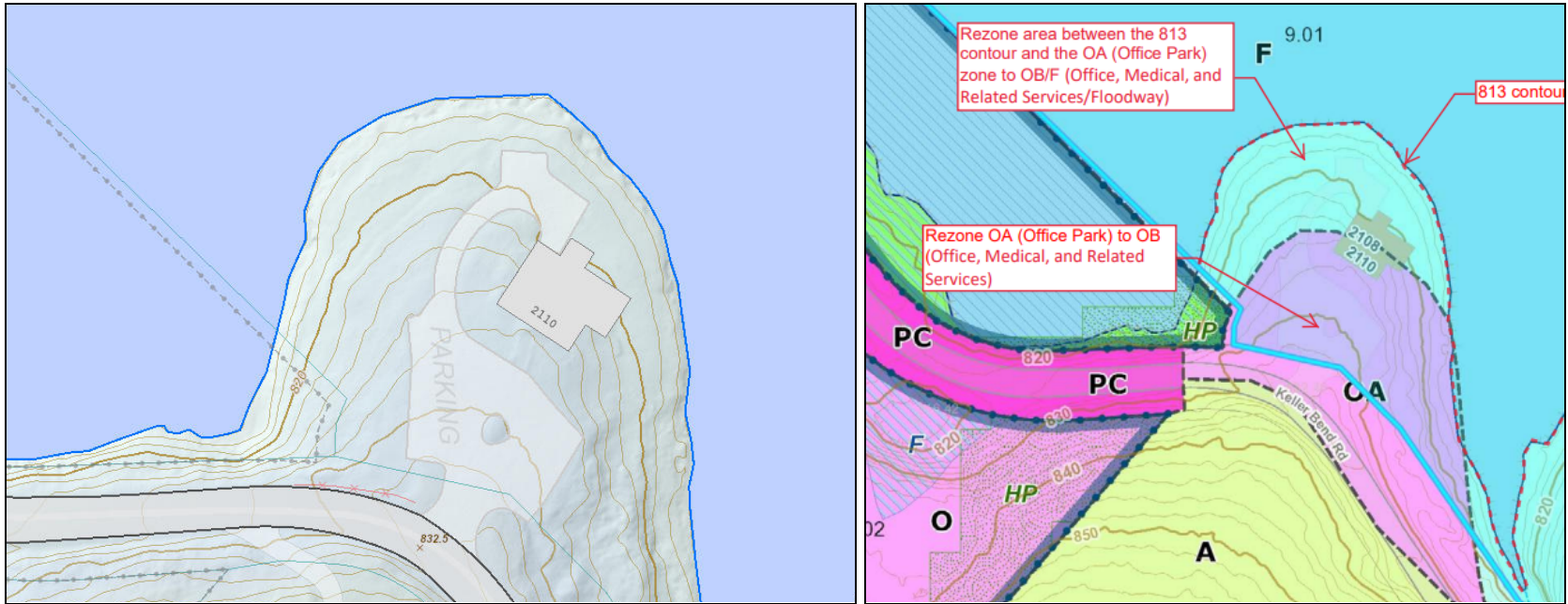


FEMA flood map courtesy of KGIS.org. As can clearly be seen, well over 50% of the existing structure at 2110 Keller Bend Rd. and ~50% of the total land mass of the 155 00901 parcel falls in Flood Zone AE which is defined as an area that has a 1% risk of flooding annually, and a full 26% risk of flooding over 30 consecutive years¹. An extreme caveat is that these flood maps were published in 2021 and do not account for the significant flood events observed in Knox County since the beginning of 2020.

¹ $1 - (1 - 0.01)^{30} = 0.2603$



Topography map courtesy of KGIS.org. Staff recommendation is to approve zoning change to permit development above the 813 contour line as OB/F and the existing OA zone, which extends all the way to the 813 contour line on the East side of the property, will be changed to OB. This creates the potential for residential structures to be built on land that has an extreme risk of flooding.



In 2020, the average daily traffic count on the section of Keller Bend Rd used for access to 2100 Keller Bend Rd was 2,230 (count courtesy of Knoxville Regional Transportation Planning Organization; map courtesy of KGIS.org). A traffic impact study was not required on this zoning request, but a rudimentary statistical analysis shows with near certainty, an increase of turning traffic out of 2100 Keller Bend Rd that necessarily has to interact or cross over the southbound Keller Bend Rd. flow of traffic will result in an accident at least once per year.