ANNE WHISTON: Picture nature. Picture the Charles River in Boston and the city beyond. Maybe you grew up in a small town or in the suburbs where big trees like those on MIT’s campus are familiar. Imagine nature in the city. Maybe you think of roads and parkways shaded by large trees. Or maybe running barefoot in the mown lawn of a city park.

SPRIN: It may be somewhat harder to think of a weedy vacant lot on the side of a highway, but it’s just as crucial to recognize the importance of natural processes here as here, in Frederick Law Olmstead’s Emerald Necklace. After all, both are part of the built landscape. Every place in our cities was built upon a site formed without humanity’s touch. It’s almost impossible to see now, but the very ground on which MIT stands was placed there by people. Street trees in Beacon Hill are obvious markers of nature in the city. Whereas in Boston’s Chinatown there may appear to be none at all. But look more closely. Natural processes don’t always announce themselves, and they aren’t always beautiful.

Natural systems in the city are far more than potted plants. Nature persists, even when boxed in or ignored. And ignorance of natural processes can be catastrophic. Understanding requires careful observation, a search for clues to the life of a tree, for example. And an open mind to integrate significant details into hypotheses.

Think about sets of systems, such as plants, air, and earth. Animals, the flow of water, the play of sun and shadow, and wind. And how the interrelated histories of these systems have shaped the city’s past. And how they’ll shape its future. After all, like MIT, the Boston region may be historical, but it is far from timeless.