

Fact Sheet

Major Excavation and Structural Work

Proposals involving major excavation and structural work, especially at or adjacent to historic 19th century buildings, warrant extreme caution and are subject to **enhanced engineering review**. The Landmarks Preservation Commission (LPC) requires additional application materials prepared by qualified professionals to demonstrate the work can be done safely and without jeopardizing the structural integrity or architectural elements of the building and surrounding buildings.

The scopes of work that are subject to enhanced engineering review include facade reconstructions, excavation and underpinning, and other interior and exterior structural interventions, on their own or related to new additions or new buildings.

Owners are responsible for, and should be fully committed to protecting, the landmarked building(s) impacted by their proposed work and should be aware of these heightened application requirements and the costs and scheduling issues that may be associated with them. Whenever possible, LPC recommends taking a conservative approach that minimizes risk (e.g., “benching” to lower a cellar floor rather than underpinning the foundation), which may call for scaling back the initial proposal.

LPC Regulation

LPC Rules address and set forth requirements for some excavation and structural work that can be approved at staff level, including

- [Repair, Restoration, Replacement and Re-Creation of Building Facades and Related Exterior Elements](#)
- [Additions: Rooftop and Rear Yard Additions or Enlargements](#)
- [Excavation](#)

Proposals that do not meet LPC Rules require review by the full Commission at a public hearing. While applicants should become familiar with the Rules before filing an application, and can make adjustments to become eligible for staff level review if feasible, certain scopes of work will almost always require a Public Hearing, including:

- Reconstructing all or most of a primary façade (LPC’s consulting engineer will peer review the application and advise LPC staff if it can be stabilized and repaired in place)
- Removing all or most of a party wall (even if entirely interior)

Key Considerations:

- Unreinforced masonry buildings constructed in the early- to mid-19th century, such as rowhouses and tenements, have often developed structural weaknesses over time that need to be addressed early in the planning of a project.
- It is very important that the facades of these buildings are in sound condition, as determined by an onsite inspection and assessment that may include probes, before approved work proceeds.
- If the facade is not in sound condition, necessary repairs must be made prior to beginning the proposed structural intervention or in proper sequence as planned by qualified professionals.
- Extra precautions may be necessary in small buildings of different types and ages, including wood-framed buildings and buildings with unreinforced masonry foundations.

- Excavating an additional below-grade floor or under the rear yard for a below-grade addition
- Constructing new buildings, or constructing both rooftop and rear yard additions

Additionally, certain scopes of work may be approved at staff level, but will require submission of additional application materials, including but not limited to:

- Reconstructing or removing all or most of a secondary façade (the applicant's structural engineer must determine that it cannot be stabilized and repaired in place), including in conjunction with constructing an addition that meets the Rules
- Removing all interior floors and load-bearing partitions
- Excavating with underpinning

LPC Review and Referrals

For proposals with major excavation and structural work, LPC staff will require additional application materials for review, and in some situations will initiate enhanced engineering review of these documents with referrals to LPC's consulting structural engineer and/or the NYC Department of Buildings (DOB). LPC staff will make this determination and notify the applicant early in the process.

The enhanced engineering review may require changes to the design, specifications, and/or means and methods for undertaking the proposed work for LPC to complete its review. These application materials should be submitted, at least in draft form, before the proposal is scheduled for a public hearing, if applicable, and must always be fully developed and submitted prior to issuance of a LPC permit.

In addition, projects subject to enhanced engineering review by DOB must start a filing and submit relevant filing drawings (e.g., Foundation, Support of Excavation, Demolition, Structural, Architectural, etc.) to DOB for review, and provide LPC staff with evidence of the DOB filing. Having only a DOB job number in pre-filing status with no filing drawings submitted is not acceptable and will delay review of the project.

Application Materials for Enhanced Engineering Review

To avoid delays, owners, architects, and other professionals involved with the project should review the following application materials in advance of filing the application and be prepared to provide them to LPC staff, as applicable:

- **Structural engineer’s conditions report and protection plan:** addresses the building’s age and original construction type, and the condition of the foundations, interior framing, and all facades; includes photos of existing conditions and probes
- **Site survey:** identifies foundation at the building and adjoining buildings
- **Architectural (A), Structural (S), Demolition (DM), and Foundation (FO) filing drawings:** fully describes the work and accounts for any necessary shoring/bracing and permanent repairs to the foundations, interior framing, and facades to remain
- **Support of Excavation (SOE) filing drawings**
- **Monitoring plan:** meet or exceed the requirements of TPPN 10/88

Additionally, LPC may require the work to pause to conduct site visits or review the engineer’s sign-off at certain stages of construction once the work has begun (e.g., after shoring and bracing has been installed but prior to excavation or demolition commencing). Owners and consulting parties **MUST** notify LPC of any changes to the approved scope of work (e.g., requesting to reconstruct a façade instead of retaining it) and file for an amendment with LPC prior to engaging in any modified work.