

APPENDIX J
TOPOGRAPHIC SURVEYS

Appendix J – Topographic Surveys

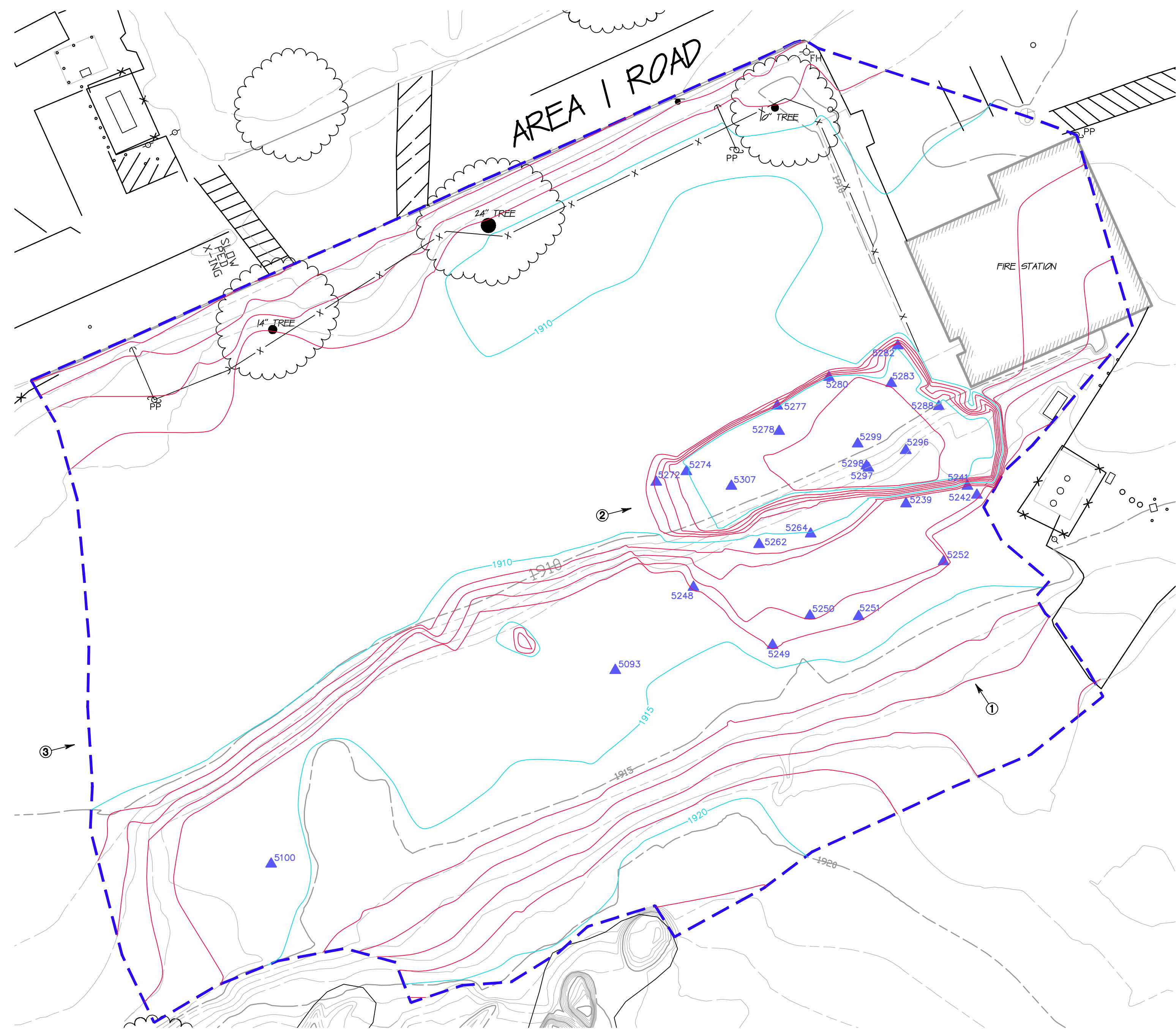
Table of Contents

Sage Surveys

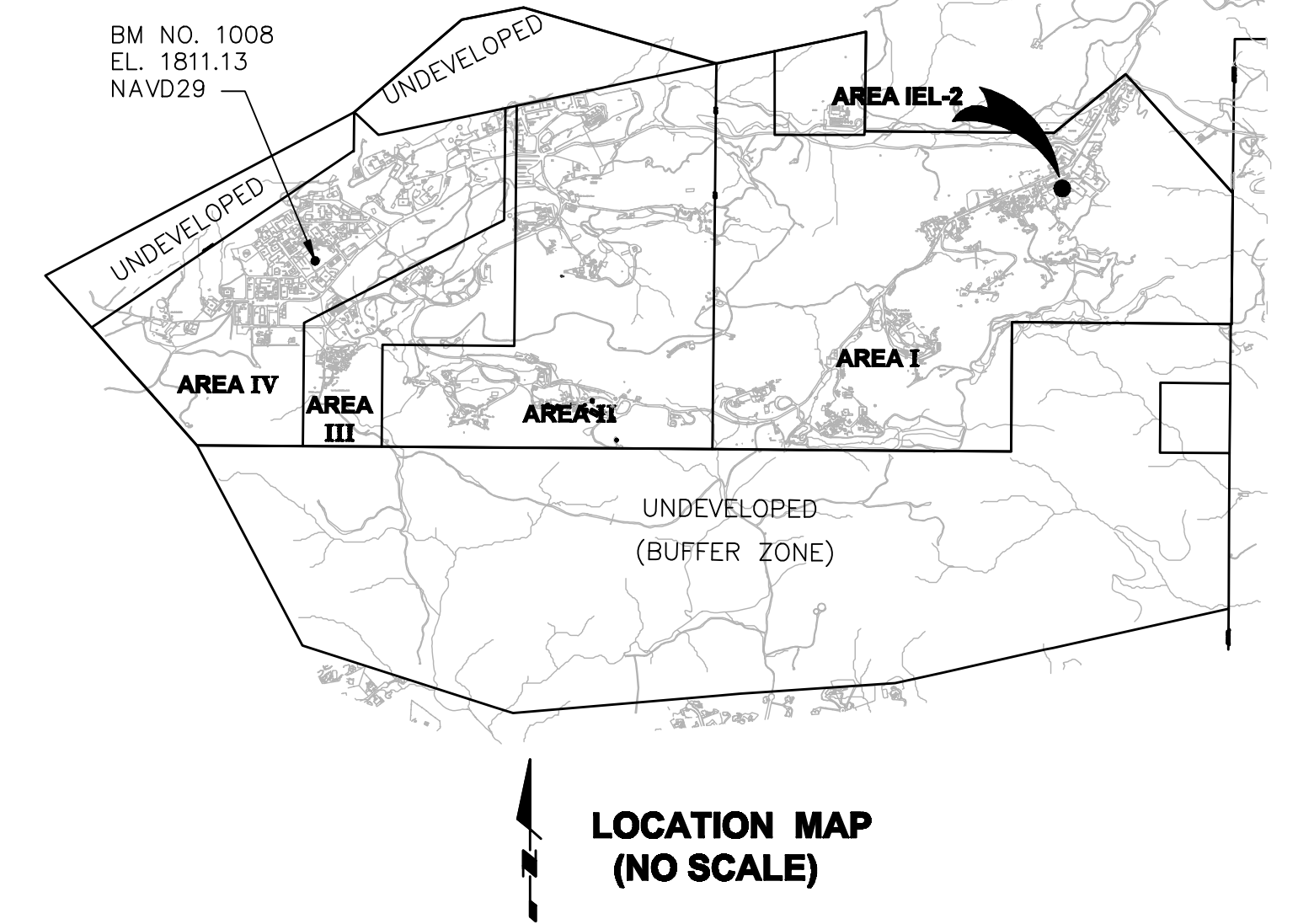
1. IEL-2 Post-Excavation Topographic Survey
2. IEL-2 Post-Restoration Topographic Survey

Cal Vada Surveys

3. Post-Excavation Surveys for ISRA Areas AP/STP-1B, AP/STP-1C-1, AP/STP-1C-2, AP/STP-1E-1, AP/STP-1E-2, AP/STP-1E-3, ELV-1C, ELV-1D, IEL-3, LOX-1B-1, LOX-1B-2, LOX-1B-3, and the Soil Borrow Area



- LEGEND**
- 1920 5' CONTOURS (MAY 2011)
 - 1' CONTOURS (MAY 2011)
 - 1500 5' CONTOURS (JUNE 2010)
 - 1' CONTOURS (JUNE 2010)
 - SURVEYED EXCAVATION LIMITS
 - DIRT ROAD
 - POWER POLE
 - SIGN
 - FLAG POLE
 - BRUSH LINE
 - TREE
 - ▲ SAMPLE POINT LOCATION
 - Ⓢ PHOTO VIEWPOINT



SAGE CONSULTANTS INC. BOEING SSSL ISRA IEL-2, SAMPLE POINTS SHEET 1 of 1
 JO: 494-V-2000 5800 WOOLSEY CANYON ROAD, CANOGA PARK, CA Date: 06/07/2011

Point ID	NAME	North Latitude *	West Longitude *	NAVD 88***	Northing**	Easting**	GROUND ELEV ****
5093	ILBS02	34-14-04.68586	118-40-33.42340	1917.22	268029.4198	1795968.4539	1914.58
5100	ILBS0146	34-14-04.15427	118-40-34.54336	1916.93	267976.3153	1795874.0649	1914.29
5239	ILBS06AS001	34-14-05.14312	118-40-32.47717	1914.81	268075.1090	1796048.2076	1912.17
5241	ILET0102S001	34-14-05.19225	118-40-32.27727	1914.87	268079.9624	1796065.0237	1912.24
5242	ILBS02AS001	34-14-05.16774	118-40-32.24618	1915.26	268077.4679	1795967.6172	1912.62
5248	ILBS0294AS001	34-14-04.91277	118-40-33.16974	1916.21	268052.2141	1795989.9051	1913.57
5249	ILBS0234AS001	34-14-04.75690	118-40-32.91027	1916.23	268036.3119	1796011.5829	1913.59
5250	ILET0100S001	34-14-04.83745	118-40-32.78892	1915.54	268044.3864	1796021.8260	1913.90
5251	ILBS0228AS001	34-14-04.83666	118-40-32.62972	1916.06	268044.2162	1796035.1912	1913.42
5252	ILBS0229AS001	34-14-04.98674	118-40-32.36366	1915.54	268059.2320	1796058.4791	1912.90
5262	ILET0104S001	34-14-05.02997	118-40-32.95623	1913.00	268063.9411	1796007.9103	1910.36
5264	ILET0103S001	34-14-05.05966	118-40-32.78830	1912.69	268066.8480	1796022.0289	1910.06
5272	ILBS0235S001	34-14-05.19731	118-40-33.28353	1910.32	268081.0466	1795979.7052	1907.68
5274	ILET0106S001	34-14-05.22629	118-40-33.19538	1907.71	268083.9207	1795987.9654	1905.07
5277	ILBS0169AS001	34-14-05.40632	118-40-32.89999	1908.95	268101.9527	1796012.8878	1906.31
5278	ILET0108S001	34-14-05.33732	118-40-32.89323	1907.05	268094.9739	1796013.4088	1904.42
5280	ILBS0297AS001	34-14-05.48469	118-40-32.73181	1907.44	268109.7805	1796027.0611	1904.80
5282	ILBS0293AS001	34-14-05.57163	118-40-32.50786	1907.20	268118.4420	1796045.9220	1904.58
5283	ILET0110S001	34-14-05.46963	118-40-32.52811	1906.71	268108.1426	1796044.1524	1904.07
5287	ILET0113S001	34-14-05.43284	118-40-32.34780	1907.93	268104.3224	1796059.2690	1905.29
5288	ILET0109S001	34-14-05.40784	118-40-32.37250	1907.17	268101.7888	1796057.1748	1904.53
5296	ILET0114	34-14-05.28791	118-40-32.47948	1905.69	268089.7461	1796048.1121	1903.05
5297	ILET0115	34-14-05.23896	118-40-32.60095	1905.88	268084.8672	1796037.8808	1903.25
5298	ILET0112S001	34-14-05.24498	118-40-32.60768	1905.94	268085.4794	1796037.3192	1903.30
5299	ILET0111S001	34-14-05.30470	118-40-32.63649	1906.29	268091.5324	1796034.9410	1903.65
5307	ILET0107S001	34-14-05.18758	118-40-33.04801	1906.89	268079.9253	1796000.3121	1904.25

* degrees, minutes, seconds; NAD 83
 ** SPC, CA Zone 5, Survey Feet, NAD 27
 *** NAVD 88: north side surface casing
 ****NAVD 29, north side

SITE VOLUMES (Cubic Yards)

Site Volume Table: Unadjusted

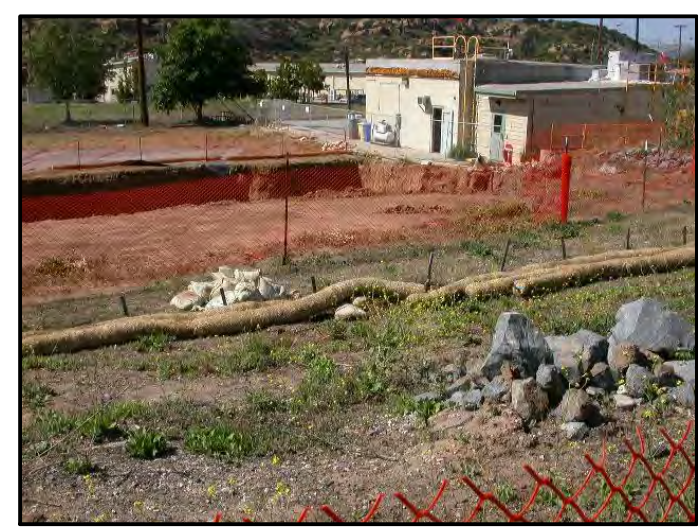
Site	Stratum	Surf1	Surf2	Method	Unadjusted	Fill	Net
LDD IEL 2000	PostEx	EG-Aerial			918	492	427 (C)
					977	553	424 (C)
					975	552	423 (C)

NOTES

PURPOSE: THE PURPOSE OF THIS DRAWING IS TO SHOW POST-EX TOPOGRAPHY AND CALCULATE THE VOLUME OF CUT SOIL AS OF MAY 2011.

NOTES: 1: EXISTING SURFACE SURVEYED MAY 27, 2011.
 2: VOLUMES CALCULATED USING AUTODESK LAND DESKTOP SOFTWARE.

THE TOPOGRAPHIC INFORMATION SHOWN HEREON WAS PREPARED BY GOLDEN STATE AERIAL SURVEYS. THIS MAP WAS PREPARED AT A SCALE OF 1" = 40' WITH A ONE FOOT CONTOUR INTERVAL. PREPARED FROM AERIAL PHOTOGRAPHY DATED JUNE 2, 2010. THE POST EXCAVATION DATA WAS PREPARED FROM A FIELD SURVEY DATED MAY 27, 2011.



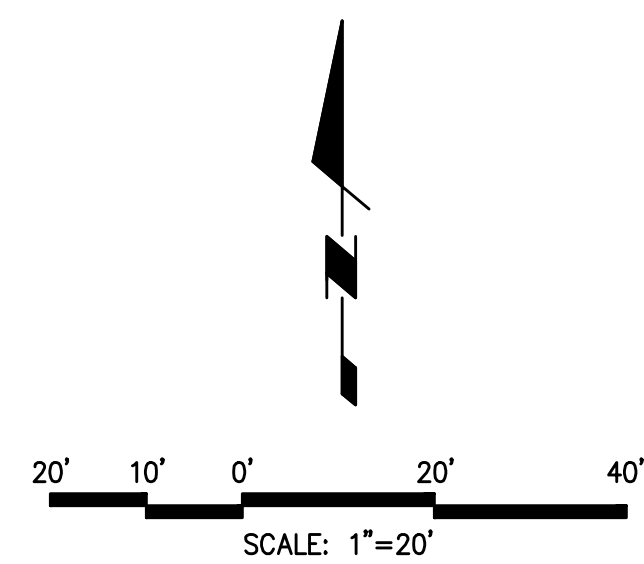
VIEW 1
LOOKING NORTHWEST



VIEW 2
LOOKING EAST



VIEW 3
LOOKING NORTHEAST



SAGE Consultants, Inc.
 LAT 34°-13'-00" N LONG 119°-02'-40" W ELEV 55.438m
 Surveyors * Application Developers * GIS Integrators * Engineers
 1978 Ventura Blvd., CAMARILLO CA 93010-7847
 Tel. (805) 482-6088 * Fax (805) 389-9815
 www.sagecon.com

Robert E. Littell
 ROBERT E. LITTELL RCE 13395



THE BOEING COMPANY
ISRA IEL-2
POST EXCAVATION EXHIBIT

5800 WOOLSEY CANYON ROAD
 CANOGA PARK, CA 9134-1148

COUNTY OF VENTURA STATE OF CALIFORNIA

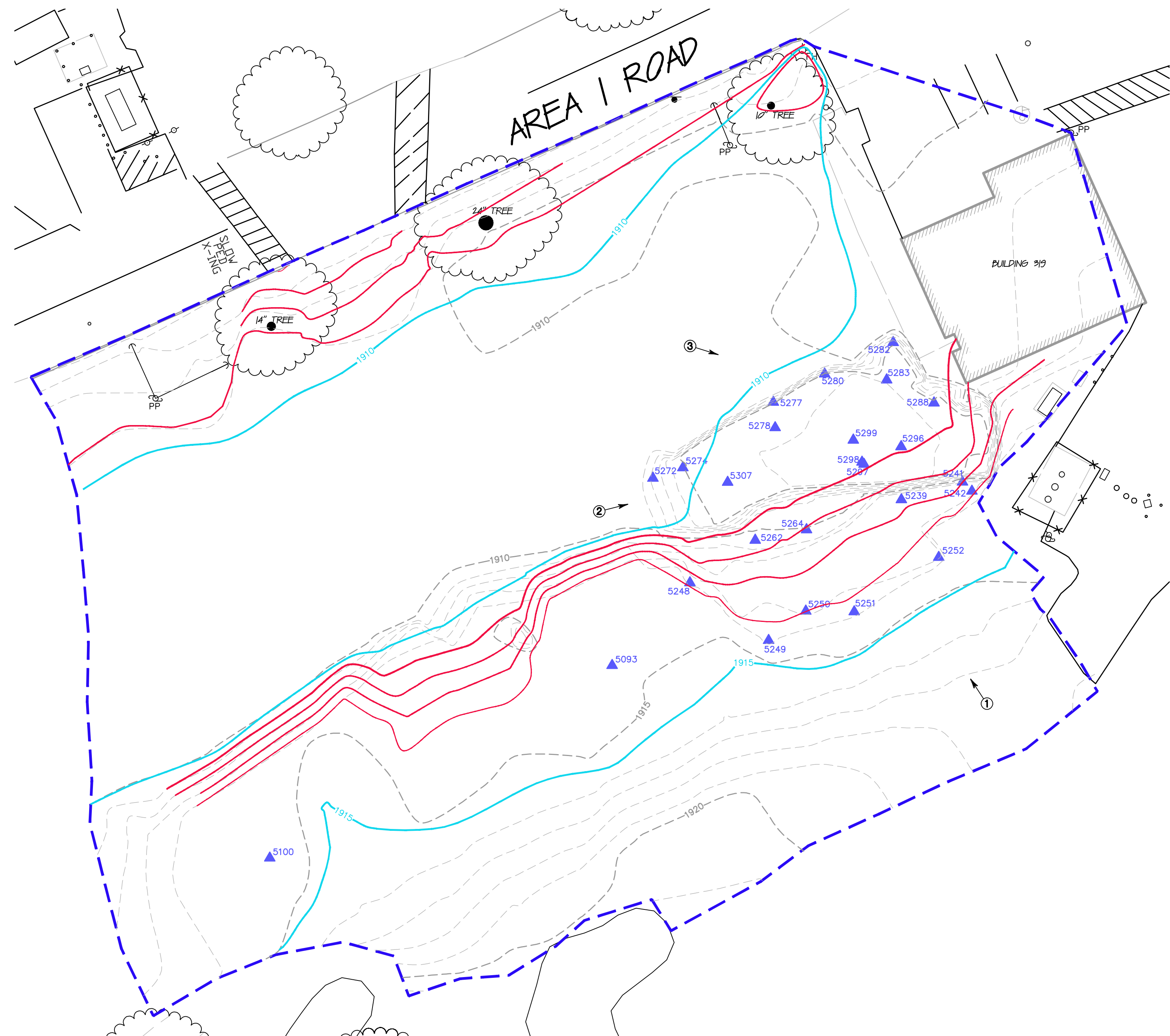
JO 494-V-2000

BENCH MARK:
 FOUND BRASS DISK STAMPED "N 22688.45 E 12152.65 ELEV 1813.75 LS 2957" SET IN TOP WEST EDGE OF ROCK OUTCROPPING LOCATED IN VACANT FIELD NORTH OF ASPHALT DRIVE NORTH OF BUILDING 110.

COORDINATES DERIVED FROM BOEING 1992 TOPOGRAPHIC MAP (NAD27 NAVD29 FEET):
 N 266917.4900
 E 1785312.1200
 ELEV 1811.13

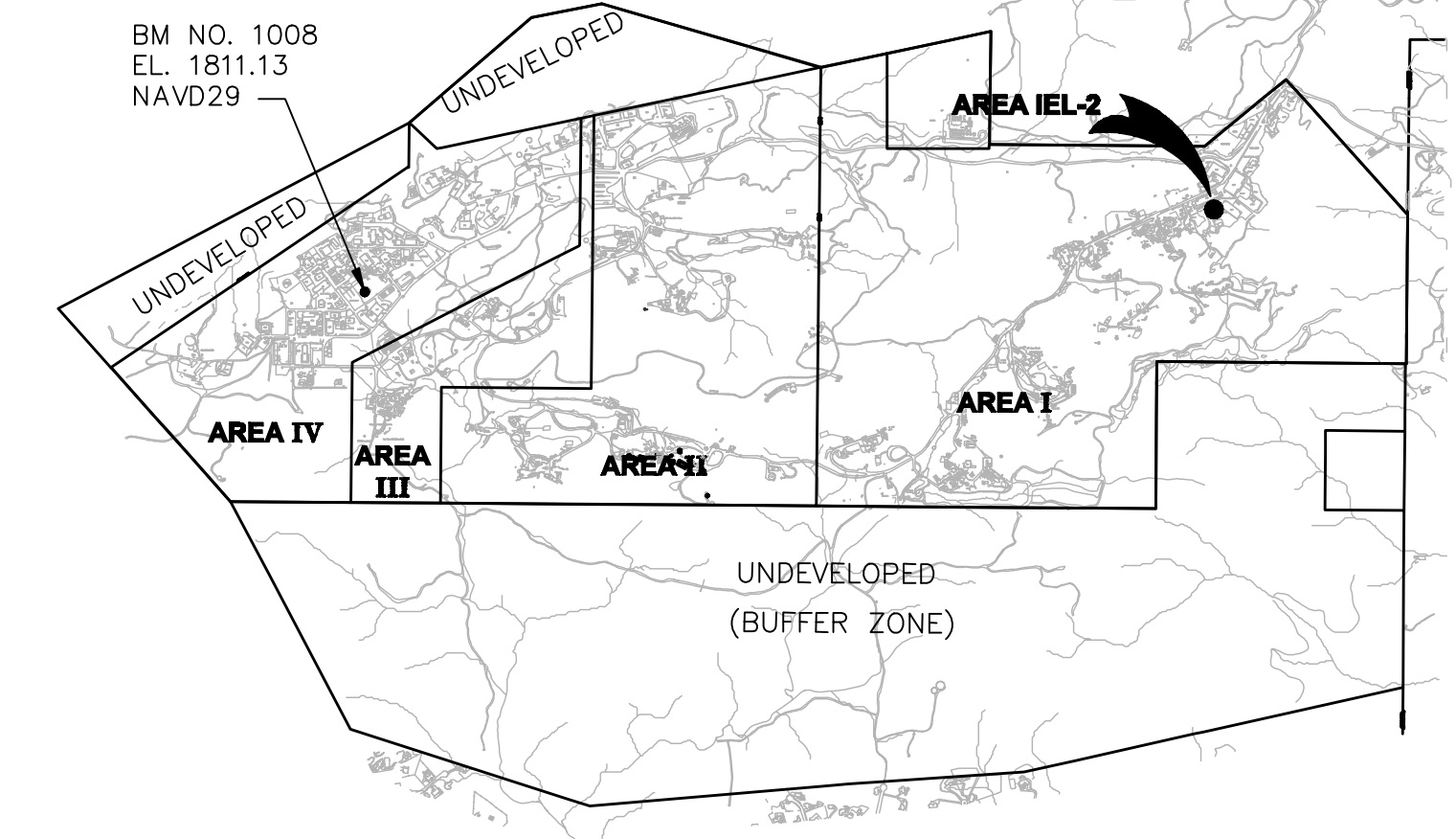
DATE: JUNE 8, 2011

SHEET 1 OF 1



LEGEND

- 1920 5' CONTOURS (JUNE 2011)
- 1' CONTOURS (JUNE 2011)
- - - 1500 5' CONTOURS (MAY 2011)
- - - 1' CONTOURS (MAY 2011)
- - - SURVEYED EXCAVATION LIMITS
- - - DIRT ROAD
- PP POWER POLE
- S SIGN
- F FLAG POLE
- B BRUSH LINE
- TREE
- ▲ SAMPLE POINT LOCATION
- ③ PHOTO VIEWPOINT



**LOCATION MAP
(NO SCALE)**

SAGE CONSULTANTS INC. BOEING SSSL ISRA IEL-2, SAMPLE POINTS SHEET 1 of 1
 JO: 494-V-2000 5800 WOOLSEY CANYON ROAD, CANOGA PARK, CA Date: 06/07/2011

Point ID	NAME	North Latitude *	West Longitude *	NAVD 88***	Northing**	Easting**	GROUND ELEV ****
5093	ILBS92	34-14-04.68586	118-40-33.42340	1917.22	268029.4198	1795968.4539	1914.58
5100	ILBS0146	34-14-04.15427	118-40-34.54336	1916.93	267976.3153	1795874.0649	1914.29
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* degrees, minutes, seconds; NAD 83
 ** SPC, CA Zone 5, Survey Feet, NAD 27
 *** NAVD 88: north side survey casing
 ****NAVD 29, north side



VIEW 1
LOOKING NORTH



VIEW 2
LOOKING EAST



VIEW 3
LOOKING SOUTHEAST

SITE VOLUMES (Cubic Yards)

Site Volume Table: Unadjusted

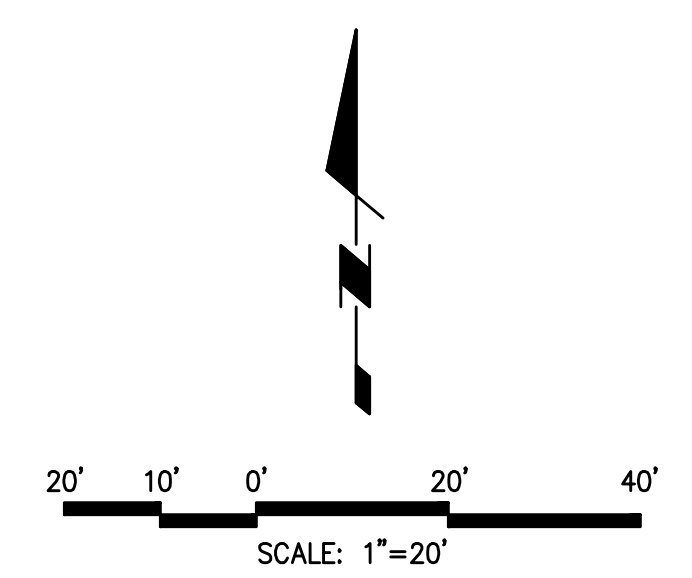
Site	Stratum Surf1	Surf2	As-Built	PostEx	As-Built	Cut	Fill	Net	Method
IEL-2	AsBuilt	PostEx	As-Built			275	759	484 (F)	Grid
						301	852	551 (F)	Composite
						307	858	551 (F)	End area

NOTES

PURPOSE: THE PURPOSE OF THIS DRAWING IS TO SHOW AS-BUILT TOPOGRAPHY AND CALCULATE THE VOLUME OF FILL SOIL AS OF JUNE 2011.

NOTES: 1: AS-BUILT SURFACE SURVEYED JUNE 17, 2011.
 2: VOLUMES CALCULATED USING AUTODESK LAND DESKTOP SOFTWARE.

THE TOPOGRAPHIC INFORMATION SHOWN HEREON WAS PREPARED BY GOLDEN STATE AERIAL SURVEYS. THIS MAP WAS PREPARED AT A SCALE OF 1" = 40' WITH A ONE FOOT CONTOUR INTERVAL. PREPARED FROM AERIAL PHOTOGRAPHY DATED JUNE 2, 2010. THE POST EXCAVATION DATA WAS PREPARED FROM A FIELD SURVEY DATED MAY 27, 2011.



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 ROBERT E. LITTELL RCE 13395

THE BOEING COMPANY
ISRA IEL-2
AS-BUILT EXCAVATION
EXHIBIT

5800 WOOLSEY CANYON ROAD
 CANOGA PARK, CA 9134-1148
 COUNTY OF VENTURA STATE OF CALIFORNIA

JO 494-V-2000

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COORDINATES DERIVED FROM BOEING 1992 TOPOGRAPHIC MAP (NAVD27 NAVD29 FEET):
 N 266917.4900
 E 1785312.1200
 ELEV 1811.13

DATE: JUNE 23, 2011

SHEET 1 OF 1