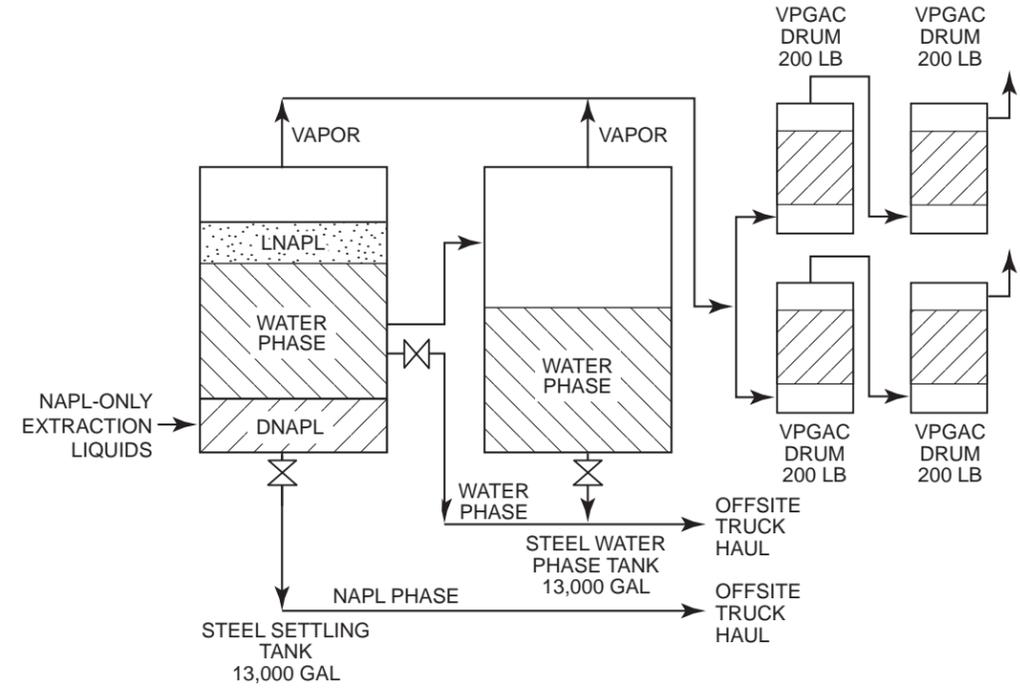
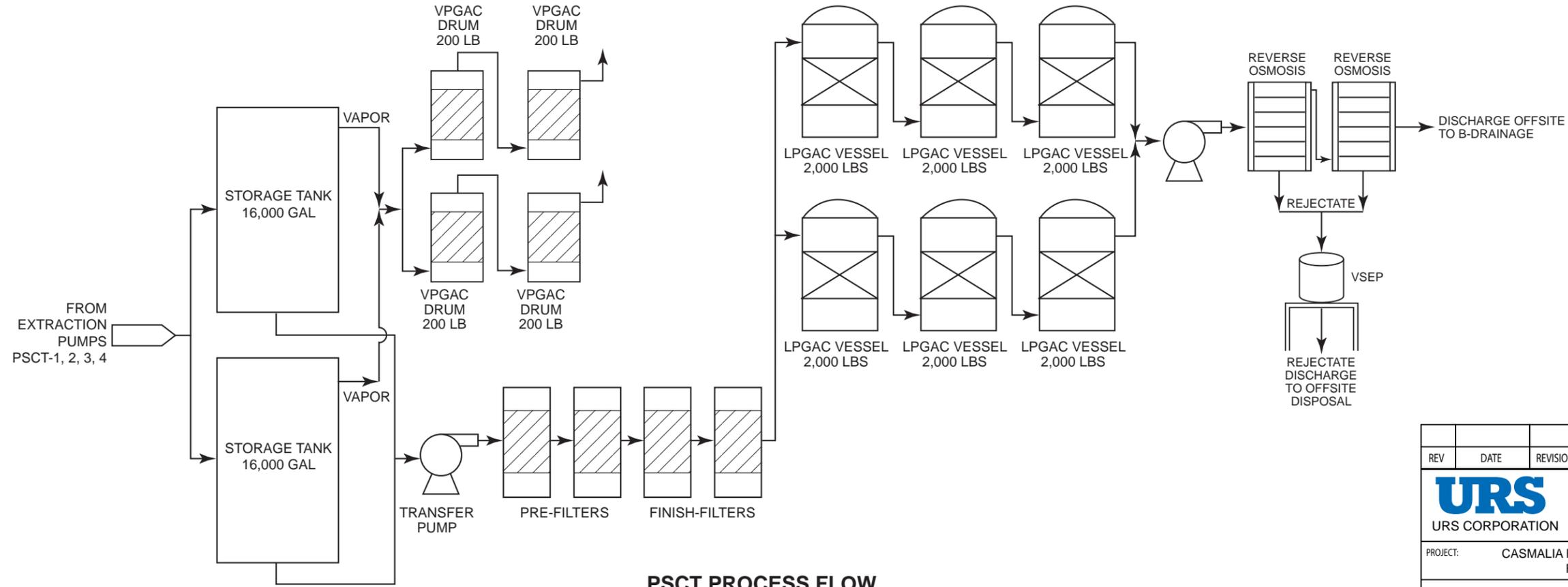


GALLERY WELL PROCESS FLOW

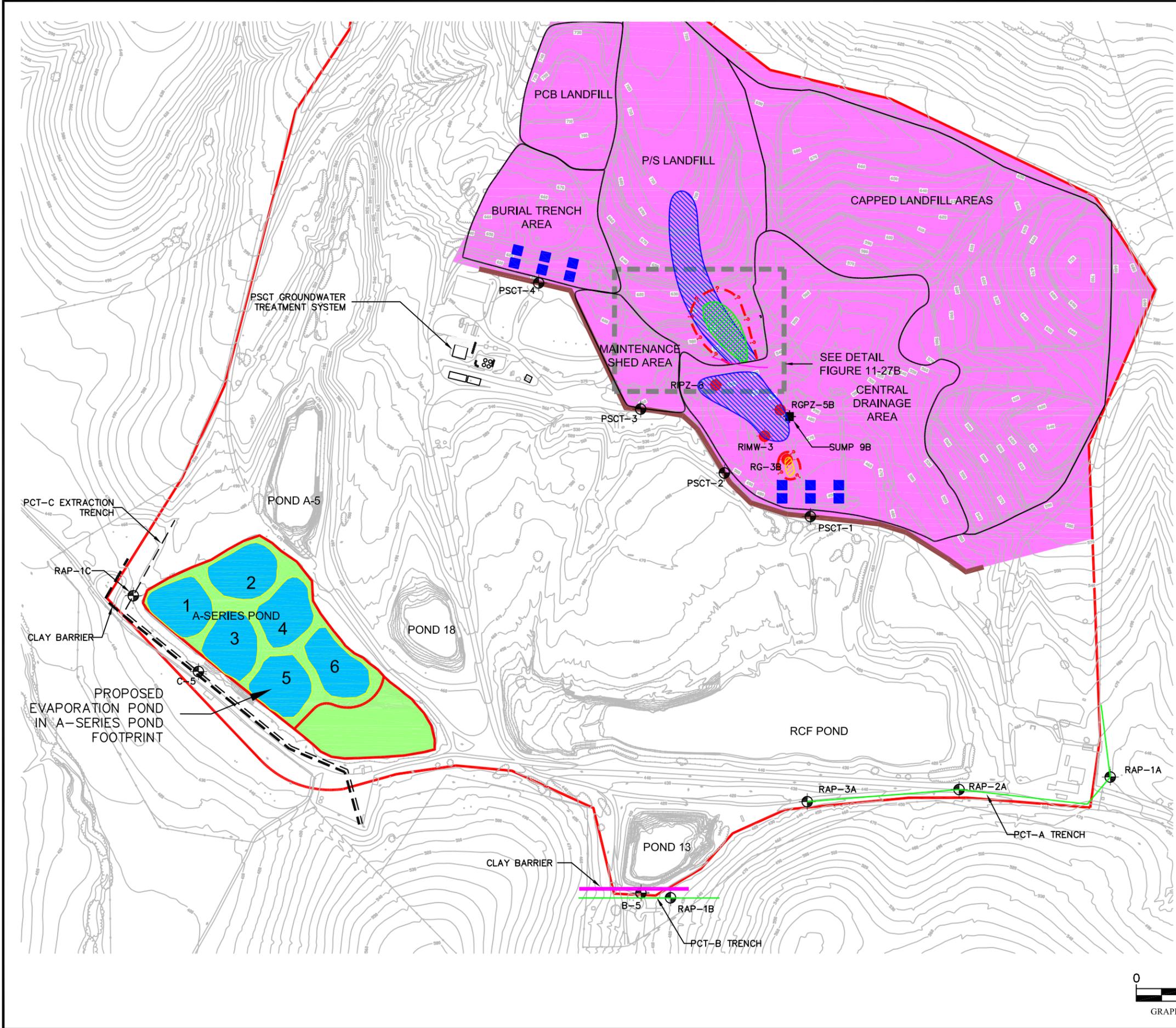


NAPL-ONLY EXTRACTION PROCESS FLOW



PSCT PROCESS FLOW

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH - ALTERNATIVE 4 PROCESS FLOW DIAGRAM					
FIGURE 11-26C					



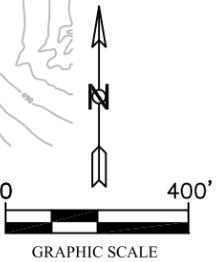
LEGEND:

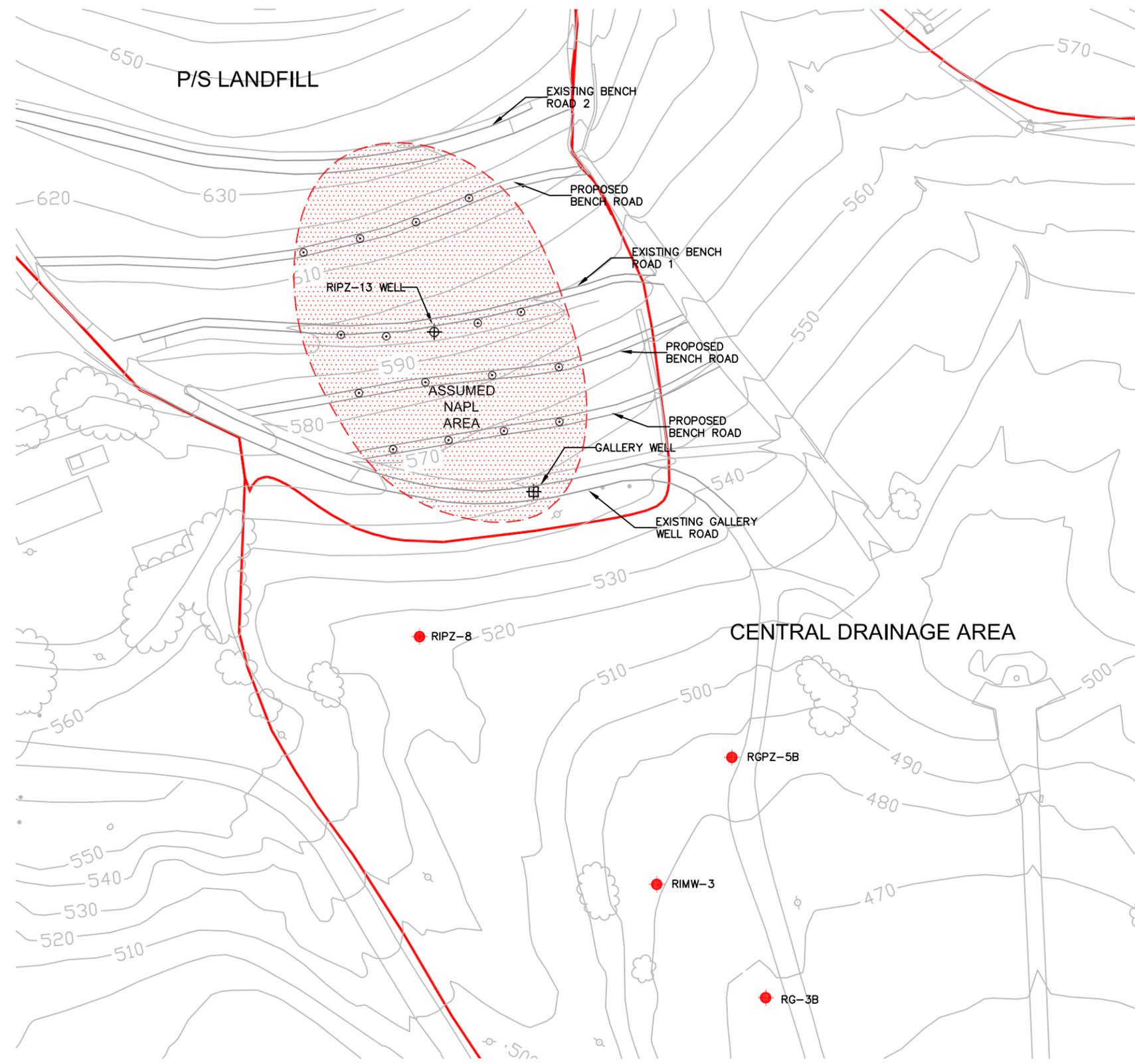
- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- PCT-A & PCT-B TRENCHES
- CLAY BARRIER
- LINED EVAPORATION POND
- AREA 5 NORTH
- LNAPL IN UPPER HSU
- DNAPL IN UPPER HSU
- DNAPL IN LOWER HSU
- ? — POTENTIAL EXTENT OF DNAPL IN LOWER HSU
- ⊕ TRENCH EXTRACTION WELL
- LHSU MONITORING WELL
- LNAPL SKIMMER WELL
- ⊕ SUMP

NOTES:

1. TREATED PSCT AND AGGRESSIVE EXTRACTION GROUNDWATER IS SENT TO THE PROPOSED LINED EVAPORATION POND IN FOOTPRINT OF A-SERIES POND. NAPL AND GALLERY WELL LIQUIDS ARE SENT OFFSITE FOR DISPOSAL.
2. SIXTEEN NAPL EXTRACTION WELLS ARE INCLUDED IN THE VICINITY OF RIPZ-B IN THE P/S LANDFILL IN THE UPPER HSU.
3. FOUR EXISTING MONITORING WELLS IN THE CDA ARE CONVERTED TO LNAPL SKIMMER WELLS TO RECOVER FLOATING PRODUCT.
4. FS AREA 1 INCLUDING CENTRAL DRAINAGE AREA, BURIAL TRENCH AREA AND PCB LANDFILL AND A PORTION OF FS AREA 3 INCLUDING THE MAINTENANCE SHED AREA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF THE SOIL REMEDY.
5. A TOTAL OF TWELVE WELLS WILL MONITOR ANY POTENTIAL VOC MIGRATION UNDER THE PSCT IN THE LHSU. THE LHSU MONITORING WELLS ARE CONSTRUCTED AS TWO WELL CLUSTERS WITH ONE SCREENED IN THE UPPER AND THE OTHER IN THE LOWER PORTIONS OF THE LHSU, JUST NORTH OF PSCT-1 AND PSCT-4.

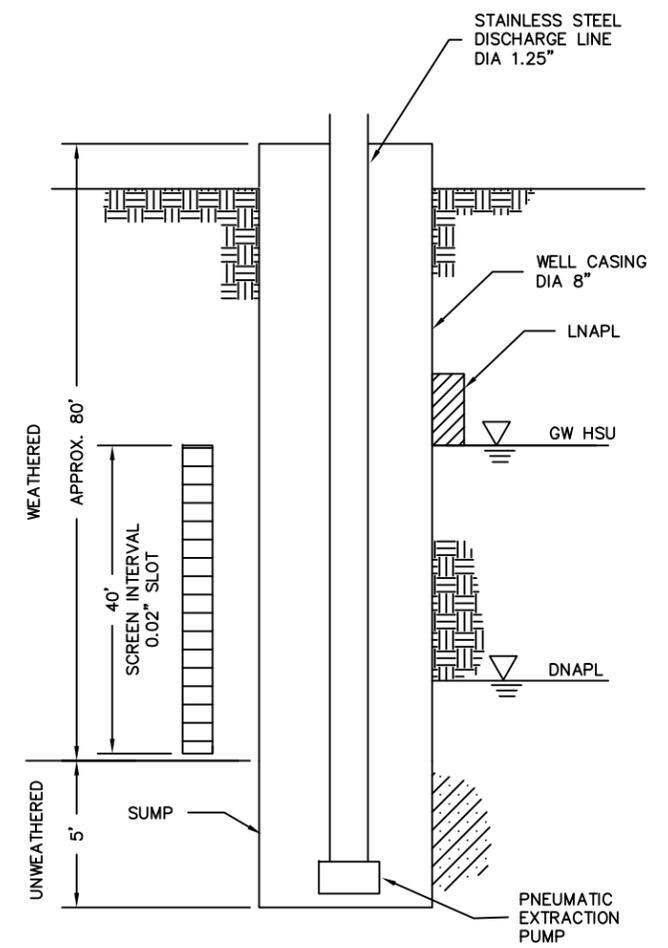
REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
<div style="display: inline-block; vertical-align: middle; font-size: small; margin-left: 10px;"> 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259 </div>					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY AREA 5 NORTH GROUNDWATER - ALTERNATIVE 5 EXTRACTION (PSCT, GALLERY WELL) + AGGRESSIVE NAPL EXTRACTION + NAPL-ONLY EXTRACTION (CDA) + MONITORING (12 NEW LHSU WELLS) + DISCHARGE ONSITE					
FIGURE 11-27A					





LEGEND:

-  NAPL EXTRACTION AREA
-  EXISTING EXTRACTION WELL
-  AGGRESSIVE NAPL EXTRACTION WELL (16 WELLS)
-  BENCH ROAD
-  EXISTING MONITORING WELL FOR LNAPL SKIMMER



AGGRESSIVE NAPL EXTRACTION WELL IN UPPER HSU

NOT TO SCALE

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
					
130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH - ALTERNATIVE 5 EXTRACTION (PSCT, GALLERY WELL) + AGGRESSIVE NAPL EXTRACTION + EXTRACTION (NAPL-ONLY, CDA)					

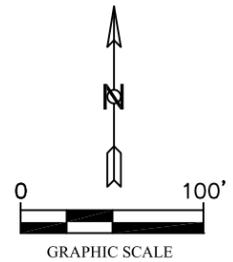
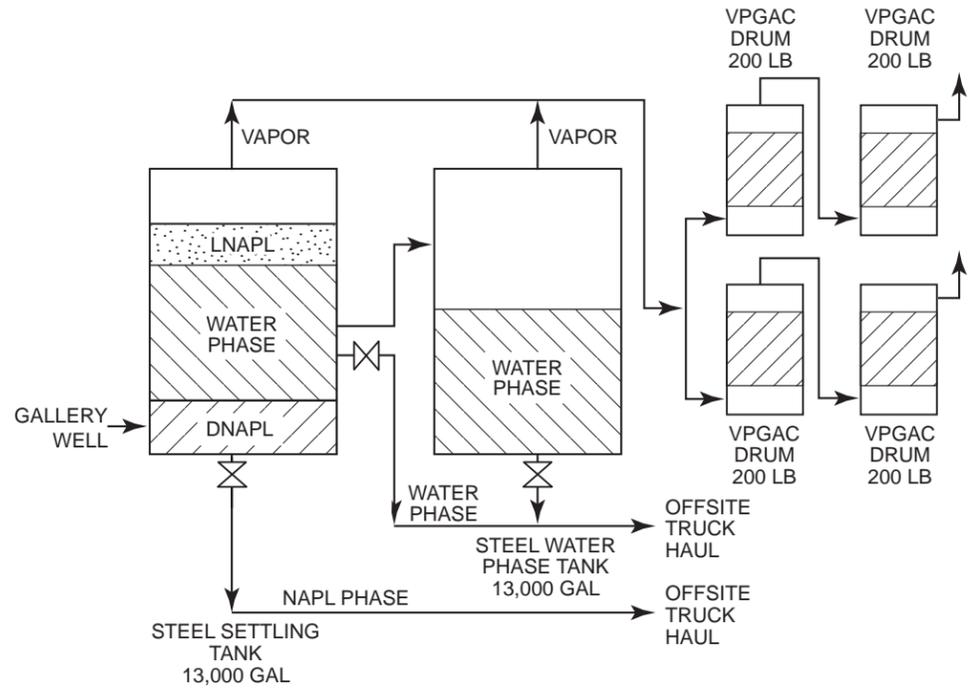
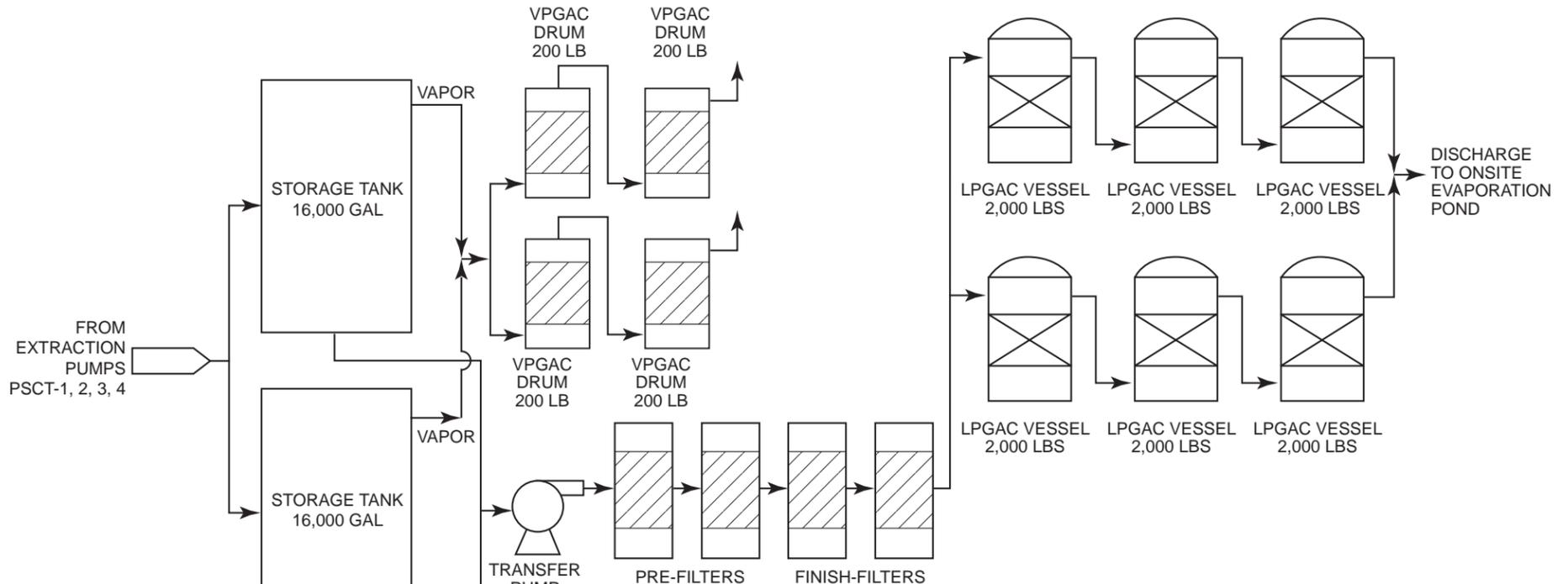


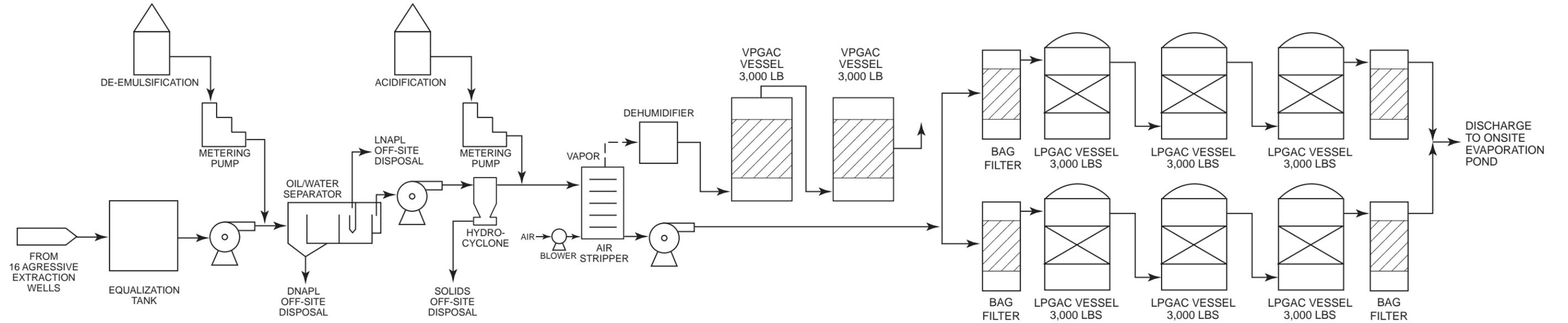
FIGURE 11-27B



GALLERY WELL PROCESS FLOW

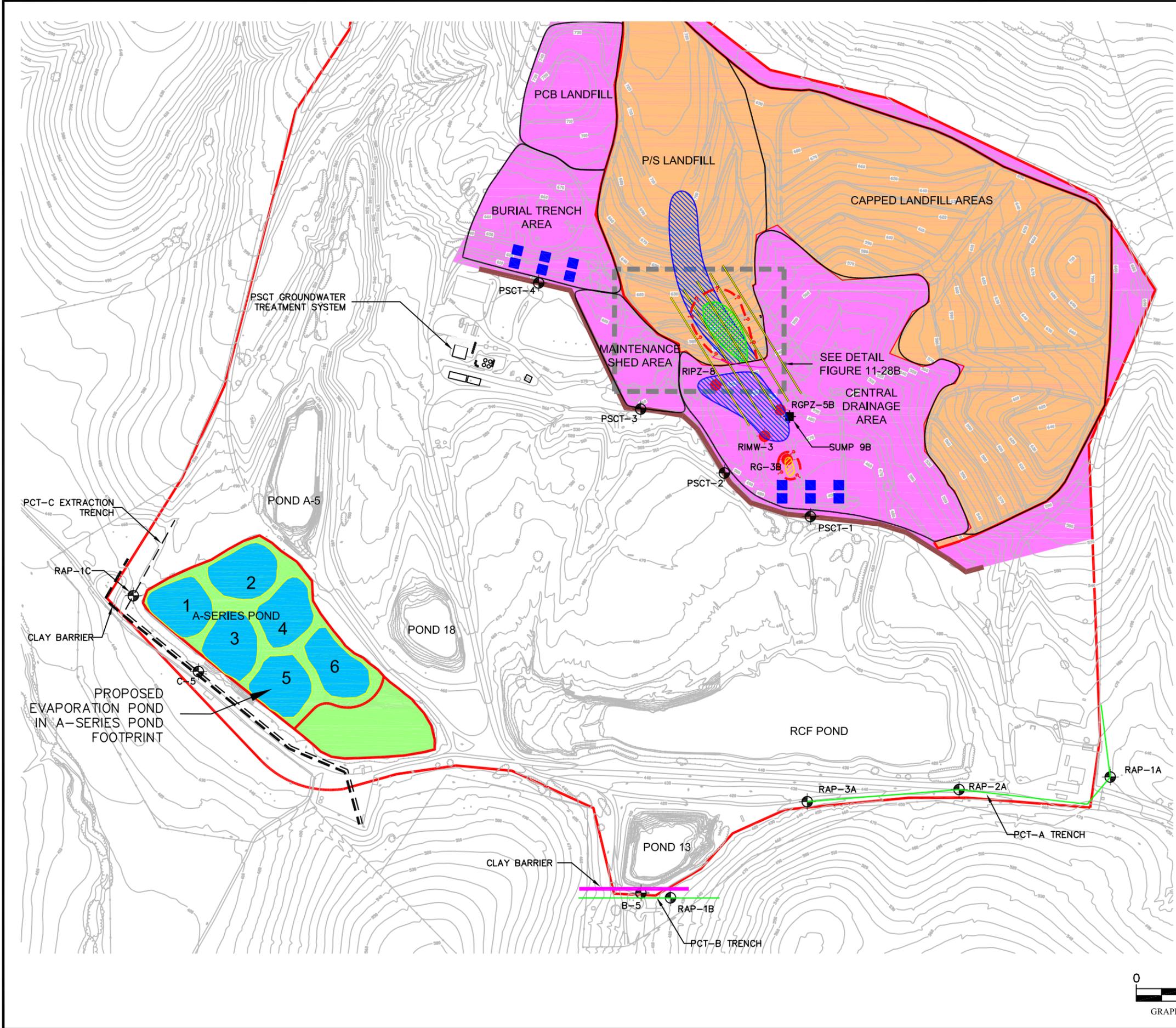


PSCT PROCESS FLOW



AGGRESSIVE EXTRACTION PROCESS FLOW

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
					
130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH - ALTERNATIVE 5 PROCESS FLOW DIAGRAM					
FIGURE 11-27C					



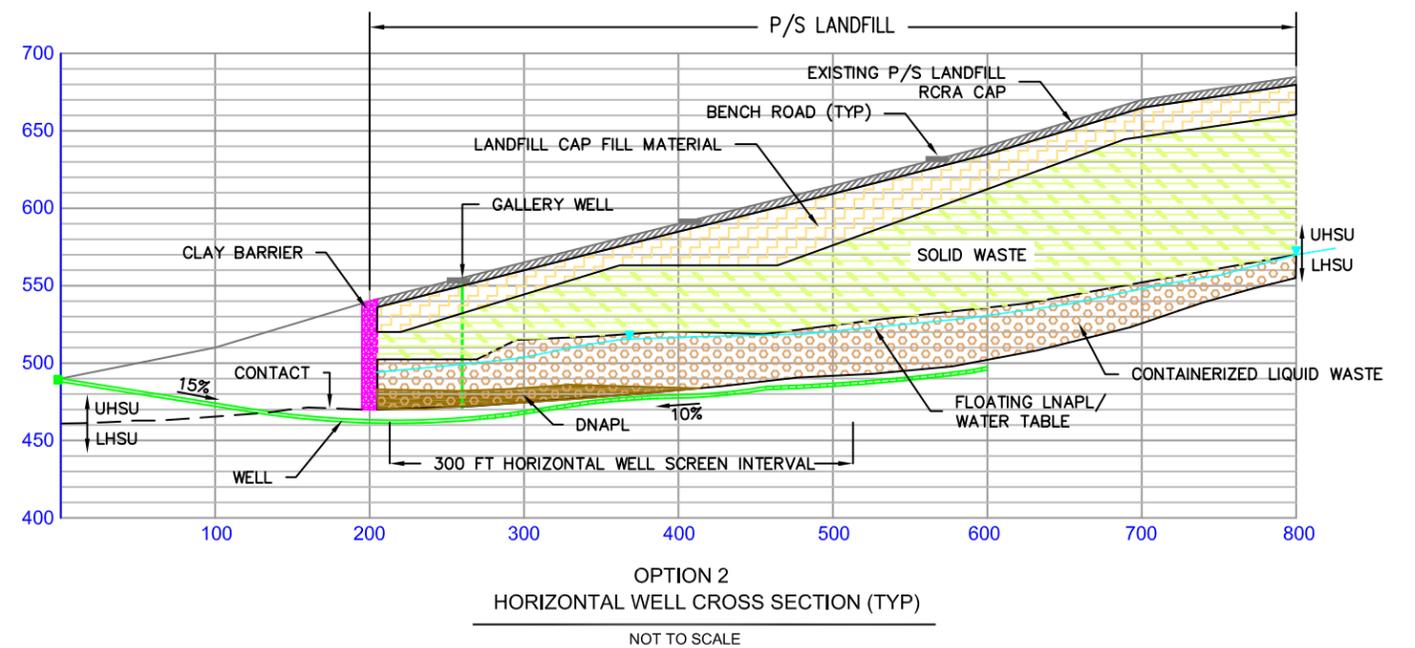
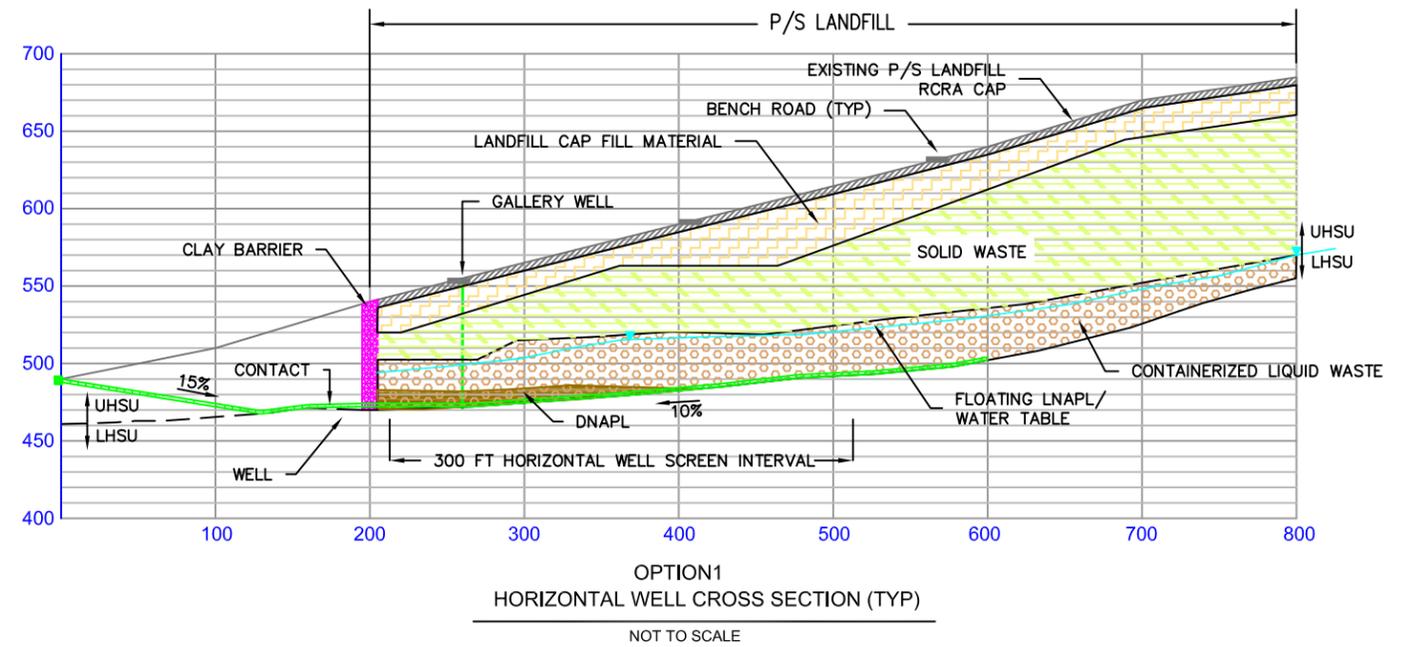
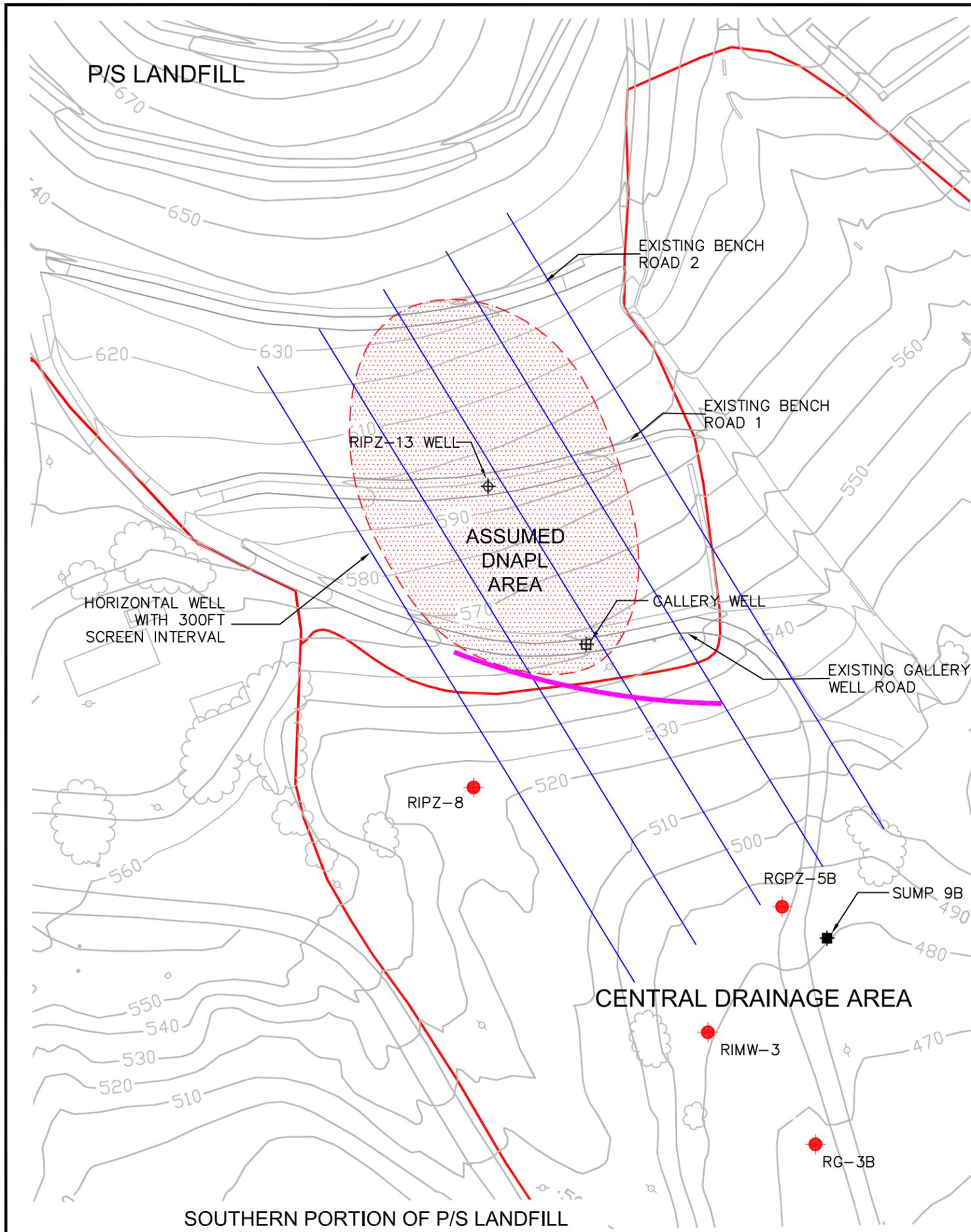
LEGEND:

- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- PCT-A & PCT-B TRENCHES
- CLAY BARRIER
- HORIZONTAL WELL
- LINED EVAPORATION POND
- AREA 5 NORTH
- LNAPL IN UPPER HSU
- DNAPL IN UPPER HSU
- DNAPL IN LOWER HSU
- ? POTENTIAL EXTENT OF DNAPL IN LOWER HSU
- ⊕ TRENCH EXTRACTION WELL
- LHSU MONITORING WELL
- LNAPL SKIMMER WELL
- ⊕ SUMP

NOTES:

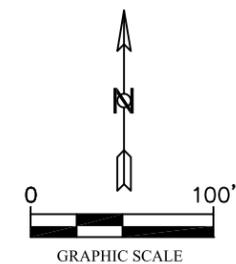
1. TREATED PSCT GROUNDWATER IS SENT TO THE PROPOSED LINED EVAPORATION POND IN THE FOOTPRINT OF THE A-SERIES POND. DEWATERED LIQUIDS FROM HORIZONTAL WELLS, NAPL AND GALLERY WELL LIQUIDS ARE SENT OFFSITE FOR DISPOSAL.
2. FIVE HORIZONTAL WELLS ARE ADDED UNDER THE P/S LANDFILL TO DEWATER IT, SEE DETAIL ON FIGURE 11-28B.
3. FOUR EXISTING MONITORING WELLS IN THE CDA ARE CONVERTED TO LNAPL SKIMMER WELLS TO RECOVER FLOATING PRODUCT.
4. FS AREA 1 INCLUDING CENTRAL DRAINAGE AREA, BURIAL TRENCH AREA AND PCB LANDFILL AND A PORTION OF FS AREA 3 INCLUDING THE MAINTENANCE SHED AREA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF THE SOIL REMEDY.
5. A TOTAL OF TWELVE WELLS WILL MONITOR ANY POTENTIAL VOC MIGRATION UNDER THE PSCT IN THE LHSU. THE LHSU MONITORING WELLS ARE CONSTRUCTED AS TWO WELL CLUSTERS WITH ONE SCREENED IN THE UPPER AND THE OTHER IN THE LOWER PORTIONS OF THE LHSU, JUST NORTH OF PSCT-1 AND PSCT-4.

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
<div style="display: inline-block; vertical-align: middle; font-size: small; margin-left: 10px;"> 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259 </div>					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE					
FEASIBILITY STUDY					
AREA 5 NORTH GROUNDWATER - ALTERNATIVE 6					
EXTRACTION (PSCT, GALLERY WELL) + DEWATERING P/S LANDFILL + NAPL-ONLY EXTRACTION (4 EXISTING WELLS, CDA) + MONITORING (12 LHSU WELLS) + DISCHARGE ONSITE					
FIGURE 11-28A					

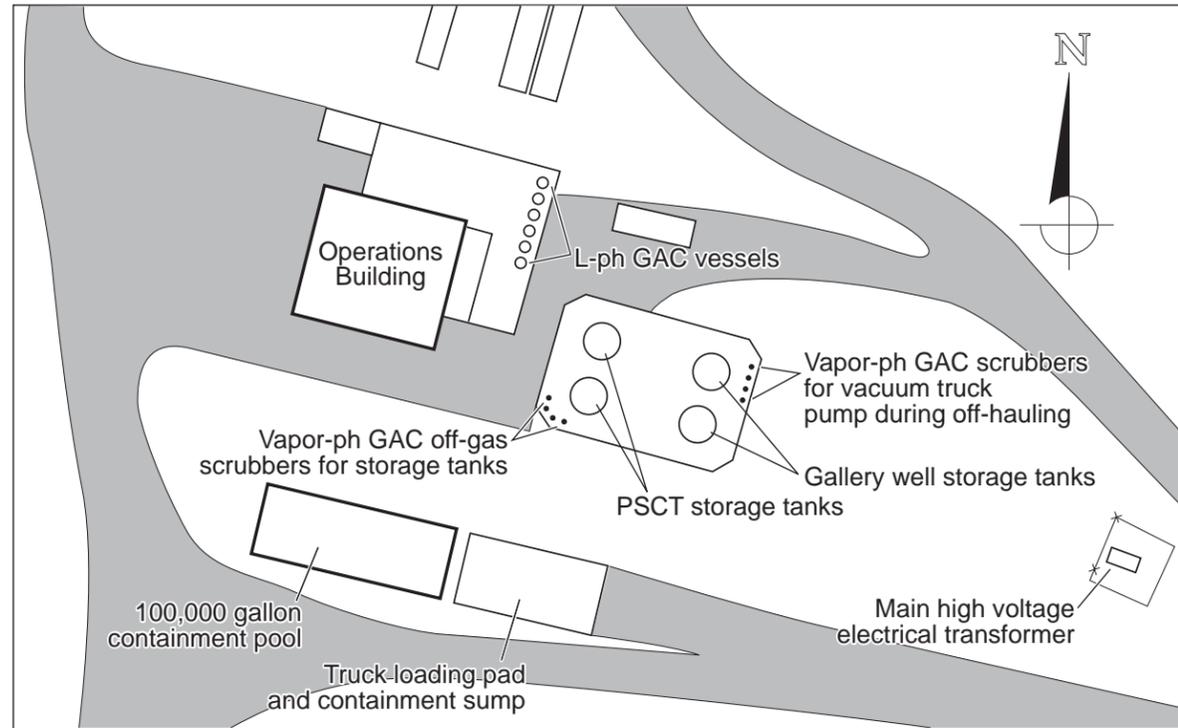


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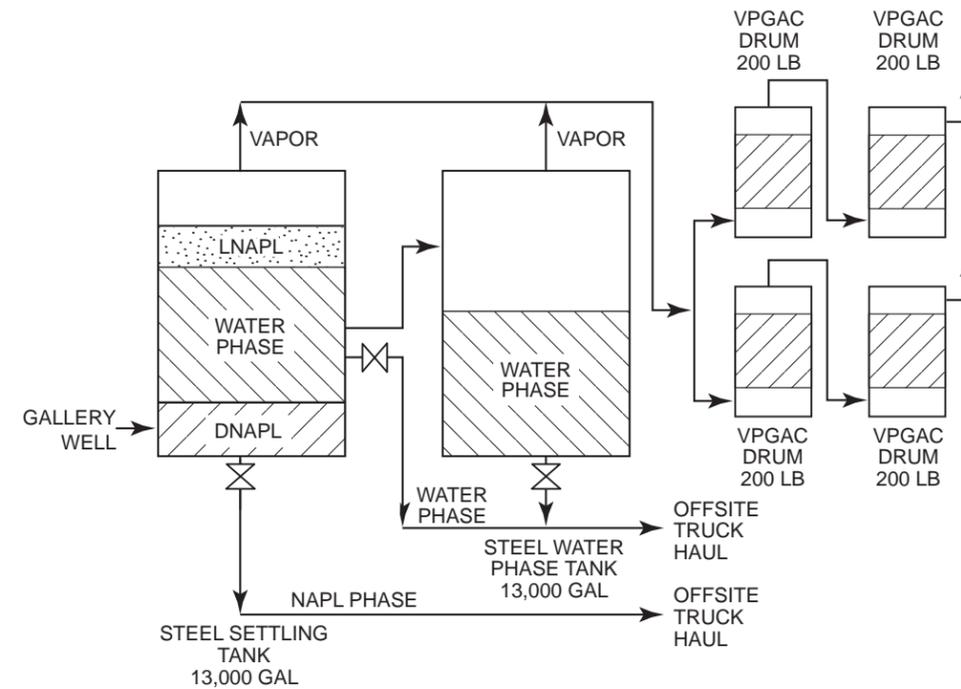
- NAPL EXTRACTION AREA
- EXISTING EXTRACTION WELL
- LNAPL SKIMMER WELL
- EXISTING CLAY BARRIER
- HORIZONTAL WELL
- BENCH ROAD



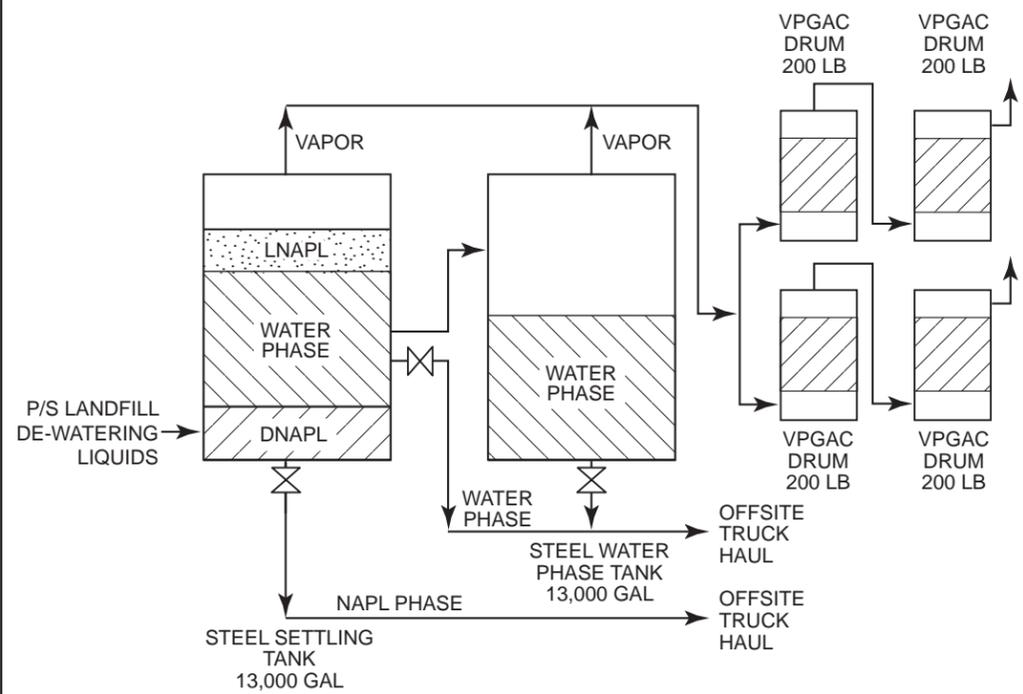
REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
		PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY AREA 5 NORTH - ALTERNATIVE 6 EXTRACTION (PSCT, GALLERY WELL) + DEWATER P/S LANDFILL + EXTRACTION (NAPL-ONLY IN CDA, 4 EXISTING WELLS) + MONITORING (12 NEW WELLS) + TREAT AND DISCHARGE ONSITE			
FIGURE 11-28B					



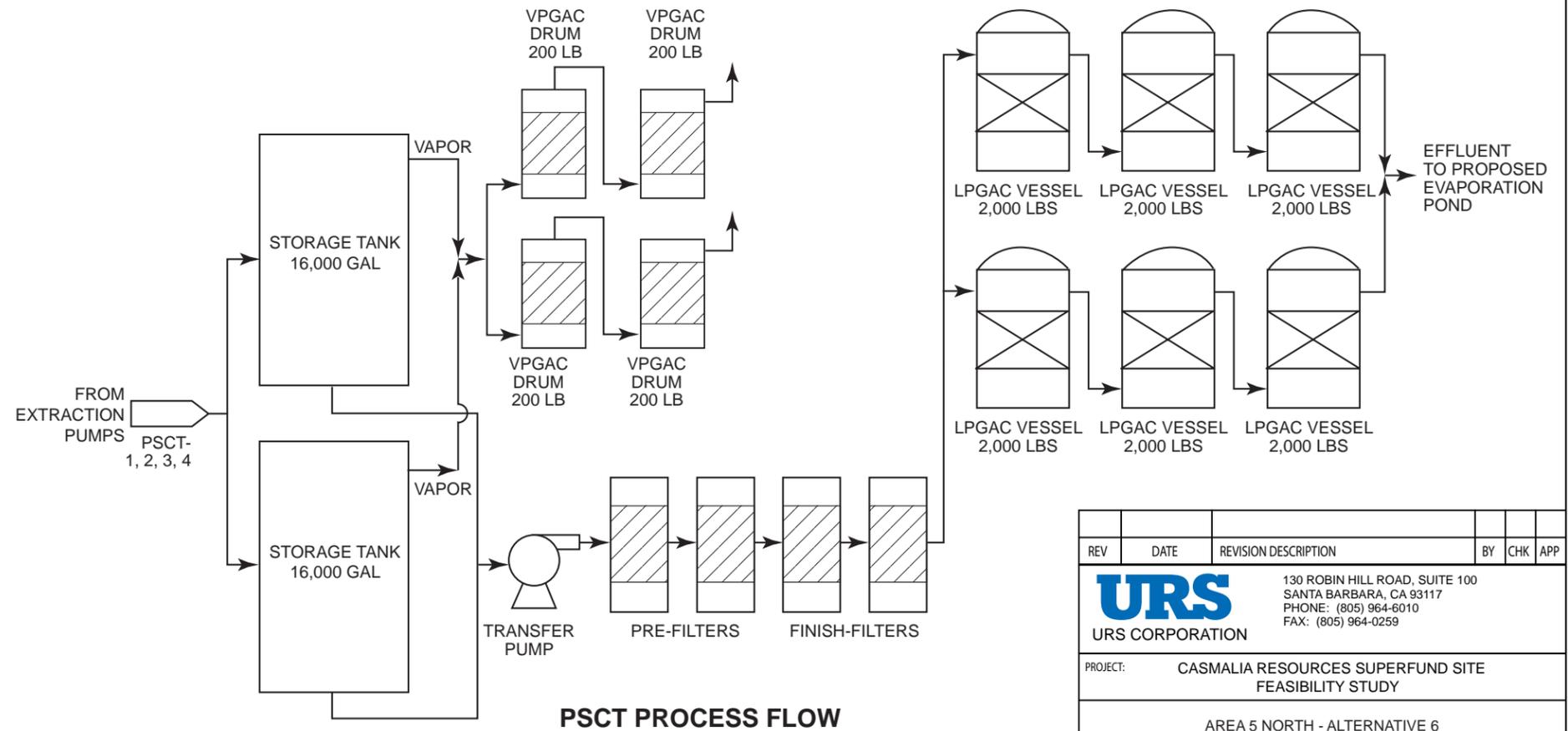
**TREATMENT SYSTEM LAYOUT
IN LIQUID TREATMENT AREA**



GALLERY WELL PROCESS FLOW

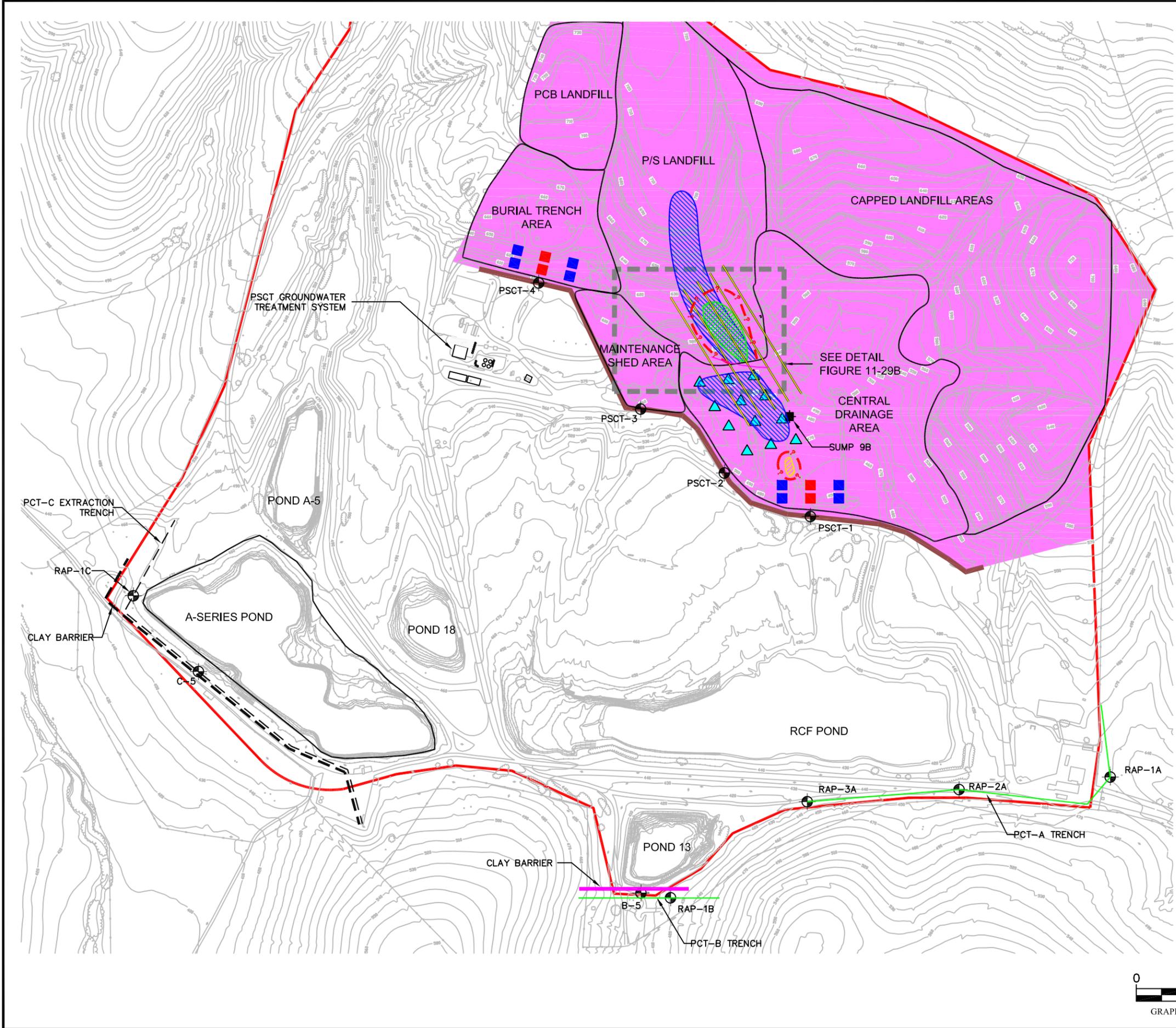


P/S LANDFILL DE-WATERING LIQUIDS PROCESS FLOW



PSCT PROCESS FLOW

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
					
130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH - ALTERNATIVE 6 PROCESS FLOW DIAGRAM AND TREATMENT SYSTEM LAYOUT					
FIGURE 11-28C					



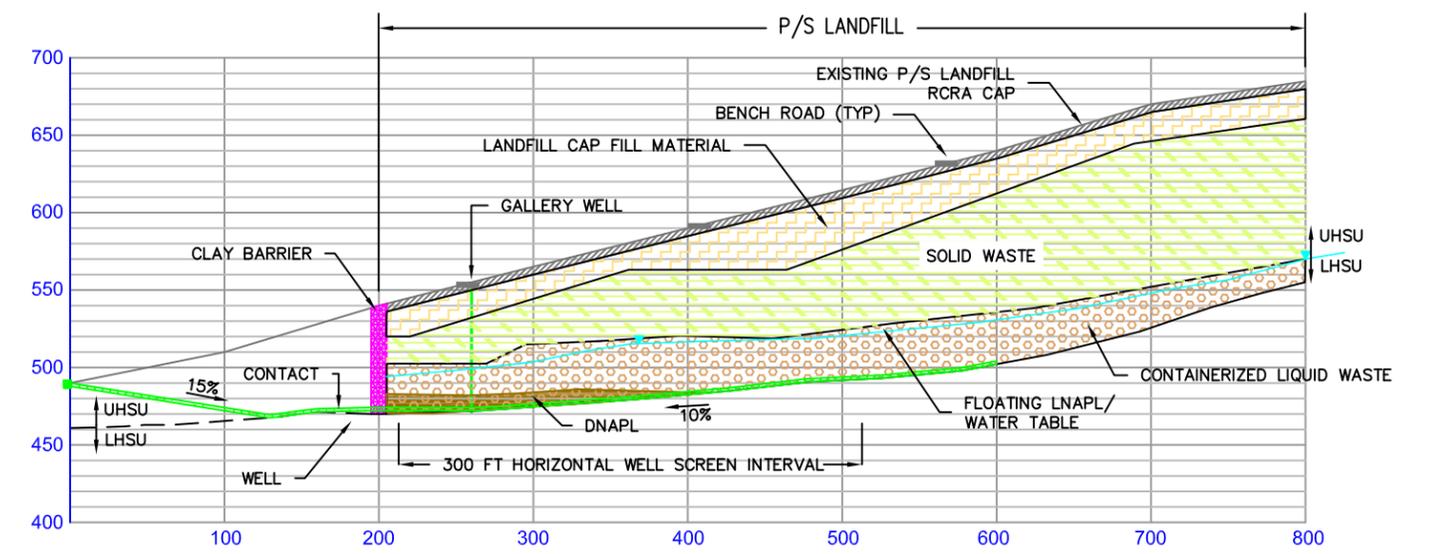
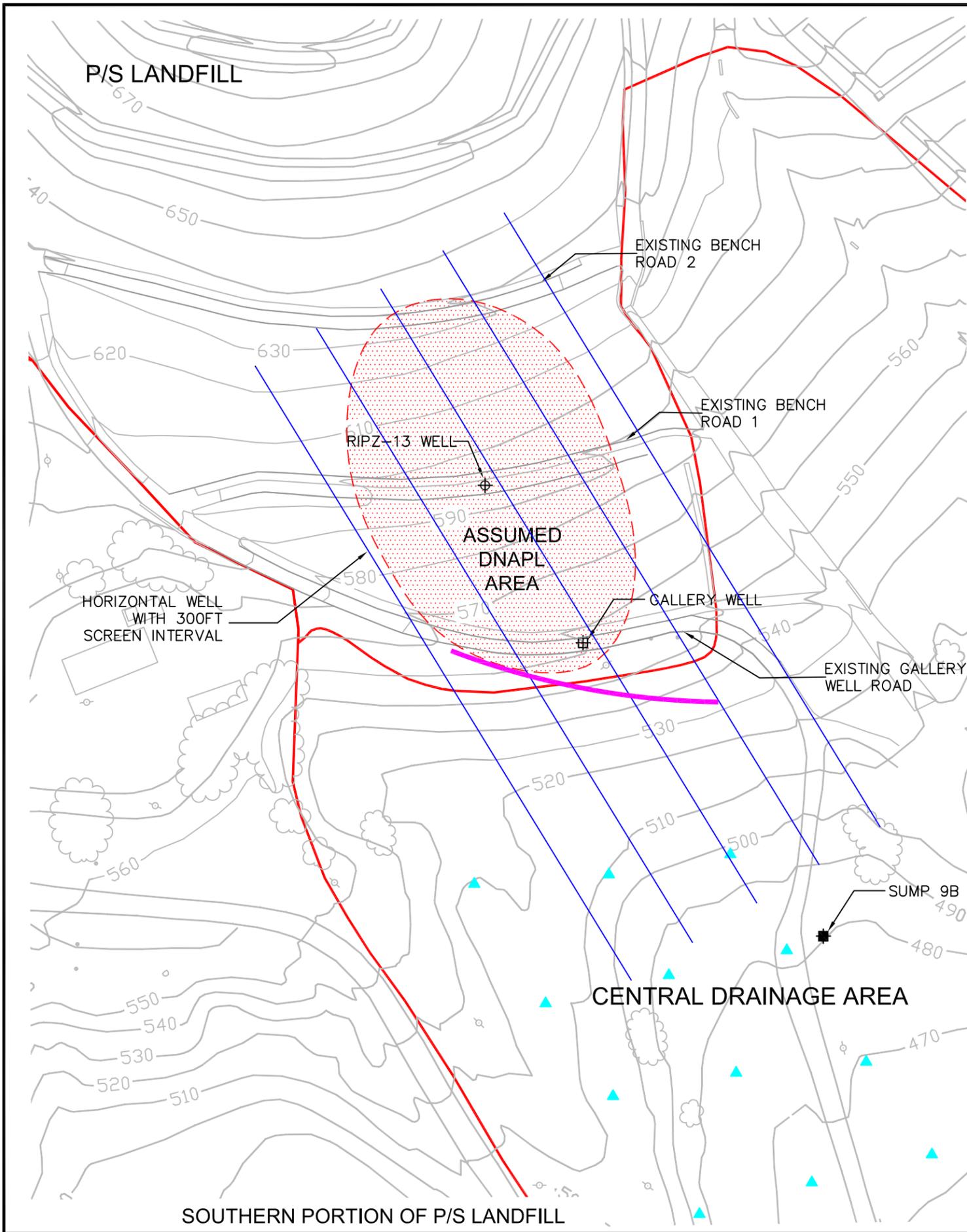
LEGEND:

- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- PCT-A & PCT-B TRENCHES
- CLAY BARRIER
- HORIZONTAL WELL
- AREA 5 NORTH
- LNAPL IN UPPER HSU
- DNAPL IN UPPER HSU
- DNAPL IN LOWER HSU
- - - POTENTIAL EXTENT OF DNAPL IN LOWER HSU
- ⊕ TRENCH EXTRACTION WELL
- LHSU MONITORING WELL
- ▲ LNAPL SKIMMER WELL
- ⊕ SUMP
- LHSU EXTRACTION WELL

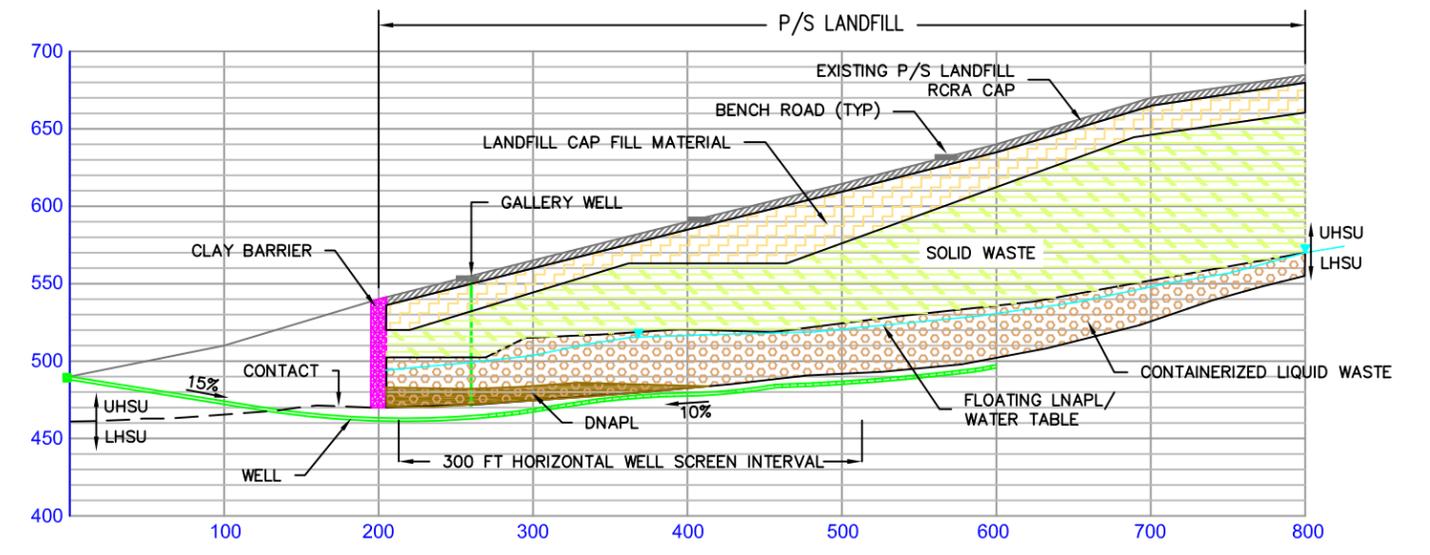
NOTES:

1. TREATED PSCT GROUNDWATER IS SENT TO A NEW LIQUIDS TREATMENT PLANT AND THEN DISCHARGED OFFSITE TO THE B-DRAINAGE. NAPL, GALLERY WELL LIQUIDS AND WASTE BRINE LIQUIDS ARE SENT OFFSITE TO A PERMITTED FACILITY FOR DISPOSAL.
2. FIVE HORIZONTAL WELLS ARE ADDED UNDER THE P/S LANDFILL TO DEWATER IT, SEE DETAIL ON FIGURE 11-28B.
3. FOUR EXISTING MONITORING WELLS IN THE CDA ARE CONVERTED TO LNAPL SKIMMER WELLS TO RECOVER FLOATING PRODUCT, INCLUDING THE INSTALLATION OF EIGHT NEW EXTRACTION WELLS, EQUIPPED WITH PNEUMATIC LNAPL SKIMMERS.
4. FS AREA 1 INCLUDING CENTRAL DRAINAGE AREA, BURIAL TRENCH AREA AND PCB LANDFILL AND A PORTION OF FS AREA 3 INCLUDING MAINTENANCE SHED AREA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF THE SOIL REMEDY.
5. A TOTAL OF EIGHT WELLS WILL MONITOR ANY POTENTIAL VOC MIGRATION UNDER THE PSCT IN THE LHSU. THE LHSU MONITORING WELLS ARE CONSTRUCTED AS TWO WELL CLUSTERS WITH ONE SCREENED IN THE UPPER AND THE OTHER IN THE LOWER PORTIONS OF THE LHSU, JUST NORTH OF PSCT-1 AND PSCT-4.
6. FOUR LHSU EXTRACTION WELLS WILL BE INSTALLED TO ENSURE CONTAINMENT OF LOWER HSU VOC PLUME WITHIN AREA 5. THE LHSU EXTRACTION WELLS ARE SCREENED IN THE TOP 30 TO 150 FEET OF THE LOWER HSU

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
<div style="display: inline-block; vertical-align: middle; margin-left: 10px; font-size: 8px;"> 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259 </div>					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH GROUNDWATER - ALTERNATIVE 7 EXTRACTION (PSCT, GALLERY WELL) + DEWATERING P/S LANDFILL + NAPL-ONLY EXTRACTION (12 NEW WELLS, CDA) + EXTRACTION (4 LHSU WELLS) + MONITORING (8 LHSU WELLS) + DISCHARGE OFFSITE					
FIGURE 11-29A					



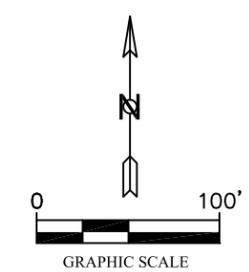
OPTION1
HORIZONTAL WELL CROSS SECTION (TYP)
NOT TO SCALE



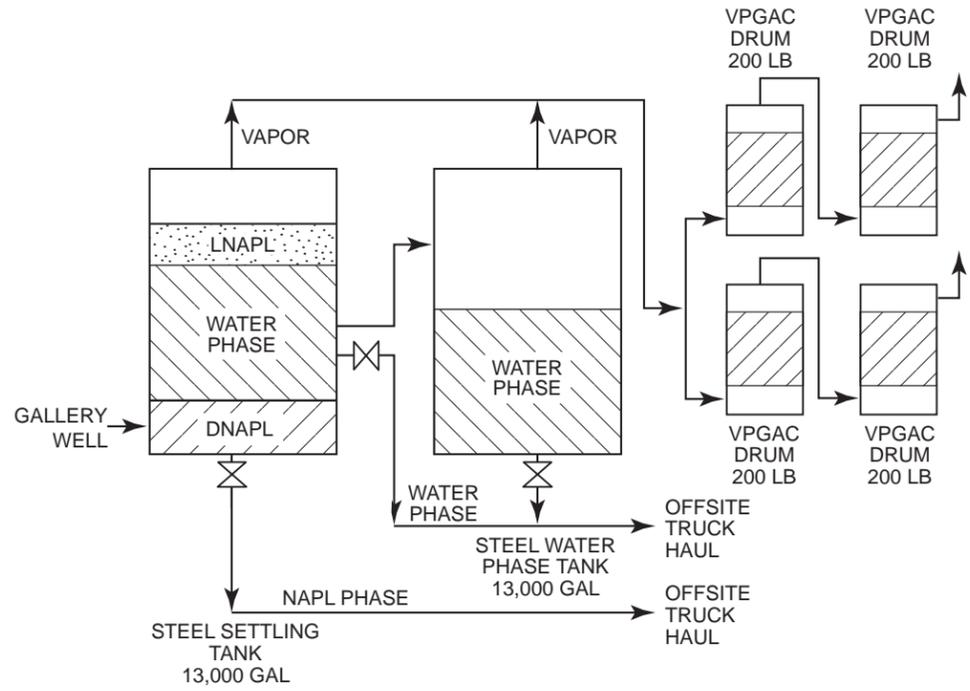
OPTION 2
HORIZONTAL WELL CROSS SECTION (TYP)
NOT TO SCALE

LEGEND:

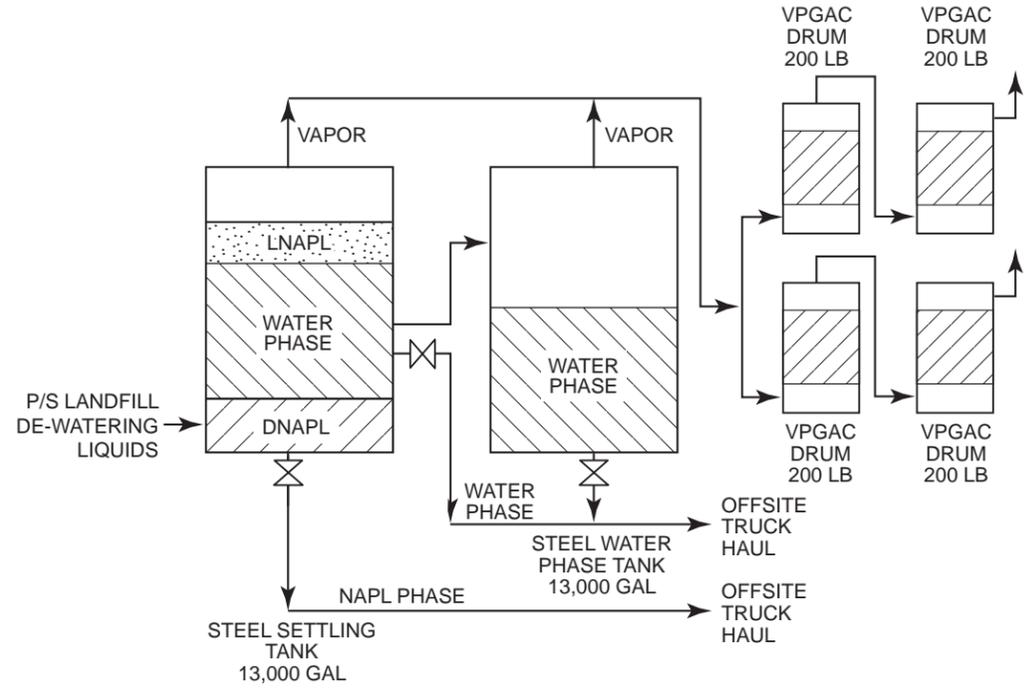
- NAPL EXTRACTION AREA
- EXISTING EXTRACTION WELL
- NEW LNAPL SKIMMER WELL
- EXISTING CLAY BARRIER
- HORIZONTAL WELL
- BENCH ROAD



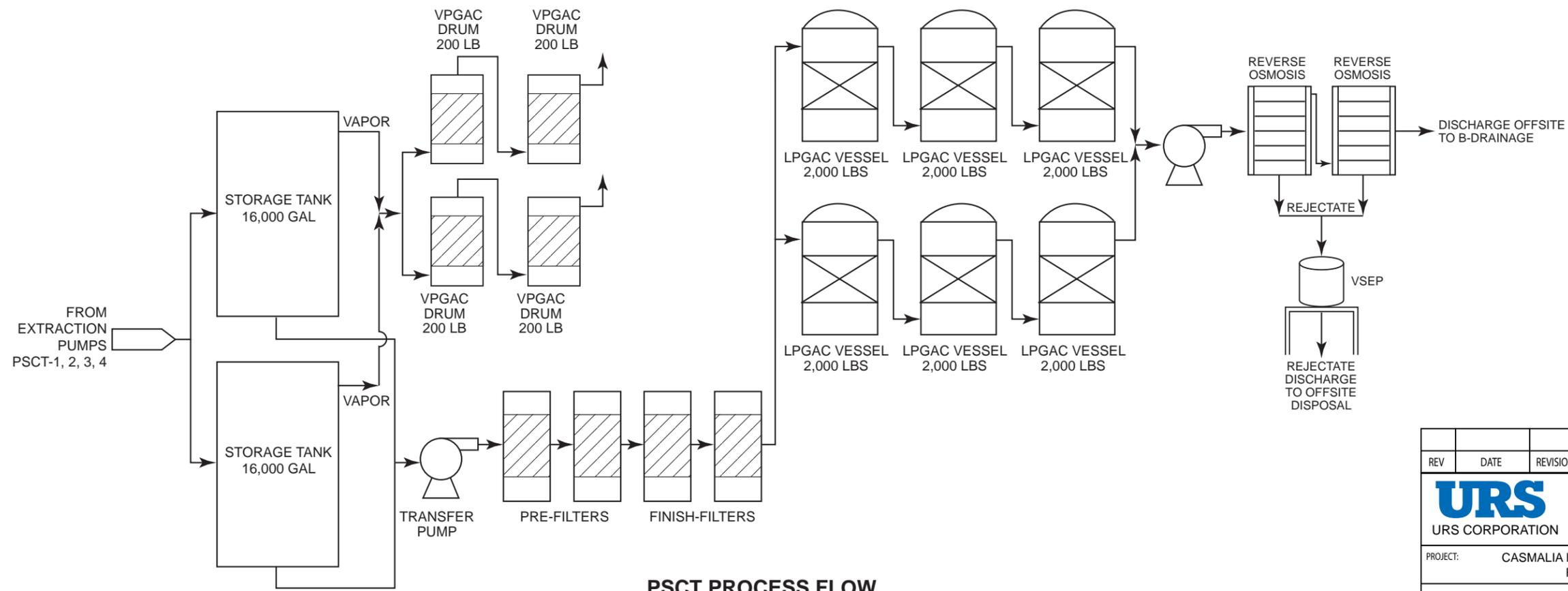
REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH - ALTERNATIVE 7 EXTRACTION (PSCT, GALLERY WELL) + DEWATER P/S LANDFILL + EXTRACTION (NAPL-ONLY IN CDA, 12 NEW WELLS) + EXTRACTION (4 NEW LHSU WELLS) + MONITORING (8 NEW LHSU WELLS) + TREAT AND DISCHARGE PSCT GROUNDWATER OFFSITE					
FIGURE 11-29B					



GALLERY WELL PROCESS FLOW

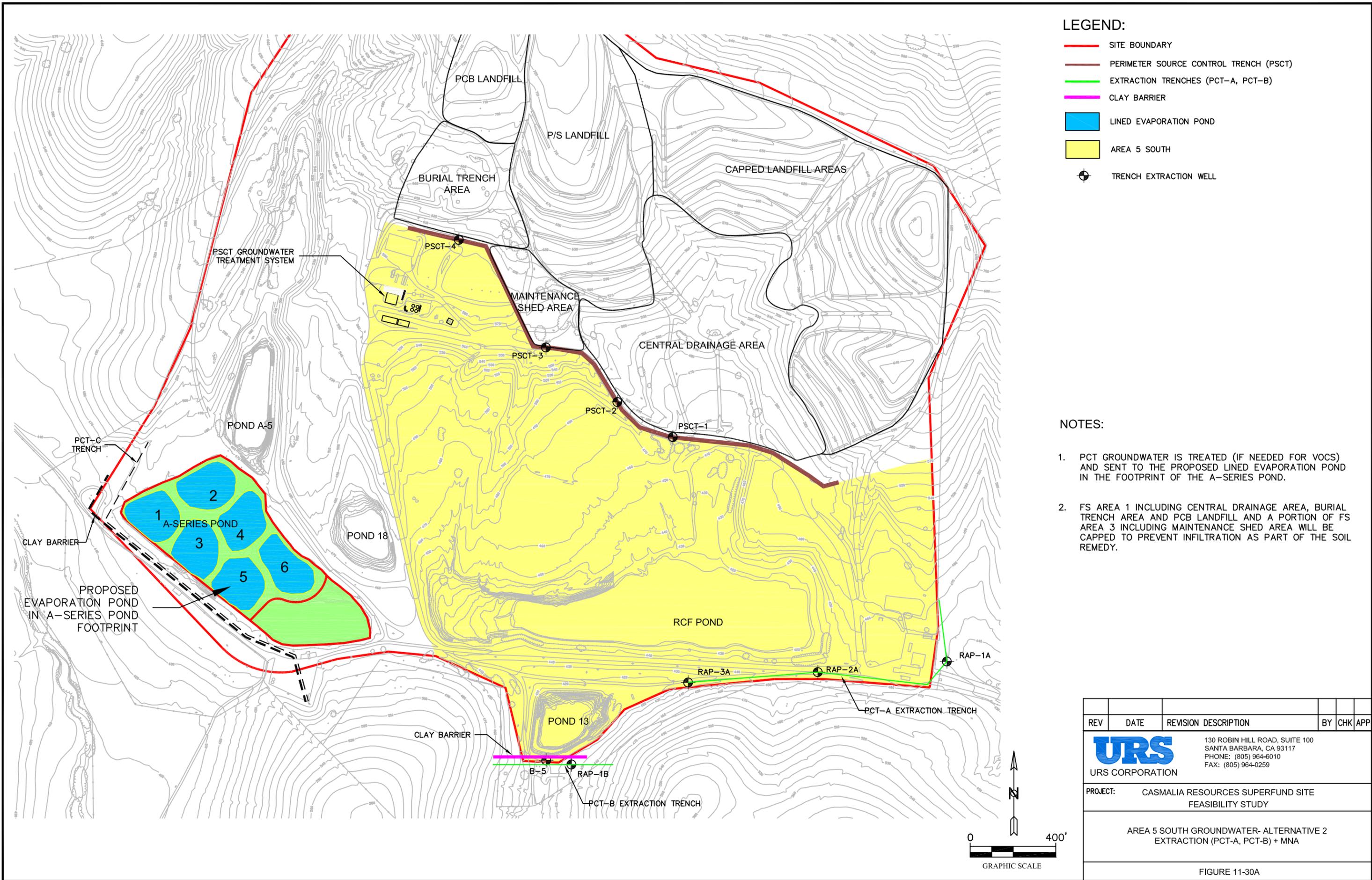


P/S LANDFILL DE-WATERING LIQUIDS PROCESS FLOW



PSCT PROCESS FLOW

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259 URS CORPORATION					
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 NORTH - ALTERNATIVE 7 PROCESS FLOW DIAGRAM					
FIGURE 11-29C					



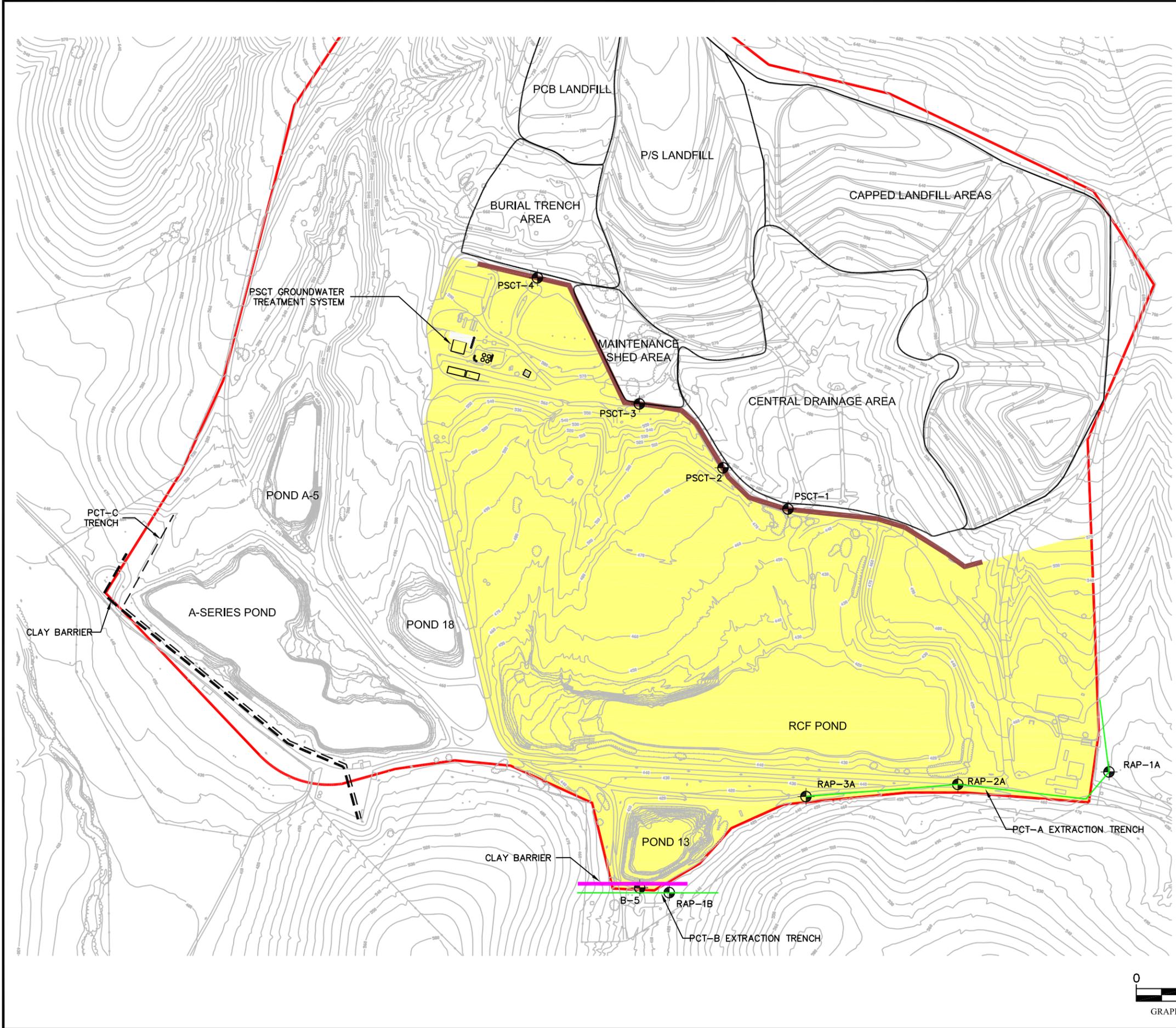
LEGEND:

- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-A, PCT-B)
- CLAY BARRIER
- LINED EVAPORATION POND
- AREA 5 SOUTH
- TRENCH EXTRACTION WELL

NOTES:

1. PCT GROUNDWATER IS TREATED (IF NEEDED FOR VOCs) AND SENT TO THE PROPOSED LINED EVAPORATION POND IN THE FOOTPRINT OF THE A-SERIES POND.
2. FS AREA 1 INCLUDING CENTRAL DRAINAGE AREA, BURIAL TRENCH AREA AND PCB LANDFILL AND A PORTION OF FS AREA 3 INCLUDING MAINTENANCE SHED AREA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF THE SOIL REMEDY.

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		URS CORPORATION 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT:			CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY		
AREA 5 SOUTH GROUNDWATER- ALTERNATIVE 2 EXTRACTION (PCT-A, PCT-B) + MNA					
FIGURE 11-30A					



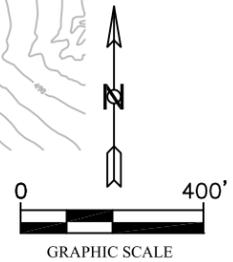
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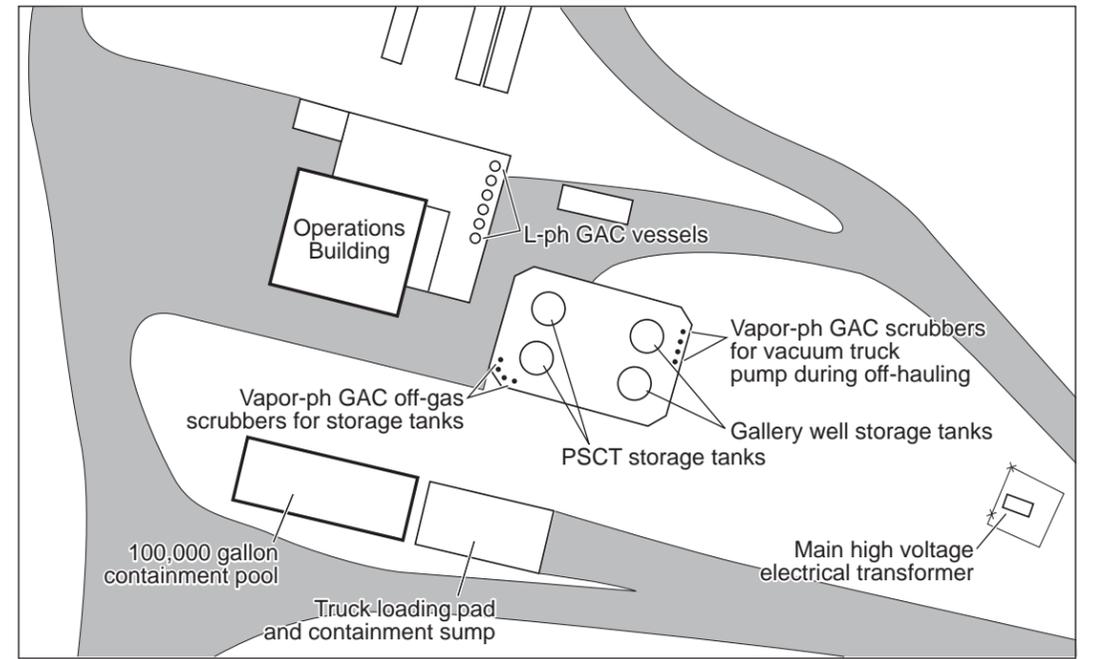
- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-A, PCT-B)
- CLAY BARRIER
- AREA 5 SOUTH
- TRENCH EXTRACTION WELL

NOTES:

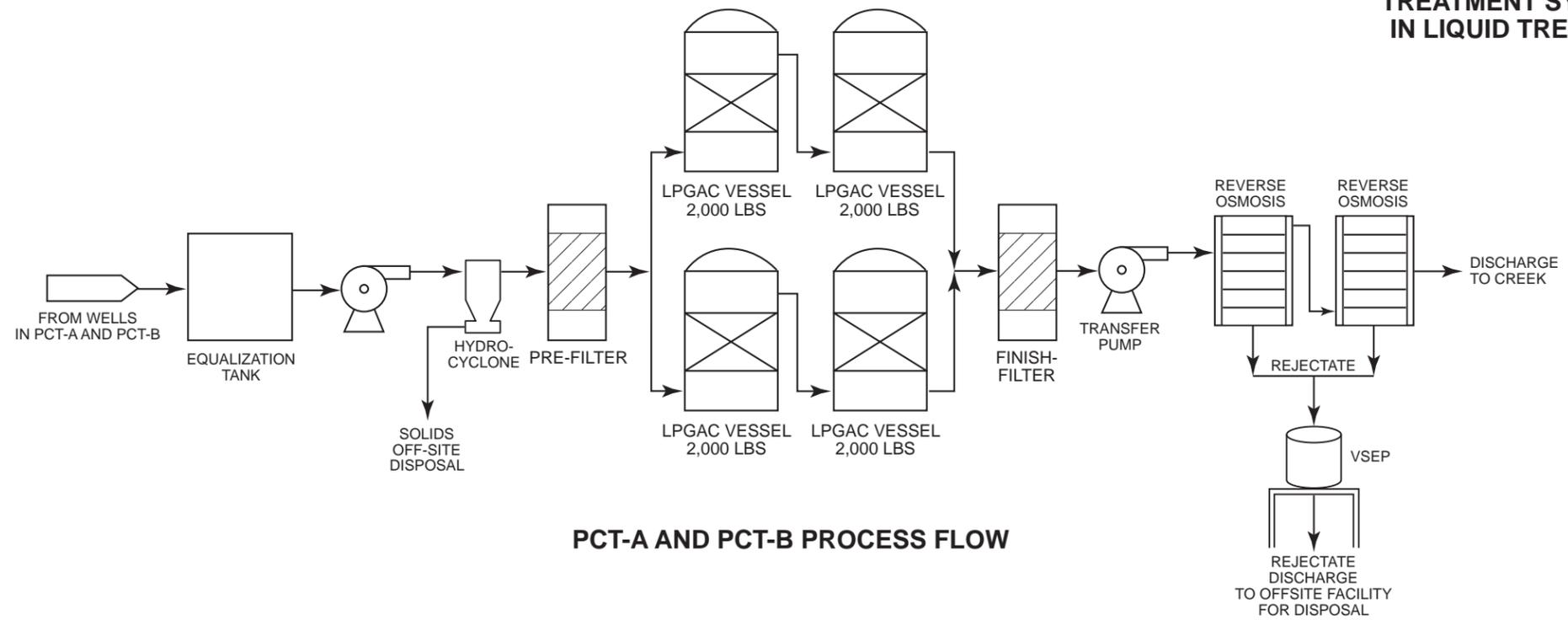
1. TREATED PCT GROUNDWATER IS DISCHARGED OFFSITE IN ACCORDANCE WITH THE SITE-SPECIFIC NPDES PERMIT.
2. FS AREA 1 INCLUDING CENTRAL DRAINAGE AREA, BURIAL TRENCH AREA AND PCB LANDFILL AND A PORTION OF FS AREA 3 INCLUDING MAINTENANCE SHED AREA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF THE SOIL REMEDY.

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		URS URS CORPORATION	130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259		
PROJECT:		CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY			
AREA 5 SOUTH GROUNDWATER- ALTERNATIVE 3 EXTRACTION (PCT-A, PCT-B) + MNA					
FIGURE 11-31A					





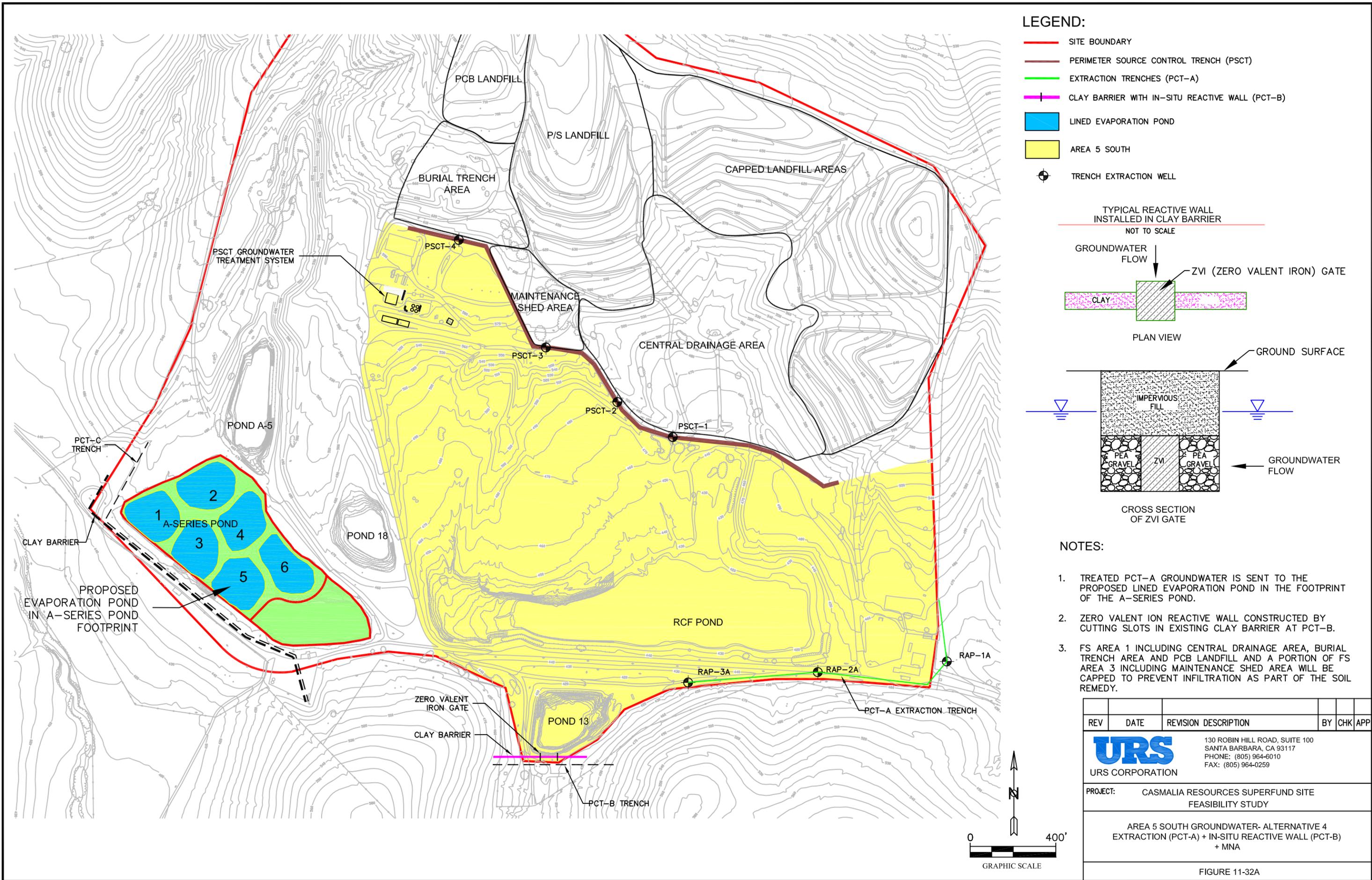
**TREATMENT SYSTEM LAYOUT
IN LIQUID TREATMENT AREA**

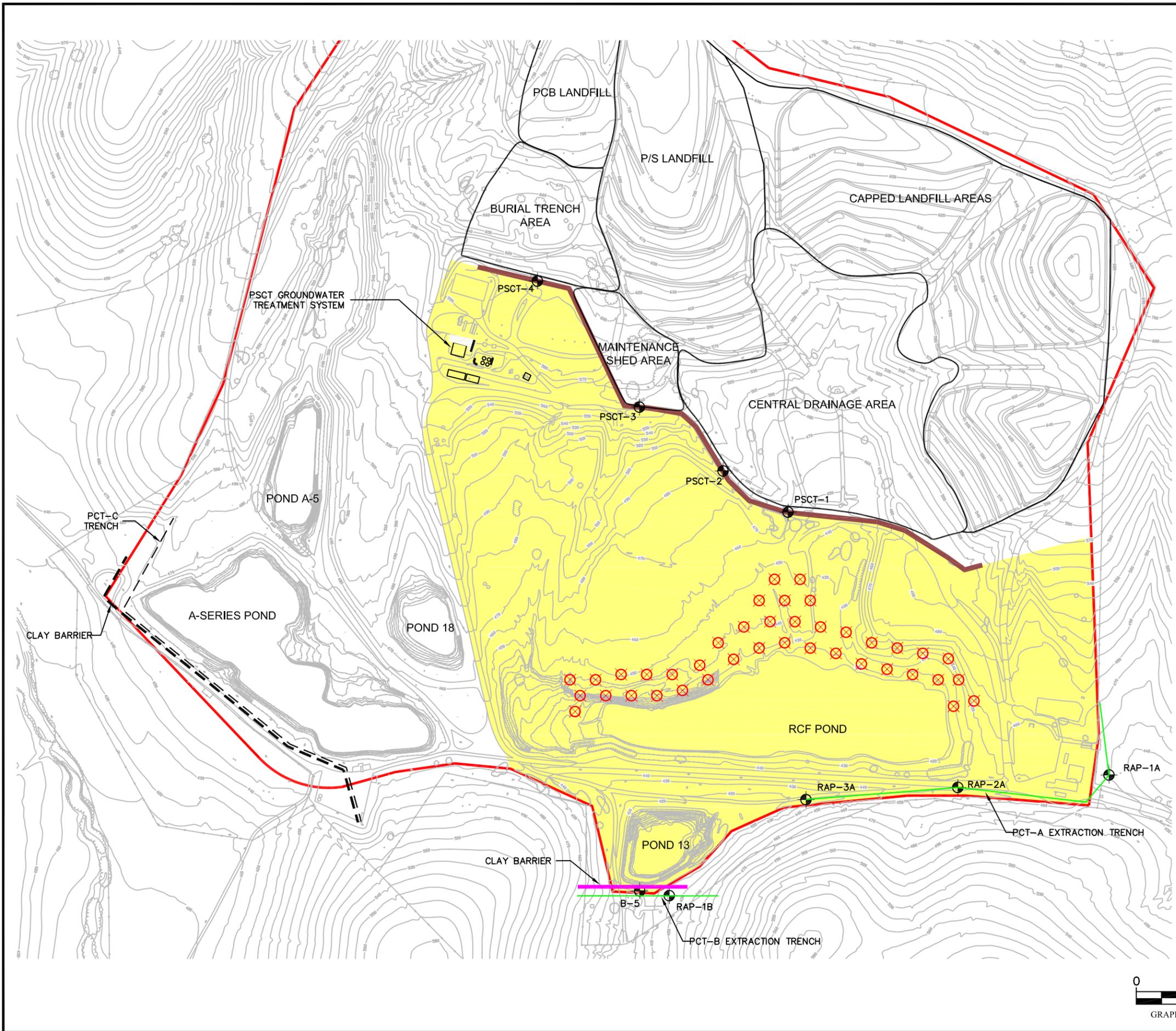


PCT-A AND PCT-B PROCESS FLOW

NOTE:
Treatment system is designed for 10 gpm and will be operated in batch mode with treatment operations occurring every other day for typical conditions

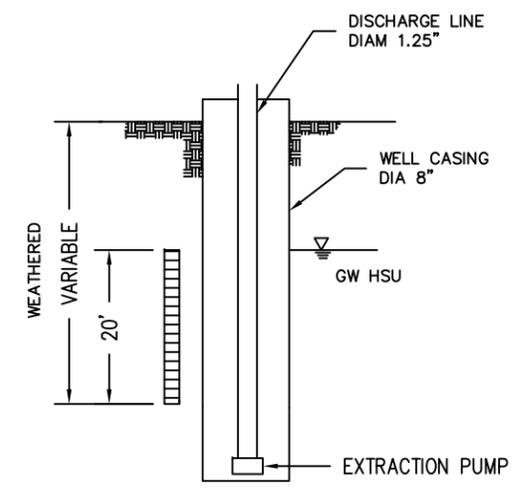
REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 SOUTH - ALTERNATIVE 3 PROCESS FLOW DIAGRAM					
FIGURE 11-31B					





LEGEND:

- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-A, PCT-B)
- CLAY BARRIER
- AREA 5 SOUTH
- TRENCH EXTRACTION WELL
- LARGE DIAMETER EXTRACTION WELL



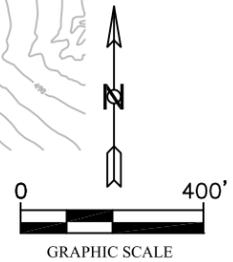
LARGE DIAMETER EXTRACTION WELL

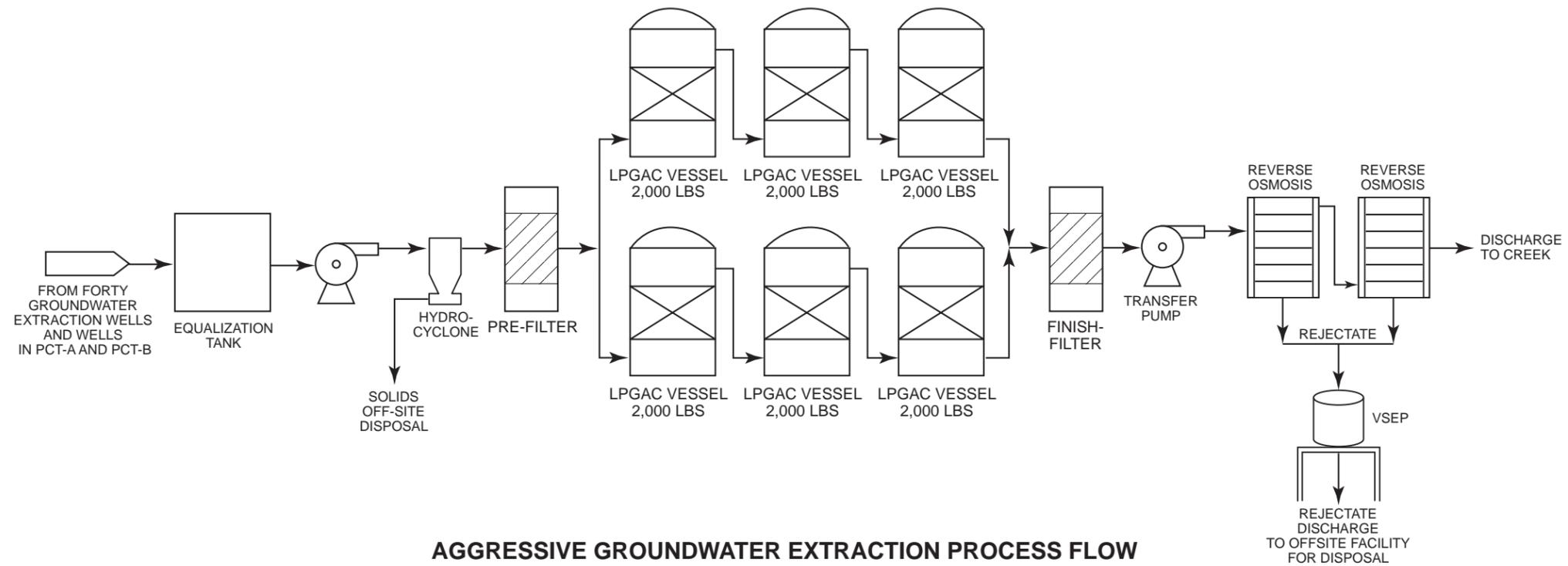
NOT TO SCALE

NOTES:

1. TREATED PCT AND EXTRACTED GROUNDWATER IS DISCHARGED OFFSITE IN ACCORDANCE WITH THE SITE-SPECIFIC NPDES PERMIT.
2. FORTY NEW LARGE DIAMETER EXTRACTION WELLS ARE DISTRIBUTED ACROSS AREA 5 SOUTH AT APPROXIMATELY 150-FOOT SPACING, SEE DETAIL ON FIGURE 11-207B.
3. FS AREA 1 INCLUDING CENTRAL DRAINAGE AREA, BURIAL TRENCH AREA AND PCB LANDFILL AND A PORTION OF FS AREA 3 INCLUDING MAINTENANCE SHED AREA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF THE SOIL REMEDY.

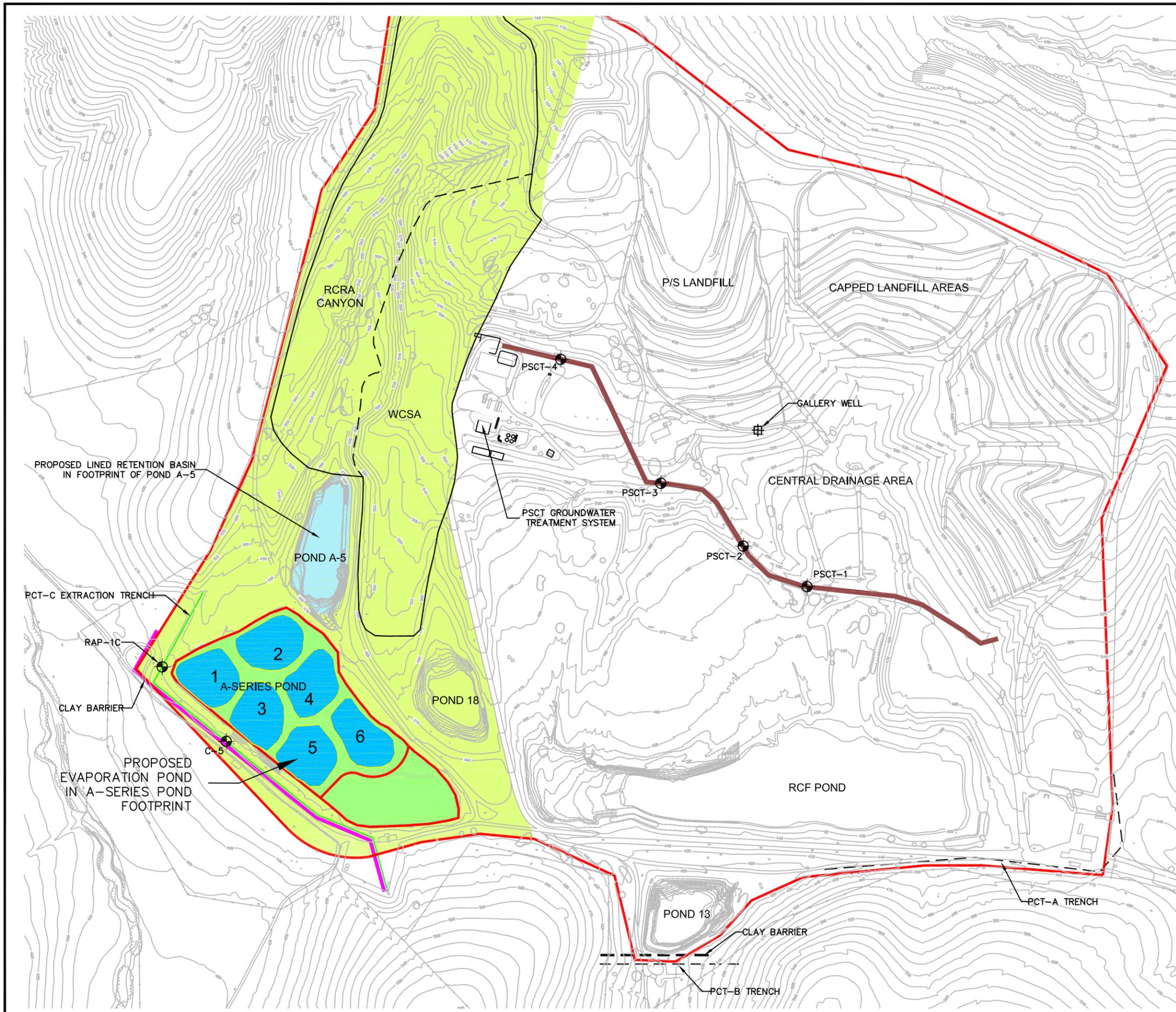
REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT:		CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY			
AREA 5 SOUTH GROUNDWATER- ALTERNATIVE 5 EXTRACTION (PCT-A, PCT-B) + AGGRESSIVE EXTRACTION + MNA					
FIGURE 11-33A					





NOTE:
 Treatment system is designed for 30 gpm and will be operated in batch mode with treatment operations occurring every other day for typical conditions

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		130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT:		CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY			
		AREA 5 SOUTH - ALTERNATIVE 5 PROCESS FLOW DIAGRAM			
FIGURE 11-33B					

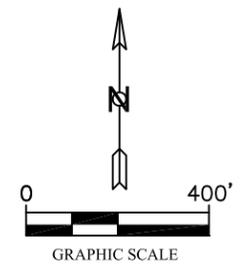


LEGEND:

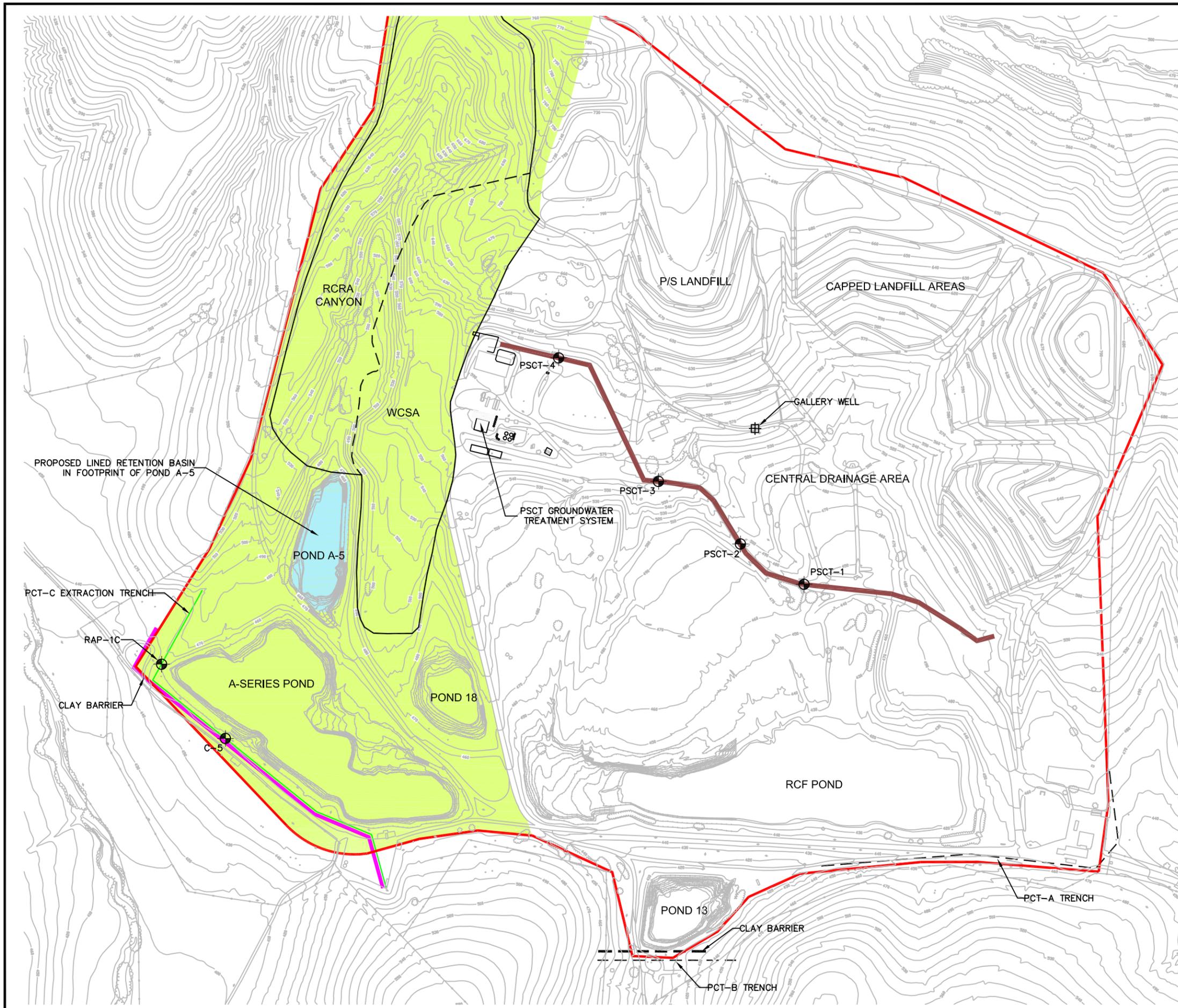
- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-C)
- CLAY BARRIER
- LINED EVAPORATION POND
- LINED RETENTION BASIN
- AREA 5 WEST
- EXISTING EXTRACTION WELL
- TRENCH EXTRACTION WELL

NOTES:

1. EXTRACTED PCT GROUNDWATER IS SENT TO THE PROPOSED LINED EVAPORATION POND IN THE FOOTPRINT OF THE A-SERIES POND.
2. FS AREA 2 INCLUDING RCRA CANYON AND WCSA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF SOIL REMEDY.
3. FS AREA 4 INCLUDING POND A-5 AND A-SERIES POND WILL BE LINED TO PREVENT INFILTRATION AS PART OF THE SITE REMEDY.



REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		URS CORPORATION 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT:			CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY		
AREA 5 WEST GROUNDWATER - ALTERNATIVE 2 EXTRACTION (PCT-C) + MNA					
FIGURE 11-34A					

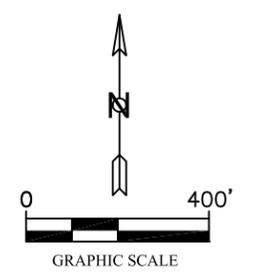


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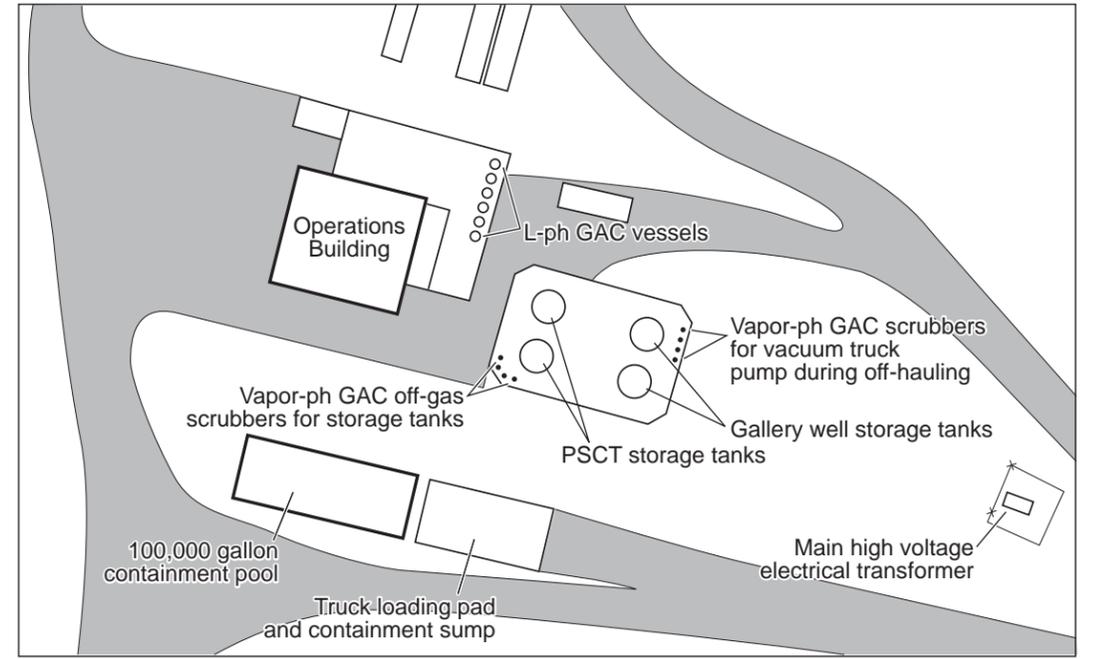
- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-C)
- CLAY BARRIER
- LINED RETENTION BASIN
- AREA 5 WEST
- EXISTING EXTRACTION WELL
- TRENCH EXTRACTION WELL

NOTES:

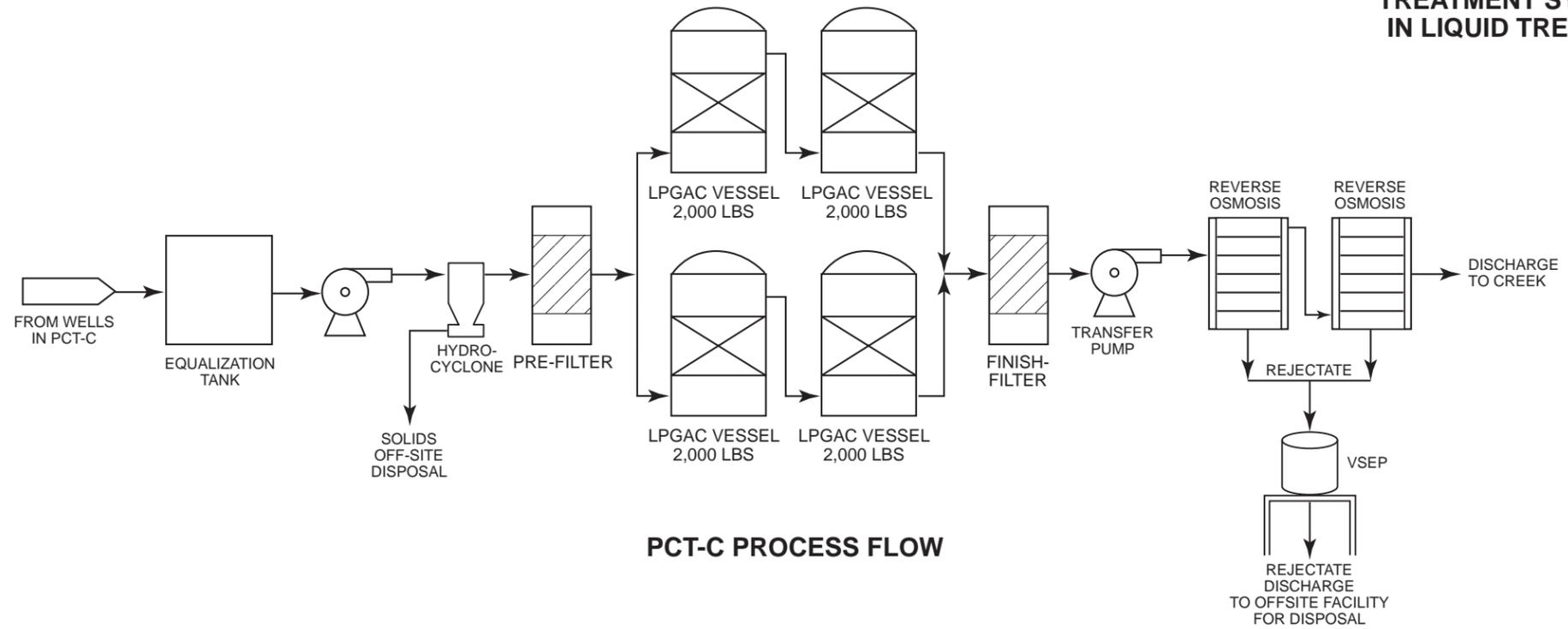
1. TREATED PCT GROUNDWATER IS DISCHARGED OFFSITE IN ACCORDANCE WITH A SITE-SPECIFIC NPDES PERMIT.
2. FS AREA 2 INCLUDING RCRA CANYON AND WCSA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF SOIL REMEDY.
3. FS AREA 4 INCLUDING POND A-5 AND A-SERIES POND WILL BE LINED TO PREVENT INFILTRATION AS PART OF THE SITE REMEDY.



REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		URS CORPORATION 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT:			CASMLIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY		
AREA 5 WEST GROUNDWATER - ALTERNATIVE 3 EXTRACTION (PCT-C) + TREAT AND DISCHARGE OFFSITE					
FIGURE 11-35A					



**TREATMENT SYSTEM LAYOUT
IN LIQUID TREATMENT AREA**

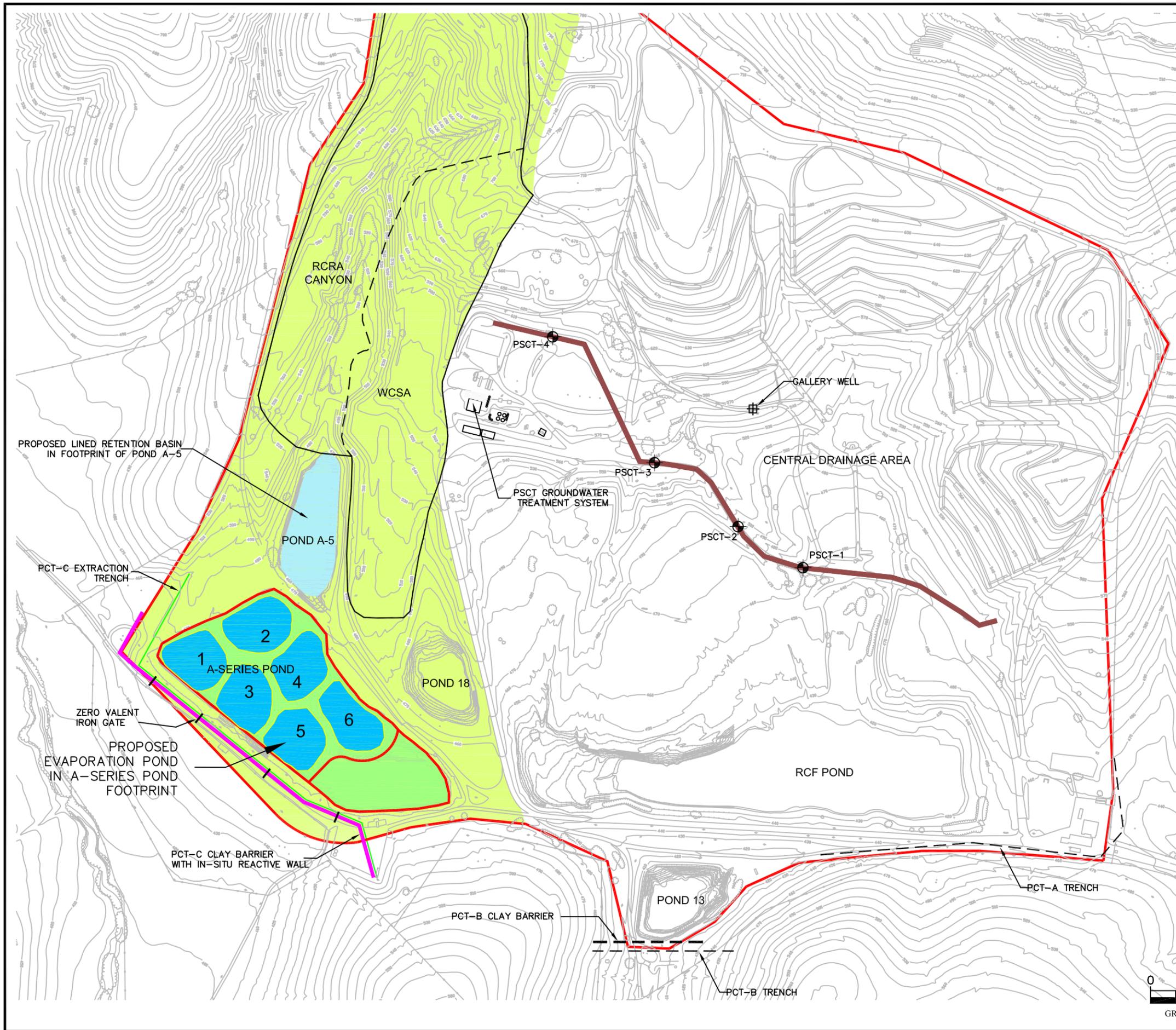


PCT-C PROCESS FLOW

NOTE:

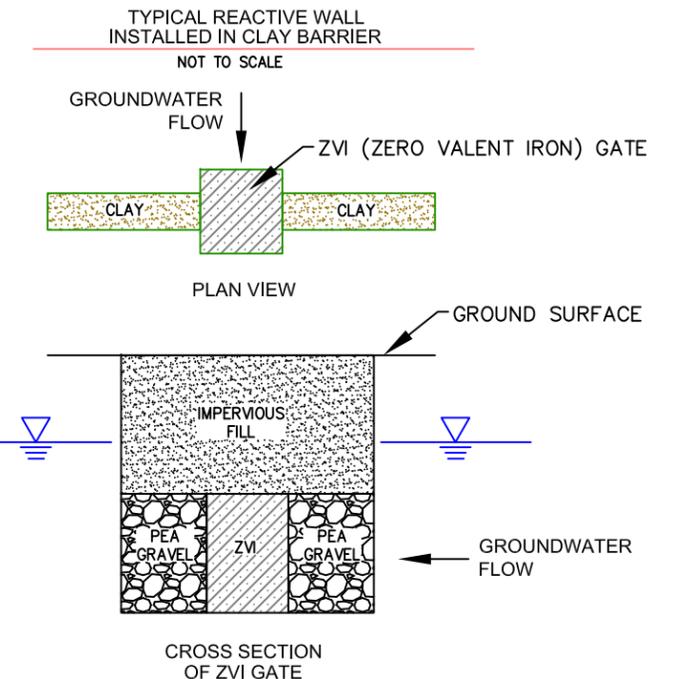
Treatment system is designed for 10 gpm and will be operated in batch mode with treatment operations occurring every other day for typical conditions

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
		130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT: CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY					
AREA 5 WEST - ALTERNATIVE 3 PROCESS FLOW DIAGRAM					
FIGURE 11-35B					



LEGEND:

- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-C)
- CLAY BARRIER WITH IN-SITU REACTIVE WAL (PCT-C)
- LINED EVAPORATION POND
- LINED RETENTION BASIN
- AREA 5 WEST
- ⊕ EXISTING EXTRACTION WELL
- ⊙ TRENCH EXTRACTION WELL



NOTES:

1. ZERO VALENT IRON REACTIVE WALL CONSTRUCTED BY CUTTING SLOTS IN EXISTING CLAY BARRIER AT PCT-C.
2. FS AREA 2 INCLUDING RCRA CANYON AND WCSA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF SOIL REMEDY.
3. FS AREA 4 INCLUDING POND A-5 AND A-SERIES POND WILL BE LINED TO PREVENT INFILTRATION AS PART OF THE SITE REMEDY.

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP

URS
URS CORPORATION

130 ROBIN HILL ROAD, SUITE 100
SANTA BARBARA, CA 93117
PHONE: (805) 964-6010
FAX: (805) 964-0259

PROJECT: CASMALIA RESOURCES SUPERFUND SITE
FEASIBILITY STUDY

AREA 5 WEST GROUNDWATER - ALTERNATIVE 4
INSITU REACTIVE WALL (PCT-C) + MNA

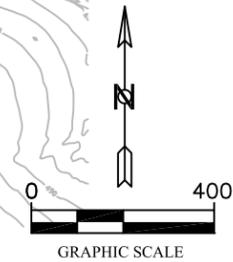
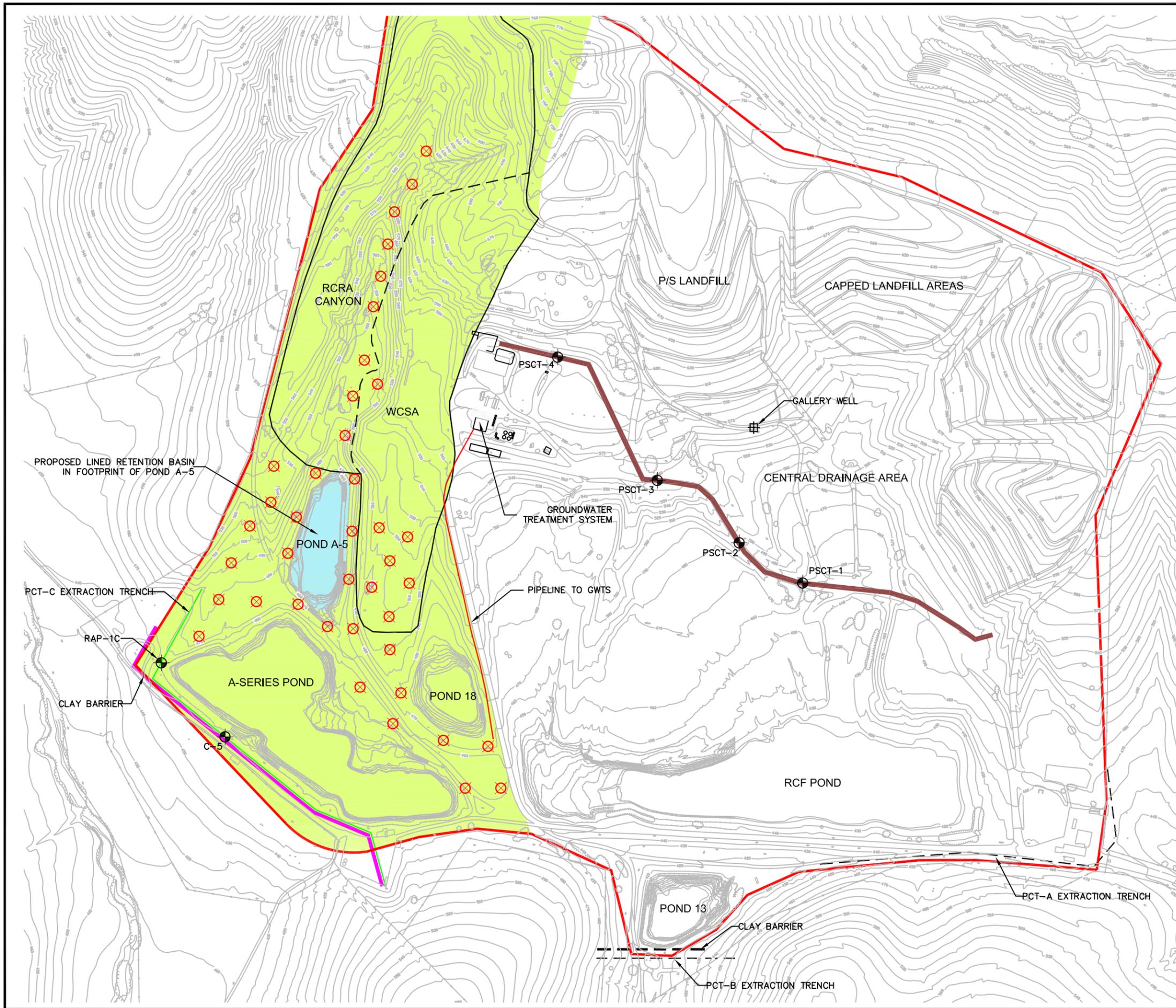


FIGURE 11-36A



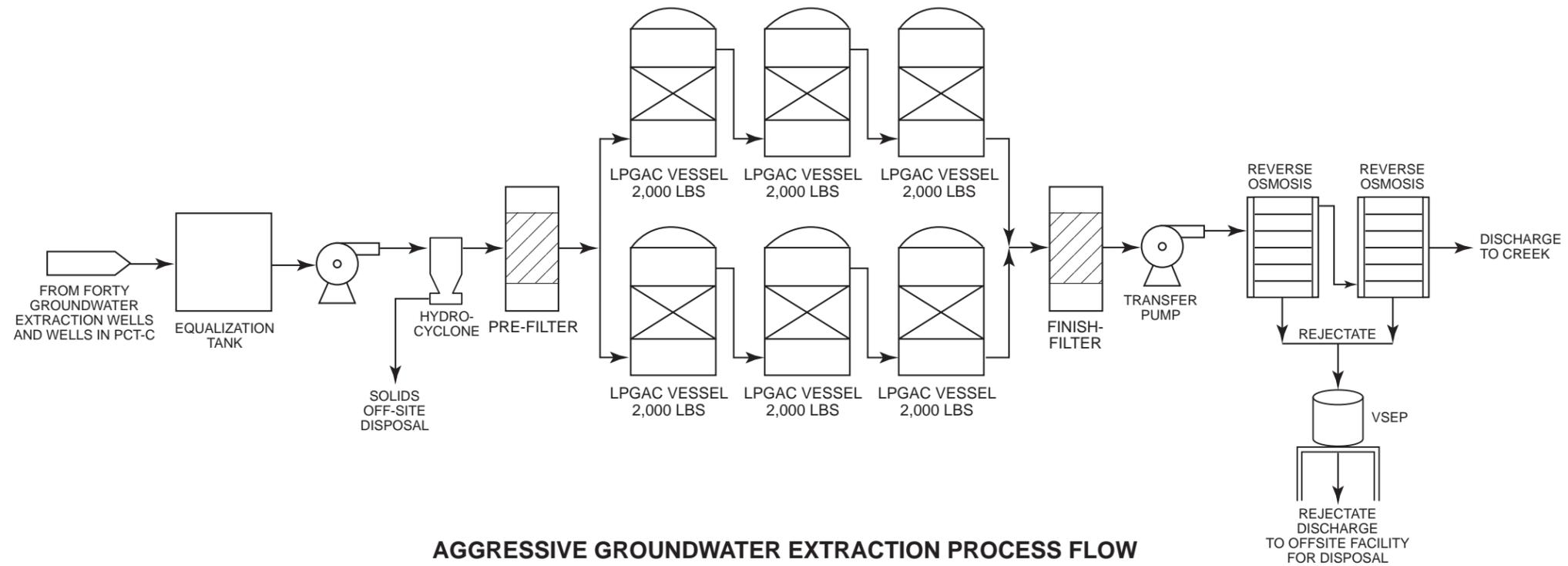
LEGEND:

- SITE BOUNDARY
- PERIMETER SOURCE CONTROL TRENCH (PSCT)
- EXTRACTION TRENCHES (PCT-C)
- CLAY BARRIER
- LINED RETENTION BASIN
- AREA 5 WEST
- + EXISTING EXTRACTION WELL
- ⊙ TRENCH EXTRACTION WELL
- X AGGRESSIVE EXTRACTION WELL (40 WELLS AT 75 FT SPACING)

NOTES:

1. EXTRACTED GROUNDWATER IS TREATED AND DISCHARGED OFFSITE IN ACCORDANCE WITH A SITE-SPECIFIC NPDES PERMIT.
2. FORTY NEW LARGE DIAMETER EXTRACTION WELLS ARE DISTRIBUTED ON AVERAGE AT 150-FOOT SPACING ACROSS AREA 5 WEST.
3. FS AREA 2 INCLUDING RCRA CANYON AND WCSA WILL BE CAPPED TO PREVENT INFILTRATION AS PART OF SOIL REMEDY.
4. FS AREA 4 INCLUDING POND A-5 AND A-SERIES POND WILL BE LINED TO PREVENT INFILTRATION AS PART OF THE SITE REMEDY.

REV	DATE	REVISION DESCRIPTION	BY	CHK	APP
<div style="display: inline-block; vertical-align: middle; margin-left: 10px; font-size: 0.8em;"> 130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259 </div>					
PROJECT:		CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY			
AREA 5 WEST GROUNDWATER - ALTERNATIVE 5 AGGRESSIVE EXTRACTION (40 WELLS) + EXTRACTION (PCT-C) + MNA					
FIGURE 11-37A					



AGGRESSIVE GROUNDWATER EXTRACTION PROCESS FLOW

NOTE:

Treatment system is designed for 20 gpm and will be operated in batch mode with treatment operations occurring every other day for typical conditions

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		130 ROBIN HILL ROAD, SUITE 100 SANTA BARBARA, CA 93117 PHONE: (805) 964-6010 FAX: (805) 964-0259			
PROJECT:		CASMALIA RESOURCES SUPERFUND SITE FEASIBILITY STUDY			
		AREA 5 WEST - ALTERNATIVE 5 PROCESS FLOW DIAGRAM			
FIGURE 11-37B					