

Table of Contents
Co7. Site Furnishings

Co7.1	Introduction	Co7-1	Co7.5	Site Furnishing Elements	Co7-2
	C07.1.1 Opportunities	C07-1		C07.5.1 Benches	C07-2
	C07.1.2 Authority	C07-1		C07.5.2 Picnic Tables & Benches	C07-2
	C07.1.3 Warranty	C07-1		C07.5.3 Outdoor Grills	C07-2
Co7.2	Design Objectives	Co7-1		C07.5.4 Security Bollards	C07-3
Co7.3	Design Approach	Co7-1		C07.5.5 Bike Racks	C07-3
Co7.4	Design Criteria	Co7-1		C07.5.6 Flag Poles	C07-3
				C07.5.7 Fences & Gates	C07-4
				C07.5.8 Playground Equipment	C07-4
				C07.5.9 Fitness Equipment	C07-4
				C07.5.10 Safety Surfacing	C07-4
				C07.5.11 Site Furniture – Coastal Zone	C07-5
				C07.5.12 Shade Structures	C07-6



Landscape Master Plan
C. Site Development Criteria
Co7. Site Furnishings

Co7. Site Furnishings

Co7.1 Introduction

The following site furniture requirements for Tyndall Air Force Base (AFB) expand upon the requirements found in the *Tyndall AFB Installation Facilities Standards* (IFS). Each element of site furniture must be purchased from a single source for all buildings and uses so that all elements match across the base for a unified look.

The following plan elements are described in this section:

- Benches
- Picnic Tables & Benches
- Outdoor Grills
- Security Bollards
- Bike Racks
- Flag Poles
- Fences & Gates
- Playground Equipment
- Fitness Equipment
- Safety Surfacing
- Site Furniture – Coastal Zone
- Shade Structures

C07.1.1 Opportunities

A coordinated, consistent inventory of site furnishings positively contributes to the landscaped environment, overall images and character, and unique identity of Tyndall AFB. The selections presented in this site furnishings plan support the base’s commitment to using materials that are durable, easy to maintain, visually unified, and compatible with the installation architecture.

C07.1.2 Authority

All site furnishing placement must comply with antiterrorist (AT) standoff distance requirements of UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*.

C07.1.3 Warranty

Coordination of design and construction with Tyndall AFB staff, agencies, service providers and third-party contractors is critical to the successful implementation of planned improvements. All work is required to be warrantied regarding location and installation of materials in a manner consistent with the intent of the Landscape Master Plan and IFS, and to not create a conflict for installation of adjacent improvements by others. All potential conflicts will be identified by designers/contractors in respective sections of the Compliance Checklist and reviewed by Tyndall AFB Staff.

Co7.2 Design Objectives

- Provide a consistent design standard for site furnishings and for ease of maintenance.
- Provide sustainable and durable outdoor amenities

Co7.3 Design Approach

The approach to the selection of elements is based on the following requirements:

- Can be exposed in a coastal salt environment
- Ease of maintenance
- Holds up to heavy public use
- Reasonable cost
- Reflects and is compatible with the architectural style and colors of the base
- Resilient to use and reduces environmental impacts
- Requires less maintenance
- Withstands hurricane-force winds
- Withstands flooding

Co7.4 Design Criteria

The criteria in this section relate to specific design requirements, including IFS requirements, and guidelines for designers/contractors to follow and Tyndall AFB personnel to review. Additional criteria are provided in the other sections of this **Landscape Master Plan** and are not repeated in this section; however, the requirements for site furnishings must be coordinated with other site elements. The sections that follow serve as worksheets, with supporting guidance and illustrations, for designers/contractors to use among their teams and in coordination with Tyndall AFB. These worksheets should be used to complete the **Compliance Checklist** submittal for each project. Each requirement includes a selection of check boxes to indicate the applicability of that requirement to a specific context, and to demonstrate compliance with the requirements.

Yes No N/A

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The designer/contractor either selects “Yes” if compliance has been met, “No” if it has not, or “N/A” if the requirement is not applicable to the project.



The future of Tyndall AFB

C07.5 Site Furnishing Elements

C07.5.1 Benches

- Yes

No

N/A

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SFC 1.

Coordinate all standards in this section with the Tyndall AFB Landscape Master Plan. Remove poorly located or redundant litter receptacles, bicycle racks, vending machines, walls, and fences to reduce visual clutter and to lessen the requirements for maintenance.
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SFC 2.

Site furnishings will primarily be concrete, recycled materials, and in some cases hardwood parts. Generally, match the site furniture of adjacent facilities and the facility district. No metal will be used for bench seats and backs. 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.
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SFC 3.

Select high-quality architectural precast concrete benches for general areas that include wood seats and backs. Select Ipe wood seats and backs.
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SFC 4.

When concrete benches are utilized, select benches that are white in color with an acid finish.
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SFC 5.

Select plastic lumber benches made of polyethylene and mixed with wood fiber (WPC lumber) at boardwalk, beach, marina, and at locations where shade structures are site or cost prohibitive.
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SFC 6.

Surface-mount benches in place.



Precast concrete benches with wood seats and backs, above, are the preferred bench style at Tyndall AFB.

C07.5.2 Picnic Tables & Benches

- Yes

No

N/A

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SFC 7.

Place picnic tables and benches so they do not impede AT stand-off distances as required in UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*.
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SFC 8.

Select high quality architectural precast concrete picnic tables and benches.
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SFC 9.

Select concrete that is white in color.
- ☐

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SFC 10.

If wood treatments are utilized in picnic tables and benches, select Jurrah wood.
- ☐

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SFC 11.

If metal treatments are utilized in picnic tables and benches, select white metal.
- ☐

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SFC 12.

Surface-mount picnic tables and benches on concrete.



C07.5.3 Outdoor Grills

- Yes

No

N/A

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SFC 13.

Select grills that are 14-gauge heavy-duty steel construction finished with high heat, nontoxic, black enamel.
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SFC 14.

Select grills that have covered hoods to reduce floating cinders for fire safety.
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SFC 15.

Select grills that have 500 square inches of cooking surface with a 3-1/2-inch-diameter in-ground pedestal.
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SFC 16.

Select grills that include a side utility shelf.
- ☐

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SFC 17.

Select grills that have latch options, if available, to deter bears.



C07.5.4 Security Bollards

- Yes No N/A
- ☐☐☐

SFC 18. Comply with UFC 4-022-02, *Selection and Application of Vehicle Barriers*, for bollards intended to provide crash resistance and other security measures.
- ☐☐☐

SFC 19. Select bollards based on the level of security desired – light, medium, or heavy.
- ☐☐☐

SFC 20. Select bollards based on whether they must be removable or fixed.
- ☐☐☐

SFC 21. Select bollards that are a minimum of 5 inches in diameter.
- ☐☐☐

SFC 22. Use Type 316 stainless steel appropriate for use in a marine environment.
- ☐☐☐

SFC 23. Verify that any bollard used for anti-ram protection is on the approved DoD Anti-Ram Vehicle Barrier List.

C07.5.5 Bike Racks

- Yes No N/A
- ☐☐☐

SFC 24. Select bike racks that are powder coated cast aluminum.
- ☐☐☐

SFC 25. Select bike racks that are metallic silver in color.
- ☐☐☐

SFC 26. Select bike racks that have a curved top reflecting the architectural style of the base.
- ☐☐☐

SFC 27. Surface-mount bike racks on concrete.

C07.5.6 Flag Poles

- Yes No N/A
- ☐☐☐

SFC 28. Select flagpoles that comply with Air Force Instruction 34-1201, *Protocol*.
- ☐☐☐

SFC 29. Select flagpoles that are complete units from a single manufacturer and include fittings, accessories, bases, anchorage devices, finials, and lightning grounding.
- ☐☐☐

SFC 30. Verify that flagpoles are rated to withstand hurricane wind.
- ☐☐☐

SFC 31. Select flagpoles that are cone or entasis-tapered fabricated from seamless extruded tubing.
- ☐☐☐

SFC 32. Select flagpoles that have internal halyard, cam, and cleat systems.
- ☐☐☐

SFC 33. Select flagpoles that are satin/silver metal finish.
- ☐☐☐

SFC 34. Provide manufacturer’s standard foundation tube and sleeve for installation.
- ☐☐☐

SFC 35. Select flagpoles that meet National Association of Architectural Metal Manufacturers FP 1001-07, *Guide Specifications For Design of Metal Flagpoles*, and all regional wind velocity standards for sustained wind and wind gusts.



C07.5.7 Playground Equipment

Playground equipment needs meet the following requirements:

- Yes No N/A
- ☐☐☐

SFC 36. Conform to the requirements in all relevant Housing and Community Facilities UFC (Series 4-700) and Facilities Criteria (FC) (Series 4-700) for playground designs.
- ☐☐☐

SFC 37. Comply with requirements for play areas in the U.S. Access Board’s Guide on Play Areas.
- ☐☐☐

SFC 38. Comply with requirements of UFC 4-740-14, *Design: Child Development Centers*, and FC 4-740-14N, *Navy and Marine Corps Child Development Centers*.
- ☐☐☐

SFC 39. Design playgrounds to meet current Americans with Disabilities Act (ADA) access criteria and International Play Equipment Manufacturers Association (IPEMA) safety criteria.
- ☐☐☐

SFC 40. Group play equipment together with elements for appropriate age groups: toddlers 6 to 23 months; preschool, 2 to 5 years; and grade school, 5 to 12 years.
- ☐☐☐

SFC 41. Provide equipment that has elements that are ADA accessible in meaningful way, not just access platforms.
- ☐☐☐

SFC 42. Provide shade furnishings that can withstand hurricane winds as part of the equipment.
- ☐☐☐

SFC 43. Provide surfacing under equipment that has appropriate fall zones and depth of material and that meets code for the height of the adjacent equipment.
- ☐☐☐

SFC 44. Provide water fountains at each playground.
- ☐☐☐

SFC 45. Provide benches at each playground.



C07.5.8 Fitness Equipment

- Yes No N/A
- ☐☐☐

SFC 46. Locate fitness equipment in a single location similar to a playground or as single elements along a trail system.
- ☐☐☐

SFC 47. Select fitness equipment that addresses strengthening needs of both lower and upper body.



C07.5.9 Safety Surfacing

- Yes No N/A
- ☐☐☐

SFC 48. Comply with requirements for recreational facilities in the U.S. Access Board’s Architectural Barriers Act Standards, Chapter 10, *Recreational Facilities*, and ASTM F1951, *Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*.
- ☐☐☐

SFC 49. Select safety surfacing (see diagram at the right) for playgrounds that is a high quality poured-in-place rubber EPDM system bound with aliphatic binders.
- ☐☐☐

SFC 50. Select surfacing that is composed of two layers: a bottom cushion layer that meets the standards of IPEMA and ASTM F1292-13, *Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment*.
- ☐☐☐

SFC 51. Use a top layer that is a colored wearing surface and other layers as shown in diagram to right.
- ☐☐☐

SFC 52. Use a base of surface of compacted stone, asphalt, or concrete base depending on soil conditions.
- ☐☐☐

SFC 53. Contain all outside edges using a flush concrete curb.
- ☐☐☐

SFC 54. Use a pitched surface to drain.

C07.5.10 Site Furniture – Coastal Zone

Tyndall AFB’s Coastal Zone is an extremely dynamic, beautiful natural environment. Paths, trails, and boardwalks allow access to these areas, attracting Airmen, families, and visitors to the base.

Site furnishings along a path or within a small plaza can provide much needed rest from the area’s hot summer sun. Site furnishings should enhance the native environment while promoting safe and appealing use.

Yes No N/A

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SFC 55. Position site furnishings for users to enjoy spending time in the natural coastal environment.

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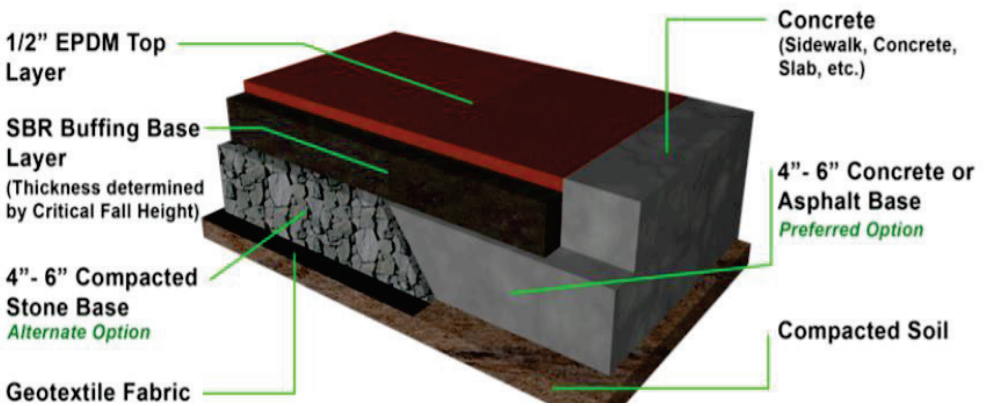
SFC 56. Select furnishing types, colors, and placement to recognize and fit within the natural character of the coastal area.

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SFC 57. Use finishes, materials, and assemblies that can withstand the area’s extreme marine-environmental conditions.

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SFC 58. Use only coastal zone site furniture as documented in this section unless otherwise approved by the Tyndall AFB Design Review Board and the U.S. Fish and Wildlife Service.



C07.5.11 Shade Structures



Example of large size structure for Group 1 facilities; masonry to match the adjacent building will be used to enhance structures for Group 1 facilities (note that stone is not a material used at Tyndall AFB)

Shade structures will match and complement the design style of the adjacent building materials and colors. They must not be a standalone style but should reflect the “family” of structures that are repeated throughout a certain area. Some use of curved forms is preferred to complement the surrounding architecture, not detract from it. Structures should be aluminum construction; steel options could be used in special circumstances, with approval from Tyndall AFB.

The structures should be sized according to building use and need. Not every building will need a shade structure. They will be used at buildings as directed by the Tyndall AFB. In general, Group 1 facilities will include a larger structure appropriate for larger gatherings of people. Group 2 and 3 facilities will use a medium size structure, and Group 3 facilities will use a smaller structure as shown above. Exceptions will be based on need. A shared shade structure can be considered for buildings that are close together, such as on the Flightline or the in the Community Commons. Outdoor eating facilities and recreation areas would be candidates for a larger structure.

Shade structures used for Group 1 facilities will be enhanced using a masonry surround on the column support. Note that stone is not used at Tyndall AFB; see the IFS *Design Intent: Architectural Image & Character* for material options.



Example of variation with overlapping wings; midsize structure used for most buildings in Groups 2 and 3



Example of a smaller scale structure for Group 3 facilities not needing large structure

- | Yes | No | N/A | | |
|--------------------------|--------------------------|--------------------------|---------|---|
| ☐ | ☐ | ☐ | SFC 59. | Design shade structures to reflect the architectural style as outlined in the Tyndall AFB IFS <i>Design Intent: Architectural Image & Character</i> . For furnishings with wood elements a weather shelter or enclosure is required. |
| ☐ | ☐ | ☐ | SFC 60. | Design shade structures to have curved metal roofs with a aluminum supports capable of withstanding Category 5 hurricane wind speeds. |
| ☐ | ☐ | ☐ | SFC 61. | Use footing size and depth to meet the wind criteria. Footings must be designed by a structural engineer. |
| ☐ | ☐ | ☐ | SFC 62. | Use a powder-coated aluminum finish. Design the metal roof color coordinate with the roof color of the adjacent building. Design the metal structure to coordinate with the metal color used on the outside of the building. Select masonry (if used) to match that of adjacent building. |



Type A – Powder-coated steel picket fence with a concrete mow strip. Use at Group 1 and 2 facilities.



Type B – Powder-coated welded wire fabric security fence with a concrete mow strip. Use at Group 3 facilities.



Type C – Powder-coated welded wire anti-climb security perimeter fence with a concrete mow strip.

Tyndall AFB uses various fence types, including fabric, frame, posts and gate materials, that are applicable for different base facilities. For maintenance purposes, include a 12-inch mow strip at the base of all fencing. Gray fencing is preferred, in keeping with the *IFS Design Intent: Architectural Image & Character*. All fencing on base must comply with UFC requirements.

Yes	No	N/A				SFC 63.	Comply with UFC requirements for all fencing and gates used on Tyndall AFB.
☐	☐	☐				SFC 64.	Provide 12-inch concrete mow strips under fencing.

Fence Type	Location
Type A	Group 1 & 2 Facilities
Type B	Group 3 Facilities
Type C	High Security Areas

Exhibit C07-1. Site Elements and Locations Per Building Type

Site Furnishing Elements	Location	Number of Elements Per Facility Type	Note
Benches	- Group 1 & 2 Facilities - Group 3 & 4 Facilities - Trailheads - Along trails	- Minimum of 2 - Minimum of 1 - Minimum of 1 - As shown on trail plans	Designer/contractor to use discretion if more benches are needed based on use of facility and number of occupants
Tables and Benches	All facility group types	Minimum of 6 per designated dining area	Designer/contractor to use discretion if more tables and benches are needed based on use of facility and number of occupants
Outdoor Grill	Outdoor dining areas or picnic areas	Minimum of 1 per table	Provide less if directed by Tyndall AFB
Bollards	All facility group types	As needed	
Bike Racks	All facility group types	- Minimum of 6 - Minimum of 12 at certain buildings, see map	Designer/contractor to use discretion if more bike racks are needed based on use of facility and number of occupants
Playground Equipment	Child Development Center	Various based on age groups	
Exercise Equipment	Stationed along trail system	6 stations between housing and the athletic center	At other locations as directed
Safety Surfacing	Under all playground or exercise equipment	Size of area determined by safe zone required by code	Size of area determined by safe zone required by code
Flagpole	Command Center and Flag Park	3 at each facility	At other facility types as directed
Shade Structures	- Large structure - Group 1 - Medium structure - Groups 2 & 3 - Small structure - Group 3	As directed	Designer/contractor use discretion on size based on use of facility and number of occupants
Fences			
Type A	Facility Groups 1 & 2	As directed	
Type B	Facility Group 3	As directed	
Type C	High Security Areas	As directed	

Exhibit C07-2. Site Furnishing Locations Plan

