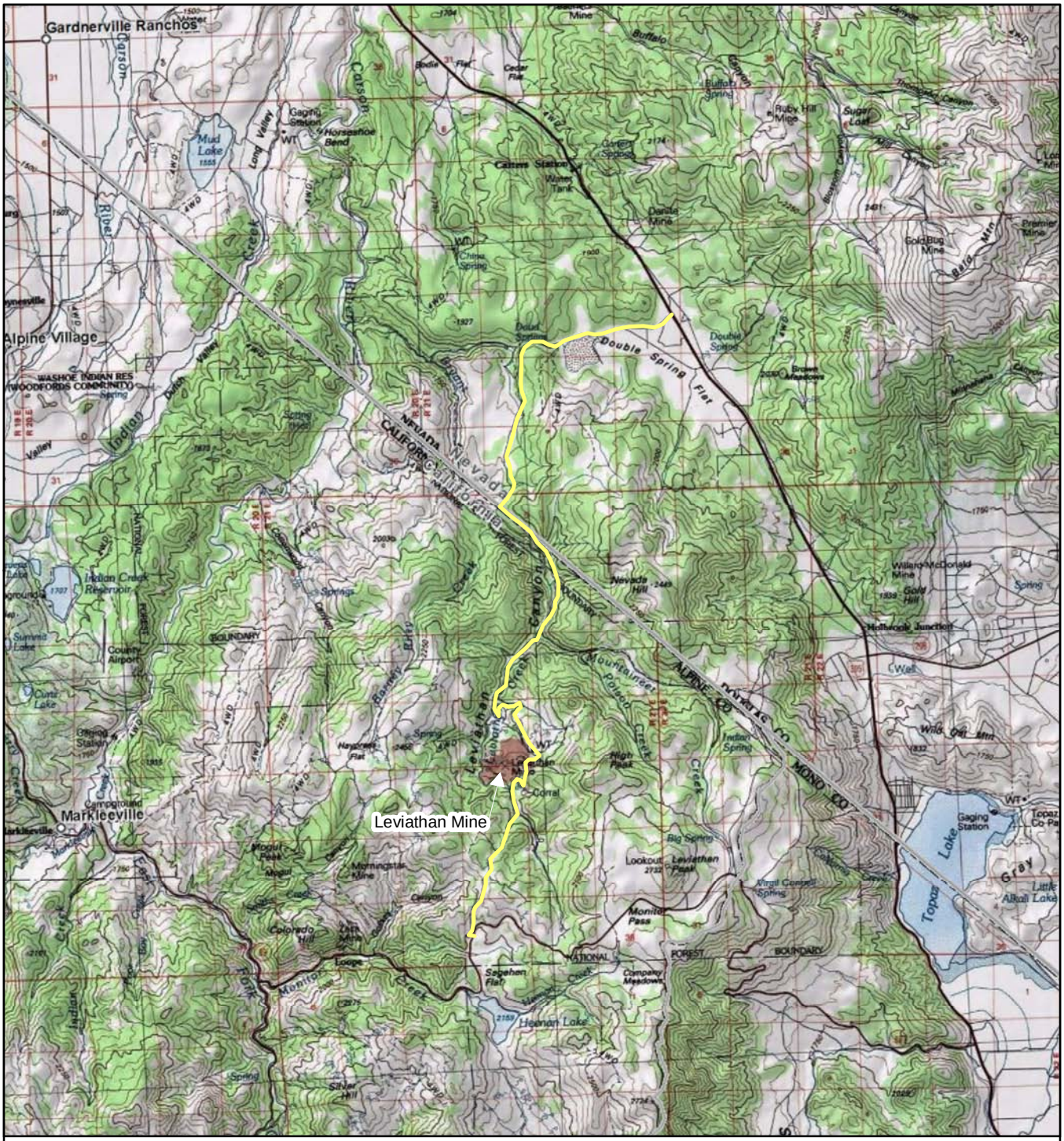
FIGURES



Explanation

★ Site location

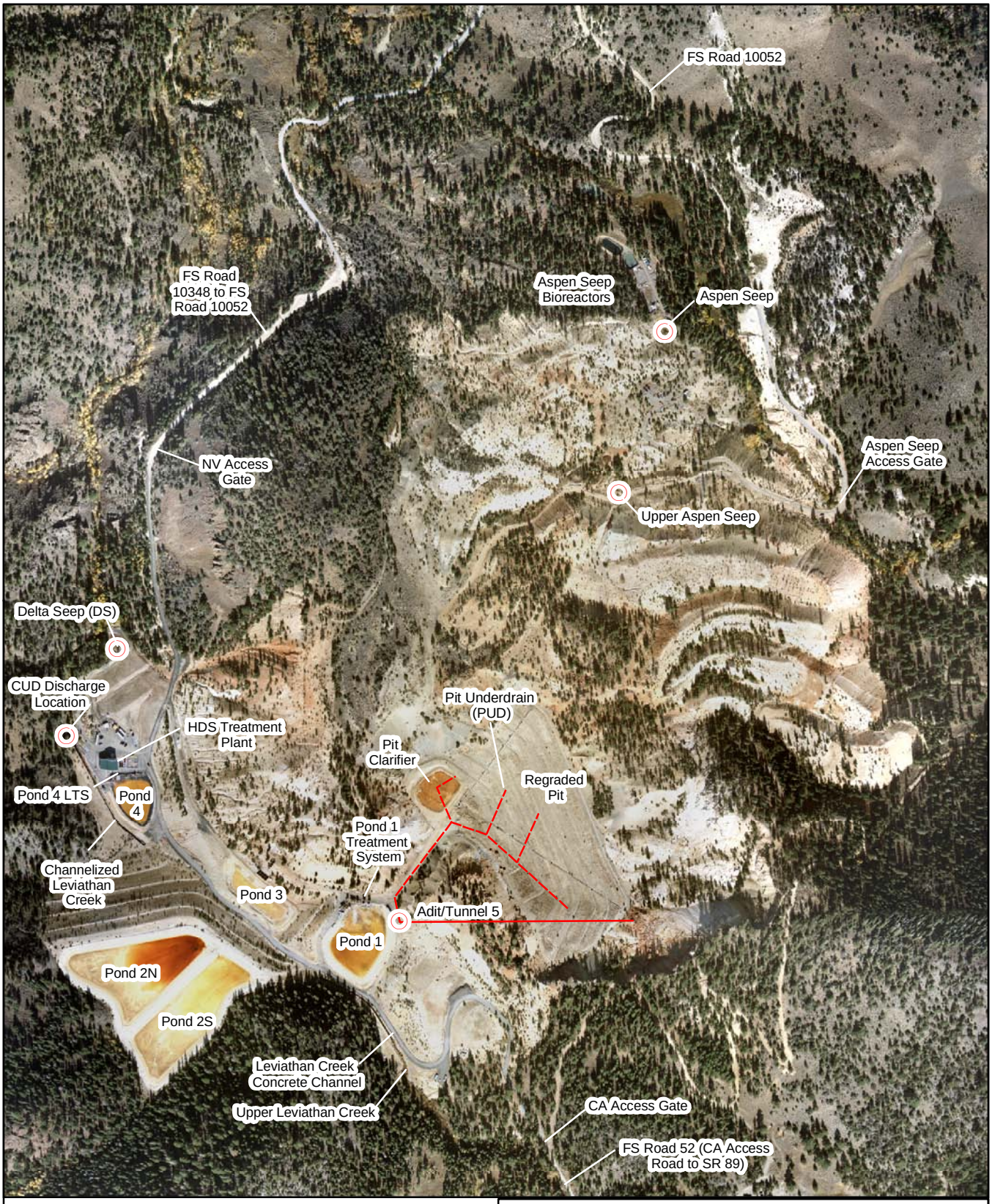
N

0 2 4 Miles

SITE LOCATION MAP
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 3/17/2011	Project No. 0130911112
AMEC Geomatrix		Figure 1

File path: P:/project/13000/leviathan/cad/2010completion report/1_sitemap.mxd



Explanation

○ Discharge Points

N

0 500 1,000 Feet

Basemap: Summit Engineering, October 22, 2009

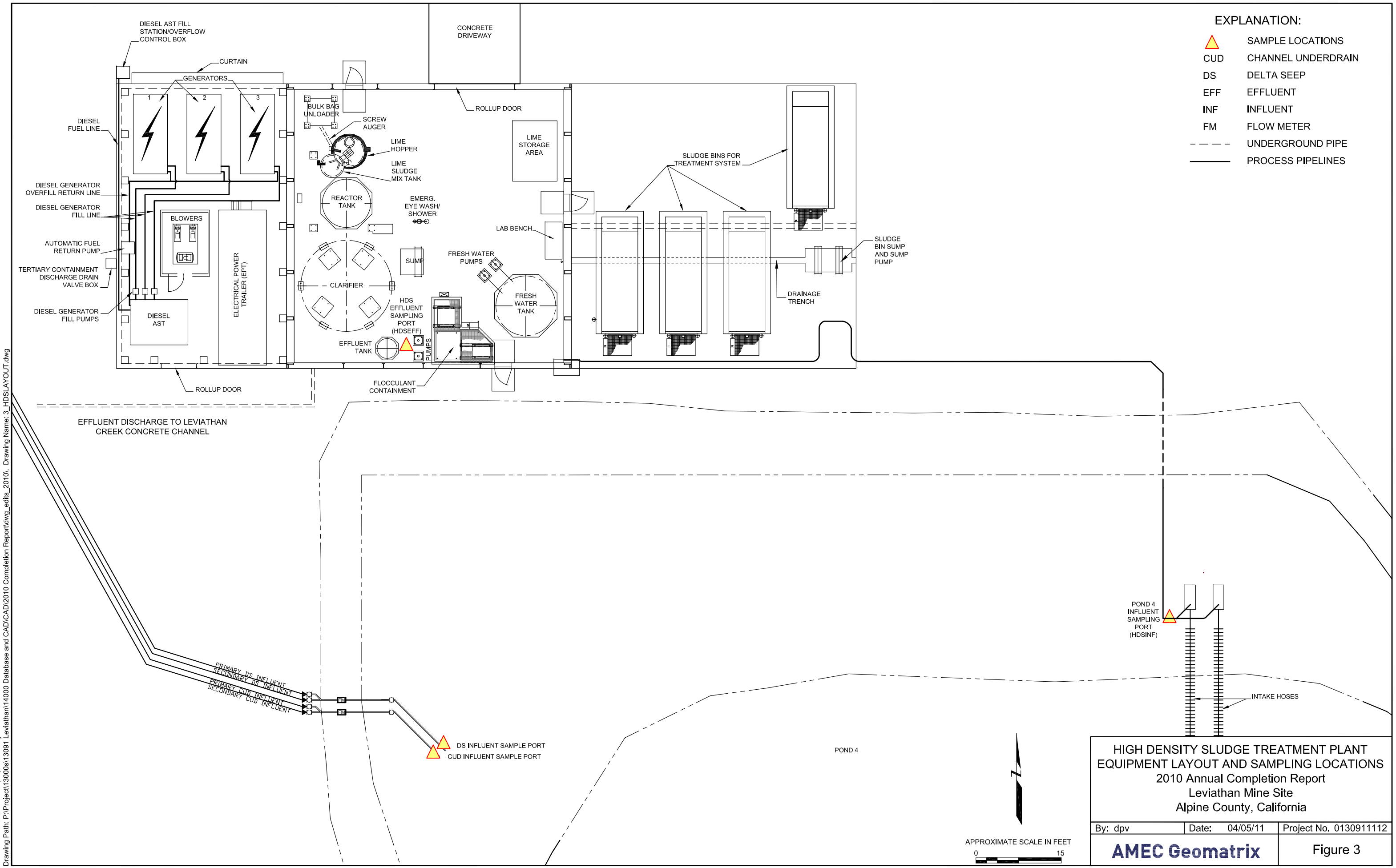
SITE LAYOUT
2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 3/11/2011	Project No. 0130911112

AMEC Geomatrix

Figure 2

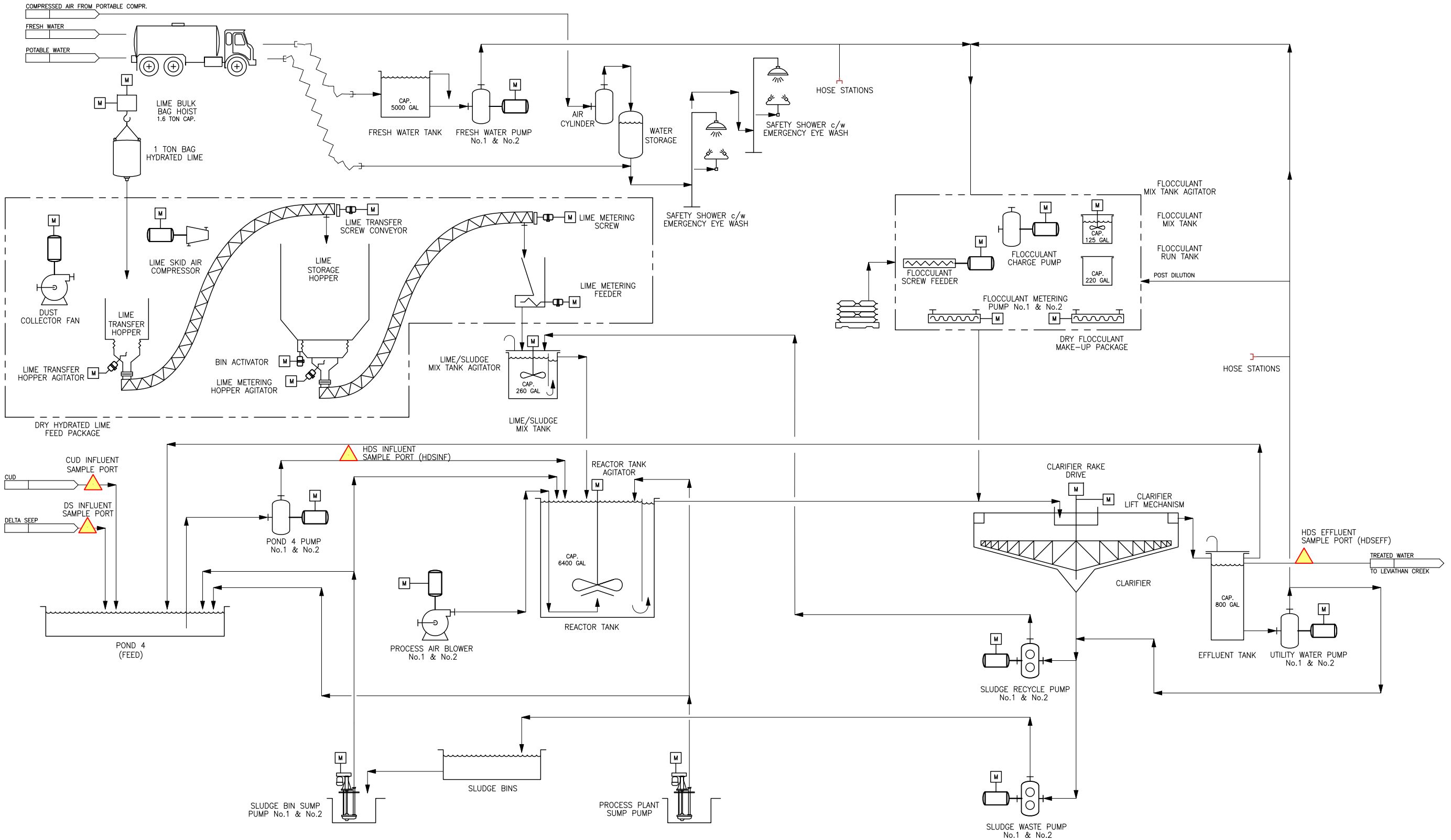
File path: P:/project/13000/leviathan/cad/2010annualreport/2_sitemap.mxd



HIGH DENSITY SLUDGE TREATMENT PLANT
EQUIPMENT LAYOUT AND SAMPLING LOCATIONS
2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 04/05/11	Project No. 0130911112
AMEC Geomatrix		Figure 3

Plot Date: 04/05/11 - 3:40pm, Plotted by: donna.valasek
Drawing Path: P:\Project\13000s\13091 Leviathan\14000 Database and CAD\CAD\2010 Completion Report\dwg_edits_2010\, Drawing Name: 3_HDSLAYOUT.dwg



EXPLANATION:

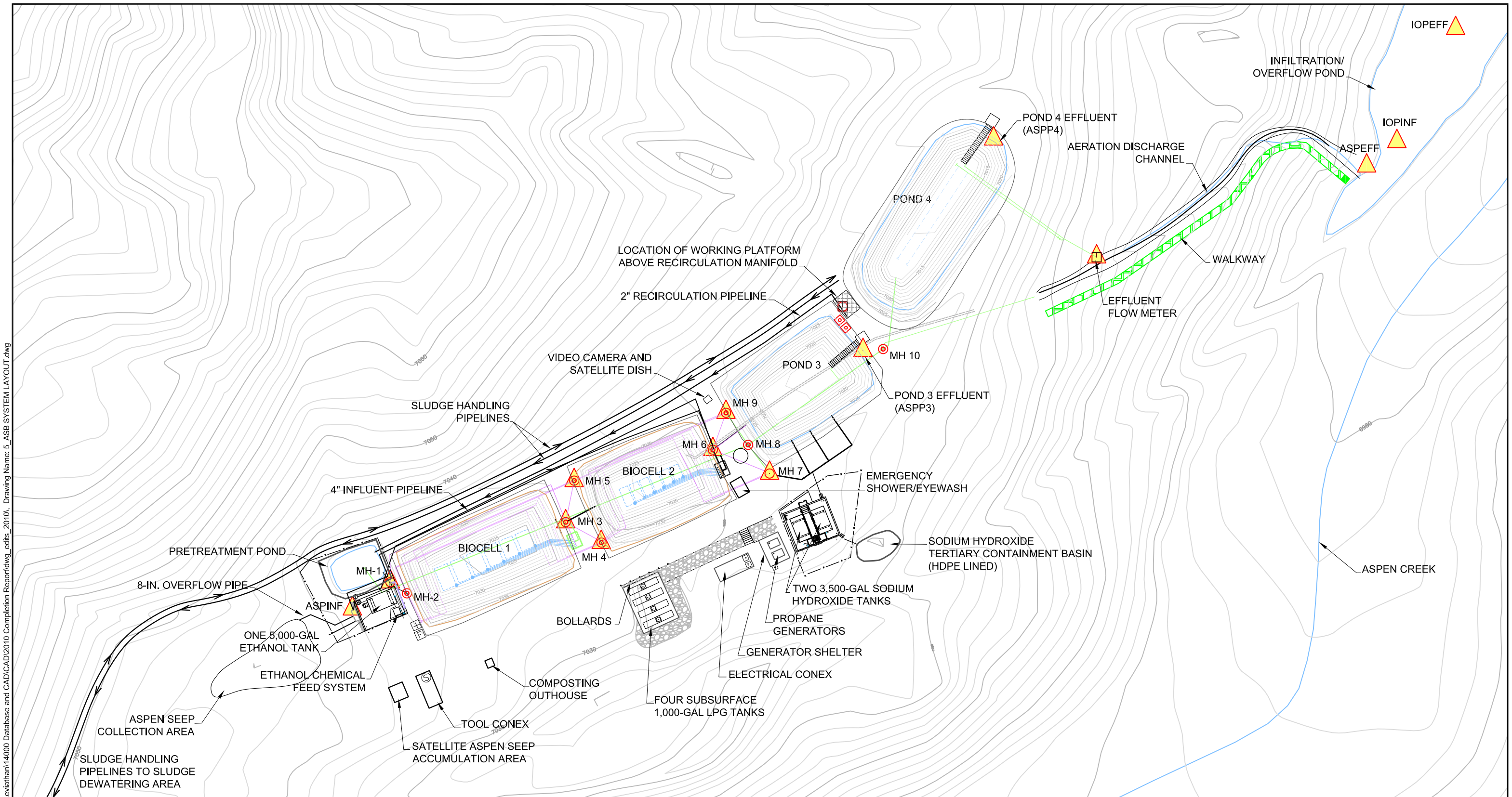
△	SAMPLE PORT LOCATION
CUD	CHANNEL UNDERDRAIN
DS	DELTA SEEP
HDS	HIGH-DENSITY SLUDGE

HIGH DENSITY SLUDGE TREATMENT SYSTEM PROCESS FLOW DIAGRAM

2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 04/05/11	Project No. 0130911112
AMEC Geomatrix		Figure 4

Plot Date: 04/05/11 - 3:42pm, Plotted by: donna.valasek
Drawing Path: P:\Project\13000s\13091 Leviathan\14000 Database and CAD\CAD\2010 Completion Report\dwg_edits_2010\, Drawing Name: 4_HDSFLOWDIAGRAM.dwg



Explanation

- Sample point
- Manhole
- Rock slope
- Submersible pump
- Flowmeter/totalizer
- First aid
- Spill kit
- Fire extinguisher

N

APPROXIMATE SCALE IN FEET
0 50

ASPEN SEEP BIOREACTOR TREATMENT SYSTEM LAYOUT AND SAMPLING LOCATIONS
2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 03/17/11	Project No. 0130911112
AMEC Geomatrix		Figure 5

Plot Date: 03/17/11 - 6:13pm, Plotted by: donna.valasek
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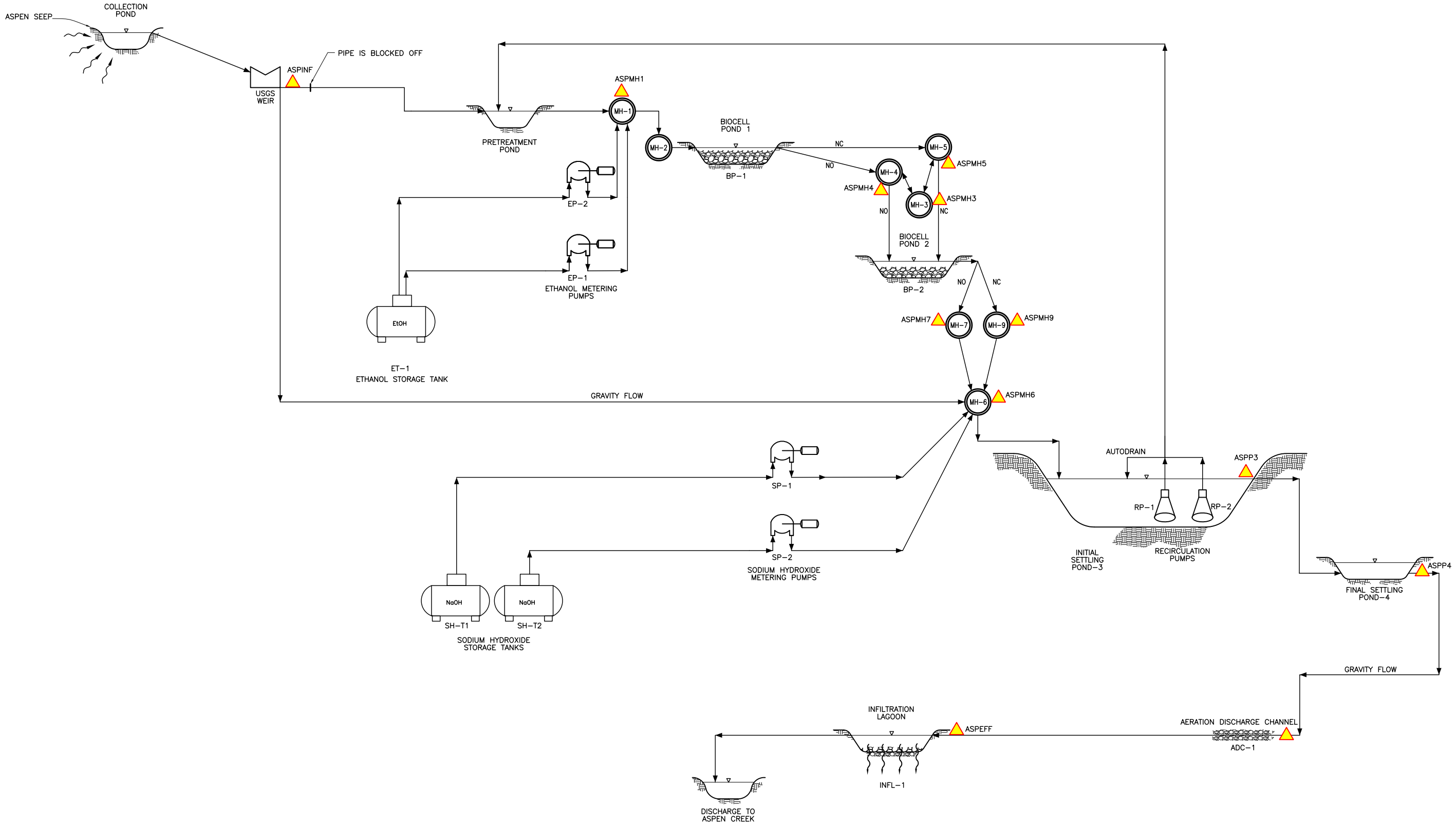


EXPLANATION

△ SAMPLE PORTS

NOTES:

1. CONFIGURATION SHOWN AS FRONT TO BACK FLOW THROUGH BP-1 AND BP-2.
2. CHEMICAL FEED PUMPS CAN BE CONFIGURED TO DRAW FROM ANY TANK.

BASEMAP MODIFIED FROM

N

0 1 2
FEET

ASPEN SEEP BIOREACTOR TREATMENT SYSTEM PROCESS FLOW DIAGRAM
2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 04/05/11	Project No. 0130911112
AMEC Geomatrix		Figure 6

Plot Date: 04/05/11 - 3:44pm, Plotted by: donna.valasek
Drawing Path: P:\Project\13000s\13091 Leviathan\14000 Database and CAD\CAD\2010 Completion Report\dwg_edits_2010\, Drawing Name: 6_ASBPROCESSFLOW.dwg

POND 4 EFFLUENT
AERATION DISCHARGE CHANNEL
POND 4
LOCATION OF WORKING PLATFORM ABOVE RECIRCULATION MANIFOLD
2" RECIRCULATION PIPELINE
MH 10
POND 3
VIDEO CAMERA AND SATELLITE DISH
POND 3 EFFLUENT
MH 9
MH 6
MH 8
MH 7
MH 5
TWO 3,500-GAL SODIUM HYDROXIDE TANKS
SLUDGE DRYING BEDS
4" INFLUENT PIPELINE
PRETREATMENT POND
MH-1
8-IN. OVERFLOW PIPE
MH-2
BIOCELL 1
ASP-INF
SAFETY SHOWER
SODIUM HYDROXIDE TERTIARY CONTAINMENT BASIN (HDPE LINED)
ELECTRICAL CONEX
ONE 5,000-GAL ETHANOL TANK
ETHANOL CHEMICAL FEED SYSTEM
COMPOSTING OUTHOUSE
FOUR SUBSURFACE 1,000-GAL LPG TANKS
ASPEN SEEP COLLECTION AREA
TOOL CONEX
SATELLITE ACCUMULATION AREA
PERMANENT HIGH-DENSITY POLYETHYLENE SLUDGE/ FILTRATE PIPELINES
EMERGENCY SHELTER

Explanation

- Sample point
- Manhole
- Rock slope
- Submersible pump
- Flowmeter/totalizer
- First aid
- Spill kit
- Fire extinguisher

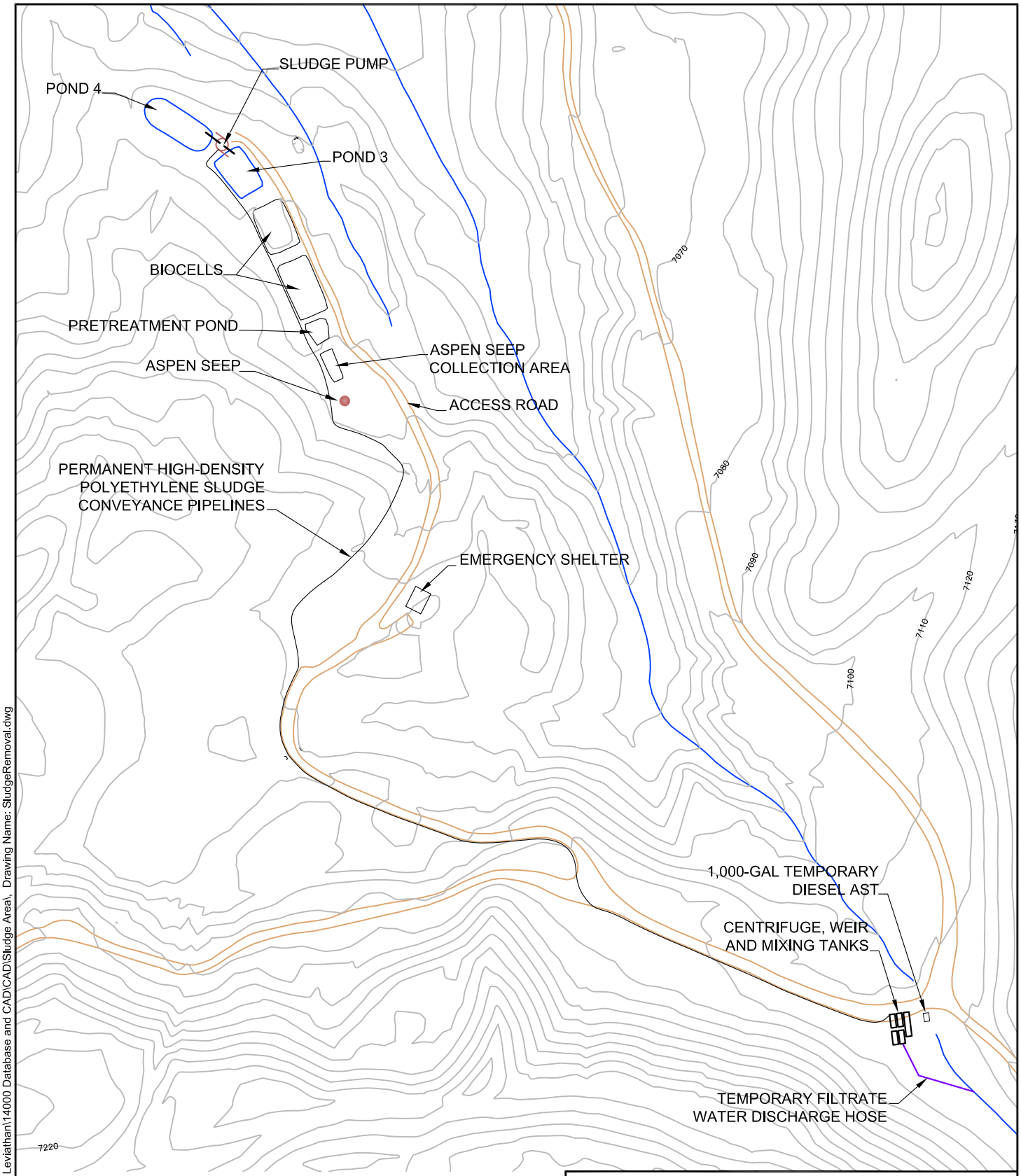
N

APPROXIMATE SCALE IN FEET
0 60

SLUDGE DRYING BED PILOT TEST LAYOUT
2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 04/05/11	Project No. 0130911112
AMEC Geomatrix		Figure 7

Plot Date: 04/05/11 - 3:45pm, Plotted by: donna.valasek
Drawing Path: P:\Project\13000s\13091 Leviathan\14000 Database and CAD\CAD\2010 Completion Report\dwg_edits_2010\, Drawing Name: 7_SLUDGEDRYINGBED.dwg



CENTRIFUGE SLUDGE REMOVAL LAYOUT
2010 Annual Completion Report
Leviathan Mine Site
Alpine County, California

By: dpv	Date: 4/5/2011	Project No. 0130911112
AMEC matrix		Figure 8

Plot Date: 04/05/11 - 4:04pm, Plotted by: donna.valasek
Drawing Path: P:\Project\13000s\13091 Leviathan\14000 Database and CAD\CAD\Sludge Area\, Drawing Name: SludgeRemoval.dwg