

Docket Item # 6 & 7
BAR CASE #2011-0263 &
2011-0264

BAR Meeting
October 5, 2011

ISSUE: Permit to Demolish/Encapsulate and New Construction for Bus Shelters

APPLICANT: Department of Transportation & Environmental Services, City of Alexandria

LOCATION: East side of the 300, 500, 800 and 1200 blocks of South Washington Street, the 200 and 500 blocks of North Washington Street , and the 1300 and 1600 blocks of East Abingdon Street

ZONE: Multiple zones

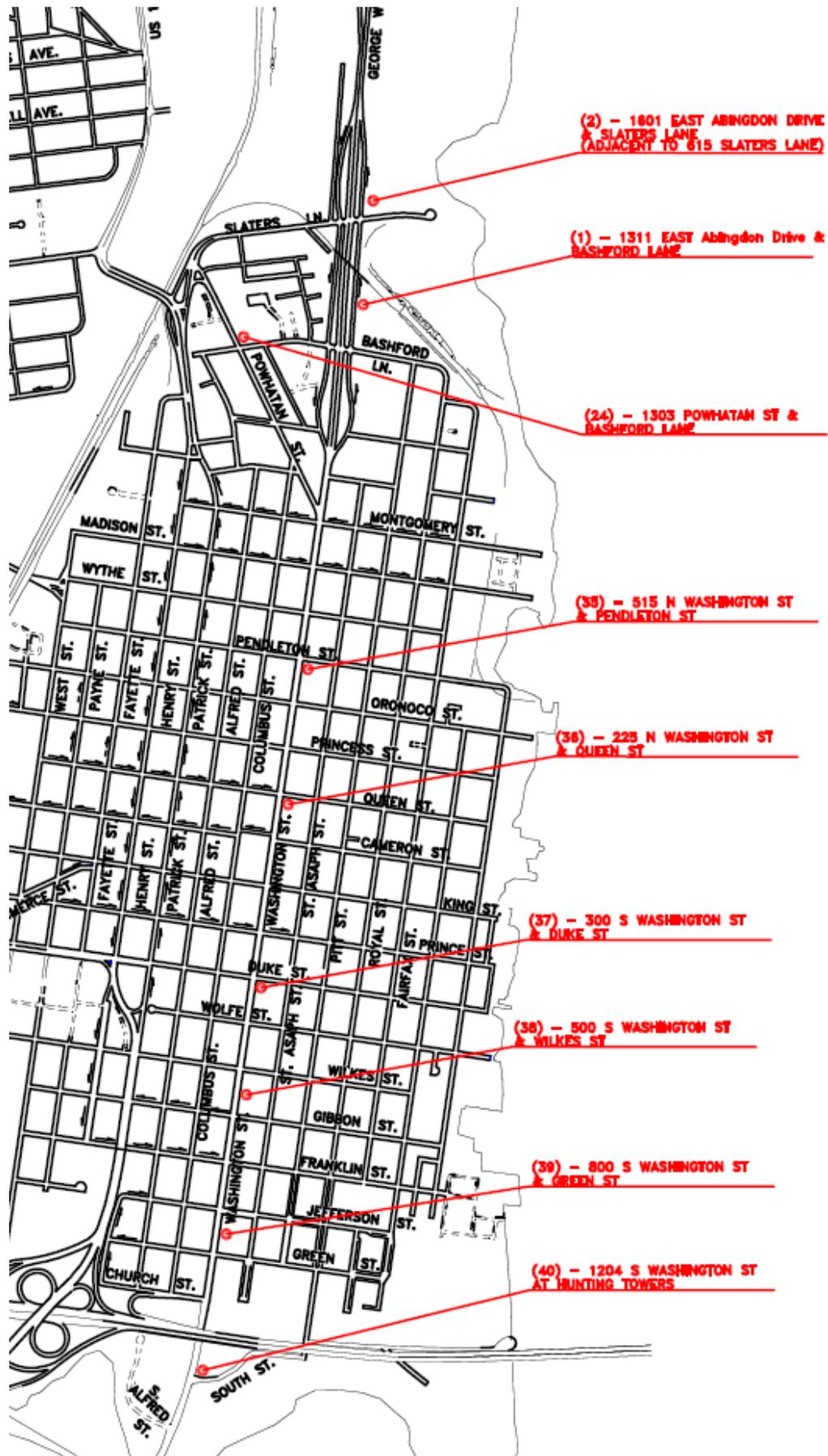
STAFF RECOMMENDATION: Staff recommends approval with the following conditions:

1. That the end panels of each bus shelter remain clear glass and unobstructed;
2. That the any historical information be presented in a way that is consistent with the City's adopted Wayfinding program; and
3. That the Department of Transportation & Environmental Services staff work with BAR staff to determine acceptable locations for solar panels and remote solar poles so that they are appropriately sited and minimally obtrusive.

****EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B) and 10-206(B) of the Zoning Ordinance, any official Board of Architectural Review approval will expire 12 months from the date of final approval if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.

****BUILDING PERMIT NOTE:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Building and Fire Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.

Locations of Existing Bus Shelters to be Replaced



Note: This item requires a roll call vote.

I. ISSUE

The applicant is requesting a Permit to Demolish/Encapsulate seven existing bus shelters that will be replaced with new bus shelters in the same location. In total, eight new bus shelters will be installed in the location of seven existing shelters and one shelter that was previously demolished as part of the Woodrow Wilson Bridge construction project and replaced with a small canopy. Six of the bus shelters are located at regular intervals along the east side of Washington Street and two are located on the east side of East Abingdon Drive. Removal and replacement of bus shelters in the historic districts require approval of a Permit to Demolish and Certificate of Appropriateness from the BAR according to the Zoning Ordinance and the *Design Guidelines*.

Background

In 2008, the City received a \$500,000 grant from the Federal Highway Administration to replace approximately 40 existing bus shelters throughout the City. The grant money covers the design and planning process as well as the installation of bus shelters that will serve residents and visitors alike.

Transportation & Environmental Services Staff have collaborated with Planning & Zoning Staff to coordinate the project and select an appropriate and cost-effective design. In addition, the City has been working with the Virginia Department of Transportation (VDOT) and the National Park Service (NPS) throughout the planning process. Public meetings have also been held and suggestions were incorporated into the current design. Overall, the response to the current design has been positive. Initially, a prefabricated design was considered. However, after reviewing many options, it was decided that a prefabricated scheme was not appropriate for the City. All of the prefabricated options were either too modern or too Colonial Revival in nature. Creating a distinct design for Alexandria was also considered. As part of the planning process, City staff and the City's design consultant for the project looked at the newly installed bus shelters in the District of Columbia. Staff and the public found the design used in D.C. to be appropriate. Seeing the bus shelters in D.C., in highly visible locations adjacent to very historic buildings, revealed that this concept design was successful. The shelters in D.C. were designed and installed as part of a public/private partnership with Clear Channel, who continues to maintain the shelters in exchange for advertising. Although the design proposed for Alexandria is very similar to that used in D.C., Clear Channel is not involved with this proposal and no advertising is proposed within the historic districts in Alexandria.

Proposed Design

The proposed bus shelter design for Alexandria is not a direct copy of the bus shelters in D.C. The Alexandria model has a slightly different design and will be a black metal rather than silver. Additionally, the City's design consultant also improved upon some of the production details. There will be no advertising and the end panels will remain unobscured. Route maps and local historic interpretation information will be installed but they will be on the back panel only.

The proposed bus shelters measure approximately 8 feet by 15 feet and have a contemporary and minimalist modular design. The black metal frame will have clear glass panels on three sides and a translucent glass shed roof. A coordinating black metal bench will be located within the shelter. There will be small LED screens to provide route and real-time schedule information. The shelters will have small solar panels affixed to the top of the shelter to power low-level lighting for safety and the small LED real time transit information screens. The proposed solar panels will have a

swivel component to achieve optimal southern orientation. In some locations, due to the tree canopy or building shade, a small pole with a solar panel will need to be installed near the shelter. The end panels will remain clear and unobscured. Two double sided panels with maps, transit information and historical background may be installed on the rear panel. The shelters will be constructed on the existing concrete pads. In some cases it may be necessary to install a new pad—in such cases the pad will be no more than 12 inches deep. The proposed shelters will be compliant with the Americans with Disabilities Act (ADA).

II. HISTORY

The existing bus shelters are a standard Washington Metropolitan Area Transit Authority (WMATA) design made of Plexiglas with steel frames that were installed between 1974 and 1976.

III. ANALYSIS

The proposed bus shelters comply with Zoning Ordinance requirements however no signs or advertising, other than those governmental signs related to the City's Wayfinding program or transit information, are permitted.

Permit to Demolish

In considering a Permit to Demolish, the Board must consider the following criteria set forth in the Zoning Ordinance, §10-105(B):

- (1) Is the building or structure of such architectural or historical interest that its moving, removing, capsulating or razing would be to the detriment of the public interest?
- (2) Is the building or structure of such interest that it could be made into a historic house?
- (3) Is the building or structure of such old and unusual or uncommon design, texture and material that it could not be reproduced or be reproduced only with great difficulty?
- (4) Would retention of the building or structure help preserve the memorial character of the George Washington Memorial Parkway?
- (5) Would retention of the building or structure help preserve and protect an historic place or area of historic interest in the city?
- (6) Would retention of the building or structure promote the general welfare by maintaining and increasing real estate values, generating business, creating new positions, attracting tourists, students, writers, historians, artists and artisans, attracting new residents, encouraging study and interest in American history, stimulating interest and study in architecture and design, educating citizens in American culture and heritage, and making the city a more attractive and desirable place in which to live?

In the opinion of Staff, none of the above criteria are met and Staff supports the demolition of the existing bus shelters noting that they are in a significantly deteriorated condition with rusted frames and scratched Plexiglas, making a wholesale replacement the optimal solution.

New Construction—Bus Shelters

Staff finds the proposed bus shelter design to be an appropriate design that is of its own time, compatible with the surrounding historic buildings and respective of the memorial character of the George Washington Memorial Parkway. The streamlined design allows the bus shelters to be highly functional yet visually unobtrusive. By maintaining the end panels as clear glass, the bus shelters do not draw attention to themselves, in the way that advertising or art does on the D.C. shelters. Staff

October 5, 2011

also found it to be inappropriate for these shelters to have a phony Colonial design, as George Washington never took the bus through Alexandria, and Staff believes that a very simple, minimalist style is the most appropriate. The National Park Service strongly agreed, as it protects the memorial character of the Parkway. To ensure that future decisions do not visually block the Parkway or adjacent buildings, Staff recommends a condition of approval that the end panels remain clear and unobscured.

A small amount of electrical power is needed for low-level general illumination and real time transit information. However, because of the need for separate electrical transformers, metering and undergrounding requirements, it is both technically and economically infeasible to provide this power from the public utility grid. Solar collectors provide a less expensive solution and support the City's green building policies. The *Design Guidelines* on solar collectors advise that they "be located on the most visually inconspicuous area of a structure consistent with the requirements of maximum access to the sun" and they "should be as small as possible." Due to the location of the bus shelters in the public right-of-way on Washington Street, it is difficult to make the solar collectors visually recede entirely. However, upon reviewing different schemes and noting that the most up-to-date technology will be used for the solar panels, Staff finds that the three small solar panels attached to the rear of the roof of each shelter are acceptable. Where tree canopy or buildings shade the shelter, T&ES Staff will work with BAR Staff to determine the least visible placement of a new remote pole or co-location on an existing utility pole.

Staff recommends approval of the application with the conditions noted above. This project represents a good model of coordination between City Staff in the departments of Transportation & Environmental Services and Planning & Zoning to review and plan for future infrastructure improvements located in the historic districts.

STAFF

Catherine Miliaras, Historic Preservation Planner, Planning & Zoning

Al Cox, FAIA, Historic Preservation Manager, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C - code requirement R - recommendation S - suggestion F- finding

Code Enforcement:

- F-1 The review by Code Administration is a preliminary review only. Once the applicant has filed for a building permit, code requirements will be based upon the building permit plans. If there are any questions, the applicant may contact Thomas Sciulli, Plan Review Supervisor at thomas.sciulli@alexandriava.gov or 703-746-4190. (Code)
- C-1 Demolition and building permits are required for this project. Five sets of *construction documents* construction, anchorage, and resistance to wind and snow loads shall accompany the permit application(s)

Transportation and Environmental Services:

RECOMMENDATIONS

- R1. The building permit must be approved and issued prior to the issuance of any permit for demolition. (T&ES)
- R2. Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R3. All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (T&ES)
- R4. No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)
- R5. Conduit will be required for utilities placed underground. (T&ES)

CITY CODE REQUIREMENTS

- C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, and Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)
- C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C-4 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C-5 Any work within or from the right-of-way requires a separate permit from T&ES. (Sec. 5-3-61), to include but not limited to: Excavations, Lane Closures and Sidewalk

October 5, 2011

Closures. Please contact T&ES/C&I Permits Section at (703) 746-4035 for further information. (T&ES)

Alexandria Archaeology:

Archaeology Comments:

1. Call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds. The language noted above shall be included on all final site plan sheets involving any ground disturbing activities. (Archaeology)
2. The applicant shall not allow any metal detection and/or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. Failure to comply shall result in project delays. The language noted above shall be included on all final site plan sheets involving any ground disturbing activities. (Archaeology)

Findings:

F-1 This project has been deemed to be under the jurisdiction of Section 106 of the National Historic Preservation Act of 1966. The applicant will coordinate with the Virginia Department of Historic Resources and the federal agency involved in the project, as well as with Alexandria Archaeology.

National Park Service:

See attached letter.

V. IMAGES



Figure 1. Example of existing WMATA bus shelter to be demolished.



Figure 2. Detail of existing WMATA bus shelter to be demolished.

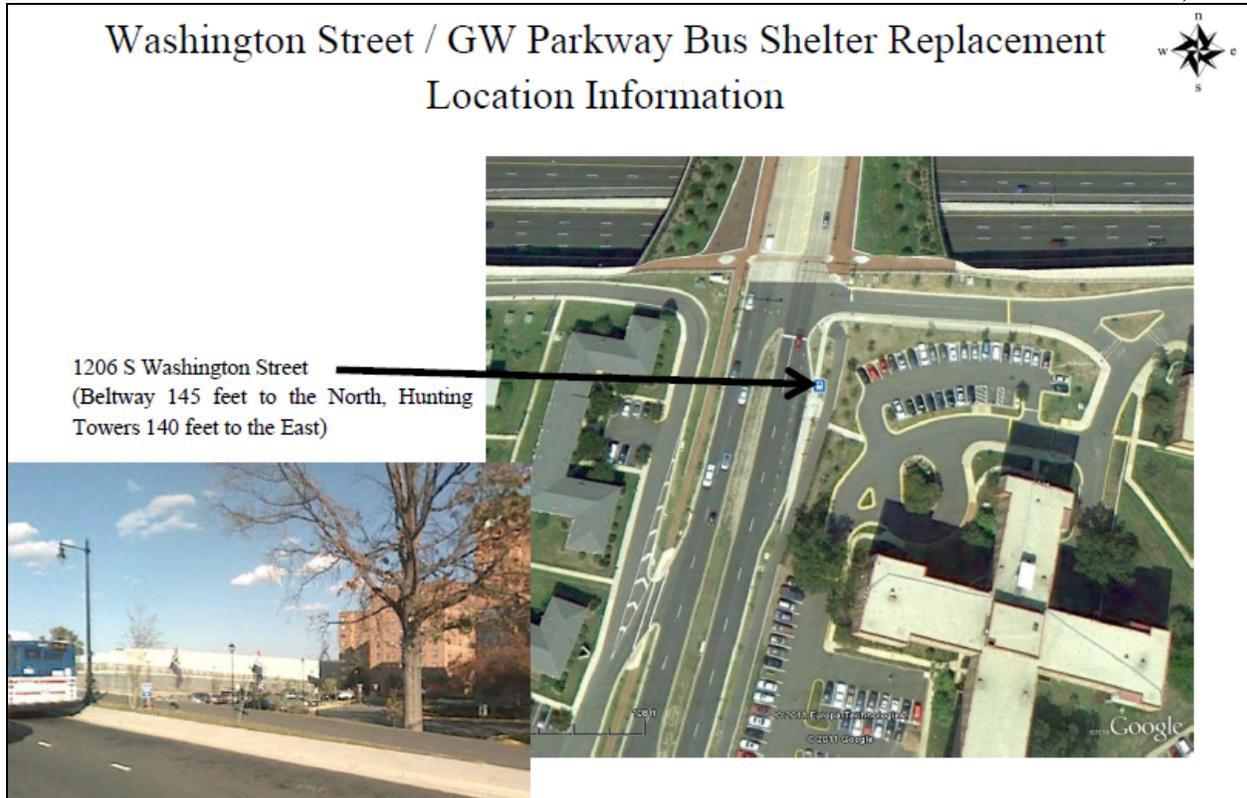


Figure 3. Location of shelter on 1200 block of South Washington Street.

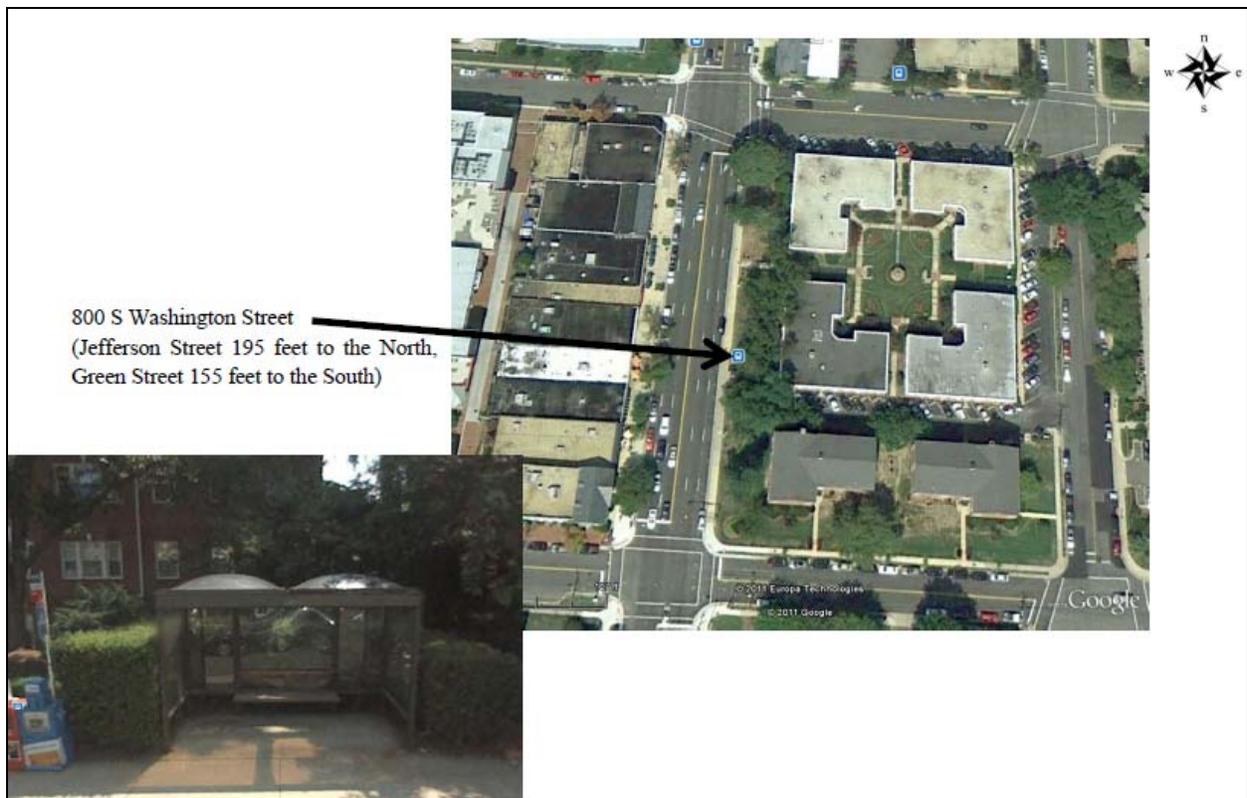


Figure 4. Location of shelter on 800 block of South Washington Street.

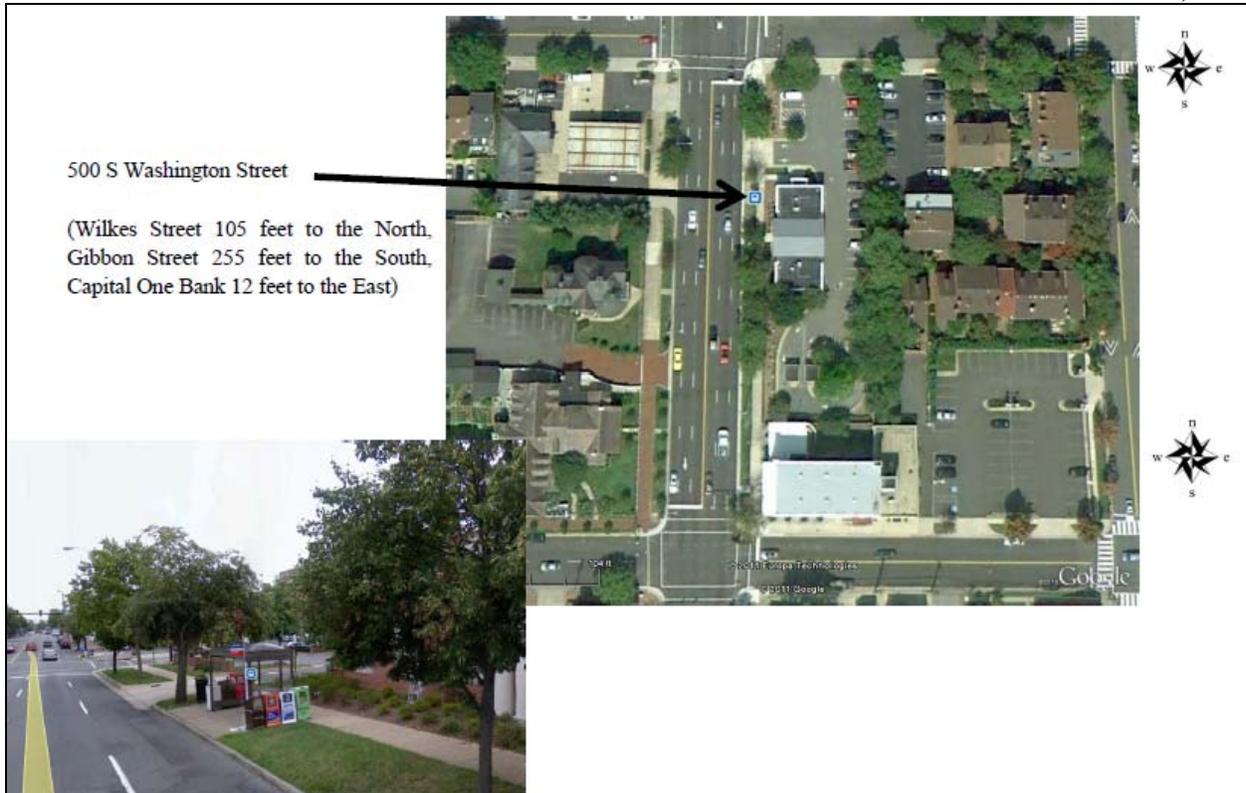


Figure 5. Location of shelter on 500 block of South Washington Street.

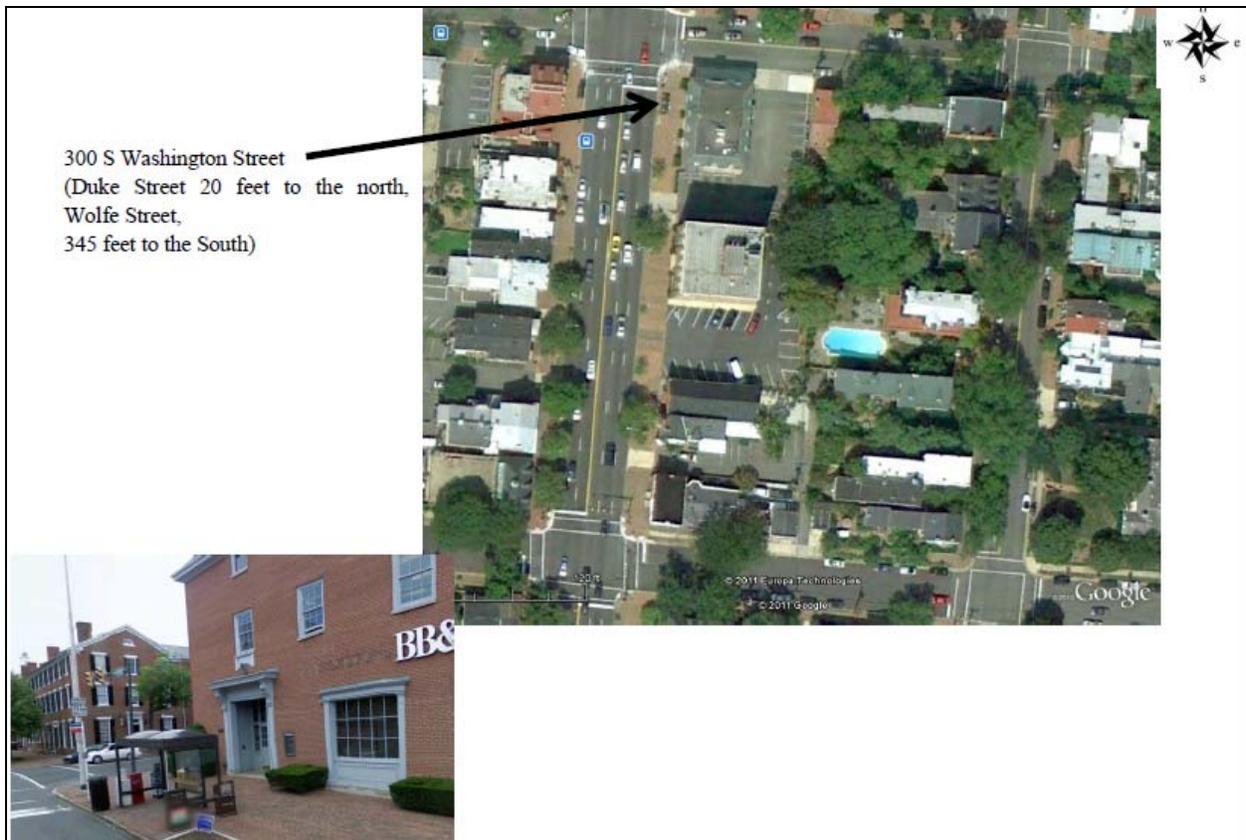


Figure 6. Location of shelter on 300 block of South Washington Street.

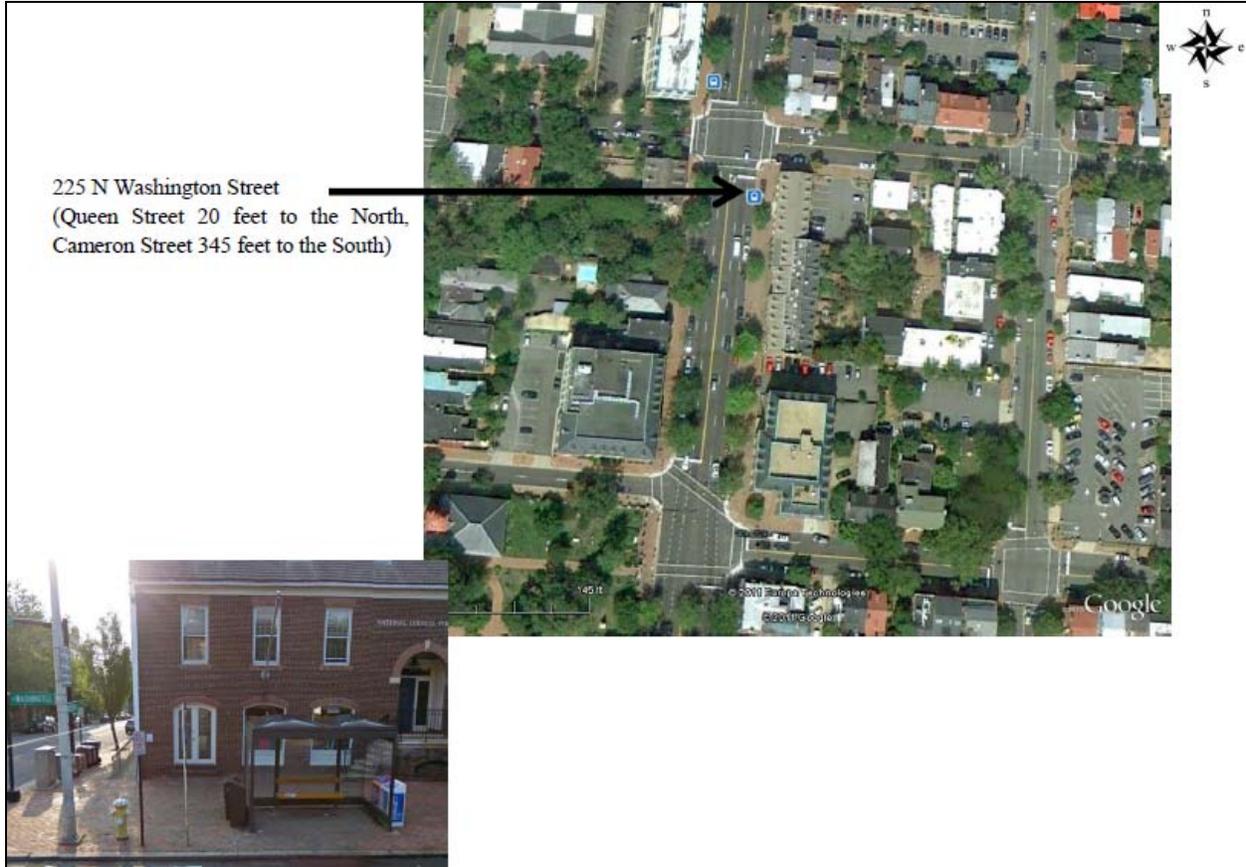


Figure 7. Location of shelter on 200 block of North Washington Street.

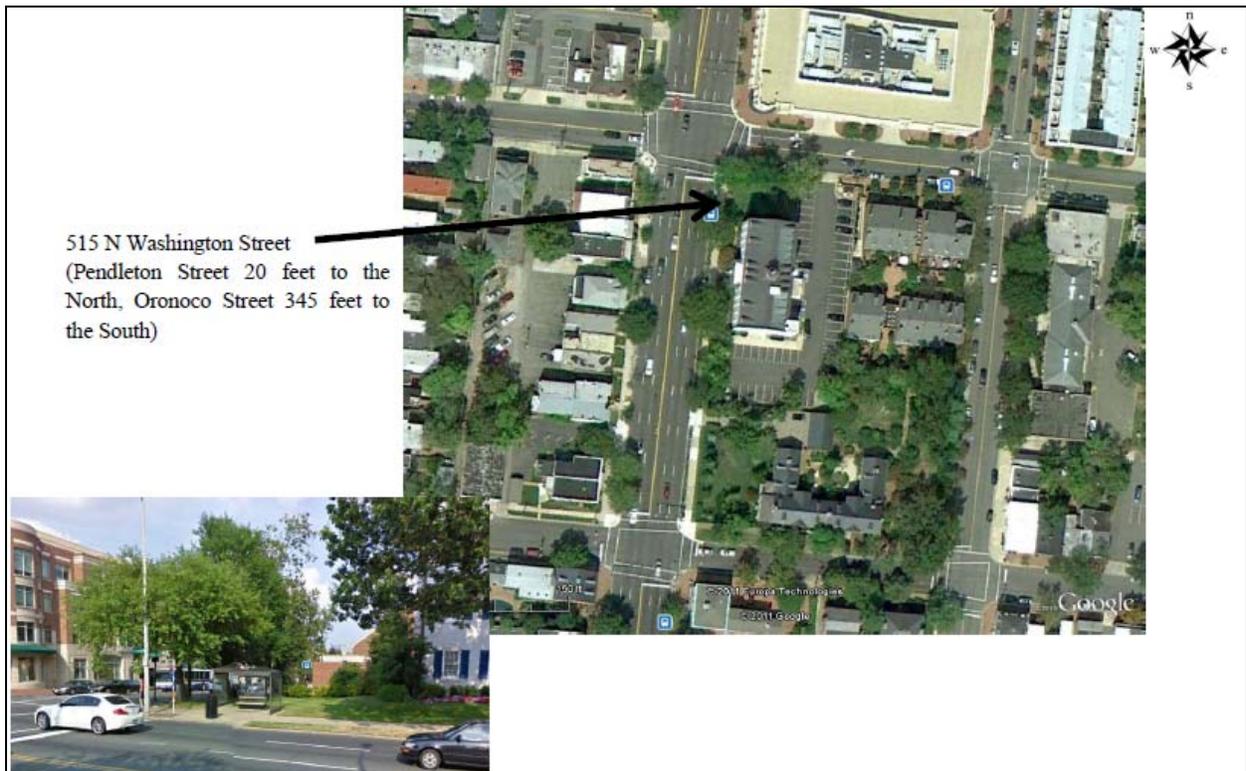


Figure 8. Location of shelter on 500 block of North Washington Street.

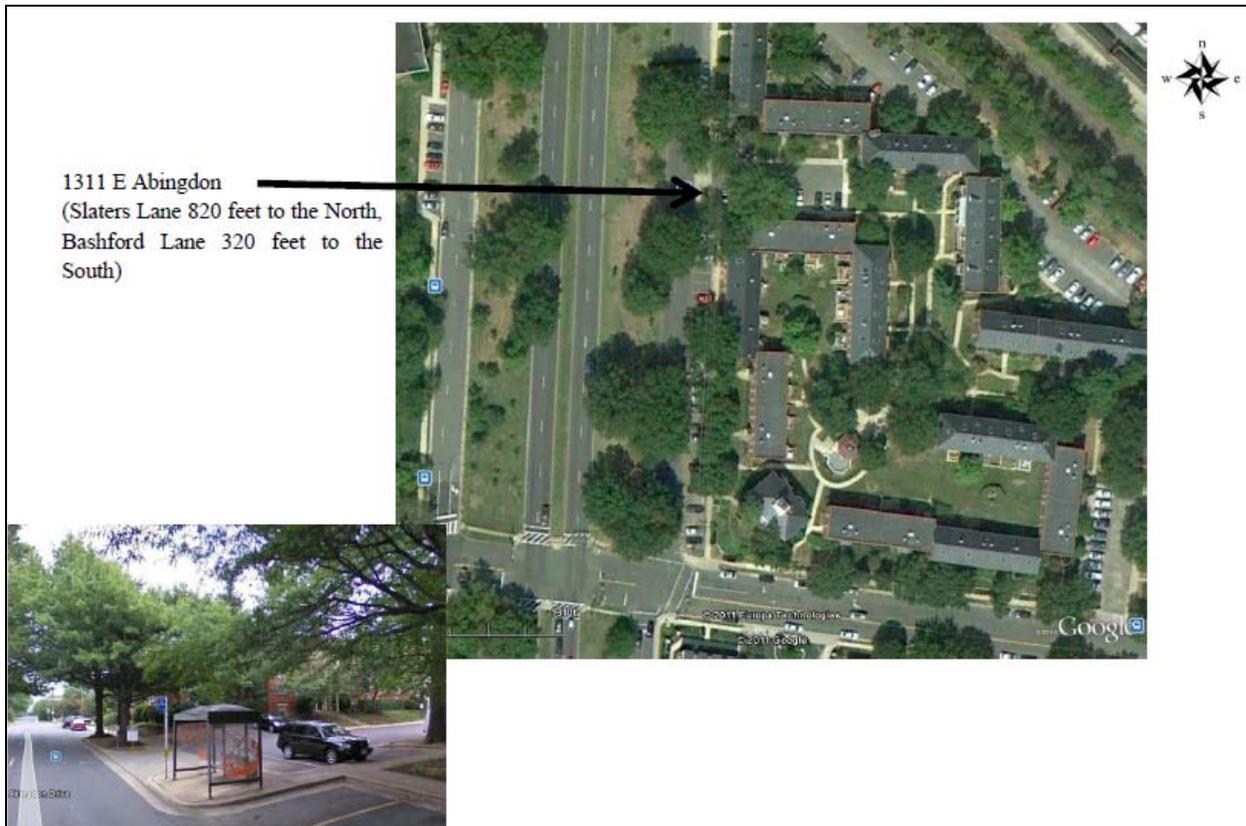


Figure 9. Location of shelter on 1300 block of East Abingdon Drive.

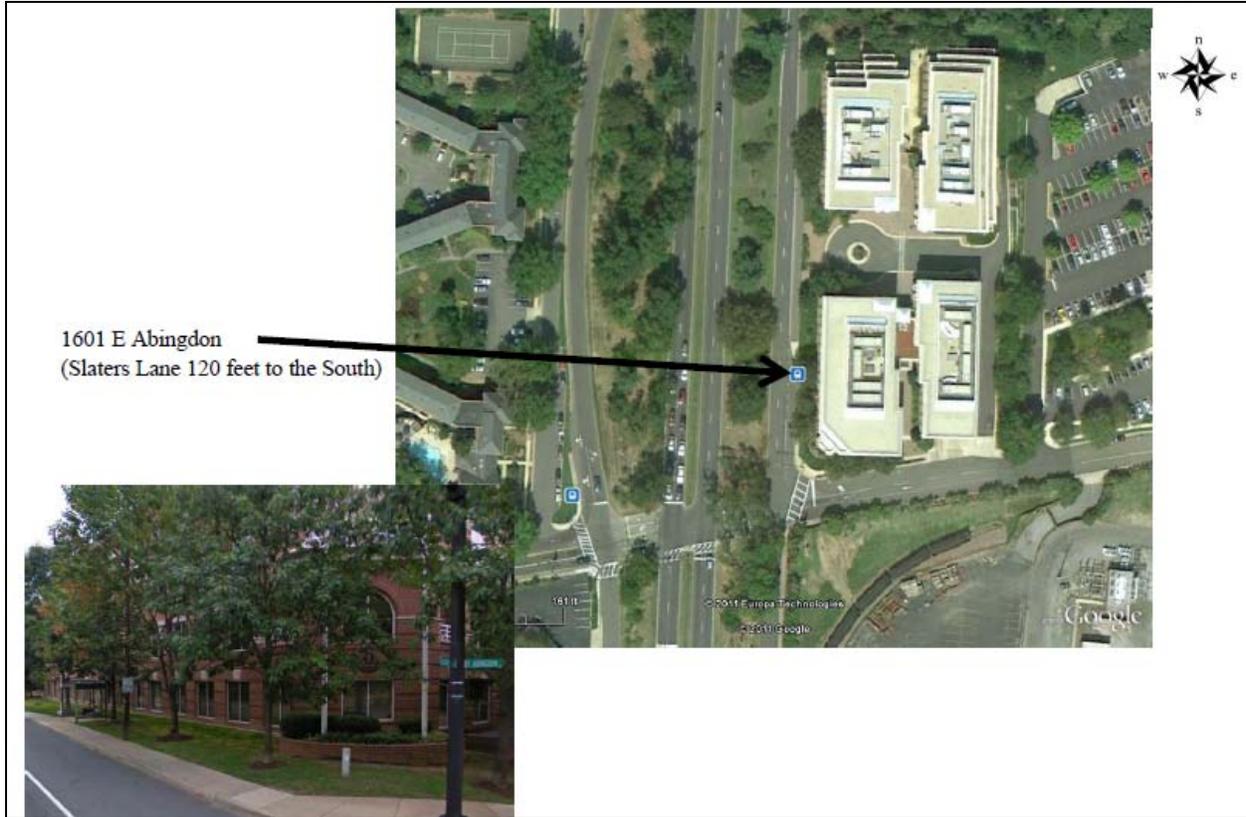


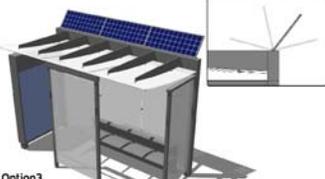
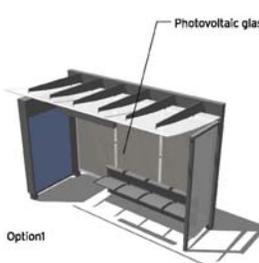
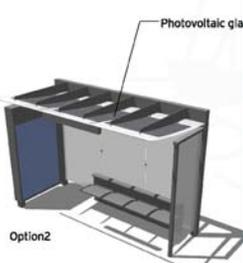
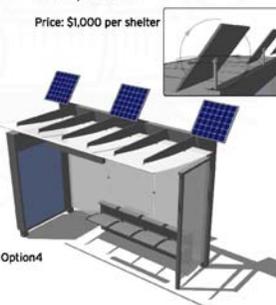
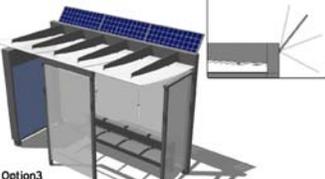
Figure 10. Location of shelter on 1600 block of East Abingdon Drive.



Figure 11. Proposed Alexandria bus shelter prototype.



Figure 12. Proposed bus shelter with solar panels.

<p>Option1: Photovoltaic glass Pythagoras Solar, USA</p>  <p>Size: 7' x 13.3' (3 pieces) Calculation: (Lowest direction and month)Power: 38 kwHr/month Daily generation: 38kwHr/365=1140wHr Daily needed: 130w * 6Hr=780wHr Price: \$11,000 per shelter</p>	<p>Option2: Photovoltaic glass Taiyo Kogyo Corporation, Japan</p>  <p>Size: 3.117' x 3.125' Calculation: 50W / piece 3 pieces: 150W Needed power: 130W Price: \$5,000 per shelter</p>	<p>Option3: Traditional solar panel HQRP KIT, USA</p> <p>Size: 1.5' x 3.95' Calculation: 85W / piece 3 pieces: 255W Needed power: 130W Price: \$1,500 per shelter</p>	 <p>Option3 Installation 1</p>	
 <p>Option1</p>	 <p>Option2</p>	<p>Option4: Traditional solar panel Kyocera Solar Inc, USA</p> <p>Size: 2.25' x 2.25' Calculation: 54W / piece 3 pieces: 162W Needed power: 130W Price: \$1,000 per shelter</p>  <p>Option4</p>	 <p>Option3 Installation 2</p>	
				 <p>Option3 Installation 3</p>

DECEMBER 14, 2010

BUS SHELTER DESIGN PROJECT
 90% Construction Document - Solar Energy Research



Figure 13. Solar Energy Research and Options with preferred option in red.



Figure 14. District of Columbia standard bus shelter.



Figure 15. Example of D.C. bus shelter *in situ*.



United States Department of the Interior

NATIONAL PARK SERVICE
George Washington Memorial Parkway
c/o Turkey Run Park
McLean, Virginia 22101

IN REPLY REFER TO
L3000R (GWMP)

September 29, 2011

City of Alexandria Board of Architectural Review
Old and Historic Alexandria District
Mr. Thomas Hulfish, III, Chairman
301 King Street, Room 2100
Alexandria, VA 22314

RE: BAR 2011-0263 / BAR 2011-0264, Demolition and replacement of Metrobus shelters

Dear Mr. Hulfish:

Alexandria Department of Planning and Zoning staff has requested comments from National Park Service (NPS), George Washington Memorial Parkway (GWMP) on the above cases coming before the City of Alexandria Board of Architectural Review, Old and Historic Alexandria District (BAR) on October 5, 2011. We have provided verbal feedback to city staff on August 9, 2011. This letter will confirm our position regarding new bus shelters on Washington Street.

We are committed to working with the BAR to maintain the spirit of our 1929 Agreement to keep the "dignity, purpose and memorial character" of the Mount Vernon Memorial Highway/Washington Street as it passes through Alexandria. We applaud the sleek, minimalist design proposed for the bus shelters, which should not present an adverse impact to the larger setting of Mount Vernon Memorial Highway/Washington Street.

Regarding signage for the shelters, we would request that it be limited to that required to provide transportation information. We would prefer to see this signage confined to the rear panel of the shelter versus the side panels, so as to present less of a visual intrusion to those travelling the Mount Vernon Memorial Highway/Washington Street.

Our biggest concern is in regard to solar panels. As presented to us in the August meeting, the more cost-effective solar panels rise above the roofline of the shelters. We feel this throws off the sleek design of the shelters and makes them more of a visual impact to travelers on Washington Street. If the photovoltaic glass options are not viable for these shelters, we would prefer for the City to pursue wired options to power all shelters on Washington Street. We would presume, given the amount of utilities in the area, that this would be a straight-forward procedure.

Finally, we know the current board shares our mutual concern to limit advertising and signage along Washington Street. We would like to state, for the record, that should future actions by the city move to place advertising, billboards, or other material of that nature on these bus shelters, we will vigorously oppose such actions.

If you have any questions regarding these comments, please contact Park Ranger Ben Helwig at 703-289-2515.

We appreciate the Board of Architectural Review and the Department of Planning and Zoning's attempts to contact us and abide by the terms of the 1929 Agreement. Please continue to keep us informed of future actions in the Washington Street corridor. We look forward to continuing a good relationship with the City of Alexandria.

Sincerely,

Dottie P. Marshall
Superintendent, George Washington Memorial Parkway