













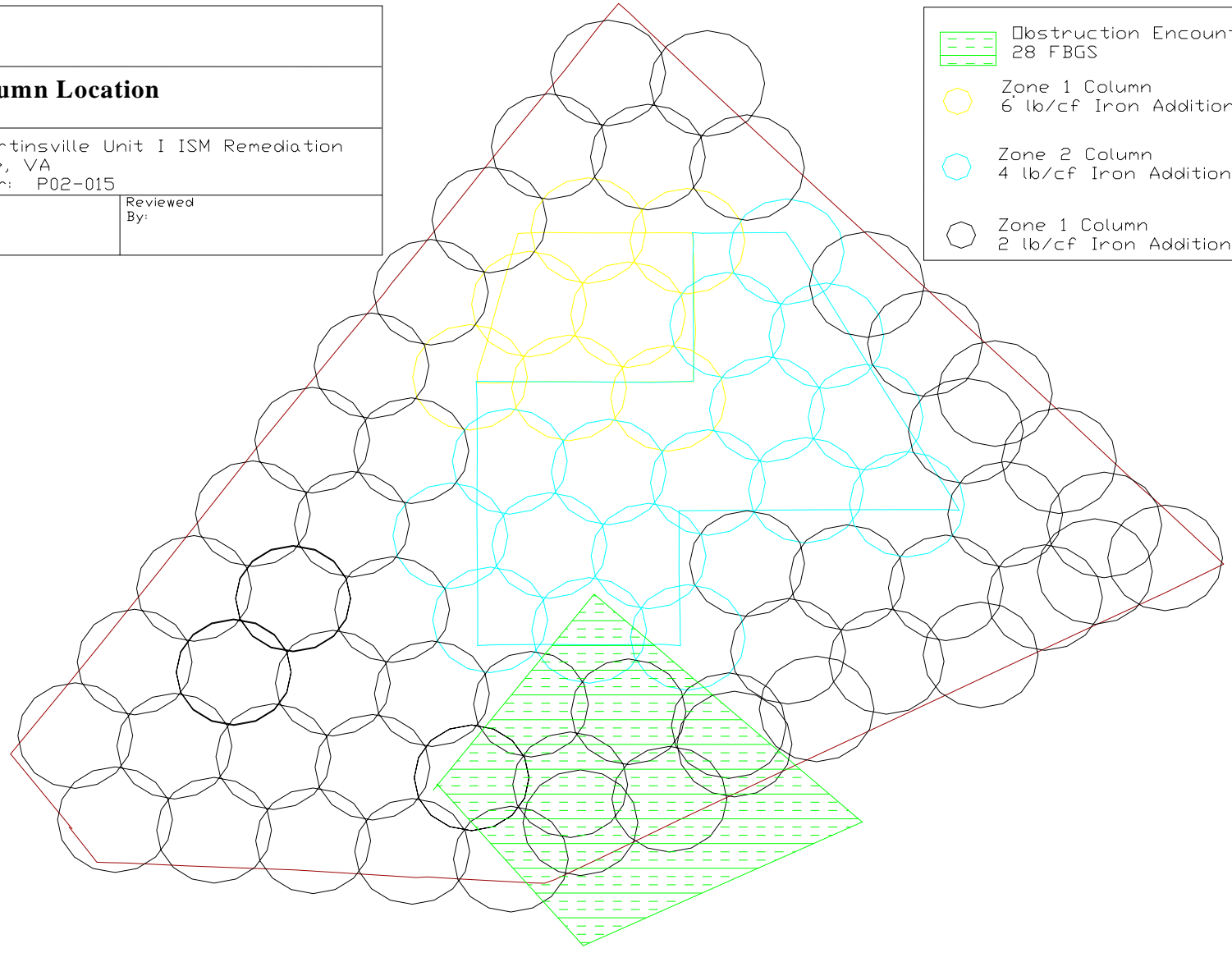






Final Column Location	
As-Built	
Dupont Martinsville Unit I ISM Remediation Martinsville, VA Job Number: P02-015	
Drawn By:	Reviewed By:

	Obstruction Encountered 28 FBGS
	Zone 1 Column 6 lb/cf Iron Addition
	Zone 2 Column 4 lb/cf Iron Addition
	Zone 1 Column 2 lb/cf Iron Addition





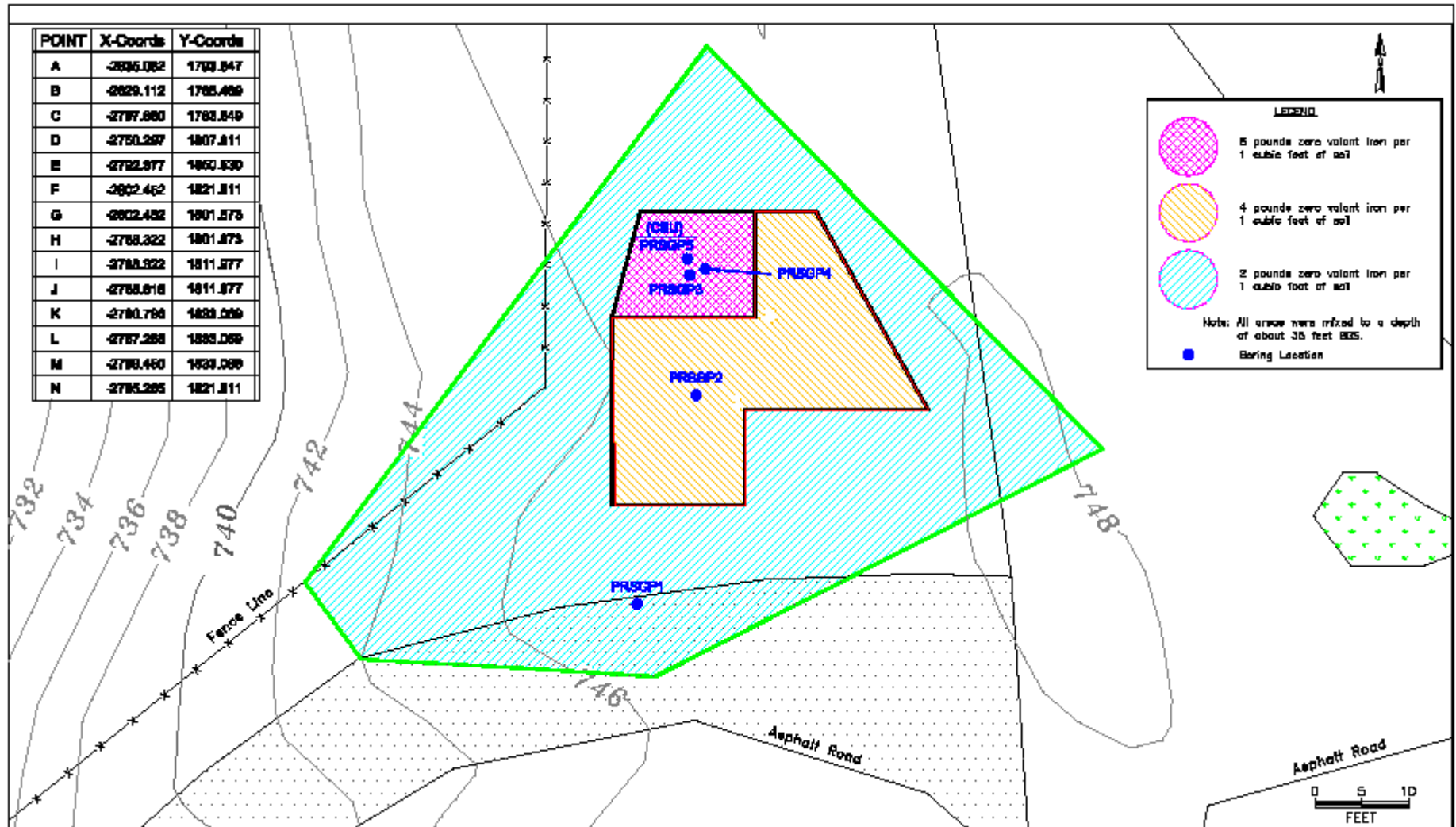
Overview

- Total Amount of Additives
 - 225 tons Iron
 - 340 tons Clay
 - 250,000 gallons Water
- Required 10 weeks, averaged four columns completed per day at end of project

Learnings

- Prepare for dealing with obstructions
- Incorporate iron and clay together
- Water management required
- Difficult to account for all of the iron used
- Additional soil volume generated
- May have air emissions or odors if contamination is near-surface

Post-Remediation Sampling Locations



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NOTE: Coordinates are Metric/US Plant Coordinates. Benchmark located east of Plant Area.

Preliminary Post-Remediation Results

(Maximum Concentrations)

	Pre-Remediation	Post-Remediation
Carbon Tetrachloride	30,000	0.7
Methylene Chloride	39	120
TCE	16	0.9
PCE	19	26

-All results are mg/kg

-44 Pre-Remediation samples

-18 Post-Remediation samples

Next Steps

- Long-term surface water and downgradient groundwater monitoring
- Additional source zone soil sampling
- ZVI Source Treatment Technology applications at other sites

Thank You