NCPC File No. 5855

NCPC
NATIONAL CAPITAL PLANNING COMMISSION

GODDARD SPACE FLIGHT CENTER
REPLACEMENT ANTENNA
Greenbelt, Prince George's County, Maryland

Delegated Action of the Executive Director
April 28, 2005

Pursuant to delegations of authority adopted by the Commission on October 3, 1996, I approve the preliminary and final site and building plans for a replacement, receive-only, 7.2 meter (23 ½ feet) C-Band satellite antenna at the Goddard Space Flight Center, as depicted on NCPC Map File No. 3212.00(38.30)-41576.

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The National Aeronautics and Space Administration's (NASA) Goddard Space Flight Center has submitted an antenna construction design for an operational antenna which will replace an older, larger, and outdated antenna dish. The new antenna will utilize the existing small building south of its proposed location for housing the necessary cable and electronic equipment room. A new wave guide cabling system would be developed from the new antenna to the existing brick building, with only minor building modifications (additional cable openings).

The new antenna is a smaller diameter dish-type, receive-only, antenna that will replace an older large 11 meter (36 feet) dish antenna that has become obsolete for NASA purposes. The proposed design requires the construction of a 16.5 feet by 16.5 feet concrete pad contiguous to an existing road at the Goddard Space Flight Center (GSFC) antenna Earth Station area 600, near Building 25. This is the GSFC land area where most of the large existing satellite dish antennas reside.

No additional employees or other facilities are required with the new antenna except for a small liquid propane gas tank for emergency power purposes, and the new wave guide rack and support system mentioned earlier. The planned smaller dish antenna operation will transfer some of the current signal functions of the 11 meter dish to another antenna at the site, while the new dish antenna would be fully dedicated to video signal processing at the same existing frequencies of the 11 meter dish.

The exterior appearance of the new antenna is much smaller than the antenna it replaces. The composite material and metal support system of the dish will be painted white and the LPG tank would be painted white also. NASA has certified the new antenna meets all Federal Communications Commission (FCC) operational requirements and the manufacturer guarantees antenna conformance with FCC requirements. The operating vendor will perform industry standard performance tests to verify antenna compliance at the time of initial start-up.

Staff has evaluated the information from the NASA project coordinators and has determined the antenna adheres to the NCPC Categorical Exclusion requirements for NEPA purposes. Additionally, NASA has reviewed its data from the master plan, which was commented on by the Maryland Historical Trust in August 2002, determining the existing ground Earth Station area 600 has no effect or impact on any historic resources at the GSFC pursuant to Section 106 of the National Historic Preservation Act. Goddard has one historic property listed in the National Register of Historic Places: the Spacecraft Magnetic Testing Facility, Building 305, which has also been designated a National Historic Landmark for its national significance to the space program. This facility is far removed visually from the Earth Station area 600 vicinity, at over 3800 feet east of the antenna site.

Staff has found no major issues with the proposal. The planned antenna is a receive-only antenna and is situated in a location removed from any visible public viewshed. The project is consistent with the Commission's delegated project review criteria for receive-only antennas and would have no adverse impact on land uses or environmental resources of the general site.

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Patricia E. Gallagher, AICP
Executive Director