

# Cloverly Community Meeting

Former Shell Service Station  
15541 New Hampshire Avenue  
Silver Spring, MD

February 22, 2010

# AGENDA

- Case History
- MTBE Overview
- Site Conceptual Model
- Recent Sampling Results
- Corrective Action Plan
- Water Resource Analysis
- Questions? (30 min)

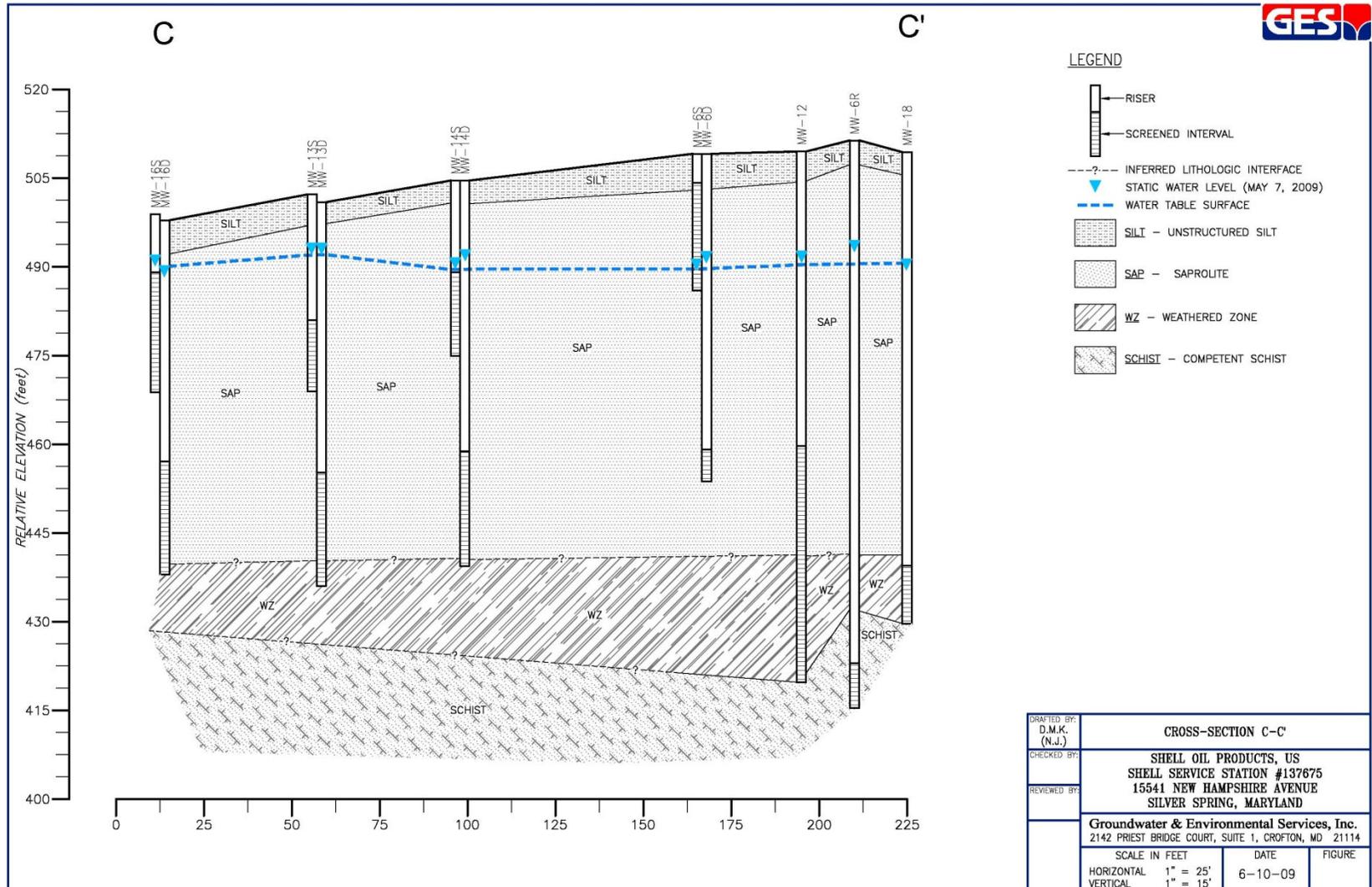
# CASE HISTORY

- September 2002 – Shell Branded Station Closed for Business
- November 2002 – Underground Storage Tanks Removed
- February 2003 – Work Plan Submitted to MDE to Install Wells
- September 2003 – Potable Well Sampling Initiated
- December 2003 – Initial Monitoring Wells Installed after receiving access
- July 2004 – Pump & Treat System Started on Site
- March 2005 – Soil Vapor Extraction (SVE) System Started on Site
- September 2007 – SVE System Shut Down
- June 2007 – Initial Testing Began for Offsite Treatment System
- November 2009 – Corrective Action Plan Submitted to MDE

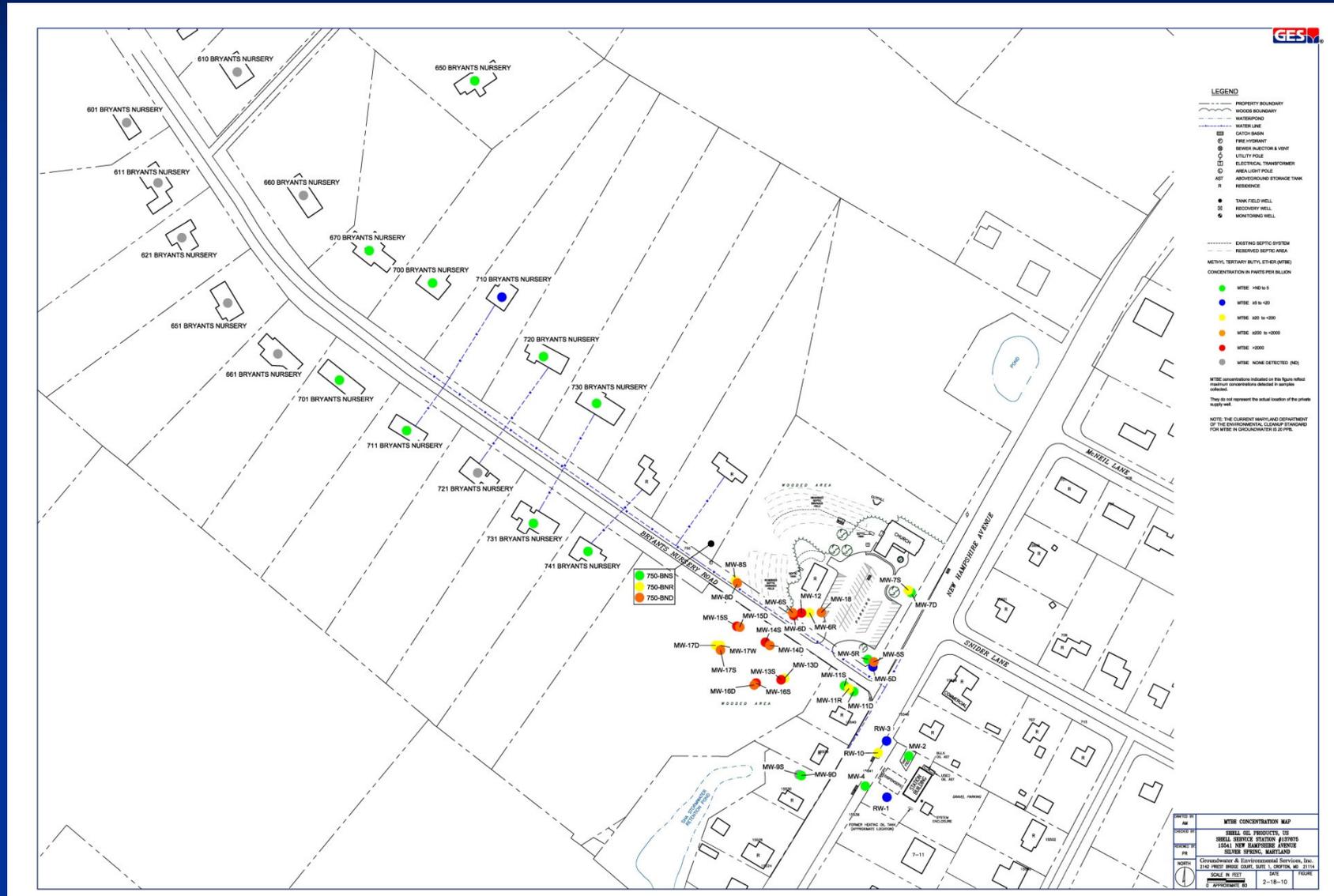
# MTBE Overview

- MTBE - methyl tertiary-butyl ether
- Used in gasoline beginning in 1979 as an octane enhancer (oxygenate)
- In 1992, MTBE concentrations in some gasoline increased to fulfill Clean Air Act requirements
- In 2006, MTBE stopped being used in gasoline in our area
- MDE cleanup standard for MTBE is 20 ppb

# Site Conceptual Model



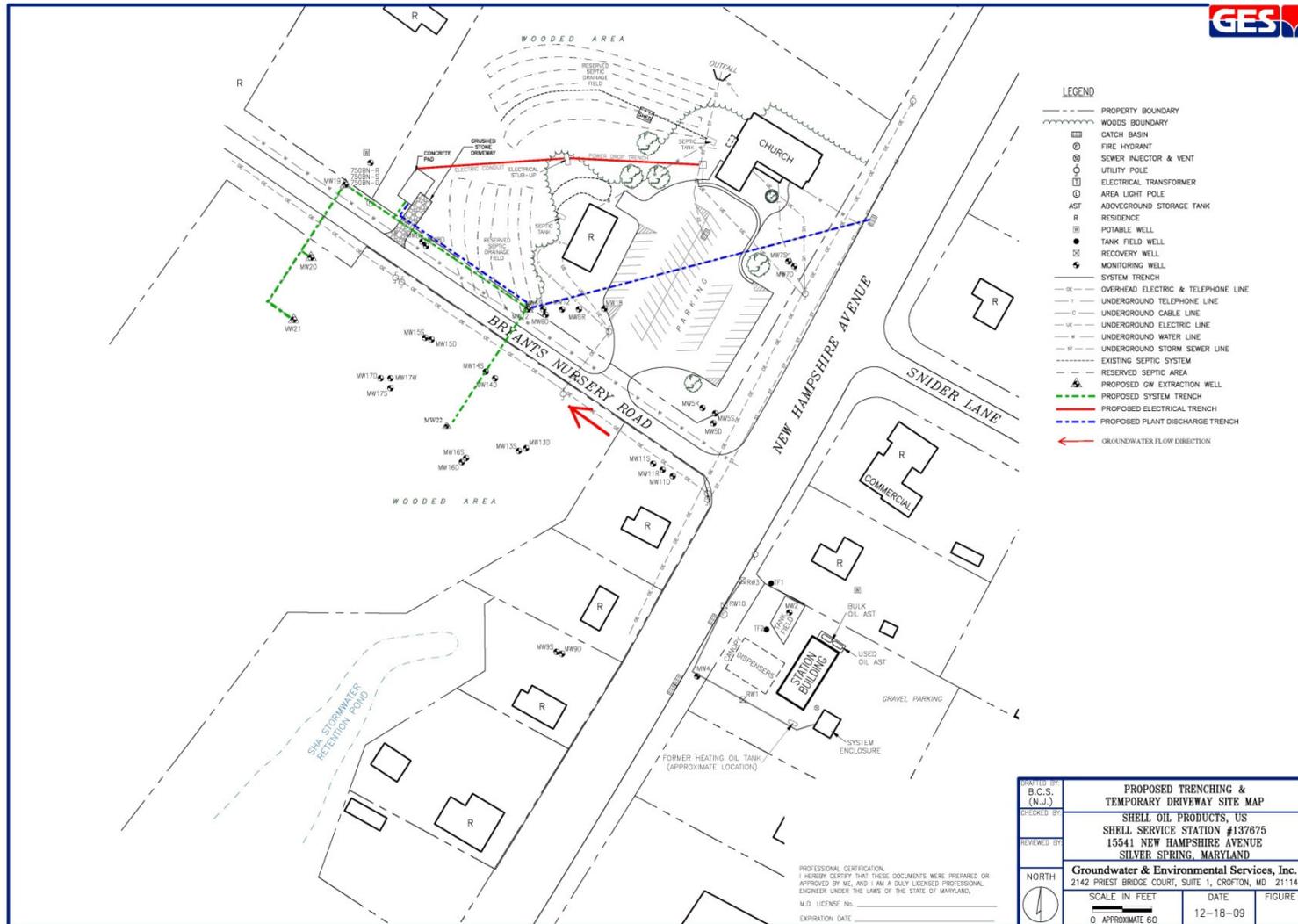
# Recent Sampling Results



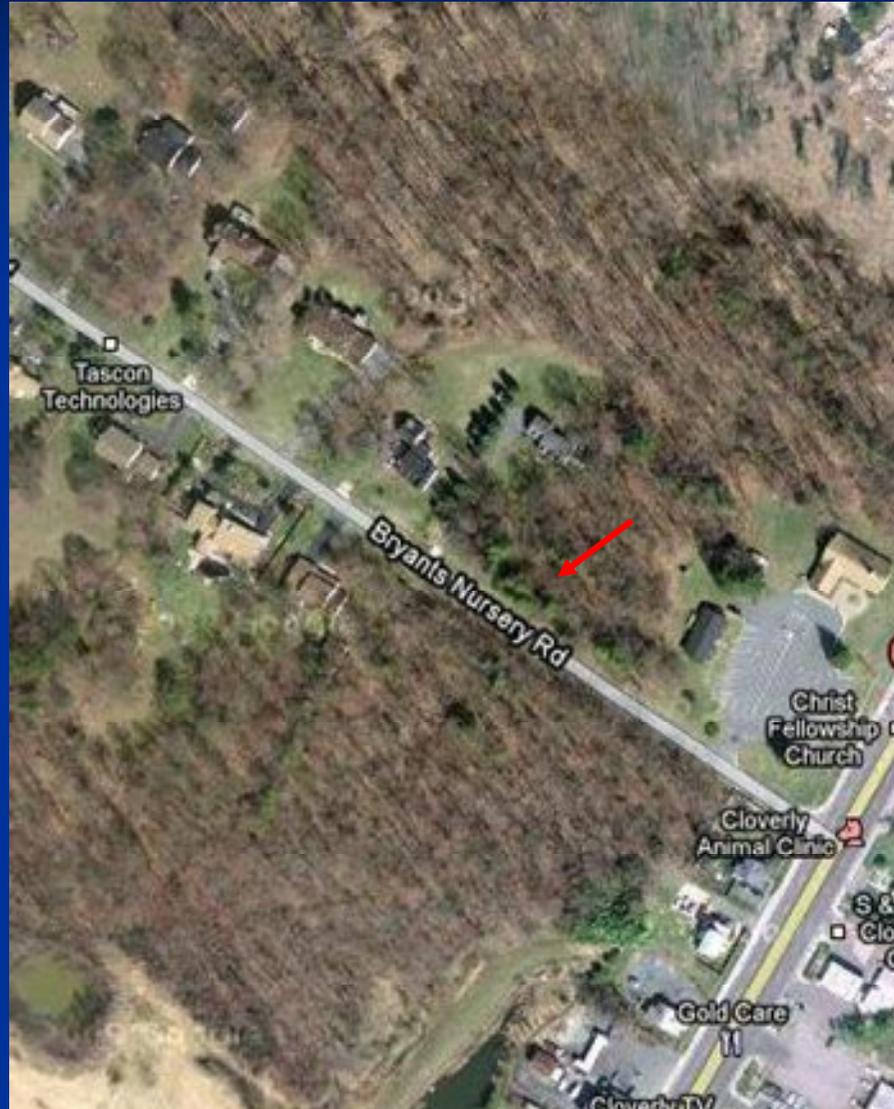
# Corrective Action Plan

- Proposed System Layout Map
- System Placement
- System Construction
- System Performance

# Proposed System Layout Map



# System Placement



# System Construction – Outside View



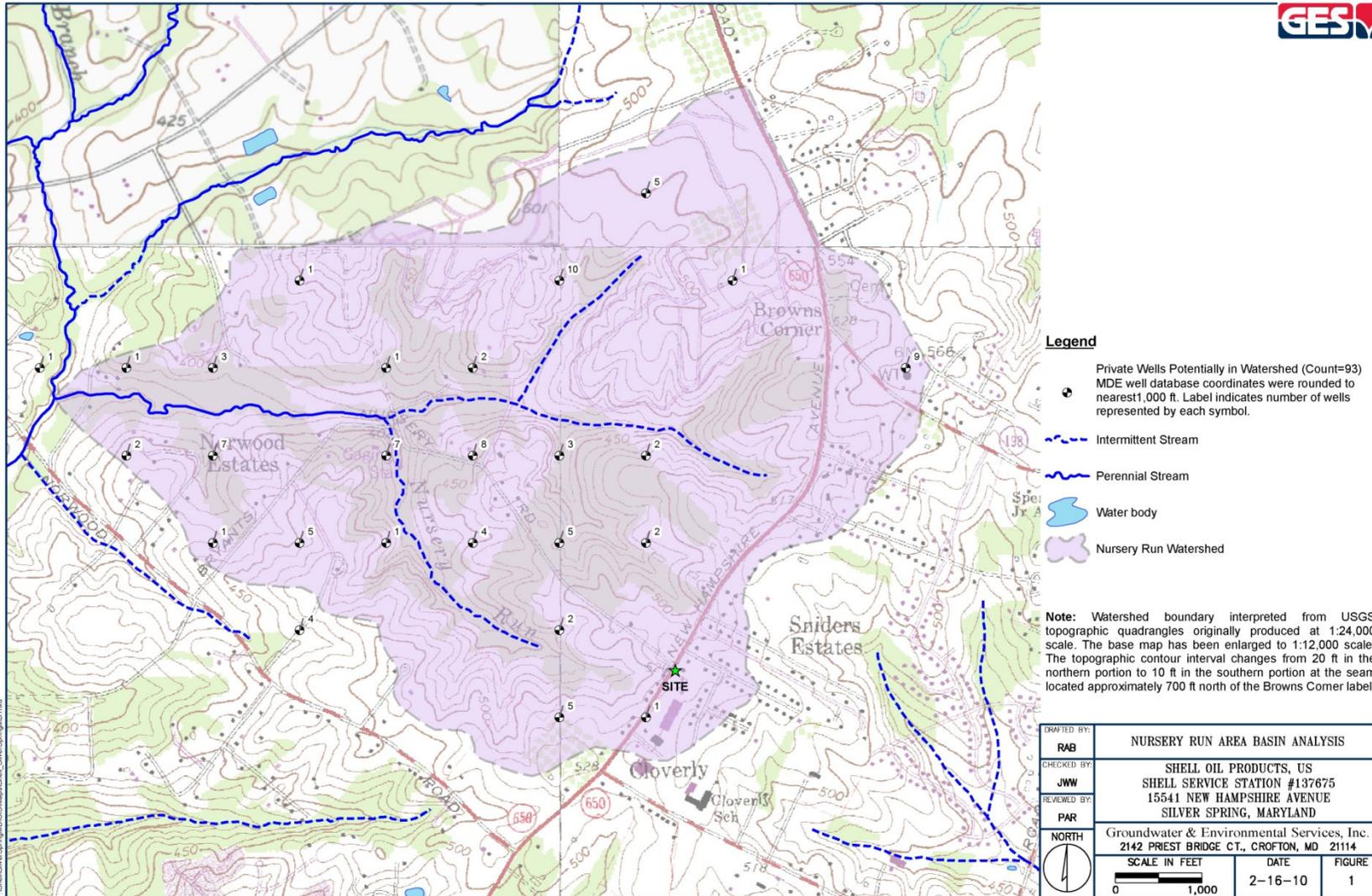
# System Construction – Inside View



# System Performance

- Planned operation of system will be 24/7 (except for routine maintenance)
- Maximum Noise Level – 55 dba at 10 feet
- Average Anticipated Pumping Rate – 6.5 to 12 gpm
- Treated effluent water will be discharged through SHA storm sewer to SHA retention pond, in accordance with discharge permit
- Air will be treated with an air stripper and discharged, in accordance with air discharge permit
- Telemetry system will alert GES if system turns off
- System Shutdown Goals – System will run until MTBE groundwater concentrations have significantly decreased and are protective of the residents (approximately two to four years)

# Water Resource Analysis



QUESTIONS?