Appendix C
NCPC Urban Design and Security Policies and Objectives

National Capital Urban Design and Security Plan
Objectives and Policies

Introduction

Intent and Applicability

There are many aspects to security planning and design that must be considered when designing security measures to protect buildings and their occupants. Risk management strategies for chemical, biological radiological or explosive threats, range from infrastructure protection, building construction and perimeter security to surveillance and operations. The criteria are derived from various Presidential directives and other federal security criteria contained in documents such as the Department of Homeland Security's *Interagency Security Committee Manual for New Federal Office Buildings and Major Modernization Projects,* the Department of Defense's *Unified Facilities Code*, and the National Capital Planning Commissions' *National Capital Urban Design and Security Plan*.

Criteria in the *Interagency Security Committee Manual and the Unified Facilities Code* address the architectural design, engineering and construction of buildings and structures, electronic security, parking security, and building perimeter security. The *National Capital Urban Design and Security Plan (Plan)*, including these objectives and policies contained herein, addresses planning and design issues associated with risk management strategies that impact the pubic realm, primarily physical perimeter security for explosive delivered by bomb-laden vehicles. The Plan and its objectives and policies should be used in conjunction with other federal security criteria.

When choosing security measures to lessen the probability of progressive building collapse, these security design objectives and policies should be used as guidelines to address important city planning and design issues that should be considered when it is necessary to construct physical perimeter security in urban areas. They are intended to balance the need for perimeter security with the need to protect public space by keeping it open, accessible and attractive.

The objectives and policies will be used to review development plans for perimeter security projects within urban settings in the National Capital Region. In accordance with the Commission's existing in-lieu of zoning authority, they will be used to evaluate physical perimeter security proposals on federally owned land within the District of Columbia and other public projects in the central area, and to make recommendations on federal projects in National Capital Region. These polices apply to permanent physical perimeter security projects for existing buildings and new construction. Except for section II.C.2, Urban Landscape Contextual Design, these policies also apply to temporary security projects.

The objectives and polices reinforce the importance of design quality in the nation's capital where it is important to respect community identity and a culture of democracy. The objectives and policies strive to balance building security with the functional and visual quality of public space, paying attention to: (1) the monumental core's historic resources and the democratically-inspired design principles inherent in D.C.'s historic city plan; (2) the District's and surrounding region's need for mobility, mixed use development and activated street level activity to protect and enhance its economic vitality; and (3) the importance of protecting public space from the adverse

impacts of perimeter security to ensure that residents, workers and visitors maintain their rights to access, use and enjoy the grace and beauty of public space in the capital and the region.

I. Objectives

1. To protect the design principles inherent in D.C.'s historic plan and its historic resources and minimize the physical and visual intrusion of security barriers into public space (such as the national capital's vistas, rights-of-way, parks, squares, circles and plazas). These spaces, vistas and environs embody the American ideals of a free and open society.

2. To strike a balance between physical perimeter security for federal buildings and the vitality of the public realm.

3. To acknowledge that acceptance of a reasonable level of risk is inherent in striking an appropriate balance between security provisions and other fiscal, planning, design and operational objectives.

4. To encourage a multi-faceted approach to selection of appropriate security measures that considers intelligence information, operational and procedural measures (such as surveillance and screening) and design strategies (such as structural engineering, window glazing, emergency egress and physical perimeter barriers).

5. To limit the vulnerability from explosives entering or being placed adjacent to sensitive federal buildings.

II. Policies

A. Security Measures

These policies promote risk management strategies that are effective for different threat conditions and minimize the placement and impact of security barriers on public space. The selection of appropriate operational, procedural and physical protective measures should differ for various communities based on specific development patterns and personnel resources. Urban conditions may require more operational security measures and sensitive building design to minimize the impact of physical security barriers on public space; whereas, suburban or campus-like conditions may make more use of physical design strategies, such as greater standoff distances.

1. Intelligence information, operational and procedural controls and physical protective measures at building entries and within the building, should be the primary defense against environmental hazards and persons carrying explosive devices.

2. Intelligence information, operational controls and physical design measures should be used to protect against vehicle-borne explosives.

B. Physical Perimeter Security and Mobility

These physical perimeter security polices strive to balance security with the needs of the city's multi-modal transportation system to ensure safety and efficient mobility for residents, workers and visitors throughout the national capital region.

1. Permanent closure of streets or sidewalks within right-of-ways established by the L'Enfant Plan should be prohibited.

2. Temporary closure or access restrictions to streets, parking lanes, or sidewalks should be limited to only the protection of those uses deemed absolutely essential for immediate continuity of critical government operations. These closures or restrictions should only be allowed during times of extraordinary security threats, or brief periods of time when required for extraordinary events or activities, such as large public demonstrations, the State of the Union Address or ceremonial parades.

   Temporary closure or access restrictions should be in accordance with previously established plans and procedures. Coordination should occur among governmental entities directly affected by the closure or those that can provide meaningful input on a range of potential impacts caused by the closure, such as: the Department of Homeland Security-National Capital Region Coordination, the local emergency management service, the local law enforcement agency, the US Capitol Police, the US Park Police, the US Secret Service, the Federal Protective Service, local planning and transportation offices and the National Capital Planning Commission, as appropriate.

3. The National Security Threat Level and the determination of which uses are absolutely essential for immediate continuity of critical government operations should be made by the Secretary of Homeland Security.

4. Streets necessary for emergency evacuation should not be closed, blocked or access restricted except for brief periods when required for extraordinary events or activities.

C. Physical Perimeter Security

Intelligence information, operational procedures, building hardening and physical barriers are risk management measures used to secure buildings from the threat of

bomb laden vehicles. Intelligence information, operational procedures and building hardening are risk management measures that have little or no physical impact on public space.

When physical perimeter security is necessary, it should be located within and integrated into the design of the building yard. If there is no building yard, as typically found in urban areas, it may be necessary to place physical perimeter security measures in public space. This should be done in an unobtrusive manner that appropriately integrates the security barriers into an attractive urban landscape.

C.1. Barrier Placement and Design

1. New buildings in urban settings should be constructed at established urban building lines.

2. Habitable building space should be provided along the street frontage to accommodate public space or activated ground floor uses, such as retail or other commercial enterprises, as appropriate.

3. Interior building space programming for new buildings, or for major renovation projects, in urban settings should consider locating critical uses and operations in areas of the building that will minimize the need to place perimeter security in public space.

4. Protection of exterior air-intake systems should be visually and physically integrated into the architecture of the building design. Air-intake protective measures should not prevent access to the building yard or public space nor impede pedestrian circulation.

5. For existing buildings in urban areas, perimeter security barriers should be located within the building yard when the face of the sensitive building to the outside edge of the building yard is a minimum of 20 feet. If the distance from the face of the building to the outside edge of the building yard is less than 20 feet, then perimeter security barriers may be permitted in public space adjacent to that building.

6. The placement of security barriers in public space is discouraged and should be minimized.

7. Existing streetscape, landscape or building site features should be hardened or perimeter security should be integrated into the topography of the site to provide physical perimeter security where feasible. If this not achievable, then security barriers should be integrated into the urban landscape in a manner that minimizes their visual impact and physical infringement into public space.

8. When physical perimeter security elements are located at the edge of the building yard, designs should accommodate visual and physical public access to the building lawn and designated entries.

9. The location and arrangement of security barriers should be compatible with the placement of security barriers for other buildings on the street.

10. The location of perimeter security barriers should minimize interruption of pedestrian circulation. Barriers should not unduly cross sidewalks perpendicularly causing pedestrians to maneuver between them.

11. Perimeter security barriers at intersections, corners and near cross walks or other highly used pedestrian areas should be minimized; barriers that are needed should be located to allow safe pedestrian waiting areas and pedestrian movement.

12. Placement of security barriers should incorporate best design practices and be arranged to:

    a. Comply with the American Disabilities Act (ADA) and Architectural Barriers Act (ABA);
    b. provide visual clues to signify important circulation routes and site or building features;
    c. ensure that the public space is visually and physically accessible;
    d. provide sufficient clearances to allow access to and from transit stops;
    e. provide safe pedestrian access to and along sidewalks, public spaces, and building entrances;
    f. provide emergency access to buildings and emergency evacuation from buildings;
    g. ensure that maintenance equipment such as snow plows, utility trucks and motorized cleaners can access and maneuver within building yards, sidewalks, and plazas;
    h. provide at least 2-feet from the face of the curb to the face of the barrier to allow for opening car doors, unloading and loading of passengers, and ease of access to public space.

    The best design practices should be based on design industry standards, such as those referenced in Time Savers for Landscape Architects or Time Savers for Architects.

13. Security elements located at the curb, or edge of the sidewalk, should not unduly impede pedestrian access to various permitted sidewalk and street activities, such as cafés, kiosks, demonstration areas, or parade viewing areas along ceremonial streets. The designs must accommodate viewing stands, tents and review stands that are used during significant public events.

C.2. Urban Landscape Contextual Design

14. The design of security barriers, including their mass, form and materials should respond to the architectural and landscape context in which they are located and complement and aesthetically enhance the special character of the associated building and precinct.

15. Physical perimeter security barriers within the building yard should be incorporated into the landscape design and include low walls, fences, seating, landscaping, and other public amenities typically found within the landscape. The design of these barriers should be architecturally compatible with adjacent buildings and respect the overall character of the streetscape.

16. Perimeter security barriers in public space should incorporate decorative tree wells, planters, light poles, signage, benches, parking meters, trash receptacles and other elements and public amenities typically found in a streetscape.

17. Protection of existing trees, including their canopies and root systems, and new street tree planting is encouraged when the plantings will be in context with the existing or the planned streetscape of the corridor. This will minimize the visual impact and the physical intrusion of the security barriers in the urban landscape.

18. The design of perimeter security should respect the building's use, significance and location in the community, as well as established view corridors.

19. Perimeter security design should strive for continuity, consistency and enhancement of the overall streetscape.

20. Perimeter security design should avoid relying on repetitive use of single elements, such as continuous rows of bollards or planters.

21. Physical perimeter security should follow design principles to achieve a sense of openness, balance, rhythm, and hierarchy that will improve way finding and visual linkages along a street and enhance the pedestrian experience. For example, elements can be designed and placed to signify primary or secondary pedestrian entrances.

22. Perimeter security barriers should be designed as a family of beautiful functional streetscape elements that also function as a public amenity.

23. Physical perimeter security projects (located in areas with a previously approved streetscape program) should be designed to be consistent with the design intent of the streetscape standards of that associated area.

24. Security barrier design (placement, height, spacing, dimensional volume, structural integrity and other physical characteristics) should respond to the identified threats as well as specific building and site conditions, relational vehicle design speeds and angles-of-approach and pavement types.

25. Curbs, copings and retaining walls should be incorporated into the design of security barriers to reduce the perceived height of the barrier.

C.3. Vehicular and Pedestrian Controls

26. Pedestrian screening security operations should not be conducted in public space. If building additions or renovations are required to accommodate this function, the new construction should be compatible with the existing architecture and should not project into L'Enfant Plan rights-of-way, other public space, or view-sheds.

27. Guard booths should be integrated into, and designed in context with, the site and building design. When feasible, guard booths should be located in the building yard; where the depth of the building yard is insufficient, the guard booth should be located to minimize interruption of pedestrian movement along the pathway.

28. Vehicular controls at building entries, such as vehicle barriers and guard booths should be located so that pedestrian movement along sidewalks is not blocked. Check points should be designed to allow off-street queuing space that does not block pedestrian movement or traffic flow.

29. Vehicular control measures that are visible from public space should be attractively designed and mechanical equipment should be hidden. Solid hydraulic plate barriers should only be used in locations that are not highly visible from public space.

30. Signage, electronic signals or other control measures should be integrated into vehicular barriers and guard booths to minimize visual clutter.

C.4. Comprehensive Streetscape Design

The National Capital Urban Design and Security Plan is predicated on a design framework that defines contextual areas and special streets. Special streets, recognized as the monumental avenues and diagonal streets in the L'Enfant Plan are the great linear connectors of the city and provide an important symbolic and ceremonial function in the nation's capital. Ideally, the physical perimeter security for buildings on these monumental and diagonal streets should be designed collectively as a contextually appropriate cohesive streetscape. In the absence of funding to design the entire streetscape, it is incumbent upon the federal agencies

to coordinate their design solutions with their neighbors along the street and consider the larger context.

31. The Capital's monumental avenues, such as Pennsylvania, Constitution, Independence, Maryland, Virginia and New Jersey Avenues should receive special treatment to ensure that security projects are addressed comprehensively, emphasizing the streetscape as a whole with attention to their axiality and formality.

32. Diagonal Avenues should be treated in a manner that emphasizes their landscape features, including significant tree and ground plantings.

33. Special streets (such as Pennsylvania, Constitution, Independence and Maryland Avenues), or those that are included in special planning areas (such as 10th Street SW, 7th Street NW, and F Street NW) should be treated in a manner that reinforces their linkages, unique conditions and individual character.

34. Grid streets should be treated in a manner that builds upon existing streetscape standards and minimizes the contrast between security and streetscape elements.

Terminology

The terms below are defined for use with this document:

- **Bollard.** (Pronounced bŏl'ərd). A post set in a series to prevent vehicular access or to protect property from damage by vehicular encroachment. A bollard is sometimes used to direct traffic. The term is nautical in origin and is a post on a dock, wharf, ship or tug used for securing lines.

- **Building Yard.** The area between the sidewalk and the face of the building typically expressed as lawn area, landscape area, or paved plaza area, that may be in public or private ownership.

- **Campus.** A group of buildings in an open or park-like setting that house various functions serving a common use or mission.

- **Explosive devices.** Various forms of explosive materials carried in a container that is transported by persons, such as package bombs, suitcase bomb, suicide-vests or other similar devices, or when the explosive is transported in a vehicle.

- **Environmental hazards.** Forms of terrorism carried out through chemical, biological and radiological attack.

- **Essential for immediate continuity of critical government operations.** Those operations deemed essential to protect national security, and the safe keeping of essential resources, facilities and records necessary for the continuity of governmental functions that exercise civil authority and provide vital services to maintain the safety of the public.

- **Federal Facilities.** Buildings, installations, structures, land owned or leased by the federal government, monuments and memorials.

- **Federally Leased Space.** Buildings, and land incidental thereto, for which the federal government has a right of occupancy by having a leasehold interest.

- **Federally Owned Space.** Buildings, and land incidental thereto, the title to which is vested, or which will become vested, pursuant to existing agreement, in the federal government.

- **Harden.** A construction method to increase the strength of a structural element that reduces vulnerability to external blasts.

- **Intelligence Information.** Information that identifies detects and assesses the nature and scope of terrorist threats in relation to actual and potential vulnerabilities of the homeland.

- **Monumental Core.** The area encompassing the Capitol grounds, the Mall, the Washington Monument grounds, the White House grounds, the Ellipse, West Potomac Park, East Potomac Park, the Southwest Federal Center, the Federal Triangle area, President's Park, the Northwest Rectangle, Arlington Cemetery and the Pentagon area, Fort Myer and Henderson Hall.

- **National Capital Region.** The District of Columbia; Montgomery and Prince George's Counties in Maryland; Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia; and all cities now or hereafter existing in Maryland or Virginia within the geographic area bounded by the outer boundaries of the combined area of said counties. This definition is set in the National Capital Planning Act of 1952.

- **Operational Controls or Procedural Security Measures.** Risk management strategies that require established procedures to be performed by personnel, or strategies that can be performed electronically, or mechanically and monitored by personnel, including but not limited to surveillance, vehicle screening and emergency egress.

- **Physical Security Measures.** Risk management strategies that include physical modification to a building or construction of a building such as structural engineering,

window glazing, or strategies that include construction within the area around a building, such as structural engineering of landscape or streetscape features, vehicular control devices or other similar measures.

- **Precinct.** An area dominated by a single land use or associated uses, or an area that is dominated by a particular architectural style or landscape character.

- **Risk Assessment.** An analysis of the potential for loss or damage to an asset that includes evaluating the interrelationship between the value of an asset, the threats against it, and its vulnerability to each applicable hazard and threat.

- **Security Measure.** The general term that refers to a number of potential risk management strategies to increase protection of an asset; such as intelligence information, operational or procedural controls, or physical design.

- **Standoff.** The distance between an asset and a threat.

- **L'Enfant Street.** Streets identified in L'Enfant's plan for the city embody the designs and plans for the original City of Washington and, which were promulgated by President George Washington and recognized by Congress as the general work of Pierre Charles L'Enfant, Andrew Ellicott and Benjamin Banneker, notably as subsequently laid out by the Office of the Surveyor of the District of Columbia government according to the "King Plats of the City of Washington in the District of Columbia, 1803."

- **Suburban area/setting.** Settings that are typically recognized as dispersed low-density to mid-density development that separates residential, commercial and services by clustering like uses in a manner that makes vehicular use essential for movement of people and goods. Buildings are setback from property lines and parking is concentrated, often in large surface parking lots.

- **Threat Assessment.** The evaluation of threats based upon numerous characteristics such as history, magnitude of a threat, and capability of the entity or individual seeking to carry out the threat.

- **Urban area or setting.** Settings recognized as the concentration of mid-density to high-density development that supports horizontally and vertically integrated mix of uses for shopping, entertainment, business, services, cultural, and housing opportunities. The building mass, organization, orientation and build-to lines create spatial definition along streets, squares and circles to create a pedestrian environment that supports multi-modal forms of mass transportation and where parking is typically concentrated in parking garages.

- **Vulnerability Assessment**. The evaluation of characteristics that contribute to and mitigate the susceptibility of an asset to damage or weakness that can be exploited by an aggressor.