# MINE MODIFICATION #1

# FOR MINE PERMIN #431



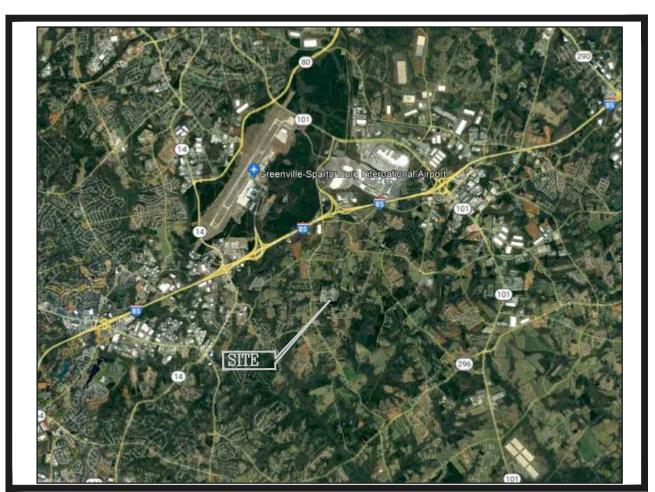
# Heidelberg Materials Southeast Agg LLC

7 West Point Blvd. Mauldin, S.C, 29662

# PELEIM QUARRY

240 EAST HOWELL ROAD GREER, SOUTH CAROLINA, 29651

Phone 864-848-1165

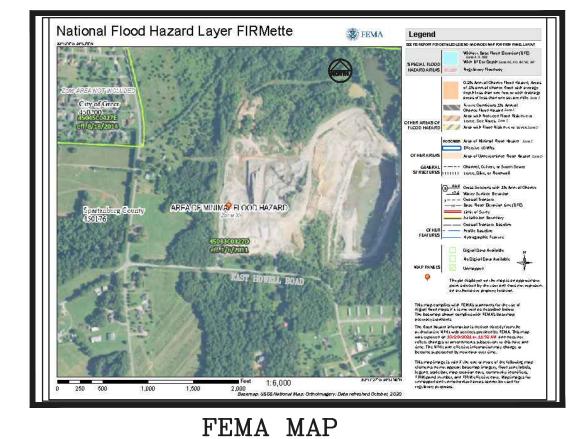


LOCATION MAP
SCALE; 1"= 5 MILES

LAT: 34.866268 N LONG: -82.192890 W

SITE DATA:

PROPERTY OWNER: HANSON AGGREGATES SOUTHEAST, LLC
ENVIRONMENTAL 24 HOUR CONTACT
JIM ZADOROZNY - 770-617-7398

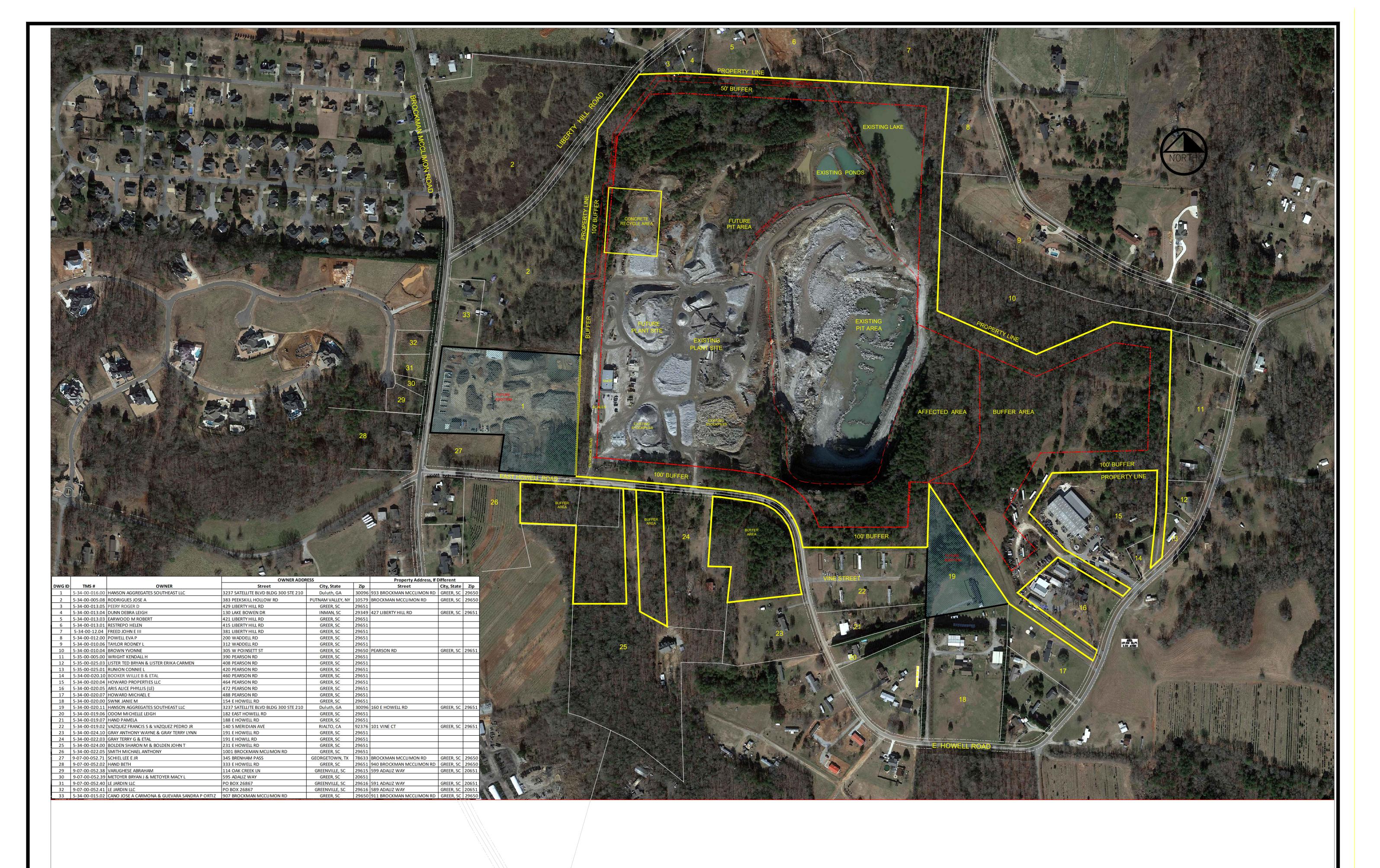


SCALE 1" =1000'
FEMA PANEL - #45083C0327D



Seven Dunwoody Park, Suite 115 Atlanta, Georgia 30338 Phone: (770) 395-6111 Fax: (770) 395-6999

	SHEET	INDEX
SHEET No.	DESCRIPTION	
1	EXISTING CONDITIONS MAP	
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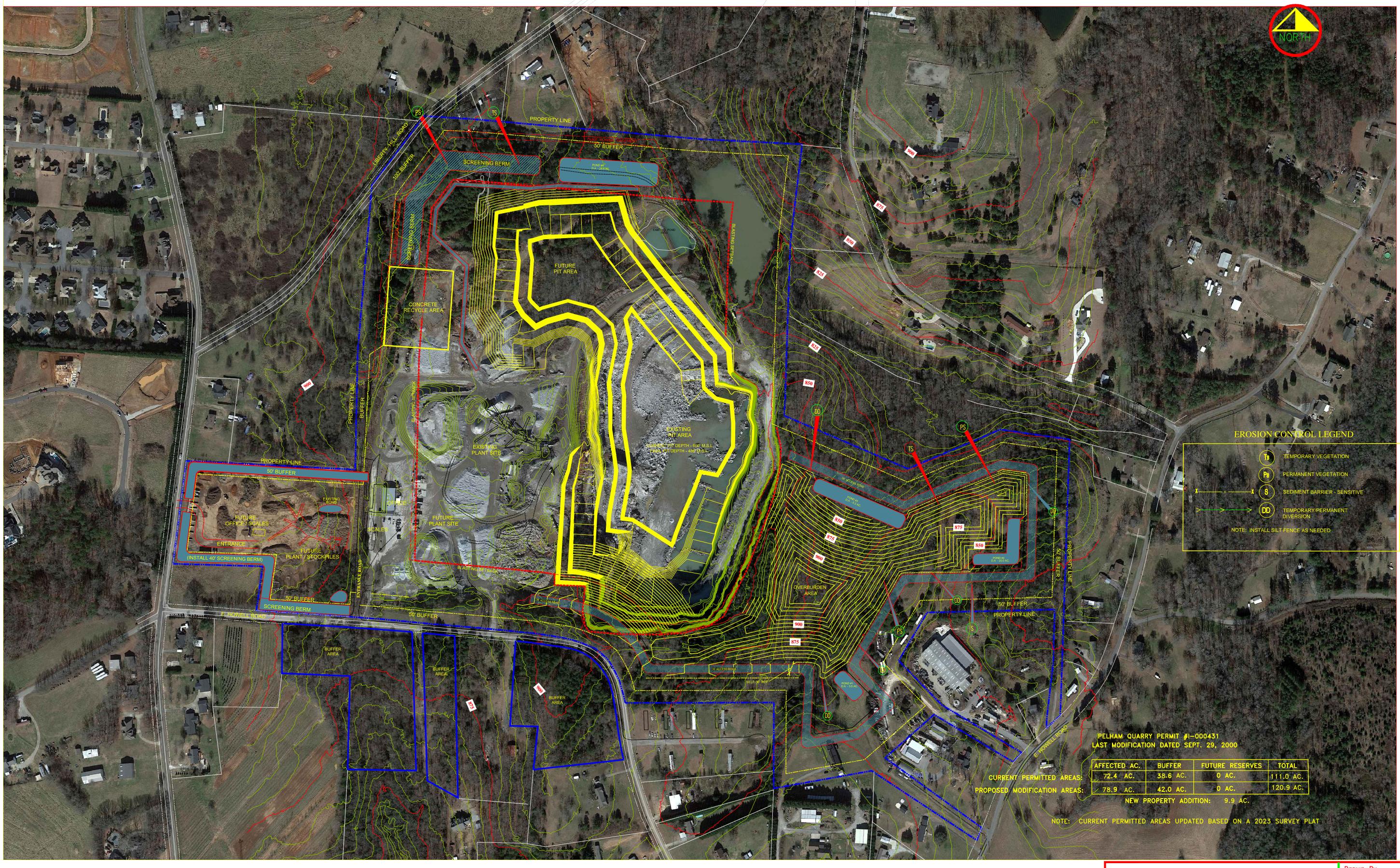
EXISTING CONDITIONS MAP

Heidelberg Materials Southeast Agg LLC

PELHAM QUARRY

SPARTANBURG COUNTY, SOUTH CAROLINA

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hecked By	
cale	1"= 150'
ate	10/20/2023
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MINE PLAN
Heidelberg Materials Southeast Agg LLC
PEHLAM QUARRY

SPARTANBURG COUNTY, SOUTH CAROLINA

Drawn By

DB

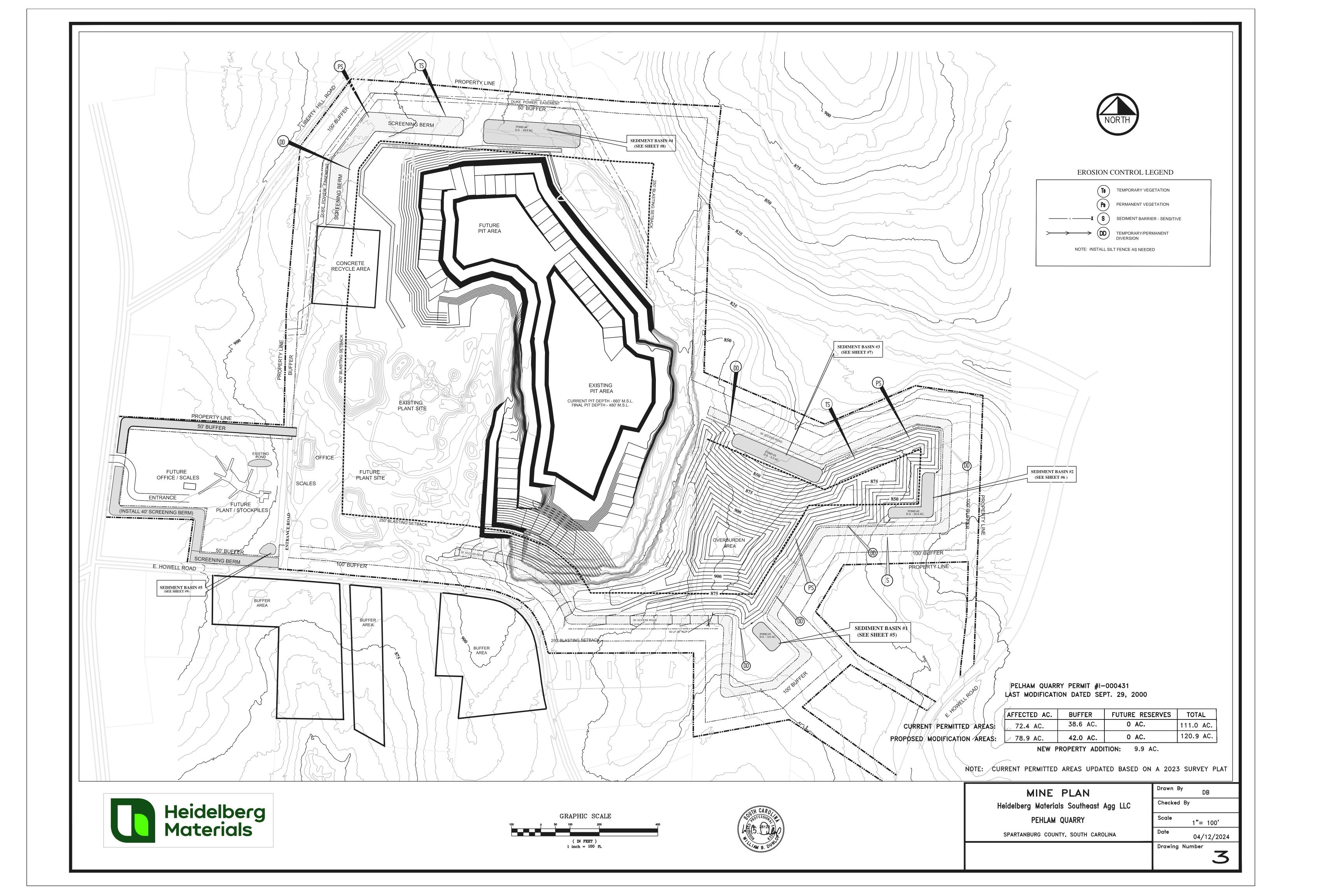
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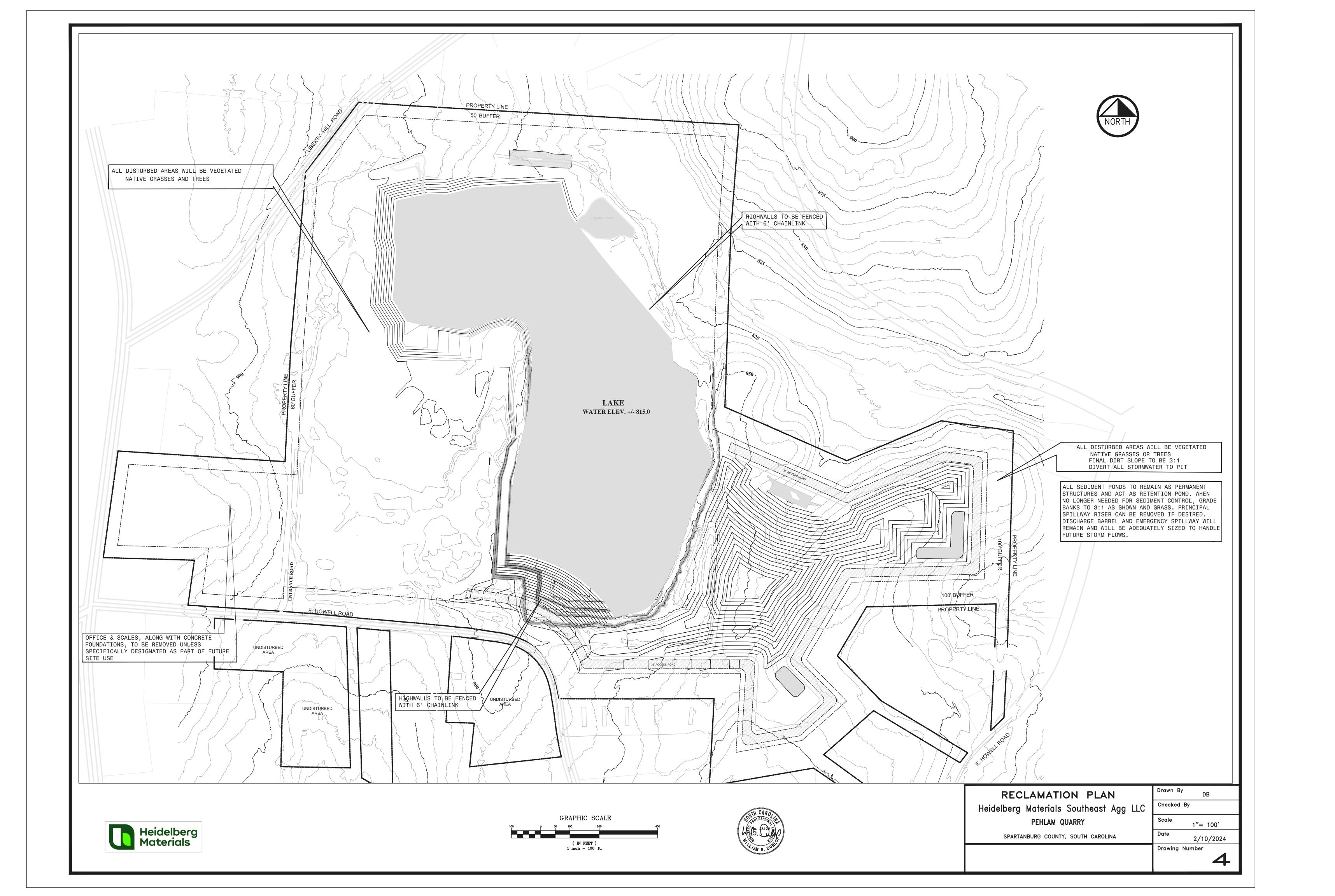
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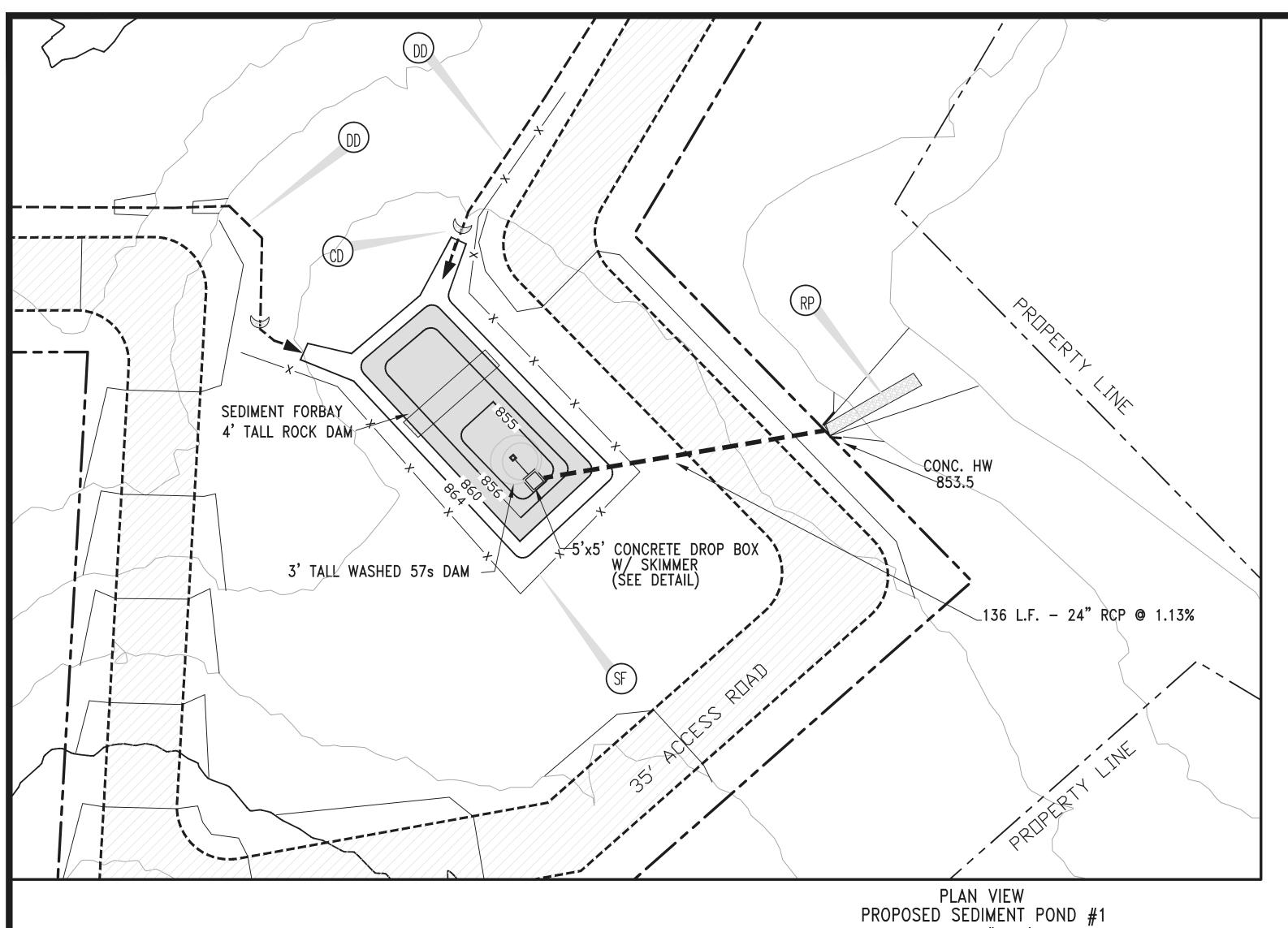
1"= 100'

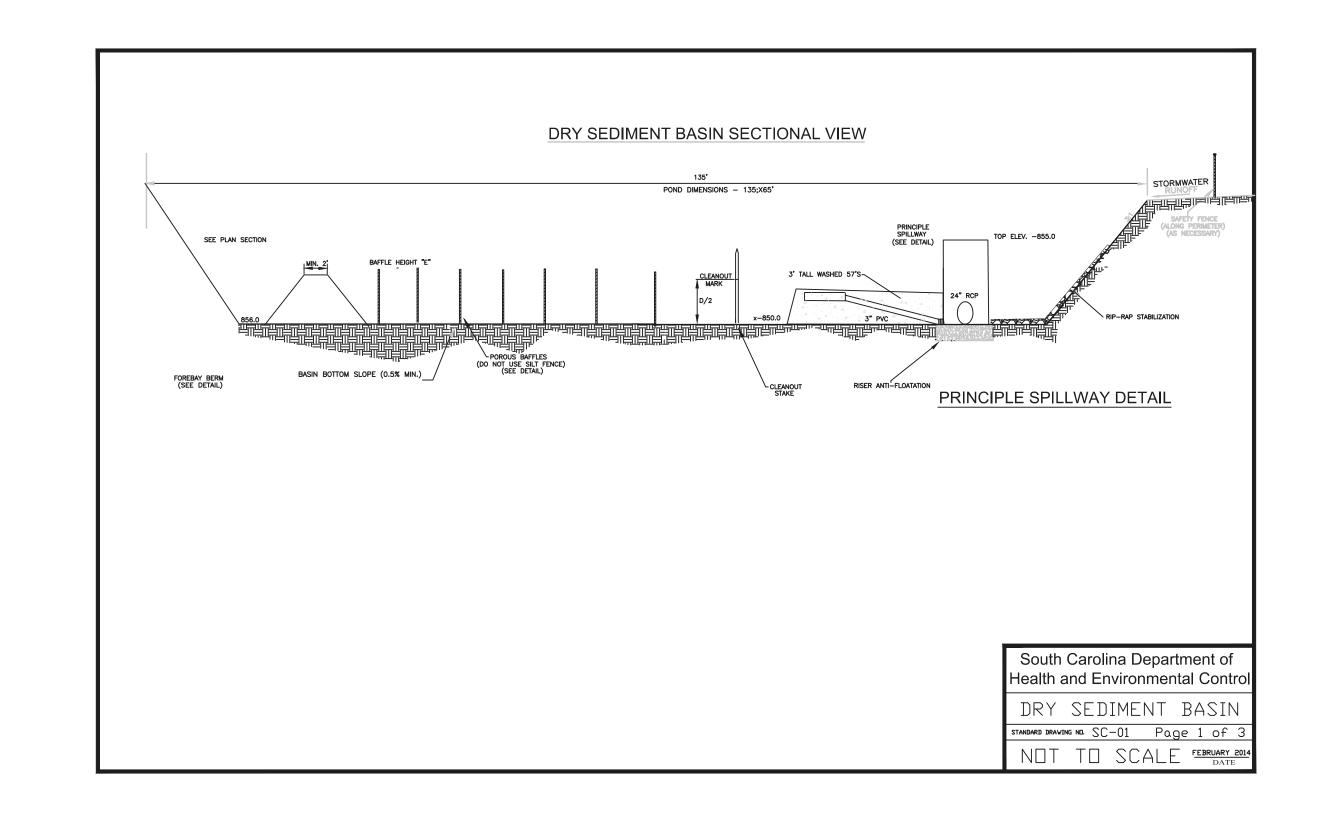
Date

10/20/2023









PLAN VIEW
PROPOSED SEDIMENT POND #1
SCALE 1"= 30'
NOTE: FIELD VERIFY ELEVATIONS

PROSION CONTROL LEGEND

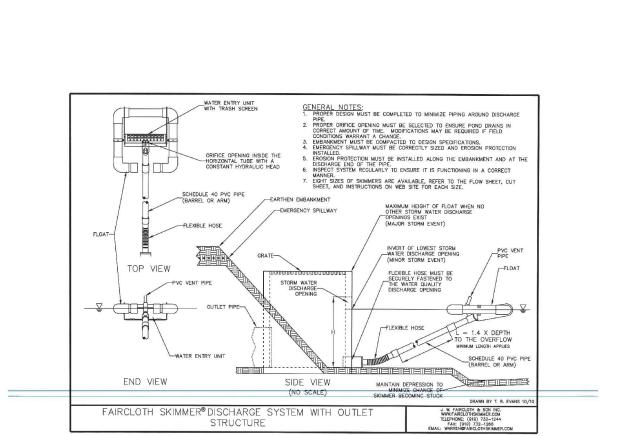
TEMPORARY VEGETATION

SEDIMENT POND #1

DO DIVERSION DITCH

CONSTRUCTION ENTRANCE

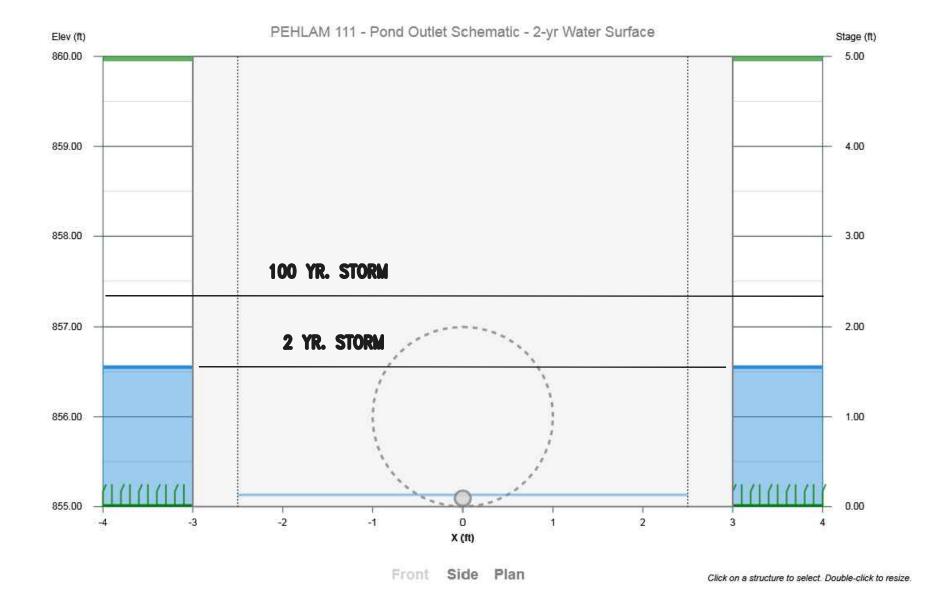
ROCK CHECK DAM



FAIRCLOTH SKIMMER RESULTS

# 24" COMC, PIPE" INV. ELEV. = 855.0 3" PVC SKIMMER INLET INV. ELEV, 855.10 CONC. PAD 24" & CLASS V OUTLET PIPE IN ELEV = 855.0 7.0" FRONT VIEW SIDE VIEW

5'x 5' OUTLET CONTROL STUCTURE NTS



POND ROUTING RESULTS

# STAGE/STORAGE

	Incremental	Contour	Average	Incremental	Cumulative	Cleanout		
Elevation	Depth	Area	Area	Volume	Volume	Elev	Elevation (ft)	
(ft)	(ft)	(sf)	(sf)	(cf)	(cf)	(		
855		1040			0			
	1.00		11200			<	836.5	
856		3100			1978			
·	4.00		17201					
860		5560			19040			

REQUIRED STORAGE = 3.5 AC x 3,600 CU. FT. = 12,600 CU.FT. ACTUAL STORAGE = 19,041 CU. FT.





Heidelberg Materials Southeast Agg LLC
PEHLAM QUARRY

SPARTENBURG COUNTY, SOUTH CAROLINA



Black Rock Consulting, LLC
SEVEN DUNWOODY PARK, SUITE 115 - ATLANTA, GA 30338 - 770-395-61

Drawn By DB

Checked By

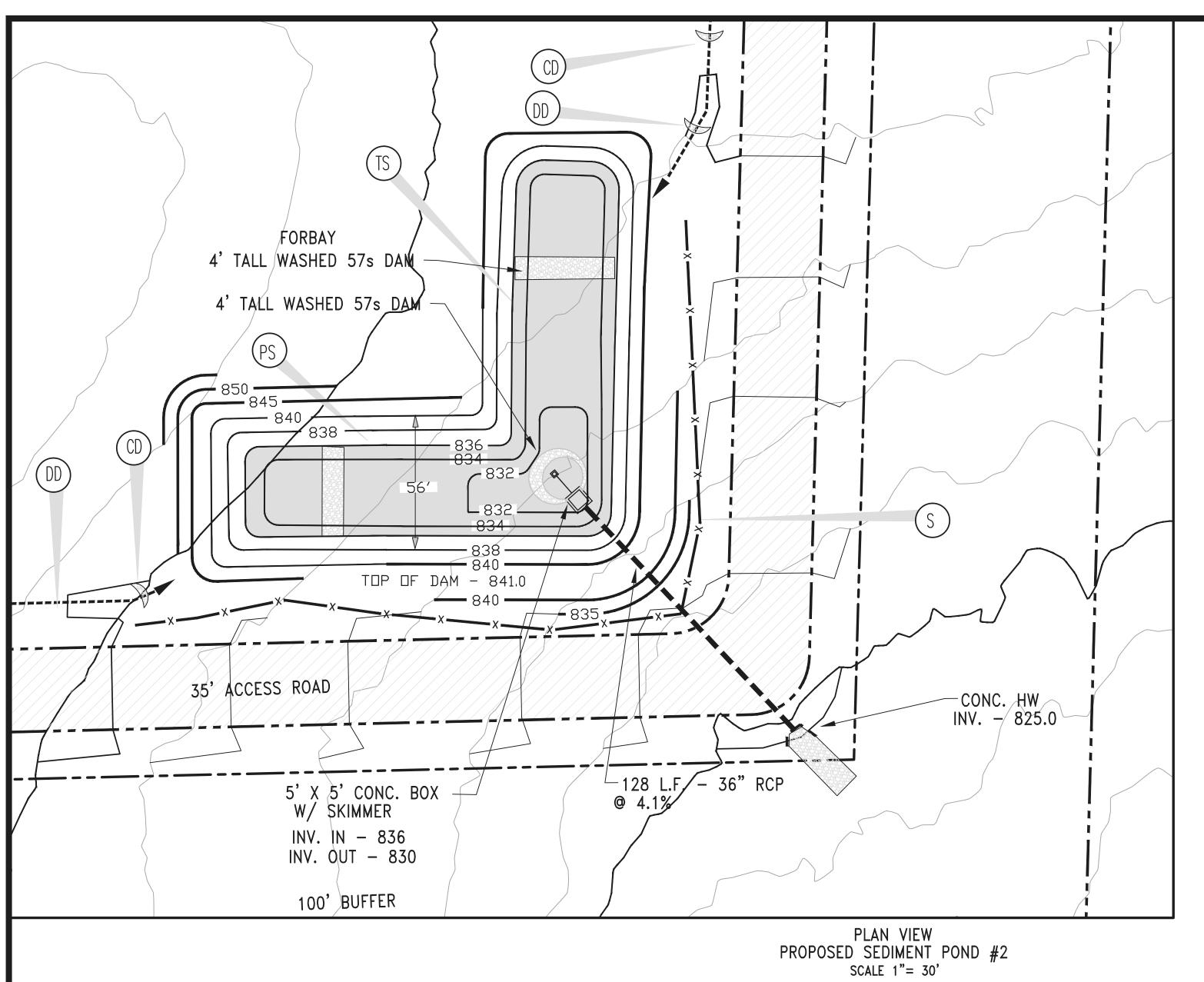
Scale

AS SHOWN

Date

7/12/2023

Drawing Number



NOTE: FIELD VERIFY ELEVATIONS

Temporary vegetation

Permanent vegetation

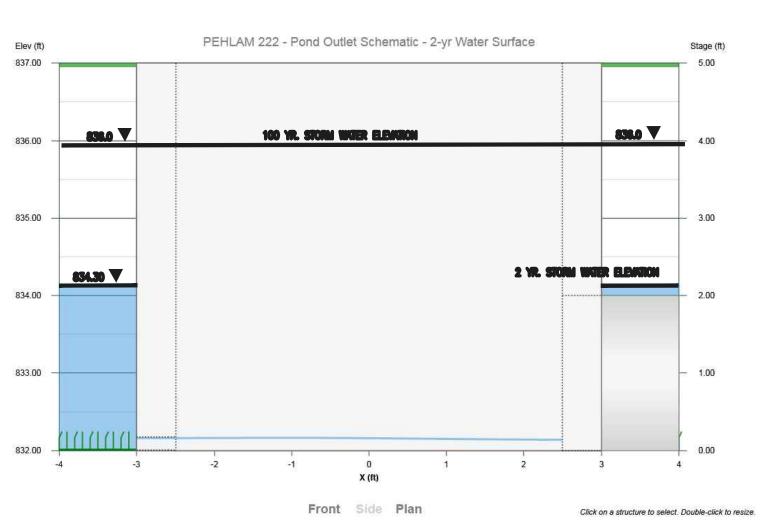
Sediment barrier - sensitive

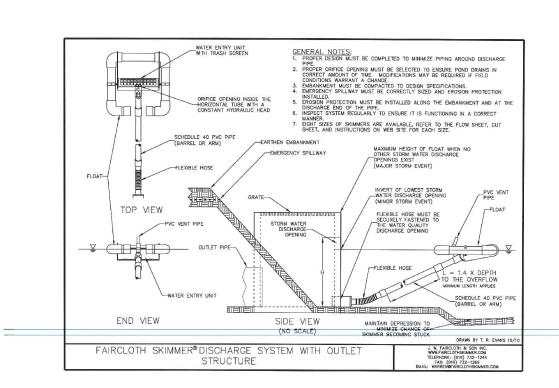
DD Diversion ditch

CO Construction entrance

ROCK CHECK DAM

BASIN BOTTOM SLOPE (0.5% MIN.)\_\_\_





6'x 6' OUTLET CONTROL STUCTURE NTS

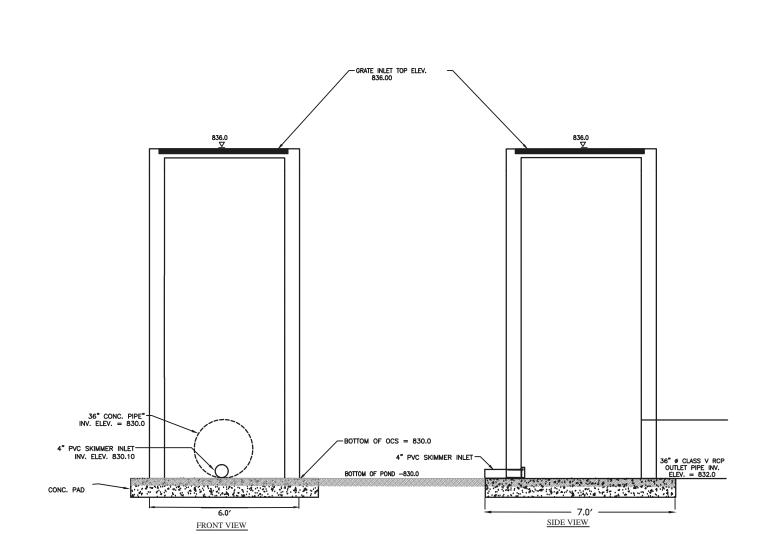
### POND ROUTING RESULTS

# STAGE/STORAGE

	Incremental	Contour	Average	Incremental	Cumulative	Cleanout		
Elevation	Depth	Area	Area	Volume	Volume	Elev	Elevation (ft)	
(ft)	(ft)	(sf)	(sf)	(cf)	(cf)	(1		
832		1416			0			
	2.00		11200			<	836.5	
834		7787						
	2.00		17201					
836		11240						
	2.00		27600		97,344			
838		16240						

REQUIRED STORAGE = 4.5 AC x 3,600 CU. FT. = 79,200 CU.FT. ACTUAL STORAGE = 97,344 CU. FT.





PRINCIPLE SPILLWAY DETAIL

South Carolina Department of Health and Environmental Contro

DRY SEDIMENT BASIN

NOT TO SCALE FEBRUARY 20

DRY SEDIMENT BASIN SECTIONAL VIEW

FAIRCLOTH SKIMMER RESULTS



SEDIMENT	BASIN	#2

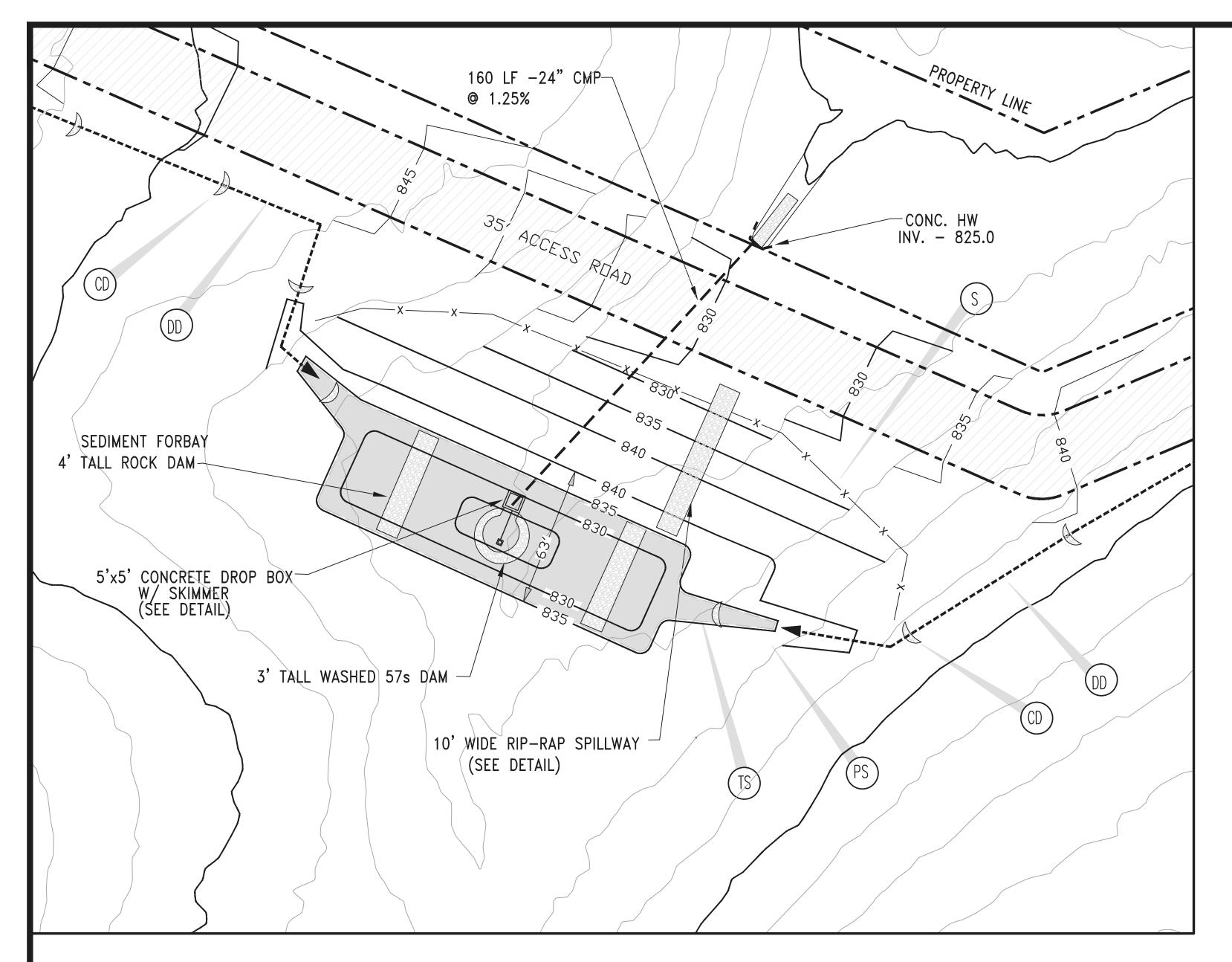
Heidelberg Materials Southeast Agg LLC

PEHLAM QUARRY
SPARTANBURG COUNTY, SOUTH CAROLINA

Black Rock Consulting, LLC

SEVEN DUNWOODY PARK, SUITE 115 - ATLANTA, GA 30338 - 770-395-61

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Checked By
Scale AS SHOWN
Date 10/20/2023
Drawing Number
6

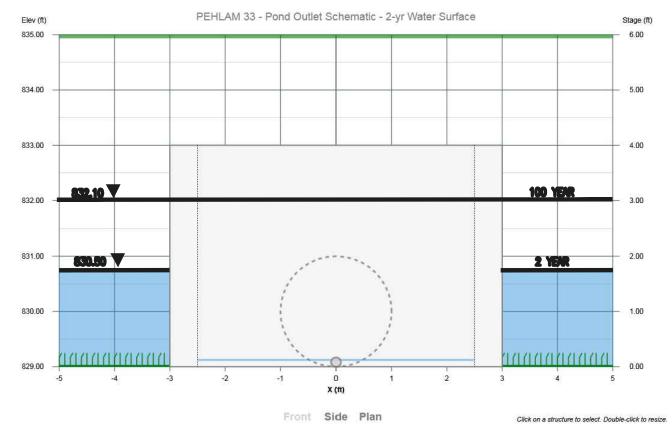


PLAN VIEW
PROPOSED SEDIMENT POND #3
SCALE 1"= 30' NOTE: FIELD VERIFY ELEVATIONS

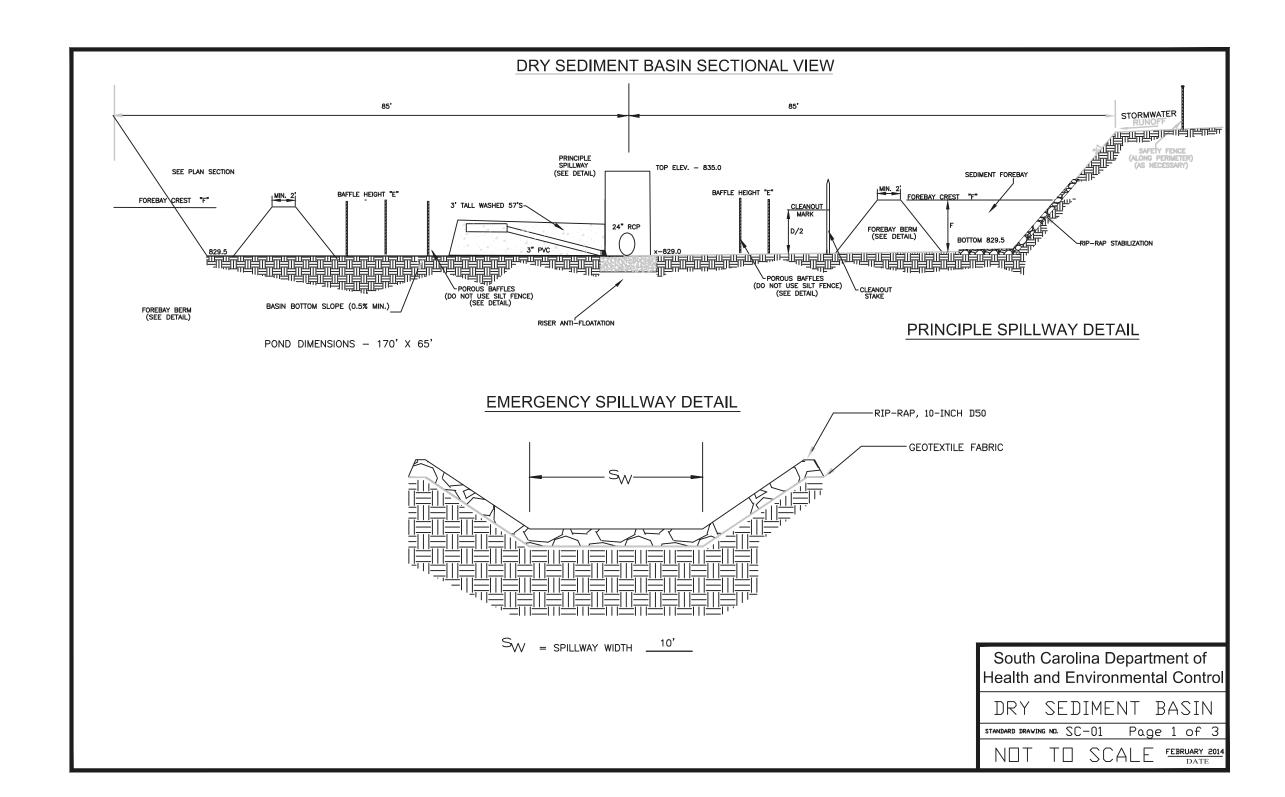
# STAGE/STORAGE

	Incremental	Contour	Average	Incremental	Cumulative Volume	Cleanout Elevation		
Elevation	Depth	Area Area Volume Volume	Area	Area Volume Volume				
(ft)	(ft)	(sf)	(sf)	(cf)	(cf)	(1	(ft)	
829		840			0			
	1.00		11200			<	836.5	
830		5532						
	5.00		17201					
835		9740			25250			

REQUIRED STORAGE =  $5.5 \text{ AC} \times 3,600 \text{ CU}$ . FT. = 19,800 CU.FT. ACTUAL STORAGE = 25,250 CU. FT.

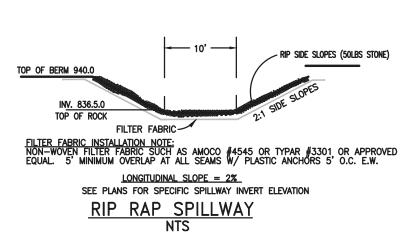


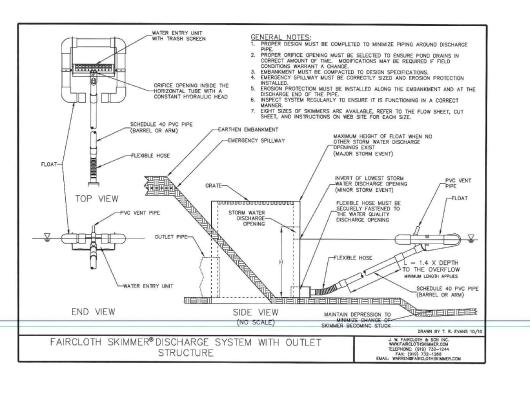
2 YEAR ROUTING RESULTS



### EROSION CONTROL LEGEND TEMPORARY VEGETATION Pa PERMANENT VEGETATION SEDIMENT BARRIER - SENSITIVE → (DD) DIVERSION DITCH CONSTRUCTION ENTRANCE

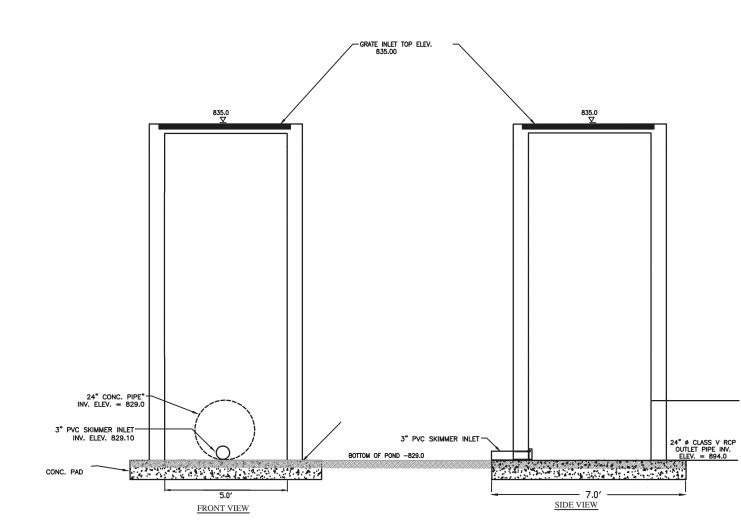
ROCK CHECK DAM





FAIRCLOTH SKIMMER RESULTS





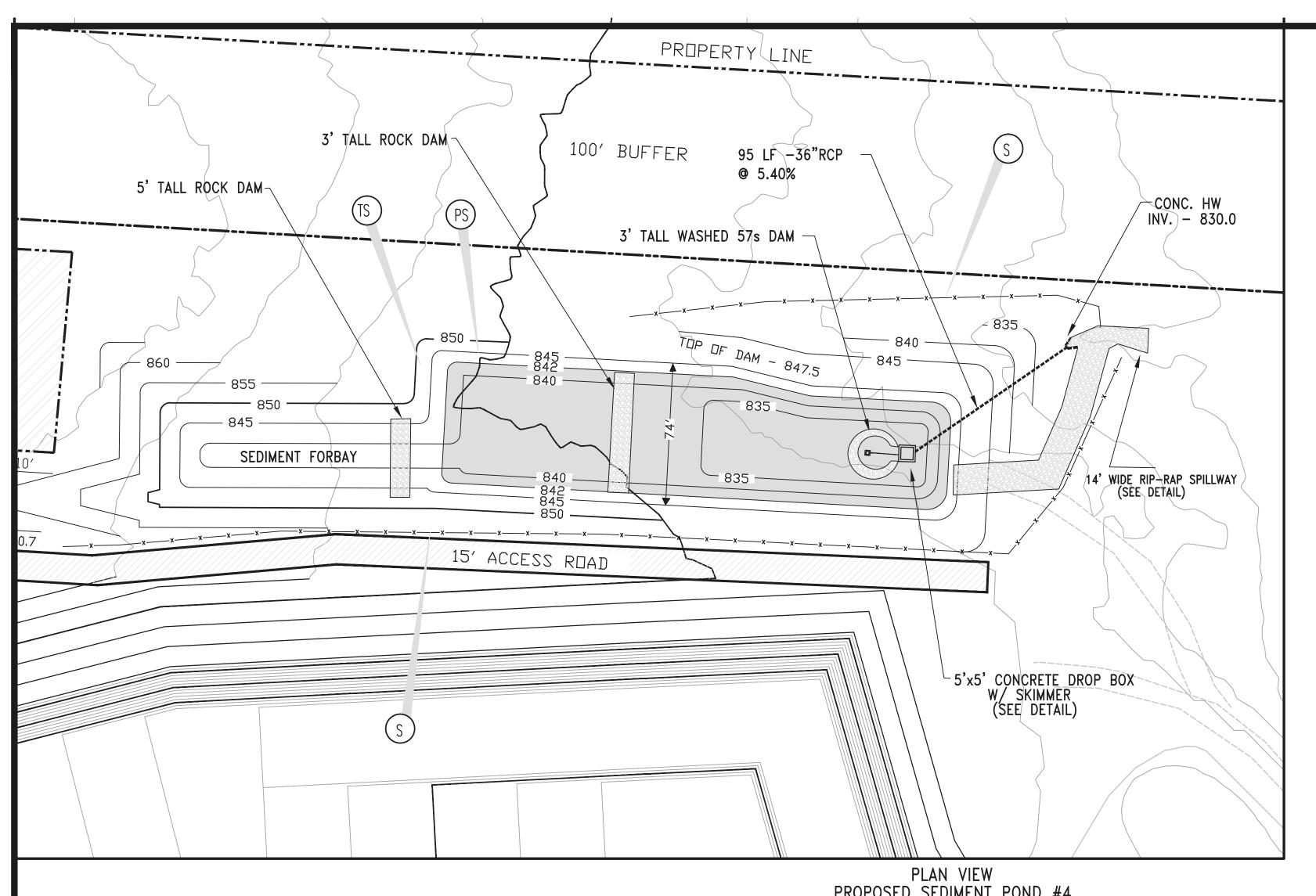
5'x 5' OUTLET CONTROL STUCTURE NTS

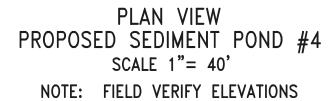
### SEDIMENT BASIN #3

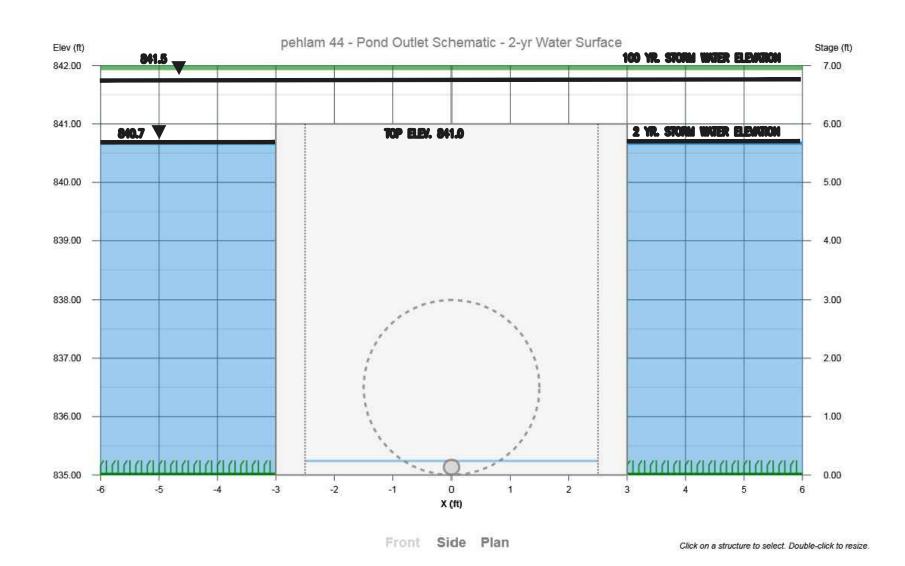
Heidelberg Materials Southeast Agg LLC PEHLAM QUARRY

SPARTENBURG COUNTY, SOUTH CAROLINA Black Rock Consulting, LLC
SEVEN DUNWOODY PARK, SUITE 115 - ATLANTA, GA 30338 - 770-395-6111

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Checked By
Scale AS SHOWN
Date 7/15/2023
Drawing Number
 7





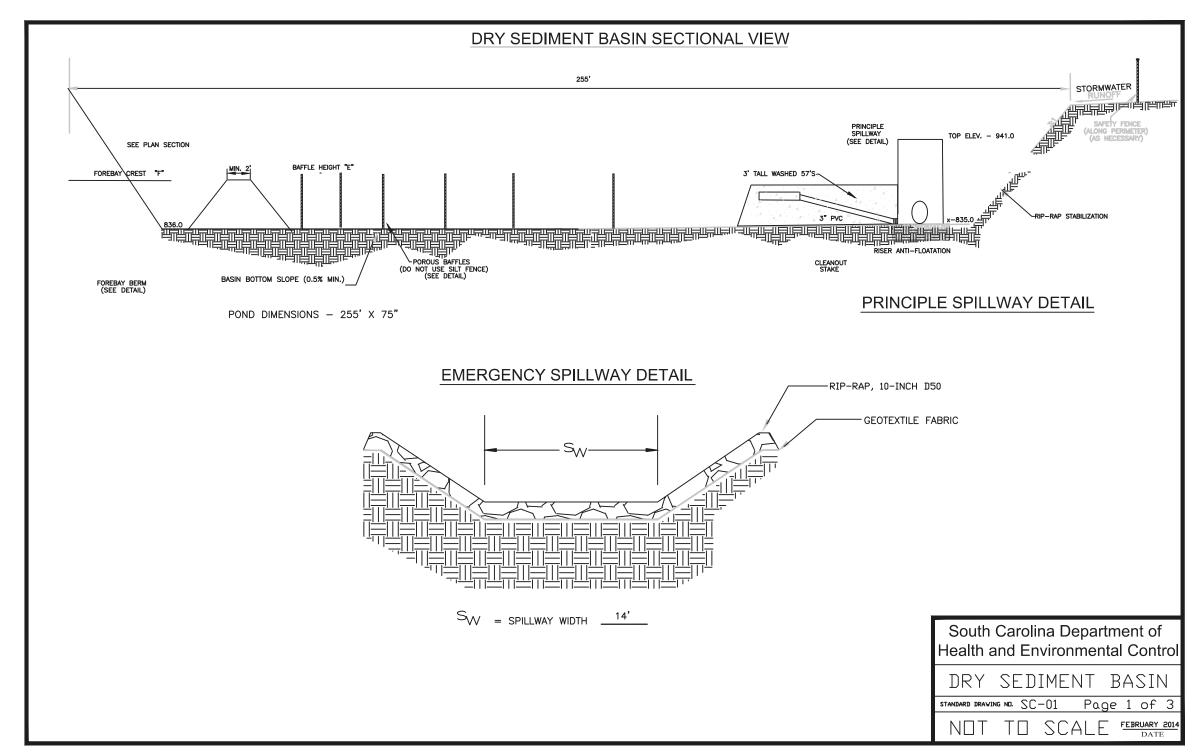


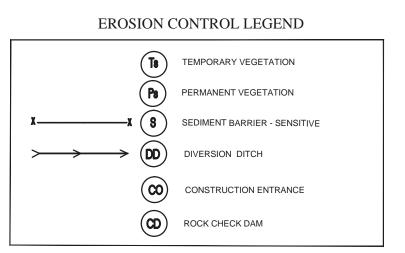
POND #4 ROUTING RESULTS

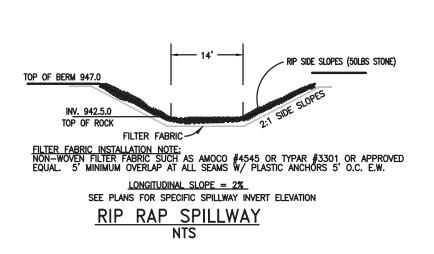
# STAGE/STORAGE

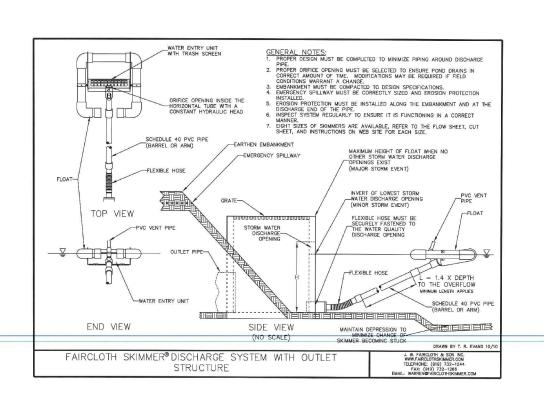
	Incremental	Contour	Average	Incremental	Cumulative	Cleanout Elevation (ft)		
Elevation	Depth	Area	Area	Volume	Volume			
(ft)	(ft)	(sf)	(sf)	(cf)	(cf)			
835		3700			0			
	5.00		11200			<	836.5	
840		11,200			37250			
	3.00		17201					
842		15600			69250	·		

REQUIRED STORAGE = 19.1 AC  $\times$  3,600 CU. FT. = 68,760 CU.FT. ACTUAL STORAGE = 69,250 CU. FT.



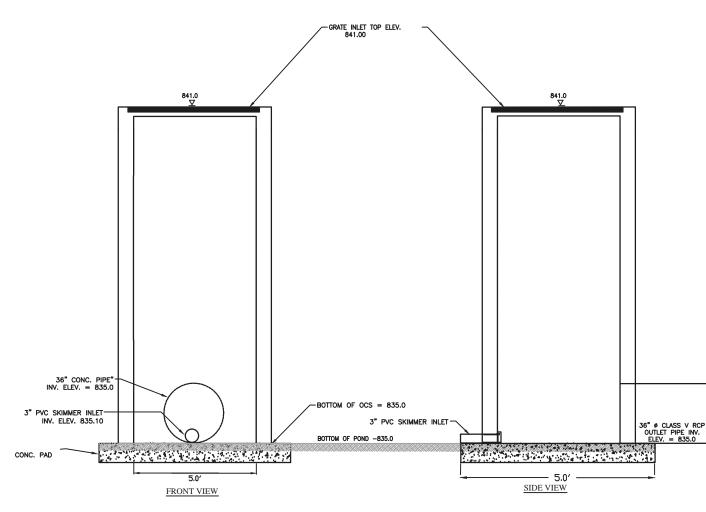






FAIRCLOTH SKIMMER RESULTS





5'x 5' OUTLET CONTROL STUCTURE NTS

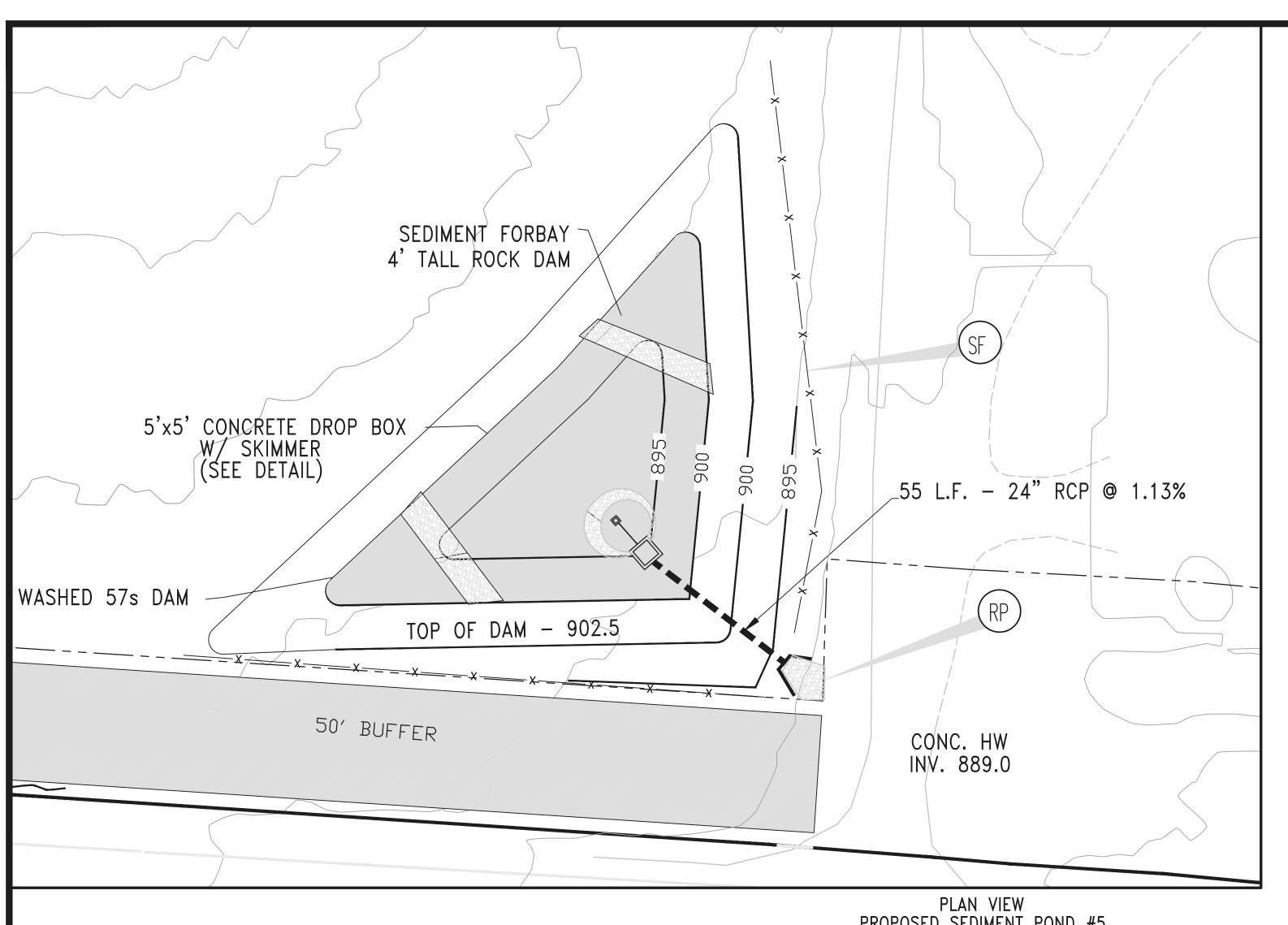
SEDIMENT	<b>BASIN</b>	#4
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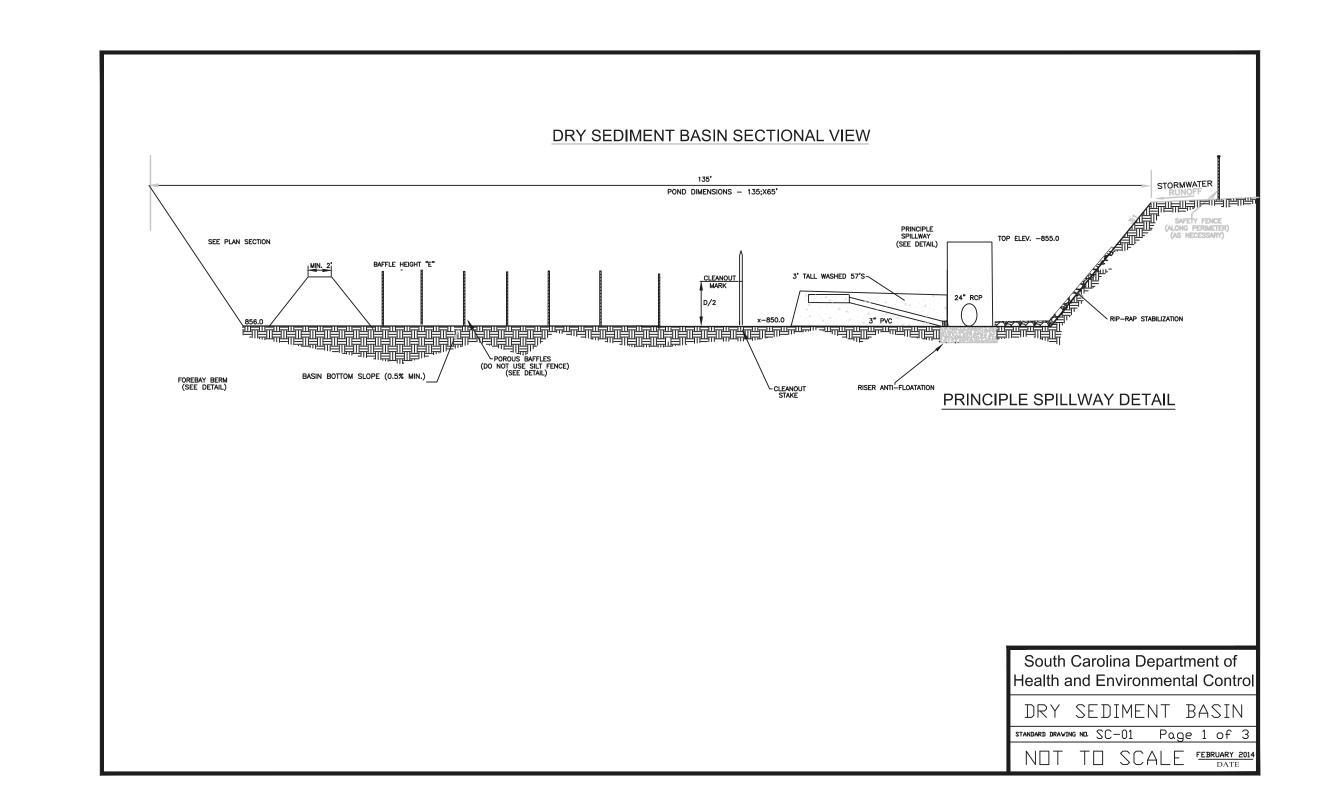
Heidelberg Materials Southeast Agg LLC
PEHLAM QUARRY

SPARTENBURG COUNTY, SOUTH CAROLINA

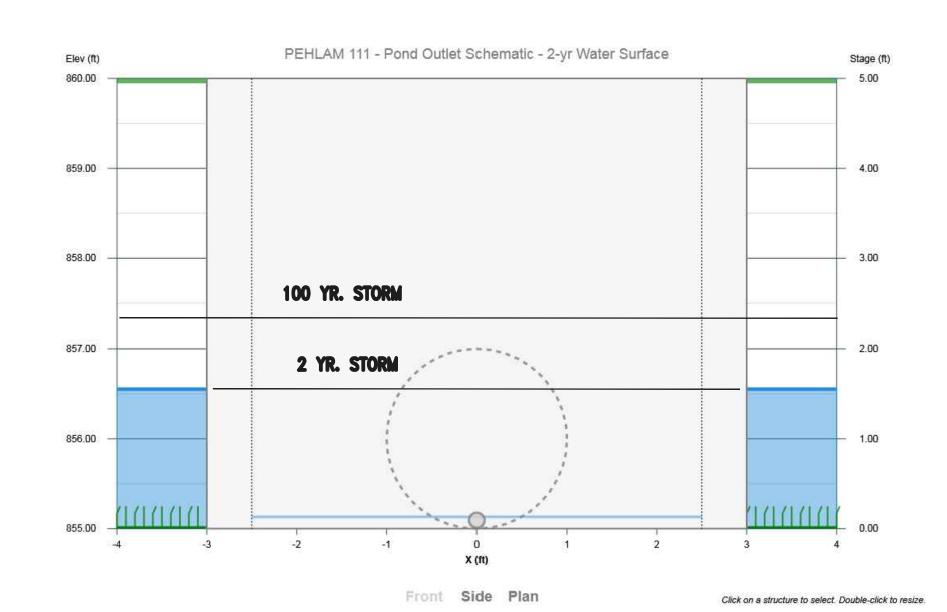
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	Checked By
	Scale AS SHOWN
	Date 715/2023
	Drawing Number
-6111	8







PLAN VIEW PROPOSED SEDIMENT POND #5 SCALE 1"= 30' NOTE: FIELD VERIFY ELEVATIONS



# MANNYER. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

EROSION CONTROL LEGEND

→ (DD) DIVERSION DITCH

TEMPORARY VEGETATION

Pa PERMANENT VEGETATION

SEDIMENT BARRIER - SENSITIVE

CONSTRUCTION ENTRANCE

ROCK CHECK DAM

FAIRCLOTH SKIMMER RESULTS

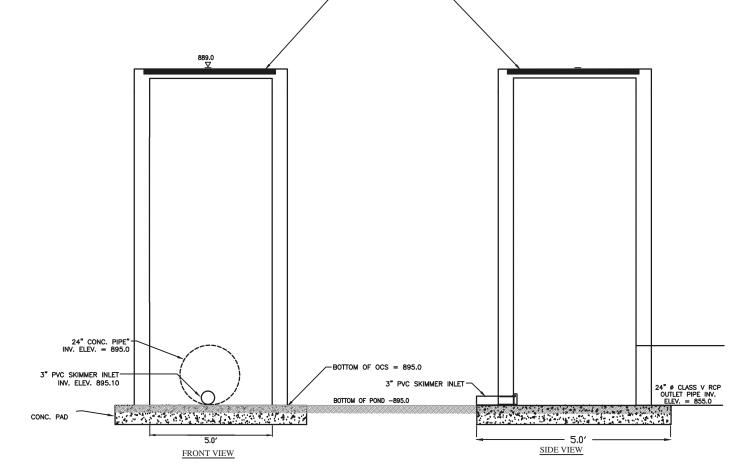
# STAGE/STORAGE

	Incremental	Contour	Average	Incremental	Cumulative	Clea	Cleanout	
Elevation	Depth	Area	Area	Volume	Volume	Elevation		
(ft)	(ft)	(sf)	(sf)	(cf)	(cf)	(ft)		
855		1040			0			
	1.00		11200			<	836.5	
856		3100			1978			
	4.00		17201					
860		5560			19040			

POND ROUTING RESULTS

REQUIRED STORAGE =  $3.5 \text{ AC} \times 3,600 \text{ CU}$ . FT. = 12,600 CU.FT. ACTUAL STORAGE = 19,041 CU. FT.





5'x 5' OUTLET CONTROL STUCTURE NTS

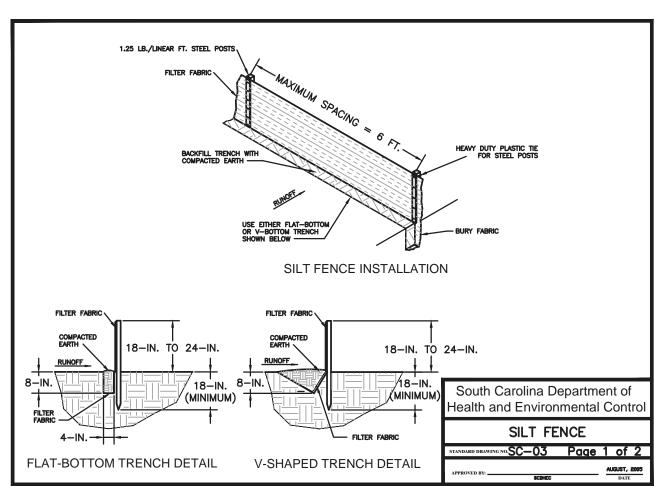
SEDIMENT	<b>BASIN</b>	#5
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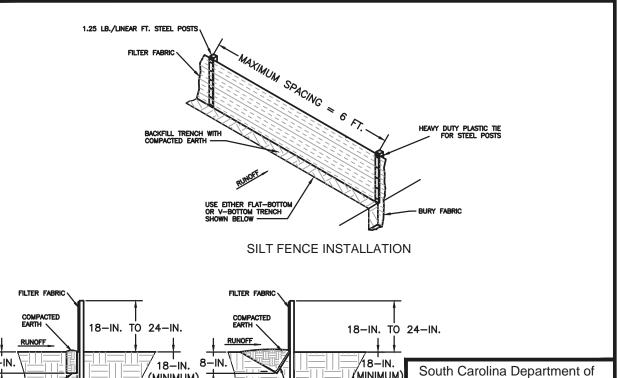
Heidelberg Materials Southeast Agg LLC

PEHLAM QUARRY SPARTENBURG COUNTY, SOUTH CAROLINA

Black Rock Consulting, LLC
SEVEN DUNWOODY PARK, SUITE 115 - ATLANTA, GA 30338 - 770-395-6

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SILT FENCE DETAIL

Silt fence is applicable in areas:

Where the maximum sheet or overland flow path length to the fence is 100-feet.

Where the maximum slope steepness (normal [perpendicular] to fence line) is 2H:1V. That do not receive concentrated flows greater than 0.5 cfs. <u>Do not</u> place silt fence across channels or use it as a velocity control BMP.

Use 48—inch long steel posts that meet the following minimum physical requirements:

Composed of high strength steel with minimum yield strength of 50,000 psi.

Have a standard "T" section with a nominal face width of 1.38—inches and nominal "T" length of 1.48—inches.

Weigh 1.25 pounds per foot  $(\pm 8\%)$ . Have a soil stabilization plate with a minimum cross section area of 17-square inches attached to the steel posts.

Use steel posts with a minimum length of 4-feet, weighing 1.25 pounds per linear foot (± 8%) with projections to aid in fastening the fabric. Except when heavy clay soils are present on site, steel posts will have a metal soil stabilization plate welded near the bottom such that when the post is driven to the proper depth, the plate will be below the ground level for added stability. The soil plates the following characteristics:

plates should have the following characteristics: Be composed of minimum 15 gauge steel. Have a minimum cross section area of 17-square inches.

Painted with a water based baked enamel paint.

### Geotextile Filter Fabric Filter fabric is:

Composed of fibers consisting of long chain synthetic polymers composed of at least 85% by weight of polyolefins, polyesters, or polyamides. Formed into a network such that the filaments or yarns retain dimensional stability relative to each other. Free of any treatment or coating which might adversely alter its physical properties after installation. Free of defects or flaws that ignificantly affect its physical and/or filtering properties. Cut to a minimum width of 36 inches.

Use only fabric appearing on SCDOT Approval Sheet #34 meeting the requirements of the most current edition of the SCDOT Standard Specifications for Highway Construction.

South Carolina Department of Health and Environmental Control SILT FENCE STANDARD DRAVING NDSC-03 Page 2 of 3

### SILT FENCE DETAIL

Installation

Excavate a trench approximately 6-inches wide and 6-inches deep when placing fabric by hand. Place 12-inches of geotextile fabric into the 6-inch deep trench, extending the remaining 6-inches towards the upslope side of the trench. Backfill the trench with soil or gravel and compact. Bury 12-inches of fabric into the ground when pneumatically installing silt fence with a slicing method. Purchase fabric in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrapped the fabric together at a support post with both ends fastened to the post, with a 6-inch minimum overlap. Install posts to a minimum depth of 24-inches. Install posts a minimum of 1- to 2- inches above the fabric, with no more than 3-feet of the post above the ground. Space posts to maximum 6-feet centers. Attach fabric to wood posts using staples 3-feet of the post above the ground. Space posts to maximum 6-feet centers. Attach fabric to wood posts using staples made of heavy—duty wire at least 1½-inch long, spaced a maximum of 6-inches apart. Staple a 2-inch wide lathe over the filter fabric to securely fasten it to the upslope side of wooden posts. Attach fabric to the steel posts using heavy—duty plastic ties that are evenly spaced and placed in a manner to prevent sagging or tearing of the fabric. In call cases, ties should be affixed in no less than 4 places. Install the fabric a minimum of 24-inches above the ground. When necessary, the height of the fence above ground may be greater than 24-inches. In tidal areas, extra silt fence height may be required. The post height will be twice the exposed post height. Post spacing willremain the same and extra height fabric will be 4-, 5-, or 6-feet tall. Locate silt fence checks every 100 feet maximum and at low points. Install the fence perpendicular to the direction of flow and place the fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.

Inspect every seven calendar days and within 24-hours after each rainfall event that produces ½-inches or more of precipitation. Check for sediment buildup and fence integrity.

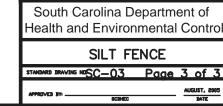
Check where runoff has eroded a channel beneath the fence, or where the fence has sagged or collapsed by fence overtopping. If the fence fabric tears, begins to decompose, or in any way becomes ineffective, replace the section of fence immediately. Remove sediment accumulated along the fence when it reaches 1/3 the height of the fence, especially if heavy rains are

Remove trapped sediment from the site or stabilize it on site.

Remove silt fence within 30 days after final stabilization is achieved or after temporary best management practices (BMPs) are no longer needed.

Permanently stabilize disturbed areas resulting from fence removal.

> South Carolina Department of Health and Environmental Contro SILT FENCE



### 2-FT. MIN. — HOLD-DOWN STAKES - INLET PROTECTION LEVEL SECTION 4-FT MIN. | LEVEL SECTION TOP OF COMPACTED 2-FT. MIN. PLAN VIEW South Carolina Department of lealth and Environmental Control PIPE SLOPE DRAIN STANDARD DRAVING NRC-01 Page 1 of 2 TYPICAL PIPE SLOPE DRAIN LAYOUT AUGUST, 2005 DATE

### STABILIZED CONSTRUCTION ENTRANCE

Stabilized construction entrances should be used at all points where traffic will be leaving a construction site and moving directly onto a public road.

If washing is used, provisions must be made to intercept the wash water and trap the sediment before it is carried offsite. Washdown facilities shall be required as directed by SCDHEC as needed. Washdown areas in general must be established with crushed gravel and drain into a sediment trap or sediment basin. Construction entrances should be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by vehicles.

Remove all vegetation and any objectionable material from the foundation area.

Divert all surface runoff and drainage from stones to a sediment trap or basin. Install a non-woven geotextile fabric prior to placing any stone.

Install a culvert pipe across the entrance when needed to provide positive drainage.

The entrance shall consist of 1-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.

Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.

prevent tracking of mud at the edge of the entrance.

South Carolina Department of Health and Environmental Control STABILIZED CONSTRUCTION ENTRANCE STANDARD DRAVING NSC-06 Page 2 of 3 AUGUST, 2005

DIVERSION SWALE

RAWING NORC-03 Page 1 of 2

AUGUST, 2005

### STABILIZED CONSTRUCTION ENTRANCE

Inspect construction entrances every seven (7) calendar days and within 24-hours after each rainfall event that produces ½-inches or more of precipitation, or after heavy use. Check for mud and sediment buildup and pad integrity. Make daily inspections during periods of wet weather. Maintenance is required more frequently in wet weather conditions. Reshape the stone pad as needed for drainage and runoff control.

Wash or replace stones as needed and as directed by the inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone.

Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin. Repair any broken pavement immediately.

South Carolina Department of Health and Environmental Contro STABILIZED CONSTRUCTION ENTRANCE STANDARD DRAVING NISC-06 Page 3 of 3

APPROVED BY: \_\_\_\_\_\_SCOHEC

### PIPE SLOPE DRAIN

Pipe slope drains are used when it is necessary for water to flow down a slope without causing erosion, especially before a slope has been stabilized or before permanent drainage structures are installed.

### Typical pipe slope drains are made of non-perforated corrugated plastic pipe.

Slope drain sections should be securely fastened together, have gasket watertight fittings, and be securely anchored into the soil. Diversion berms or dikes should direct runoff to slope drains. The minimum depth of these dikes or berms should be 1.5—feet. The height of the berm around the pipe inlet should be a minimum of 1.5—feet high and at least 0.5—feet higher than the top of the pipe. The berm at the pipe inlet shall be compacted around the pipe. The area around the inlet shall be properly stabilized with ECBs, TRMs, riprap or other applicable stabilization techniques.

Inspect pipe slope drain inlet and outlet points every seven (7) calendar days and within 24-hours after each rainfall event that

The area below the outlet must be properly stabilized with ECBs, TRMs, riprap or other applicable stabilization technique. If the pipe slope drain is conveying sediment-laden water, direct all flows into the sediment trapping facility. Permanent slope drains should be buried beneath the soil surface a minimum 1.5-feet.

produces ½-inches or more of precipitation.

The inlet should be free from undercutting, and no water should be going around the point of entry. If there are problems, the headwall should be reinforced with compacted earth or sandbags. The outlet point should be free of erosion and installed with appropriate outlet protection.

All temporary pipe slope drains should be removed within 30 days after final site stabilization is achieved or after the temporary BMP is no longer needed. Disturbed soil areas resulting from removal should be permanently stabilized.

South Carolina Department of Health and Environmental Contro PIPE SLOPE DRAIN rawing noRC-01 Page 2 of 2 AUGUST, 2005

# <u>L</u>EVEL BOTTOM GRASS OR STABLE LINING FLATTER 1.5-FT. MIN<u>.</u> ⊉-FT. MIN. →SWALE SPACING = 100-FT., 200-FT., DEPENDING ON SUBPE South Carolina Department of Health and Environmental Contr

### DIVERSION SWALE

The bottom width should be a minimum of 2-feet, and the bottom should be level.

The depth should be a minimum of 1.5—feet and the side slopes should be 2H:1V or flatter.

he maximum grade shall be 5%, with positive drainage to a suitable outlet.

Slopes shall be stabilized immediately using vegetation, sod, and erosion control blankets or turf reinforcement mats to prevent erosion. The upslope side of the swale should provide positive drainage so no erosion occurs at the outlet. Provide energy dissipation

Sediment-laden runoff shall be directed to a sediment trapping facility.

Swales should be inspected, every seven (7) calendar days and within 24-hours after each rainfall event that produces ½-inches or precipitation and repairs made as necessary.

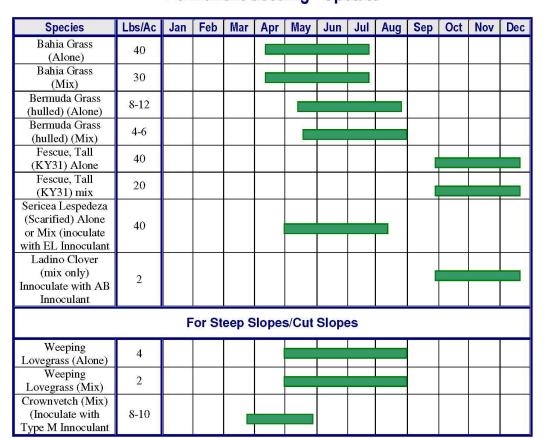
Damage caused by construction traffic or other activity must be repaired before the end of each working day.

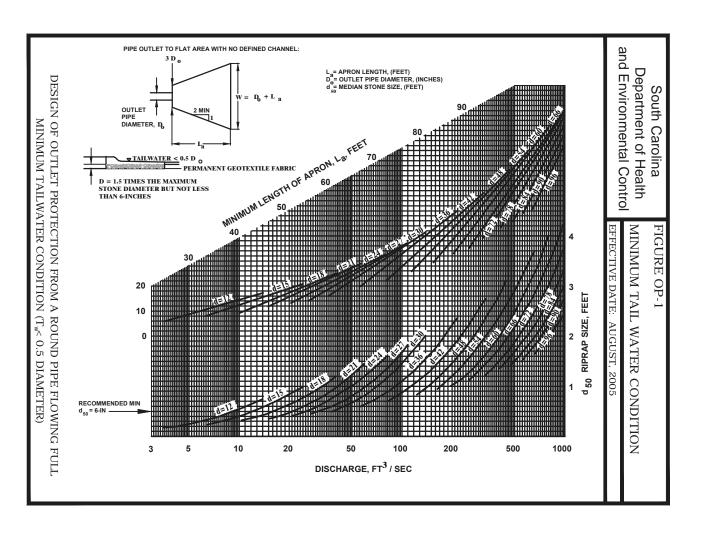
South Carolina Department of Health and Environmental Contr DIVERSION SWALE DRAWING NO. RC-03 Page 2 of 2

### **Temporary Seeding - Upstate**

Species	lbs./ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet (Alone)	40								, al				
Browntop Millet (Mix)	10								Ų				
Rye Grain (Alone)	56												
Rye Grain (Mix)	10		100										4
Rye Grass (Alone)	50												
Rye Grass (Mix)	8												
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												

### Permanent Seeding - Upstate





CONSTRUCTION DETAILS	Drawn B	BDJ
Heidelberg Materials Southeast Agg LLC	Checked	By DB
PELHAM QUARRY		AS SHOWN
I LEITAM QUARRI	Date	7/15/2023
1D)	Drawing	Number



Black Rock Consulting, LLC SEVEN DUNWOODY PARK, SUITE 115 - ATLANTA, GA 30338 -