Carol A. Grissom Senior Objects Conservator

August 1, 2013

Mr. Shane L. Dettman, AICP Senior Urban Planner, Urban Design and Plan Review National Capital Planning Commission 401 9th Street, NW – Suite 500 Washington, DC 20004

Dear Shane:

I have looked over the materials in the latest more-than-700-page Eisenhower Memorial Tapestry Engineering and Technical Data Summary submitted July 8, 2013. Results for new laboratory testing of welds are included, and articles have been added on the stainless-steel United States Air Force Memorial (2006), the Korean War Veterans Memorial (1995), and passenger rail cars at Bombadier. Automated gas shielded flux core arc welding of the US Air Force Memorial and automated resistance welding at Bombadier may have application to the Eisenhower Memorial tapestry, but the cast stainless-steel of figures in the Korean War Veterans Memorial would seem to be less relevant. Sections on subjects more within my area of expertise (metal and sculpture conservation), however, are essentially unchanged from the previous submission.

Several items (now found in Section 5.0 Maintenance and Cleaning) that I noted in my letter of February 13, 2013, have still not been addressed in the current report. They include the following:

- 1) The likelihood is noted of "an addition of a protective plastic film after initial manufacturing of the tapestry [that] should protect the stainless steel from damage and soiling after fabrication and during installation." Is it plastic sheeting, or is it a sprayed-on coating? If it is a sprayed-on coating, how would it be removed? I ask this, because if a sprayed-on coating is used, any residues left on the tapestry might result in corrosion.
- 2) The amount and frequency of cleaning that will be required for the tapestry remains a concern, in so far as it is difficult to estimate in the absence of comparable items. Nevertheless, I would expect the tapestry to be regularly disfigured by guano from birds perched on the box beams at the tops of each tapestry or even on the tapestry itself, and I would expect that more than the proposed "simple wash-down on a yearly basis" would be required. I would also like to see details about the ease of removal of panels, should an area become damaged.
- 3) In the section on *General Cleaning*, "use of a high pressure spray is not recommended as it could potentially compromise the passivation of the Stainless Steel." This would

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seem to contradict testing done for removal of wind-blowne debris by Gale Associates. Although the amount of pressure was not specified, a pressure washer was required to remove both plastic bags and wet toilet paper during the testing. Moreover, the temptation to use a pressure washer to remove guano from the tapestry will be great.

4) Two lifts are shown for cleaning the tapestry, and there is no explanation as to why two lifts are required, since both reach heights of around 80 feet. Lift 1, an MLE T7535-45-Atrium Lift with outriggers, is inappropriate for use at the Eisenhower Memorial. MLE (Man & Material Lift Engineering, 414-486-1760) maintains that the lift should only be used indoors on flat hard surfaces. Lift 2, an 860 SJ (the Genie lift in the key?), is illustrated in use on the south tapestry in a swale, a depression in the terrain near trees. I would like to know if it is safe to use the lift on soft ground in a swale.

Since I understand that the National Park Service (NPS) is to provide maintenance for the tapestry, does it own a lift that will reach to the top of the tapestry or will it have to rent one? Does the NPS bear costs associated with renting or purchasing a lift or lifts?

I cede authority to NIST's Tim Foecke and other corrosion scientists in the matter of weld corrosion, but, like him, I look forward to seeing a sample of robotically welded tapestry. Only then can the feasibility and durability of the proposed tapestry be evaluated with confidence.

Sincerely,