CE 3372 WATER SYSTEMS DESIGN

DRINKING WATER STORAGE PART 3 (FALL 2020)

STORAGE IN COMPUTER MODELS

- Storage elements in computer models are tanks or reservoirs (EPANET), or storage junctions (SWMM)
- Have similar minimal data requirements that include:
 - Invert (bottom) elevation
 - Min Pool elevation (above the invert)
 - Begin Pool elevation (above the invert)
 - Max Pool elevation (above the invert)
 - Tank dimensions (or depth-storage curve)

TANK DESCRIPTIONS Supply reservoir (or tank); identify reservoir pool elevation May need to make configuration assumptions Diameter Z=315 ft Tank dimensions should be Max Level sensible • Pipe length is given (or assumed Z=300 ft **Min Level** based on min level and connecting L₂=120 ft node elevation) Node 2 Pipe 8: $L_1 + L_2 = 300$ ft Z=180 ft Elevation 1=180 ft

TANK DESCRIPTIONS

Supply reservoir (or tank); identify reservoir pool elevation

 Can also use a volume vs. depth table to convey tank storage capabilities -- quite similar to reservoir routing in hydrology

Pipe 8: $L_1 + L_2 = 300$ ft

1=180 ft

Node 2

