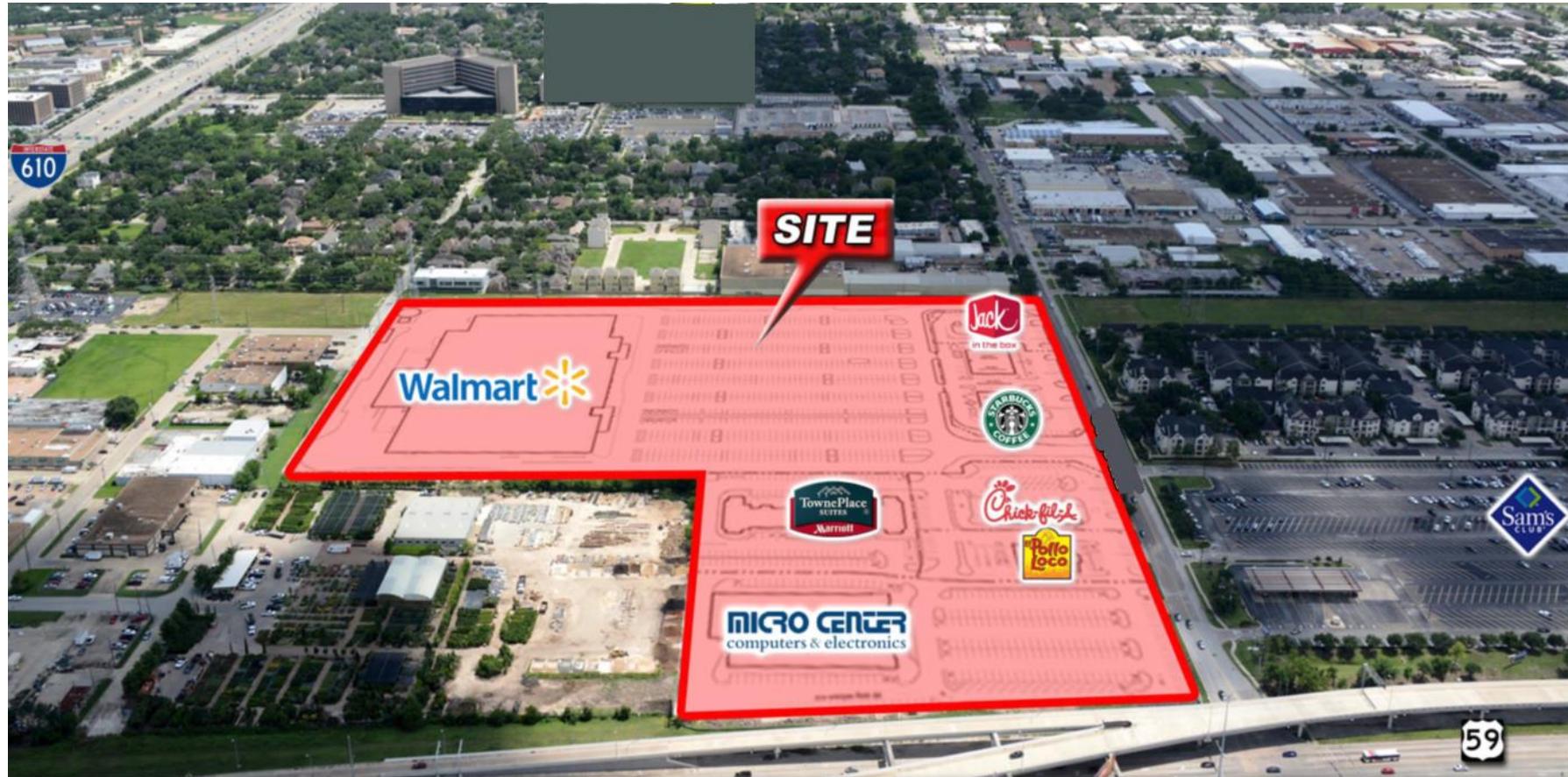


Report to City Council

Shoppes at Uptown Crossing Development located at S Rice and Westpark



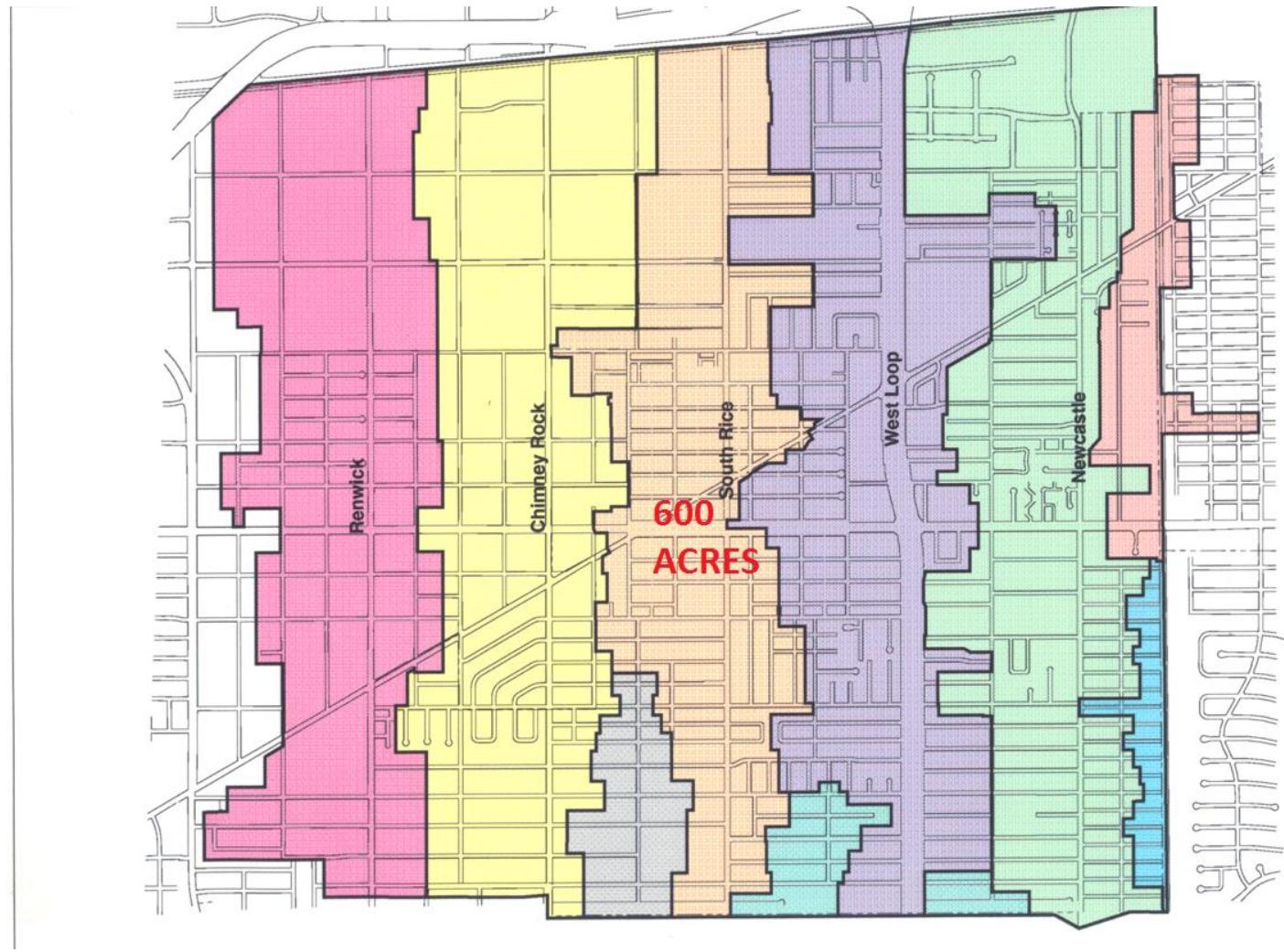
Micro Center/Walmart/Hotel/Restaurants/Office

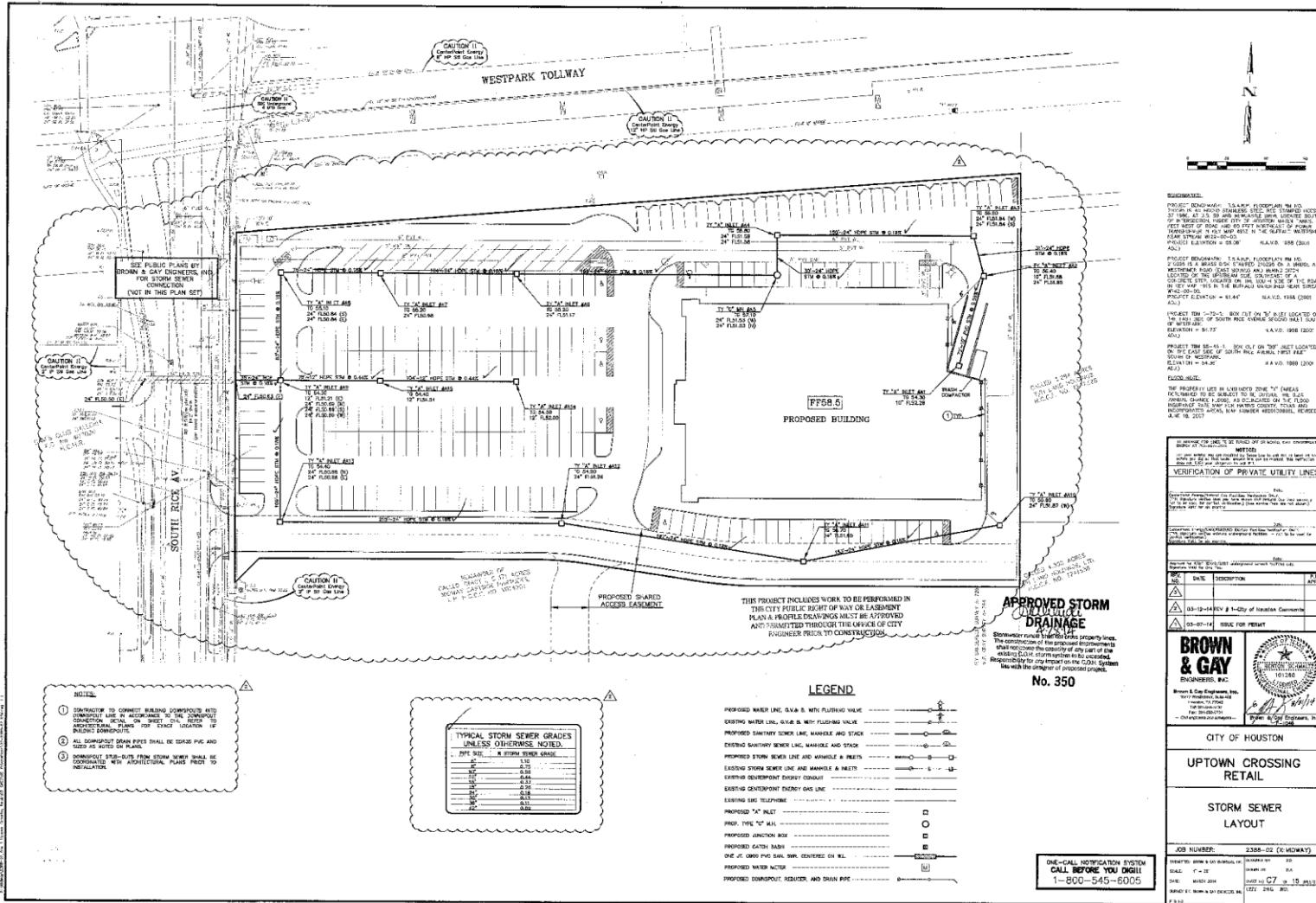


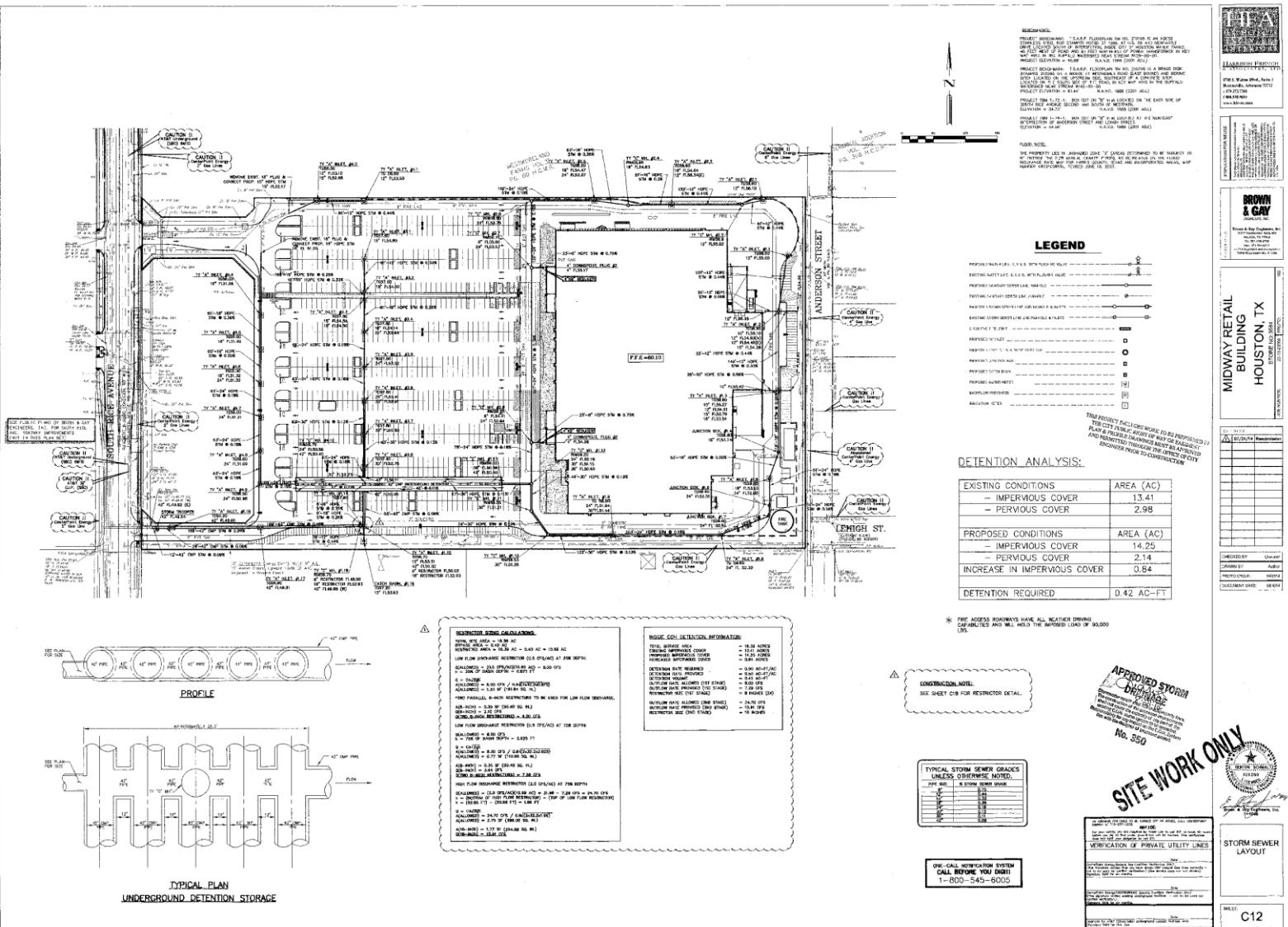
Anticipated Improvements to S Rice Ave.



S Rice Drainage Area







ARKK ENGINEERS

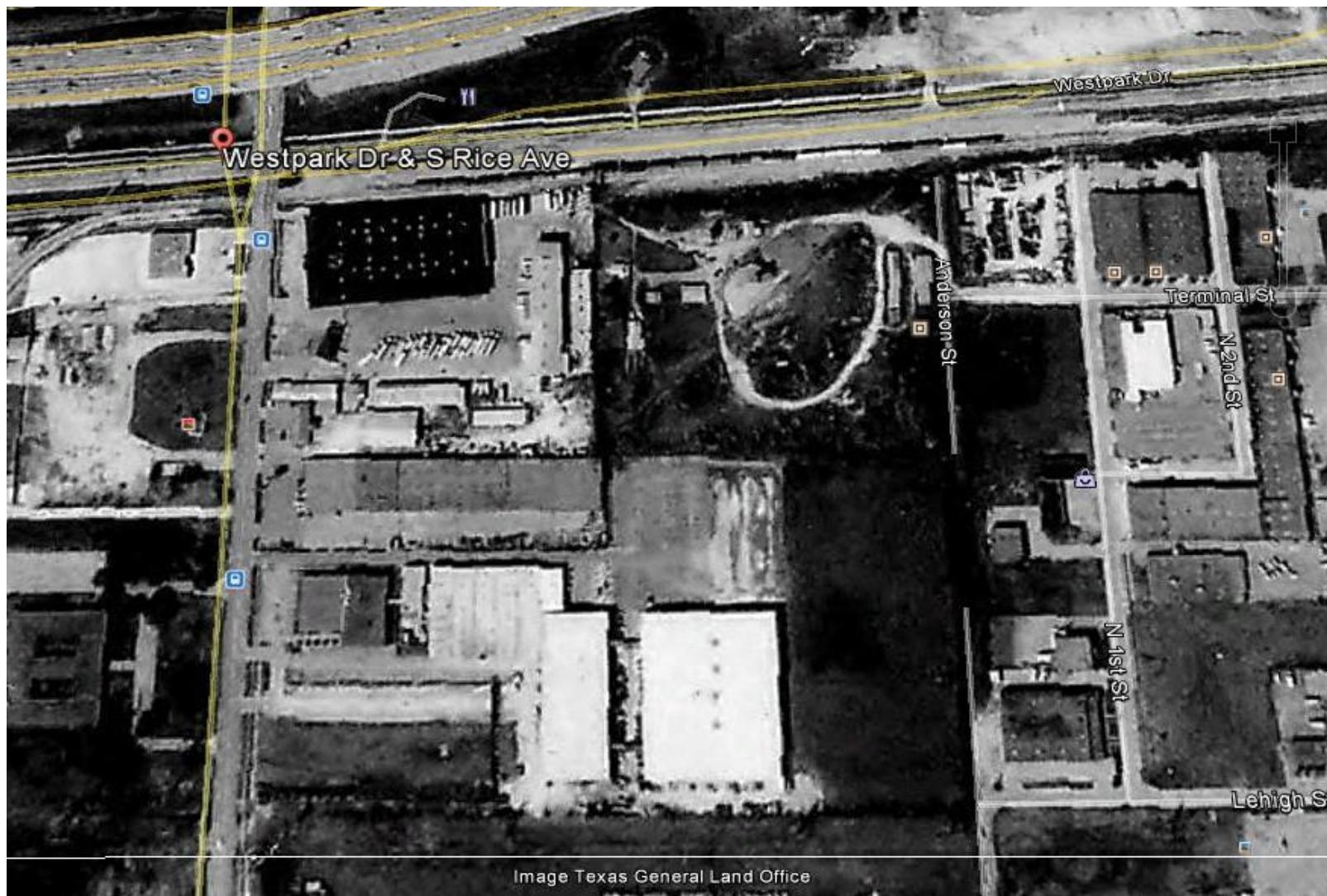
Walmart Site



1943 satellite image



1953 satellite image



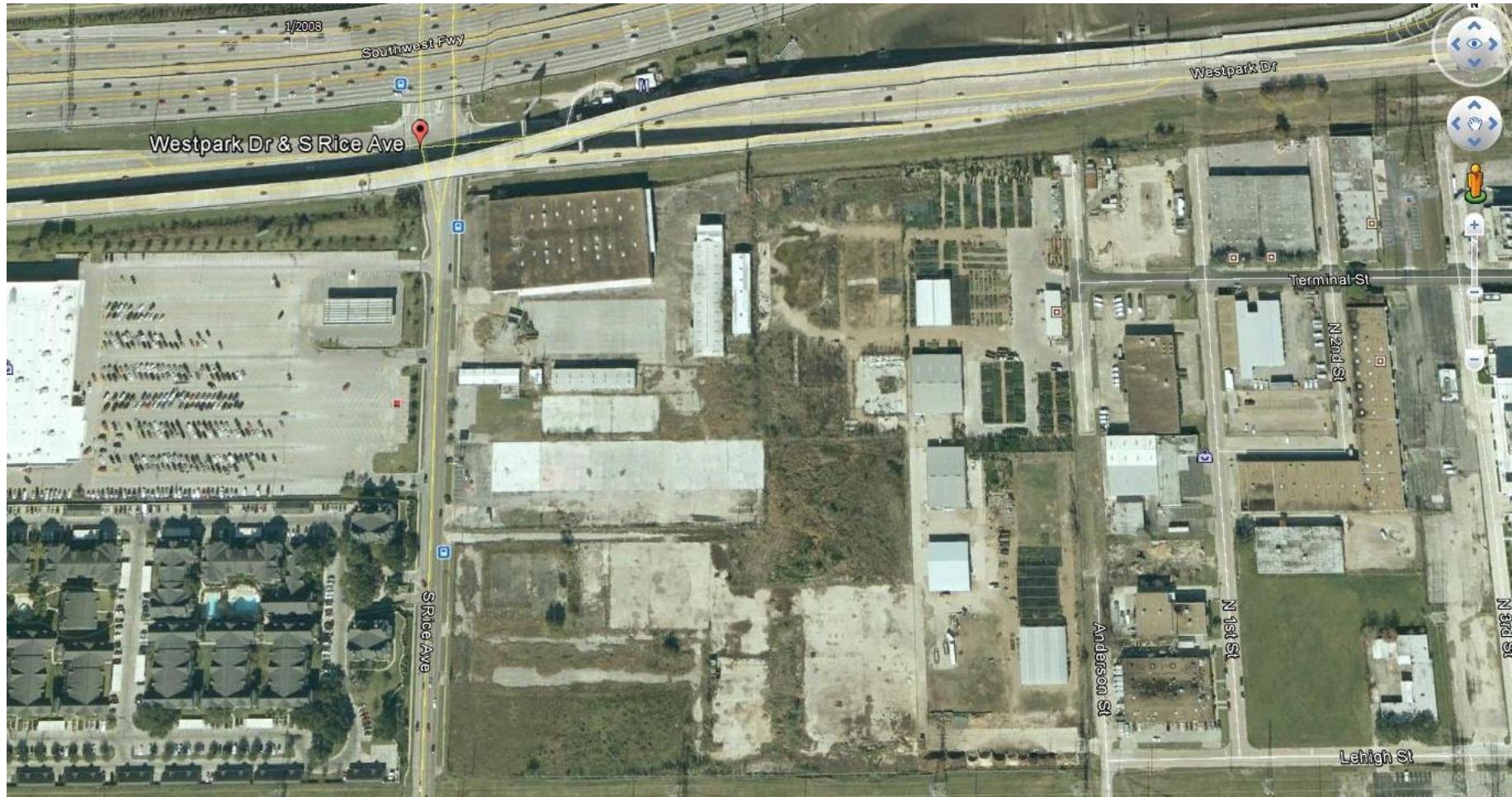
1978 satellite image



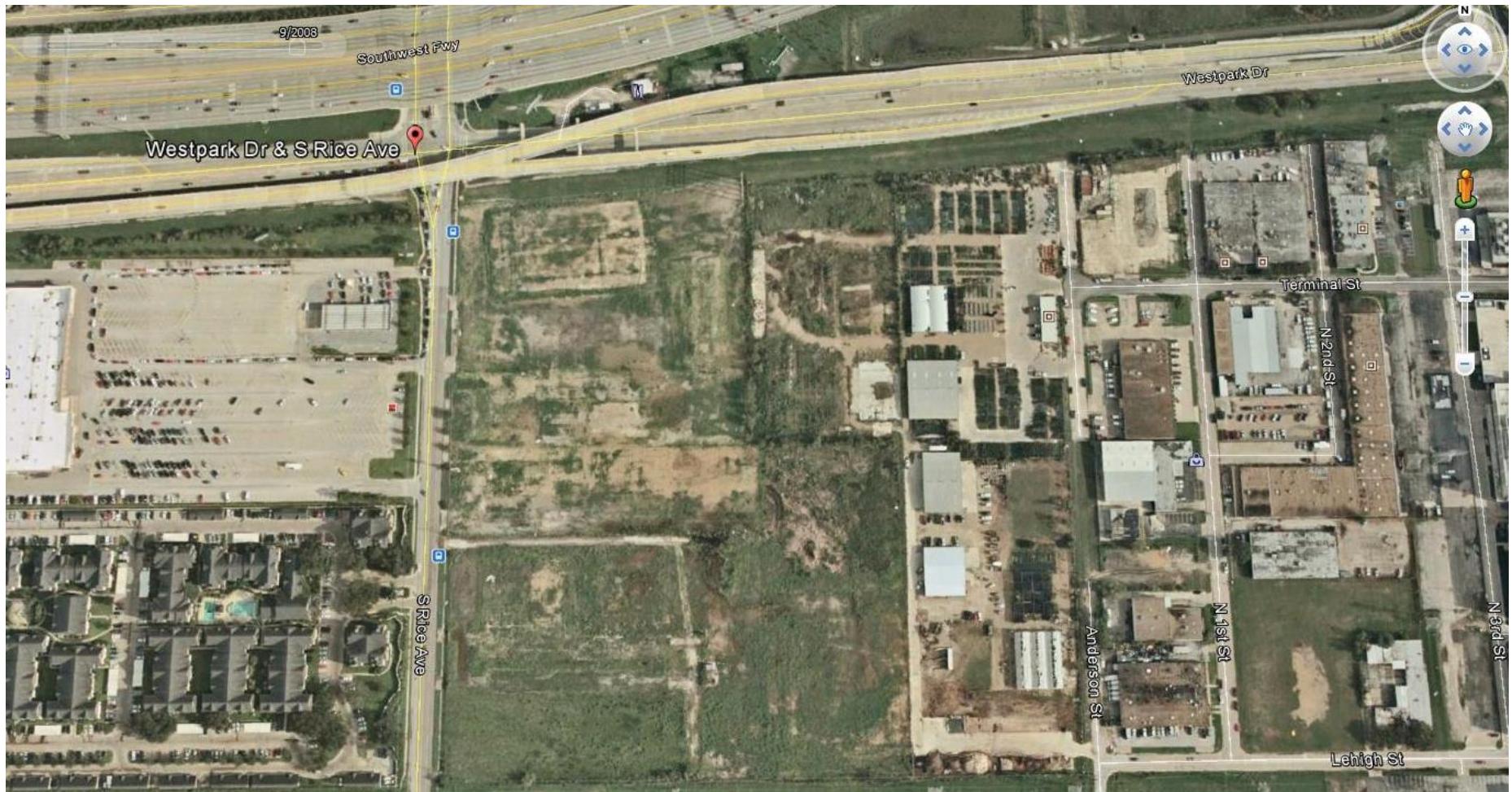
1989 satellite image



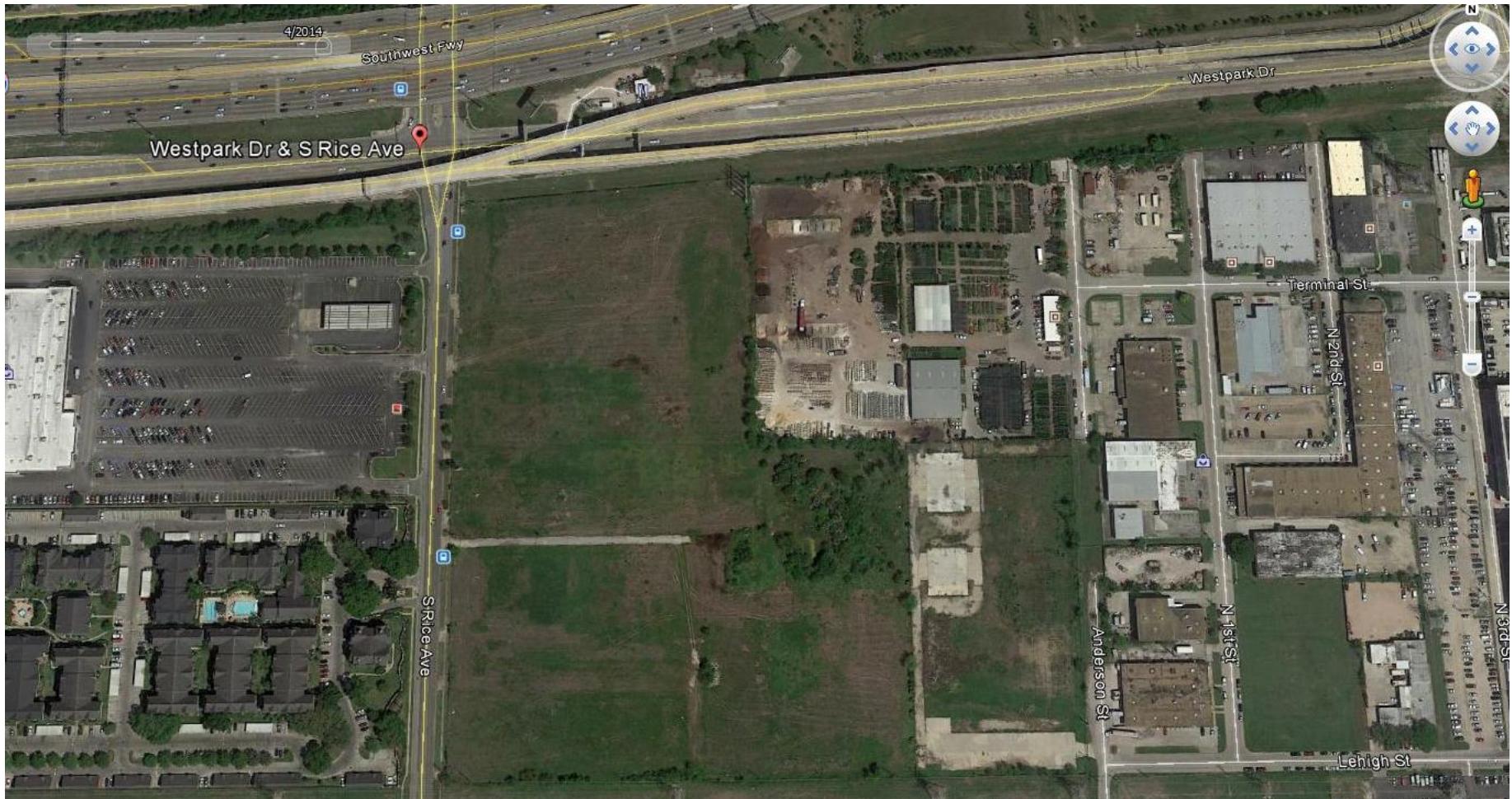
2002 satellite image



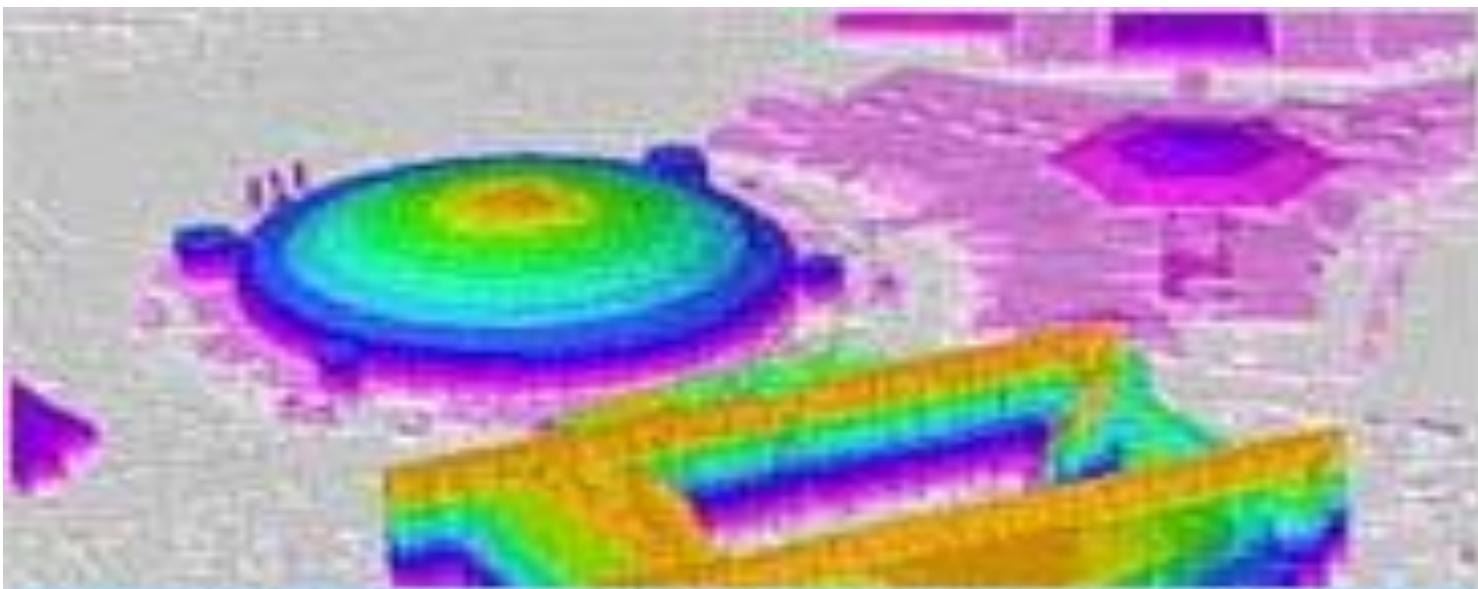
January 2008 satellite image



September 2008 satellite image

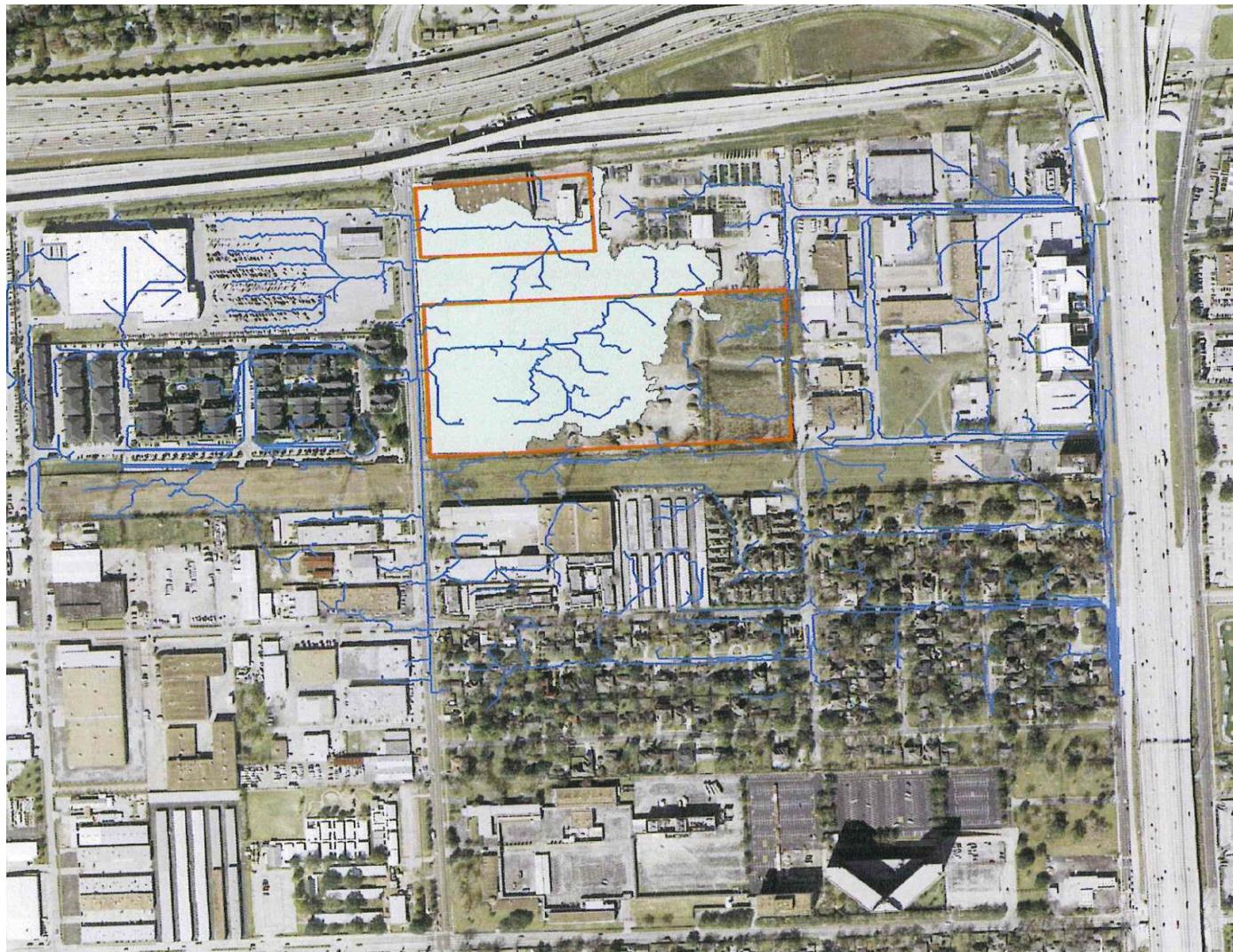


Prior to Development 2014 satellite image



Color-enhanced image of the Reliant Stadium and Astrodome, produced from LiDAR data.

Flow Paths

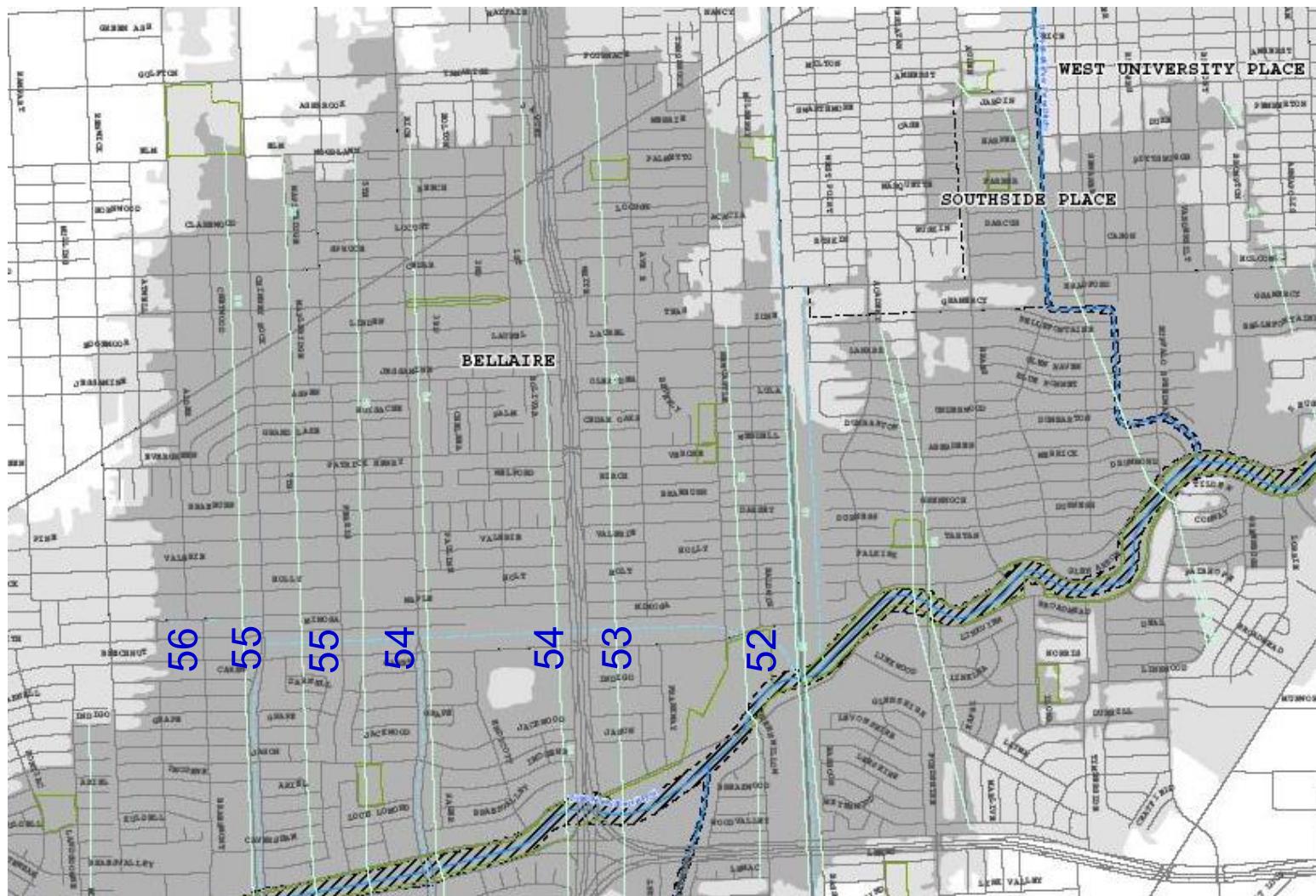


LiDAR





100 year storm flows



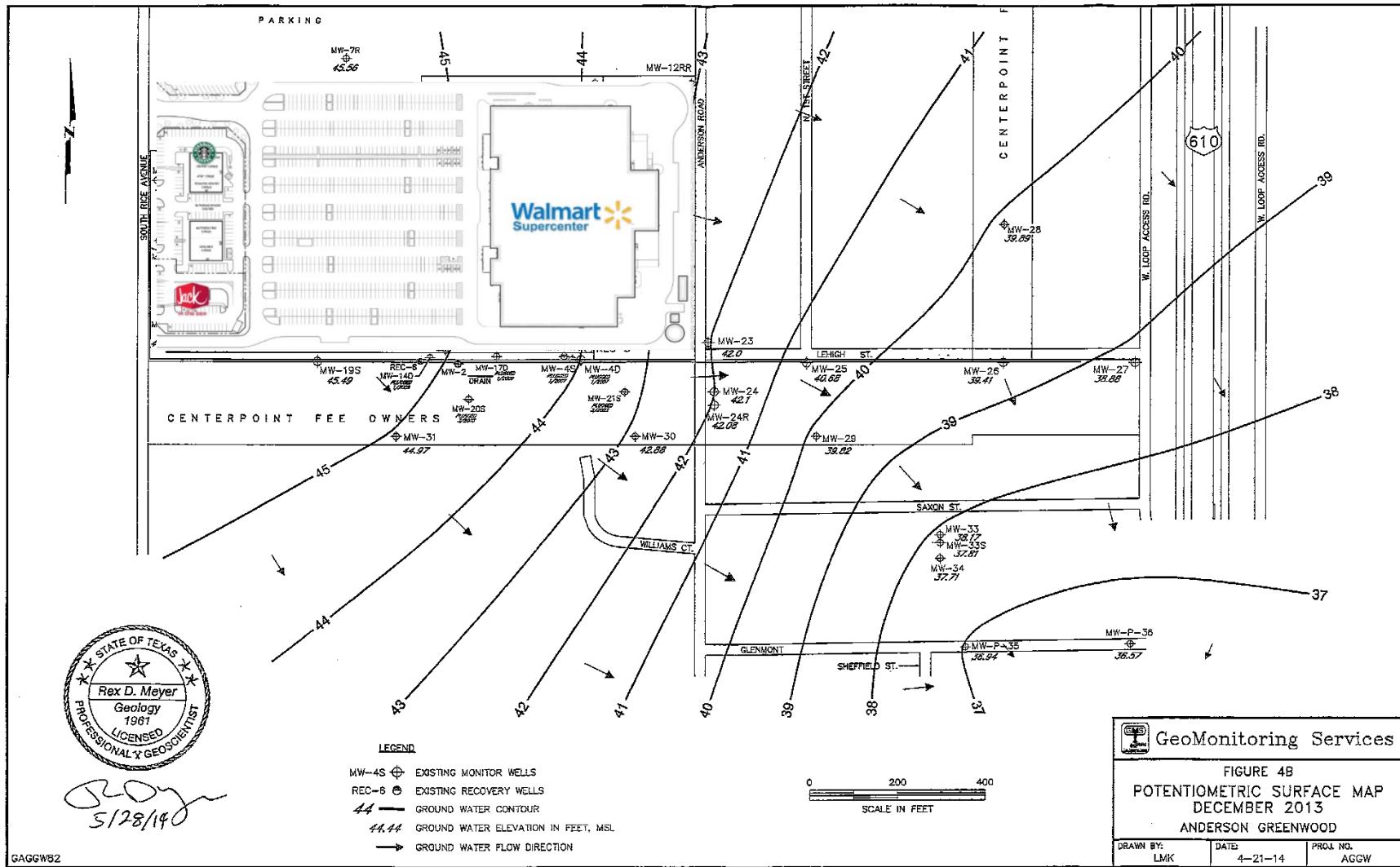
Flood Hazard Data Map

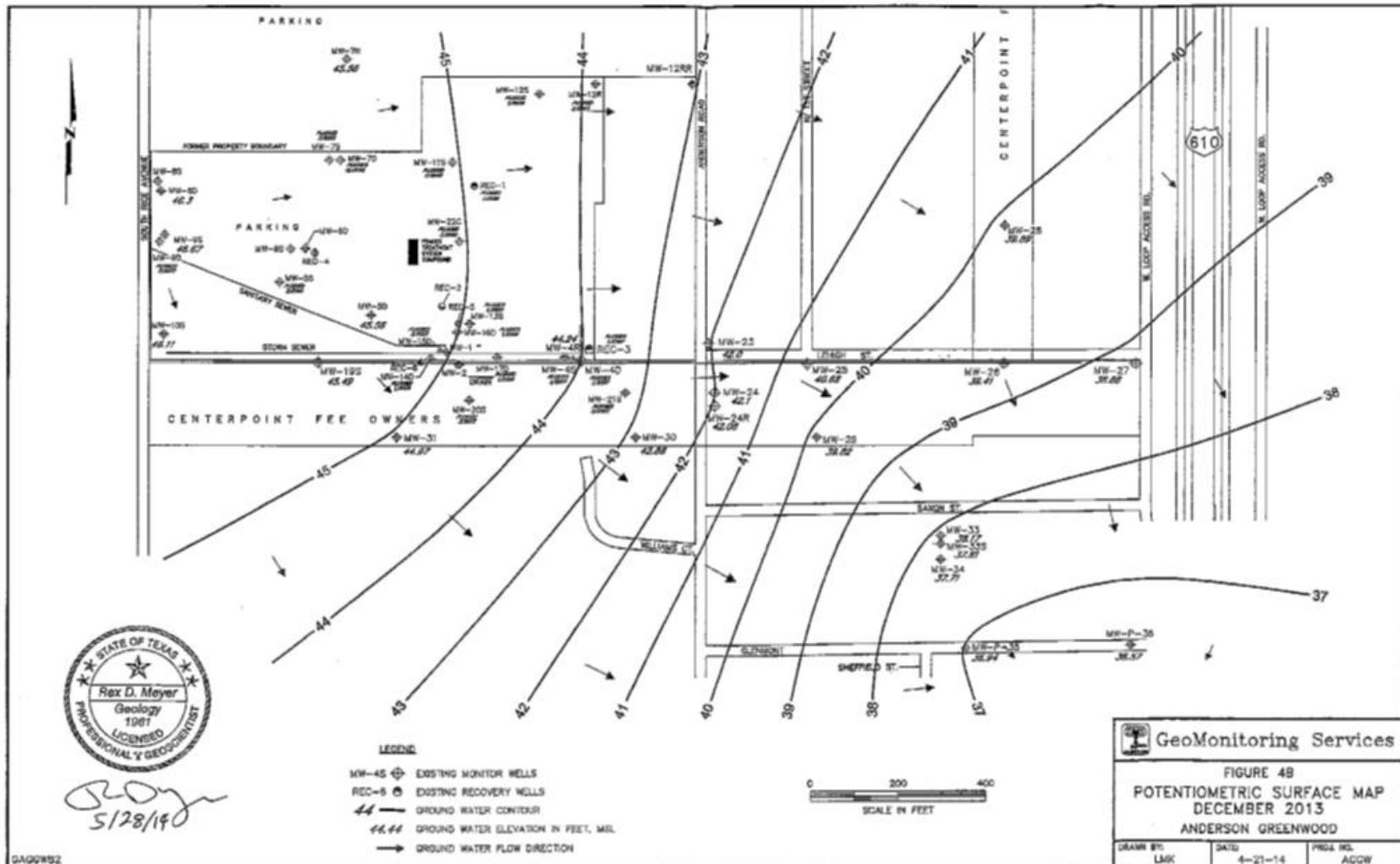
Estimated order of magnitude

- Bellaire 3.6 square miles
- 80% in the flood plain
- Assume average depth of flood plain is 1.75 feet
- 140,500,000 cubic feet of water
- Assume 3 hour 100 year rainfall

$43 \text{ cfs} \times 3 \text{ hr} \times 60 \text{ min} \times 60 \text{ sec} = 464,400 \text{ cubic feet}$

$464,400 / 140,500,000 = 0.003\% \text{ or } 0.005 \text{ ft. or } .06 \text{ inches}$





George
5/28/14

8408112

