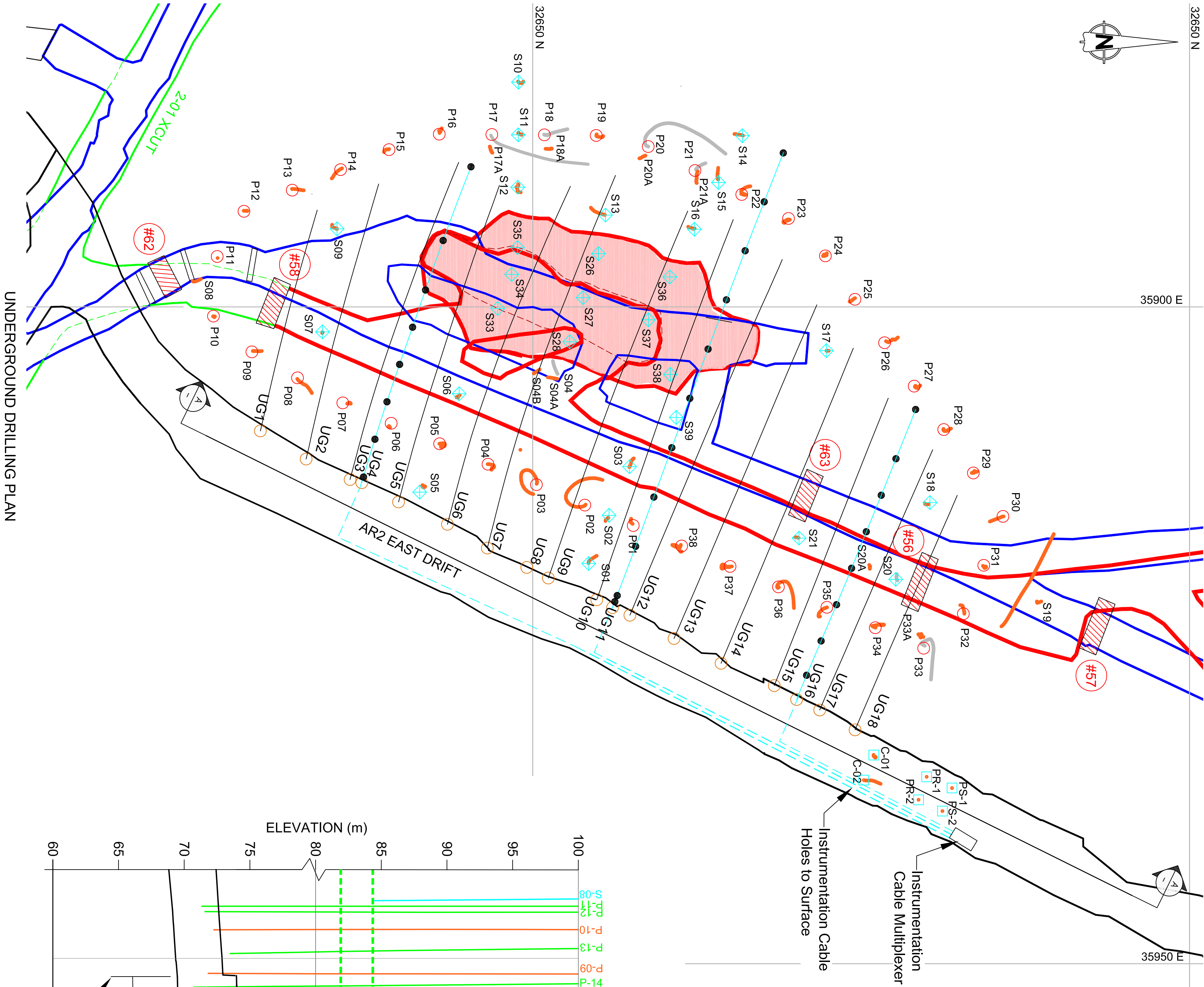
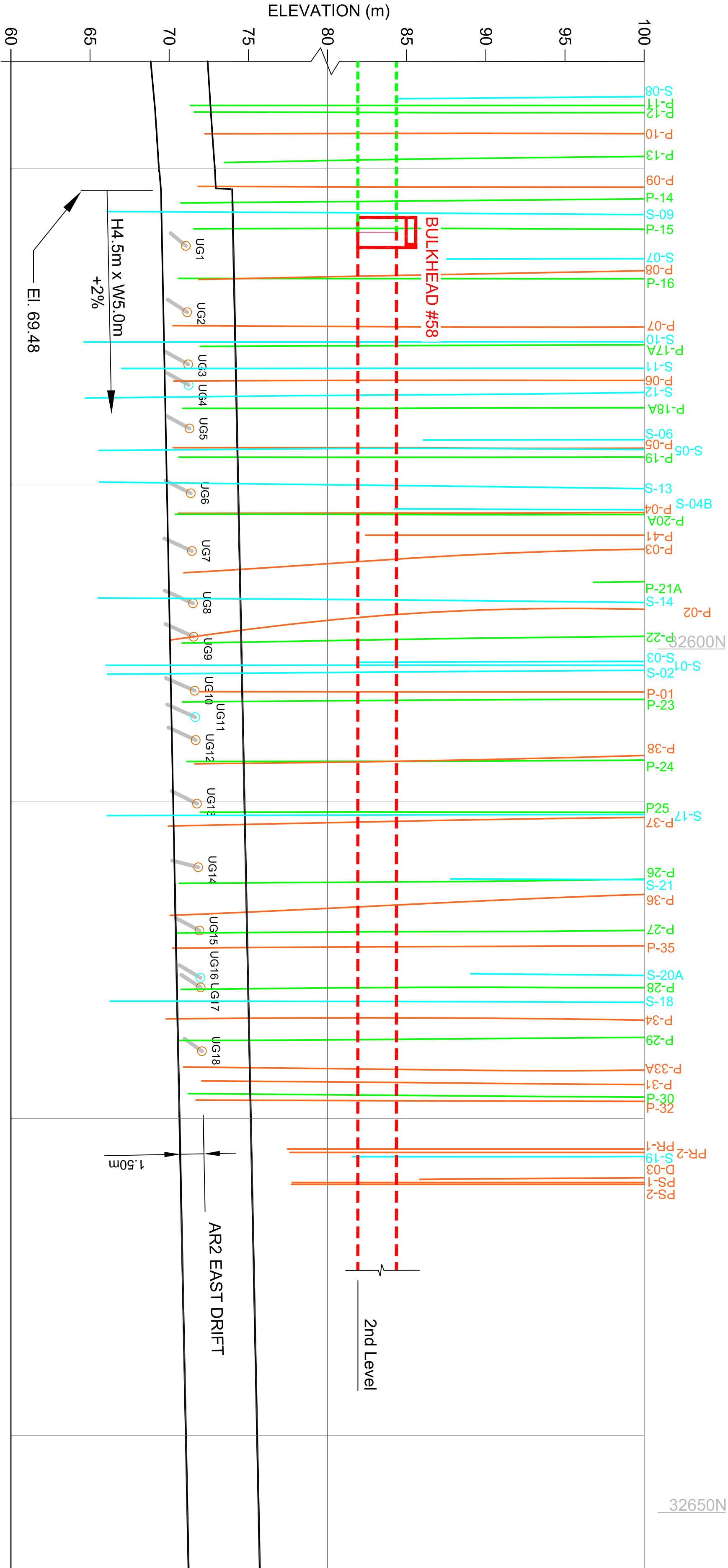




UNDERGROUND DRILLING PLAN



VIEW A



Table 1: Differences between UG and Downhole Surveys

Underground Survey Support Hole	Breakthrough Coordinates			Downhole Survey Bottom Coordinates (m)			Differences between Surveys		
	Easting (m)	Northing (m)	Elevation (m)	Easting (m)	Northing (m)	Elevation (m)	X-Y Plane (m)	Z Plane (m)	Elevation (m)
UG1	35924.88	32626.33	76.27	35924.31	32626.66	77.70	0.63	1.43	1.43
UG2	35926.73	32626.54	76.03	35926.31	32626.48	77.72	0.42	1.69	1.69
UG3	35927.32	32622.96	76.10	-	-	77.48	-	1.38	1.38
UG4	35928.43	32632.44	76.02	-	-	77.63	-	1.61	1.61
UG5	35928.19	32630.18	75.99	-	-	77.77	-	1.78	1.78
UG6	35928.27	32630.00	76.07	-	-	77.73	-	1.66	1.66

Table 2: Underground Drillhole Details

Hole ID	Easting (m)	Northing (m)	Collar Elevation (m)	EDH (m)	Dip (Deg)	Asbuilt Survey Length (m)	Measured Freeze Pipe Length (m)	Diameter (mm)	Thermistor Cable ID
UG1	35924.88	32626.33	76.27	77.47	283	3.35	17.00	11.40	UG1
UG2	35926.73	32626.54	76.03	77.52	285	-5.3	24.86	25.46	UG2
UG3	35927.32	32622.96	76.10	77.58	289	-5.8	25.00	25.46	UG3
UG4	35928.43	32632.44	76.02	77.63	288	-5.9	25.00	25.46	UG4
UG5	35928.19	32630.18	75.99	77.63	289	-6.8	25.99	27.56	UG5
UG6	35928.27	32630.00	76.07	77.73	288	-8.5	29.01	31.17	UG6
UG7	35929.64	32601.19	72.73	67.92	291	-8.7	34.00	31.03	UG7
UG8	35927.29	32604.08	72.75	68.47	290	-7.2	34.00	31.03	UG8
UG9	35922.89	32606.08	72.78	68.8	293	-6.9	33.01	31.76	UG9
UG10	35923.47	32607.4	72.77	69.03	293	-6.7	32.00	27.78	UG10
UG11	35925.24	32610.76	72.80	69.82	293	-5.9	29.01	27.78	UG11
UG12	35927.13	32604.34	72.84	70.68	293	-4.5	27.00	26.1	UG12
UG13	35928.63	32618.39	72.86	70.47	292	-5.8	24.00	23.6	UG13
UG14	35929.63	32611.95	72.88	70.94	293	-5.3	22.00	21.7	UG14
UG15	35929.63	32611.95	72.88	70.94	293	-5.3	22.00	21.7	UG15
UG16	35929.2	32614.54	72.92	70.81	294	-6.1	20.01	19.6	UG16

Notes: 1. Collar coordinates from a asbuilt survey provided by AECOM. 2. Azimuth and dip calculated based on a straight line between the collar and the last survey point.

Table 3: Thermistor Details

Hole ID	UG14	UG11	UG16
Thermistor ID:	UG14m1	UG11m2	UG16m1
Number of Thermistor Beads:	11	11	11
Hole Length (m):	25.55	37.26	23.81
In-ground Cable Length (m):	25.59	37.23	23.78

Sensor 1	-	0.73	-
Sensor 2	-	1.23	-
Sensor 3	-	5.23	1.78
Sensor 4	0.59	9.23	4.78
Sensor 5	3.59	13.23	7.78
Sensor 6	6.59	17.23	10.78
Sensor 7	9.59	21.23	13.78
Sensor 8	12.59	25.23	16.78
Sensor 9	15.59	29.23	19.78
Sensor 10	19.59	33.23	22.78
Sensor 11	25.59	37.23	23.78

- LEGEND
- UG1
 - Surface Instrumentation Collar
 - Surface Freeze Collar
 - Underground Support Hole Collar
 - Underground Surveyed Breakthrough Location
 - Downhole Survey
 - Abandoned Drillhole Downhole Survey
 - 1st Level
 - Arseic Contaminated Area (2nd Level)
 - 2nd Level
 - AR2 East Drift
 - Underground Instrumentation Cable
 - Arseic Chamber
 - Bulkhead

- NOTES:
- Grid shown is Metric GMRP. Approximate conversion to UTM Zone 11 NAD83 - Add 600,000 E and 6,900,000 N.
 - Scale bar shown are for D Size drawing prints.
 - Table 1 provides the differences between the downhole surveys completed during surface drilling (2009) compared to the underground surveyed breakthrough location.
 - All elevations and lengths shown in the tables are in meters.
 - The hole lengths listed does not include an allowance for sub-drilling.
 - All holes to be sub-drilled as needed.
 - Underground drillhole locations to be drilled from the AR2 East Drift.
 - Underground thermistor cables to be routed to a multiplexer located approximately midway between Chamber 10 and Chamber 9 before routed to surface.
 - The thermistor string lead lengths are based on the assumed multiplexer location indicated in the plan. Thermistor lead lengths will require to be increased if multiplexer is moved further north.
 - Final location of the Instrumentation Cable Multiplexer to be confirmed.
 - Surface drillholes beyond the underground drillholes (to the west) have been excluded from View A.