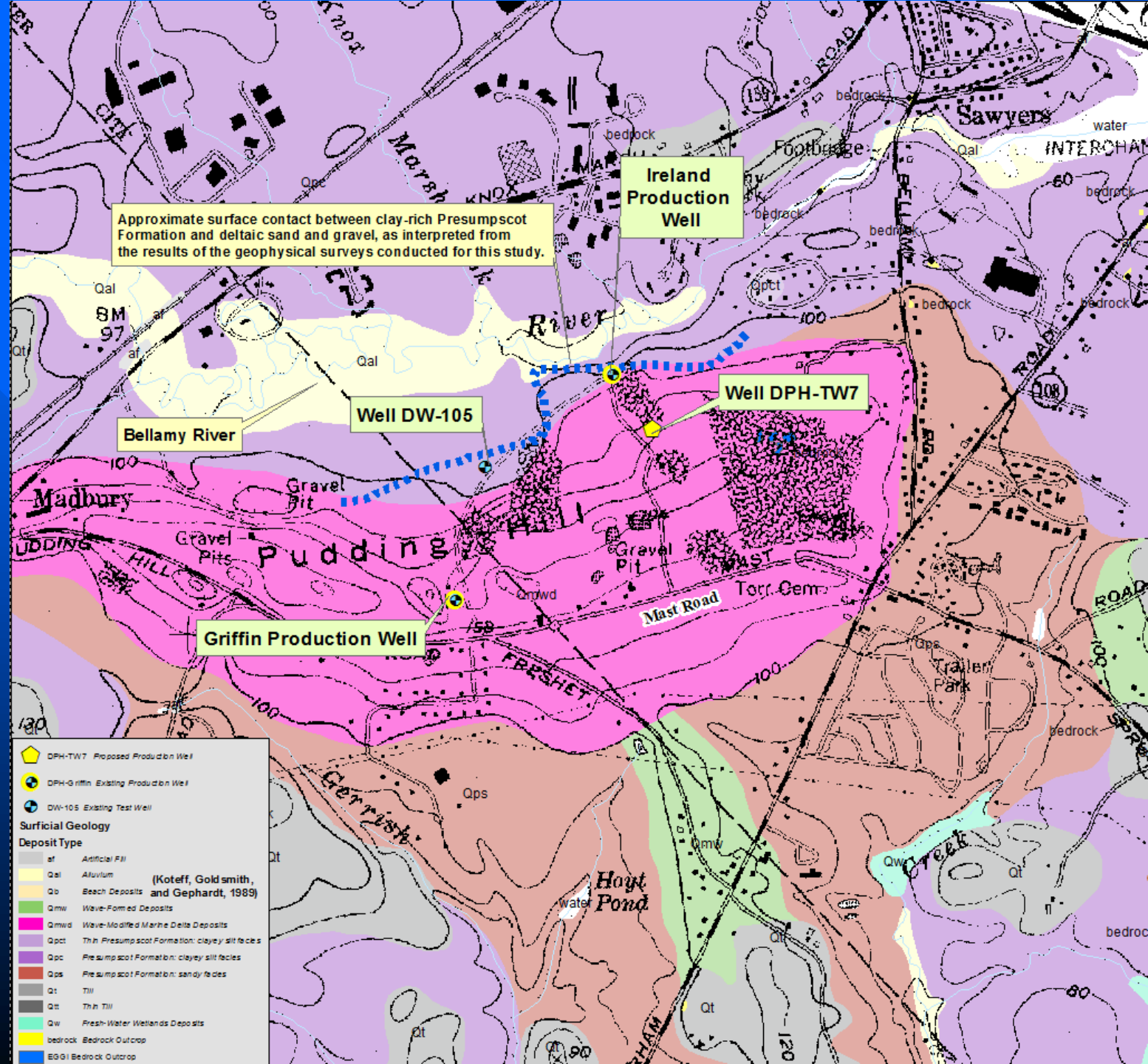


“Next Steps” Groundwater Investigations City of Dover

**James Emery, President
Emery & Garrett Groundwater
Investigations, LLC**



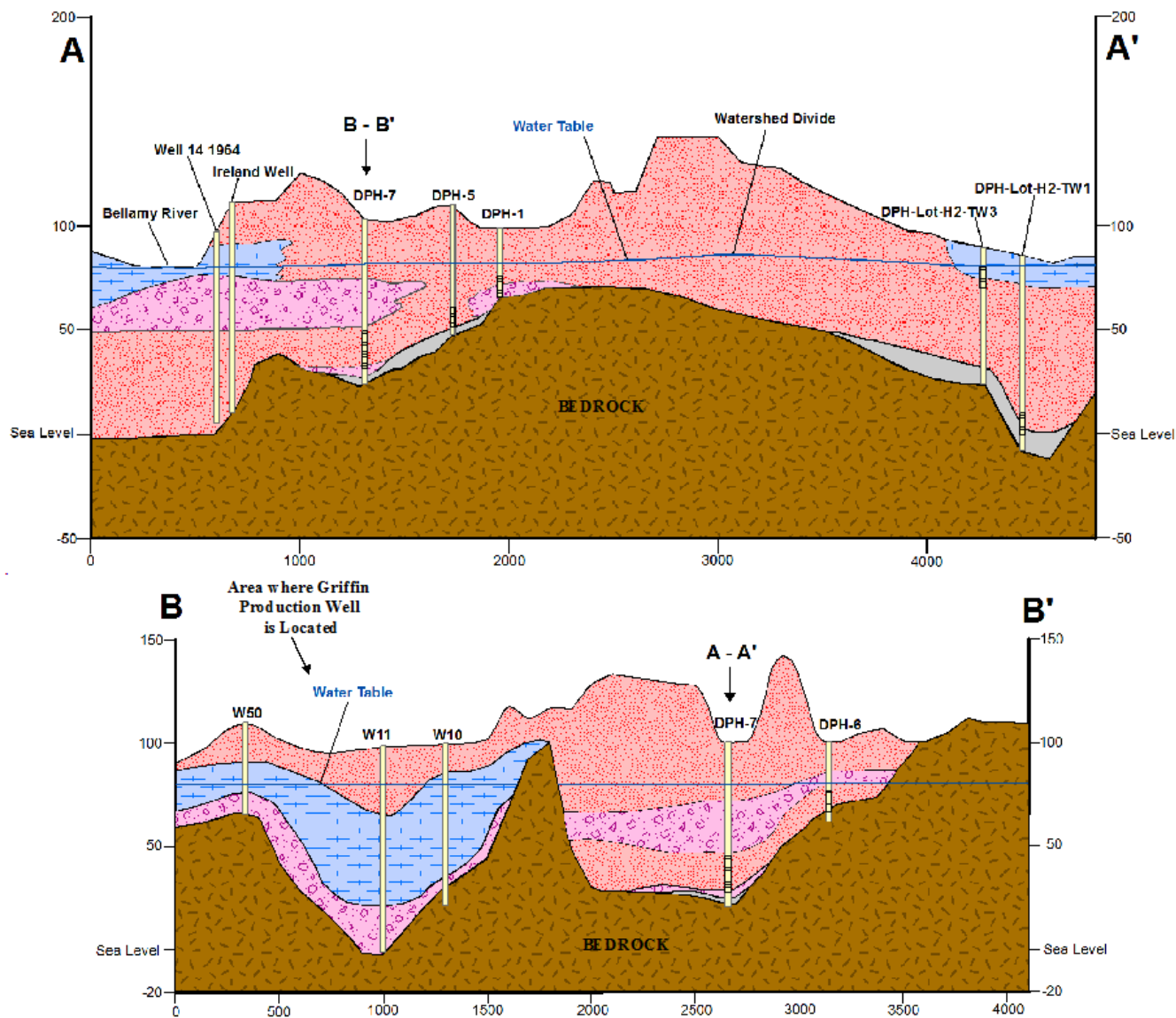
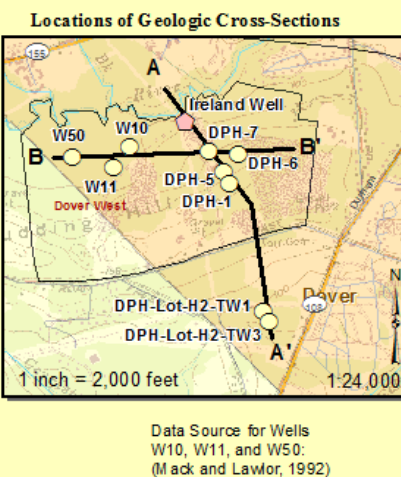


FIGURE 5

Schematic Geologic Cross-Sections
Pudding Hill Aquifer

Dover, New Hampshire



Emery & Garrett Groundwater
Investigations, LLC **FIGURE 5**

Emery & Garrett
Groundwater Investigations

Horizontal Scale: 1 inch = 500 feet

Vertical Scale: 1 inch = 50 feet

FIGURE 1

Monitoring Wells
at the Stonewall Kitchen
Development Site
Pudding Hill Aquifer

City of Dover, New Hampshire

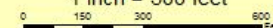
Legend

-  DSK-1 *Monitoring Well installed for Stonewall Kitchen Development Project*
-  DPH-1 *Well previously Installed by EGGI*
-  DPH-PW2 *Proposed Production Well*
-  Ireland Well *Existing Production Well*
-  Road
-  DPH-PW2 *Sanitary Protective Area*
-  Building Footprint *Phase I Area*
-  Blast Area *Approximate Location*
-  Stormwater Ponds
-  Stonewall Property
-  City of Dover Property

Grading and drainage plans were created by Altus Engineering of Portsmouth, NH and were used to digitize the location of key plan elements. Location of the engineered features in Figure are approximate.



Scale is 1:3,600
1 inch = 300 feet

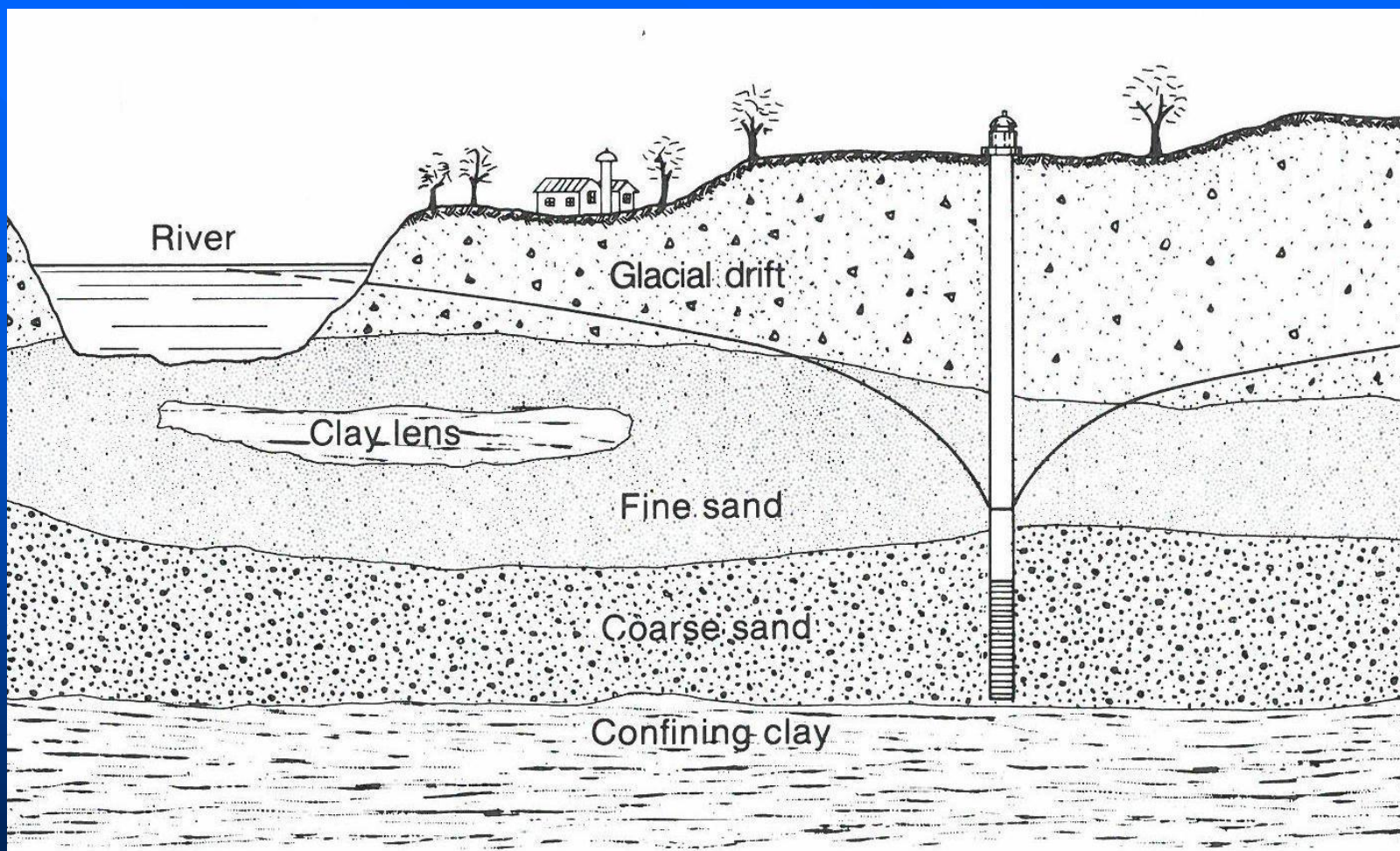


Emery & Garrett **FIGURE 1**
Groundwater Investigations, LLC

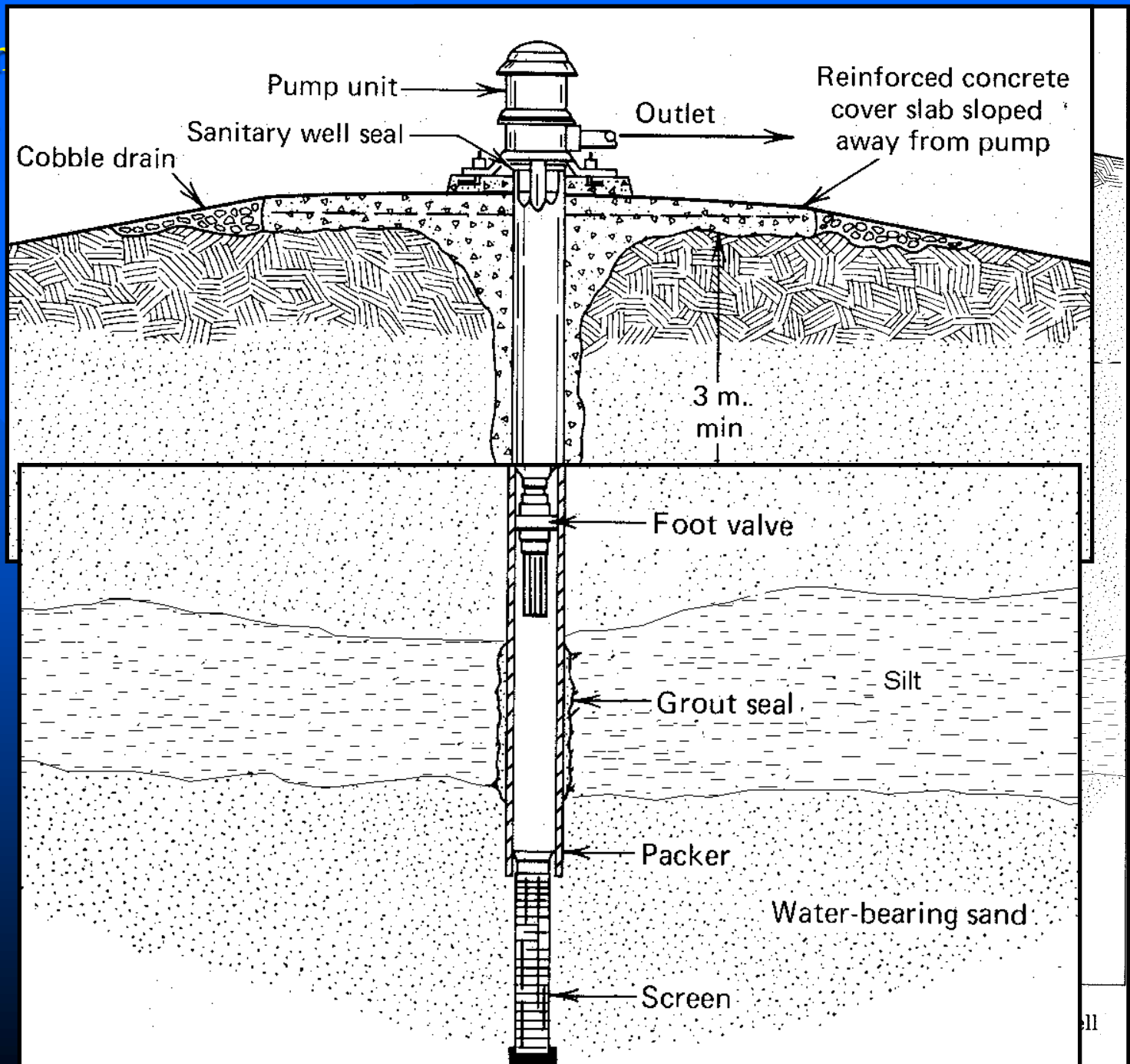
Sources: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, SRF, Google, and the GIS User Community

IRELAND WELL - WHY REPLACE THE WELL?

- The Well was constructed in 1960 (55 years ago).
- Due to sand entering the original screen, a second screen was installed in 1998. This makes the Well nearly impossible to clean and rehabilitate.
- The yield of the Well has dropped from 600 gallons per minute to less than 350 gallons per minute.
- Pump wear in this Well has been excessive due to silt/sediment entering through the screen. As a result, a new pump was installed in 2014.
- The attempt to redevelop/rehabilitate the Well in 2014 was ineffective/poor. The starting specific yield capacity before the development process began was 16 gallons per minute per foot of drawdown; the resultant specific yield capacity after five days of redevelopment was only 16.8 gallons per minute per foot of drawdown. It is not recommended that additional attempts/investments be taken to rehabilitate this Well again.



Scher
a



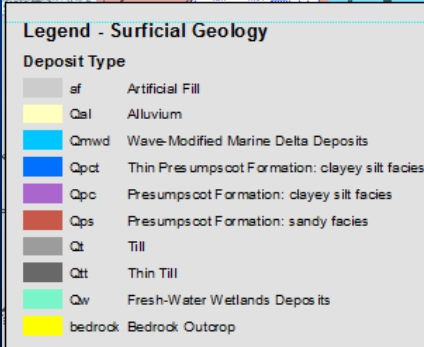
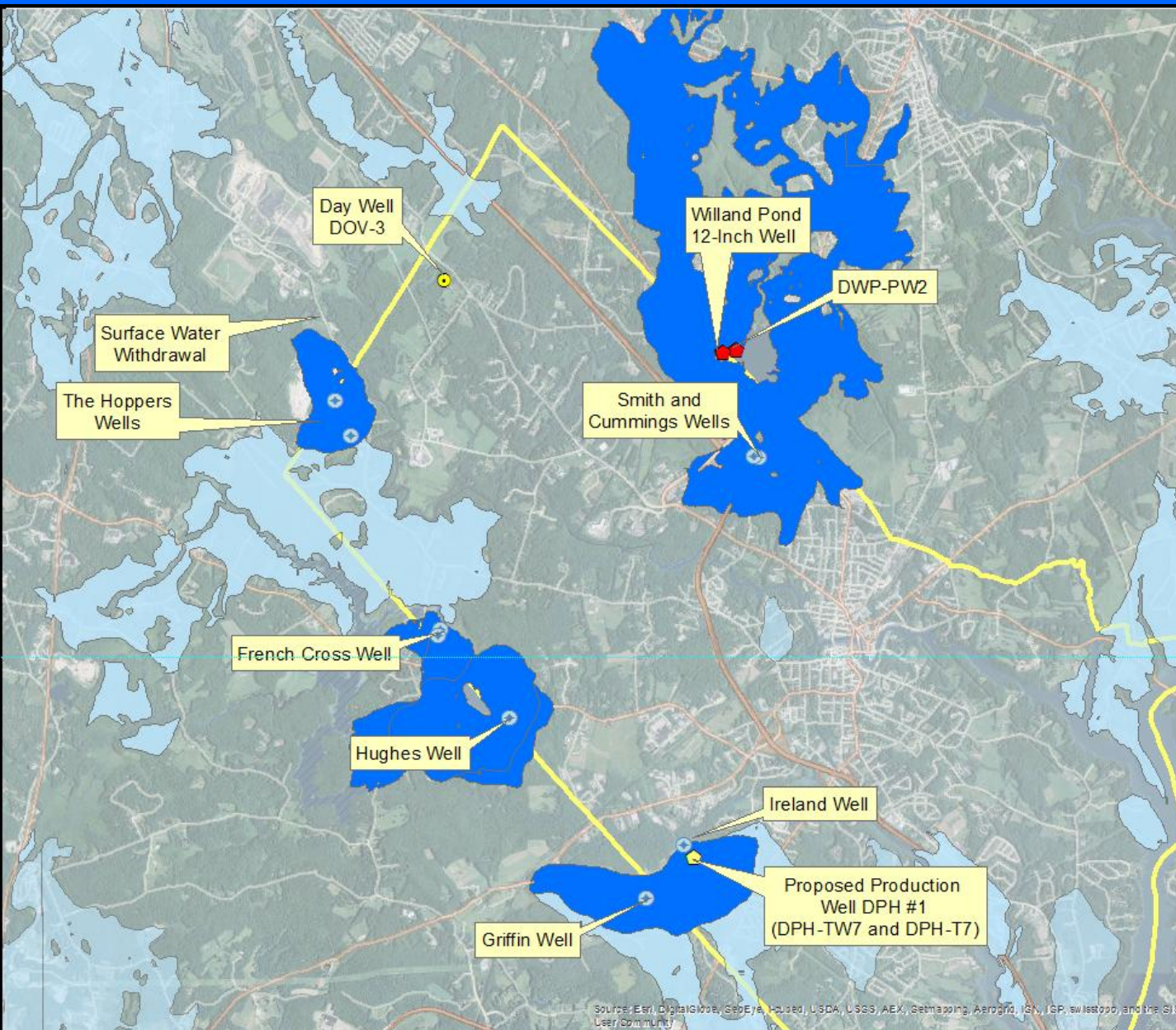


FIGURE 1

Existing and Potential
Production Wells
City of Dover



Legend

- Existing Production Well - NHDES GIS
- Wells Developed by EGGI
 - Permitted Production Well
 - Proposed Production Well
 - Exploratory Test Well
- Aquifers from which water resources are derived
- Other glacial sand and gravel deposits
- Dover City Limits



Scale is 1:48,000
1 inch = 4,000 feet
0 2,000 4,000 8,000 Feet

Source: Esri, DigitalGlobe, GeoEye, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Emery & Garrett **FIGURE 1**
Groundwater Investigations, LLC

END

