seasonal accents. At each separate group of displayed items, limit the number of plant species to maximize visual impact with mass plantings.
- 2. All free-standing signs shall be surrounded by appropriate landscaping. This landscaping shall be designed to enhance the sign without detracting from its communication ability.
- 3. Provide landscape screening of utility elements adjacent to Facility Group 1.

C06.1.11. Other

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable

 N/A Has small graphics to include (250px x 188px)

C07. SITE FURNISHINGS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Site Furnishings: http://afcfs.wbdg.org/site-development/site-furnishings/index.html

C07.1. Furnishings and Elements

- Applicable N/A Has large graphics to include (800px x 440px)
- ♠ Applicable N/A Has small graphics to include (250px x 188px)



Coordinated Furnishings



Compatibility with Architecture



Low Maintenance Materials



Lighted Bollards



Screen Wall



Compatible Playground Structures

1. Provide a coordinated consistent inventory of site furnishings to positively contribute to the visual environment, image, and identity of the base; ensure durability, low maintenance, reduced visual clutter, and compatibility with the adjacent architecture.

- 2. Remove poorly located or redundant litter / ash receptacles, newspaper and bicycle racks, telephone booths, vending machines, walls and fences to reduce visual clutter and to lessen the requirements for maintenance.
- 3. Group 1 and 2 site furnishing shall be determined by the designer and approved by the BCE. Group 3 and 4 site furnishings shall be vinyl-coated steel utilizing a mesh, open-weave design. Generally match the site furniture of adjacent facilities and the facility district.
- 4. Install needed outdoor seating (benches and low walls) in public gathering spaces near main and secondary building entrances. Low walls shall match facility architecture.
- 5. Benches in Groups 1, 2 and 3 shall be determined by the designer and approved by the BCE. Provide vinyl-coated aluminum benches in Group 4 and parks.
- 6. Provide bicycle racks for all Group 1, 2 and 3 facilities throughout Peterson AFB. Use the approved stanchion design or curvilinear design with heavy-duty galvanized steel. Install bicycle lockers only when there is a documented demand for long-term bicycle storage using the base standard system. Locate racks and lockers per ATFP requirements.
- 7. Limit the use of bollards, but when necessary for force protection use precast concrete non-illuminated bollards in Groups 1 and 2; steel pipe bollards in Group 3; and decorative aluminum bollards in Group 4 and parks and trails. Illuminated bollards may be used as approved on a case basis; light shields shall be factory finished dark bronze.
- 8. Bus shelters shall be provided only where there is a documented need and when approved on a case basis. Generally emulate the designs of adjacent shelters using factory finished dark bronze metal structure, wall panels and standing seam roofing; glazing shall be dark solar gray/bronze polycarbonate.
- 9. When visual screening is necessary, consider landscaping as the first option; screen walls are permitted only in Group 1 finished with Peterson brick and detailed to match the adjacent facilities. Do not use concrete masonry units (CMU) as an exposed finish for walls.
- 10. For fencing, apply the standards for "Products, Materials and Color" in the following section using Styles A, B, C, D, E or F as applicable for the Facility Group number.
- 11. Fencing at Facility Group 1 shall be Style D with brick piers, intermittent steel posts, and steel rails and pickets, powder coated dark bronze; Group 2 facilities may use Style B or Style C steel fencing with steel components finished dark brown. Style E fencing may be used for visual screening at Groups 1 and 2. Group 3 fencing may use Style A chain-link with barbed-wire outriggers limited to highest-security assets. Style F rail fences are permitted only in Group 4 and recreational areas.
- 12. Provide trash dumpster enclosures for Group 1 with cast-in-pace concrete or Peterson brick walls to match adjacent facilities and for Groups 2 and 3 with metal walls; all gates shall be metal. Factory finish metals dark bronze.
- 13. Group 1, 2 and 3 picnic tables and seating shall be precast concrete similar to benches. Group 4 and recreational areas shall have vinyl-coated steel picnic tables and seating in an open mesh design. Generally limit picnic tables, barbeque grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas.
- 14. Limit the use of freestanding planters to areas with ongoing maintenance.
- 15. Flagpoles using Peterson standards may be installed in accordance with AFI 34-1201 as approved on a case basis.
- 16. Provide kiosks only where there is a documented need for visual communication of posted messages. When used, match adjacent facilities in materials and detailing and consolidate kiosks with other site furnishings within 30 feet of major pedestrian paths. Limit kiosks to facility Groups 1 and 3 and parks.
- 17. Monuments and static displays are generally discouraged unless these are fully vetted through the Installation Development Plan (IDP) process and approved on a case basis.
- 18. Refer to the Overview Section "Facility Hierarchy" topic of this IFS for guidelines regarding ancillary structures such as pavilions and shade shelters.

C07.2. Site Furnishings Products, Materials and Color

Note: Apply the below base-wide standards for Site Furnishings (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

C07.2.1. Barbeque Grills

● Applicable ○ N/A



rype:	Charcoai	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Most Dependable Fountains, Inc.	
Color:	Natural stainless steel	
Finish:	Mill	
Model #: SS BBQ Grill		
Other:	Built-in Concrete or masonry, coordinate with Base Architect	
UFGS:		



Type:	Natural Gas	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	BBQ Coach	
Color:	Natural stainless steel	
Finish:	Mill	
Model #: 32" 4-Burner		
Other:	Built-in Concrete or masonry, coordinate with Base Architect	
UFGS:		

C07.2.2. Benches



Type:	Pre-cast concrete
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Materials, Inc.
Color:	Weatherstone Gray
Finish:	Standard Finish (Smooth)
Model #	t: Mesa, Rectangular design
Other:	N/A
UFGS:	N/A



Type:

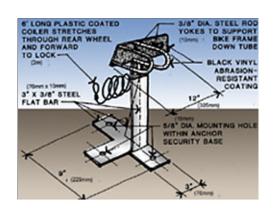
Applies to:

Factory finished metal

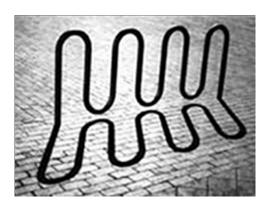
☐ Group 1 ☐ Group 2 ☐ Group 3 ● Group 4 ☐ Other Wabash Valley Mfr: Color: Dark Bronze Finish: Vinyl coated Model #: Signature Series 6' Bench with Back, Perforated Other: Coordinate with Base Architect UFGS: N/A

C07.2.3. Bike Racks

♠ Applicable ○ N/A



Type:	Style 1: Single bike
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	SW 2733 Chaparral; FSC X0045, and black
Finish:	Powder coated base and vinyl clad top
Model	#: Post (stanchion)
Other:	N/A
UFGS:	N/A



Style 2: Multiple bikes

Type:

C07.2.4. Bike Lockers

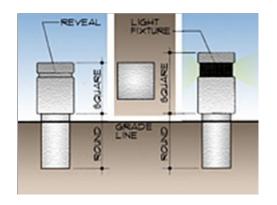
♠ Applicable ○ N/A



Type:	Style 3, Factory finished composite	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	CycleSafe	
Color:	Black polycarbonate	
Finish:	Factory	
Model #: PROPark Series		
Other:	Self-closing, lockable system	
UFGS:	N/A	

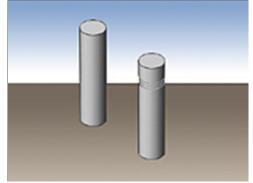
C07.2.5. Bollards

♠ Applicable ○ N/A

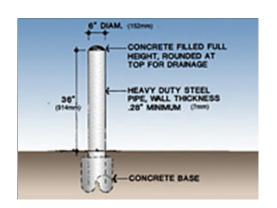


Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Materials, Inc.
Color:	Weatherstone Gray
Finish:	Standard Finish (Smooth)
Model #	t: 1852, Square design, rounded outside corners
Other:	Dark bronze light shields for lighted option, refer to C09.2.3. Lighted Bollards, (see Appendix for Facility Districts requirements)
UFGS:	N/A

Type: Style 1: Force Protection, precast concrete



Type:	Force Protection, metal
Applies 1	io: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Lithonia
Color:	DNATXD (Textured natural aluminum)
Finish:	Powder coated
Model #	: KBR8, Extruded aluminum, round with flat top
Other:	Solid bollard without light kit, refer to C09.2.3. Lighted Bollards
UFGS:	N/A



Type:

Building Protection, steel

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: (Bollard Cover) Reliance Foundry

Color: Brown cover may be field painted dark bronze

Finish: Factory

Model #: 6" Steel pipe, concrete filled, Cover: R-7173

Other: A 1" (25.4 mm) rigid conduit and box with shroud may be provided at top of bollard with a receiver/key switch application, refer to C09.2.3. Lighted Bollards

C07.2.6. Bus Shelters

● Applicable ○ N/A



Type:	1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Silver
Finish:	Powder coated
Model #	#: Gabled roof
Other:	Provide concrete slab and 2 pre-manufactured aluminum benches
UFGS:	N/A
Туре:	2
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark Bronze
Finish:	Powder coated



Finish: Powder coated

Model #: Gabled roof

Other: Provide concrete slab and 2 pre-manufactured aluminum benches

UFGS: N/A

C07.2.7. Drinking Fountains

♠ Applicable ○ N/A



Type:	Pedestal
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Most Dependable Fountains, Inc.
Color:	Natural
Finish:	Stainless Steel
Model #	#: MDF 440 SMSS
Other:	Accessible
UFGS:	N/A

C07.2.8. Dumpster Enclosures / Gates

Type:

1, Concrete and steel

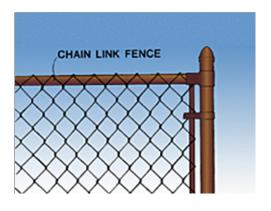




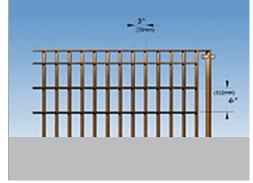
Type:	2, Brick and steel	
Applies	to: Group 1 • Group 2 • Group 3 Group 4 Other	
Mfr:	Custom	
Color:	Peterson Blend	
Finish:	Running Bond	
Model #: Match adjacent building		
Other:	Steel gates, Canyon Brown (PMS #168c), Dumpsters shall be painted brown	
UFGS:	Section 04 20 00 Unit Masonry	

C07.2.9. Fencing

♠ Applicable ○ N/A



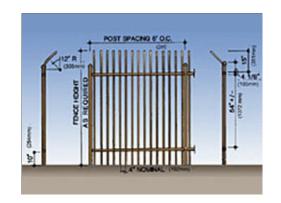
Type:	Style A Barrier: High security, low visibility
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	General Wire Co.
Color:	Dark brown; Retrofits: Brown (PMS #412) or Light Brown (PMS #168c)
Finish:	PVC coating over galvanized steel
Model #	#: Chain link, steel posts and rails, gates and accessories
Other:	N/A
UFGS:	Section 32 31 13 Chain Link Fences and Gates



Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark brown
Finish:	Powder coated
Model #: Steel grid: flat bar stock verticals, round rod horizontals	
Other:	Steel posts, horizontal bars, braces, and accessories, in heights, lengths, and gauges as required; Close all ends of tubing
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

Style B Barrier: High security, medium visibility

Type:



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Custom

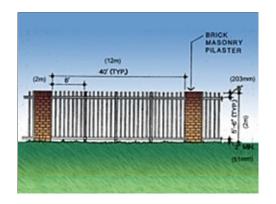
Color: Dark bronze, SW 2733, Chaparral; FSC X0045

Finish: Powder coated

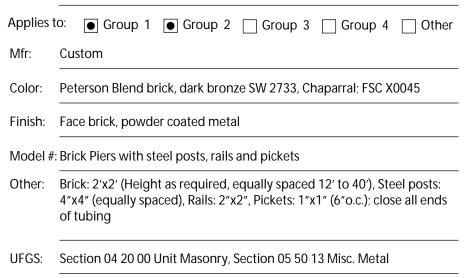
Model #: Steel posts, rails and pickets (vertical, angular bent inward at top)

Other: Posts, rails, and pickets in heights, lengths and gauges as required, (see Appendix for Facility Districts requirements)

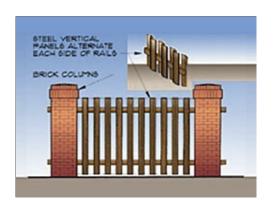
UFGS: Section 05 50 13 Miscellaneous Metal Fabrications



Type:



Style D Barrier: Low security, High visibility



Type: Style E Barrier: Low security, High visibility Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 Mfr: Custom Peterson Blend brick, dark bronze SW 2733, Chaparral; FSC X0045 Color: Finish: Powder coated metal Model #: Brick Piers with steel posts, rails and alternating panels Brick: 2'x2' (Height as required, equally spaced 8' to 40'), Steel posts: 4"x4" (equally spaced), Rails: 1-1/4"x1-1/2", vertical steel panels spaced alternately on each side of the rails; matching gates; close all ends **UFGS**: Section 04 20 00 Unit Masonry, Section 05 50 13 Misc. Metal



Type:	Style F Barrier: Very low security, high visibility
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Integral Mixed Davis Color# 5130 "Cocoa"
Finish:	Factory
Model #	#: Post and rail
Other:	Concrete 3-rail, wood-grain textured (4,000 psi at 28 days); Posts: 39" height, 8' spacing, set 30" deep below grade with footing, typical
UFGS:	SECTION 03 33 00 Cast-In-Place Architectural Concrete



Type: Style F Barrier (Alternate): Very low security, high visibility

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: James Hardie Building Products, Inc.

Color: Earth Tones

Finish: Factory

Model #: Post and rail with vertical boards

Other: Posts: Height as required, 8' max. spacing; apply boards to outside face.

UFGS: Not Available (SECTION 074646 Fiber Cement Siding)

C07.2.10. Flagpoles



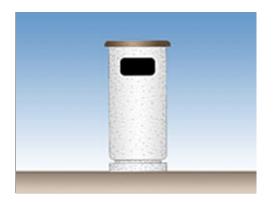
Type:	1	
Applies to: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Eder Flag	
Color:	Natural aluminum	
Finish:	Satin Lustre	
Model #: ECL30 IH, Internal Halyard		
Other:	5" Butt Dia. 33' H (30' Exposed)	
UFGS:	N/A	

C07.2.11. Lighting – Landscape / Accent

Please refer to the Lighting section.

C07.2.12. Litter and Ash Receptacles

● Applicable ○ N/A



Type:	Style 1: Precast concrete	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Materials, Inc.	
Color:	Weatherstone Gray	
Finish:	Smooth	
Model #: TR-3225 Sante Fe Square		
Other:	Rigid plastic internal liner, http://materialsinc.com/wp-content/uploads/2014/10/ TR-3225_SANTA_FE.pdf	
UFGS:	N/A	



Type:	Style 2: Metal	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Wabash Valley	
Color:	Black or as approved	
Finish:	Perforated Pattern	
Model #: Urbanscape "E" with liner, 32 Gallon		
Other:	With dome top, without side door	
UFGS:	N/A	

C07.2.13. Picnic Tables

● Applicable ○ N/A



Type: Precast concrete

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Materials, Inc.

Color: Weatherstone Gray

Finish: Standard Finish (Smooth)

Model #: TS-3490 New Mexican

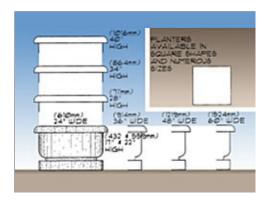
Other: (303) 458-9595



Type:	Metal, vinyl coated	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Wabash Valley	
Color:	Brown or as approved	
Finish:	Factory vinyl coated	
Model #: Signature Series, 46" Square Pedestal Tables with 4 Seats		
Other:	Perforated Pattern, In-ground mount	
UFGS:	N/A	

C07.2.14. Planters

♠ Applicable ○ N/A



Type:	Precast concrete	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Materials, Inc.	
Color:	Weatherstone Gray	
Finish:	Smooth	
Model #	#: Santa Fe	
Other:	N/A	
UFGS:	N/A	

C07.2.15. Play Equipment

● Applicable ○ N/A



Steel
to: Group 1 Group 2 Group 3 Group 4 Other
Little Tikes Commercial
Varies
Powdercoated Steel
#: N-R-G Freestyle
Coordinate with Base Architect
N/A

C07.2.16. Screen Walls

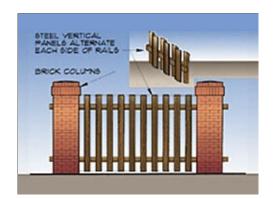
♠ Applicable ○ N/A



Type:	Cast-in-place Concrete
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Transit Mix, Colorado Springs
Color:	Exposed Aggregate (Pikes Peak Granite)
Finish:	Medium Texture (or media blasted)
Model #	#: Sheet-formed with exposed-tie reveals or board-formed
Other:	Match adjacent building
UFGS:	SECTION 03 33 00 Cast-In-Place Architectural Concrete

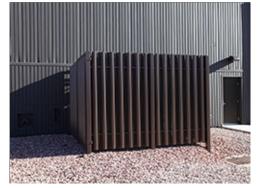


Type:	Brick
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Peterson Blend
Finish:	Factory
Model #	f: N/A
Other:	Running bond pattern
UFGS:	Section 04 20 00 Unit Masonry



Type: Applies to: ☐ Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other Mfr: Custom Peterson Blend, dark bronze Color: Finish: Factory, Powder coated Model #: Brick Piers with steel posts, rails and pickets Brick: 2'x2', Steel posts: 4"x4", Rails: 2"x2", Pickets: 1"x1" (4"o.c.) Close all ends of tubing UFGS: Section 04 20 00 Unit Masonry, Section 05 50 13 Misc. Metal

Brick / Steel



Type:	Steel
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark Bronze
Finish:	Factory powder coated
Model #	f: N/A
Other:	Match adjacent building
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: James Hardie Building Products, Inc.

Color: Earth Tones

Finish: Wood textured

Model #: Hardie Plank, Vertical boards

Other: Match adjacent building

UFGS: (Not Available) SECTION 074646 Fiber Cement Siding

C07.2.17. Tree Grates

♠ Applicable ○ N/A



Type:	Cast Iron
Applies t	io: • Group 1 • Group 2 Group 3 Group 4 Other
Mfr:	Neenah Enterprises, Inc.
Color:	Natural cast iron
Finish:	Cast
Model #: 2-Piece, Round or square	
Other:	N/A
UFGS:	N/A

C07.2.18. Other

○ Applicable N/A

CO8. EXTERIOR SIGNS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Exterior Signs: http://afcfs.wbdq.org/site-development/exterior-signs/index.html

C08.1. Colors and Types

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Provide concise functional signs as a visually unifying element with consistent colors and types for all Installation and Gate Identification Signs; Building Identification Signs; Traffic Control Devices; Directional and Wayfinding Signs; and Informational and Motivational Signs.
- 2. Provide signs with the lowest overall life cycle costs considering initial cost, ongoing maintenance and lifespan while meeting quality standards.
- 3. Reduce the number of signs, reduce visual clutter and provide only essential signs required for identification, directions, instructions, and customer service following UFC 3-120-01. Remove non-conforming signs during renovation projects.
- 4. Maintain the existing Installation and Gate Identification Signs and "Colorado theme" in color, lettering, materials and construction methods and match these in future entrance signs. Follow UFC 3-120-01 for sign layout and content. No unit names, unit mottos, or names and titles of individuals are permitted.
- 5. Provide Building Identification Signs following UFC 3-120-01 for size, layout and content.

- 6. Group 1 facilities shall have a freestanding monolithic facility sign in metal on an understated natural warm gray concrete base or brick base. Provide "Peterson Brown" backgrounds with white Helvetica Medium sentence case lettering, 6" capital and 3" lower case letters. Organizational emblems in full color (command shield, branch insignia, shoulder sleeve insignia, coat of arms, etc.) may be included 6" from top at the left side of the panel following UFC 3-120-01.
- 7. Display of emblems on building exterior walls or other permanent structures is strictly prohibited.
- 8. Raised "standout" letters and numbers may be used for Group 1 with approval on a case basis. Clear anodized aluminum with a smooth surface or PAFB standard Dark Bronze letters may be used as directed by the Base Civil Engineer.
- 9. Group 2 and 3 facilities shall have wall mounted facility signs. Provide 2'-3" x 2'-3" x 2" panels with general layouts following UFC 3-120-01, except provide only the building's address number and not the street name. Signs are not permitted for Group 4 facilities.
- 10. Only one identification sign is permitted at each building entrance. Include a building address consistent with US Postal Service protocols following UFC 3-120-01.
- 11. Traffic Control Devices, which regulate vehicular traffic on the installation, shall conform to the standards in the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration. Provide street signs following this IFS.
- 12. Provide Directional and Wayfinding Signs and address both pedestrian and vehicular traffic following UFC 3-120-01 for size, layout and content.
- 13. Reserved parking signs should be kept to a minimum. When approved, provide post-mounted sign faces with Peterson Brown backgrounds and white Helvetica lettering, 1-1/2" in height.
- 14. Follow UFC 3-120-01 for Informational and Motivational Signs for size, layout and content.
- 15. Symbols or pictographs (graphic expressions of actual objects) may be used to indicate service, mandatory / prohibitory, sports, and recreation when rapid communication is necessary. Provide a square symbol background with rounded corners and a consistent border line-weight for all symbols.
- 16. Force Protection signage may be applied to glass doors using white vinyl lettering. The sign shall be oval in shape with a ¼" white border. FP CON lettering shall be 1 3/8" Arial Bold with the words "REAL" and "EXERCISE" letter in ¾" Arial Regular lettering spaced accordingly. The bottom of this lettering shall be placed at the midpoint of border.
- 17. Refer to UFC 3-120-01 for prohibited signs, which include those with animated, blinking, chasing, flashing, or moving effects.
- 18. To reduce costs, Peterson AFB prefers to fabricate signs in house where possible. This has been successful in saving money and creating a consistent aesthetic thread throughout the base. See destination signage for dimensional requirements.

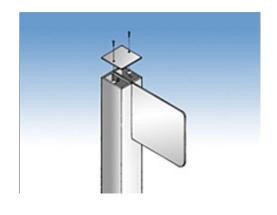
C08.1.1. Materials and Color Specifications

○ Applicable ● N/A	Has large graphics to include (800px x 440px)
Applicable ● N/A	Has small graphics to include (250px x 188px)

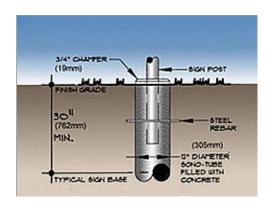
- 1. Fabricate sign panels from aluminum sheet, minimum 12 gauge, for durability. Sign posts shall be powder-coated steel with capped ends in a concrete base.
- 2. Fence mounted sign panels may be attached with exposed fasteners.
- 3. All signage shall be provided using the following standard colors:
- a. Standard Blue: FHA #3, Highway Blue; SW 2940, Bridgeport (N); FSC X5180
- b. Standard Dark Bronze: Federal Specification 30040

- c. Standard Red: FHA #3, Highway Red; SW 2910, Red Door (PC); FSC X1086
- d. Standard Black: FHA Black (non-reflective); SW 2119, Umbrella Black (C); FSC X7038
- e. Standard White: FHA White; SW 2423, Polar White (TWT); FSC X7925
- f. Peterson Air Force Brown: Federal Specification 10091.

Materials and Color Specifications



Type:	Typical Sign Post
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark bronze
Finish:	Powder coated
Model #	#: EOCPS1
Other:	Square posts and squared ends
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Type:	Typical Sign Base	
Applies t	o: • Group 1 • Group 2 Group 3 Group 4 Other	
Mfr:	Custom	
Color:	Natural Gray	
Finish:	Sonotube-formed	
Model #: 30" height x 12" diameter		
Other:	At grade with 3/4" chamfer	
UFGS:	Section 03 33 00 Cast-In-Place Architectural Concrete	

C08.1.2. Installation and Gate Identification Signs

● Applicable ○ N/A



Type:	Level A
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	Peterson AFB Brown, federal standard 595B color 10091, white lettering
Finish:	Sheet-formed base, powder coat or vinyl sign face
Model #	: Custom metal pylon, concrete base
Other:	Refer to UFC for layout, content and dimensions
UFGS:	Section 03 33 00 Cast-In-Place Architectural Concrete
Type:	Level B
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	Peterson AFB Blue, FSC X5180, Natural gray base, white lettering



Color: Peterson AFB Blue, FSC X5180, Natural gray base, white lettering

Finish: Sheet-formed base, powder coat or vinyl sign face

Model #: Custom metal pylon, concrete base

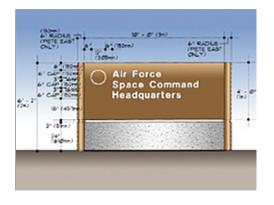
Other: Refer to UFC for layout, content and dimensions

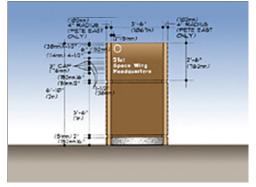
UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete



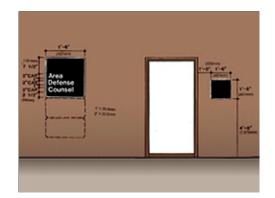
Type:	Level C
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	Peterson AFB Brown, federal standard 595B color 10091, white lettering
Finish:	Powder coat
Model #	#: Custom metal posts and sign face
Other:	Refer to UFC for layout, content and dimensions
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.3. Building Identification Signs

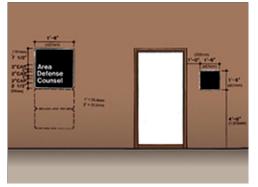




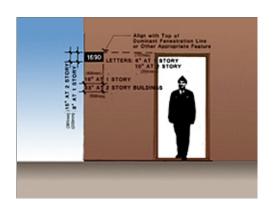
Type:	Level B
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	Peterson AFB Brown, federal standard 595B color 10091, white lettering
Finish:	Powder coat or vinyl sign face
Model a	#: Aluminum sheet metal, aluminum post mounted
Other:	N/A
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Type:	Level C	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Peterson Sign Shop	
Color:	Peterson AFB Brown, federal standard 595B color 10091, white lettering	
Finish:	Powder coat or vinyl sign face	
Model #: Aluminum sheet metal, wall mounted		
Other:	N/A	
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications	



Type:	Level D
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	Peterson AFB Brown, federal standard 595B color 10091, white lettering
Finish:	Powder coat or vinyl sign face
Model #	#: Aluminum sheet metal, wall mounted
Other:	N/A
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Type:	Building Numbers
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	Peterson AFB Brown, federal standard 595B color 10091, white lettering
Finish:	Powder coat or vinyl sign face
Model #	: N/A
Other:	N/A
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.4. Traffic Control Devices (Street Signs)

♠ Applicable ○ N/A

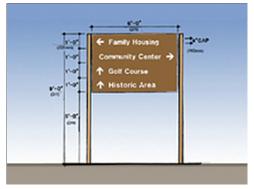


Type:	Street Signs
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	White reflective lettering on a Standard Brown background
Finish:	Powder coat or vinyl sign face
Model a	#: Aluminum sign face, control arm or pole mounted
Other:	Mount 7' above grade minimum, pictographs and logos are prohibited on street name signs per UFC.
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

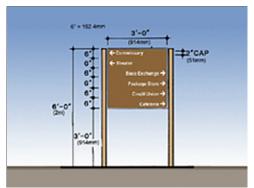
- 1. Maintain streets signs as the most important directional signage on the base with consistent color and layout conforming to UFC-3-120-01.
- 2. Provide White reflective lettering on a Standard Brown background for street signs. Note that pictographs and logos are prohibited on street name signs per UFC.
- 3. Determine the length of the sign by the number of letters in the street name. Always use a single line of text. Use capital and lower case lettering. Capital letters shall be seven inches (7", 177.8mm) high. Provide a ½" (12.7mm), white rule line around the sign edge (insert 1" (25.4mm) from the edge of metal). Do not abbreviate street names, but it is acceptable to shorten street types such as Boulevard (Blvd.), Street (St.), and Avenue (Ave.).
- 4. Street signs shall be mounted at each intersection on the horizontal member of the streetlight, or on poles fifteen feet from the curb line. The tops of signs mounted on poles shall be seven feet (7'-0", 2.13m) off the ground. They should be located away from trees or other obstructions.

C08.1.5. Directional and Wayfinding Signs

♠ Applicable N/A



Type:	Level A
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	White letters & symbols (reflectivity mandatory) brown background
Finish:	Powder coat or vinyl sign face
Model #	#: Aluminum sign face, aluminum posts
Other:	Use on all roadways, provide base area names
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications
Type:	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other



Color: White letters & symbols (reflectivity mandatory) brown background

Finish: Powder coat or vinyl sign face

Model #: Aluminum sign face, aluminum posts

Other: Use on all roadways, provide base area names

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.6. Informational Signs

- Applicable

 N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)
- 1. Minimize informational signs such as static display signs, hours of operation, and project signs to reduce visual clutter.

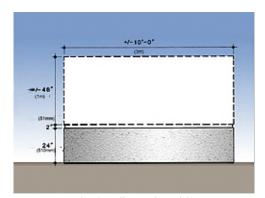
Peterson Sign Shop

Mfr:

- 2. Static display signs shall have standard blue background.
- 3. Hours of operation signs shall have a level of quality equivalent to the Facility Group number.
- 4. Temporary/Project Signage shall be judiciously placed to avoid visual clutter. Schedule and arrange for the removal of these signs prior to installation.

C08.1.7. Motivational Signage

- Applicable N/A Has large graphics to include (800px x 440px)
- Applicable N/A Has small graphics to include (250px x 188px)

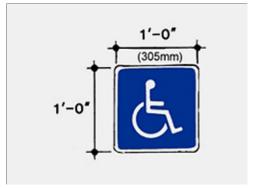


Professionally Produced Sign

- 1. Provide professionally produced motivational signs as important elements of campaigns to boost morale, improve safety, aid in recruiting, and accomplish other motivational objectives. Consolidate this signage to reduce visual clutter.
- 2. Motivational signs shall be limited to an electronic "marquee" type changeable sign near each gate. Temporary wood panel signs (rodeo, charity events, etc.) shall be eliminated. Motivational information may also be posted in a small, printed format on kiosks in specified, high pedestrian use areas. Refer to kiosks under Site Furnishings.
- 3. Follow UFC 3-120-01 for color and layout. Note that animated, blinking, chasing, flashing, or moving effects are prohibited by the UFC.
- 4. Mount marquee signs on reinforced concrete bases with a natural warm gray color.

C08.1.8. Parking Lot Signs

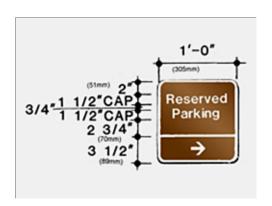
● Applicable ○ N/A



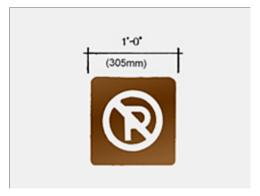
Type:	Accessible Parking Signs
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	White lettering on standard blue background
Finish:	Vinyl background and letters, powder coated post
Model #	t: Aluminum sheet sign face, galvanized steel posts
Other:	1'x1' sign face
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

Reserved Parking Signs

Type:



Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	White lettering on standard brown background
Finish:	Vinyl background and letters, powder coated post
Model #	#: Aluminum sheet sign face, galvanized steel posts
Other:	1'x1' sign face
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



31	
Applies	to: • Group 1 • Group 2 • Group 3 • Group 4 Other
Mfr:	Peterson Sign Shop
Color:	White lettering on standard brown background
Finish:	Vinyl background and letters, powder coated post
Model #	: Aluminum sheet sign face, galvanized steel posts
Other:	1'x1' sign face
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Applies to: Group 1 Group 2 Group 3 Group 4 Other Mfr: Peterson Sign Shop Color: White lettering on standard brown background Finish: Vinyl background and letters, powder coated post Model #: Aluminum sheet sign face, mounted to parking lot light fixture posts Other: 1'x1' sign face UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

- 1. Whenever possible, limit the number of parking signs by "bracketing" multiple reserved parking spaces. Use the "bracketing" approach for three (3) or more contiguous spaces. For one (1) or two (2) spaces, use individual signs at each space. The signs will only indicate Disabled or General Reserved. Individual space information, i.e. "CO" or "NCO OF THE MONTH" will be painted on the curb as per AFPAM 32-1099, except that the letters shall be white on a Standard Light Brown (PMS #168c) background.
- 2. Follow the guidelines and requirements in ABAAS and the MUTCD for accessible parking signs.

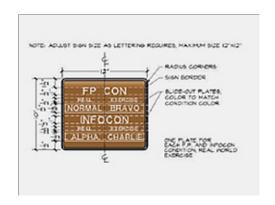
Type:

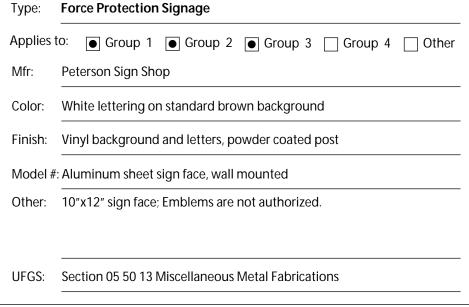
Parking Prohibited Signs

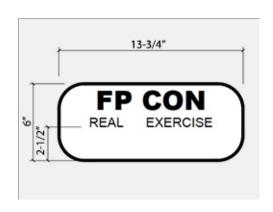
3. Use parking lot identification signs to identify areas or rows within large parking lots over 100 spaces or two double rows of parking.

C08.1.9. Regulatory Signs

● Applicable ○ N/A







Type:

Applies to: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Peterson Sign Shop	
Color:	White lettering	
Finish:	Vinyl	
Model #	#: Direct application to glass entrance doors	
Other:	N/A	
UFGS:	N/A	

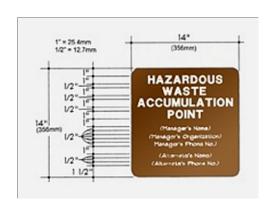
Force Protection Signage (Alternate)



Type.	Designated Tobacco Ose
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Peterson Sign Shop
Color:	White lettering on standard brown background
Finish:	Vinyl background and letters, powder coated post
Model #	#: Aluminum sheet sign face, galvanized steel posts
Other:	1'x1' sign face
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

Designated Tohacco Use

Type.



Hazardous Waste
to: Group 1 Group 2 Group 3 Group 4 Other
Peterson Sign Shop
White lettering on standard brown background
Vinyl background and letters, powder coated post
#: Aluminum sheet sign face, galvanized steel posts
14"x14" sign face; Emblems are not authorized.
Section 05 50 13 Miscellaneous Metal Fabrications

- 1. Regulatory signage, which restricts, warns and advises, shall be limited to those mandated under Highway/Traffic, Government Warning, and/or Parking Regulation. Follow UFC 3-120-01 and its industry references for color and layout.
- 2. Provide a comprehensive, systematic approach to regulatory signage to avoid clutter and confusion from "over signage."
- 3. Traffic control signs shall be used only where required to regulate vehicular traffic as described in the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration. The IFS does not control this type of signage.
- 4. Maintain base warning signs for safety and security at the base perimeter and at specific secure areas. Use these to notify visitors of restrictions governing conduct on the base, as well as other security procedures.
- 5. Hazardous waste signs shall be reflective Peterson Brown backgrounds with 1" upper case Helvetica white lettering. Emblems are not authorized. These signs may be fence mounted.

C08.1.10. Other

C09. LIGHTING

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdq.org/site-development/index.html

Comply with AF Corporate Standards for Lighting: http://afcfs.wbdg.org/site-development/lighting/index.html

C09.1. Fixtures and Lamping

○ Applicable	Has large graphics to include (800px x 440px)
	Has small graphics to include (250px x 188px)

- 1. Provide a coordinated life cycle cost efficient lighting system for parking lots, pedestrian routes, and facilities to promote operations and safety while preserving a visual environment appropriate for the facility group.
- 2. Integrate controls to automatically reduce lighting power during periods of non-activity; automatically turn off power when sufficient daylight is available.
- 3. Ensure continuity and consistency of lighting elements. In new construction generally match post types, fixture types, styles, heights, sizes, materials, colors, and lamp types of adjacent facilities and the facility district.
- 4. Use appropriately designed or shielded luminaires to direct light downward to minimize light pollution and intrusion onto adjacent sites.
- 5. Wall mounted fixtures should respond to the architectural character of the facility.
- 6. Calculate illuminant levels for all lighting applications following UFC 3-530-01 and ensure compliance with pre-curfew maximum brightness level requirements.
- 7. Efficient accent lighting of architectural and landscape features may be provided for Group 1, lodging and historical applications. Accent lights in ground-mounted locations may be provided for static displays and signs when these do not conflict or cause hazards with overhead aircraft.
- 8. Comply with UFC 3-530-01 for light source technology and lamp types. High efficiency lamping such as LED is preferred for most applications.
- 9. Provide round tapered, square non-tapered, or round non-tapered aluminum poles and aluminum fixtures with square, rectangular or circular housings in colors and shapes to match adjacent facilities and the facility district.
- 10. Install lighted bollards only at Group 1 and high-traffic Group 2 facilities. Generally match materials, colors and shapes of adjacent facilities and the facility district.
- 11. Install natural warm gray color, smooth finished concrete bases for all poles in heights appropriate for the facility group and application. Generally Groups 1, 2 and 4 shall have at-grade bases. Group 3 shall have taller bases for added durability.
- 12. When parking lot lighting is necessary, provide an illuminated path to the building's main entrance. Pole bases should be contained within an internal landscape island.

Consistently install lighting for sidewalks, bikeways and trails to match adjacent facilities.

C09.2. Light Fixture Types

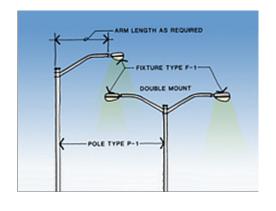
Note: Apply the below base-wide standards for Light Fixtures (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

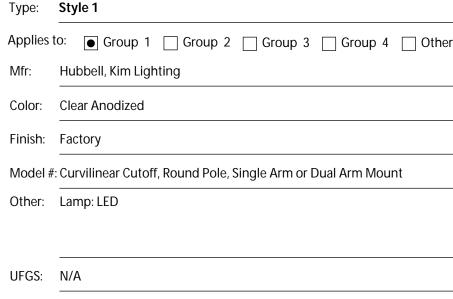
Type:

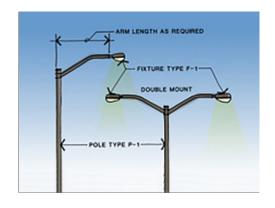
Style 2

C09.2.1. Street Lighting

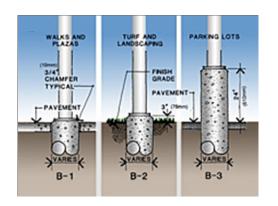
● Applicable ○ N/A







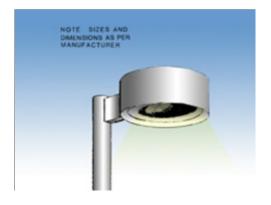
Applies to: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Hubbell, Kim Lighting	
Color:	Dark Bronze Anodized	
Finish:	Factory	
Model #: Curvilinear Cutoff, Round Pole , Single Arm or Dual Arm Mount		
Other:	Lamp: LED	
UFGS:	N/A	



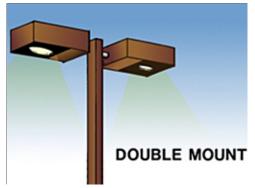
Туре:	Street Lighting Bases (B-1)	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Transit Mix	
Color:	Natural gray	
Finish:	Smooth	
Model #: Round cast in place		
Other:	Heights shall be at grade	
UFGS:	Section 03 33 00 Cast-In-Place Architectural Concrete	

C09.2.2. Parking Lot Lighting

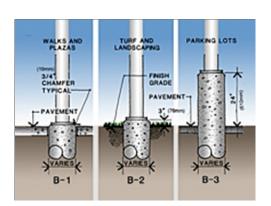
♠ Applicable ○ N/A



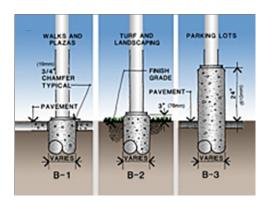
Type:	Style 1	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Hubbell, Kim Lighting	
Color:	Clear Anodized	
Finish:	Factory	
Model #	#: Curvilinear Cutoff, Round Pole, Single Arm or Dual Arm Mount	
Other:	Lamp: LED, Sidewalk fixture similar	
UFGS:	N/A	



Type:	Style 2
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Hubbell, Kim Lighting
Color:	Dark Bronze Anodized
Finish:	Factory
Model #	: Rectilinear Cutoff, Single Arm or Dual Arm Mount
Other:	Lamp: LED, Sidewalk fixture similar
UFGS:	N/A
	Applies Mfr: Color: Finish: Model # Other:



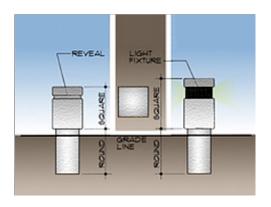
Light Pole Base (B-1) Type: Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other Mfr: Transit Mix Color: Natural gray Finish: Smooth Model #: Round cast in place Other: Heights shall be at grade UFGS: N/A



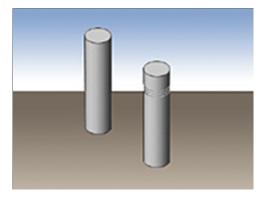
Type:	Light Pole Base (B-2 or B-3)	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Transit Mix	
Color:	Natural gray	
Finish:	Smooth	
Model #: Round cast in place		
Other:	Heights 3' to 5' based on vehicle size	
UFGS:	N/A	

C09.2.3. Lighted Bollards

♠ Applicable ○ N/A

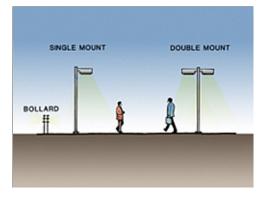


Type:	Precast Concrete
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	HE Williams
Color:	Natural warm gray
Finish:	Smooth
Model a	#: Precast Concrete OSC12S (Square) or OSC12R (Round)
Other:	Lamp: LED, Pedestrian Lighting
UFGS:	N/A



Type:	Metal
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Lithonia
Color:	DNATXD (Textured natural aluminum)
Finish:	Powder coated
Model #	#: KBR8 LED, extruded aluminum, flat top
Other:	Lamp: LED, Pedestrian Lighting, Recreational Areas
UFGS:	N/A

C09.2.4. Sidewalk Lighting



Type: Style 1

Applies to: Group 1 Group 2 Group 3 Group 4 Other

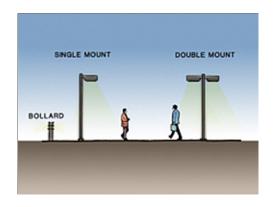
Mfr: Hubbell, Kim Lighting

Color: Clear Anodized

Finish: Factory

Model #: Curvilinear Cutoff, Single arm

Other: Lamp: LED, 8' height



Type:	Style 2
Applies	io: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Hubbell, Kim Lighting
Color:	Dark Bronze Anodized
Finish:	Factory
Model #	: Rectilinear Cutoff, Single arm
Other:	Lamp: LED, 8' height
UFGS:	N/A

C09.2.5. Walls / Stairs Lighting



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Vista Lighting

Color: Dark bronze anodized

Finish: Smooth

Model #: Aluminum Step and Brick Lights, 5230 round louvered

Other: Lamp: LED

C09.2.6. Other

○ Applicable • N/A

D. FACILITIES EXTERIORS

Comply with Air Force Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

D01. SUPPORTING THE MISSION

Comply with AF Corporate Standards for Supporting the Mission: http://afcfs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html

D02. SUSTAINABILITY

Comply with Air Force Corporate Standards for Sustainability: http://afcfs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html

D03. ARCHITECTURAL FEATURES

Comply with AF Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Architectural Features: http://afcfs.wbdg.org/facilities-exteriors/architectural-features/index.html

Insert 3 photos for each facility group.

Image Sizing and Cropping Tool (small)

























Group 3

D03.1. Orientation, Massing and Scale

- 1. Orient new buildings to maximize energy efficiency, passive solar and daylighting potential of the building; narrow buildings oriented along an east-west axis are preferred to minimize heat gain in the summer months and maximize heat gain in the winter months resulting in less overall energy usage.
- 2. Provide orthogonal geometry for principal building form; angular geometry may be used sparingly for Group 1 and used only for emphasis at specific areas such as building entrances and stairwells.
- 3. Maintain a human scale and reduce the visual scale of large buildings with sub-massing related to interior functional operations; create consistent form and scale in adjacent buildings with compatible profiles or silhouettes.
- 4. Building heights shall not be limited; however, building heights over 2 stories shall be considered on a case basis.
- 5. Combine functions where practical to avoid a proliferation of small, independent structures.
- 6. Use and coordinate shading devices with orientation and for function.

D03.2. Architectural Character

- 1. Develop architectural features, materials and detailing appropriate for the Facility Group designation. Refer to Building Entrances, Wall Systems and Roof Systems.
- 2. Respond to the local climate and regional influences with environmentally functional architectural features.
- 3. For new facilities design generally maintain consistency and visual unity in the character of the adjacent buildings through compatible architectural features: repeated use of similar forms such as roofs, and through recurring elements such as doors, windows, materials and colors.
- 4. Provide an aerospace-related architectural theme expressive of innovation and technology that represents Space Command and its mission.
- 5. All facilities shall express sustainability through their orientation, massing, shape, form, materials, and detailing. Provide louvers, fins and other shading devices to control heat gain and glare and to and improve energy efficiency.
- 6. Strive for economical construction without compromising a high-quality, professional appearance.

D03.3. Details and Color

- 1. Provide elements of the aerospace-related theme in Group 1 and 2 to include natural colors of stainless steel and aluminum blended with earth tone colors of concrete and brick. Refer to wall systems for detailed material specifications.
- 2. Relate the level of architectural detailing to the Facility Group.
- 3. Use only integrally colored materials as the predominant exterior building material; do not use materials that require field painting and ongoing maintenance.
- 4. Provide consistent and compatible colors for every exterior building feature, including walls, roofs, doors, windows, gutters, downspouts, utility and mechanical elements, and other visible elements.
- 5. Noncorrosive metals with mill finishes are preferred; factory applied long lasting colored finishes may be used on metals following specified colors under wall systems.
- 6. Combine details and color with orientation, massing, scale and architectural character to maintain base compatibility.

D03.3.1. Climate-based Data and Life-Cycle Cost-Effective Passive and Natural Design Strategies:

Climate dominated by mechanical cooling

Clim	ate dominated by mechanical heating
O Clim	ate with similar mechanical cooling / heating needs
Clim	ate with minimal mechanical cooling / heating needs
Clim	ate with high humidity
Clim	ate with moderate humidity
Clim	ate with low humidity
High	Solar Insolation
○ Mod	erate Solar Insolation
○ Low	Solar Insolation
Soils	with High Thermal Conductivity
Soils	with Average Thermal Conductivity
Soils	with Low Thermal Conductivity
Other:	
Other:	
Facility:	Narrow buildings along E-W axis
Wall:	Integral shading features and devices / Interior masonry thermal mass walls
Doors:	Recessed
Window	s: Limit north-facing windows / maximize windows on south façades with shading
Roof:	High to medium albedo, minimal to moderate slope
Structur	e: (exposed) Non-ferrous metals or concrete
MEP:	Ground-source and solar photovoltaic following LCCA
Other:	
Other:	

Note: Apply the below <u>base-wide standards</u> for Architectural Features (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D03.3.2. Natural Ventilation System

♠ Applicable ○ N/A



Type:	Style 1 Aluminum Windows
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Kawneer (or equivalent)
Color:	Group 1: Silver, Group 2: Dark Bronze
Finish:	Anodized
Model #	#: 2x4, Awning type
Other:	Provide thermally broken frames
UFGS:	Section 08 41 13 Aluminum-Framed Entrances and Storefronts
Type:	Style 2 Steel Windows



Applies to: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Steelcraft (or equivalent)	
Color:	Dark Bronze	
Finish:	Powder coated	
Model #: 2x4 frame, Awning type		
Other:	Provide thermally broken frames	
HEGS:	Section 08 11 13 Steel Doors and Frames	

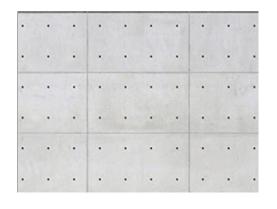
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Marvin (or equivalent)
Color:	Earth Tones
Finish:	Factory
Model #	t: 4" Depth, Double-hung type
Other:	N/A
UFGS:	Section 08 52 00 Wood Windows

Type:

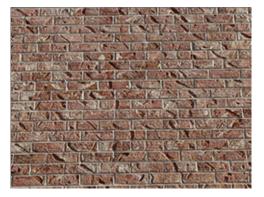
Style 3 Aluminum-clad Wood Windows

D03.3.3. Thermal Mass

♠ Applicable ○ N/A



Type:	Style 1 Wall Material - Cast-in Pace Concrete	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Transit Mix, Colorado Springs	
Color:	Exposed Aggregate (Pikes Peak Granite)	
Finish:	Medium texture	
Model #: Sheet-formed with exposed-tie reveals		
Other:	Medium Texture (or media blasted)	
UFGS:	Section 03 33 00 Cast-In-Place Architectural Concrete	



Type:	Style 2 Wall Material - Brick
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Robinson Brick, Colorado Springs
Color:	Peterson Blend
Finish:	Light texture
Model #	#: Modular Face Brick
Other:	N/A
UFGS:	Section 04 20 00 Unit Masonry

D03.3.4. Thermal Shading



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Kawneer (or equivalent)

Color: Group 1: Silver, Group 2: Dark Bronze

Finish: Factory, to match frames

Model #: Louver

Other: Shading devices may be attached to frames or structure

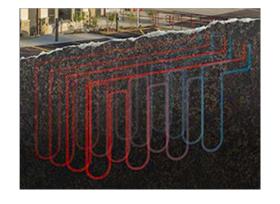
UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts



Type:	Style 2 Wall Devices	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Steelcraft (or equivalent)	
Color:	Dark Bronze	
Finish:	Factory, to match frames	
Model #: Louver, powder coated		
Other:	Shading devices may be attached to frames or structure UFGS: Section 08 11 13 Steel Doors and Frames	
UFGS:	Section 08 11 13 Steel Doors and Frames	

D03.3.5. Renewable Heating/Cooling

♠ Applicable ○ N/A



rype:	Style i Geotnermai (Ground Source)
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Climate Master
Color:	N/A
Finish:	N/A
Model #	: N/A
Other:	Vertical ground loop well field
UFGS:	Section 23 81 47 Water-Loop and Ground-Loop Heat Pump Systems

D03.3.6. Solar Photovoltaic System

♠ Applicable ○ N/A



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Varies

Color: Factory

Finish: Factory

Model #: Flat panel

Other: Ground mount or roof mount

UFGS: Section 26 31 00 Solar Photovoltaic (PV) Components

D03.3.7. Solar Thermal System



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Varies

Color: Factory

Finish: Factory

Model #: Flat panel

Other: Other: Ground mount or roof mount

UFGS: Section 48 14 13.00 20 Solar Liquid Flat Plate and Evacuated Tube

D04. BUILDING ENTRANCES

Comply with AF Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Building Entrances: http://afcfs.wbdg.org/facilities-exteriors/building-entrances/index.html

Insert 3 photos for each facility group.

Image Sizing and Cropping Tool (small)









Group 2

Group 3

Group 4

















D04.1. Primary Entrances

- 1. Group 1 entrances shall be identified by the use of wall plane changes, vertical elements, or similar manipulation of entrance design elements and/or changes in materials.
- Group 2 entrances may have adjacent pedestrian gathering space to enhance a sense of entrance to facilities.
- 3. Express primary building entrances as the focal point of the façade and align these with pedestrian access points. Locate main building entrances on south facades whenever possible.
- 4. All south facing entrances shall be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes, providing protection from the wind and sun.
- 5. When north-facing facades are along the pedestrian area create an entrance feature into a transitional space then direct users to east-facing or west-facing building entrances.
- 6. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1.
- 7. Fully integrate all elements including the design of handicap ramps in the overall design of the primary entrance in an organized uncluttered appearance.
- 8. Install paved transitional spaces sized for the building function and occupancy.
- 9. Install appropriate lighting and site furniture following AT/FP and IFS.
- 10. Protect entrances from falling ice and snow.

Provide porte cocheres or covered drop-offs when justified for lodging and medical facilities; do not use for prestige or architectural accents.

D04.2. Secondary Entrances

- 1. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1; use of stair towers as vestibules for multi-story buildings is encouraged when building and / or energy codes are satisfied.
- 2. Reflect the character of the primary entrance to a lesser extent with a smaller scale.
- 3. Integrate secondary entrances with free-standing shading systems on the east and west ends of buildings for weather protection and shading.

D05. WALL SYSTEMS

 $\label{lem:comply} \mbox{Comply with AF Corporate Standards for Facilities Exteriors:}$

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Doors and Windows:

http://afcfs.wbdg.org/facilities-exteriors/wall-systems/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/wall-systems/materials/index.html

Insert 3 photos for each facility group.

Image Sizing and Cropping Tool (small)

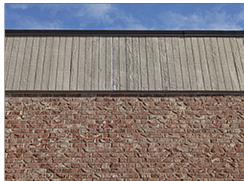














Group 3

Group 4











D05.1. Hierarchy of Materials

- 1. Group 1 facilities may have more refined detailing than Group 2 and Group 2 may have more definition than Group 3.
- 2. Design walls using a hierarchy of primary and secondary wall materials with detailing appropriate for the climate region and use group.
- 3. Limit the number of primary wall materials on the base with each material a consistent color following Installation Facilities Standards (IFS).
- 4. Use materials and detailing not subject to excessive weathering. Provide wall accents consistently throughout the base.
- 5. Use materials in neutral colors, integrally colored materials and factory-finished metals.

D05.2. Layout, Organization and Durability

- 1. Organize wall components including doors, windows, accents, shading devices, control joints, etc., to provide an ordered, professional appearance.
- 2. Integrate shading devices into the overall composition of the wall.
- 3. Use shading devices to functionally shade windows and openings based on building orientation appropriate for the local climate.
- 4. Base-approved materials shall be used for all shading devices; shading systems may be those included in a manufacturer's window system or may be custom systems integrated into the wall.
- 5. Provide appropriate transitions between dissimilar materials to mitigate effects of thermal expansion and galvanic action.
- 6. All joint sealants shall be slightly darker than adjacent surfaces.
- 7. Materials requiring regular maintenance are not permitted; do not use exposed structural steel or other materials that require painting.
- 8. Protect lower portions of walls subject to abuse with a wainscot of masonry or other durable surface.

D05.3. Equipment, Vents and Devices

- 1. Arrange all mechanical, electrical, fire alarm, lightning protection and other system components to create an orderly appearance, which integrates with the wall system.
- 2. Do not expose conduits, cables, piping, lightning protection components, etc. on exterior walls; if unavoidable in renovations, finish these elements to match the adjacent wall surface.
- 3. Avoid visual clutter and where surface-mounted elements are required they shall match the wall color.

D05.4 Wall Systems Materials

Facility Group 1 wall materials shall be as follows.

Facility Group 3 wall materials shall be as follows.

Primary: Metal Panels or Brick Primary: **Ribbed Metal Sheeting**

Secondary: Cast-in-place Concrete or (with brick) Architectura

Ribbed Metal Sheeting in Alternate Color or Brick Secondary:

Accent: Optional: (with brick) Metal Panels

Accent: Optional: Brick

Facility Group 2 wall materials shall be as follows.

Facility Group 4 wall materials shall be as follows.

Primary: **Brick** Primary: **Fiber Cement Siding**

Secondary: **Architectural Precast** Secondary: Fiber Cement Siding, Trim Boards

Optional: Cast-in-Place Concrete Accent:

Accent: Concrete or Brick Foundation Cladding

Note: Apply the below base-wide standards for Wall Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D05.4.1. Flat Metal Panels

Applicable \(\cap \text{N/A} \)



Style 1 Type:

Applies to:

● Group 1 ☐ Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr:

Alucobond

Model #: Alucobond Classic, Rainscreen I

Color:

Anodic Clear Mica PVDF 2

Finish:

Matte

Other:

Route and Return Dry Seal

UFGS:

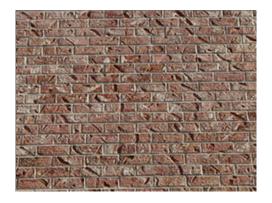
Section 07 42 13 Metal Wall Panels:

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf Section 07 42 63 Fabricated Wall Panel Assemblies:

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 63.pdf

D05.4.2. Brick Veneer

Applicable \(\cap \) N/A



Type: Style 1

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Robinson Brick, Colorado Springs

Model #: Modular Face Brick

Color: Peterson Blend

Finish: Light texture

Other: N/A

UFGS: Section 04 20 00 Unit Masonry:

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 04 20 00.pdf

D05.4.3. Architectural Precast

● Applicable ○ N/A



Type: Style 1 Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other Stresscon, Colorado Springs Mfr: Model #: Smooth Casting Color: Light Beige Finish: Very Light texture Other: N/A UFGS: Section 03 45 00 Precast Architectural Concrete: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 45 00.pdf

D05.4.4. Stucco Over Sheathing

○ Applicable ● N/A

D05.4.5. Curtain Wall

○ Applicable ● N/A

D05.4.6. Cast-In-Place Concrete

● Applicable ○ N/A



Type:	Style 1	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Transit Mix, Colorado Springs	
Model #: Sheet-formed with exposed-tie reveals		
Color:	Exposed Aggregate (Pikes Peak Granite)	
Finish:	Medium Texture (or media blasted)	
Other:	N/A	
UFGS:	Section 03 33 00 Cast-In-Place Architectural Concrete:	

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf

D05.4.7. Tilt-Up Concrete

○ Applicable ● N/A

D05.4.8. Ribbed Metal Sheeting

♠ Applicable ○ N/A



rype.	Style I
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Berridge
Model #	f: Flush Seam Panel
Color:	Dark Bronze (Match SW 2733, Chaparral (BGY); FSC X0045)
Finish:	Embossed Texture
Other:	24 Gauge Steel
LIFGS.	Section 07 42 13 Metal Wall Panels:

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf



Type:	Style 2
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Berridge
Model #: Flush Seam Panel	
Color:	Beige (Match SW 2046, Snow Goose (TWT); FSC X3690)
Finish:	Embossed Texture
Other:	24 Gauge Steel
UFGS:	Section 07 42 13 Metal Wall Panels:

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf

D05.4.9. EFIS

○ Applicable ● N/A

D05.4.10. GRFC

○ Applicable ● N/A

D05.4.11. Concrete Block

D05.4.12. Fiber Cement Siding

♠ Applicable ○ N/A



.) [5 5.	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	James Hardie Building Products, Inc.
Model #	: Horizontal Lap Siding, Shingle Siding
Color:	Earth Tones
Finish:	Wood Texture
Other:	Hardie Plank, Hardie Shingle
UFGS:	SECTION 074646 Fiber Cement Siding: (Not Available on UFGS)

Style 1

Type:

D05.4.13. Other

○ Applicable ● N/A

D06. DOORS AND WINDOWS

Comply with AF Corporate Standards for Facilities Exteriors:

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Doors and Windows:

http://afcfs.wbdg.org/facilities-exteriors/doors-and-windows/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/doors-and-windows/materials/index.html

Insert 3 photos for each facility group.

Image Sizing and Cropping Tool (small)

























Group 4

Group 3

D06.1. Types

- 1. Door and window frame systems shall be a storefront type and incorporate a thermal break feature.
- 2. Clear anodized aluminum finishes are preferred because they show less wear and weathering than dark anodized finishes; match the color of the door and frame. For renovation projects the color of new windows, doors and frames may match existing.
- 3. Group 1 and 2 facilities shall have awning operable windows for a minimum of one half (1/2) of the total window area unless prohibited by interior operations.
- 4. Group 1 facilities shall have metal windows, doors and frames of clear anodized aluminum or powder coated steel factory finished silver to be compatible with stainless steel, factory finished steel or aluminum panels.
- 5. Group 2 facilities may have metal windows, doors and frames similar to Group 1 or anodized aluminum or powder coated steel factory finished dark bronze to match SW 2733, Chaparral (BGY); FSC X0045. Limit hollow metal doors and frames to security doors, utility rooms and mechanical rooms in Groups 1 and 2 facilities.
- 6. Group 3 facilities shall have metal windows, doors and frames factory finished to match dark bronze color SW 2733, Chaparral (BGY); FSC X0045.
- 7. Group 3 secondary entrances may be hollow metal clad to match the adjacent wall.
- 8. Group 3 and 4 buildings shall employ awning or double hung operable windows for a minimum of one half (1/2) of the total window area. Casement windows may be used when matching existing conditions.
- 9. Provide insulation in metal doors and thermal breaks in metal frames.
- 10. Standard-sized hinged doors are preferred. Use sliding, folding, overhead, sectional and other door configurations only to support mission operations.
- 11. Automatic doors are allowed only where functionally necessary.
- 12. Utility and emergency egress doors shall match the wall color.
- 13. Passive thermal comfort methods of ventilation are encouraged where life cycle cost justified.
- 14. Windows must meet force protection requirements.

Adjacent joint sealants should be slightly darker than the frame color.

D06.2. Layout and Geometry

- 1. Develop fenestration geometries in new construction and renovations generally matching adjacent facilities and to promote horizontal visual emphasis. Horizontal and vertical alignment of fenestration units as a visual composition in the exterior building envelope is required.
- 2. All south facing fenestration shall be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes (or shading device), providing protection from the wind and sun.
- 3. Visually and functionally compose openings in walls for the climate-specific exposure.
- 4. Consistently use opening type, size, placement, mullion pattern, and color to reinforce the overall architectural design.
- 5. Openings shall augment interior lighting and space conditioning needs.
- 6. Protect against vandalism, intrusion and coordinate sound ratings.
- 7. Large service or garage doors shall be carefully screened from entries and similar "people" places.

D06.3. Glazing and Shading

- 1. Provide 1" insulating glass at all window and door applications, tempered where required by code, and laminated safety glass at sloped applications. Install 1/4" glass at spandrel panel (opaque) locations.
- 2. All window and door glass shall be medium gray in color of the manufacturer's standard tint, visible light transmittance of 42% and shading coefficient of 0.64 for 1/4" thick glass. Insulating glass units: daylight transmittance 40% maximum, daylight reflectance (outdoors) 8% maximum, shading coefficient (no shade) 0.60 maximum.
- 3. Provide High Solar Heat Gain Coefficient (SHGC) dual-pane glazing where interior thermal mass walls and operable insulating curtains are installed.
- 4. Translucent wall panels may be approved on a case basis.
- 5. Do not use mirrored glazing.
- 6. Fully integrate applicable shading designs for overhangs, louvers, light shelves and grilles.
- 7. Install window screens on operable windows.

D06.4. Hardware

- 1. Provide hardware appropriate for the Facility Group while considering activity and frequency of use and local climate; hardware may be of higher visual quality for Facility Group 1.
- 2. Ensure hardware will perform throughout the facility's lifespan without showing extreme wear.
- 3. Select finishes that will not degrade by intensity of operation or exposure to the elements.
- 4. Use consistent finish and color on window and door systems throughout a facility. For renovation projects the color of new hardware may match existing.
- 5. Design building systems to eliminate the need for security screens whenever possible.

D06.5. Doors and Windows Materials

Note: Apply the below <u>base-wide standards</u> for Doors and Windows (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D06.5.1. Anodized Aluminum

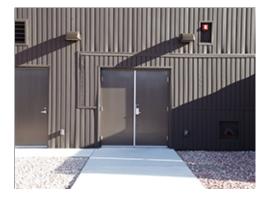
Applicable \(\cap \text{N/A} \)



Type:	Anodized Aluminum Doors, Windows and Frames		
Applies t	o: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Kawneer (or equivalent)		
Color:	Group 1: Silver Powder Coated, Group 2 Dark Bronze Powder Coated		
Finish:	Matte		
Model #:	Model #: 2x4		
Other:	Provide thermally broken frames		
UFGS:	Section 08 41 13 Aluminum-Framed Entrances and Storefronts: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf		

D06.5.2. Hollow Metal

● Applicable ○ N/A



Type:	Hollow Metal Doors, Windows and Frames	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Steelcraft (or equivalent)	
Color:	Group 1: Silver Powder Coated, Group 2 and 3 Dark Bronze Powder Coa	
Finish:	Satin	
Model a	#: 2x4 frame	
Other:	Provide thermally broken frames	
UFGS:	Section 08 11 13 Steel Doors and Frames:	

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf

D06.5.3. Aluminum-clad Wood

● Applicable ○ N/A



Type:	Aluminum-clad Wood Doors, Windows and Frames		
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Marvin (or equivalent)		
Color:	Earth Tones		
Finish:	Satin		
Model #	: Double hung		
Other:	N/A		
UFGS:	Section 08 14 00 Wood Doors		
	http://www.ushdo.org/FFC/DOD/UFCC/UFCC 00.14.00.pdf		

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf

D06.5.4. Other

○ Applicable ● N/A

D07. ROOF SYSTEMS

Group 1

Group 3

Group 4

 $Comply with AF\ Corporate\ Standards\ for\ Facilities\ Exteriors:$

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Roof Systems:

http://afcfs.wbdg.org/facilities-exteriors/roof-systems/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/roof-systems/materials/index.html

Insert 3 photos for each facility group.

Image Sizing and Cropping Tool (small)

























D07.1. Roof Type and Form

- 1. Use proven, cost-effective roof systems with high durability, weather resistance, and low maintenance that are compatible with Installation Facilities Standards (IFS) and requirements for the designated Facility Group.
- 2. Generally match the roof type and form of existing adjacent facilities in new construction.
- 3. Group 1 and 2 buildings shall use "flat" membrane roofs with parapets as the predominant design element, emphasizing the horizontal lines of the building.
- 4. Provide screens for roof-mounted appendages and equipment of the same materials, which are used predominantly in the building's wall systems.
- 5. Roof translucent panels are permitted only for Group 1 and shall match the white panels used previously at the AFSPC headquarters building.
- 6. Group 2 and 3 facilities under 5,000 sf and narrow in plan geometry, may use low-sloped shed, gabled or hipped standing seam metal roofs. Larger facilities may use sloped-roof features in conjunction with predominantly minimal-sloped "flat" membrane roofs.
- 7. Group 4 facilities shall have gabled or hipped composite shingle roofs.
- 8. Roof eaves shall extend beyond the exterior wall for roof drainage and shading. Provide overhangs for shading in response to local climatic conditions, sized and proportioned to the height of the facility and to the window openings being shaded.
- 9. South-facing eaves shall coordinate with adjacent wall-mounted shading devices.
- 10. The color, shape and slope of the eave and soffit shall be compatible with adjacent facilities.
- 11. Keep roofs uncluttered and minimize penetrations.
- 12. Diminish massive roofs into coordinated smaller consistent with adjacent facilities; avoid random, arbitrary changes.
- 13. Increase the insulation value of existing roofing systems during renovations if supported by life cycle cost and structural analysis.

Roofs shall be maintained for the life of the system and replaced in accordance with UFC 3-110-04 and AFI 32-1051. A warranty is required on all new roofs.

D07.2. Roof Slope

- 1. Group 1 and 2 buildings shall use "flat" minimally sloped roofs, min. 1/4":12."
- 2. Group 2 and 3 facilities may have a maximum of 32° or 7.5:12 to allow the sun to melt snow on the winter solstice. 4:12 to 6:12 roof slopes are preferred. Larger facilities may use sloped-roof features with predominantly min. 1/4":12" roofs.
- 3. Group 4 facilities shall use 4:12 to 6:12 roof slopes.
- 4. Ensure adequate drainage, and connect to the rain collection system.
- 5. Minimal-sloped roofing with vegetated roofs may be used when required for architectural compatibility or economically justified.
- 6. Provide roof slopes to accommodate solar photovoltaic, solar thermal, passive systems and daylighting when applicable following UFC 1-200-02.
- 7. Provide membrane underlayments on sloped roofs when required to address ice damming.
- 8. Install snow guards on sloped roofs over building access points where snow and ice may accumulate.

D07.3. Parapets and Copings

1. Extend wall materials vertically above the roof line and provide complementary horizontal copings to conceal all structural roof elements. Ensure copings are properly flashed and detailed to avoid roof leaks.

D07.4. Color and Reflectivity

- 1. All minimal-slope membrane roofs shall use only use high-albedo, high reflectivity color to help decrease the temperature around the buildings and minimize damage to human and wildlife habitat.
- 2. Sloped roofs in Groups 2 and 3 shall be dark bronze or silver to match adjacent facilities and follow requirements of the Facilities Excellence Plan.
- 3. Sloped roofs in Group 4 shall be earth tones.
- 4. Comply with UFC 3-110-03 and ASHRAE 90.1 for Solar Reflectance Index (SRI) and thermal requirements.
- 5. For renovations, ceramic coatings may be used when life-cycle cost effective to improve reflectivity.
- 6. All roof flashing shall match the color of the predominant background material.

D07.5. Gutters, Downspouts, Scuppers, Drains

- 1. Internal roof drainage systems are required for Group 1 facilities. Group 2 may use internal drainage systems, scuppers with downspouts, or gutters with downspouts. Groups 3 and 4 shall use gutters and downspouts.
- 2. Gutters are required for all eaves receiving water and are required for all eaves above the first story unless the area drained is minimal.
- 3. All gutters and fascias shall match the roof color.
- 4. Size the roof drainage system for 10-year storms per SMACNA.
- 5. Use scuppers as required in parapet walls. Arrange scuppers in an orderly manner consistent with other elements of the wall system.
- 6. On Group 2 facilities, when open scuppers are connected to downspouts, provide transitions consistent with adjacent facilities.
- 7. Integrate downspouts with the architectural details of the wall system and arrange in an orderly, non-prominent appearance. Generally blend downspouts with the color of the wall (not contrasting it).
- 8. Fabricate downspouts from non-corrosive materials such as aluminum, zinc-coated steel, or stainless steel. Stainless steel may only be used for Group 1 facilities.
- 9. Open-faced downspouts are required on north-facing exposures.
- 10. Provide angled transitional pieces for downspouts to fit closely against the wall for their entire length.
- 11. Coordinate locations of downspouts to conceal control joints in masonry walls when possible.

Place downspouts away from building entries. Water discharged should not run across sidewalks.

D07.6. Roof Vents and Elements

- 1. Minimize and consolidate roof penetrations into a single, inconspicuous point whenever possible.
- 2. On sloped roofs clad pipe penetrations to match the roofing material.

- 3. Avoid the use of rooftop mechanical equipment, however for renovations and unavoidable configurations ensure units are screened.
- 4. Provide access points and service routes to equipment that protect the roof.
- 5. Screen all large vents.
- 6. Ensure attic spaces are properly vented at ridges and soffits.
- 7. Match roof color for all exposed equipment and vents.
- 8. Avoid roof-mounted antenna systems.
- 9. Arrange Lightning Protection Systems (LPS) components in an ordered, uncluttered, inconspicuous appearance and integrated into the organization of the roof and wall systems.
- 10. Ensure that LPS roof mounting systems are approved by the roofing manufacturer.
- Additions to a roof shall not interfere with LPS or other rooftop systems that may be required.
- 12. Permanent fall protection shall be included with any addition to a roof with a slope above 3:12 per UFC 3-110-03. to a roof with a slope above 3:12 per UFC 3-110-03.

D07.7. Clerestories and Skylights

- 1. Clerestories and skylights are permitted in Group 1 facilities. These are allowed in Group 2, 3 and 4 facilities only when serving passive systems and are justifiable by life-cycle analysis.
- 2. Clerestories are preferred to skylights to avoid roof penetrations. Skylights, when permitted, must be simple in shape and integrated with the roof system to eliminate leakage.
- 3. Design clerestories and skylights using the same principles for seasonal shading that are required for walls and roof overhangs.
- 4. Translucent panel systems are preferred in clerestory applications due to lack of window cleaning.
- 5. Clerestories and skylights must comply with UFC 4-10-01.

D07.8. Vegetated Roof

- 1. Vegetated roofs are encouraged when they can be sustained with low maintenance, without potable irrigation systems and when they provide energy savings.
- 2. Use of a vegetative roof should include a maintenance contract for unique requirements.
- 3. Ensure that a vegetated roof is appropriate for the specific application and climate zone and where justifiable by life-cycle analysis.
- 4. Provide walking paths and pads for access and maintenance.
- 5. Do not use vegetative roofs near flightlines.

D07.9. Roof Systems Materials

Note: Apply the below <u>base-wide standards</u> for Roof Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Berridge

Color: Dark Bronze

Finish: Matte

Model #: Tee-Panel

Other: Shed, gabled or hipped standing seam metal

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 61 14.00 20.pdf

D07.9.2. Membrane Single-ply

● Applicable ○ N/A



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Carlisle Syntec Systems

Color: Off-white

Finish: Smooth

Model #: Single-ply, "flat" minimal slope

Other: Gabled or shed translucent panel clerestories

UFGS: Section 07 53 23 Ethylene-Propylene-Diene-Monomer Roofing http://www.wbdq.org/FFC/DOD/UFGS/UFGS 07 53 23.pdf

Section 07 54 50 TPO Thermoplastic Single-Ply Roofing

D07.9.3. Built-up Multi-ply

○ Applicable N/A

(Not Available on UFGS)

D07	0 1	Cor	icrete	Tila
DUI	.9.4.	COL	ıcrete	HHE

○ Applicable N/A

D07.9.5. Clay Tile

○ Applicable ● N/A

D07.9.6. Slate Shingles

○ Applicable N/A

D07.9.7. Vegetated System

D07.9.8. Ribbed Metal Sheeting

○ Applicable N/A

D07.9.9. Composite Shingles



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Tamko
Color:	Earth Tones
Finish:	Factory
Model #	t: Heritage
Other:	Gabled or hipped with transverse gabled or hipped features

UFGS: Section 07 31 13 Glass-fiber-reinforced Asphalt Shingles http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 31 13.pdf

D07.9.10. Other

○ Applicable N/A

D08. STRUCTURAL SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Structural Systems:

http://afcfs.wbdg.org/facilities-exteriors/structural-systems/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/structural-systems/materials/index.html

Insert 3 photos for each facility group.

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Group 2



D08.1. Systems and Layouts

- 1. Pre-engineered structural steel framing is preferred for Groups 1, 2 and 3 facilities; conventional thermal envelopes and IFSapproved wall materials and detailing are required. Concrete framing may be used for Group 1. Rigid steel framing may be used for Groups 1 and 2.
- 2. Wood framing or light-gauge steel framing shall be used for Group 4.
- 3. Narrow buildings 60' or less in width with column-free interiors are preferred for office, administrative and personnel spaces; when interior columns are required optimize the structural grid layout for open-plan arrangements.
- 4. Fully coordinate structural grids with exterior window systems to align columns with window frames or wall systems.
- 5. When structure is exposed provide an organized appearance and coordinate with mechanical, electrical, plumbing, fire protection, information technology, and communications systems.
- Specialty systems (such as space frames, vaults or domes) and of structure as a visual feature may be approved on a case basis.
- 7. Cost-effectively designed interior bearing walls may be used for thermal mass.

D08.2. Structural Systems Materials

Note: Apply the below <u>base-wide standards</u> for Structural Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D08.2.1. Concrete

Applicable \(\cap \) N/A



Style 1
to: Group 1 Group 2 Group 3 Group 4 Other
Stresscon. Inc.
Natural Gray
Light texture
t: Post and beam, waffle slab
N/A

UFGS:

Section 03 30 53 Miscellaneous Cast-In-Place Concrete http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 30 53.pdf Section 03 33 00 Cast-In-Place Architectural Concrete http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf Section 03 47 13 Tilt-Up Concrete

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 47 13.pdf

D08.2.2. Insulated Concrete Forming (ICF)



Type:	Rigid Framing	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	US Steel	
Color:	Shop primed	
Finish:	Matte	
Model #	t: Structural steel shapes	
Other:	N/A	
UFGS:	Section 05 12 00 Structural Steel http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 12 00.pdf	

D08.2.4. Pre-Engineered Steel

● Applicable ○ N/A



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Behlen Building Systems

Color: Factory primed

Finish: Matte

Model #: Moment Frame

Other: Draped insulation may be used behind wall system;
Behlen standing seam roof system may be used for Group 3

UFGS: Section 13 12 00 Steel Building Systems
(Not Available on UFGS)
Section 13 34 19 Metal Building Systems

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 13 34 19.pdf

D08.2.5. Masonry

Type:

Moment Frame

D08.2.6. Heavy Timber

○ Applicable ● N/A

D08.2.7. Light-gauge Steel

♠ Applicable N/A



Type:	Style 1	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Steelrite	
Color:	Factory	
Finish:	Galvanized	
Model #	f: Structural framing shapes	
Other:	N/A	
UFGS:	Section 05 45 00 Light Gauge Steel Framing System (Not Available on UFGS)	

D08.2.8. Lumber Framing



Type:	Style 1
Applies t	o: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Boise Cascade Wood Products
Color:	N/A
Finish:	S4S
Model #	Structural dimensional lumber
Other:	N/A
11500	

UFGS:

Section 06 10 00 Rough Carpentry http://www.wbdg.org/FFC/DOD/UFGS/UFGS 06 10 00.pdf

Section 06 11 00 Wood Framing and Sheathing

(Not Available on UFGS)

D08.2.9. Other

○ Applicable ● N/A

D09. MECHANICAL, ELECTRICAL AND PLUMBING

Comply with AF Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Mechanical, Electrical and Plumbing: http://afcfs.wbdg.org/facilities-exteriors/machanical-electrical-and-plumbing/index.html

Insert 3 photos for each facility group.

Image Sizing and Cropping Tool (small)





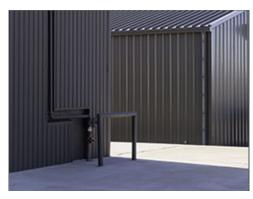




















Group 4

Group 1

Group 2

Group 3

D09.1. Passive and Active Systems

- 1. Fully integrate passive heating and cooling systems into facility designs whenever practical for the local climate, which is dominated by mechanical heating loads, prior to the design of active mechanical systems.
- 2. Provide optimized passive and active systems; design active mechanical systems to supplement thermal mass walls and floors.
- 3. Develop renewable energy systems including geo-exchange (ground source heat pumps) when life cycle cost effective.
- 4. Performance display screens, which report energy performance and utility savings, are encouraged; when provided locate these in building lobbies or common areas.
- 5. Solar domestic hot water systems are required when life cycle cost effective.
- 6. Integrate shading into building exteriors to reduce solar heat gain during the summer.

D09.2. Functionality and Efficiency

- 1. Fully coordinate mechanical, electrical, plumbing (MEP) and fire protection systems with each other and with the building structure, enclosure, thermal envelope and interior design.
- 2. Ensure direct exterior access is provided (for CE) to main mechanical and electrical rooms.
- 3. Screen exterior equipment from primary views (landscape, building masses, screen walls) and comply with AT/FP requirements.
- 4. Keep equipment away from main building entrances; locate service area/yard on least visible side of a building.
- 5. Coordinate the location of all exterior meters, equipment and devices to provide convenient access and an overall coordinated and orderly appearance.
- 6. Design emergency generator systems integrally with all other building systems and avoid incompatible building additions; locate generators near service areas and not visible from primary entrances.
- 7. When structure is exposed as a finished ceiling, fully integrate MEP and fire protection systems to provide an organized uncluttered appearance.
- 8. Conceal ducts, piping, conduits, devices, etc., when permanent walls, suspended ceilings or raised floors are provided; locate sprinkler heads in orderly configuration.
- 9. Limit interior wall-mounted equipment in occupied personnel spaces; avoid surface-mounted conduit and pipes.
- 10. Provide efficient utility rooms with layouts to facilitate system performance and maintenance; provide convenient access to controls, clearly label systems and include operating and maintenance instructions.
- 11. Separate mechanical and electrical and communications rooms.
- 12. Integrate recessed and wall-mounted fixtures such as fire standpipe cabinets and drinking fountains within permanent walls.

Group 1

Group 3

Group 4

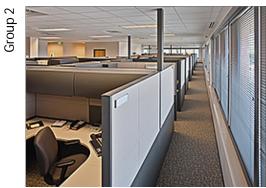
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E01. Building Configurations

Comply with Air Force Corporate Standards for Building Configurations: http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/index.html

- 1. Provide open-plan configurations for office, administrative, operational and related activities and spaces for maximum flexibility. Use a "core and shell" approach in which all building systems, infrastructure and permanent interior partitions anticipate two or more uses (operations) during a facility's lifespan.
- 2. Create flexible interior configurations using Furniture, Fixtures & Equipment (FF&E) and limit private offices and private rooms. Refer to AFMAN 32-1084 for space requirements. To the greatest extent, limit permanent partitions to core areas such as toilet rooms, stairs, mechanical and utility rooms. Use more durable long-lasting finishes in core areas for walls, ceilings, floor coverings and built-in casework. Coordinate interior FF&E layouts with structural grids during space planning.
- 3. Provide high-performance building configurations following UFC 1-200-02. Ensure passive design strategies are cost effectively incorporated before active mechanical systems are designed.
- 4. Comply with UFC 1-200-01, general building requirements. UFC 1-200-01 provides applicability of model building codes and government unique criteria for typical design disciplines and building systems, as well as for accessibility, antiterrorism, security, high performance and sustainability requirements, and safety.
- 5. Meet security and force protection requirements in UFC 4-010-01: DoD Minimum Antiterrorism Standards for Buildings.
- 6. Comply with AFCFS for supporting mission requirements, addressing human comfort and well being, and creating highly flexible interiors while satisfying metrics for high performance and sustainable buildings.
- 7. Provide a level of quality for interior features, materials and finishes that is appropriate for the Facility Group number. Group 1 may receive higher quality than Groups 2 thru 4. Refer to Facility Hierarchy.
- 8. Provide open-plan configurations for office, administrative, operational and related activities and spaces for maximum flexibility using a "core and shell" approach as defined in AFCFS. Fully integrate facility interiors with overall building systems and preserve all passive and natural design strategies.
- 9. Design and review must be accomplished by, or in consultation with, professional interior designers or architects with significant interior design experience. For in-house design and maintenance projects that require interior design applications, the 21st CES Interior Designer is expected to work on the project.
- 10. Consult with the State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation regarding proposed changes to properties listed on or eligible for listing on the National Register of Historic Places. Follow requirements of The National Historic Preservation Act and Secretary of the Interior Standards for the Treatment of Historic Properties.
- 11. Maintain architectural compatibility following AFCFS and this Installation Facilities Standards (IFS) document to create continuity while avoiding monotony.

E01.1. Layout and Common Areas

Comply with Air Force Corporate Standards for Layout and Common Areas: http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/layout-and-common-areas/index.html

- 1. Create open-plan interior environments to accommodate changes.
- 2. Limit interior partitions, private offices and rooms; use furniture or modular systems to provide privacy and acoustic control.
- 3. When partitions are functionally justified such as for conference rooms, use systems furniture and moveable (demountable) floor-to-ceiling wall systems for acoustical or visual privacy.
- 4. Proportion lobbies and common spaces based on type of function, activity and facility group and flexibility to support multiple missions over time. Provide distinct boundaries for waiting areas with a variety of comfortable and moveable furniture arranged in small flexible groupings to accommodate the widest range of persons and families.

- 5. Design common areas to accommodate and manage a sudden influx of people that rapidly reaches the maximum occupant load.
- 6. Allow no direct sight lines into restrooms.
- 7. Situate utility and core areas to minimize impact on daylighting and to maximize use as thermal buffers.
- Ensure electrical, lighting and communications systems can be adaptable to configuration changes.
- 9. Avoid power poles to the maximum extent; when poles are necessary minimize the number and coordinate locations with furniture placement and other elements.
- 10. Avoid sloping floors to maintain flexibility and eliminate future structural changes.
- 11. Special consideration may apply to Sensitive Compartmented Information Facilities (SCIFs).

E01.1.1. Interior Design Process

- 1. Comply with UFC 3-120-10 for the Comprehensive Interior Design (CID,) which includes both Structural Interior Design (SID) and Furniture, Fixtures & Equipment (FF&E) design services.
- 2. Use a collaborative, integrated planning and design team, composed of user, government support staff, and appropriate professionals. Integrate architectural features using simple detailing to create a professional appearance; avoid extravagant or excessive detailing.
- 3. Ensure interior designs satisfy the functional requirements within the context of flexibility, sustainability and the building's energy performance.
- 4. Base space planning on square foot allocations from AFH 32-1084. Identify special requirements if any, such as privacy separation, VIP areas, gathering spaces and storage. Note: The occupant's rank and position will influence the square footage and selection of materials.
- 5. Provide clear circulation and pathway finding for both horizontal and vertical directions that accommodate the number of personnel in the facility.
- 6. Maximize efficiencies in the space plan for functional relationships and adjacencies for all facility users. Efficiently create and situate rooms and support rooms such as conference/meeting rooms and break rooms.
- 7. Provide interior design building-related illustrations, drawings, schedules, materials selections, specifications and cost estimates as listed in UFC 3-120-10. Refer to Furnishings in this IFS also.
- 8. SID Format shall follow HQ AFCEC standards. Additionally, provide the following minimum requirements:
- a. Final order data sheets shall be provided in an electronic format that is readily used such as Word or Excel.
- b. Information and samples are to be submitted in separate binders: 8 ½" x 11" format; white 3" D-ring binders, only; pockets on the inside of the covers; more than one binder may be used; limit fold-out items to 25 ½".
- c. Label the SID outside spine, outside cover and inside title page with the following information:

%Phase %

%ID

%Project Title and Number

% ocation of Project

%Submittal Date

%A&E or Project firm

% olume Number (ex: Vol. 1 of 3)

d. Each sheet within the SID binder is to be labeled:

%Project title

%Location %A&E or Project firm name %heet number

9. Base the FF&E package on the furniture footprint developed in the SID. Identify all new or existing equipment needed and its users within each facility or each area of the facility. Provide specific information on: equipment sizes, electrical requirements, ventilation requirements, weight (if heavy), quantity, and security level if required. Presume all administrative spaces have computers and supporting equipment.

E01.1.2. Codes and Regulations

- 1. Refer to UFC 1-200-01 for modifications to the International Building Code (IBC) to determine applicable sections of the IBC. Both the IBC Chapter 3 and UFC 3-600-01 govern "Use and Occupancy Classification" for example.
- 2. Fire code requirements shall be as defined in the International Building Code (IBC) and must be used where dictated by UFC 1-200-01 DoD Building Code (General Building Requirements) except where noted in UFC 3-600-01 (Fire Protection Engineering For Facilities).
- 3. National Fire Protection Association (NFPA) 101 must be utilized to determine the occupancy classification as it relates to fire/smoke resistance rating of interior non-load bearing partitions (other than occupancy separation), means of egress, interior finish, features of fire protection (including vertical openings) and associated requirements.

E01.2. Quality and Comfort

Comply with Air Force Corporate Standards for Quality and Comfort: http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/quality-and-comfort/index.html

- 1. Include durability in the life cycle cost analysis for best-value material selections with long life expectancies that do not show excessive wearing.
- 2. Select long-lasting materials and finishes for permanent core areas such as lobbies, restrooms and stairs.
- 3. Select low-maintenance materials and products that reduce ongoing servicing and repair and that are easy to clean.
- 4. Relate the visual quality of finishes to the Facility Group number.
- 5. Building and interior configurations should address both operations and climatic responses.
- 6. Convey a professional image; avoid trendy patterns and textures.
- 7. Use materials and finishes that provide a healthy indoor environment.
- 8. Orient interior spaces toward views while maintaining cost-effective building performance and efficiency.
- 9. Promote air movement and daylighting for human health and wellbeing.
- 10. Investigate customs or cultural influences that might become protocol issues and comply with Federal Government policy regarding protection and enhancement of the cultural environment. For example, no symbol of any kind (that could relate to any religion) is allowed in the chapel.

E02. Floors

Comply with Air Force Corporate Standards for Floors: http://afcfs.wbdg.org/facilities-interiors/floors/index.html

E02.1. Floor Materials

Facility Group 1 floor materials shall be as follows. Facility Group 3 floor materials shall be as follows. Primary: Prepared Slabs (Ground, Polished) Primary: Prepared Slabs (Ground) Secondary: Porcelain tile Secondary: Prepared Slabs (Sealer) Tertiary: Carpet, Rubber Stair Treads Tertiary: N/A Facility Group 4 floor materials shall be as follows. Facility Group 2 floor materials shall be as follows. Primary: Prepared Slabs (Ground, Polished) Primary: Carpet Secondary: Ceramic tile Secondary: Ceramic tile Tertiary: Carpet, Rubber Stair Treads Tertiary: N/A 1. Select floor materials in response to the amount of foot traffic a floor receives and to local conditions to provide the greatest long-term value. 2. Floor treatments (patterns and layouts) should convey the designation of the Facility Groups (Group 1, 2, 3 or 4), type of use, and type of space while considering a life cycle cost analysis. Facility Group 1 may receive higher quality treatments than Facility Groups 2 through 4, but should not convey an excessive use of resources. 3. Lower the initial cost of flooring in new construction while providing durability appropriate for the facility type. Carpet must comply with requirements for performance, aesthetics, functional use and maintenance; refer to UFGS 09680 Carpet and ETL 07-4 Air Force Carpet Standard. Coordinate carpet selections and specifications with installation design standards. 5. Natural stone and terrazzo flooring may be used in high traffic areas of Group 1 as approved on a case basis. 6. Resilient and rapidly renewable flooring may be used in low traffic areas in Group 1, 2 and 4. 7. Acceptable resilient floor includes rubber, VCT, LVT, cork, and linoleum. Resilient flooring may be used for stairs, office break rooms, dining areas, fitness areas, and (rubber) floor base. 8. Use carpet tiles under system furniture installations. Refer to TARR Rating for carpets following AF criteria. Refer to AFCFS. 9. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below base-wide standards for Floors (products, materials and color). Then refer to the Appendix and apply any

additional requirements specifically related to the Facility District in which the project is located.

E02.1.1. Prepared Slabs

Applicable \(\cap \text{N/A} \)



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Transit Mix Colorado Springs
Color:	Natural gray cement, neutral to red aggregates
Finish:	Semi-gloss
Model #	#: Medium to small aggregate
Other:	Fine polished texture
UFGS:	Section 03 35 45 Polished Concrete Finishing (Not Available on LEGS)

E02.1.2. Natural Stone and Terrazzo

E02.1.3. Quarry Tile

Applicable \(\cap \) N/A



Type: Style 1

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Daltile

Color: Earth tones

Finish: Matte, slip resistant

Model #: N/A

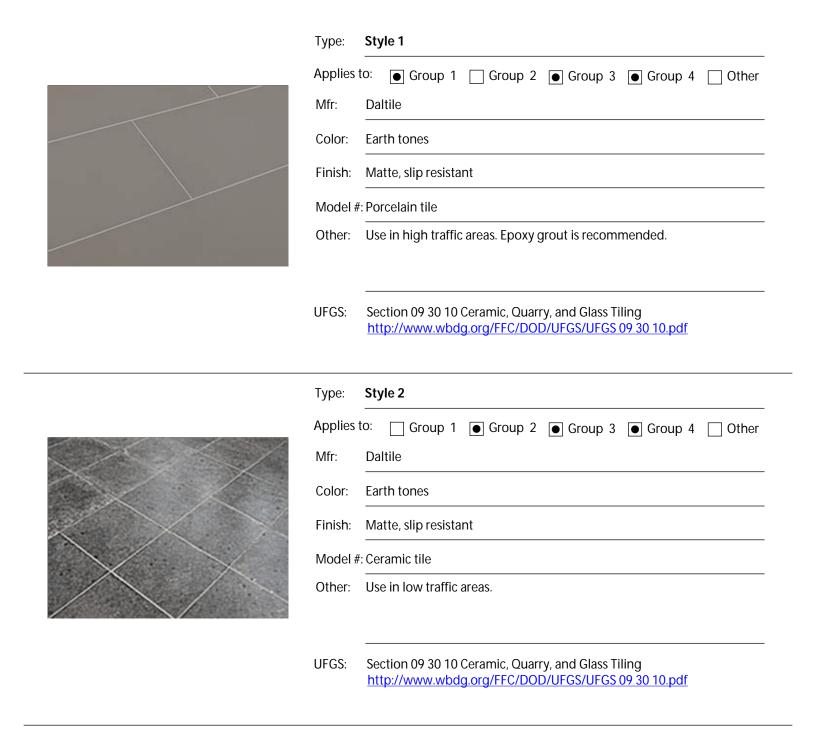
Other: Use in commercial kitchen flooring.

UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf

E02.1.4. Ceramic Tile

● Applicable ○ N/A



E02.1.5. Resilient Floor

Applicable \(\cap \text{N/A} \)



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Roppe
Color:	Neutral tones
Finish:	Factory
Model #	: Raised design rubber tread
Other:	Stair Treads Material
UFGS:	Section 09 65 00 Resilient Flooring

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 65 00.pdf

E02.1.6. Carpet♠ Applicable♠ N/A



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Mohawk Group

Color: Neutral multi-colored tones/patterned/solid

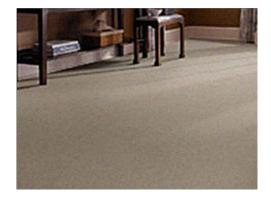
Finish: Yarn: Nylon 6 or 6.6/cut pile or loop pile

Model #: Broadloom, 6' wide rolled, carpet tiles, entry walk-off carpet

Other: N/A

UFGS: UFGS 09 68 00 Carpeting

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf



Type:	Style 2
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Mohawk Group
Color:	Earth tones
Finish:	Factory
Model #	e: Broadloom, residential loop, "Smartstrand"
Other:	N/A
HFGS:	LIEGS 09 68 00 Carneting

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf

E02.1.7. Rapidly-Renewable Products

○ Applicable N/A

E02.1.8. Other

○ Applicable ● N/A

E03. Walls

Comply with Air Force Corporate Standards for Walls: http://afcfs.wbdg.org/facilities-interiors/walls/index.html

E03.1. Wall Materials

Facility Group 1 wall materials shall be as follows. Facility Group 3 wall materials shall be as follows.

Primary: Concrete or brick Primary: Ground face block

Gypsum board (painted) Secondary: N/A Secondary:

Tertiary: Ceramic tile (restrooms) Tertiary: Ceramic tile (restrooms)

Facility Group 4 wall materials shall be as follows. Facility Group 2 wall materials shall be as follows.

Primary: Primary: Gypsum board (painted) Brick

Secondary: Gypsum board (painted) Secondary:

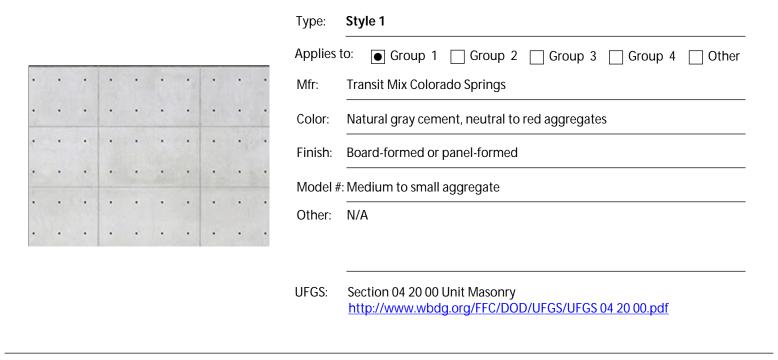
Tertiary: Ceramic tile (restrooms) Tertiary: Ceramic tile (restrooms)

- 1. Provide durable low-maintenance wall materials and finishes for a long life span with the possibility of one or more uses of spaces during that time. Apply wall finishes assuming a 10-year lifespan. Color shall be cohesive and of consistent quality throughout a facility.
- 2. Comply with Unified Facilities Criteria for Sound Transmission Loss (TL), Noise Reduction (NR) and Sound Transmission Class (STC) ratings.
- 3. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
- 4. Provide a level of finish following UFGS Section 09 29 00 Gypsum Board.
- 5. Select and apply paint with sheens (gloss levels) appropriate for the application following UFGS Section 09 90 00 Paints and Coatings.
- 6. Provide ceramic tile on wet walls of kitchens, toilet rooms, locker rooms, etc., in all facility groups.
- 7. Neutral split-face or ground-face integrally colored block with a clear sealer may be used in Group 3. Do not paint block.
- 8. Provide rubber base on drywall partitions in Groups 1 and 2.
- 9. Hardwood base may only be used in Group 1 as approved on a case basis.
- 10. Hardwood chair rails / bumper rails other than oak (unless matching existing) may be used in high-use areas of Groups 1 and 2; aqueous clear finishes are preferred to reduce maintenance; plastic chair rails are permitted only in medical applications.
- 11. Corner guards are permitted in all high traffic areas such as corridors, lobbies, elevator areas, large open offices, service areas. Use 2" solid color vinyl in office areas; use satin stainless steel angle in service areas and other areas of heavy use.
- 12. Decorative moldings may be used only in Group 1 when approved on a case basis.
- 13. Corner guards are permitted only in high traffic spaces with wheeled or cart use such as private service areas in Groups 1 and 2; stainless steel corners guards with a satin finish may be judiciously used in Group 3.
- 14. Group 4 may use painted composite wood base.
- 15. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below <u>base-wide standards</u> for Walls (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E03.1.1. Concrete

Applicable \(\cap \) N/A



E03.1.2. Masonry

Applicable \(\cap \text{N/A} \)



Type:

Style 1

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf

E03.1.3. Ceramic Tile

Applicable \(\cap \text{N/A} \)



Type:	Sty;e 1
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Daltile
Color:	Earth tones
Finish:	Gloss, Semi-gloss
Model #	: Ceramic wall tile
Other:	Located on wet walls in restrooms, square shapes are preferred in Groups 1, 2 and 3.
UFGS:	Section 09 30 10 Ceramic, Quarry, and Glass Tiling

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf

E03.1.4. Gypsum Board

● Applicable ○ N/A



Type: Style 1 Applies to: ● Group 1 ● Group 2 ☐ Group 3 ● Group 4 ☐ Other Mfr: **US Gypsum** Color: Solid Earth tone colors Finish: Paint (Sheen per UFGS) Model #: Tapered edge Other: N/A **UFGS**:

Section 09 29 00 Gypsum Board

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf

Section 09 90 00 Paints and Coatings

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf

E03.1.5. Metal Panels

○ Applicable N/A

E03.1.6. Wood Paneling

○ Applicable ● N/A

E03.1.7. Rapidly-Renewable Products

○ Applicable ● N/A

E03.1.8. Other

E04. Ceilings

Comply with Air Force Corporate Standards for Ceilings: http://afcfs.wbdg.org/facilities-interiors/ceilings/index.html

E04.1. Ceiling Materials

Facility Group 1 ceiling materials shall be as follows.

Facility Group 3 ceiling materials shall be as follows.

Primary: Exposed Framing (Roof / Floor Structure Above) Primary: Exposed Framing (Roof / Floor Structure Above)

Secondary: Grid and Acoustical Tile Secondary: Exposed Framing (Roof / Floor Structure Above)

Tertiary: Gypsum board (painted) Tertiary: Gypsum board (painted) (restrooms)

Facility Group 2 ceiling materials shall be as follows.

Facility Group 4 ceiling materials shall be as follows.

Primary: Exposed Framing (Roof / Floor Structure Above) Primary: Gypsum board (painted)

Secondary: Grid and Acoustical Tile Secondary: N/A

Tertiary: Gypsum board (painted) Tertiary: N/A

- 1. Provide durable low-maintenance ceiling materials for a long facility life span with flexibility for two or more uses during that time.
- 2. Structural roof and floor decks and other components may be exposed when cost effective to eliminate or minimize secondary suspended ceilings. Promote passive heating and cooling, natural ventilation and daylighting to the maximum extent possible.
- 3. Provide daylighting for occupied interiors whenever possible. Create a cost-effective layered system of ambient light, task light and accent light. A single overhead illumination system (with equal lighting throughout open plans) is discouraged.
- 4. All individual elements placed on ceilings or suspended from ceilings shall be fully coordinated and have an ordered appearance. Ceiling types, layouts and materials should be cohesive and consistent throughout a facility.
- 5. Limit the transmittance of sound through building components and the reflectance of sound within interior spaces following UFC 3-450-01. Comply with Unified Facilities Criteria for Sound Transmission Loss (TL), Noise Reduction (NR) and Sound Transmission Class (STC) ratings.
- 6. Accent ceiling materials such as metal, wood, and rapidly renewable may be used in Group 1 as approved on a case basis.
- 7. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
- 8. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below <u>base-wide standards</u> for Ceilings (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

UFGS:

Section 05 30 00 Steel Decks

E04.1.1. Exposed Framing (Roof / Floor Structure Above)



Type:	Style 1
Applies	to: • Group 1 • Group 2 • Group 3 Group 4 Other
Mfr:	Vulcraft
Color:	Color reviewed on a case basis
Finish:	Field painted (Sheen per UFGS)
Model #	: Formlok floor and roof decking
Other:	N/A

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 30 00.pdf

E04.1.2. Exposed Concrete

○ Applicable N/A

E04.1.3. Grid and Acoustical Tile

● Applicable ○ N/A



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Armstrong
Color:	White
Finish:	Factory
Model a	#: 2'x2' tegular with reveal edge and fine texture, grid 15/16"
Other:	Performance characteristics are Class A; NRC-0.70; CAC-40; LR-0.86; minimum recycled content 82%.
UFGS:	Section 09 51 00 Acoustical Ceilings http://www.wbdq.org/FFC/DOD/UFGS/UFGS 09 51 00.pdf

E04.1.4. Gypsum Board

♠ Applicable ○ N/A



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	US Gypsum
Color:	Solid neutral colors
Finish:	Paint (Sheen per UFGS)
Model #	: Tapered edge
Other:	N/A
UFGS:	Section 09 29 00 Gypsum Board http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf Section 09 90 00 Paints and Coatings

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf

E04.1.5. Metal Panels

○ Applicable ● N/A

E04.1.6. Wood

○ Applicable ● N/A

E04.1.7. Rapidly-Renewable Products

○ Applicable ● N/A

E04.1.8. Other

○ Applicable N/A

E05. Doors and Windows

Comply with Air Force Corporate Standards for Doors and Windows: http://afcfs.wbdg.org/facilities-interiors/doors-and-windows/index.html

E05.1. Doors and Windows and Frames Materials

Facility Group 1

door (frame) and window frame materials shall be as follows.

Primary: Aluminum, clear anodized

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 1

door (leaf) materials shall be as follows.

Primary: Hardwood veneer

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 2

door (frame) and window frame materials shall be as follows.

Primary: Aluminum, clear anodized

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 2

door (leaf) materials shall be as follows.

Primary: Hardwood veneer

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 3

door (frame) and window frame materials shall be as follows.

Primary: Hollow metal (galvanized, painted)

Secondary: Hollow metal (galvanized)

Tertiary: N/A

Facility Group 3

door (leaf) materials shall be as follows.

Primary: Hollow metal (galvanized, painted)

Secondary: Hollow metal (galvanized)

Tertiary: N/A

Facility Group 4

door (frame) and window frame materials shall be as follows.

Primary: Wood

Secondary: N/A

Tertiary: N/A

Facility Group 4

door (leaf) materials shall be as follows.

Primary: Wood solid core

Secondary: Composite solid core

Tertiary: N/A

^{1.} Provide doors and windows for a long facility life span and for maximum flexibility under adaptive use. Install durable doors, windows and frames made of low-maintenance materials. Hardware types and finishes shall not degrade or show excessive wear over their lifespan.

- 2. Install glazing in doors and locate windows to preserve paths of sunlight. Create openings to enhance air flow and to facilitate passive ventilation. Balance building performance with occupant comfort, health, safety, security and productivity.
- 3. Visually integrate doors and windows with the overall facility design to create an organized appearance. These elements must convey an image of lasting quality and efficiency without extravagance. Ensure systems and materials are appropriate for the Facility Group.
- 4. Hardwood casings may be provided over metal frames in Group 1 as approved on a case basis.
- 5. Paneled textured doors are preferred in Group 4.
- 6. Do not use hollow-core wood doors.
- 7. Generally match original hardware in renovations.
- 8. All door locks shall be keyed to BEST commercial/heavy duty locks.
- 9. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below <u>base-wide standards</u> for Doors and Windows (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E05.1.1. Aluminum

Applicable \(\cap \text{N/A} \)



Type:	Style 1			
Applies	to: Group 1 Group 2 Group 3 Group 4 Other			
Mfr:	Kawneer			
Color:	Clear anodized			
Finish:	Factory			
Model #: InFrame Interior Framing, (2x4 nominal framing)				
Other:	Brushed stainless steel hardware			

UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf

Section 08 71 00 Door Hardware

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

E05.1.2. Hollow Metal

Applicable \(\cap \text{N/A} \)



rype:	Style 1 - Steel Doors		
Applies t	io: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Steelcraft		
Color:	Neutral colors		
Finish:	Paint (Sheen per UFGS)		
Model #	: Hollow metal, 2" wide frames, 16 ga pressed steel min., welded corners		
Other:	Steel doors are only permitted in utility areas of Group 1 and 2. Provide A25 galvannealed coating. All interior steel doors shall have a factory applied primer finish, satin stainless steel hardware.		
UFGS:	Section 08 11 13 Steel Doors and Frames http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf Section 08 71 00 Door Hardware		

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf



Type:

Style 1 - Steel Frames

Section 08 71 00 Door Hardware

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Steelcraft

Color: Neutral colors

Finish: Paint (Sheen per UFGS)

Model #: Hollow metal, frame grouted solid

Other: Provide in utility areas of Group 1 and 2. Provide A25 galvannealed coating. All interior steel frames shall have a factory applied primer finish.

UFGS: Section 08 11 13 Steel Doors and Frames http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

E05.1.3. Wood

Applicable \(\cap \text{N/A} \)



Type:	Style 1			
Applies t	io: Group 1 Group 2 Group 3 Group 4 Other			
Mfr:	Simpson			
Color:	Natural hardwood veneer			
Finish:	Clear Sealer, satin (aqueous)			
Model #: Full slab				
Other:	3'x7'x 1 ¾", solid core, stained birch veneer face, 5 ply construction, rotary cut finish. Provide satin stainless steel hardware. Glass lites may be used.			
UFGS:	Section 08 14 00 Wood Doors http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf Section 08 71 00 Door Hardware			



Type: Style 2

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Simpson

Color: Natural hardwood veneer or painted

Finish: Clear Sealer or paint, satin (aqueous)

Model #: Full slab or panels

Other: Satin nickel hardware

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

UFGS: Section 08 14 00 Wood Doors

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf

Section 08 71 00 Door Hardware

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

E05.1.4. Other

○ Applicable N/A

E06. Casework Systems

Comply with Air Force Corporate Standards for Casework Systems: http://afcfs.wbdg.org/facilities-interiors/casework-systems/index.html

E06.1. Casework Materials

1. Cabinets, countertops and hardware shall be appropriate for the Facility Group and for the particular application and frequency of use. Materials should be durable and not show excessive wear over their lifespan. Countertops should be neutral in color, smooth-to-light textured and compatible with adjacent cabinet surfaces and plumbing fixtures.

- When used for storage, furniture systems are preferred rather than built-in cabinetry or casework in office, administrative and operational applications. Casework or architectural millwork may be provided in main lobbies in Groups 1 and 2, consolidated break areas and work areas, and food service areas in Groups 1, 2, and 3 and in kitchens and baths in Group 4.
 Materials, shapes, and detailing should convey an image of long-lasting quality without extravagance; avoid trendy designs. Comply with Architectural Woodwork Institute (AWI).
 Select casework systems and materials considering durability, maintenance requirements and LCCA.
 Provide countertops/backsplashes in restrooms, kitchenettes and break rooms shall be fabricated of a minimum ½" solid surface material.
- 6. Natural stone and cast stone countertops may only be used in Group 1 with approval on a case basis.
- 7. Metal cabinets and countertops shall be provided in heavy-use operations and in Group 3.
- 8. Refer to AFCFS for approved materials.

E06.1.1. Plastic Laminate					
○ Applicable					
E06.1.2. Solid Polymer Surface					
○ Applicable					

E06.1.3. Rapidly-Renewable Products

○ Applicable ● N/A

E06.1.4. Metal

○ Applicable ● N/A

E06.2. Countertop Materials

E06.2.1. Plastic Laminate

E06.2.2. Solid Polymer Surface

E06.2.3. Natural Stone

○ Applicable ● N/A

E06.2.4. Cast Stone

○ Applicable ● N/A

E06.2.5. Metal

○ Applicable N/A

E07. Furnishings

Comply with Air Force Corporate Standards for Furnishings: http://afcfs.wbdg.org/facilities-interiors/furnishings/index.html

E07.1. Durability and Serviceability

Comply with AF Corporate Standards for Durability and Serviceability: http://afcfs.wbdq.org/facilities-interiors/furnishings/durability-and-serviceability/index.html

E07.2. Accessories

Comply with AF Corporate Standards for Accessories: http://afcfs.wbdg.org/facilities-interiors/furnishings/accessories/index.html

E08. Interior Signs

Comply with Air Force Corporate Standards for Interior Signs: http://afcfs.wbdg.org/facilities-interiors/interior-signs/index.html

E08.1 Types and Color

Comply with Air Force Corporate Standards for Types and Color: http://afcfs.wbdg.org/facilities-interiors/interior-signs/types-and-color/index.html

E08.2. Interior Signs Materials

1. Natural stone, masonry and cast stone signs may only be used in Group 1 with approval on a case basis.

E09. Lighting, Power and Communication

http://afcfs.wbdg.org/facilities-interiors/lighting-power-and-communication/index.html

E09.1. Functionality and Efficiency

Comply with Air Force Corporate Standards for Functionality and Efficiency: http://afcfs.wbdg.org/facilities-interiors/lighting-power-and-communication/functionality-and-efficiency/index.html

E09.2. Types and Color

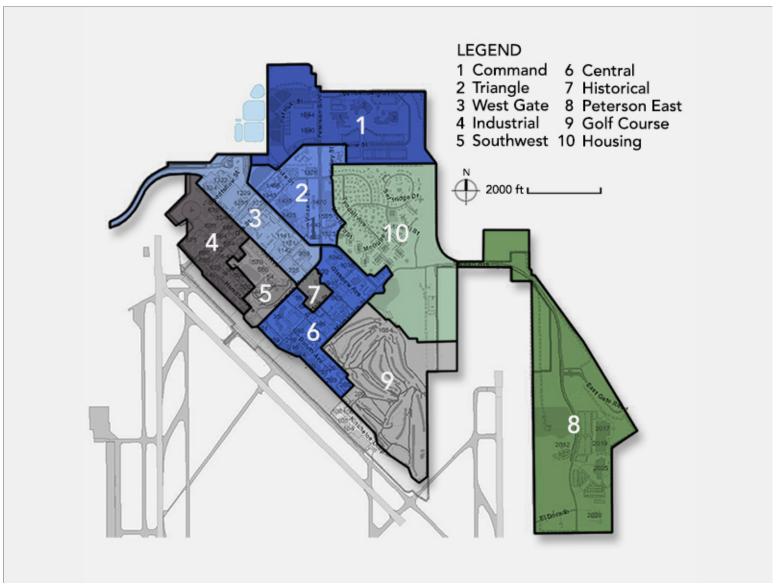
1. Not applicable.

F. APPENDIX - Facility Districts

- Applicable
- N/A

Comply with Air Force Corporate Standards for Facility Districts: http://afcfs.wbdg.org/facility-districts/index.html

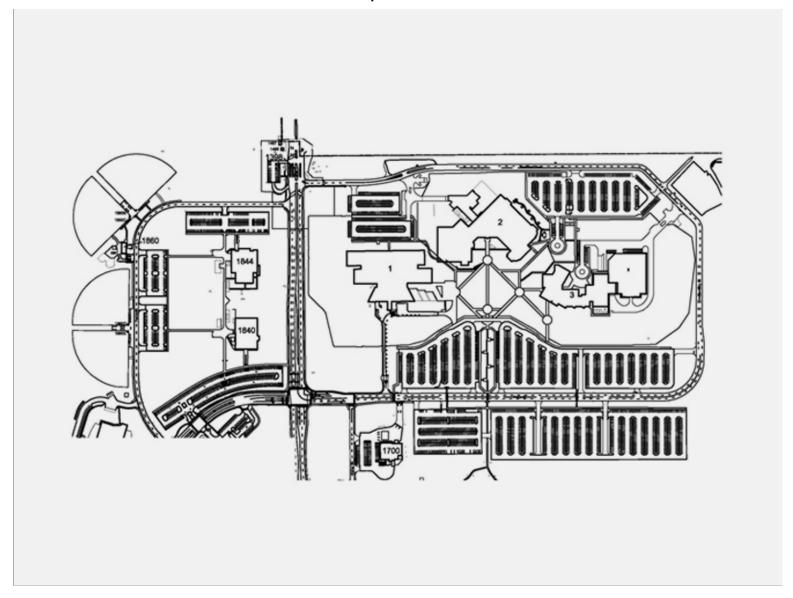
Facilities Districts Overview Map:



Note: Apply the <u>base-wide standards</u> in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related to the Facility District.

Enter No. of Facility Districts 10

The following Facility Districts list exceptions to the base standards that are unique to each district. Please refer to the Site Development, Facilities Exteriors, and Facilities Interiors sections of this IFS for base standards.



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)







Group 2	Applicable	● N/A
Group 3	Applicable	● N/A
Group 4	Applicable	N/A
Other	Applicable	● N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

- 1. The following building types and storage facilities shall not be in this character area: storage sheds, pre-manufactured (temporary) buildings, wood gazebos, miscellaneous utility structures, transformer buildings and CONEX boxes.
- 2. Provide mini-storage warehouse structures at discreet locations in this character area. Such structures should be used in lieu of storage sheds, CONEX boxes, and similar scattered storage devices are not permitted.
- 3. All warehouse structures must conform to the building design guidelines for the character area and mini-campus in which they are physically located. Provide upward-acting garage doors to provide access to individual compartments within each storage warehouse. All storage items must be located completely within the structures, such that they are not visible to the public when the compartment doors are closed.

C07. Site Furnishings

- 1. Illuminated bollards light shields shall be stainless steel.
- 2. Gates for trash dumpster enclosures may be factory finished silver or galvanized steel.
- 3. Site walls such as screen walls, fixed planters, retaining walls, and similar site related structures shall match those used elsewhere on the adjacent building.
- 4. Trash enclosures shall match those used elsewhere on the adjacent building.

C08. Exterior Signs

1. All vertical sign applications shall be fabricated with steel and painted Fed Standard 595B, color 25630 for the sign field or background and color 15095 for borders and lettering. 2 " galvanized posts without predrilled holes shall be used. Hole knockouts are acceptable for this application.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

- 1. This character area has an established space-related theme. The materials used are technologically advanced, and the silhouettes of the buildings imply the sleek expression of space technology.
- 2. For all new construction and renovations generally match adjacent existing buildings in form, materials and detailing to preserve a visually unified and dominant central core.

D04. Building Entrances

1. Entrances and all south facing fenestration shall be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes, providing protection from the wind and sun.

D05. Wall Systems

- 1. Match the metal panel color of adjacent buildings with either natural stainless steel or match SW 2114, Gris (TWT); FSC X6373. A single darker shade of blue shall be used for the accent features, and shall match SW 2260, Scottis Lech (TWT); FSC X5526.
- 2. Architectural concrete shall be a light to medium warm gray and shall match the exposed aggregate texture of the adjacent building.

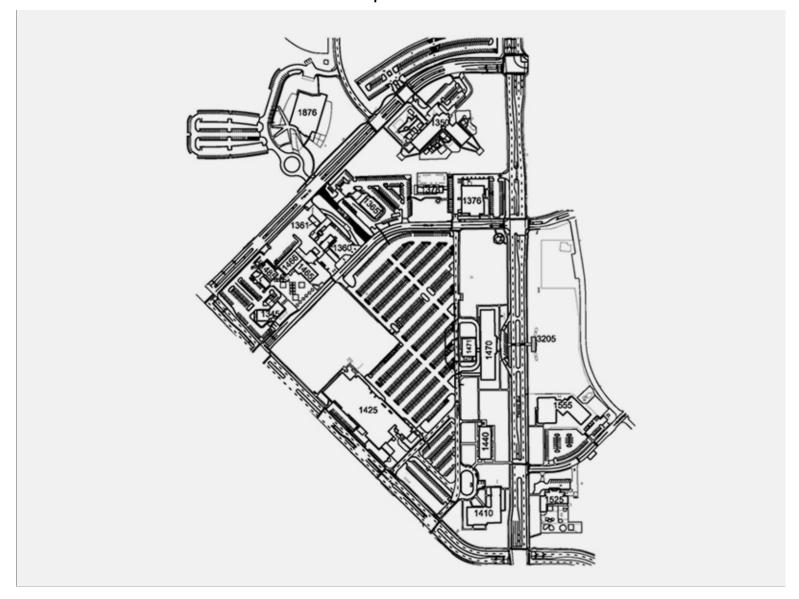
D06. Doors and Windows

- 1. South facing fenestration shall be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes, providing protection from the wind and sun.
- 2. All operable windows in this character area shall be awning type.
- 3. Command Mini-Campus: Glass shall match glass color used on the AFSPC building.
- 4. Space Support Mini-Campus: Window wall systems shall be used for large areas of fenestration. Careful consideration must be used in selection and placement of fenestration when energy efficiency is to be maximized.
- 5. Large service or garage type doors shall be carefully screened from entries or other public areas.

D07. Roof Systems

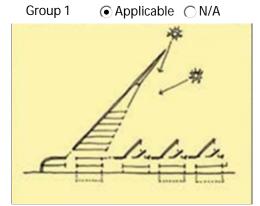
1. Command Mini-Campus: Circular geometry may be used only at the roof line to produce a silhouette effect. Roof detailing should be limited to use as focal points at such areas as above interior plazas, at main or secondary entrances, but not service entrances. They may appear as skylights, elevated roof planes, vertical roof planes, or other geometric devices.

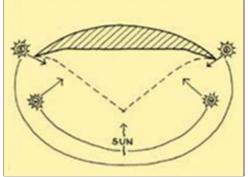
2. Space Support Mini-Campus: Roof focal points may be used, but must be set back from the required horizontal roof line (parapet) a minimum distance of four feet (4') (1.22 m). Roof focal elements shall not overhang the roof line parapet or be used in an integrated fascia detail. All roof elements shall use only the orthogonal geometry to produce a silhouette above the main building parapet lines. Radial elements shall only be used on a case by case basis.
E. FACILITIES INTERIORS (Not applicable)

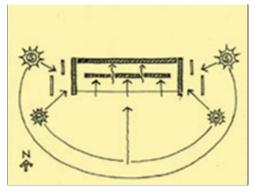


Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)

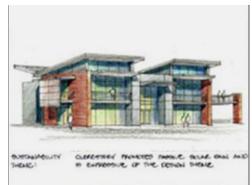












Group 3 Applicable N/A
Group 4 Applicable N/A
Other Applicable N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. An anchor facility such as a HQ Area or VQ Area is the focal point of the east end of the development. The central Pedestrian Area of the Mixed-use District is the focal point of the west end of the development. An axial relationship is reinforced between the pedestrian plaza and the headquarters building. Spaces between the anchor (HQ or VQ) area and the Pedestrian Area should facilitate connection and movement between the two areas.

C02. Utilities

- 1. The Triangle District represents a new model for utilities infrastructure for the Base and serves as a visual symbol of sustainability, energy efficiency, and water conservation. Envisioned as a "green" self-sustaining District, the utility system is literally a District-based renewable-energy system.
- 2. Provide a net-zero energy system so that all energy required to operate buildings and site facilities is provided by on-site. Maintain energy security by duplicating the redundancy provided by the local public utility and by providing uninterrupted electric service via back-up generators for all essential and emergency-operations uses.
- 3. Any required above-grade elements shall be screened following the Triangle District standards.
- 4. All service lines, equipment, and other elements associated with utilities shall be located below grade.

C03. Parking Areas

- 1. Parking concept statement: Reinforce the "Monumental Plain" concept, symbolize a sustainable landscape, and reduce maintenance and heat island effects with below-grade structured parking, not visible from the ground level of the Triangle Area.
- 2. Gateway access drives are sloped to parking areas with the primary drive entering at the apex of a solar array. Provide parking structures with parking areas below grade and with at-grade canopies. Canopies shall be covered with vegetated-roof systems or solar arrays based on the approved Site Plan. Daylighting is provided over drive aisles and along the perimeter of the Triangle Area.
- 3. Provide light wells in roof canopies. Medians and islands are not permitted within parking garages. Paving in the structured parking area all paving shall be concrete.

C04. Stormwater Management

- 1. Roadway Landscaping: Landscaped medians are not required in the Triangle Area. If medians are used they must be integrated with the stormwater system and include bioswales with xeric vegetation or hardscape with the approved pavers. Views from roadways to the middle-ground of native grass fields are encouraged and should be preserved.
- 2. Curb and Gutter: Profiles for curbing and gutter shall be integrated into the stormwater system directing flows to bioswales when appropriate. Standard base-wide profile for curb and gutter or header curb (flush with paving) may be used in the Triangle area.

C05. Sidewalks, Bikeways and Trails

1. Plazas and courtyard paving may use rose sandstone as an accent material.

C06. Landscape

1. The desired character for the central core is an upscale, festive, "commercialized" shopping mall atmosphere. The landscape design should respond to this design direction. Developing courtyards, shady sitting areas, and outdoor gathering areas is encouraged for an area with potential for intense pedestrian use.

C07. Site Furnishings

1. Illuminated bollards light shields shall be stainless steel.

C08. Exterior Signs

C09. Lighting

1. Only indirect lighting is permitted in pedestrian areas. Inset fixtures in walls are preferred to pole-mounted fixtures. Pole-mounted fixtures and mounting heights must be approved by the IP-EPC. Architectural and accent lighting is encouraged when it contributes indirect lighting to pedestrian spaces.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

1. The anchor (HQ or VQ) facility, due to its symbolic nature, may be up to 8 stories.

D04. Building Entrances

D05. Wall Systems

- 1. Approved metals are aluminum, zinc, and stainless steel. No materials that require painting are permitted. When a mill finish grain is provided ensure that the grain is parallel to the drip line. Create metal transitions between metal panels and brick endwalls.
- 2. Brick shall be the predominant material on east, west, and north walls in a running bond pattern using the approved Peterson AFB blend.
- 3. Shading systems shall be stationary and integrated into the building wall systems along south facades and shaped so that no UV is allowed to penetrate glazing from April 10 to September 1, 72 days before and 72 days after the summer solstice.
- 4. Detached and/or integrated stationary shading systems shall be provided on east and west facades and configured so that no UV is allowed to penetrate glazing from March 21 to September 21 (from the spring equinox to the fall equinox.) All fixed shading systems shall be designed so that 100% (nominal) of UV is allowed to penetrate glazing from November 30 to January 12, approximately three weeks prior to and three weeks following the winter solstice.
- 5. Approved metals for wall systems shall be used for shading devices. Shading systems may be part of the window system provided by the manufacturer or custom systems integrated into the wall.
- 6. Use warm gray architectural precast concrete for lintels, belt courses, and copings, when a contrasting masonry material is desirable.

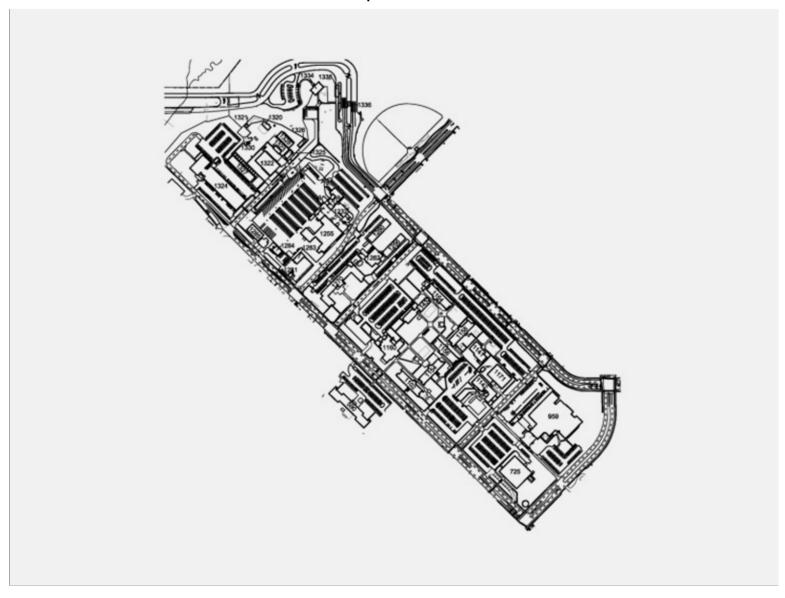
D06. Doors and Windows

- 1. Curtain-wall systems may be used on south facing facades. Solar pre-heaters should be provided as part of the south window system as well. Vertically-proportioned punched windows are preferred for east, west, and north exposures.
- 2. All glazing shall match Pittsburgh Paint and Glass (PPG) Solex Green or equal. Provide triple-pane low SHGC glazing on the north facing exposures.

D07. Roof Systems

- 1. All roofs in the mixed-use area shall have a shed form following the Facilities Excellence Plan.
- 2. In order to express rainwater capture, "butterfly" roofs may be used when the inflection point occurs outside an exterior wall. South-facing planes of butterfly roofs, covering pedestrian areas, shall be louvered to provide shading in the summer and solar gain in the winter.
- 3. Minimal-sloped roofs are permitted when combined with vegetated roof systems or roof-mounted solar arrays.

Map of District



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)







Group 3

Applicable \(\cap \text{N/A} \)







Group 4



Other

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. Preservation of the Peterson Corridor Open Space Preserve at the east end along Peterson Boulevard should be a high priority for this character area. This particular area is presently landscaped and is a visual asset. New building projects should not be allowed to encroach upon this preserve.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

1. Dormitory Mini-Campus: The horizontal emphasis shall be broken both vertically and horizontally by design elements expressed on the exterior. The maximum building height shall be forty-five feet (45') (13.72 m).

D04. Building Entrances

- 1. Engineering Mini-Campus: Building entrances, fenestration and garage type doors should be emphasized in some manner, visually breaking up the building elevation below the horizontal fascia panels.
- 2. Central Command Mini-Campus: Visually dominant focal points shall be incorporated into the overall exterior through contrasting but visually complementary geometric shapes. These focal points shall be used most commonly at building entrances and in conjunction with fenestration design elements.
- 3. Entrances shall be recessed a minimum of four feet (4') (1.22 m) from the adjacent exterior wall planes.

D05. Wall Systems

- 1. Engineering Mini-Campus: brick shall be used as the primary building material following the pattern on buildings 1322 and 1324.
- 2. Engineering Mini-Campus: architectural concrete shall be used for the fascia with patterned or vertical ribbed following buildings 1322 and 1324; brick shall be consistently used below the concrete fascia.
- 3. Engineering Mini-Campus: metal vertical siding and standing seam roofing, for use on temporary storage buildings only. This Material applies only to existing miscellaneous metal buildings. New metal buildings of this type shall not be permitted.
- 4. Transportation Mini-Campus: Concrete masonry units (CMU) may be used as the primary building material; unit size shall be 8" x 16". A minimum of eighty percent (80%) of the wall surface shall use ribbed split face CMU. The remaining wall surface area shall use standard finish CMU.

- 5. Transportation Mini-Campus: Brick masonry shall be used as horizontal accent features; the accent feature must use the brick in the form of soldier coursing.
- 6. Transportation Mini-Campus: Metal standing seam fascia panels shall be used, and shall match the standing seam roofing, which is used at the sloped roof areas.
- 7. Dormitory Mini-Campus: Brick masonry with size and bond patterns shall follow the precedent of existing buildings. New buildings shall use brick masonry running bond pattern, with contrasting coursing techniques used for visual interest.
- 8. Dormitory Mini-Campus: Steel roofing shall be at all sloped roof applications, complete with all metal accessories and closure items required.
- 9. Dormitory Mini-Campus: Concrete shall be exposed to view at structural slab edges in conjunction with exterior circulation paths. These exposed concrete edges shall be used at the roof and at all floor slabs above the ground floor, and must be used in tandem with the required pipe handrails.
- 10. Community Mini-Campus: Brick masonry shall match the size, style, and bond patterns used at the NCO/education office, Building 1141.
- 11. Community Mini-Campus: Architectural concrete with exposed aggregate shall be used for all fascia panels and when required at foundation level to match an existing building material or style.
- 12. Community Mini-Campus: Fabric awnings do not meet AFCFS standards and are discouraged except when required to match existing awnings.

D06. Doors and Windows

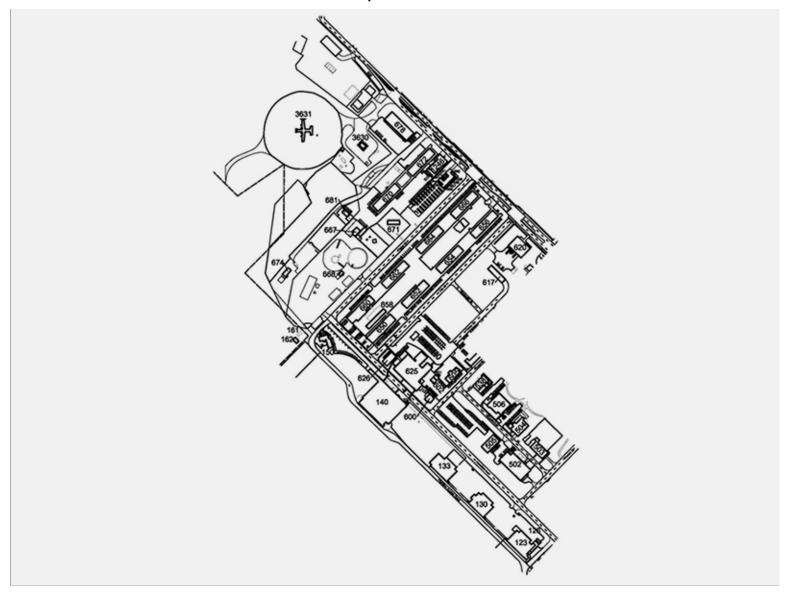
- 1. Engineering Mini-Campus: Where office type activities prevail, horizontal bands of windows shall be employed. Where main uses are storage or maintenance, fewer vertically oriented windows will occur.
- 2. Transportation Mini-Campus: High narrow horizontal bands of windows must be provided in tandem with the roof fascia panels and as is appropriate for other places in the exterior elevations.
- 3. West Gate Community Mini-Campus: Narrow, vertically oriented windows (appropriate to some buildings) are not recommended for this mini-campus.

D07. Roof Systems

- 1. Engineering Mini-Campus: All buildings must use a concrete fascia panel system as used on the Engineering complex Buildings 1322 and 1324. The concrete fascia panels or other edge treatment must be employed to screen roof structural elements. The continuous, unbroken horizontal rooflines shall be preserved at the concrete fascia panels, and excessive use of wall plane or geometric changes should be avoided.
- 2. Transportation Mini-Campus: Following the precedent of the existing buildings, the "front" of each building, generally under the high point of the roof pitch, should employ a metal roof fascia and the accompanying row of windows and doors below the fascia. Plane changes in the roof lines and fascia may be used as a design element to emphasize entries.
- 3. Dormitory Mini-Campus: Exposed concrete fascia shall be employed as a screening element at the flat roof line. On the sloped roof buildings, a metal edge cover treatment shall be used to screen all roof structural members. Roof design elements exposed to view shall follow the angular geometry exclusively.

D08. Structural Systems

1. Dormitory Mini-Campus: The horizontal emphasis shall be diminished both vertically and horizontally by exposed exterior structural elements. Vertical elements shall be masonry columns and walls, spaced in a rhythmic pattern responding to individual tenant units. Horizontal elements shall be exposed edges of structural floors and roofs at each elevation. A second wall plane shall be provided behind the expressed structure, which contains all fenestration units.



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)

Group 1 Applicable • N/A

Group 3 • Applicable • N/A







Group 4 Applicable • N/A

Other Applicable • N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)C01. Site Design / NEPA

1. Site design elements can similarly be used in a consistent manner to make this area more "friendly" to visitors and employees. Their use can also help visually break up the dark, rather foreboding nature of so many large buildings.

C02. Utilities

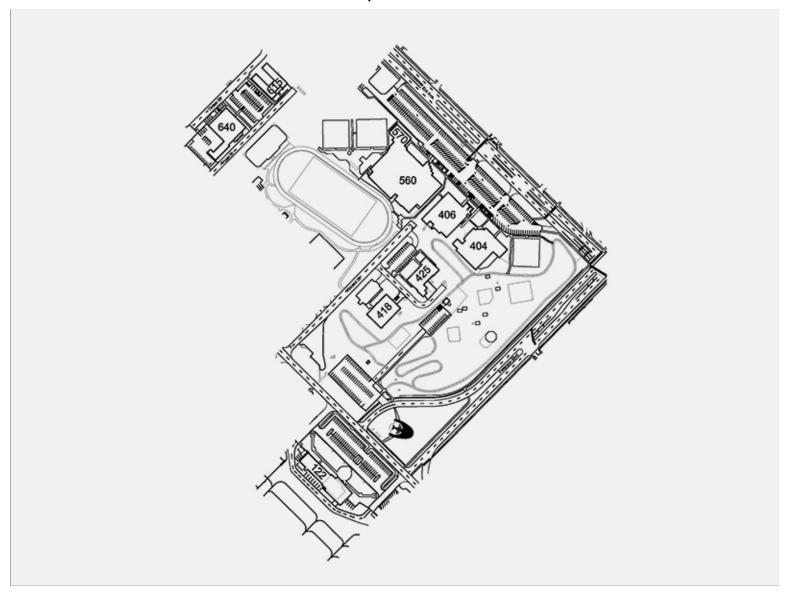
1. Exterior equipment and vertical appurtenances near the flight line area shall be painted Dark Bronze to match FSC 30040. Painted surfaces shall have a matte (low-luster) finish, to reduce their visual impact. Enforce a common color palette for visual continuity.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

- 1. Building height may be up to three (3) stories above grade, or a total height of forty five feet (45'). Allowable heights may be restricted by airfield runway airspace imaginary surfaces, which take precedence.
- 2. Buildings in this area should not appear residential in scale (from 200 to 5,000 square feet (464.52 m2), but should generally be of commercial scale (5,001 to 25,000 square feet) (464.61 m2 to 2,322.58 m2).
- 3. Diminish the apparent size of industrial scale buildings, 25,001 sf (2,322.67 m2) or larger with design elements appropriate for Facility Group 3.

Map of District



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)

Group 1 Applicable • N/A







Group 3 Applicable N/A
Group 4 Applicable N/A
Other Applicable N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

- 1. The existing jogging trail should be more visually and physically defined using landscaping and trail edge design elements. This trail should also be more directly connected with other parts of the base, to encourage more fitness efforts from people who live and work at Peterson AFB.
- 2. The continuity of the Peterson Corridor Open Space Preserve should be kept intact along the east side of this character area, paralleling Peterson Boulevard.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

1. Buildings in this character area should be one story with design features to emphasize the horizontal; any overall elevation or partial elevation, the width/height ratio shall be no less than 3:1.

D05. Wall Systems

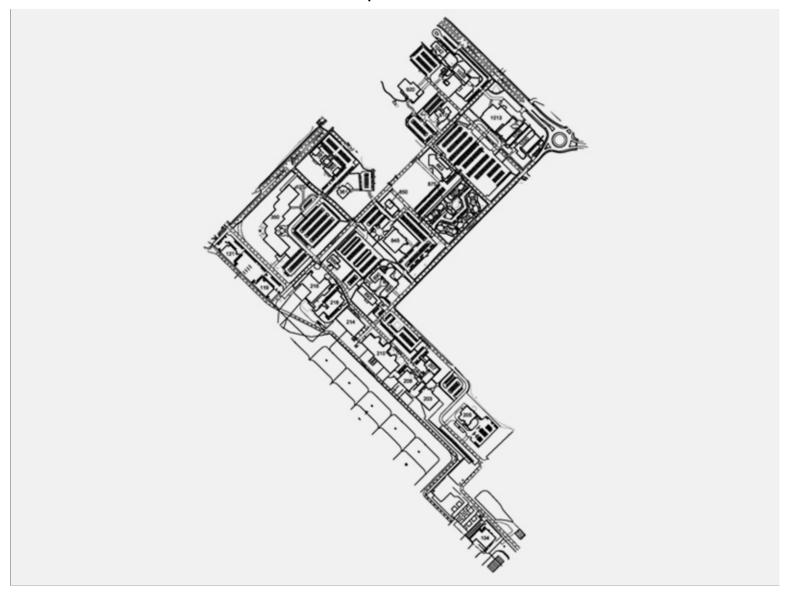
- 1. Downspouts shall be painted to blend with the exterior finish / color of the exterior cladding.
- 2. Brick, heritage antique, tan (rbc), shall be used at the central command and base mini-campuses. Brick, empire gold #478r, brown (sbc), shall be used at the AFRES and flight line mini-campuses. Stacked soldier courses that act as lintels or function as a "fascia panel" is encouraged.
- 3. Metal shall be aluminum, dark bronze anodized finish. Steel shall be factory finished to match SW 2733, Chaparral (BGY); provide FSC X0045 at all flashing systems, louvers, gutters and downspouts, windows, doors and frames, and miscellaneous metal trims. Seams at metal roofing/siding systems, and aggregate textures and joint rhythms at aggregate panel systems shall provide adequate detailing.
- 4. Brick masonry shall use variations in bond patterns and corbeling or similar masonry techniques. Stacked soldier courses at the cornice line emulating a "fascia panel" is encouraged.
- 5. Exposed aggregate concrete shall match the color of the exposed aggregate concrete used on building 205.

D06. Doors and Windows

1. Fenestration at entries shall be recessed behind the building principal wall plane a minimum distance of four feet (4') (1.22 m), providing a protected entry area.

D07. Roof Systems

1. Recreation Mini-Campus: Roof designs may use the orthogonal, angular and circular geometries, separately or in combination to achieve the desired expression.



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)

Group 1	Applicable	● N/A
Group 2	Applicable	● N/A
Group 3	Applicable	● N/A
Group 4	Applicable	● N/A
Other		● N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)

C01. Site Design / NEPA

1. The Peterson Corridor Open Space Preserve should be maintained along Peterson Boulevard along the entire west side of this character area. Buildings should not be permitted to encroach upon this preserve, allowing it to maintain its full width the entire length of Peterson Boulevard. Future development pressures will likely be brought to bear by large facilities planned for this particular area.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

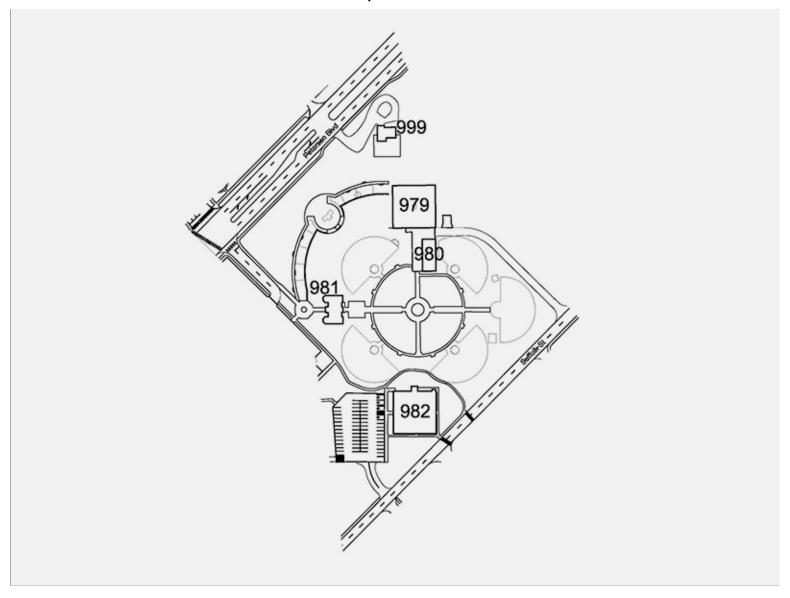
D05. Wall Systems

- 1. Base Mini-campus: Fascia panels may be contrasting aggregate having a total height of 1/5 of the overall wall height, located at the top of the wall.
- 2. Flight Control Mini-campus: While the existing primary and visually dominant material used in this mini-campus is exposed aggregate pre-cast concrete panels, metal panels, and tinted glass shall be continued in all future projects.

D06. Doors and Windows

- 1. Garage/service type doors and frames, and hangar doors and frames shall be factory finished to match the metal wall panels at the Flight Line Mini-Campus. Color shall match SW 2733, Chaparral (BGY); FSC X0045.
- 2. Fenestration at entries shall be recessed behind the building principal wall plane a minimum distance of four feet (4') (1.22 m), providing a protected entry area.

Map of District



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)







Group 3 Applicable • N/A
Group 4 Applicable • N/A
Other Applicable • N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)C01. Site Design / NEPA

- 1. Preserve the distinguishing original qualities of the site and its environment. Recognize site features as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance are discouraged.
- 2. Changes, which may have taken place in the course of time, are evidence of the history and development of the site and its environment and may have acquired significance in their own right; this significance shall be recognized and respected.

C07. Site Furnishings

- 1. All new site furnishings shall match existing custom-designed furnishings in this district.
- 2. Match existing benches: precast concrete finished to match glazed terra-cotta fascia of terminal building. Provide three "dentils," one "triangle," and one "pediment" per support). Recycled vinyl shall be used at seats.
- 3. Match existing trash receptacles: precast concrete finished to match glazed terra-cotta fascia of terminal building. Provide three "dentils," one "triangle," and one "pediment" per support). Rigid plastic internal liner shall be Dark Brown color.
- 4. Match existing bollards: pre-cast concrete construction, color to match glazed terra-cotta fascia of terminal building with cast and finished smooth surfaces to match terminal building fascia. Each side of upper portion of bollard to be cast with a facsimile of the stylized bird at museum entrances; lower half shall be square with eased corners. An illuminated version may be used with the light located in the reveal portion of the bollard.
- 5. Entrances; lower half shall be square with eased corners. An illuminated version may be used with the light located in the reveal portion of the bollard.

C08. Exterior Signs

1. Informational Signs: Museum/Historic District shall feature a continuous 1-1/2" (38.1 mm) deep return and shall be mounted on pre-cast concrete pedestal as illustrated.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

1. Preserve and provide an application of Art Deco and utilitarian themes and follow these Standards for Rehabilitation:

Ævery reasonable effort shall be made to provide a compatible use for a property, which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.

The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

% All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

% Changes, which may have taken place in the course of time, are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

Distinctive stylistic features or examples of skilled craftsmanship, which characterize a building, structure, or site shall be treated with sensitivity.

Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

%Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to any project. %Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.

Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

D05. Wall Systems

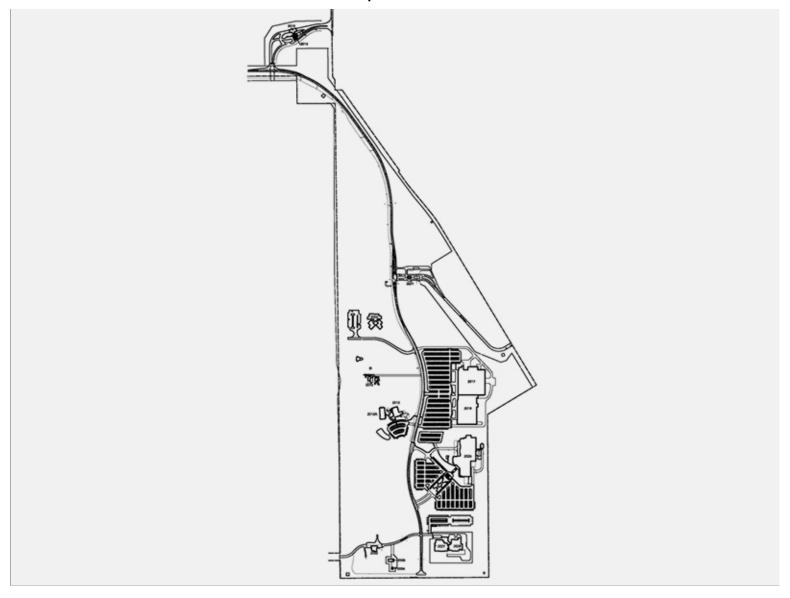
- 1. Preserve the use of classic art deco elements such as stepped-back facades, stylized figure sculptures (birds at each entry), geometric parapet trim (triangles), and glazed tiles (beige and blue at Fascia and entries.
- 2. Any damage to historical elements should be carefully repaired. Tiles should be maintained. The original stucco paint color should be determined to be white as currently displayed.

D06. Doors and Windows

- 1. Preserve the existing aircraft doors for aesthetic and historic reasons yet allow for easy pedestrian entry through use of a smaller scale "man-door". Preserve existing windows, which were re-glazed with insulating and ultra-violet light blocking glass.
- 2. Broadmoor Hangar: Preserve the bronze aluminum and glass doors to each side of the building and the divided-lite casement windows.

D07. Roof Systems

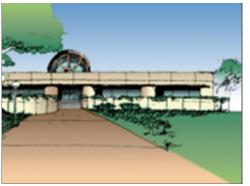
1. Observe the Standards for Rehabilitation for all roof repairs or replacements.



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)







Group 3 Applicable • N/A
Group 4 Applicable • N/A
Other Applicable • N/A

B. INSTALLATION ELEMENTS (Only applicable sections are shown)

B02. Street Envelope Standards

1. Traffic Signs: Peterson East shall use for sign panel (s) shall be mounted onto aluminum posts, size and shape as shown. Typically the post top ends shall be closed with a flat aluminum plate. Part Numbers: EOCPS1 and EOFPS1, 84" (2,133.6 mm) center post or flag post, choice of half round.

C. SITE DEVELOPMENT (Only applicable sections are shown)

C07. Site Furnishings

1. Bollards – Force Protection: Group 1 and 2 (3 and 4 N/A); Mfr: Materials Inc.; Style: Precast concrete; Color: Weatherstone Gray; Finish: Smooth; Model: 1852, Round (cylindrical) design; Other: Dark bronze light shields for lighted option; UFGS: N/A.

2. Fencing: Group 2; Mfr: Custom; Type: High visibility, medium security; Color: Dark bronze; Finish: Powder coated; N/A; Other: Brick: 2'x2', Steel posts: 4"x4", Rails: 2"x2", Pickets: 1"x1" (6"o.c.); Close all ends of tubing; Bent tops of pickets shall use circular bent for all Peterson East applications. UFGS: Section 05 50 13 Miscellaneous Metal Fabrications http://www.wbdg.org/FFC/DOD/UFGS/UFGS%2005%2050%2013.pdf

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D05. Wall Systems

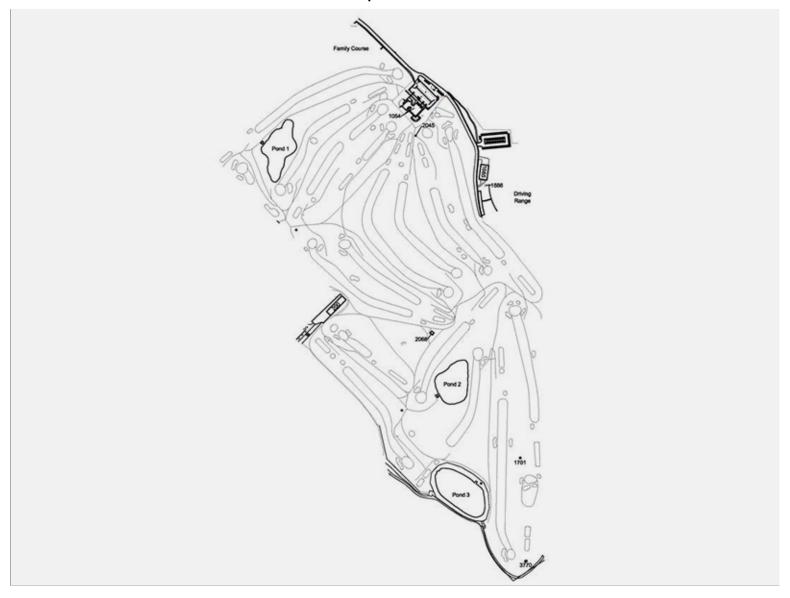
1. Metal panel color shall be earth tones. Lighter shades of these low-chroma colors may be used to visually complement the subtle colors of the natural prairie. Examples of appropriate composite panel colors include series a "oyster" (beige) or series b "canyon brown" (tan), as manufactured by Alucobond Technologies, Inc., Benton, KY 42025.

D06. Doors and Windows

1. Individual window units, where used as "punched" openings, should be placed to visually complement the horizontal emphasis required for the exterior elevations.

D07. Roof Systems

1. Visually dominant focal points shall be used periodically in the roof arrangement to diminish large expanses of roof. These details may follow the orthogonal (right angle) and circular geometry, providing that the circular geometry is visually dominant. Such focal points may appear as building design elements such as skylights, elevated roof planes, or similar geometric devices.



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)







Group 3 Applicable • N/A
Group 4 Applicable • N/A
Other Applicable • N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown)

C04. Stormwater Management

1. Consider a program to use non-potable water/stormwater for golf course irrigation.

D. FACILITIES EXTERIORS (Only applicable sections are shown)

D03. Architectural Features

- 1. The concept for this character area should express an "Outdoor Recreation" image.
- 2. Buildings in this character area must not exceed 5,000 sf in size.

D05. Wall Systems

- 1. A horizontal visual emphasis shall be dominant, such that the width/height ratio shall be no less than 2:1. All buildings shall use orthogonal and angular geometry throughout, where either geometry may be visually dominant for each building.
- 2. Exterior insulation and finishing system (EIFS) shall be used in future projects as a secondary exterior building material. EIFS shall be introduced at the existing golf course clubhouse exterior to help diminish the visual dominance of concrete double tee construction.
- 3. Brick heritage antique, tan (rbc) shall be the predominant wall material.
- 4. Metal, aluminum; dark bronze anodized color may be used as a secondary wall material. Steel, factory finished dark bronze, to match SW 2733, Chaparral (bgy) may be used.

D06. Doors and Windows

1. Fenestration at entries shall be recessed behind the building principal wall plane a minimum distance of four feet (4') (1.22 m), providing a protected entry area.

D07. Roof Systems

- 1. Buildings in the Golf Course district shall demonstrate a bold design expression through the use of gabled, hipped, pyramid and angular shapes, or composite combinations of these. Roof configuration shall provide dramatic mountain views from major building masses. Maximum pitch 6:12 and minimum pitch 3:12 (vertical to horizontal), should be used as a strong, dominant design statement.
- 2. Vegetated roofs may be used on a case basis.



Insert 3 photos for each facility group within the Facility District as applicable.

Image Sizing and Cropping Tool (small)

Group 2 Applicable • N/A
Group 3 Applicable • N/A
Group 4 • Applicable • N/A







Other Applicable • N/A

B. INSTALLATION ELEMENTS (Not applicable)

C. SITE DEVELOPMENT (Only applicable sections are shown) **C03. Parking Areas**

1. On-street parallel parking is permitted only in family housing areas, provided that such parking occurs only on one side of local streets. On-street, head-in parking that would require backing of a vehicle onto any street is discouraged.

D. FACILITIES EXTERIORS (Only applicable sections are shown)D03. Architectural Features

1. Buildings in this area shall have a residential character.