Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Fabrication Facility
5801 Bluff Road
Hopkins, South Carolina 29061
USA

SCDES, BLWM
Greg Cassidy
2600 Bull Street
Columbia, SC 29201

Direct tel: 803.647.1920
Direct fax: 803.695.3964
e-mail: joynerdp@westinghouse.com
Your ref:
Our ref: LTR-RAC-25-31

July 2, 2025

Subject: **Groundwater Well Installations**
CVOC Pilot Study PMWs, W-127, and W-23A

Mr. Cassidy:

Westinghouse Electric Company Columbia Fuel Fabrication Facility (CFFF) located in Hopkins, SC is requesting authorization to install fourteen groundwater wells. Twelve wells are designated as chlorinated volatile organic compounds (CVOC) performance monitoring wells (PMWs) to support the Pilot Study Work Plan[1]. The other two wells are new installations / relocations to support LEU+ construction activities.[2]

The locations of the PMWs are the same as those proposed in the Pilot Study Work Plan (Figure 10) in January 2025. PMWs will be named PMW-1A, PMW-1B, PMW-2A, etc.

Prior to abandonment of W-85 and W-86 and in order to support LEU+ construction activities, CFFF requests permission to install lower zone monitoring well W-127. W-127 will be paired with existing upper zone monitoring well W-84 to ensure there are no data gaps in the eastern edge of the building monitoring system well network.

Well W-23R also needs to be relocated in order to support LEU+ construction activities. CFFF requests permission to relocate well W-23R to the south/southeast and rename it well W-23A, as illustrated in the attached Figure 4.

In accordance with the aforementioned work needed to support the Pilot Study as well as LEU+ construction activities, please find attached for your review the following documents prepared by AECOM for CFFF:

- Monitoring Well Application, 14 wells (12 Pilot Study, 2 LEU+ construction installation / relocation)
- Typical Monitoring Well Schematics
- CVOC Pilot Test Layout (Figure 10, January 2025)
- Site Map (Figure 4, January 2025) with proposed locations for new wells W-23A and W-127 identified

In summation, CFFF and AECOM request well permits for 12 performance monitoring wells (PMW- 1A, PMW-1B, PMW-2A, etc. and 2 additional wells (W-127, W-23A). Please note that the performance wells will have groundwater samples collected from them this month, while wells W-23A and W-127 will not be sampled until the next routine groundwater sampling campaign in October 2025.

Please contact me if there are any questions regarding this submission.

[1]The Pilot Study Work Plan was submitted to SCDES on January 30, 2025 (LTR-RAC-25-10) and was later approved by SCDES on February 20, 2025.
[2] CFFF LTR-RAC-24-50 requested abandonment of W-85 and W-86 (submitted on October 10, 2024); SCDES approved the abandonment on October 14, 2024

Respectfully,

Diana P. Joyner
Lead Environmental Engineer
Westinghouse Electric Company, CFFF
803.497.7062 (m)

cc : N. Parr, CFFF Environmental Protection Manager
J. Ferguson, CFFF EH&S Manager
J. Grant, AECOM PM & Remediation Services Manager
C. Fizgerald, PE, AECOM Engineering Manager
I. Ros, PE, AECOM Remediation Engineer
ENOVIA Records

Monitoring Well Application

1. Proposed Location of Monitoring Well(s):

   Street Address: **Westinghouse CFFF**
   5801 Bluff Rd.

   City (including Zip): **Hopkins, SC 29061**

   County: **Richland**

   Please attach Scaled Map or Plat

2. Well Owner's Information:

   Name (Last then First): **Parr, Nancy**

   Company: **Westinghouse CFFF**

   Complete Address: **5801 Bluff Rd.**
   Hopkins, SC 29061

   Telephone Number: **(803) 647-3338**

3. Property Owner's Information:

   ☑ Check if same as Well Owner

   Name (Last then First):

   Company:

   Address:

   Telephone Number:

4. Proposed Drilling Date: **07/07/2025**

   7/7/25

5. Intended Purpose of Well(s):

   Pre-Purchase ☐

   Investigation ☑

   NOTE: If this request is for an existing DHEC project, please enter the Program area and ID number below.

   Program Area: **BLWM**
   Project or Site ID #: **51377**

6. Proposed number of monitoring wells: **14**

7. Proposed parameters to be analyzed (check all that apply), please specify analytical method beside check box:

VOCs	☑
BTEX	☐
MtBE	☐
Naphthalene	☐
PAHs	☐
Metals	☐
Nitrates	☐
Base, Neutral & Acid Ex.	☐
Pesticides/Herbicides	☐
Phenols	☐
Radionuclides	☐
PCBs	☐
Other (specify below)	☐

8. Proposed construction details (complete and attach proposed monitoring well schematics):

   See attachments.

AECOM

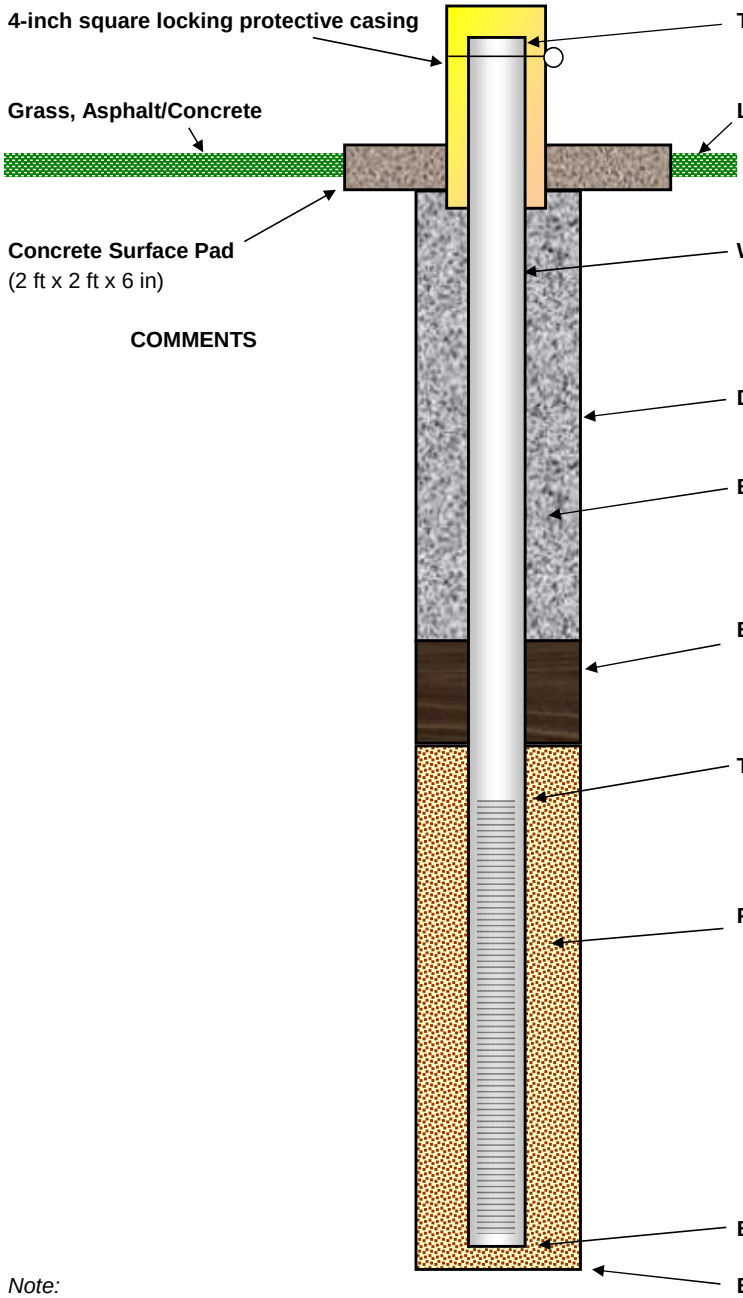
Typical Surficial Aquifer Upper Zone Monitoring Well Schematic - Above Grade

Project Name: Westinghouse CFFF **Drilling Co:** _____ **Well Number:** _____

Location: Hopkins, SC **Driller:** _____ **Job Number:** _____

Client: _____ **Drilling Method:** _____ **Date Completed:** _____

Geologist: _____ **Static Water Level:** _____ **Survey Datum:** _____



4-inch square locking protective casing

Grass, Asphalt/Concrete

Concrete Surface Pad
(2 ft x 2 ft x 6 in)

COMMENTS

Top Of Casing Elevation _____ ft _____ ft Stickup

Land Surface Elevation _____ ft

Well Casing From _____ ft to _____ ft

Casing Type: **PVC**
Inside Diameter: **2 inch**

Diameter of Borehole (nominal)
8 in

Bentonite/Cement Grout
From _____ ft to _____ ft

Bentonite Pellet Seal
Type: _____
From _____ ft to _____ ft

Top of Screen Depth _____ ft
Screen Type: **PVC**
Screen Slot Size: **0.010-in** ID _____ in
Screen Length: **10** ft

Filter Sand for Screen
Sand Type: _____
From _____ ft to _____ ft

Bottom of Well Depth _____ ft

Bottom of Boring (estimated) Depth _____ ft

Total Depth of Well, b. Top of Casing Depth _____ ft

Note:
Drawing Not to Scale
All Depths are Referenced to Ground Surface

AECOM

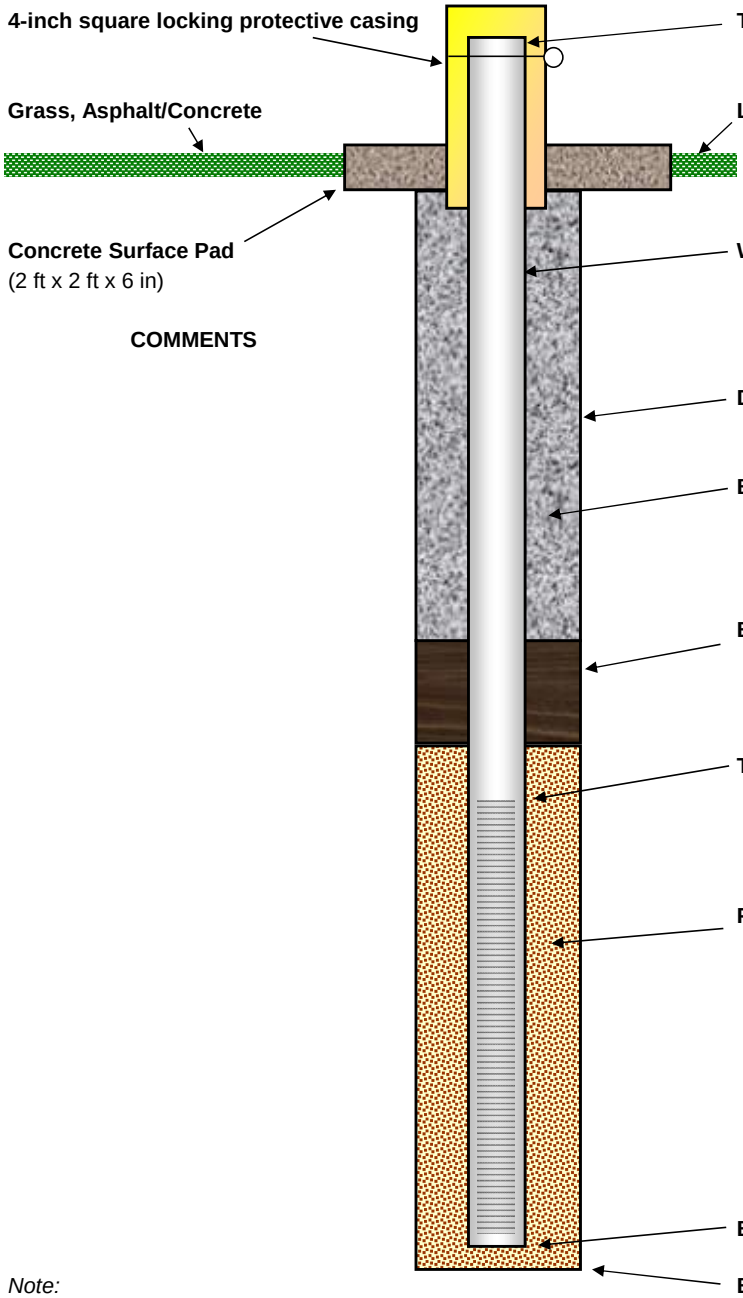
Typical Surficial Aquifer Lower Zone Monitoring Well Schematic - Above Grade

Project Name: Westinghouse CFFF **Drilling Co:** _____ **Well Number:** _____

Location: Hopkins, SC **Driller:** _____ **Job Number:** _____

Client: _____ **Drilling Method:** _____ **Date Completed:** _____

Geologist: _____ **Static Water Level:** _____ **Survey Datum:** _____



4-inch square locking protective casing

Grass, Asphalt/Concrete

Concrete Surface Pad
(2 ft x 2 ft x 6 in)

COMMENTS

Top Of Casing Elevation _____ ft _____ ft Stickup

Land Surface Elevation _____ ft

Well Casing From _____ ft to _____ ft

Casing Type: **PVC**
Inside Diameter: **2 inch**

Diameter of Borehole (nominal)
8 in

Bentonite/Cement Grout
From _____ ft to _____ ft

Bentonite Pellet Seal
Type: _____
From _____ ft to _____ ft

Top of Screen Depth _____ ft
Screen Type: **PVC**
Screen Slot Size: **0.010-in** ID _____ in
Screen Length: **5** ft

Filter Sand for Screen
Sand Type: _____
From _____ ft to _____ ft

Bottom of Well Depth _____ ft

Bottom of Boring (estimated) Depth _____ ft

Total Depth of Well, b. Top of Casing Depth _____ ft

Note:
Drawing Not to Scale
All Depths are Referenced to Ground Surface

AECOM

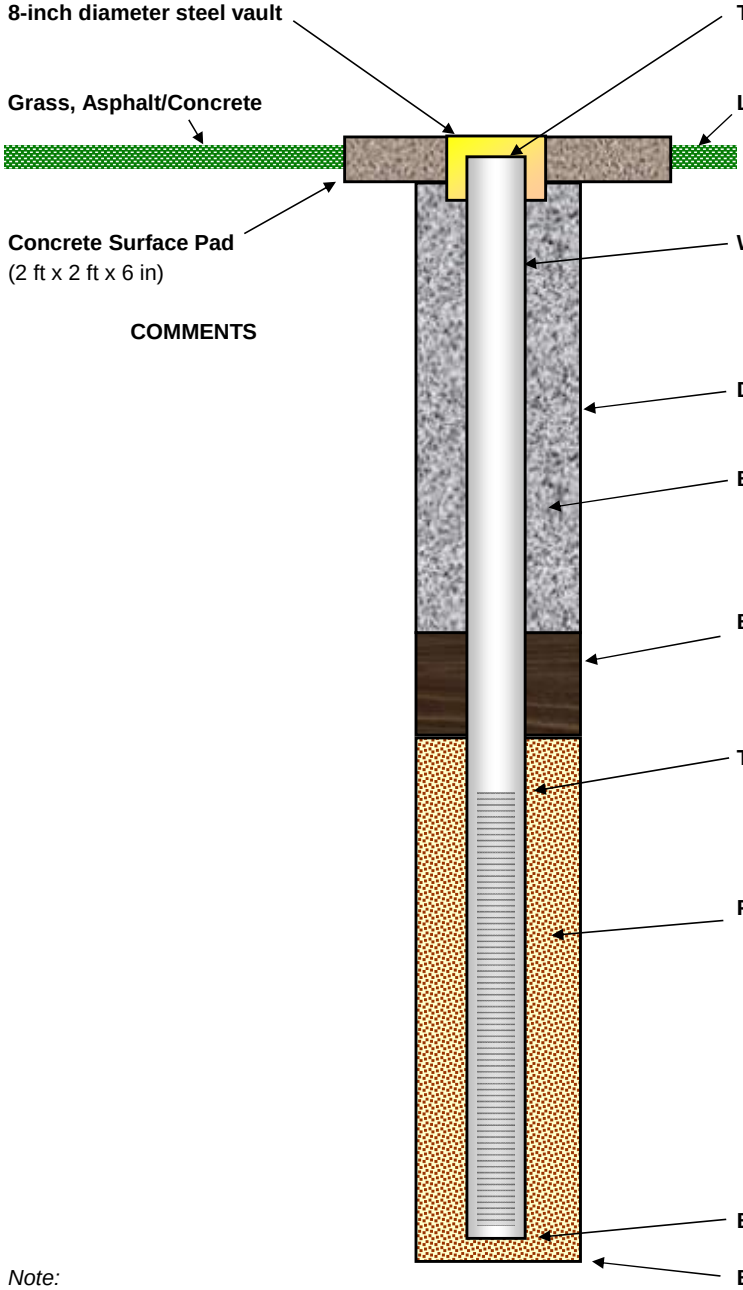
Typical Surficial Aquifer Upper Zone Monitoring Well Schematic - Below Grade

Project Name: Westinghouse CFFF **Drilling Co:** _____ **Well Number:** _____

Location: Hopkins, SC **Driller:** _____ **Job Number:** _____

Client: _____ **Drilling Method:** _____ **Date Completed:** _____

Geologist: _____ **Static Water Level:** _____ **Survey Datum:** _____



Top Of Casing Elevation _____ ft _____ ft Stickup

Land Surface Elevation _____ ft

Well Casing From _____ ft to _____ ft

Casing Type: **PVC**

Inside Diameter: **2 inch**

Diameter of Borehole (nominal)

8 in

Bentonite/Cement Grout

From _____ ft to _____ ft

Bentonite Pellet Seal

Type: _____

From _____ ft to _____ ft

Top of Screen Depth _____ ft

Screen Type: **PVC**

Screen Slot Size: **0.010-in** ID _____ in

Screen Length: **10** ft

Filter Sand for Screen

Sand Type: _____

From _____ ft to _____ ft

Bottom of Well Depth _____ ft

Bottom of Boring (estimated) Depth _____ ft

Total Depth of Well, b. Top of Casing Depth _____ ft

Note:
Drawing Not to Scale
All Depths are Referenced to Ground Surface

AECOM

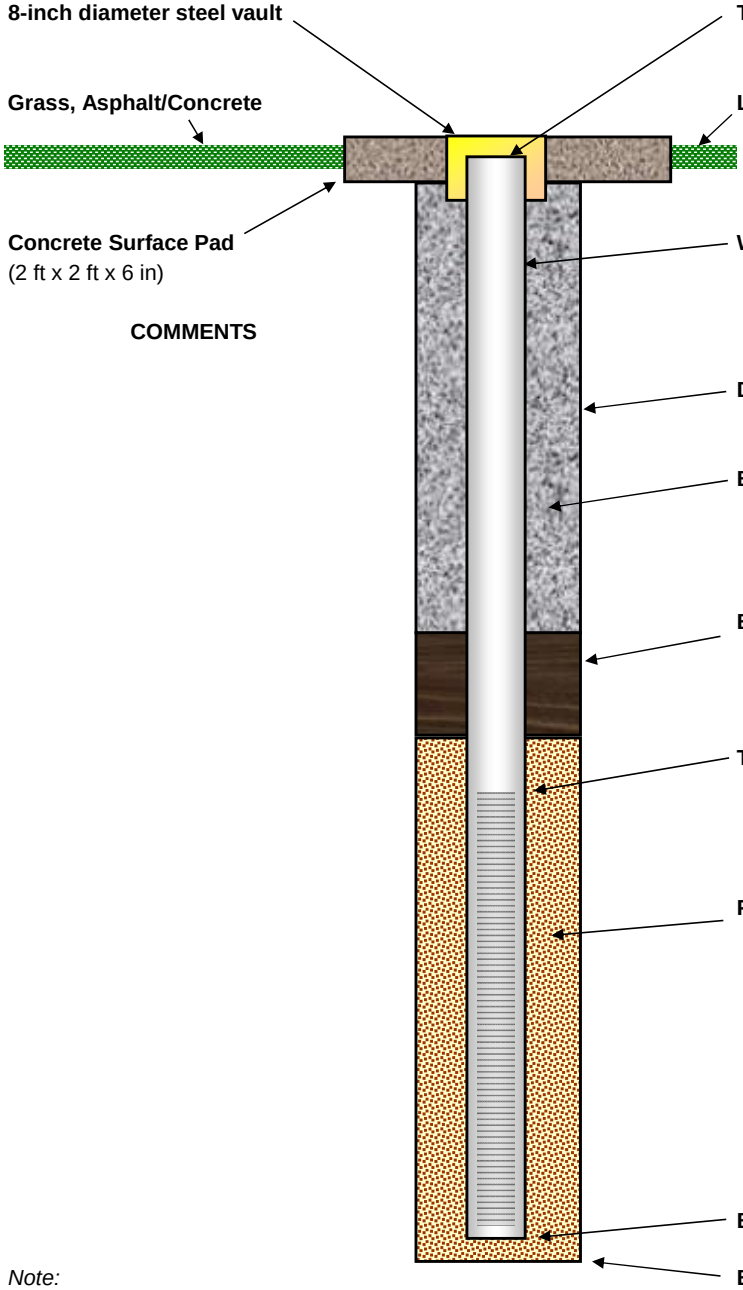
Typical Surficial Aquifer Lower Zone Monitoring Well Schematic - Below Grade

Project Name: Westinghouse CFFF **Drilling Co:** _____ **Well Number:** _____

Location: Hopkins, SC **Driller:** _____ **Job Number:** _____

Client: _____ **Drilling Method:** _____ **Date Completed:** _____

Geologist: _____ **Static Water Level:** _____ **Survey Datum:** _____



8-inch diameter steel vault

Grass, Asphalt/Concrete

Concrete Surface Pad
(2 ft x 2 ft x 6 in)

COMMENTS

Top Of Casing Elevation _____ ft _____ ft Stickup

Land Surface Elevation _____ ft

Well Casing From _____ ft to _____ ft

Casing Type: **PVC**
Inside Diameter: **2 inch**

Diameter of Borehole (nominal)
8 in

Bentonite/Cement Grout
From _____ ft to _____ ft

Bentonite Pellet Seal
Type: _____
From _____ ft to _____ ft

Top of Screen Depth _____ ft
Screen Type: **PVC**
Screen Slot Size: **0.010-in** ID _____ in
Screen Length: **5** ft

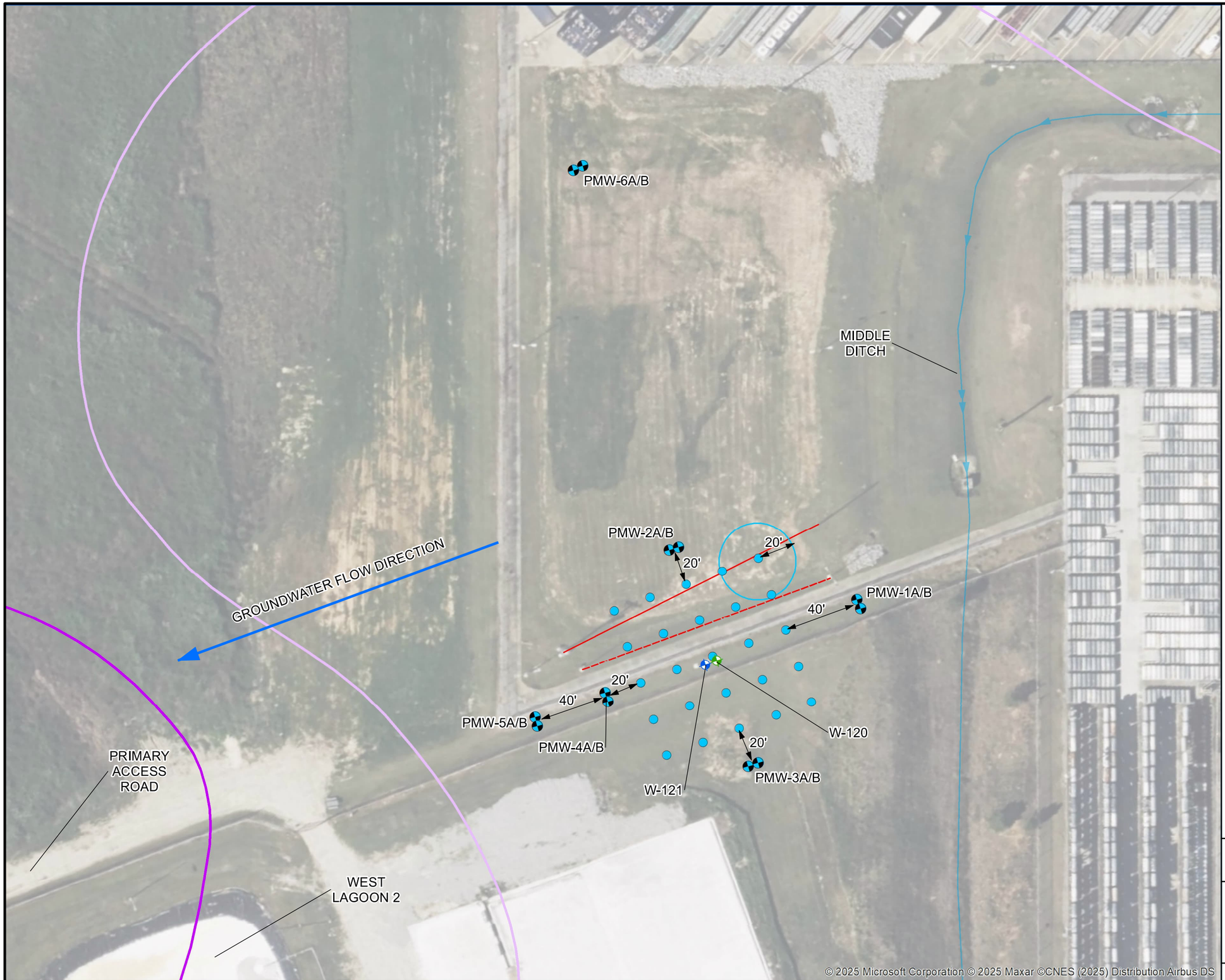
Filter Sand for Screen
Sand Type: _____
From _____ ft to _____ ft

Bottom of Well Depth _____ ft

Bottom of Boring (estimated) Depth _____ ft

Total Depth of Well, b. Top of Casing Depth _____ ft

Note:
Drawing Not to Scale
All Depths are Referenced to Ground Surface



Legend

- Surficial Aquifer - Upper Zone Monitoring Well
- Surficial Aquifer - Lower Zone Monitoring Well
- Performance Monitoring Well
- ERD+ZVI Injection Point
- Target Radius of Influence
- PCE MCL Isocontour Line (5 µg/L)
- TCE MCL Isocontour Line (5 µg/L)
- Ditch
- Culvert
- Underground Electric Utility
- Overhead Electric Utility

0 25 50 Feet

1:600

Map Projection: NAD 1983, South Carolina State Plane, FIPS 3900, Feet

Datum: North American 1983

AECOM
101 Research Drive
Columbia, SC 29203
T: (803) 254-4400 F: (803) 771-6676

CVOC
Pilot Test Layout

WESTINGHOUSE COLUMBIA FUEL FABRICATION FACILITY
HOPKINS, SOUTH CAROLINA

PROJECT NO.	PREPARED BY:	DATE:	
60691645	IJR	January 2025	**FIGURE 10**

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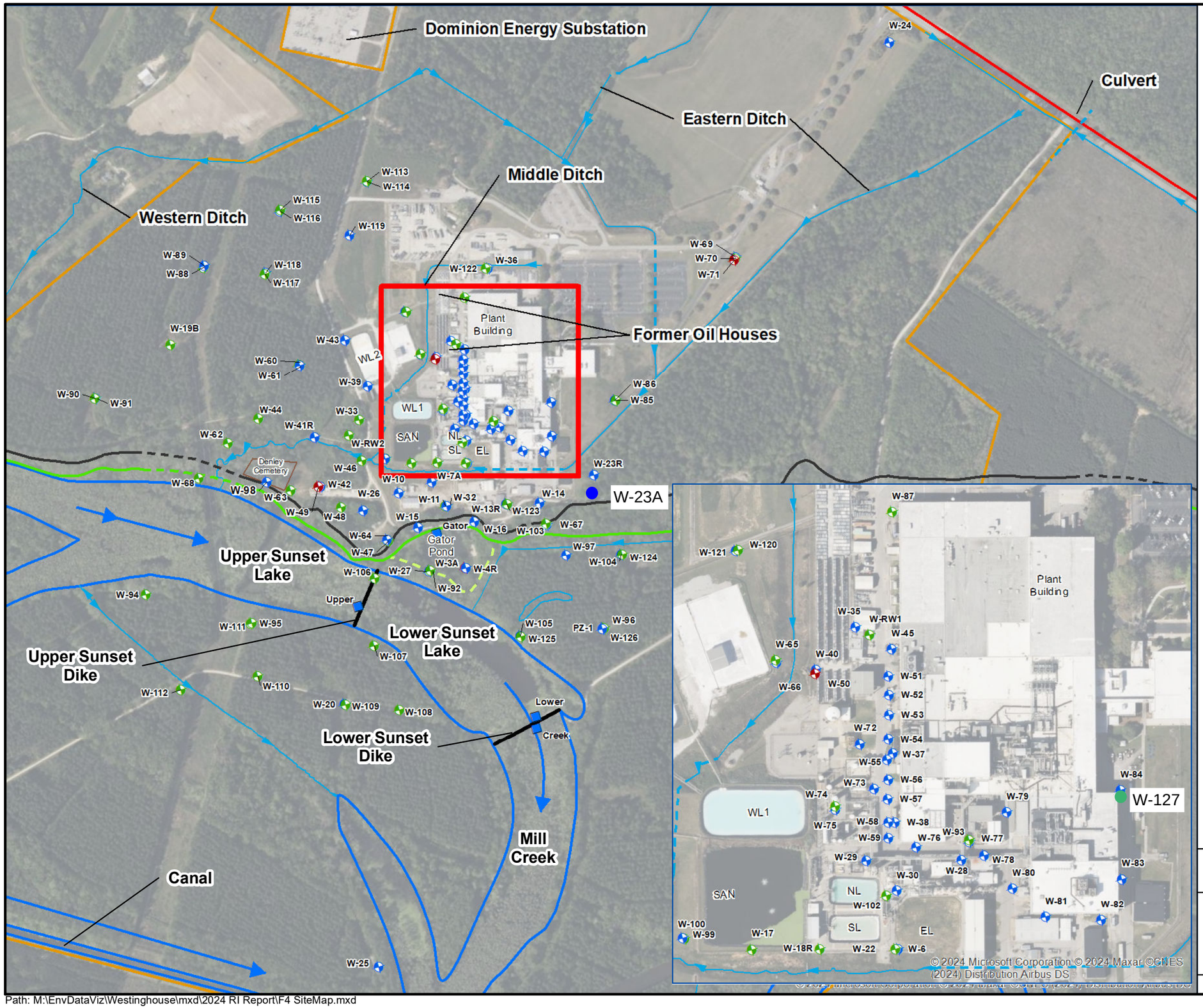

Legend

- Surficial Aquifer - Upper Zone Monitoring Well
- Surficial Aquifer - Lower Zone Monitoring Well
- Black Creek Aquifer Monitoring Well
- Staff Gage Location
- Ditch
- Culvert
- Dike Location
- Mill Creek Flow Direction
- Mill Creek
- Property Line
- SCRDI Bluff Road (Superfund Site)
- Top of Bluff
- Inferred Top of Bluff
- Bottom of Bluff
- Inferred Bottom of Bluff
- Secondary Bluff Area

EL	Former East Lagoon
NL	North Lagoon
SL	South Lagoon
SAN	Sanitary Lagoon
WL1	West Lagoon I
WL2	West Lagoon II

0 300 600 Feet

1:7,200

Map Projection: NAD 1983, South Carolina State Plane, FIPS 3900, Feet

Datum: North American 1983

AECOM
2151 Pickens Street, Suite 301
Columbia, SC 29201
T: (803) 254-4400 F: (803) 771-6676

Site Map

WESTINGHOUSE COLUMBIA FUEL FABRICATION FACILITY
HOPKINS, SOUTH CAROLINA

PROJECT NO.	PREPARED BY:	DATE:	
60700386	CCS	January 2025	**FIGURE 4**

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