3.0

AFFECTED ENVIRONMENT

3.0 AFFECTED ENVIRONMENT

3.1 Cultural Resources

This section documents the historic and visual resources that are present on the Lafayette Building site and within the surrounding area. Through the Section 106 process, the Area of Potential Effects (APE) was defined based on the potential for the proposed security improvements to be visible from historic resources surrounding the site. The APE is illustrated in Figure 3-1. The study area for visual resources is identical to the APE for historic resources.

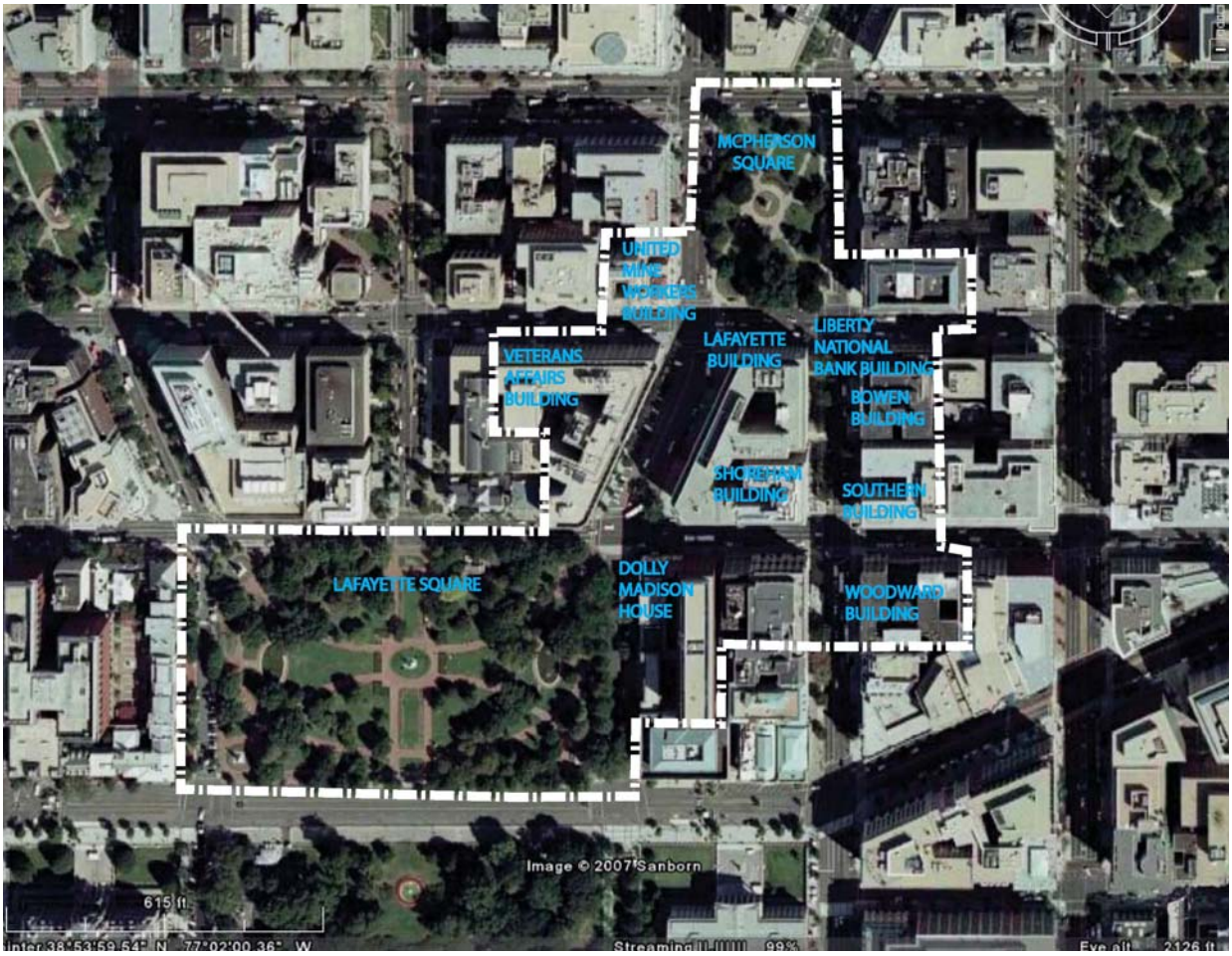

Figure 3-1
Area of Potential Effects

3.1.1 Historic Resources

Lafayette Building

The Lafayette Building was designed in 1939 by Chicago architectural firm of Holabird and Root, together with A.R. Class of Washington, DC for the Reconstruction Finance Corporation (RFC), a component of the Federal Loan Agency. The RFC played an important role in World War II, financing the wartime mobilization of American industry. The RFC was responsible for constructing new plants for the manufacture of armored vehicles and aircraft, for stockpiling raw materials, and for creating a synthetic rubber industry in the US. It is generally believed that the Allied forces would not have won the war were it not for the critical support of the RFC.

When the Lafayette Building was designed, the Shoreham Building, now the Sofitel Hotel, already occupied the southeast corner of the block. The trapezoidal site, created by the diagonal of Vermont Avenue, together with the existing building, dictated an unusual plan. Arranged around one courtyard and an alley that provide light and air to the interior of the building, the plan resembles a lower case "e." It is prominently sited just south of McPherson Square and north of Lafayette Square.

The style of the Lafayette Building is Stripped Classical, common for government buildings of the time, especially in Washington. The exterior of the building is clad in pale limestone, accented at the base of the building and the entrance by polished black granite. It stands twelve stories high, and the top two floors are set back slightly behind a terraced balcony. The windows on the first two floors are recessed, appearing as single voids in the unadorned façade. Rows of regularly spaced square windows punctuate the upper stories, and recessed panels on both ends of the Vermont Avenue and H Street elevations give the impression of Classical pilasters. A granite retaining wall placed about two feet from the base of the building on all but the H Street façade provides space for a narrow planting bed. The acutely angled corner of Vermont Avenue and H Street, opposite the northeast corner of Lafayette Park, provided the opportunity to create a short concave façade to address the park. It is emphasized and embellished by a small landscaped plaza marked by a flagpole. Unusual for office buildings of the time, the 15th Street façade incorporates a row of commercial stores at the north end of the block.

The Lafayette Building is a National Historic Landmark, based on the critical role the RFC played in the Allied forces victory in World War II. It is further significant for its association with Jesse Jones, the head of the RFC during this period. It is also a contributing element within the 15th Street Financial Historic District.

Figure 3-2
Lafayette Building Entrance on Vermont Avenue, NW showing temporary security planters

Figure 3-3
West Elevation of Lafayette Building (view north on Vermont Ave) showing mature trees

Figure 3-4
Southwest Corner of Lafayette Building (facing Lafayette Park)

Figure 3-5
East Elevation on 15th Street, NW (looking south from 15th and I)

Figure 3-6
Entrance to Alley on 15th Street, NW

Figure 3-7
Garage Entrance on H Street, NW

Other Historic Resources within the APE

The L'Enfant Plan

Recognized as one of the country's most notable achievements in urban planning, the 1791 Plan of the City of Washington, designed by Pierre Charles L'Enfant, includes a coordinated system of radiating avenues, vistas, and parks overlaid upon an orthogonal grid of streets. The Plan defines the physical and symbolic character of the capital city through its arrangement of buildings, parks, and views.

Figure 3-8
1791 Plan of the City of Washington (L'Enfant Plan)
Source: NCPC

The Senate Park Commission of 1901, known as the McMillan Commission, expanded on the L'Enfant Plan, creating a powerful statement of City Beautiful ideals. It emphasized the creation of formal settings for buildings, and the organization of important spaces along central axes. The McMillan Plan is significant because it represents the first effort to conduct systematic, comprehensive urban planning for a major city. It was intended to guide the development of the capital city for years to come.

The Plan of the City of Washington is listed in the National Register of Historic Places, and is also a city landmark, listed in the District of Columbia Inventory of Historic Sites. The designation also recognizes components of the McMillan Plan that contribute to, extend, or enhance the L'Enfant Plan. The period of significance is 1791-1942. The nomination identifies historic streets, reservations and appropriations, and vistas. Vermont Avenue, 15th Street, NW, H Street, NW, and I Street, NW are all contributing elements within the L'Enfant Plan. The vista along Vermont Avenue, terminating at the White House, is also a contributing element. Lafayette Square, located to the southwest of the Lafayette Building, is part of President's Park,

one of L'Enfant's Original Appropriations (Appropriation No. 1). McPherson Square, located directly north of the Lafayette Building, across I Street, NW was L'Enfant's Reservation No. 11.

15th Street Financial Historic District

The 15th Street Financial Historic District is a linear collection of monumental Beaux Arts commercial buildings connecting two reservations, Sherman Park to the south and McPherson Square to the north. The district contains a high concentration of the city's leading financial institutions, aligned on 15th Street north of the US Treasury. The buildings, stylistically distinguished and well executed, were primarily constructed between 1900 and 1930, and are characterized by robust monumentality, the use of classical vocabulary, and strong sculptural details. The Lafayette Building, a later and quieter evocation of classicism, although prominent in size and location, is a contributing element within the historic district.

The 15th Street Financial Historic District is listed in the National Register of Historic Places. In addition, it is listed in the District of Columbia's Inventory of Historic Sites.

Figure 3-9
15th Street, NW at H Street, NW Looking North with Lafayette Building on far left

There are several other contributing elements within the APE. One resource, the Union Trust Company Building, was designed by Wood, Donn, and Deming in 1906. This Neoclassical Revival building has a first story arcade, five middle stories characterized by a colonnade of Corinthian columns, and a final story capped by a heavy cornice and balustrade. The building was extended to the west on H Street, NW in 1927. In addition to being a contributing element within the 15th Street Financial Historic District, the Union Trust Company Building is listed individually in the National Register of Historic Places and in the DC Inventory of Historic Sites.

Figure 3-10
Union Trust Company Building

The Southern Building, located at the northeast corner of 15th and H Streets is also a contributing element within the 15th Street Financial Historic District. Designed by D.H. Burnham and Company, this U-shaped building has Italian Renaissance origins. The building features intricate terra-cotta spandrels between buff-brick piers and a delicately ornamented parapet. In addition to being a contributing element within the 15th Street Financial Historic District, the building is listed individually in the DC Inventory of Historic Sites.

Additional contributing buildings include the Liberty National Bank Building, originally a two-story Neoclassical Revival structure, located at the southeast corner of 15th and I Streets, NW; the Bowen Building, a Renaissance Revival structure located in the middle of the block on 15th Street, across from the Lafayette Building; the Shoreham Building, which shares the block with the Lafayette Building; and the Woodward Building, a Renaissance Revival structure located at the southeast corner of 15th and H Streets, NW.

Figure 3-11
The Shoreham Building (now the Sofitel Hotel)

Lafayette Square Historic District

Lafayette Square is a seven-acre public park located directly north of the White House on H Street between 15th and 17th Streets, NW. It was originally part of L'Enfant's Appropriation Number 1, termed "President's Park." The Square was separated from the White House grounds in 1804 when Pennsylvania Avenue was constructed. In 1824, walks were laid out and the park was landscaped in honor of the visit of General Lafayette of France, for whom the park was then named. The park was redesigned between 1851 and 1852 by Andrew Jackson Downing, and then later by the Works Progress Administration (WPA).

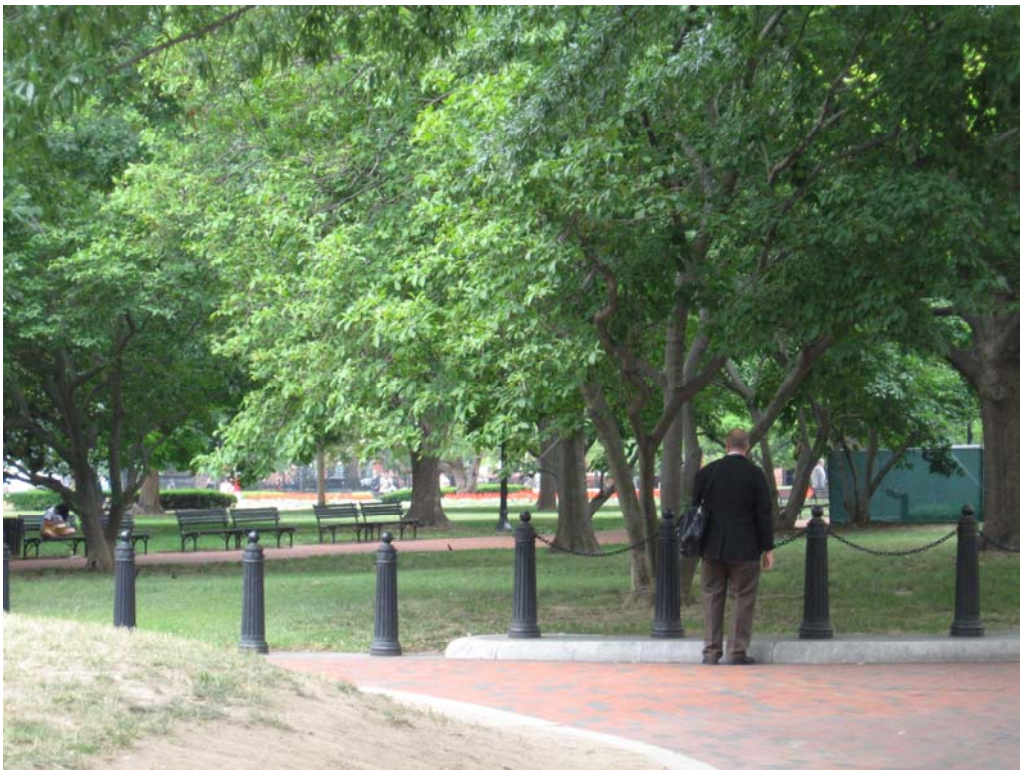

Figure 3-12
Lafayette Square

Roughly bounded by 15th and 17th Streets, NW, State and Treasury Places, and H Street to the north, the Lafayette Square Historic District encompasses the park and a number of 19th and 20th century buildings that surround the park. The district was designated a National Historic Landmark in 1970 and was listed in the DC Inventory of Historic Sites in 1973.

The Dolly Madison House, located at the corner of H Street and Madison Place, is a contributing element within the Lafayette Square Historic District. Constructed in 1820, the Dolly Madison House is a simple three-story Federal style residence capped by a heavy cornice. It currently houses the US Court of Appeals for the Federal Circuit. The Dolly Madison House is also listed in the DC Inventory of Historic Sites.

The Department of Veterans Affairs Building, located at 15th Street, NW and Vermont Avenue, directly across from the Lafayette Building, is also a contributing element within the Lafayette Square Historic District. Constructed in 1919, the ten-story Neoclassical Revival structure has five wide bays, articulated by the alternation of smooth and rusticated surfaces. There is a cornice at the third-story in the center bay, marking the entrance to the building. Classically inspired windows capped by arches and connected by a string course define the second story of the main Vermont Avenue elevation. The third through the tenth stories are much simpler, detailed only by the variation in texture and the regularly spaced rectangular windows. The building is capped by a heavy dentiled cornice. The Department of Veterans Affairs Building has been determined by GSA to be potentially eligible for individual listing in the National Register of Historic Places.

Figure 3-13
Department of Veterans Affairs Headquarters Building (across Vermont Avenue, looking south)

United Mine Workers Building

The United Mine Workers Building, located at 900 15th Street, NW, combines Italian Renaissance Revival detailing with aspects of American commercial architecture. Constructed in 1912 as the University Club, the building was purchased by John Lewis for the United Mine Workers. The six-story structure has a Doric entrance portico and arched windows with volute keystones on the second floor. It has a rusticated limestone base and was designed with a projecting limestone cornice and balustrade. The balustrade was removed when the sixth floor was added to the building in 1937. It is a National Historic Landmark and is listed in the DC Inventory of Historic Sites.

Figure 3-14
United Mine Workers Building (McPherson Square to right)

3.1.2 Visual Resources

Methodology

This section documents the existing visual character of the Lafayette Building and the surrounding area. The study area for visual resources was determined by estimating the visibility of the Lafayette Building, and thus the proposed security improvements, to viewers from public places and historic resources. Due to the urban density surrounding the site, views are generally afforded along the streets that border the site, including Vermont Avenue, H Street, NW 15th Street, NW and I Street, NW. Views are also available from McPherson Square north of the site, and Lafayette Square southwest of the site.

Visual Environment

Vermont Avenue/West of the Site

Vermont Avenue is a wide diagonal thoroughfare that visually connects Lafayette Square to areas to the northeast, including Thomas Circle, through McPherson Square. The expansive view along Vermont Avenue was identified by L'Enfant as significant in his plan for Washington, DC. The view corridor is defined by mid-rise commercial buildings, including the twelve-story Lafayette Building, and is framed by street trees of varying sizes. Within the view corridor, a statue of Brigadier General James McPherson marks the center of McPherson Square and a statue of Tadeusz Kosciusko is located near the northeast corner of Lafayette Square.

Figure 3-15
Vermont Avenue at H Street, NW Looking to the North

Adjacent to the Lafayette Building, the sidewalk is visually narrow at 19 feet wide, with a small planting bed created by a low granite curb near the face of the building, and street trees that border the edge of the roadway. At the north end of the block, the sidewalk widens dramatically, mirroring the sidewalks north of McPherson Square on Vermont Avenue. The southwest corner of the building is cut off to form a concave elevation, with a planting bed at the face of the building and a wide corner sidewalk marked by a flagpole. Two mature street trees and one smaller tree line this block face.

Figure 3-16
Looking North on the Vermont Avenue Sidewalk

H Street/South of the Site

H Street, NW is a heavily traveled five-lane thoroughfare that runs one-way to the east, following L'Enfant's grid for the city. The view along H Street is tightly framed by mid-rise commercial structures of a variety of styles and eras. On the north side of the street, the sidewalk is visually narrow at only 17 feet wide and there are several small street trees adjacent to the Lafayette Building. East of the Lafayette Building, in front of the Shoreham Building (the Sofitel Hotel), rounded planters containing small trees line the sidewalk near the street edge and smaller urn-shaped planters have been placed near the building face. A three-bay garage entrance at mid-block is faced in back granite and marked by yellow bollards. The contrasting materials of the garage serve to visually divide the Lafayette Building from the Sofitel Hotel to the east.

Figure 3-17
H Street, NW at Vermont Avenue Looking to the East

Figure 3-18
H Street, NW Looking East in Front of the Sofitel Hotel

15th Street/West of the Site

15th Street, NW is a broad, one-way street that borders the Lafayette Building on its east side. 15th Street and its associated view corridor connect the U.S. Treasury Building and Sherman Park with McPherson Square. The view corridor is partially obscured by tree canopy along the roadway. Mid-rise, primarily early 20th century financial structures frame the view along the corridor, and mature trees line both sides of the street. Adjacent to the Lafayette Building, the sidewalk is approximately 36 feet wide, divided evenly by a line of planters. These planters define outside seating areas for several of the businesses, separating this area from the pedestrian zone. Mid-block, an alley separates the Lafayette Building from the Sofitel Hotel to the south. McPherson Square is located north of the Lafayette Building, providing a strong green edge to the view to the north.

Figure 3-19
15th Street at I Street Looking to the South (Lafayette Building on right)

Figure 3-20
15th Street Sidewalk Looking to the North with McPherson Square in the Distance (Lafayette Building on left)

I Street/McPherson Square

Part of L'Enfant's grid, I Street is a wide, heavily traveled thoroughfare, that runs one-way to the west. Mid-rise commercial structures and small street trees placed within the Lafayette Building streetscape define the view on the south side of the street. McPherson Square, a heavily treed urban park, provides a green edge to the view on the north side of the street. The sidewalk adjacent to the Lafayette Building is 18 feet wide. In the block to the west, the sidewalk widens by approximately seven feet, narrowing the roadway and providing an expansive pedestrian zone. The flat topography and consistent building line provide distant views along the street.

Figure 3-21
I Street, NW looking to the West

Figure 3-22
The Sidewalk on I Street, NW Looking to the West

3.2 Land Use and Planning Policies

3.2.1 Land Use

The Lafayette Building is a twelve-story government office building located on a prominent site in northwest Washington, DC, facing Lafayette Park and McPherson Square. The building currently houses the Export-Import Bank and a portion of the Department of Veterans Affairs, which is headquartered across Vermont Avenue. Five retail establishments occupy the ground level of the building on the east side, near the intersection of 15th and I Streets, NW. These include two delis, the American Deli and Loeb's Deli, a hair salon, a dry cleaner, and an optometrist's office. The Lafayette Building shares the block with the Sofitel Hotel, located at the intersection of H and 15th Streets, NW. While the Lafayette Building is owned by the federal government, the sidewalks surrounding the building occupy public space under the jurisdiction of the District of Columbia.

The surrounding area is comprised primarily of mid-rise commercial structures, some with ground floor retail, government office buildings, and parks. South and east of the site, along 15th Street, NW there are financial institutions and commercial office space housed within early twentieth century structures. Many of these buildings have ground floor retail space. The American Bar Association and United Press International are located on H Street, NW directly south of the site. The US Court of Appeals for the Federal Circuit is also located south of the site on Madison Place. Southwest of the site, Lafayette Square is a heavily treed urban park, providing pathways and benches for passive recreation activities. The White House is located south of Lafayette Square, across Pennsylvania Avenue. Directly east of the site, the Department of Veterans Affairs Building occupies a large portion of the block. An entrance to the McPherson Square Metrorail station is located at the north end of the Department of Veterans Affairs Building, at the intersection of Vermont Avenue and I Streets. McPherson Square, a treed urban park bisected by pathways and marked at its center by a sculpture of James McPherson, is located directly north of the Lafayette Building.

3.2.2 Planning Policies

Zoning

In the District of Columbia, federally owned properties, such as the Lafayette Building, are not subject to local zoning regulations. Instead, new design and renovation of federal buildings are regulated by NCPC, pursuant to the District of Columbia Zoning Enabling Act of 1938 (ch. 534, 52 Stat. 802 and DC ST § 6-641.15). "In lieu of zoning," NCPC has the right of approval for height, bulk, number of stories, and open space for projects on federal property. Also in accordance with the Commission's existing in-lieu of zoning authority, NCPC's *National Capital Urban Design and Security Plan Objectives and Policies* are used to evaluate physical perimeter security proposals on federally owned land within DC These polices apply to permanent physical perimeter security projects for existing buildings and new construction.

Comprehensive Plan for the National Capital

The *Comprehensive Plan for the National Capital, Federal Elements* (August 2004) has been adopted by NCPC as the primary tool used for the planning of federal properties in Washington, DC. The Plan contains goals, objectives, and planning policies for the growth and development of the Nation's Capital. Of particular relevance to the proposed Lafayette Building perimeter security improvements are the Federal Workplace Element and the Preservation and Historic Features Element.

The Federal Workplace Element states that the federal government should:

- Design such improvements in accordance with guidance included in *The National Capital Urban Design and Security Plan (and related policies).*
- Incorporate security needs into the design of buildings, streetscapes, and landscapes using urban design principals in a manner that: enhances and beautifies the public realm, resulting in coherent and welcoming streetscapes; does not excessively restrict or impede operational use of sidewalks or pedestrian, handicap, or vehicular mobility; and does not impact the health of existing mature trees.
- Design projects in a manner that does not impede commerce and economic vitality, but balances the need for perimeter security with the need to enhance and maintain the vitality of urban areas.
- Design security barrier lines and elements that complement and enhance the character of the area in which they will be located and that respect the historic context of the area when applicable.
- Design security elements to respond to site-specific conditions, such as vehicle approach speed and angles, in order to minimize the size of security elements when possible.
- Place security elements in the building yard, rather than in public space where possible.

The Preservation and Historic Features Element states that the federal government should:

- Protect and enhance the vistas and views, both natural and designed that are an integral part of the national capital's image.
- Promote continuity in the historic design framework of the nation's capital by protecting and enhancing the elements, views, and principles of the L'Enfant Plan.
- Protect the settings of historic properties, including views to and from the sites where significant, as integral parts of the historic character of the property.

NCPC's *Urban Design and Security Plan* (2002) and *Urban Design and Security Plan Policies and Objectives* (2005)

In response to the need for increased security in the Nation's Capital, NCPC developed the *National Capital Urban Design and Security Plan* in 2002. The Plan illustrates how an array of landscape treatments and street furniture may be applied within various contextual areas and are not intended as final design solutions. The Plan also establishes a series of goals for improving perimeter security measures within the city. They are as follows:

- Provide appropriate levels of perimeter security for sensitive buildings and their occupants against threats generated by unauthorized vehicles approaching or entering them.
- Provide security in the context of a city-wide program of streetscape enhancement and public realm beautification, rather than as a separate or redundant system of components whose only purpose is security.
- Expand the palette of elements that can gracefully provide perimeter standoff security, avoiding the monotony of endless lines of jersey barriers or bollards, which only invoke defensiveness.
- Produce a coherent strategy for deploying specific families of streetscape and security elements in which priority is given to achieving aesthetic continuity along streets, and within areas, rather than solutions selected solely by the needs of a particular building under the jurisdiction of one public agency.
- Provide perimeter security in a manner that does not impede the City's commerce and vitality, pedestrian or vehicular mobility, or operational use of sidewalks within the Monumental Core or downtown.

Under the NCPC *Urban Design and Security Plan*, a wide range of physical elements is recommended for use in perimeter security. These potential security measures include traditional streetscape elements, such as bollards and low terraced or free-standing walls, and innovative amenities such as streetlights, planters, fences, and seats that may be "hardened" or strengthened, to function as components of physical building security. The NCPC Security Plan also specifies that perimeter security systems should be carefully designed to include elements that respond to their contextual areas, reflecting the unique character of their surrounding environment through the use of appropriate materials, scale, and details.

In 2005, the *Urban Design and Security Plan* was augmented by NCPC's adoption of the *Urban Design and Security Plan Policies and Objectives*. NCPC's objectives and policies are intended to clarify, refine and articulate the Commission's position on urban design and counter-terrorism security in urban environments and should be used to guide federal agencies and the Commission during the planning, design and evaluation of individual perimeter security projects. These objectives and policies include the following:

- To strike a balance between physical perimeter security for federal buildings and the vitality of the public realm.
- 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).
- Intelligence information, operational controls, and physical design measures should be used to protect against vehicle-borne explosives.
- The placement of physical security barriers in public space is discouraged and should be minimized.
- 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 the building.

- 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.
- 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.
- 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.

Downtown DC Business Improvement District (Downtown BID) Streetscape Guidelines

The Downtown BID is a corporation supported by voluntary contributions from downtown property owners and businesses. The Downtown BID serves as a catalyst for the continuing development of downtown. In 1999, the corporation established guidelines for streetscapes with the goal of creating a unified and coherent treatment of public pedestrian spaces. The guidelines establish specific designs for streetscape elements and dictate the placement and species of street trees. The guidelines for the roadways that border the site are as follows:

Vermont Avenue:

- Pavers should be 2’ x 3’ concrete set in the London Walk pattern.
- Street lighting should be black, Twin-20, spaced 40’ on center.
- Trees should be Northern Red Oak, placed 40’ on center, with 6’ x 12’ planter curbs.
- Benches should be Timberform Restoration, or an approved substitute, of black metal with wood slats.
- Trash receptacles should be black Ironsites Bethesda, with at least four per block.
- Bicycle Racks should be black in the Viper design.

15th Street, NW:

- Pavers should be 2’ x 3’ concrete set in the London Walk pattern.
- Street lighting should be black, single-globe, spaced 60’ on center.
- Trees should be Bloodgood London Planetree, spaced 30’ on center.
- Benches should be Timberform Restoration, or an approved substitute, of black metal with wood slats.
- Trash receptacles should be black Ironsites Bethesda, with at least four per block.
- Bicycle Racks should be black in the Viper design.

H and I Streets, NW:

- Pavers should be 2' x 3' concrete set in the London Walk pattern.
- Street lighting should be black, single-globe, spaced 60' on center.
- Trees should be Halka Honeylocust spaced 40' on center.
- Benches should be Timberform Restoration, or an approved substitute, of black metal with wood slats.
- Trash receptacles should be black Ironsites Bethesda, with at least four per block.
- Bicycle Racks should be black in the Viper design.

Washington, DC Historic Landmark and Historic District Preservation Act of 1978, Historic Preservation Regulations, and Section 106 of the National Historic Preservation Act

Historic preservation in Washington, DC is guided by the Historic Landmark and Historic District Preservation Act (DC Law 2-144, as amended) and carried out through the Historic Preservation Regulations (10 DCMR Title 10A). In accordance with these regulations, the DC Historic Preservation Review Board (HPRB) reviews DC permit applications, including public space permits for work within the DC Landmark Plan of the City of Washington. The DC State Historic Preservation Officer is responsible for review of building and site alternations for federal properties under Section 106 of the National Historic Preservation Act. The HPRB also provides Section 106 guidance to the SHPO when sought by SHPO staff.

Shipstead-Luce Act

The installation of security improvements at the Lafayette Building is subject to review and approval by the Commission of Fine Arts (CFA) under the Shipstead-Luce Act of 1910. Under this Act, the CFA may recommend changes to the height and appearance, color, and texture of materials of the exterior of construction in order to avoid impairment of the public values of the park (40 USCA Section 121). Recommendations are then sent to the Mayor's Agent for the District of Columbia historic preservation law for consideration in issuing the requested building permit.

DC Department of Transportation (DDOT) Downtown DC Streetscape Regulations and Departmental Order 301.03

DDOT provides regulations pertaining to the design of streetscapes in the downtown area. These regulations include specification for the size and placement of trees, and standards for paving, streetlights, and street furniture. The regulations are generally consistent with the guidelines established by the Downtown DC BID.

Pubic Space Committee

In December 2003, DDOT issued Departmental Order 301.03 to assist DDOT staff in handling security requests in public space. The policy states the following:

- Security measures installed to protect buildings shall require a Public Space Permit from the Government of the District of Columbia.

- DDOT encourages security perimeters to be established within privately owned space or federal public space adjacent to buildings (i.e. not on sidewalks, curbs, gutters, streets, or public alleys).
- Perimeter barriers shall be no closer than two (2) feet from the curb line and shall not block pedestrian traffic flow from the curb line to the sidewalk, and shall not present unreasonable barriers to pedestrians traveling within the sidewalk.

Tree Removal Permit

The Urban Forestry Administration, under the DDOT, requires permits for the removal of street trees. If a tree removal permit is approved, the Urban Forestry Administration will require the replacement of lost trees in kind (based on caliper), either on the site or in comparable area.

3.3 Vegetation

Vegetation on the Lafayette Building site consists primarily of a series of street trees of varying sizes. A 36" caliper Oak tree is located along Vermont Avenue, near the corner of H Street, NW. Further north on Vermont Avenue, there are two additional Oak trees, one 21" and one 12". Four small Maple trees, each 6-to-9" caliper, are located along I Street, NW. On 15th Street, NW the trees are well established, providing a shaded canopy for the sidewalk. The tree closest to the intersection with I Street is a 30" caliper Elm tree. The two trees to the south are also Elms, approximately 16" each. There are two additional Elms in front of the hotel, each 20." There is a 12" caliper Gingko on the north side of the sidewalk on H Street, NW.

In addition to street trees, there is a narrow planting bed with Lariope that runs around the base of the building on Vermont Avenue, and H and I Streets, NW. A larger planting area, containing Spirea, Climbing Hydrangea, Nandina, and Crimson Barberry is located along the corner of H Street and Vermont Avenue.

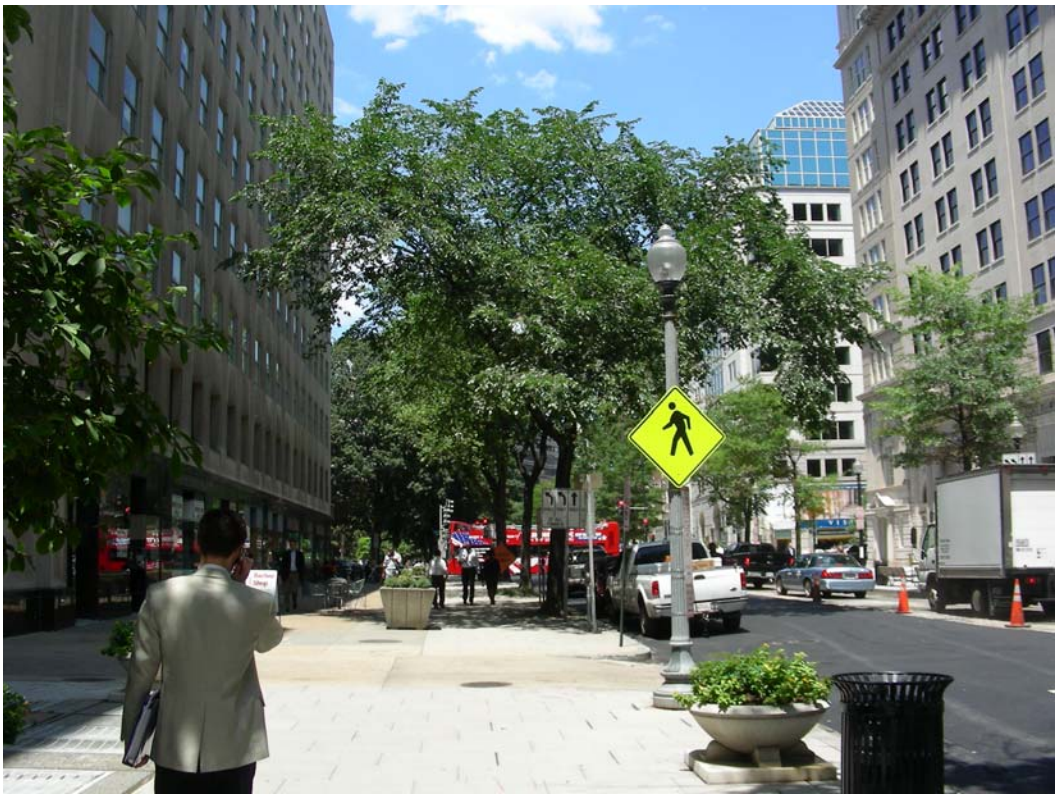

Figure 3-23
Line of Elm Trees on 15th Street, NW

3.4 Transportation

This transportation analysis includes vehicular circulation and access, parking, and pedestrian circulation. The discussions of vehicular circulation and access, and parking are based on a transportation study completed by GSA in December, 2006.

3.4.1 Vehicular Circulation and Access

The transportation network in the vicinity of the Lafayette Building includes local roadways, with connections to the greater Washington metropolitan region. The Lafayette Building covers the majority of one city block, bordered by I Street, NW to the north, 15th Street, NW to the east, H Street, NW to the south, and Vermont Avenue, NW to the west. For the purposes of the vehicular circulation analysis, the study area includes the roadways that border the sites as well as roadway segments that are generally within two blocks of the site.

H Street, NW is a one-way minor arterial that runs in the eastbound direction within the study area. During the AM and PM peak hours, H Street provides five travel lanes; however, during off-peak hours, parking is permitted on one side of the roadway between 16th Street and Vermont Avenue and on both sides of the roadway between Vermont Avenue and 15th Street. There are signalized intersections along H Street between 16th and 15th Streets.

I Street, NW is a one-way principal arterial that runs in the westbound direction within the study area between 15th and 16th Streets. I Street provides five travel lanes during peak hours; however, parking is permitted on both sides of the roadway during off-peak hours and the number of travel lanes is reduced to three.

15th Street, NW is a one-way principal arterial located between I and H Streets that runs northbound within the study area. 15th Street is a two-way principal arterial that runs north-south south of H Street. Four travel lanes in the northbound direction are provided during peak hours between H and I Streets and three northbound lanes and two southbound lanes are provided during peak hours south of H Street. Parking is permitted on both sides of the street during off-peak hours, leaving two travel lanes remaining.

Vermont Avenue is a two-way collector that terminates at Lafayette Park in the south. Four travel lanes are provided, two in each direction. Angled parking for government vehicles is allowed on the west side of the street during off-peak hours. Motorcycle parking is provided on the east side of the street near the intersection with H Street. North of this, on the east side of the street, parallel parking is provided for government vehicles during off-peak hours. Government vehicles often double park in the easternmost northbound lane.

Vehicular access to the site is available for employees through the parking garage entrance located along H Street between Vermont Avenue and 15th Street. Truck access for both the Lafayette Building and the Sofitel Hotel is provided along 15th Street via the existing public alley. The alley can currently accommodate more than one truck at a time, although coordination is required upon exit. Small trucks are able to pass through the alley and exit adjacent to the parking garage entrance on H Street. Large trucks must back out onto 15th Street once their delivery is complete. Trucks waiting to gain access to the alley currently double park on 15th Street. The alley serves the hotel as well as the Lafayette Building. Hotel functions include deliveries, trash collection, service entrance, and VIP entrance.

Existing Levels of Service

The specific criterion typically used to assess a roadway system is Level of Service (LOS), a traditional traffic circulation and roadway engineering measure. LOS is a qualitative letter grade (on a scale of A to F) given to street systems. For intersections, LOS is based on the average delay each driver experiences while passing through the intersection (compared to the situation if the intersection did not exist). The Highway Capacity Manual (Transportation Research Board, 2000) defines LOS at intersections to represent reasonable ranges in control delays. The standard of adequacy is a LOS of D for signalized intersections and LOS E with vehicle delay of 50 seconds or less for unsignalized intersections.

Existing Traffic Conditions

A traffic analysis was conducted to estimate how well the existing infrastructure accommodates the current and future traffic demand in the study area. The traffic modeling/evaluation software, Synchro, was used to evaluate the traffic conditions within the study area following the procedures set forth by the Transportation Research Board in their Highway Capacity Manual. The software estimates the LOS at both signalized and unsignalized intersections based on existing lane usage, traffic controls, and existing traffic volumes. For the purposes of this analysis, it is determined that an intersection has reached capacity when it has LOS E or worse. At that point, the maximum level of congestion allowable has been reached and further increases would result in unsafe and intolerable driving conditions.

Existing traffic volumes, lane configurations, pedestrian volumes, and signal timings were entered into Synchro to develop a base case, existing conditions model. SimTraffic, Synchro's associated traffic simulation software, was used to assist in the development of a model that accurately replicates existing conditions.

Manual turning movement counts were conducted during the AM peak period (7am – 9am), mid-day (11am – 1pm), and PM peak period (4pm – 6pm) at the key intersections in the study area. Turning movement counts were recorded at all study intersection as well as two locations within the study area, along H Street and 15th Street. The daily traffic volume along 15th Street north of H Street on a typical weekday is 21,600 vehicles in the northbound direction. Along H Street west of 15th Street the daily traffic volume is 12,300 vehicles in the eastbound direction.

All of the intersections in the study area currently operate within acceptable levels of service.

Table 3-1
Existing Intersection Level of Service

Intersection Evaluated	AM	Mid-Day	PM
H Street, NW and Vermont Avenue	B	B	C
H Street, NW and public garage entrance (unsignalized)	A	A	A
H Street, NW and 15th Street, NW	C	B	A
15th Street, NW and public alley entrance (unsignalized)	A	A	A
15th Street, NW and I Street, NW	C	C	B
I Street, NW and Vermont Avenue	C	B	C
H Street, NW and 16th Street, NW	B	C	C
16th Street, NW and New York Avenue	A	B	C

Source: Lafayette Building Modernization Project – Traffic Analysis

3.4.2 Parking

A parking garage with 135 spaces is located on the Lafayette Building site. This parking garage services both Export-Import Bank and Veterans Affairs employees at the Lafayette Building and staff and guests of the Sofitel Hotel. The entrance to the parking garage is located along H Street between Vermont Avenue and 15th Street.

On-street parking is also available in the vicinity of the Lafayette Building and throughout the study area. Limited metered parking is available on the streets bordering the site:

- *H Street, NW:* Parking is not permitted along H Street during peak hours. During off-peak hours, parking is permitted on one side of the roadway between 16th Street and Vermont Avenue and on both sides of the roadway between Vermont Avenue and 15th Street. On the north side of H Street adjacent to the Lafayette and Sofitel Buildings, there are currently 12 off-peak spaces.
- *I Street, NW:* Parking is permitted along both sides during off-peak hours only. On the south side of I Street adjacent to the Lafayette Building, there are seven off-peak spaces.
- *15th Street, NW:* Parking is permitted on both sides of the street during off-peak hours. Two parking spaces are allocated to taxi cab drivers for all day parking and one parking space is allocated to the Sofitel Hotel for receiving hotel guests on the left side of 15th Street during off-peak hours between I Street and the public alley intersection. On the west side of the street north of the public alley, there are three additional off-peak spaces.
- *Vermont Avenue:* Two hour parking is permitted on both sides of the street for government vehicles during off-peak hours. On the east side of the street, adjacent to the Lafayette Building, there are eight government spaces and 24 spaces allocated for motorcycles available during off-peak hours. No parking is permitted during peak hours.

3.4.3 Pedestrian Circulation

The blocks within the study area are part of an active downtown area of Washington, DC, with a mix of commercial and retail businesses as well as office buildings. Activity in the area includes many truck deliveries, people walking to public transit stops, busy hotel drop-offs, visitors to sidewalk cafes, and pedestrians accessing the parks in the area.

Pedestrian sidewalks are present on both sides of H Street, I Street, 15th Street, and Vermont Avenue in the study area. Pedestrian volumes are heavy on each of the sidewalks, particularly during AM and PM peak hours and at mid-day. At the corner of Vermont Avenue and I Street, NW, on the west side of the street, there is a Metrorail station that contributes to the heavy pedestrian traffic on I Street, NW. Visitors to the White House traveling by Metrorail employ this exit, so there is a continuous flow of pedestrians on the west side of Vermont Avenue. Pedestrians also use the public alley off of 15th Street, which includes the Sofitel staff entrance.

3.5 Utilities and Infrastructure

Subsurface utility lines surround the building, under both the sidewalks and the roadways. On Vermont Avenue, two electrical lines, a 6" gas line, and an 8" water line are located between the curb and the center line of the roadway. A sewer line that exits the building south of the main entrance, runs north under the sidewalk, turning the corner at I Street, NW.

On I Street, NW an 18" sewer line and a 6" gas line are located under the sidewalk. An electrical line is also located under the sidewalk at the east end of the block, and enters the building mid-block. An 8"-12" water line is located just north of the curb line, within the roadway.

On 15th Street, NW there is an electric line that runs under the sidewalk, between the line of planters and the curb. There are two PEPCO vaults just south of the entrance to the alley. A telecom line and a second electrical line run from the roadway into the alley. A gas line and a 12" water line run down the center of the roadway.

On H Street, NW a 12" water line runs down the center of the roadway, crossing the sidewalk and entering the Lafayette building near the corner of H Street and Vermont Avenue. An electrical line runs under the roadway, just outside the curb line, crossing the sidewalk and turning the corner at Vermont Avenue. An 8" gas line runs down the center of the sidewalk, and a 12" sewer line is located just outside the curb.