

5.4 VISUAL IMAGERY AVAILABILITY FOR WTC 7 DAMAGE AND FIRE CHARACTERIZATION

5.4.1 Overview

There was a period of nearly seven hours between the WTC 1 and WTC 7 collapses. The availability of imagery of the lower 13 floors of WTC 7, where most of the structural damage and fire activity occurred, was sporadic and variable over this period. The images that were available provided sufficient information to guide the reconstruction of the WTC 7 collapse. However, the degree of detail was less than that for the WTC towers.

5.4.2 Limitations of Imagery

Obstructed View

As shown earlier in this chapter, views of the lowest 13 floors from any distance beyond the immediate vicinity were generally blocked by nearby buildings. The principal exception was the lower portion of the north face, which was observable looking down Greenwich Street. Views of the lower floors elsewhere were only available from locations very close to WTC 7 or from overhead.

Dust from the Collapse of the WTC Towers

When WTC 2 collapsed at 9:58:59 a.m., the situation around the WTC complex completely changed. The collapse generated a huge dust cloud that, due to its high density, spread much like a liquid around the buildings of Lower Manhattan. An image of this cloud taken nearly four minutes after the collapse is shown in Figure 5–27. In the immediate aftermath it was not possible to see WTC 7. Thousands of people rapidly fled the area. As a result, the amount of collected imagery shot from the vicinity of the WTC site abruptly dropped when WTC 2 collapsed. Due to the prevailing wind, the dust cloud around WTC 7 began to clear by around 10:15 a.m. and some nearby imagery of WTC 7 was recorded during the period between the collapse of WTC 2 and the collapse of WTC 1 at 10:28:22 a.m.



Figure 5–27. Cropped photograph showing the dust cloud created by the collapse of WTC 2.

The image was shot from the west at 10:03:56 a.m. WTC 7 can barely be seen above the cloud. The intensity levels of the photograph have been adjusted.