National Capital Planning Commission

Kennedy Center Expansion Project

2700 F Street NW, Washington DC

Approval of Preliminary and Final Building Plans

Kennedy Center for the Performing Arts

December 6, 2018 | File: 7523

Project Summary

Commission Meeting Date: December 6, 2018

NCPC Review Authority: 40 U.S.C. § 8722(b)(1) and (d)

Applicant Request: Approval of Preliminary and Final Building Plans

Session: Delegated Action

NCPC Review Officer: Carlton Hart

NCPC File Number: 7523

Project Summary:

The Kennedy Center Expansion project (now known as The REACH), was approved by the NCPC on July 9, 2015, has been under construction since October 2015 and is scheduled for completion in the spring of 2019.

Following considerable study and engineering, the Kennedy Center's architects are now proposing the addition of an advanced lightning protection system that will provide coverage for both the new pavilion structures and the surrounding landscape without negatively impacting the architectural integrity of the Steven Holl design.

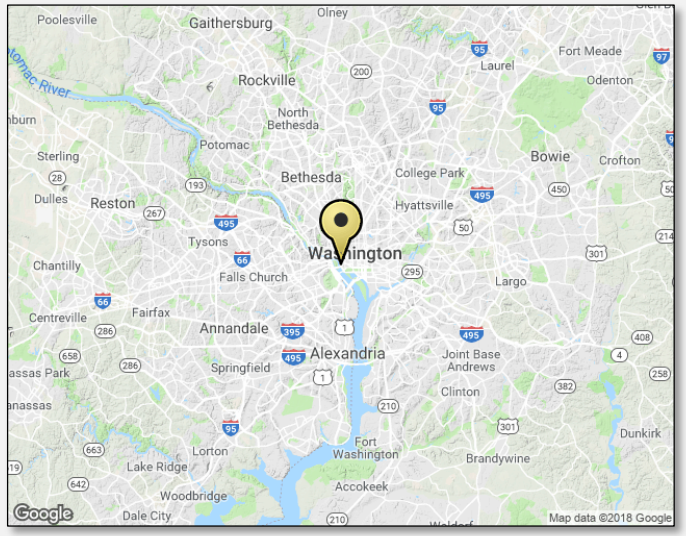
The purpose of the proposed project is to provide lightning protection to the new structures of the REACH, as well as the landscaped spaces and plazas surrounding them. The Kennedy Center anticipates using these open spaces for outdoor events, concerts and education activities, but will also welcome the public to enjoy the park-like setting whenever possible. While codes do not require such a comprehensive system, the Kennedy Center believes it is highly desirable to protect the new buildings and users of the open spaces while at the same time preserving the clean, uncluttered geometric shapes of Steven Holl's iconic design. A traditional Franklin rod system would only protect the buildings and would require dozens of spiked rods to be placed around the roof lines of each of the three pavilions, distracting from the architecture.

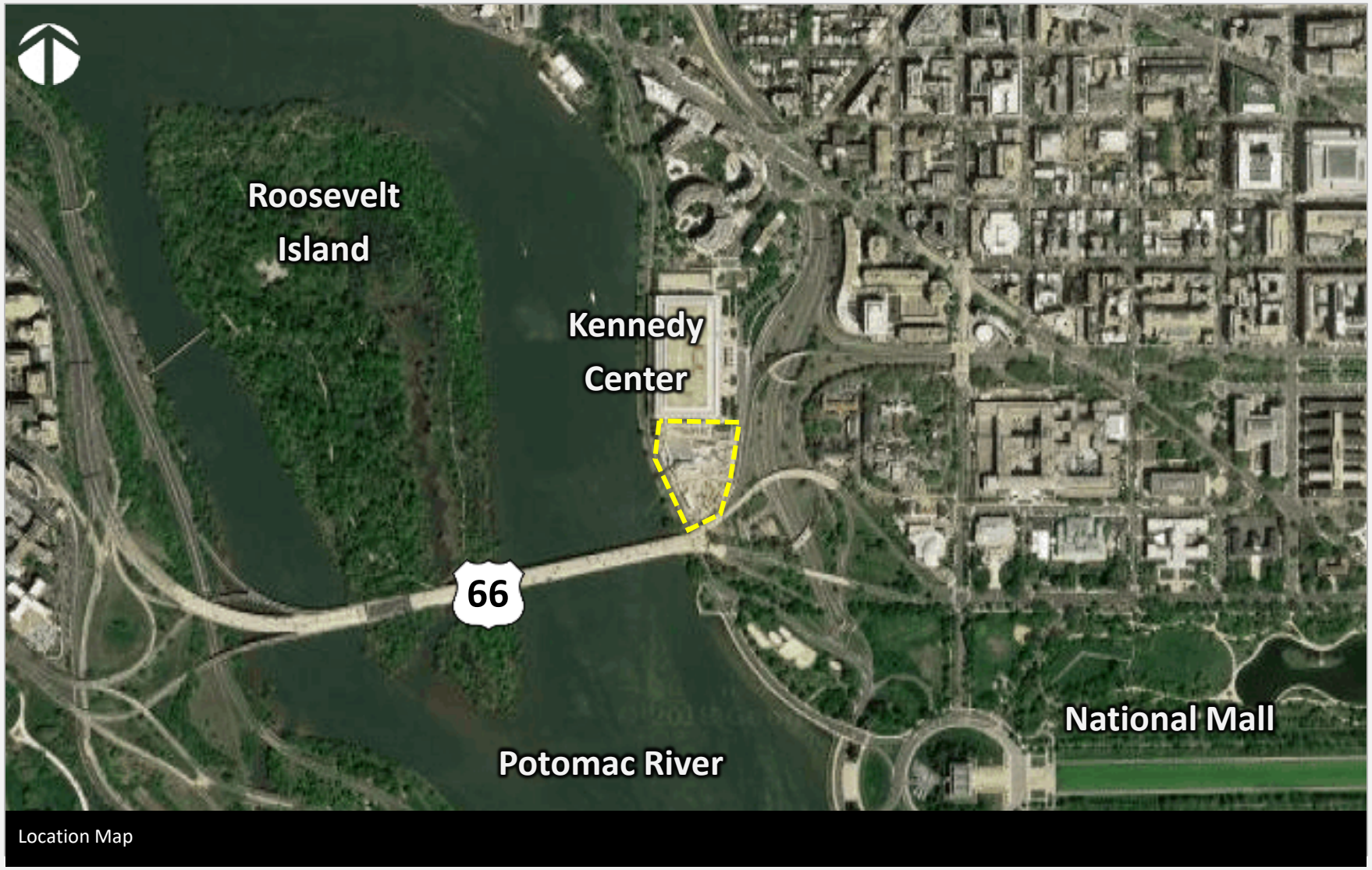
Project Summary

The proposed system utilizes early streamer emission technology which, when conditions are right for potential lightning strikes, produces ionization from special terminals mounted on masts. These terminals attract lightning and safely transmit its energy into the earth, but unlike traditional building-mounted Franklin rod systems, they provide coverage for the entire campus including lawns and open spaces, and not just the buildings. Aesthetically, these masts will negate the installation of dozens of individual spiked rods around the perimeter of each pavilion, preserving the clean lines and geometry of the REACH design.

In order to provide maximum coverage with minimal visual impact, the engineering of the system resulted in the specification of two distinct masts. One will be 10’ tall, made of milled aluminum tapered from 4” at the base to 3” at the top and mounted on the upper roof of the Kennedy Center’s original building providing coverage to the north end of the REACH, including the plaza and upper lawn. The second mast, made of galvanized steel, will be mounted to the base of a new retaining wall at the south end of the REACH site, within the new grove of gingko trees. It will be 59’ tall from the finished grade of the gingko grove and will be 6” in diameter at the base, tapering to 3.5” at the top. This mast will protect the bulk of the REACH campus including the lower lawn and the two southernmost pavilions, and is placed along the Roosevelt bridge access to blend in with the existing signs and lampposts.

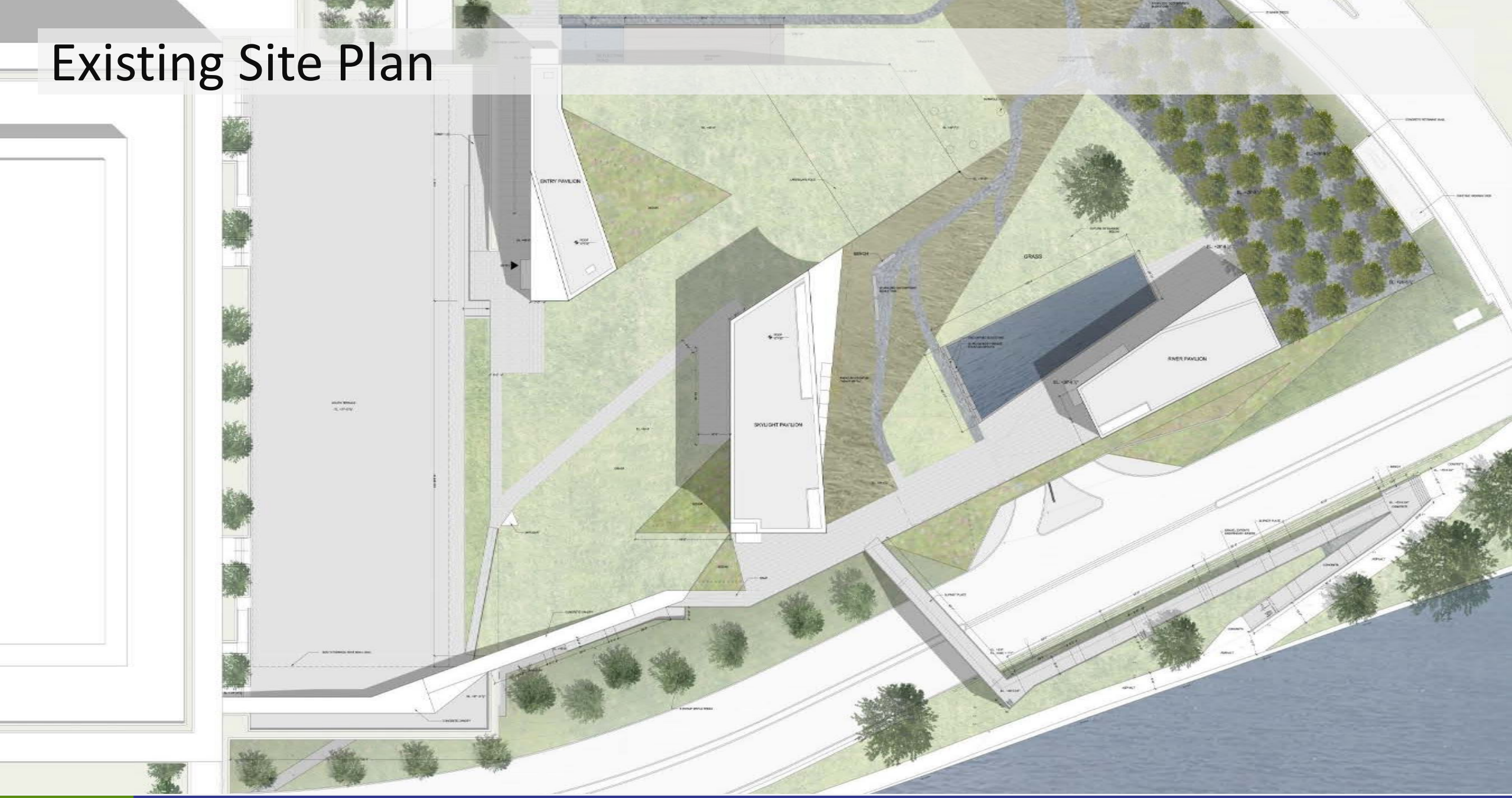
Site Location



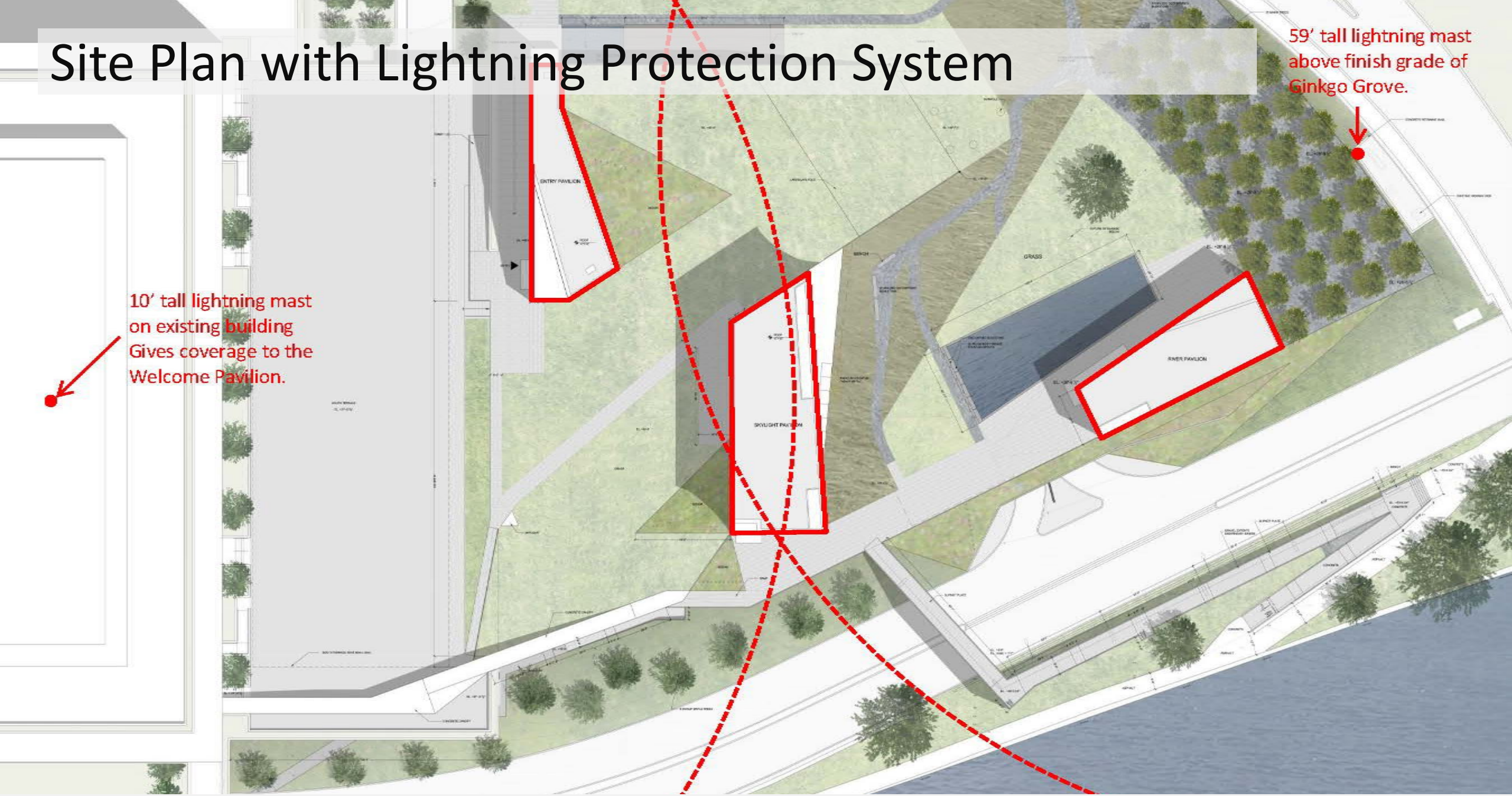


Location Map

Existing Site Plan

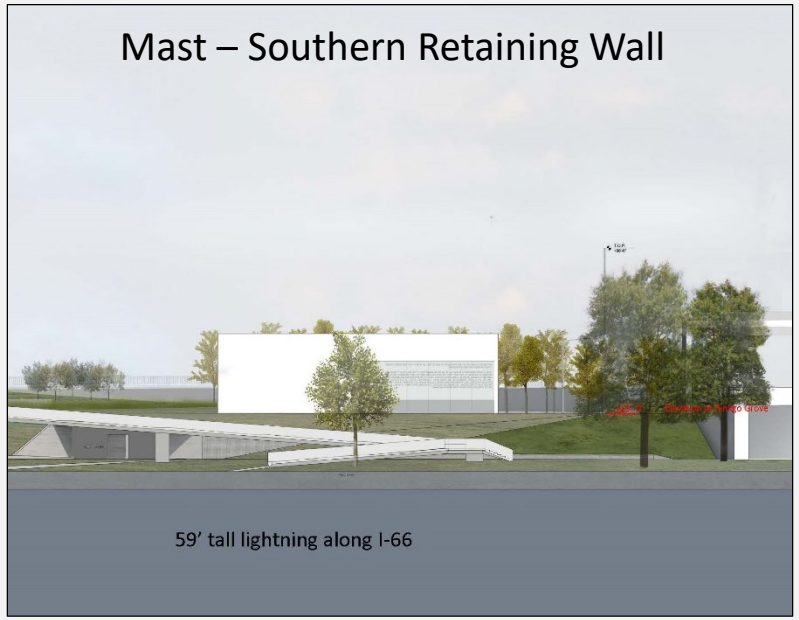


Site Plan with Lightning Protection System



Elevations

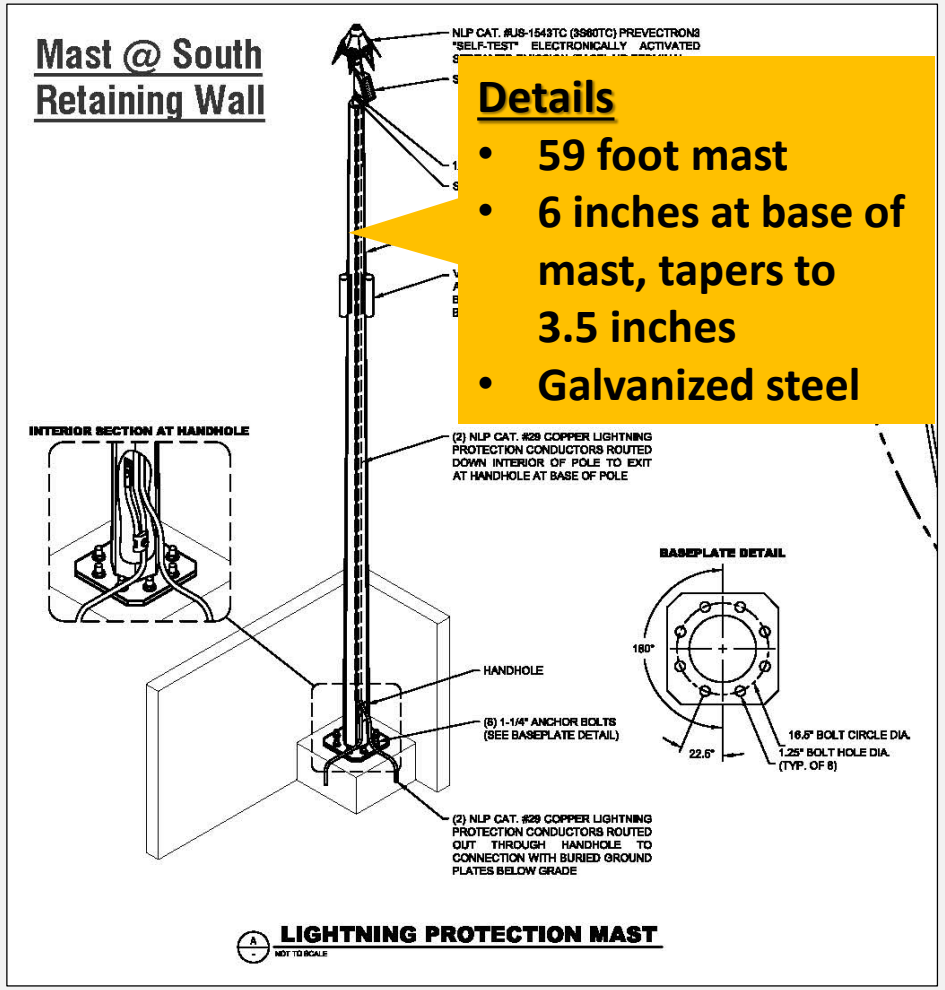

Mast – Existing Roof
10’ tall lightning mast on existing building


Mast – Southern Retaining Wall
59’ tall lightning along I-66

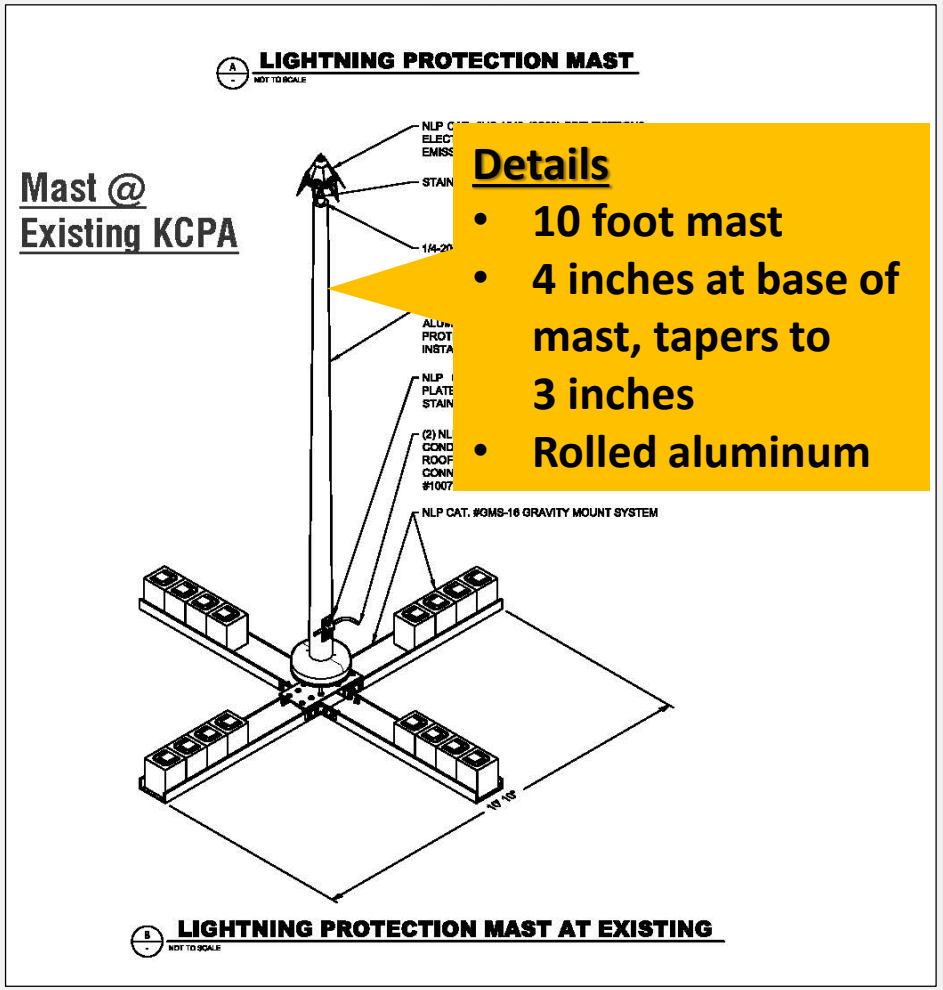

Site Elevation
10’ tall lightning mast on existing building.
109’
99’
80’
44’
59’ tall lightning mast along I-66.
59’
29’

Proposed Lightning Rod Photo Simulation

Mast Details



Mast - South Retaining Wall



Mast - Existing Kennedy Center Roof