



DESIGN AND DEVELOPMENT GUIDELINES



PRINCESS ANNE COMMONS BIOMEDICAL PARK



November 2016



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Princess Anne Commons Design Guidelines and Development Standards

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Introduction 1

The area now known as Princess Anne Commons has grown from an area of approximately 1,100 acres in 1995 to what is now nearly 3,000 acres (please see map on the following page). Much of the increase in the size of the area came after December 2005, when the Comprehensive Plan, Zoning Ordinance, and related development ordinances were amended to protect the Interfacility Traffic Area (ITA) between NAS Oceana and NALF Fentress from development. An Interfacility Traffic Area Overlay District was adopted, consisting of areas having an AICUZ greater than 65 dB DNL. Due to the incompatibility of residential uses in the higher AICUZ of the ITA, one of the principal effects of this new designation was to reduce the residential density to what could be achieved by right with Agricultural zoning (one unit per 15 acres). A second, and what has proven to be a more significant effect was an increase in the area owned by the City of Virginia Beach, as the City and U.S. Navy began a program of purchasing property voluntarily offered to the City by private property owners.



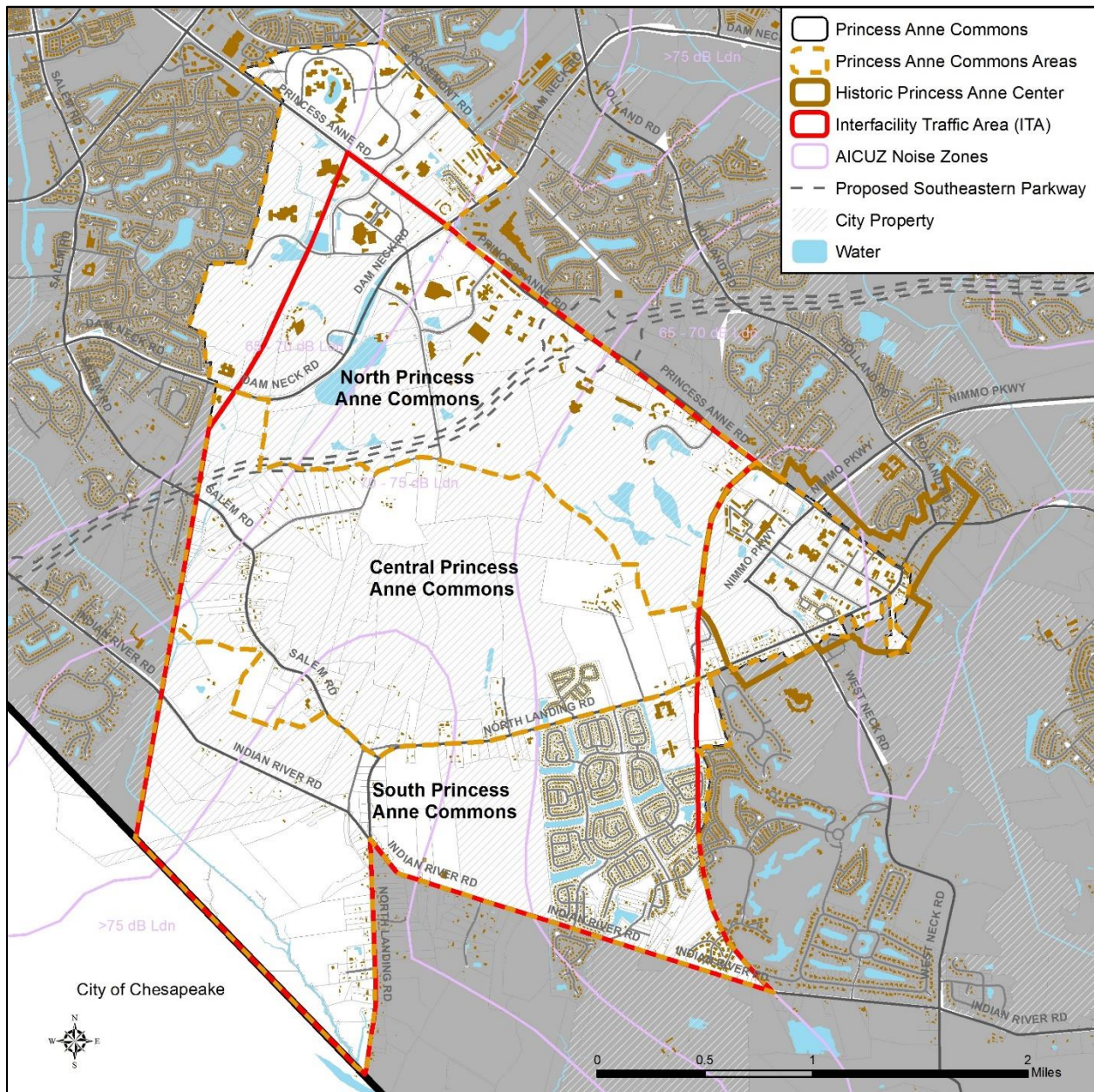
Princess Anne Commons now offers the prospect to expand on the original goals established for it, providing unique education, medical, entertainment, recreation, habitat preservation, and quality economic development opportunities. Additionally, the Comprehensive Plan designates this area as Special Economic Growth Area 4 – Princess Anne Commons, recognizing the land development constraints and economic development opportunities associated with this area’s location within a military aircraft overfly zone. A primary focus of this area will be to provide locations for campus-like development that may not be suitable in a more urban setting. While recognizing that

some land use adjustments are appropriate to accomplish strategic public outcomes, the Comprehensive Plan provides the following general recommendations for Princess Anne Commons (SEGA 4), unless otherwise specified by these Guidelines:

- Strive to achieve extensive open space connectivity throughout the Commons.
- Protection of most sensitive land.
- Mixed-use town center style development in the Municipal Center and Historic/Cultural District, including residential uses in AICUZ under 65 dB DNL.
- Low-impact campus style development for work, education, research, and recreation.
- Guidelines for building types to ensure appropriate quality and character.
- Public amenity areas for walking, cycling, and recreation.
- High-quality parkway-level roadways with landscaped edges, pathways, and low-level lighting with good lighting coverage.

1 Introduction

- Potential for extension of mass transit service to Princess Anne Commons and the Municipal Center.

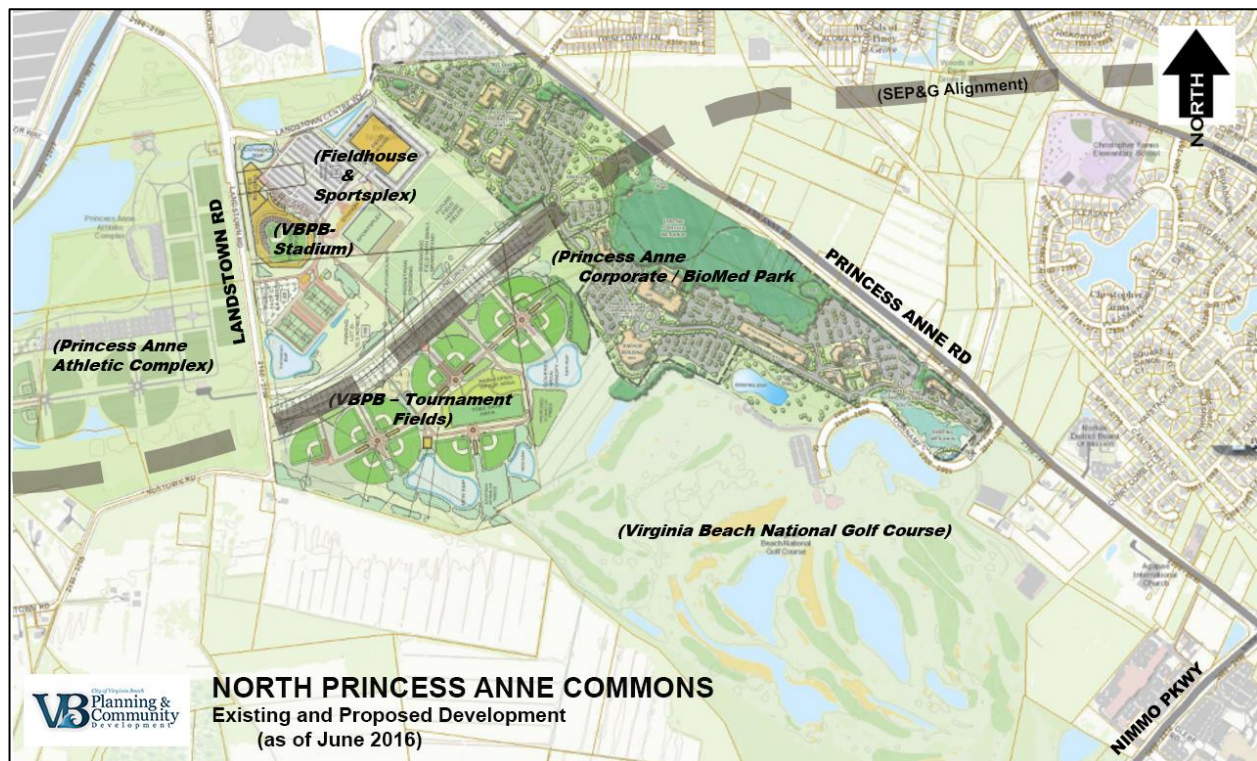


The Design and Development Guidelines that follow are based on these recommendations and are intended to be used during the site and building design of the various projects that will be part of this important and unique place within the city. Specifically, the purposes of the Guidelines are as follows:

- a. Assist property owners and developers regarding appropriate site, building, and sign design;

- b. Encourage innovation and creativity in the design and use of sites and buildings; and
- c. Enhance the visual appeal, and thus the general ambience of the Commons.

Eventually, there will be several sets of Guidelines for the different types of development and activities that are envisioned for Princess Anne Commons. This document, however, provides design and development guidance for the "VABeachBio Research Park" that will develop within Princess Anne Commons Biomedical Park. This 'BioPark' will develop parallel to the southern side of Princess Anne Road, stretching from Landstown Centre Way at the west to Tournament Drive at the east. The graphic below shows the location of the BioPark in relationship to existing and proposed development in North Princess Anne Commons.



A 'Design Vocabulary' for Princess Anne Commons

The past 20 years of development since the inception of the Commons has resulted in a commonality of design style, materials, shapes, colors, and landscape that forms the foundation of what is presented on the following pages. These common design elements are the 'design vocabulary' for Princess Anne Commons, and are depicted in the photos below.



Contemporary Shapes & Forms





Plant Materials



The Color Blue



Water



SITE PLANNING

General Guidelines - Landscaping

Princess Anne Commons is first, and most importantly, a park – thus, the name ‘Commons.’ The buildings, uses, and all physical changes should have a strong emphasis on the landscaped environment. This emphasis will provide an overall visual continuity throughout the Commons and will serve as a backdrop for the development of each individual site. During the individual site development stage, the landscape architect and site designer should give careful consideration and analysis to respond to surrounding site components such as site context, open space, landmarks, views and vistas, streetscapes, and the protection of existing vegetation.

During the design process, begin by identifying existing natural characteristics of the site that should be conserved. Natural site features and landform should be considered in the early stages of development design prior to building placement. Natural site amenities may consist of a significant stand of trees, unusual topographic conditions, natural drainage patterns, and similar natural features, and should be preserved to the greatest degree possible. Natural characteristics create a sense of place on undeveloped sites that can be expanded upon during the development process.



A variety of tree species are located within Princess Anne Commons due to the site's previous use as a tree nursery

Specific Standards

Please see Appendix A – Section 1 for specific requirements related to landscape plantings, irrigation, site lighting, and site furniture.

Access and Circulation

Curb cuts and driveways should be kept to a minimum, especially on internal, pedestrian-oriented streets.



Clearly mark and efficiently place vehicular and non-vehicular access to all new developments during the planning and development process. Vehicular and pedestrian access should be distinct and clearly separated.

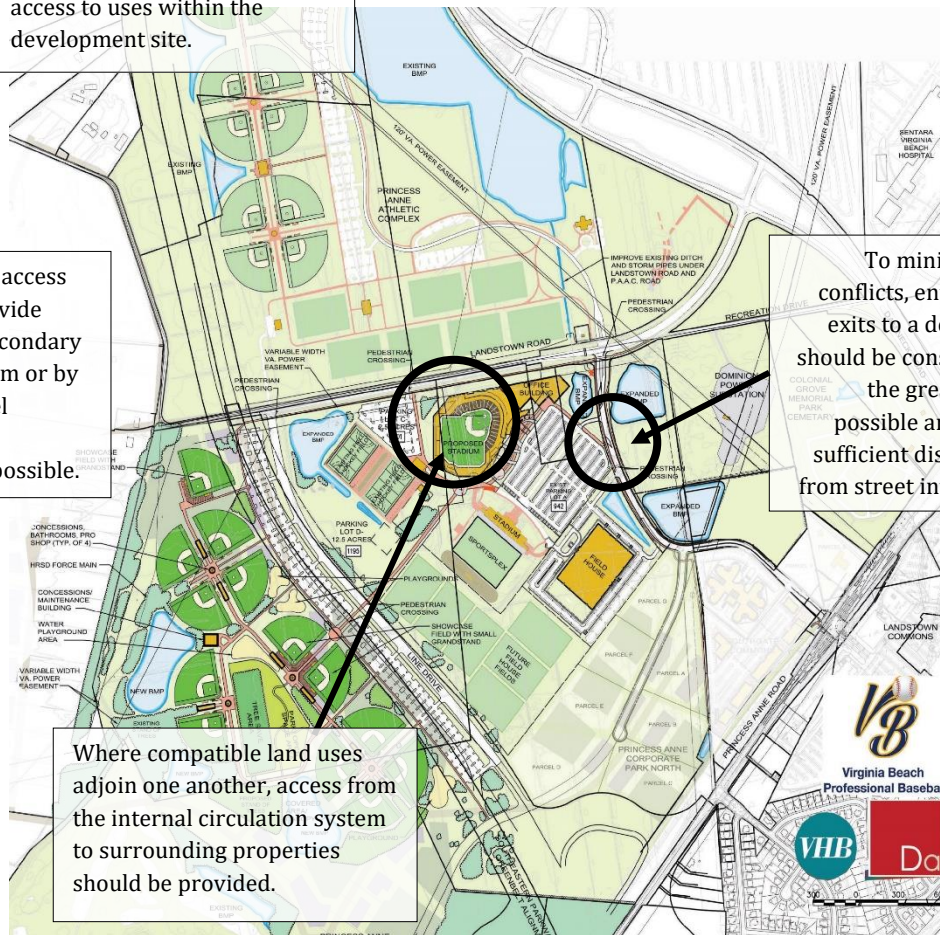


The Operation Smile campus demonstrates good use of the separation of vehicular and pedestrian access to the site



As depicted on this plan, there should be an internal circulation system that provides safe and convenient access to uses within the development site.

Coordinate access with or provide from the secondary street system or by cross-parcel easements whenever possible.



To minimize traffic conflicts, entrances and exits to a development should be consolidated to the greatest extent possible and located a sufficient distance away from street intersections.

Where compatible land uses adjoin one another, access from the internal circulation system to surrounding properties should be provided.

(Plan prepared by VHB and Da for Virginia Beach Professional Baseball © 2014)



Entrances and driveways should permit safe and convenient pedestrian crossing where they intersect sidewalk and other pedestrian access ways.

A change in paving material to make the driver aware of the crossing is encouraged.



Where appropriate, pedestrian pathways not necessarily associated with the public roadways fronting the property should be provided in developments.

Pedestrian pathways should be located within a landscaped or natural area that may consist of a significant stand of trees, unusual topographic conditions, natural drainage patterns or other natural features.

Pathways should be constructed of a durable, low maintenance material such as asphalt or some surface material that is semi-permeable in nature.



Existing pedestrian pathway in Princess Anne Commons



Parking Areas

- To the greatest extent possible, parking areas should be located toward the rear of the site while buildings should be generally oriented to the front of the site adjacent to the principal roadway access.

Additionally, the parking area should be broken up into separate sub-areas to avoid the 'sea of asphalt' appearance.



- Landscaping for the parking area should be strategically located to provide visual relief, shading of the lot, green areas, and screening while insuring that lines-of-sight are maintained, both at the time of planting and when the plants have matured.





Access between parking areas on separate lots should be accomplished through use of shared-access easements, which join the lots.

Individual curb cuts for each parking area onto roadways is discouraged. Internal circulation roads on a parcel should be designed with stubs to adjoining undeveloped parcels that will provide future shared access.



Area with several projects that demonstrate the use of good internal access to parking lots with limited access points to arterial roadways

As required by the City Zoning Ordinance (§ 203), areas for the parking of bicycles and motorcycles must be provided on site with ready access to the pedestrian/bicycle pathway system.



Bicycle parking rack that also serves as public art

BUILDING DESIGN

The relationship of buildings to the public and private spaces around them is critical to the overall success of the Princess Anne Commons BioPark. Building placement, massing, and appearance define this relationship. Each building's architectural style, form, architectural details, exterior materials, textures, and color work together to provide an environment that ensure quality and provide a sense of place that will remain memorable.

Placement on Site & Architectural Style

The following provides general guidelines pertaining to the placement of buildings on a site within Princess Anne Commons for corporate, research, medical facilities, and academic buildings. Construction of all such facilities are governed by the City of Virginia Beach Zoning Ordinance and the Virginia Statewide Building Code, latest amended edition. In all cases, however, should there be a conflict between the guidelines and the Zoning Ordinance and/or the Building Code, latest amended edition, the Zoning Ordinance and/or Building Code prevail.

- The general principal for building placement and architectural style is development of one-story or multi-story buildings (dependent on use), set in a landscaped environment that maintains an aesthetic continuity throughout the surrounding area.

As noted in the Introduction of these Guidelines, there is a Design Vocabulary for Princess Anne Commons, and the existing buildings within the Commons stand as examples of the design style, materials, and colors to be used (see photo on next page and the photos in the Introduction).

- Each designer is encouraged to express individuality and creativity while blending his or her design into the design context of the surrounding area.
- The general design context should reflect a high-quality, modern corporate image. Colonial era architectural elements may be integrated into the design; however, the overall architecture of the building should not be a replication of colonial era design.
- All building designs will be subject to the approval of the City (through the Proffers of the Conditional Zoning Agreement) and the City of Virginia Beach Development Authority. It is intended that the architecture and landscape create a basic harmony of design throughout Princess Anne Commons such that no building, sign, landscape, or other element of the built environment will detract from the attractiveness of the overall environment.

Building Mass

The following provides general guidelines that emphasize the importance of the mass, scale, and proportion of buildings on a site within Princess Anne Commons for corporate, research, medical facilities, and academic buildings. In all cases, however, should there be a conflict

between the guidelines and the City of Virginia Beach Zoning Ordinance and/or the Virginia Statewide Building Code, latest amended edition, the Zoning Ordinance and/or Building Code prevail.

- How the mass of a building is distributed on a site usually has the greatest impact on a project's overall appearance and its relationship to the surrounding area. As demonstrated by the building shown in the photograph below, breaking the footprint of a large building into smaller parts and varying a building's height is a valuable concept when designing large projects.



Photograph © 2016 Sentara Healthcare

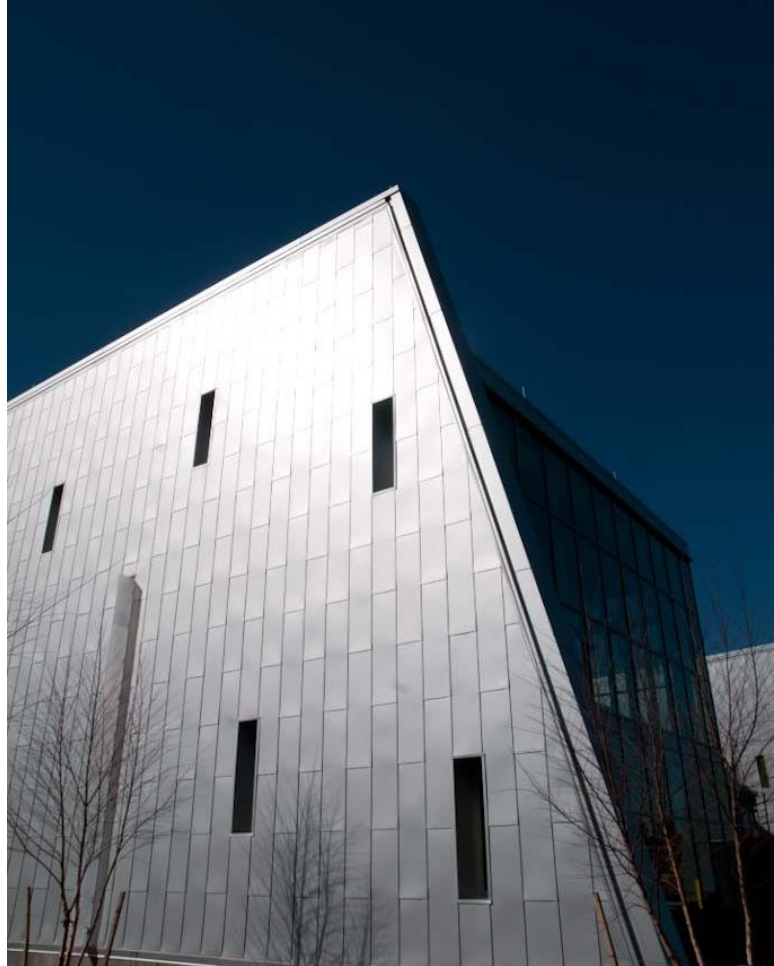
- Sculpting a building's massing can also help avoid big bulky structures that result in visual monotony rather than visual interest. It is the well-balanced variety of building massing and textures of shadow, light, and material that, in total, add to the richness of Princess Anne Commons built environment.

Building Façade

- Facades of buildings that face the street should incorporate cornices, expression of structural or architectural bays, recessed windows or doors, material or material module changes, color and/or texture differences, or strongly expressed mullions.

As an example, the photograph below is of a building in a modern style with various components that integrate principles of sustainability into the overall design. While the style and integration of sustainability principles contributed to the large expanse of the façade, there are subtle changes that provide visual interest from an external perspective:

- The rectangular grid pattern created by alternating the metal panels;
- The triangular projection in the center of the façade (shown in the lower left of the photograph); and
- The rectangular windows of the same size as the metal panels set into the façade at what appears from outside the building to be random locations.



All sides of a building should have continuity of design. No side should be unimproved. All architectural details, such as roof lines and parapets, should continue around all sides of a structure.

Exterior Materials and Colors

Buildings should be of long-lived and sustainable materials, including brick, stone, tinted and textured concrete masonry, and glass. EIFS should not be

used below the first-floor elevation except when used as soffits. The material palette should provide variety, reinforce massing and changes in the horizontal or vertical plane.

- An identifiable break should be provided between a building's ground or second floor and the upper floors. This break may consist of a change in material, change in fenestration, or similar means. As shown in the photograph to the right, the pre-cast block and cornice around the windows provide such a break.



- Colors, materials, and finishes should be coordinated in a consistent manner on all elevations.

In order to maintain aesthetic continuity within Princess Anne Commons, bright primary colors should not be used except in limited use for building accents, such as entry doors or trim.



The bright blue band above the first floor arcade level of this building shows an appropriate use of a bright primary color as an accent.

Exterior Building Lighting

- Each project should develop a system or family of lighting with layers that contribute to the night-time experience, including facade uplighting, sign and display window illumination, landscape, and parking area lighting.



- Integrate security lighting into the architectural and landscape lighting system. Security lighting should not be distinguishable from the project's overall lighting system.



- Exterior lighting should be shielded to reduce glare and eliminate light being cast into the night sky.



Mechanical Equipment and Service Areas

- Ground level mechanical equipment that cannot be located inside the building should be screened with an enclosure or structure incorporated into the main building. The design, materials, and colors should be complementary with the main building.
- Rooftop mechanical equipment (including elevator rooms) should be screened so as to be 'invisible' from the ground adjacent to the building as well as from approaches to the building. Horizontal (flat) roof forms should be screened by extensions of the building wall planes (parapet).
- Loading and trash collection areas should be concealed from view to the greatest extent possible and are ideally located inside the building. Access to these areas should be minimized and arranged so that maneuvering is avoided on public streets. A vertical clearance of at least 14 feet is recommended.



Parking Structures

Traditionally, the design of parking structures takes a secondary position to the development of larger projects. Parking structures are often treated as nothing more than buildings having the sole function of providing a place for people to park their cars and not as an integral part of the design fabric of the locale. The following guidelines are for those instances when a parking garage is deemed the best parking solution. The guidelines are intended to encourage parking structures that will be integrated into the desired design fabric of Princess Anne Commons, so that ultimately, parking structures will be viewed as long-term, quality amenities to the city and not as utilitarian 'quick-fixes' for a parking problem.

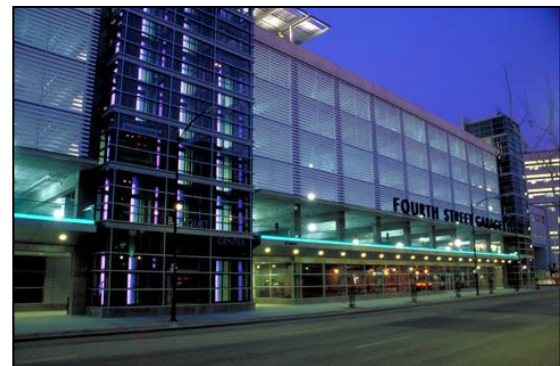
The exterior facade should maintain a horizontal line throughout. The sloping nature of the interior structure, necessary in the design of parking structures, should not be repeated on the exterior facade.



The height and mass of the structure should be consistent with the urban design fabric within which the structure is to be located (e.g., a 7-story parking structure should not be situated in an area that consists of primarily 2 to 3 story structures).



Parking structures should have an external 'skin' designed to improve the building's appearance over the basic concrete structure of ramps, walls and columns. This can include heavy-gage metal screen, pre-cast concrete panels, laminated glass or photovoltaic panels.



Parking structures should integrate sustainable design features such as photovoltaic panels (especially on the top parking deck), renewable materials with proven longevity, and stormwater treatment wherever possible.



■ Pedestrian access to and from a parking structure should be well-defined and attractive. Vertical circulation cores (elevator and stairs) should be located on the primary pedestrian corners and be highlighted architecturally so visitors can easily find and access these entry points. Directional signs should be provided at internal exits to identify streets and help orient pedestrians as they exit the parking facility.



■ Proper security is an important aspect of parking structure operations. A safe, secure environment for patrons, employees, and vehicles is critical. Adequate security measures should be an integral part of the design. The overall design of the structure should be such that it provides for easy surveillance from the street. The proper placement and design of windows, lighting, and landscaping increases the ability for police and



others to observe intruders and maximizes the potential to deter crime.



Elevators - Elevators should be located along the exterior periphery of the building, preferably on a street side and oriented so that the elevator lobby is visible from the street at each level. The back of the elevator cab and shaft should be made of glass or other similar transparent material that will allow maximum surveillance from the exterior.

Stairways - As with elevators, stairways should be located along the exterior periphery of the building, preferably on a street side and oriented so that the stairway is visible from the street at each level. Glass or a

similar transparent material should be used to allow visibility.

Access - Pedestrian access into and out of the building should be channeled thorough only one or two points to allow surveillance either by a cashier or a remote television camera.

SECTION 1

A

Protection of Existing Vegetation: Site developer, through sensitive grading and drainage plans, shall save stands of natural vegetation 15' outside of all proposed building walls and 5' outside of all paved areas. The building developer shall identify, "flag", and barricade up to the tree dripline such stands prior to site clearing or grading operations. Storage of materials or equipment shall not be allowed within these barriers during construction and barriers shall not be removed until finish grading of sites has been completed. All City of Virginia Beach and State of Virginia tree protection notes are applicable and shall be enforced.

B

General requirements of new plantings:

1. All shade trees along pedestrian walkways shall have a minimum branch hang height of 6'-8".
2. Where shrubs or groundcovers are used, "massing" is required unless otherwise approved. Extensive varieties of plants within one planting bed is discouraged.
3. Sod rather than seeding is required within 50' of all buildings and along all adjacent roadways which the property lines front. Minimum width of sod along roadways shall be 15' if applicable.
4. Flowering trees shall have a minimum caliper of 1 1/2"-2".
5. Shade trees shall have a minimum caliper of 3 1/2"-4" except for shade trees in parking lots which shall have a minimum caliper of 2 1/2" - 3".

6. Within the parking field and in adjacent curbed planting areas, there shall be one shade tree per 10 parking spaces with a minimum ground area of 8' x 17' surrounding the tree.
7. Continuous evergreen screening shall be required along any side of a parking lot that abutts the right-of-way of any street, lake or canal. Minimum height of plant screen along the right of way of any street shall be 30", planted 3' o.c.; where parking lots are visible from lakes or canals the plant screen shall be 4' to 5' in height, planted 3' o.c. Berming may be substituted and shall be a minimum height of 3'.
8. The attached plant list shall dictate varieties to be used unless otherwise allowed
9. All building entry drives shall be well landscaped with a combination of evergreen shrubs and flowering shrubs or flower beds, see (Exhibit L).
10. All site utilities such as heat pumps, transformers, etc. shall be screened with an evergreen shrub with spacing not to exceed 3' o.c. Height of shrub at installation shall be a minimum height of 4' to 5', see (Exhibit I).
11. All visible loading docks or loading areas that abut property lines or street right of ways shall be screened with evergreen shrubs or evergreen trees. Minimum height of shrubs at installation shall be 36" with spacing not to exceed 3' o.c., minimum height of evergreen trees shall be 4'-5' in height with spacing not to exceed 8' o.c., see (Exhibit I).

13. All planting bed areas shall be covered with a 2" layer of shredded hardwood mulch.

14. All plant material, topsoil, mulch, fertilizers, etc. shall be subject to VBDA approval. Rejected materials shall be removed from the site without delay.
15. Location of underground utilities shall be determined prior to start of work to avoid damaging.
16. All planting operations shall be under the supervision of an experienced plantsman.
17. All landscape planting plans shall be prepared and sealed by a landscape architect certified to practice as such in the Commonwealth of Virginia.
18. All plants shall be nursery grown & shall be in accordance with the most recent edition of the "American Standard for Nursery Stock." Spaded trees may be accepted if approved
19. All entry drives into each building site shall be landscaped, see (Exhibit L).
20. Street trees (3 1/2" - 4" caliper, 14' to 16' in height) shall be placed along all roadways, within the right of way, which properties abut or adjoin. One tree shall be provided for every 35' of property line that adjoins or abutts the roadway. Existing street trees, 75' off the property line, in both directions, if applicable, shall be located and shown on all landscape planting plans. The spacing of all new required street trees shall tie into existing trees maintaining a maximum spacing of 35' on center.
21. In addition to the above requirements all landscaping shall comply with the City of Virginia Beach Landscape Ordinance. Any discrepancy between the Design Criteria requirements and the City of Virginia Beach Landscape Ordinance, the more stringent requirements shall govern.

C

IRRIGATION

Each site developed shall have an automatic irrigation system to irrigate all new trees, shrubs, seeded areas & sodded areas up to the property line and to any road edges which they adjoin or front. The irrigation system shall be designed to provide the proper water requirements to maintain healthy plant life. Lawn areas and shrub beds shall be on separate zones.

D

SITE LIGHTING

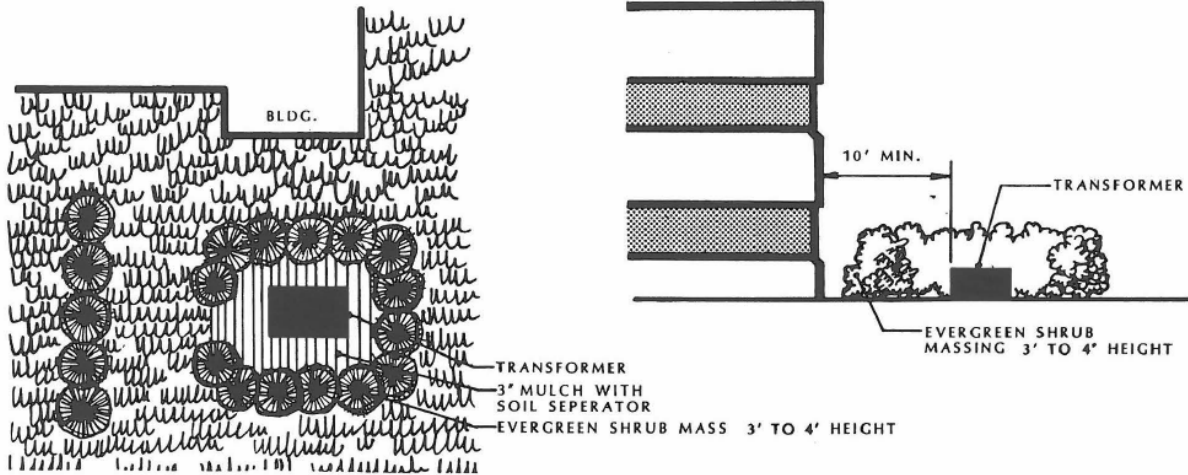
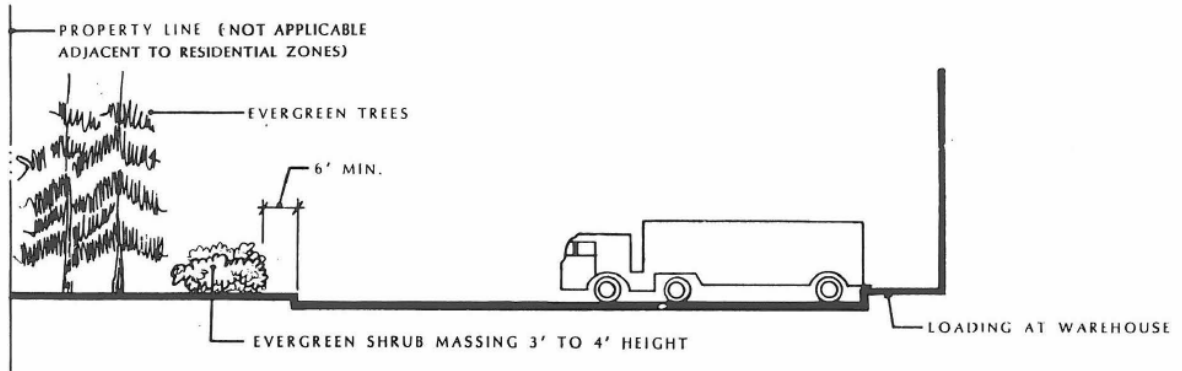
The intent is to create a uniform lighting system for the exterior lighting of the park

1. Parking light fixtures shall be a maximum height of 30'
2. Low bollard fixtures or landscape lighting is recommended for walks and building entries,
3. Building mounted floods will not be permitted, except in completely internalized service courts for the research and development (R&D) areas. -----
4. Lighting in parking lots, walkways, signage and on all buildings shall be "cool white" mercury vapor lamps. Lighting in all public right-of-ways shall be high pressure sodium.
5. Lighting levels will be determined by the recognized standard of the lighting industry, as specified in the "Lighting Handbook of the Illuminating Engineering Society". Lighting levels in parking lots shall be minimum .5 foot candles.
6. Accent lighting of buildings, landscaping and signage is required.
7. All lighting adjacent to residential areas will be placed in such a way to prevent glare or overflow lighting into these areas.

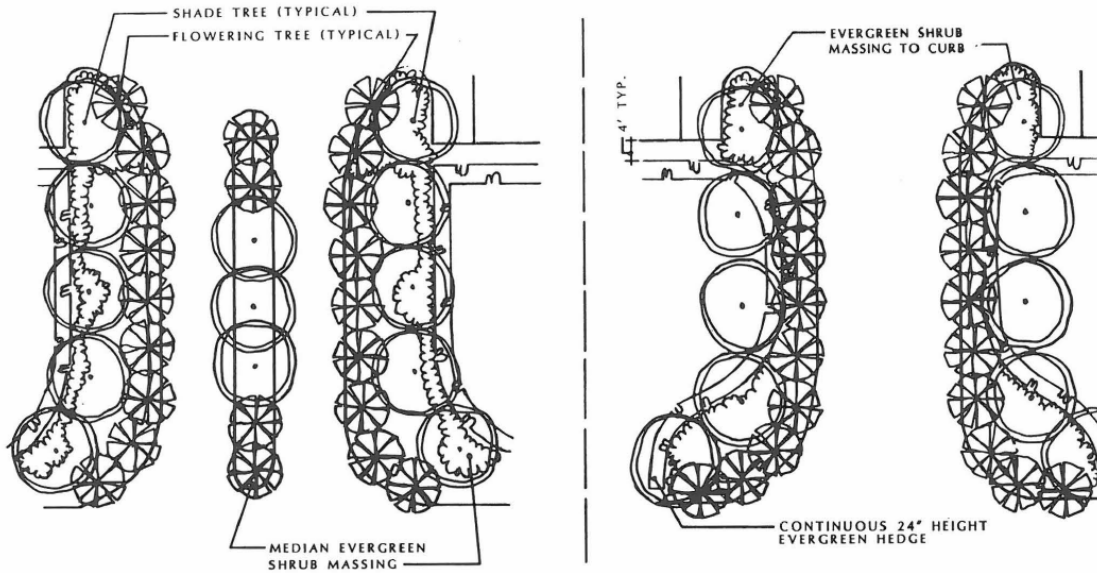
E

SITE FURNITURE

Site furniture shall include benches, seats, tables, trash receptacles, and planters, and may be placed at building entrance plazas and at entry walks. All site furniture shall be selected from a list of standard furniture, provided by the VBDA, see (Exhibit H).



I VARIOUS SCREENING REQUIREMENTS SITE UTILITIES AND LOADING DOCKS



Note: The drawings above are at a conceptual level to indicate the design intent. The landscape architect shall respond to all required City of Virginia Beach visibility triangles for intersections.

L TYPICAL BUILDING ENTRY DRIVES