

JUNE 29, 2006 POSTING

PRELIMINARY DRAFT FOR DISCUSSION ONLY

**The Port Authority of New York and New Jersey
Analysis of Potential Cumulative Effects on the WTC Site Historic Resource**

Tower Footprint Areas (Restatement)

INTRODUCTION

The following additional preliminary information and analysis regarding the World Trade Center (WTC) Site has been prepared by The Port Authority of New York and New Jersey (PANYNJ), pursuant to Section 1.G. of its Memorandum of Agreement (MOA) for the WTC Transportation Hub project. In particular, this posting updates the initial posting of February 3, 2006 regarding potential cumulative effects on the Tower footprint areas and the perimeter column bases; and incorporates responses and clarifications reflecting comments received from Consulting Parties that were primarily focused on the cumulative effects analysis process, and the Tower footprint areas. This posting also provides an update on various actions taken by the PANYNJ and the Lower Manhattan Development Corporation (LMDC) to enhance the analysis and communication of cumulative effects. The input and comments from the Consulting Parties are appreciated as the Port Authority, along with the other MOA signatories¹, are further developing and improving this aspect of the Section 106 consultation process regarding cumulative effects.

CUMULATIVE EFFECTS ANALYSIS

There are separate Section 106 agreements and processes involving the WTC site historic resource that are administered by the PANYNJ (for the WTC Transportation Hub, and the WTC Vehicular Security Center projects), the LMDC (for the WTC Memorial and Redevelopment Plan, including the Memorial and Memorial Museum projects), and the New York State Department of Transportation (for the Route 9A project). These projects are advancing in phases (including discrete contract packages), that are also at various levels of design completion and

¹ The WTC Transportation Hub [Memorandum of Agreement](#) (MOA) was executed by the Federal Transit Administration, PANYNJ, NY State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (ACHP).

Section 106 consultation at any given time. The WTC Transportation Hub MOA provides for a cumulative effects analysis in order to assess conditions resulting from ongoing project design and construction by the WTC Transportation Hub project, together with other WTC site projects, that may cause irreversible effects on components of the WTC site that have been specifically addressed in the MOA and other executed Section 106 agreements associated with the WTC Site.

The WTC Transportation Hub MOA stipulates that the PANYNJ shall request preliminary and pre-final design information from other project sponsors, and shall prepare cumulative effects analyses based on the available design information. The PANYNJ then provides the cumulative effects analysis to Consulting Parties for information and comment. The MOA stipulates that the PANYNJ would (i) forward relevant comments to project sponsors administering their own separate Section 106 processes, and (ii) engage consulting parties in discussions to resolve the comments. The PANYNJ's cumulative effects analysis can be viewed as a further *input* to the Section 106 processes for each project – the cumulative effects analysis is not meant to duplicate, replace, or override the distinct Section 106 processes, findings, and commitments by each project sponsor. Any further project design considerations that may arise from the PANYNJ's cumulative effects analyses, can only be provided by each project sponsor for their own projects, and not for other projects. The PANYNJ may only implement mitigations relating to such cumulative effects within the WTC Transportation Hub project area, and not for projects sponsored by others.

After comments were received on the initial preliminary posting of February 3, 2006, there have been several actions relating to the cumulative effects analysis:

- The PANYNJ forwarded relevant comments on the cumulative effects analysis to LMDC
- The PANYNJ requested project design and construction schedules from LMDC and Memorial Foundation to better coordinate timing of preparation and posting of the cumulative effects analyses
- The LMDC transmitted information and diagrams to the Consulting Parties on March 9, 2006 to clarify that only site preparation work would be performed in the Tower footprint areas

- The PANYNJ decided to eliminate the temporary Track 6 initially planned for the WTC Transportation Hub project, that would reduce the additional temporary impacts on the North and South Tower footprint areas
- In response to some of the comments on the initial cumulative effects posting, the PANYNJ and Federal Transit Administration arranged a meeting with the LMDC and the LMEPF on March 29, 2006 to review the Memorial and Memorial Museum schematic design, along with a scale model of that design
- The LMDC convened a meeting with Section 106 Consulting Parties on April 5, 2006 to review the Memorial and Memorial Museum schematic design, along with a scale model of that design

TOWER FOOTPRINT AREAS (Restatement)

The initial preliminary cumulative effects posting of February 3, 2006 focused on detailed measurements of the Tower footprint areas, based on the preliminary construction documents and packages that were available for review. While these measurements were technically accurate with respect to the impact based on construction packages, they did not provide a more comprehensive view of potential impacts on the Tower footprint areas beyond the construction packages. The following is a restatement of the potential cumulative effects on the Tower Footprint areas that provides a higher level perspective more appropriate for this analysis.

Based on currently available design plans, the only projects expected to occupy a portion of the Tower footprint areas are the WTC Memorial and Memorial Museum, and the WTC Transportation Hub projects. Other WTC Site projects that are advancing, such as the Freedom Tower, the Chiller Plant, and work on the east side of the WTC Site, are not expected to have any permanent effects on the Tower footprint areas². Specific project design details for the WTC Memorial and Memorial Museum projects and the WTC Transportation Hub project are provided as part of their respective Section 106 processes and communications (e.g., meetings, postings).

² The project sponsors have also noted any non-cumulative effects, such as temporary effects, on WTC Site elements as part of their Section 106 communications.

The following calculations are based on the current space allocations between the WTC Memorial and Memorial Museum project, and the WTC Transportation Hub project, from a total project scope perspective. The calculations provided in the February 3 posting, were based on information from construction contract packages (specifically foundations and footings) – that detailed the impacts of the discrete packages, but only represented a limited portion of the overall projects. In particular, the calculations for the Memorial and Memorial Museum projects are now restated in this posting from the broader perspective of area occupancy, that is better suited for consideration of cumulative effects.

North Tower (see [Fig. 1](#))

There is approximately 43,700 square feet of North Tower Footprint area, defined by the perimeter column remnants. Upon the installation of Platform D and associated structural work, the WTC Transportation Hub project will occupy and potentially affect less than 4 percent (or approximately 1,400 feet) of this area. The Memorial and Memorial Museum project will occupy and potentially affect the remaining area of more than 96% (or approximately 42,300 feet). Both infrastructure and program spaces for Memorial and Memorial Museum project will occupy this area.

South Tower (see [Fig. 1](#))

There is approximately 43,700 square feet of South Tower Footprint area, defined by the perimeter column remnants, including approximately 21,000 square feet (or approximately 48%), that is within the pre-9/11 PATH right of way. Upon the installation of Platform D and associated structural work, the WTC Transportation Hub project will occupy and potentially affect an additional 3 percent (or approximately 1,300 square feet) of the total South Tower Footprint area. The Memorial and Memorial Museum project will occupy and potentially affect the remaining area of approximately 49% (or approximately 21,400 square feet). Both infrastructure and program spaces for the Memorial and Memorial Museum project will occupy this area.

TOWER PERIMETER COLUMN BASES

The cumulative analysis of the Tower perimeter column bases affected by the projects, currently remains the same as initially posted on February 3, 2006.

CONCLUSION

Based on this cumulative effects analysis and as requested by NY SHPO, the PANYNJ will continue its consideration of potential additional mitigations in the WTC Transportation Hub project, pursuant to the PATH MOA and Section 106 process. The PANYNJ has been continuously considering comments to its Section 106 postings, and additional mitigations beyond those already outlined in the MOA. These considerations included the decision to eliminate Track 6.

There is not yet sufficiently developed project design information regarding other features at the WTC Site, such as the bathtub slurry walls, to perform the complete analysis of all cumulative effects at this time. As additional project information and schematic drawings are developed, additional cumulative analyses and updates will be performed. The project design information used for this analysis is preliminary and remains subject to further modification by the project sponsors. In particular, LMDC continues its design development for the Memorial and Memorial Museum projects in consultation with NY SHPO, ACHP, and its Section 106 Consulting Parties. While that effort may result in modifications to the design documents previously provided to the PANYNJ, the Tower footprint areas that will be occupied by the Memorial and cultural components of LMDC's WTC Memorial and Redevelopment Plan, are not expected to be diminished.