

CITY STUDY
WASHINGTON D.C.

JEFFREY N. FUGATE

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MIT: Workshop in City Form

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1800

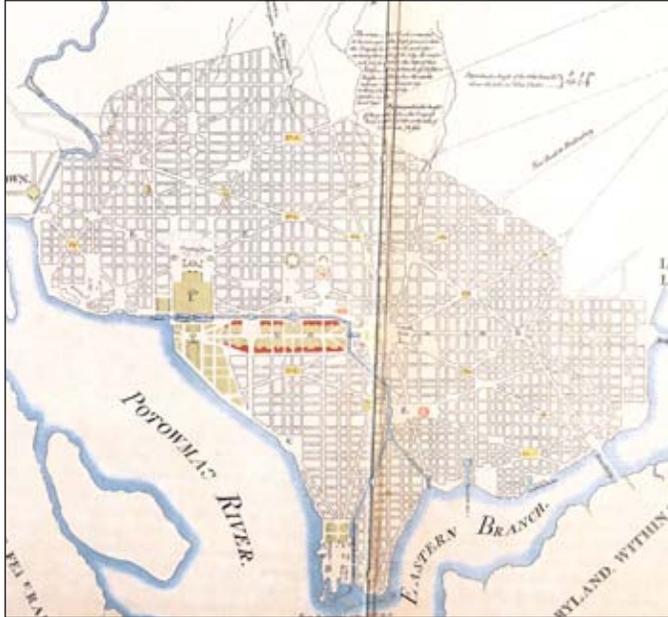
T. L. Loftin. Modified: John Passeneau, 2004 (1982 original)

The Loftin Map

Recreated by *National Geographic* cartographer, T.L. Loftin, this map of Washington in 1800 is a reminder that for all of L'Enfant grand plans, the city was being build from scratch on a swampy tidal river bank. Speculators were quick to buy up land near the planned governmental buildings, but it would take two hundred years for L'Enfant's urban vision to take form.

HISTORY

1791-1800



Pierre Charles L'Enfant. Facsimile: B.A. Colonna, F.M. Thorn, U.S. Coast and Geodetic Survey Office, 1887 (1791 original)



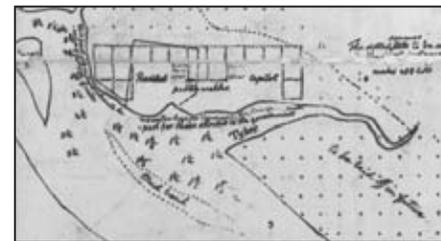
Andrew Ellicott, Thackara & Vallance, Publisher, 1792

The L'Enfant and Ellicott Plans

At the request of George Washington, Pierre L'Enfant, a French volunteer in the Continental Army, presented a baroque city plan for the new Capital inspired by French city planning, particularly the plan of Chanteloup [Miller 2002]. The city is oriented north along 16th street and bounded by the Potomac and Anacostia Rivers and Boundary Street (modern-day Florida Avenue), which follows the base of the Piedmont Escarpment.

Thomas Jefferson was able to persuade the Congress to grant a Southern site for the new Capital, but lost out on both his own plan for the new city as well as a design for the Capitol building submitted anonymously.

Notoriously difficult to work with, L'Enfant, despite Washington's favor, was eventually dismissed from the project and the final plan for the city was based on surveys conducted by Andrew Ellicott (shown here in the same scale as L'Enfant's plan) with modifications made by Jefferson, which shifted and straightened Massachusetts and Pennsylvania Avenues as well as eliminating the destination quality of the reservations L'Enfant had set aside for "Statues, Columns, Obelisks, or any other ornaments such as the different states may choose to erect."



Thomas Jefferson. Library of Congress, 1791.

Jefferson's Plan

Shown in the same scale as the L'Enfant plan, Jefferson's plan was the first of a long discourse over what the identity of the Capital would be, urban or pastoral. Jefferson's plan would have been a series of 600 x 600 ft blocks, anchored on either end by governmental buildings.



JF. Based on John Passeneau, 2005 (2004 original)

1860

HISTORY

1800-1860



W. Bennett. Engraving from painting by G. Cooke. LOC. 1834.

City of Washington from Beyond the Navy Yard

From the perspective on the other side of the Anacostia River, one can see the Capitol, the buildings along Pennsylvania Avenue, and the White House in 1834.

Most of the development came in the form of Governmental buildings, though a dry-dock is visible in the foreground.

John Bachmann. Historical Society of Washington. 1862.

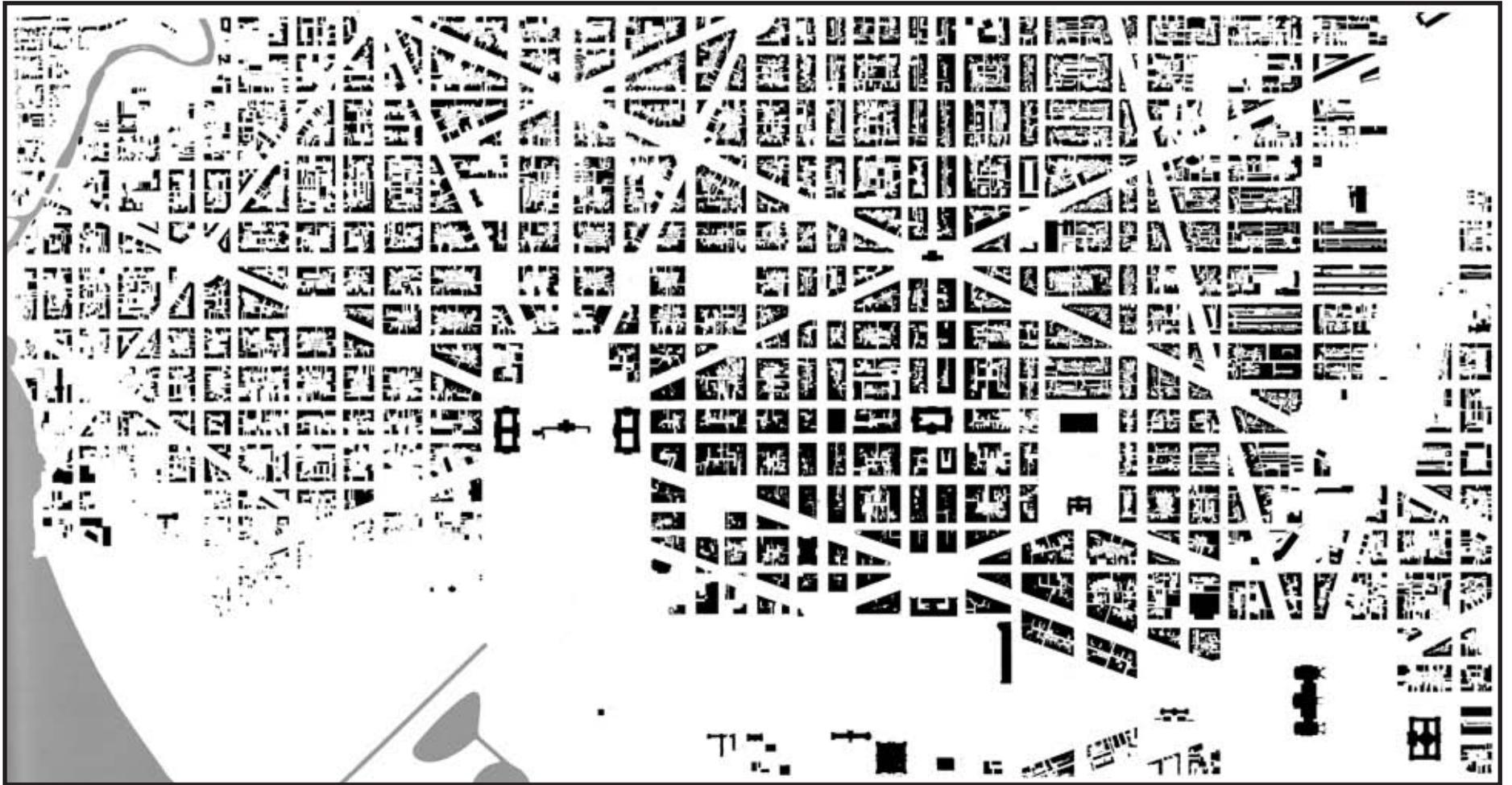
Bird's-Eye View of the City of Washington, D.C. and the Seat of War in Virginia

This Bird's-Eye drawing looking south shows the emergence of the Mall as a civic space by 1860. Englishman James Smithson's bequest to the United States for a national museum prompted deliberate consideration on how to treat the Mall.

Andrew Jackson Downing, at the request of Millard Fillmore, produced a plan for the Mall and the parks north and south of the White House. Downing's work exemplifies the "natural landscape" trend of the time, heavily influenced by Cambridge's Mt. Auburn Cemetery and pastoral notions of the young nation. In opposition to L'Enfant's geometric plan for the city, Downing's

Mall featured serpentine paths through pastoral plantings of trees and past irregularly shaped water features.

During this period, the Capitol Dome expansion, utilizing new steel structural technology, began, as did construction of Robert Mill's Washington Monument.



JF. Based on John Passeneau, 2005 (2004 original)

1900

HISTORY

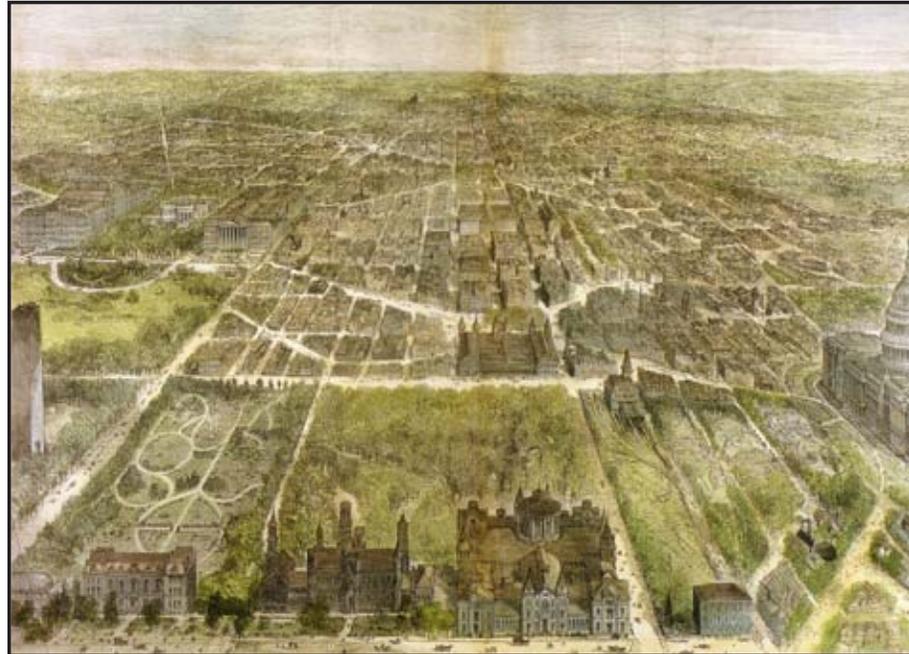
1860-1900

Our National Capital, View from the South

This Bird's-eye view to the North shows the development of the Mall and the neighborhood between it and Pennsylvania Avenue, considered one of the most dangerous and squalid in the city.

In the years after the Civil War, Washington engaged in a massive public work program to upgrade the infrastructure needed to maintain hygiene in a tropical area. The influx of workers and free blacks to the city increased the population and spurred growth of the city.

The investment in governmental buildings earlier in the Century was now paying out as the city grew up around them through private means.



Wood Engraving. After drawing by Theodore Davis. Harper's Weekly. 1882.

Olmstead, Sr. Plan for the Capitol Grounds

Despite Washington's emergence as an urban center, Olmstead's plan for the Capitol Grounds to a distinctively pastoral approach and was a precursor to the McMillan commission plan for the entire Federal Area.



Frederick Law Olmstead Sr., Architect of the Capitol. 1874.



J.F. Based on John Passeneau, 2005 (2004 original)

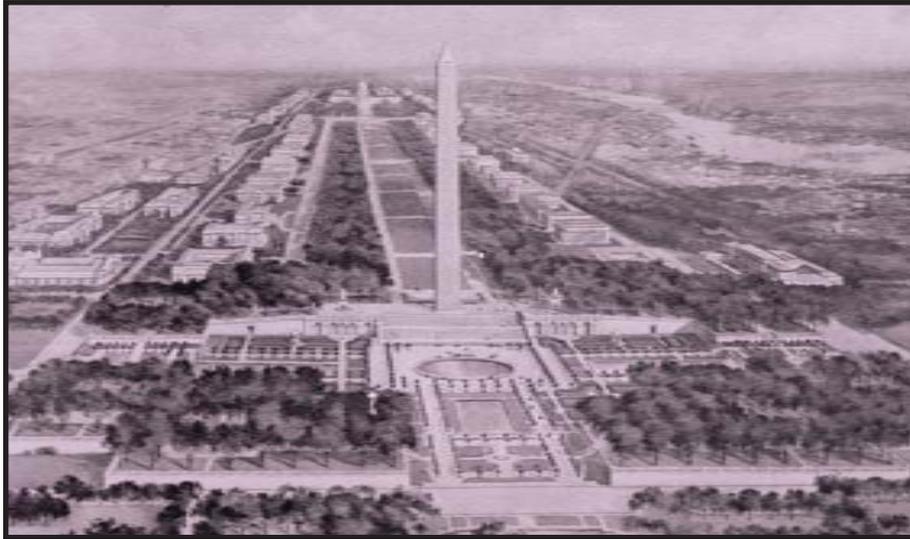
1940

Figure Ground, 1940

The impact of the McMillan plan was immediate, as evidenced in the figure ground. The neighborhood between the Mall and Pennsylvania Avenue was cleared and claimed for governmental functions. The Lincoln Memorial now anchors the Mall on the West, facing the Capitol, which now has a sight-line with the Daniel Burnham-designed Union Station to its Northeast. The comb-looking structures on the Mall were temporary housing units set up for military use.

HISTORY

1900-1940



Senate Park Commission, 1902

Perspective and Plan for McMillan Plan

The McMillan Plan envisioned a Federal District set apart from the rest of the city based on City Beautiful premises. Emphasis was placed on unifying the Mall and claiming the area between Pennsylvania Avenue and the Mall for Federal business. The Lincoln and Jefferson Memorials would form new end-points for the civic structure.

The Mall as envisioned by the McMillan Commission is pretty much as it is today. The area on either side of the Mall is strictly for Federal uses and the Mall itself is home to the Smithsonian Museums and any number of monuments.

The combination of the McMillan improvements, FDR's expansion of the Federal Government, and the impending War led to a rapid increase of population by 1940.



Senate Park Commission, 1902

1991

Dhiru Thadani's study of Washington as a Nolli map shows that the city has filled in L'Enfant's civic armiture.

HISTORY 1940-PRESENT

Downtown, facing South, c. 1970

Long a victim of political non-commitment to actually making Washington into a city, the District fell on truly hard times in the third quarter of the Century. These ariel photos show the state of the city in 1970. Many lots have been cleared for surface parking and the urban fabric is indistiguishable from any other American city in 1970.

A new political commitment to the city, plus a growing sense by the residents that Washington was a place that one could be *from* lead to renewal. By 2000, the District had rebuilt most of the surface parking lots downtown and now has more jobs located in the urban core than any other American city, other than Manhattan.

NA, circa 1970

Pennsylvania Avenue Redevelopment Plan & Southwest Urban Renewal

Urban deterioration in the Capital lead to two very different urban solutions on either side of the Mall. On the southern side, existing neighborhood fabric was demolished to make way for a new highway and large-footprint federal buildings.

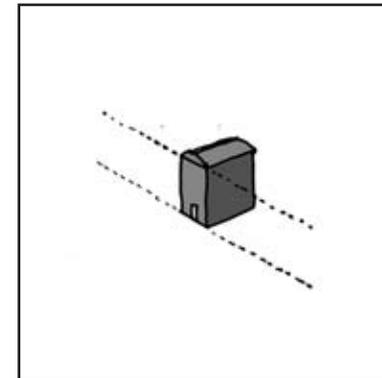
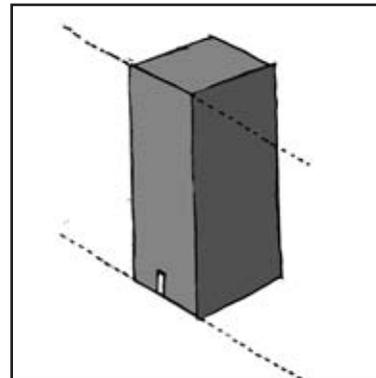
North of the Mall, the Pennsylvania Avenue Development Corporation learned many of the lessons of Urban Renewal and courted a more contextual solution.

Washington is made up of five types of building blocks, the party-wall office building, the rowhome, the detached bungalow, the neo-classical institution, and the urban villa.

Each makes a distinctive type of block and fabric. The attached buildings have given Washington the necessary density to make it second only to Manhattan in terms of jobs located in its urban center.

The neoclassical institution and urban villas serve a symbolic purpose idealizing the democratic values the new nation proported to embody.

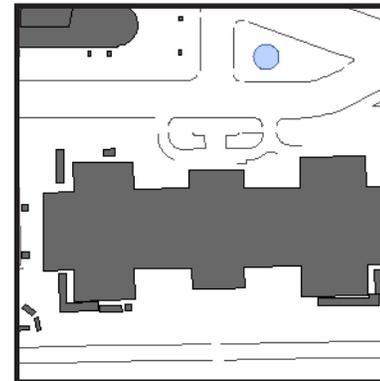
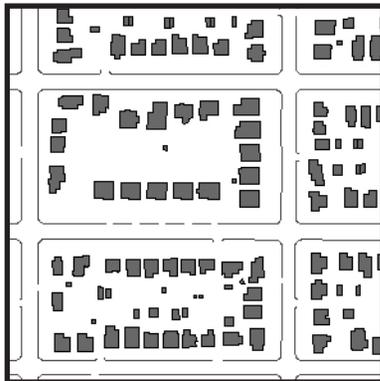
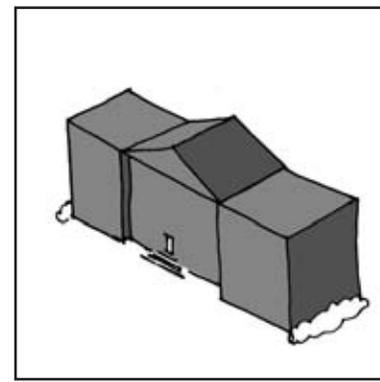
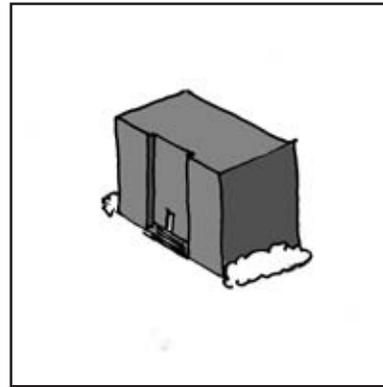
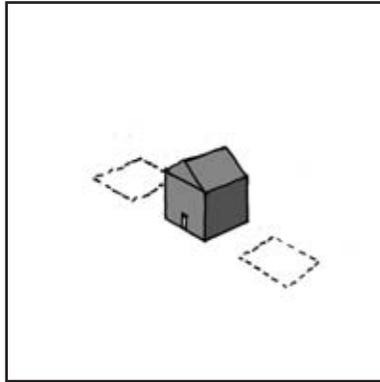
The detached home was a typical trend in suburban development in this country as residential neighborhoods attempted to maintain a pastoral ideal while remaining in close proximity to the urban economy. A reliable public transit infrastructure has made these neighborhoods some of the most desirable in the District.



The **party wall office building** maximizes the real estate in downtown Washington. Building heights are limited to 135 feet (40.5m). Office buildings typically have retail on the first floor in addition to lobbies.

The **party wall rowhome** was the traditional housing stock of Washington throughout the Eighteenth and Nineteenth Centuries. Though heights varied, many had basement apartments with seperate entry.

BUILDING TYPES & URBAN FABRIC

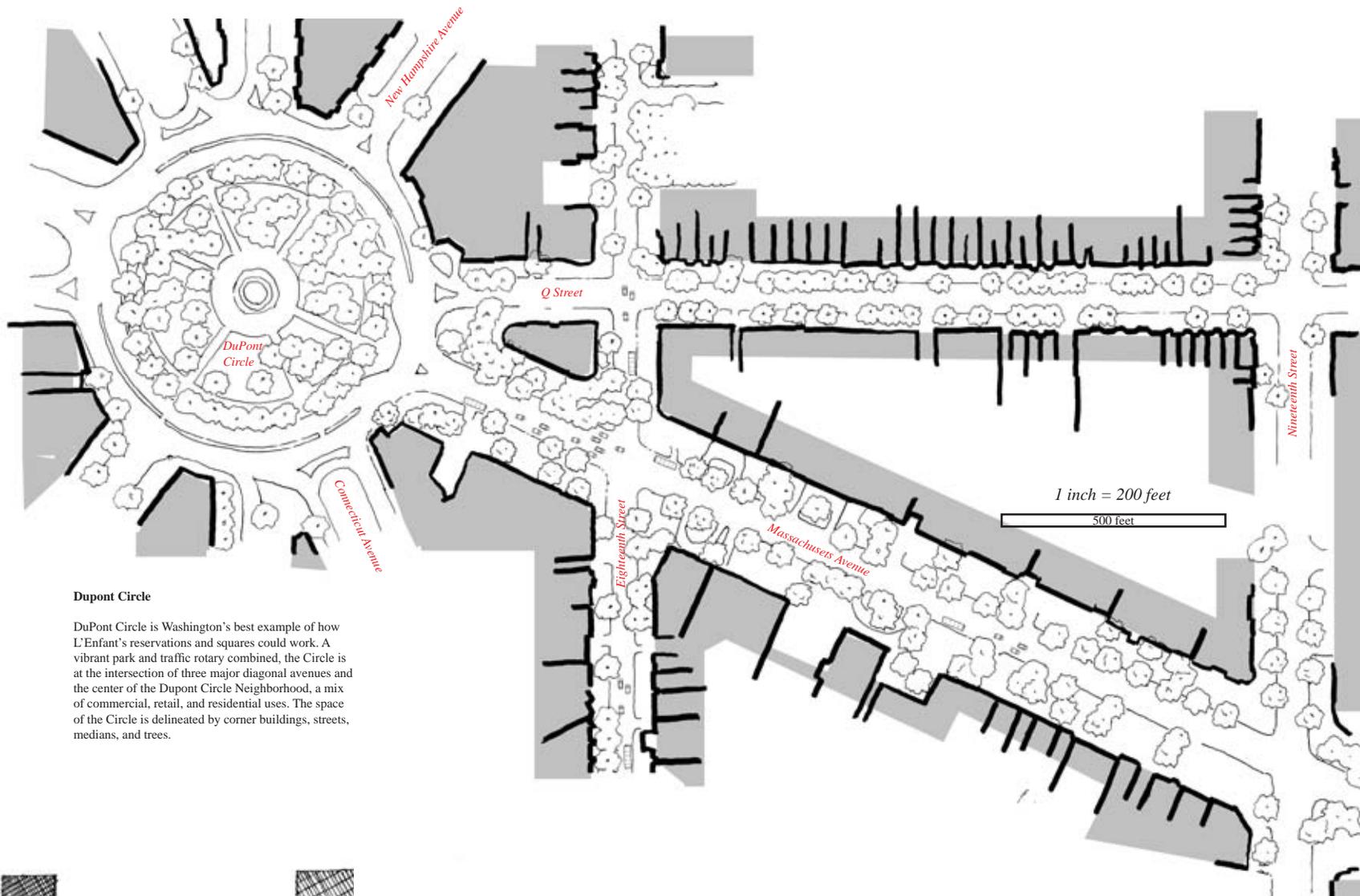


The **detached house** was introduced in the outskirts of the District in the early Twentieth Century. Originally laid out in traditional blocks with similar setbacks, the block gave way to the suburban serpentine street system typical of the mid and late Twentieth Century. This building type does not occur within the section of the city planned by L'Enfant.

Demand for stately space in the Capital drove the development of **Urban Villas**, which were detached buildings with a processional entrance. Often housing either diplomatic or charitable functions, these are most prevalent on 16th Street and Embassy Row along Wisconsin Avenue.

The **institutional building** is a significant part of the Washington landscape. Typically governmental or museums, they are set apart as neo-classical objects in an often idealized landscape.

During Urban Renewal in the Southwest quadrant, modern buildings were sited much the same way without the landscaping.



Dupont Circle

DuPont Circle is Washington's best example of how L'Enfant's reservations and squares could work. A vibrant park and traffic rotary combined, the Circle is at the intersection of three major diagonal avenues and the center of the Dupont Circle Neighborhood, a mix of commercial, retail, and residential uses. The space of the Circle is delineated by corner buildings, streets, medians, and trees.



1 inch = 100 feet

Massachusetts Avenue

Massachusetts Avenue is one of L'Enfant's planned "grand traverse Avenues", set out at 160 feet side, with 80 feet of carriage way and 80 feet of trees and pedestrian way. Modern-day Massachusetts Avenue still more or less follows L'Enfant's dimensions. Buildings in Washington are limited to 135 feet and share party walls. Along Massachusetts Avenue, they frame the space, which is further delineated by setbacks, landscaping, trees, and a parking lane.



Q Street

Q Street is representative of one of L'Enfant's "other" streets, laid out at either 90 or 110 feet. Residential in nature, Q street's buildings are traditionally three or four story rowhomes. Frontyard setbacks, trees, and a parking lane divide the space.

STREETS & SPACES

Streets and spaces were an important part of L'Enfant's plan for the new Capital. While the overall pattern of the streets and diagonal avenues is well documented (see Passaneau's *Washington through Two Centuries*), L'Enfant was also particular about the width and lay out of the street section.

L'Enfant conceived of the Mall as The Grand Avenue, with a width of 400 feet. The diagonals, including the armature streets of Massachusetts and Pennsylvania, were to be 160 feet in width. Streets "leading to public buildings or markets" were to be 130 feet and "others" were to be either 110 or 90 feet in width.

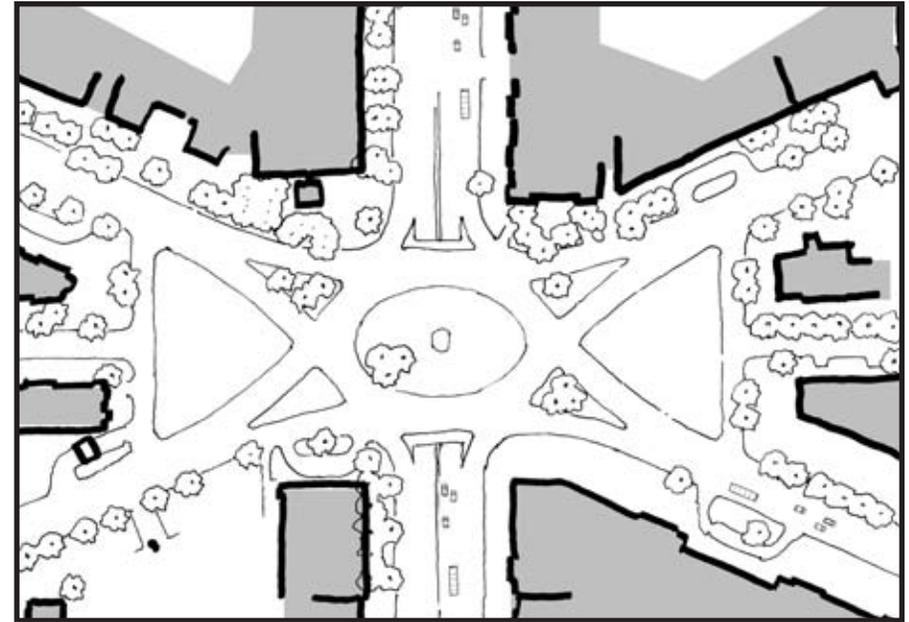
L'Enfant also planned for reservations of space at key intersections and established a Neo-Classical program of siting buildings or other monuments in these spaces. While many of the spaces have collected statues and monuments, the full intention of L'Enfant has never been realized.

Such wide streets and numerous spaces, combined with the height limit of buildings in Washington give the public space a particular character. The city is bright and open. Furthermore, the building setbacks provide space for trees and gardens which are in abundance in the city.

This character continues beyond the original area of the city, and while the grid and diagonal system of streets breaks down north of Florida Avenue, the commitment to openness and green continues.

Scott Circle

Scott Circle is a less successful example of one of L'Enfant's reservations. The space is framed with large-footprint office buildings that have little ground-floor articulation. As such, the space is not activated with people and serves primarily as a traffic circle.



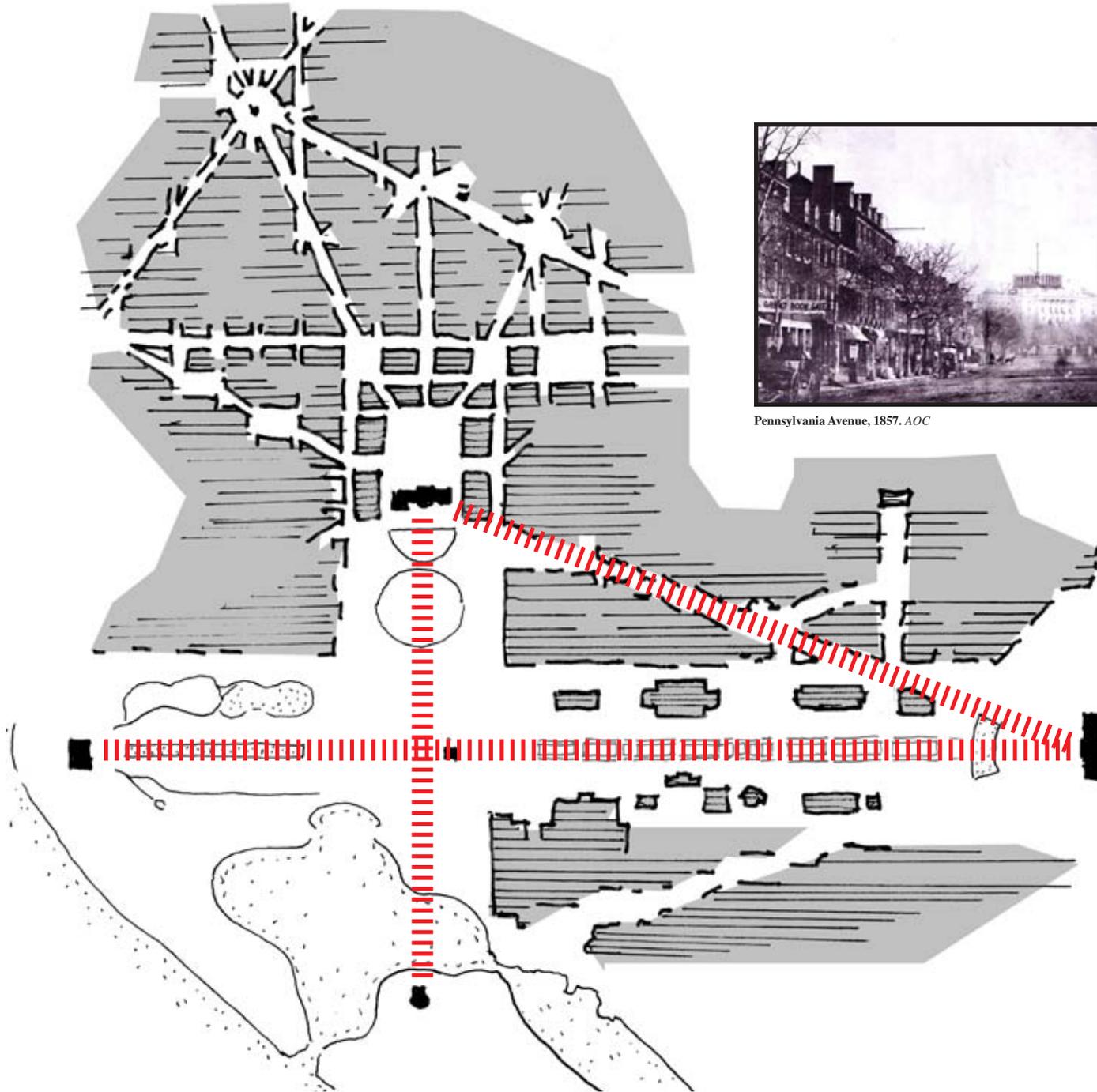
Parque De Las Ratas

Locally known as Rat Park, the intersection of Sixteenth Street, Harvard, and Columbia Road falls outside of L'Enfant's plan and is an example of the use of residual space at the intersection of late Nineteenth Century residential developments for urban purposes. Framed by large-footprint apartment buildings and churches, the park is an amenity for the surrounding neighborhoods.



1 inch = 200 feet

500 feet



Pennsylvania Avenue, 1857. AOC

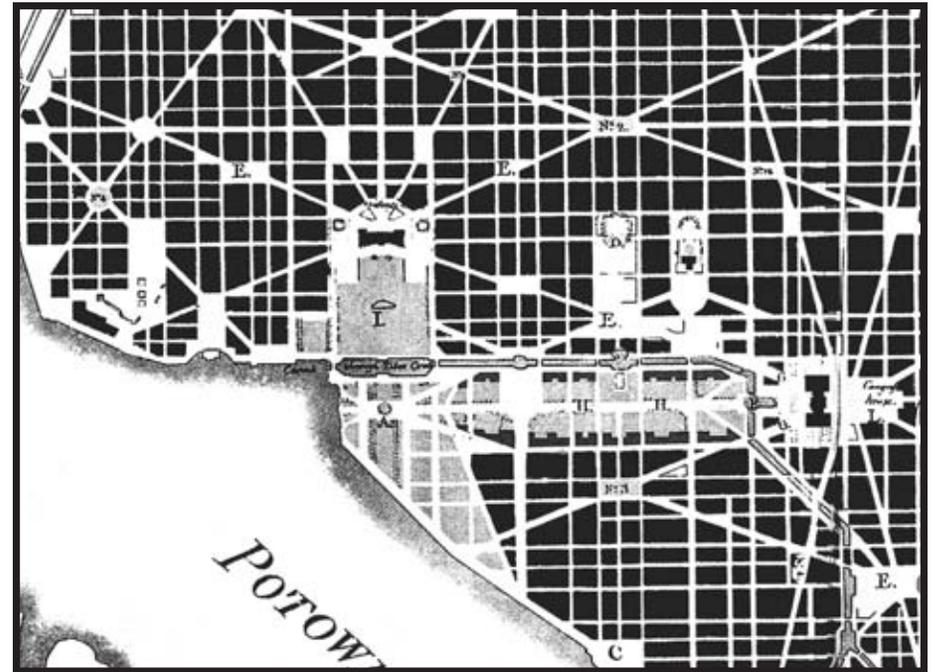
Pennsylvania Avenue, 1959. Ara Mesrobian

CIVIC STRUCTURE

Washington's civic structure was envisioned by L'Enfant as a series of sight-reciprocal squares, fountains, and wide diagonal avenues anchored by a Grand Avenue, "400 feet in breadth, and about a mile in length, bordered with gardens, ending in a slope from the houses on each side" and "communication" from the President's house and the Congress house, present-day Pennsylvania Avenue.

The skeleton of L'Enfant's civic structure remains, though the original triangle has been extended into a cruciform with the reclamation of the Tidal Basin, and the Smithsonian Museums occupy the place of the houses along what is now now as the National Mall. Other than DuPont Circle, the importance of the Squares as part of the civic structure has never been realized, nor L'Enfant's intention that downtown develop east of the Capitol.

L'Enfant's Plan for Washington, 1791.
highlights by Fugate



Modern-Day Washington, 1991.
montage of Thadana and Passeneau



GOOD URBAN SPACE

Good Urban Space Must

a) be near people

Density is necessary for urbanity. People must be present and fill the space.

Density is often thought of in terms of residential density, but this is not the only way to think about it. Downtown Washington is a bustling urban place based entirely on the density of office space and the long-hour work habits of those who occupy those offices.

b) be accessible to people both in reality and perceptually

People will use the spaces convenient to them, or perceived to be convenient. Urban spaces must be right outside the door, more or less. Washington's most famous space, the National Mall, is not its most used because it is inconvenient for the average Washingtonian to get to.

c) be legible to people

Space must have edges, paths, and centers that allow people to read it without effort to orient themselves and understand where they are. The easiest and most effective way to do this is to reference the environment that they are already used to—one of streets bounded by buildings, spaces with hard edges and corners, and monumental landmarks.

d) allow multiple layers of activity and movement

Urban space must be appropriable for the needs of the moment. The street can simultaneously serve the needs of transportation, marketplace, and recreation—the square as recreation for the more fortunate and residential for the less fortunate. Cities like Paris, Cambridge, and DC are not great because of their architecture, but because of the human zoo occupying the spaces of those cities.

Jake McGuire, Autumn Publishing Inc. 1996

DuPont Circle

Washington's DuPont Circle is an example of good urban space. Located at the intersection of the office district and residential neighborhoods, the adjacent density of people is large enough to populate the space. Legibility is obtained through party-wall buildings, consistent heights, and obvious routes in and out of the space. Despite being a overtly pedestrian area, the Circle also serves a substantial traffic role, being the intersection of three of the District's busiest diagonals.

THE PROBLEM WITH THE MALL

The problem with the Mall is:

It is too far away from the urban center of residences and offices.

The McMillan Plan effectively pushed all functions other than government administration north of Pennsylvania Avenue. This separation of the Mall from the population's everyday space means that it can only function as a destination instead of an integrated fabric.

It loses its legibility west of the Washington Monument.

With no built edge to the south, the Mall "falls" into the Potomac and loses its legibility as a space instead of a landscape.

It is strictly ceremonial space

As ceremonial space, the primary use of the Mall is to look at it, an activity engaged in primarily by visitors instead of residents. Furthermore, it is not "on the way" to any part of the city, but stands apart, situated between the River and the City.

Alex McLean. Landslides. 1990

Views of the Mall

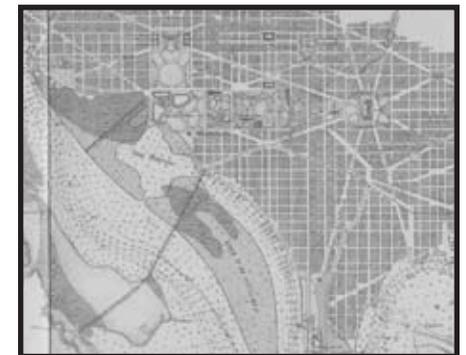
These two photos illustrate how the Mall is typically experienced, as a landscape to be beheld, not as a space to be occupied.

Alex McLean's ariel above (looking northeast) also illustrates the openness of the western end of the Mall, with no built edge to the southern side.

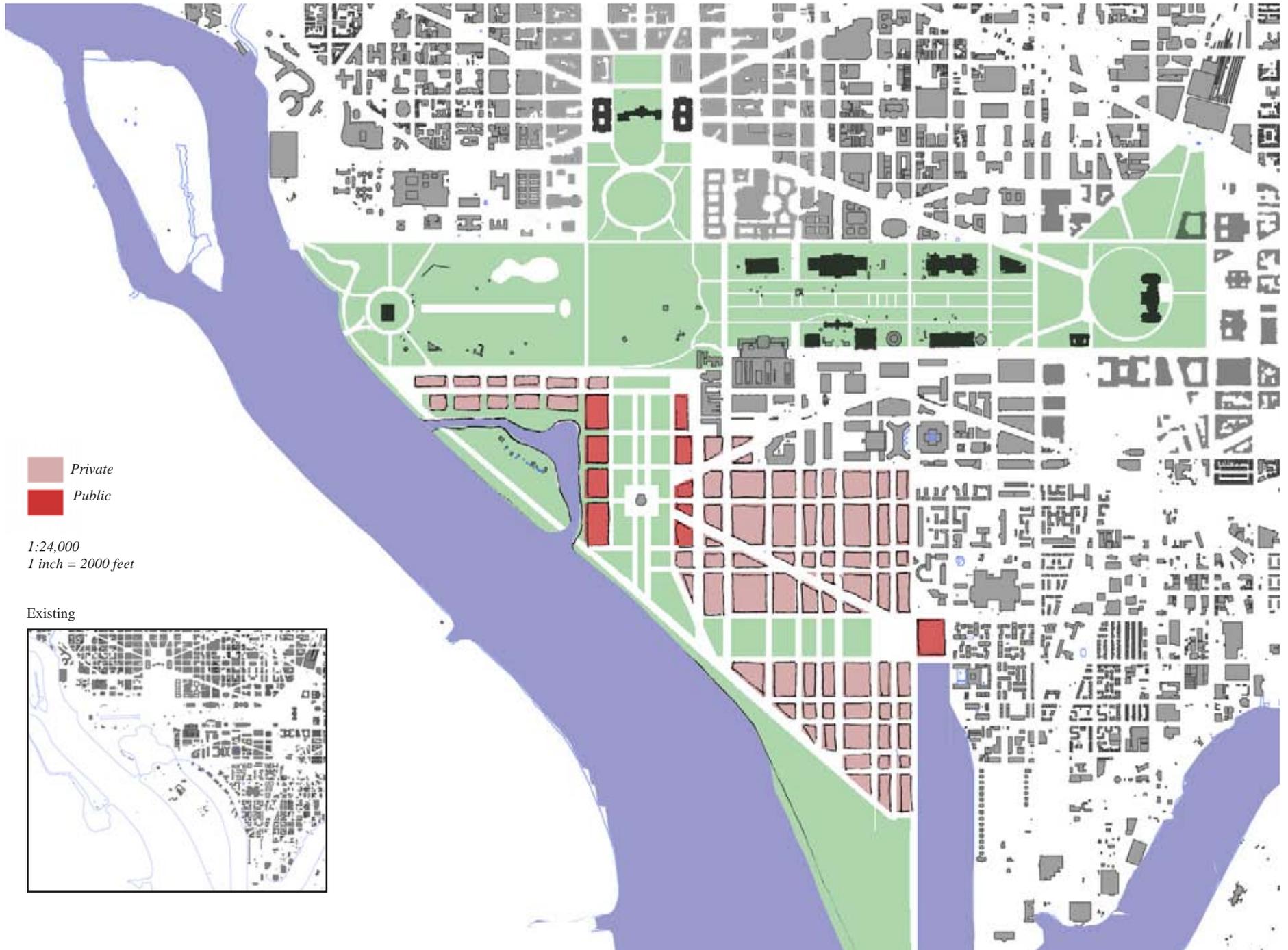
Richard Longstreth, 1987

Land Reclamation

This map shows the original engineering for reclaiming Hain's Point. Initially intended to drive economic growth by developing a port, the reclaimed land never was developed for anything other than recreation.



J.E. Hilgard, D.C. Government. 1882



DESIGN INTERVENTION

This plan imagines a Washington that celebrates the Mall as an urban space instead of a pastoral landscape by developing the reclaimed tidal flats as a new urban neighborhood.

By placing a density of people and buildings on the “other” side of the Mall, it populates the area adjacent to it, creates a legible edge, and introduces everyday use of the space in addition to destination use. Such interventions addresses the challenges of good urban space (p.22).

Design Objectives:

- a) Locate residential and occupational density adjacent.
- b) Reorient the Mall between parts of the city instead of next to it.
- c) Harden and define the edges of the Mall on the southern edge.
- d) Reclaim the Mall as everyday space while maintaining its ceremonial nature. Insert new and mixed uses along the edge in addition to the tourist-orient functions currently in place.

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