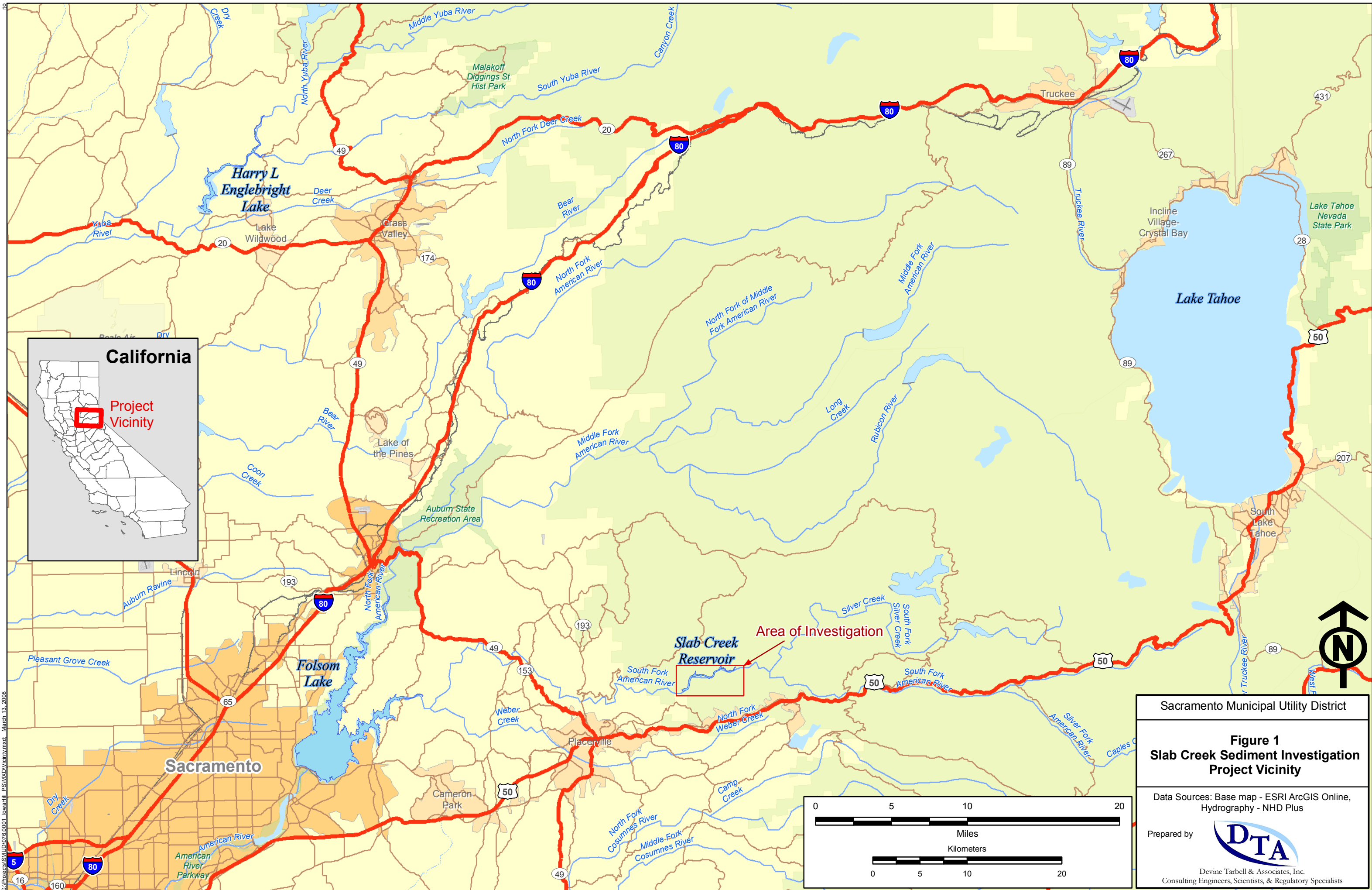


## Figures

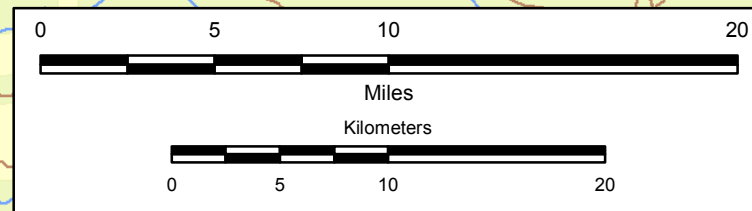
- Figure 1 General Project Location
- Figure 2 Project Configuration Plan
- Figure 3 Locations of Historic Mining in the Western Sierra Nevada
- Figure 4 Slab Creek Reservoir Sediment Sampling Locations
- Figure 5 2007 Longitudinal Profile of Slab Creek Reservoir with Proposed Iowa Hill Intake/Outlet Shown Schematically
- Figure 6 Total Mercury Analytical Results (ng/g)
- Figure 7 Methylmercury Analytical Results (ng/g)
- Figure 8 Combined Total Mercury and Methylmercury Analytical Results (ng/g)
- Figure 9 Grain Size Distribution Results



**California**

Project Vicinity

Slab Creek Reservoir  
Area of Investigation



Sacramento Municipal Utility District

**Figure 1**  
**Slab Creek Sediment Investigation**  
**Project Vicinity**

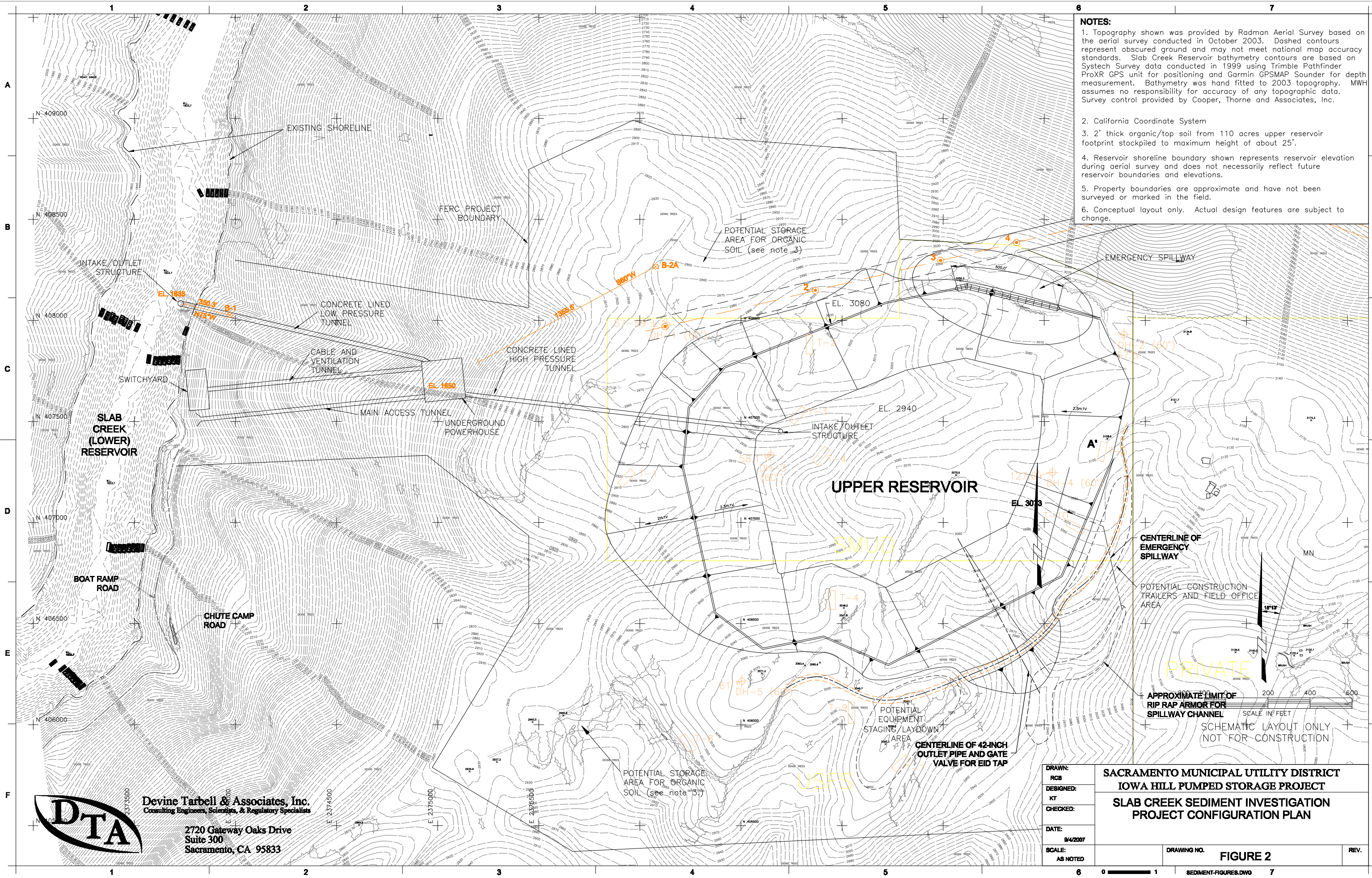
Data Sources: Base map - ESRI ArcGIS Online,  
Hydrography - NHD Plus

Prepared by

Devine Tarbell & Associates, Inc.  
Consulting Engineers, Scientists, & Regulatory Specialists

G:\Projects\SUMUD\075.0001\_bwahill\_PSMXD\Views\mxd - March 13, 2008

- NOTES:**
1. Topography shown was provided by Radman Aerial Survey based on the aerial survey conducted in October 2003. Dashed contours represent obscured ground and may not meet national map accuracy standards. Slab Creek Reservoir bathymetry contours are based on Systech Survey data conducted in 1999 using Trimble Pathfinder ProXR GPS unit for positioning and Garmin GPSMAP Sounder for depth measurement. Bathymetry was hand fitted to 2003 topography. MWH assumes no responsibility for accuracy of any topographic data. Survey control provided by Cooper, Thorne and Associates, Inc.
  2. California Coordinate System
  3. 2' thick organic/top soil from 110 acres upper reservoir footprint stockpiled to maximum height of about 25'.
  4. Reservoir shoreline boundary shown represents reservoir elevation during aerial survey and does not necessarily reflect future reservoir boundaries and elevations.
  5. Property boundaries are approximate and have not been surveyed or marked in the field.
  6. Conceptual layout only. Actual design features are subject to change.

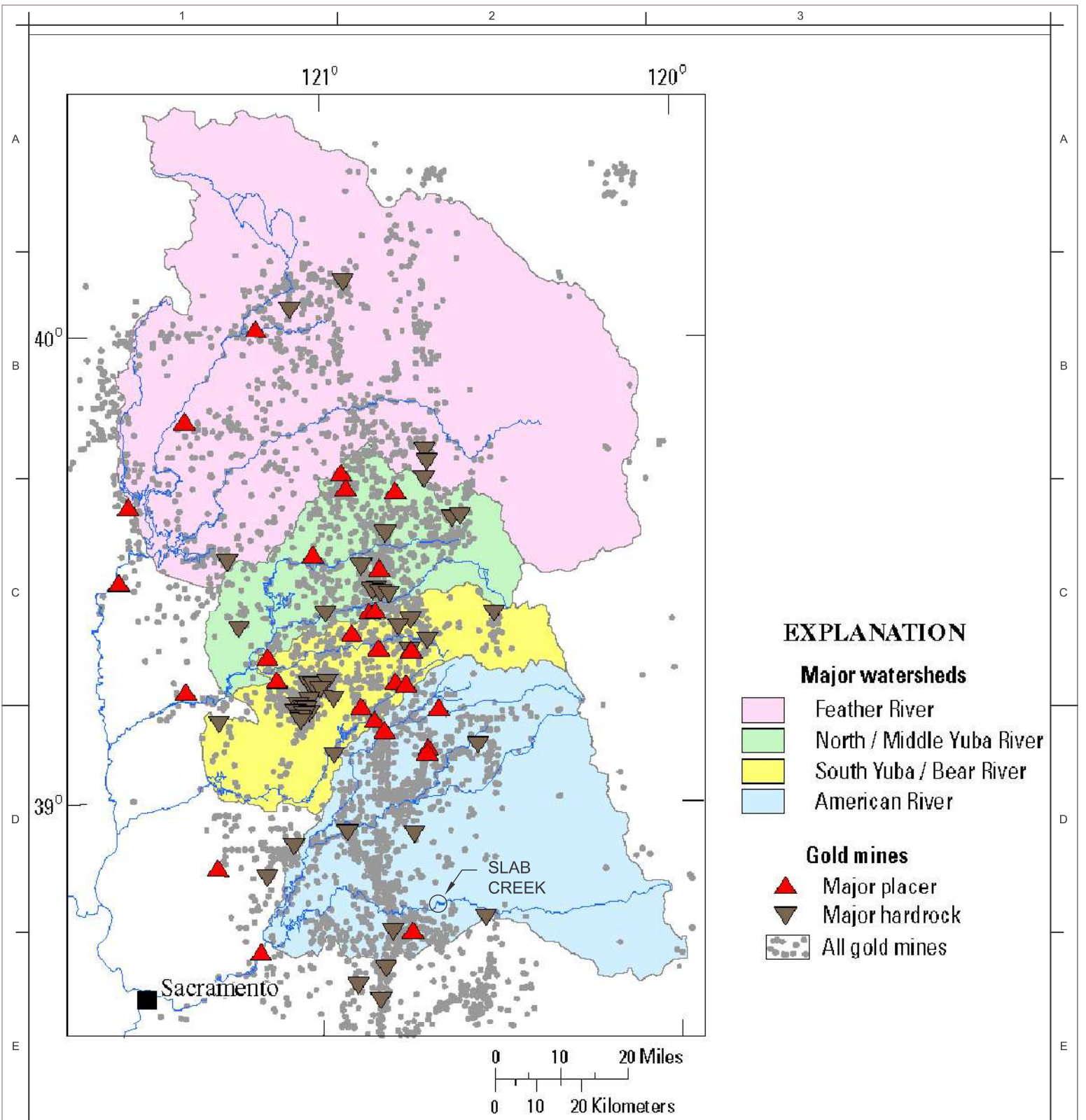


**DTA**  
 Devine Tarbell & Associates, Inc.  
 Consulting Engineers, Scientists, & Regulatory Specialists  
 2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833

DRAWN:  
 RCB  
 DESIGNED:  
 KT  
 CHECKED:  
 DATE:  
 8/4/2007  
 SCALE:  
 AS NOTED

**SACRAMENTO MUNICIPAL UTILITY DISTRICT  
 IOWA HILL PUMPED STORAGE PROJECT  
 SLAB CREEK SEDIMENT INVESTIGATION  
 PROJECT CONFIGURATION PLAN**

DRAWING NO.	<b>FIGURE 2</b>	REV.
SEDIMENT-FIGURE8.DWG		



**EXPLANATION**

**Major watersheds**

- Feather River
- North / Middle Yuba River
- South Yuba / Bear River
- American River

**Gold mines**

- Major placer
- Major hardrock
- All gold mines

Source:

Alpers, C.N., and Hunerlach, M.O., 2000, Mercury contamination from historic gold mining in California: U.S. Geological Survey Fact Sheet FS-061-00, 6 p. <http://ca.water.usgs.gov/mercury/fs06100.html>



**Devine Tarbell & Associates, Inc.**  
Consulting Engineers, Scientists, & Regulatory Specialists

2720 Gateway Oaks Drive  
Suite 300  
Sacramento, CA 95833

DRAWN:	RCB
DESIGNED:	KT
CHECKED:	
DATE:	3/19/2008
SCALE:	AS NOTED


**SACRAMENTO MUNICIPAL UTILITY DISTRICT  
IOWA HILL PUMPED STORAGE**

**SLAB CREEK SEDIMENT INVESTIGATION  
LOCATIONS OF HISTORIC MINING IN THE  
WESTERN SIERRA NEVADA MOUNTAINS**

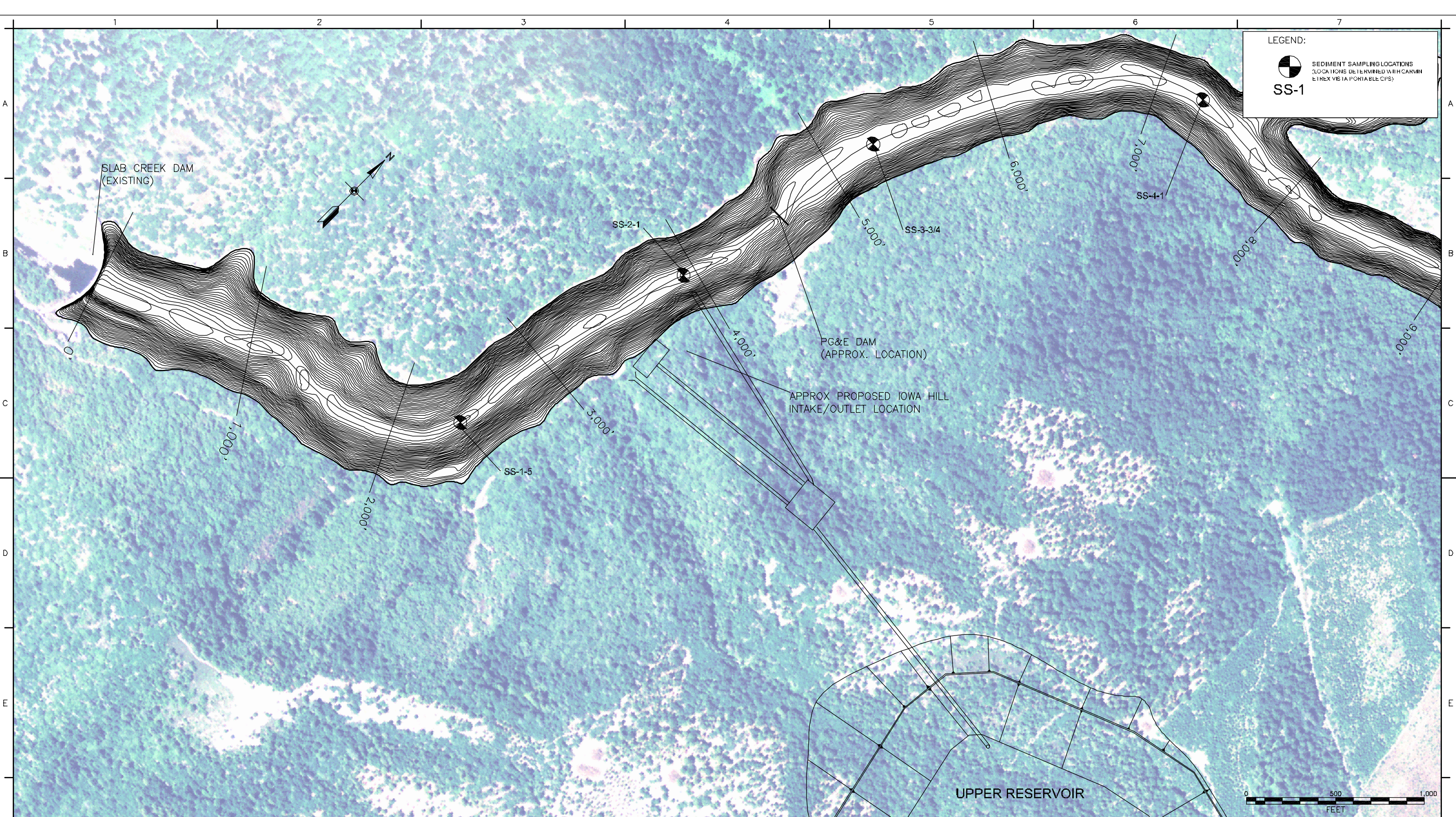
DRAWING NO. **FIGURE 3**

REV. **2**

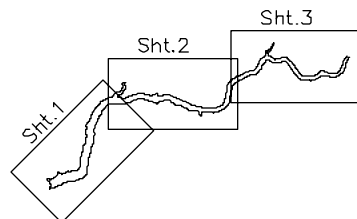
LEGEND:

 SEDIMENT SAMPLING LOCATIONS  
(LOCATIONS DETERMINED WITH CARMIN  
ET TEX VIS IA PORTABLE CPS)

**SS-1**



**Devine Tarbell & Associates, Inc.**  
 Consulting Engineers, Scientists, & Regulatory Specialists  
 2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833




DRAWN:	RCB
DESIGNED:	KT
CHECKED:	
DATE:	11/27/2007
SCALE:	1"=500'

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
 IOWA HILL PUMPED STORAGE PROJECT  
 SLAB CREEK SEDIMENT INVESTIGATION  
 SEDIMENT SAMPLING LOCATIONS

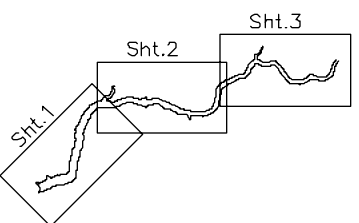
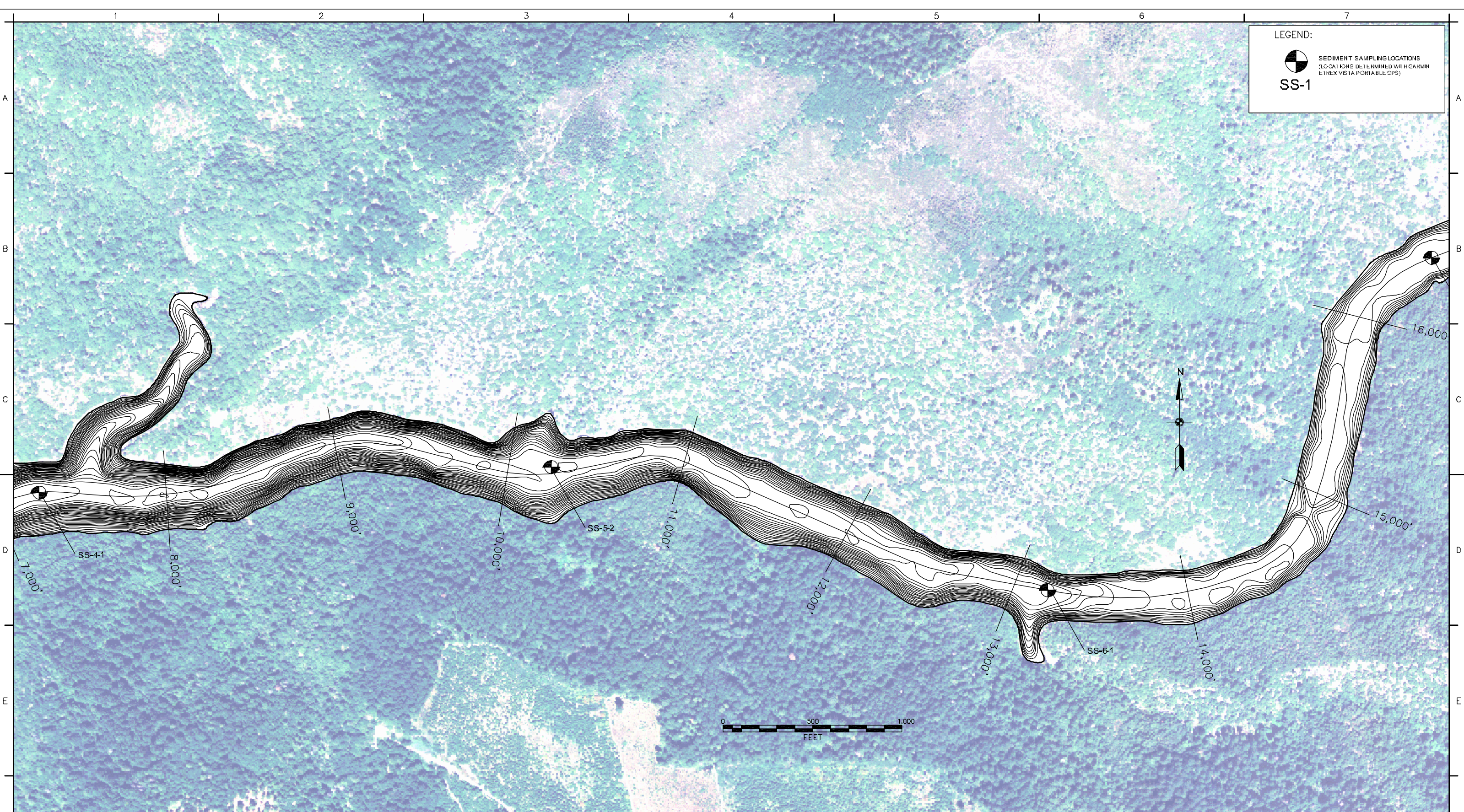
DRAWING NO.	FIGURE 4 Sh.1of3	REV.	0
-------------	------------------	------	---

LEGEND:



SEDIMENT SAMPLING LOCATIONS  
(LOCATIONS DETERMINED WITH CARMIN  
E IREX VISA PORTABLE GPS)

SS-1



Devine Tarbell & Associates, Inc.  
Consulting Engineers, Scientists, & Regulatory Specialists

2720 Gateway Oaks Drive  
Suite 300  
Sacramento, CA 95833

DRAWN:	RCB
DESIGNED:	KT
CHECKED:	
DATE:	11/27/2007
SCALE:	1"=500'

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
IOWA HILL PUMPED STORAGE PROJECT  
SLAB CREEK SEDIMENT INVESTIGATION  
SEDIMENT SAMPLING LOCATIONS

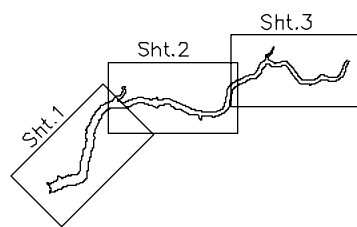
DRAWING NO.	FIGURE 4 Sh.2of3	REV.	0
-------------	------------------	------	---

LEGEND:



SEDIMENT SAMPLING LOCATIONS  
(LOCATIONS DETERMINED WITH CARMIN  
ETREX VIS TA PORTABLE CPS)

SS-1



Devine Tarbell & Associates, Inc.  
Consulting Engineers, Scientists, & Regulatory Specialists

2720 Gateway Oaks Drive  
Suite 300  
Sacramento, CA 95833

DRAWN:  
RCB  
DESIGNED:  
KT  
CHECKED:  
DATE:  
11/27/2007  
SCALE:  
1"=500'

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
IOWA HILL PUMPED STORAGE PROJECT  
SLAB CREEK SEDIMENT INVESTIGATION  
SEDIMENT SAMPLING LOCATIONS

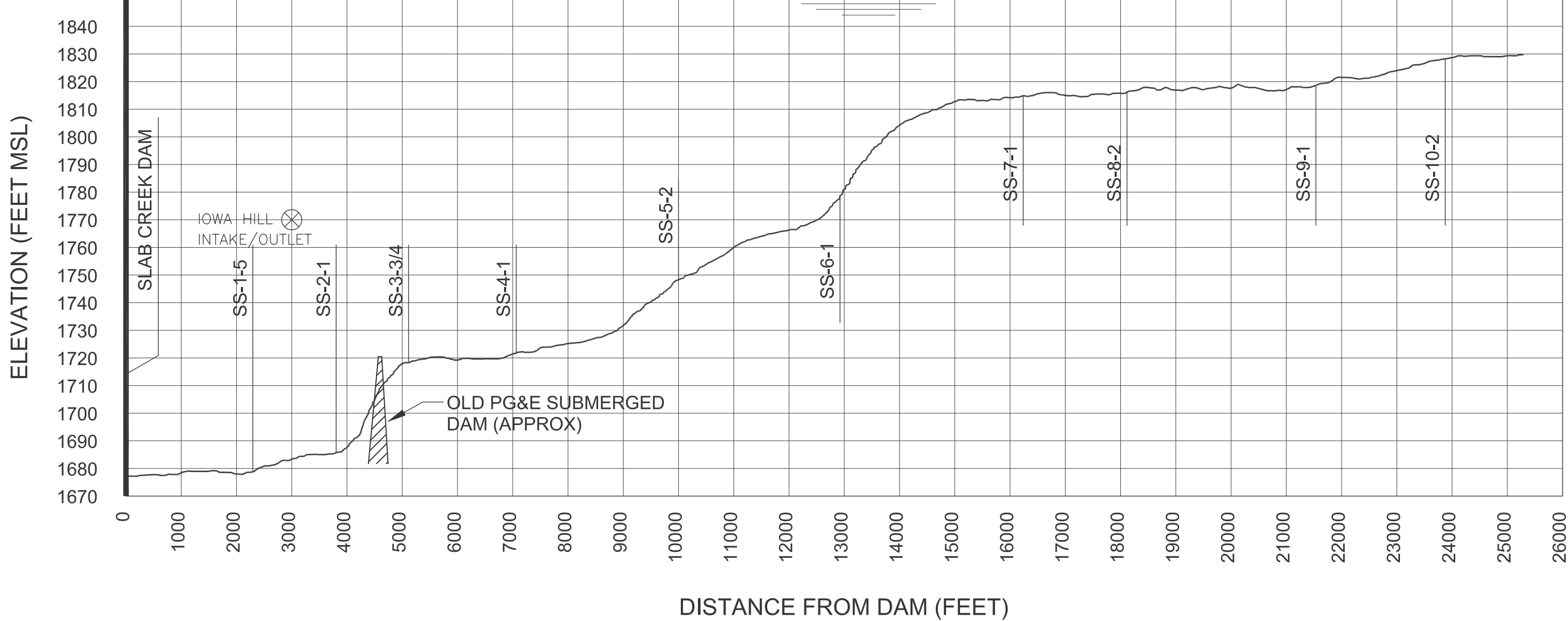
DRAWING NO. FIGURE 4 Sh.3of3

REV. 0

SLABCRK-5FT-SAMPLING

# SLAB CREEK - RESERVOIR BOTTOM ELEVATION PROFILE

RESERVOIR AT FULL POND EL. 1850 (APPROX)



Longitudinal profile of Slab Creek Reservoir, showing the location of the Iowa Hill Development intake/outlet structure, the assumed pre-Slab Creek Dam thalweg, and estimated water surface at normal drawdown reservoir level (1815ft). Thalweg elevations are derived from the 2007 bathymetric survey data.

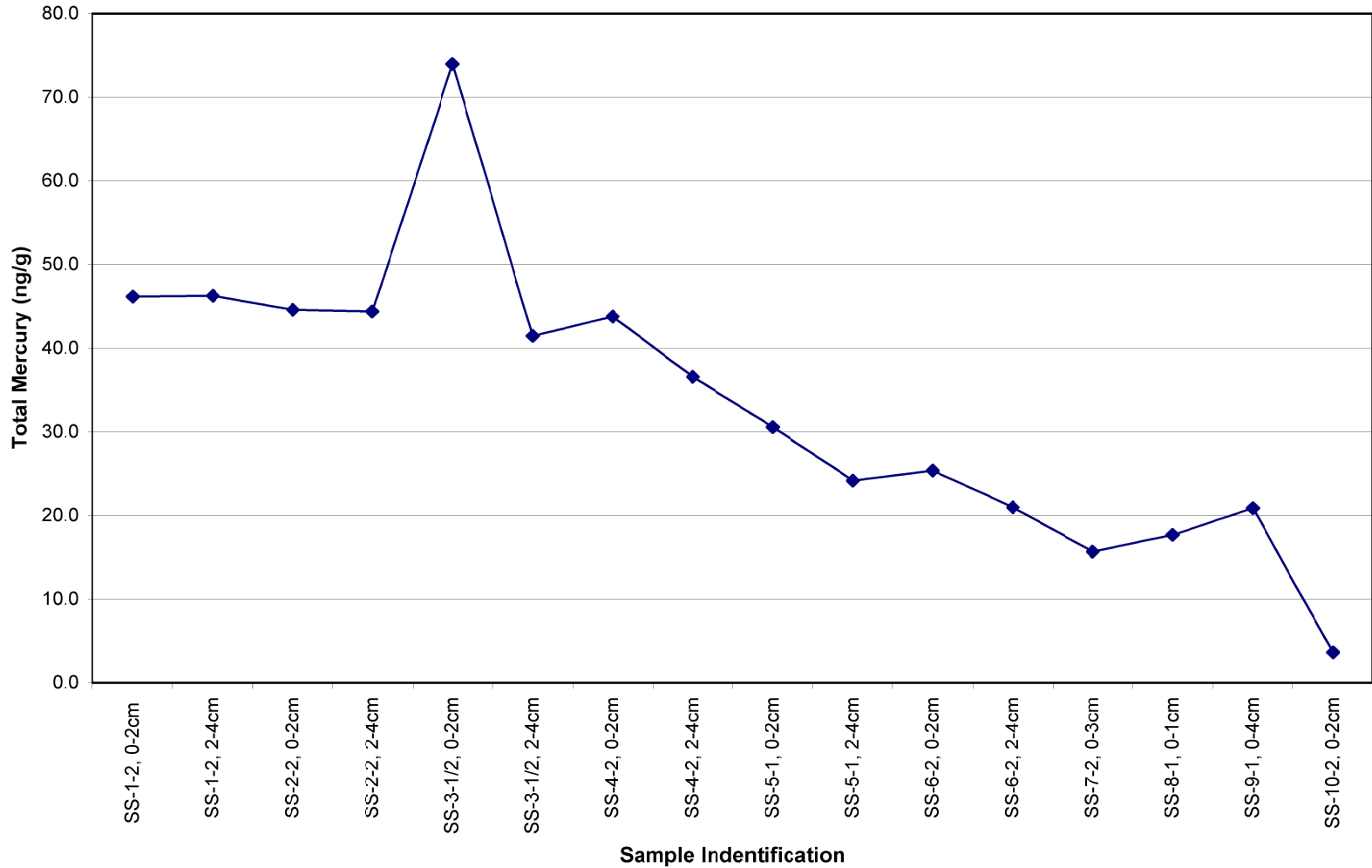


Devine Tarbell & Associates, Inc.  
 Consulting Engineers, Scientists, & Regulatory Specialists  
 2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833

DRAWN: RCB	SACRAMENTO MUNICIPAL UTILITY DISTRICT	
DESIGNED: KT	IOWA HILL PUMPED STORAGE PROJECT	
CHECKED:	SLAB CREEK SEDIMENT INVESTIGATION LONGITUDINAL PROFILE OF RESERVOIR WITH INTAKE/OUTLET SHOWN SCHEMATICALLY	
DATE: 3/20/2008	DRAWING NO.	REV.
SCALE: AS NOTED	FIGURE 5	



**FIGURE 6**  
**TOTAL MERCURY ANALYTICAL RESULTS (ng/g)**  
**SLAB CREEK RESERVOIR SEDIMENT INVESTIGATION**



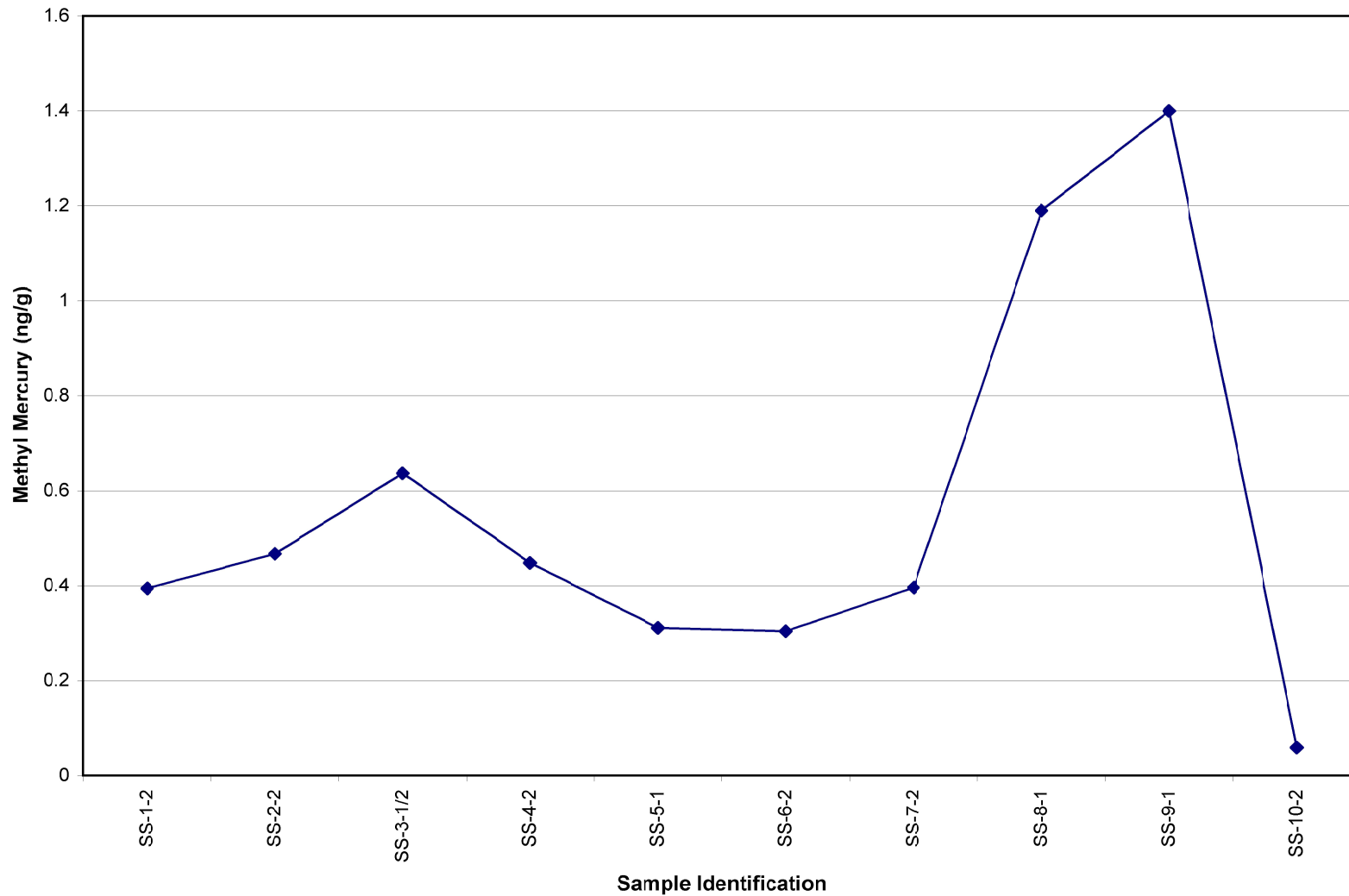
Devine Tarbell & Associates, Inc.  
 Consulting Engineers, Scientists, & Regulatory Specialists  
 2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833

DRAWN:  
RCB  
 DESIGNED:  
KT  
 CHECKED:  
 DATE:  
3/21/08  
 SCALE:  
NONE

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
 UPPER AMERICAN RIVER PROJECT  
 SLAB CREEK SEDIMENT INVESTIGATION  
 TOTAL MERCURY ANALYTICAL RESULTS  
 ng/g

DRAWING NO. CHART 6 REV. 0

**FIGURE 7**  
**METHYL MERCURY ANALYTICAL RESULTS (ng/g)**  
**SLAB CREEK RESERVOIR SEDIMENT INVESTIGATION**



Devine Tarbell & Associates, Inc.  
 Consulting Engineers, Scientists, & Regulatory Specialists

2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833

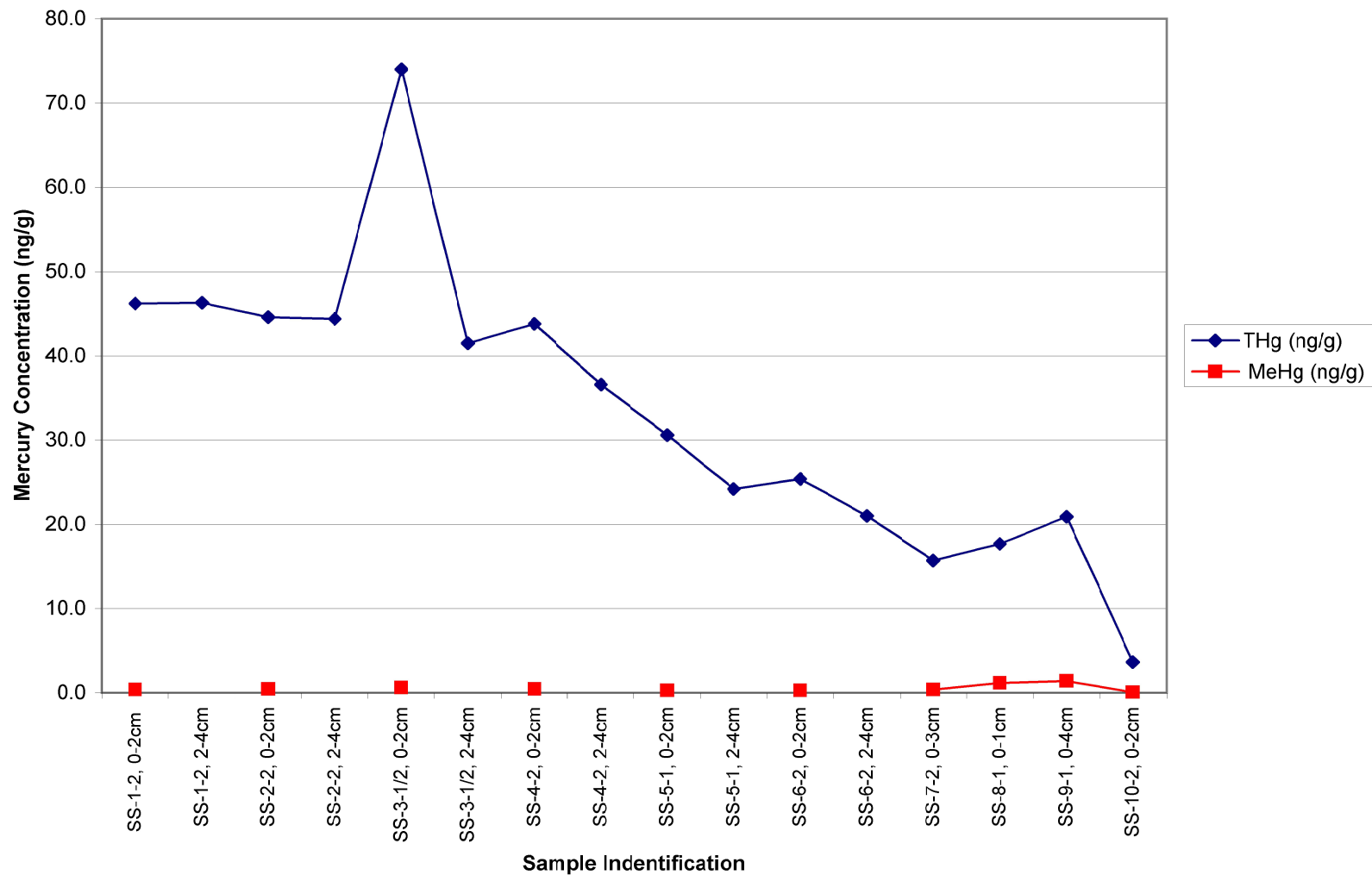
DRAWN:  
RCB  
 DESIGNED:  
KT  
 CHECKED:  
 DATE:  
3/21/08  
 SCALE:  
NONE

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
 UPPER AMERICAN RIVER PROJECT  
 SLAB CREEK SEDIMENT INVESTIGATION  
 METHYL MERCURY ANALYTICAL RESULTS  
 ng/g

DRAWING NO. CHART 7

REV. 0

**FIGURE 8**  
**TOTAL MERCURY vs METHYL MERCURY - ANALYTICAL RESULTS**  
**SLAB CREEK RESERVOIR SEDIMENT INVESTIGATION**



Devine Tarbell & Associates, Inc.  
 Consulting Engineers, Scientists, & Regulatory Specialists

2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833

DRAWN:  
RCB  
 DESIGNED:  
KT  
 CHECKED:  
 DATE:  
3/21/08  
 SCALE:  
NONE

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
 UPPER AMERICAN RIVER PROJECT

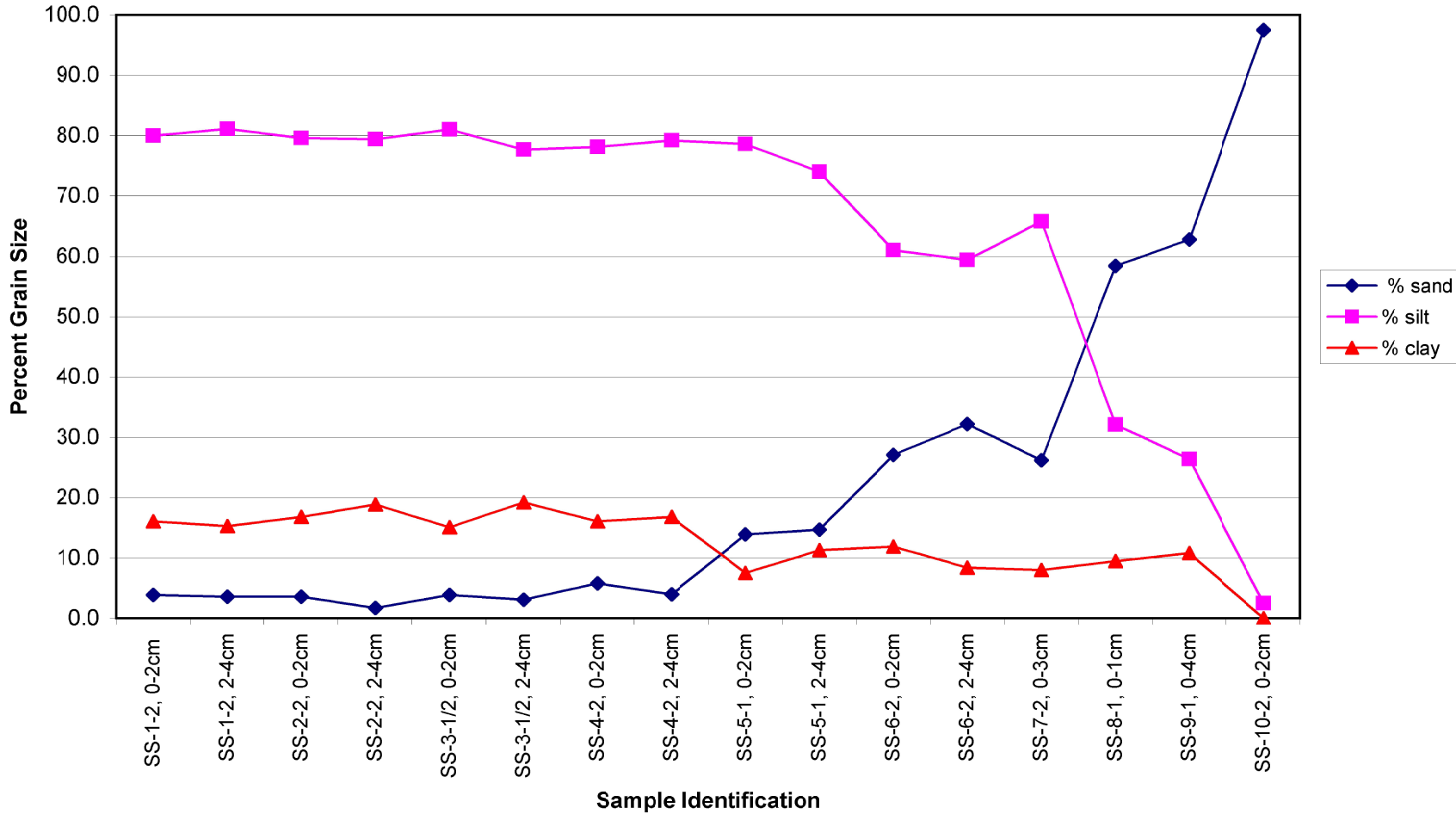
SLAB CREEK SEDIMENT INVESTIGATION  
 TOTAL MERCURY vs METHYL MERCURY  
 ANALYTICAL RESULTS

ng/g

DRAWING NO. CHART 8

REV. 0

**FIGURE 9**  
**GRAIN SIZE DISTRIBUTION RESULTS**  
**SLAB CREEK RESERVOIR SEDIMENT INVESTIGATION**



Devine Tarbell & Associates, Inc.  
 Consulting Engineers, Scientists, & Regulatory Specialists

2720 Gateway Oaks Drive  
 Suite 300  
 Sacramento, CA 95833

DRAWN: RCB	SACRAMENTO MUNICIPAL UTILITY DISTRICT UPPER AMERICAN RIVER PROJECT	
DESIGNED: KT		
CHECKED:	SLAB CREEK SEDIMENT INVESTIGATION GRAIN SIZE DISTRIBUTION RESULTS SAND/SILT/CLAY	
DATE: 3/21/08	DRAWING NO. CHART 9	REV. 0
SCALE: NONE		