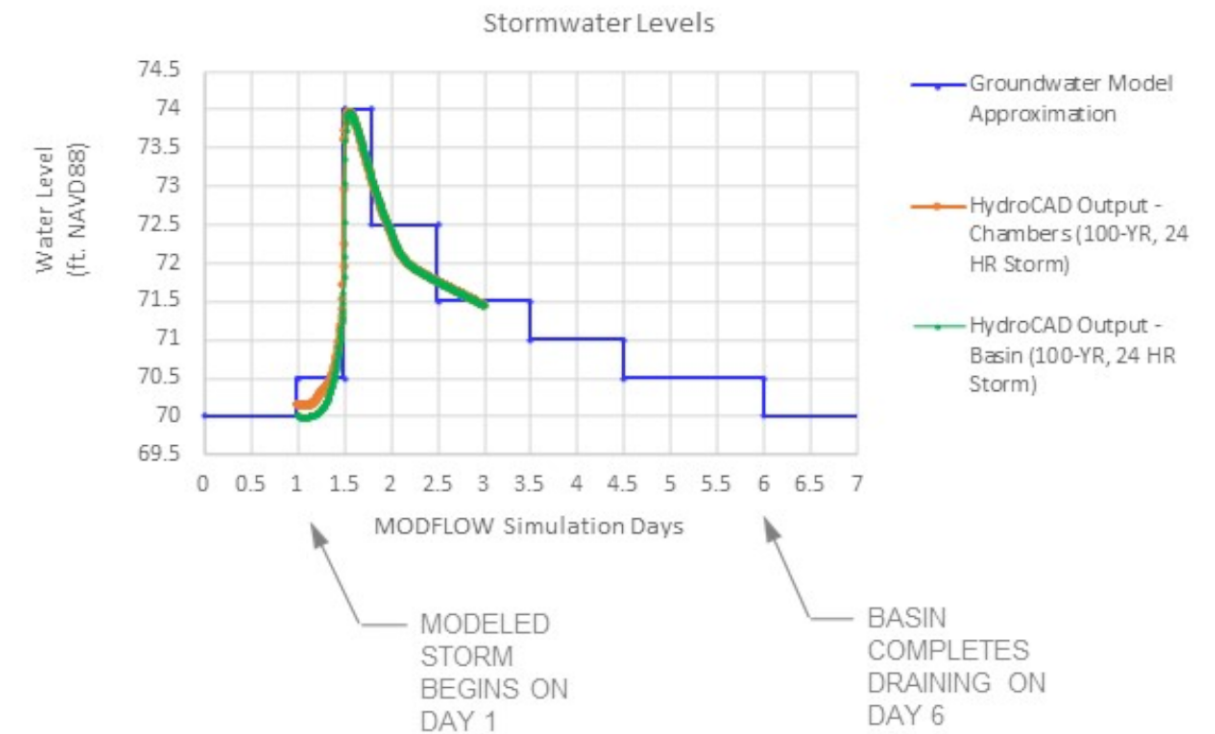


PREDICTED WATER TABLE MOUNDING AT TIME OF MAXIMUM WATER LEVEL RISE AT RESIDENCE, AFTER STORM (DAY 8 AFTER BEGIN STORM LOADING)

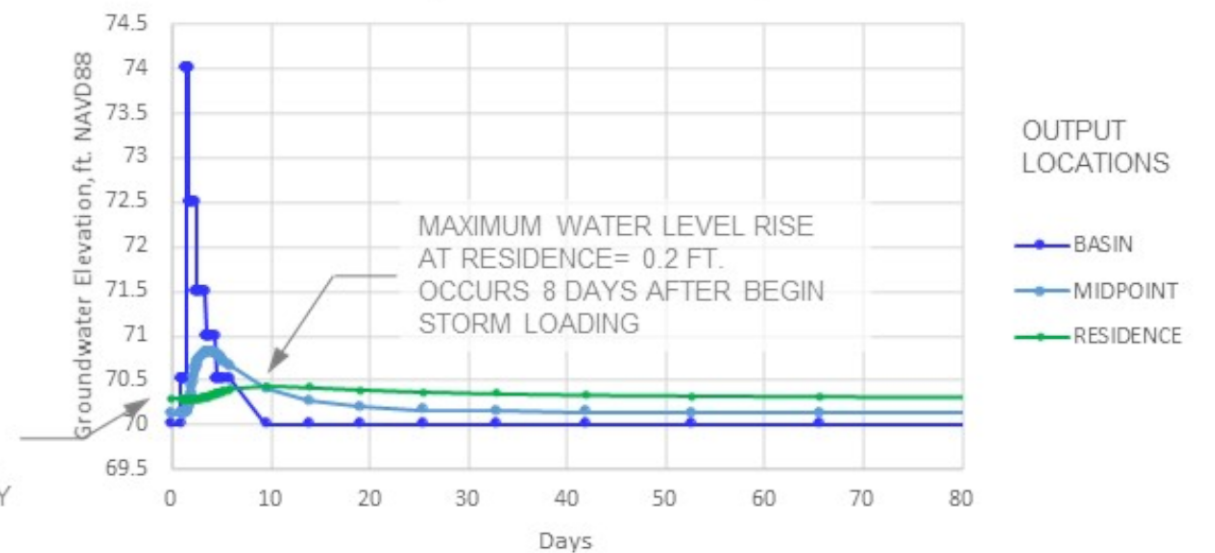
0 200 400
SCALE, FEET

NOTES:

1. Groundwater levels computed using a three dimensional groundwater flow model (MODFLOW transient simulation). Models are simplifications of actual systems. Results are subject to the interpreted conditions and simplifying assumptions, and may be also subject to change based on new information.
2. Soil hydraulic conductivity = 25 ft./d, assumed for fine-medium sand based on literature.
3. Soil specific yield = 0.22 (unitless) for fine-medium sand based on literature.
4. Assumes no additional rainfall contributions (direct percolation), where single storm would have negligible contribution to water table (most rainfall would form sheet flow runoff to catch basins). In addition, this analysis is intended to show the component of water table rise attributable to the proposed storm water management system.
5. Assumes Basin PP2 locally maintains the water table at Elev. 70 ft. NAVD88.



Predicted Water Level Rise
Proposed Stormwater Management



Proposed Development
South Windsor, Connecticut

Design Professionals, Inc.
South Windsor, Connecticut



Project 2009999

Computed Effects on
Groundwater Levels

August 2021

Exhibit 1