

City of Alachua Water System Hydraulic Modeling – Fire Flow

PREPARED FOR: City of Alachua
PREPARED BY: CH2M
DATE: August 3, 2018

Background

CH2M recently completed water distribution system modeling for the City of Alachua and is continuing water modeling services by evaluating identified fire flow scenarios as requested by the City, utilizing the City's distribution model.

Purpose

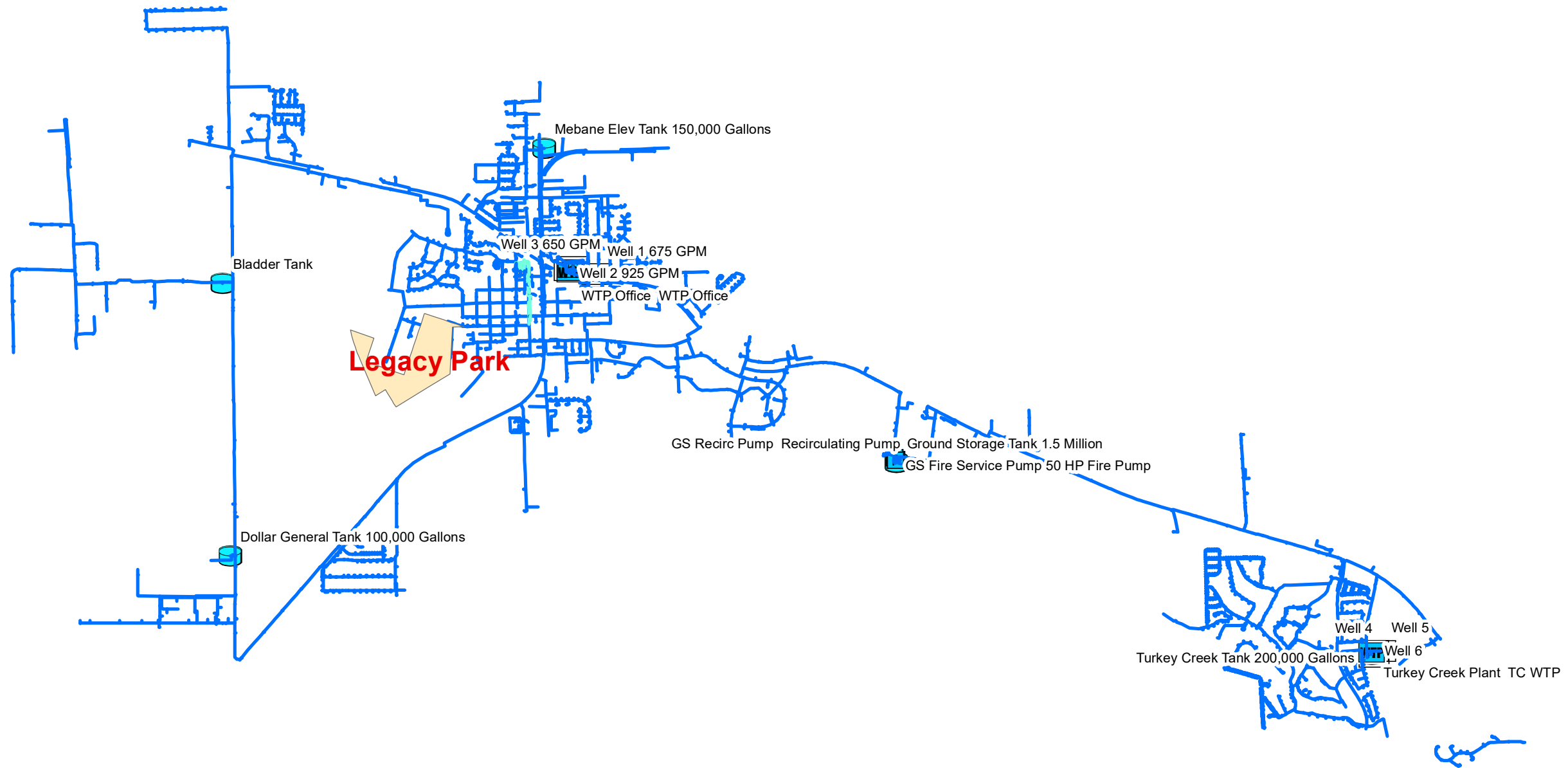
The purpose of this report is to indicate a PASS or FAIL result for the water distribution model scenario simulation requested for **Legacy Park, 15400 Peggy Rd, City of Alachua**. A copy of the submitted request form is included in Attachment 1.

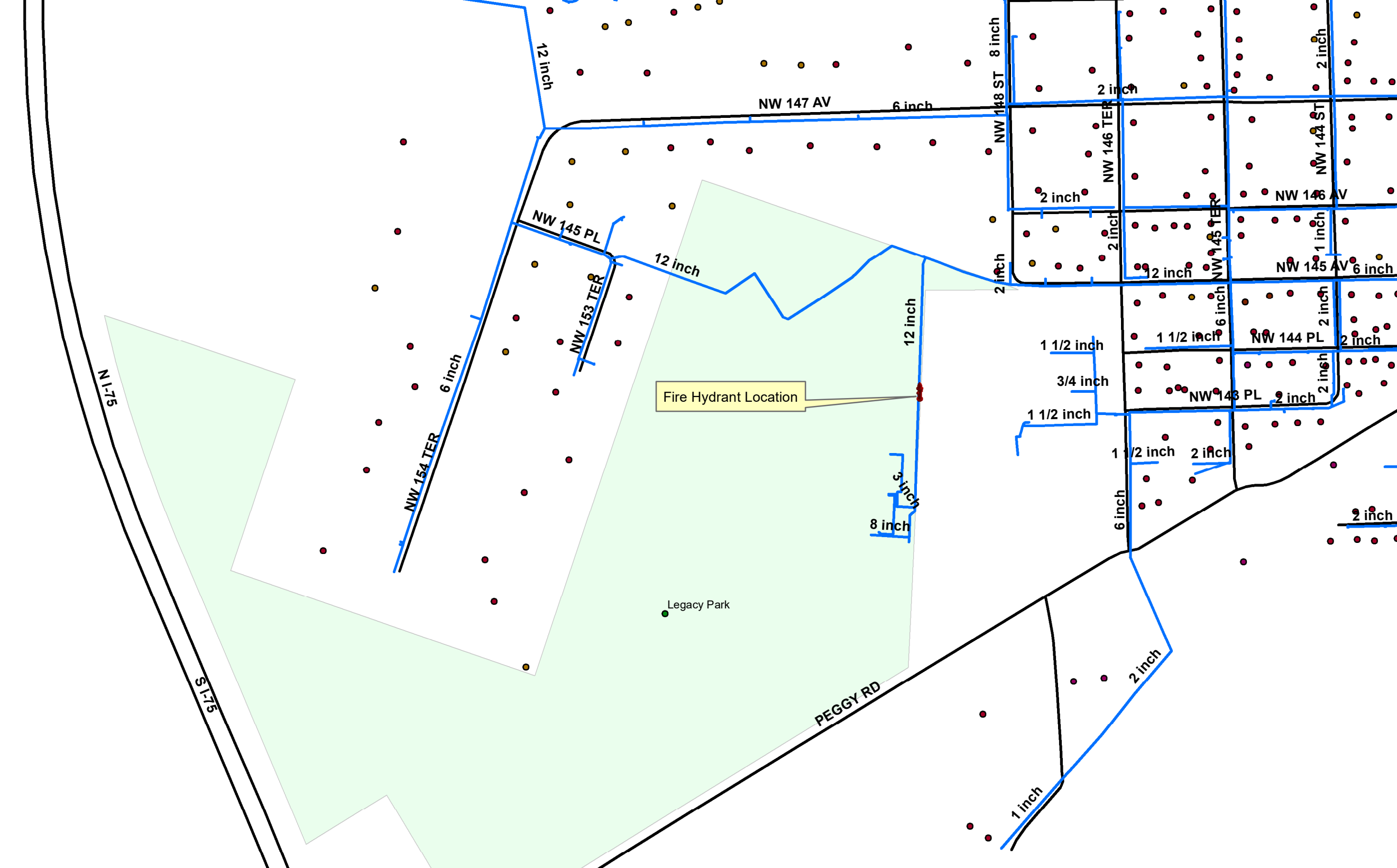
Fire Flow Assessment and Results

The result of the requested distribution model simulation is a PASS for the specified required fire flow of 1500 gpm. The details of the simulation are shown in the table below.

Scenario ID	Evaluated Location	Scenario Description	Model Junction ID	Detailed Raw Data (gpm)	Results (Pass/Fail)
4	Legacy Park 15400 Peggy Rd City of Alachua, FL	Model: Modified Base Model (added 12 & 8-inch pipes) Demand: Maximum Day Demand Pressure: 20 psig Testing time: 4:00 PM Required Fire Flow: 1500 gpm	J-6114	2116.7	PASS

Attachment 1 – Fire Flow Request Form





Fire Hydrant Location

Legacy Park

N 1-75

S 1-75

NW 145 PL

NW 153 TER

NW 154 TER

NW 147 AV

NW 148 ST

NW 146 TER

NW 144 ST

NW 146 AV

NW 145 AV

NW 144 PL

NW 143 PL

PEGGY RD

12 inch

6 inch

12 inch

6 inch

8 inch

2 inch

2 inch

2 inch

2 inch

2 inch

1 inch

6 inch

12 inch

6 inch

2 inch

2 inch

1 1/2 inch

3/4 inch

1 1/2 inch

1 1/2 inch

2 inch

6 inch

2 inch

8 inch

3 inch

2 inch

1 inch

