

# STAFF RECOMMENDATION

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**NCPC File No. 6724**

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## **H STREET, NE BETWEEN 3<sup>rd</sup> AND 14<sup>th</sup> STREETS, NE STREET, SIDEWALK, AND STREETCAR RAIL CONSTRUCTION Washington, DC**

District of Columbia Department of Transportation

January 25, 2007

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### **Abstract**

The District of Columbia Department of Transportation (DDOT) has submitted final site and building plans for the reconstruction of the street and sidewalks on H Street, NE between 3<sup>rd</sup> and 14<sup>th</sup> Streets, NE. The project is a segment of the District's Great Streets program, and DDOT plans to begin construction in 2007. The proposal includes reconstruction of the street and reconstruction of sidewalks and pedestrian amenities and safety and accessibility features that meet the Department's standards. The staff recommends approval of the road and sidewalk reconstruction. The proposal also includes the laying of tracks for a future streetcar line in eastbound and westbound lanes of H Street while the street is being reconstructed, to avoid future construction disruption. While the current submission does not include the installation of poles to carry wires for an overhead contact system, it includes below-grade foundations for their future installation. DDOT envisions and is planning for an ambitious city-wide transit system that would include streetcars. The staff recommends that DDOT, in collaboration with the Commission and others, continue to evaluate the range of streetcar propulsion technologies, especially since there are new technologies that don't use an overhead contact system. The Commission supports the development and expansion of transit services in the District. The staff's recommended approval of the proposed H Street improvements does not connote approval of a streetcar line that would use an overhead contact system.

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### **Commission Action Requested by Applicant**

Approval of preliminary and final site and building plans pursuant to 40 U.S.C. §8722(b)(1)

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### **Executive Director's Recommendation**

The Commission:

**Approves** the final site and building plans for the reconstruction of the street and sidewalk of H Street, NE, between 3<sup>rd</sup> and 14<sup>th</sup> Streets, NE, understanding that DDOT, in collaboration with the

Commission and others, will continue to evaluate the range of streetcar propulsion technologies, and advising DDOT that the Commission does not support the implementation of a streetcar system that would use an overhead contact system on streets within the L'Enfant city and Georgetown.

**Commends** the District of Columbia for implementing the Great Streets program of public space improvements, improved accessibility, and pedestrian amenities to assist the revitalization of the neighborhood commercial corridor of H Street, NE.

**Supports** the District of Columbia in providing improved transit services throughout the city.

**Finds** that:

- The future use of streetcars with an overhead contact system would entail the installation of infrastructure to support the wires--including regularly spaced posts with support arms cantilevered over traffic lanes--that would change the historically open character and appearance of Washington's rights-of-way.
- Since the late nineteenth century, there has been a legal prohibition against overhead wires within Washington City (the L'Enfant city) and Georgetown, resulting in rights-of-way that are free of electric wires and that were free of overhead wires when streetcars were previously in use.
- The Commission has a federal interest in retaining and protecting the nationally recognized, characteristic, and significant open vistas of the rights-of-way within the L'Enfant Plan, which is protected by listing in the National Register of Historic Places and in the D.C. Inventory of Historic Sites.
- The proposed installation of tracks in the H Street cartway, while not in itself a negative impact to the historically open character of a street within the L'Enfant Plan, might preclude alternative or emerging technologies for a future streetcar route on H Street, NE and elsewhere in the District of Columbia.
- The recommended approval of the streetscape plan does not connote the Commission's acceptance of a future streetcar system that uses an overhead contact system.
- DDOT should return to the Commission for review of every segment of a future streetcar system.
- Both the District of Columbia government and the National Capital Planning Commission share the goals of protecting the integrity of Washington's characteristic open streets and of meeting public transit service needs. These goals should be weighed together and a streetcar system should be considered as a whole before irrevocable decisions are made concerning one segment.

**Requests that DDOT:**

- Return to the Commission for review of the elements associated with a city-wide streetcar system, such as pylons, signs, and passenger shelters, prior to DDOT's making a final decision about the design of these elements.
- With the collaboration of other relevant District of Columbia and federal agencies, including the Commission, continue to investigate transit alternatives to a streetcar system that uses overhead wires with supporting infrastructure. Transit modes and technologies should meet the transit goals of both the District of Columbia government and the Commission, as well as our mutual mandates to protect Washington's historically open right-of-way vistas and to comply with federal law.

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**PROJECT DESCRIPTION**

Site

H Street, NE is a commercial corridor currently undergoing redevelopment. It is lined with nineteenth-century brick rowhouses and commercial structures and parking lots of the early to mid-twentieth century. It suffered damage in the 1968 riots and, four decades later, is experiencing economic revitalization. The segment from 3<sup>rd</sup> to 14<sup>th</sup> Streets lies between Union Station to the west and Bladensburg Road, NE to the east. The segment is within the original city of Washington (the area to the west of Florida Avenue, which is the boundary of the L'Enfant Plan). It is a contributing element of the L'Enfant Plan designation in both the National Register of Historic Places and the D.C. Inventory of Historic Sites.

Background

The Commission approved a corridor transportation study for the H Street, NE corridor at its November 2004 meeting. At that time, streetcar tracks were not shown on the plans. The Commission also approved plans at its September 2005 for the street, sidewalk, and open space redesign of the "Starburst" intersection, which is a related street improvement project. The intersection--immediately to the east of the current H Street, NE project area--is composed of H Street, 15<sup>th</sup> Street, Florida Avenue, Bladensburg Road, Benning Road, and Maryland Avenue, NE, and is located just outside the boundary of--and at the gateway to--the L'Enfant city.

Proposal

The proposal before the Commission is a street and sidewalk reconstruction project, with related pedestrian amenities that will improve the appearance and function of the public space in the H Street, NE corridor. Installation of a pair of rails for a proposed future streetcar route is included.

DDOT has initiated a Great Streets program to redesign key streetscapes to support place-making, mobility, and neighborhood and business revitalization. H Street, NE from 3<sup>rd</sup> to 14<sup>th</sup> Streets, NE is part of the Great Streets program, and has also been identified by DDOT as a corridor for future streetcar transit, to be linked with other proposed transit routes that would include streetcars. *DDOT's map of the first phases of the proposed system is attached as the last page of this report.*

The concrete sidewalks will be replaced with 4-foot by 4-foot squares of exposed aggregate concrete. Sidewalk bulb-outs will be constructed for transit stops (to be used at present by Metrobuses) at 5<sup>th</sup>, 8<sup>th</sup>, and 13<sup>th</sup> Streets, NE and will also define the ends of parking lanes. The grade of the bulb-outs will rise from 8 inches at their inner edges to 14 inches at the curb so that persons with disabilities can board buses and possible future streetcars at grade. Twenty-foot teardrop light standards will be installed. Street trees will be plants in pits that will be connected below grade so that the tree roots can expand more fully.

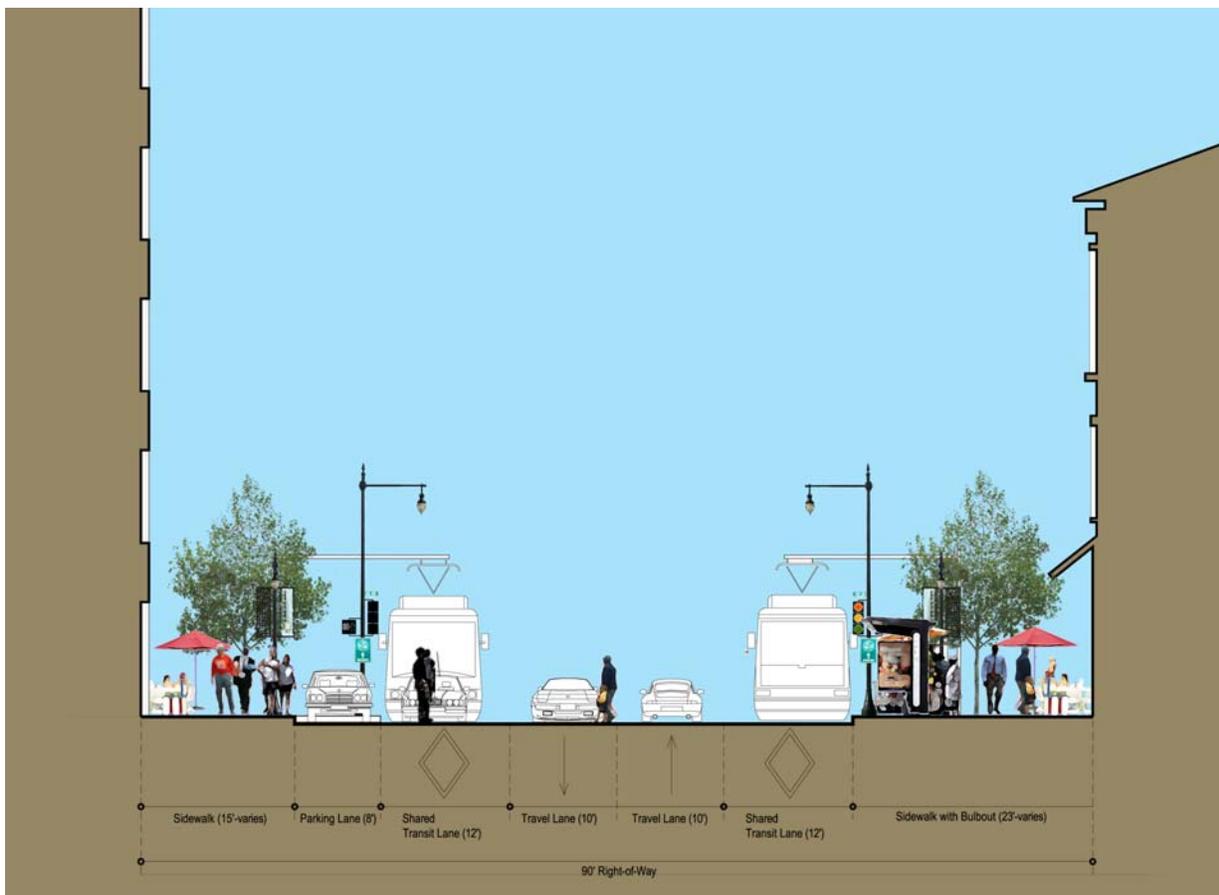


DDOT's rendering of proposed H Street, NE sidewalk improvements

The rails are to be installed in the outermost of the pair of traffic lanes running in each direction. No other above-grade element of the streetcar system appears in the engineering documents, although the below-grade foundations for future poles to carry overhead wires for the system are included.

While DDOT does not anticipate that funding will be available to move forward with the actual streetcar system on H Street for at least 5 years, the agency thought it logical to incorporate the necessary infrastructure, such as tracks, foundations for wire poles, and sidewalk bulb-outs in the Great Street design plans for H Street in order to save construction costs and minimize overall construction disruption for surrounding businesses.

DDOT submitted a street section, *below*, to illustrate how H Street, NE might look and function with streetcars. The streetcars would not run in dedicated lanes but instead would share their lanes with other vehicles. Cantilevered arms on poles installed approximately every 45 feet would extend from the sidewalk curb across parking lanes in each direction and across more than half of the streetcar lanes. They would carry the wires that the streetcar trolleys of an overhead contact system would touch. The H Street parking lanes will be constructed at a width of 8 feet, and the shared transit lanes at a width of 12 feet. (The inner car travel lanes will be constructed at a width of 10 feet.)



DDOT's section showing reconstruction of H Street, NE sidewalks and street. The section shows the proposed future appearance and function of the street with streetcars and overhead contact system infrastructure.

## PROJECT ANALYSIS

*Staff recommends approval of preliminary and final site and building plans for the street and sidewalk reconstruction of H Street, NE, between 3<sup>rd</sup> and 14<sup>th</sup> Streets, NE.*

The project addresses a segment of DDOT's Great Streets program. The choice of sidewalk materials, improvement of street lighting, provision of handicap access to buses from the curb, installation of street trees with continuous below-grade pits, and pedestrian safety features and amenities will be welcome in the H Street, NE corridor, which is part of a targeted and rapidly developing neighborhood commercial area. Staff commends DDOT for this public space project, which uses District funds for construction. Design funds were provided by the Federal Highways Administration (FHWA).

The proposed installation of tracks in the street cartway, while not in itself a negative impact on the historically open character of the streets within the L'Enfant City, might preclude alternative or emerging technologies that would not use overhead wires on a route on H Street and in other locations. DDOT intends at this time to use an overhead contact system if it proceeds with implementation of the streetcar system. *The staff advises that the recommended approval of the elements of the streetscape design does not connote acceptance of a future streetcar system within the L'Enfant city and Georgetown that would use an overhead wire system.*

The H Street corridor is within "Washington City" – more commonly known today as the original extent of the city in the L'Enfant Plan. Streetcars were introduced to Washington during the Civil War. At first drawn by horses, streetcars propelled by electricity were introduced before the end of the nineteenth century. At that time, only two cities in the country used the new practice of placing their systems' trolley wires underground: New York City (Manhattan) and Washington (the City of Washington and Georgetown). The new and unique technology helped create a distinct, wireless character to the capital city, one that has been protected by federal legislation and in planning doctrine since that time. The use of an underground propulsion system allowed Washington's city streets to be clear of projecting infrastructure and wires, a standard that is also reflected in the absence of aboveground electric wires. In addition, traffic lights and street signs have been installed on posts at the curb rather than on cantilevered arms across traffic lanes, as in other cities.

DDOT's proposed streetcar system, as currently planned by DDOT, would have an overhead contact system, and would include infrastructure to support overhead wires, which have been prohibited by federal law in the City of Washington and in Georgetown for over a century. The infrastructure that DDOT envisions includes poles with arms extending over street lanes to carry overhead wires. It also includes installation on the sidewalks of a design suite of additional shelters and sign pylons distinct from those for other transit modes.

*Staff believes that both the District of Columbia and the National Capital Planning Commission share in common the goals of protecting the integrity of Washington's characteristic open streets as well as meeting public transit service needs, and that these goals should be weighed together and that a streetcar system should be considered as a whole—as one system--before irrevocable decisions are made concerning one segment.*

As a planning matter, NCPC advises DDOT against developing a streetcar system powered by overhead contact wires with related infrastructure for any part of the streetcar system within the L'Enfant City and Georgetown. Implementation would affect viewsheds that have been protected from such overhead elements since Washington was developed as a modern city in the nineteenth century. The anticipated infrastructure would introduce an element into streetscapes that has been intentionally avoided and prohibited for over a century.

Although the implementation of streetcar routes with an overhead system could meet transit goals stated in the Federal and District elements of the Comprehensive Plan for the National Capital, it would also contradict mutually shared planning guidance to protect right-of-way viewsheds within the L'Enfant City that are also stated in the Federal and District elements of the Comprehensive Plan. Additionally, the L'Enfant Plan rights-of-way have protection through listing in the District of Columbia Inventory of Historic Sites and in the National Register of Historic Places.

Federal law supports this planning guidance. The statute specific to the prohibition of overhead contact rail wires is an 1889 statute that applies to "Washington City" and Georgetown. A series of federal statutes from the 1880s through the turn of the century continues this prohibition of overhead wires and can also be seen as part of more comprehensive planning direction, supported by Congress, to ensure that Washington remain a city of open vistas.

The staff is concerned that implementation might also disregard or preclude emerging streetcar technologies that might better suit Washington's unique natural, cultural and historic landscape. The technology to propel streetcars without overhead wires is available, although there are no applications in the United States. Several European cities, most notably Bordeaux, are protecting their views and street aesthetics around important historic areas by developing and installing surface technology. The concept is that electric energy is provided through a surface line where the center rail is electrified only as the streetcar passes over it, removing concerns about public access to an electrified at-grade rail.

Like many new technologies, there is limited experience with it to date and, according to those knowledgeable with the new technology, the system is more expensive to construct and operate. In addition, there are some differences between the Bordeaux and Washington environments and between the types of vehicles used.

There were serious drainage problems with the Bordeaux system several years ago that apparently have now been resolved, and the city is demonstrating its confidence in the technology by planning the expansion of the route from 21 to 43 kilometers by the end of this year. The French cities of Reims and Angers are also installing new streetcar systems using this surface technology.

Because the system used in Bordeaux is installed near the surface of the pavement, DDOT and Commission staffs believe that if this technology were used here, the roadbed could be saw cut and the power system could be installed without the disruption of completely reconstructing the street and without affecting the rails that may be installed with the currently proposed street improvement project.

At a time when other cities are considering the use of new surface contact streetcar systems and the removal of overhead wires and the related pole infrastructure in order to restore views in visually or historically sensitive areas, staff is concerned about the proposed introduction of an overhead contact system in Washington.

Staff requests that DDOT continue discussions with NCPC and involve other agencies, entities, and the public in seeking the best transit modes and technologies to meet the transit policies and goals of both the District of Columbia and the Commission, as well as mutual interests in and mandates to protect Washington's historic streets and vistas and to comply with federal law.

## CONFORMANCE

### Comprehensive Plan for the National Capital

The Federal Elements of the Comprehensive Plan for the National Capital contain policies that support the expansion of transit services as well as policies that protect the right-of-way viewsheds of the L'Enfant Plan.

Among the policies for Commuter Rail, Rail Transit, and Bus Transit in the Transportation Element, the federal government should support:

5. The design and implementation of new, expanded, and innovative transit services that supplement existing transit and fill unmet transit needs (e.g., Downtown Circulator, Busway, Bus Rapid Transit projects, light rail, trolley).
7. The development of intermodal transit centers that provide greater transit access and improved interconnectivity for federal commuters.

Among the policies for the Historic Plan of Washington, DC in the Preservation and Historic Features Element, the federal government should:

2. 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. Both the federal and the District of Columbia governments should adhere to these principles in any improvements or alterations to the historic framework.
8. Protect and control the visual and functional qualities of L'Enfant rights-of-way.
9. Protect the open space of the L'Enfant streets. The exceptional width and openness of the street rights-of-way constitutes public space that helps to define the character of the city.

### National Environmental Protection Act (NEPA)

NCPC does not have a separate NEPA obligation, since the project site is outside the Central Area. The Federal Highways Administration (FHWA) on May 24, 2005, found a "Categorical

exclusion per 771.117(d)(1). H Street between North Capitol Street and 17<sup>th</sup> Street is a historic street. This project should be coordinated with the SHPO per Section 106 of the NHPA. The project does not include infrastructure for a trolley line.”

#### National Historic Preservation Act (NHPA)

Both the DDOT and D.C. Historic Preservation Division staffs have informed NCPC that DDOT is initiating briefings with the D.C Historic Preservation Division staff on the project. DDOT has not submitted the project to the office for either Section 106 review or Historic Preservation Review Board review under the District’s historic preservation ordinance.

#### CONSULTATION

##### Coordinating Committee

The Coordinating Committee at its January 10, 2007 meeting reviewed the proposal and forwarded it to the Commission with the statement that the project had been coordinated with all agencies represented. The participating agencies were: NCPC, the District of Columbia Office of Planning, the National Park Service and the General Services Administration.

##### Commission of Fine Arts

DDOT has not yet submitted the project for review by the Commission of Fine Arts.

