



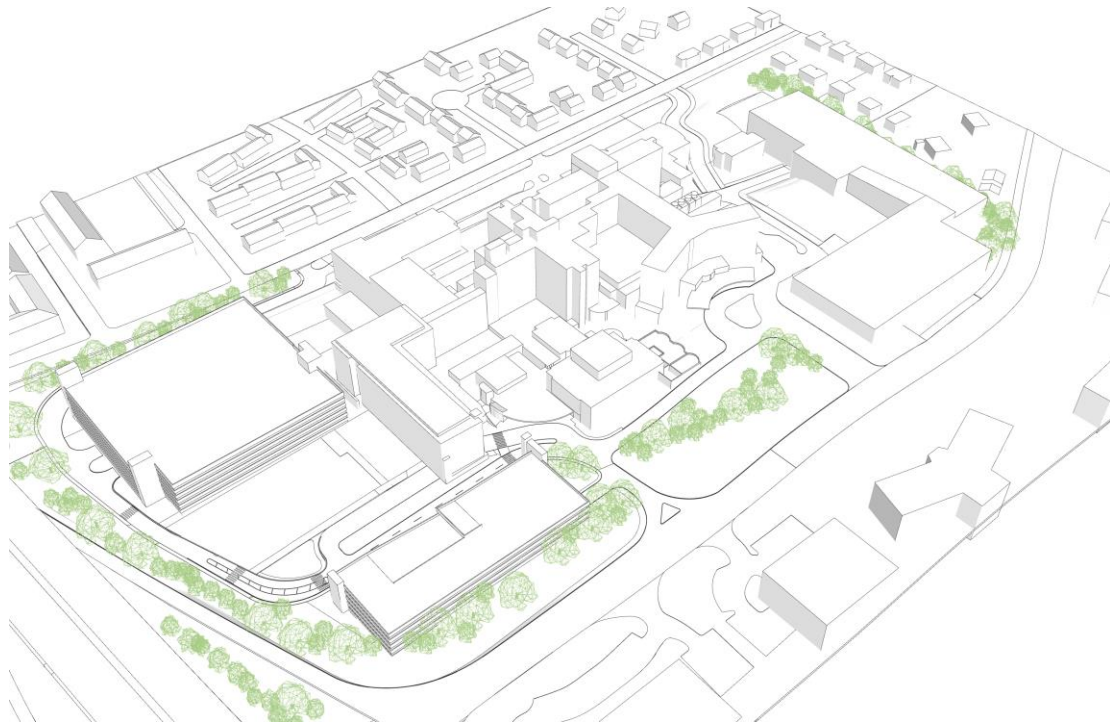
Morristown Medical Center **EXPANSION**

Solar Shadow Study | 18 November 2024

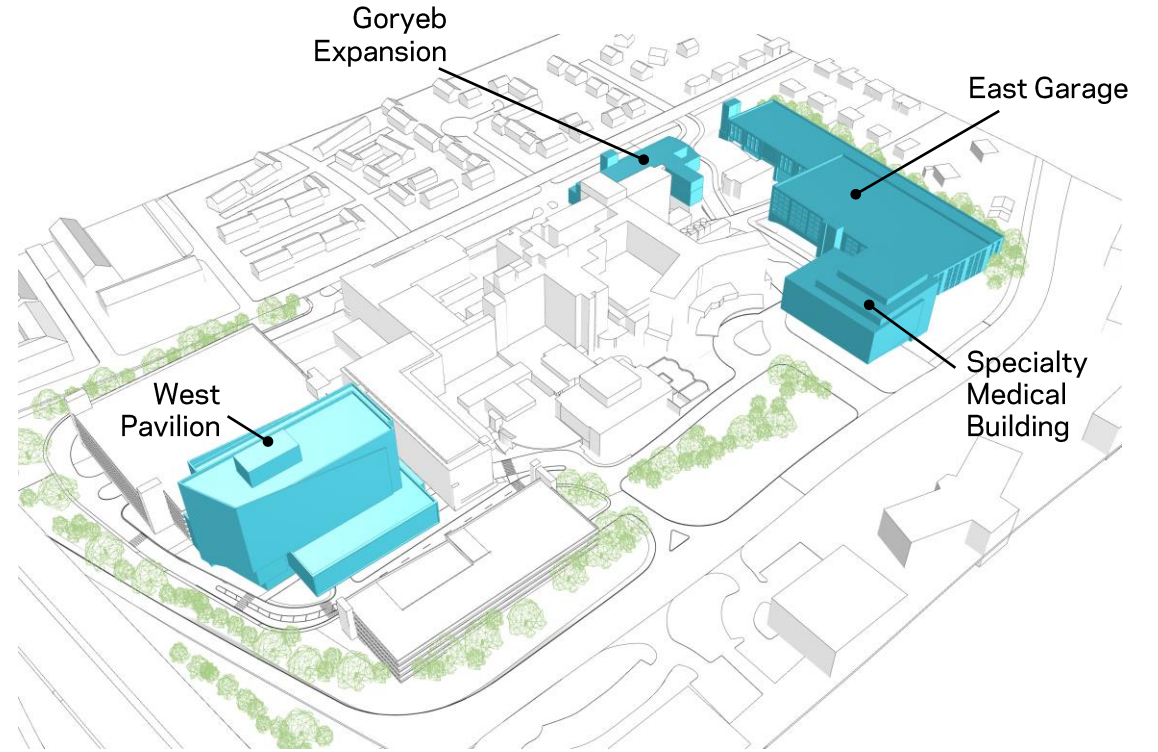


Shadow Study

Proposed Campus Expansion



EXISTING CAMPUS



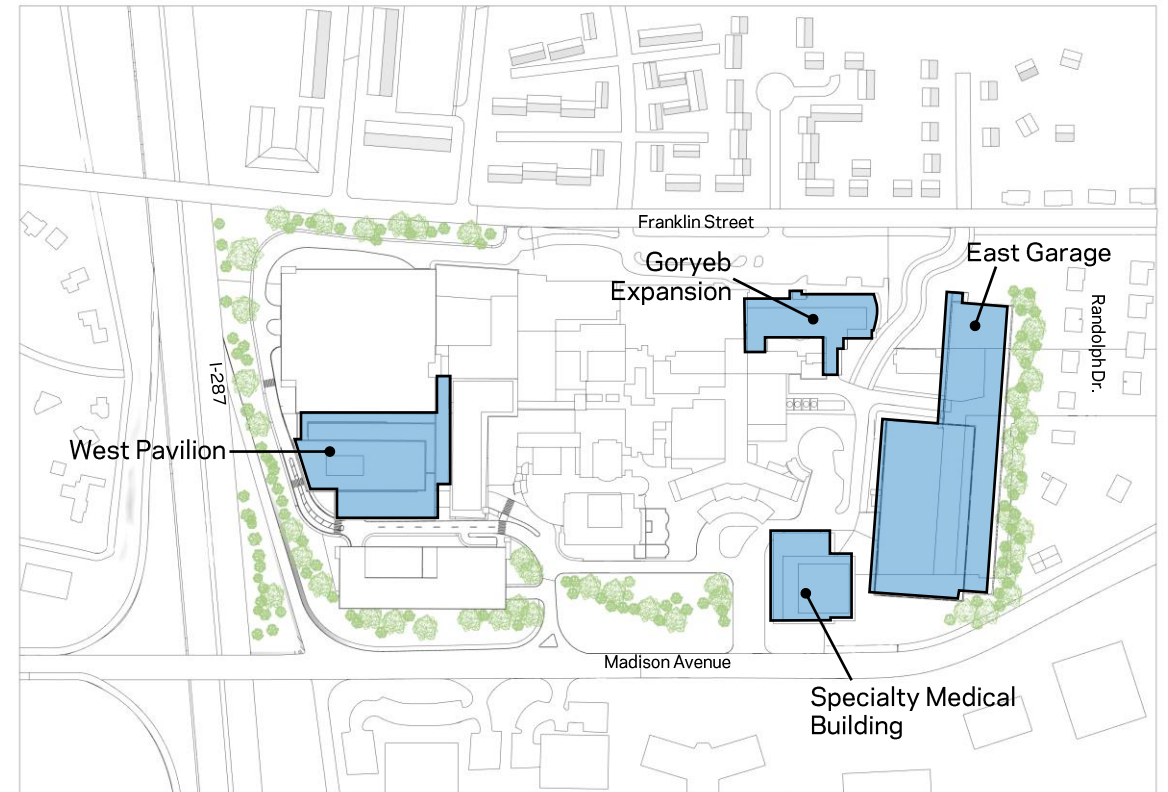
PROPOSED NEW STRUCTURES

Shadow Study

Methodology

The analysis dates that were chosen for this study are the representative results for shadow and solar hours that are typically used by building scientists and analysts to identify year-round conditions.

- The Spring and Fall months will experience the same shadow and make up the majority shadow conditions for the year.
- The Summer shadows (June to August) will always be shorter than the shadows in the Spring/Fall causing no excessive shading.
- The Winter months (largely December to February) will cast long shadows from the proposed construction during the morning hours.
- The December 21st date marks the Winter Solstice therefore simulating the longest shadows of the year. Apart from that, the following key dates and times are helpful to mention for the homes to the west of the West Pavilion:
 - November 1st to 15th, homes will be shaded only until 9am.
 - November 15th to December 1st, homes will experience shadow until 9:15am.
 - December 1st to February 15th, homes will be shaded only until 9:30am.
 - At no time of the year will there be shadow over those homes past 9:30am.



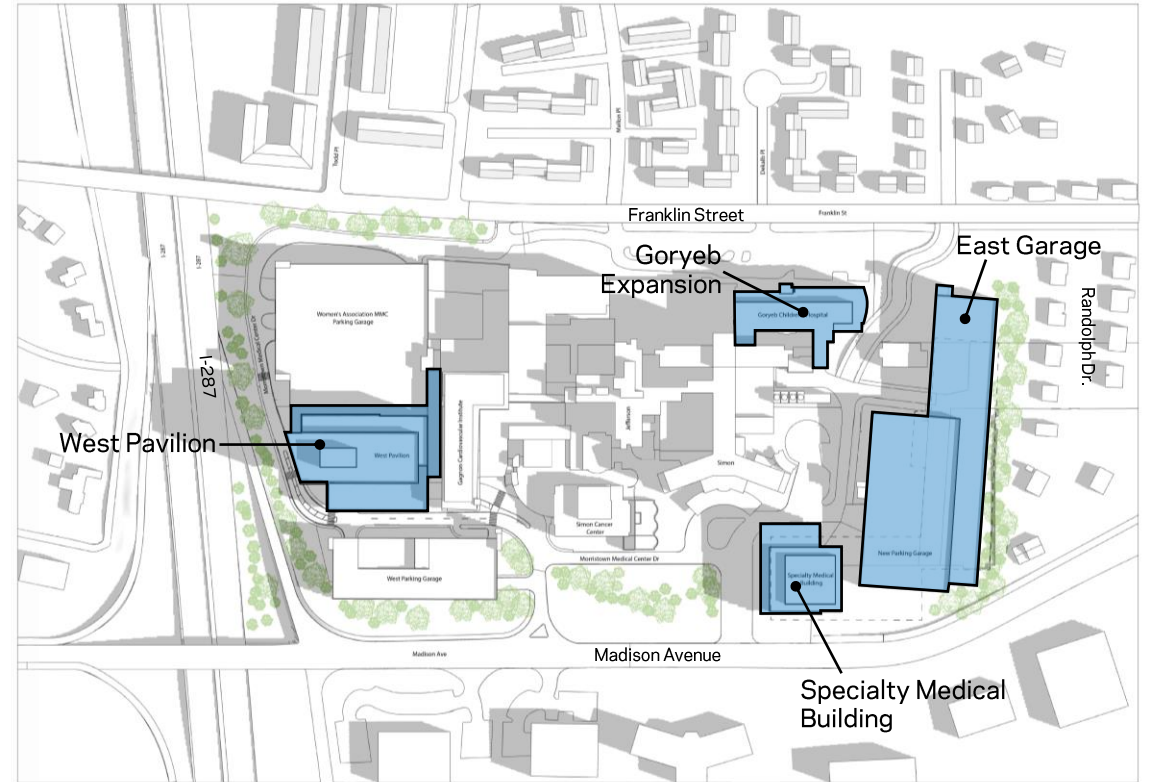
Proposed Campus Buildings

Shadow Study

Spring/Fall Equinox | 9AM Shadow



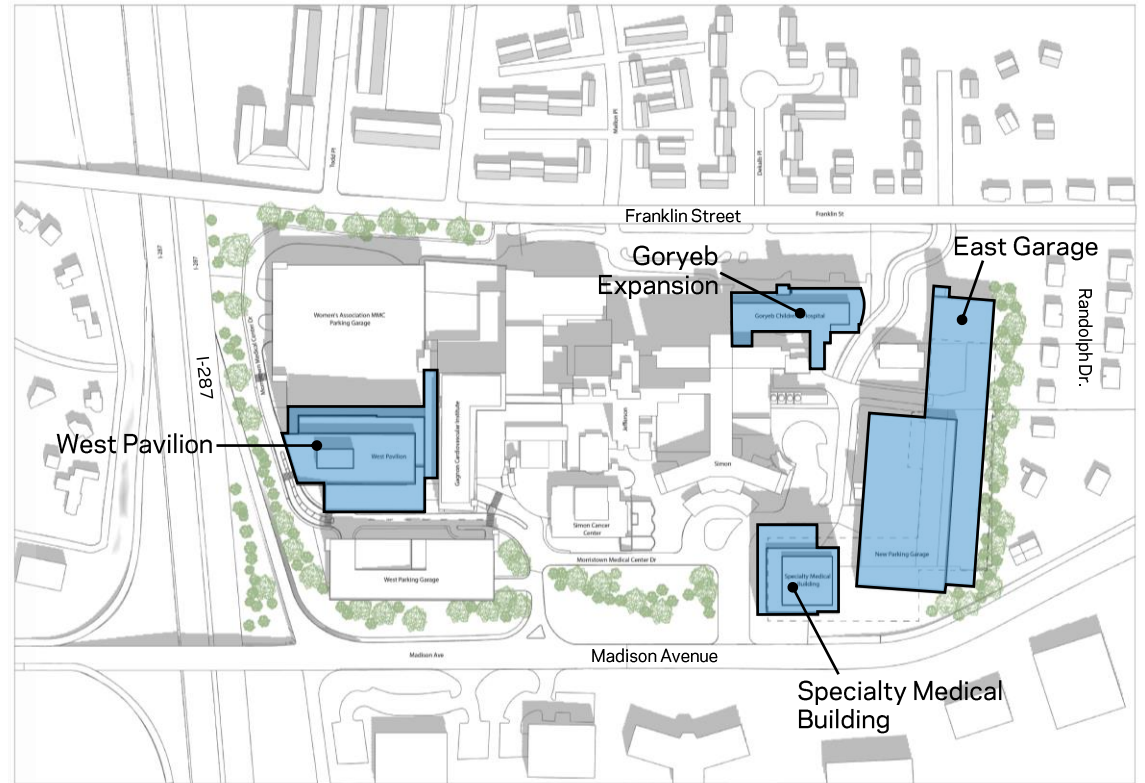
Existing Campus Shadows



Proposed Campus Shadows

Shadow Study

Spring/Fall Equinox | 12PM Shadow



Existing Campus Shadows

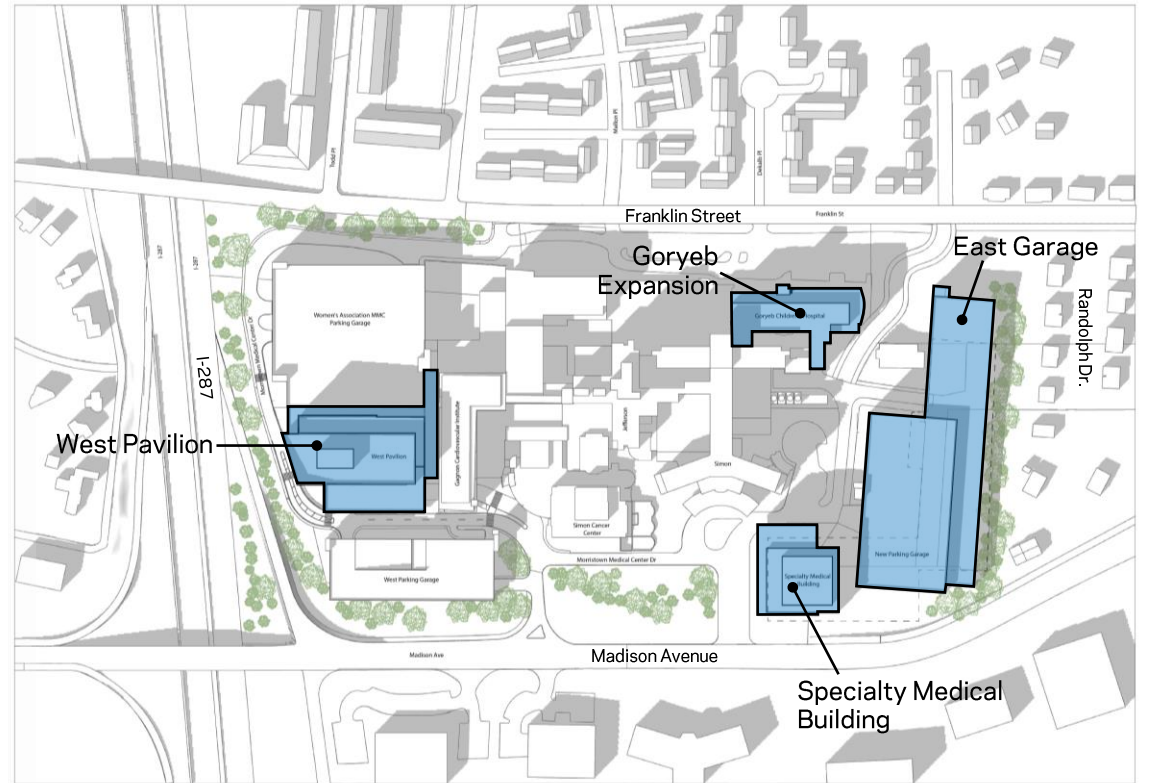
Proposed Campus Shadows

Shadow Study

Spring/Fall Equinox | 3PM Shadow



Existing Campus Shadows



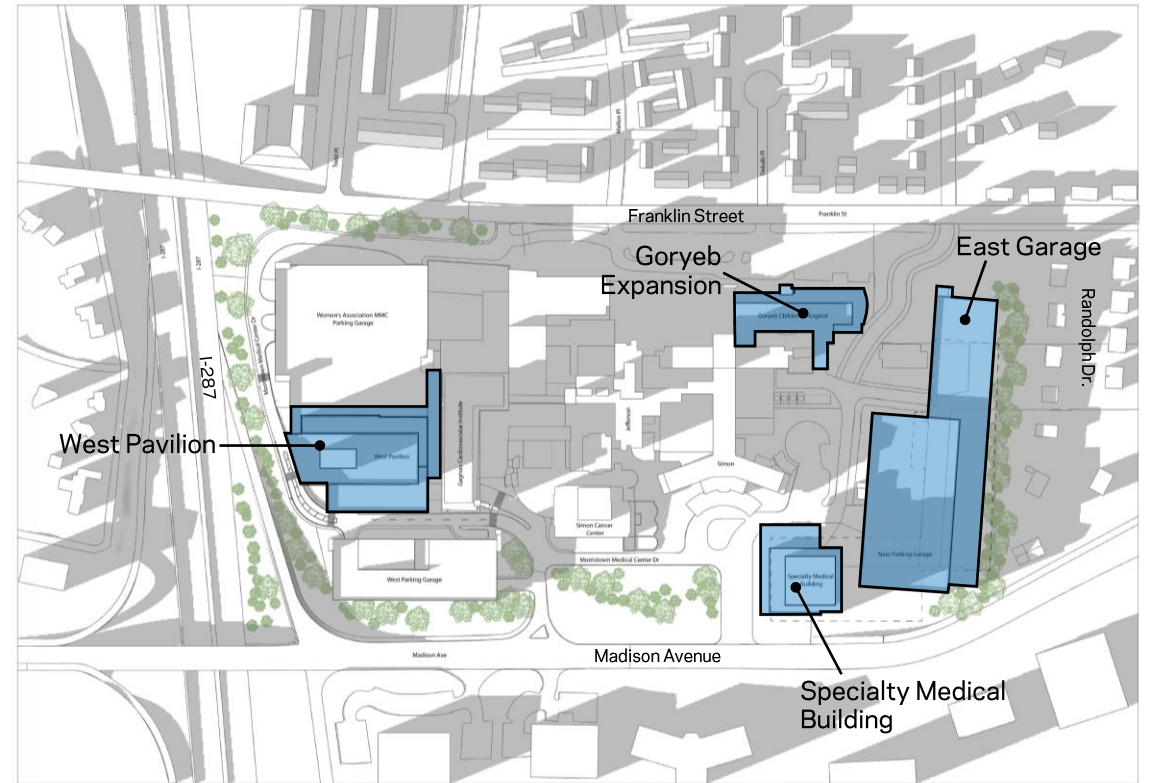
Proposed Campus Shadows

Shadow Study

Spring/Fall Equinox | 6PM Shadow



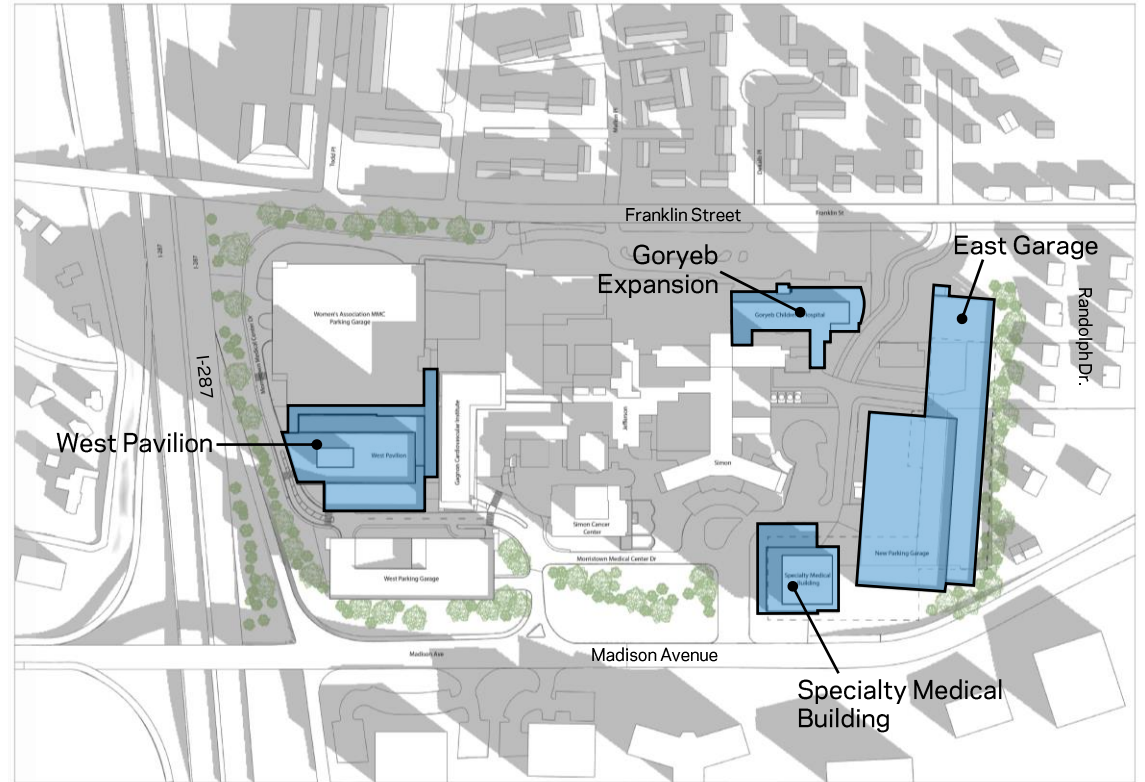
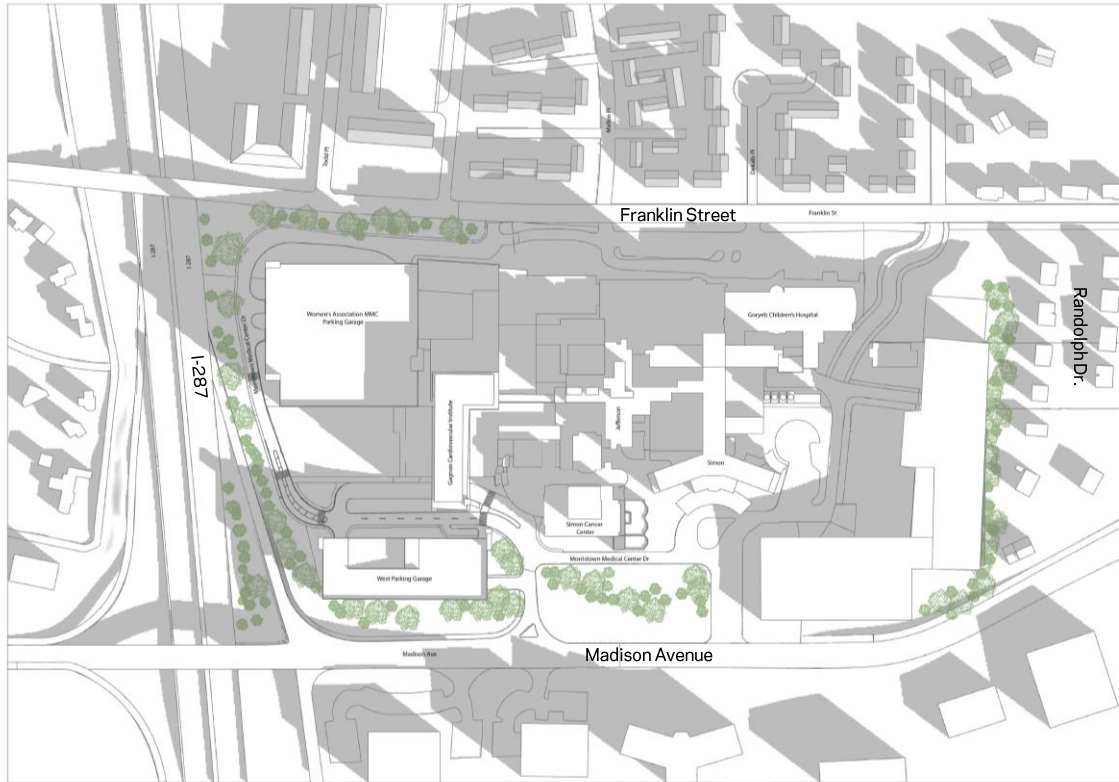
Existing Campus Shadows



Proposed Campus Shadows

Shadow Study

Winter Solstice | 9AM Shadow

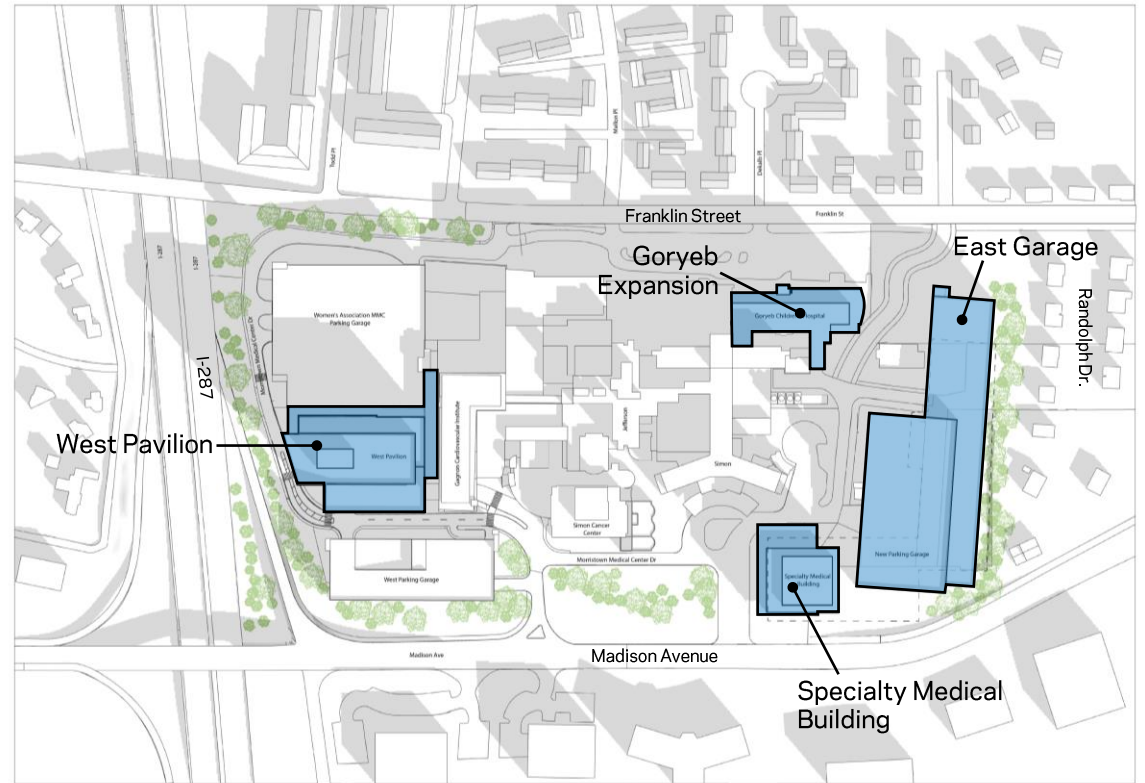


Existing Campus Shadows

Proposed Campus Shadows

Shadow Study

Winter Solstice | 9 to 9:30AM Shadow



Proposed Campus Shadows at 9AM

Proposed Campus Shadows at 9:30AM

Shadow Study

Winter Solstice | 12PM Shadow



Existing Campus Shadows



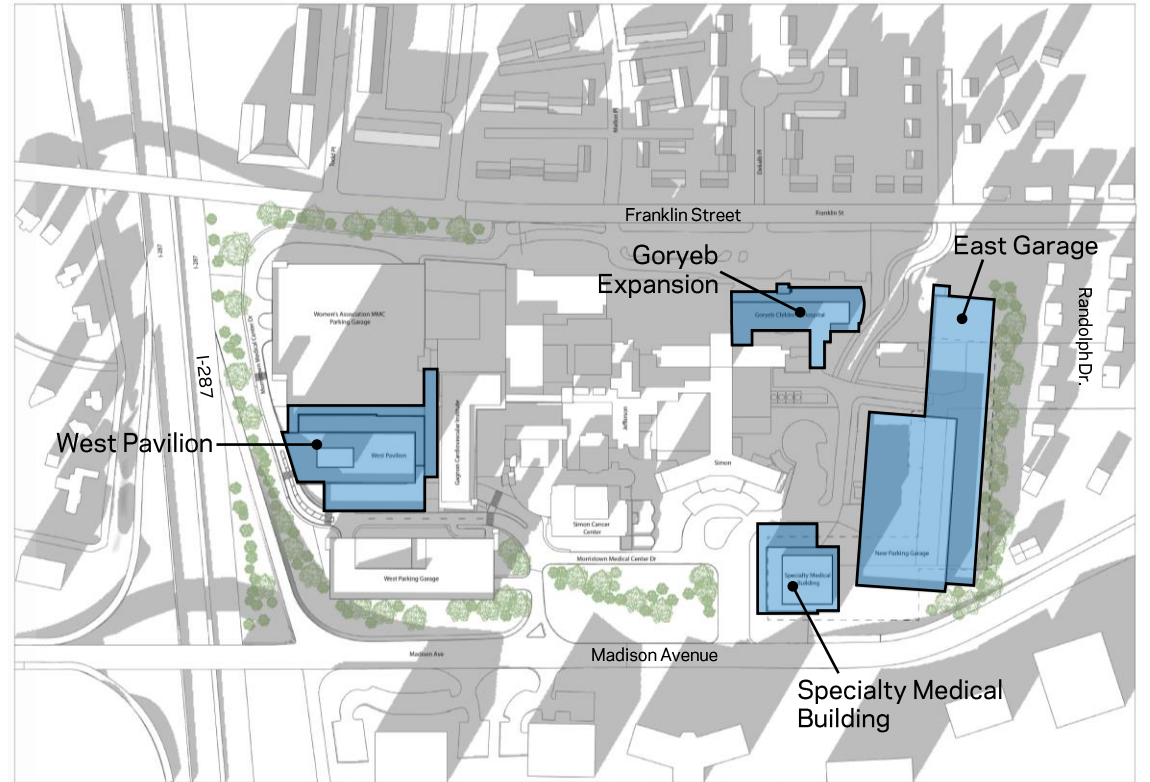
Proposed Campus Shadows

Shadow Study

Winter Solstice | 3PM Shadow



Existing Campus Shadows



Proposed Campus Shadows