SECTION 16 TABLE OF CONTENTS

SECTION **PAGE**

SECTION 16 LIST OF TABLES

TABLE **DESCRIPTION** **PAGE**

SECTION 16 LIST OF FIGURES

FIGURE **DESCRIPTION** **PAGE**

16 MINING METHODS

16.1 INTRODUCTION

The Stibnite Gold Project PFS mine plan was developed using conventional open pit hard rock mining methods. The mining operation is planned to deliver 8.05 million tons of ROM material to the primary crusher per year (nominally 22,050 short tons per day). Both oxide and sulfide mineralized material would be sent to the crusher; the oxide material would be vat-leached while the sulfide material would be processed via up to two sequential flotation circuits to produce two concentrates: (1) if sufficient antimony grade is present, an antimony concentrate that would be filtered, trucked off-site and sold; and, for all sulfide material, (2) an auriferous sulfide concentrate that would be oxidized onsite via pressure oxidation, then processed via agitated leach, carbon stripping and refining to produce a gold- and silver-rich doré.

The mine plan developed for the Project incorporates the mining of three primary mineral deposits – Yellow Pine, Hangar Flats, and West End – and re-mining and re-processing of the Historic Tailings. Mineral Reserves from the three open pits would be sent to a centrally located primary crusher, while the Historic Tailings would be mined with an excavator and trucks then hydraulically transferred from an adjacent pulping facility to the process plant grinding circuit. Waste rock would be sent to four distinct destinations: the TSF embankment, the Main WRSF, the West End WRSF, and to the mined-out Yellow Pine open pit. The general sequence of mining is the Yellow Pine deposit first, Hangar Flats second, and the West End deposit third, while Historic Tailings would overlap with the Yellow Pine deposit processing. The mining sequence is influenced by the need to backfill the Yellow Pine open pit to restore the original gradient of the EFSFSR; this order also generally follows a sequence of mining highest to lowest grade, which is also preferred.

The Historic Tailings are situated within the footprint of the proposed Main WRSF, and would be re-mined and reprocessed during the first four years of the mine schedule to provide adequate terrain for the WRSF. As the tailings material is currently at a size of 97% passing #40 mesh, it is not anticipated to overwhelm the process plant through the additional throughput. The tailings are currently overlain with 5,752 kst of neutralized spent heap leach ore (commonly referred to as the SODA) that must be removed before the Historic Tailings can be mined. The SODA material is planned to be used in the construction of the TSF starter dam during pre-production.

A summary of the ore tonnage by process type and waste tonnage from each of the primary deposits and the Historic Tailings is provided in Table 16.1. These tonnages correspond with the mine schedule provided in Table 16.7.

Table 16.1: Summary of Mine Plan Ore Type and Tonnage and Waste by Deposit

Resource	Ore Type	Ore Tons (kst)	Gold Grade (oz/st)	Silver Grade (oz/st)	Antimony Grade (%)	Waste Tons (kst)	Strip Ratio (st:st)
Yellow Pine	High Sb	6,750	0.065	0.210	0.593	124,304	2.8:1
	Low Sb	37,235	0.056	0.069	0.009		
Hangar Flats	High Sb	4,284	0.056	0.166	0.425	86,696	5.6:1
	Low Sb	11,146	0.040	0.055	0.019		
West End	Oxide	10,736	0.022	0.029	-	129,995	3.6:1
	Low Sb	24,914	0.041	0.044	-		
Historical Tailings	Low Sb	3,001	0.034	0.084	0.165	5,915	2.0:1
Totals / Averages		**98,066**	**0.047**	**0.071**	**0.070**	**346,910**	**3.5:1**

In addition to mine sequencing constraints, the PFS mine schedule was developed considering requirements of the processing plant. These are: maintenance down time and sulfur content restrictions for the feed to the POX circuit. Oxide material would be stockpiled adjacent to the primary crusher and processed during planned POX circuit maintenance to address the expected additional availability of the comminution and leach circuits over the POX circuit. To address the sulfur feed limitation, the mining schedule was developed by considering the maximum nominal sulfur levels that the POX circuit could handle in a given quarter. The peak sulfur levels generally occur in the initial 2 years of mine operations and generally correspond to the highest gold grades in the Yellow Pine deposit; after that period, the process plant would no longer be constrained by high sulfur levels.

The Independent Mining Consultants, Inc. (**IMC**) mine planning team applied the following steps to develop the Stibnite Gold Project PFS mine plan:

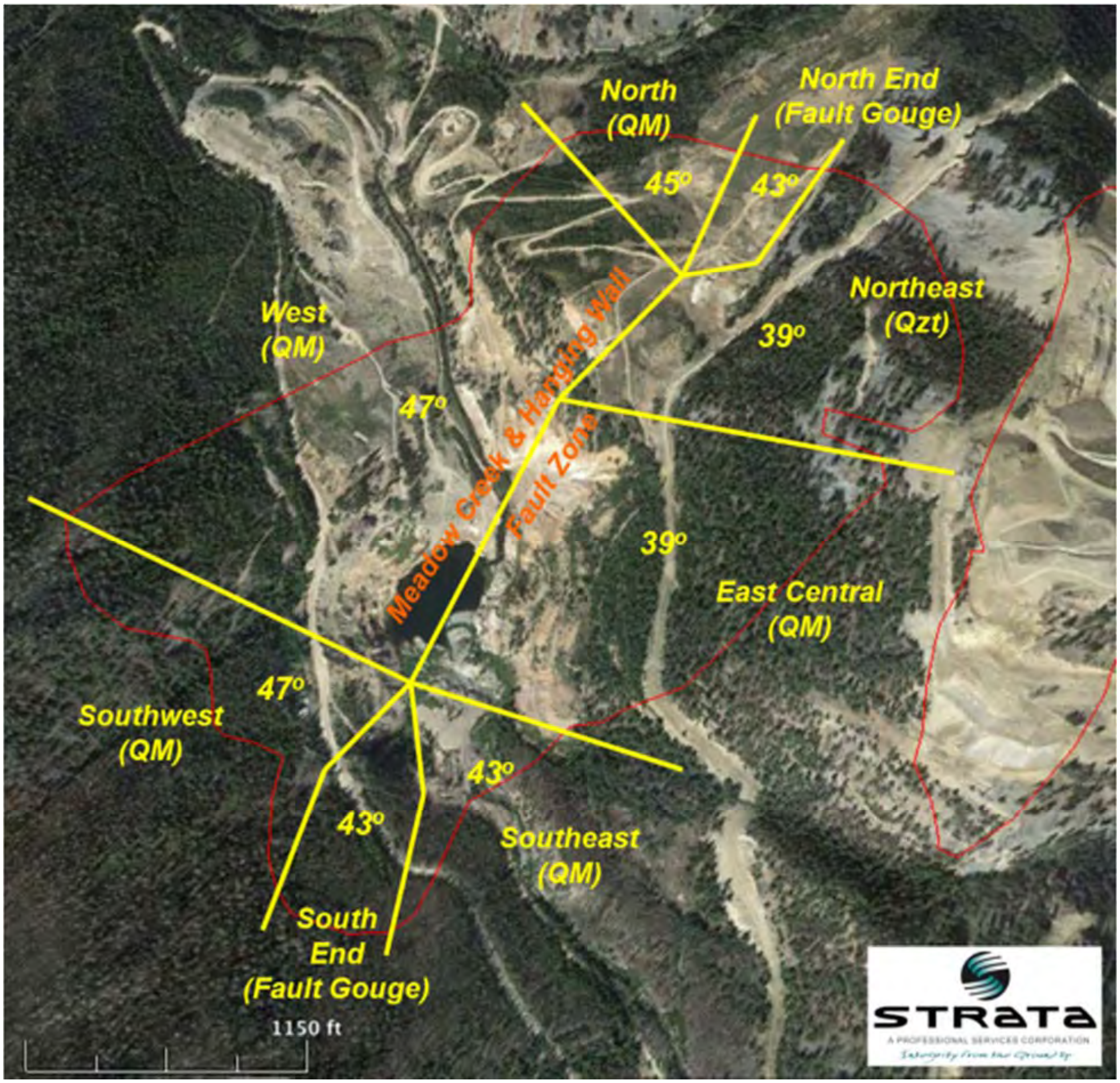
1) floating cone guidance for phase design;
2) phase designs;
3) mine production schedule;
4) waste rock storage design and waste rock allocation;
5) haul road design;
6) time sequence mine and dump drawings; and
7) equipment and manpower requirements.

Additional details associated with the preceding steps are described in the following subsections.

16.2 GEOTECHNICAL CONSIDERATIONS

Figure 16.1, Figure 16.2, and Figure 16.3 show the overall slope angles and sectors provided by the Project geotechnical consultant Strata, A Professional Services Corporation (**Strata**) for the Yellow Pine, Hangar Flats and West End open pits, respectively. The red lines on the figures are approximate ultimate open pit crests. Table 16.2, Table 16.3 and Table 16.4 provide the inter-ramp slope angles used in the Yellow Pine, Hangar Flats, and West End open pit designs provided by Strata, respectively. Overall slope angles were respected regardless of inter-ramp angles.

Figure 16.1: Overall Slope Angles Used at Yellow Pine Open Pit Sectors

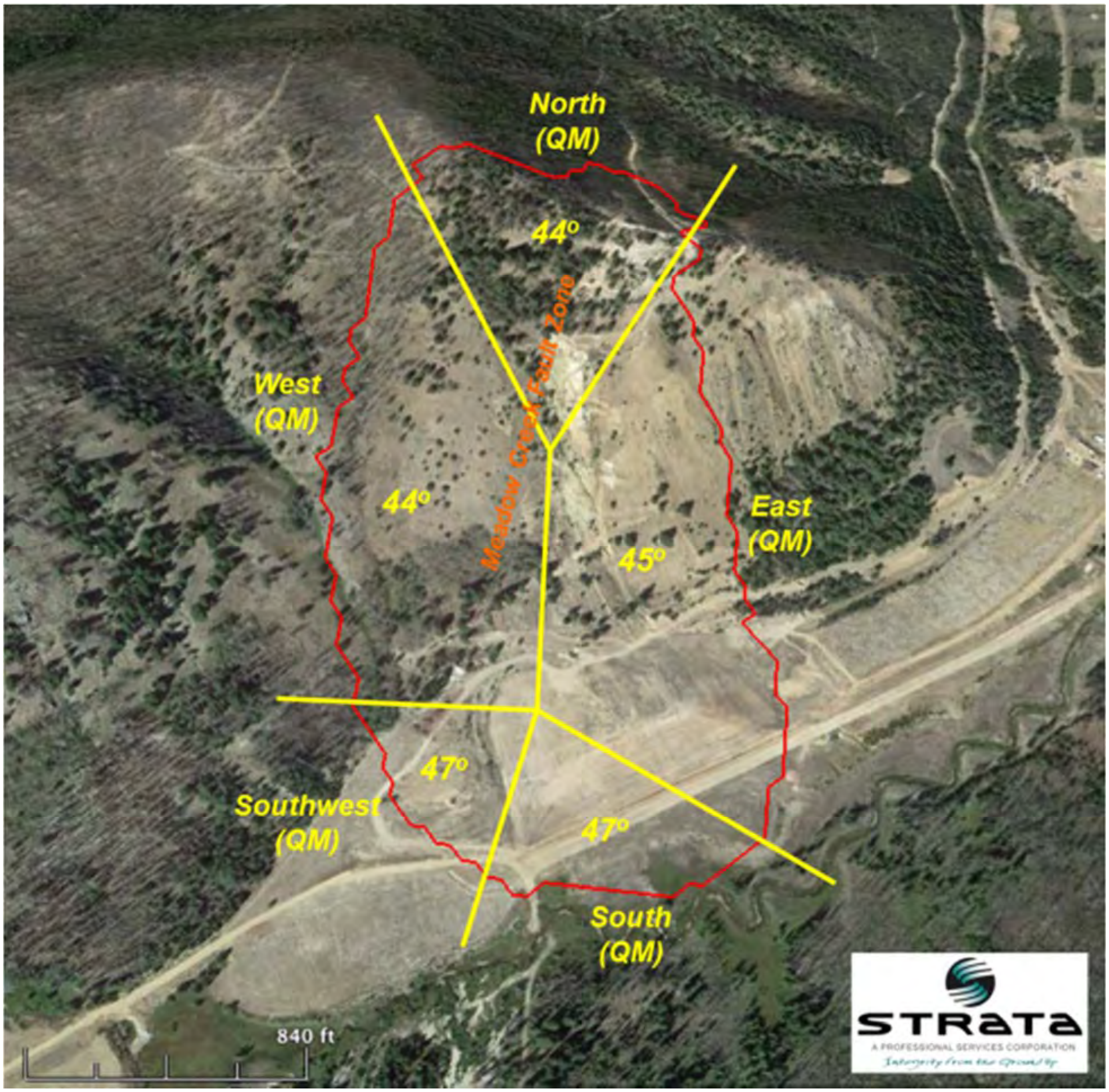


From Strata (figure oriented as north up).

Table 16.2: Yellow Pine Open Pit Inter-Ramp Slope Angles

Sector	North	West	Southwest	Southeast	East Central	Northeast
Average Slope Dip Direction	175° - 185°	147°	43° - 65°	293° - 303°	317°	230° - 250°
Inter-Ramp Slope Angle	47°	47°	48°	47°	47°	49°
Note: Open pit inter-ramp slope angles estimated by Strata.						

Figure 16.2: Overall Slope Angles Used at Hangar Flats Open Pit Sectors



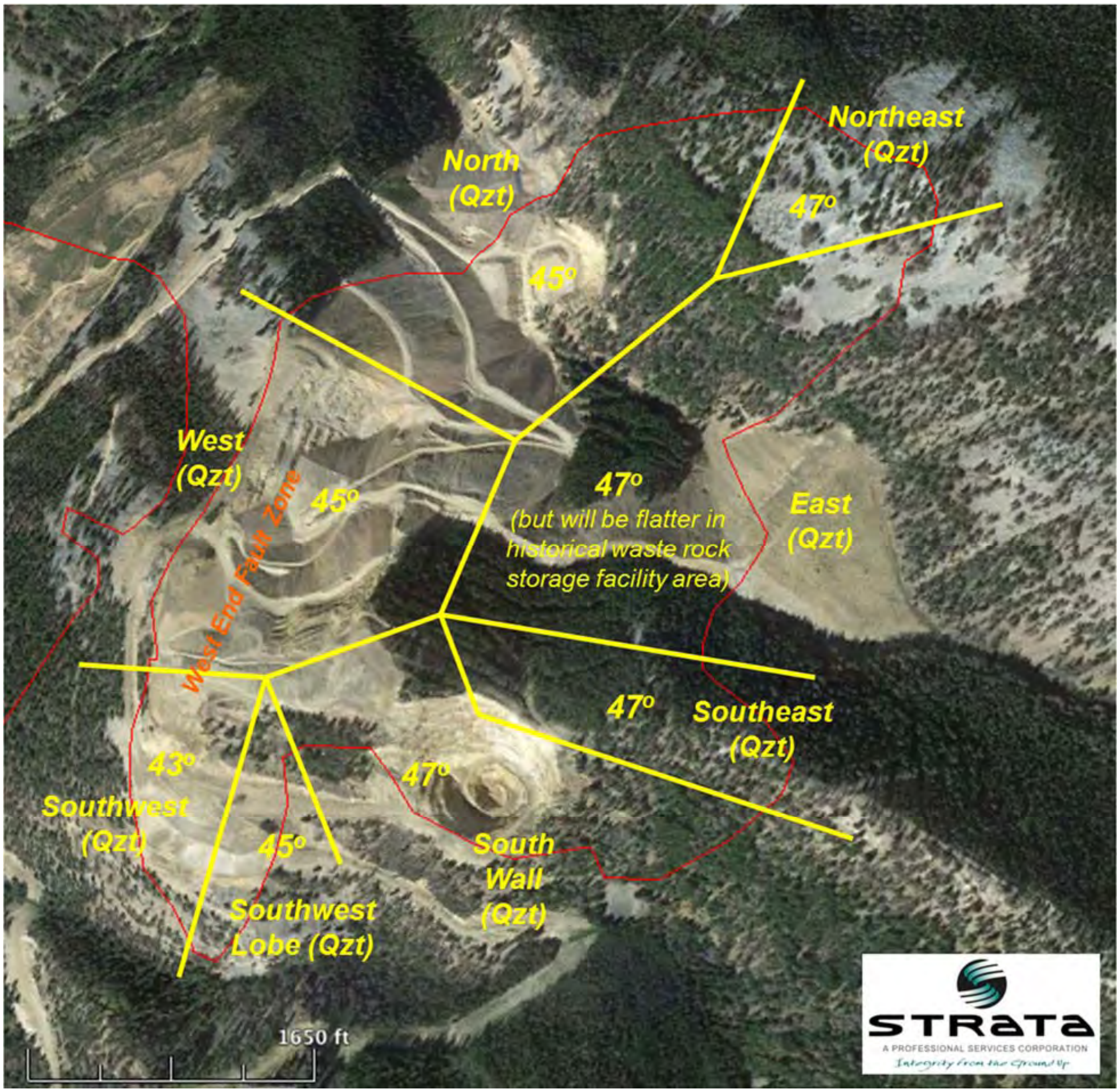
From Strata (figure oriented as north up).

Table 16.3: Hangar Flats Open Pit Inter-Ramp Slope Angles

Sector	North	West	Southwest	South	East
Average Slope Dip Direction	190°	96°	53°	345° - 360°	263°
Inter-Ramp Slope Angle	45°	47°	47°	47°	45°

Note: Open pit inter-ramp slope angles estimated by Strata.

Figure 16.3: Overall Slope Angles Used at West End Open Pit Sectors



From Strata (figure oriented as north up).

Table 16.4: West End Open Pit Inter-Ramp Slope Angles

Sector	Northeast	Northeast	West	Southwest	Southwest Lobe	South Wall	Southeast	East
Average Slope Dip Direction	207°	140° – 160°	112°	73°	290°	0° – 18°	232°	298°
Inter-Ramp Slope Angle	47°	45°	45°	47°	47°	47°	47°	47°

Note: Open pit inter-ramp slope angles estimated by Strata.

16.3 PHASE DESIGN

The final PFS phase designs were guided by the floating cone pit shells that were described in Section 15. Phases are designed to even out waste rock stripping over the mine life and to move higher-grade ore forward in the mine schedule. The culmination of the phase designs results in the ultimate pits that were presented in Section 15. Phase designs include all internal access roads and assure proper operating requirements for mining equipment.

A total of three phases were designed to achieve the ultimate Yellow Pine open pit; an initial phase followed by an eastern extension, then a western extension. The initial phase of Yellow Pine requires 3,734 thousand tons (**kst**) of waste rock stripping to expose sufficient ore for production at the planned throughput rate. Additional waste rock movement is shown in pre-production for TSF starter dam construction requirements. The second phase of Yellow Pine mines east of the initial phase because the stripping ratio is lower on this side of the open pit and consequently gold ounces are lower cost to the east side than to the west.

The Hangar Flats open pit is planned to be mined in a single phase with a small waste rock phase that would be mined in pre-production to provide material for the tailings dam construction. Hangar Flats is a single phase because the terrain of the northwestern high wall prevents access to a second pushback in that direction.

The West End open pit is planned to be mined in three phases; the second phase expanding in every direction except for the eastern wall. An initial oxide phase was designed within the ultimate West End open pit to accommodate process plant oxide feed material requirements during the first five years of mine life.

Generally, the three Yellow Pine open pit phases are mined first in the mine schedule, followed by Hangar Flats then the two West End phases. The parameters for the mine phase designs are summarized in Table 16.5.

Table 16.5: Design Parameters for Mine Phases

Design Parameter	Parameters Value
Haul Road Width Including Ditches and Berms	102 feet
Maximum Haul Road Grade	10%
Bench Height for Mining	20 feet
Face Angle of Benches	64^{o} (Double Benched)
Overall Slope Angles Used	Variable between 39^{o}- 47^{o}
Inter-ramp Slope Angles Used	Variable between 45^{o}- 49^{o}

The material mined from each phase on an annual basis is provided on Figure 16.4 and Figure 16.5. Open pit progression (at the end of preproduction and by year thereafter) as well as waste rock storage facility and haul road progression can be seen on Figure 16.12 through Figure 16.24, inclusively.

Figure 16.4: Ore Mining Schedule by Deposit and Phase

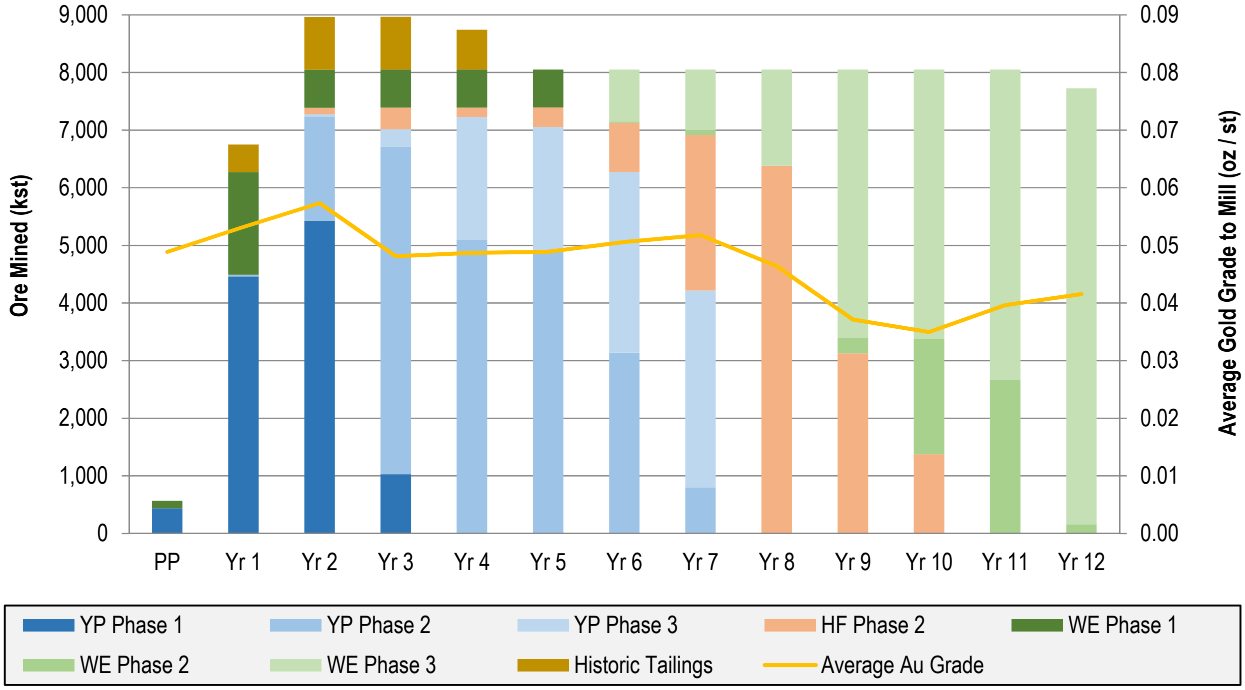
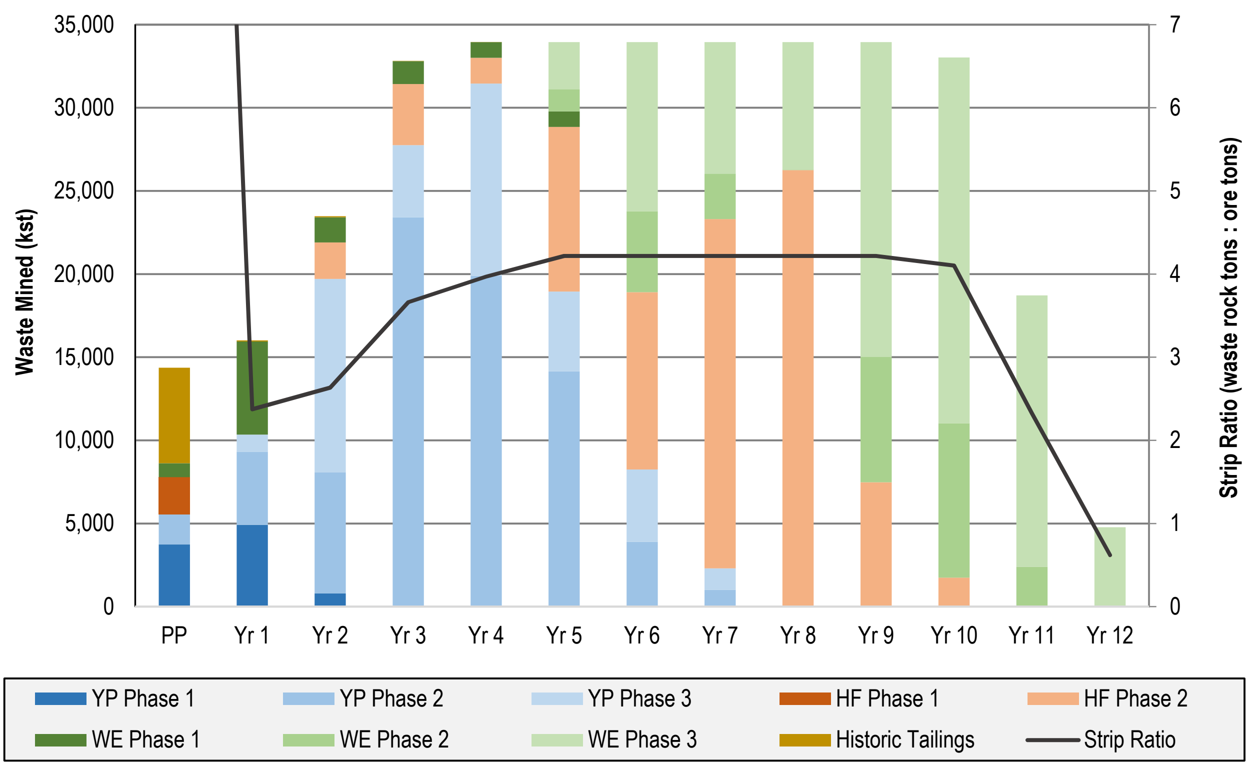


Figure 16.5: Waste Rock Mining Schedule by Deposit and Phase



16.4 MINE SCHEDULE

The mine schedule was developed based on the phase designs and the block models. The material contained within each pushback design was tabulated at multiple cutoff grades for input to the mine schedule process. As with the floating cone evaluation, only Indicated Mineral Resource categories were tabulated from the pushback designs. All other material (including Inferred Mineral Resources) was treated as waste rock in the mine schedule.

The mine schedule was developed to provide 8.05 million short tons of mined material to the primary crusher every year (22,050 short tons per day) after ramp up for approximately 12 years of mine life. The processing plant consists of a primary crusher, SAG mill, ball mill, two sequential flotation circuits, a POX circuit, CIP circuit, CIL circuit, and a conventional adsorption-desorption-recovery (**ADR**) plant. The designed process plant processes sulfide material to produce up to two mineral concentrate products: (1) when there is sufficient antimony grade to warrant, an antimony sulfide (stibnite) concentrate that would to be filtered, trucked off-site and sold; and, (2) for all material processed, an auriferous sulfide concentrate that would be oxidized onsite via POX, then processed via agitated leach, carbon stripping and refining to produce a gold- and silver-rich doré.

The Historic Tailings contain economic gold mineralization in the Indicated Mineral Resource category and are therefore included in the Mineral Reserve; they are planned to be sent to the grinding circuit during the first 4 years of the mine plan at a rate of 916 kst per year. The Historic Tailings would be mined via loader or excavator and trucked to a screening and re-slurrying system, then hydraulically transported to the process plant milling circuit. Since the Historic Tailings are quite fine-grained, typically 97% passing the #40-mesh, minimal incremental grinding effort is required by the process plant milling circuit; consequently, the processing plant would be able to accommodate the additional throughput from the Historic Tailings without the need to reduce the nominal daily mining rate.

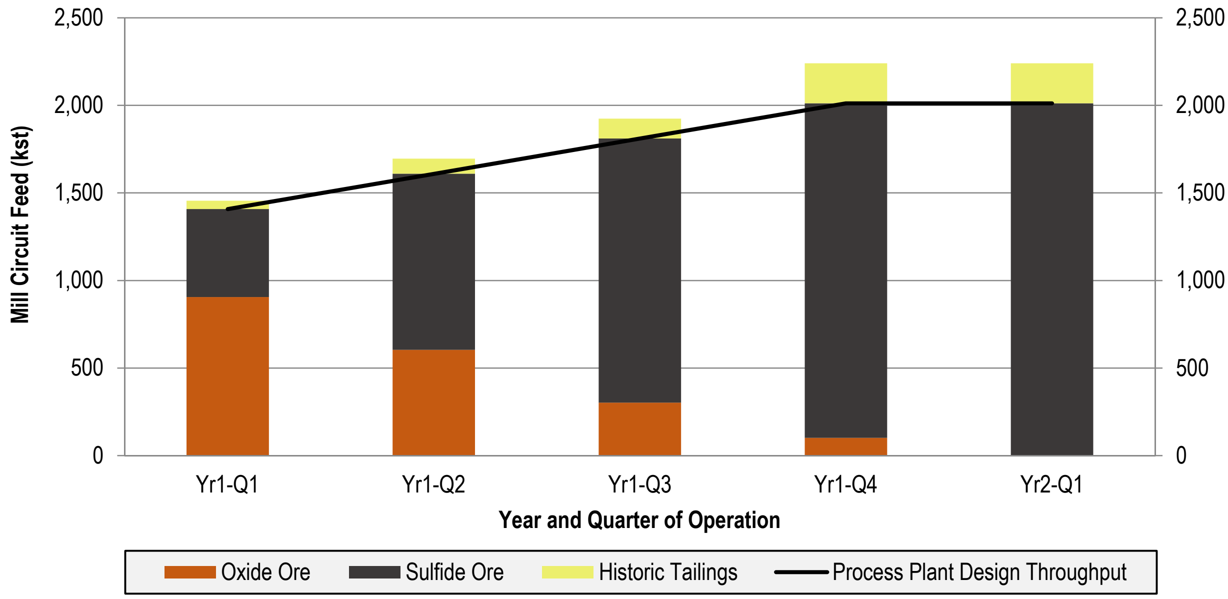
The process plant processes oxide material via crushing and grinding to produce a direct feed to the CIL circuit. Following plant commissioning, ramp up rates for the POX circuit are slower than the other circuits. To maximize utilization of all process circuits during the ramp-up period, oxide material from the West End open pit is stockpiled and batch-processed since it does not have to be processed through the POX circuit. The ramp-up schedules for the process plant and for the POX circuit are provided in Table 16.6 and Figure 16.6.

Table 16.6: Ramp-Up Schedule for Process Plant and Pressure Oxidation Circuit

Time Period	Overall Plant Design Throughput(1) (kst)	Process Plant Availability (%)	Process Plant Throughput(2) (kst)	POX Circuit Availability (%)	POX Circuit Throughput (kst)	Oxide Feed (kst)	Historic Tailings Feed (kst)
Yr1-Q1	2,012	70%	1,408	25%	503	905	48
Yr1-Q2	2,012	80%	1,609	50%	1,006	604	86
Yr1-Q3	2,012	90%	1,811	75%	1,509	302	113
Yr1-Q4	2,012	100%	2,012	95%	1,911	101	229
Yr2-Q1	2,012	100%	2,012	100%	2,012	-	229

Notes:
(1) *Overall plant design throughput excludes Historical Tailings feed.*
(2) *Process plant availability and process plant throughput excludes the pressure oxidation circuit availability and throughput.*

Figure 16.6: Chart of Ramp-Up Schedule for Process Plant and Pressure Oxidation Circuit



Following ramp-up, the oxidation circuit can be expected to have a lower annual average utilization when compared to the rest of the process plant. Fortunately, the West End deposit contains appreciable oxide mineralization that does not require oxidation prior to leaching; therefore, West End oxide material would be stockpiled and fed to the process plant during discrete times of the year while only the POX circuit is down for maintenance. This approach to processing the West End oxide material enables the process plant to operate at near its optimum utilization, while avoiding deferred processing of the high-grade, higher-NPR sulfide Mineral Reserves at Yellow Pine and Hangar Flats.

One of the main factors limiting the throughput of the POX circuit is the amount of oxygen that is able to diffuse into the slurry in the autoclave; the amount of sulfur in the feed concentrate determines how much oxygen is required to oxidize the ore. The sulfur levels are highest during the first two years of the mine schedule; however the recovery of sulfur to the antimony concentrate is expected to maintain the gold concentrate sulfur values at levels manageable for the POX circuit.

The high sulfur content of the mill feed in the first two years would produce lower than average pH solutions from the POX circuit; the low pH solutions would require additional neutralization material. Several options for neutralization material were evaluated and the selected option was to purchase additional ground lime in these periods to neutralize the tails. Other options evaluated included blending in West End ore, or adding crushed limestone from a marble deposit on the property. These options were cheaper, but they displaced enough high-grade mill feed to make them less economically attractive.

In the process of developing a sound mine operating strategy, multiple schedules were evaluated. The purpose of this work was to establish a cutoff grade schedule that balanced the increased revenue from higher head grades with the cost of mining additional waste rock tons. Using the design prices of $1,200/oz gold, $5/lb antimony and $23/oz silver, and a discount rate of 7%, a schedule was developed with increased cutoff grades and increased material mining rates to provide the highest NPV. While these design inputs differ from the final metal prices and discounting used in the PFS economic model, they were used to develop an understanding of the relative costs and benefits of increasing the head grades sent to the mill.

Cutoff grades were based on NPR in dollars per ton of ore ($/st ore) at the design prices stated above. NPR, defined as NSR less process plant OPEX and G&A, was calculated on a block-by-block basis in dollars per ton of ore ($/st ore) to indicate the value of a block.

NPR = NSR - Process Plant OPEX - Site G&A

Initially, mining costs were estimated to be $1.73/st of material. This would mean that the breakeven cutoff grade would be $1.73/st NPR and the internal cutoff grade would be $0.001/st NPR. The ore cutoff grade by period can be found in the second column of the Mine Production Schedule in Table 16.7.

Table 16.7 summarizes the mine production schedule that was developed for the PFS. This table represents the Mineral Reserve because the Probable Mineral Reserve corresponds to the total ore processed in the mine. The Probable Mineral Reserve category material was reported in Section 15. Figure 16.7 is a graphic summary of the material movements of ore and waste rock along with the strip ratio (waste rock tons : ore tons) by year and Figure 16.8 details the ore mined from each Mineral Reserve by year and includes the blended annual average gold head grade. Ore mined in pre-production (Year -1) is stockpiled and fed to the mill in Year 1.

Figure 16.7: Ore and Waste Rock Mined by Deposit by Year

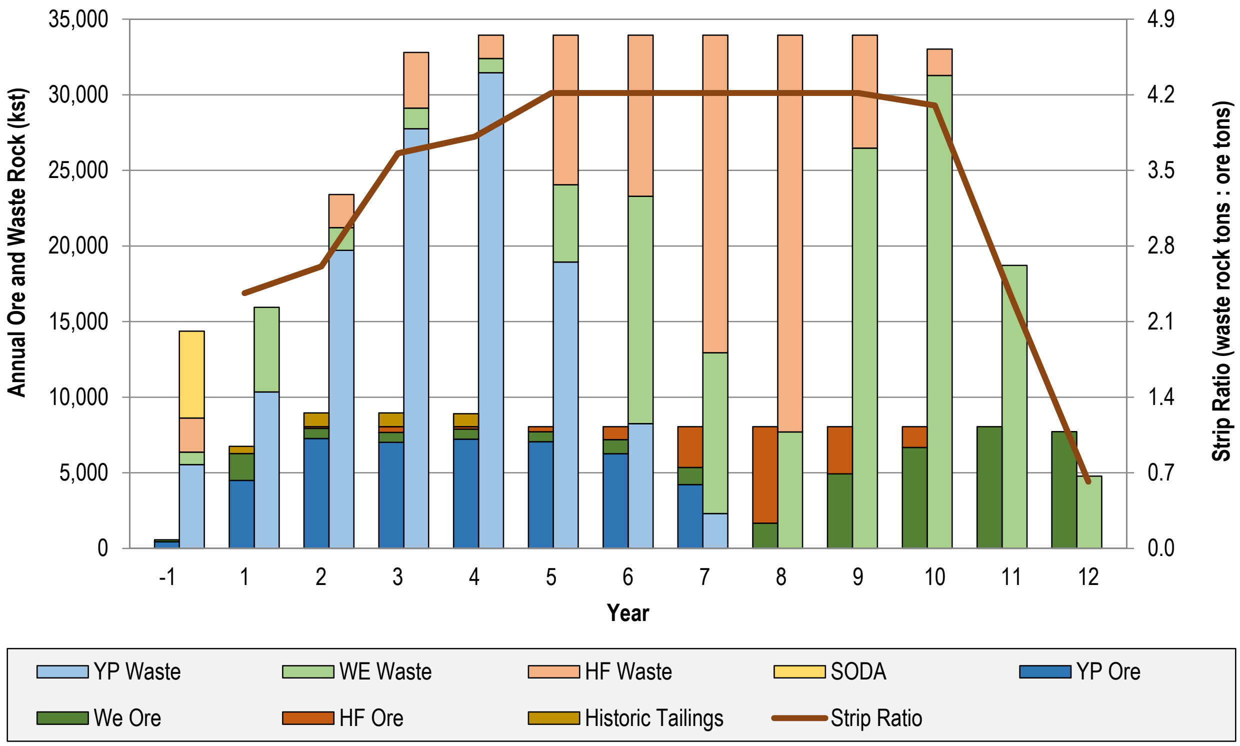


Figure 16.8: Ore Mined from Each Deposit by Type and by Year

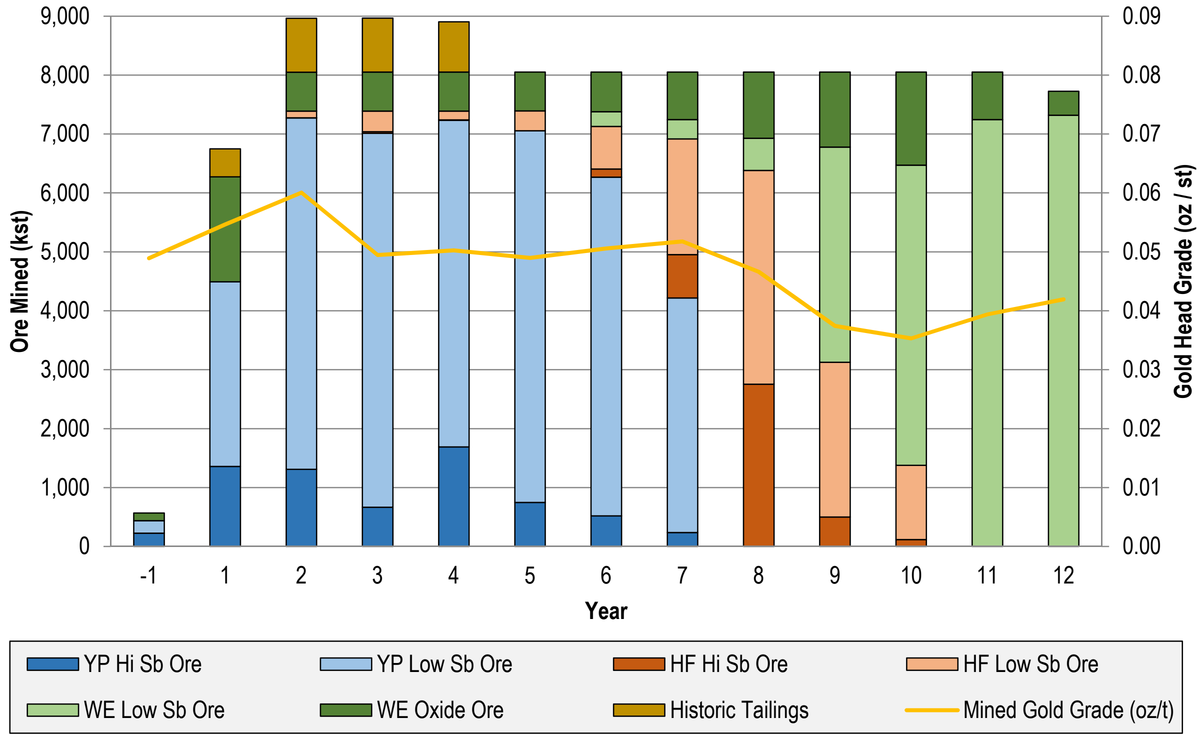


Table 16.7: Mine Production Schedule and Process Plant Feed Schedule

Time Period	Material Mined From All Pits								SODA	Ore Feed to Crusher					Historic Tailings Feed						Total Feed to the Process Plant				
	NPR Cutoff ($/st)	Ore (kst)	NPR ($/st)	Au (oz/st)	Ag (oz/st)	Sb (%)	Waste (kst)	Total (kst)	Waste (kst)	Ore (kst)	NPR ($/st)	Au (oz/st)	Ag (oz/st)	Sb (%)	Ore (kst)	NPR ($/st)	Au (oz/st)	Ag (oz/st)	Sb (%)	Waste (kst)	Ore (kst)	NPR ($/st)	Au (oz/st)	Ag (oz/st)	Sb (%)
Pre-prod-Q4							298	298	938																
Pre-prod-Q3	8.00	1	19.45	0.022	0.094	0.348	1,752	1,753	1,938																
Pre-prod-Q2	8.00	87	49.20	0.041	0.143	0.442	2,964	3,051	1,438																
Pre-prod-Q1	8.00	479	52.42	0.050	0.168	0.233	3,606	4,085	1,438																
Yr1-Q1	8.00	842	13.86	0.025	0.037	0.022	3,948	4,790		1,409	29.15	0.034	0.088	0.120	48	11.99	0.033	0.075	0.157	2	1,457	28.59	0.034	0.088	0.121
Yr1-Q2	8.00	1,609	50.01	0.050	0.119	0.183	4,348	5,957		1,609	50.01	0.050	0.119	0.183	86	11.85	0.033	0.075	0.159	6	1,695	48.07	0.049	0.116	0.182
Yr1-Q3	8.00	1,810	57.80	0.059	0.138	0.124	3,928	5,738		1,810	57.80	0.059	0.138	0.124	113	10.87	0.031	0.080	0.172	18	1,923	55.03	0.058	0.135	0.127
Yr1-Q4	8.00	2,012	65.44	0.066	0.133	0.109	3,725	5,737		2,012	65.44	0.066	0.133	0.109	229	16.33	0.037	0.080	0.163	35	2,241	60.42	0.063	0.128	0.115
Yr2-Q1	8.00	2,012	61.87	0.064	0.115	0.109	4,003	6,015		2,012	61.87	0.064	0.115	0.109	229	12.74	0.034	0.073	0.158	26	2,241	56.85	0.061	0.110	0.114
Yr2-Q2	8.00	2,013	55.24	0.058	0.099	0.108	4,980	6,993		2,013	55.24	0.058	0.099	0.108	229	2.13	0.023	0.048	0.092	25	2,242	49.82	0.054	0.094	0.107
Yr2-Q3	8.00	2,012	69.17	0.068	0.122	0.141	6,363	8,375		2,012	69.17	0.068	0.122	0.141	229	8.65	0.029	0.056	0.115	21	2,241	62.99	0.064	0.115	0.138
Yr2-Q4	7.00	2,012	46.06	0.052	0.070	0.060	8,064	10,076		2,012	46.06	0.052	0.070	0.060	229	19.22	0.040	0.089	0.178	1	2,241	43.32	0.051	0.072	0.072
Yr3	7.00	8,050	42.58	0.049	0.061	0.054	32,804	40,854		8,050	42.58	0.049	0.061	0.054	916	19.30	0.037	0.083	0.149	14	8,966	40.20	0.048	0.064	0.064
Yr4	2.00	8,050	48.51	0.050	0.108	0.155	33,950	42,000		8,050	48.51	0.050	0.108	0.155	692	15.69	0.032	0.112	0.226	15	8,742	45.91	0.049	0.108	0.160
Yr5	2.00	8,050	41.96	0.049	0.062	0.055	33,950	42,000		8,050	41.96	0.049	0.062	0.055							8,050	41.96	0.049	0.062	0.055
Yr6	3.00	8,050	44.19	0.051	0.059	0.058	33,950	42,000		8,050	44.19	0.051	0.059	0.058							8,050	44.19	0.051	0.059	0.058
Yr7	3.00	8,050	45.16	0.052	0.056	0.055	33,950	42,000		8,050	45.16	0.052	0.056	0.055							8,050	45.16	0.052	0.056	0.055
Yr8	3.00	8,050	42.52	0.046	0.100	0.171	33,950	42,000		8,050	42.52	0.046	0.100	0.171							8,050	42.52	0.046	0.100	0.171
Yr9	3.00	8,050	26.59	0.037	0.035	0.018	33,949	41,999		8,050	26.59	0.037	0.035	0.018							8,050	26.59	0.037	0.035	0.018
Yr10	4.00	8,050	24.31	0.035	0.048	0.006	33,021	41,071		8,050	24.31	0.035	0.048	0.006							8,050	24.31	0.035	0.048	0.006
Yr11	5.00	8,050	28.68	0.040	0.055	0.000	18,714	26,764		8,050	28.68	0.040	0.055	0.000							8,050	28.68	0.040	0.055	0.000
Yr12	2.00	7,726	30.18	0.042	0.045	0.000	4,778	12,504		7,726	30.18	0.042	0.045	0.000							7,726	30.18	0.042	0.045	0.000
Totals / Averages		**95,065**	**40.31**	**0.047**	**0.071**	**0.067**	**340,995**	**436,060**	**5,752**	**95,065**	**40.31**	**0.047**	**0.071**	**0.067**	**3,001**	**14.96**	**0.034**	**0.084**	**0.165**	**163**	**98,066**	**39.53**	**0.047**	**0.071**	**0.070**

Notes:
(1) NPR = Net of Process Revenue = Net Smelter Return ($/st ore) – Processing Costs ($/st ore) - Site G&A ($/st ore).
(2) Cutoff Grade for oxide ore from West End in years 1-8 is actually $0.001/st Net of Process.
(3) All units in table are imperial.
(4) Ore mined in pre-production is stockpiled and fed to the crusher in the first quarter of year 1.

16.5 WASTE ROCK STORAGE AND ALLOCATION

Waste rock from the three open pits is planned to be sent to four different destinations over the mine life. The four destinations include: the Main WRSF, the TSF embankment, the West End WRSF and the mined-out Yellow Pine open pit. The TSF embankment requires approximately 60,726 kst of rockfill for the bulk of its construction. The Main WRSF would then form a buttress immediately downstream of the TSF embankment. All of the Yellow Pine waste rock would be sent to the Main WRSF / TSF embankment, as would the Hangar Flats waste rock.

The Historic Tailings deposit lies within the footprint of the Main WRSF; consequently, the removal schedule of the Historic Tailings influences the construction of the Main WRSF. The Historic Tailings are planned to be removed from west to east; therefore, the WRSF would progress from the TSF embankment towards the east as the tailings are removed from the toe of the WRSF. West End waste rock would be sent to the West End WRSF for the first 6 years of mine life until the mining of the Yellow Pine open pit is complete; after Year 6 West End waste rock is used to backfill the Yellow Pine open pit. Figure 16.9 and Table 16.8 summarize the origin and destination of mine waste rock by time period.

Figure 16.9: Waste Rock Origin by Deposit by Year

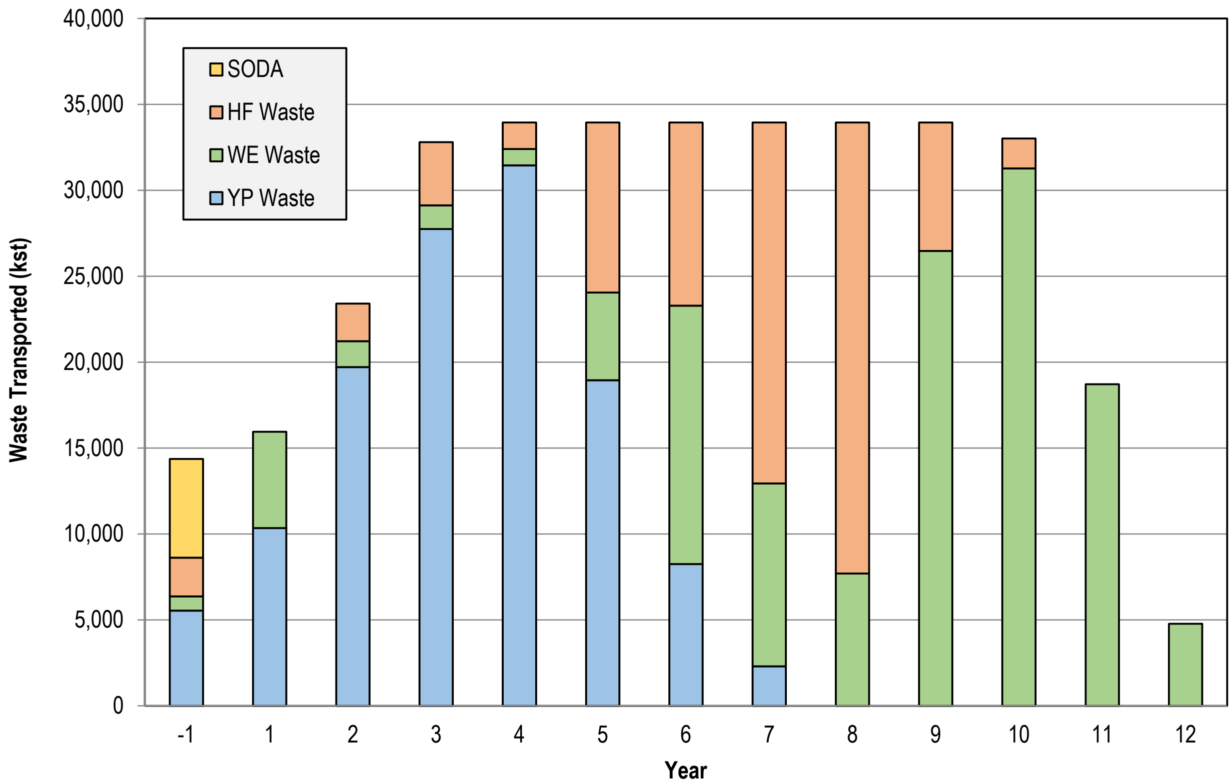


Figure 16.10: Waste Rock Destination by Period

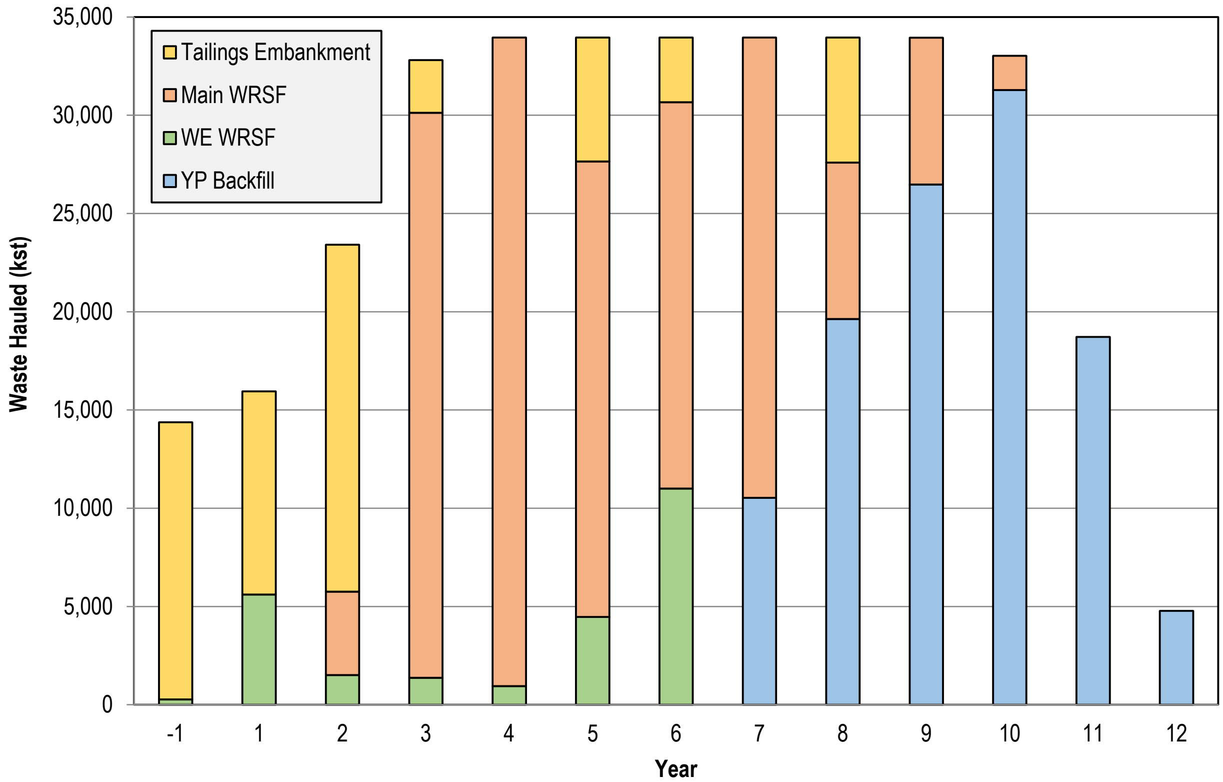


Table 16.8: Waste Rock Destination by Period

Time Period	Tailings Embankment (kst)	Main WRSF (kst)	West End WRSF (kst)	Yellow Pine Backfill (kst)
Pre-prod-q-4	1,236	-	-	-
Pre-prod-q-3	3,690	-	-	-
Pre-prod-q-2	4,402	-	-	-
Pre-prod-q-1	4,769	-	275	-
yr1-q1	1,420	-	2,528	-
yr1-q2	2,367	-	1,981	-
yr1-q3	3,042	-	886	-
yr1-q4	3,514	-	211	-
yr2-q1	4,003	-	-	-
yr2-q2	4,288	-	692	-
yr2-q3	6,363	-	-	-
yr2-q4	3,000	4,248	816	-

Time Period	Tailings Embankment (kst)	Main WRSF (kst)	West End WRSF (kst)	Yellow Pine Backfill (kst)
yr3	2,683	28,747	1,374	-
yr4	-	33,004	946	-
yr5	6,300	23,185	4,465	-
yr6	3,289	19,661	11,000	-
yr7	-	23,420	-	10,530
yr8	6,360	7,960	-	19,630
yr9	-	7,479	-	26,470
yr10	-	1,744	-	31,277
yr11	-	-	-	18,714
yr12	-	-	-	4,778
Total	**60,726**	**149,448**	**25,174**	**111,399**

As discussed earlier, the Historic Tailings are overlain by neutralized SODA. The spent ore material is planned to be loaded and hauled to the TSF embankment during pre-production as the physical characteristics and location of the material are well suited for TSF embankment construction. Approximately 5,752 kst of SODA material would be moved during the pre-production period.

16.6 MINE OPERATIONS AND EQUIPMENT

Mine mobile equipment was selected to meet the production requirements summarized in Table 16.7. All mine equipment selected for this study is standard off-the-shelf units, with the exception of the haul truck beds. Lightweight truck beds were chosen to enable the trucks to load and haul more material. Although the lightweight beds need to be replaced more frequently, the additional cost of the beds is compensated by the increased truck productivity.

Mining is scheduled for 365 days/year and 2 shifts/day of 12 hours duration. Twenty shifts per year are assumed to be lost due to weather delays and holidays. A 4-crew system working 14 days on and 14 days off has been used when calculating mine equipment operators and maintenance personnel.

The majority of production drilling is planned to be accomplished with conventional track mounted rotary blast-hole drills. Drills were selected based on the physical characteristics of the Mineral Resource and the required mining rate, and would have a 60,0000-lb pull down force with a 7-7/8" bit diameter. All dry holes would be loaded with ammonium nitrate-fuel oil (**ANFO**) while wetter holes would be lined with a plastic liner before they are loaded with emulsion slurry.

The majority of production loading is planned with 23.5 cubic yard frontend loaders. Wheel loaders were chosen over shovels for economic reasons and because the maneuverability would be beneficial at the Stibnite Gold Project since mining occurs in three separate pits. For several years, all three pits are being mined simultaneously. The 23.5 cubic yard loaders are also well suited for snow clearing and loading, SODA material loading, and to feed the crusher from stockpiles when trucked ore cannot meet the process plant throughput requirements.

Hauling is planned to be accomplished with 200-ton haul trucks fitted with lightweight beds (carrying 219 tons) for a majority of the ore and waste rock. The 200-ton haul trucks would also be used to haul accumulated snow out of the open pits and to haul SODA material to the tailings embankment.

Other equipment selected for the mining fleet include: 580-hp (D10 class) track dozers; graders with 16-foot moldboards, 20,106-gallon water trucks on 100-ton haul truck chassis, and a Low Ground Pressure 200-hp dozer to support the removal of the Historic Tailings. Small track mounted drills are included in the equipment requirements for secondary blasting and road pioneering duties. Also, these small drills would do some production drilling on the very highest benches of the phases where the working areas would not be large enough for the main production fleet. Two 4-yard backhoes would be used for general support and maintenance of drainage structures and are also planned to be used for loading Historic Tailings during the first four years of mine life.

A small fleet of 40-ton articulated haul trucks are planned for the Project; these trucks would be used for hauling Historic Tailings, constructing haul roads, and hauling ore and waste rock from the highest benches of the mine phases when the working room is narrow. A smaller 10.5-yard loader is also planned for loading the 40-ton haul trucks on the high benches and for assisting in haul road construction.

Equipment productivity was calculated on a per-shift basis considering the Project material and operating conditions. The productivity per shift and the tonnage requirements set the number of operating shifts needed per year to move the required material. Availability and utilization were applied to determine the required number of operating units. Haul truck productivity was based on detailed haul time simulations over measured haul profiles. Haul profiles were measured for each material type by time period, from each phase and storage location to each destination. Table 16.9 summarizes the mine mobile equipment fleet requirements for the mine life. In some years the mobile equipment on hand may be greater than the average fleet required; this results from the need to account for short-term fluctuations in equipment requirements.

Table 16.9: Major Mine Mobile Equipment Requirements

Equipment Type	Time Period												
	PPQ -5	PPQ -4	PPQ -3	PPQ -2	PPQ -1	Yr1-Q1	Yr1-Q2	Yr1-Q3	Yr1-Q4	Yr2-Q1	Yr2-Q2	Yr2-Q3	Yr2-Q4
Cat MD6290 Blasthole Drill	0	0	0	1	1	2	3	3	3	3	3	4	4
Cat 994 Loader	0	1	2	2	2	2	3	3	2	2	3	4	4
Cat 789 Haul Truck	0	3	4	6	10	6	9	10	10	11	14	17	18
Cat D10 Track Dozer	3	5	5	4	5	4	4	4	4	4	5	4	4
Cat D6TLGP Dozer	0	0	0	0	0	1	1	1	1	1	1	1	1
Cat 16M Grader	2	2	2	2	2	3	3	3	3	3	3	3	3
Cat 777 Water Truck	0	1	1	1	2	2	2	2	2	2	2	2	2
Cat 990 Loader	1	1	1	1	1	1	1	1	1	1	1	1	1
Cat 740 Haul Truck	3	5	5	5	3	3	5	4	5	5	4	3	3
Cat MD 5150 Pioneer Drill	3	3	3	2	2	2	2	2	2	1	2	1	1
Cat 349 Excavator	1	1	1	1	1	1	2	2	2	2	2	2	2
TOTAL	**13**	**22**	**24**	**25**	**29**	**27**	**35**	**35**	**35**	**35**	**40**	**42**	**43**

Equipment Type	Time Period									
	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12
Cat MD6290 Blasthole Drill	5	5	5	5	5	5	5	5	3	2
Cat 994 Loader	4	4	4	4	4	4	4	4	3	2
Cat 789 Haul Truck	18	20	19	20	15	16	16	13	9	6
Cat D10 Track Dozer	4	5	4	3	3	3	3	3	2	2
Cat D6TLGP Dozer	1	1	0	0	0	0	0	0	0	0
Cat 16M Grader	3	3	3	3	3	3	3	2	2	1
Cat 777 Water Truck	2	2	2	2	2	2	2	2	1	1
Cat 990 Loader	1	1	1	1	1	1	1	1	1	1
Cat 740 Haul Truck	3	3	3	2	1	1	5	5	1	1
Cat MD 5150 Pioneer Drill	1	1	2	1	1	1	1	1	1	1
Cat 349 Excavator	2	2	1	1	1	1	1	1	1	1
TOTAL	**44**	**47**	**44**	**42**	**36**	**37**	**41**	**37**	**24**	**18**

The requirements for mine supervision, operations, and maintenance personnel were calculated using the equipment list and mine schedule. For the first half of the mine life 36 salaried personnel were included for supervision, engineering, geology, and ore control; starting in Year 7, only 34 salaried personnel were included.

Mine operations and maintenance labor increases to 213 persons in the end of year two and stays between 213 and 230 persons until labor requirements begin to decline in Year 7. Maintenance personnel requirements are set to be around 50% of operations labor required. The salary and hourly staff requirements are provided in Table 16.10 and Table 16.11, respectively. Figure 16.11 presents the mine staffing graphically.

Table 16.10: Salary Staff Requirements

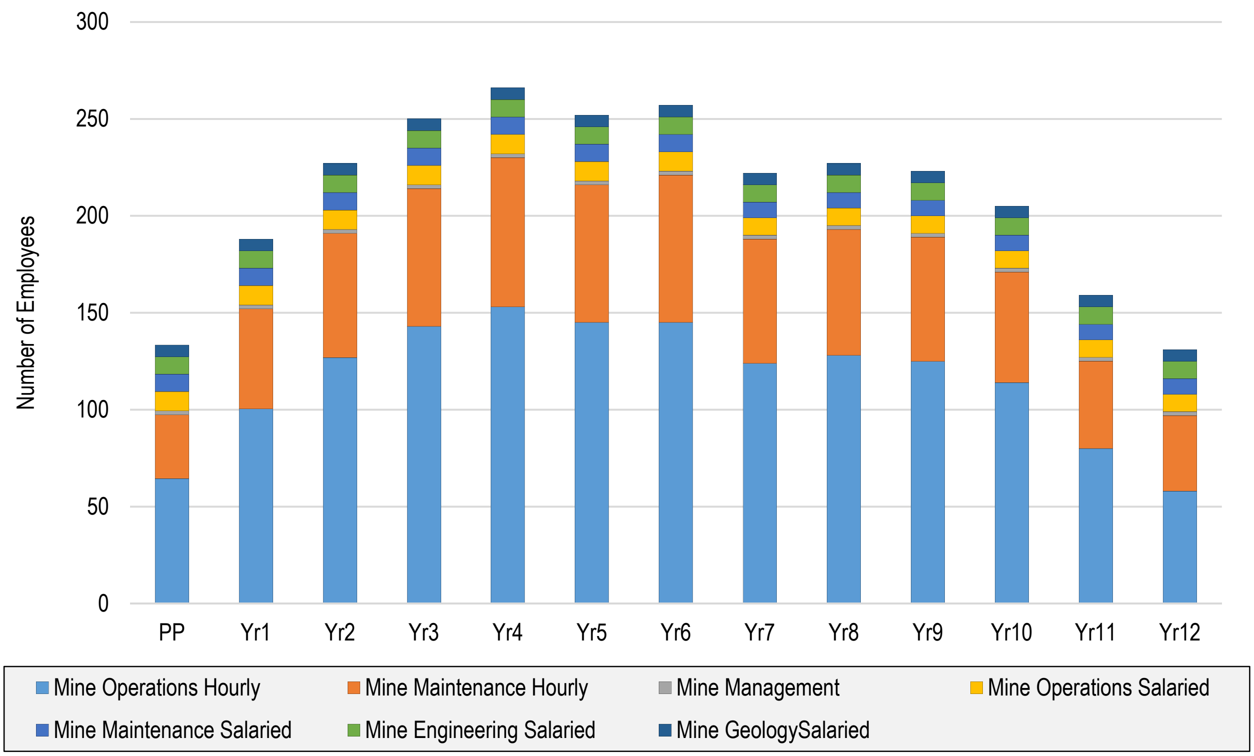
Job Titles	Time Period												
	Pre-Prod	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12
Mine Manager	1	1	1	1	1	1	1	1	1	1	1	1	1
Secretary	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Mine Operations													
Mine Superintendent	1	1	1	1	1	1	1	1	1	1	1	1	1
Mine Shift Foreman	4	4	4	4	4	4	4	4	4	4	4	4	4
Blasting Foreman	2	2	2	2	2	2	2	2	2	2	2	2	2
Mine Clerk	2	2	2	2	2	2	2	2	2	2	2	2	2
Mine Trainer	1	1	1	1	1	1	1	-	-	-	-	-	-
Mine Operations Total	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**9**	**9**	**9**	**9**	**9**	**9**
Mine Maintenance													
Maintenance Superintendent	1	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Shift Foreman	4	4	4	4	4	4	4	4	4	4	4	4	4
Maintenance Planner	1	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Trainer	1	1	1	1	1	1	1	-	-	-	-	-	-
Maintenance Clerk	2	2	2	2	2	2	2	2	2	2	2	2	2
Mine Maintenance Total	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**8**	**8**	**8**	**8**	**8**	**8**
Mine Engineering													
Senior Mine Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining Engineer	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyor	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyor Helper	4	4	4	4	4	4	4	4	4	4	4	4	4
Mine Engineering Total	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
Mine Geology													
Senior Mine Geologist	1	1	1	1	1	1	1	1	1	1	1	1	1
Mine Geologist	2	2	2	2	2	2	2	2	2	2	2	2	2
Geotechnical Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1
Sampler	2	2	2	2	2	2	2	2	2	2	2	2	2
Mine Geology Total	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Total Personnel	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**34**	**34**	**34**	**34**	**34**	**34**

Table 16.11: Hourly Staff Requirements

Job Titles	Time Period												
	PPQ -5	PPQ -4	PPQ -3	PPQ -2	PPQ -1	Yr1-Q1	Yr1-Q2	Yr1-Q3	Yr1-Q4	Yr2-Q1	Yr2-Q2	Yr2-Q3	Yr2-Q4
Mine Operations													
Drill Operator	-	-	-	1	3	6	8	7	7	7	8	10	13
Loader Operator	-	2	5	5	6	5	7	7	6	6	9	10	10
Haul Truck Driver	-	4	13	19	31	17	27	33	33	35	43	54	56
Track Dozer Operator	4	6	12	11	11	11	10	10	10	10	11	10	10
LGP Dozer Operator	-	-	-	-	-	1	1	1	2	2	2	2	2
Grader Operator	2	3	4	6	5	6	6	6	7	7	7	8	7
Service Crew	10	15	26	26	26	26	26	26	26	26	26	26	26
Blasting Crew	4	6	6	6	6	6	6	6	6	6	6	6	6
Dispatch Operator	-	-	4	4	4	4	4	4	4	4	4	4	4
Laborer	2	6	6	6	6	6	6	6	6	6	6	6	6
Mine Operations Totals	**22**	**42**	**76**	**84**	**98**	**88**	**101**	**106**	**107**	**109**	**122**	**136**	**140**
Mine Maintenance													
Mechanic	2	6	11	13	17	14	19	20	20	20	24	29	31
Mechanic's Helper	1	3	4	5	7	6	8	8	8	8	9	11	12
Welder	1	2	4	4	5	5	6	6	6	6	8	9	10
Fuel & Lube Crew	4	4	8	8	8	8	8	8	8	8	8	8	8
Tire Crew	4	4	8	8	8	8	8	8	8	8	8	8	8
Laborer	2	2	4	4	4	4	4	4	4	4	4	4	4
Mine Maintenance Totals	**14**	**21**	**39**	**42**	**49**	**45**	**53**	**54**	**54**	**54**	**61**	**69**	**73**
Total Labor Requirements	**36**	**63**	**115**	**126**	**147**	**133**	**154**	**160**	**161**	**163**	**183**	**205**	**213**
Maintenance / Operations Ratio	**0.64**	**0.50**	**0.51**	**0.50**	**0.50**	**0.51**	**0.52**	**0.51**	**0.50**	**0.50**	**0.50**	**0.51**	**0.52**

Job Titles	Time Period									
	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12
Mine Operations										
Drill Operator	14	15	15	15	13	13	14	14	10	5
Loader Operator	11	11	11	11	11	11	10	10	7	4
Haul Truck Driver	57	64	60	63	46	50	50	42	28	17
Track Dozer Operator	10	11	10	7	6	6	6	6	5	5
LGP Dozer Operator	2	2	0	0	0	0	0	0	0	0
Grader Operator	7	8	7	7	6	6	6	5	5	2
Service Crew	26	26	26	26	26	26	23	21	9	9
Blasting Crew	6	6	6	6	6	6	6	6	6	6
Dispatch Operator	4	4	4	4	4	4	4	4	4	4
Laborer	6	6	6	6	6	6	6	6	6	6
Mine Operations Totals	**143**	**153**	**145**	**145**	**124**	**128**	**125**	**114**	**80**	**58**
Mine Maintenance										
Mechanic	30	34	30	33	26	27	26	22	14	11
Mechanic's Helper	12	13	12	13	10	10	10	8	6	4
Welder	9	10	9	10	8	8	8	7	5	4
Fuel & Lube Crew	8	8	8	8	8	8	8	8	8	8
Tire Crew	8	8	8	8	8	8	8	8	8	8
Laborer	4	4	4	4	4	4	4	4	4	4
Mine Maintenance Totals	**71**	**77**	**71**	**76**	**64**	**65**	**64**	**57**	**45**	**39**
Total Labor Requirements	**214**	**230**	**216**	**221**	**188**	**193**	**189**	**171**	**125**	**97**
Mine Maintenance/Operations Ratio	**0.50**	**0.50**	**0.49**	**0.52**	**0.52**	**0.51**	**0.51**	**0.50**	**0.56**	**0.67**

Figure 16.11: Salaried and Hourly Mining Personnel by Department by Year



16.7 EXTERNAL HAUL ROADS AND MINE SEQUENCE DRAWINGS

The terrain in the area of the Stibnite Gold Project comprises steep-walled valleys and, as a result, initial haul road access to the upper benches of the open pits would require significant effort in road pioneering. Construction of these roads is planned ahead of phase mining so that access is available during scheduled mining. Designs of the initial access roads and other necessary external haul roads can be seen on the time sequence plans presented on Figure 16.12 to Figure 16.24, inclusively. Key details for each year of mining are provided with each figure.

Mining at the Project would begin in the Yellow Pine Deposit to target the lowest cost gold ounces. Yellow Pine is scheduled to be mined as quickly as possible because it contains the lowest cost ounces and also because the Yellow Pine pit needs to be available for backfilling with waste rock generated from West End, and to ultimately re-route the EFSFSR to its pre-mining vertical and horizontal alignments. The Yellow Pine pit is completed midway through year 7, at which time it begins to be backfilled with West End waste rock.

The mill requires 1,912,000 tons of oxide in the first year of production for plant ramp up. Following year 1, the mill requires at least 660,000 tons of oxide ore per year for processing during scheduled autoclave maintenance periods. A small initial phase targeting oxides is designed in the West End deposit, which contains the only oxide resource of the Project. This small phase contains enough oxide ore to feed the mill for five years before oxide ore is released from later West End phases. Waste produced from West End before the Yellow Pine pit is available for backfilling is stored in a small waste rock storage facility up the canyon from the West End open pit.

During pre-production, 8,710 kst of rock fill are required for the construction of the TSF starter embankment. This rock requirement necessitates mining more than just the primary Yellow Pine phase during pre-production. Waste rock is mined from Yellow Pine phases and a small phase in Hangar Flats to combine with SODA material to make up the construction requirements of the TSF in pre-production.

The Main WRSF is located east and on the down-slope of the TSF embankment. It expands eastward from the TSF as the Historic Tailings are removed and reprocessed, ensuring additional buttressing of the TSF. Once the Historic Tailings are completely removed in year four, the Main WRSF is expanded to the final footprint so that the waste rock can be placed in lifts from lower to higher elevations. During mining, Yellow pine waste rock is planned to be preferentially sent to the lower elevation of the WRSF over the TSF except when the TSF embankment requires additional construction material.

Figure 16.12: Annual Open Pit and Waste Rock Storage Facility Plan – End of Pre-Production

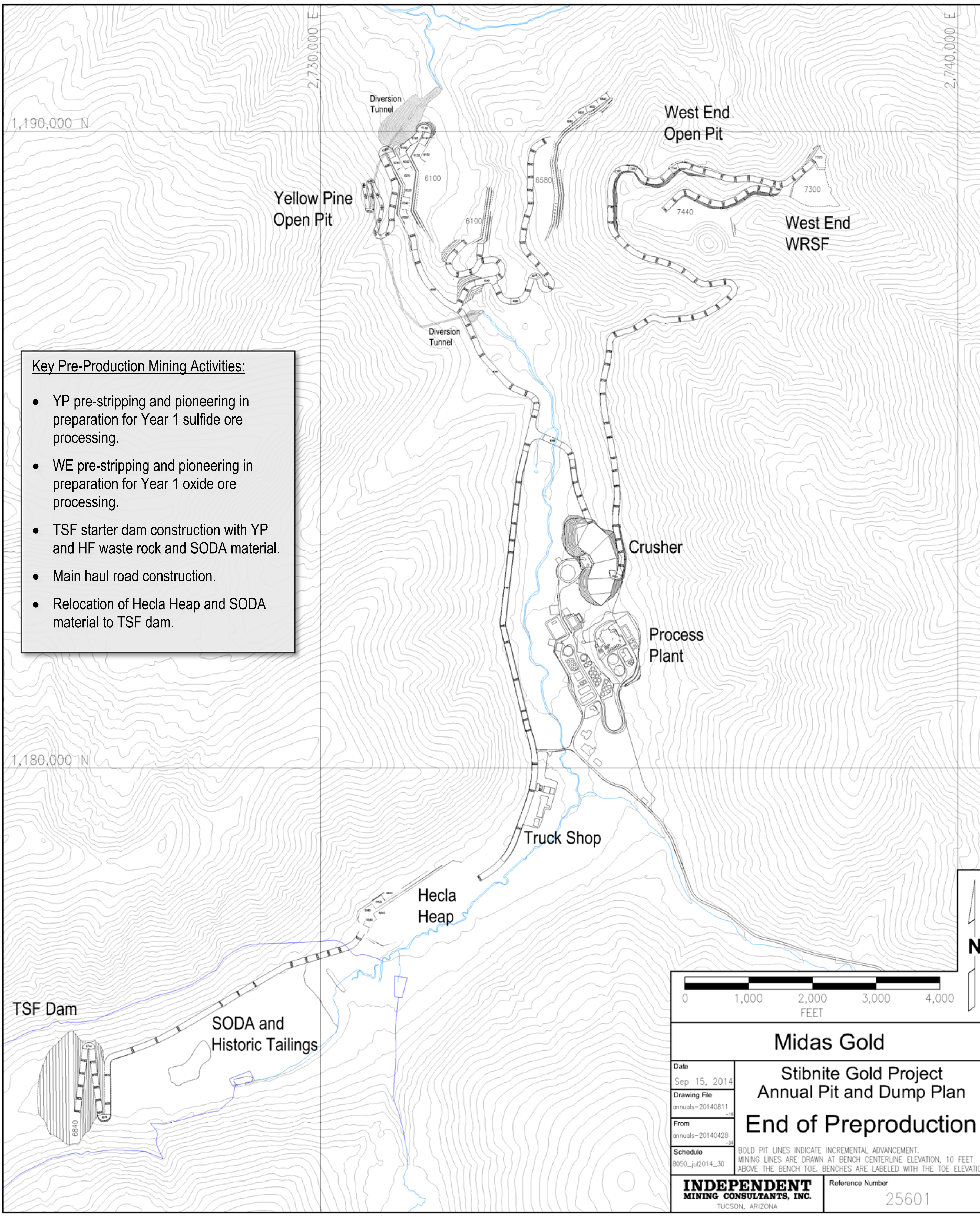


Figure 16.13: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 1

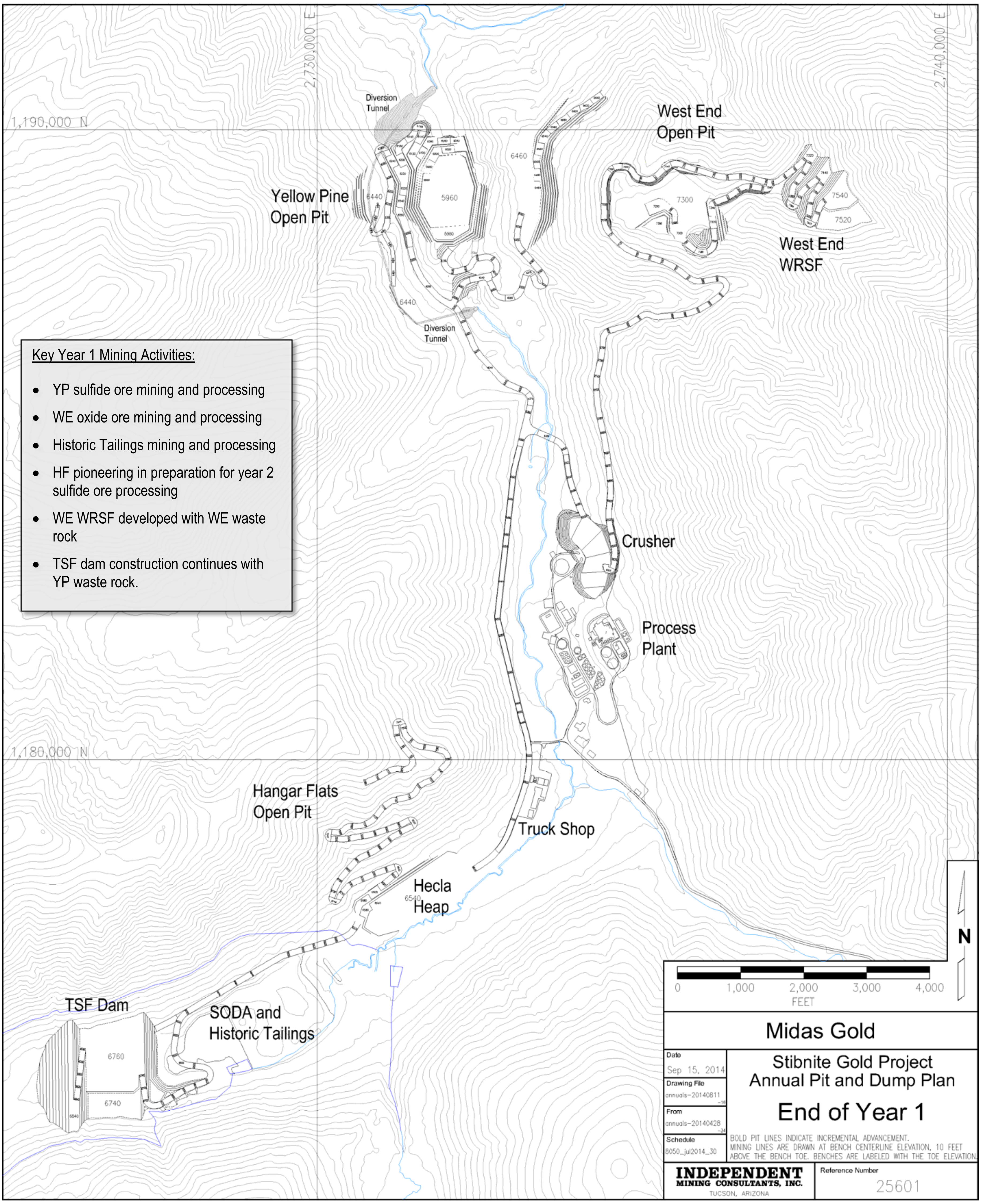


Figure 16.14: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 2

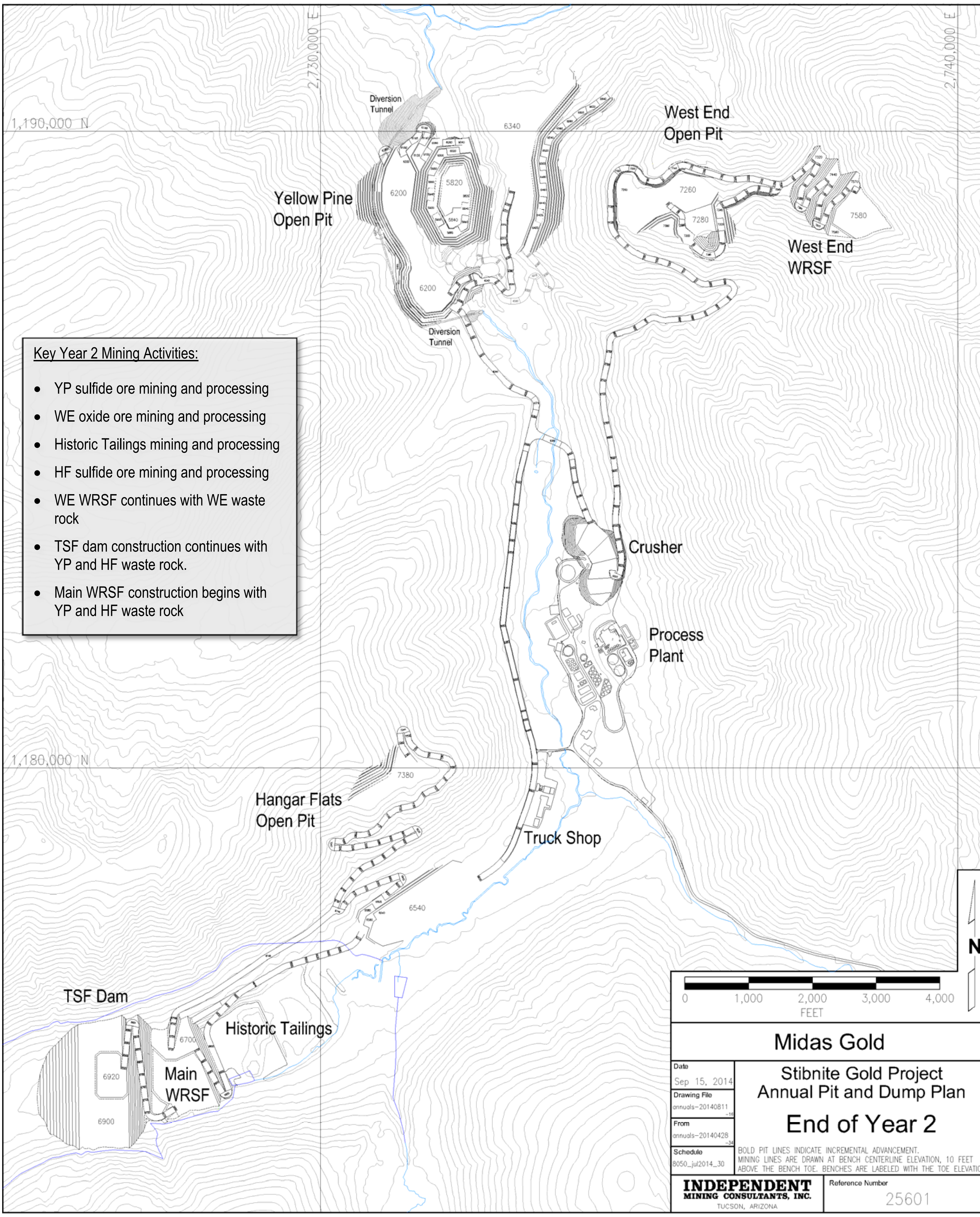


Figure 16.15: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 3

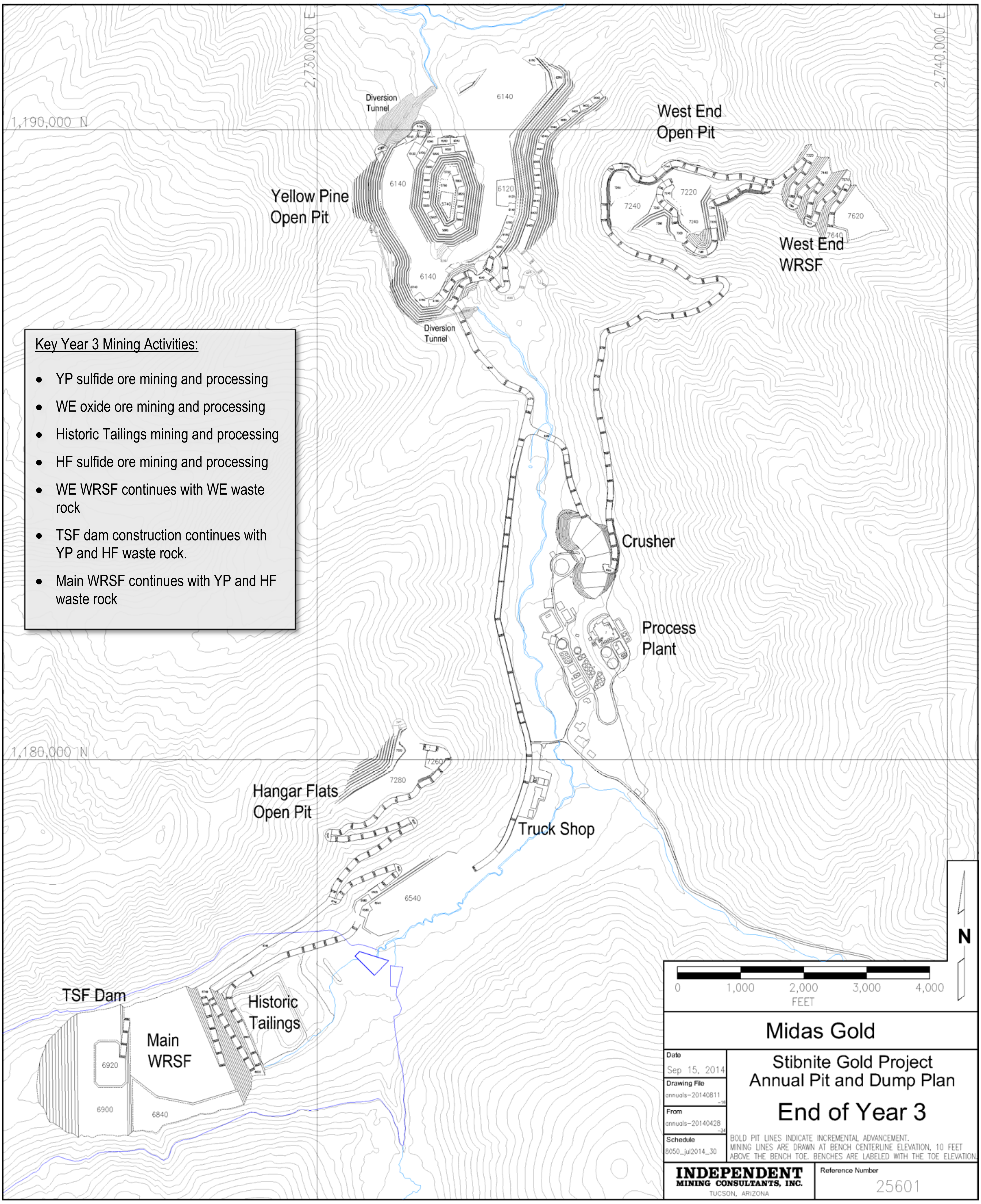


Figure 16.16: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 4

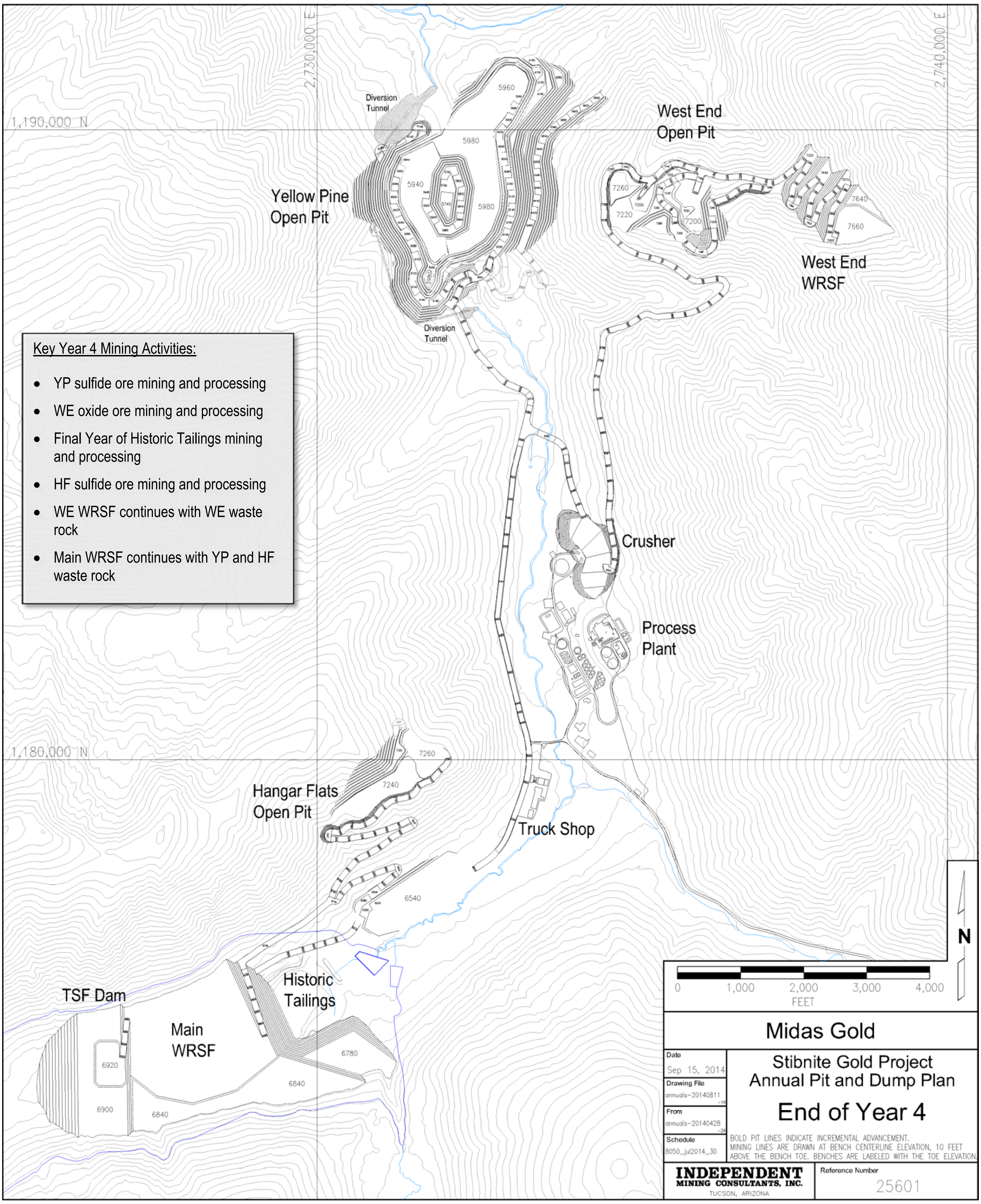


Figure 16.17: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 5

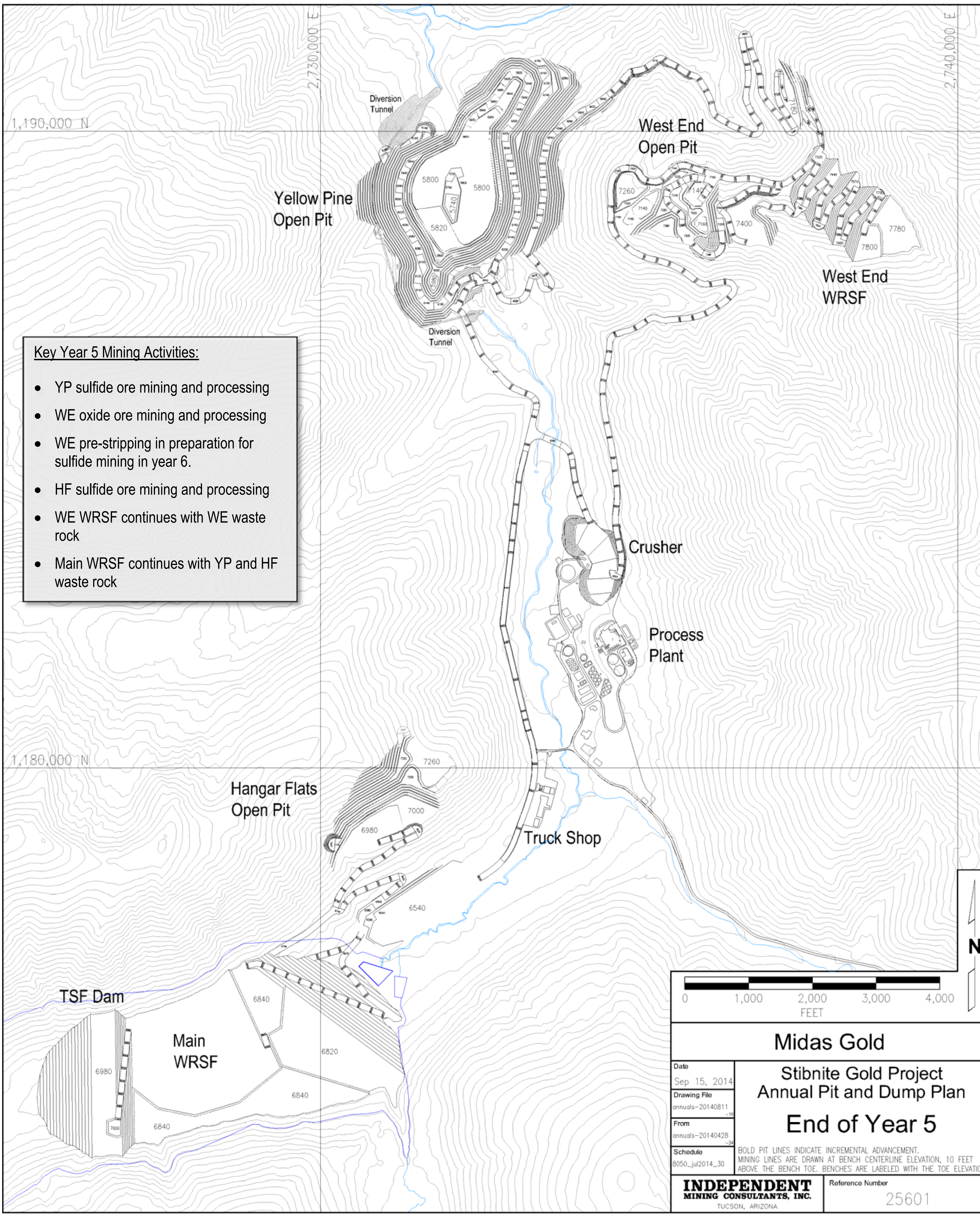


Figure 16.18: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 6

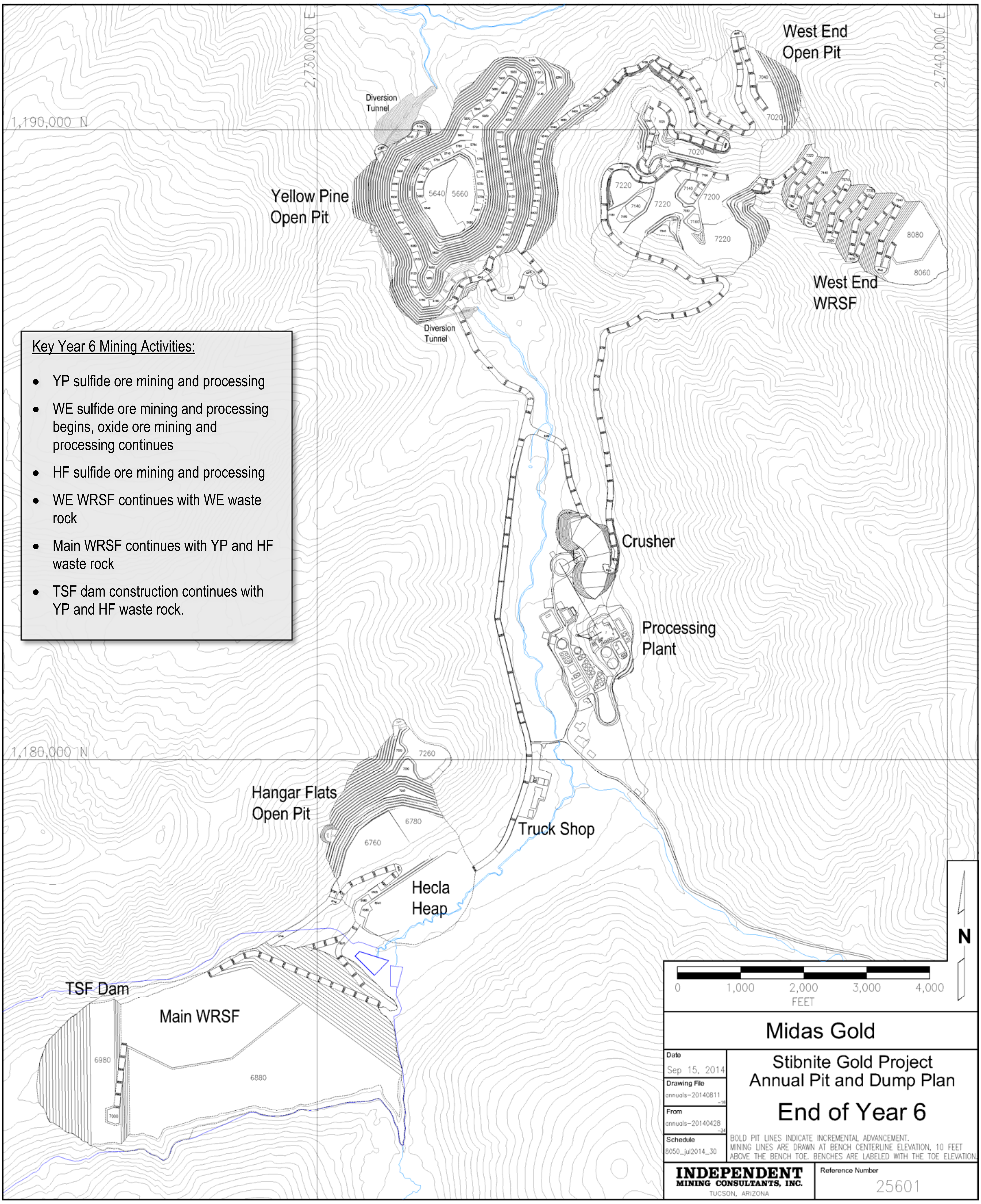


Figure 16.19: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 7

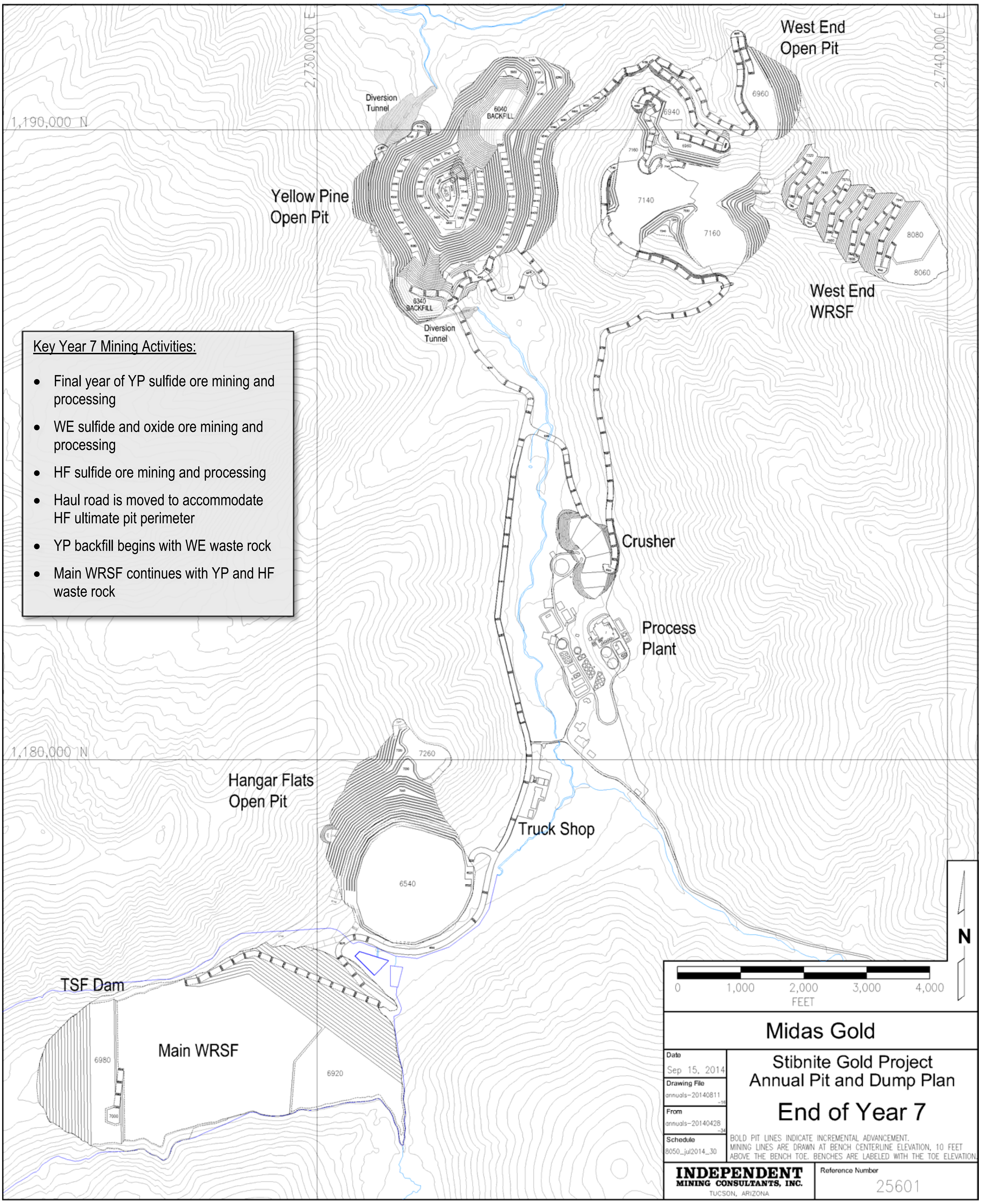


Figure 16.20: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 8

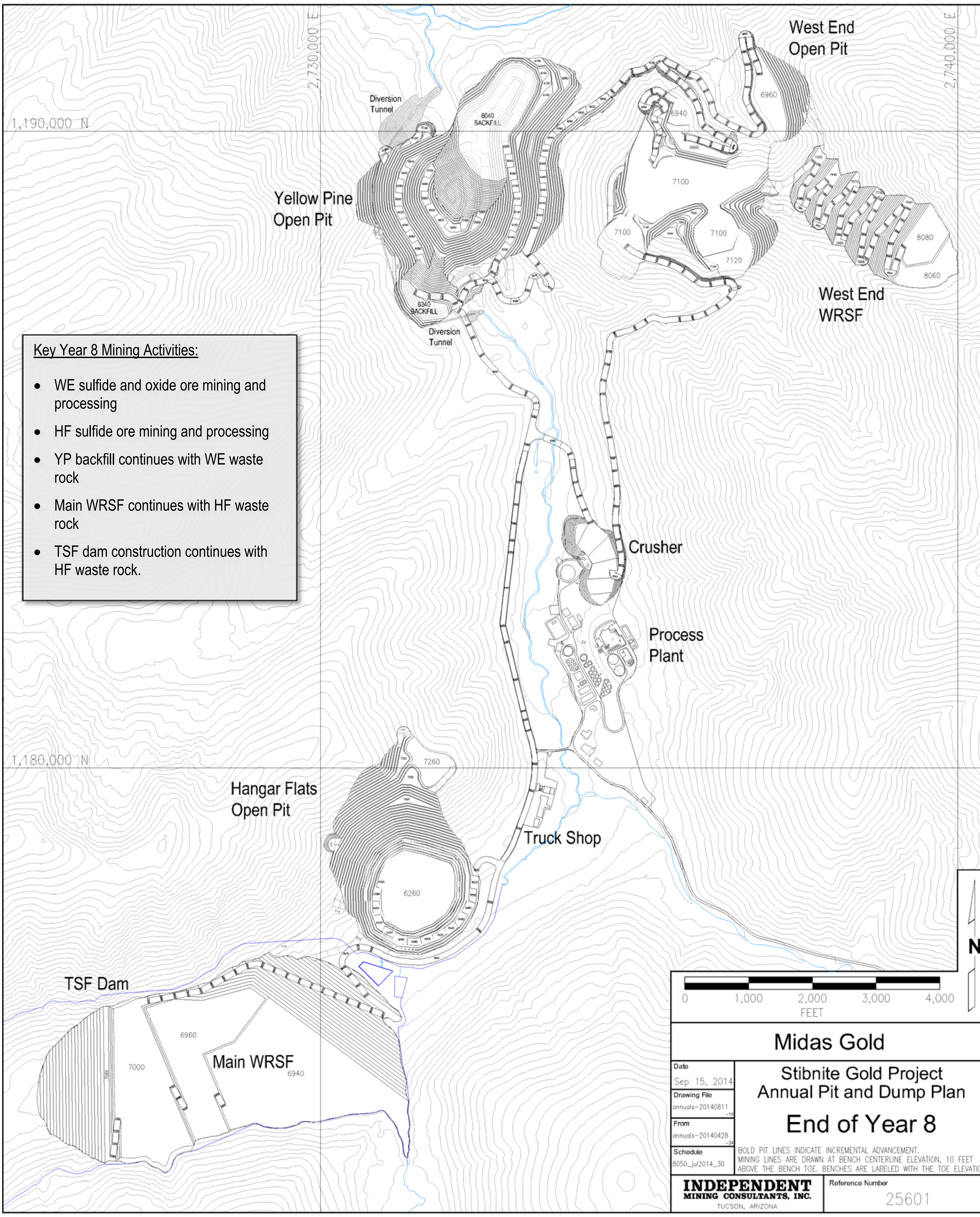


Figure 16.21: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 9

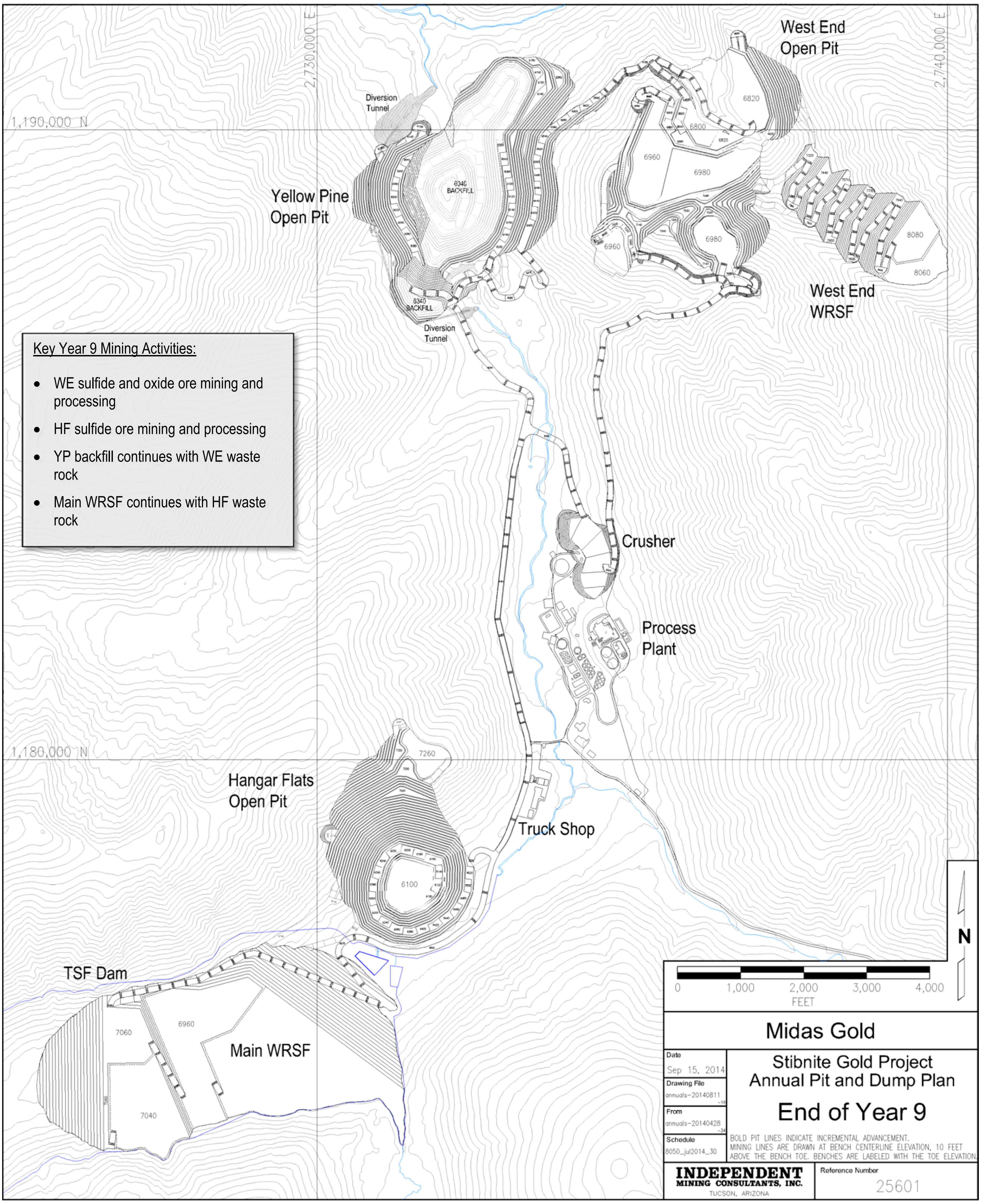


Figure 16.22: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 10

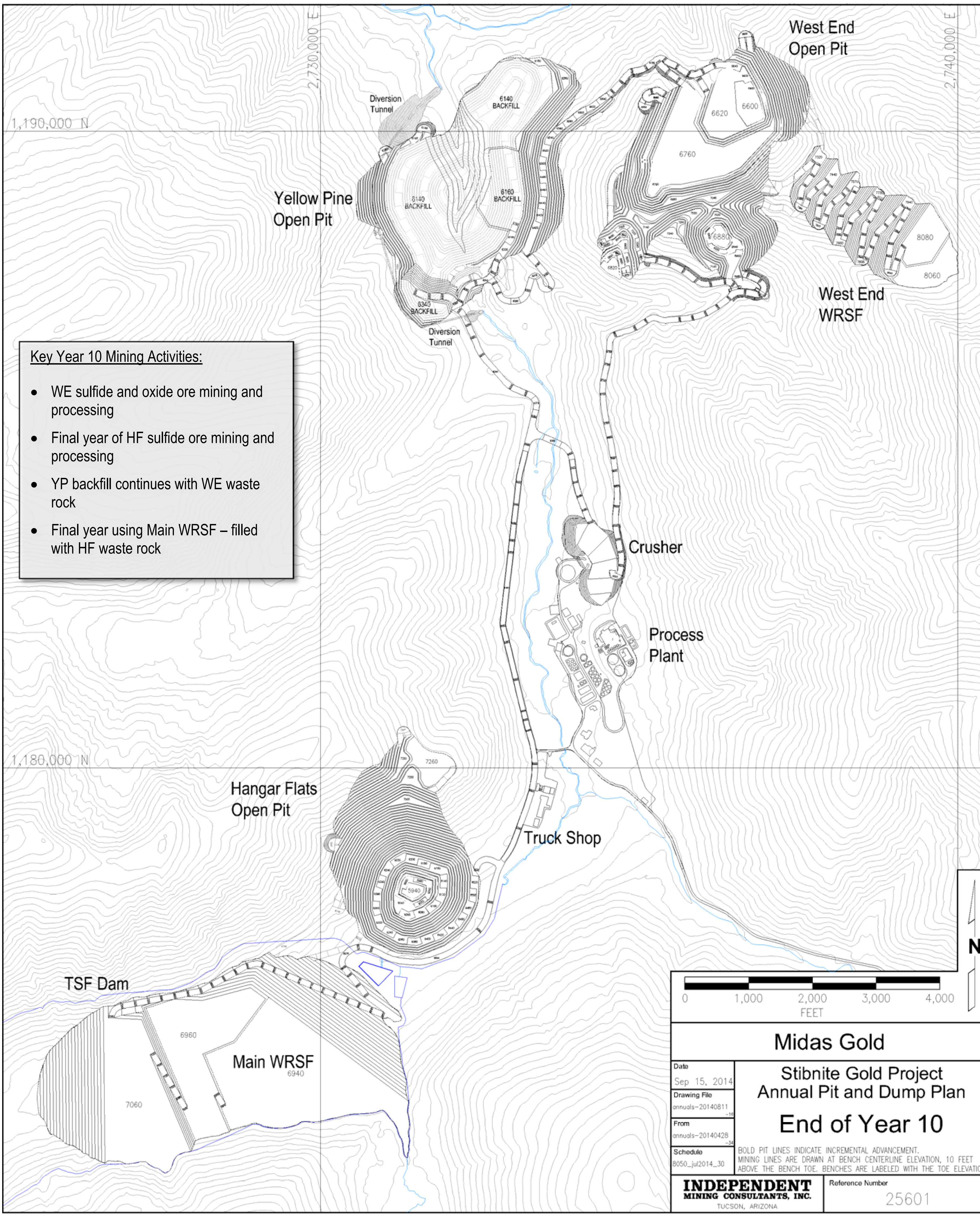


Figure 16.23: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 11

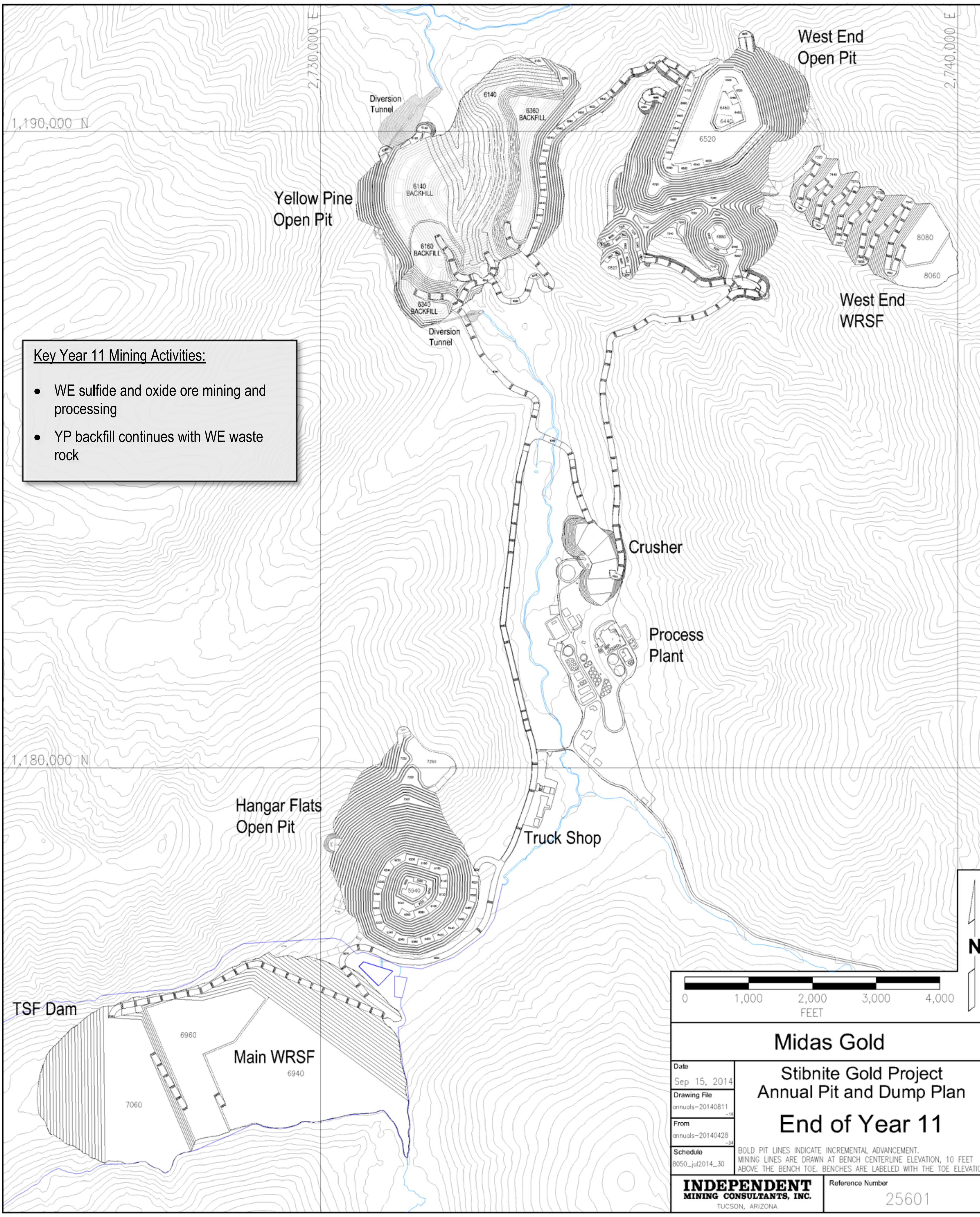
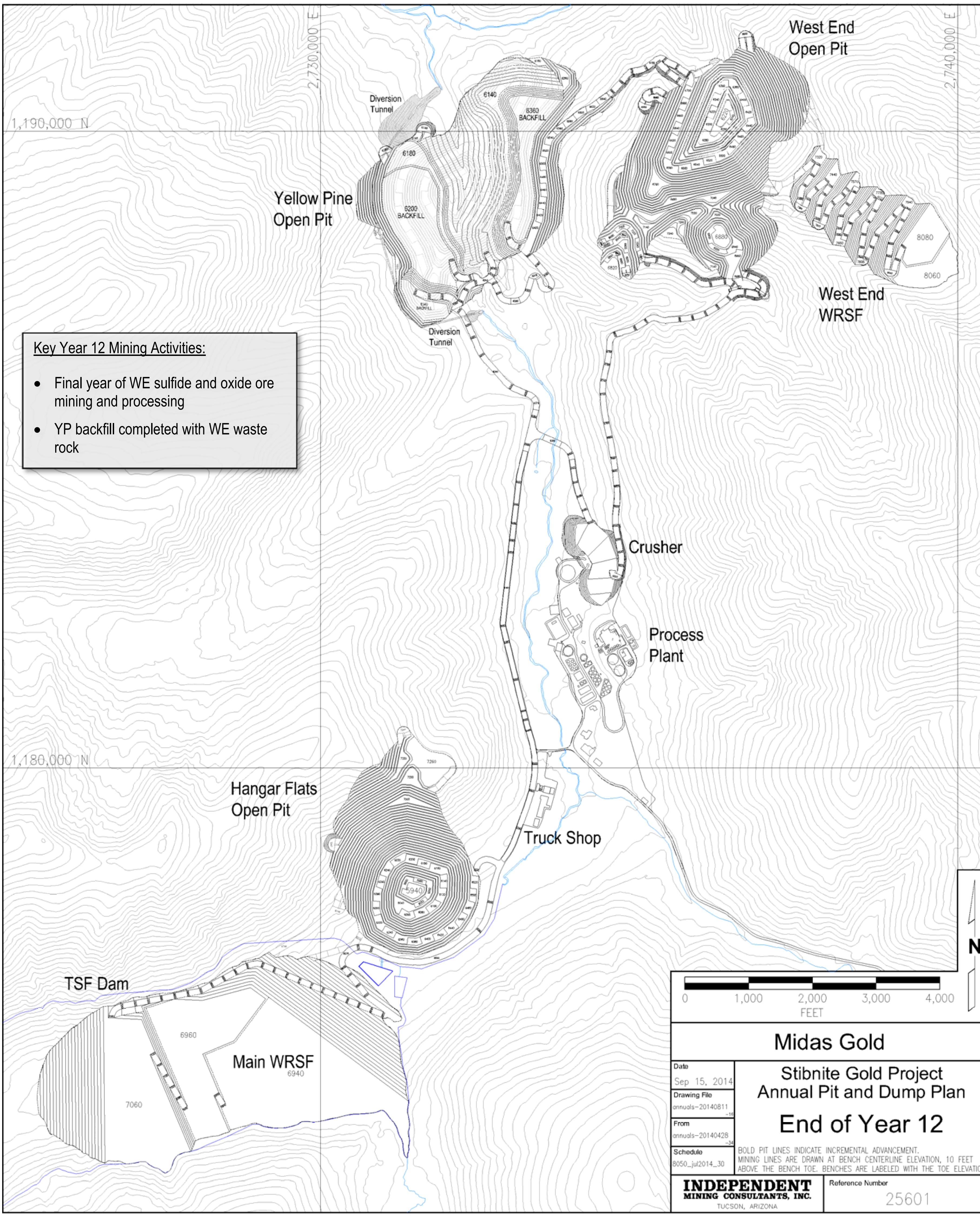


Figure 16.24: Annual Open Pit and Waste Rock Storage Facility Plan – End of Year 12



SECTION 17 TABLE OF CONTENTS

SECTION 17 LIST OF TABLES

SECTION 17 LIST OF FIGURES

17 RECOVERY METHODS

17.1 OVERVIEW

The Stibnite Gold Project process plant has been designed to process both sulfide and oxide mineralized material from three deposits (Hangar Flats, Yellow Pine, and West End) as well as Historic Tailings from former milling operations. The design of the processing facility was developed based on the laboratory testing, summarized in Section 13, to treat an average of 22,046 st/d, 365 days per year for a total of 8.05 million tons per year.

ROM material would be crushed and milled, then flotation and hydrometallurgical operations would be used to recover antimony as a stibnite flotation concentrate (with some silver and minor gold), doré bars containing gold and silver, and small quantities of elemental mercury, collected in flasks, to prevent its potential release into the environment. Historic Tailings would be introduced into the ball mill during the first 3 - 4 years of operation. Tailings from the operation would be deposited in a geomembrane-lined TSF. A simplified process flow diagram is shown on Figure 17.1 and a list of major equipment, including the estimated connected power requirements, is shown in Table 17.1.

Figure 17.1: Simplified Process Flow Diagram

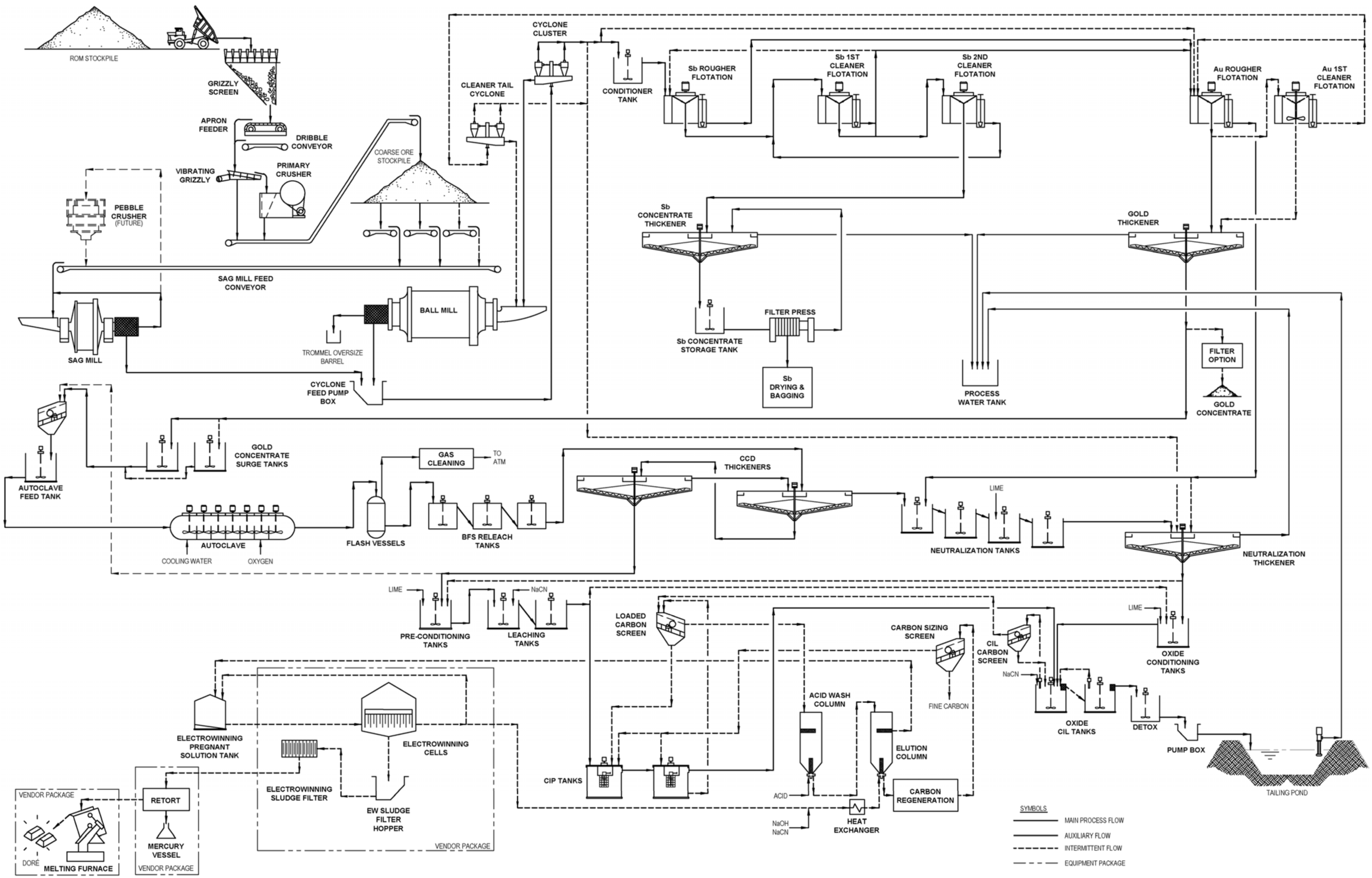


Table 17.1: Major Process Equipment List and Estimated Connected Power Requirements

No	Item	Description	Estimated Connected Power Required (kW)	
			Each	Total
1	Primary Jaw Crusher	Metso C200 Jaw Crusher; feed opening 79 in x 60 in; 160 in wide x 264 in long x 111 in high	373.0	373.0
1	Cyclone Cluster	10 cyclones in cluster; gMax26 type		
1	Semi Autogenous Grinding (SAG) Mill	30 ft diameter x 16 ft effective grinding length	7,500	7,500
1	Ball Mill	24 ft diameter x 40 ft effective grinding length	13,500	13,500
1	Cyclone Overflow Analyzer	On-Stream Analyzer		
5	Sb Rougher Flotation Cell	2,500 ft^3 Tank Cell	90.0	450.0
6	Sb 1st Cleaner Flotation Cell	350 ft^3 Tank Cell	18.7	112.2
4	Sb 2nd Cleaner Flotation Cell	180 ft^3 Tank Cell	11.0	44.0
9	Gold Rougher Flotation Cell	17,650 ft^3 SuperCell or similar	447.6	4028.4
7	Gold 1st Cleaner – Cleaner Scavenger Flotation Cells	5,650 ft^3 tank cell	186.5	1305.5
1	Gold Concentrate Thickener	100 ft diameter high – rate thickener	15	15
1	Autoclave	15.1 ft ID x 106 ft t/t; hemispherical heads; brick lined, seven compartment, agitated		
7	Autoclave Agitators		112	784
2	Flash Vessels	15.5 ft diameter x 28 ft high, brick lined		
3	Basic Ferric Sulfate (BFS) Releach Tanks	29 ft diameter x 31 ft high; Super Duplex Steel; closed top; agitated	37.5	112.5
2	Countercurrent Decantation (CCD) Thickeners	170 ft diameter high rate thickener	15	30
6	Neutralization Tanks	52 ft dia. x 54 ft high, four tanks of 316L, two tanks of carbon steel; closed top, agitated	75	450
1	Neutralization Thickener	150 ft diameter high-rate thickener	15	15
2	Concentrate Preconditioning Tanks	49 ft diameter x 51 ft high; carbon steel, agitated	18.7	37.4
4	Concentrate Leaching Tanks	52 ft diameter x 54 ft high; carbon steel, agitated	37.5	150
6	Concentrate CIP Tanks	20 ft diameter x 30 ft tank height; 2 ft freeboard; carbon steel with pump cells	37.5	375
2	Detox Tanks	40 ft diameter x 42 ft high	112	224
2	Oxide Conditioning Tanks	54 ft diameter x 56 ft height	112	224
6	Oxide CIL Tanks	54 ft diameter x 56 ft height	112	672
1	Carbon Regeneration Kiln	500 lbs/hr carbon throughput; electric fired; 1,290 F (design temp); 10 min retention at temp	11.2	11.2
1	Elution Vessel	4 to 1 height to diameter ratio; CS; 300° F (design temp); propane heater		
1	Fresh/Fire Water Tank	40.0 ft diameter x 42.0 ft high		
2	Lime Silo	54,000 ft^3 bolted tank; 30 ft diameter x 76 ft cylinder height 60° cone bottom		
2	Lime Slaker Plant	Vulcan DV-225; 9 st/h detention-type lime slaker system	164.1	328.2
1	Oxygen Plant	27.8 st/h @ 95% purity; 82.4° F; 570 psig	13,000	13,000

17.2 MINE PRODUCTION SCHEDULE SUMMARY

A preliminary mine schedule, listing elemental concentrations of interest needed to drive the process design, is shown in Table 17.2. The data in Table 17.2 does not represent the final PFS mine schedule, as the final information was not available early in the process design studies; however, the elemental trends closely align with the final PFS data. Review of Table 17.2 indicates that the gold, sulfur, and calcium concentrations within the Project deposits are highly variable. The material to be processed early in the life of the operation is relatively high in gold and sulfur concentration; however, after year four, the blend trends toward lower gold and sulfur but higher calcium concentrations. These changes have important implications for the process plant design. In addition to the higher grade, freshly mined material from Yellow Pine, Historic Tailings would be added to the process at 10 - 15% of the total throughput during the first four years of the operation. The Historic Tailings are expected to average 0.03 oz/st gold and 0.4% sulfur, with a typical size of 80% passing 180 microns.

Table 17.2: Primary Crusher Feed Schedule with Process Elements of Interest

Time Period	Ore (kst)	Au (oz/st)	Sb (%)	Sulfur (%)	Calcium (%)
-1	508	0.076	0.279	1.28	1.06
1	5,072	0.066	0.119	1.31	1.08
2	8,050	0.055	0.068	1.17	1.32
3	8,051	0.054	0.081	1.09	1.26
4	8,050	0.058	0.072	1.14	1.34
5	8,049	0.051	0.038	0.87	1.05
6	8,051	0.051	0.027	0.78	1.80
7	8,049	0.033	0.020	0.46	2.96
8	8,049	0.042	0.047	0.53	4.15
9	8,050	0.046	0.107	0.71	3.47
10	8,051	0.036	0.034	0.59	3.37
11	8,050	0.036	0.015	0.61	3.30
12	5,444	0.044	0.005	0.65	4.82
Total / Average	**91,524**	**0.047**	**0.053**	**0.82**	**2.46**

On average, 12% of the material shown in Table 17.2 would be processed through the antimony recovery circuit, with annual values ranging from approximately 27% in year one to less than 2% in year 12. Approximately 13.5% of the material noted in Table 17.2 is oxide and responds well to conventional cyanidation, but poorly to flotation. An additional 12% of the material noted in Table 17.2 is characterized as transition material and yields variable gold recoveries by both flotation and conventional cyanidation. The remaining 74.5% of the material noted in Table 17.2 is considered refractory to direct leaching to recover gold and silver but responds well to flotation to a concentrate.

17.3 PROCESS DESCRIPTION

The flow sheets developed for the Stibnite Gold Project PFS are based on metallurgical test programs directed and supervised by Blue Coast Metallurgy (**BCM**); the metallurgical testing was primarily conducted by SGS Minerals Inc. (**SGS**). Previous testing to support the PEA was also supervised by BCM and conducted by SGS.

The process plant was designed to process 22,046 st/d through crushing, milling/grinding, flotation and tailings processing operations. Zones in both Yellow Pine (YP) and Hangar Flats (HF) contain sufficient antimony to warrant processing for antimony recovery. The antimony would be recovered as stibnite flotation concentrate and would be shipped off-site for further processing.

Metallurgical testing indicates that the refractory sulfides containing gold can be recovered to a flotation concentrate. The gold can then be liberated by oxidation of the sulfide minerals and recovered by cyanide leaching of the oxidation residue. Fully- and partially-oxidized material, also referred to as oxide and transition material, respectively, yield less consistent flotation recoveries; to improve metallurgical recoveries of gold and silver from the oxide and transition materials, the oxide and flotation tailings would be processed through a carbon-in-leach (CIL) process to recover cyanide-soluble gold not recovered in the flotation step. The gold produced as doré bars at site and containing gold and silver would be sold to third parties for further processing. Minor amounts of mercury are also present in the material to be processed; equipment would be installed to recover the mercury that is with the gold, transport it to a permitted off-site facility, prevent its discharge into the environment, and maintain a safe working environment for employees.

Process design criteria were developed for each process area. Data used in the process design criteria are from various sources including:

1) PEA (SRK, 2012);
2) client provided historical data conducted by and for prior owners and operators of the Project;
3) metallurgical testing;
4) calculations;
5) vendor data or recommendations;
6) M3 database information;
7) industry practice;
8) handbooks;
9) assumptions based on experience; and
10) other reports and consultants.

The following sections provide a comprehensive summary of: the PFS process flowsheet based on the metallurgical testing and interpretation presented in Section 13; the major process equipment selected for the Project and a discussion of the alternatives considered; a description of the primary buildings required to support the major process equipment; and descriptions of the primary process support infrastructure including the water systems, process air systems and the tailings handling system. The layout of the facilities discussed in this section, and of the alternative layouts considered, is discussed in Section 18.

17.3.1 Crushing Circuit

ROM material would be delivered by mine haul truck to the primary crusher, or to one of four 100,000 ton capacity ROM stockpiles. The stockpiles provide surge for the high-antimony and oxide materials that can be campaigned through the process plant, and allow surge for blending of material for control of sulfide and carbonate concentrations.

The crushing circuit design was developed based on a 24 hour per day, 365 day per year operation at an average utilization of 75% yielding an instantaneous design-throughput of 1,225 st/h. ROM material would be dumped onto a grizzly screen and into the crusher dump hopper. A front end loader would be used to feed stockpiled material to the crusher as needed for blending. The dump hopper would have live capacity for one dump truck. A rock breaker would be installed at the dump pocket to handle oversize. An apron feeder would draw material from the dump hopper to feed a vibrating grizzly and grizzly oversize would feed the jaw crusher.

A trade-off study was completed to evaluate the economics and operational flexibility of various crushing and grinding options. The mill feed from the WE pit requires more energy for crushing and SAG grinding than the YP and HF mill feed. Crushing options evaluated included one jaw crusher, two jaw crushers, or a gyratory crusher. Grinding options included a single large SAG mill – ball mill circuit, one smaller SAG mill with pre-crush of harder WE material and conventional three-stage crushing. All of the combinations were evaluated in terms of projected capital and operating costs using a net present cost analysis with a 5% discount rate. The analysis indicated that a single large jaw crusher with a large SAG mill installed from the beginning of the operation had the lowest net present cost and requires no additional construction in the comminution circuit later in the mine life, which could be disruptive to the operation. It also has the benefit of enabling higher production rates in the early stages of mine life to shorten the payback period. Blending of HF and WE material was recommended to control hardness variations.

A large jaw crusher was selected for the Stibnite Gold Project since both YP and HF ROM material are expected to contain a high percentage of fines and, as noted in Section 13, both have a relatively low crushing work index; the WE work index is characterized as average for gold deposits globally. Crushing simulations with vendor supplied software support the selection of a jaw crusher for the Project.

The primary crusher would be installed in a concrete and steel building with a 100 ft long x 40 ft wide x 128 ft high concrete dump pocket. The steel structure would be supported on concrete piers and include preformed insulated metal roof and wall panels; a 20-ton overhead bridge crane would also be included. The ROM material would pass two vibrating grizzlies then report to the primary jaw crusher; the crusher discharge and grizzly undersize would be transferred via conveyor to the coarse ore stockpile through a reinforced concrete tunnel. The crusher production rate would be monitored by belt scale and tramp iron would be removed using a magnet. A metal detector would also be installed on the stockpile feed conveyor. Water sprays would be installed at the crusher dump pocket and at material transfer points to reduce dust emissions.

The stockpile was designed to have a 12-hour live capacity, with approximately 33,000 st (1.5 days) of total capacity. Three feeders would be provided for material reclaim to the milling circuit. The stockpile would be covered to reduce dust emissions and to protection the material from inclement weather. A dust collector would be installed to control dust in the reclaim tunnel.

The crushed-ore stockpile building was designed as a domed structure with a 240 ft inside diameter at the concrete ring dome spring line. The concrete ring would be supported by 24 concrete piers, 18 ft-6 inches high, arrayed about the center of the dome on 15^o angles. The dome rises 92 ft-9 inches above the concrete ring and is comprised of coated metal tube framing with metal roof/siding attached to the metal framing. There would be four solid concrete 15^o segments evenly spaced around the perimeter of the dome for lateral purposes. The crushed ore stockpile would be reclaimed through a 20 x 20 x 160 ft concrete reclaim tunnel through two of the three draw-holes and belt-feeders; the belt feeders would transfer the material to the SAG mill feed conveyor, which transfers the crushed ore to the grinding circuit.

17.3.2 Grinding Circuit

The grinding circuit design was developed based on a 24 hour per day, 365 days per year operation with an average utilization of 92% yielding an instantaneous design-throughput of 998.5 st/h.

Reclaimed material, recycled pebbles, reagents and process water would be fed to the SAG mill circuit, and the SAG mill discharge would be screened and the screen undersize discharged to the grinding sump; screen oversize would be recycled to the SAG feed system. Grinding test work completed to date indicates that a recycle (pebble) crusher is not required for efficient processing during the early years of operation, but recycle pebble crushing may improve grinding circuit performance in the later years of operation, depending on the blend of HF and WE material.

The SAG screen undersize would be combined with the discharge from the ball mill in the cyclone feed pump box, then pumped to a cyclone cluster for classification. When Historic Tailings are processed during early years of the operation, the slurry from the plant would also flow to the cyclone feed pump box. Cyclone underflow flows by gravity to the ball mill; cyclone overflow, at 33% solids with a target size of 80% passing (P_{80}) 75 microns, would be screened to remove tramp oversize and flow through a feed sample system and on to the antimony or gold rougher flotation circuit, depending on the antimony concentration of the material.

The grinding circuit was designed to include one 30-ft diameter by 16-ft effective grinding length (**EGL**), 7,500 kW SAG mill and one 24-ft diameter by 40-ft EGL, 13,500 kW ball mill, based on results from JKSimMet simulations using the 75th percentile hardness data for the grind characteristics for each material type described in Section 13. The equipment is large, but considered proven in the industry.

The grinding building was designed as an enclosed steel and concrete building approximately 160 ft wide x 220 ft long x up to 140 ft high (at the ridge). The steel structure is supported on concrete piers and supports preformed insulated metal roof and wall panels. An on-stream analyzer that can provide metal and sulfur analysis would be included for circuit control. The grinding area floor would be concrete on grade with containment walls to contain spills within the floor area. The floor would be sloped to a trench that directs spillage to a sump that would pump the contained material back to the mill feed. A bridge crane would be provided to service the mill area and SAG and ball mill liner handlers are provided to facilitate mill liner maintenance.

17.3.3 Flotation Circuit

The flotation circuit consists of up to two sequential flotation stages to produce two different concentrates; the first stage of the circuit was designed to produce an antimony-rich concentrate, and the second stage was designed to produce a gold-rich concentrate. If the antimony content of the feed material is not in economic concentrations then the antimony circuit would be bypassed and a gold bearing sulfide concentrate would be the only concentrate produced by the flotation circuit.

17.3.3.1 Antimony Flotation

The test data used for the material balances to size the antimony flotation circuit are from the YP-high antimony and the HF-high antimony locked cycle test results described in Section 13.

Reagents are added to grinding to depress gold bearing sulfides prior to stibnite (antimony sulfide) flotation. Discharge from the grinding circuit flows to the antimony rougher conditioning tank where lead nitrate solution is added to activate the stibnite.

The conditioned pulp reports to the antimony rougher flotation bank where other flotation reagents are added as needed. The antimony rougher flotation circuit was designed to recover the stibnite into the rougher concentrate; the objective is for gold bearing sulfides not to be recovered at this point of the circuit. Antimony rougher tailings would be combined with antimony first cleaner tailings and pumped to the gold rougher conditioning tanks. The antimony rougher operation includes one bank of five 2,500 ft^3 flotation cells with a total retention time of seven minutes. The plant cell selection was made considering a balance with the number of flotation cells in series to reduce the impact of short-circuiting, the maximum flow recommended for the flotation cells, and the desire to minimize the gold bearing sulfide flotation to the antimony concentrate.

Antimony rougher concentrate would be pumped to the antimony first cleaner conditioning tank where reagents could be added, as required, and the rougher concentrate would be mixed with antimony second cleaner tailings and discharge by gravity to the antimony first cleaner flotation. The antimony first cleaner operation includes one bank of six 350 ft^3 flotation cells with a total retention time of seven minutes.

Antimony first cleaner concentrate is pumped to the antimony second cleaner conditioning tank where it is conditioned with reagents as needed prior to antimony second cleaner flotation. Antimony first cleaner tailings would be combined with antimony rougher tailings to feed the gold rougher conditioning tanks. Antimony second cleaner tailings would be pumped to the first cleaner conditioning. The antimony second cleaner operation includes one bank of four 180 ft^3 flotation cells with a total retention time of seven minutes.

The second cleaner concentrate is the final antimony concentrate and would be sampled, thickened, filtered, dried, stored and bagged for shipment. The antimony thickener was sized at 25-ft diameter based on thickening test results indicating a unit rate of 1.46 ft^2 per ton per day of concentrate. The antimony concentrate filter and dryer were sized based on general vendor guidelines for similar material. Dried concentrate would be stored in a bin prior to bagging for shipment.

17.3.3.2 Gold Flotation

When low-antimony sulfide ore is processed by the grinding circuit, the ball mill cyclone overflow bypasses the antimony flotation circuit and feeds the gold rougher conditioning tank; when high-antimony sulfide ore is processing by the grinding circuit, antimony rougher tailings feeds the gold rougher conditioning tank. In the gold rougher conditioning tank, copper sulfate solution would be added to activate the sulfides; the conditioned pulp would discharge to the gold rougher flotation bank where additional flotation reagents would be added, as needed. The gold rougher flotation circuit was designed to recover the gold-bearing sulfides into the rougher concentrate; gold rougher tailings would flow to the neutralization tanks or the neutralization thickener. The gold rougher operation includes one bank of nine 17,650-ft^3 flotation cells with a total retention time of 80 to 90 minutes. The plant cell selection was made targeting plant to lab retention time factor of 2.5 to 3.0 and considering a balance with the number of flotation cells in series to reduce the impact of short-circuiting, and the maximum sized flotation cell currently being manufactured.

Generally, when processing YP and HF material, the rougher concentrate grade is suitable for processing through the oxidation circuit directly and would advance to the gold concentrate thickener. Some YP and HF zones, and WE rougher concentrate, would need to be cleaned to reject carbonates or improve the concentrate sulfur grade for efficient processing through the oxidation circuit. If advantageous, rougher concentrate would be pumped to the gold first cleaner conditioning tank where flotation reagents could be added, if needed, and flow by gravity to the gold first cleaner flotation followed by the gold cleaner scavenger flotation. The gold cleaner and cleaner-scavenger operation includes one bank of seven 5,646-ft^3 flotation cells with a total retention time of 75 minutes, which is approximately 2.5 times the laboratory retention time for the combined cleaner and cleaner scavenger operation.

The combined gold cleaner and gold cleaner scavenger concentrate or the gold rougher concentrate, when grade is high enough, flow to the concentrate sampler and discharge to the gold thickener. The thickener serves to adjust the pulp percent solids prior to the oxidation step for efficient pulp storage and to facilitate autoclave temperature control. Thickener overflow is returned to the process water system.

To size the concentrate thickening, storage and all downstream concentrate operations, a maximum mass pull of 20% of the rougher feed tonnage was assumed. In practice, if this mass pull could not be achieved and a concentrate grade of 5 to 6% sulfide sulfur maintained, then the mass pull would be reduced to maintain the target sulfide sulfur concentration in the autoclave feed. The target sulfide sulfur grade range of 5 to 6% was set to target auto-thermic autoclave operation and was determined based on experience at other operations.

The gold cleaner scavenger tailings would be sent through a cyclone with the coarse fraction being recycled to the primary milling circuit for additional grinding when processing low antimony material and the fine cyclone overflow reporting with the cyclone overflow to the trash screens.

A 200 ft long x 70 ft wide x up to 140 ft high building was designed to house both stages of the flotation circuit. The structure would be supported on concrete piers that support preformed insulated metal roof and wall panels. Two 20-ton overhead bridge cranes, one for each side of the building, are planned. In addition to housing the antimony and gold flotation cells, the structure supports the antimony concentrate thickening, and the pressing and drying facilities.

17.3.4 Gold Flotation Concentrate Oxidation Circuit

The primary product from the gold flotation circuit is an auriferous pyrite concentrate; arsenopyrite and arsenian pyrite are also present in the concentrate. In order to liberate finely encapsulated gold particles in the concentrate, it must be oxidized. The products of oxidation are generally ferric arsenate (scorodite) and sulfuric acid; liberated gold and silver are present within the solids.

17.3.4.1 Oxidation Circuit Trade-Off Study

Four methodologies were considered viable technologies for oxidizing the gold concentrate: pressure oxidation using an autoclave under high oxygen pressure (**POX**); biological oxidation (**BIOX**) using bacteria in reactor tanks via the proprietary BIOX® technology of Biomin South Africa Pty (Biomin); Xstrata Plc's Albion Process (Albion) and roasting. Roasting and Albion were evaluated using historically available test work from the Project, and generic results available from other projects, respectively; no testwork was completed for these methodologies as part of the PEA or PFS given the anticipated complexities and costs for these processes. POX and BIOX were evaluated with the support of a comprehensive metallurgical testing program for each technology and a technical trade-off study that was developed with supporting design and cost information from M3 and Biomin.

The POX/BIOX trade-off study included detailed metallurgical recovery estimates based on test work from all three deposits that make-up the Stibnite Gold Project, capital and operating costs estimates, environmental and closure considerations, technical risk, permitability and other considerations. Design criteria were compiled for the POX option by M3 while Biomin provided the design criteria, equipment list, and pricing for the BIOX option. M3 prepared flowsheets for the POX and BIOX options so that equipment lists could be compiled. Independent pricing was solicited for POX and BIOX capital equipment. General arrangement drawings were prepared for each option so that material take-offs for foundations and structural steel.

The trade-off study results indicate that the POX option is the most economical alternative, has lower technical risk, more certain and improved environmental outcomes, and has been permitted in the US for a number of gold operations. Table 17.3 summarizes the estimated range of potential capital costs, operating costs and life-of-mine unit operating costs for POX and BIOX. The numbers are comparative; consequently, contingency was not included or deemed necessary in the estimates.

Table 17.3: Estimated LOM Capital and Operating Cost Summary for POX and BIOX

Oxidation Option	Capital Cost	LOM Operating Cost	Operating Cost per Ton of Concentrate
POX	$93,948,000	$476,809,000	$52.57
BIOX[1]	$85,413,000	$784,379,000	$86.48
BIOX[2]	$144,258,000	$784,379,000	$86.48
BIOX[3]	$163,215,000	$784,379,000	$86.48

Notes:
(1) Biomin CAPEX less CCD and neutralization section, Biomin equipment pricing, Biomin construction factors.
(2) M3 CAPEX less CCD and neutralization section, Biomin equipment pricing, M3 take-off & construction factors.
(3) M3 CAPEX less CCD and neutralization section, M3 equipment pricing, M3 take-off & construction factors.

Biomin's capital cost estimate for the BIOX option is appreciably lower than M3's engineering build-up; whether the CAPEX lies closer to Biomin's estimate or M3's, the operating cost is significantly lower for pyrite oxidation using POX versus BIOX. The operating cost for the BIOX process is higher due to higher cyanide consumption and higher limestone consumption. The BIOX cyanide consumption is higher due to the reaction of cyanide and reduced sulfur species that form thiocyanates. In the POX process, the sulfur is primarily oxidized to sulfate and so the formation of thiocyanate is much lower. The limestone consumption for BIOX is higher since it is necessary to add limestone to the BIOX reactor to control the acid concentration during the BIOX reaction. For the POX process, limestone is not required since most of the acid generated during the oxidation is neutralized by the flotation tailings.

It may be possible to lower the BIOX operating costs by using onsite mining of limestone for pH control during oxidation within the reactors; however, analysis indicates this improvement only partially closes the gap and is at the expense of requiring a limestone process facility including plant operators, extra power, spare parts and maintenance.

The POX alternative provides a robust process to oxidize concentrate with a retention time in the autoclave of one hour compared to five days in the BIOX reactors. The risk for prolonged downtime for a technical issue with the oxidation circuit is higher for POX than for the BIOX equipment, which by its nature is simpler; however, the delicate conditions required to keep the bacterial culture alive and at peak efficiency has been a risk experienced with previous bio-oxidation operations and offsets this advantage.

The other risk factor for the two processes is that of gold recovery. Pressure oxidation is a high-energy oxidation that reaches nearly complete oxidation of sulfides. The BIOX process works on a bench scale but, in practice, with concentrate spread between 48 large reactor tanks, the opportunity for short circuiting and scale-up inefficiencies to produce lower-than-expected recoveries is a risk that has to be considered and has been experienced at operations in other locations. In order to determine risks, pilot testing of the BIOX process or evaluation of data from operating plants would have to be conducted to determine if the batch test oxidation recoveries hold up on a larger continuous scale; there is risk that bio-oxidation recoveries would diminish in practice. While one of the recommendations in this PFS is for pilot testing the POX process, this is not related to recoveries, where the risk is seen as low based on the extensive test work completed to date with consistent results, rather it is intended to provide additional information for environmental and neutralization conditions.

17.3.4.2 Pressure Oxidation Circuit

Two concentrate surge tanks provide approximately 16 hours of live surge and blending as a buffer between the circuits. Discharge from the surge tanks is pumped through a trash screen to the autoclave feed tank, located near the autoclave. The autoclave feed tank provides about one hour of live surge near the autoclave and allows the operator better control of the autoclave feed. When processing cleaner concentrates, the autoclave feed tank would also blend second stage counter-current decantation (**CCD**) thickener underflow with the cleaner concentrate to reduce the sulfide concentration to the target range of five to six percent. The recycle would allow the autoclave to run at a higher percentage of solids concentration and reduce problems with scale formation.

Two independent trains of two pumps in series are provided to feed the autoclave. The first stage of each train is a centrifugal booster pump; the second stage of each train is a positive displacement pump. During normal operation, both pump lines would be in operation. When one pump line is down for maintenance, the second pump line would continue to operate with a maximum capacity of 75 to 80% of required volume. During this time, the gold concentrate surge tank would contain the surplus flow.

The autoclave would normally operate at 428°F and 425 psig. The autoclave is designed to oxidize to sulfate 12.7 st/h of sulfide sulfur. Concentrate would be pumped into the first and largest compartment of the autoclave, containing four agitators. Pulp discharge from the first compartment flows through the remaining three compartments in series, each with one agitator. The nominal retention time of the autoclave is 60 minutes and the design sulfide sulfur oxidation is +99%. The estimated oxygen utilization is 90% due to the relatively low carbonate concentration of the feed. The target autoclave feed sulfide sulfur grade is 5.0 to 6.0% in order to achieve autothermic conditions and avoid the use of cooling water. The gold flotation concentrate has been thickened to approximately 50% solids prior to the autoclave so the autoclave feed percent solids can be controlled to facilitate autoclave temperature control. Cooling water can also be pumped to the autoclave as needed for the final temperature control. A vendor package plant would provide 670 st/d of oxygen gas at 95% purity. Steam generators are provided for initial autoclave heat up and to add heat to the process during upset conditions.

Sizing of the autoclave is based primarily on the rate that sulfide sulfur is fed to the autoclave. For the PFS design, the autoclave design is based on a sulfide sulfur feed rate of 12.7 st/h. This value is approximately 30% higher than the PEA design value. The relatively high sulfide sulfur feed rate for the PFS is a result of the sulfur feed grade variation shown in Table 17.2. As noted in Table 17.2, the higher grade gold is also higher in sulfide sulfur and the autoclave must be designed to process this high sulfur material. The autoclave is designed to operate at 5 - 6% sulfide sulfur concentration and 50% solids by weight. The relatively high percent solids in the autoclave feed does not significantly increase the autoclave size, but provides the benefits of an autothermic operation at lower sulfide sulfur concentration and reduced scaling due to the high solids content of the feed. At the stoichiometric requirement of 1.87 tons of oxygen per ton of sulfide sulfur, and estimated 90% oxygen utilization, the oxygen requirement is 27.9 st/h of gas at 95% oxygen for the design throughput. Design conditions of one hour of retention time and cooling water addition for process control result in a live reactor volume of approximately 15,700 ft^3. The total reactor volume allowing for head space and an estimated operating level of 83% results in a total volume of 18,900 ft^3. The resulting internal dimensions of the autoclave are 15.1 ft diameter (inside brick) and 106 ft in length (tangent to tangent) with an overall length of 114.3 ft.

Autoclave discharge would flow through two flash vessels in parallel. Slurry discharge from the flash vessels would flow by gravity to the basic ferric sulfate (**BFS**) re-leach tanks. The BFS re-leach is required to dissolve basic ferric sulfate [$FeSO_4(OH)$] precipitated during the autoclave operation. The three tanks in series would provide a total retention time of approximately 6 hours for this operation. Flash vessel gas phase discharge would be scrubbed in a single stage venturi scrubber and discharge to the atmosphere. Depending on operating conditions, approximately 15%, or 50 st/h, of the autoclave feed moisture would be lost in this stream as steam.

The gold concentrate surge tanks were designed to be 49 ft diameter x 51 ft tall, carbon steel tanks that feed the autoclave feed tank that feeds the autoclave housed in the autoclave building. This structure is an L-shaped steel and concrete structure supported on concrete piers and supports preformed insulated metal roof and wall panels. There is one 10-ton overhead bridge crane. One branch of the L-shaped building is approximately 180 ft long x 60 ft wide x 67 ft high (at the peak). It houses the autoclave and supporting tanks and vessels. The other leg is 80 ft long x 60 ft wide x 30 ft high; this wing houses the site assay lab, the steam plant, and an electrical room.

The slurry from the autoclave flows to the two exterior mounted flash vessels, and from there to the BFS re-leach tanks. After stepping through each of the three tanks, 29 ft diameter x 31 ft high, the slurry flows by gravity to the CCD thickeners. The average annual pressure oxidation circuit utilization was estimated to be 85%.

17.3.5 Pressure Oxidation Products Handling

Acid and soluble salts produced during the oxidation process would be separated from the solids in the CCD circuit. A two-stage CCD circuit with a wash ratio of 6:1 is planned. The wash water supplied to the CCD system would be process water with a neutral pH. The CCD thickeners would be high-rate thickeners. CCD thickener underflow would advance by pumping from thickener to thickener; CCD thickener overflow would be cooled in spray towers and advance to neutralization. Two cooling towers are required to provide the cooling. Since the solutions treated are nearly saturated, solids would precipitate during the cooling process. A spare cooling tower is installed to allow shutdown on a regular basis for routine cleaning and maintenance. During operation with high sulfur feed to the autoclave, approximately 50 st/h of water would be evaporated in the cooling tower operation.

To neutralize the CCD overflow, gold flotation rougher tailings would be mixed with the cooled CCD solution in six neutralization tanks arranged in series. Each tank is designed with a 1-hour retention time with full solution and tailings flow. The carbonates in the flotation tailings would react with the acid to precipitate metal sulfates and hydroxides in the first two stages. The quantity of tailings added to the CCD solution can be adjusted so the pH can be controlled at 2.5 in the first two stages, 5.0 in the third and fourth stages, and 7.5 to 8.0 in the last two stages. Depending on the feed blend and the sulfide and carbonate concentrations, materials treated early in the life of the operation may generate more acid than can be neutralized by the carbonate in the tailings. During these periods, lime would be added to the third tank to adjust the pH to 5.0. To complete the neutralization process lime would also be added to the fifth tank to adjust the pH to 7.0 to 8.0 prior to the neutralization thickener. Air would be sparged to the neutralization tanks to facilitate removal of carbon dioxide gas evolved during the reactions. The tanks would be covered and the discharge gas would be routed to a scrubber.

Slurry discharge from the neutralization tanks would be thickened in a high-rate thickener for water recovery. Thickener overflow would be pumped to the process water tank. Thickener underflow would flow to the tailings sump and be pumped to the TSF or the flotation tailings leach circuit, depending on the leachable gold concentration of the neutralization thickener underflow.

The CCD area consists of two high rate thickeners 170 ft in diameter in a concrete containment area. The overflow of the CCD thickeners goes through three cooling towers on its way to the neutralization tanks and then to the neutralization thickener. The neutralization tanks are six tanks 48 ft in diameter x 50 ft high. The first two tanks are open-topped and the other four are closed-top; all are agitated and they are located in a concrete containment area. The neutralization thickener is 136.6 ft in diameter with a 10-ft sidewall in a concrete containment area. Underflow from the neutralization thickener reports to the CIL tanks or to the tailings pump building. The underflow from the CCD thickeners reports to the pre-conditioning and leaching tanks.

17.3.6 Concentrate Leach and Carbon Handling

The second stage CCD thickener underflow would be pumped to two 49 ft diameter x 51 ft high pre-conditioning tanks; the slurry would be neutralized with lime with a total retention time of 10 - 12 hours. Slaked lime would be added to adjust the pH to 10.5 - 11.0 prior to cyanidation. The pre-conditioning tanks would overflow by gravity to four 52 ft diameter x 54 ft high leach tanks in series that would provide a total of 24 hours of retention time for the concentrate leach step. The tanks are designed to be stepped down, promoting gravity flow through each of the tanks.

Cyanide solution would be added to the first leach tank and air would be added to each tank to facilitate gold leaching. After leaching, the pulp would flow by gravity to the six 20 ft diameter x 32 ft high CIP tanks. A Kemix pumpcell CIP system is planned. The pumpcell system was selected to minimize gold inventory considering the high-grade concentrate leach system. Leached pulp would flow by gravity to the pumpcell feed launder. The feed launder valve arrangement would direct the flow of pulp into the desired pumpcell. Six CIP tanks in series would be provided to process flotation concentrate. Concentrate CIP tailings would be pumped to the CIL tanks. The hybrid system would allow cyanide in the CIP tailings to be used to leach gold remaining in the flotation tailings and the CIL tanks would allow additional adsorption contact to maximize soluble recovery.

17.3.7 Oxide Carbon-in-Leach and Tailings Detoxification

While the majority of the mineral resources and reserves at the Stibnite Gold Project are strongly refractory, non-refractory material is present in all three deposits, and in the Historic Tailings. To recover gold from non-refractory material in the flotation tailings, and in oxide material that would be processed during oxidation circuit scheduled maintenance periods, a CIL circuit was included in the design of the process plant.

Underflow from the neutralization thickener would be conditioned with lime in two 54 ft in diameter x 56 ft high oxide-conditioning tanks in series with a total retention time of 5 hours; slaked lime would be added to adjust the pH. Slurry from the pre-conditioning tanks would flow by gravity to the CIL tanks where it would be mixed with the tailings from the CIP circuit. Mixing the two streams would allow extended leaching of the flotation concentrate and use of the residual cyanide in the concentrate leach stream to leach the oxide material. Six 54 ft in diameter x 56 ft CIL tanks in series would provide approximately 14 hours of retention time for the combined neutralization thickener underflow and concentrate leach tailings streams.

Additional cyanide solution and compressed air could be added to the CIL tanks to facilitate gold leaching. Barren carbon from the elution circuit would be added to the tailings CIL and the loaded carbon from this scavenger stage would advance to the concentrate CIP tanks. Each CIL tank would be equipped with one operating Kemix-type carbon screen with approximately 270 ft^2 of screen area and one carbon advance pump. A monorail hoist is provided at each tank to facilitate screen changes. One standby screen is provided to allow one screen to be pulled from the process and cleaned daily. A mobile crane would be used to relocate the spare screen. CIL tailings would be screened on single-deck vibrating safety screens. Safety screen undersize would flow by gravity to the detoxification system.

Tailings from the CIL would be treated to reduce the cyanide concentration prior to discharge. In the cyanide oxidation tanks, weak acid dissociable (**WAD**) cyanide would be oxidized to the relatively non-toxic form of cyanate using sodium metabisulfite solution and air. Copper is normally added as a catalyst, but more than adequate copper has been added to the flotation step as an activator, so no additional copper sulfate is expected to be consumed in the detoxification process. Milk of lime would also be added to maintain a slurry pH in the range of 8.0 to 9.0. Air required for the reaction would be sparged below the tank agitators. Two 40 ft diameter x 42 ft high tanks in parallel, and in a concrete contained area, would provide a total retention time of approximately two hours for the detoxification operation. The SO_2-air method for detoxifying the tailings was shown to be effective based on the laboratory results presented in Section 13.

The detoxification circuit would reduce cyanide concentrations in the tailings slurry to less than 50 ppm WAD cyanide before being transported to the TSF. This WAD cyanide concentration target is based on guidance from the International Cyanide Management Institute (2002) as the concentration is generally accepted to protect birds, other wildlife and livestock from the adverse effects of cyanide process solutions; a lower concentration could be targeted, if required. A lower concentration may also be required to ensure high sulfide recovery in the flotation process. Since tailings reclaim water would be recycled to the mill, and the mill process includes sulfide flotation, cyanide must be reduced to low levels for efficient processing by flotation. Other processes in the TSF, including natural oxidation by UV radiation from sunlight, will continue to reduce the cyanide concentration in the tailings supernatant.

17.3.8 Carbon Handling and Refining

Loaded carbon from the CIP or CIL process would be screened and washed using a single-deck vibrating screen. Screen oversize would flow to the acid wash column and screen undersize would be returned to the CIP or CIL circuit for recovery of soluble metals. The acid wash and elution vessels would each have a 7-ton carbon capacity. Nominally 7 tons of carbon would be advanced daily allowing a loaded carbon concentration, of from 100 - 200 oz/st, depending on the feed grade. The estimated gold loadings are reasonable since the loaded carbon would be processed through the concentrate CIP process and minimal silver or copper would be recovered.

During the acid wash process, solution would be circulated and nitric acid would be added to the system to maintain the solution pH. Nitric acid is used to limit chloride ion use and build up in the system; chloride ions can cause autoclave corrosion. The nitric acid added would react with calcium carbonate that is adsorbed on the carbon and help maintain the carbon activity. The acid wash solution would be circulated to the acid wash circulation tank. When the acid wash is complete, the acid would be rinsed from the carbon with fresh water and solution would be diverted to the neutralization tank where it would be mixed with caustic to a safe pH. An exhaust fan and scrubber are provided to control hydrogen cyanide gas that is generated during the acid wash process.

Acid-washed carbon would be transferred to the elution vessel where it would be stripped of precious metals by the pressure Zadra method. Electrolyte would be pumped from the strip solution tank through heat exchangers to the elution vessel; heat would be added to the system as needed by a propane fired strip solution heater and the primary heat exchanger. From the elution vessel the pregnant electrolyte would flow through heat exchangers to the electrowinning feed tank and the three electrowinning cells, each with 2,000-amp rectifiers. Electrowinning cell tailings flow to the barren eluate tank and would be pumped back to the strip solution tank to complete the solution circuit. The precious metals and mercury recovered from the carbon would be plated onto stainless steel cathodes and recovered periodically in the refinery and pumped to a sludge filter.

The precious metal filter cake would be dried in the retort and the minor amounts of mercury that may be present in the sludge would be volatilized and recovered from the retort to ensure it does not enter the environment. Recovered mercury would be stored onsite in metal flasks prior to shipping to a safe disposal site or sold. Precious metals remaining in the dried sludge would be mixed with flux and melted in an induction furnace and poured into precious metal doré bars. Off gasses from the electrowinning cells and retort would be mixed and processed through a demister and carbon adsorption vessel. Off gasses from the induction furnace would go through a baghouse, HEPA filter, and carbon adsorption vessel. The planned retort has a 10 ft^3 capacity and is electrically heated. The refining furnace is a 175 kW electric induction furnace. A vault for secure doré storage is included in the refinery building.

Stripped and acid-washed carbon would be transferred to the kiln feed screen. Screen oversize would flow to the kiln feed bin and a screw feeder would feed the carbon to the kiln. The kiln would dry the carbon and heat it 1,290 °F for 10 minutes. Regenerated carbon would be returned to the CIP or CIL circuit via the carbon-sizing screen. The kiln has a design throughput of 6 tons of carbon per day. Considering the flotation reagents used, reactivation of a high percentage of the carbon is recommended.

The carbon handling and refinery area was designed as a single, 60 ft x 120 ft x 45 ft high building with two distinct areas and construction types. The ADR area is a steel and concrete building that houses the carbon regeneration kiln, the acid wash column, and all the tanks and vessels required for stripping the precious metals out of the electrolyte solution and feeding the refinery. The steel structure is supported on concrete piers and supports preformed insulated metal roof and wall panels. The refinery was designed as a masonry structure, 48 ft x 120 ft x 16 ft high. The refinery area contains the electrowinning cells, the mercury retort and the furnace.

17.3.9 Historic Tailings Reprocessing

Metallurgical testing indicates that the Historic Tailings contain significant recoverable gold; moreover, as detailed in Section 14, the average grade of the tailings is well above the economic cut-off grade. Since the tailings are within the design-footprint of the Main WRSF they have to be removed early in the mine life in order to allow the placement of waste rock from the Project.

M3 conducted a trade-off study to evaluate various methods of collecting the Historic Tailings and delivering the material to the process plant; three methods were considered: excavation, dredging, and hydraulic mining. Two transportation methods, trucking and slurry-pumping, were considered to get the material to the grinding circuit. Excavation of the material, trucking to a screening plant for re-pulping, and pumping the slurry to grinding circuit was selected as the method best suited to the material handling and environmental challenges posed by the operation.

The Historic Tailings would be mined by mechanical equipment and hauled to the re-pulping plant by trucks. Trucks would dump the material onto a grizzly screen and into the feed hopper. An apron feeder would feed a vibrating screen and screen oversize would drop to a containment bunker for periodic removal. Water would be added at the vibrating screen to facilitate the re-pulping process. Screen undersize would discharge to a sump and sump discharge would be pumped to the process plant.

Water for the Historic Tailings re-pulping system would be provided from the tailings reclaim water system. Water sprays would be added to the screen where needed to re-pulp the tailings material. An air compressor and instrument air dryer would be installed for operation and maintenance. A mobile crane would be available for maintenance of the equipment.

Based on the PFS mine schedule presented in Section 16, the ±3 million tons of Historic Tailings have to be moved within the initial 4-years of operation to avoid conflicts with the waste rock storage schedule. Based on an estimated availability of 75%, the tailings re-pulping facility was designed with an instantaneous throughput of 115 st/h.

17.3.10 Process Reagents

Reagents requiring handling, mixing, and distribution systems are summarized in Table 17.4; the table also includes estimated reagent consumption rates for full-scale plant operation, which have been estimated based on metallurgical testing results.

The dry reagents would be stored under cover, then mixed in reagent tanks and transferred to distribution tanks for process use. The reagent building would be a steel-framed structure with metal roofing; metal siding would be installed to keep reagents dry and protected from the sun. The floors would be slab-on-grade concrete with concrete containment walls to capture spills.

Table 17.4: Estimated Primary Reagent Consumption Rates

Reagent	Use in Process Plant	Yellow Pine		Hangar Flats		West End		Historic Tailings
		High Sb	Low Sb	High Sb	Low Sb	Sulfide	Oxide	Low Sb
		lb / ton	lb / ton	lb / ton	lb / ton	lb / ton	lb / ton	lb / ton
Pebble Lime (CaO)	Neutralization pH control, conditioning, leach and detox, pyrite depressant	17.6	17.2	15.0	14.4	14.4	4.0	7.0
Lead Nitrate ($Pb(NO_3)_2$)	Antimony activator	0.71	0.00	0.71	0.00	0.00	0.00	0.00
Aerophine 3418A	Antimony collector	0.03	0.00	0.04	0.00	0.00	0.00	0.00
Copper Sulfate ($CuSO_4$)	Sulfide activator and detox catalyst	0.90	0.40	0.55	0.90	0.50	0.00	0.40
Potassium Amyl Xanthate (PAX)	Sulfide collector	0.43	0.27	0.33	0.52	0.47	0.00	0.22
Methyl Isobutyl Carbinol (MIBC)	Frother	0.08	0.08	0.09	0.06	0.05	0.00	0.06
Sodium Cyanide ($NaCN$)	Gold and silver complexing agent, pyrite depressant	1.0	0.80	1.0	0.80	0.80	0.80	0.80
Flocculant	Promote settling	0.13	0.13	0.13	0.13	0.13	0.07	0.07
Activated Carbon	Recover soluble gold and silver	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Sodium Metabisulfite ($Na_2S_2O_5$)	Oxidize free and WAD cyanide	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Nitric Acid (HNO_3)	Decalcify activated carbon	0.08	0.08	0.06	0.06	0.05	0.05	0.04
Caustic ($NaOH$) (sodium hydroxide)	Carbon acid wash neutralization	0.07	0.07	0.06	0.06	0.05	0.05	0.05

17.4 WATER SYSTEMS

Two types of water systems are required for the Stibnite Gold Project process plant: fresh water and process water.

Fresh water for the Project would be supplied from groundwater wells located within the Meadow Creek valley alluvial deposits. Water from the wells would be pumped to the freshwater tank, which also serves as the firewater tank; fresh water in the tank would be distributed to and used for:

- the freshwater distribution system;
- the fire water pipeline loop;
- the gland seal water tank and pumped by horizontal centrifugal pumps to be used as seal water for mechanical equipment;
- the mine water trucks to be used in road dust control; and
- the process use points (e.g. crusher dust suppression, reagent mixing, etc.).

Process water would be reclaimed from several locations and returned to the process water tank. Overflow from the neutralization thickener, gold concentrate thickener and the antimony concentrate thickener would be pumped to the process water tank. Water reclaimed from the TSF, stormwater pond, and pipeline maintenance ponds would also be returned to the process water tank.

17.5 PROCESS AIR SYSTEMS

Several of the agitated process tanks require injected air provided by blowers, including the neutralization tanks, pre-conditioning and leaching tanks, and pre-conditioning and CIL tanks for oxide. Each of these systems has a dedicated blower and installed spare to provide the necessary volume and pressure of air for the process.

Gaseous oxygen is provided to the autoclave at pressure of 570 psig to facilitate oxidation of the sulfides to liberate the precious metals. The oxygen would be supplied from a vendor-supplied oxygen plant located near the autoclave building.

17.6 TAILINGS HANDLING SYSTEM

M3 conducted a study to evaluate the methods to pump the tailings from the process plant to the TSF. The design basis involved pumping approximately 6,000 gallons per minute of tailings with 55% solids and a specific gravity of 1.53 a vertical distance of 440 feet (starter dam) to 650 feet (final dam) and a horizontal distance of approximately 19,000 feet (starter dam) to 23,000 feet (final dam). Capital and operating costs for horizontal centrifugal and positive displacement pumps were compared and the centrifugal pumps were selected on the basis of lower life-of-mine cost, primarily due to lower initial capital cost. Various pipe types and configurations were evaluated in terms of calculated pressure and friction losses. HDPE-lined carbon steel pipe was selected for the tailings pipe from the process plant to the TSF because it was the lowest cost alternative that could handle the pressure and reduce friction losses.

The tailings would be pumped using six horizontal centrifugal pumps connected in series to lift the tailings to the starter dam crest elevation of approximately 6,873 feet amsl. Six spare pumps would be installed in series to enable continued pumping if one of the pumps in the initial series should fail. The tailings would be transported in HDPE-lined carbon steel piping 24 inches in diameter in a lined trench or, when buried, in a containment sleeve. The pipeline is routed west from the thickener and crosses EFSFSR after approximately 500 feet. The pipeline routing then parallels the waste haulage road and then climbs up the slope on the northern side of the Meadow Creek valley, parallel to the surface water diversion around the WRSF. Additional information on the configuration and management of the TSF is provided in Section 18.

Supernatant from the TSF would be reclaimed and pumped via three barge-mounted vertical turbine pumps and pipeline to the process water tank located in the process plant area; the reclaim water pipeline would share the same secondary containment as the tailings pipeline. The TSF impoundment must be raised periodically to provide additional tailings capacity; the tailings pipeline would be relocated and extended to accommodate these raises. One additional pump and one spare would need to be added to the tailings pumping system as the TSF dam rises to its ultimate height of approximately 7,060 ft amsl.

The initial routing of the pipeline (and waste haulage road) transects the ultimate Hangar Flats open pit and must be moved to circumvent the pit when mining begins to encroach; Meadow Creek also has to be realigned since it transects the ultimate Hangar Flats pit. The pipeline, road, and Meadow Creek diversion would all be moved concurrently to be outside of the ultimate Hangar Flats pit.

The tailings pumping system would be housed in an 80 ft x 125 ft x 40 ft high steel-framed building supported on concrete piers with preformed insulated metal roof and wall panels. There is an overhead bridge crane for pump maintenance.

17.7 PROCESS CONTROL SYSTEMS

The Stibnite Gold Project process plant design includes an integrated process control system consisting of three tiers of control and monitoring systems. A conceptual description of the control architecture is provided below, followed by a conceptual control philosophy that depicts the level of automation and the principles that would guide decisions concerning instrumentation and control design in the next phase of this Project.

17.7.1 Process Control Architecture

Process control for the process plant would be accomplished by a multi-tiered monitoring, control, and recording system using an Ethernet backbone. The fiber optic network would be arranged in dual self-healing ring configuration for redundant peer-to-peer communications and control. The redundant fiber optic communication modules protect the integrity of the Ethernet network by maintaining network communications, even with a failure of a fiber path. The functions of the network include data collection and control on a single high-speed network, with tie-in to the plant management system. The devices on the network include servers, workstations, switches, Programmable Logic Controllers (**PLC**s), and Human-Machine Interfaces (**HMI**s).

The control system consists of three levels of control: local control, PLC control, and Process Control System (PCS) control. Local control of each piece of driven machinery is from a local hand control station, typically a station with Start and Stop pushbuttons. Field Stop pushbuttons are hard-wired directly to the motor control centers (MCC) to operate independent of the control system or selector switch position. Likewise, personnel safety features, such as conveyor pull cords, are directly connected to the motor controls. Each piece of driven machinery is equipped with a Local/Off/Remote selector switch located in the MCC. The selector switch is arranged to provide bump-less control between the local Start/Stop pushbuttons when in the Local position, and the PLC control system when in the Remote position.

PLCs control the process equipment when the local control switch is in the “Remote Mode”, and provide monitoring and control of the equipment. PLCs are accessible to both field operators and operators in the control rooms. The PLC system would monitor the status of all local controls to supervise operations and alarm the operator of any anomalies in the system’s configuration.

The PCS integrates the system components, from the device-level communications and control, to the Ethernet networks and higher-level business systems. It incorporates redundant virtual servers and operator workstations into the network to enable operators in the mill control room, crusher control room, and in other designated control stations throughout the site to monitor and control the various component processes. These workstations would be configured to access the process screens and data associated with their specific process area. Two large screen monitors installed in the mill control room provide a process overview. Access to historical process records is provided by the historian server. An engineering workstation is installed and configured with access to all process interface screens, as well as the software required to provide system configuration and maintenance.

17.7.2 Process Control Philosophy

The process plant would incorporate modern, dependable and proven instrumentation and control systems. The monitoring and control systems would support the operation of the plant under the following parameters. The plant would operate on a two 12-hour shift per day basis. Planned maintenance shutdowns would take place on a regular basis. The plant would have an overall operating availability 92%, with lower availabilities for the crusher (75%) and autoclave (85%). There are no holiday and/or other planned work stoppages during the calendar year. The maintenance of the monitoring and control systems would be performed in accordance and support of this operating and maintenance schedule.

The mill building control room would serve as the center for communications, fire systems monitoring and emergencies in general. The control room would be manned on a 24 hour-a-day basis. A base station radio would be assigned to the control room as well as an outside telephone line. The control room would also have the ability to communicate on all other site group frequencies. The control room operator would also have access to the company e-mail system.

Real time observation of strategic points along the operation would be by a TV camera system with monitors in the control room. PLC systems would be used for controlling the plant equipment. Proper graphic displays would be developed for the PLC systems. The control room would serve as the center of all control and recording of key process variables, outputs, functions and plant stoppages.

Safety systems would include, but are not limited to the following:

- The use of start-up warnings – horns, sirens or some other means – would be used throughout the property.
- Applicable interlocks would be used to protect people and equipment.
- All fire protection systems and fire detection systems would be monitored from the mill control room.
- Interlocks and/or other safety related protection would either be hard wired or in control logic depending upon which offers the greatest level of assured safety.

Real-time process control and monitoring systems that provide data to the operators would include, but are not limited to the following.

- Instrumentation on the primary crusher would provide data on power draw, weigh scale on stockpile feed conveyor, crusher discharge hopper level indicators, etc. The primary crusher would also have a tramp iron magnet and an appropriate metal detector.
- Coarse ore stockpile would have a height measuring device and the reclaim conveyor would have vendor supplied variable speed controls for each feeder.
- Each reagent system would have the ability to be batched to the necessary strength and stored until used in the plant. The delivery systems would have the ability to be measured and controlled from the plant control room.

- The grinding area instrumentation would include the SAG mill feed conveyor weight scale, water and reagent control to the SAG mill, tramp steel magnet, cyclone feed sump levels and auto water addition to the sump, pulp densities for the cyclone feed pump discharge as well as cyclone pressure, and the ball mill power draw and automatic water addition. Both grinding mills would have the vendor supplied controls, interlocks and monitors to protect the equipment.
- The flotation circuits have on-stream X-ray analyzers. The following streams would be automatically sampled and analyzed: rougher flotation concentrate, rougher scavenger flotation concentrate, rougher tailings, first cleaner scavenger flotation tailings, and 2nd cleaner flotation concentrate. Flotation sumps would have level indicators and automatic valves for water and/or reagents where applicable. Flotation cells would have the vendor supplied packages to allow level control and other needed instrumentation normally associated with their product. Thickeners would have torque indicators with adjustable height rakes and automatic valves on the thickener underflow pumps.
- The antimony filter would have all typical vendor-supplied instrumentation. A truck scale would be necessary in order to weigh antimony concentrate prior to leaving the site. An automatic wheel wash system would be needed to ensure environmental requirements are met.
- The pressure oxidation process would be controlled by a PLC housed in the mill control room. The PLC would monitor the sulfur content and slurry density from the autoclave feed tank and pressure and temperature in the autoclave. Based on those measurements, the PLC would adjust the water and oxygen addition to the autoclave and venting of CO_2 to the flash vessels.
- The oxygen plant would be vendor supplied and vendor operated. Appropriate operating characteristics and alarms would be transmitted to the mill control room through the Ethernet.
- Slurry density, temperature and pH are monitored in the CCD process to enable the PLC to control addition of wash water and lime in the neutralization and leach pre-conditioning tanks.
- Cyanide concentration would be manually monitored and adjusted.
- Reagent addition in the detoxification tanks would be automatically metered by the PLC using monitoring information from the CIP/CIL tailings.
- The ADR plant would have vendor-supplied instrumentation and controls operated by plant personnel. Key operating parameters would be monitored by the PCS in the mill control room.
- The neutralization thickener would have a torque indicator and adjustable lift rakes. All typical vendor-supplied indicators and systems are anticipated. Thickener underflow and recycle systems would have automatic valves and a flow and density meter.
- The tailings system would have horizontal centrifugal pumps and would have remote start and stop control capability from the mill control room.
- The TSF reclaim water barge would have vertical turbine pumps with remote stop and start capabilities from the mill control room. Each pump would receive a control signal from the reclaim water storage tank. The reclaim water storage tank would have a level indicator and an automatic control on the antiscalant addition line.

Process control and monitoring systems that measure, weigh, monitor, and collect samples for assaying would include the following:

- a weigh scale on the coarse ore stockpile conveyor to enable reconciliation of mine-delivered tonnage with tons crushed;
- a weigh scale on the coarse ore reclaim conveyor for the metallurgical balance;

- automatic sample cutters would be utilized to ensure samples are taken on a regular basis and the shift composite samples would serve as a basis for the plant metallurgical balance;
- appropriate flow meters, scales and control valves would be installed where deemed necessary;
- before leaving the site, antimony concentrate would be weighed and sampled for moisture and antimony content as well as gold and silver content; and
- gold doré would be weighed and sampled for precious metal and impurity contents before being shipped offsite.

SECTION 18 TABLE OF CONTENTS

SECTION PAGE

SECTION 18 LIST OF TABLES

SECTION 18 LIST OF FIGURES

SECTION 18 LIST OF DRAWINGS

DRAWING **DESCRIPTION** **PAGE**

18 PROJECT INFRASTRUCTURE

18.1 INTRODUCTION

Existing infrastructure relevant to the development and operation of the Stibnite Gold Project was presented previously in Section 5. This section summarizes the results of trade-off and technical studies completed to establish appropriate infrastructure upgrades and infrastructure additions that would be required to support the mining and mineral processing facilities that were discussed in Sections 16 and 17, respectively. The Project infrastructure needs that are discussed in this section include:

- upgrades to existing roads to support safe and reliable all-season vehicle access to the site;
- off-site logistics, warehousing, metallurgical laboratory and administration facilities near Cascade;
- upgrades to the Idaho Power Company (**IPCo**) electrical distribution system to provide reliable, low-cost, low greenhouse gas (**GHG**) emissions electricity during mine operations;
- installation of an on-site power supply system to support construction activities and provide backup power during possible service interruptions to the IPCo electrical system;
- upgrades to the existing microwave communications system to provide reliable high-speed data and voice communications for construction and operations personnel;
- upgrades to the existing on-site camp to support construction and operations;
- construction of surface and contact water management infrastructure;
- fresh water, reclaim water, and potable water supply systems;
- process water treatment and management infrastructure;
- waste management infrastructure such as a tailings storage facility (TSF) and waste rock storage facility (WRSF); and
- sanitary waste management infrastructure.

Initial capital, sustaining capital, and closure costs associated with the infrastructure discussed herein are provided in Section 21.

18.2 SITE ACCESS

Vehicle access to the Project site is currently via secondary roads that intersect Highway 55 near the communities of Cascade and McCall, as previously discussed in Section 5, and as shown on Figure 18.1. In order to facilitate safe year-round access for mining operations; reduce proximity of roads to streams, creeks and rivers; and respect advice of community members, a new site access road alignment was developed that uses the existing US Forest Service road (NF-447), known locally as the 'Burntlog' Road (the "Burntlog Route"). Figure 18.1 illustrates the alignment of the Burntlog Route, which from Warm Lake follows the Warm Lake Road (FH 22) for 10.2 miles to Landmark, traverses the Burntlog Road (FS 447) for 17.3 miles before transitioning to a new road alignment for 8.4 miles that traverses through the Trapper Creek drainage basin to connect to the existing Thunder Mountain Road at the bottom of Meadow Creek Ridge. The route then follows the Thunder Mountain Road until it reaches an area where the route begins a steady decline in elevation to the Project site.

The Burntlog Route was selected over several other possible alternatives, such as the Cabin/Trout Creek and the Johnson Creek alternatives, following a comprehensive, multi-phased access road trade-off study. Provided below is a summary of the key attributes that resulted in the Burntlog Route being selected as the preferred route:

- least road length containing steep vertical grades and within avalanche and landslide potential areas;

- much less elevation loss after the first summit;
- least amount of excavation and hauling excess material to waste sites;
- least miles of newly constructed road through previously undisturbed national forest and riparian conservation areas (**RCA**);
- eliminates mining-related travel and transporting of materials alongside major waterways (Johnson Creek or South Fork of the Salmon River);
- minimizes the risk of hazardous material spills into major waterways (only one Johnson Creek crossing);
- least road length paralleling streams, reducing the risk of hazardous material spills and sediment load into streams;
- fewest amount of retaining walls;
- lowest cost when compared to the other short-listed alternatives; and
- it is likely to require the least amount of time to construct.

Preliminary design criteria were based on jurisdictional policies of Valley County (Valley County, 2008) and the USFS (U.S Forest Service, 2011a). Key criteria include: design speed of 20 mph, maximum 10% vertical grade, 3% cross slope, and 28-foot width. However, Midas Gold may consider seeking approval for a resource development road that is 20-foot-wide to reduce cost and environmental impact associated with a 28-foot wide road.

The access road would connect to onsite roads, which include haul roads, process plant roads, and service roads associated with the tailings storage facility and other facilities on the Project site. The contemplated roads, Project facilities, and overall site layout are shown on Figure 18.2. The onsite roads would be all-weather unpaved gravel roads that would require dust suppression in the dry months, something Midas Gold does with existing roads on and near the Project site already. Haul roads would be designed to accommodate the largest truck planned, as discussed previously in Section 16.

Figure 18.1: Proposed Road and Electrical Infrastructure Upgrades

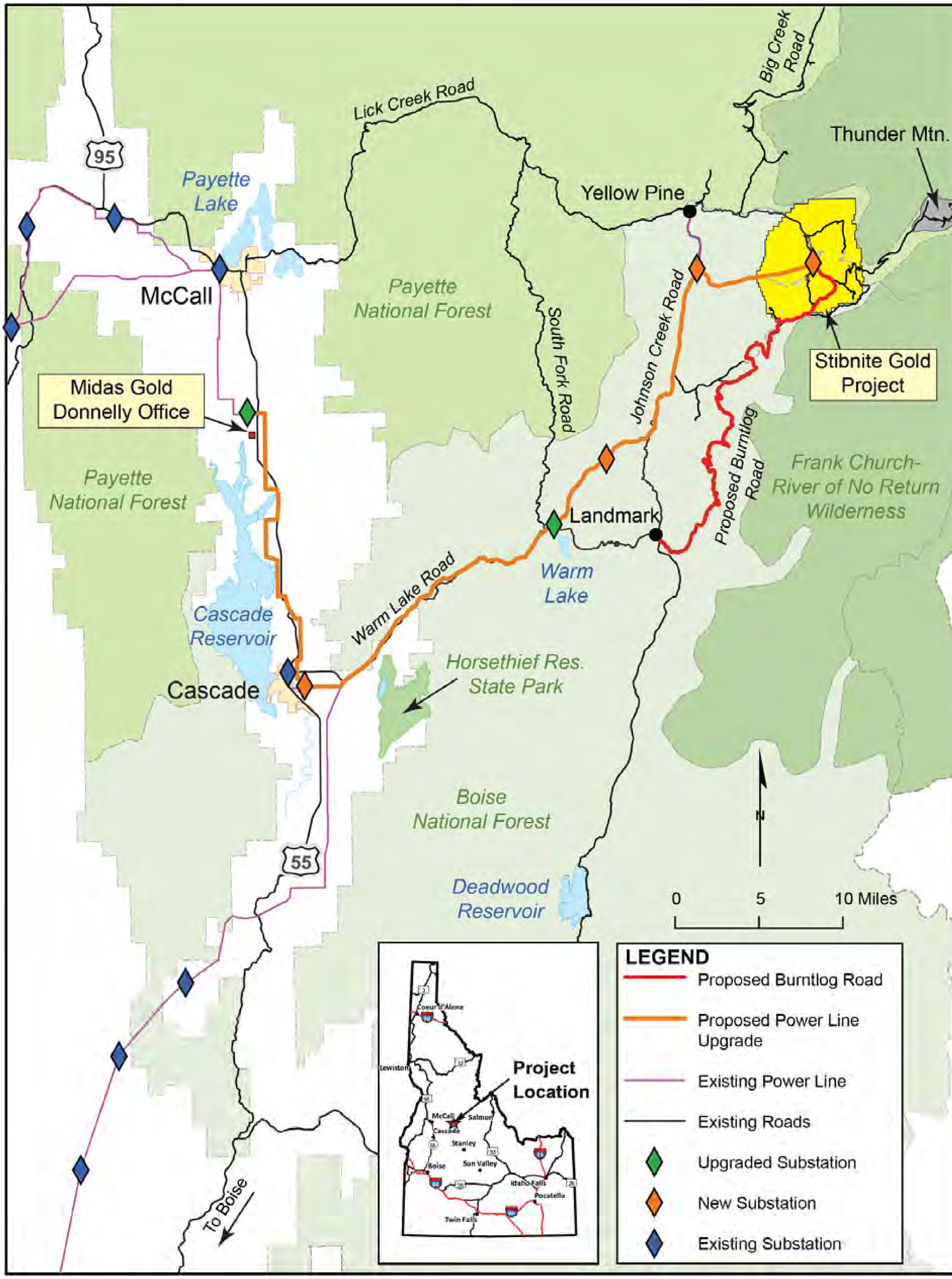
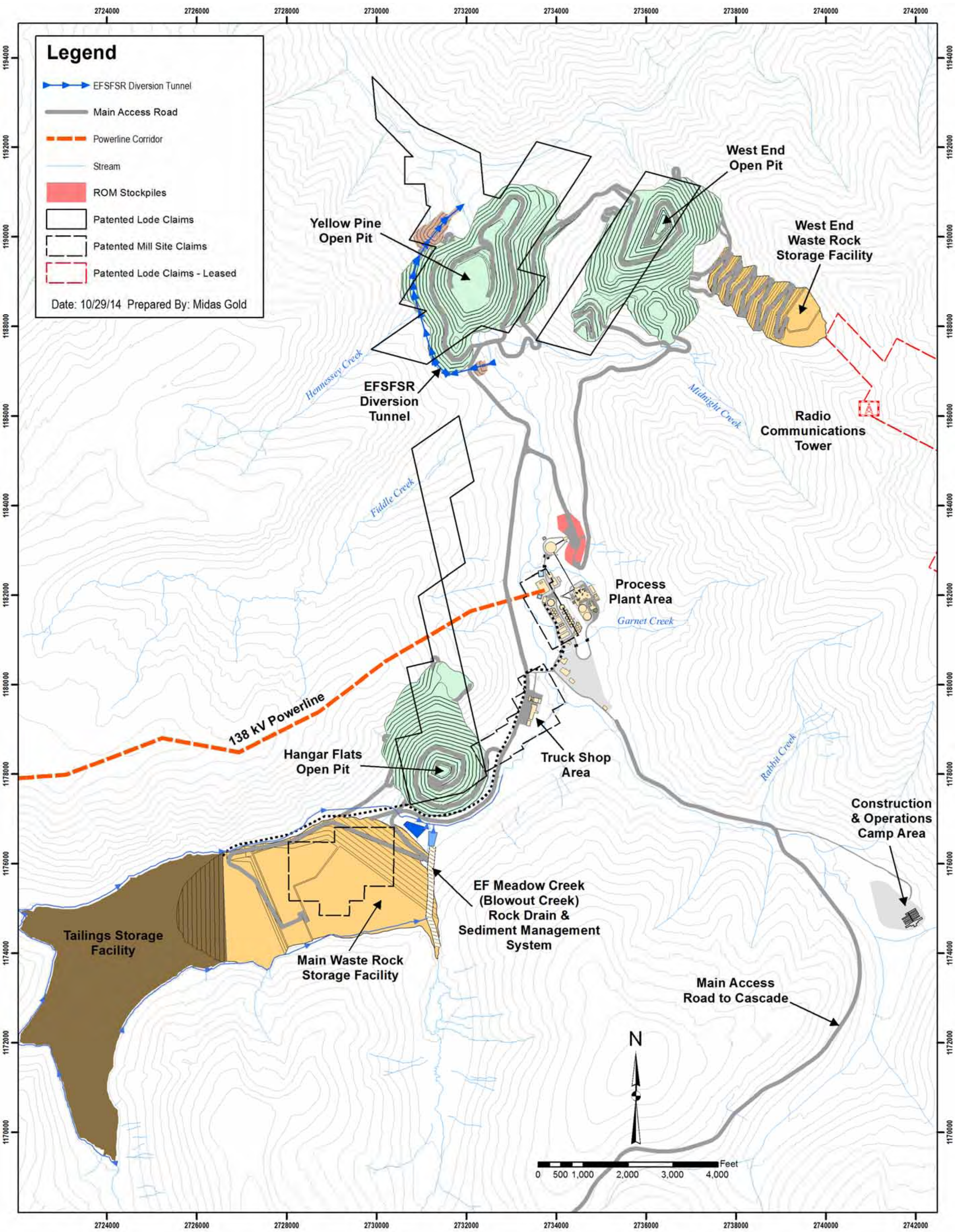


Figure 18.2: Proposed Site General Arrangement



18.3 OFF-SITE ADMINISTRATION, WAREHOUSE AND METALLURGICAL LABORATORY COMPLEX

In an effort to reduce traffic to and from the Project site and to reduce housing requirements at the site, administrative offices for the operation will be located in or near the town of Cascade (the "Cascade Complex"). The Cascade Complex would include offices for managers, safety and environmental services, human resources, purchasing, and accounting personnel. The administration building would be modular, consisting of eight 12 ft by 60 ft units. Network servers and the communications link for the mine would also be located at this complex, as well as the offsite repository for physical and electronic records for mine operations. Administration personnel in Cascade would coordinate procurement of and payment for the goods and services required at the mine site.

The Cascade Complex would also have a small warehouse to accumulate parts and supplies and a parking area for trucks to check-in and assemble prior to traveling to the Project site. Drivers would check-in at this complex and either proceed to the site, typically in a convoy, or unload at the warehouse for temporary storage and assembly of a load. A truck scale would be included to verify loads going into and out of the warehouse area, as well as a laydown area for temporary outdoor storage. A parking and assembly area for operations personnel to board buses for transportation into the mine site would also be included.

The main assay laboratory would be located at the Cascade Complex. The assay laboratory would be the primary location for sample preparation, analysis, and reporting for production, exploration, and specialty sampling for mine operations. Production samples would be delivered daily to the laboratory for processing and analysis, and the results would be transmitted electronically to mine operations and exploration personnel.

18.4 PROCESSING PLANT AND ANCILLARY INFRASTRUCTURE

The majority of the Project area is characterized by steeply sloping, mountainous terrain. Flat terrain with competent foundation conditions suitable for mine infrastructure is generally limited; these areas are typically in the valley-bottoms, near the colluvium/alluvium/bedrock contact, which is consistent with infrastructure siting by previous mine-operators. In order to establish the preferred layout for the Project process plant and related infrastructure, several potential locations were considered and evaluated against the following design constraints and considerations:

- environmental constraints (e.g. proximity to surface water and wetlands);
- regulatory constraints (e.g. land ownership or mandatory offsets from jurisdictional waters);
- topographic constraints (e.g. limited amount of flat terrain);
- geotechnical constraints (e.g. geologic hazard areas, sensitive soils, landslide areas);
- safety constraints (e.g. areas that lie in a difficult-to-mitigate avalanche paths);
- social considerations (e.g. siting a camp well-away from noise sources);
- priority Project development constraints (e.g. open pits, mine operations blast zones, tailings storage facility, waste rock storage facilities, haul roads, site access roads, high mineral resource potential);
- operability (e.g. distance from blast zones and potential mineral resources);
- efficiency considerations (e.g., establishing a logical traffic flow); and
- economic constraints (e.g. environmental mitigation, capital, operating, and closure costs).

Based on the preceding criteria, four potential process plant sites were considered: (1) the PEA plant site; (2) the former Stibnite town site; (3) the Scout Ridge site; and, (4) the former SMI mill site. Figure 18.3 shows the location of these four sites relative to other site features.

Detailed process plant and ancillary infrastructure layouts were developed for each of the four sites. The benefits and drawbacks of each location were quantitatively assessed using a detailed scoring system developed from the criteria summarized above.

Table 18.1 presents a summary of the results of the analysis.

Table 18.1: Site Layout Evaluation Results Summary

Layout Criteria	Layout Scoring Summary			
	PEA Plant Site	Old Town Site	Scout Ridge Site	SMI Mill Site
Environmental, Permitting & Social Considerations	10%	21%	21%	14%
Safety Considerations	9%	13%	12%	5%
Operational Flexibility Considerations	7%	6%	6%	5%
Capital Cost Considerations	16%	29%	29%	16%
Operating Cost Considerations	13%	19%	19%	18%
Totals	**55%**	**88%**	**87%**	**58%**

Table 18.1 indicates that the Old Town and Scout Ridge sites are strongly preferred. Given their proximity to one another, it was concluded that an optimized layout that utilizes both areas could be developed. This location provides competent foundation conditions for heavy and vibratory installations (such as the crusher, SAG mill and ball mill), a centralized layout for primary crushing and conveying coarse ore to the mills, and the best flexibility to optimize the size and location of specific plant areas with respect to each other. The area is relatively dry, is further from primary streams and the EFSFSR, the area has experienced appreciable historical disturbance, and is deemed operationally safer than other locations.

Figure 18.4 presents the primary infrastructure siting constraints in the Old Town / Scout Ridge area; Figure 18.5 presents a conceptual layout for the process plant, utilities, infrastructure, and ancillary buildings optimized on both the Old Town and Scout Ridge sites. This general arrangement has an overall north to south flow of mineralized material and concentrate. Supply truck and personnel transport traffic stay clear of the open pits and are adequately separated from both ore and waste haul truck traffic, and there is ample laydown space for storing equipment, supplies, and for erecting trucks near the mine access road. The detailed arrangement was determined on the basis of safety, environmental impacts, cost, security, noise, traffic, operational ease, and in consideration of the constraints listed above.

Figure 18.3: Potential Plant Site Locations

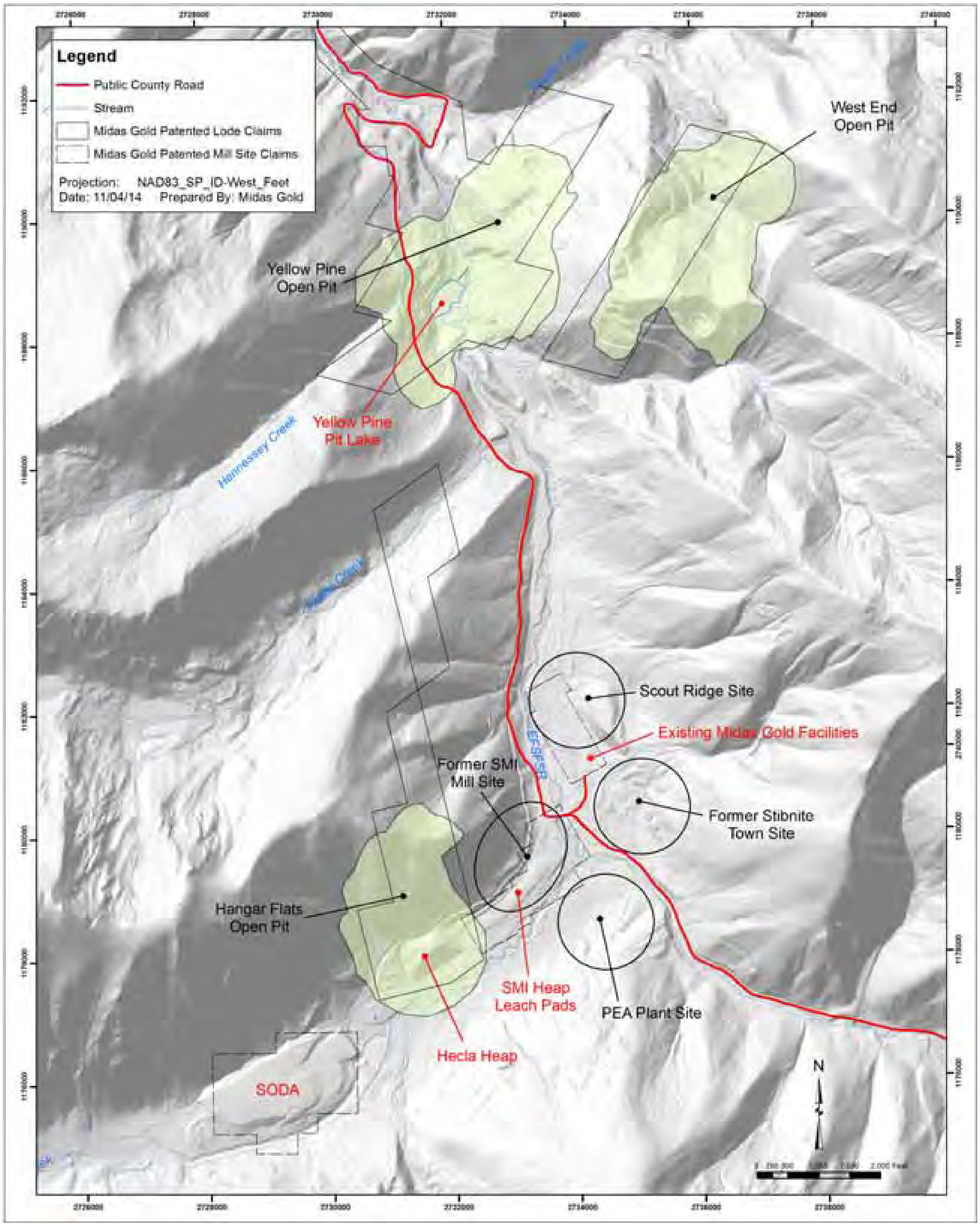


Figure 18.4: Infrastructure Siting Constraints

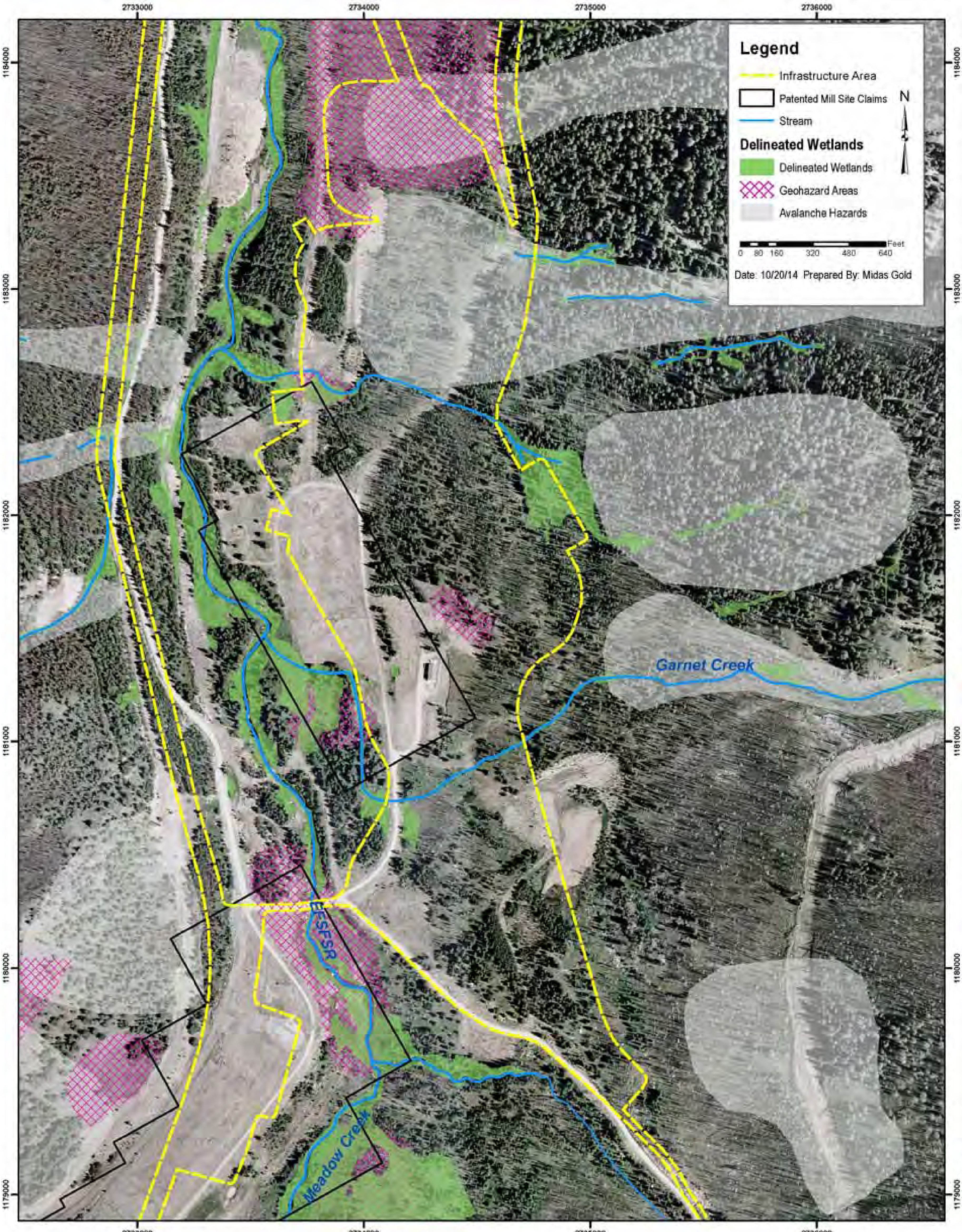
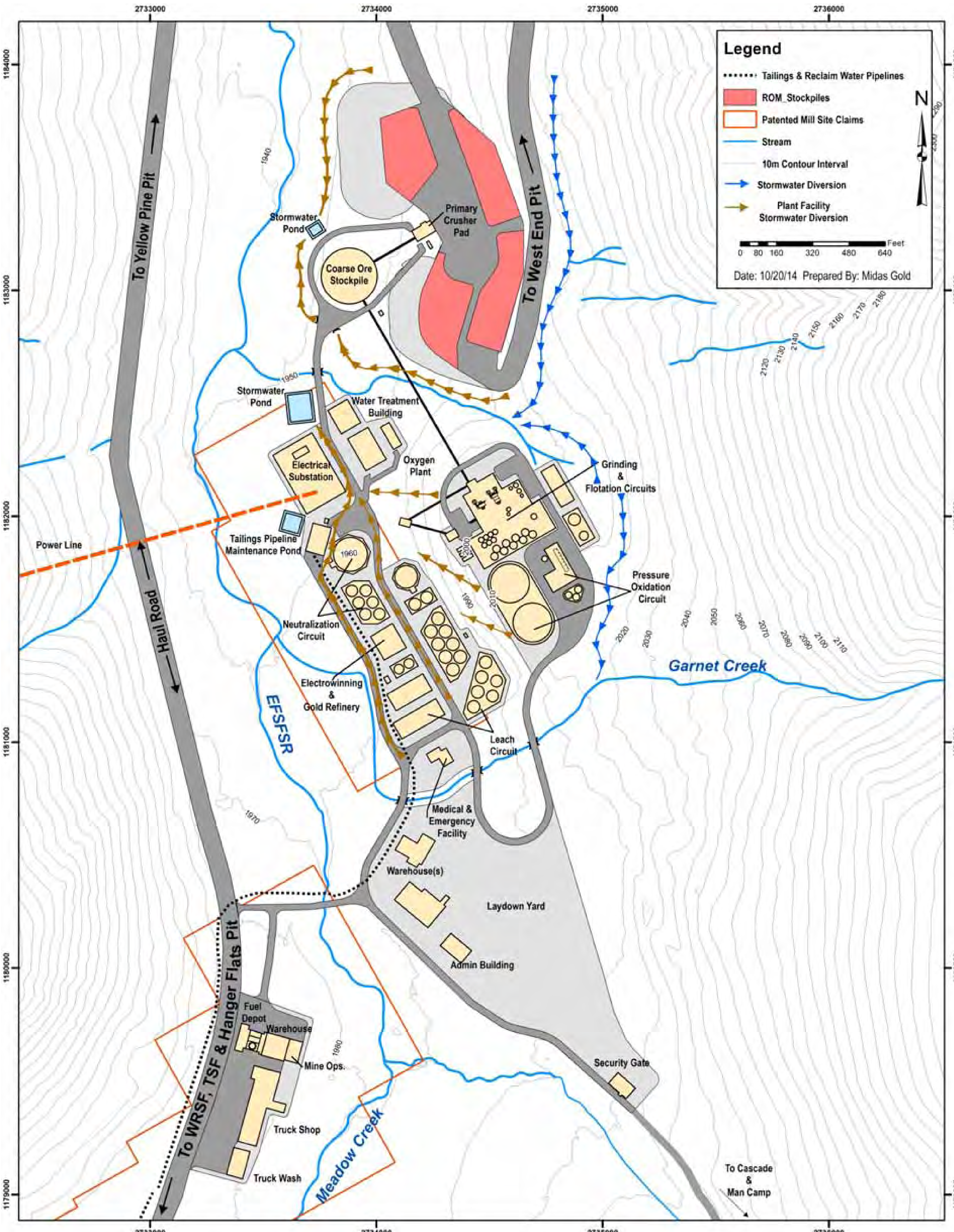


Figure 18.5: Process Plant and Ancillary Infrastructure Layout



18.5 POWER SUPPLY AND TRANSMISSION

The proposed on-site mining and mineral processing facilities are estimated to require a total instantaneous power demand of approximately 40 - 50 megawatts (**MW**). In order to identify the preferred power supply and distribution option, Midas Gold completed a comprehensive trade-off study that considered utility grid connection as well as both on-site and off-site self-generation scenarios including: diesel and natural gas reciprocating engines; simple cycle gas turbines, circulating fluidized bed combustion coal fired power; and renewable power generation scenarios involving photo voltaic solar, wind and hydro. In total, twelve power sources were considered and evaluated against environmental and social impacts, permitability, reliability and technical feasibility, and capital and operating costs.

Because the renewable power generation options considered would not be reliable sources of power for the Project's requirements of 24 hours per day, 365 days per year, and therefore would require significant alternative, redundant self-generation methods, grid power is deemed to have fewer environmental and social impacts as well as being the most economical alternative. A pre-existing 69 kV power-line corridor was historically permitted and constructed to the town of Stibnite, which indicates the feasibility of permitting a modern power-line to the Project site. Future studies will consider the expanded utilization of renewable energy, such as solar power which is currently being used for field operations, for areas like camp and offices, increasing the proportion of renewable energy utilized by the site.

The closest grid power-line to the Project site is a 12.5 kV distribution line supplying power to the nearby town of Yellow Pine, and the closest transmission line is a 69 kV line that provides power to Cascade and Warm Lake, Idaho. Since both power-lines are inadequate to carry the expected Project loads, the existing system would need to be upgraded to provide the additional service capability required.

The upgrades required to integrate the large load into the IPCo network include: an increased 230/138 kV transformer capacity; approximately 42 miles of 69 kV lines upgraded to 138 kV; approximately 21.5 miles of 12.5 kV line to upgraded to 138 kV line; and approximately 8 miles of new 138 kV line. Additionally, new or upgraded 138 kV substations at Lake Fork, Cascade, Warm Lake, and Yellow Pine, as well as measures to strengthen the voltages on the IPCo system are required. In addition, IPCo would need to re-supply small consumers between Warm Lake and Yellow Pine via a replacement 12.5 kV line as shown on Figure 18.1.

The 138 kV line would be routed to the Project site's main substation (the "Main Substation") where transformers would step the voltage down to the distribution voltage of 24.9 kV. The main substations would have redundant dual 138 to 24.9 kV transformers to prevent loss of power due to failure. Current Project design entails oxygen being supplied by a third party through a Sale-of-Gas (**SOG**) contract; therefore, a metered 24.9 kV line would be provided for the operator of the oxygen plant.

Power distribution from the Main Substation to various Project facilities would be at 24.9 kV. Main power corridors for the process plant power distribution (primary crusher, oxygen plant, truck shop, autoclave, permanent camp) would be overhead. Power within the process plant area will be underground in duct banks.

During construction, power supply would be provided by three 1,000 kW propane or diesel generators operating at 4,160 volts; the generators will also be reused for backup/emergency power during the operations phase of the Project. After primary power is provided via the 138 kV power-line, two of the generators would be relocated to the main substation for emergency power and the third would be relocated to the on-site permanent camp (as discussed below).

18.6 COMMUNICATION SYSTEM

Midas Gold's existing microwave relay (detailed in Section 5) was designed and constructed to be scalable to accommodate potential future increases in communications requirements. The system as it is currently setup provides up to 200 Mbps of bandwidth that is adequate to meet the needs of an approximately 120-person camp. Upgrading the current system to allow increases in communications capacity is a straightforward process of:

1) anchoring the existing tower pad;
2) adding an additional 20 ft section to the existing tower;
3) upgrading the antenna size to an eight foot dish or potentially adding a second antenna; and,
4) installing new high frequency (and likely FCC licensed) radios capable of increasing bandwidth to approximately 1,000 Mbps.

Updating the existing microwave relay system would provide sufficient communication capacity to service mine operations as well as the estimated 1,000-person workforce required during the Project construction period. The location of the existing tower is shown on Figure 18.2.

18.7 ON-SITE CONSTRUCTION AND OPERATIONS CAMP

Since the Project is located in a relatively remote area of Idaho, consideration was given to sourcing personnel required to construct and operate the Project as well as the housing requirements to do so.

Staffing the entire construction and operations workforce from the major nearby population centers in Valley County (population ±9,500) of McCall (population ±3,000) and Cascade (population ±1,000) has the potential to eliminate the need for an on-site residential facility (camp). While this scenario would offer significant financial advantages to the Project, the substantial one-way commute times (by road) of a minimum of 2½ hours from McCall and 2 hours from Cascade in summer conditions with an additional ½ hour in winter conditions, as well as related increased traffic, resulted in a decision that on-site housing would be required. As noted above, where possible certain functions would be located in Cascade.

Several potential camp locations were evaluated on the basis of environmental impacts, safety, cost, security, noise, traffic, quality-of-life, and operational ease. The location selected for the camp is approximately 1½ miles south-east of the confluence of the EFSFSR just off the existing Thunder Mountain Road; the location is quiet, yet located close enough to the site to yield minimal commute times, which should assist in attracting skilled operators to this remote location. For convenience, the construction camp will also be located near the operations camp area. The following sections describe how the construction and operations camps could be developed.

18.7.1 Construction Camp

Midas Gold has been conducting exploration activities at the proposed Project location since 2009 and, as a result, has facilities on-site capable of housing workers. The current on-site camp facilities are located near the proposed future plant site location and include:

- a 60-person (maximum) housing facility;
- a kitchen/dining building capable of serving 125 workers per 12 hour shift;
- a public drinking water system capable of treating 6,250 gal/day average, and a peak of 12,500 gal/hour.
- a Membrane Bioreactor (**MBR**) sewage treatment facility with a nominal treatment rate of approximately 9,000 gal/day average, and a peak treatment rate of 18,000 gal/day; and
- power provided by a 455 kW C-15 Caterpillar diesel generator.

To manage the estimated 1,000-person construction workforce, the existing exploration camp would be relocated and expanded appropriately. The camp would be developed based on the following assumptions:

- each room will have two beds and locking storage facilities for 4 workers who "share" the room on alternating shifts (day and night) and work cycles;
- there will be one bathroom for every 2 bedrooms;
- supervisors will have a dedicated room that is not shared with rotating shift personnel;
- the Owner's Team will be housed separately in the village of Yellow Pine.

18.7.2 Operations Camp

The operations camp would be developed by upgrading the construction camp. Approximately 517 employees are needed for the operation based on the overtime scheme associated with a modified "14 on, 14 off" work cycle. The bed count associated with this position assessment is approximately 250. As a result, the camp is designed to be a 300-person site residential facility, leaving approximately 50 beds for visitors and/or temporary workers of various types.

The distances from Cascade and McCall are too far for regular commuting from town to the Project site. Charter buses will be used to transport employees to and from the Cascade administration office/staging area and the Project site at the beginning and end of their work cycles, taking approximately two hours under good weather conditions. A charter bus company will operate a small fleet of 50- to 60-person buses, working on a schedule of staggered work cycles that will minimize the number of buses needed to handle the work cycle rotations.

Onsite transport of employees from the operations camp to the mine and plant work facilities would be accomplished by a small fleet of converted school buses and 14-person vans; the distance to transport employees from the operations camp to the various work facilities ranges from one to two miles. Operations personnel would double as bus and van operators. The onsite fleet would be winterized to handle snow conditions between the operation camp and the work areas.

18.8 SANITARY WASTE MANAGEMENT

Sanitary waste management would be handled by packaged sewage treatment facilities. The plant area and permanent camp would each have separate sewage treatment plants connected to leach fields for the treated water. The designs of the packaged sewage treatment plants are based on the calculated peak flow to the system. The leach fields would be designed in accordance with Valley County and State of Idaho standards using test work to establish the infiltration rates at the site of the leach field. Portable chemical toilets would be located at the mine open pits and other remote locations. The portable toilets would be serviced by a local vendor.

18.9 WATER MANAGEMENT INFRASTRUCTURE

Water management infrastructure is needed at the site to divert surface water around mine features and infrastructure or to control water that comes in contact with these features. Surface water that comes in contact with materials that have the potential to introduce mining and process-related contaminants (contact water) is kept separate from surface water that originates from undisturbed, uncontaminated ground (non-contact water). This is accomplished by diverting clean water around mine facilities and collecting and treating or reusing contact water.

18.9.1 Non-Contact Water Management

Surface water management activities include diversion of non-contact water originating offsite around mining operations, management of sediment from erosion occurring in the East Fork of Meadow Creek, and collection and treatment or reuse of contact water.

18.9.1.1 Surface Water Diversions

Surface water diversions are required to prevent offsite clean water from commingling with contact water, and to prevent the accumulation of excess water in the TSF. The principal surface water diversion routes Meadow Creek around the TSF and WRSF. Additional, smaller-scale diversions are provided to intercept hill-slope runoff around the perimeter of the TSF, WRSF, Historic Tailings reprocessing operation, open pits, and process plant area. Lower Meadow Creek would be diverted around the Hangar Flats pit prior to mining Hangar Flats below the creek level. Surface diversion channels are sized to convey the runoff from the 100-year, 24-hour storm event, determined using rainfall-runoff modeling. Diversion channels are either constructed in rock cut (on steep hillsides), or lined with rock riprap and geo-synthetic clay liner (**GCL**) to prevent erosion and minimize seepage (within alluvium/colluvium or fill). To maximize efficiency of the diversions while controlling capital costs, the TSF and WRSF diversions are phased to coincide with the various construction phases of the two facilities. TSF and WRSF diversions plans are shown on Drawing 18.1. Typical cross-sections are shown on Drawing 18.2.

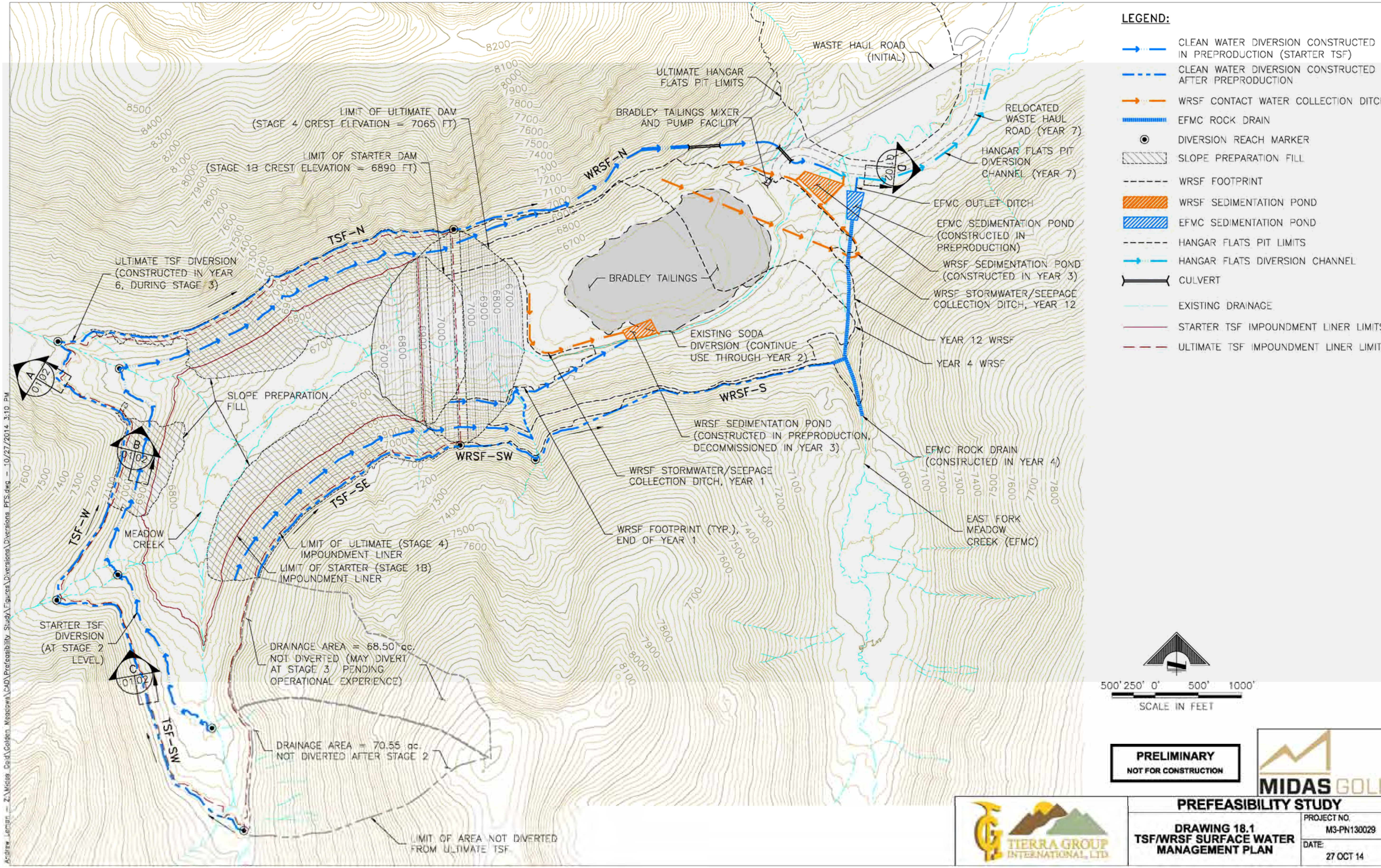
18.9.1.2 Diversion of the EFSFSR

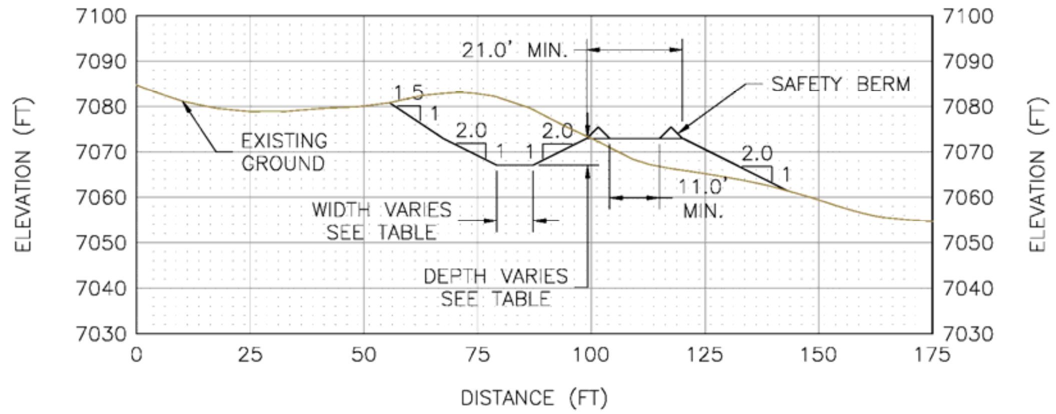
The EFSFSR was originally diverted from its natural alignment by the Bradley Mining Company, when it began open pit mining operations in the EFSFSR valley bottom in 1938. Surface channels were constructed initially, and later the Bailey tunnel diverted the river through bedrock around the east side of the historic Yellow Pine open pit. Currently the EFSFSR flows over a steep waterfall, which is a fish migration barrier, and into the historic Yellow Pine open pit, forming a pit lake and then exiting northward to its confluence with Sugar Creek. With a future goal of re-establishment of a more natural gradient suitable for fish passage in the EFSFSR flowing in the area of the Yellow Pine open pit, the pit lake must be dewatered and the EFSFSR temporarily diverted around the pit during future mining operations. The orientation of the Yellow Pine open pit relative to the surrounding steep terrain makes a surface diversion impractical; hence, the EFSFSR will be diverted around the open pit in a tunnel founded in rock.

A tunnel alignment around the west side of the Yellow Pine open pit was preferred over an alignment to the east as it would preclude potential surface water impacts to Sugar Creek, which is characterized as sensitive salmon spawning habitat. The 0.8-mile long EFSFSR diversion tunnel would be 15 x 15 feet and feature a low-flow channel excavated in the tunnel floor, as well as LED lighting, to provide for and encourage passage of migrating salmon, steelhead, and trout to the headwaters of the EFSFSR for the first time since 1938, when mining commenced in the Yellow Pine open pit. Approach channels would be rock-lined, with fish resting features. The tunnel hydraulic capacity exceeds the 500-year flood event (determined from analysis of the Stibnite USGS gauge), while the low-flow channel is sized to allow maintenance access outside of the spring runoff period. Drawing 18.3 and Drawing 18.4 present the tunnel design.

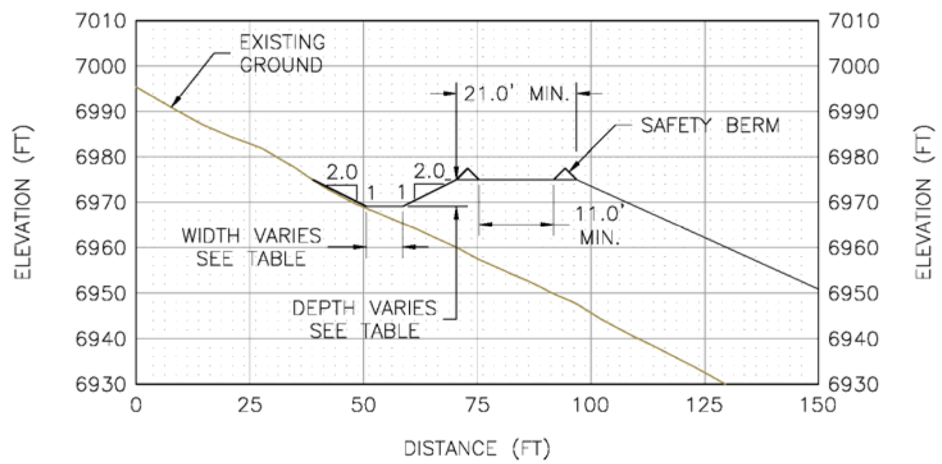
18.9.1.3 East Fork Meadow Creek Sediment Control

The East Fork of Meadow Creek (**EFMC**), which is commonly known as "Blowout Creek", introduces a significant sediment load to the EFSFSR due to ongoing erosion within the gully and alluvial fan created by a historical dam failure in the upper EFMC watershed. The sediment degrades the quality of the gravels for Salmon redds in Meadow Creek. A sedimentation basin would be excavated in the EFMC alluvial fan and this will serve to re-establish the sediment collection function of the present Yellow Pine pit lake as it is dewatered during the early phases of the Project operations. Later, the EFMC gully and alluvial fan will be in-filled and covered with waste rock as part of WRSF construction, thus capping the source of sediment and preventing subsequent erosion and sediment deposition in the river. A rock drain will convey the EFMC under the WRSF. At the time of this writing, sediment transport measurements are ongoing within Meadow Creek, EFSFSR, and EFMC to better identify sediment sources and quantify sediment loading in the site waterways. Results of the field measurements will be incorporated into design of EFMC sediment control measures when available.

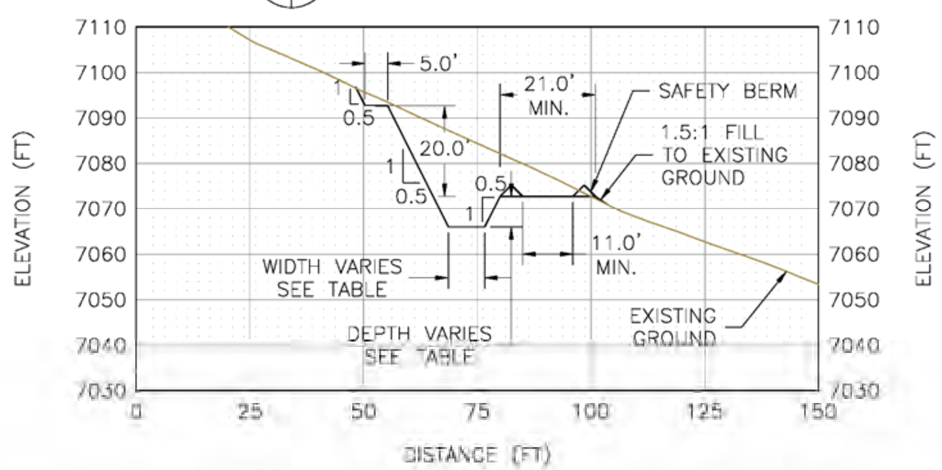

LEGEND:
CLEAN WATER DIVERSION CONSTRUCTED IN PREPRODUCTION (STARTER TSF)
CLEAN WATER DIVERSION CONSTRUCTED AFTER PREPRODUCTION
WRSF CONTACT WATER COLLECTION DITCH
EFMC ROCK DRAIN
DIVERSION REACH MARKER
SLOPE PREPARATION FILL
WRSF FOOTPRINT
WRSF SEDIMENTATION POND
EFMC SEDIMENTATION POND
HANGAR FLATS PIT LIMITS
HANGAR FLATS DIVERSION CHANNEL
CULVERT
EXISTING DRAINAGE
STARTER TSF IMPOUNDMENT LINER LIMITS
ULTIMATE TSF IMPOUNDMENT LINER LIMITS
WASTE HAUL ROAD (INITIAL)
ULTIMATE HANGAR FLATS PIT LIMITS
BRADLEY TAILINGS MIXER AND PUMP FACILITY
RELOCATED WASTE HAUL ROAD (YEAR 7)
HANGAR FLATS PIT DIVERSION CHANNEL (YEAR 7)
EFMC OUTLET DITCH
EFMC SEDIMENTATION POND (CONSTRUCTED IN PREPRODUCTION)
WRSF SEDIMENTATION POND (CONSTRUCTED IN YEAR 3)
WRSF STORMWATER/SEEPAGE COLLECTION DITCH, YEAR 12
YEAR 12 WRSF
YEAR 4 WRSF
LIMIT OF ULTIMATE DAM (STAGE 4 CREST ELEVATION = 7065 FT)
LIMIT OF STARTER DAM (STAGE 1B CREST ELEVATION = 6890 FT)
WRSF-N
TSF-N
BRADLEY TAILINGS
ULTIMATE TSF DIVERSION (CONSTRUCTED IN YEAR 6, DURING STAGE 3)
EXISTING SODA DIVERSION (CONTINUE USE THROUGH YEAR 2)
WRSF-S
SLOPE PREPARATION FILL
WRSF SEDIMENTATION POND (CONSTRUCTED IN PREPRODUCTION, DECOMMISSIONED IN YEAR 3)
EFMC ROCK DRAIN (CONSTRUCTED IN YEAR 4)
WRSF-SW
WRSF STORMWATER/SEEPAGE COLLECTION DITCH, YEAR 1
TSF-SE
TSF-W
MEADOW CREEK
WRSF FOOTPRINT (TYP.), END OF YEAR 1
EAST FORK MEADOW CREEK (EFMC)
LIMIT OF ULTIMATE (STAGE 4) IMPOUNDMENT LINER
LIMIT OF STARTER (STAGE 1B) IMPOUNDMENT LINER
STARTER TSF DIVERSION (AT STAGE 2 LEVEL)
DRAINAGE AREA = 68.50 ac. NOT DIVERTED (MAY DIVERT AT STAGE 3 PENDING OPERATIONAL EXPERIENCE)
TSF-SW
DRAINAGE AREA = 70.55 ac. NOT DIVERTED AFTER STAGE 2
LIMIT OF AREA NOT DIVERTED FROM ULTIMATE TSF
A 01 02
B 01 02
C 01 02
D 01 02
500' 250' 0' 500' 1000'
SCALE IN FEET
PRELIMINARY
NOT FOR CONSTRUCTION
MIDAS GOLD
TIERRA GROUP INTERNATIONAL, LTD.
PREFEASIBILITY STUDY
DRAWING 18.1
TSF/WRSF SURFACE WATER MANAGEMENT PLAN
PROJECT NO.
M3-PN130029
DATE:
27 OCT 14



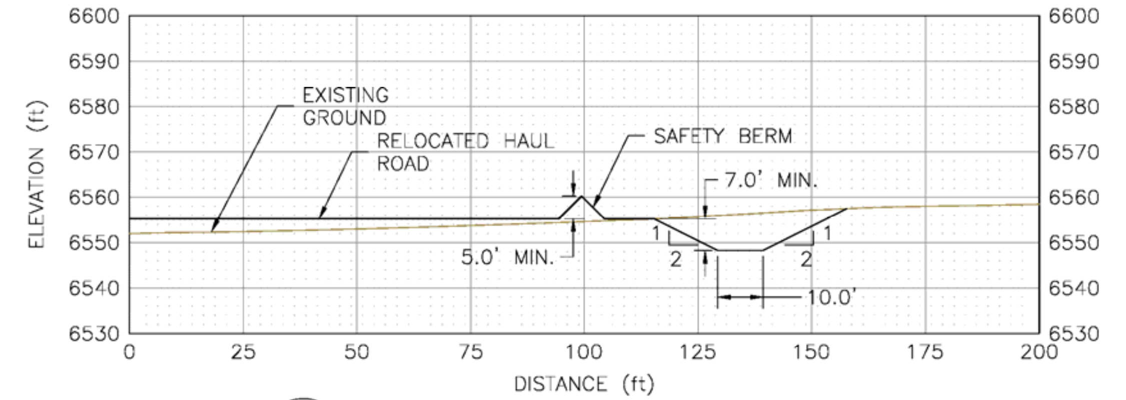
A 01|02 DIVERSION SECTION – ALLUVIUM/COLLUVIUM
SCALE AS SHOWN



B 01|02 DIVERSION SECTION – FILL
SCALE AS SHOWN



C 01|02 DIVERSION SECTION – ROCK CUT
SCALE AS SHOWN



D 01|02 HANGAR FLATS PIT DIVERSION SECTION
SCALE AS SHOWN

CHANNEL DIMENSIONS				
SEGMENT	SUBGRADE MATERIAL	SIDE SLOPE, Z (H:V)	MIN. DEPTH, D (FT)	BOTTOM WIDTH, W (FT)
TSF–SW	ALLUVIUM/COLLUVIUM	2.0:1	5.2	8.0
	ROCK	0.5:1	6.7	8.0
TSF–W	ALLUVIUM/COLLUVIUM	2.0:1	5.9	8.0
	ROCK	0.5:1	7.8	8.0
	FILL	2.0:1	5.9	8.0
TSF–N	ALLUVIUM/COLLUVIUM	2.0:1	7.1	8.0
	ROCK	0.5:1	9.8	8.0
	FILL	2.0:1	7.1	8.0
WRSF–N	ROCK	0.5:1	9.0	10.0

PRELIMINARY
NOT FOR CONSTRUCTION

MIDAS GOLD

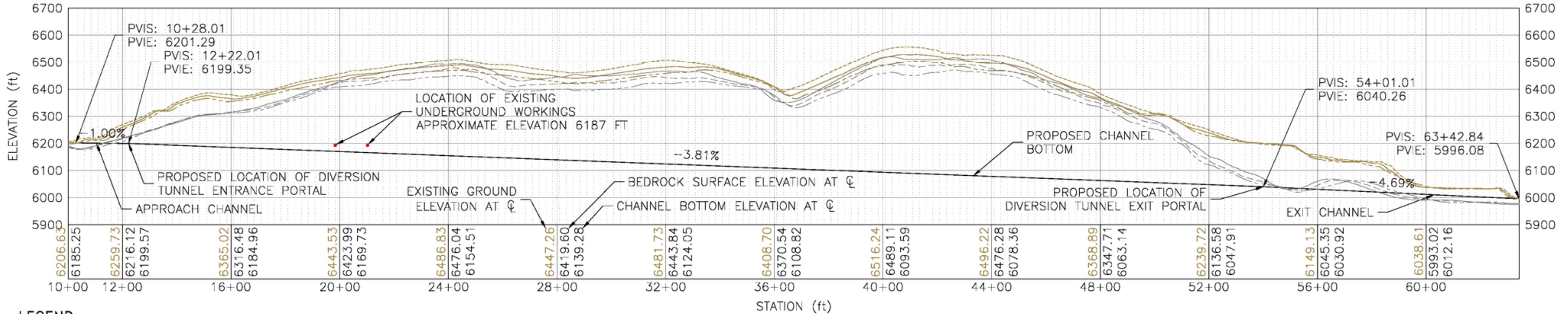
TIERRA GROUP INTERNATIONAL, LTD.

PREFEASIBILITY STUDY

DRAWING 18.2
TSF/WRSF WATER DIVERSION TYPICAL SECTIONS

PROJECT NO. M3-PN130029

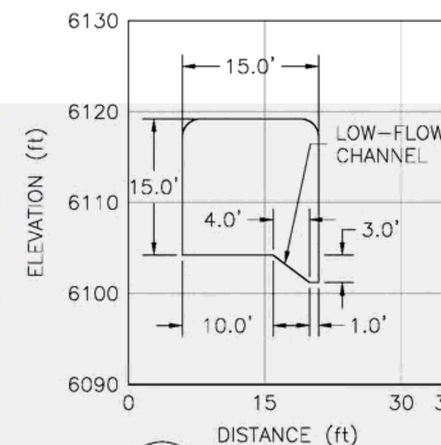
DATE: 27 OCT 14



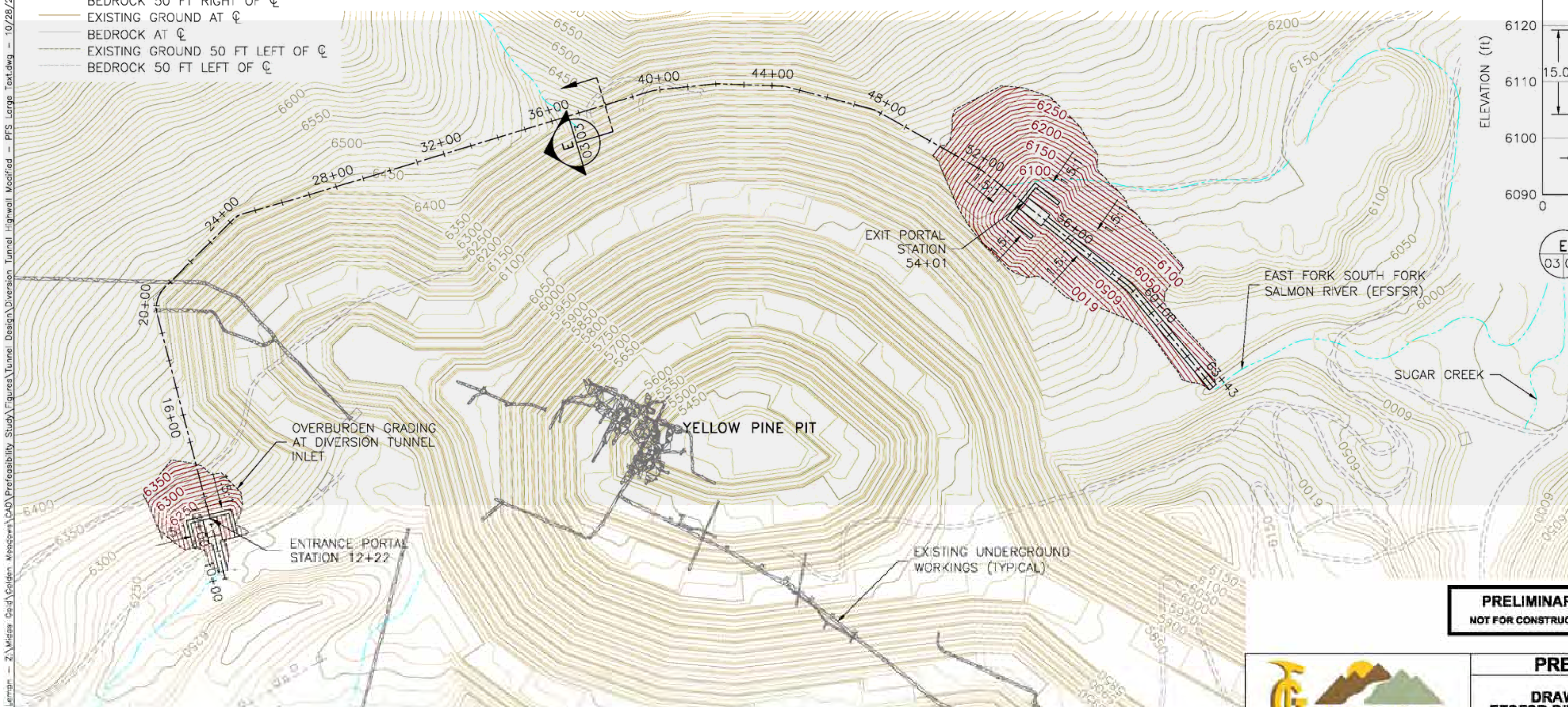
DIVERSION TUNNEL PROFILE VIEW
SCALE AS SHOWN

LEGEND:

- EXISTING GROUND 50 FT RIGHT OF ℄
- BEDROCK 50 FT RIGHT OF ℄
- EXISTING GROUND AT ℄
- BEDROCK AT ℄
- EXISTING GROUND 50 FT LEFT OF ℄
- BEDROCK 50 FT LEFT OF ℄



E 03|03 TUNNEL SECTION
SCALE AS SHOWN



DIVERSION TUNNEL PLAN VIEW

PRELIMINARY
NOT FOR CONSTRUCTION

MIDAS GOLD

TIERRA GROUP INTERNATIONAL, LTD

PREFEASIBILITY STUDY

DRAWING 18.3
EFSFSR DIVERSION PLAN AND PROFILE

PROJECT NO. M3-PN130029
DATE: 27 OCT 14

Andrew Lemon - Z:\Midas Gold\Golden Meadows\CAD\Prefeasibility Study\Figures\Tunnel Design\Diversion Tunnel Highwall Modified - PFS Large Text.dwg - 10/28/2014 2:03 PM

18.9.2 Contact Water Management

Contact water is surface water that has come into contact with the mine pits, ore stockpiles, spent leached ore (SODA and Hecla heap, once cover material is stripped), Historic Tailings, waste rock, or any other mining-related surface. Contact water may require active or passive treatment during construction, operations, or closure prior to discharge to the environment. Process water (including reclaim water pumped from the TSF) is addressed separately from contact water. Precipitation or dust control water falling on the listed surfaces will be collected, contained and segregated from surface waters that are not in contact with mine facilities.

Contact water from the plant site, ore stockpiles, WRSF, SODA/Historic Tailings reprocessing operation, and Hecla heap would be collected and contained in ponds or sumps sized appropriately for their respective catchment area. Water would be retained in these ponds to settle sediments, then pumped to the tailings impoundment or discharged after testing has confirmed that discharge limits are met.

Contact water originating in the pits (including surface runoff, snowmelt, and groundwater seepage) would be collected in sumps within the pits, and pumped out as needed for use in dust suppression in the pits and process makeup. Surplus contact water collected in the pits would be evaporated, treated for discharge, or pumped to the TSF for future use as reclaim/process makeup.

Runoff from roads with the potential to be in contact with process reagents would be collected. Storm water from other roads outside of the plant site, stockpiles, and WRSF area would be treated locally with small-scale sediment control BMPs to remove sediment prior to discharge. Vehicles leaving the mine site via the mine access road would pass through a wheel wash station and the wash water would be collected in a sump and treated for discharge, or pumped to the TSF for reuse.

18.10 WATER SUPPLY

Water supply for the mine, process plant, and permanent camp would be provided by three types of water systems: freshwater, reclaim water, and potable water. Freshwater for the process would be supplied from groundwater resources by a water supply well field and Hangar Flats dewatering well. Reclaim water would be reused and pumped from the supernatant water pond in the TSF. Potable water for the office and other mine facilities would be supplied by the process fresh water supply well field. A separate water supply well would be developed nearby for potable water supply to the camp. Potable water would be filtered and chlorinated before use.

18.10.1.1 Water Supply Well Field

Freshwater for process needs would be supplied by a water-supply well field located in the Meadow Creek valley, upstream from its confluence with the EFSFSR. Groundwater pumped from these wells would be collected in an equalization tank and pumped to the freshwater/firewater head tank located on higher ground east of the plant site. Partly as a safety measure, freshwater for process needs would be drawn by gravity from the freshwater tank from an elevated nozzle to allow the water in the bottom of the tank to remain available for fire suppression use, thereby ensuring an adequate water supply and pressure from gravity for fire suppression at all times, even when there is no power.

A portion of this flow would be diverted to the potable water tank equipped with a filter and chlorination system to inhibit bacteria in the potable water system.

Water for the permanent camp would be obtained from a separate water supply well located in the EFSFSR valley to its southwest. This water will be filtered and chlorinated for cleaning, cooking, showering, and consumptive use in the permanent camp.

18.10.1.2 Reclaim Water System

Process water pumped from the TSF supernatant water pond would be reused as process water. Water reclaimed from the TSF would be pumped to the reclaim water tank at the plant site. From the TSF to the plant site, the reclaim water pipeline would share a secondary containment trench with the tailings pipeline. At the plant site, the reclaim line would diverge and is located in its own containment trench. Water from the reclaim water tank would be distributed to the various points of use in the process where it is needed.

18.11 PROCESS WATER TREATMENT AND MANAGEMENT INFRASTRUCTURE

The mining operation would operate on a negative water balance during the initial phases of operation, using freshwater makeup from the water supply well field. Development of the Hangar Flats open pit in the alluvium of the Meadow Creek valley would require dewatering to limit water infiltration to the pit and maintain stability of the pit slopes. The current calculation of the site-wide water balance indicates a surplus and water would need to be evaporated or treated and discharged. A water treatment plant may be installed to treat this water to meet discharge standards. Water treatment standards are expected to include metal and particulate concentration standards, and temperature control. The design of the treatment system would be based on the characteristics of the water to be treated. In general, treatment and release of pumped groundwater (if treatment is required) would be prioritized ahead of treatment and release of contact water. Process water would be reused in the process plant and not discharged. The cost for a typical water treatment system of the type envisaged for this site is included in the cost estimate as sustaining capital.

Enhanced evaporation, using snowmaker-style misters, may be used to supplement the treatment system, in particular to prevent surplus process water accumulation in the TSF. Treatment and enhanced evaporation differ in their relative effectiveness, efficiency, usefulness in cold/wet conditions, and applicability to variable inflow water quality. Midas Gold will work with regulatory authorities and Project stakeholders to develop the most appropriate water management solution to maintain the stream flow regime and water quality of the EFSFSR.

18.12 MINE WASTE MANAGEMENT

Mine waste requiring on-site management includes waste rock from the three open pits; flotation and POX tailings from ore processing; and existing historic mine waste (spent heap leach ore from SODA and the Hecla heap) exposed during construction and mining. The existing Historic Tailings would be reprocessed, removing the majority of metals and sulfides of potential concern through flotation, and commingled with the rest of the tailings. Section 20 discusses the waste rock characterization, geochemistry, and implications for waste management. Also included in Section 20 is a characterization of the tailings and the historic spent ore from the SODA area.

Based on previous siting optimization and tradeoff studies, volume estimates from the current mine plan, and the waste characterization described in Section 20, a single TSF would be constructed to retain all tailings from the processing of the various ore types. This option is optimal to reduce Project footprint, provide for a single containment facility for monitoring and closure, and allow for the utilization of waste rock to buttress the TSF. Waste rock would be deposited in a WRSF adjacent to and abutting against the TSF, used as rockfill in TSF construction, placed as backfill within mined-out areas of the open pits to facilitate closure and reclamation, and above the current West End WRSF. Spent ore and waste rock from previous on-site operations would be used as a construction material in the TSF. Based on preliminary geochemical testing results, the construction use of spent ore material from the SODA area would be limited to applications where the material would either remain within containment or in a situation where the exposure of the material to air and water is limited. For example, placement of the spent ore below a synthetic liner but above the water table would reduce the potential for further oxidation and mobilization of constituents from this material. Reuse of this already mined material would reduce the quantities of materials required to be mined and crushed in order to construct these facilities, thereby reducing the environmental impact that would otherwise be required for mining and crushing.

18.12.1 Tailings Storage Facility

As currently envisioned, the Project would produce approximately 98 million short tons of tailings over a 12-year mine life. As the tailings would contain trace amounts of cyanide, and metals (particularly arsenic and antimony from minor amounts of sulfides not recovered in flotation), a fully-lined containment facility, utilizing a geo-synthetic liner, is proposed in order to isolate the tailings and process water within the impoundment. The tailings facility as contemplated consists of a rockfill dam, a fully-lined impoundment, and appurtenant water management features. The WRSF is located immediately downstream of and abutting against the TSF dam, and would act as a 0.6 mile-thick buttress, substantially enhancing dam stability. Design criteria were established based on the facility size and risk using applicable regulations and industry best practice for the TSF on a standalone basis; the addition of the downstream waste rock buttress substantially increases the safety factor for the design. Table 18.2 lists the design criteria for the TSF.

Table 18.2 TSF Design Criteria

	Parameter	Criteria	Comment
Solution and Water Management	Inflow Design Flood (IDF) – Impoundment	Probable Maximum Flood (PMF)	Facility will provide storage capacity above the normal operating pool to store the IDF, assuming diversions fail at the onset of the storm. No operational spillway is included.
	IDF - Diversions	1% probability (100-year, 24-hour event)	Diversions will pass peak flow from IDF without damage
	Freeboard – Impoundment	4 feet	Dry freeboard above stored IDF
	Freeboard – Diversions	1 foot	
Geotechnical Stability	Static Factor of Safety (FOS)	1.5	
	Pseudo-static (Earthquake) FOS	1.0	
	Design Earthquake	475-year (during operations); Maximum Credible Earthquake (post-closure)	

The TSF dam would be constructed of compacted mine waste rock, with a geo-synthetic liner on the upstream face (identical to the impoundment liner discussed below). Rockfill is placed in zones of successively more stringent lift height and compaction criteria approaching the liner, with the final buffer zone (directly under the liner system) consisting of gravel and smaller-sized material derived from SODA and screened historical waste dump material, overburden or valley alluvium. Construction from rockfill is inherently lower risk than construction from tailings material, as rockfill will not fluidize if saturated. TSF staging was determined from planned production rates coupled with the TSF water balance and tailings density estimates derived from consolidation testing/modeling. The impoundment would be fully lined to the elevation of the first stage during preproduction; however, the starter dam would initially be constructed at a lower elevation to balance rockfill needs with the available waste from the Yellow Pine open pit. The starter dam would then be raised during Year 1 of production to match the lined elevation of the rest of the facility. Four total stages are envisioned, with a facility expansion planned every 3 years during operations. Drawing 18.5 shows the proposed TSF dam stages and zones.

The TSF impoundment (including the upstream dam face) would be lined with geo-synthetic materials to prevent seepage of process water or transport of tailings out of the facility. The primary liner will consist of 60-mil (1.5 mm) linear low-density polyethylene (**LLDPE**), which features superior puncture resistance and elongation characteristics among typical TSF lining alternatives. A GCL will be placed as a secondary liner, providing a self-sealing barrier to leakage should the primary liner be torn or punctured. Where suitable soil exists (typically in valley bottoms) it would be scarified and re-compacted to prepare the liner subgrade. Steep, rocky hillsides (approximately 1/3 of the TSF footprint) would be covered with slope preparation fill to cover rock outcrops and flatten slopes sufficiently to allow liner placement. Slope preparation fill would consist of alluvium, colluvium, previously-mine rock, or rock borrowed from within the limits of the open pits. SODA material, screened site soil, or screened mine waste would be placed as a buffer zone as needed to cover coarse or rocky sections of subgrade or slope preparation fill. Slope preparation fill areas within the impoundment are designed to be stable under the same criteria as the TSF dam (static FOS 1.5, earthquake FOS 1.0).

Tailings would be deposited in the TSF from a series of drop-pipes (spigots) originating from the tailings distribution header along the facility perimeter bench. Sub-aerial tailings deposition would promote drying and consolidation of the tailings. Rotating active deposition points would allow additional drying, and sequencing of deposition would allow gradual development of a tailings beach that slopes generally from west to east within the facility, mimicking the pre-Project valley drainage and simplifying facility closure. Development of a tailings beach would also provide a measure of protection against floating ice from damaging the liner system. Drawing 18.6 and Drawing 18.7 show the TSF deposition plan for selected stages. TSF water management facilities include diversions, drainage systems, the reclaim system, and evaporators. Surface water diversion channels would serve to temporarily divert portions of the Meadow Creek within the TSF footprint and its impacted tributaries around the TSF and WRSF, while underdrains constructed in valley bottoms would collect springs and seeps and prevent accumulation of water under the liner system. A gravel over-liner drain system would collect tailings consolidation water, and route it to a sump from which it would be pumped back to the supernatant pool. Water would be reclaimed from the facility pool via barge-mounted pumps, and returned to the process plant via a pipeline. Snowmaker-type evaporators may be installed at the TSF to dispose of excess water introduced to the system when mining of Hangar Flats begins. Drawing 18.1 shows the contemplated water management plan for the WRSF and TSF. Table 18.3 summarizes the TSF design.

Table 18.3 Summary of TSF Design

Design Aspect	Description
Subgrade	Re-worked and compacted in situ materials, or minimum 12 inches of buffer/liner bedding fill.
Secondary Liner	Geo-synthetic clay liner.
Primary Liner	60-mil Single-sided textured LLDPE Geo-membrane liner.
Leak Detection	None. Underdrains may provide incidental detection and collection.
Overdrain	Discontinuous gravel drain on valley floor; geo-synthetic strip drains as needed on hillsides.
Underdrains	Geotextile-wrapped gravel trenches, with perforated HDPE pipe as needed.
Deposition Strategy	Sub-aerial; depositing from west side of impoundment and dam with pool on east side near, but not normally in contact with, dam.
Reclaim	Pumped from barge (vertical turbine pumps).

18.12.2 Tailings and Reclaim Water Pipeline Corridor

Tailings for the Project would be pumped from the Tailings Neutralization Thickener to the crest of the starter dam and then around the perimeter of the TSF. The tailings pipeline and pumping system would require sufficient head to deliver tailings to the back of the TSF. The tailings system must have enough flexibility to increase in total dynamic head as the tailings dam is contemplated to grow in height over the 12-year Life-of-Mine. In approximately Year 5, the tailings pipeline would be rerouted to the southeast to accommodate the growth of the Hanger Flats open pit.

Horizontal centrifugal pumps that increase in number as the dam height increases would be used to pump the tailings from the thickener to the TSF. The initial requirement includes four operating pumps and four standby pumps. The ultimate configuration would include six operating pumps and six standbys.

The tailings pipeline would be HDPE-lined, 24-inch carbon steel pipe. The pipeline would be installed in a geo-synthetic lined containment trench to avoid potential release of any spillage or leakage to the environment. The trench would have emergency containment ponds in low points to collect any leakage or storm water that falls within the trench. The tailings line would be installed on concrete "sleepers" to keep it off the ground. An 18-inch HDPE reclaim water line would be collocated in the trench to provide secondary containment of water being reclaimed from the TSF. The slurry line from the Historic Tailings recovery operation would also share this trench until it is no longer required.

The proposed routing of the tailings pipeline is designed to follow the waste haul road on the north side of the Meadow Creek valley (Figure 18.2). The pumping station would be on the west side of the plant area. The tailings line would be routed across the EFSFSR on a bridge in a double-contained pipe, then generally follow the haul road toward the dam. After passing the vicinity of the future Hangar Flats pit, the pipeline corridor would be installed in a trench that climbs the slope on the north side of the valley. The pipeline corridor would be accompanied by a roadway to enable monitoring and servicing the pipeline and trench. The pipeline would be installed sufficiently high on the valley slope so that it is above the ultimate height of the WRSF so that construction of the latter would not interfere with the tailings operation.

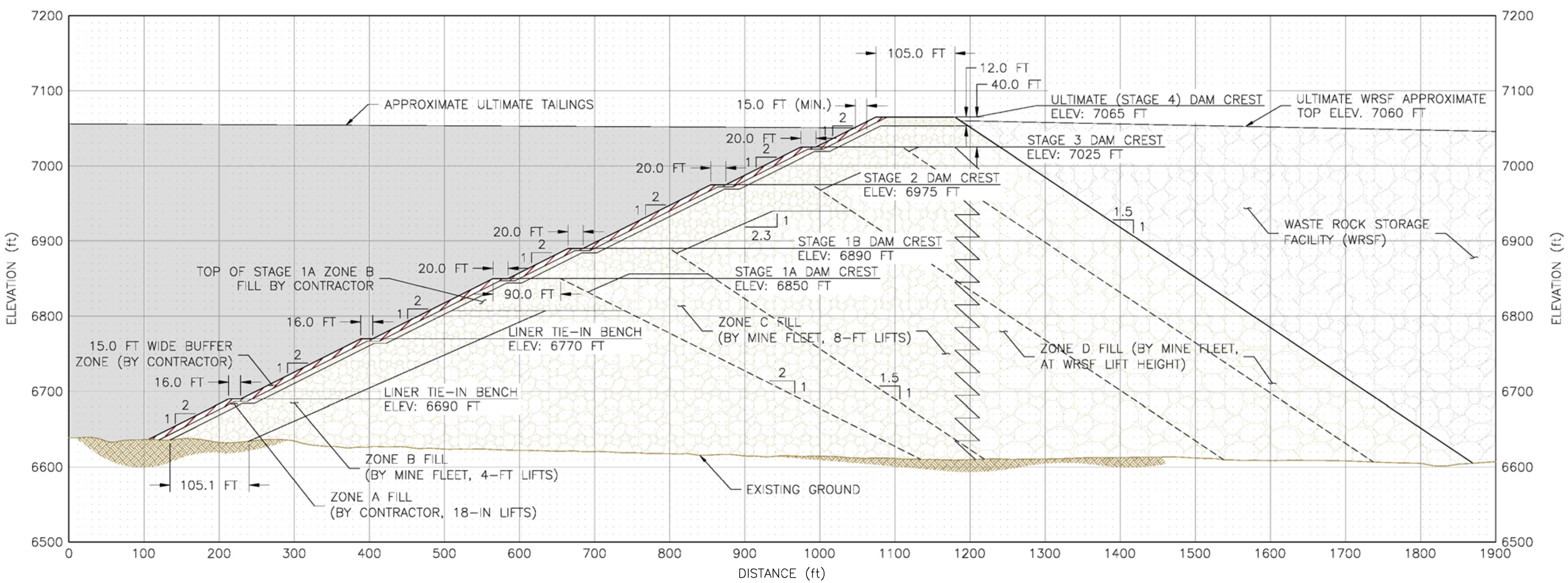
18.12.3 Waste Rock Storage Facility

The main WRSF would be located immediately east of the TSF, between the TSF and the Hangar Flats open pit. It would receive waste rock and overburden from mining the Yellow Pine and Hangar Flats open pits, totaling approximately 149 million short tons, in addition to that placed as rockfill for TSF dam construction. Most of the waste rock from the West End open pit (approximately 105 million short tons) would be used to backfill portions of the West End and Yellow Pine pits, with the remainder (approximately 25 million short tons) stored at the West End WRSF. With SODA material included, the TSF dam and WRSF combined would hold approximately 210 million short tons of waste rock and overburden.

The initial lift of the WRSF would be placed at the toe of the TSF dam, with the WRSF expanding vertically and downstream as waste placement progresses. The WRSF would thus provide a continuously-growing buttress for the TSF dam, significantly enhancing dam stability and eventually reaching a thickness of 0.6 miles.

If the results of geochemical testing (currently in-progress) indicate the need for special handling of certain waste materials, a waste management / placement plan would be developed. Waste with higher metal-leaching or acid generation potential would either be blended with neutralizing material such as that from West End pit, or segregated in a location within the WRSF that minimizes potential exposure to air and moisture.

As discussed in Section 18.8, runoff and seepage would be collected at the toe of the WRSF using berms and ditches, and routed to ponds for settling of sediments and potential reuse. Collection ditches and diversion berms would be rebuilt at the toe of the WRSF as it expands, minimizing the commingling of contact and non-contact water. Drawing 18.1 shows the water management plan for the WRSF and TSF.



PRELIMINARY
NOT FOR CONSTRUCTION

MIDAS GOLD

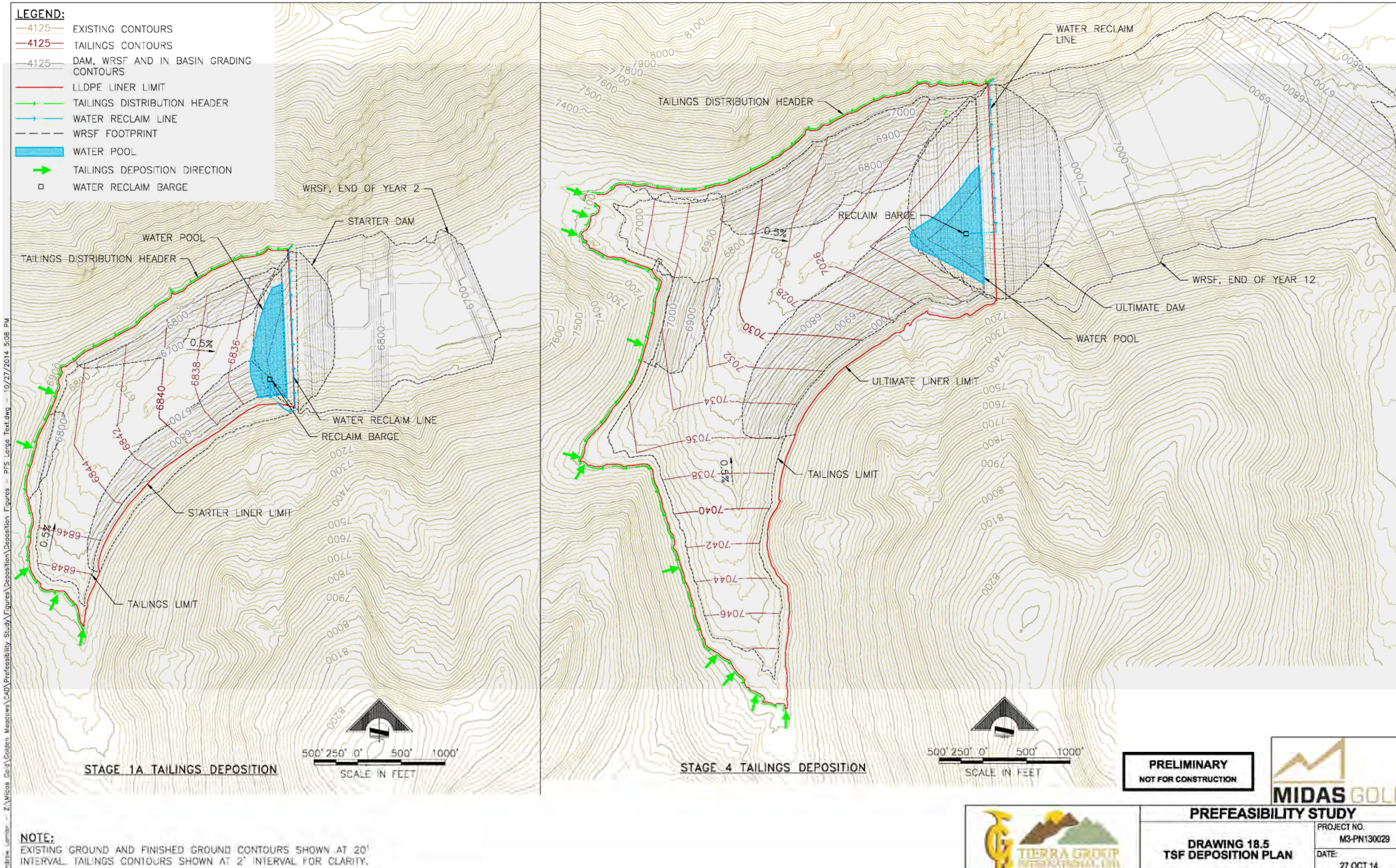
TIERRA GROUP INTERNATIONAL, LTD

PREFEASIBILITY STUDY

DRAWING 18.4
TSF DAM SECTION

PROJECT NO.
M3-PN130029

DATE:
27 OCT 14



LEGEND:
4125 EXISTING CONTOURS
4125 TAILINGS CONTOURS
4125 DAM, WRSF AND IN BASIN GRADING CONTOURS
LLDPE LINER LIMIT
TAILINGS DISTRIBUTION HEADER
WATER RECLAIM LINE
WRSF FOOTPRINT
WATER POOL
TAILINGS DEPOSITION DIRECTION
WATER RECLAIM BARGE
WRSF, END OF YEAR 2
STARTER DAM
WATER POOL
TAILINGS DISTRIBUTION HEADER
0.5%
WATER RECLAIM LINE
RECLAIM BARGE
STARTER LINER LIMIT
TAILINGS LIMIT
STAGE 1A TAILINGS DEPOSITION
500' 250' 0' 500' 1000'
SCALE IN FEET
WATER RECLAIM LINE
TAILINGS DISTRIBUTION HEADER
RECLAIM BARGE
WRSF, END OF YEAR 12
ULTIMATE DAM
WATER POOL
ULTIMATE LINER LIMIT
TAILINGS LIMIT
STAGE 4 TAILINGS DEPOSITION
500' 250' 0' 500' 1000'
SCALE IN FEET
NOTE:
EXISTING GROUND AND FINISHED GROUND CONTOURS SHOWN AT 20' INTERVAL. TAILINGS CONTOURS SHOWN AT 2' INTERVAL FOR CLARITY.
PRELIMINARY
NOT FOR CONSTRUCTION
MIDAS GOLD
PREFEASIBILITY STUDY
DRAWING 18.5
TSF DEPOSITION PLAN
PROJECT NO.
M3-PN130029
DATE:
27 OCT 14

SECTION 19 TABLE OF CONTENTS

SECTION 19 LIST OF TABLES

SECTION 19 LIST OF FIGURES

19 MARKET STUDIES AND CONTRACTS

19.1 MARKET STUDIES

19.1.1 Doré

The economic analysis completed for this PFS assumed that gold and silver production in the form of doré could be readily sold without deleterious element penalties. Assumed gold and silver doré payabilities, refining and transport charges are provided in Table 19.1; these values are considered typical.

Table 19.1: Dore Payables, Refining and Transportation Assumptions

Parameter	Gold in Doré	Silver in Doré
Metal Payability in Doré	99.5%	98.0%
Refining Charges	$1.00/oz Au	$0.50/oz Ag
Transportation Charges	$1.15/oz Au	$1.15/oz Ag

19.1.2 Antimony Concentrate

A preliminary market study for the sale of antimony concentrate was completed by a confidential independent leading industry participant. The marketing study was based on preliminary antimony concentrate production estimates, ranges for projected antimony, gold, silver, and deleterious element grades in the concentrate. The following information was derived from the antimony market study:

- Approximately 200,000 tonnes of antimony is presently produced annually around the world. One quarter of the production is from recycling while the remaining three-quarters result from primary production.
- The antimony concentrate production profile of this Project, based on the mine plan provided in Section 16, would make it one of the largest antimony producers outside of Asia.
- Antimony concentrate payables would potentially be:
    - 60 to 70% payable for an antimony concentrate with a grade of 55 to 60% antimony, respectively, with no treatment or refining charges and no minimum deductions;
    - deleterious element charges may apply, particularly for selenium and arsenic;
    - gold would not be subject to refining or other deductions and would yield payables of:
        - 15 to 20% for concentrate gold grades of 5.0 to 8.5 g/t Au, respectively;
        - 20 to 25% for concentrate gold grades 8.5 to 10.0 g/t Au, respectively; and
        - 25% for concentrate gold grades greater than 10.0 g/t Au.
    - silver would not be subject to refining or other deductions and would yield payables of:
        - 40 to 50% for concentrate silver grades of 300 to 700 g/t, respectively; and
        - 50% for concentrate silver grades greater than 700 g/t.
- Currently only a small number of smelters, all of them located in Asia, have the capacity to treat the volume of antimony concentrate planned for production by the Project. Other smelting possibilities outside of Asia

were discussed, but such facilities are only at the planning stage, and may or may not be viable alternatives 5 to 7 years in the future.

Based on the payability information provided by an independent leading industry participant, and on the concentrate transportation costs discussed in Section 18, Table 19.2 summarizes the antimony concentrate payables and transportation charge assumptions for this study.

Table 19.2: Antimony Concentrate Payables and Transportation Assumptions

Parameter	Concentrate Payables and Transportation Charges
Antimony Payability	Constant at 68% (based on a constant life-of-mine concentrate grade of 59%)
Gold Payability	<5.0 g/t Au no payability ≥5.0 g/t ≤8.5 g/t Au payability of approximately 15 - 20% ≥8.5 g/t ≤10.0 g/t Au payability of approximately 20 - 25% ≥10.0 g/t Au payability of approximately 25%
Silver Payability	<300 g/t Ag no payability ≥300 g/t ≤700 g/t Ag payability of approximately 40 - 50% ≥700 g/t Ag payability of approximately 50%
Transportation Charges	$151/wet tonne from site to Asia

19.2 METAL PRICES

The metal prices selected for the four economic cases in this report are shown in Table 19.3; the basis for selection of these metal prices is also provided in the table.

Table 19.3: Assumed Metal Prices by Case

Case	Metal Prices			Basis
	Gold ($/oz)	Silver(1) ($/oz)	Antimony(1) ($/lb)	
Case A	$1,200	$20.00	$4.00	Lower-bound case that reflects the lower prices over the past 36 months and spot on December 1, 2014.
Case B (Base Case)	**$1,350**	**$22.50**	**$4.50**	Approximate 24-month trailing average gold price as of December 1, 2014.
Case C	$1,500	$25.00	$5.00	Approximate 48-month trailing average gold price as of December 1, 2014.
Case D	$1,650	$27.50	$5.50	An upside case to show Project potential at metal prices approximately 20% higher than the base case.

Note:
(1) Prices were set at a constant gold:silver ratio ($/oz:$/oz) of 60:1 and a constant gold:antimony ratio ($/oz:$/lb) of 300:1 for simplicity of analysis, although individual price relationships may not be as directly correlated over time. Historic gold:silver ratios have averaged around 60:1.

There is no guarantee that the gold, silver, and antimony prices used in the study cases would be realized at the time of production. Prices could vary significantly higher or lower with a corresponding impact on Project economics. Historical gold, silver and antimony prices, shown on Figure 19.1, Figure 19.2 and Figure 19.3, respectively, highlight the variable nature of metal prices and their recent historical high level.

Figure 19.1: Historical LME Gold PM Fixed Prices

Figure 19.2: Historical LME Silver PM Fixed Prices

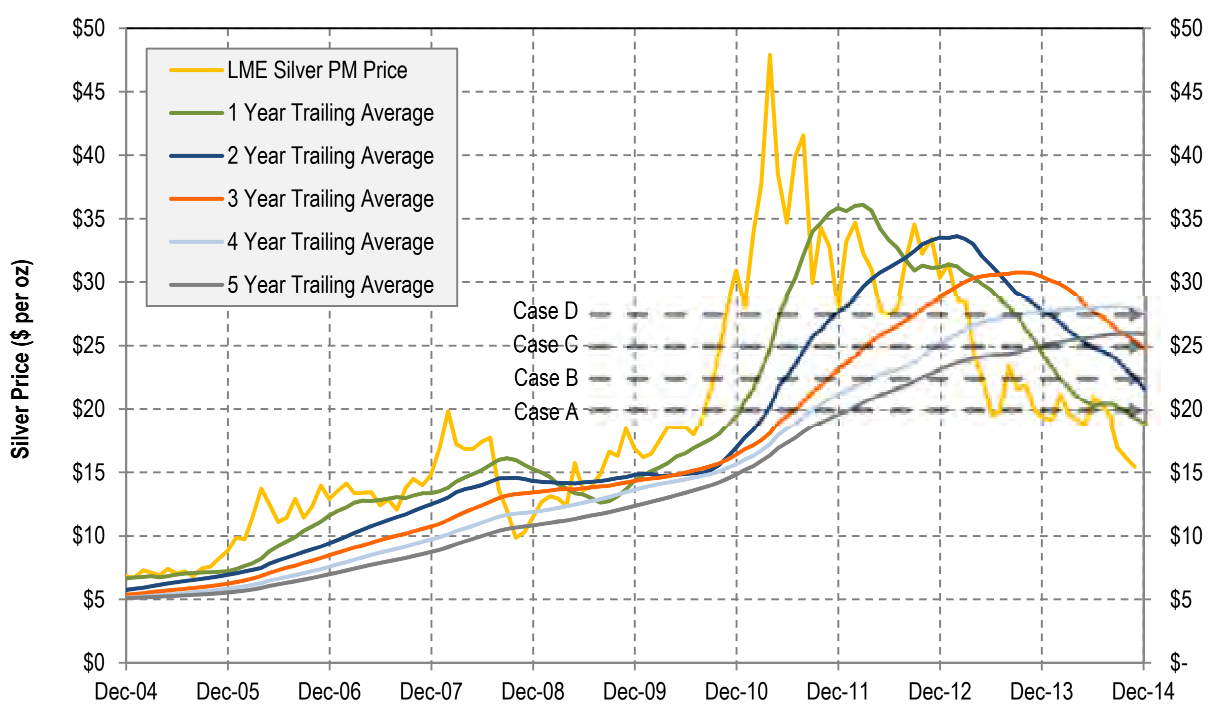
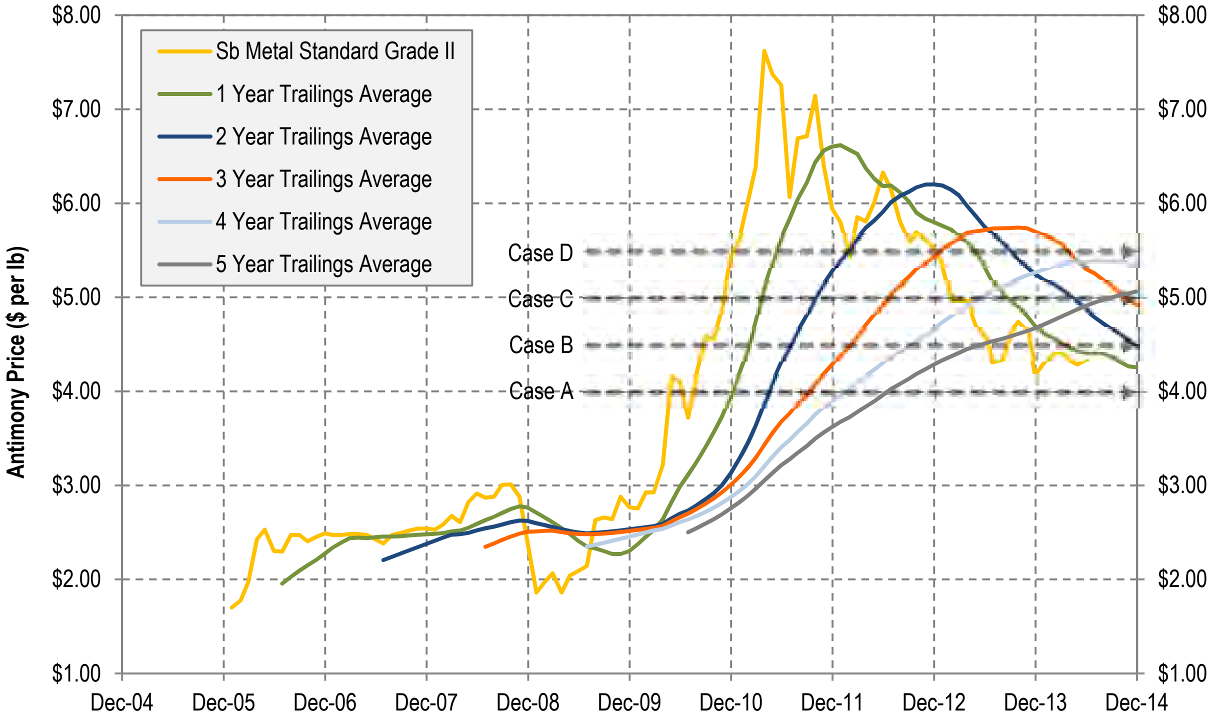


Figure 19.3: Historical Antimony Metal Standard Grade II Prices



19.3 CONTRACTS

There are no mining, concentrating, smelting, refining, transportation, handling, sales and hedging, forward sales contracts, or arrangements for the Project. This situation is typical of an exploration project that is still several years away from production.

SECTION 20 TABLE OF CONTENTS

SECTION **PAGE**

SECTION 20 LIST OF TABLES

SECTION 20 LIST OF FIGURES

20 ENVIRONMENTAL STUDIES PERMITTING AND SOCIAL COMMUNITY IMPACTS

In conjunction with its redevelopment of the Stibnite Gold Project, Midas Gold would restore much of the historically impacted brownfields site to a more natural condition than exists today. The Project area has been mined extensively for tungsten, antimony, mercury, gold, and silver since the early 1900s in numerous episodes historically and in the modern era. The District has a strong history of providing strategic metals to the United States during times of high demand such as war time critical minerals shortages; providing substantial economic benefit to the local counties and the State of Idaho, and providing much needed jobs and support to local businesses for nearly 100 years. These various historic mining efforts have shaped the District, changed the paths of rivers and streams, and left significant legacy impacts. The significant history of this District has left a variety of Recognized Environmental Conditions (**REC**s), legacy environmental features, areas of significant disturbance, and residual surface features that persist to this day.

Multiple cleanup efforts undertaken at the site by Federal and State agencies and private companies pursuant to multiple cooperative agreements include stream improvements, historic tailings reclamation efforts, facility removal and cleanup, surface disturbance reclamation, and specific action cleanup projects under the CERCLA. These projects have improved water quality, isolated historic waste features, and improved sediment control from disturbed ground; however, there still remain substantial surface disturbances, major sediment sources, water quality impacts, and degraded aquatic and terrestrial wildlife conditions, compounded further by extensive forest fire impacts and subsequent damage from soil erosion, landslides and debris flow, and resultant sediment transport.

In the Stibnite Gold Project design, Midas Gold has created a plan to restore much of the site by removing existing barriers to fish migration and re-establishing salmon and steelhead fish passage, removing uncontained historic tailings, reusing historic spent ore material for construction, restoring stream channels, and implementing sediment control projects such as on the East Fork of Meadow Creek (aka Blowout Creek). In addition to remediating historic disturbance, Midas Gold has endeavoured to minimize the Project's footprint and related impacts by siting facilities and roads on previously disturbed ground and away from riparian areas. Midas Gold has designed the major access route into the Project site to include existing roads for most of its length, with some alternate sections designed to avoid rivers and large waterways, resulting in maximum sediment control and related protection of water quality, and reducing risks of vehicle incidents impacting waterways. By including some of the workforce in an office complex in the nearby town of Cascade, the on-site workforce (the majority of which will be bussed in) would be minimized, resulting in less traffic. Re-establishment of historic electrical line power to the Project site will serve to minimize fossil fuel consumption and related haulage along the access route, and improve the reliability of services for communities and residents along the power-line corridor.

The following sections provide Project-related information on site characterization efforts and existing conditions, anticipated permitting requirements for potential development, social and community impacts and considerations, geochemical materials characterization, mitigation of stream and wetland potential disturbances, and reclamation and closure.

20.1 ENVIRONMENTAL BASELINE STUDIES

An extensive set of baseline data demonstrating historic and existing conditions exists for the Stibnite Gold Project site. Midas Gold contracted HDR, Inc. (**HDR**) and MWH Americas, Inc. (**MWH**) to provide an environmental adequacy review of all available environmental baseline reports and data compiled for the period 1979 through present. This adequacy review supplements information developed for two prior Environmental Impact Statements completed for the site since 1982 that were conducted in connection with historical mining operations discussed in Section 6 of this Report. The adequacy review was the basis for the design of individual work plans for collection of environmental baseline data. These work plans are discussed later in Section 20.1.4.

20.1.1 USFS/EPA Stibnite Characterization and Risk Assessment

An environmental site characterization was conducted at the Project site from 1998 through 2000 by the USFS and the EPA (who contracted URS Corporation (**URS**) to complete the work). The Stibnite Site Characterization and Risk Assessment (URS, 2000b) (the “URS Report”), involved a complete site characterization that addressed:

- geology and hydrology (surface water and ground water);
- surface water features and stream classification;
- fish and wildlife;
- aquatic resources;
- vegetation;
- air quality;
- land use; and
- human health.

The chemical, biological, and habitat characterization presented in the URS Report was used to prepare a risk evaluation report that determined there were no unacceptable risks to the environment or human health posed by chemical or physical stressors described in the URS Report. For all categories of populations exposed, the risk was shown as “unlikely”, and there were no populations (fish, wildlife, or human) shown as having a "likely" risk. This all-inclusive environmental baseline has been and is being augmented by additional Project environmental baseline studies as described in the following sections.

20.1.2 MSE Environmental Site Assessments

In 2009 and 2010, Midas Gold and Vista US contracted Millennium Science & Engineering, Inc. (**MSE**) to conduct Phase I and Phase II Environmental Site Assessments (ESAs), as prescribed by the American Society for Testing and Materials (**ASTM**) Standard Practices for Environmental Site Assessments (E 1527-05) (**ESA**s) and ASTM Standard Guide for Site Assessments; and Phase II Site Assessment Process (E-1903-97) for multiple parcels within the Project area; additional parcels acquired in April and May 2011 that were not part of the ESA’s were assessed by Midas Gold but have not been the subject of any physical disturbance by Midas Gold.

The purpose of the Phase I ESA was to identify, pursuant to the processes prescribed in Standard Practice E 1527-05, RECs in connection with the Property. The term “recognized environmental condition” is defined by ASTM as “The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the Property.” The extent and coverage of the MSE investigation follows ESA standards developed by ASTM as set forth in Standard Practice E 1527-05 (ASTM 2005) and the All Appropriate Inquiry (AAI) standard in Title 40 Code of Federal Regulations (**CFR**) Part 312. The ASTM Standard E1527-05 defines good commercial and customary practice for conducting an ESA of a parcel of commercial real estate with respect to the range of hazardous materials (within the scope of CERCLA and potential presence of petroleum products or residual which could adversely affect the environment. As such, this practice is intended to enable a user to satisfy, where applicable, the bona fide prospective purchaser (**BFPP**), contiguous property owner (**CPO**), and the “innocent landowner” defenses.

The Phase II investigation by MSE was conducted in coordination with a Phase I ESA of the Property also prepared by MSE. As noted above, the primary purpose of the Phase I ESA was to identify RECs associated with a specific site using information from limited sources such as literature reviews, public records, personal interviews, and a simple verification site visit. The purpose of the Phase II Environmental Analysis and Review was to further evaluate several of the significant RECs identified in the Phase I, conduct a regulatory review of likely applicable environmental regulations, further review existing data, and perform field verification and collection of additional site specific data. For this investigation by MSE, the further evaluation of significant RECs and data analysis/collection was limited to the following areas:

- geomorphic stability;
- aquatic and riparian ecology/fisheries;
- surface water quality;
- slope stability; and
- air quality.

The primary purpose of a Phase II ESA as detailed in “ASTM E1903 – 97 (2002) Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process” is “to evaluate the recognized environmental conditions identified in the Phase I ESA or transaction screen process for the purpose of providing sufficient information regarding the nature and extent of contamination to assist in making informed business decisions about the property; and where applicable, providing the level of knowledge necessary to satisfy the BFPP, CPO, and innocent purchaser defenses”.

The results of the ESAs indicate that overall water quality in all drainages is marginally impaired due to the highly mineralized nature of area and the duration and extent of historic mining. However, a site characterization conducted in 2000 by URS showed that surface water quality in the Meadow Creek and the EFSFSR improved substantially between 1997 and 1999 as a result of the Bradley Tailings Diversion and Reclamation Project.

There were 88 potential or known RECs in the evaluated portion of the Property that were categorized based on their risk rating as defined in Table 20.1.

Table 20.1: Recognized Environmental Conditions by Category

REC Category	Number	Description of Category of REC
Critical	0	Imminent threats to human health or the environment
Significant	15	High volume of waste or potential for high contaminant concentrations
Moderate	40	Moderate volume of waste, footprint or potential contaminant concentrations
Low	33	Low or unlikely to impact surface or groundwater

Of the 88 documented RECs, none are in the “Critical” category according to the MSE Report. Midas Gold has since amalgamated many of these RECs and reduced the number of identified potential RECs to 24; examples include amalgamating into a single REC those being counted as two or more due to continuity across a claim boundary, such as was the case with the SODA being counted independently on both patented and unpatented land. Six of these 24 potential RECs are located solely on patented land; four are located solely on unpatented land; and 14 of the potential RECs are located on both patented and unpatented land. Table 20.2 presents a consolidated REC summary.

Table 20.2: Consolidated RECs by Category and Ownership

REC No.	REC Description	Patented / Unpatented	MSE Risk Category
1	Spent Ore Disposal Area (SODA)	Both	Low - High
2	Former Meadow Creek Mill and Smelter Complex	Both	High
3	Hecla Heap and Former Processing Facilities	Patented	Low - Medium
4	Wastewater land application of heap leach effluent	Both	Low
5	Former Stibnite Mines Inc. (SMI) Heap Leach Pads	Patented	Medium
6	Former SMI Processing Plant	Patented	Low - Medium
7	Former Fuel Oil ASTs Areas	Patented	Medium
8	West End (Waste Rock)	Both	Medium - High
9	Yellow Pine Pit (Historic Tailings)	Patented	High
10	Yellow Pine Pit Waste Rock	Both	Medium - High
11	Former Monday Camp	Both	Medium
12	USFS Yellow Pine Repository	Patented	Low
13	Former Barrel Dumps	Both	Low
14	DMEA Mine Waste Rock Dump	Unpatented	Medium
15	Former Stibnite Landfill	Unpatented	Low - Medium
16	Former Pilot Plant	Unpatented	Low
17	Former Stibnite Service Station	Unpatented	Low
18	Historic Mine Workings	Both	Low - Medium
19	General Erosion and Sediment Transport	Both	Low - High
20	Fish Migration Barrier at Yellow Pine Pit	Both	Medium
21	Contaminated Groundwater in Alluvial Aquifer	Both	High
22	Placement of Spent Ore and Waste Rock Throughout District	Both	Medium
23	Slope Stability / Geotechnical	Both	Low - Medium
24	Surface Water Quality	Both	Medium

As noted above, none of the RECs were deemed “Critical” and no RECs were categorized as imminent threats to human health or the environment. Midas Gold is actively monitoring surface water, groundwater, seeps and springs at the site, according to the approved monitoring plan. The United States Geologic Survey (USGS) continuously monitored water quality on the site between from 1983 to 1996, and, in addition to Midas Gold’s water quality monitoring; the USGS began its water quality monitoring again in 2011 through a partially funded cooperative arrangement with Midas Gold. These continuing monitoring programs serve as environmental protections, collection of important environmental baseline data and maintenance of Midas Gold’s BFPP status. Midas Gold intends to avoid causing disturbance of existing RECs unless necessary in the context of exploration or potential future development of the Project. At this time, based on known RECs, Midas Gold is not aware of any existing risks that could materially affect potential development at the Project site.

Although some portions of the Project site were placed on the Federal Facilities Docket on September 25, 1991, and are currently listed on the Comprehensive Environmental Response, Compensation, and Liability Information System (**CERCLIS**) List (No. ID9122307607), in 2001 both the EPA and the Bureau of Environmental Health and Safety (**BEHS**), Division of Health, Idaho Department of Health and Welfare determined the risk to be too low for listing on the National Priorities List (**NPL**). No further public action by the EPA or Idaho Department of Environmental Quality (**IDEQ**) has been pursued.

20.1.3 Consent Decrees under CERCLA

Several of the patented lode and mill site claims acquired by Midas Gold comprising part of the West End Deposit, and the Cinnabar claims held under purchase option from the Estate of J.J. Oberbillig are the subject of a consent decree entered in the United States District Court for the District of Idaho (United States v. Estate of J.J. Oberbillig, No. CV 02-451-S-LMB (D. Idaho)) in 2003. Portions of the Yellow Pine and Hangar Flats deposits are the subject of a consent decree entered in the United States District Court for the Northern District of California (United States v. Bradley Mining Company, et al., No.CV-03968 TEH) in 2012. These consent decrees which Midas Gold has discussed with the relevant regulatory agencies, involve or pertain to environmental liability and remediation responsibilities with respect to the affected properties described in each. Among and subject to the various provisions in each of the decrees, these decrees can be generally described as providing the regulatory agencies that were party to the agreement access the right to conduct remediation activities and also requiring that successors and assignees refrain from activities that would interfere with or adversely affect the integrity of any remedial measures implemented by government agencies.

Midas Gold has taken all reasonable steps to locate but cannot ensure it has identified every consent decree or administrative order which may affect the Project site. In addition, the EPA, the Forest Service, and the State of Idaho have jointly identified certain required environmental remediation measures for the affected mineral properties, some of which comprise a portion of the historical Stibnite mine site, pursuant to CERCLA and the Resource Conservation and Recovery Act (**RCRA**). The Bradley and Oberbillig decrees and any required remediation measures specified by these agencies may impact future exploration and development activities on the affected properties. In addition to such required measures, Midas Gold has undertaken and plans to further undertake voluntary remediation measures to improve the overall environmental condition of the Stibnite Gold Project area. Existing consent decrees do not preclude Midas Gold from pursuing these steps to remediate and improve the environmental status of the site. These steps are described in more detail later in this Report.

20.1.4 HDR and MWH Adequacy Audits

In 2011, Midas Gold retained environmental consulting firms HDR and MWH of Boise, Idaho, and their sub-consultants, to conduct technical adequacy audits of all existing environmental information, and to develop individual work plans to conduct an environmental baseline collection program. These workplans were developed to include the following resource listing:

- aquatic resources;
- air quality;
- cultural resources;
- environmental justice;
- geochemistry;
- soils and geology;
- groundwater hydrology;
- groundwater quality;
- noise;
- public health and safety;
- recreation;
- socioeconomics;

- surface water hydrology;
- surface water quality;
- terrestrial vegetation;
- terrestrial wildlife;
- transportation and site access;
- visual resources;
- water rights; and
- wetland resources.

The environmental baseline work plans for these subject categories prepared by HDR and MWH have been approved by the USFS interdisciplinary team (ID Team), with input from involved state and federal agencies. The ID Team was specifically organized to oversee these environmental studies, to establish the existing environmental conditions, identify and quantify environmental risks and liabilities, and monitor for potential impacts from onsite activities. The ID Team is comprised of highly qualified specialists in each of the resource categories. Initial supplemental baseline studies in the areas of surface and ground water, wetlands, and vegetation were initiated in the summer of 2011. Geotechnical and geochemical fieldwork also commenced during the 2011 field season, as were fisheries, wildlife, transportation and other needed baseline studies. In early 2013, Midas Gold contracted senior NEPA specialists to conduct a baseline adequacy review to increase assurance that appropriate baseline studies were being undertaken to support future NEPA analysis of a potential mining project.

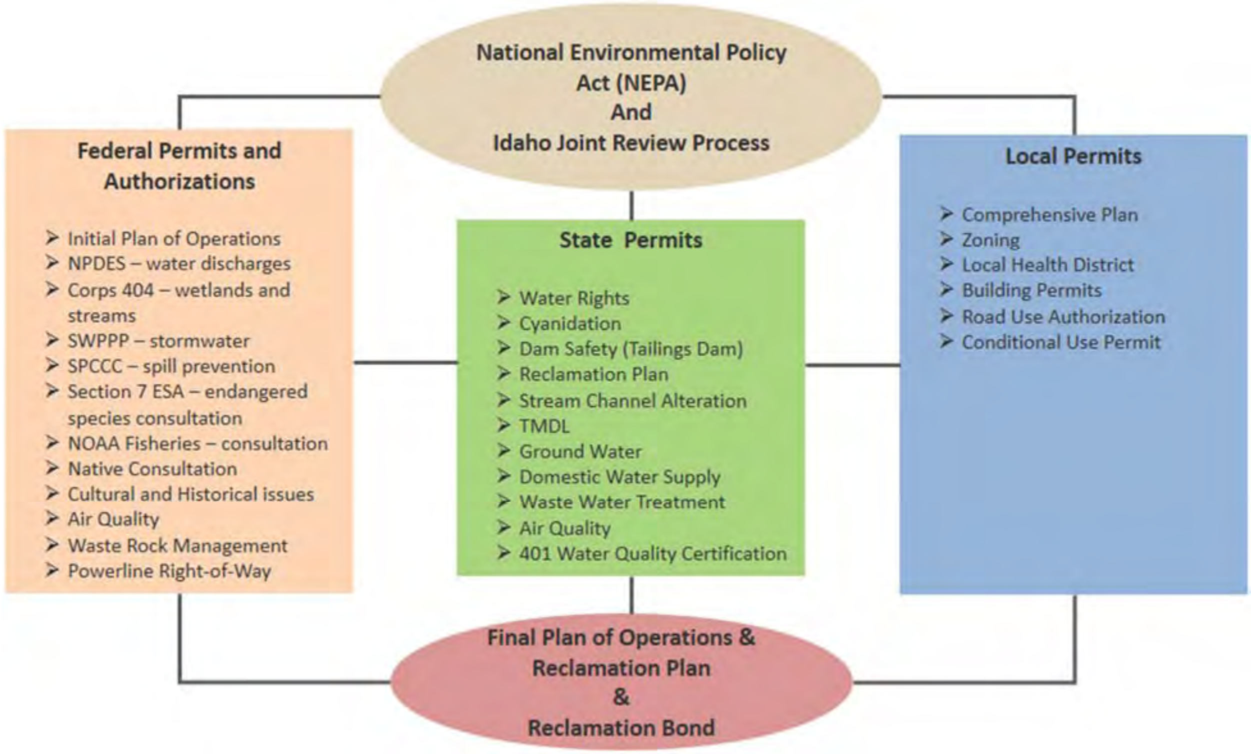
The environmental baseline program for all the major resource categories would continue through 2015 in order to accurately describe the existing environment at the “brownfield site”, and allow for a "full and fair" discussion of all potentially significant environmental impacts in the event that the Stibnite Gold Project moves forward. The fact that the entire Stibnite Gold Project has been studied extensively, both historically and currently, ensures the scientific integrity of the methodologies and analysis used to collect the data; this ensures that a meaningful analysis can conducted, allowing for a comparative assessment of all alternatives.

20.2 PERMITTING

20.2.1 Environmental Impact Statement

USFS approval of any Final Plan of Operations (**PoO**) / Reclamation Plan for the Project requires an environmental analysis under NEPA. NEPA generally requires federal agencies to study and consider the likely environmental impacts of the proposed action before taking whatever discretionary federal action is necessary for the Project to proceed. Figure 20.1 shows the "umbrella" structure of NEPA.

Figure 20.1: Mine Permitting Requirements



Under NEPA, the "purpose and need" for the potential Project would be to conduct open pit mining, which would disturb approximately 1,425 acres of land on unpatented and patented mining claims within the Project area to produce gold, antimony, and other minerals from mineralized material reserves, of which approximately 680 acres is deemed already disturbed or impacted by prior mining-related activities. The Project mining operations would provide the opportunity to improve the environmental condition of previously disturbed and surrounding site, as described elsewhere.

The EIS and the related Record of Decision (**ROD**) for PoO approval serves as an "overarching" procedural permitting requirement, as well as that of at least three other primary federal authorizations or determinations:

- National Pollutant Discharge Elimination System (**NPDES**) Permit for water discharge;
- United States Corps of Engineers (**USACE**) 404 Dredge and Fill Permit; and
- Endangered Species Act (ESA) Biological Opinion.

The EIS and ROD for the PoO effectively drive the entire permitting process, since a completed final EIS and favorable ROD are generally required before these important clearances can be obtained or utilized.

The Council on Environmental Quality identifies 10 factors for determining the significance of a proposed action, and the potential requirement for an EIS. Of these, three primary circumstances are related to mining activities:

- potential impacts on wilderness and other pristine, undeveloped areas;
- potential impacts on threatened and endangered species; and
- situations where several individual mining projects would affect a single watershed circumstance.

The fact that the Project site is a "brownfield site" (extensively mined in the past) and the subject of historic CERCLA cleanup actions, along with potential impacts on threatened and endangered species, would combine to require an EIS for any proposed action for developing a mine and processing facilities at the site.

Other primary federal and state authorizations and/or permits are described in the sections which follow. The discussion ties EIS and other permitting requirements together in terms of an estimated schedule and costs for completing the program.

20.2.2 National Pollutant Discharge Elimination System Permit

An NPDES Permit is required for point source discharges from the mining operation to "waters of the United States". In addition, since the Project is subject to performance standards for "new sources" for its respective industrial source category, the Project must demonstrate that it is applying the best available control technology to meet applicable water quality standards. The permit application must be submitted at least 180 days prior to the approved discharge.

Storm water discharges associated with this industrial activity require a related permit. Storm water is defined as "storm water runoff, snowmelt runoff, and surface runoff and drainage". Active storm water would be managed via a storm-water pollution prevention plan (**SWPPP**). This document must also be submitted at least 60 days before commencing the discharge. Where flows are from conveyances that are not impacted by operational activities, or do not come in contact with overburden or other mine waste, a permit is not required. Hence, the water management scheme developed for the Project endeavours to collect and convey clean water around the mining operation and discharge downstream, wherever feasible and practicable.

20.2.3 U.S. Army Corps of Engineers Section 404 Dredge and Fill Permit

A Section 404 Permit is required under the Clean Water Act for the discharge of dredged or fill material placed into waters of the United States. Dredged or fill material includes tailings and waste rock. Other activities, in addition to the tailings and waste rock storage that may require a 404 Permit are:

- road construction;
- bridges;
- construction of dams for water storage;
- stream diversions; and
- certain reclamation activities.

Waters of the United States include certain defined wetlands. A 2009 U.S. Supreme Court decision found mine tailings to be "fill", and can, therefore, be placed into waters of the United States with an approved Section 404 USACE Dredge and Fill Permit.

20.2.4 ESA Consultation

The Endangered Species Act prohibits the taking of fish and wildlife species classified as endangered or threatened, unless otherwise authorized. The following species are, or may be, in the vicinity of the Project site:

- spring/summer Chinook salmon (threatened);
- steelhead trout (threatened);
- bull trout (threatened);
- west slope cutthroat trout (sensitive);

- Canada lynx (threatened);
- whitebark pine (sensitive); and
- milkvetch (sensitive).

A biological opinion would be required for the listed species, under Section 7 of the Clean Water Act. Federal agencies are required to "conserve endangered or threatened species, and to ensure that their actions are not likely to jeopardize the continued existence of any of these species or adversely modify their designated habitat" (ESA, 16 U.S.C. Section 1538(a). Consultation with National Oceanic and Atmospheric Administration (**NOAA**) Fisheries for Chinook salmon and steelhead trout species would be required. The United States Fish and Wildlife Service (**USFWS**) would be the consulting agency for bull trout (non-anadromous fish) and the Canada lynx.

The consultation process would be run concurrently with the EIS. Some adverse effect is allowed, provided it does not jeopardize the continued existence of the species. Typically, a biological assessment (precursor to biological opinion) is prepared by the third-party contractor preparing the EIS. This assessment can be used to satisfy both the requirements of the ESA and NEPA. If the USFS concludes that the Project may affect a listed species or habitats, the assessment would then require formal consultation and a biological opinion. This involves:

- a summary of the information upon which the USFWS' opinion is based;
- a detailed discussion of the effects of the actions on listed species or critical habitat; and
- USFWS' opinion as to whether the agency action would jeopardize "the continued existence of the species, or adversely modify their critical habitat". The formal biological opinion must be issued within 135 days from the date that the formal consultation is initiated.

20.2.5 Other Federal Programs

There is no comprehensive federal groundwater quality statute, in contrast to surface water and the Clean Water Act. Ground water protection is found in several programs which include: the Safe Drinking Water Act, sections of CERCLA, and the RCRA. The Safe Drinking Water Act was implemented by the State of Idaho to enforce drinking water regulations for municipalities, public water systems, and related facilities. Based on the anticipated number of personnel, this operation would be classified as a public water system.

The federal Clean Air Act regulates air quality and the Project would be subject to National Ambient Air Quality Standards; definitive air quality criteria would apply. The operation would be required to meet Prevention of Significant Deterioration requirements, visibility regulations, and National Emission Standards for Hazardous Air Pollutants. This would involve pre-construction and operating permits issued and managed by the State of Idaho described below in this section.

20.2.6 Major State Authorizations, Licences, and Permits

The federal and state application processes would be integrated and processed concurrent with the EIS. The key authorizations, licenses, and permits required by the State of Idaho are as follows:

- Air Quality Application for Permit to Construct and Operate – This permit assesses the allowable impacts to air quality, and prescribes measures and controls to reduce and/or mitigate impacts.
- Cyanidation Permit – This permit is required by IDEQ and is applicable for a facility that processes mineralized material using cyanide as the primary reagent. Midas Gold intends to produce gold doré onsite and uses cyanide in its production. The regulations apply to both operations and closure and reclamation of any cyanide facility.

- Land Application Permit – In order to apply any treated process wastewater to a designated land area for ultimate disposal, the mining company must obtain a Land Application Permit from IDEQ. This could be required in order to meet the performance standards for new sources "zero discharge" requirement for net precipitation minus evaporation. This is also a safeguard to ensure no unpermitted discharges.
- Ground Water Rule – This rule establishes minimum requirements for ground water protection through standards and a set of aquifer protection categories. To implement the rule, Midas Gold would need to request the establishment of points of compliance outside and down-gradient from the mine area(s). Midas Gold would also establish reasonable upper-tolerance limits for all compliance wells, working directly with IDEQ. These upper-tolerance limits would take into account the high naturally-occurring background levels for several parameters.
- Total Maximum Daily Loads (**TMDL**) – In Idaho, TMDLs are generally assessed on a sub-basin level, which means water bodies and pollutants within a hydrologic sub-basin are generally addressed within a sub-basin report. An earlier TMDL for the main-stem South Fork Salmon River was approved by EPA in 1991. That TMDL set surrogate sediment targets for percent fines and cobble embeddedness. The Salmon River, South Fork Sub-basin report was updated in 2012 with an EPA approved addendum in February 2012 that proposed to remove the EFSFSR from the 303(d) list for sediments and metals. Recent reclamation work has stabilized historic mine and mill tailings in the discharge, and reduced transport of metals in sediment (HDR, 2012). This program of concurrent reclamation, best management practices (BMP) applications, and special environmental enhancement projects would be continued by Midas Gold during construction and over the life of the Project, should it proceed.
- Water Rights – As described in Section 5 of this technical report Midas Gold currently holds four permanent water rights associated with the mining activity area. Additional water rights will need to be secured through direct permit application and subsequent approval of such rights from the Idaho Department of Water Resources (**IDWR**) in order to have sufficient water rights to support Project development.
- Stream Channel Alteration Permit – This permit is required by the IDWR for a modification, alteration, or relocation of any stream channel within or below the mean high water mark. The PFS contemplates relocating Meadow Creek and the EFSFSR, both temporarily and permanently, as part of the overall mine plan. This permit would be obtained in conjunction with any USACE 404 permit obtained for the same purpose.
- Dam Safety Permit – The IDWR requires a Dam Safety Permit for dams greater than 10 ft high or for reservoirs exceeding a 50-acre-feet storage capacity. The Application to Construct a Dam includes design plans and specifications for construction of the dam. Mine tailings impoundments greater than or equal to 30 ft high are regulated by IDWR in the same manner. Design and construction requirements for mine tailings impoundment structures are described in IDAPA 37.03.05. The PFS contemplates construction of a TSF in the Meadow Creek drainage and would need to seek to obtain this authorization.
- Water and Wastewater Systems – The drinking water system(s) design for the contemplated work camp (construction and operations) must be approved prior to use. This would assure compliance with the Safe Drinking Water Act. IDEQ would also require approval of plans and specifications for any new sewage treatment and disposal for the work camp.
- Fuel Storage Facilities – Any proposed fuel storage must also comply with IDEQ design and operating standards, as well as Idaho State Fire Marshall and Valley County requirements.
- Reclamation Plan – All surface mines must submit and obtain approval of a comprehensive reclamation plan (Title 47) for mining activities on patented land as administered by the Idaho Department of Lands (**IDL**). This includes detailed operating plans showing pits, mineral stockpiles, overburdened piles, tailings ponds, haul roads, and all related facilities. The Reclamation Plan must also address appropriate BMPs,

and provide for financial assurance in the amount necessary to reclaim those mining activities. The plan must be approved prior to any surface disturbance. A large portion of the contemplated Yellow Pine, West End, and Hangar Flats pits and associated facilities are located on patented land.

- State Historic Preservation Office – Approval of a historic/cultural resources assessment by the State Historic Preservation Office would be required. The Project is located within the Stibnite National Historic District.
- Others – State requirements would also involve compliance with the Idaho Solid Waste Management Regulations and Standards, transportation safety requirements enforced by the Idaho Public Utilities Commission, and others.

20.2.7 Local County Requirements

There are several other permits and approvals that would apply to the Project including:

- conformance with the Valley County Comprehensive Plan;
- issuance of building permits by the county; and
- sewer and water systems approval by Central District Health Department, and various other authorizations.

A key annual authorization by the Valley County Road Department is the Valley County Road Use Permit for any mining operation. This permit addresses standard operating procedures for the road route to be used, seasonal limits, spill prevention and response planning, Hazardous Waste Operations and Emergency Response (**HAZWOPER**) or hazardous materials handling training, convoying, and other requirements.

20.2.8 Idaho Joint Review Process

The IDL is responsible for implementation of the Idaho Joint Review Process (**IJRP**); this process was established in order to coordinate and facilitate the overall mine permitting process in the state. The IJRP involves an interagency Memorandum of Understanding (**MOU**) between involved state and federal agencies. Further, the IJRP addresses a process to achieve pre-analysis coordination in approving / administering exploration permits, interagency agreement on plan completeness, alternatives considered, draft and final permits, bonding during mine plan analysis, and interagency coordination related to compliance, permit changes and reclamation/closure for major mining projects. In Idaho, the Joint Review Process was established to be the basis for interagency agreement (state, federal, and local) on all permit review requirements. The focus of the IJRP is concurrent analysis timelines; this would include, for example, in the case of Stibnite Gold Project the NEPA process, NPDES permit, USACE 404 permit, state 401 Certification of these two key permits, the State Cyanidation Permit, and the ESA Consultation. The IJRP may play a key role in achieving two primary permitting goals: (1) increased communication and cooperation between the various involved governmental agencies, and (2) reduced conflict, delay, and costs in the permitting process.

20.2.9 EIS / Permitting Sequence and Costs

This section describes the overall EIS and permitting sequence. In order to understand the sequence, recent EIS and permitting projects similar to the Stibnite Gold Project were reviewed. With regard to the likely scope of the Project, the following conceptual description was developed as the basis for this permitting analysis:

- Regulatory – EIS required; USFS Lead Agency; EPA, USACE, and IDL are cooperating agencies; National Marine Fisheries Service (**NMFS**) and USFWS are also possible cooperating agencies;
- Mining – estimated at 20,000 to 24,000 stpd mineralized material with an approximate 3.5:1 waste rock to mineralized material strip ratio;

- Processing – tailings by-product (commingled flotation and oxidized concentrate tailings) with high energy requirement for pressure oxidation of the mineralized material;
- Power – initial diesel generation during construction with some hydro power potential; line power would be developed to coincide with commencement of production;
- Waste Rock – potentially some selective placement would be required likely due to geochemical reactivity; large volumes would be stored and managed;
- Water Supply – available from existing or pending and future needed water rights;
- Water Treatment – appropriate water treatment technology and/or forced evaporation;
- Project Access – Burntlog route with backup provided by the South Fork and Johnson Creek roads;
- Man Camp – one camp located onsite;
- Laboratory and Office/Warehouse – located in Cascade to require EPA identification number for hazardous waste generation, storage and possible water treatment plant to pre-treat/treat laboratory wastes prior to discharge;
- Manpower – a peak construction-related workforce of approximately 1,000 direct jobs and approximately 475 to 525 direct jobs during operations;
- Operating Schedule – mining and processing year-round; and
- Total Land Disturbance– approximately 1,715 acres of patented and unpatented land (including Burntlog access route), of which approximately 684 acres is deemed already disturbed or impacted by prior activities.

This concept was developed only for the purpose of “scaling” the Project, such that the estimated schedules and costs could be compared with the projects listed earlier.

An EIS/permitting sequence is summarized below in four primary permitting windows.

1. Start baseline confirmatory studies for surface and ground water, fisheries and wildlife, geotechnical, geochemical as well as air quality and wetlands work and others. This work has been underway since 2011.
2. Commence preparation of the Initial Plan of Operations. Negotiate an MOU with the USFS for preparing the EIS. Conduct initial internal scoping with agency and political contacts concurrently, develop all other permit applications for submittal. During this period, the third-party EIS contractor would be selected by the USFS with input from the USACE and EPA. This would occur in time for the contractor to lead the scoping meetings. This assumes the EIS scoping would be conducted during this time and involves at least three public hearings (Yellow Pine, McCall, and Cascade). The contractor would then finalize the EIS work plan and initiate early environmental baseline adequacy determination write-ups for the various resource categories (air, water, socio-economics, etc.).
3. A Preliminary Draft EIS would be completed by the USFS (using a third-party contractor). This document would be for the lead and cooperating agencies and Midas Gold review only. Typically, this review would require about 90 to 120 days. In the initial stages of this period, Midas Gold would file most (if not all) of their permit applications. Some, like the water rights applications, would have already been submitted to the appropriate agencies; others, like the Corps 404 Permit and EPA NPDES Permit require the Draft EIS “preferred alternative”. The final permits cannot be issued until after the final EIS and ROD have been issued by the USFS.
4. A Draft EIS would be produced for public review; the review period would be about 60 days. The Final EIS would then be issued. At this point, the USFS could choose to issue the ROD concurrently or elect to issue

it 30 days later. There would an administrative appeal or objection period involved at this point. For the purposes of this very preliminary assessment, an additional 90 days was contemplated in this review. The remaining permits would also be issued over this period.

Estimated timelines for completion of the EIS and permits are approximately three to five years after the Plan of Operations is filed. This does not take into account time to correct potential deficiencies or the potential for objections and/or litigation and related delays, nor potential opportunities to shorten timelines based on the comprehensive work completed to characterize the site to date, and the brownfield nature of the site.

20.2.10 Midas Gold Permitting Management Strategy

To successfully achieve any such permitting program, Midas Gold has designed a seven-point management scheme that includes the following key points:

1. MOU providing for interagency cooperation, accountability, and predictability;
2. requirements for quality consultants;
3. communication plan for the consultants;
4. baseline studies, adequacy determinations and tracking procedures, EIS completeness evaluation;
5. budget and schedule tracking and cost controls;
6. goals for environmental enhancement in mine planning and closure; and
7. an informed public affairs process.

20.2.11 Permitting Risks and Risk Management Strategy

This section summarizes certain environmental issues and risks, and strategies by Midas Gold to manage and/or mitigate these risks. The overall approach involves a proactive regulatory/governmental affairs program, which has already been initiated by Midas Gold, and a supplemental environmental baseline program that clearly measures pre-existing conditions at the site. The description that follows highlights those risks; it also lists the measures Midas Gold has put in place to avoid permitting delays and adverse outcomes.

It is possible that the EPA or the Forest Service may initiate CERCLA actions related to historical mining in the Stibnite Mining District and impacts to soils and surface water and ground water quality from these historical operations. Both the EPA and the Forest Service have discussed the possibilities of additional actions at the Cinnabar property, which Midas Gold has optioned for purchase but does not currently own (nor has it conducted any work on the Cinnabar property). A proposed listing for Stibnite on the National Priorities List was rejected by EPA because the risks were determined to be too low to warrant a listing; this determination was made by EPA and the Idaho Department of Health and Welfare, and supported by the Governor, Valley County officials and the Idaho Delegation. However, multiple CERCLA actions not on the National Priorities List have been conducted at previous operations areas:

- Preliminary Assessment/Site Investigation Stibnite Mine Site (USFS, 1993);
- Stibnite Valley Site Inspection, Valley County, Idaho (Greystone, 1993);
- Stibnite Assay Lab Removal Action (EPA, 1998);
- Meadow Creek Diversion (EPA, 1998);
- Stibnite Mine Area Engineering Evaluation/Cost Analysis (MSE, 2003);
- Stibnite Smelter Stack and Tailings Pond Removal South Tailings Pile Contouring Report (MSE, 2003);

- Meadow Creek Channel Realignment (URS, 2005); and
- SMI Mill Removal Action (EPA, 2005).

Much of the previous environmental impact relates to mining activities associated with World War II/Korean War operation of the Yellow Pine Mine (Mitchell, 2000). Between 1939 and 1952, several millions of tons of ore were mined at the Meadow Creek and Yellow Pine mines (see Section 6 for detailed history) and disturbance partially remediated. Other, more recent, mining-related impacts associated with post-1981 projects involving at least four different operators at the West End, Garnet Creek, and Homestake (Yellow Pine area) mines that have also been assessed and partially remediated. In discussions with local and Region 10 EPA officials (as recently as March 2014), the EPA indicated they are not currently considering further CERCLA action(s) at the site. EPA's interest in the Cinnabar property is ongoing.

Midas Gold has met with Region 10 EPA officials to ascertain ongoing interest in CERCLA cleanup at the site. At this time, there appears to be support for a mine plan that incorporates site remediation and fisheries rehabilitation. Midas Gold has also met and confirmed that status with the director of IDEQ. Midas Gold has met with the State of Idaho and local elected officials and the federal Idaho Delegation regarding such a mine plan, as well as discussing the importance of the Project to the local and regional economy (e.g. the Project would potentially represent up to one third of the gross regional product). Midas Gold has also implemented an extensive investigation and documentation of pre-existing environmental conditions at the site. Small individual reclamation and remediation projects have been completed by Midas Gold on an ongoing basis at the Stibnite Gold property. Any potential future CERCLA issues identified from prior operations are considered manageable within the context of the Project.

There is a risk that any single environmental issue or combination thereof, particularly those related to the ESA (i.e. threatened salmon and steelhead species) and the biological opinion, could delay the permitting process. To date, Midas Gold has incorporated specific standard operating procedures (**SOP**s) and BMPs into its exploration plans to satisfy the requirements to protect these species. An exhaustive biological assessment and environmental assessment prepared for the exploration plan of operations has determined that these activities would have minimal or no effect on the species. These programs would be carried over by Midas Gold to any full-scale mining operation, where appropriate, and others added.

The Project also includes considering a new alternative access route to the site, which would avoid much of the "near waterway" alignment of the existing Johnson Creek and EFSFSR access corridors, reducing the risk of incidents or spills into waterways, or of sedimentation related to roads and traffic thereon.

There is a risk that the NPDES permit for water discharges from the Project would impose stringent water quality criteria. Midas Gold would propose a four-tier system of BMPs, enhanced evaporation standard operating procedures, and contingency water treatment to meet these criteria. The water treatment facilities contemplated in this PFS have been proven at other mining operations located in very sensitive environments.

Risks related to impacts on wetlands, many of which are on top of or impacted by historically impacted mining areas, that are associated with tailings and waste rock placement in the Meadow Creek drainage are planned to be offset by local and off-site wetlands bank acquisition and mitigation projects. The legal authority to place tailings fill in wetlands under appropriate circumstances and criteria is also clear as a result of a 2009 U.S. Supreme Court ruling at the Kensington Mine in southeast Alaska and other precedent.

There is also risk that there may be administration objections to and/or litigation of the outcome of the EIS, or related permitting decisions by the involved agencies.

Midas Gold's risk management strategy focuses on a three-pronged approach. First, the development program highlights the adequacy of the environmental baseline, as discussed earlier in this document. Second, Midas Gold has already established an open dialogue with key environmental organizations, tribal governments, and involved agencies; this has included meetings, site visits, and Project previews with these groups. Third, Midas Gold has proposed a "litigation avoidance initiative" to be formulated with certain key stakeholders that could involve:

1) some level of joint-operational monitoring;
2) input to reclamation planning;
3) employment and business opportunities;
4) third-party environmental audits; and
5) certain other considerations.

The objective is to make the Project a fully integrated, sustainable, and socially and environmentally responsible operation through open communications and accessibility.

The overall permitting process could potentially be expedited by, among other things, negotiating specific permitting agreements or MOUs with involved agencies. The agreements would cover the EIS and/or major permits like the EPA NPDES Permit for water discharge and the USACE 404 Dredge and Fill Permit. These two permits are required for construction of the tailings and waste rock storage facilities, and water discharge from either or both facilities. The MOUs would address:

1) organizational contacts and communication procedures/ limitations;
2) NEPA or permitting objectives;
3) work required to achieve EIS or permit completion;
4) third-party involvement;
5) statement of responsibilities;
6) deliverables;
7) importantly, schedules for review and completion;
8) coordination needs including consultation (Section 106 Historical Consultation and Native Consultation);
9) public involvement requirements; and
10) legal requirements.

20.3 SOCIAL AND COMMUNITY IMPACT

Valley and Adams Counties have experienced continued population growth since 2000, but new job creation is not keeping pace with demand. Much of the downturn is attributed to the construction industry's decrease in the number of jobs. More specifically in Valley County, the Tamarack Planned Community $1.5 billion bankruptcy has had major effects on the local economy. The Stibnite Gold Project would do much to offset these impacts.

Historically, the regional economy has been dependent on wood products. Since 1990, there has been a 43% reduction in jobs associated with logging, wood products, paper production and mining. For Valley County, manufacturing jobs also fell by 67% during the 10-year period of 2000 to 2010. In Adams County, manufacturing jobs fell about 57%. Although slowly declining, the unemployment rates in Valley and Adams County were 10.6% and 12.8%, respectively, in 2013, ranking them 4th and 1st highest in the State. Development of the Project would help revive the mining and manufacturing sectors of the local and regional economy.

According to the 2010 census, the median household income in Valley County was $50,851. The average compensation for a worker was $27,433 which increased in 2012 and then declined again in 2013 (Table 20.3). The average annual salary for a Stibnite Gold Project worker is expected to be consistent with typical Idaho State mining wages of about $72,500 annually (IMA, 2014); this would equate to a total payroll costs of about $88,000 per worker, including benefits. This salary would place Stibnite Gold Project workers among the top five of the occupational categories monitored in the regional economy. Table 20.3 provides current Valley County statistics on average employment and wages for various labor sectors in the county. As seen in the table, in 2012 and 2013 the mining industry had the highest average wage of the 12 labor sectors in Valley County reported on by the Idaho Department of Labor; and mining wages also represent the highest percentage increase (172%) of the 12 sectors over a 10 year period.

Table 20.3: Valley County Covered Employment & Average Annual Wages per Job

Labor Sector	2003 Averages		2012 Averages		2013 Averages	
	Employment	Wages	Employment	Wages	Employment	Wages
Total Covered Wages	3,539	$22,256	3,869	$33,086	3,792	$32,674
Agriculture	77	$18,114	111	$20,121	56	$33,496
Mining	**3**	**$21,929**	**39**	**$68,590**	**35**	**$81,548**
Construction	314	$22,128	269	$33,761	257	$34,166
Manufacturing	48	$20,094	38	$27,536	32	$26,326
Trade, Utilities & Transportation	594	$18,207	649	$28,167	670	$28,806
Information Activities	46	$43,170	167	$69,422	83	$52,963
Financial	128	$21,934	196	$32,815	218	$33,822
Professional and Business Services	179	$27,840	83	$34,256	95	$39,258
Educational and Health Services	186	$23,277	321	$51,453	337	$52,370
Leisure and Hospitality	804	$11,831	936	$17,671	950	$17,884
Other Services	89	$13,937	109	$22,921	102	$18,137
Government	1,071	$31,485	949	$40,232	958	$39,981
(IDL, 2014)						

To estimate the potential economic impacts of the Project, an economic impact model known as IMpact analysis for PLANning (IMPLAN) was constructed to estimate impacts within Valley and Adams Counties (regional impacts), and the state of Idaho. With the exception of federal taxes, the impacts of sourcing workers from outside of the region or the state of Idaho was not assessed, although Midas Gold does expect that a small portion of the workforce might live out of state. These estimates do not represent economic commitments by Midas Gold, but rather the model's simulation of impacts likely to occur if the Project is developed. These estimates may change based on more detailed analysis in future evaluations.

The economic model estimates multipliers for each industrial service sector. Impacts are apportioned into two levels: direct and indirect. Direct impacts are those directly created by the mining operation as export business (i.e. sales of mining products); indirect impacts are comprised of two parts: (1) the impacts on other regional businesses that provide goods or services to mining operations, and (2) the effect of employee and related consumer spending on the economy; these are the indirect and induced effects or impacts, respectively. They collectively comprise the multiplier or ripple effects on the regional and state economy (Peterson, 2014).

20.3.1 Estimated Job Creation and Payroll from Construction of Stibnite Gold Project

During the Project's 3 year construction period the work force would ramp up from an estimated 325 workers directly employed by Midas Gold in year -3 to an estimated 1,000 workers directly employed in year -1. Due to the nature of project construction, workers would be employed from the region and the surrounding areas of Idaho as much as possible; however, to fill the workforce quantity and technical requirements for the Project's construction it is estimated that workers would be sourced from outside of Idaho as well. Estimating the economic impacts and multiplier effects from workers that would work onsite but travel to out of state locations was determined to be too complex to be accurately estimated in the IMPLAN model. As a result the economic impacts generated from the Project for both the construction and operations periods were estimated for the regional economy and the state of Idaho only.

Table 20.4 provides a breakdown of the economic impacts from the construction of the Project complete with annual employment as well as the annual and total compensation paid to workers sourced in the region and the State of Idaho.

Table 20.4: Estimated Construction Period Employment and Payroll

Employment	Annual Personnel	Annual Payroll ($000,000s)	3-Year Total Payroll ($000,000)
Direct (3-yr average)			
Valley & Adams Counties (Regional)	150	$12.5	$37.5
Idaho (Outside of Valley & Adams Counties)	250	$21.5	$64.5
Total Idaho Direct Employment	**400**	**$34.0**	**$102.0**
Indirect and Induced (3-yr average)			
Valley & Adams Counties (Regional)	71	$2.8	$8.4
Idaho (Outside of Valley & Adams Counties)	250	$11.2	$33.6
Total Idaho Indirect/Induced Employment	**321**	**$14.0**	**$42.0**
Total Direct, Indirect, and Induced Employment	**721**	**$48.0**	**$144.0**

20.3.2 Estimated Job Creation and Payroll from Operation of Stibnite Gold Project

As currently planned, Midas Gold would directly employ workers from Valley and Adams Counties and other parts of Idaho over the life of the Project. By comparison it is estimated that jobs created by Midas Gold would be more than double the number of workers employed by the region's largest employer, the USFS (Table 20.5).

Table 20.5: Valley and Adams Counties Large Employers Statistics

Average Employment July 2010 to June 2011 *and Stibnite Gold Project Estimate*	
Business	**Employment Range**
Estimated Stibnite Gold Project (operations)	*475 to 525*
US Forest Service	200 to 250
McCall-Donnelly School District #421	150 to 200
Valley County	100 to 150
St Luke's Health Systems	100 to 150
Brundage Mountain Co.	50 to 100
City of McCall	50 to 100
Cascade School District #422	50 to 100
Ridley's	50 to 100
Adams County	50 to 100
Evergreen Forest/Tamarack Mill	50 to 100
Council School District #13	50 to 100
Meadows Valley School District #11	25 to 50
J I Morgan Inc.	25 to 50
Adams County Health Center Inc.	25 to 50
The Turning Point	15 to 25
State of Idaho Department of Transportation	15 to 25
(IDL, 2011)	

In addition, the ripple effect from the Project is estimated to provide 120 indirect or induced jobs in Valley and Adams Counties as well as an estimated 329 indirect and induced jobs spilling onto the surrounding areas of the state. In total, the average yearly jobs created during the operational period of the Project are estimated by the IMPLAN model at 939 direct, indirect, and induced jobs.

As noted above, each mine employee would likely generate an additional 0.878 indirect or induced jobs in the Valley / Adams counties economy. Each $1.00 of direct labor income from the hard rock mining industry generates approximately $0.33 of additional indirect/induced labor income. This would amount to approximately $30 million in annual direct and indirect payroll within the region, which is about 10.7% of the region's total gross compensation. Table 20.6 provides a breakdown of the economic impacts from the operation of the Project complete with annual employment as well as the annual and total compensation paid to workers sourced in the region and the state of Idaho.

Table 20.6: Estimated Operating Period Employment

Employment	Annual Personnel	Annual Payroll ($000,000s)	12-Year Total Payroll ($000,000s)
Direct			
Valley & Adams Counties (Regional)	300	$25	$300
Idaho (Outside of Valley & Adams Counties)	200	$17	$204
Total Idaho Direct Employment	**500**	**$42**	**$504**
Indirect and Induced			
Valley & Adams Counties (Regional)	120	$5	$60
Idaho (Outside of Valley & Adams Counties)	329	$9	$108
Total Idaho Indirect/Induced Employment	**439**	**$14**	**$168**
Total Direct, Indirect, and Induced Employment	**939**	**$56**	**$672**

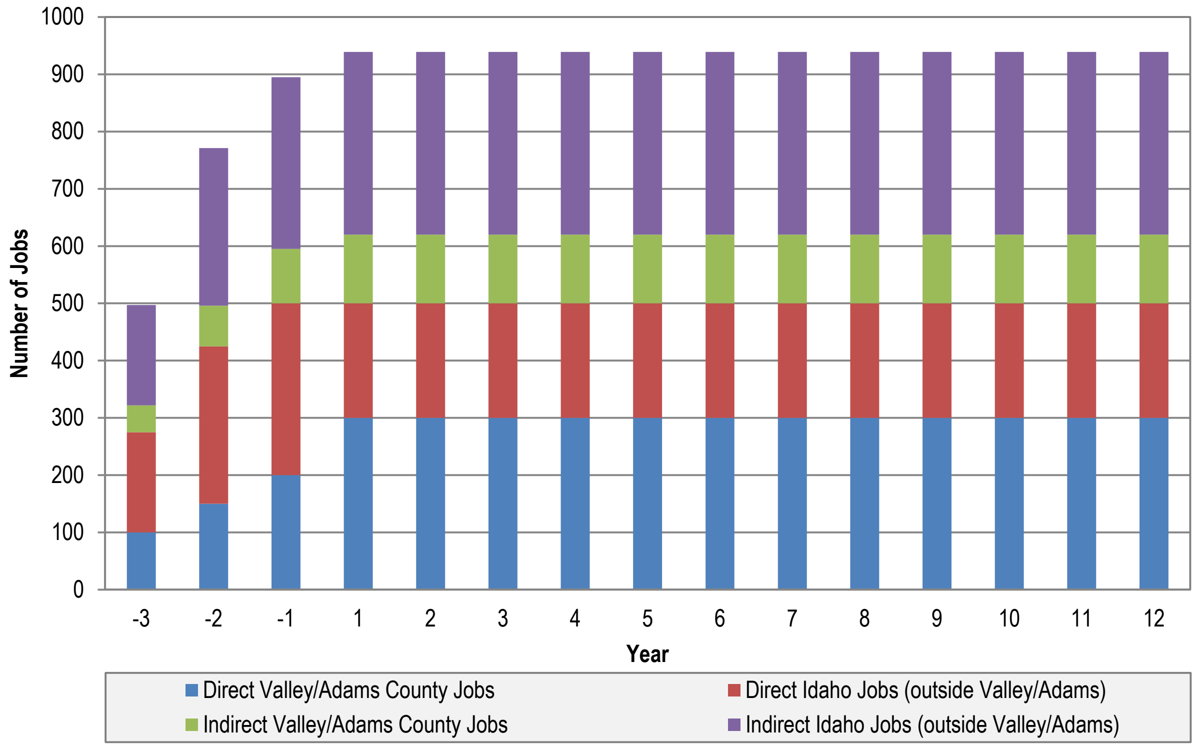
Indirect jobs would include both mine-related and community-based. Key mine-related activities that generate jobs would include:

- trucking of supplies to the mine site;
- access road maintenance;
- trucking of antimony concentrate to the shipment port;
- shuttle buses for the employees;
- catering for the man camp;
- other mechanical and maintenance;
- security services; and
- other supplies services, and contract labor.

Community-based support that generate jobs would include:

- housing construction;
- healthcare;
- law-enforcement;
- restaurants;
- retail shopping;
- public utilities and other infrastructure; and
- schools.

Figure 20.2: Annual Employment Estimates for Construction and Operations



20.3.3 Sales and Taxation of the Stibnite Gold Project

The Project, as currently designed, is estimated to create about $152 million in sales transactions in the regional economy. About $112 million of the sales would be gross regional product, the major subset of sales transactions. Additionally, a large portion of the economic activity created by the Stibnite Gold Project is estimated to affect the rest of the State of Idaho. The State of Idaho sales transactions are estimated to total about $298 million annually (including the regional impacts). The gross state product would total approximately $197 million, providing new economic activity and inter-industry linkages that would help to support every industry in the regional and state economies (Peterson, 2014).

The Project is especially important in Idaho because, according to the Idaho Department of Labor (2012), Idaho consistently ranks nearly last in the U.S. in per capita income and wages. The state ranked in first place in the percentage of workers on minimum wage (IDL 2013). This Project and its high wages will be vital for the region's and the state's economic future (Peterson, 2014).

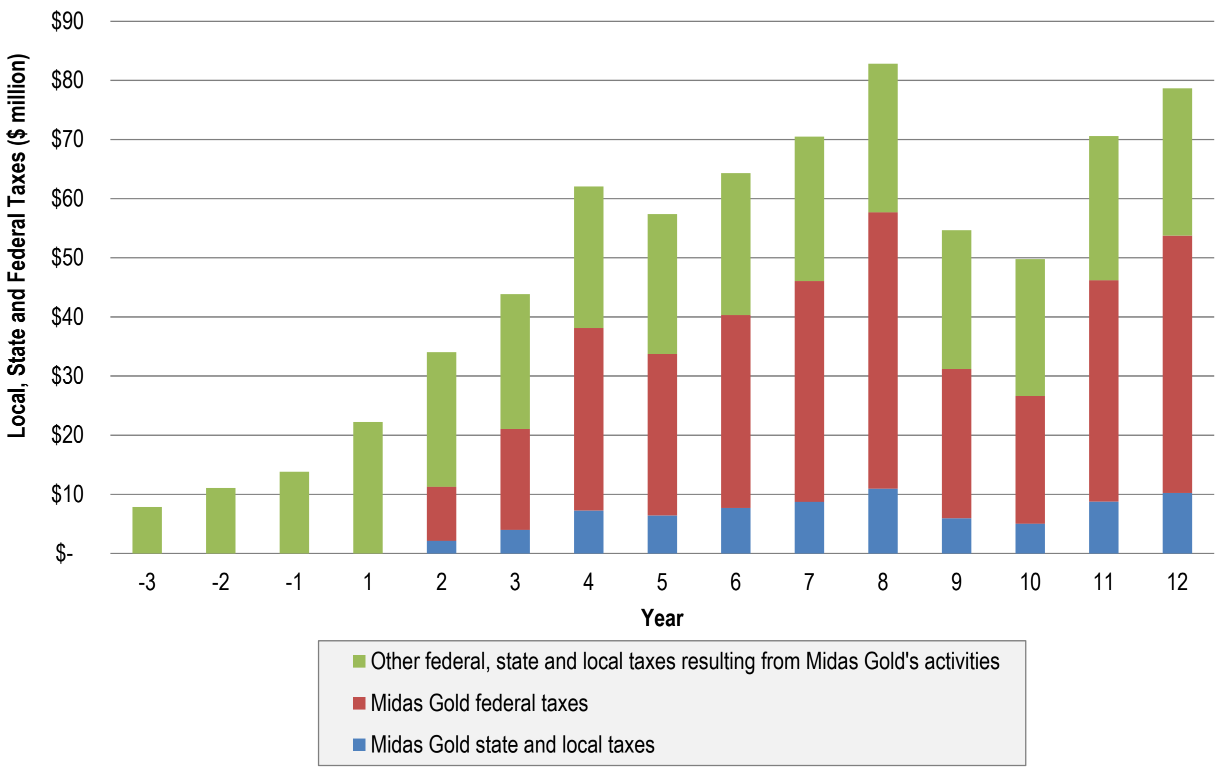
The IMPLAN model was used to estimate direct, indirect and induced taxes, that would be paid by other taxpayers (other than Midas Gold), and the tax estimates were combined with the direct federal, state and local taxes that would be paid by Midas Gold (see Section 22 for details on the PFS financial model and tax calculations) to develop an estimate for the overall taxes generated by the Project. Figure 20.3 presents a plot of estimated annual direct, indirect and induced taxes associated with the Project paid by both Midas Gold and other taxpayers to federal, state and local governments.

Taxes that would be paid directly by Midas Gold over the life of the Project, based on the assumptions in the PFS, are estimated at approximately $329 million in federal corporate income taxes, and $86 million in state corporate income and mine license taxes.

Additional indirect and induced taxes that result from Midas Gold's activities that would be paid by other taxpayers, based on the assumptions in the PFS, are estimated at approximately $177 million in federal taxes (including payroll, excise, income and corporate), and $131 million in state and local taxes (including property, sales, excise, personal, corporate, and other).

Total direct, indirect and induced taxes are therefore estimated at $506 million in federal taxes and $218 million in state and local taxes, representing a significant contribution to the economy during the 15 year construction and operating life of the Project

Figure 20.3: Chart of Estimated State and Federal Taxes



20.4 GEOCHEMICAL CHARACTERIZATION

SRK Consulting was contracted to conduct a geochemical characterization program for Midas Gold as part of the planning and impact assessment for the Stibnite Gold Project. Geochemical testing of mine waste rock materials provides a basis for assessment of the potential for metal leaching and acid rock drainage (**ML/ARD**), prediction of contact water quality, and evaluation of options for design, construction, and closure of the mine facilities. This work also supports the next phase of the Project's potential advancement, including environmental assessment and permitting. The characterization effort focuses on the assessment of waste rock geochemistry, evaluation of tailings material from mineral beneficiation, evaluation of historic mine waste, and determination of final pit wall geochemistry. In addition, this characterization program includes an evaluation of various historic mine wastes to determine the suitability of reusing these materials as construction materials.

Geochemical characterization is an iterative process and sample collection for the Project is being completed in phases. The first phase is complete and involved the collection of samples from core generated during exploration drilling activities for static and kinetic testing. The characterization program is ongoing and a subsequent phase of sample collection and testing is being conducted to ensure the dataset is spatially representative of the main material types that will be mined as part of the Project.

20.4.1 Waste Rock Characterization

20.4.1.1 Sample Collection and Testing

Waste rock is typically classified and tested according to material type. The number of samples selected for geochemical testing is based on the estimates of the relative percentage of each material type predicted to be mined according to the geologic block model. Material types for the Project were delineated in consultation with Project geologists based on data available from the recent exploration drilling programs, including the drill hole database, drill logs, and assay and multi-element data. During the sample selection process, core holes from the 2009, 2010, and 2011 exploration programs were targeted for sampling and were reviewed in the context of the final pit boundaries using Leapfrog mining software. For the first phase of characterization, a total of 120 sample intervals were selected from within the proposed open pit boundaries to represent the range of waste rock material types that would be encountered during mining and were classified according to rock type and degree of oxidation. Gold grades were also considered and sample selection was generally limited to waste grade samples.

The static test methods used for the mine waste rock characterization program include:

- whole rock analysis using four-acid digest and ICP-MS analysis to determine total chemistry for 48 elements as well as mercury (Chemex Method ME-MS61m);
- Acid Base Accounting (**ABA**) using the Modified Sobek method (Memorandum No. 96-79) with sulphur speciation;
- Net Acid Generating (**NAG**) test reporting final NAG pH and final NAG value after a two-stage hydrogen peroxide digest;
- Total Inorganic Carbon (**TIC**); and
- Nevada Meteoric Water Mobility Procedure (**MWMP**) (ASTM E2242-02) and analysis of leachate.

These static tests were selected to determine the total acid generation or neutralization potential of the samples and the potential for elemental leaching during meteoric rinsing of freshly-mined material. However, these static tests do not consider the temporal variations that may occur in leachate chemistry as a result of long-term changes in oxidation, dissolution, and desorption reaction rates. In order to address these factors, humidity cell testing (**HCT**) has been initiated for 14 samples representative of the main waste rock units associated with the Stibnite Gold Project. This testing is currently underway; therefore, the results provided herein are preliminary.

20.4.2 Waste Rock Geochemistry

20.4.2.1 Multi-Element Analysis Results

Multi-element analyses were carried out to provide an absolute upper limit of available metals for leaching from the Stibnite Gold Project material types. These analyses involved the near-complete digestion of a solid sample into solution using a four-acid digest followed by ICP-MS analysis. The multi-element data were analyzed using the geochemical abundance index (GAI) (INAP, 2002), which compares the concentration of an element in a given sample to its average crustal abundance. The results of this comparison show that silver, arsenic, antimony, mercury, sulfur, and selenium are elevated above average crustal concentrations for the majority of the Stibnite Gold Project samples. These elements are typically associated with gold deposits and their enrichment in the waste rock samples reflects the natural mineralization in the area. The actual leachability of these elements was determined from the MWMP and HCT tests that account for factors like the presence of soluble mineral weathering products, mineral habit, rock texture, and site-specific conditions that affect solubility.

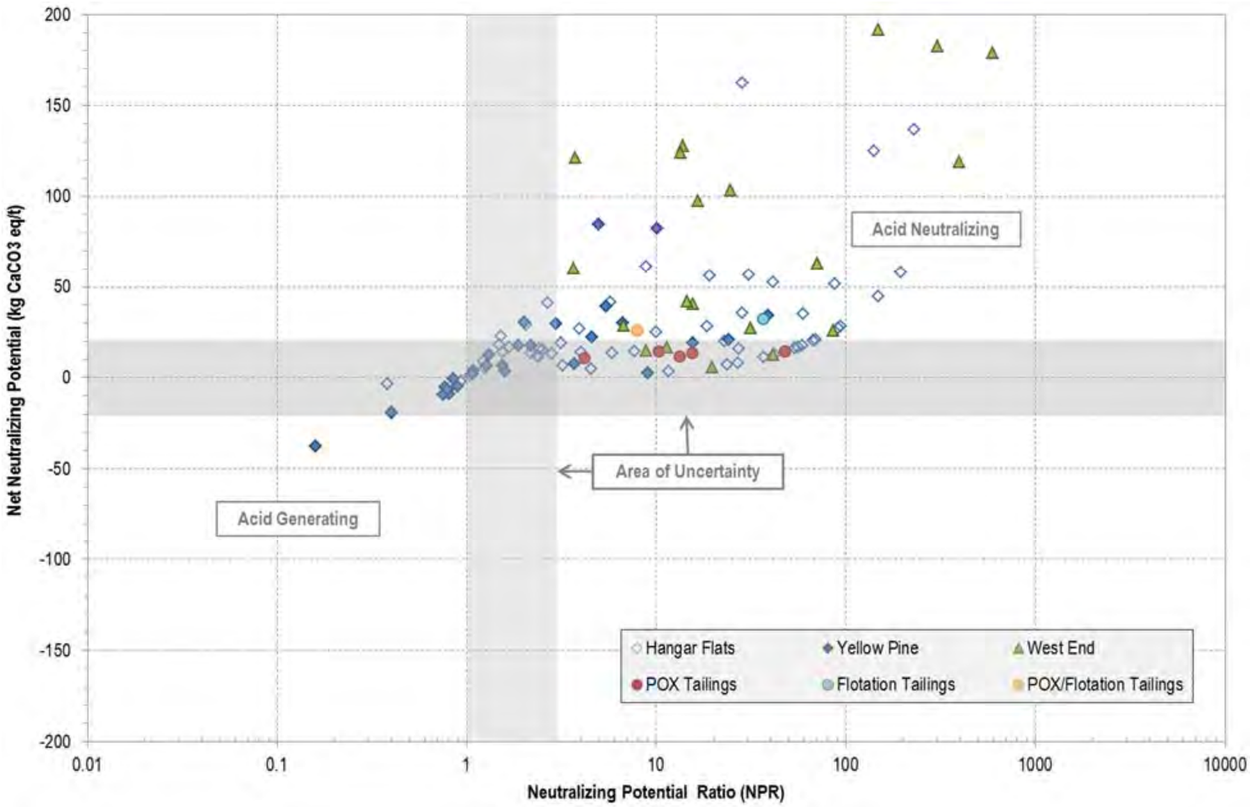
20.4.2.2 Acid Base Accounting Results

ABA tests indicate the theoretical potential for a given material to produce net acid conditions. The balance between the acid generating mineral phases and acid neutralizing mineral phases is referred to as the net neutralization potential (**NNP**), which is equal to the difference between neutralization potential (**NP**) and acid potential (**AP**). The NNP allows for the classification of the samples as potentially acid consuming or acid producing. A negative NNP value indicates there are more acid producing constituents than acid neutralizing constituents. Material that would be considered to have a high potential for acid generation produces an NNP of less than -20 kg $CaCO_3$eq/t. ABA data is also described using the neutralization potential ratio, which is calculated by dividing the NP by the AP (i.e. NP:AP). According to the Nevada BLM Water Resource Data and Analysis Guide for Mining Activities (BLM, 2008), samples with NNP values less than 20 kg $CaCO_3$eq/t and NP:AP values less than three have an uncertain potential for acid generation and require further evaluation (e.g. using kinetic test methods). The NNP values are plotted against the NP:AP values on Figure 20.4. The grey area shown on Figure 20.4 represents a zone in which the acid generation potential of the samples is uncertain.

The Hangar Flats and Yellow Pine samples contain small amounts of potentially acid generating sulfide minerals, with an average sulfide-sulfur concentration of around 0.5 wt%. Despite their overall sulfide content, most of the samples contain neutralization potential in excess of their acid generation potential. Based on the BLM criteria, more than one-third of the Hangar Flats and Yellow Pine samples were characterized as non-acid forming based on BLM criteria, with an excess of acid neutralization capacity; approximately two-thirds of the samples demonstrate an uncertain potential to generate acid and require kinetic testing to determine the long-term potential for these samples to generate acid; only one of the Yellow Pine and Hangar Flats samples shows a greater potential for acid generation with a NNP value less than -20 kg $CaCO_3$ eg/t and NP:AP values less than 1. This sample has the highest sulfide-sulfur concentration (1.5 wt%).

In contrast, samples from the West End Deposit are generally predicted to be net acid neutralizing, with approximately 90% of the West End samples meeting the BLM criteria for a non-acid forming material (NP:AP > 3; NNP > 20 kg $CaCO_3$eq/t); a few samples demonstrate an uncertain potential to generate acid and none of the West End samples show a significant potential for acid generation with NNP values consistently greater than -20 kg $CaCO_3$eg/t and NP:AP values greater than 3.

Figure 20.4: Neutralization Potential Ratio versus Net Neutralization Potential



20.4.2.3 Net Acid Generation Results

NAG testing was carried out in accordance with the method described by Miller et al. (1997). A NAG pH greater than 4.5 s.u. and a NAG value equal to zero are indicative of a non-acid generating material. NAG results greater than one kg H_2SO_4eq/t indicate the sample would generate some acidity in excess of available alkalinity. However, by convention any NAG value below 10 kg H_2SO_4eq/t of material has a limited potential for acid generation.

The NAG results for the Stibnite Gold Project samples are in general agreement with the ABA results and suggest net acid conditions would likely not develop. For the Hangar Flats and Yellow Pine deposits, 85% of the samples are predicted to be non-acid forming on the basis of NAG test work results. From the NAG results, all of the samples from the West End Deposit can be classed as non-acid forming.

20.4.2.4 Meteoric Water Mobility Procedure Results

MWMP tests were conducted on 33 samples to identify the presence of leachable metals and readily soluble salts stored in the material, as well as to provide an indication of their availability for dissolution and mobility. Leachate chemistry data from the MWMP tests were compared to applicable Idaho water quality standards to determine which constituents could potentially be leached at concentrations above these values. However, MWMP leachates only provide a qualitative evaluation of constituents that could occur at concentrations above the water quality standards and do not represent actual predictions of water quality.

The MWMP results indicate the waste rock associated with the Project has a low potential to generate acid or leach metal (loids) from freshly-mined rock. All constituents were below the water quality standards with the exception of trace amounts of antimony and arsenic and, to a lesser extent, aluminum. Antimony and arsenic were consistently leached at concentrations slightly above the water quality standards under circum-neutral conditions, regardless of material type. A comparison of MWMP results from the West End deposit to the Hangar Flats and Yellow Pine deposits, indicate the West End samples show a lower potential for release of arsenic and antimony, which can be attributed to the lower sulfide-sulfur concentrations observed for the West End samples.

The MWMP results are consistent with previous site characterization programs that demonstrate acidic drainage does not occur in the area and arsenic and antimony are elevated in both existing groundwater and surface water throughout the study area. The one exception to this is mercury, which was identified as a constituent of concern from the previous groundwater and surface water investigations, but was below the water quality standards for all samples and below analytical detection limits in all but one sample.

20.4.2.5 Humidity Cell Test Results

Kinetic testing has been initiated on 14 samples to address the uncertainties of the ABA data and provide source term leachate chemistry for the main waste rock units associated with the Stibnite Gold Project that will be used as input chemistry for the predictive geochemical modeling. Sample selection sought to represent the median/mean sulfide-sulfur content for each material type as well as the 95th percentile sulfide content. Samples selected to represent the 95th percentile of sulfide-sulfur concentrations also generally contained arsenic concentrations within the 95th percentile or greater. Likewise, samples selected to represent the median or mean sulphide-sulphur content also represent median or mean arsenic concentrations observed from the static test database.

Samples selected for kinetic testing were submitted for the standard HCT procedure designed to simulate water-rock interactions in order to predict the rate of sulfide mineral oxidation and therefore acid generation and metals mobility (ASTM D-5744-96). At the time of writing, the HCT program is currently ongoing with data available through week 45. The HCT results for the Stibnite Gold Project samples (not including the 3 SODA HCT samples discussed below) show all 14 cells are currently producing moderately alkaline leachates (pH 7.5-8) with low associated sulphate and metals release. Based on the data available to date, constituents are generally below the water quality standards with the exception of trace amounts of antimony and arsenic and to a lesser extent aluminum and manganese. Arsenic and Antimony are consistently leached at low level concentrations above the water quality standards under the moderately alkaline conditions, regardless of material type. These results are consistent with MWMP results and the observed site conditions.

The Stibnite Gold Project HCTs are currently ongoing and will be continued to monitor the potential for development of acid conditions. The HCTs will be terminated when there is no substantial change in the calculated release rate of key parameters or there is no likelihood that changes will occur within a reasonable timeframe.

20.4.3 Implications for Waste Rock Management

The results of the static geochemical test work demonstrate that the bulk of the Project waste rock material is likely to be net neutralizing and presents a low risk for acid generation. However, this prediction needs to be confirmed by the ongoing kinetic testing program since the majority of the Hangar Flats and Yellow Pine samples demonstrate an uncertain potential for acid generation based on the BLM criteria for ABA data. Although the Stibnite Gold Project waste rock material types may present a low risk for acid generation, there is still a potential to leach some constituents under the neutral to alkaline conditions (i.e. arsenic and antimony).

In general, the West End samples show an overall lower potential for acid generation and arsenic and antimony leaching in comparison to the Hangar Flats and Yellow Pine samples. These results suggest effective management of the waste rock could be achieved by using the West End waste rock to cover waste rock from the Hangar Flats and Yellow Pine open pits in order to reduce exposure of waste rock with higher sulfide content to air and water. In addition, management of drainage from all waste rock facilities would be required to limit the release of trace amounts of arsenic and antimony to receiving waters.

For the purpose of the PFS, segregation and selective handling of the waste rock is not considered necessary. However, depending upon the results of the ongoing kinetic testing program and additional sample collection and testing, waste rock from the Hangar Flats and Yellow Pine deposits may require additional management measures such as segregation and selective disposal of potentially acid generating (PAG) material to prevent development of acidic drainage in the long term. In order to demonstrate that the proposed waste management activities for the Project would not result in an environmental impact, numerical predictive calculations would be carried out once the sampling and testing portion of the characterization program is complete.

Characterization of the final open pit wall geochemistry is necessary in order to define the control that the open pit wall rocks would have on the chemistry of waters removed from the pits during operation, and pit lakes that may form after closure. The data from this characterization program is representative of geologic material that would be exposed in the final open pit walls and can be used in subsequent pit water and pit lake modeling efforts for the Project. Pit lake water and pit lake modeling studies will be assessed further in subsequent studies and development by Midas Gold.

20.4.4 Tailings Characterization

20.4.4.1 Sample Collection and Testing

Test residues from metallurgical tests that represent tailings from the Project were sampled and analyzed as part of the current characterization program. The tailings test program includes residues from the bulk flotation tailings, pressure oxidation (POX) circuit tailings, and a mixture of the two. The POX tailings have been run at different grind sizes for the three different deposits providing six samples. In addition, one bulk flotation tailings sample and one sample consisting of an equal mix of POX and bulk flotation tailings have also been characterized, increasing the total to eight samples. Due to the limited quantity of material available, leach testing was completed using a modified Synthetic Precipitation Leachate Procedure (**SPLP**) (EPA, 1994) in addition to ABA and multi-element analysis.

20.4.4.2 Tailings Geochemistry

From the ABA testwork, the flotation tailings sample included in this study is predicted to be acid neutralizing and contains negligible sulfide-sulfur (0.03 wt%). The sulfide-sulfur content of the POX tailings is comparable to the flotation tailings with an average sulfide-sulfur concentration of 0.04 wt%. However, the neutralization potential for the POX tailings are generally lower than observed for the flotation tailings and, as a result, the acid generation potential for this material is uncertain with NNP values between -20 kg and 20 $CaCO_3$eq/t (Figure 20.4).

From the SPLP results, the potential for metal leaching from the flotation tailings material is demonstrated to be low with the exception of arsenic and antimony that are elevated in low levels above water quality standards under alkaline conditions at 0.35 and 0.025 mg/L, respectively. Therefore, these constituents are predicted to be elevated in the bulk flotation tailings contact water. The source of these constituents is likely from trace amounts of pyrite, arsenopyrite and stibnite remaining in the bulk flotation tailings material.

The POX tailings consist mainly of the oxidation product oxyhydroxy scorodite, a crystalline ferric arsenate mineral and also produced near neutral to alkaline leachates. However, the magnitude of antimony and arsenic release was higher in comparison to the flotation tailings, with an average arsenic concentration of 13.3 mg/L and an average antimony concentration of 0.09 mg/L. In addition, sulfate is elevated above the water quality standards for a few of the SPLP results for POX samples, and weak acid dissociable (**WAD**) cyanide was above the water quality standards for all POX samples.

20.4.4.3 Implications for Tailings Management

From the test work, bulk flotation tailings are expected to generate neutral pH drainage and require no special disposal considerations to prevent acidic drainage. Although the sulfide-sulfur content of the POX tailings is comparable to the flotation tailings, the neutralization potential of the POX tailings is generally lower and the acid generating potential is currently undefined without further test work. Based on the current mine plan, tailings would be deposited in a single facility, the POX tailings would be co-deposited with the flotation tailings. Due to the excess neutralizing capacity of the bulk flotation tailings, comingling of the POX tailings with the flotation tailings would reduce the overall potential for acid conditions to develop due within the tailings facility. Although acidic conditions are not anticipated to develop, any tailings drain-down would require management to limit the release of trace amounts of arsenic and antimony to receiving waters.

The POX tailings have a lower buffering capacity in comparison to the bulk flotation tailings and the magnitude of antimony and arsenic release is higher in comparison to the flotation tailings. Therefore, there would be some benefit to blending the more reactive POX tailings with the bulk flotation tailings, which is consistent with the PFS approach for tailings storage for the Project.

20.4.5 Spent Ore Characterization

20.4.5.1 Sample Collection and Testing

The characterization program includes an evaluation of the geochemical characteristics of spent ore from the existing SODA. The location and physical properties of this material make it ideal for use as construction material for the Project. A sampling and testing program has been implemented to determine the suitability of the existing spent ore material from the SODA site for use as a construction material. Midas Gold collected material representative of the spent ore material within the SODA site during a comprehensive drilling campaign conducted in 2013. The static test methods used for this characterization program are the same as described for the waste rock characterization program above. Ongoing test work of the SODA samples includes mineralogical analysis and humidity cell testing.

20.4.5.2 Spent Ore Geochemistry

Based on the ABA and NAG test results, the SODA samples contain low levels of potentially acid generating minerals with an average sulfide-sulfur content of 0.07 wt%. Based on the BLM criteria, the majority of the SODA samples are non-acid forming with an excess of acid neutralization capacity. In comparison to the waste rock samples, the SODA samples generally have lower overall sulfide-sulfur and a higher neutralization potential. The higher neutralization potential can be related to the addition of lime to the ore material prior to leaching with cyanide and the source rock for the majority of the material that contributed to SODA being from the West End deposit.

The MWMP results indicate the SODA material has a low potential to generate acid or leach metals with the exception of low levels of arsenic, antimony and WAD cyanide and to a lesser extent aluminum, manganese, mercury, iron, selenium and sulfate. These results are consistent with the results from the waste rock characterization program as well as previous site characterization programs that demonstrate no acidic drainage occurs in the area and arsenic and antimony are elevated in both groundwater and surface water throughout the study area.

Further testing of the SODA material to define the potential for acid development according to the BLM guidance is not warranted. However, three SODA samples were submitted for kinetic testing to assess leaching rates of arsenic and antimony minerals present in the samples. The changes in these reaction rates through the course of the test would be used to estimate the magnitude of constituents that could be mobilized from the SODA material under long-term weathering and oxidation conditions. Samples were selected from the static test dataset to represent the mean sulfide-sulfur /arsenic content, the 95th percentile sulfide-sulfur /arsenic content and the lower sulfide-sulfur/arsenic content (25th percentile). At the time of writing, the HCT program for the SODA samples is currently ongoing with data available through week 16. The HCT results for the SODA samples show all 3 cells are currently producing moderately alkaline leachates (pH 7.5-8.5) with low associated sulfate and metals release. For two of the three samples, all constituents are generally below the water quality standards with the exception of antimony and arsenic. For the remaining sample, aluminum, iron, manganese, mercury, selenium, silver, and sulfate are elevated above water quality standards during the first few weeks of the test and antimony and arsenic are consistently leached at concentrations above the water quality standards under the moderately alkaline conditions.

20.4.5.3 Implications for Use as Construction Material

The results of the static geochemical test work for the SODA samples demonstrate that the spent ore material is net neutralizing and present a low risk for acid generation. Although the SODA material generally presents a low risk for acid generation, there is still a potential to leach some constituents under the neutral to alkaline conditions at concentrations above water quality standards (e.g., arsenic, antimony and WAD cyanide). Based on these preliminary results, the use of spent ore material from the SODA area would be limited to applications where the material would either remain within containment or in a situation where the exposure of the material to air and water is limited. For example, placement of the spent ore below a synthetic liner but above the water table would reduce the potential for further oxidation and mobilization of constituents from this material.

20.5 MITIGATION

In the Stibnite Gold Project design, Midas Gold has created a plan to restore the site by removing existing barriers to fish migration and re-establishing salmon and steelhead fish passage, removing uncontained historic tailings, reusing historic spent ore material for construction, restoring stream channels, and implementing sediment control projects such as repairing the EFMC. In addition to remediating historic disturbance, Midas Gold has minimized the Project's footprint and related impacts by siting facilities and roads on previously disturbed ground and away from riparian areas. Midas Gold has designed the major access route into the Project site to include existing roads for most of its length with some alternate sections designed to avoid rivers and large waterways, resulting in maximum sediment control and related protection of water quality. By including some of the workforce in an office complex in the nearby town of Cascade, the on-site workforce will be minimized, resulting in less traffic. Re-establishment of historic electrical line power to the Project site will serve to minimize fossil fuel consumption and related haulage along the access route.

Midas Gold has also adopted a series of mitigation and conservation principles as follows:

1. Midas Gold would conduct mining, processing, and reclamation activities in an environmentally responsible manner.
2. Project infrastructure would be located on previously disturbed areas and sites where ever practicable.
3. Midas Gold would design and construct facilities to minimize impacts to aquatic and terrestrial wildlife, improve habitat through various projects across the Project site, and protect anadromous and local aquatic populations.
4. Midas Gold would protect and improve local surface water and groundwater quality.
5. Midas Gold would construct or purchase new ecologically diverse wetlands to replace those affected by new mine development.

20.5.1 Mitigation through Responsible Operations

Midas Gold developed and currently utilizes several measures designed to minimize environmental impacts due to current activities at the Project site including:

- A SWPP implemented as part of a Multi Sector General Permit (MSGP) to inhibit sediment or pollution from entering onsite streams.
- A Spill Prevention, Control and Countermeasures Plan (**SPCC**) comprised of a site-specific spill prevention plan, fuel haul guidelines, fuel unloading procedures, inspections, secondary containment on all fuel storage tanks onsite, and staff training.
- An onsite Recycling SOP to reduce recyclable waste delivery to landfills.
- A surface-water monitoring program to assess the effective implementation of exploration BMPs.
- An annual Environmental Training Program for onsite staff and consultants, covering SWPPP, SPCC, Waste and Recycling management, Midas Gold's wastewater reuse plant, noxious weed overview, Threatened, Endangered, Sensitive, Candidate, and Proposed (**TESCP**) plants and wildlife overview, and operational requirements.
- An Operating Permit Compliance Training class for site management and supervisors to specifically cover operating permit constraints and limits to promote accountability with all levels of Project management.
- Additional SOPs and BMPs for Fuel Haulage, Drilling, Ground Water Protection, Drill Pad siting and helicopter supported drilling, and reclamation are just some of the various protection measures.

Going forward, Midas Gold would continue to build on their strong record by continuing to proactively evaluate BMPs and SOPs effectiveness, and adapt and improve them as appropriate, including a post-closure component.

20.5.2 Mitigation through Facilities Locations

Careful thought and planning have gone into the Stibnite Gold Project design with specific effort made toward minimizing incremental disturbance by locating facilities and infrastructure on previously disturbed and impacted areas, and improving historic conditions at site, as shown on Figure 20.5. Key examples of this planning effort include:

- The Main WRSF is located at the SODA site, which is also the location of the Historic Tailings storage facility, and has been sited to provide a substantial buttress to the TSF;
- The process plant area encompasses portions of the former Stibnite town site, the current Stibnite camp area, and former contractor shop area;
- The Stibnite Gold Project truck shop and fuel storage area is located on the plant site area from previous heap leach operations;
- The Hangar Flats, West End and Yellow Pine open pits largely lie within areas already extensively disturbed by historical mining operations;
- The EFSFSR diversion approach is similar to that undertaken in prior operations and is situated within the currently disrupted portions of the river channel;
- The Burntlog access road would primarily follow an existing forestry road corridor;
- The power line would follow the existing and historically used power line corridor and right-of-way; and
- Several existing haul road corridors would be utilized to minimize new disturbance.

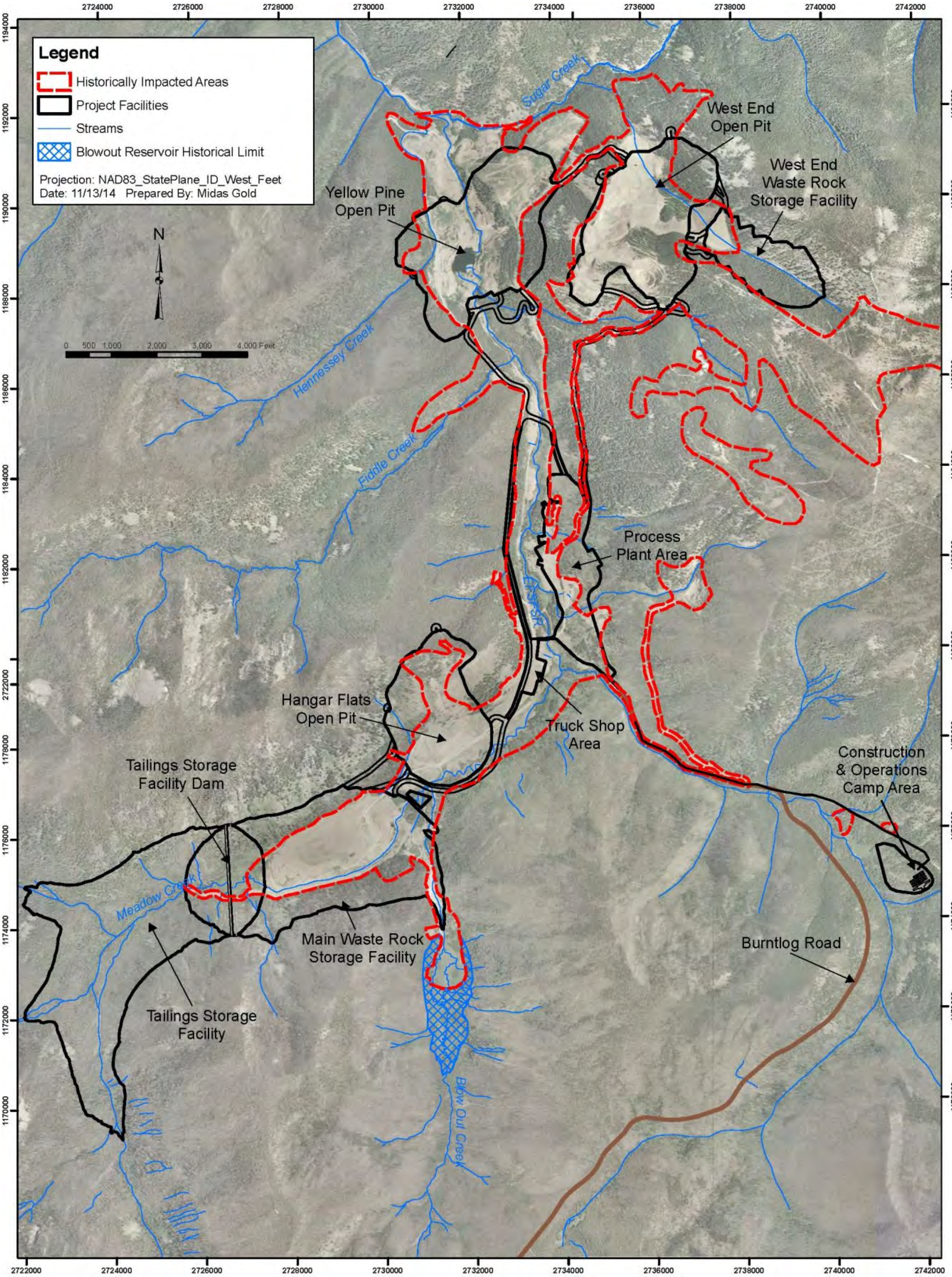
Several examples of improving existing site conditions include;

- Removal of uncontained historic tailings, reprocessing to remove metals in sulfides, and re-deposition of cleaned tailings into a lined TSF;

- Removal and reuse of SODA materials;
- Removal and reuse of spent leach ore from Hecla Mining Company (Hecla) heap;
- Removal of historical waste dumps from around the Yellow Pine and West End pit areas and relocation to a designed WSF;
- Removal of historical Hecla, Canadian Superior Mining Ltd. leach pads and residual infrastructure;
- Removal of potentially contaminated materials from below the historical mill and smelter site;
- Reestablishing short and long-term fish passage through the Yellow Pine pit area on the EFSFSR; and
- Rehabilitation and stabilization of the EFMC.

These are all examples of a Project that has been designed to reclaim the previous disturbance and remnant mining features in order to minimize new facilities and disturbance related to the Project. Major facilities such as the TSF, the Main WRSF, the process plant site, the truck shop, and haul road corridors, have all been sited to minimize total additional disturbance and reduce potential impacts to streams, riparian areas, or wetlands.

Figure 20.5 Project Facilities Locations Relative to Historical Disturbance



20.5.3 Protect Local ESA Listed Fish Species Populations and Enhance Habitat

The protection of fish species and enhancement of local habitat is a key conservation commitment. This commitment involves a “design for closure” approach whereby the development plan, mine plan, and closure strategy integrate key fisheries protection and habitat restoration components aimed at achieving a sustainable anadromous fishery.

In many areas of the Project, opportunities exist during operations and into closure to improve fish habitat by planting trees for shade and installing strategically placed woody species and shade generating plantings. Other efforts that benefit fish include spawning gravel placement, the creation of pools and riffles, and the removal of migration barriers such as the one that currently exists at the Yellow Pine open pit.

Prior to installation of dams on the main Columbia River system and historic mining of the Yellow Pine open pit, the EFSFSR may have been home to a healthy and vibrant salmon spawning run. Since surface mining of the Yellow Pine Pit commenced in 1938, a fish barrier has existed which has halted salmon migration in the District for over 75 years. The Project mine plan, detailed in Section 16 of this Report, entails diverting the EFSFSR and mining first the previously disturbed Yellow Pine pit, followed by mining of the previously disturbed West End Pit, which allows the Yellow Pine Pit to be backfilled with the uneconomic but net neutralizing waste rock portion of the West End Pit. Once the Yellow Pine pit is backfilled with net neutralizing waste material from the West End pit, the grade of the EFSFSR would be restored to approximate pre-mining conditions, thus restoring the in-channel fish migration that existed so many years ago. Upon closure, wetlands and spawning grounds could be established to assist in the return of fish migration and reestablishment of a healthy riparian zone along the rebuilt river channel. As detailed in Section 18 of this Report, one of the main components of the 0.8-mile long EFSFSR diversion tunnel would be a low-flow channel excavated in the tunnel floor, as well as LED lighting, to provide for and encourage passage of migrating salmon, steelhead, and trout to the headwaters of the EFSFSR; this would allow for fish passage during mine operations for the first time since 1938.

20.5.4 Protect and Improve Local Surface Water and Groundwater Quality

Responsible mining operations and a comprehensive monitoring program will serve to protect water quality. Midas Gold may also be able to improve water quality in the District by cleaning up areas that may be impairing water quality conditions. SODA, the Hecla leach facility, waste rock near the Yellow Pine and West End mining areas, and the Historic Tailings facility are previously disturbed areas which may be impacting local ground and surface water and, as a result, have been integrated into the current Project as areas that can benefit through redevelopment and restoration. By relocating these materials to more desirable long-term storage alternatives, their ability to leach constituents of concern should be reduced, such as reprocessing and placement in a lined tailings facility..

Another area for potential improvement is the EFMC, also known as Blowout Creek. This area is a major source of sediment contribution to the EFSFSR drainage basin and results from a water resource dam failure dating back to the 1960s. The EFMC sedimentation could be mitigated during operations when sufficient materials and equipment are available at site. Specifically, one concept would involve installation of a drain system to control sediment production, backfilling of the significant erosional feature, and rerouting of the EFMC stream channel to connect back up with the reconstructed main Meadow Creek channel at mine closure. These efforts would dramatically reduce the sediment currently available for transport at every major precipitation event and during spring runoff.

20.5.5 Enhancement, Restoration, or Creation of Wetlands, Streams, or Habitat

As detailed in this Report, aspects of the current design of the Stibnite Gold Project entail the disturbance of property within the Stibnite Mining District and, in the case of the proposed power-line upgrade and Burntlog Access Road (see Section 18), outside of the District. While Project facilities and infrastructure would be located in areas of previous disturbance wherever practicable, in some cases disturbance of wetlands and streams would be unavoidable. According to current regulations, any person, firm, or agency planning to alter or work in “waters of the

U.S.", including the discharge of dredged or fill material, must first obtain authorization from USACE under Section 404 of the Clean Water Act (CWA; 33 United States Code [U.S.C.] 1344) and, if applicable, Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). For work within navigable waters of the U.S., permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Midas Gold contracted with HDR to conduct an ordinary high water mark (**OHWM**) analysis and wetland delineation to document baseline wetlands and stream conditions for the Stibnite Gold Project. The delineation was conducted in anticipation of future mine operations that may affect areas containing wetlands and other Waters of the U.S. that may be subject to regulation under the Clean Water Act. The wetland study area encompassed all portions the Project as currently designed. The approximate extent of potential impacts to Waters of the U.S. were determined using HDR's delineation and the mine plans and associated features documented in this Report. The areas that were delineated include portions of the following drainages:

- Meadow Creek;
- EFSFSR;
- Fiddle Creek;
- East Fork Meadow Creek;
- Garnet Creek;
- Midnight Creek;
- Unnamed tributary (commonly known as Hennessy Creek);
- Unnamed tributary (commonly known as Rabbit Creek);
- West End Creek; and
- Sugar Creek.

In order to mitigate for the wetland and stream disturbances, Midas Gold would plan to replace the lost aquatic resource(s) prior to carrying out the planned and approved disturbance. Several means exist to mitigate disturbed aquatic resources, a common one is the use of a mitigation bank. According to the EPA "a mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 or a similar state or local wetland regulation" (EPA, 2014). Though it is still early in the Project development, with the current estimated disturbance quantities Midas Gold intends to mitigate Project disturbance through a mitigation bank or similar entity. The potential costs associated with these activities are provided in Section 21 of this report.

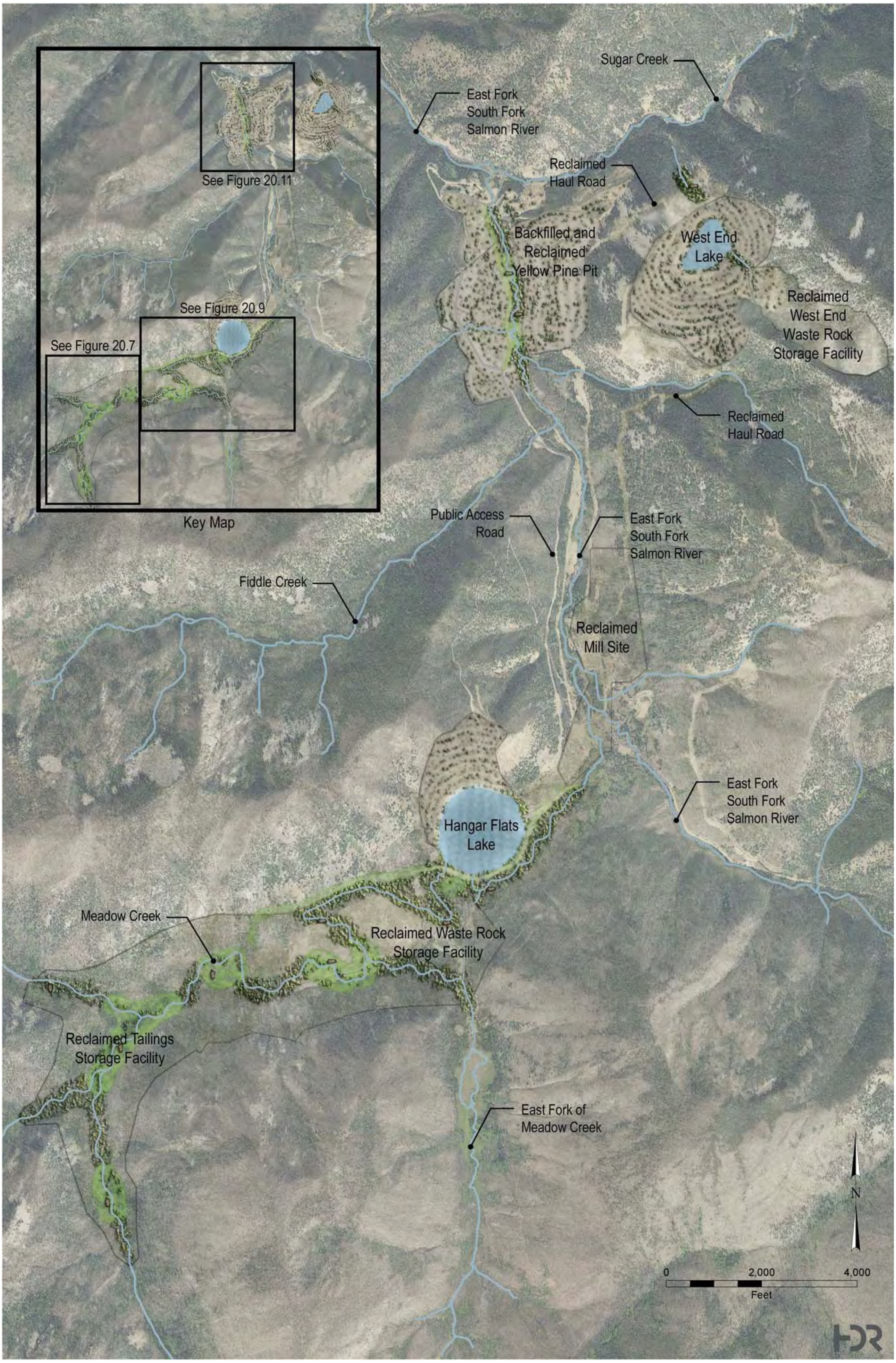
20.6 CLOSURE

Table 20.7 lists 17 priority Project conservation components that form the basis of the overall conservation strategy; Figure 20.6 presents a site-wide illustration of the overall closure strategy. These components range from construction of the new Burntlog Road, which effectively moves the primary transportation route away from the fragile Johnson Creek fishery, to post-closure wetlands and stream habitat enhancement on top of the Meadow Creek TSF surface. The conservation commitment to restore the site through implementation of these measures is also discussed in greater detail, along with associated timing, in the sections that follow.

Table 20.7: Priority Conservation Components

Conservation Measures	Environmental / Conservation Benefit with Approximate Timing
1. Upgrade and utilization of existing Burntlog access route	Elimination of existing access route along high priority fisheries habitats; reduces risk of fuel spills and sedimentation from roads and traffic thereon (Yr -3 to Yr -1).
2. Construct EFSFSR fish passage tunnel	During Yellow Pine pit pre-stripping, construct fish passage tunnel for low/high flow fish passage; allows anadromous and local fish passage (Yr -3 to Yr -1).
3. Construct Meadow Creek diversion around TSF (operational north and south channels)	Divert upper Meadow Creek around initial TSF footprint (Yr -2 to Yr -1) then raise around ultimate TSF footprint (Year 6); removes sedimentation and ground water infiltration from As and Sb source and an existing REC; facilitates effective long-term water management.
4. Spent Ore Disposal Area (SODA)	Relocate 6 Mt SODA facility; provides easily accessible construction material and eliminates significant sedimentation source and existing REC (Yr -1 to Yr 1).
5. Reprocess Historic Tailings	Reprocess 3 Mt of As and Sb laden tailings for permanent storage in a lined TSF; eliminates existing primary source of contamination in Meadow Creek and REC (Yr 1 to Yr 4).
6. Cinnabar access road and Sugar Creek channel rehabilitation	Improve conditions to eliminate major sedimentation source to important salmon spawning reach of Sugar Creek (Yr -3).
7. Relocate Hecla heap leach facility	Relocate Hecla heap leach material to TSF dam; eliminates a potential source of contamination to surface and ground water and REC (Yr -1).
8. Backfill Yellow Pine pit with West End waste rock	Backfill Yellow Pine open pit with geochemically stable material from West End; provides gradient suitable for long-term fish passage in engineered channel and large filter bed of acid consuming material (Yr 7 to Yr 12).
9. Restore segments of Meadow Creek and general habitat below main WRSF	Develop and enhance existing riparian and wetlands and salmon spawning habitat in Meadow Creek downstream of Main WRSF; improves local habitat and removes majority of historic sedimentation and heavy metal contamination from REC source (Yr 6 to Closure).
10. EF Meadow Creek (Blowout Creek) sediment control project	Construct settling basin downstream of Blowout Creek (Year -1) and rock drain, re-contouring and buttressing in Blowout Creek chute (Year 4); enhance settling of turbidity and TSS, minimize major sediment source in EFSFSR basin and re-establish wetlands in valley above.
11. Enhance riparian habitat in EFSFSR above and below Yellow Pine pit	Enhance existing riparian and wetlands and salmon spawning habitat; wetlands mitigation through removal of portions of historic waste rock dumps adjacent to streams and re-establishing habitat in tributary creeks (Yr -3 through Closure).
12. Wetlands and riparian/stream enhancement: Upper Meadow Creek, EFSFSR and off-site purchase	Create and enhance onsite and offsite wetlands according to approved Corps wetlands mitigation and complete closure and reclamation plans (Yr -3 to Closure).
13. Restore Meadow Creek mill and smelter site	Remove material associated with the former mill and smelter site that lies within the limits of the Hangar Flats pit and place contaminated material within the lined TSF (Yr -1).
14. Relocate hazardous waste repository to more suitable location	Relocate the materials in the current hazardous waste repository located on waste dumps adjacent to the EFSFSR to a more suitable location (Yr -1).
15. Closure of historical Bradley tunnel	Closure and sealing of the historical Bradley tunnel, redirecting water into EFSFSR and preventing metal leachates from rock drained by the tunnel entering Sugar Creek.
16. Reforestation of burned and disturbed areas	Extensive tree planting across the entire Project area, which is heavily impacted by forest fires, reducing erosional sedimentation, landslides and avalanches.
17. Closure of historical underground workings on USFS lands	There are a number of historical underground mine workings located on USFS lands that are potential sources of metal leachates and/or safety hazards, including the DMEA portal, that would be sealed reducing or eliminating potential metals leaching and human safety hazards.

Figure 20.6: Overall Site Closure



20.6.1 Tailings and Main Waste Rock Storage Facilities

The reclamation and closure of the TSF consists of two primary elements: a cover system for the tailings deposited in the impoundments, and a surface water management system. The cover is designed to promote vegetative growth and limit erosion on the TSF. The surface water management system (post closure) would direct water across the surface and connect stream segments previously bypassed during operations. By constructing defined channels across the surface of the closed facility, erosional issues would be minimized and in-stream habitat maximized, riparian areas developed, and vegetative growth with native species maximized to reestablish wildlife habitat and stable soil conditions. Flows would be directed into the rehabilitated Meadow Creek stream channel.

TSF closure would begin with removal of the remaining inventory of tailings supernatant on the surface of the TSF through enhanced evaporation, and/or water treatment. Enhanced evaporation using snowmaking misters or similar evaporation systems would limit the need for a new lined pond installation and account for positive water management. Water treatment and discharge would be accomplished under the discharge limits imposed by a NPDES permit, if treatment and discharge are needed.

The mining operation would result in a combined TSF and WRSF complex. The surface of the TSF would be topped at closure with a natural cover to promote vegetative restoration, stream and upland habitat, and control sediment produced from the surface of the facility.

This cover would initially be comprised of sands and gravels and be placed either hydraulically in lenses, or mechanically placed, depending on the composition of the final tailings surface. The cover base (2 - 3 ft) would be amended with soil-like material for planting. The surface would then be re-vegetated to stabilize the facility. Midas Gold would construct a number of vegetative “islands” composed of non-reactive waste rock combined with growth medium across the surface, similar to the existing islands on top of the historic SODA.

Upstream of the TSF, two largely undisturbed stream channels would remain; one to the west, and the other to the south (Figure 20.7). The WRSF is specifically designed to maximize salmon spawning habitat in lower Meadow Creek. To make the rebuilt Meadow Creek channel traversing the WRSF passable to salmon, it would need to be re-sloped thereby reducing the amount of channel in lower Meadow Creek available for spawning habitat, which was deemed a less desirable outcome. The designed slope on the WRSF would potentially allow steelhead, bull trout, and cut throat trout to traverse the facility, thus providing habitat for those species on the upper reaches of Meadow Creek.

The meandering channel on top of the WRSF would offer excellent stable rearing habitat. Habitat engineering could include spawning reaches where properly sized gravel would be located. Some limited periodic maintenance would be required to reposition gravel after extreme high flows.

The channel proceeding down the face of the WRSF would be engineered in a similar fashion as outlined above. The channel would be highly entrenched and installed with a series of pools in a pool and riffle fish-way. Each pool would be keyed into the hardened banks of the channel. The vertical height distance between the successive pools would be a 1 foot to 18 inch transition.

As the channel transitions to the top of the WRSF, its design can revert back to habitat conditions that are reasonably similar to those proposed for lower Meadow Creek. Low flow discharges are common; both depth and wetted channel width decline dramatically at these low flows. A channel 5 ft wide at the bottom that slopes quickly to a maximum depth of 1.5 ft before it widens to benches, would convey higher water depths at any given discharge, than would a wider channel with more gently sloping banks.

The total lined channel would control/contain all high flows without spilling out onto the WRSF, thus avoiding impacts on the impervious layer. Limited high flow associated with the diversion channel and limited sediment inputs by this alignment ensure that the Meadow Creek channel on the WRSF would be very stable. This allows for a wide range of sediment types and habitat features to be installed in the channel. Outside or "off-channel" spawning area comprised of cobbles of 4 to 12 inches, boulders and boulder clusters, or large woody debris, would provide velocity breaks and cover for fish. Riparian plantings of grasses and shrubs, particularly willows, would provide additional cover to the channel.

The need to offset wetland loss associated with the TSF/WRSF complex of fill provides the opportunity to create wetlands on wide benches adjacent to the Meadow Creek stream channel. A construction variation to that described earlier, only with the bench extending a much greater distance from the channel would be employed to accomplish this feature. These "wetland benches" would be planted with a series of succession species, the closest to the channel being the most water dependent.

Figure 20.7 shows a potential succession of plantings from the wettest and most erosive zone to the direct upland and least erosive zone. Plantings from the wettest to the driest are as follows:

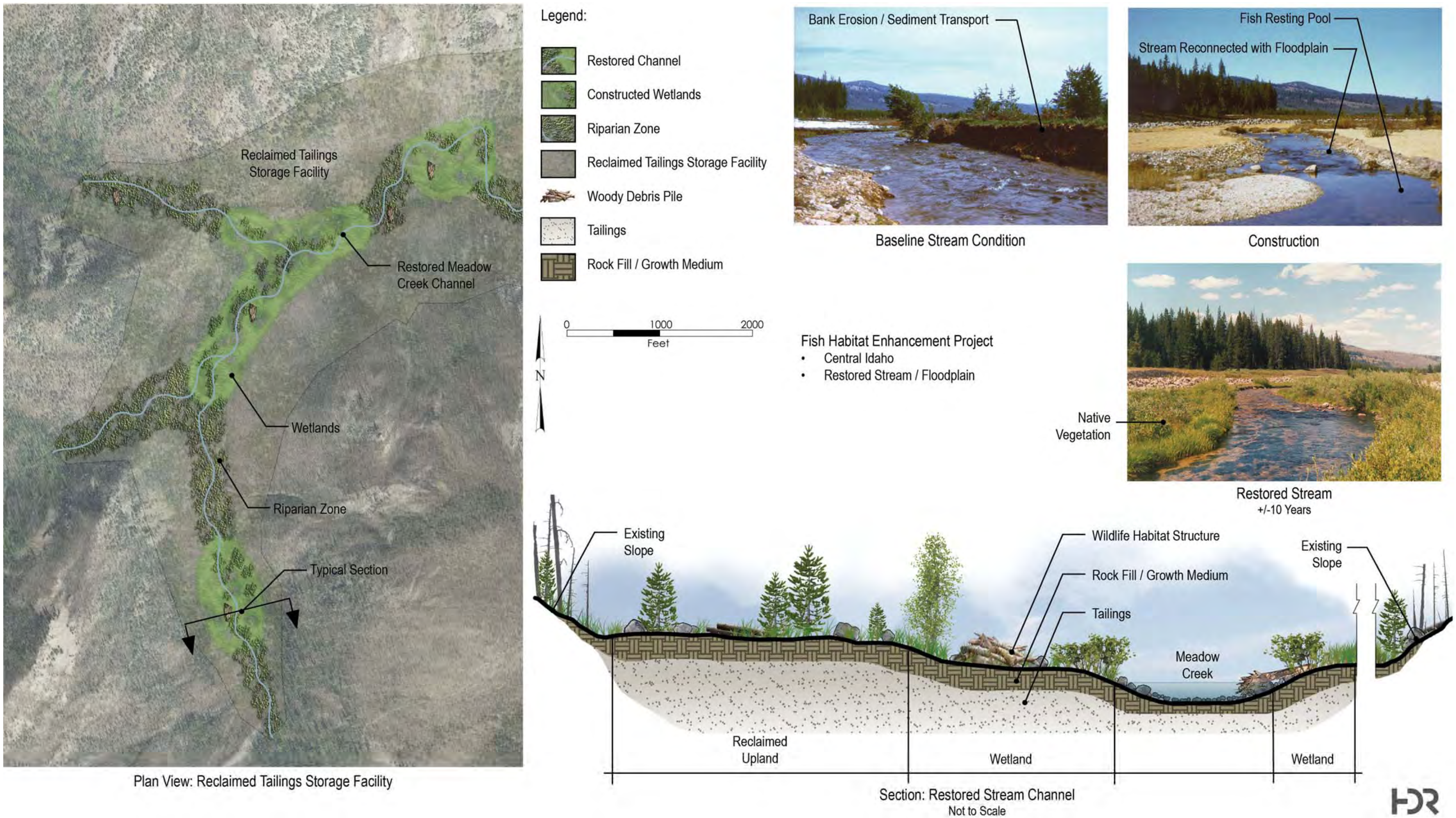
1. Emergent wetland zone;
2. Overbank zone; and
3. Upland wetland zone.

Recommended plant species that are suitable for each zone are described below in Table 20.8. Planting is recommended in the fall. Native stock from the nearby Buffaloberry Nursery or another high elevation nursery is recommended.

Table 20.8: Recommended Potential Planting Zones and Plant Species

Planting Zone	Species Common Name	Species Scientific Name
Emergent Wetland Zone	Nebraska sedge	*Carex nebrascensis*
	Jointed rush	*Juncus articulatis*
	Baltic rush	*Juncus balticus*
	Northwest mannagrass	*Glyceria occidentalis*
Overbank Zone	Coyote's willow	*Salix exigua*
	Yellow willow	*Salix hutea*
	Geyer willow	*Salix geyeriana*
	Black twinberry	*Lonicera involucrata*
	Wood's rose	*Rosa woodsii*
	Aspen	*Populus tremuloides*
	Fremont cottonwood	*Populus fremontii*
	Silver buffaloberry	*Sheperdia argentea*
Upland Zone	Squaw current	*Ribes cereum*
	Common chokecherry	*Prunus virginiana*
	Lodgepole pine1	*Pinus contorta*
	Grand fir1	*Aabies grandis*

Figure 20.7: Tailings Storage Facility Post Closure Details



20.6.2 Hangar Flats Open Pit

Hangar Flats pit would function as a sedimentation basin at closure, much like the current Yellow Pine pit does to a reasonable extent today. Surface water and runoff from the TSF, Main WRSF and Blowout Creek would be routed through this "sediment trap" prior to flowing into Meadow Creek. Figure 20.8 illustrates the current configuration of the SODA and Historical Tailings area as well as the Hecla Heap and EFMC erosional features. The pit is projected to be approximately 600 ft deep and 110 acres in size, sufficient volume for hundreds of years of anticipated sediment deposition. It would serve to provide adequate retention needed to settle out a significant part of any suspended solids flowing through the pit. The flow pattern into and out of the open pit is shown on Figure 20.9.

The road leading to the pit would be reclaimed and blocked with large boulders or earthen barriers to prevent motorized vehicle passage. The berms would be placed far enough away from the final pit to prevent failure of the berm due to normal pit wall sloughing. Warning signs will be posted as a safety measure.

Meander bends would be constructed in reconstructed sections of Meadow Creek all the way to the junction with the EFSFSR. These meanders would be connected by a low gradient straight channel portion of Meadow Creek, which maximizes the length of flowing stream available for spawning, and also reduces the potential for predation of salmon and steelhead smolts by bull trout residing in the Hanger Flats pit.

Figure 20.8: Upper Meadow Creek Area Existing Conditions and Post Closure

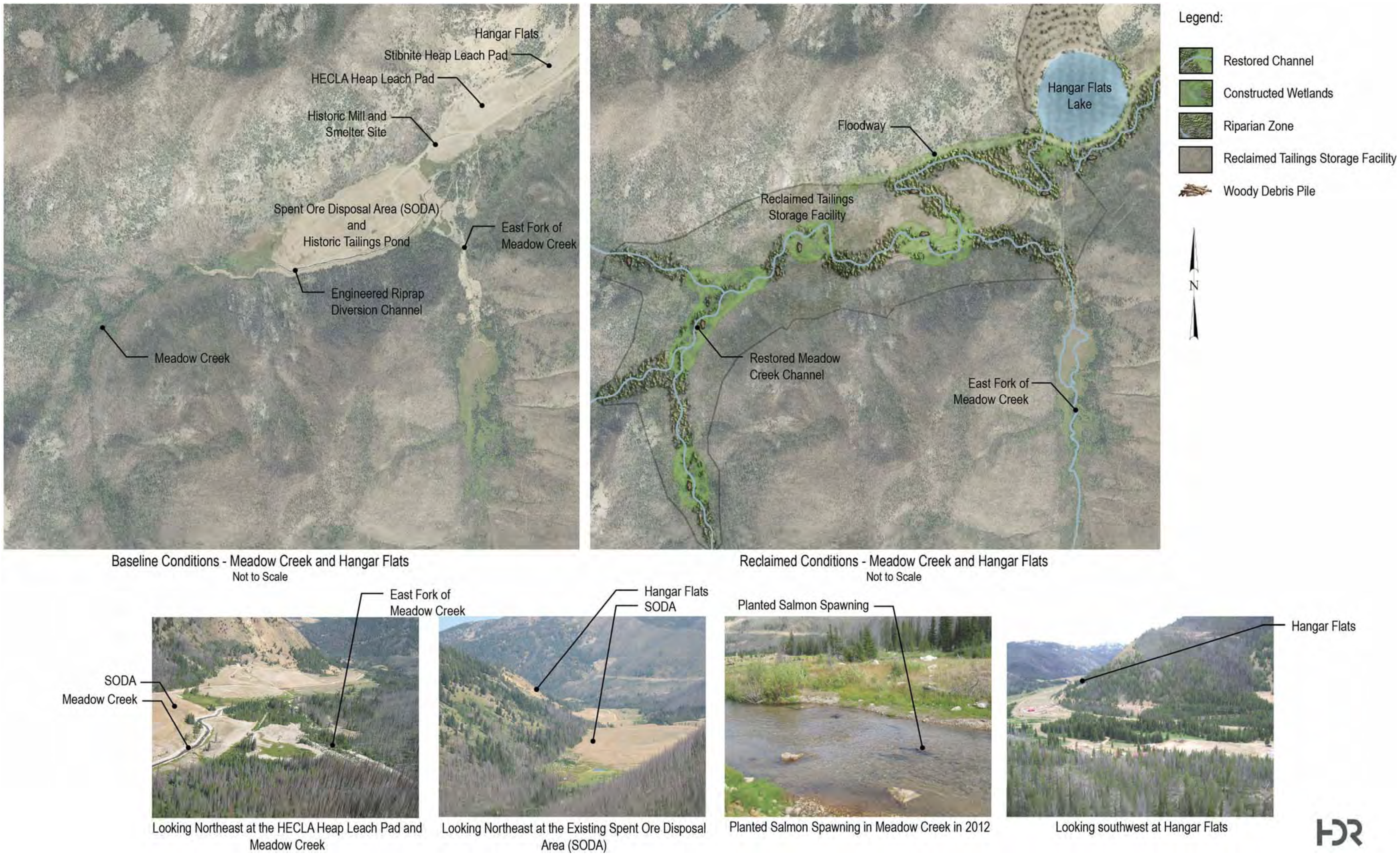
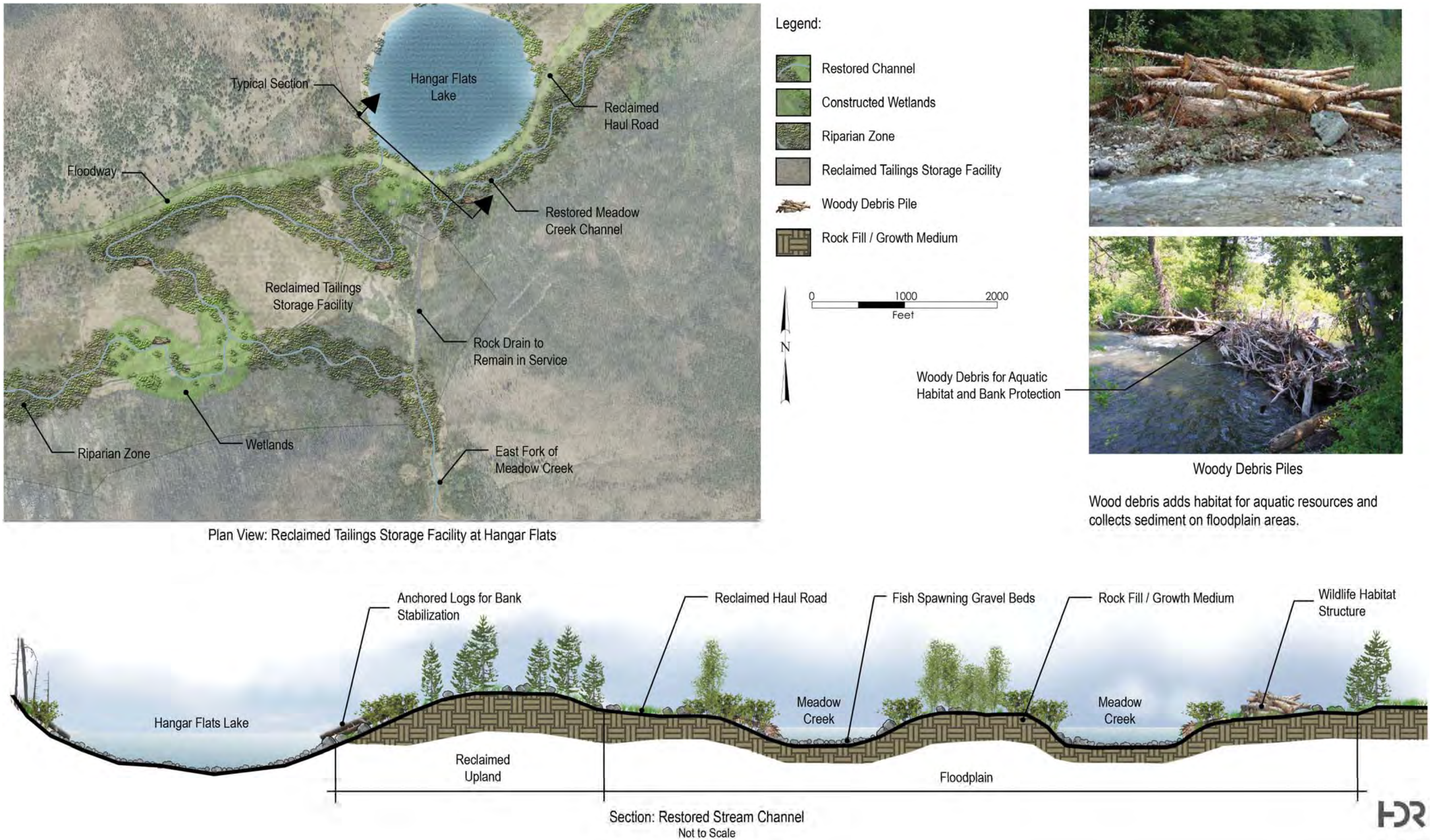


Figure 20.9: Hangar Flats and Main WRSF Area Post Closure Details



20.6.3 Yellow Pine Open Pit

Initially, the EFSFSR would be diverted around the Yellow Pine pit in a "fish passage tunnel", and reintroduced into the EFSFSR below the pit, and upstream from the confluence of Sugar Creek and the EFSFSR. Based on the anticipated flow regime and fish passage criteria, key considerations are: (1) high flow events; (2) water depths associated with low flow periods; and (3) the vertical height of structures over which salmon and steelhead need to leap while swimming in an upstream direction (water depths and velocities are limiting factor(s)).

Key tunnel design and construction considerations were method of excavation (i.e. single versus dual headings), associated labor, equipment, material costs, low-flow channel configuration, and inlet and outlet channel sections. These components satisfy the following:

- preliminary flood conveyance;
- fish passage;
- maintenance access; and
- pit wall stability-related considerations.

The primary fish-passage design criterion was that fish are able to enter the tunnel, swim the entire length of the tunnel, and exit, continuing their migration without experiencing significant delay or stress. Chinook salmon, steelhead and bull trout, which are protected under the federal Endangered Species Act, are accorded special consideration in the design. Key fish passage considerations include water velocities associated with high flow events, water depths associated with low flow periods, and vertical height structures the fish need to leap over while swimming in an upstream direction.

Upon cessation of all mining activities involving the Yellow Pine pit, Midas Gold plans to restore the stream channel through the backfilled pit by filling and grading a large area of the excavated site. The nature of the backfill material, which is net acid consuming, provides a significant quantity of material that would act as a large scale filter bed to groundwater migrating subsurface down the EFSF valley, potentially absorbing dissolved metals or acidic solutions emanating from upstream, were any to ever develop. A sinuous channel mimicking the EFSFSR channel upstream would be constructed to provide upstream fish passage to trout and salmon spawning and rearing habitat described earlier in the section. The channel will be designed within the step-down benches of the backfilled pit. The service road would be widened in strategic locations to accommodate wetland ponds and riparian habitat. Figure 20.10 illustrates the current configuration of the Yellow Pine Pit area.

High flow events drive the overall channel and floodplain design (width, depth, etc.); a typical channel cross-section would involve an approximate 21 ft wide channel bottom with uniform banks extending to 30 ft wide at bank height, 4 ft above the channel bottom (Figure 20.11) with a substrate of an approximate size of boulders and gravels. The reclaimed channel slope would range from 2.9% to 3.1%, which is comparable to most of the pre-project upstream sections of the EFSFSR. The average gradient of the EFSFSR through the backfilled Yellow Pine open pit is approximately 6% and includes the creation of resting and shelter areas comprised of rock sills for migrating salmon and bull trout.

Once the channel is constructed, the fish passage tunnel would be closed. This would be accomplished by plugging the lower tunnel portal, backfilling portions of the tunnel with rock fill, and plugging the upper entrance. This measure would be implemented late in the overall closure schedule.

Figure 20.10: Yellow Pine Open Pit Existing Conditions and Post Closure

Baseline Conditions - Yellow Pine Pit
Not to Scale

Reclaimed Conditions - Yellow Pine Pit
Not to Scale

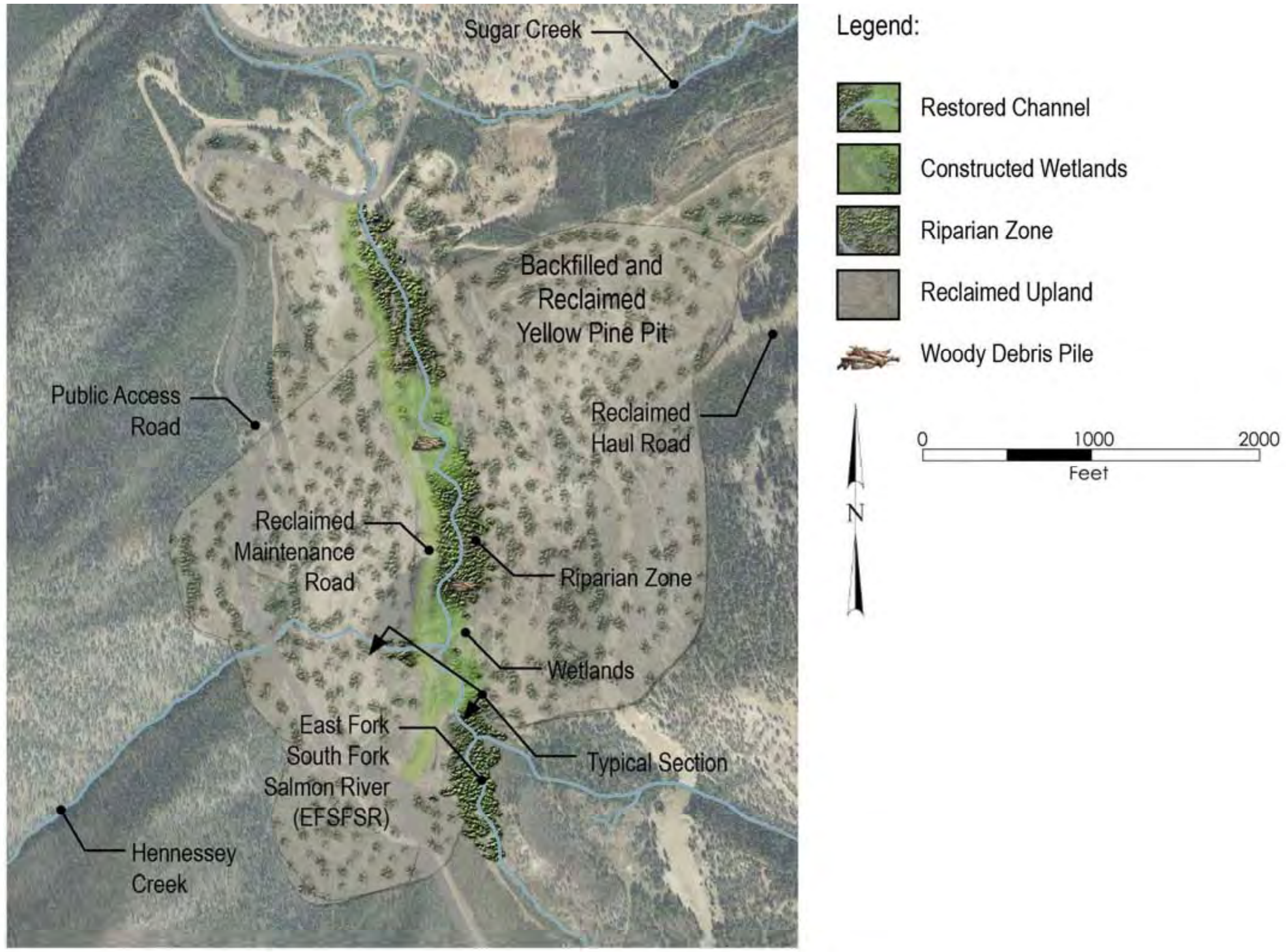
Yellow Pine Pit

EFSFSR Downstream of the Yellow Pine Pit Lake

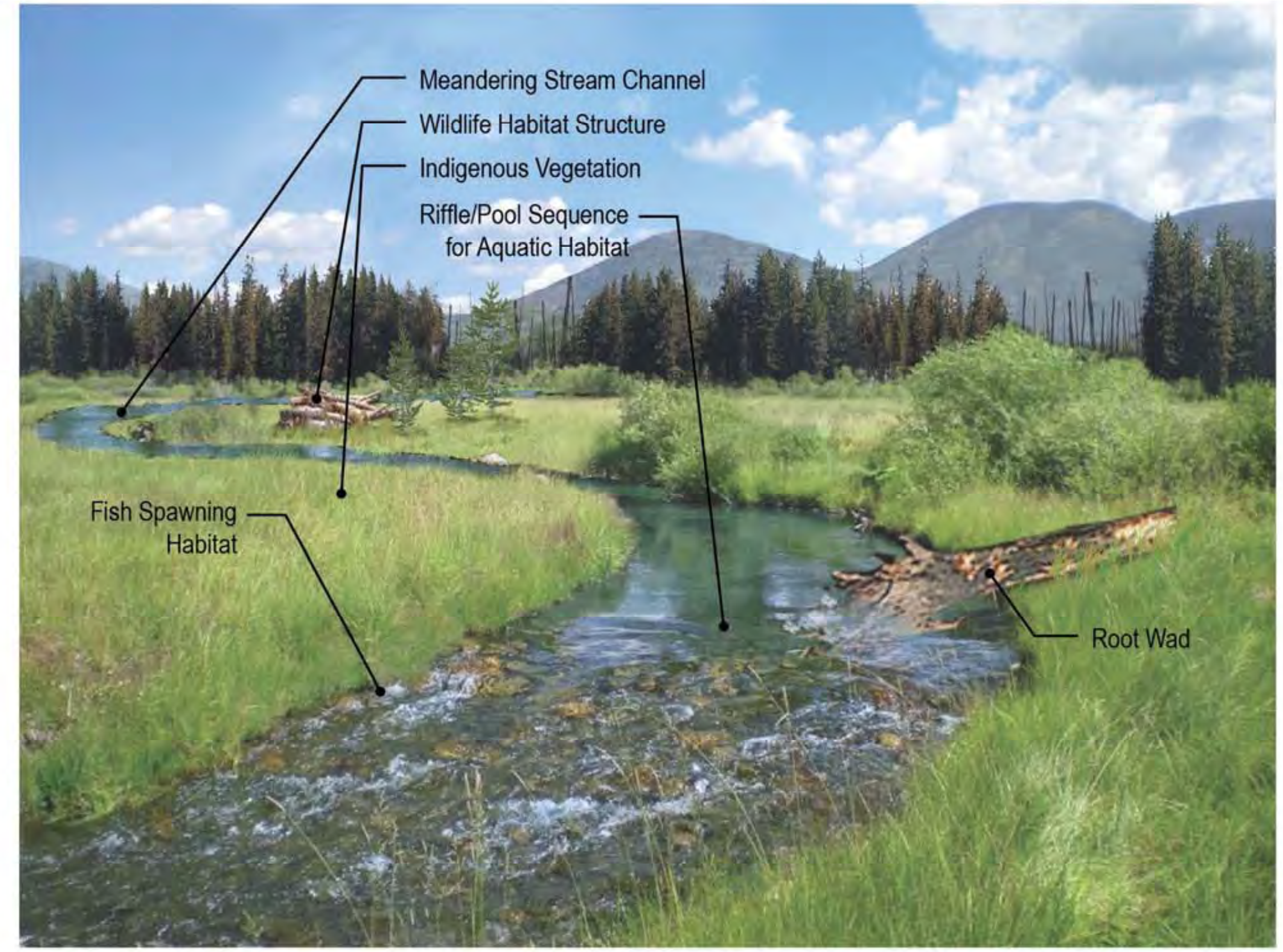
EFSFSR and Yellow Pine Pit Looking Upstream

HDR

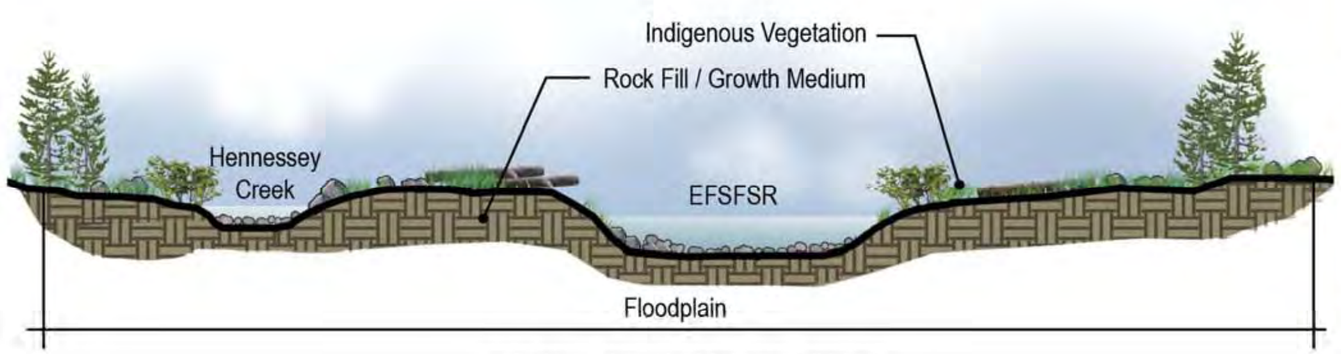
Figure 20.11: Yellow Pine Open Pit Post Closure Details



Plan View: Reclaimed Yellow Pine Pit

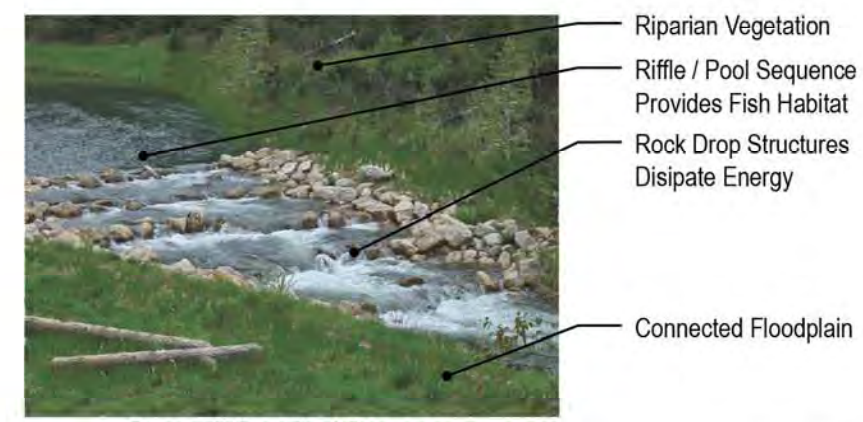


Conceptual Rendering: Reclaimed East Fork South Fork Salmon River Over Yellow Pine Pit Backfill



Section: Restored Stream Channel
Not to Scale

Habitat Structures
Large wood habitat structures maintain pool scour and provide cover for resting fish.



Stream Riffle / Pool Sequence

HDR

20.6.4 West End Waste Rock Storage Facility

The West End WRSF would be re-graded to promote positive drainage and prevent pooling on top of the dump; the top of the dump would be crowned and would be covered with growth media to enhance re-vegetation success and limit seepage. The "cover" would then be re-vegetated with an approved native seed mixture to promote stabilization of the facility, and mitigate sedimentation off the surface.

20.6.5 West End Open Pit

Carbonate-rich waste rock from the West End deposit would be used to backfill the Yellow Pine open pit prior to closure. This acid-neutralizing material would form the base over which the new EFSFSR fish passage channel would be constructed. The mined-out West End open pit would encompass an area of approximately 179 acres.

The final open pit closure configuration would be designed so as to not overtop or discharge. This is due to its location high in the drainage with minimal upslope hydrologic catchment. An overflow spillway would channel surface flows along contour to a settling basin, then to lower West End Creek. The West End open pit would be properly signed to communicate the safety risk of the partially backfilled pit lake and pit high walls. Safety berms would also be employed, as appropriate.

20.6.6 Plant Site and Related Infrastructure

Unless there is an ongoing beneficial use, the processing plant, maintenance facilities, office, and shop building will be dismantled and recycled/salvaged to the extent practicable. Foundations will be broken and covered with an appropriate depth of soil-like material (approximately 2 ft).

All non-salvageable equipment would be buried at the site. Fuel tanks would be off-loaded and salvaged. Fuel storage areas would be tested for contamination, as would the areas where the chemical storage buildings were located. All reagents, petroleum products, solvents, and other hazardous or toxic materials in the mill would be removed from the site for reuse, or disposed of according to applicable state and federal requirements.

Following removal of facilities, the area would be graded to promote drainage and re-vegetated with approved seed mix.

20.6.7 Burntlog Access Road

The Burntlog access road upgraded and constructed to avoid or bypass major sections of the Johnson Creek route and its important fishery would be closed once all reclamation work and related environmental monitoring has been completed. Once all reclamation and closure projects are complete, Midas Gold would effectively "un-build" the road; this will involve pulling back and re-contouring new road cuts and fills and seeding with native grasses. Upgraded sections would be returned to their previous pre-project widths and newly constructed road sections would be removed. Valley County and/or the USFS may decide to assume long-term care and maintenance responsibilities for the route. Otherwise, upon removal, access to the site and the neighboring Thunder Mountain area would be re-established by constructing a public access road through the site connect the existing Stibnite and Thunder Mountain Roads.

20.6.8 Operations Camp

The operations camp would be used during the initial 2 - 3 years of reclamation and closure activities but these activities would not require the full camp; consequently, a portion of the camp would be removed during the early years of closure. After the majority of closure activities are complete, the camp would be dismantled and salvaged and the area reclaimed and re-vegetated.

20.6.9 Haul Roads

Strategic roads would initially be left in place during reclamation and closure. Drainage facilities constructed for haul roads would be properly installed including ditches, cross drains, design flow culverts and safety berms. The actual road surfaces and cuts and fill banks would be restored to the pre-hauling configurations by ripping and re-vegetating. Road grades would be designed to facilitate drainage and crowned and fitted with drainage ditches.

20.6.10 Power-Line Corridor

After closure activities that have significant power requirements have been completed, the section of the power-line from the Yellow Pine substation to the site will be disassembled, and the maintenance road reclaimed to its pre-existing state. Drainage stabilization and erosion control features would be installed. The upgraded power-line from Warm Lake to Yellow Pine would be left in place; Idaho Power would continue to maintain that line.

20.6.11 Waste Management Considerations

A number of proactive operational and post-closure water management features would be incorporated into the conservation design strategy. These would include the following:

- There would be construction of a sedimentation basin in the EFSFSR valley bottom and EFMC alluvial fan. These features would re-establish the sediment collection function of the present Yellow Pine open pit lake.
- Later, the EFMC gully would be covered with waste rock to eliminate the source of sediment and the EFMS stream diverted to connect with Meadow Creek along a stable alignment.
- Contact water from the open pits, waste rock, and TSF would be collected and actively or passively treated, or evaporated, or reused in the process.
- Process contact water would be treated to remove contaminants, filter particulates, and control temperature to mitigate potential impacts to local surface water and ground water.
- Midas Gold is also sensitive to the need to maintain adequate stream flows and related in-stream water quality.
- The Meadow Creek TSF is designed to accommodate the Probable Maximum Flood (**PMF**).

The Hangar Flats pit lake would provide a single point location for future treatment of waters emanating from the TSF, Main WRSF and EFMC (Blowout Creek) should such ever be required. Having the majority of the large scale disturbances feeding into this one location is a significant advantage for such treatment scenarios, if ever required.

20.6.12 LOM and Post-Closure Environmental Monitoring

A conceptual ground water and surface water sampling program follows. A more definitive plan and costs are included in the reclamation plan. Post-closure water quality monitoring would include:

- water quality monitoring as required by the SWPPP;
- water quality monitoring as required by the NPDES Permit;
- ongoing trend sampling for surface water and ground water; and
- monitoring associated with the State of Idaho Groundwater Rule and point(s) of compliance.

The primary purpose of this monitoring would be to determine if potential environmental changes would result from the Project. Further, the monitoring program is intended to evaluate the long-term effectiveness of conservation and mitigation measures outlined in the Final Plan of Operations and other permit approval documents.

Inspections of the TSF and primary waste dump(s) would occur annually for the initial three years following closure, and after extreme events (100-year, 24-hour storm). After this initial monitoring, the contemplated schedule would be Years 5, 15, and 30. This would involve evaluation of the performance of the TSF for the following: geotechnical observations and recommendations, hydrologic monitoring, and water balance review. The actual routine and emergency monitoring and reporting requirements would be defined in the Dam Safety Permit.

The ongoing post-closure fisheries and aquatic biota (stream habitat) monitoring program would focus on evaluating species diversity and habitat conditions as they relate to the Mitigation and Conservation Plan. The initial pre-Project environmental baseline program conducted during 2011-2014 will be the foundation upon which future potential impacts and long-term mitigation success are measured. Key components would include: in-stream flow needs, adult salmon counts, fry escapement and winter survival, habitat characteristics, and construction monitoring. This program would demonstrate conservation and mitigation program effectiveness. Monitoring would occur in Years 5, 15, 30.

Ground water monitoring would focus on measuring any potential changes in exiting ground water conditions beneath the tailings impoundment system and throughout the EFSF basin. Sampling stations below the tailings impoundment, as well as below the three mine pits and the downstream points(s) of compliance, would be indicative of potential ground water impacts associated with the mining operation.

All newly reclaimed areas would be managed consistent with the Project's reclamation, mitigation and conservation principles. The sites would be examined according to the schedule beginning with the concurrent reclamation phase, and proceeding through reclamation and post-closure. The success of re-vegetation would be monitored to ensure erosion is minimized and/or mitigated, and that native species re-establishment is occurring. Maintenance would be conducted on the site as necessary to promote species viability and re-colonization. Reclamation guarantees per 36 CFR Section 228A regulations would be provided by Midas Gold via reclamation bonding or other acceptable and established financial assurance mechanisms.

At the conclusion of "active closure", when construction of all final closure activities is complete, the post-closure program would be initiated. The contemplated schedule is Years 1-5, 15 and 30. Closure maintenance is planned for Years 5, 15 and 30, and would vary for each of the primary components listed.

Midas Gold would compile all reporting information into a single comprehensive "environmental monitoring and mitigation report", based on these schedules. The report would contain information about the following:

- surface water quality;
- ground water quality;
- aquatic biota;
- fisheries;
- tailings storage facility;
- reclamation / re-vegetation status; and
- mitigation and conservation.

The report would be kept on file by Midas Gold, and made available to appropriate federal, state and local agencies upon request.

20.6.13 Conservation and Closure Costs

Anticipated costs for reclamation of the Stibnite Gold Project were developed utilizing a standardized reclamation cost-estimating model currently used and developed in Nevada for mining specific projects. This model has been utilized for mining projects on public and private land in Nevada and other states for many years and is called the SRCE model and is available online through the Nevada Department of Environmental Protection website.

A definitive cost breakdown for reclamation and closure costs and conservation/mitigation measures is provided in Section 21.

SECTION 21 TABLE OF CONTENTS

SECTION **PAGE**

SECTION 21 LIST OF TABLES

TABLE **DESCRIPTION** **PAGE**

21 CAPITAL AND OPERATING COSTS

21.1 CAPITAL COSTS

21.1.1 Summary

The estimated capital expenditure or capital costs (**CAPEX**) for the Stibnite Gold Project consists of four components: (1) the initial CAPEX to design, permit, pre-strip, construct, and commission the mine, plant facilities, ancillary facilities, utilities, and operations camp, and complete on and offsite environmental mitigation and remediation; (2) the sustaining CAPEX for facilities expansions, mining equipment replacements, expected replacements of process equipment and ongoing environmental mitigation activities; (3) the closure and reclamation CAPEX to close and rehabilitate on and off-site components of the Project, which includes post-closure water treatment; and (4) working capital to cover delays in the receipts from sales and payments for accounts payable and financial resources tied up in inventory. Initial and working CAPEX are the two main categories that need to be available to construct a mining project.

Table 21.1 summarizes the initial, sustaining and closure CAPEX for the Project. It includes direct mining equipment and pre-stripping costs, process plant costs, on-site infrastructure such as the TSF and the operations camp, and off-site infrastructure such as the power transmission line, the mine access road, the Cascade Complex, and reclamation and closure costs. The initial CAPEX also includes indirect costs for engineering, permitting, land acquisitions, some environmental mitigation, and other costs. Initial CAPEX also includes an estimate of contingency based on the accuracy and level of detail of the cost estimate. The purpose of the contingency provision is to make allowance for uncertain cost elements which are predicted to occur, but are not included in the cost estimate. These cost elements include uncertainties concerning completeness, accuracy AND CHARACTERISTICS OR NATURE of material takeoffs, accuracy of labor and material rates, accuracy of labor productivity expectations, and accuracy of equipment pricing.

Table 21.1: Capital Cost Summary

Area	Detail	Initial CAPEX ($000s)	Sustaining CAPEX ($000s)	Closure CAPEX ($000s)	Total CAPEX ($000s)
Direct Costs	Mine Costs	47,552(1)	35,346	-	82,898
	Processing Plant	336,219	1,579	-	337,798
	On-Site Infrastructure	149,245	39,937	-	189,182
	Off-Site Infrastructure	80,327	-	-	80,327
Indirect Costs		176,687	4,275	-	180,962
Owner's Costs		26,806	-	-	26,806
Environmental Mitigation Costs		10,606	8,165	-	18,771
Bonding, Closure and Reclamation Costs		762	9,185	56,542	66,489
Total CAPEX without Contingency		**828,204**	**98,488**	**56,542**	**983,233**
Contingency		142,050	-	-	142,050
Total CAPEX with Contingency		**970,254**	**98,488**	**56,542**	**1,125,283**

Note:
(1) Initial mining CAPEX also includes some environmental remediation costs as discussed in Section 21.1.7.1.

The primary assumptions used to develop the CAPEX are provided below:

- The estimate is based on 3rd quarter 2014 costs and is un-escalated.
- All cost estimates were developed and are reported in United States of America (US) dollars.

- Contingency during the pre-production period is specific to each major component of the Project as determined by the various consultants.
- Qualified and experienced construction contractors will be available at the time of Project execution.
- Borrow sources are available in Meadow Creek or nearby within the Project boundary.
- Weather related delays in construction are not accounted for in the estimate. However, the engineering, procurement and construction management (**EPCM**) schedule does account for a ramp down in construction activity during the three winter months (December, January, and February).
- The oxygen plant is accounted for as an “over-the-fence” supply contract. Capital costs have been included for building a dedicated substation for the oxygen plant. Midas Gold will supply power and other utilities to the oxygen plant during operations as well as provide beds at the operations camp for its workers.
- Bonding cost represents the estimated financial cost of putting appropriate bonding in place, not the amount of the bond itself.
- No provision has been made for currency fluctuations.

21.1.2 Mine Capital Costs

The mine capital generally includes three components: capital to purchase the mining fleet, capital for mine support equipment, and the cost of pre-stripping. Mine capital cost for mobile equipment was developed from the mine equipment list presented in Section 16. Mine capital costs including equipment and pre-production development are presented in Table 21.2.

Table 21.2: Mine Capital Cost Summary

Mining CAPEX Components	Pre-Production ($000s)	Sustaining ($000s)	Total CAPEX ($000s)
Mine Major Equipment (Leased)	20,365	27,021	47,386
Mine Support Equipment (Purchased)	16,428	8,325	24,753
Capitalized Preproduction Development (30%)	10,759(1)	-	10,759(1)
Total Mining CAPEX	**47,552**	**35,346**	**82,898**

Note:
(1) Pre-production mining costs include environmental remediation costs as discussed in Section 21.1.7.1; the remaining 70% of preproduction development is included in OPEX as detailed in Table 21.5

Midas Gold plans to lease the major mining equipment, meaning that the majority of the cost of the mining fleet is excluded from initial and sustaining CAPEX and moves to operating expenditures (**OPEX**). Lease rates were based on a combination of 36-month and 60-month leases mostly with equipment buyouts at the end of the lease period. For some sustaining capital equipment that is planned to be returned to the supplier at the end of the mine life, no buyout was included. Lease rates for the major mine equipment were obtained from a local major mine equipment vendor. End of lease term buyout options are accounted for as capital costs while down payments and monthly payments are treated as operating costs. Starting in Year 1, monthly lease payments become part of operating costs and any buyouts of mobile equipment become included sustaining capital. Smaller support equipment will be purchased, unit costs for which are based on recent information in the IMC equipment cost database. Mine capital costs include the following:

1. Cost of the buyout option for all leased mine mobile equipment required to drill, blast, load, and haul the material from the pit to the appropriate destinations.
2. Auxiliary equipment to maintain the mine and material storage areas in good working order as well as construct the mine haul roads and maintain them.

3. Equipment to maintain the mine fleet such as tire handlers and forklifts.
4. Light vehicles for mine operations and staff personnel.
5. An allowance is included for initial shop tools.
6. An allowance is included for initial spare parts inventory.
7. Mine engineering equipment (computers, survey equipment, etc.) is included.
8. Equipment replacements are included as required based on the useful life of the equipment.

There are certain capital costs associated with the mine that are included elsewhere in the estimate. These items include mine office buildings, shop facilities, mobile equipment that is not required by the mine, and all infrastructure costs (except for haul roads).

Table 21.3 summarizes the mine capital costs by year. The buyout costs for the mine major equipment are included as capital costs, but the down payment and lease payments during the operation period are carried as OPEX and are not shown here. Preproduction stripping is part of the mine capital cost, but is shown separately to differentiate it from the cost of purchasing mine equipment.

Table 21.3: LOM Mining Capital Cost Detail

Year / Quarter	Mine Equipment			Capitalized Preproduction Consumables And Labor ($000s)	Total(1)(2) Mine Capital ($000s)
	Leased Major Equipment Buyout Optional Payments ($000s)	Leased Major Equipment Down & Monthly Payments ($000s)	Other Support Equipment Capital Costs ($000s)		
Initial Capital					
PP Q-5	-	2,221	11,696	857	14,774
PP Q-4	-	5,379	1,942	1,428	8,749
PP Q-3	-	3,307	818	2,545	6,670
PP Q-2	-	3,549	603	2,652	6,804
PP Q-1	-	5,909	1,369	3,278	10,556
Sub-Totals	**-**	**20,365**	**16,428**	**10,759**	**47,552**
Sustaining Capital					
1	-	-	39	-	39
2	-	-	53	-	53
3	-	-	30	-	30
4	-	-	933	-	933
5	7,348	-	1	-	7349
6	7,076	-	6,338	-	13414
7	1,821	-	-	-	1821
8	6,365	-	931	-	7296
9	1,494	-	-	-	1494
10	-	-	-	-	-
11	-	-	-	-	-
12	2,917	-	-	-	2917
Sub-Totals	**27,021**	**-**	**8,325**		**35,346**
Totals	**27,021**	**20,365**	**24,753**	**10,759**	**82,898**

Notes:
(1) Mine preproduction development is shown as 30% capital cost and 70% operating expense.
(2) End of lease term buyout options shown as a capital cost

Major mine equipment is leased in the year it is required for operation. The acquisition schedule for the leased major mine mobile equipment is provided in Section 16. The mine capital costs in Table 21.3 represent major mine equipment leased in the preproduction production period; other support equipment is purchased outright. Equipment leases after the start of production are carried as OPEX.

If major mine equipment was purchased outright, the initial CAPEX would increase by $53.4 million, sustaining CAPEX would increase by $53.7 million, and LOM undiscounted OPEX would decrease by $121.8 million.

Mine support equipment will be purchased outright. Table 21.3 also includes the mine support equipment capital costs. Mine support equipment pricing was priced from vendor quotes and from IMC's database for capital equipment purchases. The truck shop, truck wash, and truck shop warehouse are included in the Plant CAPEX. Table 21.4 presents the detailed purchase schedule for the support mine equipment along with the necessary facilities capital costs.

Table 21.4: Mine Support Capital Equipment and Facilities Capital Costs

Mine Support Equipment / Facilities	Unit Cost ($000s)	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Blasthole Stemmer	317	317	634	951
Blasters Flatbed Truck (2 T)	80	160	160	320
ANFO/Slurry Truck (40,000 lb)	511	511	511	1,022
Fuel Truck 777G	1,511	1,511	1,511	3,022
Lube Truck 777G	1,678	1,678	1,678	3,356
Flatbed Truck (8 - 10 ton)	102	102	102	204
18 T Service Truck with Crane	316	316	316	632
Crane Truck (8 - 10 ton)	296	296	296	592
Cat 988 with Tire Handler	682	682	682	1,364
Mechanics Truck	166	498	498	996
Welding Truck	277	277	277	554
Shop Forklift (Hyster H100FT)	52	52	-	52
RT Forklift (Sellick SD-100)	90	90	-	90
Grove 80 T Crane	488	488	-	488
Cat 430E Backhoe/Loader	157	157	157	314
Man Van	71	284	568	852
Pickup Truck (4x4)	66	330	660	990
Light Plants	30	150	90	240
Mine Radios	1	35	35	70
Mine Dispatch System	2,650	2,650	-	2,650
Engineering/Geology Equipment	150	150	150	300
Shop Tools (3% of Major Equipment)	2,135	2,135	-	2,135
Initial Spare Parts (5% of Major Equipment)	3,559	3,559	-	3,559
Total Support Equipment/Facilities CAPEX		**16,428**	**8,325**	**24,753**

Pre-stripping requirements were developed quarterly to provide ore exposure for production in year 1 and also construction material for the TSF starter dam. A total of 14.4 Mst of waste rock would be mined during preproduction. Approximately 14.1 Mst (5.5 Mst from YP, 2.3 Mst from HF, 0.5 Mst from WE, and 5.8 Mst from SODA) of the 14.4 Mst would be used to build the TSF starter dam; the remaining 0.3 Mst of waste rock from WE would be stored in the WE WRSF. Mining costs during pre-production were based on areas stripped, haul profiles, established equipment rates and estimated operator wages. The cost build-up assumes that pre-stripping activities will be conducted by an owner-operated fleet using leased equipment. Table 21.5 shows the estimated development costs by quarter before start-up. The costs for topsoil stripping and storage are included in the mining costs. Development costs in preproduction quarter -5 (PP Q-5) include costs for the haul road between the Yellow Pine pit and the WRSF and TSF. The development costs are divided between capital (30%) and operating (70%) expenses.

A small amount of capital is needed to support the mining effort, as shown at the bottom of Table 21.4. These include geology and engineering equipment such as surveying instruments, and mine planning hardware and software. Truck shop initial tools were estimated as 3% of mine major equipment capital costs. The first supply of the truck shop warehouse with operating spare parts is capitalized at 5% of mine major equipment capital costs.

Table 21.5: Mine Pre-Production Expense

Period	Development Costs ($000s)	CAPEX 30% ($000s)	OPEX 70% ($000s)
PP Q-5	2,856(1)	857	1,999
PP Q-4	4,760	1,428	3,332
PP Q-3	8,482	2,545	5,937
PP Q-2	8,840	2,652	6,188
PP Q-1	10,925	3,278	7,648
Total	**35,863**	**10,759(2)**	**25,104(2)**

Notes:
(1) Dedicated for haul road development.
(2) Mining CAPEX and OPEX include environmental remediation costs as discussed in Section 21.1.7.1.

21.1.3 Plant Capital Costs

Capital costs for the processing plant were estimated using budgetary equipment quotes, material take-offs for concrete, steel, and earthwork, estimates from vendors and consultants, and estimates based on experience with similar projects of this type. The capital cost estimate for the plant is shown in Table 21.6. Some of the costs and quantity estimates used by M3 were supplied by other consultants.

Table 21.6: Plant Capital Cost Summary

Area Description	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Historic Tailings	4,565	-	4,565
Primary Crusher	12,108	-	12,108
Crushed Ore Stockpile & Reclaim	8,884	-	8,884
Grinding and Classification	61,716	-	61,716
Pebble Crushing Circuit	-	1,579	1,579
Antimony Recovery	22,346	-	22,346
Gold Flotation	25,733	-	25,733
Pressure Oxidation	71,934	-	71,934
CCD & Neutralization	39,254	-	39,254
Leaching/CIP	17,346	-	17,346
Detox	2,943	-	2,943
CIL Leaching	14,535	-	14,535
Carbon Handling & Refinery	10,367	-	10,367
Fresh Water System	2,336	-	2,336
Main Substation	20,722	-	20,722
Reagents	18,214	-	18,214
Oxygen Plant	3,217	-	3,217
Total Plant CAPEX	**336,219**	**1,579**	**337,798**

21.1.3.1 Plant Capital Basis of Estimate

The capital cost estimate is based on the cost of equipment, material, labor, and construction equipment needed to complete the plant up to start-up. The accuracy of the CAPEX estimate at the prefeasibility level is -10% to +25. Data for this estimate was obtained from numerous sources including:

- prefeasibility-level design engineering consisting of flow sheets, general arrangement plans and cross sections, civil grading drawings, and electrical one-line drawings;
- POX conceptual engineering produced by Pieterse Consulting Inc. during 2014;
- topographical base information provided by Midas Gold from a 2009 aerial LiDAR survey augmented by a 2013 LiDAR survey for outlying areas for the mine access road;
- budgetary equipment and materials quotes from vendors; and
- local labor rates for Valley County, Idaho modified by M3's experience from other projects.

Below is a description of the pricing that was used by category.

Capital Equipment Pricing

Prices were solicited for all major equipment. Procurement packages of similar equipment were sent to three qualified suppliers to get budgetary quotations. Major capital equipment categories for this Project included electrical, mechanical, and piping. Accuracy of +/- 15% was requested from suppliers for this CAPEX. For some equipment generally under $100,000 in value, pricing data were taken from recent M3 projects.

Electrical Equipment

One-line electrical distribution diagrams were designed for each plant and ancillary area to determine the required number and size of transformers, switchgear, and motor control centers. These one-line drawings were sent to three qualified electrical suppliers for direct pricing. Quotes were evaluated by the electrical engineer to ensure that the specifications for the equipment were met. An average of the suppliers quoted prices was used to populate the capital cost estimate.

Electrical bulk materials were factored by area and benchmarked from recent projects. The cost of electrical equipment was subtracted from the factors except in cases where the electrical costs were judged to be too low.

Mechanical Equipment

All major mechanical equipment was priced for the capital cost estimate by soliciting budgetary quotations, or in the case of minor equipment, from quotes or purchases from recent jobs. The vendors that were approached were generally the best known suppliers of process equipment in the mining industry: Metso, FL Smidth, Outotec, Sandvik, Weir Warman, GIW, Goulds, Flowserve, Delkor Tennova, McClanahan, Konecranes, etc. Autoclave equipment prices were solicited from the main providers: Koch-Knight, Stebbins, DSB, Ekato, Lightnin, Mikropul, Clean Gas Systems, Weir-Geho, Midwest Cooling Towers, Marley, Clayton, Cleaver-Brooks, and others. Operating data sheets (ODSs) were developed to provide duty specifications for each unique piece of major equipment in the Equipment Register. The ODSs were populated with process data and flows from the Metsim process simulation, from specifications in the Process Design Criteria and from physical information derived from General Arrangement drawings. Vendors were provided capacities and flows (nominal and design), specific gravity and bulk density, slurry densities (percent solids), work and abrasion indices, materials of construction, and other information needed to receive a credible quote. All quotes were evaluated to determine if they met the duty specifications. In general, the price that was used in the capital cost estimate was based on the best suited proposal, not the lowest cost quote. In cases where there were multiple qualified proposals, the average of vendor's prices was used. Mechanical equipment quotes were obtained for:

- jaw crusher;
- conveyors & stacker;
- reclaim apron feeders;
- SAG/ball mills with trammel screens;
- pebble (cone) crusher;
- hydro-cyclone;
- flotation tank cells for both antimony and gold rougher and cleaner circuits;
- concentrate, CCD, and neutralization thickeners;
- plate and frame filter presses;
- field erected and shop-fabricated tankage;
- POX equipment including the autoclave, flash tanks, autoclave agitators, positive displacement feed pumps, steam generators, and Venturi scrubber;
- conventional 7-ton carbon plant for gold recovery and carbon regeneration;
- screen slurry plant for Historic Tailings; and
- tailings, slurry, froth, and process pumps.

Quotes for the autoclave, flash tanks, and autoclave agitators were based on preliminary sizing information. The final process design required a larger autoclave and flash tanks. Prices for the final design were factored to reflect the new autoclave size. For the autoclave and flash tanks, a factor of 21% represents the estimated increase in steel weight of the larger autoclave over the autoclave that was quoted. Autoclave agitators, positive displacement feed pumps, and other scalable equipment were scaled up similarly.

Piping, Pump, and Valve Quotes

A list of pumps was developed for all process areas. Operating data were tabulated for all pumps on this list including flow, total dynamic head, percent solids, slurry specific gravity, service, corrosivity, and pump style (horizontal centrifugal, vertical turbine, etc.). Requests for budgetary quotes were furnished to three or more pump suppliers for comparative quotes. A piping engineer reviewed the vendor submissions and technical information to select the appropriate equipment to include in the capital cost estimate.

M3 sized and specified the valves in the autoclave area. These valves were priced by known providers, Caldera, Mogas, Flowserve, and Tyco. The total bill of materials for autoclave area valves is $6.5 million. Pipe costs were factored and benchmarked against other recent projects.

Structural Steel and Concrete Material Take Off (**MTO**) Methods

The method used to quantify concrete volumes and structural steel weights was to take similar structures already designed from other projects and then modify the dimensions and/or steel member sizes appropriately for the new project's building characteristics. At times when there are different loading conditions, (e.g. snow load), a quick calculation was performed to verify sizing of roof framing. When there was a new foundation that was judged to be unique from past projects, a calculation of a typical bearing condition was performed to verify concrete dimensions. The calculations are effective at getting a close approximation of the final design.

Concrete & Structural Commodity Pricing

MTOs were prepared for architectural and structural commodities to establish quantities and prices using solicited budgetary prices of unit costs. Unit pricing was solicited from four structural steel providers for the Project, which were adjusted for steel unit prices typical for current large EPCM jobs.

Two regional concrete suppliers and contractors provided prices for supply of concrete, predicated on the assumption that a batch plant would be set up on site and that aggregate would be available from alluvial gravels in the Meadow Creek valley. A crushing and screening plant would also be needed to make the particle size gradations for concrete mix designs. The cost to house the batch plant operators was also considered.

Plate work was estimated using MTOs at a cost of $2,850 per ton.

Instrumentation

Instrumentation materials costs were factored by area from total plant equipment costs.

21.1.4 Infrastructure Costs

21.1.4.1 Onsite Infrastructure

The onsite Infrastructure includes site utilities and roads, auxiliary facilities, the TSF, surface and tunnel water diversions, and the operations camp. Table 21.7 summarizes the direct costs for onsite infrastructure.

Table 21.7: Onsite Infrastructure CAPEX Summary

Onsite Infrastructure	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Site - General	21,521	-	21,521
Auxiliary Facilities	38,552	-	38,552
Tailings Storage Facility / Reclaim System	42,757	25,371	68,128
Water Diversions	18,537	4,566	23,103
Water Treatment Plant	-	10,000	10,000
Permanent Camp	27,878	-	27,878
Total Onsite Infrastructure	**149,245**	**39,937**	**189,182**

The auxiliary facilities include a variety of offices, shops, and warehouses that support the day-to-day operations of the mine and the plant. Table 21.8 lists the main auxiliary facilities and their direct costs that were included in the initial CAPEX.

Table 21.8: Onsite Auxiliary Facilities CAPEX

Onsite Auxiliary Facilities	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Ancillaries - General	56	-	56
Administration Building	2,240	-	2,240
Security Building	1,588	-	1,588
Medical & Emergency Services	2,332	-	2,332
Mine Ops/Mine Dry Building	1,889	-	1,889
Warehouse	5,466	-	5,466
Truck Shop/Truck Wash/Truck Warehouse	15,227	-	15,227
Reagents Storage	2,129	-	2,129
Plant Maintenance Building	4,350	-	4,350
Assay Lab	470	-	470
Fuel Station	2,637	-	2,637
Explosives Storage	167	-	167
Total Onsite Auxiliary Facilities	**38,552**	**-**	**38,552**

The capital components that make-up the tailings management system consist of the tailings dam, the tailings impoundment, tailings pumps, slurry pipeline system, water reclaim system, TSF under-liner drains, TSF surface water diversions, and the civil work that is required to route the tailings and reclaim water lines between the process plant and the TSF. The water reclaim system consists of reclaim barge, pumps, pipeline, and storage tank. The TSF impoundment will be expanded three times during the life-of-mine. Due to limited availability of construction material during preproduction, the initial TSF dam will be constructed to a lower level (Stage 1A) than the rest of the impoundment (Stage 1B), and then raised to the Stage 1B level during the first two years of production. Including the Stage 1B raise, the tailings dam is planned to be raised four times during the life-of-mine. Table 21.9 summarizes the direct costs for the TSF.

Table 21.9: Tailings Storage Facility CAPEX

Tailings Storage Facility	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Tailings Dam	5,309	4,861	10,170
Tailings Impoundment	17,340	18,179	35,520
Tailings & Water Reclaim	20,107	2,331	21,591
TSF and Reclaim Total	**42,757**	**25,371**	**67,280**

The water diversions include the surface diversions that divert non-contact water around the TSF and WRSF, a sedimentation pond located below the surface water diversions, the surface approaches and exit to the tunnel water diversion beneath the Yellow Pine pit, and the tunnel water diversion itself. The surface water diversions were estimated by Tierra Group International while the tunnel diversion was estimated by Cementation USA Inc., an underground contractor. Initial CAPEX includes the initial diversions around the TSF and tunnel diversion around the Yellow Pine open pit; the sustaining CAPEX is for additional diversions associated with the TSF, as shown in Table 21.10.

Table 21.10: Surface Water Diversion CAPEX

Water Diversions	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Starter TSF/WRSF Diversions	2,566	-	2,566
EFSFSR Diversion Tunnel Approaches	1,987	-	1,987
EFMC Sedimentation Pond (lined)	149	-	149
Initial WRSF SWM Pond (unlined)	106	-	106
East Fork Diversion Tunnel (Underground)	13,729	-	13,729
EFMC Rock Drain & Outlet	-	223	223
Final WRSF SWM Pond (lined)	-	262	262
Stage 3 TSF/WRSF Diversions	-	3,784	3,784
Hangar Flats diversion	-	296	296
Water Diversion Total	**18,537**	**4,566**	**23,103**

The 300-bed operations camp would be formed from the 1,000-bed construction camp by removing 700 beds after start-up; the dining and housekeeping facilities, fresh water supply, power distribution, and wastewater treatment at the camp would remain. The direct costs are based mainly on budgetary quotations of from a local supplier of modular camps with specific experience at the Stibnite Gold site. The cost per bed equates roughly to $40,000 per bed. The cost to furnish the camp was estimated to be 10% of the cost of the buildings. The total direct cost of the operations plus construction camp facility, shown in Table 21.7, does not include the cost of catering or housekeeping.

21.1.4.2 Offsite Infrastructure

The offsite infrastructure includes three main components: the power transmission line, the mine access road, and the Cascade Complex that includes administration offices, the production assay lab, the staging area for mine personnel transportation, and some warehousing capacity. Table 21.11 summarizes the direct costs estimated for these three components.

Table 21.11: Offsite Infrastructure Summary

Off-Site Infrastructure	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Power-line	40,224	-	40,224
Mine Access Roads	34,302	-	34,302
Off-Site Cascade Complex	5,801	-	5,801
Total Off-site Infrastructure	**80,327**	**-**	**80,327**

Midas Gold's Cascade Complex is described in Section 18.5. The estimated direct costs of these facilities, shown in Table 21.11, do not include land acquisition costs for the facility; these costs are included in owner's costs.

The power transmission line and substation upgrades are described in Section 18. The cost for the power transmission line was developed by Power Engineers Inc. of Boise, Idaho, in consultation with Idaho Power Company. The power transmission line includes upgrading of seven substations between Emmett, Idaho and McCall, Idaho to handle the new power demands. Table 21.12 summarizes the Power Engineers cost estimate including indirect costs.

Table 21.12: Power Transmission Construction and Substation Upgrades

Component	Power Transmission Line Costs	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Direct Costs	Power Infrastructure Improvements and Construction	40,224	-	40,224
Indirect Costs	Mob/Demob	420	-	420
	Construction Management	2,293	-	2,293
	Engineering Cost	4,172	-	4,172
Power Transmission Line Totals		**47,109**	**-**	**47,109**

The mine access road is described in Section 18. The cost was developed by HDR Inc.; the cost estimate includes civil excavation costs, placement of aggregate base course and geotextile, emplacement of culverts, retaining walls, installation/upgrade of bridges, the installation of a storm water drainage system, and other minor costs. HDR also estimated the indirect costs and contingency. Table 21.13 summarizes HDR's cost estimate.

Table 21.13: Mine Access Road CAPEX

Component	Mine Access Road Costs	Initial ($000s)	Sustaining ($000s)	Total ($000s)
Direct Costs	Mine Road Design and Construction	34,302	-	34,302
Indirect Costs	Mob/Demob	2,046	-	2,046
	Other Indirect Costs	6,543	-	6,543
Mine Access Road Totals		**42,890**	**-**	**42,890**

21.1.5 Indirect Costs

Indirect costs are those costs that can generally not be tied to a specific work area, as summarized in Table 21.14. This category includes "other direct costs" that are related to construction that can't be assigned directly to a work area including the following:

- quality assurance testing is included at 2% of total direct costs for civil, concrete, piping, steel, and electrical costs;
- survey is included at 1% of total direct costs for civil, concrete, and steel costs;

- mobilization of contractors is 0.5% of total direct cost without mine & mobile equipment and including quality assurance;
- pipe spooling detail is included at 3% of piping materials; and
- programming included at 0.2% of direct costs.

Table 21.14: Indirect Capital Cost Summary

Indirect Cost Items	Cost ($000s)
Quality Assurance Testing	6,184
Surveying	1,526
Pipe Spooling	696
Programming	967
Construction Camp Costs	18,726
Freight	22,580
EPCM Costs	81,915
Start-up and Commissioning	1,990
Vendor Erection Supervision	1,194
Capital and Commissioning Spares	4,974
Other Indirect Costs	23,700
Sales Tax	12,233
Total Indirect Costs	**176,687**

21.1.5.1 EPCM Costs

M3 breaks down estimated EPCM costs into various categories that total 16.7% of direct constructed field cost excluding mining pre-strip and mine equipment costs, as shown in Table 21.15.

Table 21.15: EPCM Capital Cost Summary

EPCM Components	Percentage of Total Direct Field Cost	Cost ($000s)
Temporary Facilities & Support	0.5%	2,499
Project Services	1.0%	4,997
Project Control	0.75%	3,748
Management & Accounting	0.75%	3,748
EPCM Fee Fixed	1.0%	5,183
EPCM Construction Trailers	0.2%	999
Engineering	6.0%	27,758
Construction Power	0.1%	500
Construction Management	6.5%	32,483
EPCM Total	**16.7%**	**81,915**

21.1.5.2 Other Indirect Costs

Table 21.14 also includes indirect costs from other consultants for infrastructure construction, including the power transmission line, mine access road, TSF, and water diversions. The indirect costs for these tasks were provided by the estimating entity, as detailed in Table 21.16.

Table 21.16: Other Indirect Capital Costs

Other Indirect Costs		Cost ($000s)
Process Plant Indirect Costs	Mob/Demob	2,659
Power Transmission Line Indirect Costs	Power-line Mob/Demob	420
	Power-line Construction Management	2,293
	Power-line Engineering	4,172
Mine Access Road Indirect Costs	Access Road Mob/Demob	2,046
	Other Access Road Indirect Costs	6,543
TSF Indirect Costs	TSF Mob/Demob	300
	TSF/Portal Indirect Costs	1,400
Diversion Tunnel Indirect Costs	Diversion Tunnel Indirect Costs	3,867
Total Other Indirect Costs		**23,700**

21.1.6 Owner Costs

Owner costs were developed to cover specific functions relating to the construction of the Project. Owner costs exclude exploration and corporate costs and are summarized in Table 21.17.

Key staff, plant and equipment operators will be hired as early as three months prior to start-up for training, and preparation work. Senior staff and engineering personnel will also be hired several months prior to start-up as they become available. Environmental monitoring will continue through the construction period. Other Owner Cost items include:

- Owner's construction and administrative costs, including the Owners camp;
- plant mobile equipment cost;
- insurance, accounting and legal;
- furniture and office equipment;
- tools;
- staffing and operator training cost; and
- initial fills and wear steel spares.

Table 21.17: Owner Team Capital Costs

Owner Team Item	Sub Section	Total ($000s)
Owner Team Salaries & Burden	Construction Management Team	9,330
Owner Team Indirect Costs	Phone	100
	Radio	100
	IT Hardware	200
	Software	500
	Medical and Safety Supplies	130
	Housing	375
	Food	1,095
	Offices & Furniture	90

Owner Team Item	Sub Section	Total ($000s)
Environmental, Social & Permitting Consulting Support	Permitting	2,000
	Compliance	800
	Legal	750
	Community Relations	180
Land Acquisition	Land for Offsite Complex	500
Insurance	Construction Insurance	2,000
Operations Staff Build-Up & Training	Administration Team	200
	Mine Team	800
	Process Team	600
	Job-Specific Training	1,500
Operations Direct Costs	Small Tools	225
	Light Vehicles	2,931
	Warehouse First Fills	2,400
Total Owner Costs		**26,806**

21.1.7 Environmental Remediation & Mitigation Costs

21.1.7.1 Environmental Remediation

Environmental remediation costs include readily identifiable components of the Project that are related to relocating specific historical materials to new location and include the spent heap leach ore stored in the SODA area and on the Hecla heap pad. The costs for these remediation projects have been included in the mining costs; as noted in Table 21.1, Table 21.2 and Table 21.5. A breakdown of the environmental remediation costs is summarized in Table 21.18.

Table 21.18: Environmental Remediation Cost Summary

Environmental Remediation Items	Initial CAPEX ($000s)	OPEX ($000s)	Total Remediation Costs ($000s)
SODA Relocation	1,694	3,952	5,646
Hecla Heap Relocation	566	1,320	1,885
Totals	**2,259**	**5,272**	**7,531**
Note: All costs included in this table are included in mining CAPEX and OPEX.			

Not included in the environmental remediation costs are the following, with reasons identified:

- Removal and reprocessing of the 3.0 Mst of Historic Tailings in the Indicated Mineral Resource category since these materials are above cut-off grade and therefore treated as Mineral Reserves in the economic model, with costs treated as OPEX against the revenue received.
- Removal and relocation of historical waste rock material within the footprint of the Yellow Pine and West End open pits, since these materials are inadequately defined to determine precise quantities and are therefore aggregated into the overburden mining costs and included in the OPEX. As noted in Section 25, there is an opportunity based on limited available data that a component of these materials may have sufficient grade to reprocess as ore, which would increase revenues and reduce strip ratios and therefore reduce OPEX.

- Remediation of the EFMC (Blowout Creek) drainage, which is primarily addressed by placing several million tons of newly mined and suitable waste rock to buttress the slope thereby reducing erosion combined with sediment control during operations and a newly developed surface channel at closure. The placement of this material is included in the waste material costs and included in OPEX.
- Remediation of historically impacted areas (e.g. historical mill and smelter site, tailings areas, town sites, shop areas, haul roads, heap leach facilities, etc.) where new facilities are to be located in the current Project design (e.g. Hangar Flats open pit, Main WRSF, process plant area, new haul roads, truck shop, etc.) are not separated out as a mitigation cost, rather they are incorporated into the construction cost of the new facilities and the subsequent closure costs for the these areas affected by the Project included in Closure Costs.
- Restoration of historically impacted drainages, wetlands, slopes, as well as replanting of areas historically affected by forest fires is all captured in Closure Costs.

21.1.7.2 Stream and Wetland Mitigation

Stream and wetland mitigation costs are estimated from expected impacts to those resources as identified in jurisdictional delineations conducted during baseline evaluations. A substantial effort was made during the Project design phase to minimize impacts to both jurisdictional wetlands and stream reaches through facilities design, siting, and orientation. Additionally, as the site has been impacted significantly by historic operations, facilities siting criteria were designed and implemented to minimize impacts to previously un-disturbed wetlands and stream channels.

Recognizing that impact mitigation will be a negotiated process with multiple agencies and stakeholder input, and that a Functional Assessment of wetland conditions and function has not yet been completed, unit costs were developed from western US mitigation projects and known planned disturbances to establish an estimate of the anticipated mitigation costs for the Project. Costs for mitigation have been allocated in time to capture anticipated development schedules and planned disturbance recognizing that development timing occurs after mitigation as appropriate.

Table 21.19: Stream and Wetland Mitigation Costs

Item	Initial ($000s)	Sustaining ($000s)
Wetland Mitigation Costs	4,265	3,370
Stream Mitigation Costs	6,341	4,795
Totals	**10,606**	**8,165**

21.1.8 Closure Costs

Closure costs were developed utilizing the Standardized Reclamation Cost Estimator (**SRCE**) a tool that was developed for mining projects in the State of Nevada and currently supported directly by the Nevada Division of Environmental Protection. This model is used extensively by public and private property mining projects in multiple states and jurisdictions. The inputs for the model are updated annually for unit costs and, where applicable, user-edited data files were included to account for Idaho and Project specific items.

Reclamation specific costs are developed from the SRCE model utilizing specific design elements detailed in the Project's operation and closure plans. Costs were then incorporated into the overall project cost model in the year that they occur.

Closure costs include items such as potential long-term water treatment, reclamation maintenance activities, and long-term site monitoring which may include surface and ground water monitoring, vegetation success monitoring, aquatic species and habitat monitoring, and chemical and physical stability.

The basis for cost components of the long-term closure and monitoring activities are factored from anticipated operational costs, experience from closure operations of similar projects, and standard unit costs. The schedule of costs for reclamation, closure, and post-closure are allocated along the life of mine and closure based upon expected reclamation and closure related activities.

Table 21.20: Closure Costs

Item	Initial ($000s)	Sustaining ($000s)	Closure ($000s)	Total Closure ($000s)
Cost for Arranging Bond	762	7,052	3,230	11,044
Earthwork / Re-contouring	-	2,133	15,808	17,941
Re-vegetation / Stabilization	-	-	2,395	2,395
Detoxification / Water Treatment/Disposal of Wastes	-	-	15,008	15,008
Structure, Equipment and Facility Removal, and Misc.	-	-	4,510	4,510
Monitoring	-	-	1,202	1,202
Construction Management & Support	-	-	6,473	6,473
Indirect Costs	-	-	7,915	7,915
Totals	**762**	**9,185**	**56,541**	**66,488**

21.1.9 Contingency

Contingency costs, as summarized in Table 21.21, are estimates of the costs that are not included in the CAPEX that can be expected to be spent during construction. The more engineering that is done ahead of the estimate the higher the accuracy of the CAPEX and thus, the lower the contingency costs. The total estimated contingency for this Project is 17.2% of the total initial CAPEX before contingency and is considered typical for a prefeasibility-level study.

Table 21.21: Summary of Contingency Capital Costs

Contingency Capital Costs	Cost ($000s)
Mine Capital - 5%	2,378
Plant, Auxiliaries, Cascade Facilities - 17.5%	105,990
Power Transmission Line - 15%	7,070
Access Road - 30%	12,867
TSF - 15%	3,397
Water Diversions - Surface 15%	721
Water Diversions - Underground 17.5%	3,079
Owner's Cost - 17.5%	4,691
Mitigation Costs - 17.5%	1,856
Total Contingency	**142,050**

21.2 OPERATING COST

The average cash operating cost before by-product credits, royalties, refining and transportation charges over the LOM and during the first four years of operations are estimated to be $26.65/st and $27.15/st of ore processed, respectively. The average cash operating cost after by-product credits but before royalties, refining and transportation charges over the LOM and during the first four years of operations are estimated to be $23.20/st and $21.83/st of ore processed, respectively. These cash costs include mine operations, process plant operations, and general and administrative costs (**G&A**) and are summarized in Table 21.22.

Table 21.22: OPEX Summary

Cash Operating Cost Estimate	LOM Average			Years 1-4 Average	
	$/st mined	$/st milled	$/oz Au	$/st milled	$/oz Au
Mining OPEX(1)	2.00	9.08	222	10.04	222
Processing OPEX	-	14.45	354	14.10	312
General & Administrative OPEX	-	3.13	77	3.01	67
Cash Costs Before By-Product Credits(2)	**-**	**26.65**	**653**	**27.15**	**601**
By-Product Credits	-	-3.45	-85	-5.32	-118
Cash Costs After of By-Product Credits(2)	**-**	**23.20**	**568**	**21.83**	**483**

Note:
(1) Mining OPEX excludes capitalized stripping.
(2) Cash costs shown in this table are before royalties, refining, and transportation charges. Cash costs that include these costs are presented in Section 22.

Major cost items driving the OPEX estimate include power (diesel and electricity), reagents (lime, sodium metabisulfite, cyanide, and copper sulfate), and labor. The details that comprise the OPEX are provided in the sections that follow.

21.2.1 Major Reagents, Fuel and Electricity Costs

Table 21.23 summarizes the unit costs for the major Project consumables (process reagents, diesel fuel and power). A more detailed list of the consumables for the Project is provided in Table 21.30.

Table 21.23: Cost Assumptions for Reagents and Power

Item	Unit	Cost Estimate	Comment
Diesel fuel	$ per gallon	3.28	Quote for off-road diesel to site
Electricity	$ per kWhr	0.05876	Price rate quote
Lime	$ per ton	253	Price quote to site
Sodium Cyanide	$ per lb	1.134	Price quote to site
Sodium Metabisulfite	$ per lb	0.295	Price quote to site
Copper Sulfate	$ per lb	1.32	Price quote to site

21.2.2 Labor Requirements

Labor for the Project was estimated for the mine, process plant, and G&A support. Labor rates were estimated using market surveys for the region and comparable wage rates from other mining operations in the area. Onsite personnel were assumed to be housed in a camp facility and working 12-hour shifts on a 14-day on, 14-day off work schedule except for salaried employees. A breakdown of the labor requirements stratified by function (mine, process, or G&A) and location (onsite or offsite) is presented in Table 21.24 with the annual estimated payroll for an average year.

Table 21.24: Estimated Labor Requirements

Labor Category	Number of Personnel			Average Annual Payroll ($000s)
	Low	Peak	Average	
Mine Operations Personnel - Hourly	62	153	121	9,130
Mine Personnel - Salaried	26	27	26	2,988
Mine Maintenance Personnel - Hourly	45	77	62	5,311
Mine Maintenance Personnel - Salaried	8	9	9	1,012
Process Operations Personnel - Hourly	72	72	72	6,199
Process Operations Personnel - Salaried	13	13	13	1,467
Process Maintenance Personnel - Hourly	56	56	56	4,968
Process Maintenance Personnel - Salaried	5	5	5	558
G&A Hourly Personnel - Onsite	62	62	62	4,506
G&A Salaried Personnel - Onsite	9	9	9	1,112
G&A Hourly Personnel - Offsite	28	28	28	2,020
G&A Salaried Personnel - Offsite	12	12	12	1,491
Labor Totals	**398**	**523**	**475**	**40,762**

21.2.3 Mine Operating Cost

Mine operating costs were developed based on first principles for the mine plan and equipment list presented in Section 16. The unit costs for labor were jointly developed by Midas Gold and M3. Fuel costs were set at $3.28 per gallon. Table 21.25 summarizes the consumable and labor operating costs by the unit operations.

Table 21.25: Life-of-Mine Mining Cost Averages

Mining Function	Percentage	Unit Cost ($/st)
Drilling	9.4%	0.168
Blasting	10.0%	0.179
Loading	9.7%	0.172
Hauling	38.4%	0.685
Auxiliary	16.6%	0.296
General Mine	5.0%	0.090
General Maintenance	4.6%	0.082
G&A	6.3%	0.113
Total for Material Mined	**100.0%**	**1.786**
Drilled and Blasted		**2.004**
Mill Feed		**7.943**

The operating costs have been broken into quarterly time periods for preproduction and years 1 and 2 to parallel the mine plan. Preproduction is established to be 15 months or 5 quarters. During the first quarter of preproduction (Qtr -5), the costs shown are for development of the initial access roads to the mine working areas. No in-pit mining tonnage is moved during that period so there is no calculation of “cost per ton”. The cost per ton in all remaining periods is based on the total in situ tonnage mined from the pits within the mine plan. Preproduction development costs (Table 21.3) are carried 30% as CAPEX and the remaining 70% as OPEX. Table 21.26 summarizes the total mine operating cost per time period. This table should provide a clear indication of the mine operating costs by year of operation. The major mining fleet is planned to be leased. Equipment down payments and monthly payments will be treated as operating costs in the economic analysis. Therefore, down payments and monthly payments are shown as operating costs in Table 21.26.

Table 21.26: Mine OPEX by Period

Period	Consumables and Labor Operating Cost ($000s)	Equipment Lease and Down Payments ($000s)	Totals ($000s)
PP Q-5	-	-	1,999
PP Q-4	-	-	3,332
PP Q-3	-	-	5,937
PP Q-2	-	-	6,188
PP Q-1	-	-	7,648
Yr 1 Q1	10,125	3,191	13,316
Yr 1 Q2	12,178	4,127	16,305
Yr 1 Q3	12,899	3,197	16,096
Yr 1 Q4	13,152	3,197	16,349
Yr 2 Q1	14,056	4,037	18,093
Yr 2 Q2	15,095	5,859	20,954
Yr 2 Q3	17,574	7,427	25,001
Yr 2 Q4	17,970	5,237	23,207
Yr 3	73,532	18,559	92,091
Yr 4	79,372	20,427	99,799
Yr 5	76,746	11,428	88,174
Yr 6	75,713	7,274	82,987
Yr 7	62,296	6,787	69,083
Yr 8	64,292	4,286	68,578
Yr 9	66,129	4,252	70,381
Yr 10	60,229	5,565	65,794
Yr 11	43,041	4,844	47,885
Yr 12	28,695	2,108	30,803
Totals	**743,094**	**121,802**	**890,000**

Note: Operating Costs shown in pre-production are the 70% of preproduction consumable and operating costs allocated to OPEX.

The mine operating costs provided in Table 21.25 include:

1. Drilling, blasting, loading, and hauling of material from the mine to the crusher, stockpiles or waste storage facilities. Maintenance of the waste storage areas and stockpiles is included in the mining costs. Maintenance of mine mobile equipment is included in the operating costs.
2. Mine supervision, mine engineering, geology and ore control are included in the G&A category.
3. Operating labor and maintenance labor for the mine mobile equipment are included.
4. Mine access road construction and maintenance is included. If mine haul trucks drive on the road, its cost and maintenance is included in the mine operating costs.

5. Relocation of SODA material and reprocessing of Historic Tailings is included.
6. Delivery of mine waste rock to the tailings dam construction is included. However, placement and compaction of that material at the TSF is not included.
7. The small stockpile (572 kst) that is generated during preproduction stripping would be fed to the crusher in Year 1.
8. The cost of backfilling the Yellow Pine open pit with West End waste rock is included.
9. A general mine allowance is included that is intended to cover mine pumping costs and general operating supplies that cannot be assigned to one of the unit operations.
10. A general maintenance allowance is included that is intended to cover the general operating supplies of the maintenance group.

The mine is planned to work two 12 hour shifts per day for 365 days per year. Ten days (20 shifts) of lost time are assumed due to weather delays.

21.2.4 Plant Operating Cost

This section addresses the following operating costs process plant OPEX. The process plant operating costs are summarized by the categories of labor, electric power, liners (wear steel), grinding media, reagents, maintenance parts and services, annual POX shutdown, oxygen, and supplies and services, as presented in Table 21.27.

Table 21.27: Process Plant OPEX Summary by Category

Plant Operation Cost Category	LOM Cost ($000s)	Cost ($/st)
Labor	158,316	1.61
Power	205,550	2.10
Liners	45,465	0.46
Grinding Media	122,336	1.25
Reagents	581,955	5.93
Maintenance Parts & Services	123,598	1.26
Annual POX Shutdown	52,000	0.53
Oxygen	85,361	0.87
Supplies & Services	42,229	0.43
Totals	**1,416,809**	**14.45**

The processing costs divided by process area are provided in Table 21.28

Table 21.28: Process Plant OPEX by Process Area

Process Area	LOM Cost ($000s)	Cost ($/st)
Crushing and Conveying	24,857	0.25
Grinding & Classification	395,942	4.04
Antimony Recovery	39,813	0.41
Gold Flotation	130,895	1.33
Pressure Oxidation	202,382	2.06
CCD and Neutralization	146,633	1.50
CIP Leaching and Cyanide Recovery & Detox	347,873	3.55
Carbon Handling & Refinery	45,685	0.47
Tailings & Water Reclaim	25,736	0.26
Water Treatment	4,151	0.04
Fresh Water System	4,091	0.04
Ancillaries	48,752	0.50
Total Process Plant	**1,416,809**	**14.45**

21.2.4.1 Process Plant Labor Cost

The process plant operating and maintenance labor costs were derived from a staffing plan and are based on labor rates from an industry survey for this region and modified where necessary. The annual salaries include overtime and benefits for both salaried and hourly employees. The burden rate used is 35% for hourly staff and 40% for salaried staff to include a 5% average annual bonus. The process labor numbers of personnel and costs divided by process area are provided in Table 21.29.

Table 21.29: Process Labor Costs by Process Area

Labor Costs by Process Area	Number of Personnel	Annual Labor Cost ($000s)
Crushing and Conveying	8	691
Grinding	12	1,080
Antimony Recovery	8	691
Gold Flotation Operator	4	378
Pressure Oxidation	12	1,004
Tailings	4	346
Carbon Handling & Refinery	12	1,037
Ancillaries	25	2,439
Maintenance	61	5,526
Totals	**146**	**13,193**

21.2.4.2 Reagents

Reagent consumption rates were determined from the metallurgical test data or industry practice. Budget quotations were received for reagents supplied from local sources where available, with an allowance for freight to site or from historical data from other projects. Estimated LOM reagent costs by process area are presented in Table 21.30.

Table 21.30: LOM Reagent Costs by Process Area

Process Area	Reagent	Life-of-Mine ($000s)
Grinding	Lime	735
	Sodium Cyanide	2,069
	Copper Sulfate	44,252
Antimony Recovery	Lead Nitrate	10,850
	Aerophine 3418A	2,196
	Methyl Isobutyl Carbinol	1,996
	Sodium Cyanide	552
Gold Flotation	Copper Sulfate	23,919
	Potassium Amyl Xanthate	39,042
	Methyl Isobutyl Carbinol	21,618
Pressure Oxidation	Flocculant	1,075
CCD and Neutralization	Flocculant	9,390
	Lime	95,835
CIP Leaching and Cyanide Recovery & Detoxification	Sodium Cyanide	98,066
	Lime	99,585
	Carbon	17,836
	Sodium Metabisulfite	94,279
	Copper Sulfate	1,557
Carbon Handling & Refinery	Sodium Hydroxide	1,933
	Nitric Acid	15,169
Total LOM Reagent Cost		**581,955**

21.2.4.3 Maintenance Wear Parts and Consumables

Wear parts consumption (liners) and grinding media were estimated on a pound/ton basis. The consumption rate and unit costs were used to calculate the annual costs and cost per unit of production. These consumption rates and costs are shown in Table 21.31.

Table 21.31: Life-of-Mine Wear Steel Cost

Wear Steel Category	Applicable Equipment	Life-of-Mine Costs ($000s)
Liners	Primary Crusher	1,049
	Pebble Crusher	1,061
	SAG Mill	31,149
	Ball Mill	12,205
Grinding Media	SAG Mill	31,285
	Ball Mill	91,051
Total LOM Wear Steel Cost		**167,801**

An allowance was made to cover the cost of maintenance for the facilities and all items not specifically identified. The allowance made as a percent of the direct capital cost of equipment for each area; the rate used was 5%.

21.2.5 General and Administrative Cost

General and Administration costs include management, accounting, human resources, environmental and safety compliance, laboratory, community relations, site residential camp, communications, insurance, legal, training, and other costs not associated with either mining or processing. The LOM G&A cost estimated for the Project are presented in Table 21.32.

Table 21.32: General and Administration Cost Detail

Cost Item	LOM ($000s)
Labor & Fringes (G&A and laboratory)	130,781
Accounting (excluding labor)	1,200
Safety (excluding labor)	1,200
Human Resources (excluding labor)	1,200
Environmental Department (excluding labor)	6,000
Security (excluding labor)	1,800
Laboratory (excluding labor)	9,000
Janitorial Services (contract)	2,400
Community Relations (excluding labor)	9,000
Office Operating Supplies and Postage	3,000
Maintenance Supplies	9,565
Maintenance Labor, Fringes, and Allocations	3,000
Power	2,190
Propane	2,400
Phone/Communications	3,600
Licenses, Fees, and Vehicle Taxes	1,800
Legal	15,000
Insurances	42,000
Subs, Dues, Public Relations, and Donations	1,200
Travel, Lodging, and Meals	3,600
Camp (excluding labor)	54,000
Training	3,000
Total	**306,936**

SECTION 22 TABLE OF CONTENTS

SECTION **PAGE**

SECTION 22 LIST OF TABLES

TABLE **DESCRIPTION** **PAGE**

SECTION 22 LIST OF FIGURES

22 ECONOMIC ANALYSIS

The economic analysis presented in this Report uses a financial model that estimates cash flows on an annual basis for the life of the Project at the level of detail appropriate to the prefeasibility level of engineering and design. Annual cash flow projections are estimated over the LOM based on the CAPEX, OPEX, sales revenue and other cost estimates. CAPEX is estimated in four categories: initial, sustaining, closure and reclamation, and working, and are distributed in accordance with the estimated year of expenditure. OPEX estimates include labor, reagents, maintenance, supplies, services, and electrical power for each year. The sales revenue is based on payable metals contained in doré bullion and antimony concentrate produced by the process. Other costs, such as royalties, taxes, and depreciation are estimated in accordance with the present stage of the Project.

The financial model results are presented in terms of Net Present Value (**NPV**), payback period (time in years to recapture the initial capital investment), and the Internal Rate of Return (**IRR**) for the Project. Annual cash flow projections are estimated over the LOM based on the estimates of capital expenditures and production cost and sales revenue. The estimates of CAPEX and OPEX have been developed specifically for this Project, as presented in Section 21.

22.1 ASSUMPTIONS

Assumptions that were used to estimate the CAPEX and OPEX are presented in Section 21. Specific assumptions used in the construction of the financial model are provided below.

- A discount rate of 5% is applied to NPV calculations.
- Funding for the Project is assumed to be 100% equity funding with no financing costs except leasing of major mining equipment since this equipment would almost certainly be lease purchased.
- Revenue for doré and antimony concentrates is claimed in the same year as it is produced.
- Costs incurred prior to the construction commencement date are not included in the model and are considered “sunk costs,” except for tax purposes, where the aggregate expenditures accumulated prior to the construction commencement date are available to offset taxes.
- A 15-day delay in revenue from sales and a 15-day delay in payment of accounts payable are used in the formulation of working capital, which is recaptured at the end of mine life.
- An allowance of 5% is included in the financial model for salvage value of selected capital equipment, excluding buildings and tanks, which are included in the reclamation costs.
- Depreciation is calculated using the Modified Accelerated Cost Recovery System (**MACRS**) method in accordance with current U.S. Internal Revenue Service (**IRS**) regulations.
- Depletion is estimated for the financial model using the percentage method; a rate of 15% is used for gold and silver and 22% is used for antimony.

22.2 REVENUE

Revenue for the financial model is based on the grade and tonnage of mill feed from the mine plan (Table 22.1), using the plant recovery for the specific mineralization type to yield metal production figures (Table 22.2). The appropriate refinery or smelter treatment terms (Table 22.3) are applied to the payable metals (Table 22.4) using the metal prices presented in Table 22.5. Metal prices were fixed in mid-2014 for mine planning purposes.

Table 22.1: Life of Mine Contained Metal by Deposit

Deposit	Ore Type	Ore Tons (kst)	Contained Metal Grade			Contained Metal Quantity		
			Gold (oz/st)	Silver (oz/st)	Antimony (%)	Gold (oz)	Silver (oz)	Antimony (klb)
Yellow Pine	High Sb	6,750	0.065	0.210	0.593	438,012	1,420,491	80,012
	Low Sb	37,235	0.056	0.069	0.009	2,085,266	2,552,639	6,364
Hangar Flats	High Sb	4,284	0.056	0.166	0.425	238,068	711,929	36,438
	Low Sb	11,146	0.040	0.055	0.019	449,227	614,683	4,320
West End	Oxide	10,736	0.022	0.029	-	233,295	215,682	-
	Low Sb	24,914	0.041	0.044	-	1,023,994	1,089,717	-
Historical Tailings	High Sb	3,001	0.034	0.084	0.165	101,315	251,920	9,906
Totals / Averages		**98,066**	**0.047**	**0.071**	**0.070**	**4,569,176**	**6,857,061**	**137,040**

Table 22.2: Recovered Metal Production

Deposit	Doré Bullion		Antimony Concentrate		
	Gold (koz)	Silver (koz)	Antimony (klb)	Gold (koz)	Silver (koz)
Yellow Pine	2,263	338	69,822	12	611
Hangar Flats	597	68	30,030	5	349
West End	1,090	681	-	-	-
Historic Tailings[1]	72	20	-	-	-
Totals Production	**4,023**	**1,107**	**99,852**	**17**	**960**

Annual metal production by deposit is illustrated on Figure 22.1.

Figure 22.1: Annual Metal Production by Deposit

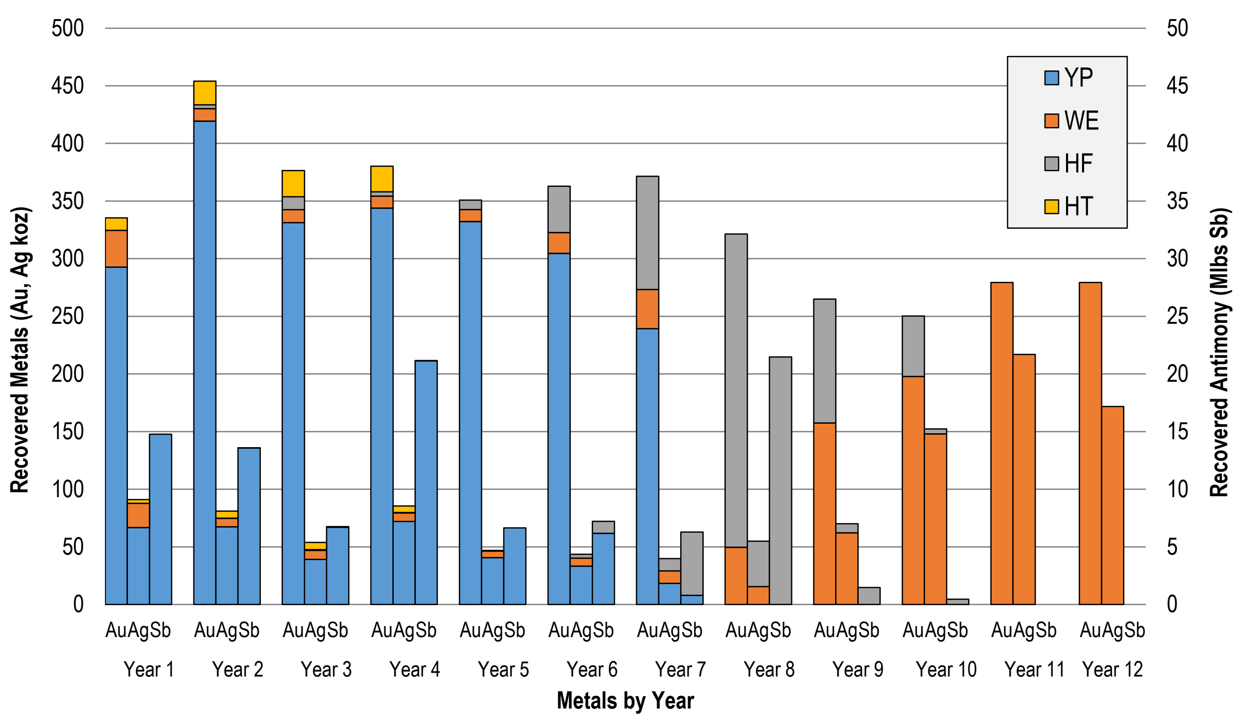


Table 22.3: Smelter Treatment Factors

Gold and Silver Bullion	
Gold Payability	99.5%
Silver Payability	98.0%
Refining Charge – Au (per troy ounce)	$1.00
Transportation Charge – Au (per troy ounce)	$1.15
Refining Charge – Ag (per troy ounce)	$0.50
Transportation Charge – Ag (per troy ounce)	$1.15
Antimony Concentrate	
Payable Antimony (%)	68%
Gold Payability (approximate)	
<5.0 g/t	0%
5.0 to <8.5 g/t	15-20%
8.5 to <10.0 g/t	20-25%
≥10.0 g/t	25%
Silver Payability (approximate)	
<300 g/t	0%
300 to <700 g/t	40-50%
≥700 g/t	50%
Transportation to Asia (per wet ton)	$151

Table 22.4: Payable Metals Production

Product	Gold (koz)	Silver (koz)	Antimony (klb)
Doré Bullion	4,002	1,085	-
Antimony Concentrate	3	382	67,900
Total Payable Metals	**4,006**	**1,467**	**67,900**

Table 22.5: Metal Price Cases

Case	Metal Prices			Basis
	Gold ($/oz)	Silver[(1)] ($/oz)	Antimony[(1)] ($/lb)	
Case A	1,200	20.00	4.00	Lower-bound case that reflects the lower prices over the past 36 months and spot on December 1, 2014.
Case B (Base Case)	**1,350**	**22.50**	**4.50**	Approximate 24-month trailing average gold price as of December 1, 2014.
Case C	1,500	25.00	5.00	Approximate 48-month trailing average gold price as of December 1, 2014.
Case D	1,650	27.50	5.50	An upside case to show Project potential at metal prices approximately 20% higher than the base case.

Note:
(1) Prices were set at a constant gold:silver ratio ($/oz:$/oz) of 60:1 and a constant gold:antimony ratio ($/oz:$/lb) of 300:1 for simplicity of analysis, although individual price relationships may not be as directly correlated over time. Historic gold:silver ratios have averaged around 60:1.

22.3 CAPITAL COSTS

The details of the CAPEX estimate for the Project are summarized below and are presented in more detail in Section 21. For purposes of the financial model, CAPEX is broken into four categories: initial capital, sustaining capital, closure and reclamation capital, and working capital. Table 22.6 presents a summary of the initial, sustaining and closure and reclamation capital costs.

Table 22.6: Capital Cost Summary

Capital Cost Area	Initial CAPEX ($000s)	Sustaining CAPEX ($000s)	Closure CAPEX ($000s)	Total CAPEX ($000s)
Direct Costs	613,343	76,862	-	690,206
Indirect Costs	176,687	4,275	-	180,962
Owner's Costs	26,806	-	-	26,806
Environmental Mitigation Costs	10,606	8,165	-	18,771
Closure Bonding, Closure and Reclamation Costs	762	9,185	56,542	66,489
Contingency	142,050	-	-	142,050
Totals	**970,254**	**98,488**	**56,542**	**1,125,283**

22.3.1 Initial Capital

The total initial CAPEX carried in the financial model for new construction and pre-production mine development is expended over a 3 year period. The initial CAPEX includes direct and indirect capital costs, owner's costs and contingency. The initial CAPEX would be expended in the years before production and a small amount carried over into the first production year.

22.3.2 Sustaining Capital

A schedule of CAPEX incurred during the production period was estimated and included in the financial analysis under the category of sustaining capital. The LOM sustaining capital is estimated to be $98.5 million, as shown in Table 22.6. This capital will be expended over a 12-year period.

22.3.3 Reclamation and Closure

Reclamation and closure costs were estimated to be $56.5 million on a gross basis. The estimate does not include approximately $102.4 million in gross payable revenue from the 75 koz of gold to be recovered from Historic Tailings as part of the Project legacy clean-up, nor does it include savings incurred from using the 7.3 million tons of spent heap leach ore in TSF construction, which is material that would otherwise have had to be obtained from other sources at additional cost.

22.3.4 Working Capital

A 15-day delay of receipt of revenue from sales is used for accounts receivable. A delay of payment for accounts payable of 15 days is also incorporated into the financial model. Working capital is estimated to be $7.5 million before production and an additional $18 million immediately after commencement of production but prior to receipt of revenue. Working capital also includes an allowance for capital tied up in parts inventory prior to its use. All the working capital is recaptured at the end of the mine life and the final value of these accounts is $0.

22.4 OPERATING COSTS

The average cash operating cost before by-product credits, royalties, refining and transportation charges over the LOM and during the first four years of operations are estimated to be $26.65/st and $27.15/st of ore processed, respectively. The average cash operating cost after by-product credits but before royalties, refining and transportation charges over the LOM and during the first four years of operations are estimated to be $23.20/st and $21.83/st of ore processed, respectively. These cash costs include mine operations, process plant operations, and general and administrative costs (**G&A**) and are summarized in Table 22.7.

Table 22.7: Operating Cost Summary

Cash Operating Cost Estimate	LOM Average			Years 1-4 Average	
	$/st mined	$/st milled	$/oz Au	$/st milled	$/oz Au
Mining OPEX(1)	2.00	9.08	222	10.04	222
Processing OPEX	-	14.45	354	14.10	312
General & Administrative OPEX	-	3.13	77	3.01	67
Cash Costs Before By-Product Credits(2)	**-**	**26.65**	**653**	**27.15**	**601**
By-Product Credits	-	-3.45	-85	-5.32	-118
Cash Costs After of By-Product Credits(2)	**-**	**23.20**	**568**	**21.83**	**483**

Note:
(1) Mining OPEX excludes capitalized stripping.
(2) Cash costs shown in this table are before royalties, refining, and transportation charges; cash costs that include these costs are presented in Table 22.8.

22.5 ROYALTIES, DEPRECIATION AND DEPLETION

There is a 1.7% royalty that applies to gold revenue, as detailed in Section 4. The LOM reduction in Net Operating Income is estimated to be $91.9 million.

Depreciation is calculated using the MACRS method starting with the first year of production. The initial capital and sustaining capital used a 7 year life. The last year of production is the catch up year for the assets that are not fully depreciated at that time.

The percentage depletion method was used in the evaluation. It is determined as a percentage of gross income from the property, not to exceed 50% of taxable income before the depletion deduction. A rate of 15% is used for gold and silver and a rate of 22% is used for antimony.

22.6 TAXATION

22.6.1 Income Tax

Taxable income for income tax purposes is defined as metal revenues minus operating expenses, royalty, property and severance taxes, reclamation and closure expense, depreciation and depletion. Deduction for depletion is used in the calculation of State income tax, but no deduction is taken for the federal income taxes paid. The combined effective tax rate was calculated as follows:

Combined Effective Tax Rate = State Rate + Federal Rate x (100% - State Rate)

= 7.4% + 35% x (100% - 7.4%)

= 39.8%

22.6.2 Idaho Mine License Tax

This is a tax for the privilege of mining or receiving royalties from mining operations. The tax rate is 1% of the value of ores mined or extracted and royalties received. The basis is the taxable income that is defined by the IRS.

22.7 TOTAL PRODUCTION COSTS

A detailed breakdown of the various measures of cash cost over the life of the mine are shown in Table 22.8. The costs are presented in $/st mined, $/st milled, and in $/oz Au. The table provides the cash costs before and after by-product credits for the LOM and initial four years of operation, as well as the total cash costs, which include royalties, refining and transportation charges for the LOM and initial seven years of operation and, finally, the All in Costs (**AIC**) that includes non-sustaining capital.

Table 22.8: Total Production Cost Summary

Total Production Cost Item	LOM			Years 1-4	
	($/st mined)	($/st milled)	($/oz Au)	($/st milled)	($/oz Au)
Mining	2.00	9.08	222	10.04	222
Processing	-	14.45	354	14.10	312
G&A	-	3.13	77	3.01	67
Cash Costs Before By-Product Credits	**-**	**26.65**	**653**	**27.15**	**601**
By-Product Credits	-	-3.45	-85	-5.32	-118
Cash Costs After of By-Product Credits	**-**	**23.20**	**568**	**21.83**	**483**
Royalties	-	0.94	23	0.34	23
Refining and Transportation	-	0.25	6	1.04	8
Total Cash Costs	**-**	**24.38**	**597**	**23.20**	**513**
Sustaining CAPEX	-	1.00	24	0.52	11
Salvage	-	-0.27	-7	0.00	0
Property Taxes	-	0.04	1	0.04	1
All-In Sustaining Costs	**-**	**25.15**	**616**	**23.76**	**526**
Reclamation and Closure(1)	-	0.58	14	-	-
Initial (non-sustaining) CAPEX(2)	-	9.89	242	-	-
All-In Costs	**-**	**35.62**	**872**	**-**	**-**

Notes:
(1) Defined as non-sustaining reclamation and closure costs in the post-operations period.
(2) Initial Capital includes capitalized preproduction.

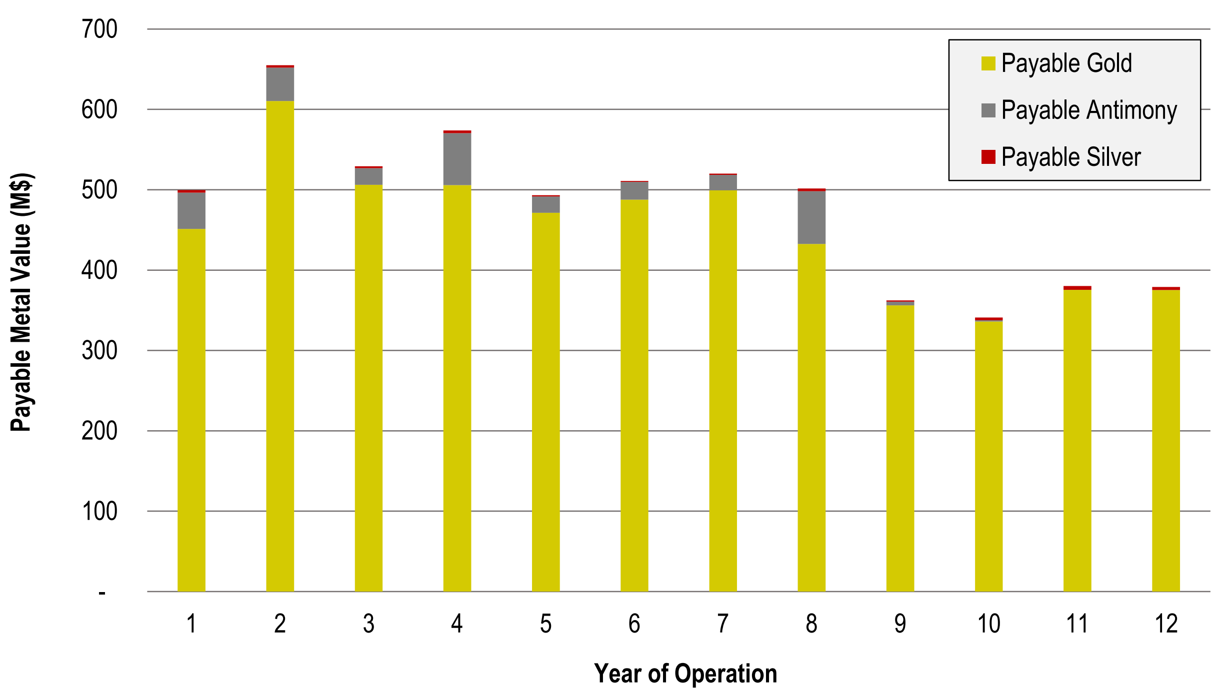
22.8 FINANCIAL MODEL RESULTS

The financial model results are presented in terms of NPV, IRR, and payback period in years for recovery of the capital expenditures. These economic indicators are presented on both pre-tax and after-tax bases. The NPV is presented both undiscounted ($NPV_{0\%}$) and at a 5% discount rate ($NPV_{5\%}$), as shown in Table 22.9, and indicates that on an after-tax basis the Project has an $NPV_{5\%}$ of $832 million, an IRR of 19.3%, and a payback period of 3.4 years.

Table 22.9: Financial Model Pre-Tax and After-Tax Indicators by Case

Parameter	Unit	Pre-tax Results	After-tax Results
Case A ($1,200/oz Au, $20.00/oz Ag, $4.00/lb Sb)			
$NPV_{0\%}$	M$	1,286	1,041
$NPV_{5\%}$	M$	662	513
IRR	%	16.2	14.4
Payback Period	Production Years	4.0	4.1
Case B ($1,350/oz Au, $22.50/oz Ag, $4.50/lb Sb)			
$NPV_{0\%}$	M$	1,915	1,499
$NPV_{5\%}$	M$	1,093	832
IRR	%	22.0	19.3
Payback Period	Production Years	3.2	3.4
Case C ($1,500/oz Au, $25.00/oz Ag, $5.00/lb Sb)			
$NPV_{0\%}$	M$	2,543	1,929
$NPV_{5\%}$	M$	1,524	1,129
IRR	%	27.2	23.4
Payback Period	Production Years	2.6	2.9
Case D ($1,650/oz Au, $27.50/oz Ag, $5.50/lb Sb)			
$NPV_{0\%}$	M$	3,171	2,344
$NPV_{5\%}$	M$	1,955	1,414
IRR	%	31.9	27.0
Payback Period	Production Years	2.2	2.5

Figure 22.2: Payable Metal Value by Year for Case B in Millions of Dollars

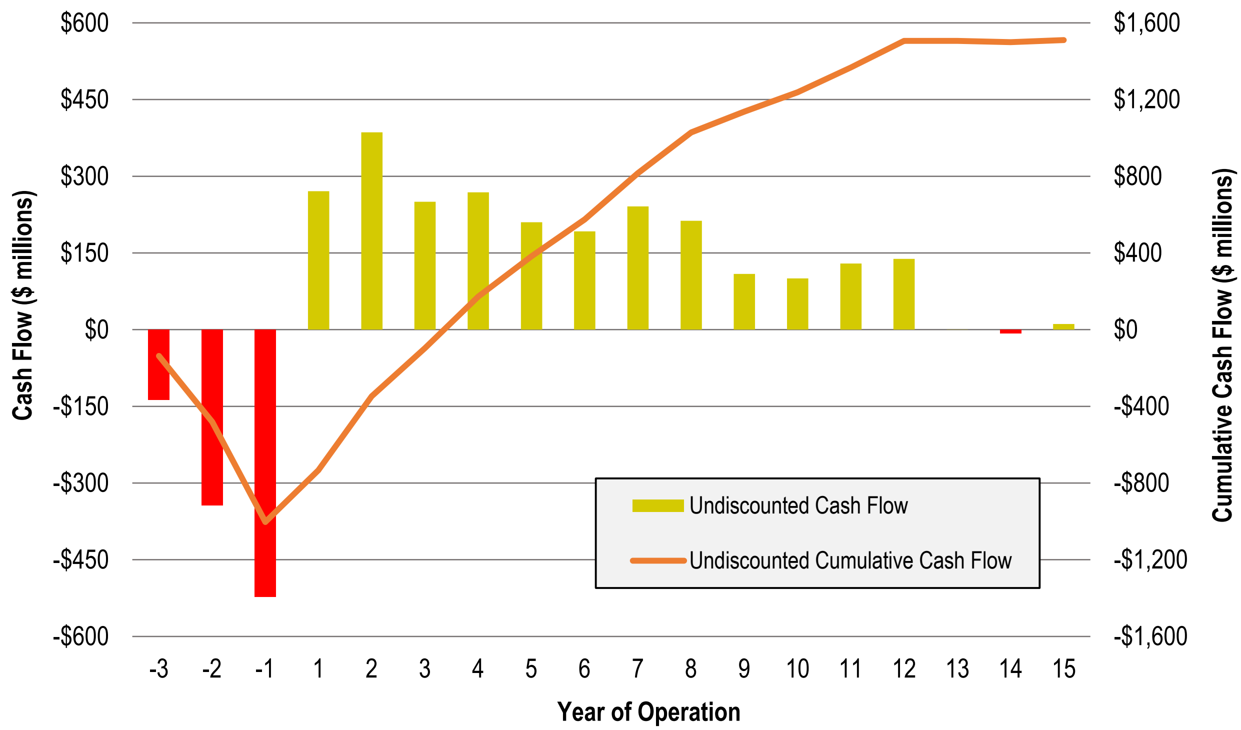


The after-tax, undiscounted payback periods for each case are as follows.

- **Case A:** 4.1 production years
- **Case B:** 3.4 production years
- **Case C:** 2.9 production years
- **Case D:** 2.5 production years

The undiscounted cash flows for Case B, the base case, are depicted on Figure 22.3.

Figure 22.3: Undiscounted After-Tax Cash Flow for Case B



22.9 MINE LIFE

Using the current Mineral Reserve and the nominal design throughput of 22,050 stpd, the mine plan projects a 12-year production life. Construction is projected to require a three-year period after the permits are obtained and prior to the start of commercial operations. Closure is projected to take at least 10 years post-production, with some reclamation work occurring concurrently with operations, and the bulk of the closure activities and costs incurred in the first 3 years after operations cease. Some closure activities and long-term monitoring are anticipated to continue well after the reclamation period is complete to ensure that the closure designs continue to protect the environment and are performing in accordance with the design parameters.

22.10 SENSITIVITY ANALYSIS

The sensitivity of the financial model was tested with respect to metal prices or gold grade, initial CAPEX, and OPEX for each case. The value of each parameter was raised and lowered 20% to evaluate the impact of such changes on the NPV at a 5% discount rate. The results for the pre-tax $NPV_{5\%}$ are presented in Table 22.10, and the results for after-tax $NPV_{5\%}$ are presented in Table 22.11. After-tax sensitivities with respect to $NPV_{0\%}$, $NPV_{5\%}$, IRR, and payback in production years are presented in Table 22.12.

Table 22.10: Pre-tax $NPV_{5\%}$ Sensitivities by Case

Case	Variable	Pre-tax $NPV_{5\%}$ (M$)		
		-20% Variance	0% Variance	20% Variance
Case A	CAPEX	862	662	463
	OPEX	1,017	662	308
	Metal Price or Grade	-27	662	1,352
Case B (Base Case)	**CAPEX**	**1,292**	**1,093**	**894**
	OPEX	**1,447**	**1,093**	**739**
	Metal Price or Grade	**318**	**1,093**	**1,869**
Case C	CAPEX	1,723	1,524	1,325
	OPEX	1,878	1,524	1,170
	Metal Price or Grade	662	1,524	2,386
Case D	CAPEX	2,154	1,955	1,755
	OPEX	2,309	1,955	1,600
	Metal Price or Grade	1,007	1,955	2,902

Table 22.11: After-tax $NPV_{5\%}$ Sensitivities by Case

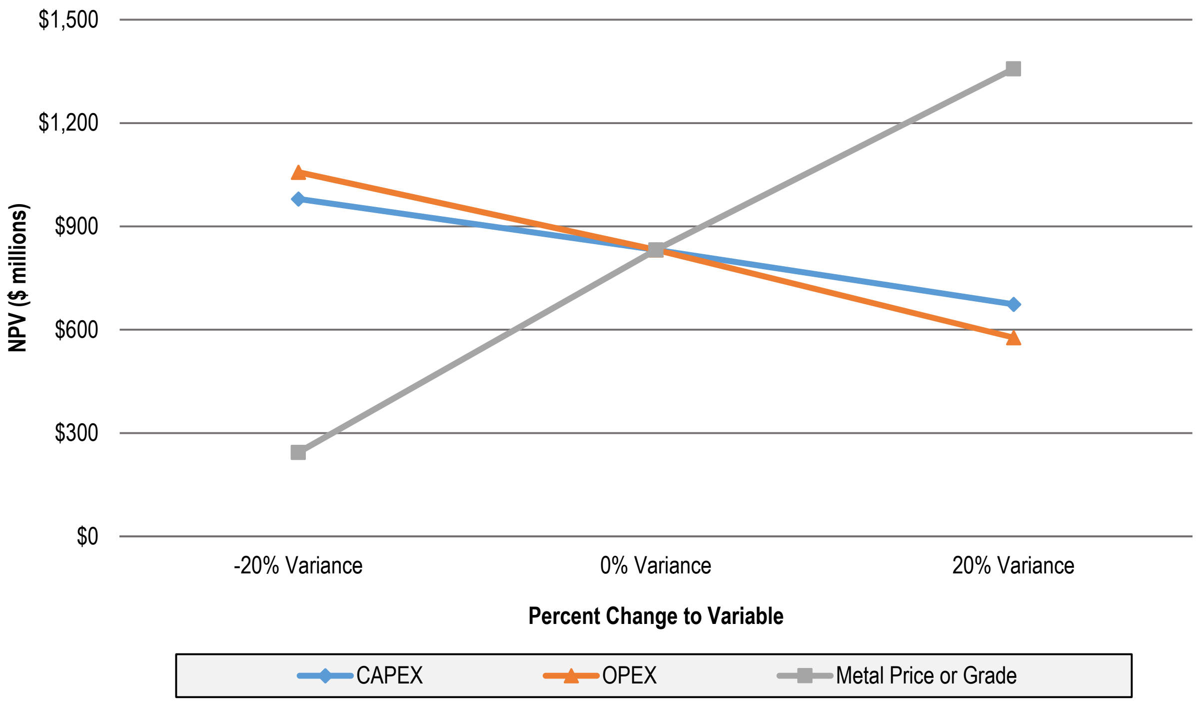
Case	Variable	After-Tax $NPV_{5\%}$ (M$)		
		-20% Variance	0% Variance	20% Variance
Case A	CAPEX	676	513	346
	OPEX	760	513	239
	Metal Price or Grade	-30	513	1,012
Case B (Base Case)	**CAPEX**	**980**	**832**	**674**
	OPEX	**1,057**	**832**	**577**
	Metal Price or Grade	**244**	**832**	**1,357**
Case C	CAPEX	1,266	1,129	982
	OPEX	1,341	1,129	903
	Metal Price or Grade	513	1,129	1,696
Case D	CAPEX	1,548	1,414	1,277
	OPEX	1,623	1,414	1,200
	Metal Price or Grade	770	1,414	2,035

Table 22.12: Base Case After-Tax Sensitivity Analysis

Variance	$NPV_{0\%}$ (M$)	$NPV_{5\%}$ (M$)	IRR (%)	Payback (yrs)
Metal Prices or Gold Grade				
20%	2,262	1,357	26.3	2.6
10%	1,887	1,100	23.0	2.9
0%	**1,499**	**832**	**19.3**	**3.4**
-10%	1,089	546	15.0	4.0
-20%	656	244	9.8	5.4
Capital Cost				
20%	1,332	674	15.2	4.0
10%	1,417	754	17.1	3.7
0%	**1,499**	**832**	**19.3**	**3.4**
-10%	1,578	907	21.8	3.0
-20%	1,654	980	24.7	2.7
Operating Cost				
20%	1,130	577	15.5	3.9
10%	1,323	710	17.5	3.6
0%	**1,499**	**832**	**19.3**	**3.4**
-10%	1,665	946	20.9	3.2
-20%	1,828	1,057	22.4	3.0

The after-tax sensitivities for $NPV_{5\%}$ (Table 22.12) for Case B are illustrated on **Error! Reference source not found.**Figure 22.4.

Figure 22.4: Case B After-Tax $NPV_{5\%}$ Sensitivities



The $ATNPV_{5\%}$ of the Project is most sensitive to changes in revenue, which is manifested as changes in metal prices and gold grades. For example, a 20% increase in gold price or gold grade leads raises the $ATNPV_{5\%}$ from $832 million to $1,357 million, a 63% increase. Similarly, a decrease of 20% in gold grade or gold price results in a 71% decrease in $ATNPV_{5\%}$.

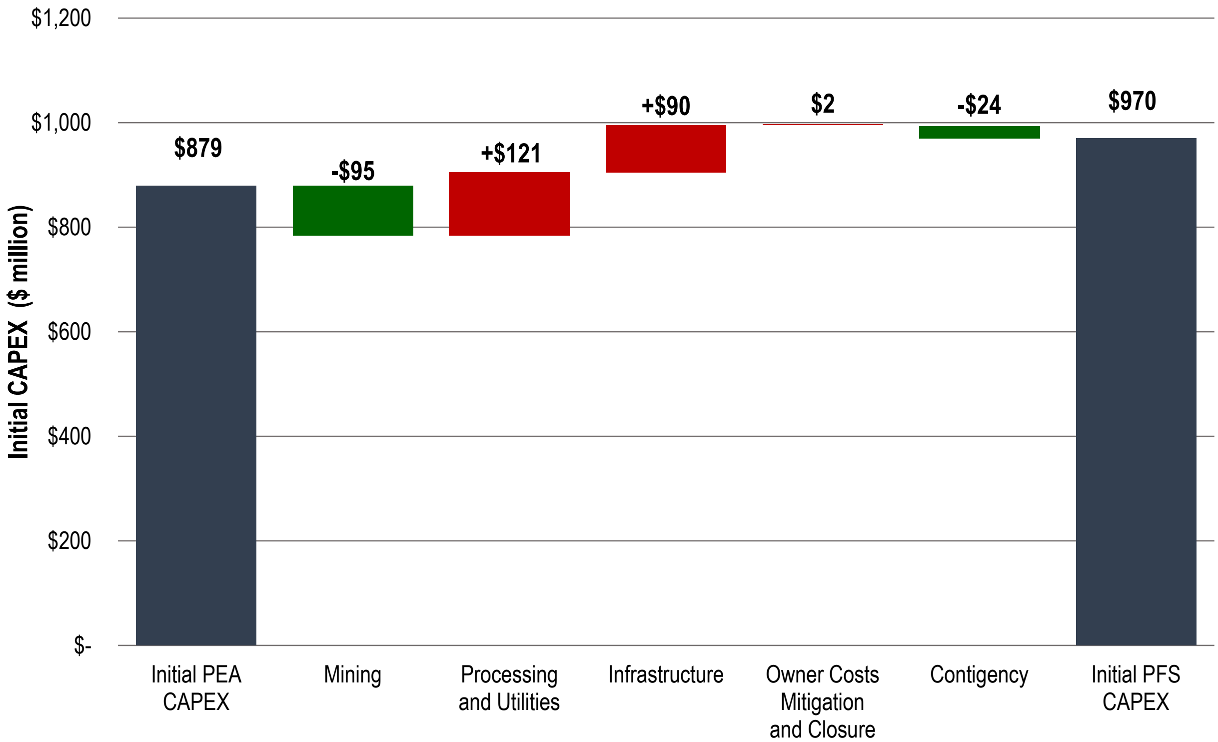
All of the cases indicate that the Project is a bit more sensitive to changes in OPEX than it is to changes in CAPEX. For example, the change in $ATNPV_{5\%}$ for a 20% increase in CAPEX is -19%, where as a 20% increase in OPEX causes a -31% change in $ATNPV_{5\%}$.

22.11 CHANGES FROM THE 2012 PEA

22.11.1 Initial CAPEX Changes from the PEA

In comparison to the 2012 PEA, the initial CAPEX has increased by approximately 10%. The largest increases in initial CAPEX are in the process plant and offsite infrastructure costs, which are partially offset by the decrease in mine CAPEX resulting from leasing the mine fleet (with those costs moved to OPEX). The decrease in owner's cost is offset by the mitigation costs, which are broken out as a separate line item. The decrease in contingency, despite the increase in CAPEX, is due largely to the advancement in engineering and design in the prefeasibility process. The waterfall chart below illustrates the principal changes in the initial CAPEX from the 2012 PEA to the PFS.

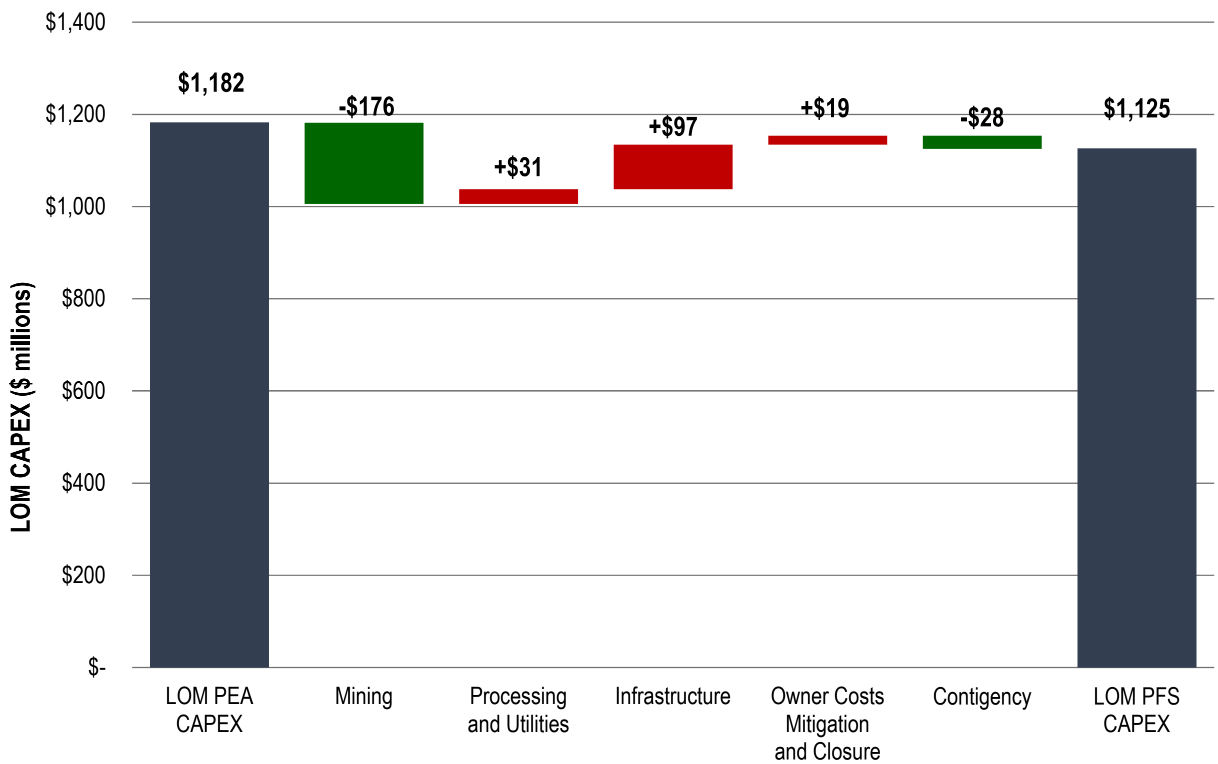
Figure 22.5: Changes in Initial CAPEX from PEA to PFS



22.11.2 LOM CAPEX Changes from the PEA

Broad changes in the LOM CAPEX from the PEA are summarized on the waterfall chart on Figure 22.6. Total LOM CAPEX has been reduced by approximately $57 million (5%), primarily related to reductions in the mining area and contingency, as discussed below, offset by increases in most other areas. Some costs have been aggregated to allow direct comparison to the PEA LOM CAPEX.

Figure 22.6: Changes in LOM CAPEX from PEA to PFS



The changes in initial CAPEX are described in the preceding section and waterfall chart. The principle changes in sustaining CAPEX from the PEA to the current PFS primarily result from leasing the mining fleet, and the decision to eliminate a portion of the Hangar Flats deposit from the LOM plan thereby reducing the mine life and total tons moved and, consequently, not having to replace the mine fleet later in the mine life. Additional reductions in sustaining costs result from a shorter mine life, elimination of the acidulation circuit for West End ores, lesser material processed, and a slightly smaller tailings storage facility.

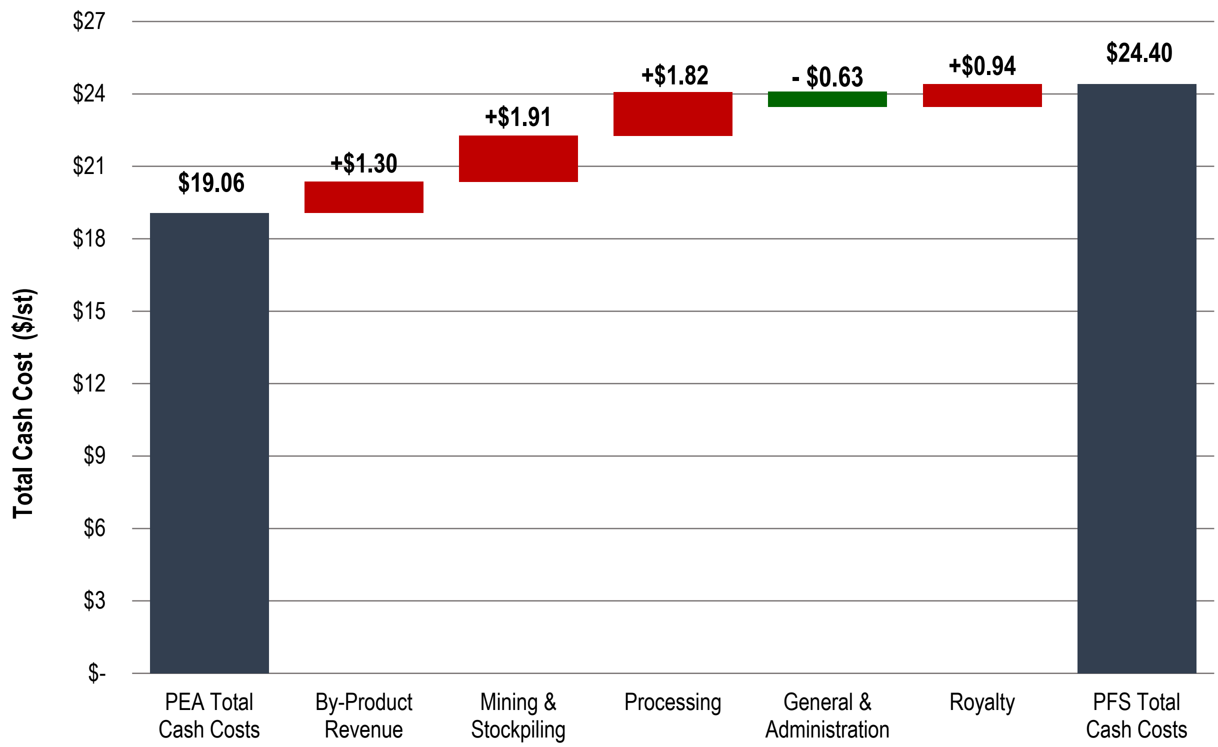
22.11.3 Total Cash Cost Changes from the PEA

In comparison to the 2012 PEA, the total cash costs ($/st) have increased; Figure 22.7 illustrates the principal changes in the total cash costs from those reported in the 2012 PEA. The principle changes on LOM total cash costs from the PEA to the current PFS are:

- The increase in cash costs from the reduction in by-product revenues primarily results from the decision not to use a large portion of the historical antimony assay data in Mineral Resource modeling, as discussed in Section 14.
- The increase in cash costs in mining results from leasing the major pieces of mining equipment, longer haul distances associated with a more detailed mine plan that incorporates ramps, and a significant reduction in mining of waste rock from the smaller Hangar Flats open pit, which had a lower unit cost because of the shorter haul for this material.
- The increase in processing costs results from higher grinding media consumption and higher power costs from finer grinding (from P_{80} of 100 µm in the PEA to P_{80} of 75 µm in the PFS), higher oxygen consumption due to the higher sulfur values in the Yellow Pine deposit, and the addition of cyanidation of the flotation tailings to improve metallurgical recoveries.

- The lower general and administrative costs primarily result from more comprehensive water balance modeling that allowed the deferral of water treatment to mid-way through the mine life.
- The royalty increase results from the 1.7% royalty that applies to gold revenue, as detailed in Section 4.

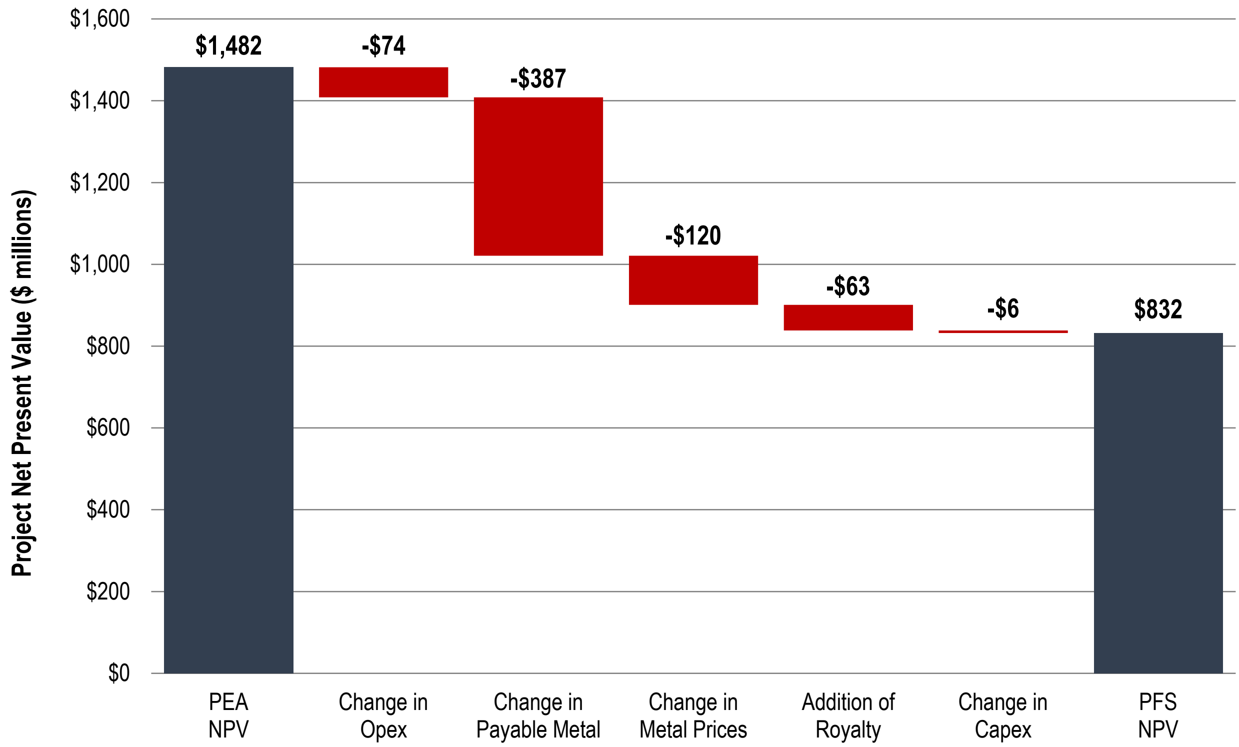
Figure 22.7: Changes in Total Cash Costs from PEA to PFS



22.11.4 Net Present Value Changes from the PEA

Many factors have influenced $ATNPV_{5\%}$ from the $1,482 million reported in the PEA (SRK, 2012) to the $832 million reported in this PFS. These changes are presented graphically on Figure 22.8. Significant changes include a decrease in payable metal, decrease in metal prices, increases to OPEX and the addition of a royalty. The decrease in payable metal is partially a result of changing from using Mineral Resources in the PEA to Mineral Reserves (i.e. Inferred Mineral Resources are excluded, as required for a PFS under NI 43-101) in addition to other changes in the Mineral Resource estimates for each of the deposits, as discussed in Section 14. The decrease in metal prices during the intervening time further exacerbated the reduction in LOM revenue. Changes in OPEX are largely due to increases in electricity costs and consumption (resulting from finer grinding), and increases in mining costs. The sale of a royalty on gold from the Project to Franco Nevada is the source of the change related to royalties.

Figure 22.8: Changes in $ATNPV_{5\%}$ from PEA to PFS



As discussed in Section 25, there are a number of identified opportunities to increase the payable metals with future work, including potential conversion of inferred Mineral Resources to the indicated category, which currently constitute approximately 10.8 million tons of above cutoff containing approximately 347 koz Au, 524 koz Ag, and 9,544 klbs Sb at average grades of 0.032 oz/st Au (1.1 g/t), 0.049 oz/st Ag (1.7 g/t). Conversion of some or all of these tons would increase payable metal and reduce strip ratios. **Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that these inferred Mineral Resources will be converted to the Measured and Indicated categories through further drilling, or into Mineral Reserves, once economic considerations are applied.** Other opportunities identified in Section 25 could also significant positive impacts, if realized.

SECTION 23 TABLE OF CONTENTS

SECTION **PAGE**

23 ADJACENT PROPERTIES

The Project is not impacted by adjacent properties. No data or information from adjacent properties was used to support this PFS.

SECTION 24 TABLE OF CONTENTS

SECTION PAGE

SECTION 24 LIST OF TABLES

TABLE DESCRIPTION PAGE

SECTION 24 LIST OF FIGURES

24 OTHER RELEVANT DATA AND INFORMATION

24.1 ANTIMONY INFORMATION

24.1.1 Introduction

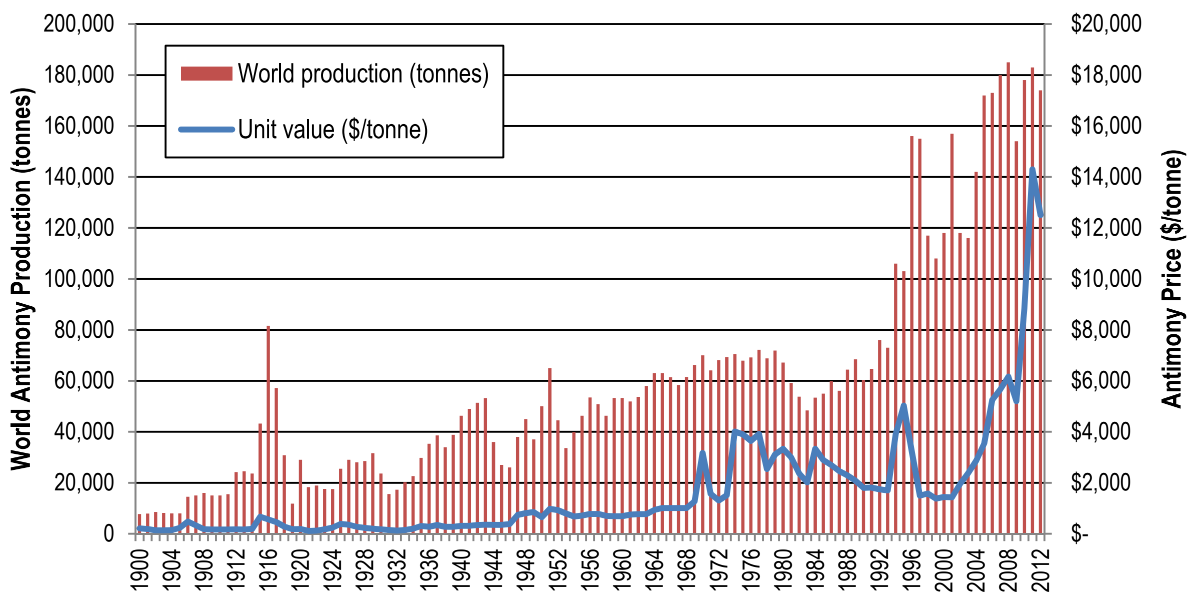
The name "antimony" is derived from the Greek meaning "never found alone". The principal use of antimony today is as an oxide synergist in the flame retardant chemical additive sector. Antimony (Sb) is a silvery-white, shining, soft and brittle metal. It is a semiconductor and has thermal conductivity lower than most metals. Due to its poor mechanical properties, pure antimony is only used in very small quantities; larger amounts are used for alloys and in antimony compounds.

24.1.2 History

China has dominated world supply for the past 110 years; the most famous deposit in China is the Hsikwangshan deposit in Hunan, reputedly worked since the 16th Century to become a world-class producer and it is still the dominant source, producing 30,000 to 40,000 tonnes of contained antimony per annum.

From 1897 to 1911, the average world production of antimony metal was just over 10,000 tonnes with an average metal price of 7.5¢/lb ($165/tonne). From 1911 to 1914, production increased from 15,000 tonnes per annum to 22,000 tonnes per annum, with prices remaining at similar levels to those before. During World War I, production rose sharply to 82,000 tonnes in 1916 as the metal's physical properties for ammunition were deemed important. Metal prices rose to a peak of 32¢/lb in 1915 and settled back down to 8¢/lb after the end of the war, but remained volatile between 5¢/lb (ammunition stockpile destocking) and 19¢/lb for the rest of the decade. Peacetime demand declined to around 22,000 tonnes per year with the US consuming ~10,000 tonnes per year, with a further 5,600 tonnes per year from recycling ore as a by-product from lead ore. Metal prices jumped once more during the Korean war of 1950 - 53, reaching over $1,000/st for the first time in the history of the metal. China dramatically increased its production in the late 1980s and 1990s to command 90% of production once more (summarized from Tri-Star, 2012). Figure 24.1 illustrates antimony production and pricing since 1900.

Figure 24.1: World Antimony Production and Price from 1900 – 2012



Source: USGS, 2014b

24.1.3 Supply

Of the ~200,000 tonnes of contained antimony presently produced annually on a worldwide basis, approximately one-quarter is from secondary production via recycling of antimony bearing metal alloys. Of the balance, three-quarters of that is produced as primary antimony, while approximately 10% is produced from antimony bearing residues from lead smelting. As such, approximately 135,000 tonnes per annum of antimony is produced from antimony concentrates and ores (Confidential Report, 2014). As can be seen from the table below, China remains by far the world's largest producer of primary antimony.

Table 24.1: Estimated Mine Production of Antimony by Country

Country	Annual Antimony Production (tonnes)					
	2008	2009	2010	2011	2012e	2012 (%)
Australia	1,500	1,000	1,106	1,577	2,481	1.4%
Bolivia	3,905	2,990	4,980	3,947	4,000	2.3%
Canada	132	64	9000	10000	7,000	4.0%
China	166,000	140,000	150,000	150,000	145,000	83.3%
Kyrgyzstan	700	700	700	1,500	1,500	0.9%
Peru	531	145	-	-	-	0.0%
Russia	3,500	3,500	6,040	6,348	6,500	3.7%
South Africa	3,983	2,673	3,700	4,700	3,800	2.2%
Tajikistan	2,000	2,000	2,000	2,000	2,000	1.1%
Turkey	2,700	1,400	650	3,400	1,900	1.1%
Totals	**185,000**	**154,000**	**178,000**	**183,000**	**174,000**	**100.0%**
Source: USGS, 2013						

Six companies, including Hunan Hsikwangshan, Guangxi China Tin and Hunan Chenzhou Mining account for 90% of China's supply (Roskill 2012), accounting for around 70% of official mine production in 2011, down from around 80% in earlier years. According to Chinese government statistics, over 75% of all of China's reported primary antimony production in 2013 was from Hunan province, followed far behind by Guangxi and Yunnan, however, government statistics underreport and are adjusted regularly without explanation, making analysis challenging. However, Hsikwangshan Twinkling Star Company Limited (Twinkling Star) is acknowledged as the world's largest integrated antimony producer. Located in Lengshuijiang, it produces ~30% of antimony products in China and ~25% globally. Capacity is ~32,000 tonnes per annum of contained antimony metal plus trioxide. Twinkling Star is a state-owned company; its parent corporation is the Hunan Nonferrous Group, which itself is majority owned by China Minmetals Corporation (Minmetals). Chenzhou Mining Company Limited (Chenzhou) is an integrated antimony and gold producer, producing approximately 19,000 tonnes of antimony products per annum and 6 tonnes of gold. As their own mine contains significant amounts of gold, Chenzhou operates a recovery circuit to capture gold from antimony smelting and separate it using an electrowinning refining process. Chenzhou Mining is majority owned by the Hunan Gold Group (aka Hunan Jinxin Gold Group) and is therefore considered a state-owned company. Other large operations in China include Multi Antimony Corp. (4,000 tonnes), China Tin Group (~4,000 tonnes), Guangxi Youngsun Metals (~10,000 tonnes) plus, following a government imposed consolidation, there are nine smelters (apart from Twinkling Star's operation) in Lengshujiang, each with a minimum capacity of 5,000 tonnes per annum (Confidential Report, 2014).

China appears unwilling (if not unable) to maintain its level of mine production given resource depletion, rising costs, environmental crackdown, and resource conservation (Confidential Report, 2014). As a result, production in China is unlikely to increase over the next few years and could even fall in the face of government determination to limit environmental damage from smaller operations (Roskill, 2012). However, the rate of fall may be slower than was forecast by Roskill in 2012 (Confidential Report, 2014).

Other sources of supply outside China include Geopromining in Russia, producing 5,000-6,000 tonnes of contained antimony in gold-antimony concentrates, and Mandalay Resources producing approximately 6,000 tonnes of contained antimony in gold-antimony concentrates. Comsup Commodities Inc. (via Anzob LCC) owns the Jizhikrut antimony-mercury deposit in Tajikistan; the mine is estimated to be producing at a rate of 4,500 tonnes per annum of contained antimony albeit with high mercury (0.6%-1.0%) with a new smelter that was built in 2013. The Consolidated Murchison mines in South Africa have been operating since the 1930s, with production of ~2,200 contained tonnes antimony in 2013; with the closure of their roaster, ConsMurch now sells its concentrates to China and India. Suspended operations include Beaver Brook in Canada, which is owned by Twinkling Star and is estimated to have two years of reserves left, and Hillgrove in New South Wales, Australia, which has a potential production capacity of 4,000 to 5,000 tonnes of contained antimony per year.

Roskill (2012) comments that new capacity could enter the market to meet growing demand but notes that increased production elsewhere is likely to offset any declines in Chinese production in the short term. Roskill has identified a number of significant additional sources of antimony concentrates in Europe, N. America, Africa and Oceania that could add over 14,000 tonnes per year Sb to world mine capacity within the next four years. However, non-China antimony deposits thus far identified are insufficient to keep up with demand increases (Confidential Report, 2014).

Based on the forecast for demand growth and China's falling production, it is estimated that an additional 18,000 tonnes of annual primary mine production will need to be brought online through 2030 to meet demand (Confidential Report, 2014).

24.1.4 Critical Minerals Status

In 2013, the U.S. Department of Defense (**DoD**) ranked antimony #2 in the list of strategic and non-fuel defense material shortfalls (US DoD, 2013) and foresees a shortfall of 20,500 tons in a four-year period, and recommends mitigation options to address this shortfall including strategic stockpiling of ~11,000 tons of antimony.

Also in 2013, the US Geological Survey (USGS, 2013) estimated world primary mine production at 167,000 tonnes, of which 150,000 tonnes came from China (a 95% dependence ratio), with Bolivia in a distant second at 4,980 tonnes. World refined production was estimated by the USGS in the same report at 194,510 tonnes, of which 187,000 tonnes came from China (a 98% dependence ratio), with Bolivia again a distant second at 2,200 tonnes.

In a report on critical raw materials for the European Union (2014), the European Commission identifies an estimated 93% of the supply and estimates that all but 6% (i.e. 87% of the world's supply) comes from China. Out of the 19 critical raw materials identified in the European Commission report (2014), antimony is the only metal ranked as being in deficit in the three time horizons evaluated (2012, 2015 and 2020), estimating a small deficit in 2012 and forecasting a large deficit in 2015 and 2020.

In 2012, the British Geological Survey ranked antimony with a relative supply risk index of 9.0, the second highest risk ranking of the 41 commodities considered due to China's dominance of world production and reserves, compounded by the relatively low level of recycling and low substitutability.

24.1.5 Stockpiling

China's State Reserve Bureau (**SRB**) has been active in recent years buying antimony metal in China, purchasing approximately 10,000 tonnes in 2013. The total amount of antimony stockpiled by the SRB is unknown. Apart from the material held by the SRB, Minmetals (as of 2014) was understood to have maintained a stockpile of

20,000 tonnes of metal and oxide in Guangxi warehouses. Moving forward, it is unknown if the SRB or Minmetals will continue to purchase surplus production (Confidential Report, 2014).

A private exchange, the Fanya Minor Metals Exchange, that functions as a quasi-ETF began warehousing minor metals in 2014, holding 2,600 tonnes of antimony as of 30 June 2014 (Confidential Report, 2014).

24.1.6 Smelting and Refining

Outside of China, integration of mining and smelting or downstream processing has become rarer as previously integrated operations have found it difficult to compete with Chinese production. For that matter, there is little smelter production of any scale outside of China. Tri-Star Resources and US Antimony Corp. (Montana) are attempting to integrate mining supply with processing facilities, but are in relatively early stages of development. Tri-Star intends to begin construction of its smelter in Oman in 2015. There are a number of facilities in Belgium, France, Bolivia and India producing primary trioxide and recycling antimony from lead acid batteries; outside of Bolivia, none produce antimony from mines.

China has been increasingly importing antimony concentrates since 2007, with imports of concentrates (not contained metal) increasing from 17,000 tonnes in 2007 to more than 68,000 tonnes in 2012 (Minmetals, 2013) and ~64,500 tonnes in 2013 (Confidential Report, 2014). Looking at contained metals, Chinese imports of antimony in concentrates are estimated at ~25,500 tonnes in 2013, led by Russia (~8,300 tonnes of contained antimony in 2013), Australia (~5,300 tonnes), Tajikistan (~4,400 tonnes) and Myanmar (~2,800 tonnes), although smuggled imports are likely much higher from Myanmar (Confidential Report, 2014).

24.1.7 Export Quotas

China has imposed export quotas for antimony and antimony products since 2009; the table below summarizes the announced quotas and amount actually exported during the year.

Table 24.2: Chinese Antimony Export Quotas

Export Quota Component	2011	2012	2013	2014
Total Annual Quota Announced as Headline Figure	60,300	59,400	59,400	59,400
Actual Quota Released to Each	59,502	58,584	58,562	58,512
Actual Exports During Year	40,128	43,482	28,524	N/A
Unused Quota	20,172	15,918	30,876	N/A
Percent of Quota Utilized	67%	74%	49%	N/A

24.1.8 Primary Antimony Uses

The largest use of antimony oxide is in a synergistic system with a halogen (generally chlorine or bromine) flame retardant system for plastics and textiles. Normal applications for this product include upholstered chairs, rugs, television cabinets, business machine housings, electrical cable insulation, laminates, coatings, adhesives, circuit boards, electrical appliances, seat covers, car interiors, tape, aircraft interiors, fiberglass products, carpeting, etc. Around 90% of flame retardant production ends up in electronics and plastics, while the remaining 10% ends up in coated fabrics and furniture upholstery and bedding.

The principal uses of antimony outside of flame retardant include:

- an alloy in lead-acid batteries;
- military equipment and ammunitions;

- alternative wind and solar energy applications involving fire resistant transmission lines;
- a catalyst in food applications such as plastic packaging and water bottles.

Antimony is also used as a decolorizing agent in optical glass such as photocopiers, camera lenses, binoculars and IPad screens. It is also used in semi-conductors and many components of motor vehicles. Antimony oxide is used as a phosphorescent agent in fluorescent light bulbs and antimony oxide, antimony trisulphide and/or organic compounds of antimony are added to fluid lubricants and/or molybdenum disulphide to improve performance.

One potential key future growth area could be in computer phase change memory, which is projected to lead to 1 gigahertz transfer speeds (30x faster than flash) (Visual Capitalist, 2012).

24.1.9 Reserves

Global reserves are estimated at 1.8 million tonnes (USGS, 2014a) which, at an estimated global production rate of 0.2 million tonnes per year (Roskill, 2012), is estimated to be less than 9 years of production. Furthermore, while official Chinese statistics still report considerable reserves, independent estimates suggest that they might be reaching exhaustion, particularly in the area of Lengshuijiang City, the center of antimony mining in China. Although some resources were discovered in 2011, very few deposits have been explored or developed in recent years (Roskill, 2012).

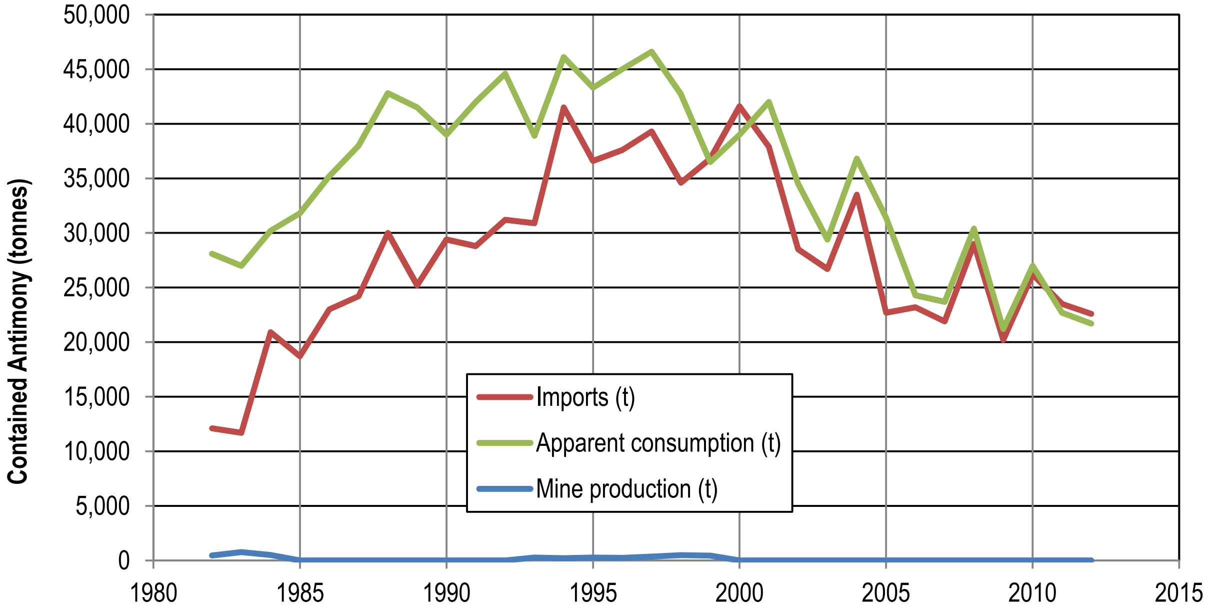
Table 24.3: World Mine Production and Reserves of Antimony

Country	Mine Production of Antimony (tonnes)		Antimony Reserves (tonnes)
United States	-	-	-
Bolivia	4,000	5,000	310,000
China	145,000	130,000	950,000
Russia (recoverable)	6,500	6,500	350,000
South Africa	3,800	4,200	27,000
Tajikistan	2,000	4,700	50,000
Other countries	13,000	13,000	150,000
World Totals (rounded)	**174,000**	**163,000**	**1,800,000**
Source: USGS, 2014a			

24.1.10 US Perspective

Historically, the US used to meet a significant amount of its demand from domestic mine production, but imports began to climb rapidly in the early 1980s from ~12,000 tonnes in 1982 to ~24,000 tonnes five years later, and passing 35,000 tonnes 1995 before reaching a peak of 41,600 tonnes in 2000. Imports have fallen to ~22,000 tonnes in 2012 as the result of the effects of rising prices, the global financial crisis and substitution. According to the USGS (2014a), there was zero domestic mine production in 2013, and there is one processing facility in Montana producing minor amounts of antimony metal and oxide from imported feedstock; as a result, US dependence on imports is 100%. For 2013, the USGS estimates US consumption of 24,000 tonnes of contained antimony, and US imports were estimated at 25,000 tonnes. Sources of import were: China, 71%; Mexico, 9%; Belgium, 8%; Bolivia, 5%; and other, 7%. The Mexican imports are the source of the feedstock for the plant in Montana; Belgian imports come from a processing facility there that imports feedstock from elsewhere.

Figure 24.2: US Production, Imports & Consumption of Antimony



Source: USGS, 2014b

The estimated US domestic distribution of primary antimony consumption was as follows: metal products, including antimonial lead (for batteries) and ammunition, 35%; nonmetal products, including ceramics and glass and rubber products, 35%; and flame retardants, 30% (USGS, 2014b).

24.1.11 Outlook

According to Roskill (2012), growth in consumption has been led by high growth rates in Asia, particularly in China, over the past few years.

Overall, antimony demand remains highly dependent on the level of consumption of antimony trioxide in the flame-retardants sector and antimony metal in lead-acid batteries; Roskill (2012) estimates that these two sectors accounted for nearly 80% of antimony consumption worldwide in 2011.

Non-metallurgical markets for antimony are forecast by Roskill (2012) to increase by nearly 4% per year through to 2016 with higher growth for flame-retardants, plastic catalysts and heat stabilizers tempered by lower growth in ceramics and other uses. Other sources suggest a growth rate in the range of 1.5% per annum (Confidential Report, 2014).

According to Roskill (2012), metallurgical markets are forecast to increase by nearly 2% per year, as the antimony content of new lead-acid batteries continues to fall. Lead alloys will show higher rates of growth because of increasing usage in construction applications in emerging economies.

Continued growth in demand for antimony, especially trioxide, combined with the uncertainty over the ability of China to increase production because of resource and environmental limitations, means prices are likely to stay high and volatile (Roskill, 2012). Prices for antimony trioxide could rise to $15,000 per tonne by 2016 (in 2011 dollar terms), eclipsing the $13,000 per tonne peak witnessed in 2011 (Roskill, 2012). Subsequent to the Roskill report of 2012, which was essentially issued at the peak of the antimony prices, antimony substitutes may have drawn some demand away from antimony demand and this may explain some of the recent softening in the antimony prices.

Others are more conservative on their outlook, given reduced demand resulting from slowing economies and the increase in antimony substitutes, with the recent high prices and production not falling as fast as expected in China (Confidential Report, 2014) and forecast that antimony prices will be range bound at $8,000-$11,000 per tonne until current surplus is consumed, likely through 2018, and do not see prices being sustained above $13,000 per tonne even during the forecast deficit period post-2020, depending on the rate of demand growth, how quickly Chinese production falls and the development of additional production. Minmetals (2013) forecast volatile prices as markets adjust to changing conditions, but commented that prices should go up.

24.2 SECONDARY ANTIMONY PROCESSING

The process design and flowsheet developed for this PFS were establish based on producing a by-product antimony concentrate with sale of the concentrate to an antimony smelter (all suitable currently operating antimony smelters are located in Asia). This approach was considered appropriate given the estimated cost and perceived complexity of building and operating a secondary antimony processing plant; however, several compelling advantages were identified that support further study of secondary processing of the antimony concentrate including:

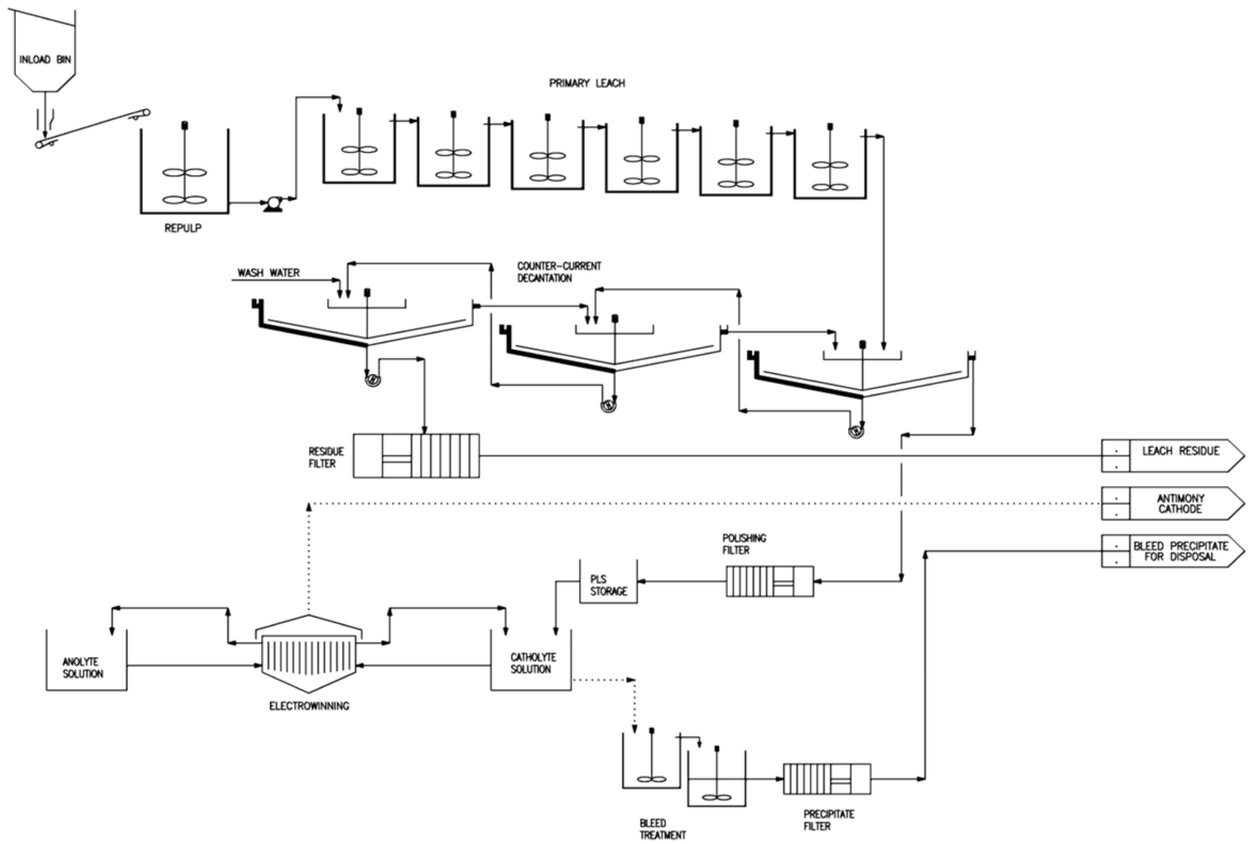
- the payability of the antimony concentrate is low at approximately 65%;
- the antimony mineral resource at the Project is one of the largest known in the western world with significant upside potential;
- potential strategic importance of antimony to US defense and energy sectors considering that there is no domestic production; only recycling and minor treatment of imported concentrates resulting in the US being overly dependent on China for imports;
- recent testwork (summarized in Section 13) has indicated that the potential exists to treat the antimony concentrate using the caustic sulfide leach process previously used at the Sunshine Mine near Kellogg, Idaho to recover ~95% of the antimony as electrowon metal, while returning all of the gold and ~50% of the silver back to the cyanide leach circuit in the process residue.

Given the preceding, Midas Gold commissioned a study by AGP Mining Consultants Inc. (**AGP**) to estimate the capital and operating costs for a secondary antimony process plant based on the testing presented in Section 13 and the following assumptions:

- 25 st/d nominal plant feed rate;
- concentrate delivered in bulk at 5-15% moisture;
- concentrate grading ~ 50% Sb, by weight;
- regrinding not required prior to concentrate leach;
- camp facilities not required;
- electricity used for steam generation;
- caustic sulfide leach leading to 98% Sb dissolution in less than 2 hours at approximately 90°C;
- electrowinning of antimony directly from the pregnant leach solution;
- recycling of solution back into the leach circuit, with a portion bled off to prevent contaminant buildup;
- leach residue returned to the Stibnite processing plant as bulk filter cake;
- bleed precipitate shipped in bulk bags for disposal;
- overall antimony recovery of 95%;

- the process flow summarized on Figure 24.3; and
- final product cathode shipped on pallets by truck.

Figure 24.3: Antimony Recovery Plant Process Flow Summary Diagram



The total direct CAPEX estimate for the processing plant, based on the preceding assumptions and including mechanical, civil, earthworks, structural, piping, electrical, instrumentation, buildings and mobile equipment costs were estimated at $24.3 million; indirect costs (EPCM, site establishment, first fill, etc.) and contingency (20%) were estimated at $3.7 million and $4.9 million, respectively, bringing the total capital cost estimate to $32.9 million.

The estimated process plant OPEX, which included labor, spares, electricity, reagents, piping, assay laboratory, fuel, consumables and waste disposal, were estimated at $527/st ($581 per tonne) of concentrate processed, or about $0.56 per pound of antimony metal produced.

For an assumed antimony mineral resource of, for example, 200 million lbs, the all-in unit costs, including capital and operating costs, based on the estimates presented in the AGP study yielded an estimated cost of $0.72/lb. For the payability and concentrate transportation costs detailed in Section 19, the deductions associated with antimony concentrate sales are approximately $1.73/lb. Consequently, secondary antimony processing appears to offer a financial advantage over the base case of approximately $1/lb from an undiscounted cash flow perspective based on the analysis and assumptions provided herein. Further, the attractiveness of this alternative would increase significantly if antimony prices were to increase, since the CAPEX and OPEX for the AGP study would remain constant at higher prices, whereas the value of the percentage withheld by the smelters would increase proportionally with the metal price. Therefore, additional metallurgical testing, engineering and cost estimating appear to be warranted, particularly if additional antimony mineral reserves are defined.

Were additional processing of antimony concentrates deemed warranted, this would most likely occur off site; as a result, the current Project design of trucking concentrates offsite would not change.

24.3 PROJECT EXECUTION PLAN

24.3.1 Description

The Project Execution Plan describes, at a high level, how the PFS design presented in this document would be carried out. This plan contains an overall description of what the main work focuses are, Project organization, the estimated schedule, and where important aspects of the design would be carried out.

The Project execution proposed incorporates an integrated strategy for engineering, procurement and construction management (**EPCM**). The primary objective of the execution methodology is to deliver the Project at the lowest capital cost, on schedule, and consistent with the Project standards for quality, safety, and environmental compliance.

24.3.2 Objectives

The Project execution plan has been established with the following objectives:

- to maintain the highest standard of safety and environmental performance so as to avoid and minimize incidents and accidents;
- to design and construct a process plant, together with the associated infrastructure, that is cost-effective, achieves performance specifications and is built to high quality standards;
- to design and operate the mine using proven methodologies and equipment;
- to optimize the Project schedule to achieve an operating plant in the most efficient and timely manner within the various constraints placed upon the Project; and
- to comply with the requirements of the conditions for the construction and operating license approvals.

24.3.3 Plan of Approach

24.3.3.1 Philosophy

This section describes the execution plan for advancing the Stibnite Gold Project from the current Prefeasibility Design stage to production. The Project execution plan formally identifies and documents the key Project processes and procedures that are required to support the successful execution of the Project including:

- completion of a Feasibility Study;
- develop a Project schedule that encompasses the Feasibility Study through procurement, construction and commissioning;
- consider significant Project logistics;
- develop and implement site communications, construction infrastructure, and water supply for an early and efficient startup;
- plan for early construction mobilization;
- develop practices and protocols that are protective of the environment and ensure compliance with permits and regulations;

- develop an Environmental, Health and Safety Plan that is comprehensive yet concise so that contractors, construction managers, and members of Midas Gold's development team are safe during the field construction phase of the Project;
- develop and execute Project control procedures and processes;
- perform constructability reviews;
- implement Project accounting and cost control best practices;
- issue a cost control plan and a control budget; and
- oversee Project accounting.

Midas Gold would utilize an Engineering, Procurement and Construction Management (EPCM) approach utilizing multiple hard money and low unit cost prime contracts for Construction Management (CM), as the recommended method for executing the Project. The capital cost estimate is based on this methodology. Mine development pre-production work activities as well as the water diversion tunnel, the site access road construction and power transmission line are envisioned to be performed by contractors selected through a pre-qualification and pre-tending process. Because the Project is located in an area with an abundance of qualified contractors, construction would be performed by companies from the Rocky Mountain region, wherever possible. Some items affecting the Project are:

- ability to start work that does not require engineering;
- availability of construction and engineering resources;
- experience of the qualified firms considered and their typical and proposed approach; and
- an approach that utilizes the best resources available (matching contractors to the size of each contract).

As previously mentioned, M3 utilized an EPCM approach as the basis for the capital cost estimate. This approach provides for contracts that would include civil, concrete, structural steel, mechanical, piping, electrical and instrumentation.

The majority of mechanical and electrical equipment required are designed to be procured within North America. Concrete and building construction materials are designed to be sourced locally, wherever possible. Structural and miscellaneous steel, piping, tanks, electrical and miscellaneous process equipment are designed to be sourced within the US, to the extent practical, within the region.

24.3.3.2 Engineering

Engineering is designed to match the plant protocol for drawing titles, equipment numbers and area numbers. Design will continue to produce drawings in the Imperial System of Units (English) format. Drawings and specifications for the PFS have been done in English and are anticipated to remain that way for each subsequent design step.

A site conditions specification would be needed to ensure that vendors are aware of the site conditions. Individual equipment specifications would also be needed.

Engineering control of the PFS design would be maintained through drawing lists, specification lists, equipment lists, pipeline lists, cable schedule, and instrument lists. Control of Engineering Requisitions for Quote (ERFQ) would be performed through an anticipated purchase orders list. Progress would be tracked through the use of the lists mentioned.

As designed, concrete reinforcing steel drawings would be done using customary bar available in the US. Reinforcing bar would be fully detailed to allow either site or shop fabrication.

Structural steel would be detailed using a program such as TEKLA software. Mechanical steel would be dictated utilizing software such as Inventor, TEKLA, or something similar. This would allow fabrication of steel prior to the award of steel installation contracts.

Owner review of engineering progress and design philosophy would of course be an ongoing process.

24.3.3.3 Procurement

Procurement of long delivery equipment and materials is scheduled with their relevant engineering tasks. This would ensure that the applicable vendor information is incorporated into the design drawings and that the equipment would be delivered to site at the appropriate time and supports the overall Project schedule. Particular emphasis would be placed on procuring the material and contract services required to establish the temporary construction infrastructure required for the construction program.

Procurement of major process equipment would be by the EPCM contractor, acting as Agent for Midas Gold through the use of owner-approved purchase order forms. This will include all of the equipment in the equipment list as well as all of the instruments in the instrument list. Some instruments are designed to be part of vendor equipment packages. In addition, structural steel, electrical panels, electrical lighting, major cable quantities, specialty valves and special pipe would also be designed to be vendor packages. Contractors would be responsible for the purchase of common materials only.

Equipment and bulk material Suppliers would be selected via a competitive bidding process. Similarly, construction contractors would be selected through a pre-qualification process followed by a competitive bidding process. It is envisaged that as designed, the Project would employ a combination of lump sum and unit price contracts as appropriate for the level of engineering and scope definition available at the time contract(s) are awarded.

It is intended that equipment would be sourced on a world-wide basis, assessed on the best delivered price and delivery schedule, fit-for-purpose basis.

Equipment would be purchased Free on Board (**FOB**) at the point of manufacture or nearest shipping port for international shipments. A logistics contractor would be selected to coordinate all shipments of equipment and materials for the Project and arrange for ocean and overland freight to the job site.

The EPCM contractor would be responsible for the receipt of the major equipment and materials at site. The equipment and materials would be turned over to the installation contractor for storage and safe keeping until installed. Bulk piping and electrical materials and some minor equipment would be made part of the construction contracts, and as such would be supplied by the various construction contractors. It is expected that each construction contractor provide for the receipt, storage, and distribution of materials and minor equipment they purchased.

The EPCM contractor would establish a list of recommended pre-qualified vendors for each major item of equipment for approval by Midas Gold. The EPCM contractor will prepare the tender documents, issue the equipment packages for the bid, prepare a technical and commercial evaluation, and issue a letter of recommendation for purchase for approval by Midas Gold. Midas Gold, with the assistance of the EPCM contractor, would conduct the commercial negotiations with the recommended vendor and advise the EPCM contractor of the negotiated terms for preparation of the purchase documents. When approved, the EPCM contractor would issue the purchase order, track the order, and expedite the engineering information and delivery of the equipment to the site.

24.3.3.4 Inspection

The EPCM contractor would be responsible to conduct QA/QC inspections for major equipment during the fabrication process to ensure the quality of manufacture and adherence to specifications. Levels of inspection for major equipment would be identified during the bidding stage, which may range from receipt and review of the manufacturer's quality control procedures to visits to the vendor's shops for inspection and witnessing of shop tests prior to shipment of the equipment. Where possible, inspectors close to the point of fabrication would be contracted to perform this service in order to minimize the travel cost for the Project. Some assistance may also be provided by the EPCM engineering design team.

24.3.3.5 Expediting

The EPCM contractor would also be responsible to expedite the receipt of vendor drawings to support the engineering effort as well as the fabrication and delivery of major equipment to the site. An expediting report would be issued at regular intervals outlining the status of each purchase order in order to alert the Project of any delays in the expected shipping date or issue of critical vendor drawings. Corrective action can then be taken to mitigate any delay.

The logistics contractor would be responsible to coordinate and expedite the equipment and material shipments from point of manufacture to site, including international shipments through customs.

24.3.3.6 Project Services

The EPCM contractor would be responsible for management and control of the various Project activities and ensure that the team has appropriate resources to accomplish Midas Gold's objectives.

24.3.4 Construction

24.3.4.1 Construction Methodology

As currently designed for this prefeasibility report, the construction program is scheduled to start in Year -3. Initial construction work includes clearing and grubbing of the plant site, mass earthwork for site development, Project access road and in-plant roads. Concrete foundations for the process buildings and other support structures are designed to be constructed thereafter. The grinding-flotation building and autoclave buildings are planned to be bridge-frame metal, moment frame structures. The truck shop, the Historic Tailings reclaim building, maintenance shop, and warehouse buildings are currently planned as pre-engineered metal buildings or fabric covered structures. Most of the ancillary buildings on the Stibnite Gold Project site are planned to be modular buildings including the offices, camp, and the ancillary facilities.

As currently designed, construction work is scheduled for approximately 36 months from mobilization to the commencement of commissioning. Earthworks associated with the well field and related facilities would commence after Project permits have been released as soon as a contractor can be mobilized to the field. This work would include completion of the surface diversions, process building foundations and process ponds.

24.3.4.2 Construction Management

Construction Management would likely be done by the EPCM contractor as Agent for the Owner using prime contracts for civil/concrete and structural/mechanical/electrical/piping/instrumentation. The contracting plan is based on utilizing local contractors to execute the construction work packages to minimize mobilization and travel costs. The EPCM contractor would pre-qualify local contractors and prepare tender documents to bid and select the most qualified contractor for the various work packages. Some work packages would include the design, supply, and erection for specific facilities which are specialized in nature. The EPCM team would be comprised of individuals capable of coordinating the construction effort, supervising and inspecting the work, performing field engineering functions, administering contracts, supervising warehouse and material management functions, and performing cost control and schedule control functions. These activities would be under the direction of a resident construction manager and a team of engineers, and locally hired supervisors, and technicians. There would also be a commissioning team to do final checkout of the Project.

Construction progress would be measured by using quantity ledgers for construction quantities to develop percent completion and earned hours by contractors. Quantity surveyors will measure the amount of civil quantities, yards of concrete placed, tons of steel erected, and similar measures for architectural, piping and electrical quantities. Mechanical installations would be measured based on the estimated installation hours from the control estimate developed during detailed engineering.

Some site services would be contracted to third party specialists, working under the direction of the resident construction manager. Construction service contracts identified at this time include field survey and QA/QC testing services.

24.3.5 Contracting Plan

Contracting is an integral function in the Project's overall execution. Contracting for the Stibnite Gold Project per the current PFS design would be done in full accord with the provisions of the Midas Gold/EPCM contract.

A combination of vertical, horizontal, and design-construct contracts may be employed as best suits the work to be performed, degree of engineering and scope definition available at the time of award. The PFS design locates a concrete batch plant on site that is designed to use screened colluvial and alluvial materials native to Meadow Creek or spent ore in the SODA. The design includes a dedicated construction camp at the Stibnite Gold Project site that has been designed to be located approximately one mile from the plant along the upper EFSFSR intersection with the mine access road.

The civil contract would cover all clearing, grubbing, bulk excavation, engineered fill, grading, and possibly, geomembrane lining of the TSF, ponds and pipe trenches.

The concrete contract would include all concrete forming, rebar, placement and stripping. If possible, the batch plant would be tied to the concrete placement contract to leverage the economy of having one management for both functions.

As part of the contracting strategy, a list of proposed contract work packages has been developed to identify items of work anticipated to be assembled into a contract bid package. Depending upon how the Project is ultimately executed and the timing, several work packages may be combined to form one contract bid package. Table 24.4 represents the Proposed Contract Work Package list:

Table 24.4: Proposed Contract Work Package List

No.	Bid Packages:	Comments
1	Materials Testing	Soils, Concrete & Structural Materials
2	Survey	Confirm Existing Terrain. Create Topo of Roadway, Heap Leach & Plant Site Areas
3	Mine Access Road	Includes Roadway Drainage Culverts & Trenching
4	Bridges and Stream Crossings	Multi-plate tunnels
5	Water Diversion Tunnel	Underground mine contractor

No.	Bid Packages:	Comments
6	138 kV Power Transmission Line	Idaho Power to Yellow Pine Substation; a second contractor to erect power transmission line from Yellow Pine Substation to site
7	Construction Camp Installation	Possibly by provider of modular construction camp
8	Main Substation & Oxygen Plant Substation	Includes Emergency Generator Installation & Testing
9	Mine Pre-Stripping Contract	Includes Starter Dam construction
10	Field Electrical Distribution - Sub Station to Process Areas, Camp & Water Pumping	Overhead lines and duct banks from switch gear
11	Water Supply System - Yard Water Piping	Includes Fire Suppression
12	Septic System - Sewer Piping, Plant & Leach Field	Two septic systems required: process plant area and camp area
13	Clearing, Grubbing, Site Excavation, Engineered Backfill, Grading, Trenching, - all Areas	
14	Concrete Work - All Areas	
15	Structural Steel Buildings & Platforms	From foundation bolts. Includes roofing and siding installation.
16	Architectural Finishes	In offices and larger frame structure buildings
17	Field Erected Tanks	Typically part of design-supply-erect contract.
18	Mechanical Equipment	Crusher, conveyors, reclaim feeders, grinding mills, flotation cells, thickeners, pumps, mechanical steel, etc.
19	Process Piping & Field Instrumentation	
20	Instrumentation & Controls Programming	PLC programming, HMI screen development; I/O & communications.
21	Permanent Camp Installation	By camp provider

24.3.6 Project Schedule

A PFS-level schedule has been developed based on the Project description, and objectives philosophy documented herein. The schedule includes Engineering, Contracts, Procurement, Construction, Remaining Site Work, Site Pre-Commissioning, and Site Commissioning activities and is presented on Figure 24.5.

The schedule assumes that pilot plant and feasibility study commence in Year -5 leading into basic and then detailed engineering so that procurement can begin in Q4 of Year -4. Construction would commence shortly thereafter in Q1 of year -3. It is important to note that mine equipment would need to be procured and assembled early starting in Q1 of Year -3 so that pre-stripping could commence in Q2 of Year -2.

The 138 kV power transmission line would also need to start early commencing in Q1 of Year -3 and finishing at the end of Q4 of Year -1.

The Oxygen Plant contract procurement is currently designed to begin in Q1 of Year -3. In order to be able to transport larger items to the project site, the Mine Access Road is schedule so that it would commence in Q1 of Year -3 and continue through Q4 of Year -2.

The autoclave procurement and fabrication commence in Q1 of Year -3 so that they could be delivered, welded into a single shell, stress relieved, pressure tested, and installed by the end of Q2 of Year -1. As currently designed site commissioning could begin shortly thereafter leading to project turnover and the commencement of processing by the end of Year -1.

24.3.6.1 Construction Completion and Handover Procedure

The Construction Completion Procedure is part of the Construction Quality Plan as well as the Project specific Commissioning Plan. Contractors would enter into contractual agreements with Midas Gold to perform certain portions of the work, which includes quality control of their work.

The Commissioning Plan would be designed, developed, and implemented to insure a step-by-step, documented process and procedure for all mechanical, process, electrical/instrumentation completion, checkout and pre-operational testing. Pre-operational testing and commissioning would take place concurrent with mechanical completion. Pre-operational testing, per the current PFS design, is currently scheduled to commence in Q2 of Year -1 and wet commissioning and start-up is scheduled to commence in Q4 of Year -1.

24.3.7 Quality Plan

A Project specific, Quality Plan would be developed and implemented on the site. The Quality Plan would be designed to be a management tool for the EPCM contractor, through the construction contractors, to maintain the quality of construction and installation on every aspect of the Project. The plan, which consists of many different manuals and subcategories, would be developed during the engineering phase and available prior to the start of construction.

24.3.8 Commissioning Plan

The Commissioning Plan would also be designed to be Project specific and characterized as the transition of the constructed facilities from a status of “mechanically” or “substantially” complete to operational as defined by the subsystem list that would need to be developed for the Project. The commissioning group would systemically verify the functionality of plant equipment, piping, electrical power and controls. This test and check phase would be conducted by discrete facility subsystems. The tested subsystems would be combined until the plant is fully functional. Start-up, also a commissioning group responsibility, would progressively move the functional facilities to operational status and performance.

In addition to these activities, the commissioning portion of the work would also include coordination of facilities operations training, maintenance training and turnover of all compiled commissioning documentation in an agreed form.

24.3.9 Environmental, Health and Safety Plan

The Environmental Health and Safety Plan (**EHSP**) would need to be established for the construction of the Stibnite Gold Project and any other authorized work at the Project site. The EHSP would cover all contractor personnel working on the Project and any other authorized work for the Project.

The EHSP specifies regulatory compliance requirements, training, certifications and medical requirements necessary to complete the Project for all personnel and contractors involved in the Project. The EHSP would include a comprehensive program of sampling and analyses to monitor environmental conditions to insure no negative effects occur during construction. The plan would also include a site-wide Stormwater Management Pollution Prevention Plan (**SWPPP**) as a preventative measure and a Spill Control and Countermeasures Plan (**SPCC**). Along with the Operations Procedures, the EHSP would be required to be followed by all Contractor personnel working at the site.

24.3.10 Traffic Management Plan

In order to minimize the disruption along the mine access road and at the mine site, traffic to the site would need to be coordinated by a dispatcher located at the Cascade offsite facility. Midas Gold would adopt a Traffic Management

Plan to guide those travelling between Cascade and the mine site. The plan would be developed in collaboration with the EPCM contractor, construction contractors, suppliers and transportation companies.

24.3.11 Project Organization

Figure 24.4: Project Organization Block Diagram

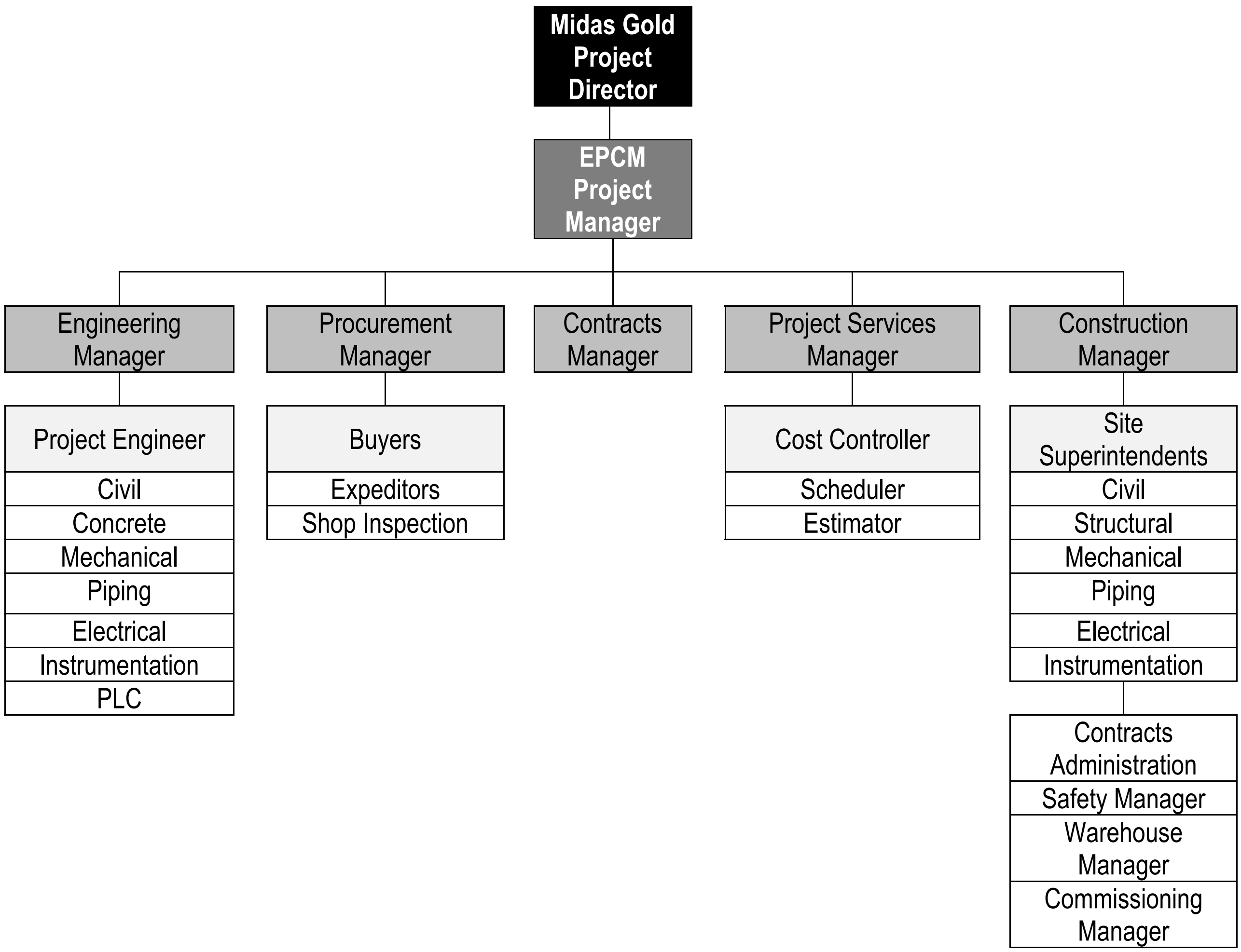


Figure 24.5: Stibnite Gold Project Summary Schedule

SECTION 25 TABLE OF CONTENTS

SECTION **PAGE**

SECTION 25 LIST OF TABLES

25 INTERPRETATION AND CONCLUSIONS

25.1 INTRODUCTION

According to CIM definition standards for Mineral Resources and Mineral Reserves prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014 (**CIM Standards**), a Preliminary Feasibility Study is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the "Modifying Factors" (as defined in the CIM Standards) and the evaluation of any other relevant factors that are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting. A Preliminary Feasibility Study is at a lower confidence level than a Feasibility Study. Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves; these include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

25.2 INTERPRETATION

The QPs of this Report have reviewed the data for the Stibnite Gold Project and are of the opinion that the Project meets the requirements for a Preliminary Feasibility Study. Opinions from individual QPs on the sections of the PFS that they are responsible for (see Section 2 for responsibilities) are set out in the following subsections.

25.2.1 Surface Rights, Royalties, and Mineral Tenure

Midas Gold is vested with fee simple, mineral, or possessory record title to, or an option to purchase, the Stibnite Gold Project properties described in Section 4 , subject to the royalties, agreements, limitations and encumbrances described in Section 4.

25.2.2 Geology and Mineralization

The understanding of the regional and local geology with regards to the lithology, structure, alteration and mineralization for each of the mineralized zones and deposit types discussed in Sections 7 and 8 is sufficient to estimate the Mineral Resources and Mineral Reserves contained herein.

25.2.3 Exploration

The previous drilling exploration programs, along with the geologic mapping, geochemical and geophysical studies, and petrology and mineralogy research carried out to date, reasonably supports the potential for expansion of defined deposits, potential for discovery of high-grade underground mineable prospects, and the potential for discovery of new bulk mineable prospects as discussed in Section 9 .

25.2.4 Drilling and Sampling

The drilling methods, recovery, collar survey, downhole survey, and material handling for the samples used in the Mineral Resource and Mineral Reserve estimates for this Report are sufficient to support the Mineral Resource and Mineral Reserve estimates contained in this Report, subject to the assumptions and qualifications contained in Sections 10 and 11 .

25.2.5 Data Verification

The data used for estimating the Mineral Resources for the Hanger Flats, West End, Yellow Pine and Historic Tailings is adequate for the purposes of this Report and may be relied upon to report Mineral Resources and Mineral Reserves based on the conditions and limitations set out in Section 12.

25.2.6 Metallurgy

The metallurgical testing conducted on samples from West End, Hangar Flats, Yellow Pine, and the Historic Tailings included extensive mineralogical studies and developmental metallurgical testing on various ore types from each of the deposits. The developmental metallurgical testing and analysis detailed in Section 13 supports the selection of the process flow sheet that proved successful when applied to each of the deposits, making it possible to design a single plant that can process all ores from the Project as they are mined subject to the conditions and limitations set out in Section 13 .

25.2.7 Mineral Resources

The Mineral Resource estimates in Section 14 are accurate to within the level of estimate required for categorization as Inferred and Indicated Mineral Resources with the latter suitable for use in a Preliminary Feasibility Study, subject to the conditions and limitations set out in Section 14, and these estimates were performed consistent with industry best practices and demonstrate reasonable prospects for economic extraction, as required by NI 43-101.

25.2.8 Mineral Reserves

A thorough review of the designs, schedules, risks, and constraints of the Project detailed within this Report and given that there is, in the opinion of the QP responsible for Section 15, a basis for an economically viable Project after taking into account mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, governmental factors and other such modifying factors, thereby supporting the declaration of Mineral Reserves. Subject to the conditions and limitations contained in this Report, this PFS demonstrates that, as of the date of this Report, extraction can reasonably be justified. The term 'Mineral Reserve' does not necessarily signify that all governmental approvals have been received; it does signify that there are reasonable expectations that such approvals will be granted.

25.2.9 Mine Plan and Schedule

The mine plan and schedule detailed in Section 16 have been developed to maximize mining efficiencies, while utilizing the current level of geotechnical, hydrological, mining and processing information available and are, subject to the conditions and limitations set out in Section 16, sufficient to support the declaration of Mineral Reserves.

25.2.10 Metallurgical Recovery

The recovery methods including the major unit operations detailed in Section 17 comprising, primary crushing, SAG and ball mill grinding, antimony flotation (when warranted), bulk auriferous sulfide flotation, auriferous sulfide concentrate pressure oxidation, cyanidation of the pressure oxidation residue, CIL processing of the flotation tailings, precious metal recovery to doré and tailings detoxification are sufficient to demonstrate recoveries to support the mine planning and economics detailed herein, and the declaration of Mineral Reserves.

25.2.11 Infrastructure

The on-site and off-site infrastructure detailed in Section 18 is designed and cost estimated to a level of detail that supports Project viability and the economics detailed herein.

25.2.12 Market Studies and Contracts

The doré and antimony concentrate market studies detailed in Section 19 are consistent with industry standards and market patterns, and are similar to contracts found throughout the world. The metal prices selected for the four economic cases in this Report represent a probable range of scenarios that support a prefeasibility economic analysis.

25.2.13 Environment, Permits, and Social and Community Impacts

Section 20 summarizes the reasonable available information on: environmental studies conducted to date and the related known environmental issues associated with the Project, the Project related social and community impacts and benefits, the remediation of legacy impacts built into the design for and execution of the Project, the Project permitting requirements, and the requirements and plans for waste rock and tailings storage. Additionally, mine closure, reclamation and mitigation are discussed and cost estimated to a level of detail that supports Project economic and technical viability to the level of a Prefeasibility Study and the economics detailed herein.

25.2.14 Capital and Operating Costs

The capital and operating costs detailed in Section 21, which were derived from several previous sections of the Report are, subject to the conditions and limitations in this Report, designed and cost-estimated to a level of detail that supports Project economic and technical viability to the level of a Prefeasibility Study and the economics detailed herein.

25.2.15 Financial Analysis

The financial analysis presented in Section 22 illustrates that the Project economics, subject to the conditions and limitations in this Report, are positive and can support estimation of Mineral Reserves and the demonstration of technical and economic viability to the level of a Prefeasibility Study.

25.3 CONCLUSIONS

The financial analysis presented in Section 22 demonstrates that the Stibnite Gold Project is technically viable and has the potential to generate robust economic returns based on the assumptions and conditions set out in this Report and this conclusion warrants continued work to advance the Project to the next level of study, which is a Feasibility Study.

The QPs of this Report are not aware of any unusual, significant risks or uncertainties that could be expected to affect the reliability or confidence in the Project based on the data and information available to date.

25.4 RISKS

As with most projects at the preliminary feasibility level, there continues to be risks that could affect the economic potential of the Project. Many of the risks relate to the need for additional field information, laboratory testing, or engineering to confirm the assumptions and parameters used in this Report. External risks are, to a certain extent, beyond the control of Midas Gold and are much more difficult to anticipate and mitigate, although, in many instances, some risk reduction can be achieved. Table 25.1 identifies what are currently deemed to be the most significant internal Project risks, potential impacts, and possible mitigation approaches. In summary, the Project-specific risks identified following the PFS include:

- Mineral Resource modelling;
- geotechnical engineering;

- loss of gold into Sb concentrate;
- metallurgical recoveries;
- water management;
- water geochemistry; and
- development or construction schedule.

Table 25.1 Project Risks Identified Following the PFS

Risk		Explanation / Potential Impact	Possible Risk Mitigation
General Risks Common to the Mining Industry			
GR1	CAPEX and OPEX	The ability to achieve the estimated CAPEX and OPEX costs are important elements of Project success. An increase in OPEX of 20% would reduce the after tax $NPV_{5\%}$ by approximately $20 M using current open pit designs. If OPEX increases, then the mining cut-off grade would increase and, all else being equal, the size of the optimized pit would reduce, yielding fewer mineable tons and less recoverable gold.	Further cost estimation accuracy with the next level of study, as well as the active investigation of potential cost-reduction measures would assist in the accuracy of cost estimates.
GR2	Permit Acquisition or Delay	The ability to secure all of the permits to build and operate the Project is of paramount importance. Failure to secure the necessary permits could stop or delay the Project.	A thorough Environmental and Social Impact Assessment of a Project design that gives appropriate consideration to the environment and local community expectations and input is required.
GR3	Ability to Attract Experienced Professionals	The ability of Midas Gold to attract and retain competent, experienced professionals is a key success factor for the Project. High turnover or the lack of appropriate technical and management staff at the Project could result in difficulties meeting Project goals.	The early search for, and retention of, professionals may help identify and attract critical people.
GR4	Falling Metal Prices	A drop in metal prices during the mine development process could have a negative impact on the profitability of the operation, especially in the critical first years.	Begin construction when the outlook is good for price improvement and have mitigating strategies, such as hedging or purchase of puts, and supporting analyses to address the risk of a downturn.
GR5	Change in Permit Standards, Processes, or Regulations	A change in standards, processes, or regulations could have a significant impact on project schedules, operating cost and capital cost.	Participate in legislative and regulatory processes to ensure standards remain protective, fair and achievable.
Stibnite Gold Project Specific Risks			
PR1	Mineral Resource Modelling	Certain Mineral Resources were estimated with data that included historic samples and these may have not had sufficient confirmation from modern drilling and sampling to support a production decision, which introduces some level of risk and uncertainty. The risk is the level of certainty in the Mineral Resource estimates and whether they can be confirmed with additional drilling.	Further confirmation drilling and verification are needed to remove, replace or supplement historic sample-based data from Mineral Resource estimates, especially in the Yellow Pine deposit.

Risk		Explanation / Potential Impact	Possible Risk Mitigation
PR2	Geotechnical Engineering	The geotechnical condition of the soils under the WRSF, plant, and infrastructure facilities may be different than assumed and could have financial implications on the Project CAPEX and/or OPEX.	Further field investigations are required to support the Feasibility Study.
PR3		The geotechnical nature of the open pit wall rock, including the nature of faults and secondary geological structures, could impact the allowable pit slopes, which could impact mineable tons, strip ratio and overall Project economics negatively or positively.	
PR4	Loss of Gold into Sb Concentrate	The flotation circuit design is based on sequential flotation (the flotation and removal of antimony sulfides followed by the flotation of gold sulfides from the antimony flotation tailings) for a portion of the mill feed. Higher than expected gold losses in the antimony flotation circuit would negatively impact the viability of the antimony circuit.	Additional metallurgical work (i.e. pilot plant testing) should be completed as part of the Feasibility Study, which should increase confidence in the projected metallurgical recoveries.
PR5	Metallurgical Recoveries	Changes to metallurgical assumptions could lead to reduced metal recovery and revenue, increased processing costs, and/or changes to the processing circuit design, which would all negatively impact the Project economics. A 1% reduction in total gold recovery would reduce the Case B $NPV_{5\%}$ by about $29M.	Pilot plant runs with appreciable larger samples should be completed to support the Feasibility Study, to increase the confidence of the recovery assumptions and overall process design.
PR6	Water Management	Water management is a critical component of the Project. While a comprehensive site-wide water balance model and 3D groundwater model was used to design the ground and surface water diversion and interception systems, more field information is required to improve the accuracy of the water balance, size diversion channels and settling ponds, design treatment facilities, and develop comprehensive long-term closure designs.	Complete additional hydrogeological fieldwork in the Meadow Creek Valley to improve the understanding of the groundwater regime around the Hangar Flats open pit. Continue to collect and analyze on-site groundwater, surface water, and meteorological data to enhance hydrological knowledge of the site.
PR7	Water Geochemistry	Based on test work completed, it was assumed that waste rock storage facilities (WRSFs) do not need to be lined and that metal leaching (ML) and acid rock drainage (ARD) would be manageable and achieve regulatory water discharge limits without treatment. If future ML/ARD testing indicates that the WRSFs require lining or special treatment, then CAPEX and/or OPEX would increase.	Additional geochemical testing and modeling should be completed to further refine the appropriate water management strategies for the Project.

Risk		Explanation / Potential Impact	Possible Risk Mitigation
PR8		While current test work indicates otherwise, comingling of tailings streams may lead to water chemistries of reclaimed waters that adversely affect flotation metallurgy.	More refined geochemical testing of the tailings supernatant should be completed in the next level of study. More makeup water or alternative water management plans may need to be investigated, depending on the outcome.
PR9		Long-term, post-closure, pit lakes in the Hangar Flats and West End open pits were assumed to be of acceptable discharge quality after a period; were this not the case, additional treatment costs may be incurred.	Additional testing and pit lake modeling will be required in the next phase of study to verify this assumption.
PR10	Development or Construction Schedule	The Project development could be delayed or extended for a number of reasons, which would impact Project economics.	If an aggressive schedule is to be followed, FS field work and critical path laboratory testing should begin as soon as possible.

25.5 OPPORTUNITIES

There are many significant opportunities that could improve the economics, and/or permitting schedule of the Project beyond those common to the sector (such as increasing metal prices, falling input costs, etc.). The major opportunities that have been identified at this time are summarized in Table 25.2. Further information and assessments are needed before these opportunities could be included in the Project economics.

The opportunities are separated into general opportunities common to the mining industry, and Project-specific opportunities unique to the Stibnite Gold Project. The Project-specific opportunities are further categorized into three broad categories of potential to improve the Project Net Present Value ($NPV_{5\%}$); the categories, and a brief listing the opportunities, are provided below:

- High potential benefit opportunities (potential to increase $NPV_{5\%}$ by more than $100 million) include:
  - in pit conversion of Inferred Mineral Resources to Mineral Reserves;
  - out of pit conversion of Inferred Mineral Resources to Mineral Reserves adjacent to the current Mineral Reserves;
  - in pit conversion of unclassified material currently treated as waste rock to Mineral Reserves;
  - improved continuity of higher grade gold mineralization in the Yellow Pine Pit, particularly around the area influenced by excluded or limited Bradley drilling could enhance gold grades in these areas, which are scheduled early in the Project life;
  - increased Mineral Resources and Mineral Reserves in West End by adding fire assay information in areas where only cyanide assays were available. Could also potentially increase grade.
  - potential additional antimony mineralization in areas where Bradley data was eliminated (which are scheduled early in the Project life) and/or areas where antimony was not assayed;
  - potential for an underground Mineral Reserve at Scout that would likely be antimony rich;
  - potential for an underground Mineral Reserve at Garnet that has the potential to be relatively high grade; and
  - exploration potential for new deposits.
- Medium potential benefit opportunity (potential to increase $NPV_{5\%}$ by $10 to $100 million) include:
  - Metallurgical improvements that improve the Project economics;
  - Secondary antimony processing to enhance payability;
  - Potential definition of antimony as a critical mineral in US legislation;
  - Open pit slope steepening through collection of additional geotechnical information and analysis;
  - Onsite quicklime generation; and
  - Alternative funding sources for off-site infrastructure; and
  - Utilizing preowned equipment to reduce CAPEX and development timelines.
- Low Potential Benefit Opportunity (potential to increase $NPV_{5\%}$ by less than $10 million include:
  - Tungsten recovery as a by-product;

Using the antimony credit in open pit optimization, increasing Mineral Reserves.

Table 25.2 Project Opportunities Identified Following the PFS

Opportunity		Explanation	Potential Benefit
General Opportunities Common to the Mining Industry			
GO1	Permit Acquisition	In the same way that permit acquisition is a potential risk to the Project schedule, it may also be an opportunity. Idaho is characterized as having a low jurisdictional risk, and as a mining friendly state. In addition, the brownfields nature of the Project site may provide a significant impetus to see the Project, with the extensive remediation of legacy impacts built into the design, accelerated.	The opportunity to shorten the permitting schedule exists, bringing value forward.
GO2	Rising Metal Prices	Increases in metal prices, especially gold, would increase revenue and Project economics.	Increased revenue enhances financial factors.
GO3	Reagent/Fuel Price Decreases	Reduction in reagent and consumable prices, especially lime, fuel, and oxygen, has the potential to decrease operating costs and enhance the Project economics.	Lower OPEX may lead to higher net revenue and enhanced Project economics.
Project Specific Opportunities with High Potential Benefit			
PO1	In-pit conversion of Inferred Mineral Resources to the Indicated category	Significant Inferred Mineral Resources exist in each of the Project deposits, including material within the Mineral Reserve pits; these Mineral Resources are currently treated as waste rock and therefore a cost. Conversion of Inferred Mineral Resources within the Mineral Reserve pits to the Measured and Indicated Mineral Resources categories would increase Mineral Reserves, reduce strip ratios and improve overall Project economics.	A tabulation of the Inferred Mineral Resources within the PFS pits, using a Net of Process cutoff of $0.001/ton, results in contained mineralization above cutoff of 10.8 million tons containing approximately 347 koz Au, 524 koz Ag, and 9,544 klbs Sb at average grades of 0.032 oz/st Au (1.1 g/t), 0.049 oz/st Ag (1.7 g/t), including 878 thousand tons containing 0.5% Sb. 100% conversion of this mineralization to Mineral Reserves would reduce the Project strip ratio from 3.5:1 to 3.1:1.
PO2	Out of pit conversion of Inferred Mineral Resources to the Indicated category	Additional drilling in the vicinity of the three Project pits has the potential of increasing the grade and tonnage of the Mineral Reserves by (a) converting above cutoff Inferred Mineral Resources to Indicated, (b) supporting expanded pits that bring current above cutoff Indicated Mineral Resources outside the pits into Mineral Reserves and (c) adding new above cutoff mineralization in currently poorly drilled areas.	Increases in Mineral Reserve tonnages, especially at higher grades, could improve the Project economics, especially if those improvements could be realized in the early stages of development.

	Opportunity	Explanation	Potential Benefit
PO3	In Pit Waste Rock conversion to Mineral Resource	Significant volumes within each of the Mineral Reserve pits are comprised of unclassified material based on a lack of drilling. As drilling continues within the pit limits, some portion of this material could be converted to Mineral Resources above cut-off, increasing Mineral Reserves and reducing the strip ratios.	Increases in Mineral Reserves and reductions in strip ratio would lead to a longer Project life and potentially reduced CAPEX and OPEX. This opportunity is particularly evident at Hangar Flats, where a significant proportion of the in pit material classified as waste rock comprises unclassified blocks due to a lack of drill data west of the MCFZ.
PO4	Improve the continuity of mineralization in the Yellow Pine Pit	As discussed in Section 12, a significant amount of historic information was excluded from Mineral Resource estimation, including holes missing critical supporting information in the core of the Yellow Pine Mineral Resource. Specifically, in the case of the antimony Mineral Resource in Yellow Pine, Bradley Mining Company samples were excluded due to apparent high bias with respect to antimony grade, even though some of these holes were focused within the highest grades portions of the antimony mineralization. As a result, the antimony Mineral Resource may be understated in both tons and grade.	Further drilling in the core of the Yellow Pine Mineral Resource, where known mineralization occurs but data was not used in the current Mineral Resource estimates, could demonstrate continuity helping to increase grade in areas or convert material from waste rock to Mineral Reserves. Inclusion of the historic data would have increased estimated contained gold in Yellow Pine by approximately 4% (approximately 180k oz) and contained antimony by up to 20% (approximately 18 million lbs) as compared to the Mineral Resource estimates stated herein.
PO5	Increase in Mineral Resources and Reserves in West End from CN Assay	Partial or spot Au FA is prevalent throughout the West End deposit, where available AuCN assays do not adequately define the transition from oxide to sulfide gold and likely significantly underestimate the contained gold in the transition and sulfide portions of the deposit. As discussed in Section 14, this issue was addressed by removing 70 drill holes with incomplete AuFA assays from the current Mineral Resource estimate, likely resulting in an underestimation of the total gold grade and quantum of the Mineral Resources.	Additional drilling in the areas where AuCN assays have confirmed and potentially under-predicted the existence of gold mineralization could increase the quantity and grade of the Mineral Resources and increase the Mineral Reserves and reduce the strip ratio in the West End open pit. Compared to the PEA Mineral Resource estimate, approximately 300 koz of gold were eliminated through the removal of this data and other contributing factors.
PO6	Potential Additional Antimony	In the Mineral Resource estimates used in this Report (see Section 14), some of the pre-Midas Gold data used did not include assays for antimony and thus was not available for inclusion in the Mineral Resource estimates, potentially resulting in an underestimation of the actual antimony grades.	Additional drilling in the areas that lack antimony assays could increase the grade and quantity of the antimony Mineral Resources in the Yellow Pine and Hangar Flats deposits.

	Opportunity	Explanation	Potential Benefit
PO7	Potential for Scout Underground Mineral Reserve	Scout is a potentially underground mineable Au-Ag-Sb exploration prospect (see Section 9). It has been identified as a **conceptual** potential underground geologic potential in the range of 2-5 million tons containing between 50 - 300 koz Au; 40 -150 Mlbs Sb; and 300 - 1,500 koz Ag with target dimensions of approximately 25 - 75 ft thick (true), 2,000 - 3,000 ft along strike and extending 250 - 300 ft down dip at grades ranging from 0.03 - 0.06 oz/st Au (1 - 2 g/t), 1 - 4% Sb, and 0.15 – 0.30 oz/st Ag (5 - 25 g/t).	Addition of a high-grade underground Mineral Reserve at Scout could potentially enhance Project economics by blending in a percentage of high grade feed early in the Project life and would help to smooth and extend the antimony concentrate production profile.
PO8	Potential for Garnet Underground Mineral Reserve	The dimensions of mineralized material located beneath and beyond the boundaries of the former Garnet open pit, as determined by simple polygonal estimation methods from historic drilling and geophysical data, outlines a **conceptual** underground geologic potential in the 1 - 2 million ton range containing 250 – 500 koz Au approximately 30 - 60 ft thick (true) by 160 – 250 ft wide by 1,300 - 1,800 ft long down plunge at grades ranging from 0.15 – 0.23 oz/st Au (5 - 8 g/t).	Addition of a high-grade underground Mineral Reserve at Garnet could potentially enhance Project economics by blending in a percentage of high grade feed early in the Project life, increasing annual gold production.
PO9	Exploration Potential for Additional Deposits	As discussed in Section 9, the expansion of known Mineral Resources and the addition of new deposits may be possible with further drilling. Based on preliminary geophysical results, the Project area has several exploration targets that justify drilling and may or may not lead to the discovery of additional underground and/or open pit deposits.	The expansion of the Project's Mineral Resources could potentially lead to a longer Project life and/or greater operating flexibility and potentially the justification for a higher throughput. This becomes particularly important, as demonstrated by the economic margin from Yellow Pine vs. Hangar Flats or West End, if higher-grade Mineral Resources are defined that defer lower-grade Mineral Resources currently utilized in the economic analysis.
Project Specific Opportunities with Medium Potential Benefit			
PO10	Metallurgical improvements that improve the Project economics	Several metallurgical opportunities exist, but require confirmation testing. The principal testing required to potentially improve Project metallurgy include: grindability studies, mineralogical profiling, flow sheet upside investigations, follow-up bench scale flotation and tailings leach studies, further development of antimony concentrate processing, a gold pilot plant, an antimony pilot plant, further whole ore and POX residue leach development testing to include carbon adsorption isotherm testing, and inclusion of silver data in all testing to further define recoveries.	Further metallurgical testing is needed better define these opportunities and their impacts.

	Opportunity	Explanation	Potential Benefit
PO11	Secondary antimony processing	Secondary antimony processing of the antimony concentrates to produce a marketable antimony product such as: antimony trioxide, antimony metal, sodium antimonite, or other, has been tested on a preliminary basis with positive results (See Section 13) and could result in enhanced Project economics. These benefits increase as antimony prices increase due to the percentage payability for antimony concentrates vs, stable costs for secondary processing. In addition, secondary antimony processing would largely eliminate any risk related to gold lost to antimony concentrates during flotation, since most of such gold could be recovered from leach residues after secondary antimony processing.	Secondary antimony processing would allow a significant portion of antimony products to be produced in the USA, reduce US reliance on offshore suppliers, as well as improve terms for payable metal. Additionally, in the current flow sheet, antimony flotation is performed prior to gold flotation and the antimony concentrate is shipped offsite for further processing. As a result, any gold lost to the antimony flotation circuit is also shipped offsite, resulting in the loss of gold or reduced payability. Secondary antimony processing at a nearby plant could allow the gold lost in the concentrate to be fed back into the POX Circuit, post-antimony processing, to recover some of the gold lost to the antimony concentrate.
PO12	Potential definition of antimony as a critical mineral	S.1113 Critical Minerals Policy Act and HR 4402 Critical Minerals Bill are not expected to become law during the current Administration. However, similar legislation is expected to be reintroduced in 2015. Such bills are intended to improve permitting predictability and timelines.	Passage of such legislation could reduce the timeline for environmental assessment and permit acquisition for eventual development
PO13	Open pit slope steepening	The open pit slope designs for the PFS were based off of a PFS-level field and laboratory test program; however, based on existing pit slopes at the site, there is some indication that slopes could be steepened, subject to the results of additional geotechnical drilling and analyses.	An increase in overall pit slopes has the potential to add gold to the in-pit tonnage as Mineral Resources below the current Mineral Reserve pits could come in to the Mineral Reserve pit and/or reduce the overall strip ratio and waste tonnage mined.
PO14	Onsite quicklime generation	The Project area has known limestone occurrences that may be suitable for developing quicklime that could be used in mineral processing.	Quicklime is the highest Project reagent cost at over $16M annual average OPEX LOM; the PFS was developed assuming that quicklime would be purchased and trucked into the site. The ability to make the quicklime on site could significantly reduce quicklime costs and significantly reduce the Project OPEX.
PO15	Preowned Equipment	If available at the time of construction decision, some major capital equipment components may be available as pre-owned items suitable for the Project, with some modifications to the equipment and/or Project.	If acquired on favorable terms, could reduce capital costs and lead times.

	Opportunity	Explanation	Potential Benefit
PO16	Alternative funding for off-site infrastructure	Government funding programs such as the Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grant program, provides a unique opportunity for the DOT to invest in road, rail, transit and port projects that promise to achieve critical national objectives. Since 2009, Congress has dedicated more than $4.1 billion to fund projects that have a significant impact on the Nation, a region or a metropolitan area. Similarly, P3 (public-private partnerships) have been used for infrastructure development when the benefits extend to the broader community.	Alternative funding could move costs out of CAPEX and/or OPEX.
Project Specific Opportunities with Low Potential Benefit			
PO17	Tungsten contribution	The YP open pit was mined in the early 1940s for its tungsten; the pit was the largest single source of tungsten for the WWII Allied war effort. Tungsten content remaining in the YP and HF deposits is unknown due to limited assay data and highly variable distribution.	The addition of a tungsten component to the overall value of the Project cannot be quantified until Mineral Resources are defined or production commences and sufficient tungsten is identified in the production stream, but there remains a possibility that tungsten could contribute to the Project economics on an incremental basis.
PO18	Conversion of additional legacy waste materials to ore	There are several million tons of historical waste stored at Yellow Pine and West End and on the Hecla heap that limited data suggests some may be above cut-off grade, which can only be determined through additional drilling. This material is currently treated as waste and therefore a cost center in the PFS.	If sufficient tonnage and grade is defined, this material could be reprocessed, generating additional revenues and reducing strip ratios.
PO19	Antimony credit in open pit optimization	The contribution of antimony sales was not taken into account for the open pit optimization work; only gold values were used. The inclusion of antimony revenue would lower the gold equivalent cut-off grade and likely increase the mineable portion of the Mineral Resource.	The Project economics and life may be enhanced with the inclusion of antimony revenue in the open pit optimization.

SECTION 26 TABLE OF CONTENTS

SECTION 26 LIST OF TABLES

26 RECOMMENDATIONS

Based on the results of this Preliminary Feasibility Study, it is recommended that the Project move forward to the next phase. A detailed list of recommendations and work programs has been developed, including estimated costs, that would move the Project through to completion of a Feasibility Study (FS) and, if warranted, through the regulatory process for mine development. Total estimated cost for completion of this phase is $22.3 million. An additional $22.5 million is identified as discretionary expenditures that would target certain opportunities identified in Section 25 that could enhance the PFS case but that are not required to complete a FS or for permitting. The estimates have been factored on the basis of some success in each of these areas; were poor results to be received early in the evaluation of the opportunity, discretionary expenditures for this activity would be significantly less than indicated, while exceptional success or exceptional results in a particular area of activity could require higher expenditures than indicated. In addition, it is not likely that all discretionary activities would be undertaken in the timeframe leading up to the completion of the FS; some, such as drilling the CN assay areas at West End, may wait for some time post-production due to the current schedule for their extraction in the LOM plan unless gold prices warrant an expedited approach.

The detailed recommendations have been grouped into logical discipline categories including:

- Mineral Resource evaluation and exploration;
- Field programs required for FS;
- Metallurgical testing required for FS;
- Project optimization and FS engineering; and
- Environmental, regulatory affairs and compliance.

Some recommendations are fundamental to moving the Project forward, whereas other items are discretionary. Table 26.1 summarizes the recommendations and work programs, and separates the costs associated with the work program into core and discretionary categories.

Table 26.1: Project Recommendations, Work Program and Budget

Recommendations and Work Program		Unit	Quantity	Estimated Costs ($000s)	
				Core	Discretionary
Mineral Resource Evaluation and Exploration					
R1	Further replacement and/or confirmation of pre-Midas Gold drilling, especially at Yellow Pine, to improve confidence, continuity, and potentially grade/contained metal, especially for Sb.	feet of drilling	16,400	3,600	-
R2	Selective, high-value drilling that targets converting in-pit Inferred Mineral Resource to Mineral Reserves, increasing grade and/or reducing strip ratio in all pits.	feet of drilling	18,000	-	3,600
R3	Selective, high value drilling targeting near-pit opportunities for additional Mineral Reserves, especially at Yellow Pine.	feet of drilling	10,000	-	2,000
R4	Selective testing of in-pit unclassified material for potential additional Mineral Reserves and lower strip ratio for all pits, but especially at Hangar Flats west of the MCFZ.	feet of drilling	10,000	-	2,000
R5	Additional drilling at West End to determine total gold, in areas where only AuCN assay data is available, for potential higher grades, additional Mineral Reserves and/or lower strip ratio.	feet of drilling	13,800	-	3,000
R6	Definition of small tonnage, high grade Mineral Resources at Garnet, Upper Midnight, and Scout for potential high margin mill feed that could supplement early production.	feet of drilling	30,000	-	6,600

	Recommendations and Work Program	Unit	Quantity	Estimated Costs ($000s)	
				Core	Discretionary
R7	Continued exploration including mapping, geochemical sampling, and potentially drilling geared toward defining additional Mineral Resources.	feet of drilling	16,400	-	4,000
R8	Increase geologic understanding and control at known deposits to improve Mineral Resource interpretation and geo-metallurgy.	each	1	100	-
Field Programs Required for FS					
R9	Geotechnical drilling and testing at HF and WE to support the FS open pit designs (some overlap with Mineral Resource expansion drilling), potentially increasing pit slopes, increasing Mineral Reserves as pits deepen into below pit Mineral Reserves and reducing strip ratios.	feet of drilling	6,000	1,000	-
R10	Penetration testing within TSF dam footprint to support the FS engineering design.	each	1	100	-
R11	Shallow sampling of alluvium via test pits or hand-held augur drilling in TSF footprint to characterize liner bedding and borrow materials.	each	1	100	-
R12	Shallow sampling of alluvium via test pits or hand-held augur drilling and bedrock to define concrete aggregate borrow sources.	each	1	100	-
R13	Geotechnical drilling at process plant and truck shop areas for FS foundation designs.	feet of drilling	3,000	500	-
R14	Installation of large-diameter well and pumping test near HF open pit to support FS water supply and HF open pit dewatering system designs, and for closure-related pit lake modeling.	each	1	100	-
Metallurgical Testing Required for FS					
R15	Additional metallurgical testing to optimize grinding, recoveries, reagent consumption and other operating parameters.	each	1	800	300
R16	Complete additional testing of secondary antimony processing to determine if circuit should be included in FS.	each	1	200	500
R17	Complete gold flotation and pressure oxidation pilot plant to better define operating parameters, reagent consumptions, metallurgical recoveries and environmental performance parameters.	each	1	1,300	500
R18	Complete additional metallurgical testing to improve understanding of, and potentially optimize, silver recoveries.	each	1	100	-
Feasibility-Level Engineering					
R19	Complete a multi-discipline, Project-wide enterprise optimization study using cost and technical information developed for the PFS to develop a roadmap for the FS.	each	1	500	-
R20	Concurrent to permitting, complete feasibility-level engineering and design based on additional information gathered post-PFS.	each	1	3,000	-
Environmental, Regulatory Affairs and Compliance					
R21	Advance environmental and closure-related technical studies based on additional field and laboratory information generated.	each	1	700	-
R22	Continue baseline data collection, environmental compliance and reclamation.	each	1	3,900	-
R23	Continue to advance regulatory process including Plan of Operations, Federal EIS under NEPA, and Federal and State permits.	each	1	6,200	-
Totals				**22,300**	**22,500**

27 REFERENCES

Albert, T. E. (1997). *Stibnite Project Report of Bottle Leach Tests. Reno, NV*: Kappes, Cassiday & Associates.

Bennett, E. H., and Knowles, C. R. (1985). Tertiary plutons and related rocks in central Idaho, in McIntyre, D. H., editor, *Symposium on the geology and mineral deposits of the Challis 1 x 2 degree quadrangle, Idaho*: U. S. Geological Survey Bulletin 1658, p. 81-95.

Blake, C. (2012). *A Mineralogical Description of Four Composite Samples from the Golden Meadows Project, Idaho.* Kenn, UK: Process Mineralogical Consulting.

Brackebusch, F. W. (1987). *Hecla Mining Company Yellow Pine Sulfide Project Pre-Feasibility Study.* Kellogg, ID: Mine Systems Design.

British Geological Survey. (2012). *Risk List 2012.* September 2012.

Britton, J. W. (1978). *Stibnite Project - Roasting Tests on Arsenical Gold Concentrate.* White Rock, BC: Britton Research Ltd.

Broughton, L. M. (1987). *West End Sulphide Ore Exploratory Metallurgical Testwork.* North Vancouver, BC: Coastech Research, Inc.

Canadian Institute of Mining, Metallurgy, and Petroleum (CIM). CIM Definition Standards for Mineral Resources and Mineral Reserves. May 10, 2014.

Canadian Securities Administrators' National Instrument 43-101, Standards of Disclosure for Mineral Projects, and its related Companion Policy 43-101CP and Form 43-101F1 for Technical Reports, effective June 30, 2011.

China Minmetals Corporation (2013). *Review and Preview of Global Antimony Market.* Presentation, April 2013.

CIM Council. (2014). *CIM Definition Standards for Mineral Resources and Mineral Reserves*, Retrieved from http://web.cim.org

Confidential Report. (2014). *Marketing report prepared for Midas Gold.* August 2014.

Cookro, T. M., Silberman, M.L. and Berger, B.R. (1987). Gold-Tungsten-Bearing Hydrothermal Deposits in the Yellow Pine Mining District, Idaho; in *Bulk Mineable Precious Metal Deposits of the Western United States*; Geological Society of Nevada Symposium Proceedings, p. 577-624.

Cookro, T.M. (1989). *A model for the development of the hydrothermal mineralization at the Yellow Pine Mine in central Idaho.* Geological Society of America Abstracts With Programs, v. 21, no. 5, p. 69.

Cooper, J. R. (1944). *Tungsten, antimony, and gold deposits near Stibnite, Yellow Pine Mining District, Valley County, Idaho*. U.S. Geological Survey Open File report no. 43-9.

Cooper, J.R. (1951), *Geology of the tungsten, antimony and gold deposits near Stibnite, Idaho*. U.S. Geological Survey Bulletin 969-F, pp. 151-197.

Currier, L.W. (1935). *A preliminary report on the geology and ore deposits of the eastern part of the Yellow Pine district, Idaho*. Idaho Bureau of Mines and Geology Pamphlet No. 43, 27p.

Ekren, E. B. (1985) Eocene cauldron-related volcanic events in the Challis quadrangle, in McIntyre, D. H., editor, *Symposium on the geology and mineral deposits of the Challis 1 x 2 degree quadrangle, Idaho.* U.S. Geological Survey Bulletin 1658, p. 43-58.

European Commission. (2014). *Critical raw materials for the EU, Report of the Ad hoc Working Group on defining critical raw materials.* European Commission Enterprise and Industry. May 2014.

Fisher, F.S., McIntyre, D.H., and Johnson, K.M. (1992). *Geologic Map of the Challis 1°x2° Quadrangle, Idaho.* U.S. Geological Survey Miscellaneous Investigations Series Map I-1819, Denver, CO: U.S. Geological Survey,.

Gajo, M. (2014a). *CAVM 50146-002 Final Report - Part 1 - Master Composites (Draft).* Burnaby, BC: SGS Minerals Services.

Gajo, M. (2014b). *CAVM 50146-002 Final Report - Part 2 - Variability Composites (Draft).* Burnaby, BC: SGS Minerals Services.

Gajo, M. (2014c). *CAVM 50146-002 Final Report - Part 3 - Auxiliary Studies (Draft).* Burnaby, BC: SGS Minerals Services.

Gillerman, V.S., Isakson, V.H., Schmitz, M.D., Benowitz, J., Layer, P.W. (2014). *Geochronology of Intrusive Rocks and Hydrothermal Alteration at the Structurally Controlled Stibnite Au-Sb-W Deposit, Idaho*. Geological Society of America, Abstracts with Programs. Vol. 46, No. 6, p. 165.

Gladkovas, M. (2014). *CALR 13880-004 - Antimony EW and Spent Leach Results Summary (Memo).* Lakefield, ON: SGS Minerals Services.

Hackl, R. (1987). *Results of Bioleach Tests on the Stibnite Ore and Concentrate - Progress Report #1.* Burnaby, BC: Giant Bay Resources Ltd.

Harrington, J. G., Bartlett, R. W., & Prisbrey, K. A. (1993). *Kinetics of Bio-Oxidation of Coarse Refractory Gold Ores.* Moscow, ID: University of Idaho.

Hart, A.A. (1979). *A historical summary and cultural resource study of Yellow Pine, Stibnite, and Cinnabar, Valley County, Idaho*. Stibnite mining project: Idaho State Historical Society manuscript, 23 p.

Huttl, J. B. (1952). Yellow Pine is Expanding its Output of Strategic Metals. *Engineering and Mining Journal, v. 153, no. 5*, p. 72-77.

IDL. (2011). *Communications & Research*. December 29, 2011. Idaho Department of Labor

IDL. (2012). *Idaho Wages Lost Ground to National Wages in 2012.* Idaho Department of Labor.

IDL. (2013). *Percentage of Idaho's Minimum Wage Workers in 2012 Tops Nation.* Idaho Department of Labor.

IDWR. (2014). *Idaho Department of Water Resources, Water Right Report*. Water Right No.: 77-7122, 77-7141, 77-7285, 77-7293.

International Cyanide Management Institute (2002). *International Cyanide Management Code for the manufacture, transport, and use of cyanide in the production of gold*. May 2002.

Jackman, I. (1993). *LR 4389 - An Investigation into the Recovery of Gold from Yellow Pine Deposit Samples.* Lakefield, ON: Lakefield Research.

Jackman, I. (2014a). *CALR 13880-003 An Investigation into the Recovery of Gold from Golden Meadows Yellow Pine Samples.* Lakefield, ON: SGS Minerals Services.

Jackman, I. (2014b). *CALR 13880-001 Report #1 - An Investigation into the Recovery of Gold From Golden Meadows Concentrate Samples.* Lakefield, ON: SGS Minerals Services.

Kleinkopf, M. D. (1998). *Aeromagnetic and gravity studies of Payette National Forest, Idaho*. U.S. Geologic Survey, Open report 98-219 D

Lang, J.R., Baker, T., Hart, C.J.R. and Mortensen, J.K. (2000). *An exploration model for intrusion-related gold-systems*: SEG Newsletter, No. 40, p. 6-15.

Larsen, E.S., and Livingston, D.C. (1920). *Geology of the Yellow Pine Cinnabar-Mining District, Idaho*. U.S. Geological Survey Bulletin 750-E.

Leonard, B.F. (1973). *Gold anomaly in soil of the West End Creek area, Yellow Pine district, Valley County, Idaho*. U.S. Geological Survey Circular 680, 16 p.

Leonard, B.F., and Marvin, R.F. (1982). Temporal evolution of the Thunder Mountain caldera and related fractures, central Idaho, in Bonnichsen, Bill, and Breckenridge, R.M., eds., *Cenozoic geology of Idaho: Idaho Bureau of Mines and Geology Bulletin* 26, p. 23-41.

Lewis, C.F., and Lewis, R.D. (1982). *Fossil evidence for Ordovician age roof pendants previously considered as Precambrian in the Idaho batholith.* Geological Society of America Abstracts with Programs, v. 14, no. 5, p. 265.

Lewis, R. (2002). *Digital Atlas of Idaho – Valley County*. Idaho Geologic Survey.

Lewis, R., Link, P., Stanford, L., Long, S. (2012). *State of Idaho Geologic Map, Idaho.* Idaho Geological Survey ISBN 978-1-55765-118-1.

Lewis, R.D. (1984). *Geochemical Investigation of the Yellow Pine, Idaho and Republic, Washington mining districts*: Purdue University Ph.D. Dissertation. p. 204.

Lewis, R.S., Stewart, D.E., Stewart, E.D., Isakson, V., Schwartz, D., and Vervoort, J.D. (2014). *Mesoproterozoic (?) to Paleozoic Strata in the Stibnite-Edwardsburg Area, Central Idaho.* Geological Society of America, Abstracts with Programs. Vol. 46, No. 5, p. 80.

Lund, K. (1999). *Metamorphic rocks of central Idaho: A progress report*: Proceedings of Belt Symposium III, Montana Bureau of Mines and Geology.

Lund, K., Aleinikoff, J., Evans, K.V., and Fanning, C. M. (2003). *SHRIMP U-Pb geochronology of neoproterozoic Windermere Supergroup, Central Idaho: Implications for rifting of western laurentia and synchroneity of Sturtian glacial deposits.* GSA Bulletin, v. 115, no. 3, pp. 349-372.

Lund, K., and Snee, L.W. (1988). Metamorphism, structural development, and age of the continent-island arc juncture in west-central Idaho. in Ernst, W.G., editor, *Metamorphism and Crustal Evolution of the Western United States*, Rubey Colloquium Series vol. 7. Prentice Hall.

Lupu, C., & Gladkovas, M. (2014). *CALR 13880-001 Part #2 - The Recovery of Antimony from Golden Meadows Stibnite Concentrate.* Lakefield, ON: SGS Minerals Services.

Manduca, C.A., Kuntz, M.A. and Silver, L.T. (1993). *Emplacement and deformation history of the western margin of the Idaho batholith near McCall, Idaho: Influence of a major terrane boundary*. Geological Society of America Bulletin. Vol 105, no. 6, p. 749-765.

Martin, C., Palko, A. (2011a). *Midas Gold - Hangar Flats Gold Deportment Study*. Parksville, BC: Blue Coast Metallurgy.

Martin, C., Palko, A. (2011b). *Midas Gold – West End Gold Deportment Study*. Parksville, BC: Blue Coast Metallurgy.

Masters, I. (2012). *Golden Meadows Project Process Development Studies Bench Scale Pressure Oxidation Test Work.* Ft. Saskatchewan, AB: Dynatec Technologies.

McCarley, R. (2013). *CALR 14129-001 Final Report - The Recovery of Gold from the Historic Golden Meadows Tailings Deposit.* Lakefield, ON: SGS Minerals Services.

McClelland, G. E. (2012). *Report on Preliminary Treatment of Golden Meadows POX Residue Samples/Composites.* Sparks, NV: McClelland Laboratories, Inc.

McKinstry, H. (1948). *Mining Geology;* Prentice Hall, p. 92-96.

Millennium Science & Engineering Inc. (2011), *2011 Phase I Environmental Site Assessment*. Boise, ID: Millennium Science & Engineering Inc.

Millennium Science & Engineering, Inc. (2011), *2011 Phase II Environmental Site Assessment*. Boise, ID: Millennium Science & Engineering Inc.

Miller, S., Robertson, A., and Donohue, T. (1997). Advances in Acid Drainage Prediction Using the Net Acid Generation (NAG) Test. p. 535-549. In *Proceedings of the 4th International Conference on Acid Rock Drainage* (Vancouver, May 31-June 6, 1997), vol II.

Mitchell, V. E. (2000). *History of the Stibnite Mining Area, Valley County, Idaho.* Moscow, ID: University of Idaho. Idaho Geological Survey Special Report, 166 p.

Mitchell, V. E. (1995). *History of the Stibnite Mining Area, Valley County, Idaho.* Moscow, ID: University of Idaho. Idaho Geological Survey Special Report.

Olivier, J. W. (2014). *Preliminary Economic Assessment of Capital and Operating Costs for the Golden Meadows BIOX Plant (Draft).* Johannesburg, SA: Biomin South Africa Pty Ltd.

Palko, A. (2012). *Midas Gold – Yellow Pine Gold Deportment Study*. Parksville, BC: Blue Coast Metallurgy.

Parrish, I.S. (1997). *Geologist's Gordian Knot: To Cut Or Not To Cut*; Mining Engineering, vol. 49, p 45-49.

Peele, R. (1950). *Mining Engineer's Handbook* (Vol. 2), p. 10-42 – 10-43.

Peterson, S. (2014). *An economic impact analysis of the proposed Midas Gold, Inc. Golden Meadows Gold Mine Technical Report Update*.

Pettingill, J., Davis, B., & Roy, A. (2013). *Thermal Treatment of Sb Concentrate.* Kingston, ON: Kingston Process Metallurgy Inc.

Piccoli, P.M., Hyndman, D.W. (1985). *Magnetite/ilmenite boundary in the western Atlanta lobe of the Idaho batholith*. Northwest Geology, v.14.

Pincock, Allen, and Holt. (2003). *Yellow Pine Project Idaho, USA Technical Report: Prepared for Vista Gold Corp*: Lakewood, CO: November 17, 2003.

Pincock, Allen, and Holt. (2006). *NI 43-101 Technical Report, Preliminary Assessment of the Yellow Pine Project, Yellow Pine, Idaho. Prepared for Vista Gold Corp.* Lakewood, CO: December 13, 2006.

Ratnayake, S. (2013a). *CAVM 50146-001 Final Report - Part A - Comminution.* Vancouver, BC: SGS Minerals Services.

Ratnayake, S. (2013b). *CAVM 50146-001 Final Report - Part B - Master Composites.* Vancouver, BC: SGS Minerals Services.

Ratnayake, S. (2013c). *CAVM 50146-001 Final Report - Part C - Variability Testing.* Vancouver, BC: SGS Minerals Services.

Rollwagen, D. W. (1987). *LR 3306 - An Investigation of the Recovery of Gold from Core Samples.* Lakefield, ON: Lakefield Research.

Roskill. (2012). *Antimony: Global Industry Markets & Outlook (11th Edition)*. September 2012.

Schrader, F.C., and C.P. Ross. (1926). *Antimony and quicksilver deposits in the Yellow Pine district, Idaho.* U.S. Geological Survey Bulletin 780-D, pp. 137-167.

Sherritt Gordon Mines Limited. (1983). *Stibnite Gold Project Process Development Phases I, II and III.* Ft. Saskatchewan, AB: Sherritt Gordon Mines Limited.

Smitherman, J.R. (1985). *Geology of the Stibnite roof pendant, Valley County, Idaho.* University of Idaho M.S. thesis, p. 62.

SRK. (2011). *NI 43-101 Technical Report on Mineral Resources, Golden Meadows Project, Valley County, Idaho*. Lakewood, CO: June 6, 2011. SRK Consulting.

SRK. (2012). *Preliminary Economic Assessment Technical Report for the Golden Meadows Project, Idaho.* Vancouver: BC. September 21, 2012. SRK Consulting (Canada), Inc.

Strata, A Professional Services Corporation. (2014). *Preliminary Feasibility Study Slope Designs for Three Proposed Open Pits at the Golden Meadows Project in the Stibnite Mining District, Valley County, Idaho.* Strata, A Professional Services Corporation. February 14, 2014.

Strayer IV, L.M., Hyndman, D.W., Sears, J.W., and Myers, P.E. (1989). *Direction and shear sense during suturing of the Seven Devils/Wallowa terrane.* Western Idaho: Geology, Vol. 17.

Tri-Star Resources. (2012). *An Antimony Primer.* Tri-Star Resources.

U.S. Forest Service. (2011a). *U.S. Forest Service Handbook (FSH 7709.56)*. July 13, 2011.

U.S. Forest Service. (2011b). *Cost Estimating Guide for Road Construction.* February 2011.

URS. (2000a). *Stibnite Area Site Characterization Report*: Volume 1. Prepared for: The Stibnite Area Site Characterization Voluntary Consent Order Respondents. Denver, CO: URS Corporation.

URS. (2000b). *Stibnite Area Risk Evaluation:* Prepared for: The Stibnite Area Site Characterization Voluntary Consent Order Respondents. Denver, CO: URS Corporation.

US Department of Defense. (2013). *Strategic and Critical Materials 2013 Report on Stockpile Requirements.* Office of the Under Secretary of Defense for Acquisition, Technology and Logistics. January 2013.

US Geological Survey. (2006). *Minerals Yearbook – Antimony.* Volume I.

US Geological Survey. (2012). *Open File Report 2013-1184 US Minerals Dependence*. December 2012.

US Geological Survey. (2013). *Mineral Yearbook 2012.* October 2013.

US Geological Survey. (2014a). *Mineral Commodity Summary – Antimony.* March 2014.

US Geological Survey. (2014b). *Antimony Statistics 1900-2012*. April 2014

Valley County [Idaho]. (2008). *Minimum Standards for Public Road Design and Construction.* April 16, 2008.

Visual Capitalist Infographic. (2012). *Antimony.* December 2012. Retrieved from http://www.visualcapitalist.com/antimony-fireproof-and-supply-critical/

Waite, R. G. (1996). *To Idaho's Klondike: The Thunder Mountain Gold Rush, 1901-1909*. Journal of the West 35.

White, D.E. (1940). *Antimony deposits of a part of the Yellow Pine district, Valley County, Idaho: a preliminary report.* U.S. Geological Survey Bulletin 922-I, pp. 247-279.

APPENDIX I: PREFEASIBILITY STUDY CONTRIBUTORS AND PROFESSIONAL QUALIFICATIONS

CERTIFICATE of QUALIFIED PERSON

I, Conrad E. Huss, P.E., Ph.D., do hereby certify that:

1. I am Senior Vice President and Chairman of the Board of:

   M3 Engineering & Technology Corporation
   2051 W. Sunset Rd., Suite 101
   Tucson, Arizona 85704

2. I graduated with a Bachelor's of Science in Mathematics and a Bachelor's of Art in English from the University of Illinois in 1963. I graduated with a Master's of Science in Engineering Mechanics from the University of Arizona in 1968. In addition, I earned a Doctor of Philosophy in Engineering Mechanics from the University of Arizona in 1970.

3. I am a Professional Engineer in good standing in the State of Arizona in the areas of Civil (No. 9648) and Structural (No. 9733) engineering. I am also registered as a professional engineer in the States of California, Illinois, Maine, Minnesota, Missouri, Montana, New Mexico, Oklahoma, Texas, Utah, and Wyoming.

4. I have worked as an engineer for a total of forty-three years. My experience as an engineer includes over *36* years designing and managing mine development and expansion projects including material handling, reclamation, water treatment, base metal and precious metal process plants, industrial minerals, smelters, special structures, and audits.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6. I am responsible for Sections 1, 2, 3, 4, 5, 6 18.3, 18.4.2, 18.6, 18.7 18.8, 19, 21.1, 21.2.2, 22, 23, 24, 25, 26 and 27 of the technical report titled "Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho", dated effective December 8, 2014; prepared for Midas Gold Corporation.

7. I have not visited the Stibnite Gold project site.

8. I have not had prior involvement with the property that is the subject of the Technical Report.

9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make the report not misleading.

10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 15th day of December, 2014.

(Signed) (Sealed) *"Conrad E. Huss"*
Signature of Qualified Person

Conrad E. Huss, P.E., Ph.D.
Print Name of Qualified Person

CERTIFICATE of QUALIFIED PERSON

I, Garth Kirkham, P.Geo, do hereby certify that:

I am currently employed as a Consulting Geoscientist and Principal for:

Kirkham Geosystems Ltd.
6331 Palace Place
Burnaby, BC, Canada V5E 1Z6

2. I am a graduate of the University of Alberta in 1983 with a BSc. I have continuously practiced my profession since 1988. I have worked on and been involved with NI43-101 studies on the Kutcho, Adi Nefas, Debarwa, Tahuehueto, Demir deposits.

3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).

4. I have read the definition of “qualified person” set out in National instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

5. I am responsible for Sections 7, 8, 9, 10, 11, 12, and 14 of the technical report titled “Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho”, dated effective December 8, 2014.

6. I have not had prior involvement with the property that is the subject of the Technical Report.

7. I have visited the Stibnite Gold property on April 23-25, 2014 and July 14-15, 2014.

8. As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make the report not misleading.

9. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 15th day of December, 2014.

(Signed) (Sealed) *“Garth Kirkham”*
Signature of Qualified Person

Garth Kirkham
Print Name of Qualified Person

CERTIFICATE of QUALIFIED PERSON

I, Christopher Martin, MIMMM, C.Eng. do hereby certify that:

1. I am currently employed as Principal Metallurgist by Blue Coast Metallurgy, Ltd, 1020 Herring Gull Way, Parksville, BC V9P 1R2

2. I hold degrees in Mineral Processing Technology from Camborne School of Mines (BSc(Hons)) (1984) and Metallurgical Engineering from McGill University (1988).

3. I am a full professional member of the Institute of Minerals, Materials, and Mining, in good standing since 1990.

4. I have practiced my profession in plant operations, in flowsheet development, plant design and optimization since 1984.

5. I have read the definition of "qualified person" set out in National instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for Section 13 of the technical report titled "Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho", dated effective December 8, 2014.

7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. I have visited the Stibnite Gold property on August 25, 2011 for one day.

9. As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make the report not misleading.

10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 15th day of December, 2014.

(Signed) (Sealed) *"Christopher Martin"*
Signature of Qualified Person

Christopher Martin
Print Name of Qualified Person

CERTIFICATE of QUALIFIED PERSON

I, John M. Marek P.E. do hereby certify that:

a) I am currently employed as the President and a Senior Mining Engineer by:

Independent Mining Consultants, Inc.
3560 E. Gas Road
Tucson, Arizona, USA 85714

b) This certificate is part of the report titled "Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho", with an effective date of 15 December 2014.

c) I graduated with the following degrees from the Colorado School of Mines
Bachelors of Science, Mineral Engineering – Physics 1974
Masters of Science, Mining Engineering 1976

I am a Registered Professional Mining Engineer in the State of Arizona USA
Registration # 12772

I am a Registered Professional Engineer in the State of Colorado USA
Registration # 16191

I am a Registered Member of the American Institute of Mining and Metallurgical Engineers, Society of Mining Engineers

I have worked as a mining engineer, geoscientist, and reserve estimation specialist for more than 37 years. I have managed drill programs, overseen sampling programs, and interpreted geologic occurrences in both precious metals and base metals for numerous projects over that time frame. My advanced training at the university included geostatistics and I have built upon that initial training as a resource modeler and reserve estimation specialist in base and precious metals for my entire career. I have acted as the Qualified Person on these topics for numerous Technical Reports.

My work experience includes mine planning, equipment selection, mine cost estimation and mine feasibility studies for base and precious metals projects world wide for over 37 years. I have experience with the overall management, review, and assembly of feasibility studies.

d) I last visited the Stibnite Gold project site on 17 September 2013. One day was spent reviewing geology and operating conditions at site.

e) I am responsible for the following sections of the report titled titled "Stibnite Gold Project, Prefeasibility Technical Report, Valley County, Idaho", with an effective date of 15 December 2014: 15, 16, 21.1.2, and 21.2.3. I contributed to the Section 1 Summary.

f) I am independent of Midas Gold Corp. applying the tests in Section 1.5 of National Instrument 43-101.

g) Independent Mining Consultants, Inc. and John Marek have not worked on the Stibnite Gold Project previous to this report.

h) I have read National Instrument 43-101 and Form 43-101F1, and to my knowledge, the Technical Report has been prepared in compliance with that instrument and form.

i) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated: December 15, 2014.

(Signed) (Sealed) *"John M. Marek"*
Signature of Qualified Person, Registered Member of the American Institute of Mining and Metallurgical Engineers, Society of Mining Engineers

John M. Marek
Print Name of Qualified Person

CERTIFICATE of QUALIFIED PERSON

I, Allen R. Anderson P.E., do hereby certify that:

1. I am currently employed as President of Allen R. Anderson Metallurgical Engineer Inc. located at:
11050 E. Ft. Lowell Rd.
Tucson AZ, 85749

2. I am a graduate of South Dakota School of Mines and Technology, May 1977, and hold Bachelor of Science degree in Metallurgical Engineering.

3. I am a Registered Professional Engineer – Mining in the State of Arizona in good standing. Registration # 50635.

4. I have been employed in the mining industry for thirty-seven years. I worked for mining and exploration companies including DUVAL and Battle Mountain Gold for twenty years and for engineering companies including The Winters Company, Jacobs Engineering and KD Engineering for seven years. I have been working as an independent consultant for the last ten years.

5. I have read the definition of "qualified person" set out in National instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for Section 17 of the technical report titled "Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho", dated effective December 8, 2014 (the "Technical Report").

7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. I have not visited the Stibnite Gold property.

9. As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make the report not misleading.

10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

11. I have read National Instrument 43-101; and Form 43-101F1 and the Technical Report. Technical Report has been prepared in compliance with that instrument and form.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 15th day of December, 2014.

(Signed) (Sealed) *"Allen R. Anderson"*
Signature of Qualified Person

Allen R. Anderson
Print name of Qualified Person

CERTIFICATE of QUALIFIED PERSON

I, Richard C. Kinder, P.E., do hereby certify that:

1. I am currently employed as an Engineer and Project Manager by:

   HDR Engineering, Inc.
   412 E. Parkcenter Blvd., Suite 100
   Boise, Idaho 83706-6659

2. I was awarded the degree of Bachelor of Science in Civil Engineering from Washington State University in 1984.
3. I am a Registered Professional Engineer in good standing in the State of Idaho (#7277)
4. I have practiced engineering and project management for the past 29 years in civil engineering and construction administration of transportation projects across the United States for several construction and engineering firms.
5. I have read the definition of "qualified person" set out in National instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am responsible for Section 18.2 of the technical report titled "Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho", dated effective December 8, 2014 (the "Technical Report").
7. I have not had prior involvement with the property that is the subject of the Technical Report.
8. I visited the Stibnite Gold property and surrounding area on several occasions from September 2011 through October 2012 for the purpose of conducting an analysis for alternative access to the property to support the Technical Report. The last site trip was conducted on October 12, 2012 for duration of approximately 4 hours to explore the Burntlog Alternative access route. I also coordinated with Midas Gold thereafter on issues related to the alternative access roads.
9. As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make the report not misleading.
10. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
11. I have read National Instrument 43-101, Form 43-101F1, and the Technical Report. The Section 18.2 has been prepared in compliance with that instrument and form.
12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 15th day of December, 2014.

(Signed) (Sealed) *"Richard C. Kinder"*
Signature of Qualified Person

Richard C. Kinder
Print name of Qualified Person

CERTIFICATE of QUALIFIED PERSON

I, Peter E. Kowalewski P.E., do hereby certify that:

1. I am currently employed as a Principal Engineer by Tierra Group International, Ltd. ("Tierra Group") with an office at 111 East Broadway, Suite 220, Salt Lake City, Utah, U.S.A.

2. I am a graduate of the Colorado School of Mines in 1992 and 1997 with B.Sc. (Geological Engineering) and **M.E.** (Applied Mechanics) degrees, respectively. I have practiced my profession continuously since graduation in 1992, focusing on the civil, geotechnical, hydrologic, and hydraulic design of facilities primarily for the mining industry. My primary focus has been on the design, permitting, construction, operation, and closure of mine waste containment facilities such as tailings impoundments, heap leach facilities, waste rock storage facilities, and appurtenant structures such as ponds and channels.

3. I am a Licensed Professional Engineer **(P.E.)** (Civil) in multiple States, including the State of Idaho (Idaho License #15289). In addition, I am a Registered Member of the Society for Mining, Metallurgy, and Exploration, Inc. (SME) (Member #4055322RM).

4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.

5. I am responsible for Sections 18.9, 18.10, 18.11, 18.12, 20 of the technical report titled "Stibnite Gold Project, Prefeasibility Study Technical Report, Valley County, Idaho", dated effective December 8, 2014.

6. I have not had prior involvement with the property that is the subject of the Technical Report.

7. I visited the Stibnite Gold property on March 7, 2013.

8. As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make the report not misleading.

9. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 15th day of December, 2014.

(Signed) (Sealed) *"Peter E. Kowalewski"*
Signature of Qualified Person

Peter E. Kowalewski
Print name of Qualified Person

APPENDIX II: PROPERTY DESCRIPTION AND LOCATION

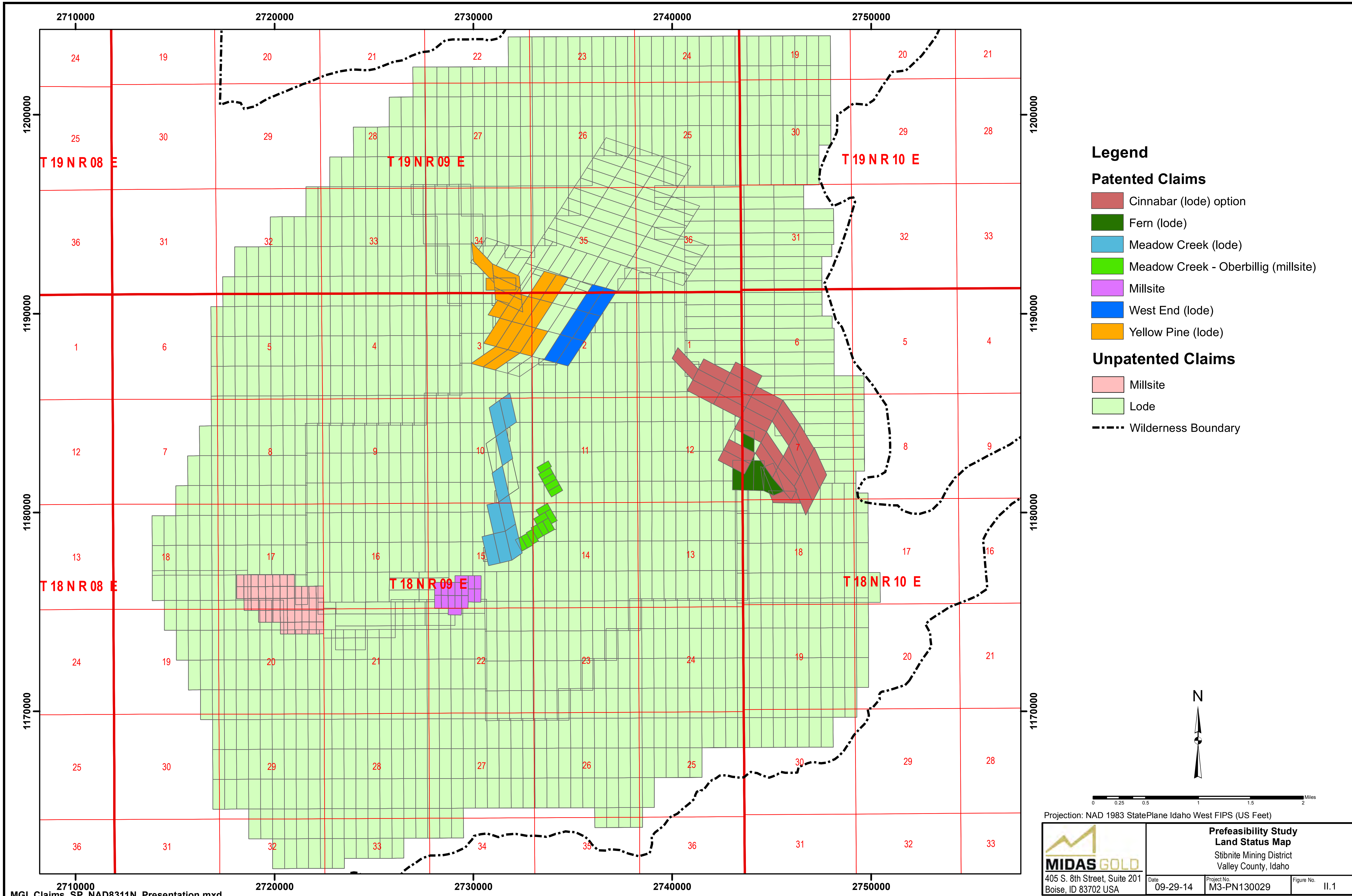

Legend
Patented Claims
Cinnabar (lode) option
Fern (lode)
Meadow Creek (lode)
Meadow Creek - Oberbillig (millsite)
Millsite
West End (lode)
Yellow Pine (lode)
Unpatented Claims
Millsite
Lode
Wilderness Boundary
T 19 N R 08 E
T 19 N R 09 E
T 19 N R 10 E
T 18 N R 08 E
T 18 N R 09 E
T 18 N R 10 E
2710000
2720000
2730000
2740000
2750000
1200000
1190000
1180000
1170000
N
Miles
Projection: NAD 1983 StatePlane Idaho West FIPS (US Feet)
MIDAS GOLD
405 S. 8th Street, Suite 201
Boise, ID 83702 USA
Prefeasibility Study
Land Status Map
Stibnite Mining District
Valley County, Idaho
Date
09-29-14
Project No.
M3-PN130029
Figure No.
II.1
MGI_Claims_SP_NAD8311N_Presentation.mxd

Table II.1: Mineral Concession Summary[8]

PATENTED CLAIMS						
Acquisition	Claim Group	Number of Claims		Acres	Hectares	Property Tax 2013
		Lode	Millsite			
2009 Bradley[1,7]	Meadow Creek	9	--	184.4	74.6	$135.70
2009 JJO[2]	Meadow Creek – Oberbillig[6]	--	14	68.5	27.7	$825.06
	Millsite	--	16	80.5	32.6	$58.86
	West End	6	--	123.9	50.2	$95.60
2011 Yellow Pine[3]	Yellow Pine	17	--	300.7	121.7	$220.78
2011 Fern[4]	Fern	6	--	99.7	40.4	$73.50
2011 Cinnabar[5]	Cinnabar	27	--	484.8	196.2	$355.96
	Totals	**65**	**30**	**1,342.6**	**543.3**	**$1,765.46**
UNPATENTED CLAIMS						
Acquisition	Claim Group	Number of Claims		Acres	Hectares	BLM Claims Fees
		Lode	Millsite			
2009 acquisition	Unpatented	183	46			$32,060
2009 staked	Unpatented	238	--			$33,320
2011 Yellow Pine[3]	Unpatented	8	--			$1,120
2011 staked	Unpatented	921	--			$128,940
2012 staked	Unpatented	1	--			$140
	Totals	**1,351**	**46**	**25,761.5**	**10,425.3**	**$195,580**

Notes:
1. *Acquired by 3/31/2008 Option to Purchase from Bradley Mining Co., warranty deed 6/11/2009.*
2. *Acquired from JJO, LLC via 6/2/2009 Promissory Note, matures 6/2/2015 (balance remaining $40,000).*
3. *Acquired from Bradley Mining Company via 11/7/2003 Option to Purchase, warranty deed 11/28/2012.*
4. *Acquired from Stephens, warranty deed 4/28/2011.*
5. *Acquired from JJO, LLC via 5/1/2011 Option to Purchase, five annual extensions expire 5/1/17 (balance remaining $300,000).*
6. *Hecla Mining Co. retains surface estate on portion of claims MS #1 through MS #6.*
7. *5% NSR royalty right acquired via Promissory Note, matures 6/2/15 (balance remaining $160,000).*
8. *The entire Golden Meadows property (excluding the Cinnabar group) is subject to the May 9, 2013 1.7% NSR precious metals royalty held Franco-Nevada.*

Table II.2: Mineral Concession Summary – Patented Claims

Count	Claim Name	Claim Type	Mine Survey No.	Date Patented	Patent No.	Section, Township, Range	PIN[1]	Owner[2]	Date Acquired
Meadow Creek - Oberbillig[4]									
1	MS 1	Millsite	3655	09/27/1990	11900097	15-18N-9E	RP18N09E115495	MGI[3]	04/28/2009
2	MS 2	Millsite	3655	09/27/1990	11900097	14,15-18N-9E	RP18N09E115495	MGI[3]	04/29/2009
3	MS 3	Millsite	3655	09/27/1990	11900097	14,15-18N-9E	RP18N09E115495	MGI[3]	04/30/2009
4	MS 4	Millsite	3655	09/27/1990	11900097	14,15-18N-9E	RP18N09E115495	MGI[3]	05/01/2009
5	MS 5	Millsite	3655	09/27/1990	11900097	14-18N-9E	RP18N09E115495	MGI[3]	05/02/2009
6	MS 6	Millsite	3655	09/27/1990	11900097	14-18N-9E	RP18N09E115495	MGI[3]	05/03/2009
7	MS 7	Millsite	3655	09/27/1990	11900097	14-18N-9E	RP18N09E115495	MGI	05/04/2009
8	MS 8	Millsite	3655	09/27/1990	11900097	14-18N-9E	RP18N09E115495	MGI	05/05/2009
9	MS 9	Millsite	3655	09/27/1990	11900097	14-18N-9E	RP18N09E115495	MGI	05/06/2009
10	MS 13	Millsite	3655	09/27/1990	11900097	11-18N-9E	RP18N09E115495	MGI	05/07/2009
11	MS 14	Millsite	3655	09/27/1990	11900097	11-18N-9E	RP18N09E115495	MGI	05/08/2009
12	MS 15	Millsite	3655	09/27/1990	11900097	11-18N-9E	RP18N09E115495	MGI	05/09/2009
13	MS 16	Millsite	3655	09/27/1990	11900097	11-18N-9E	RP18N09E115495	MGI	05/10/2009
14	MS 17	Millsite	3655	09/27/1990	11900097	11-18N-9E	RP18N09E115495	MGI	05/11/2009
Meadow Creek[5]									
15	Meadow Creek No. 3	Lode	3039	02/19/1926	974550	15-18N-9E	RP18N09E108995	MGIAC	05/12/2009
16	Meadow Creek No. 4	Lode	3039	02/19/1926	974550	15-18N-9E	RP18N09E108995	MGIAC	05/13/2009
17	Meadow Creek No. 2	Lode	3039	02/19/1926	974550	15-18N-9E	RP18N09E108995	MGIAC	05/14/2009
18	Meadow Creek No. 1	Lode	3039	02/19/1926	974550	15-18N-9E	RP18N09E108995	MGIAC	05/15/2009
19	Meadow Creek No. 5	Lode	3039	02/19/1926	974550	15-18N-9E	RP18N09E108995	MGIAC	05/16/2009
20	Monday No. 6	Lode	3397	01/25/1946	1120542	10-18N-9E	RP18N09E038995	MGIAC	05/17/2009
21	Meadow Creek No. 8	Lode	3397	01/25/1946	1120542	10,15-18N-9E	RP18N09E038995	MGIAC	05/18/2009
22	Monday No. 2	Lode	3397	01/25/1946	1120542	10-18N-9E	RP18N09E038995	MGIAC	05/19/2009
23	Monday No. 3	Lode	3397	01/25/1946	1120542	10-18N-9E	RP18N09E038995	MGIAC	05/20/2009
West End[4]									
24	MW 9	Lode	3645	12/15/1989	11900012	2-18N-9E	RP18N09E020026	MGI	05/21/2009

Count	Claim Name	Claim Type	Mine Survey No.	Date Patented	Patent No.	Section, Township, Range	PIN[1]	Owner[2]	Date Acquired
25	MW 13	Lode	3645	02/25/1987	11870032	2-18N-9E	RP18N09E020026	MGI	05/22/2009
26	MW 22	Lode	3645	02/25/1987	11870032	2-18N-9E	RP18N09E020026	MGI	05/23/2009
27	MW 8	Lode	3645	12/15/1989	11900012	2-18N-9E	RP18N09E020026	MGI	05/24/2009
28	MW 12	Lode	3645	02/25/1987	11870032	2-18N-9E; 35-19N-9E	RP18N09E020026	MGI	05/25/2009
29	MW 23	Lode	3645	02/25/1987	11870032	2-18N-9E; 35-19N-9E	RP18N09E020026	MGI	05/26/2009
Millsite[4]									
30	MS 36	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	05/27/2009
31	MS 51	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	05/28/2009
32	MS 52	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	05/29/2009
33	MS 53	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	05/30/2009
34	MS 28	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	05/31/2009
35	MS 35	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/01/2009
36	MS 37	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/02/2009
37	MS 38	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/03/2009
38	MS 39	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/04/2009
39	MS 42	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/05/2009
40	MS 43	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/06/2009
41	MS 44	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/07/2009
42	MS 45	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/08/2009
43	MS 46	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/09/2009
44	MS 47	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/10/2009
45	MS 48	Millsite	No Survey	09/27/1990	11900098	15,22-18N-9E	RP18N09E155300	MGI	06/11/2009
Fern[6]									
47	Spruce Grove	Lode	3030	11/04/1926	988370	12-18N-9E	RP18N09E127345	MGIAC	04/28/2011
48	Fern	Lode	3030	11/04/1926	988370	7-18N-10E	RP18N09E127345	MGIAC	04/28/2011
49	Fern No. 2	Lode	3030	11/04/1926	988370	7-18N-10E	RP18N09E127345	MGIAC	04/28/2011
50	Fern No. 4	Lode	3030	11/04/1926	988370	7-18N-10E	RP18N09E127345	MGIAC	04/28/2011
51	Bucks Bed No. 1	Lode	3030	11/04/1926	988370	7-18N-10E	RP18N09E127345	MGIAC	04/28/2011

Count	Claim Name	Claim Type	Mine Survey No.	Date Patented	Patent No.	Section, Township, Range	PIN[1]	Owner[2]	Date Acquired
52	Bucks Bed	Lode	3030	11/04/1926	988370	7-18N-10E	RP18N09E127345	MGIAC	04/28/2011
Cinnabar[7]									
53	Hermes	Lode	3038	06/02/1927	1003392	1,12-18N-9E; 6,7-18N-10E	RP18N09E018435	JJO	option
54	Annie Sell	Lode	3038	06/02/1927	1003392	7-18N-10E	RP18N09E018435	JJO	option
55	Pretty Maid	Lode	3038	06/02/1927	1003392	1-18N-9E	RP18N09E018435	JJO	option
56	West End	Lode	3395	07/15/1946	1121067	1-18N-9E	RP18N09E013840	JJO	option
57	Liberty	Lode	3395	07/15/1946	1121067	1,12-18N-9E	RP18N09E013840	JJO	option
58	Liberty No. 1	Lode	3395	07/15/1946	1121067	1,12-18N-9E; 7-18N-10E	RP18N09E013840	JJO	option
59	U.S.A.	Lode	3395	07/15/1946	1121067	12-18N-9E; 7-18N-10E	RP18N09E013840	JJO	option
60	Vermillion Ext. No. 2	Lode	3395	07/15/1946	1121067	7-18N-10E; 12-18N-9E	RP18N09E013840	JJO	option
61	Golden Gate No. 4	Lode	3038	06/02/1927	1003392	7-18N-10E	RP18N09E018435	JJO	option
62	Vermillion Ext. No. 1	Lode	3038	06/02/1927	1003392	7-18N-10E	RP18N10E071525	JJO	option
63	Vermillion	Lode	3038	06/02/1927	1003392	7,18-18N-10E	RP18N10E071525	JJO	option
64	Monumental No. 1	Lode	3396	11/01/1944	1119154	1-18N-9E	RP18N09E018150	JJO	option
65	Monumental No. 2	Lode	3396	11/01/1944	1119154	1-18N-9E; 6,7-18N-10E	RP18N09E018150	JJO	option
66	C 12	Lode	3396	11/01/1944	1119154	6-18N-10E; 1-18N-9E	RP18N09E018150	JJO	option
67	Monumental No. 3	Lode	3396	11/01/1944	1119154	6,7-18N-10E	RP18N09E018150	JJO	option
68	Monumental No. 4	Lode	3396	11/01/1944	1119154	7-18N-10E	RP18N09E018150	JJO	option
69	Monumental No. 5	Lode	3396	11/01/1944	1119154	7-18N-10E	RP18N09E018150	JJO	option
70	Monumental No. 6	Lode	3396	11/01/1944	1119154	7-18N-10E	RP18N09E018150	JJO	option
71	White Metal No. 1	Lode	3395	07/15/1946	1121067	7-18N-10E	RP18N09E122155	JJO	option
72	Vermillion Ext. No. 3	Lode	3395	07/15/1946	1121067	7-18N-10E	RP18N09E013840	JJO	option
73	White Metal No. 2	Lode	3395	07/15/1946	1121067	7-18N-10E	RP18N09E122155	JJO	option
74	Flyer	Lode	3395	07/15/1946	1121067	7-18N-10E; 18-18N-10E	RP18N09E122155	JJO	option
75	White Metal	Lode	3395	07/15/1946	1121067	7-18N-10E	RP18N09E013840	JJO	option
76	White Metal No. 3	Lode	3395	07/15/1946	1121067	7-18N-10E	RP18N09E122155	JJO	option
46	White Metal No. 4	Lode	3395	07/15/1946	1121067	7,18-18N-10E	RP18N09E122155	JJO	option
77	White Metal No. 6	Lode	3395	07/15/1946	1121067	12-18N-9E; 7-18N-10E	RP18N09E122155	JJO	option

Count	Claim Name	Claim Type	Mine Survey No.	Date Patented	Patent No.	Section, Township, Range	PIN[1]	Owner[2]	Date Acquired
78	Mountain Belle Frac.	Lode	3395	07/15/1946	1121067	7-18N-10E; 12-18N-9E	RP18N09E013840	JJO	option
Yellow Pine[8]									
79	Hennessy No. 6	Lode	3357	06/18/1941	1111588	2,3-18N-9E	RP18N09E030005	IGR	04/28/2009
80	Homestake No. 5	Lode	3357	06/18/1941	1111588	2,3-18N-9E	RP18N09E030005	IGR	04/28/2009
81	Hennessy No. 2	Lode	3357	06/18/1941	1111588	3-18N-9E	RP18N09E030005	IGR	04/28/2009
82	Hennessy Lode No. 4	Lode	3357	06/18/1941	1111588	3-18N-9E	RP18N09E030005	IGR	04/28/2009
83	Hennessy No. 3	Lode	3357	06/18/1941	1111588	3-18N-9E	RP18N09E030005	IGR	04/28/2009
84	Hennessy No. 5	Lode	3357	06/18/1941	1111588	3-18N-9E	RP18N09E030005	IGR	04/28/2009
85	Homestake No. 1	Lode	3357	06/18/1941	1111588	2,3-18N-9E	RP18N09E030005	IGR	04/28/2009
86	Hennessy No. 1	Lode	3357	06/18/1941	1111588	2,3-18N-9E	RP18N09E030005	IGR	04/28/2009
87	Hennessy Lode No. 7	Lode	3357	06/18/1941	1111588	3-18N-9E	RP18N09E030005	IGR	04/28/2009
88	Homestake No. 2	Lode	3357	06/18/1941	1111588	2,3-18N-9E; 35-19N-9E	RP18N09E030005	IGR	04/28/2009
89	Homestake	Lode	3357	06/18/1941	1111588	2,3-18N-9E; 35-19N-9E	RP18N09E030005	IGR	04/28/2009
90	A No. 1	Lode	3246	05/12/1933	1064103	3-18N-9E	RP18N09E030020	IGR	04/28/2009
91	Fair Deal No. 3	Lode	3246	05/12/1933	1064103	3-18N-9E; 34-19N-9E	RP18N09E030020	IGR	04/28/2009
92	Fair Deal No. 2	Lode	3246	05/12/1933	1064103	34-19N-9E	RP18N09E030020	IGR	04/28/2009
93	Fair Deal No. 1	Lode	3246	05/12/1933	1064103	34-19N-9E	RP18N09E030020	IGR	04/28/2009
94	Fair Deal No. 4	Lode	3246	05/12/1933	1064103	34-19N-9E	RP18N09E030020	IGR	04/28/2009
95	Camp Bird No. 2	Lode	3246	05/12/1933	1064103	34-19N-9E	RP18N09E030020	IGR	04/28/2009

Notes:
1. *PIN = Valley County Parcel Identification Number.*
2. *MGI = Midas Gold, Inc., MGIAC = MGI Acquisition Corp., IGR = Idaho Gold Resources LLC, JJO = J.J. Oberbillig Estate.*
3. *Split estate - MGI owns mineral rights, Hecla Mining Co. owns surface on a portion of these six claims.*
4. *Part of Oberbillig claim group included in MGI purchase from JJO, LLC, closed escrow June 2, 2009.*
5. *Meadow Creek claim group acquired from Bradley Mining Co. via Mar. 31, 2008 Option to Purchase, warranty deed June 11, 2009.*
6. *Fern claim group acquired from Stevens, warranty deed April 28, 2011.*
7. *Cinnabar group included in MGI Acquisition Corporation Option to Purchase from JJO, LLC dated May 1, 2011, five annual extensions that expire May 1, 2017.*
8. *Yellow Pine claim group acquired from Bradley Mining Co. via Nov. 7, 2003 Option to Purchase, closed escrow Nov. 29, 2012.*

Table II.3: Mineral Concession Summary – Unpatented Claims

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1	SFMS 1	190070	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312095	1
2	SFMS 2	190071	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312096	2
3	SFMS 3	190072	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312097	3
4	SFMS 4	190073	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312098	4
5	SFMS 5	190074	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312099	5
6	SFMS 6	190075	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312100	6
7	SFMS 7	190076	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312101	7
8	SFMS 8	190077	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312102	8
9	SFMS 9	190078	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312103	9
10	SFMS 10	190079	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312104	10
11	SFMS 11	190080	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312105	11
12	SFMS 12	190081	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312106	12
13	SFMS 13	190082	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312107	13
14	SFMS 14	190083	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312108	14
15	SFMS 15	190084	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312109	15
16	SFMS 16	190085	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312110	16
17	SFMS 17	190086	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312111	17
18	SFMS 18	190087	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312112	18
19	SFMS 19	190088	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312113	19
20	SFMS 20	190089	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312114	20
21	SFMS 21	190090	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312115	21
22	SFMS 22	190091	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312116	22
23	SFMS 23	190092	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312117	23
24	SFMS 24	190093	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312118	24
25	SFMS 25	190094	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312119	25
26	SFMS 26	190095	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312120	26
27	SFMS 27	190096	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312121	27

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
28	SFMS 28	190097	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312122	28
29	SFMS 29	190098	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312123	29
30	SFMS 30	190099	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312124	30
31	SFMS 31	190100	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312125	31
32	SFMS 32	190101	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312126	32
33	SFMS 33	190102	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312127	33
34	SFMS 34	190103	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312128	34
35	SFMS 35	190104	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312129	35
36	SFMS 36	190105	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312130	36
37	SFMS 37	190106	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312131	37
38	SFMS 38	190107	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312132	38
39	SFMS 39	190108	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312133	39
40	SFMS 40	190109	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312134	40
41	SFMS 41	190110	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312135	41
42	SFMS 42	190111	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312154	42
43	SFMS 43	190112	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312155	43
44	SFMS 44	190113	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312156	44
45	SFMS 45	190114	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312157	45
46	SFMS 46	190115	Millsite	MGI	07/27/2006	Niagara	08/14/2006	312158	46
47	SF 1	189924	Lode	MGI	05/24/2006	Niagara	08/10/2006	311895	47
48	SF 2	189925	Lode	MGI	05/24/2006	Niagara	08/10/2006	311896	48
49	SF 3	189926	Lode	MGI	05/24/2006	Niagara	08/10/2006	311897	49
50	SF 4	189927	Lode	MGI	05/24/2006	Niagara	08/10/2006	311898	50
51	SF 5	189928	Lode	MGI	05/24/2006	Niagara	08/10/2006	311899	51
52	SF 6	189929	Lode	MGI	05/24/2006	Niagara	08/10/2006	311990	52
53	SF 7	189930	Lode	MGI	05/24/2006	Niagara	08/10/2006	311901	53
54	SF 8	189931	Lode	MGI	05/24/2006	Niagara	08/10/2006	311902	54
55	SF 9	189932	Lode	MGI	05/24/2006	Niagara	08/10/2006	311903	55

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
56	SF 10	189933	Lode	MGI	05/24/2006	Niagara	08/10/2006	311904	56
57	SF 11	189934	Lode	MGI	05/24/2006	Niagara	08/10/2006	311905	57
58	SF 12	189935	Lode	MGI	05/24/2006	Niagara	08/10/2006	311906	58
59	SF 13	189936	Lode	MGI	05/24/2006	Niagara	08/10/2006	311907	59
60	SF 14	189937	Lode	MGI	05/24/2006	Niagara	08/10/2006	311911	60
61	SF 15	189938	Lode	MGI	05/24/2006	Niagara	08/10/2006	311912	61
62	SF 16	189939	Lode	MGI	05/24/2006	Niagara	08/10/2006	311913	62
63	SF 17	189940	Lode	MGI	05/24/2006	Niagara	08/10/2006	311914	63
64	SF 18	189941	Lode	MGI	05/24/2006	Niagara	08/10/2006	311915	64
65	SF 19	189942	Lode	MGI	05/24/2006	Niagara	08/10/2006	311916	65
66	SF 20	189943	Lode	MGI	05/24/2006	Niagara	08/10/2006	311917	66
67	SF 21	189944	Lode	MGI	05/24/2006	Niagara	08/10/2006	311918	67
68	SF 22	189945	Lode	MGI	05/24/2006	Niagara	08/10/2006	311919	68
69	SF 23	189946	Lode	MGI	05/24/2006	Niagara	08/10/2006	311920	69
70	SF 24	189947	Lode	MGI	05/24/2006	Niagara	08/10/2006	311921	70
71	SF 25	189948	Lode	MGI	05/24/2006	Niagara	08/10/2006	311922	71
72	SF 26	189949	Lode	MGI	05/24/2006	Niagara	08/10/2006	311923	72
73	SF 27	189950	Lode	MGI	05/24/2006	Niagara	08/10/2006	311924	73
74	SF 28	189951	Lode	MGI	05/24/2006	Niagara	08/10/2006	311925	74
75	SF 29	189952	Lode	MGI	05/24/2006	Niagara	08/10/2006	311926	75
76	SF 30	189953	Lode	MGI	05/24/2006	Niagara	08/10/2006	311927	76
77	SF 31	189954	Lode	MGI	05/24/2006	Niagara	08/11/2006	311949	77
78	SF 32	189955	Lode	MGI	05/24/2006	Niagara	08/11/2006	311950	78
79	SF 33	189956	Lode	MGI	05/24/2006	Niagara	08/11/2006	311951	79
80	SF 34	189957	Lode	MGI	05/24/2006	Niagara	08/11/2006	311952	80
81	SF 35	189958	Lode	MGI	05/24/2006	Niagara	08/11/2006	311953	81
82	SF 36	189959	Lode	MGI	05/24/2006	Niagara	08/11/2006	311954	82
83	SF 37	189960	Lode	MGI	05/24/2006	Niagara	08/11/2006	311955	83

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
84	SF 38	189961	Lode	MGI	05/24/2006	Niagara	08/11/2006	311956	84
85	SF 39	189962	Lode	MGI	05/24/2006	Niagara	08/11/2006	311957	85
86	SF 40	189963	Lode	MGI	05/24/2006	Niagara	08/11/2006	311958	86
87	SF 41	189964	Lode	MGI	05/24/2006	Niagara	08/11/2006	311959	87
88	SF 42	189965	Lode	MGI	05/24/2006	Niagara	08/11/2006	311960	88
89	SF 43	189966	Lode	MGI	05/24/2006	Niagara	08/11/2006	311961	89
90	SF 44	189967	Lode	MGI	05/24/2006	Niagara	08/11/2006	311962	90
91	SF 45	189968	Lode	MGI	05/24/2006	Niagara	08/11/2006	311963	91
92	SF 46	189969	Lode	MGI	05/24/2006	Niagara	08/11/2006	311964	92
93	SF 47	189970	Lode	MGI	05/24/2006	Niagara	08/11/2006	311965	93
94	SF 48	189971	Lode	MGI	05/24/2006	Niagara	08/11/2006	311966	94
95	SF 49	189972	Lode	MGI	05/24/2006	Niagara	08/11/2006	311967	95
96	SF 50	189973	Lode	MGI	05/24/2006	Niagara	08/11/2006	311968	96
97	SF 52	189974	Lode	MGI	05/24/2006	Niagara	08/11/2006	311969	97
98	SF 53	189975	Lode	MGI	05/24/2006	Niagara	08/11/2006	311970	98
99	SF 54	189976	Lode	MGI	05/24/2006	Niagara	08/11/2006	311971	99
100	SF 55	189977	Lode	MGI	05/24/2006	Niagara	08/11/2006	311972	100
101	SF 56	189978	Lode	MGI	05/24/2006	Niagara	08/11/2006	311973	101
102	SF 57	189979	Lode	MGI	05/24/2006	Niagara	08/11/2006	311974	102
103	SF 58	189980	Lode	MGI	05/24/2006	Niagara	08/11/2006	311975	103
104	SF 59	189981	Lode	MGI	05/24/2006	Niagara	08/11/2006	311976	104
105	SF 61	189982	Lode	MGI	05/24/2006	Niagara	08/11/2006	311977	105
106	SF 62	189983	Lode	MGI	05/24/2006	Niagara	08/11/2006	311978	106
107	SF 63	199733	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347151	107
108	SF 64	199734	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347152	108
109	SF 65	189986	Lode	MGI	05/24/2006	Niagara	08/11/2006	311981	109
110	SF 66	189987	Lode	MGI	05/24/2006	Niagara	08/11/2006	311982	110
111	SF 67	189988	Lode	MGI	05/24/2006	Niagara	08/11/2006	311983	111

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
112	SF 68	189989	Lode	MGI	05/24/2006	Niagara	08/11/2006	312022	112
113	SF 69	189990	Lode	MGI	05/24/2006	Niagara	08/11/2006	312023	113
114	SF 70	189991	Lode	MGI	05/24/2006	Niagara	08/11/2006	312024	114
115	SF 71	199735	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347153	115
116	SF 72	199736	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347154	116
117	SF 73	189994	Lode	MGI	05/24/2006	Niagara	08/11/2006	312027	117
118	SF 74	189995	Lode	MGI	05/24/2006	Niagara	08/11/2006	312028	118
119	SF 75	189996	Lode	MGI	05/24/2006	Niagara	08/11/2006	312029	119
120	SF 76	189997	Lode	MGI	05/24/2006	Niagara	08/11/2006	312030	120
121	SF 77	189998	Lode	MGI	05/24/2006	Niagara	08/11/2006	312031	121
122	SF 78	189999	Lode	MGI	05/24/2006	Niagara	08/11/2006	312032	122
123	SF 79	190000	Lode	MGI	05/24/2006	Niagara	08/11/2006	312033	123
124	SF 80	190001	Lode	MGI	05/24/2006	Niagara	08/11/2006	312034	124
125	SF 81	190002	Lode	MGI	05/24/2006	Niagara	08/11/2006	312035	125
126	SF 82	190003	Lode	MGI	05/24/2006	Niagara	08/11/2006	312036	126
127	SF 83	190004	Lode	MGI	05/24/2006	Niagara	08/11/2006	312037	127
128	SF 84	190005	Lode	MGI	05/24/2006	Niagara	08/11/2006	312038	128
129	SF 85	190006	Lode	MGI	05/24/2006	Niagara	08/11/2006	312039	129
130	SF 86	190007	Lode	MGI	05/24/2006	Niagara	08/11/2006	312040	130
131	SF 87	190008	Lode	MGI	05/24/2006	Niagara	08/11/2006	312041	131
132	SF 88	190009	Lode	MGI	05/24/2006	Niagara	08/11/2006	312042	132
133	SF 89	190010	Lode	MGI	05/24/2006	Niagara	08/11/2006	312043	133
134	SF 90	190011	Lode	MGI	05/24/2006	Niagara	08/11/2006	312044	134
135	SF 91	190012	Lode	MGI	05/24/2006	Niagara	08/11/2006	312048	135
136	SF 92	190013	Lode	MGI	05/24/2006	Niagara	08/11/2006	312049	136
137	SF 93	190014	Lode	MGI	05/24/2006	Niagara	08/11/2006	312050	137
138	SF 94	190015	Lode	MGI	05/24/2006	Niagara	08/11/2006	312051	138
139	SF 95	190016	Lode	MGI	05/24/2006	Niagara	08/11/2006	312061	139

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
140	SF 96	190017	Lode	MGI	05/24/2006	Niagara	08/11/2006	312062	140
141	SF 97	190018	Lode	MGI	05/24/2006	Niagara	08/11/2006	312063	141
142	SF 98	190019	Lode	MGI	05/24/2006	Niagara	08/11/2006	312064	142
143	SF 99	190020	Lode	MGI	05/24/2006	Niagara	08/11/2006	312065	143
144	SF 100	190021	Lode	MGI	05/24/2006	Niagara	08/11/2006	312066	144
145	SF 101	199737	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347155	145
146	SF 102	190023	Lode	MGI	05/24/2006	Niagara	08/11/2006	312068	146
147	SF 103	190024	Lode	MGI	05/24/2006	Niagara	08/11/2006	312069	147
148	SF 104	190025	Lode	MGI	05/24/2006	Niagara	08/11/2006	312070	148
149	SF 105	190026	Lode	MGI	05/24/2006	Niagara	08/11/2006	312071	149
150	SF 106	190027	Lode	MGI	05/24/2006	Niagara	08/11/2006	312072	150
151	SF 107	190028	Lode	MGI	05/24/2006	Niagara	08/11/2006	312073	151
152	SF 108	190029	Lode	MGI	05/24/2006	Niagara	08/11/2006	312074	152
153	SF 109	190030	Lode	MGI	05/24/2006	Niagara	08/11/2006	312075	153
154	SF 110	190031	Lode	MGI	05/24/2006	Niagara	08/11/2006	312076	154
155	SF 111	190032	Lode	MGI	05/24/2006	Niagara	08/11/2006	312077	155
156	SF 112	190033	Lode	MGI	05/24/2006	Niagara	08/11/2006	312078	156
157	SF 113	190034	Lode	MGI	05/24/2006	Niagara	08/11/2006	312079	157
158	SF 114	190035	Lode	MGI	05/24/2006	Niagara	08/11/2006	312080	158
159	SF 115	190036	Lode	MGI	05/24/2006	Niagara	08/11/2006	312081	159
160	SF 116	190037	Lode	MGI	05/24/2006	Niagara	08/11/2006	312082	160
161	SF 117	190038	Lode	MGI	05/24/2006	Niagara	08/11/2006	312083	161
162	SF 118	190039	Lode	MGI	05/24/2006	Niagara	08/11/2006	312084	162
163	SF 125	199736	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347156	163
164	SF 126	190041	Lode	MGI	05/24/2006	Niagara	08/11/2006	312086	164
165	SF 127	190042	Lode	MGI	05/24/2006	Niagara	08/11/2006	312087	165
166	SF 128	190043	Lode	MGI	05/24/2006	Niagara	08/11/2006	312088	166
167	SF 129	190044	Lode	MGI	05/24/2006	Niagara	08/11/2006	312089	167

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
168	SF 130	190045	Lode	MGI	05/24/2006	Niagara	08/11/2006	312090	168
169	SF 131	199739	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347157	169
170	SF 132	190047	Lode	MGI	07/27/2006	Niagara	08/11/2006	312072	170
171	SF 133	194738	Lode	MGI	12/11/2007	Niagara	03/03/2008	329605	171
172	SF 134	194739	Lode	MGI	12/11/2007	Niagara	03/03/2008	329606	172
173	SF 135	194740	Lode	MGI	12/11/2007	Niagara	03/03/2008	329607	173
174	SF 136	194741	Lode	MGI	12/11/2007	Niagara	03/03/2008	329608	174
175	SF 137	194742	Lode	MGI	12/11/2007	Niagara	03/03/2008	329609	175
176	SF 138	194743	Lode	MGI	12/11/2007	Niagara	03/03/2008	329610	176
177	SF 139	194744	Lode	MGI	12/11/2007	Niagara	03/03/2008	329611	177
178	SF 140	194745	Lode	MGI	12/11/2007	Niagara	03/03/2008	329612	178
179	SF 141	194746	Lode	MGI	12/11/2007	Niagara	03/03/2008	329613	179
180	SF 142	194747	Lode	MGI	12/11/2007	Niagara	03/03/2008	329614	180
181	SF 143	194748	Lode	MGI	12/11/2007	Niagara	03/03/2008	329615	181
182	SF 144	194749	Lode	MGI	12/11/2007	Niagara	03/03/2008	329616	182
183	SF 145	194750	Lode	MGI	12/11/2007	Niagara	03/03/2008	329617	183
184	SF 146	194751	Lode	MGI	12/11/2007	Niagara	03/03/2008	329618	184
185	SF 147	194752	Lode	MGI	12/11/2007	Niagara	03/03/2008	329619	185
186	SF 148	194753	Lode	MGI	12/11/2007	Niagara	03/03/2008	329620	186
187	SF 149	194754	Lode	MGI	12/11/2007	Niagara	03/03/2008	329621	187
188	SF 150	194755	Lode	MGI	12/11/2007	Niagara	03/03/2008	329622	188
189	SF 151	194756	Lode	MGI	12/11/2007	Niagara	03/03/2008	329623	189
190	SF 152	194757	Lode	MGI	12/11/2007	Niagara	03/03/2008	329624	190
191	SF 153	194758	Lode	MGI	12/11/2007	Niagara	03/03/2008	329625	191
192	SF 154	194759	Lode	MGI	12/11/2007	Niagara	03/03/2008	329626	192
193	SF 155	194760	Lode	MGI	12/11/2007	Niagara	03/03/2008	329627	193
194	SF 156	194761	Lode	MGI	12/11/2007	Niagara	03/03/2008	329628	194
195	SF 157	194762	Lode	MGI	12/11/2007	Niagara	03/03/2008	329629	195

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
196	SF 158	194763	Lode	MGI	12/11/2007	Niagara	03/03/2008	329630	196
197	SF 159	194764	Lode	MGI	12/11/2007	Niagara	03/03/2008	329631	197
198	SF 160	194765	Lode	MGI	12/11/2007	Niagara	03/03/2008	329632	198
199	SF 161	194766	Lode	MGI	12/11/2007	Niagara	03/03/2008	329633	199
200	SF 162	194767	Lode	MGI	12/11/2007	Niagara	03/03/2008	329634	200
201	SF 163	194768	Lode	MGI	12/11/2007	Niagara	03/03/2008	329635	201
202	SF 164	194769	Lode	MGI	12/11/2007	Niagara	03/03/2008	329636	202
203	SF 165	194770	Lode	MGI	12/11/2007	Niagara	03/03/2008	329637	203
204	SF 166	194771	Lode	MGI	12/11/2007	Niagara	03/03/2008	329638	204
205	SF 167	194772	Lode	MGI	12/11/2007	Niagara	03/03/2008	329639	205
206	SF 168	194773	Lode	MGI	12/11/2007	Niagara	03/03/2008	329640	206
207	SF 169	194774	Lode	MGI	12/11/2007	Niagara	03/03/2008	329641	207
208	SF 170	194775	Lode	MGI	12/11/2007	Niagara	03/03/2008	329642	208
209	SF 171	194776	Lode	MGI	12/11/2007	Niagara	03/03/2008	329643	209
210	SF 172	194777	Lode	MGI	12/11/2007	Niagara	03/03/2008	329644	210
211	SF 173	194778	Lode	MGI	12/11/2007	Niagara	03/03/2008	329645	211
212	SF 174	194779	Lode	MGI	12/11/2007	Niagara	03/03/2008	329646	212
213	SF 175	194780	Lode	MGI	12/11/2007	Niagara	03/03/2008	329647	213
214	SF 176	194781	Lode	MGI	12/11/2007	Niagara	03/03/2008	329648	214
215	SF 177	194782	Lode	MGI	12/11/2007	Niagara	03/03/2008	329649	215
216	SF 178	194783	Lode	MGI	12/11/2007	Niagara	03/03/2008	329650	216
217	SF 179	194784	Lode	MGI	12/11/2007	Niagara	03/03/2008	329651	217
218	SF 180	194785	Lode	MGI	12/11/2007	Niagara	03/03/2008	329652	218
219	SF 181	194786	Lode	MGI	12/11/2007	Niagara	03/03/2008	329653	219
220	SF 182	194787	Lode	MGI	12/11/2007	Niagara	03/03/2008	329654	220
221	SF 183	194788	Lode	MGI	12/11/2007	Niagara	03/03/2008	329655	221
222	SF 184	194789	Lode	MGI	12/11/2007	Niagara	03/03/2008	329656	222
223	SF 185	194790	Lode	MGI	12/11/2007	Niagara	03/03/2008	329657	223

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
224	SF 186	194791	Lode	MGI	12/11/2007	Niagara	03/03/2008	329658	224
225	SF 187	194792	Lode	MGI	12/11/2007	Niagara	03/03/2008	329659	225
226	SF 188	194793	Lode	MGI	12/11/2007	Niagara	03/03/2008	329660	226
227	SF 189	194794	Lode	MGI	12/11/2007	Niagara	03/03/2008	329661	227
228	SF 190	194795	Lode	MGI	12/11/2007	Niagara	03/03/2008	329662	228
229	SF 191	194796	Lode	MGI	12/11/2007	Niagara	03/03/2008	329663	229
230	SF 192	199740	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347158	230
231	SF 193	199741	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347159	231
232	SF 194	199742	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347160	232
233	SF 195	199743	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347161	233
234	SF 196	199744	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347162	234
235	SF 197	199745	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347164	235
236	SF 198	199746	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347163	236
237	SF 199	199747	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347165	237
238	SF 200	199748	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347166	238
239	SF 201	199749	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347167	239
240	SF 202	199750	Lode	MGI	09/17/2009	MGIAC	11/13/2009	347168	240
241	SF 203	199751	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347169	241
242	SF 204	199752	Lode	MGI	09/16/2009	MGIAC	11/13/2009	347170	242
243	SF 205	199753	Lode	MGI	09/18/2009	MGIAC	11/13/2009	347171	243
244	SF 206	199754	Lode	MGI	09/18/2009	MGIAC	11/13/2009	347172	244
245	SF 207	199755	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347173	245
246	SF 208	199756	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347174	246
247	SF 209	199757	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347175	247
248	SF 210	199758	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347176	248
249	SF 211	199759	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347177	249
250	SF 212	199760	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347178	250
251	SF 213	199761	Lode	MGI	09/18/2009	MGIAC	11/13/2009	347179	251

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
252	SF 214	199762	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347180	252
253	SF 215	199763	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347186	253
254	SF 216	199764	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347187	254
255	SF 217	199765	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347188	255
256	SF 218	199766	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347189	256
257	SF 219	199767	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347190	257
258	SF 220	199768	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347194	258
259	SF 221	199769	Lode	MGI	09/19/2009	MGIAC	11/13/2009	347195	259
260	SF 222	199770	Lode	MGI	09/18/2009	MGIAC	11/13/2009	347196	260
261	SF 223	200326	Lode	MGI	01/12/2001	MGI	02/16/2010	349501	261
262	SF 224	200327	Lode	MGI	01/12/2001	MGI	02/16/2010	349497	262
263	SF 225	200328	Lode	MGI	01/12/2001	MGI	02/16/2010	349500	263
264	SF 226	200329	Lode	MGI	01/12/2001	MGI	02/16/2010	349502	264
265	SF 227	200330	Lode	MGI	01/12/2001	MGI	02/16/2010	349503	265
266	SF 228	200331	Lode	MGI	01/12/2001	MGI	02/16/2010	349504	266
267	SF 229	200332	Lode	MGI	01/12/2001	MGI	02/16/2010	349505	267
268	SF 230	200333	Lode	MGI	01/12/2001	MGI	02/16/2010	349506	268
269	SF 231	200334	Lode	MGI	01/12/2001	MGI	02/16/2010	349507	269
270	SF 232	200335	Lode	MGI	01/12/2001	MGI	02/16/2010	349508	270
271	SF 233	200336	Lode	MGI	01/12/2001	MGI	02/16/2010	349509	271
272	SF 234	200337	Lode	MGI	01/12/2001	MGI	02/16/2010	349510	272
273	SF 235	201078	Lode	MGI	04/20/2010	MGI	06/11/2010	352443	273
274	SF 236	201079	Lode	MGI	04/20/2010	MGI	06/11/2010	352444	274
275	SF 237	201080	Lode	MGI	04/20/2010	MGI	06/11/2010	352445	275
276	SF 238	201081	Lode	MGI	04/20/2010	MGI	06/11/2010	352446	276
277	SF 239	201082	Lode	MGI	04/20/2010	MGI	06/11/2010	352447	277
278	SF 240	201083	Lode	MGI	04/20/2010	MGI	06/11/2010	352448	278
279	SF 241	201084	Lode	MGI	04/20/2010	MGI	06/11/2010	352449	279

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
280	SF 242	201085	Lode	MGI	04/20/2010	MGI	06/11/2010	352450	280
281	SF 243	201086	Lode	MGI	04/20/2010	MGI	06/11/2010	352451	281
282	SF 244	201087	Lode	MGI	04/20/2010	MGI	06/11/2010	352452	282
283	SF 245	201088	Lode	MGI	04/20/2010	MGI	06/11/2010	352453	283
284	SF 246	201089	Lode	MGI	04/20/2010	MGI	06/11/2010	352454	284
285	SF 247	201090	Lode	MGI	04/20/2010	MGI	06/11/2010	352457	285
286	SF 248	201091	Lode	MGI	04/20/2010	MGI	06/11/2010	352458	286
287	SF 249	201092	Lode	MGI	04/20/2010	MGI	06/11/2010	352459	287
288	SF 250	201093	Lode	MGI	04/20/2010	MGI	06/11/2010	352460	288
289	SF 251	201094	Lode	MGI	04/20/2010	MGI	06/11/2010	352461	289
290	SF 252	201095	Lode	MGI	04/20/2010	MGI	06/11/2010	352462	290
291	SF 253	201096	Lode	MGI	04/20/2010	MGI	06/11/2010	352463	291
292	SF 254	201097	Lode	MGI	04/20/2010	MGI	06/11/2010	352464	292
293	SF 255	201098	Lode	MGI	04/20/2010	MGI	06/11/2010	352389	293
294	SF 256	201099	Lode	MGI	04/20/2010	MGI	06/11/2010	352390	294
295	SF 257	201100	Lode	MGI	04/20/2010	MGI	06/11/2010	352392	295
296	SF 258	201101	Lode	MGI	04/20/2010	MGI	06/11/2010	352393	296
297	SF 259	201102	Lode	MGI	04/20/2010	MGI	06/11/2010	352394	297
298	SF 260	201103	Lode	MGI	04/20/2010	MGI	06/11/2010	352395	298
299	SF 261	201104	Lode	MGI	04/20/2010	MGI	06/11/2010	352397	299
300	SF 262	201105	Lode	MGI	04/20/2010	MGI	06/11/2010	352399	300
301	SF 263	201106	Lode	MGI	04/20/2010	MGI	06/11/2010	352401	301
302	SF 264	201107	Lode	MGI	04/20/2010	MGI	06/11/2010	352403	302
303	SF 265	201108	Lode	MGI	04/20/2010	MGI	06/11/2010	352405	303
304	SF 266	201109	Lode	MGI	04/20/2010	MGI	06/11/2010	352430	304
305	SF 267	201110	Lode	MGI	04/20/2010	MGI	06/11/2010	352431	305
306	SF 268	201111	Lode	MGI	04/20/2010	MGI	06/11/2010	352436	306
307	SF 269	201112	Lode	MGI	04/20/2010	MGI	06/11/2010	352437	307

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
308	SF 270	201113	Lode	MGI	04/20/2010	MGI	06/11/2010	352438	308
309	SF 271	201114	Lode	MGI	04/20/2010	MGI	06/11/2010	352439	309
310	SF 272	201115	Lode	MGI	04/20/2010	MGI	06/11/2010	352440	310
311	SF 273	201116	Lode	MGI	04/20/2010	MGI	06/11/2010	352441	311
312	SF 274	201117	Lode	MGI	04/20/2010	MGI	06/11/2010	352442	312
313	SF 275	201118	Lode	MGI	04/20/2010	MGI	06/11/2010	352443	313
314	SF 276	201119	Lode	MGI	04/20/2010	MGI	06/11/2010	352345	314
315	SF 277	201120	Lode	MGI	04/20/2010	MGI	06/11/2010	352351	315
316	SF 278	201121	Lode	MGI	04/20/2010	MGI	06/11/2010	352354	316
317	SF 279	201122	Lode	MGI	04/20/2010	MGI	06/11/2010	352355	317
318	SF 280	201123	Lode	MGI	04/20/2010	MGI	06/11/2010	352356	318
319	SF 281	201124	Lode	MGI	04/20/2010	MGI	06/11/2010	352357	319
320	SF 282	201125	Lode	MGI	04/20/2010	MGI	06/11/2010	352358	320
321	SF 283	201126	Lode	MGI	04/20/2010	MGI	06/11/2010	352359	321
322	SF 284	201127	Lode	MGI	04/20/2010	MGI	06/11/2010	352368	322
323	SF 285	201128	Lode	MGI	04/20/2010	MGI	06/11/2010	352370	323
324	SF 286	201129	Lode	MGI	04/20/2010	MGI	06/11/2010	352373	324
325	SF 287	201130	Lode	MGI	04/20/2010	MGI	06/11/2010	352375	325
326	SF 288	201131	Lode	MGI	04/20/2010	MGI	06/11/2010	352377	326
327	SF 289	201132	Lode	MGI	04/20/2010	MGI	06/11/2010	352379	327
328	SF 290	201133	Lode	MGI	04/20/2010	MGI	06/11/2010	352380	328
329	SF 291	201134	Lode	MGI	04/20/2010	MGI	06/11/2010	352381	329
330	SF 292	201135	Lode	MGI	04/20/2010	MGI	06/11/2010	352382	330
331	SF 293	201136	Lode	MGI	04/20/2010	MGI	06/11/2010	352384	331
332	SF 294	201137	Lode	MGI	04/20/2010	MGI	06/11/2010	352387	332
333	SF 295	201138	Lode	MGI	04/20/2010	MGI	06/11/2010	352413	333
334	SF 296	201139	Lode	MGI	04/20/2010	MGI	06/11/2010	352414	334
335	SF 297	201140	Lode	MGI	04/20/2010	MGI	06/11/2010	352415	335

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
336	SF 298	201141	Lode	MGI	04/20/2010	MGI	06/11/2010	352416	336
337	SF 299	201142	Lode	MGI	04/20/2010	MGI	06/11/2010	352417	337
338	SF 300	201143	Lode	MGI	04/20/2010	MGI	06/11/2010	352418	338
339	SF 301	201144	Lode	MGI	04/20/2010	MGI	06/11/2010	352419	339
340	SF 302	201145	Lode	MGI	04/20/2010	MGI	06/11/2010	352420	340
341	SF 303	201146	Lode	MGI	04/20/2010	MGI	06/11/2010	352421	341
342	SF 304	201147	Lode	MGI	04/20/2010	MGI	06/11/2010	352422	342
343	SF 305	201148	Lode	MGI	04/20/2010	MGI	06/11/2010	352423	343
344	SF 306	201149	Lode	MGI	04/20/2010	MGI	06/11/2010	352424	344
345	SF 307	201150	Lode	MGI	04/20/2010	MGI	06/11/2010	352425	345
346	SF 308	201151	Lode	MGI	04/20/2010	MGI	06/11/2010	352426	346
347	SF 309	201152	Lode	MGI	04/20/2010	MGI	06/11/2010	352427	347
348	SF 310	201153	Lode	MGI	04/20/2010	MGI	06/11/2010	352428	348
349	SF 311	201154	Lode	MGI	04/20/2010	MGI	06/11/2010	352429	349
350	SF 312	201155	Lode	MGI	04/20/2010	MGI	06/11/2010	352336	350
351	SF 313	201156	Lode	MGI	04/20/2010	MGI	06/11/2010	352339	351
352	SF 314	201157	Lode	MGI	04/20/2010	MGI	06/11/2010	352341	352
353	SF 315	201158	Lode	MGI	04/20/2010	MGI	06/11/2010	352374	353
354	SF 316	201159	Lode	MGI	04/20/2010	MGI	06/11/2010	352376	354
355	SF 317	201160	Lode	MGI	04/20/2010	MGI	06/11/2010	352378	355
356	SF 318	201161	Lode	MGI	04/20/2010	MGI	06/11/2010	352383	356
357	SF 319	201162	Lode	MGI	04/20/2010	MGI	06/11/2010	352385	357
358	SF 320	201163	Lode	MGI	04/20/2010	MGI	06/11/2010	352386	358
359	SF 321	201164	Lode	MGI	04/20/2010	MGI	06/11/2010	352388	359
360	SF 322	201165	Lode	MGI	04/20/2010	MGI	06/11/2010	352391	360
361	SF 323	201166	Lode	MGI	04/20/2010	MGI	06/11/2010	352396	361
362	SF 324	201167	Lode	MGI	04/20/2010	MGI	06/11/2010	352398	362
363	SF 325	201168	Lode	MGI	04/20/2010	MGI	06/11/2010	352400	363

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
364	SF 326	201169	Lode	MGI	04/20/2010	MGI	06/11/2010	352402	364
365	SF 327	201170	Lode	MGI	04/20/2010	MGI	06/11/2010	352404	365
366	SF 328	201171	Lode	MGI	04/20/2010	MGI	06/11/2010	352406	366
367	SF 329	201172	Lode	MGI	04/20/2010	MGI	06/11/2010	352407	367
368	SF 330	201173	Lode	MGI	04/20/2010	MGI	06/11/2010	352408	368
369	SF 331	201174	Lode	MGI	04/20/2010	MGI	06/11/2010	352409	369
370	SF 332	201175	Lode	MGI	04/20/2010	MGI	06/11/2010	352410	370
371	SF 333	201176	Lode	MGI	04/20/2010	MGI	06/11/2010	352411	371
372	SF 334	201177	Lode	MGI	04/20/2010	MGI	06/11/2010	352412	372
373	SF 335	201178	Lode	MGI	04/20/2010	MGI	06/11/2010	352333	373
374	SF 336	201179	Lode	MGI	04/20/2010	MGI	06/11/2010	352334	374
375	SF 337	201180	Lode	MGI	04/20/2010	MGI	06/11/2010	352335	375
376	SF 338	201181	Lode	MGI	04/20/2010	MGI	06/11/2010	352337	376
377	SF 339	201182	Lode	MGI	04/20/2010	MGI	06/11/2010	352338	377
378	SF 340	201183	Lode	MGI	04/20/2010	MGI	06/11/2010	352340	378
379	SF 341	201184	Lode	MGI	04/20/2010	MGI	06/11/2010	352342	379
380	SF 342	201185	Lode	MGI	04/20/2010	MGI	06/11/2010	352344	380
381	SF 343	201186	Lode	MGI	04/20/2010	MGI	06/11/2010	352346	381
382	SF 344	201187	Lode	MGI	04/20/2010	MGI	06/11/2010	352347	382
383	SF 345	201188	Lode	MGI	04/20/2010	MGI	06/11/2010	352348	383
384	SF 346	201189	Lode	MGI	04/20/2010	MGI	06/11/2010	352349	384
385	SF 347	201190	Lode	MGI	04/20/2010	MGI	06/11/2010	352350	385
386	SF 348	201191	Lode	MGI	04/20/2010	MGI	06/11/2010	352352	386
387	SF 349	201192	Lode	MGI	04/20/2010	MGI	06/11/2010	352353	387
388	SF 350	201193	Lode	MGI	04/20/2010	MGI	06/11/2010	352360	388
389	SF 351	201194	Lode	MGI	04/20/2010	MGI	06/11/2010	352367	389
390	SF 352	201195	Lode	MGI	04/20/2010	MGI	06/11/2010	352369	390
391	SF 353	201196	Lode	MGI	04/20/2010	MGI	06/11/2010	352371	391

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
392	SF 354	201197	Lode	MGI	04/20/2010	MGI	06/11/2010	352372	392
393	SF 355	201198	Lode	MGI	04/20/2010	MGI	06/11/2010	352302	393
394	SF 356	201199	Lode	MGI	04/20/2010	MGI	06/11/2010	352303	394
395	SF 357	201200	Lode	MGI	04/20/2010	MGI	06/11/2010	352304	395
396	SF 358	201201	Lode	MGI	04/20/2010	MGI	06/11/2010	352312	396
397	SF 359	201202	Lode	MGI	04/20/2010	MGI	06/11/2010	352313	397
398	SF 360	201203	Lode	MGI	04/20/2010	MGI	06/11/2010	352314	398
399	SF 361	201204	Lode	MGI	04/20/2010	MGI	06/11/2010	352315	399
400	SF 362	201205	Lode	MGI	04/20/2010	MGI	06/11/2010	352316	400
401	SF 363	201206	Lode	MGI	04/20/2010	MGI	06/11/2010	352317	401
402	SF 364	201207	Lode	MGI	04/20/2010	MGI	06/11/2010	352318	402
403	SF 365	201208	Lode	MGI	04/20/2010	MGI	06/11/2010	352319	403
404	SF 366	201209	Lode	MGI	04/21/2010	MGI	06/11/2010	352320	404
405	SF 367	201210	Lode	MGI	04/21/2010	MGI	06/11/2010	352321	405
406	SF 368	201211	Lode	MGI	04/21/2010	MGI	06/11/2010	352322	406
407	SF 369	201212	Lode	MGI	04/21/2010	MGI	06/11/2010	352323	407
408	SF 370	201213	Lode	MGI	04/21/2010	MGI	06/11/2010	352324	408
409	SF 371	201214	Lode	MGI	04/21/2010	MGI	06/11/2010	352325	409
410	SF 372	201215	Lode	MGI	04/21/2010	MGI	06/11/2010	352326	410
411	SF 373	201216	Lode	MGI	04/21/2010	MGI	06/11/2010	352331	411
412	SF 374	201217	Lode	MGI	04/21/2010	MGI	06/11/2010	352332	412
413	SF 375	201218	Lode	MGI	04/21/2010	MGI	06/11/2010	352275	413
414	SF 376	201219	Lode	MGI	04/21/2010	MGI	06/11/2010	352276	414
415	SF 377	201220	Lode	MGI	04/21/2010	MGI	06/11/2010	352277	415
416	SF 378	201221	Lode	MGI	04/21/2010	MGI	06/11/2010	352278	416
417	SF 379	201222	Lode	MGI	04/21/2010	MGI	06/11/2010	352279	417
418	SF 380	201223	Lode	MGI	04/21/2010	MGI	06/11/2010	352280	418
419	SF 381	201224	Lode	MGI	04/21/2010	MGI	06/11/2010	352281	419

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
420	SF 382	201225	Lode	MGI	04/21/2010	MGI	06/11/2010	352282	420
421	SF 383	201226	Lode	MGI	04/21/2010	MGI	06/11/2010	352283	421
422	SF 384	201227	Lode	MGI	04/21/2010	MGI	06/11/2010	352287	422
423	SF 385	201228	Lode	MGI	04/21/2010	MGI	06/11/2010	352288	423
424	SF 386	201229	Lode	MGI	04/21/2010	MGI	06/11/2010	352289	424
425	SF 387	201230	Lode	MGI	04/21/2010	MGI	06/11/2010	352293	425
426	SF 388	201231	Lode	MGI	04/21/2010	MGI	06/11/2010	352294	426
427	SF 389	201232	Lode	MGI	04/21/2010	MGI	06/11/2010	352295	427
428	SF 390	201233	Lode	MGI	04/21/2010	MGI	06/11/2010	352296	428
429	SF 391	201234	Lode	MGI	04/21/2010	MGI	06/11/2010	352298	429
430	SF 392	201235	Lode	MGI	04/21/2010	MGI	06/11/2010	352299	430
431	SF 393	201236	Lode	MGI	04/21/2010	MGI	06/11/2010	352300	431
432	SF 394	201237	Lode	MGI	04/21/2010	MGI	06/11/2010	352301	432
433	SF 395	201238	Lode	MGI	04/21/2010	MGI	06/11/2010	352252	433
434	SF 396	201239	Lode	MGI	04/21/2010	MGI	06/11/2010	352253	434
435	SF 397	201240	Lode	MGI	04/21/2010	MGI	06/11/2010	352254	435
436	SF 398	201241	Lode	MGI	04/21/2010	MGI	06/11/2010	352255	436
437	SF 399	201242	Lode	MGI	04/21/2010	MGI	06/11/2010	352257	437
438	SF 400	201243	Lode	MGI	04/21/2010	MGI	06/11/2010	352258	438
439	SF 401	201244	Lode	MGI	04/21/2010	MGI	06/11/2010	352259	439
440	SF 402	201245	Lode	MGI	04/21/2010	MGI	06/11/2010	352260	440
441	SF 403	201246	Lode	MGI	04/21/2010	MGI	06/11/2010	352261	441
442	SF 404	201247	Lode	MGI	04/21/2010	MGI	06/11/2010	352263	442
443	SF 405	201248	Lode	MGI	04/21/2010	MGI	06/11/2010	352264	443
444	SF 406	201249	Lode	MGI	04/21/2010	MGI	06/11/2010	352265	444
445	SF 407	201250	Lode	MGI	04/21/2010	MGI	06/11/2010	352270	445
446	SF 408	201251	Lode	MGI	04/21/2010	MGI	06/11/2010	352271	446
447	SF 409	201252	Lode	MGI	04/21/2010	MGI	06/11/2010	352272	447

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
448	SF 410	201253	Lode	MGI	04/21/2010	MGI	06/11/2010	352273	448
449	SF 411	201254	Lode	MGI	04/21/2010	MGI	06/11/2010	352274	449
450	SF 412	203035	Lode	MGI	10/28/2010	MGI	11/23/2010	356587	450
451	SF 413	203036	Lode	MGI	10/28/2010	MGI	11/23/2010	356589	451
452	SF 414	203037	Lode	MGI	10/28/2010	MGI	11/23/2010	356590	452
453	SF 415	203038	Lode	MGI	10/28/2010	MGI	11/23/2010	356591	453
454	SF 416	203039	Lode	MGI	10/28/2010	MGI	11/23/2010	356592	454
455	SF 417	203040	Lode	MGI	10/28/2010	MGI	11/23/2010	356593	455
456	SF 418	203041	Lode	MGI	10/28/2010	MGI	11/23/2010	356594	456
457	SF 419	203042	Lode	MGI	10/28/2010	MGI	11/23/2010	356595	457
458	SF 420	203043	Lode	MGI	10/28/2010	MGI	11/23/2010	356596	458
459	SF 421	203044	Lode	MGI	10/28/2010	MGI	11/23/2010	356597	459
460	SF 422	203045	Lode	MGI	10/28/2010	MGI	11/23/2010	356598	460
461	SF 423	203046	Lode	MGI	10/28/2010	MGI	11/23/2010	356599	461
462	SF 424	203047	Lode	MGI	10/28/2010	MGI	11/23/2010	356600	462
463	SF 425	203048	Lode	MGI	10/28/2010	MGI	11/23/2010	356614	463
464	SF 426	203049	Lode	MGI	10/28/2010	MGI	11/23/2010	356617	464
465	SF 427	203050	Lode	MGI	10/28/2010	MGI	11/23/2010	356619	465
466	SF 428	203051	Lode	MGI	10/28/2010	MGI	11/23/2010	356620	466
467	SF 429	203052	Lode	MGI	10/28/2010	MGI	11/23/2010	356621	467
468	SF 430	203053	Lode	MGI	10/28/2010	MGI	11/23/2010	356622	468
469	SF 431	203054	Lode	MGI	10/28/2010	MGI	11/23/2010	356608	469
470	SF 432	203055	Lode	MGI	10/28/2010	MGI	11/23/2010	356609	470
471	SF 433	203056	Lode	MGI	10/28/2010	MGI	11/23/2010	356610	471
472	SF 434	203057	Lode	MGI	10/28/2010	MGI	11/23/2010	356611	472
473	SF 435	203058	Lode	MGI	10/28/2010	MGI	11/23/2010	356612	473
474	SF 436	203059	Lode	MGI	10/28/2010	MGI	11/23/2010	356613	474
475	SF 437	203060	Lode	MGI	10/28/2010	MGI	11/23/2010	356615	475

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
476	SF 438	203061	Lode	MGI	10/28/2010	MGI	11/23/2010	356616	476
477	SF 439	203062	Lode	MGI	10/28/2010	MGI	11/23/2010	356618	477
478	SF 451	205314	Lode	MGI	06/20/2011	MGI	07/05/2011	361283	478
479	SF 452	205315	Lode	MGI	06/20/2011	MGI	07/05/2011	361282	479
480	SF 453 A	211429	Lode	MGI	08/18/2012	MGI	09/06/2012	371928	480
481	SF 456	206796	Lode	MGI	08/23/2011	MGI	11/08/2011	364063	481
482	SF 457	206797	Lode	MGI	08/23/2011	MGI	11/08/2011	364064	482
483	SF 458	206798	Lode	MGI	08/23/2011	MGI	11/08/2011	364065	483
484	SF 459	206799	Lode	MGI	08/23/2011	MGI	11/08/2011	364066	484
485	SF 460	206800	Lode	MGI	08/23/2011	MGI	11/08/2011	364067	485
486	SF 461	206801	Lode	MGI	08/23/2011	MGI	11/08/2011	364068	486
487	SF 462	206802	Lode	MGI	08/23/2011	MGI	11/08/2011	364069	487
488	SF 463	206803	Lode	MGI	08/23/2011	MGI	11/08/2011	364070	488
489	SF 464	206804	Lode	MGI	08/23/2011	MGI	11/08/2011	364071	489
490	SF 465	206805	Lode	MGI	08/23/2011	MGI	11/08/2011	364072	490
491	SF 466	206806	Lode	MGI	08/23/2011	MGI	11/08/2011	364073	491
492	SF 467	206807	Lode	MGI	08/23/2011	MGI	11/08/2011	364077	492
493	SF 468	206808	Lode	MGI	08/23/2011	MGI	11/08/2011	364078	493
494	SF 469	206809	Lode	MGI	08/23/2011	MGI	11/08/2011	364079	494
495	SF 470	206810	Lode	MGI	08/23/2011	MGI	11/08/2011	364080	495
496	SF 471	206811	Lode	MGI	08/23/2011	MGI	11/08/2011	364081	496
497	SF 472	206812	Lode	MGI	08/23/2011	MGI	11/08/2011	364082	497
498	SF 473	206813	Lode	MGI	08/23/2011	MGI	11/08/2011	364083	498
499	SF 474	206814	Lode	MGI	08/23/2011	MGI	11/08/2011	364084	499
500	SF 475	206815	Lode	MGI	08/23/2011	MGI	11/08/2011	364085	500
501	SF 476	206816	Lode	MGI	08/23/2011	MGI	11/08/2011	364086	501
502	SF 477	206817	Lode	MGI	08/23/2011	MGI	11/08/2011	364087	502
503	SF 478	206818	Lode	MGI	08/23/2011	MGI	11/08/2011	364088	503

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
504	SF 479	206819	Lode	MGI	08/23/2011	MGI	11/08/2011	364089	504
505	SF 480	206820	Lode	MGI	08/23/2011	MGI	11/08/2011	364090	505
506	SF 481	206821	Lode	MGI	08/23/2011	MGI	11/08/2011	364091	506
507	SF 482	206822	Lode	MGI	08/23/2011	MGI	11/08/2011	364092	507
508	SF 483	206823	Lode	MGI	08/23/2011	MGI	11/08/2011	364093	508
509	SF 484	206824	Lode	MGI	08/23/2011	MGI	11/08/2011	364094	509
510	SF 485	206825	Lode	MGI	08/23/2011	MGI	11/08/2011	364095	510
511	SF 486	206826	Lode	MGI	08/23/2011	MGI	11/08/2011	364096	511
512	SF 487	206827	Lode	MGI	08/23/2011	MGI	11/08/2011	364097	512
513	SF 488	206828	Lode	MGI	08/24/2011	MGI	11/08/2011	364098	513
514	SF 489	206829	Lode	MGI	08/24/2011	MGI	11/08/2011	364099	514
515	SF 490	206830	Lode	MGI	08/24/2011	MGI	11/08/2011	364100	515
516	SF 491	206831	Lode	MGI	08/24/2011	MGI	11/08/2011	364101	516
517	SF 492	206832	Lode	MGI	08/24/2011	MGI	11/08/2011	364102	517
518	SF 493	206833	Lode	MGI	08/24/2011	MGI	11/08/2011	364103	518
519	SF 494	206834	Lode	MGI	08/24/2011	MGI	11/08/2011	364104	519
520	SF 495	206835	Lode	MGI	08/24/2011	MGI	11/08/2011	364105	520
521	SF 496	206836	Lode	MGI	08/24/2011	MGI	11/08/2011	364106	521
522	SF 497	206837	Lode	MGI	08/24/2011	MGI	11/08/2011	364107	522
523	SF 498	206838	Lode	MGI	08/24/2011	MGI	11/08/2011	364108	523
524	SF 499	206839	Lode	MGI	08/24/2011	MGI	11/08/2011	364109	524
525	SF 500	206840	Lode	MGI	08/24/2011	MGI	11/08/2011	364112	525
526	SF 501	206841	Lode	MGI	08/24/2011	MGI	11/08/2011	364113	526
527	SF 502	206842	Lode	MGI	08/24/2011	MGI	11/08/2011	364114	527
528	SF 503	206843	Lode	MGI	08/24/2011	MGI	11/08/2011	364115	528
529	SF 504	206844	Lode	MGI	08/24/2011	MGI	11/08/2011	364116	529
530	SF 505	206845	Lode	MGI	08/24/2011	MGI	11/08/2011	364117	530
531	SF 506	206846	Lode	MGI	08/24/2011	MGI	11/08/2011	364118	531

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
532	SF 507	206847	Lode	MGI	08/24/2011	MGI	11/08/2011	364121	532
533	SF 508	206848	Lode	MGI	08/24/2011	MGI	11/08/2011	364122	533
534	SF 509	206849	Lode	MGI	08/24/2011	MGI	11/08/2011	364123	534
535	SF 510	206850	Lode	MGI	08/24/2011	MGI	11/08/2011	364124	535
536	SF 511	206851	Lode	MGI	08/24/2011	MGI	11/08/2011	364125	536
537	SF 512	206852	Lode	MGI	08/24/2011	MGI	11/08/2011	364126	537
538	SF 513	206853	Lode	MGI	08/24/2011	MGI	11/08/2011	364127	538
539	SF 514	206854	Lode	MGI	08/27/2011	MGI	11/08/2011	364128	539
540	SF 515	206855	Lode	MGI	08/27/2011	MGI	11/08/2011	364129	540
541	SF 516	206856	Lode	MGI	08/27/2011	MGI	11/08/2011	364130	541
542	SF 517	206857	Lode	MGI	08/27/2011	MGI	11/08/2011	364131	542
543	SF 518	206858	Lode	MGI	08/27/2011	MGI	11/08/2011	364132	543
544	SF 519	206859	Lode	MGI	08/27/2011	MGI	11/08/2011	364133	544
545	SF 520	206860	Lode	MGI	08/27/2011	MGI	11/08/2011	364134	545
546	SF 521	206861	Lode	MGI	08/24/2011	MGI	11/08/2011	364135	546
547	SF 522	206862	Lode	MGI	08/24/2011	MGI	11/08/2011	364136	547
548	SF 523	206863	Lode	MGI	08/24/2011	MGI	11/08/2011	364137	548
549	SF 524	206864	Lode	MGI	08/24/2011	MGI	11/08/2011	364138	549
550	SF 525	206865	Lode	MGI	08/24/2011	MGI	11/08/2011	364139	550
551	SF 526	206866	Lode	MGI	08/24/2011	MGI	11/08/2011	364140	551
552	SF 527	206867	Lode	MGI	08/24/2011	MGI	11/08/2011	364142	552
553	SF 528	206868	Lode	MGI	08/24/2011	MGI	11/08/2011	364143	553
554	SF 529	206869	Lode	MGI	08/24/2011	MGI	11/08/2011	364144	554
555	SF 530	206870	Lode	MGI	08/24/2011	MGI	11/08/2011	364145	555
556	SF 531	206871	Lode	MGI	08/24/2011	MGI	11/08/2011	364146	556
557	SF 532	206872	Lode	MGI	08/24/2011	MGI	11/08/2011	364147	557
558	SF 533	206873	Lode	MGI	08/24/2011	MGI	11/08/2011	364149	558
559	SF 534	206874	Lode	MGI	08/24/2011	MGI	11/08/2011	364150	559

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
560	SF 535	206875	Lode	MGI	08/24/2011	MGI	11/08/2011	364152	560
561	SF 536	206876	Lode	MGI	08/24/2011	MGI	11/08/2011	364153	561
562	SF 537	206877	Lode	MGI	08/24/2011	MGI	11/08/2011	364156	562
563	SF 538	206878	Lode	MGI	08/24/2011	MGI	11/08/2011	364157	563
564	SF 539	206879	Lode	MGI	08/24/2011	MGI	11/08/2011	364158	564
565	SF 540	206880	Lode	MGI	08/24/2011	MGI	11/08/2011	364159	565
566	SF 541	206881	Lode	MGI	08/24/2011	MGI	11/08/2011	364160	566
567	SF 542	206882	Lode	MGI	08/24/2011	MGI	11/08/2011	364161	567
568	SF 543	206883	Lode	MGI	08/24/2011	MGI	11/08/2011	364162	568
569	SF 544	206884	Lode	MGI	08/24/2011	MGI	11/08/2011	364163	569
570	SF 545	206885	Lode	MGI	08/24/2011	MGI	11/08/2011	364164	570
571	SF 546	206886	Lode	MGI	08/24/2011	MGI	11/08/2011	364165	571
572	SF 547	206887	Lode	MGI	08/24/2011	MGI	11/08/2011	364166	572
573	SF 548	206888	Lode	MGI	08/24/2011	MGI	11/08/2011	364167	573
574	SF 549	206889	Lode	MGI	08/24/2011	MGI	11/08/2011	364168	574
575	SF 550	206890	Lode	MGI	08/24/2011	MGI	11/08/2011	364169	575
576	SF 551	206891	Lode	MGI	08/24/2011	MGI	11/08/2011	364170	576
577	SF 552	206892	Lode	MGI	08/24/2011	MGI	11/08/2011	364171	577
578	SF 553	206893	Lode	MGI	08/24/2011	MGI	11/08/2011	364172	578
579	SF 554	206894	Lode	MGI	08/24/2011	MGI	11/08/2011	364173	579
580	SF 555	206895	Lode	MGI	08/24/2011	MGI	11/08/2011	364174	580
581	SF 556	206896	Lode	MGI	08/24/2011	MGI	11/08/2011	364175	581
582	SF 557	206897	Lode	MGI	08/24/2011	MGI	11/08/2011	364176	582
583	SF 558	206898	Lode	MGI	08/24/2011	MGI	11/08/2011	364177	583
584	SF 559	206899	Lode	MGI	08/24/2011	MGI	11/08/2011	364178	584
585	SF 560	206900	Lode	MGI	08/24/2011	MGI	11/08/2011	364179	585
586	SF 561	206901	Lode	MGI	08/24/2011	MGI	11/08/2011	364180	586
587	SF 562	206902	Lode	MGI	08/24/2011	MGI	11/08/2011	364181	587

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
588	SF 563	206903	Lode	MGI	08/24/2011	MGI	11/08/2011	364182	588
589	SF 564	206904	Lode	MGI	08/24/2011	MGI	11/08/2011	364183	589
590	SF 565	206905	Lode	MGI	08/24/2011	MGI	11/08/2011	364184	590
591	SF 566	206906	Lode	MGI	08/24/2011	MGI	11/08/2011	364185	591
592	SF 567	206907	Lode	MGI	08/24/2011	MGI	11/08/2011	364186	592
593	SF 568	206908	Lode	MGI	08/24/2011	MGI	11/08/2011	364187	593
594	SF 569	206909	Lode	MGI	08/24/2011	MGI	11/08/2011	364188	594
595	SF 570	206910	Lode	MGI	08/24/2011	MGI	11/08/2011	364189	595
596	SF 571	206911	Lode	MGI	08/24/2011	MGI	11/08/2011	364190	596
597	SF 572	206912	Lode	MGI	08/24/2011	MGI	11/08/2011	364191	597
598	SF 573	206913	Lode	MGI	08/24/2011	MGI	11/08/2011	364192	598
599	SF 574	206914	Lode	MGI	08/24/2011	MGI	11/08/2011	364193	599
600	SF 575	206915	Lode	MGI	08/24/2011	MGI	11/08/2011	364194	600
601	SF 576	206916	Lode	MGI	08/24/2011	MGI	11/08/2011	364195	601
602	SF 577	206917	Lode	MGI	08/24/2011	MGI	11/08/2011	364196	602
603	SF 578	206918	Lode	MGI	08/24/2011	MGI	11/08/2011	364197	603
604	SF 579	206919	Lode	MGI	08/24/2011	MGI	11/08/2011	364198	604
605	SF 580	206920	Lode	MGI	08/24/2011	MGI	11/08/2011	364199	605
606	SF 581	206921	Lode	MGI	08/24/2011	MGI	11/08/2011	364200	606
607	SF 582	206922	Lode	MGI	08/24/2011	MGI	11/08/2011	364201	607
608	SF 583	206923	Lode	MGI	08/24/2011	MGI	11/08/2011	364202	608
609	SF 584	206924	Lode	MGI	08/24/2011	MGI	11/08/2011	364203	609
610	SF 585	206925	Lode	MGI	08/24/2011	MGI	11/08/2011	364204	610
611	SF 586	206926	Lode	MGI	08/24/2011	MGI	11/08/2011	364205	611
612	SF 587	206927	Lode	MGI	08/24/2011	MGI	11/08/2011	364206	612
613	SF 588	206928	Lode	MGI	08/24/2011	MGI	11/08/2011	364207	613
614	SF 589	206929	Lode	MGI	08/24/2011	MGI	11/08/2011	364212	614
615	SF 590	206930	Lode	MGI	08/24/2011	MGI	11/08/2011	364213	615

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
616	SF 591	206931	Lode	MGI	08/24/2011	MGI	11/08/2011	364214	616
617	SF 592	206932	Lode	MGI	08/24/2011	MGI	11/08/2011	364215	617
618	SF 593	206933	Lode	MGI	08/26/2011	MGI	11/08/2011	364216	618
619	SF 594	206934	Lode	MGI	08/26/2011	MGI	11/08/2011	364217	619
620	SF 595	206935	Lode	MGI	08/26/2011	MGI	11/08/2011	364218	620
621	SF 596	206936	Lode	MGI	08/26/2011	MGI	11/08/2011	364219	621
622	SF 597	206937	Lode	MGI	08/26/2011	MGI	11/08/2011	364220	622
623	SF 598	206938	Lode	MGI	08/26/2011	MGI	11/08/2011	364221	623
624	SF 599	206939	Lode	MGI	08/26/2011	MGI	11/08/2011	364222	624
625	SF 600	207007	Lode	MGI	08/26/2011	MGI	11/09/2011	364223	625
626	SF 601	207008	Lode	MGI	08/26/2011	MGI	11/09/2011	364224	626
627	SF 602	207009	Lode	MGI	08/26/2011	MGI	11/09/2011	364225	627
628	SF 603	207010	Lode	MGI	08/26/2011	MGI	11/09/2011	364226	628
629	SF 604	207011	Lode	MGI	08/26/2011	MGI	11/09/2011	364227	629
630	SF 605	207012	Lode	MGI	08/26/2011	MGI	11/09/2011	364228	630
631	SF 606	207013	Lode	MGI	08/26/2011	MGI	11/09/2011	364229	631
632	SF 607	207014	Lode	MGI	08/26/2011	MGI	11/09/2011	364230	632
633	SF 608	207015	Lode	MGI	08/26/2011	MGI	11/09/2011	364231	633
634	SF 609	207016	Lode	MGI	08/26/2011	MGI	11/09/2011	364232	634
635	SF 610	207017	Lode	MGI	08/26/2011	MGI	11/09/2011	364233	635
636	SF 611	207018	Lode	MGI	08/26/2011	MGI	11/09/2011	364234	636
637	SF 612	207019	Lode	MGI	08/26/2011	MGI	11/09/2011	364235	637
638	SF 613	207020	Lode	MGI	08/25/2011	MGI	11/09/2011	364236	638
639	SF 614	207021	Lode	MGI	08/25/2011	MGI	11/09/2011	364237	639
640	SF 615	207022	Lode	MGI	08/25/2011	MGI	11/09/2011	364238	640
641	SF 616	207023	Lode	MGI	08/26/2011	MGI	11/09/2011	364239	641
642	SF 617	207024	Lode	MGI	08/26/2011	MGI	11/09/2011	364240	642
643	SF 618	207025	Lode	MGI	08/26/2011	MGI	11/09/2011	364241	643

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
644	SF 619	207026	Lode	MGI	08/26/2011	MGI	11/09/2011	364242	644
645	SF 620	207027	Lode	MGI	08/26/2011	MGI	11/09/2011	364243	645
646	SF 621	207028	Lode	MGI	08/26/2011	MGI	11/09/2011	364245	646
647	SF 622	207029	Lode	MGI	08/26/2011	MGI	11/09/2011	364246	647
648	SF 623	207030	Lode	MGI	08/26/2011	MGI	11/09/2011	364247	648
649	SF 624	207031	Lode	MGI	08/26/2011	MGI	11/09/2011	364248	649
650	SF 625	207032	Lode	MGI	08/26/2011	MGI	11/09/2011	364249	650
651	SF 626	207033	Lode	MGI	08/26/2011	MGI	11/09/2011	364250	651
652	SF 627	207034	Lode	MGI	08/26/2011	MGI	11/09/2011	364251	652
653	SF 628	207035	Lode	MGI	08/26/2011	MGI	11/09/2011	364252	653
654	SF 629	207036	Lode	MGI	08/26/2011	MGI	11/09/2011	364253	654
655	SF 630	207037	Lode	MGI	08/26/2011	MGI	11/09/2011	364254	655
656	SF 631	207038	Lode	MGI	08/26/2011	MGI	11/09/2011	364255	656
657	SF 632	207039	Lode	MGI	08/26/2011	MGI	11/09/2011	364256	657
658	SF 633	207040	Lode	MGI	08/26/2011	MGI	11/09/2011	364257	658
659	SF 634	207041	Lode	MGI	08/26/2011	MGI	11/09/2011	364258	659
660	SF 635	207042	Lode	MGI	08/26/2011	MGI	11/09/2011	364259	660
661	SF 636	207043	Lode	MGI	08/25/2011	MGI	11/09/2011	364260	661
662	SF 637	207044	Lode	MGI	08/25/2011	MGI	11/09/2011	364261	662
663	SF 638	207045	Lode	MGI	08/25/2011	MGI	11/09/2011	364262	663
664	SF 641	207046	Lode	MGI	08/27/2011	MGI	11/09/2011	364263	664
665	SF 642	207047	Lode	MGI	08/27/2011	MGI	11/09/2011	364264	665
666	SF 643	207048	Lode	MGI	08/27/2011	MGI	11/09/2011	364265	666
667	SF 644	207049	Lode	MGI	08/27/2011	MGI	11/09/2011	364266	667
668	SF 645	207050	Lode	MGI	08/25/2011	MGI	11/09/2011	364267	668
669	SF 646	207051	Lode	MGI	08/25/2011	MGI	11/09/2011	364268	669
670	SF 647	207052	Lode	MGI	08/25/2011	MGI	11/09/2011	364269	670
671	SF 648	207053	Lode	MGI	08/25/2011	MGI	11/09/2011	364270	671

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
672	SF 649	207054	Lode	MGI	08/25/2011	MGI	11/09/2011	364271	672
673	SF 650	207062	Lode	MGI	08/25/2011	MGI	11/09/2011	364272	673
674	SF 651	207063	Lode	MGI	08/25/2011	MGI	11/09/2011	364273	674
675	SF 652	207064	Lode	MGI	08/25/2011	MGI	11/09/2011	364274	675
676	SF 653	207065	Lode	MGI	08/25/2011	MGI	11/09/2011	364275	676
677	SF 654	207066	Lode	MGI	08/25/2011	MGI	11/09/2011	364276	677
678	SF 655	207067	Lode	MGI	08/25/2011	MGI	11/09/2011	364277	678
679	SF 656	207068	Lode	MGI	08/25/2011	MGI	11/09/2011	364278	679
680	SF 657	207069	Lode	MGI	08/25/2011	MGI	11/09/2011	364279	680
681	SF 658	207070	Lode	MGI	08/25/2011	MGI	11/09/2011	364280	681
682	SF 659	207071	Lode	MGI	08/25/2011	MGI	11/09/2011	364281	682
683	SF 660	207072	Lode	MGI	08/25/2011	MGI	11/09/2011	364282	683
684	SF 661	207073	Lode	MGI	08/25/2011	MGI	11/09/2011	364283	684
685	SF 662	207074	Lode	MGI	08/25/2011	MGI	11/09/2011	364284	685
686	SF 663	207075	Lode	MGI	08/25/2011	MGI	11/09/2011	364285	686
687	SF 664	207076	Lode	MGI	08/25/2011	MGI	11/09/2011	364286	687
688	SF 665	207077	Lode	MGI	08/25/2011	MGI	11/09/2011	364287	688
689	SF 666	207078	Lode	MGI	08/25/2011	MGI	11/09/2011	364288	689
690	SF 667	207079	Lode	MGI	08/25/2011	MGI	11/09/2011	364289	690
691	SF 668	207080	Lode	MGI	08/25/2011	MGI	11/09/2011	364290	691
692	SF 669	207081	Lode	MGI	08/25/2011	MGI	11/09/2011	364291	692
693	SF 670	207082	Lode	MGI	08/23/2011	MGI	11/09/2011	364292	693
694	SF 671	207083	Lode	MGI	08/23/2011	MGI	11/09/2011	364293	694
695	SF 672	207084	Lode	MGI	08/23/2011	MGI	11/09/2011	364294	695
696	SF 673	207085	Lode	MGI	08/23/2011	MGI	11/09/2011	364295	696
697	SF 674	207086	Lode	MGI	08/23/2011	MGI	11/09/2011	364296	697
698	SF 675	207087	Lode	MGI	08/18/2011	MGI	11/09/2011	364297	698
699	SF 676	207088	Lode	MGI	08/18/2011	MGI	11/09/2011	364298	699

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
700	SF 677	207089	Lode	MGI	08/23/2011	MGI	11/09/2011	364299	700
701	SF 678	207090	Lode	MGI	08/23/2011	MGI	11/09/2011	364300	701
702	SF 679	207091	Lode	MGI	08/23/2011	MGI	11/09/2011	364301	702
703	SF 680	207092	Lode	MGI	08/23/2011	MGI	11/09/2011	364302	703
704	SF 681	207093	Lode	MGI	08/23/2011	MGI	11/09/2011	364303	704
705	SF 682	207094	Lode	MGI	08/23/2011	MGI	11/09/2011	364304	705
706	SF 683	207095	Lode	MGI	08/23/2011	MGI	11/09/2011	364305	706
707	SF 684	207096	Lode	MGI	08/23/2011	MGI	11/09/2011	364306	707
708	SF 685	207097	Lode	MGI	08/23/2011	MGI	11/09/2011	364307	708
709	SF 686	207098	Lode	MGI	08/23/2011	MGI	11/09/2011	364308	709
710	SF 687	207099	Lode	MGI	08/23/2011	MGI	11/09/2011	364309	710
711	SF 688	207100	Lode	MGI	08/23/2011	MGI	11/09/2011	364310	711
712	SF 689	207101	Lode	MGI	08/23/2011	MGI	11/09/2011	364311	712
713	SF 690	207102	Lode	MGI	08/23/2011	MGI	11/09/2011	364312	713
714	SF 691	207103	Lode	MGI	08/23/2011	MGI	11/09/2011	364313	714
715	SF 692	207104	Lode	MGI	08/23/2011	MGI	11/09/2011	364314	715
716	SF 693	207105	Lode	MGI	08/23/2011	MGI	11/09/2011	364315	716
717	SF 694	207106	Lode	MGI	08/23/2011	MGI	11/09/2011	364316	717
718	SF 695	207107	Lode	MGI	08/23/2011	MGI	11/09/2011	364317	718
719	SF 696	207108	Lode	MGI	08/23/2011	MGI	11/09/2011	364318	719
720	SF 697	207109	Lode	MGI	08/23/2011	MGI	11/09/2011	364319	720
721	SF 698	207110	Lode	MGI	08/23/2011	MGI	11/09/2011	364320	721
722	SF 699	207111	Lode	MGI	08/23/2011	MGI	11/09/2011	364321	722
723	SF 700	207112	Lode	MGI	08/23/2011	MGI	11/09/2011	364322	723
724	SF 701	207113	Lode	MGI	08/23/2011	MGI	11/09/2011	364329	724
725	SF 702	207114	Lode	MGI	08/23/2011	MGI	11/09/2011	364330	725
726	SF 703	207115	Lode	MGI	08/23/2011	MGI	11/09/2011	364331	726
727	SF 704	207174	Lode	MGI	09/19/2011	MGI	11/10/2011	364479	727

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
728	SF 705	207175	Lode	MGI	09/19/2011	MGI	11/10/2011	364480	728
729	SF 706	207176	Lode	MGI	09/19/2011	MGI	11/10/2011	364481	729
730	SF 707	207177	Lode	MGI	09/19/2011	MGI	11/10/2011	364482	730
731	SF 708	207178	Lode	MGI	09/19/2011	MGI	11/10/2011	364483	731
732	SF 709	207179	Lode	MGI	09/19/2011	MGI	11/10/2011	364484	732
733	SF 710	207180	Lode	MGI	09/19/2011	MGI	11/10/2011	364485	733
734	SF 711	207181	Lode	MGI	09/19/2011	MGI	11/10/2011	364486	734
735	SF 712	207182	Lode	MGI	09/19/2011	MGI	11/10/2011	364487	735
736	SF 713	207183	Lode	MGI	09/19/2011	MGI	11/10/2011	364488	736
737	SF 714	207184	Lode	MGI	09/19/2011	MGI	11/10/2011	364489	737
738	SF 715	207185	Lode	MGI	09/19/2011	MGI	11/10/2011	364490	738
739	SF 716	207186	Lode	MGI	09/19/2011	MGI	11/10/2011	364491	739
740	SF 717	207187	Lode	MGI	09/19/2011	MGI	11/10/2011	364492	740
741	SF 718	207188	Lode	MGI	09/19/2011	MGI	11/10/2011	364493	741
742	SF 719	207189	Lode	MGI	09/19/2011	MGI	11/10/2011	364494	742
743	SF 720	207190	Lode	MGI	09/19/2011	MGI	11/10/2011	364495	743
744	SF 721	206940	Lode	MGI	08/30/2011	MGI	11/09/2011	364332	744
745	SF 722	206941	Lode	MGI	08/30/2011	MGI	11/09/2011	364333	745
746	SF 723	206942	Lode	MGI	08/30/2011	MGI	11/09/2011	364334	746
747	SF 724	206943	Lode	MGI	08/30/2011	MGI	11/09/2011	364335	747
748	SF 725	206944	Lode	MGI	08/30/2011	MGI	11/09/2011	364336	748
749	SF 726	206945	Lode	MGI	08/30/2011	MGI	11/09/2011	364337	749
750	SF 727	206946	Lode	MGI	08/30/2011	MGI	11/09/2011	364338	750
751	SF 728	206947	Lode	MGI	08/30/2011	MGI	11/09/2011	364339	751
752	SF 729	206948	Lode	MGI	08/30/2011	MGI	11/09/2011	364340	752
753	SF 730	206949	Lode	MGI	08/30/2011	MGI	11/09/2011	364341	753
754	SF 731	206950	Lode	MGI	08/30/2011	MGI	11/09/2011	364342	754
755	SF 732	206951	Lode	MGI	08/30/2011	MGI	11/09/2011	364343	755

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
756	SF 733	206952	Lode	MGI	08/30/2011	MGI	11/09/2011	364344	756
757	SF 734	206953	Lode	MGI	08/30/2011	MGI	11/09/2011	364345	757
758	SF 735	206954	Lode	MGI	08/29/2011	MGI	11/09/2011	364346	758
759	SF 736	206955	Lode	MGI	08/29/2011	MGI	11/09/2011	364347	759
760	SF 737	206956	Lode	MGI	08/29/2011	MGI	11/09/2011	364348	760
761	SF 738	206957	Lode	MGI	08/29/2011	MGI	11/09/2011	364349	761
762	SF 739	206958	Lode	MGI	08/29/2011	MGI	11/09/2011	364350	762
763	SF 740	206959	Lode	MGI	08/29/2011	MGI	11/09/2011	364351	763
764	SF 741	206960	Lode	MGI	08/29/2011	MGI	11/09/2011	364352	764
765	SF 742	206961	Lode	MGI	08/29/2011	MGI	11/09/2011	364353	765
766	SF 743	206962	Lode	MGI	08/29/2011	MGI	11/09/2011	364354	766
767	SF 744	206963	Lode	MGI	08/29/2011	MGI	11/09/2011	364355	767
768	SF 745	206964	Lode	MGI	08/29/2011	MGI	11/09/2011	364356	768
769	SF 746	206965	Lode	MGI	08/29/2011	MGI	11/09/2011	364357	769
770	SF 747	206966	Lode	MGI	08/29/2011	MGI	11/09/2011	364358	770
771	SF 748	206967	Lode	MGI	08/29/2011	MGI	11/09/2011	364359	771
772	SF 749	206968	Lode	MGI	08/29/2011	MGI	11/09/2011	364360	772
773	SF 750	206969	Lode	MGI	08/29/2011	MGI	11/09/2011	364361	773
774	SF 751	206970	Lode	MGI	08/29/2011	MGI	11/09/2011	364362	774
775	SF 752	206971	Lode	MGI	08/29/2011	MGI	11/09/2011	364363	775
776	SF 753	206972	Lode	MGI	08/30/2011	MGI	11/09/2011	364364	776
777	SF 754	206973	Lode	MGI	08/30/2011	MGI	11/09/2011	364365	777
778	SF 755	206974	Lode	MGI	08/30/2011	MGI	11/09/2011	364366	778
779	SF 756	206975	Lode	MGI	08/30/2011	MGI	11/09/2011	364367	779
780	SF 757	206976	Lode	MGI	08/30/2011	MGI	11/09/2011	364368	780
781	SF 758	206977	Lode	MGI	08/30/2011	MGI	11/09/2011	364369	781
782	SF 759	206978	Lode	MGI	08/30/2011	MGI	11/09/2011	364370	782
783	SF 760	206979	Lode	MGI	08/30/2011	MGI	11/09/2011	364371	783

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
784	SF 761	206980	Lode	MGI	08/30/2011	MGI	11/09/2011	364372	784
785	SF 762	206981	Lode	MGI	08/30/2011	MGI	11/09/2011	364373	785
786	SF 763	206982	Lode	MGI	08/30/2011	MGI	11/09/2011	364374	786
787	SF 764	206983	Lode	MGI	08/30/2011	MGI	11/09/2011	364375	787
788	SF 765	206984	Lode	MGI	08/30/2011	MGI	11/09/2011	364376	788
789	SF 766	206985	Lode	MGI	08/30/2011	MGI	11/09/2011	364377	789
790	SF 767	206986	Lode	MGI	08/30/2011	MGI	11/09/2011	364378	790
791	SF 768	206987	Lode	MGI	08/30/2011	MGI	11/09/2011	364379	791
792	SF 769	206988	Lode	MGI	08/30/2011	MGI	11/09/2011	364380	792
793	SF 770	206989	Lode	MGI	08/30/2011	MGI	11/09/2011	364381	793
794	SF 771	206990	Lode	MGI	08/30/2011	MGI	11/09/2011	364382	794
795	SF 772	206991	Lode	MGI	08/30/2011	MGI	11/09/2011	364383	795
796	SF 773	206992	Lode	MGI	08/30/2011	MGI	11/09/2011	364384	796
797	SF 774	206993	Lode	MGI	08/30/2011	MGI	11/09/2011	364385	797
798	SF 775	206994	Lode	MGI	08/30/2011	MGI	11/09/2011	364386	798
799	SF 776	206995	Lode	MGI	08/30/2011	MGI	11/09/2011	364387	799
800	SF 777	206996	Lode	MGI	08/29/2011	MGI	11/09/2011	364388	800
801	SF 778	206997	Lode	MGI	08/29/2011	MGI	11/09/2011	364389	801
802	SF 779	206998	Lode	MGI	08/29/2011	MGI	11/09/2011	364390	802
803	SF 780	206999	Lode	MGI	08/29/2011	MGI	11/09/2011	364391	803
804	SF 781	207000	Lode	MGI	08/29/2011	MGI	11/09/2011	364392	804
805	SF 782	207001	Lode	MGI	08/29/2011	MGI	11/09/2011	364393	805
806	SF 783	207002	Lode	MGI	08/29/2011	MGI	11/09/2011	364394	806
807	SF 784	207003	Lode	MGI	08/29/2011	MGI	11/09/2011	364395	807
808	SF 785	207004	Lode	MGI	08/29/2011	MGI	11/09/2011	364396	808
809	SF 786	207005	Lode	MGI	08/30/2011	MGI	11/09/2011	364397	809
810	SF 787	207006	Lode	MGI	08/30/2011	MGI	11/09/2011	364398	810
811	SF 788	207191	Lode	MGI	09/07/2011	MGI	11/10/2011	364496	811

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
812	SF 789	207192	Lode	MGI	09/07/2011	MGI	11/10/2011	364497	812
813	SF 790	207193	Lode	MGI	09/07/2011	MGI	11/10/2011	364498	813
814	SF 791	207194	Lode	MGI	09/07/2011	MGI	11/10/2011	364499	814
815	SF 792	207195	Lode	MGI	09/07/2011	MGI	11/10/2011	364500	815
816	SF 793	207196	Lode	MGI	09/07/2011	MGI	11/10/2011	364501	816
817	SF 794	207197	Lode	MGI	09/07/2011	MGI	11/10/2011	364502	817
818	SF 795	207198	Lode	MGI	09/07/2011	MGI	11/10/2011	364503	818
819	SF 796	207199	Lode	MGI	09/07/2011	MGI	11/10/2011	364504	819
820	SF 797	207200	Lode	MGI	09/07/2011	MGI	11/10/2011	364505	820
821	SF 798	207201	Lode	MGI	09/07/2011	MGI	11/10/2011	364506	821
822	SF 799	207202	Lode	MGI	09/07/2011	MGI	11/10/2011	364507	822
823	SF 800	207203	Lode	MGI	09/07/2011	MGI	11/15/2011	364581	823
824	SF 801	207204	Lode	MGI	09/07/2011	MGI	11/15/2011	364582	824
825	SF 802	207205	Lode	MGI	09/07/2011	MGI	11/15/2011	364583	825
826	SF 803	207055	Lode	MGI	08/31/2011	MGI	11/15/2011	364408	826
827	SF 804	207056	Lode	MGI	08/31/2011	MGI	11/15/2011	364409	827
828	SF 805	207057	Lode	MGI	08/31/2011	MGI	11/15/2011	364410	828
829	SF 806	207058	Lode	MGI	08/31/2011	MGI	11/15/2011	364411	829
830	SF 807	207059	Lode	MGI	08/31/2011	MGI	11/15/2011	364412	830
831	SF 808	207060	Lode	MGI	08/31/2011	MGI	11/15/2011	364413	831
832	SF 809	207061	Lode	MGI	08/31/2011	MGI	11/15/2011	364414	832
833	SF 810	207206	Lode	MGI	09/07/2011	MGI	11/15/2011	364584	833
834	SF 811	207207	Lode	MGI	09/07/2011	MGI	11/15/2011	364585	834
835	SF 812	207208	Lode	MGI	09/07/2011	MGI	11/15/2011	364586	835
836	SF 813	207209	Lode	MGI	09/07/2011	MGI	11/15/2011	364587	836
837	SF 814	207210	Lode	MGI	09/07/2011	MGI	11/15/2011	364588	837
838	SF 815	207211	Lode	MGI	09/07/2011	MGI	11/15/2011	364589	838
839	SF 816	207212	Lode	MGI	09/07/2011	MGI	11/15/2011	364590	839

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
840	SF 817	207213	Lode	MGI	09/07/2011	MGI	11/15/2011	364591	840
841	SF 818	207214	Lode	MGI	09/07/2011	MGI	11/15/2011	364592	841
842	SF 819	207215	Lode	MGI	09/07/2011	MGI	11/15/2011	364593	842
843	SF 820	207216	Lode	MGI	09/07/2011	MGI	11/15/2011	364594	843
844	SF 821	207217	Lode	MGI	09/07/2011	MGI	11/15/2011	364595	844
845	SF 822	207218	Lode	MGI	09/07/2011	MGI	11/15/2011	364596	845
846	SF 823	207219	Lode	MGI	09/07/2011	MGI	11/15/2011	364597	846
847	SF 824	207220	Lode	MGI	09/07/2011	MGI	11/15/2011	364598	847
848	SF 825	207221	Lode	MGI	09/07/2011	MGI	11/15/2011	364599	848
849	SF 826	207116	Lode	MGI	08/31/2011	MGI	11/15/2011	364415	849
850	SF 827	207117	Lode	MGI	08/31/2011	MGI	11/15/2011	364416	850
851	SF 828	207118	Lode	MGI	08/31/2011	MGI	11/15/2011	364417	851
852	SF 829	207119	Lode	MGI	08/31/2011	MGI	11/15/2011	364418	852
853	SF 830	207120	Lode	MGI	08/31/2011	MGI	11/15/2011	364419	853
854	SF 831	207121	Lode	MGI	08/31/2011	MGI	11/15/2011	364420	854
855	SF 832	207122	Lode	MGI	08/31/2011	MGI	11/15/2011	364421	855
856	SF 833	207123	Lode	MGI	08/31/2011	MGI	11/15/2011	364422	856
857	SF 834	207222	Lode	MGI	09/07/2011	MGI	11/15/2011	364600	857
858	SF 835	207223	Lode	MGI	09/07/2011	MGI	11/15/2011	364601	858
859	SF 836	207224	Lode	MGI	09/07/2011	MGI	11/15/2011	364602	859
860	SF 837	207225	Lode	MGI	09/07/2011	MGI	11/15/2011	364603	860
861	SF 838	207226	Lode	MGI	09/07/2011	MGI	11/15/2011	364604	861
862	SF 839	207227	Lode	MGI	09/07/2011	MGI	11/15/2011	364605	862
863	SF 840	207228	Lode	MGI	09/07/2011	MGI	11/15/2011	364606	863
864	SF 841	207229	Lode	MGI	09/07/2011	MGI	11/15/2011	364607	864
865	SF 842	207230	Lode	MGI	09/07/2011	MGI	11/15/2011	364608	865
866	SF 843	207231	Lode	MGI	09/07/2011	MGI	11/15/2011	364609	866
867	SF 844	207232	Lode	MGI	09/07/2011	MGI	11/15/2011	364610	867

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
868	SF 845	207233	Lode	MGI	09/07/2011	MGI	11/15/2011	364611	868
869	SF 846	207234	Lode	MGI	09/07/2011	MGI	11/15/2011	364612	869
870	SF 847	207235	Lode	MGI	09/07/2011	MGI	11/15/2011	364613	870
871	SF 848	207124	Lode	MGI	08/31/2011	MGI	11/15/2011	364423	871
872	SF 849	207125	Lode	MGI	08/31/2011	MGI	11/15/2011	364424	872
873	SF 850	207126	Lode	MGI	08/31/2011	MGI	11/15/2011	364425	873
874	SF 851	207127	Lode	MGI	08/31/2011	MGI	11/15/2011	364426	874
875	SF 852	207128	Lode	MGI	08/31/2011	MGI	11/15/2011	364427	875
876	SF 853	207129	Lode	MGI	08/31/2011	MGI	11/15/2011	364428	876
877	SF 854	207130	Lode	MGI	08/31/2011	MGI	11/15/2011	364429	877
878	SF 855	207131	Lode	MGI	08/31/2011	MGI	11/15/2011	364430	878
879	SF 856	207236	Lode	MGI	09/07/2011	MGI	11/15/2011	364614	879
880	SF 857	207237	Lode	MGI	09/07/2011	MGI	11/15/2011	364615	880
881	SF 858	207238	Lode	MGI	09/07/2011	MGI	11/15/2011	364616	881
882	SF 859	207239	Lode	MGI	09/07/2011	MGI	11/15/2011	364617	882
883	SF 860	207240	Lode	MGI	09/07/2011	MGI	11/15/2011	364618	883
884	SF 861	207241	Lode	MGI	09/07/2011	MGI	11/15/2011	364619	884
885	SF 862	207242	Lode	MGI	09/07/2011	MGI	11/15/2011	364620	885
886	SF 863	207243	Lode	MGI	09/07/2011	MGI	11/15/2011	364621	886
887	SF 864	207244	Lode	MGI	09/07/2011	MGI	11/15/2011	364622	887
888	SF 865	207245	Lode	MGI	09/07/2011	MGI	11/15/2011	364623	888
889	SF 866	207246	Lode	MGI	09/07/2011	MGI	11/15/2011	364624	889
890	SF 867	207247	Lode	MGI	09/07/2011	MGI	11/15/2011	364625	890
891	SF 868	207132	Lode	MGI	08/31/2011	MGI	11/15/2011	364431	891
892	SF 869	207133	Lode	MGI	08/31/2011	MGI	11/15/2011	364432	892
893	SF 870	207134	Lode	MGI	08/31/2011	MGI	11/15/2011	364433	893
894	SF 871	207135	Lode	MGI	08/31/2011	MGI	11/15/2011	364434	894
895	SF 872	207136	Lode	MGI	08/31/2011	MGI	11/15/2011	364435	895

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
896	SF 873	207137	Lode	MGI	08/31/2011	MGI	11/15/2011	364436	896
897	SF 874	207138	Lode	MGI	08/31/2011	MGI	11/15/2011	364437	897
898	SF 875	207139	Lode	MGI	08/31/2011	MGI	11/15/2011	364438	898
899	SF 876	207248	Lode	MGI	09/08/2011	MGI	11/15/2011	364628	899
900	SF 877	207249	Lode	MGI	09/08/2011	MGI	11/15/2011	364629	900
901	SF 878	207250	Lode	MGI	09/08/2011	MGI	11/15/2011	364630	901
902	SF 879	207251	Lode	MGI	09/08/2011	MGI	11/15/2011	364631	902
903	SF 880	207252	Lode	MGI	09/08/2011	MGI	11/15/2011	364632	903
904	SF 881	207253	Lode	MGI	09/08/2011	MGI	11/15/2011	364633	904
905	SF 882	207254	Lode	MGI	09/08/2011	MGI	11/15/2011	364634	905
906	SF 883	207255	Lode	MGI	09/08/2011	MGI	11/15/2011	364635	906
907	SF 884	207256	Lode	MGI	09/08/2011	MGI	11/15/2011	364636	907
908	SF 885	207257	Lode	MGI	09/08/2011	MGI	11/15/2011	364637	908
909	SF 886	207258	Lode	MGI	09/08/2011	MGI	11/15/2011	364638	909
910	SF 887	207259	Lode	MGI	09/08/2011	MGI	11/15/2011	364639	910
911	SF 888	207260	Lode	MGI	09/08/2011	MGI	11/15/2011	364640	911
912	SF 889	207261	Lode	MGI	09/08/2011	MGI	11/15/2011	364641	912
913	SF 890	207262	Lode	MGI	09/08/2011	MGI	11/15/2011	364642	913
914	SF 891	207263	Lode	MGI	09/08/2011	MGI	11/15/2011	364643	914
915	SF 892	207264	Lode	MGI	09/08/2011	MGI	11/15/2011	364644	915
916	SF 893	207265	Lode	MGI	09/08/2011	MGI	11/15/2011	364645	916
917	SF 894	207266	Lode	MGI	09/08/2011	MGI	11/15/2011	364646	917
918	SF 895	207267	Lode	MGI	09/08/2011	MGI	11/15/2011	364647	918
919	SF 896	207268	Lode	MGI	09/08/2011	MGI	11/15/2011	364648	919
920	SF 897	207269	Lode	MGI	09/08/2011	MGI	11/15/2011	364649	920
921	SF 898	207270	Lode	MGI	09/08/2011	MGI	11/15/2011	364650	921
922	SF 899	207271	Lode	MGI	09/08/2011	MGI	11/15/2011	364651	922
923	SF 900	207272	Lode	MGI	09/08/2011	MGI	11/17/2011	364658	923

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
924	SF 901	207273	Lode	MGI	09/08/2011	MGI	11/17/2011	364692	924
925	SF 902	207274	Lode	MGI	09/08/2011	MGI	11/17/2011	364695	925
926	SF 903	207275	Lode	MGI	09/08/2011	MGI	11/17/2011	364696	926
927	SF 904	207276	Lode	MGI	09/08/2011	MGI	11/17/2011	364697	927
928	SF 905	207277	Lode	MGI	09/08/2011	MGI	11/17/2011	364698	928
929	SF 906	207278	Lode	MGI	09/08/2011	MGI	11/17/2011	364699	929
930	SF 907	207279	Lode	MGI	09/08/2011	MGI	11/17/2011	364700	930
931	SF 908	207280	Lode	MGI	09/08/2011	MGI	11/17/2011	364701	931
932	SF 909	207281	Lode	MGI	09/08/2011	MGI	11/17/2011	364702	932
933	SF 910	207282	Lode	MGI	09/08/2011	MGI	11/17/2011	364703	933
934	SF 911	207283	Lode	MGI	09/08/2011	MGI	11/17/2011	364704	934
935	SF 912	207284	Lode	MGI	09/08/2011	MGI	11/17/2011	364705	935
936	SF 913	207285	Lode	MGI	09/08/2011	MGI	11/17/2011	364706	936
937	SF 914	207286	Lode	MGI	09/08/2011	MGI	11/17/2011	364707	937
938	SF 915	207287	Lode	MGI	09/08/2011	MGI	11/17/2011	364708	938
939	SF 916	207288	Lode	MGI	09/08/2011	MGI	11/17/2011	364709	939
940	SF 917	207289	Lode	MGI	09/08/2011	MGI	11/17/2011	364710	940
941	SF 918	207290	Lode	MGI	09/08/2011	MGI	11/17/2011	364711	941
942	SF 919	207291	Lode	MGI	09/08/2011	MGI	11/17/2011	364712	942
943	SF 920	207140	Lode	MGI	08/27/2011	MGI	11/17/2011	364439	943
944	SF 921	207141	Lode	MGI	08/30/2011	MGI	11/17/2011	364440	944
945	SF 922	207292	Lode	MGI	09/08/2011	MGI	11/17/2011	364713	945
946	SF 923	207293	Lode	MGI	09/08/2011	MGI	11/17/2011	364714	946
947	SF 924	207294	Lode	MGI	09/08/2011	MGI	11/17/2011	364715	947
948	SF 925	207295	Lode	MGI	09/08/2011	MGI	11/17/2011	364716	948
949	SF 926	207296	Lode	MGI	09/08/2011	MGI	11/17/2011	364717	949
950	SF 927	207297	Lode	MGI	09/08/2011	MGI	11/17/2011	364718	950
951	SF 928	207298	Lode	MGI	09/08/2011	MGI	11/17/2011	364719	951

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
952	SF 929	207299	Lode	MGI	09/08/2011	MGI	11/17/2011	364720	952
953	SF 930	207300	Lode	MGI	09/08/2011	MGI	11/17/2011	364721	953
954	SF 931	207301	Lode	MGI	09/08/2011	MGI	11/17/2011	364722	954
955	SF 932	207302	Lode	MGI	09/08/2011	MGI	11/17/2011	364723	955
956	SF 933	207303	Lode	MGI	09/08/2011	MGI	11/17/2011	364724	956
957	SF 934	207304	Lode	MGI	09/08/2011	MGI	11/17/2011	364725	957
958	SF 935	207305	Lode	MGI	09/08/2011	MGI	11/17/2011	364726	958
959	SF 936	207306	Lode	MGI	09/08/2011	MGI	11/17/2011	364727	959
960	SF 937	207307	Lode	MGI	09/08/2011	MGI	11/17/2011	364728	960
961	SF 938	207308	Lode	MGI	09/08/2011	MGI	11/17/2011	364729	961
962	SF 939	207309	Lode	MGI	09/08/2011	MGI	11/17/2011	364730	962
963	SF 940	207310	Lode	MGI	09/08/2011	MGI	11/17/2011	364731	963
964	SF 941	207311	Lode	MGI	09/09/2011	MGI	11/17/2011	364732	964
965	SF 942	207312	Lode	MGI	09/09/2011	MGI	11/17/2011	364733	965
966	SF 943	207313	Lode	MGI	09/09/2011	MGI	11/17/2011	364734	966
967	SF 944	207314	Lode	MGI	09/09/2011	MGI	11/17/2011	364735	967
968	SF 945	207315	Lode	MGI	09/09/2011	MGI	11/17/2011	364736	968
969	SF 946	207316	Lode	MGI	09/09/2011	MGI	11/17/2011	364737	969
970	SF 947	207317	Lode	MGI	09/09/2011	MGI	11/17/2011	364738	970
971	SF 948	207318	Lode	MGI	09/09/2011	MGI	11/17/2011	364739	971
972	SF 949	207319	Lode	MGI	09/09/2011	MGI	11/17/2011	364740	972
973	SF 950	207320	Lode	MGI	09/09/2011	MGI	11/17/2011	364741	973
974	SF 951	207321	Lode	MGI	09/09/2011	MGI	11/17/2011	364742	974
975	SF 952	207322	Lode	MGI	09/09/2011	MGI	11/17/2011	364743	975
976	SF 953	207323	Lode	MGI	09/09/2011	MGI	11/17/2011	364744	976
977	SF 954	207324	Lode	MGI	09/08/2011	MGI	11/17/2011	364745	977
978	SF 955	207325	Lode	MGI	09/08/2011	MGI	11/17/2011	364746	978
979	SF 956	207326	Lode	MGI	09/08/2011	MGI	11/17/2011	364747	979

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
980	SF 957	207327	Lode	MGI	09/09/2011	MGI	11/17/2011	364748	980
981	SF 958	207328	Lode	MGI	09/09/2011	MGI	11/17/2011	364749	981
982	SF 959	207329	Lode	MGI	09/09/2011	MGI	11/17/2011	364750	982
983	SF 960	207330	Lode	MGI	09/09/2011	MGI	11/17/2011	364751	983
984	SF 961	207331	Lode	MGI	09/09/2011	MGI	11/17/2011	364752	984
985	SF 962	207332	Lode	MGI	09/09/2011	MGI	11/17/2011	364753	985
986	SF 963	207333	Lode	MGI	09/09/2011	MGI	11/17/2011	364754	986
987	SF 964	207334	Lode	MGI	09/09/2011	MGI	11/17/2011	364755	987
988	SF 965	207335	Lode	MGI	09/09/2011	MGI	11/17/2011	364756	988
989	SF 966	207336	Lode	MGI	09/09/2011	MGI	11/17/2011	364757	989
990	SF 967	207337	Lode	MGI	09/09/2011	MGI	11/17/2011	364758	990
991	SF 968	207338	Lode	MGI	09/09/2011	MGI	11/17/2011	364769	991
992	SF 969	207339	Lode	MGI	09/09/2011	MGI	11/17/2011	364770	992
993	SF 970	207340	Lode	MGI	09/09/2011	MGI	11/17/2011	364771	993
994	SF 971	207341	Lode	MGI	09/09/2011	MGI	11/17/2011	364772	994
995	SF 972	207342	Lode	MGI	09/09/2011	MGI	11/17/2011	364773	995
996	SF 973	207343	Lode	MGI	09/09/2011	MGI	11/17/2011	364774	996
997	SF 974	207344	Lode	MGI	09/09/2011	MGI	11/17/2011	364775	997
998	SF 975	207345	Lode	MGI	09/09/2011	MGI	11/17/2011	364776	998
999	SF 976	207346	Lode	MGI	09/09/2011	MGI	11/17/2011	364777	999
1000	SF 977	207347	Lode	MGI	09/09/2011	MGI	11/17/2011	364778	1000
1001	SF 978	207348	Lode	MGI	09/09/2011	MGI	11/17/2011	364779	1001
1002	SF 979	207349	Lode	MGI	09/09/2011	MGI	11/17/2011	364780	1002
1003	SF 980	207350	Lode	MGI	09/09/2011	MGI	11/17/2011	364781	1003
1004	SF 981	207351	Lode	MGI	09/09/2011	MGI	11/17/2011	364782	1004
1005	SF 982	207352	Lode	MGI	09/09/2011	MGI	11/17/2011	364783	1005
1006	SF 983	207353	Lode	MGI	09/09/2011	MGI	11/17/2011	364784	1006
1007	SF 984	207354	Lode	MGI	09/09/2011	MGI	11/17/2011	364785	1007

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1008	SF 985	207355	Lode	MGI	09/09/2011	MGI	11/17/2011	364786	1008
1009	SF 986	207356	Lode	MGI	09/09/2011	MGI	11/17/2011	364787	1009
1010	SF 987	207357	Lode	MGI	09/09/2011	MGI	11/17/2011	364788	1010
1011	SF 988	207358	Lode	MGI	09/09/2011	MGI	11/17/2011	364789	1011
1012	SF 989	207359	Lode	MGI	09/09/2011	MGI	11/17/2011	364790	1012
1013	SF 990	207360	Lode	MGI	09/09/2011	MGI	11/17/2011	364791	1013
1014	SF 991	207361	Lode	MGI	09/09/2011	MGI	11/17/2011	364792	1014
1015	SF 992	207362	Lode	MGI	09/09/2011	MGI	11/17/2011	364793	1015
1016	SF 993	207363	Lode	MGI	09/10/2011	MGI	11/17/2011	364794	1016
1017	SF 994	207364	Lode	MGI	09/10/2011	MGI	11/17/2011	364795	1017
1018	SF 995	207365	Lode	MGI	09/10/2011	MGI	11/17/2011	364801	1018
1019	SF 996	207366	Lode	MGI	09/10/2011	MGI	11/17/2011	364802	1019
1020	SF 997	207367	Lode	MGI	09/10/2011	MGI	11/17/2011	364803	1020
1021	SF 998	207368	Lode	MGI	09/10/2011	MGI	11/17/2011	364804	1021
1022	SF 999	207369	Lode	MGI	09/10/2011	MGI	11/17/2011	364805	1022
1023	SF 1000	207370	Lode	MGI	09/10/2011	MGI	11/18/2011	364820	1023
1024	SF 1001	207371	Lode	MGI	09/10/2011	MGI	11/18/2011	364821	1024
1025	SF 1002	207372	Lode	MGI	09/10/2011	MGI	11/18/2011	364822	1025
1026	SF 1003	207373	Lode	MGI	09/10/2011	MGI	11/18/2011	364823	1026
1027	SF 1004	207374	Lode	MGI	09/10/2011	MGI	11/18/2011	364824	1027
1028	SF 1005	207375	Lode	MGI	09/10/2011	MGI	11/18/2011	364825	1028
1029	SF 1006	207376	Lode	MGI	09/10/2011	MGI	11/18/2011	364826	1029
1030	SF 1007	207377	Lode	MGI	09/10/2011	MGI	11/18/2011	364832	1030
1031	SF 1008	207378	Lode	MGI	09/10/2011	MGI	11/18/2011	364833	1031
1032	SF 1009	207379	Lode	MGI	09/10/2011	MGI	11/18/2011	364834	1032
1033	SF 1010	207380	Lode	MGI	09/10/2011	MGI	11/18/2011	364835	1033
1034	SF 1011	207381	Lode	MGI	09/10/2011	MGI	11/18/2011	364836	1034
1035	SF 1012	207382	Lode	MGI	09/10/2011	MGI	11/18/2011	364837	1035

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1036	SF 1013	207383	Lode	MGI	09/10/2011	MGI	11/18/2011	364838	1036
1037	SF 1014	207384	Lode	MGI	09/10/2011	MGI	11/18/2011	364839	1037
1038	SF 1015	207385	Lode	MGI	09/10/2011	MGI	11/18/2011	364840	1038
1039	SF 1016	207386	Lode	MGI	09/10/2011	MGI	11/18/2011	364841	1039
1040	SF 1017	207387	Lode	MGI	09/10/2011	MGI	11/18/2011	364842	1040
1041	SF 1018	207388	Lode	MGI	09/10/2011	MGI	11/18/2011	364843	1041
1042	SF 1019	207389	Lode	MGI	09/10/2011	MGI	11/18/2011	364844	1042
1043	SF 1020	207390	Lode	MGI	09/10/2011	MGI	11/18/2011	364845	1043
1044	SF 1021	207391	Lode	MGI	09/10/2011	MGI	11/18/2011	364846	1044
1045	SF 1022	207392	Lode	MGI	09/10/2011	MGI	11/18/2011	364847	1045
1046	SF 1023	207393	Lode	MGI	09/10/2011	MGI	11/18/2011	364848	1046
1047	SF 1024	207394	Lode	MGI	09/10/2011	MGI	11/18/2011	364849	1047
1048	SF 1025	207395	Lode	MGI	09/10/2011	MGI	11/18/2011	364850	1048
1049	SF 1026	207396	Lode	MGI	09/10/2011	MGI	11/18/2011	364851	1049
1050	SF 1027	207397	Lode	MGI	09/10/2011	MGI	11/18/2011	364852	1050
1051	SF 1028	207398	Lode	MGI	09/12/2011	MGI	11/18/2011	364853	1051
1052	SF 1029	207399	Lode	MGI	09/12/2011	MGI	11/18/2011	364854	1052
1053	SF 1030	207400	Lode	MGI	09/12/2011	MGI	11/18/2011	364855	1053
1054	SF 1031	207401	Lode	MGI	09/12/2011	MGI	11/18/2011	364856	1054
1055	SF 1032	207402	Lode	MGI	09/12/2011	MGI	11/18/2011	364857	1055
1056	SF 1033	207403	Lode	MGI	09/12/2011	MGI	11/18/2011	364858	1056
1057	SF 1034	207404	Lode	MGI	09/12/2011	MGI	11/18/2011	364859	1057
1058	SF 1035	207405	Lode	MGI	09/12/2011	MGI	11/18/2011	364860	1058
1059	SF 1036	207406	Lode	MGI	09/17/2011	MGI	11/18/2011	364861	1059
1060	SF 1037	207407	Lode	MGI	09/17/2011	MGI	11/18/2011	364862	1060
1061	SF 1038	207408	Lode	MGI	09/17/2011	MGI	11/18/2011	364863	1061
1062	SF 1039	207409	Lode	MGI	09/17/2011	MGI	11/18/2011	364864	1062
1063	SF 1040	207410	Lode	MGI	09/17/2011	MGI	11/18/2011	364865	1063

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1064	SF 1041	207411	Lode	MGI	09/08/2011	MGI	11/18/2011	364866	1064
1065	SF 1042	207412	Lode	MGI	09/12/2011	MGI	11/18/2011	364867	1065
1066	SF 1043	207413	Lode	MGI	09/12/2011	MGI	11/18/2011	364871	1066
1067	SF 1044	207414	Lode	MGI	09/12/2011	MGI	11/18/2011	364872	1067
1068	SF 1045	207415	Lode	MGI	09/12/2011	MGI	11/18/2011	364873	1068
1069	SF 1046	207416	Lode	MGI	09/12/2011	MGI	11/18/2011	364874	1069
1070	SF 1047	207417	Lode	MGI	09/12/2011	MGI	11/18/2011	364875	1070
1071	SF 1048	207418	Lode	MGI	09/12/2011	MGI	11/18/2011	364876	1071
1072	SF 1049	207419	Lode	MGI	09/12/2011	MGI	11/18/2011	364877	1072
1073	SF 1050	207420	Lode	MGI	09/12/2011	MGI	11/18/2011	364878	1073
1074	SF 1051	207421	Lode	MGI	09/17/2011	MGI	11/18/2011	364879	1074
1075	SF 1052	207422	Lode	MGI	09/17/2011	MGI	11/18/2011	364880	1075
1076	SF 1053	207423	Lode	MGI	09/17/2011	MGI	11/18/2011	364881	1076
1077	SF 1054	207424	Lode	MGI	09/17/2011	MGI	11/18/2011	364882	1077
1078	SF 1055	207425	Lode	MGI	09/17/2011	MGI	11/18/2011	364883	1078
1079	SF 1056	207426	Lode	MGI	09/17/2011	MGI	11/18/2011	364884	1079
1080	SF 1057	207427	Lode	MGI	09/17/2011	MGI	11/18/2011	364885	1080
1081	SF 1058	207428	Lode	MGI	09/17/2011	MGI	11/18/2011	364886	1081
1082	SF 1059	207429	Lode	MGI	09/17/2011	MGI	11/18/2011	364887	1082
1083	SF 1060	207430	Lode	MGI	09/17/2011	MGI	11/18/2011	364888	1083
1084	SF 1061	207431	Lode	MGI	09/18/2011	MGI	11/18/2011	364889	1084
1085	SF 1062	207432	Lode	MGI	09/18/2011	MGI	11/18/2011	364890	1085
1086	SF 1063	207433	Lode	MGI	09/18/2011	MGI	11/18/2011	364891	1086
1087	SF 1064	207434	Lode	MGI	09/18/2011	MGI	11/18/2011	364892	1087
1088	SF 1065	207435	Lode	MGI	09/18/2011	MGI	11/18/2011	364893	1088
1089	SF 1066	207436	Lode	MGI	09/18/2011	MGI	11/18/2011	364894	1089
1090	SF 1067	207437	Lode	MGI	09/18/2011	MGI	11/18/2011	364895	1090
1091	SF 1068	207438	Lode	MGI	09/18/2011	MGI	11/18/2011	364896	1091

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1092	SF 1069	207439	Lode	MGI	09/18/2011	MGI	11/18/2011	364897	1092
1093	SF 1070	207440	Lode	MGI	09/18/2011	MGI	11/18/2011	364898	1093
1094	SF 1071	207441	Lode	MGI	09/18/2011	MGI	11/18/2011	364899	1094
1095	SF 1072	207442	Lode	MGI	09/18/2011	MGI	11/18/2011	364900	1095
1096	SF 1073	207443	Lode	MGI	09/18/2011	MGI	11/18/2011	364901	1096
1097	SF 1074	207444	Lode	MGI	09/18/2011	MGI	11/18/2011	364902	1097
1098	SF 1075	207445	Lode	MGI	09/18/2011	MGI	11/18/2011	364903	1098
1099	SF 1076	207446	Lode	MGI	09/18/2011	MGI	11/18/2011	364904	1099
1100	SF 1077	207447	Lode	MGI	09/18/2011	MGI	11/18/2011	364905	1100
1101	SF 1078	207448	Lode	MGI	09/18/2011	MGI	11/18/2011	364906	1101
1102	SF 1079	207449	Lode	MGI	09/18/2011	MGI	11/18/2011	364907	1102
1103	SF 1080	207450	Lode	MGI	09/18/2011	MGI	11/18/2011	364908	1103
1104	SF 1081	207451	Lode	MGI	09/21/2011	MGI	11/18/2011	364909	1104
1105	SF 1082	207452	Lode	MGI	09/12/2011	MGI	11/18/2011	364910	1105
1106	SF 1083	207453	Lode	MGI	09/12/2011	MGI	11/18/2011	364911	1106
1107	SF 1084	207454	Lode	MGI	09/12/2011	MGI	11/18/2011	364912	1107
1108	SF 1085	207455	Lode	MGI	09/12/2011	MGI	11/18/2011	364913	1108
1109	SF 1086	207456	Lode	MGI	09/12/2011	MGI	11/18/2011	364914	1109
1110	SF 1087	207457	Lode	MGI	09/12/2011	MGI	11/18/2011	364915	1110
1111	SF 1088	207458	Lode	MGI	09/12/2011	MGI	11/18/2011	364916	1111
1112	SF 1089	207459	Lode	MGI	09/12/2011	MGI	11/18/2011	364917	1112
1113	SF 1090	207460	Lode	MGI	09/12/2011	MGI	11/18/2011	364918	1113
1114	SF 1091	207461	Lode	MGI	09/12/2011	MGI	11/18/2011	364919	1114
1115	SF 1092	207462	Lode	MGI	09/12/2011	MGI	11/18/2011	364920	1115
1116	SF 1093	207463	Lode	MGI	09/12/2011	MGI	11/18/2011	364921	1116
1117	SF 1094	207464	Lode	MGI	09/12/2011	MGI	11/18/2011	364922	1117
1118	SF 1095	207465	Lode	MGI	09/12/2011	MGI	11/18/2011	364923	1118
1119	SF 1096	207466	Lode	MGI	09/12/2011	MGI	11/18/2011	364924	1119

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1120	SF 1097	207467	Lode	MGI	09/12/2011	MGI	11/18/2011	364925	1120
1121	SF 1098	207468	Lode	MGI	09/12/2011	MGI	11/18/2011	364926	1121
1122	SF 1099	207469	Lode	MGI	09/13/2011	MGI	11/18/2011	364927	1122
1123	SF 1100	207470	Lode	MGI	09/17/2011	MGI	11/21/2011	364944	1123
1124	SF 1101	207471	Lode	MGI	09/13/2011	MGI	11/21/2011	364945	1124
1125	SF 1102	207472	Lode	MGI	09/13/2011	MGI	11/21/2011	364946	1125
1126	SF 1103	207473	Lode	MGI	09/13/2011	MGI	11/21/2011	364947	1126
1127	SF 1104	207474	Lode	MGI	09/13/2011	MGI	11/22/2011	364991	1127
1128	SF 1105	207475	Lode	MGI	09/13/2011	MGI	11/22/2011	364992	1128
1129	SF 1106	207476	Lode	MGI	09/13/2011	MGI	11/22/2011	364993	1129
1130	SF 1107	207477	Lode	MGI	09/13/2011	MGI	11/22/2011	364994	1130
1131	SF 1108	207478	Lode	MGI	09/13/2011	MGI	11/22/2011	364995	1131
1132	SF 1109	207479	Lode	MGI	09/13/2011	MGI	11/22/2011	364996	1132
1133	SF 1110	207480	Lode	MGI	09/13/2011	MGI	11/22/2011	364997	1133
1134	SF 1111	207481	Lode	MGI	09/13/2011	MGI	11/22/2011	364998	1134
1135	SF 1112	207482	Lode	MGI	09/13/2011	MGI	11/22/2011	364999	1135
1136	SF 1113	207483	Lode	MGI	09/13/2011	MGI	11/22/2011	365001	1136
1137	SF 1114	207484	Lode	MGI	09/13/2011	MGI	11/22/2011	365002	1137
1138	SF 1115	207485	Lode	MGI	09/13/2011	MGI	11/22/2011	365003	1138
1139	SF 1116	207486	Lode	MGI	09/13/2011	MGI	11/22/2011	365004	1139
1140	SF 1117	207487	Lode	MGI	09/13/2011	MGI	11/22/2011	365005	1140
1141	SF 1118	207488	Lode	MGI	09/13/2011	MGI	11/22/2011	365006	1141
1142	SF 1119	207489	Lode	MGI	09/12/2011	MGI	11/22/2011	365007	1142
1143	SF 1120	207490	Lode	MGI	09/12/2011	MGI	11/22/2011	365008	1143
1144	SF 1121	207491	Lode	MGI	09/12/2011	MGI	11/22/2011	365009	1144
1145	SF 1122	207492	Lode	MGI	09/12/2011	MGI	11/22/2011	365010	1145
1146	SF 1123	207493	Lode	MGI	09/12/2011	MGI	11/22/2011	365011	1146
1147	SF 1124	207494	Lode	MGI	09/12/2011	MGI	11/22/2011	365012	1147

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1148	SF 1125	207495	Lode	MGI	09/12/2011	MGI	11/22/2011	365013	1148
1149	SF 1126	207496	Lode	MGI	09/12/2011	MGI	11/22/2011	365014	1149
1150	SF 1127	207497	Lode	MGI	09/12/2011	MGI	11/22/2011	365015	1150
1151	SF 1128	207498	Lode	MGI	09/12/2011	MGI	11/22/2011	365016	1151
1152	SF 1129	207499	Lode	MGI	09/12/2011	MGI	11/22/2011	365017	1152
1153	SF 1130	207500	Lode	MGI	09/12/2011	MGI	11/22/2011	365018	1153
1154	SF 1131	207501	Lode	MGI	09/12/2011	MGI	11/22/2011	365019	1154
1155	SF 1132	207502	Lode	MGI	09/12/2011	MGI	11/22/2011	365020	1155
1156	SF 1133	207503	Lode	MGI	09/12/2011	MGI	11/22/2011	365021	1156
1157	SF 1134	207504	Lode	MGI	09/12/2011	MGI	11/22/2011	365022	1157
1158	SF 1135	207505	Lode	MGI	09/12/2011	MGI	11/22/2011	365023	1158
1159	SF 1136	207506	Lode	MGI	09/13/2011	MGI	11/22/2011	365024	1159
1160	SF 1137	207507	Lode	MGI	09/13/2011	MGI	11/22/2011	365025	1160
1161	SF 1138	207508	Lode	MGI	09/13/2011	MGI	11/22/2011	365026	1161
1162	SF 1139	207509	Lode	MGI	09/13/2011	MGI	11/22/2011	365027	1162
1163	SF 1140	207510	Lode	MGI	09/13/2011	MGI	11/22/2011	365028	1163
1164	SF 1141	207511	Lode	MGI	09/13/2011	MGI	11/22/2011	365029	1164
1165	SF 1142	207512	Lode	MGI	09/13/2011	MGI	11/22/2011	365030	1165
1166	SF 1143	207513	Lode	MGI	09/13/2011	MGI	11/22/2011	365031	1166
1167	SF 1144	207514	Lode	MGI	09/13/2011	MGI	11/22/2011	365032	1167
1168	SF 1145	207515	Lode	MGI	09/13/2011	MGI	11/22/2011	365033	1168
1169	SF 1146	207516	Lode	MGI	09/13/2011	MGI	11/22/2011	365034	1169
1170	SF 1147	207517	Lode	MGI	09/13/2011	MGI	11/22/2011	365035	1170
1171	SF 1148	207518	Lode	MGI	09/13/2011	MGI	11/22/2011	365036	1171
1172	SF 1149	207519	Lode	MGI	09/13/2011	MGI	11/22/2011	365037	1172
1173	SF 1150	207520	Lode	MGI	09/13/2011	MGI	11/22/2011	365038	1173
1174	SF 1151	207521	Lode	MGI	09/13/2011	MGI	11/22/2011	365048	1174
1175	SF 1152	207522	Lode	MGI	09/13/2011	MGI	11/22/2011	365049	1175

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1176	SF 1153	207523	Lode	MGI	09/13/2011	MGI	11/22/2011	365050	1176
1177	SF 1154	207524	Lode	MGI	09/12/2011	MGI	11/22/2011	365051	1177
1178	SF 1155	207525	Lode	MGI	09/12/2011	MGI	11/22/2011	365052	1178
1179	SF 1156	207526	Lode	MGI	09/12/2011	MGI	11/22/2011	365053	1179
1180	SF 1157	207527	Lode	MGI	09/12/2011	MGI	11/22/2011	365054	1180
1181	SF 1158	207528	Lode	MGI	09/12/2011	MGI	11/22/2011	365055	1181
1182	SF 1159	207529	Lode	MGI	09/12/2011	MGI	11/22/2011	365056	1182
1183	SF 1160	207530	Lode	MGI	09/12/2011	MGI	11/22/2011	365057	1183
1184	SF 1161	207531	Lode	MGI	09/12/2011	MGI	11/22/2011	365058	1184
1185	SF 1162	207532	Lode	MGI	09/12/2011	MGI	11/22/2011	365059	1185
1186	SF 1163	207533	Lode	MGI	09/12/2011	MGI	11/22/2011	365060	1186
1187	SF 1164	207534	Lode	MGI	09/12/2011	MGI	11/22/2011	365061	1187
1188	SF 1165	207535	Lode	MGI	09/12/2011	MGI	11/22/2011	365062	1188
1189	SF 1166	207536	Lode	MGI	09/12/2011	MGI	11/22/2011	365063	1189
1190	SF 1167	207537	Lode	MGI	09/12/2011	MGI	11/22/2011	365064	1190
1191	SF 1168	207538	Lode	MGI	09/12/2011	MGI	11/22/2011	365065	1191
1192	SF 1169	207539	Lode	MGI	09/12/2011	MGI	11/22/2011	365066	1192
1193	SF 1170	207540	Lode	MGI	09/12/2011	MGI	11/22/2011	365067	1193
1194	SF 1171	207541	Lode	MGI	09/13/2011	MGI	11/22/2011	365068	1194
1195	SF 1172	207542	Lode	MGI	09/13/2011	MGI	11/22/2011	365069	1195
1196	SF 1173	207543	Lode	MGI	09/13/2011	MGI	11/22/2011	365070	1196
1197	SF 1174	207544	Lode	MGI	09/13/2011	MGI	11/22/2011	365071	1197
1198	SF 1175	207545	Lode	MGI	09/13/2011	MGI	11/22/2011	365072	1198
1199	SF 1176	207546	Lode	MGI	09/13/2011	MGI	11/22/2011	365073	1199
1200	SF 1177	207547	Lode	MGI	09/13/2011	MGI	11/22/2011	365074	1200
1201	SF 1178	207548	Lode	MGI	09/13/2011	MGI	11/22/2011	365075	1201
1202	SF 1179	207549	Lode	MGI	09/13/2011	MGI	11/22/2011	365076	1202
1203	SF 1180	207550	Lode	MGI	09/13/2011	MGI	11/22/2011	365077	1203

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1204	SF 1181	207551	Lode	MGI	09/18/2011	MGI	11/22/2011	365078	1204
1205	SF 1182	207552	Lode	MGI	09/18/2011	MGI	11/22/2011	365079	1205
1206	SF 1183	207553	Lode	MGI	09/18/2011	MGI	11/22/2011	365080	1206
1207	SF 1184	207554	Lode	MGI	09/18/2011	MGI	11/22/2011	365081	1207
1208	SF 1185	207555	Lode	MGI	09/18/2011	MGI	11/22/2011	365082	1208
1209	SF 1186	207556	Lode	MGI	09/18/2011	MGI	11/22/2011	365083	1209
1210	SF 1187	207557	Lode	MGI	09/18/2011	MGI	11/22/2011	365084	1210
1211	SF 1188	207558	Lode	MGI	09/18/2011	MGI	11/22/2011	365085	1211
1212	SF 1189	207559	Lode	MGI	09/18/2011	MGI	11/22/2011	365086	1212
1213	SF 1190	207560	Lode	MGI	09/18/2011	MGI	11/22/2011	365087	1213
1214	SF 1191	207561	Lode	MGI	09/18/2011	MGI	11/22/2011	365088	1214
1215	SF 1192	207562	Lode	MGI	09/18/2011	MGI	11/22/2011	365089	1215
1216	SF 1193	207563	Lode	MGI	09/18/2011	MGI	11/22/2011	365090	1216
1217	SF 1194	207564	Lode	MGI	09/18/2011	MGI	11/22/2011	365091	1217
1218	SF 1195	207565	Lode	MGI	09/18/2011	MGI	11/22/2011	365092	1218
1219	SF 1196	207566	Lode	MGI	09/18/2011	MGI	11/22/2011	365093	1219
1220	SF 1197	207567	Lode	MGI	09/18/2011	MGI	11/22/2011	365094	1220
1221	SF 1198	207568	Lode	MGI	09/18/2011	MGI	11/22/2011	365095	1221
1222	SF 1199	207569	Lode	MGI	09/18/2011	MGI	11/22/2011	365096	1222
1223	SF 1200	207570	Lode	MGI	09/21/2011	MGI	11/22/2011	365098	1223
1224	SF 1201	207571	Lode	MGI	09/21/2011	MGI	11/22/2011	365099	1224
1225	SF 1202	207572	Lode	MGI	09/21/2011	MGI	11/22/2011	365100	1225
1226	SF 1203	207573	Lode	MGI	09/21/2011	MGI	11/22/2011	365101	1226
1227	SF 1204	207574	Lode	MGI	09/18/2011	MGI	11/22/2011	365102	1227
1228	SF 1205	207575	Lode	MGI	09/18/2011	MGI	11/22/2011	365103	1228
1229	SF 1206	207576	Lode	MGI	09/18/2011	MGI	11/22/2011	365104	1229
1230	SF 1207	207577	Lode	MGI	09/18/2011	MGI	11/22/2011	365105	1230
1231	SF 1208	207578	Lode	MGI	09/18/2011	MGI	11/22/2011	365106	1231

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
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1233	SF 1210	207580	Lode	MGI	09/18/2011	MGI	11/22/2011	365108	1233
1234	SF 1211	207581	Lode	MGI	09/17/2011	MGI	11/22/2011	365109	1234
1235	SF 1212	207582	Lode	MGI	09/18/2011	MGI	11/22/2011	365110	1235
1236	SF 1213	207583	Lode	MGI	09/18/2011	MGI	11/22/2011	365111	1236
1237	SF 1214	207584	Lode	MGI	09/18/2011	MGI	11/22/2011	365112	1237
1238	SF 1215	207585	Lode	MGI	09/18/2011	MGI	11/22/2011	365113	1238
1239	SF 1216	207586	Lode	MGI	09/18/2011	MGI	11/22/2011	365114	1239
1240	SF 1217	207587	Lode	MGI	09/18/2011	MGI	11/22/2011	365115	1240
1241	SF 1218	207588	Lode	MGI	09/18/2011	MGI	11/22/2011	365116	1241
1242	SF 1219	207589	Lode	MGI	09/18/2011	MGI	11/22/2011	365117	1242
1243	SF 1220	207590	Lode	MGI	09/21/2011	MGI	11/22/2011	365118	1243
1244	SF 1221	207591	Lode	MGI	09/21/2011	MGI	11/22/2011	365119	1244
1245	SF 1222	207592	Lode	MGI	09/21/2011	MGI	11/22/2011	365120	1245
1246	SF 1223	207593	Lode	MGI	09/21/2011	MGI	11/22/2011	365121	1246
1247	SF 1224	207594	Lode	MGI	09/21/2011	MGI	11/22/2011	365122	1247
1248	SF 1225	207595	Lode	MGI	09/21/2011	MGI	11/22/2011	365123	1248
1249	SF 1226	207596	Lode	MGI	09/21/2011	MGI	11/22/2011	365124	1249
1250	SF 1227	207597	Lode	MGI	09/21/2011	MGI	11/22/2011	365125	1250
1251	SF 1228	207598	Lode	MGI	09/21/2011	MGI	11/22/2011	365126	1251
1252	SF 1229	207599	Lode	MGI	09/21/2011	MGI	11/22/2011	365127	1252
1253	SF 1230	207600	Lode	MGI	09/21/2011	MGI	11/22/2011	365128	1253
1254	SF 1231	207601	Lode	MGI	09/21/2011	MGI	11/22/2011	365129	1254
1255	SF 1232	207602	Lode	MGI	09/21/2011	MGI	11/22/2011	365130	1255
1256	SF 1233	207603	Lode	MGI	09/21/2011	MGI	11/22/2011	365131	1256
1257	SF 1234	207604	Lode	MGI	09/21/2011	MGI	11/22/2011	365132	1257
1258	SF 1235	207605	Lode	MGI	09/21/2011	MGI	11/22/2011	365133	1258
1259	SF 1236	207606	Lode	MGI	09/21/2011	MGI	11/22/2011	365134	1259

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
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1261	SF 1238	207608	Lode	MGI	09/21/2011	MGI	11/22/2011	365136	1261
1262	SF 1239	207609	Lode	MGI	09/21/2011	MGI	11/22/2011	365137	1262
1263	SF 1240	207610	Lode	MGI	09/21/2011	MGI	11/22/2011	365138	1263
1264	SF 1241	207611	Lode	MGI	09/21/2011	MGI	11/22/2011	365139	1264
1265	SF 1242	207612	Lode	MGI	09/21/2011	MGI	11/22/2011	365140	1265
1266	SF 1243	207613	Lode	MGI	09/21/2011	MGI	11/22/2011	365141	1266
1267	SF 1244	207614	Lode	MGI	09/18/2011	MGI	11/22/2011	365142	1267
1268	SF 1245	207615	Lode	MGI	09/21/2011	MGI	11/22/2011	365143	1268
1269	SF 1246	207616	Lode	MGI	09/21/2011	MGI	11/22/2011	365144	1269
1270	SF 1247	207617	Lode	MGI	09/21/2011	MGI	11/22/2011	365145	1270
1271	SF 1248	207618	Lode	MGI	09/21/2011	MGI	11/22/2011	365146	1271
1272	SF 1249	207619	Lode	MGI	09/21/2011	MGI	11/22/2011	365147	1272
1273	SF 1250	207620	Lode	MGI	09/21/2011	MGI	11/22/2011	365148	1273
1274	SF 1251	207621	Lode	MGI	09/21/2011	MGI	11/22/2011	365149	1274
1275	SF 1252	207622	Lode	MGI	09/21/2011	MGI	11/22/2011	365150	1275
1276	SF 1253	207623	Lode	MGI	09/21/2011	MGI	11/22/2011	365151	1276
1277	SF 1254	207624	Lode	MGI	09/21/2011	MGI	11/22/2011	365152	1277
1278	SF 1255	207625	Lode	MGI	09/21/2011	MGI	11/22/2011	365153	1278
1279	SF 1256	207626	Lode	MGI	09/21/2011	MGI	11/22/2011	365154	1279
1280	SF 1257	207627	Lode	MGI	09/21/2011	MGI	11/22/2011	365155	1280
1281	SF 1258	207628	Lode	MGI	09/21/2011	MGI	11/22/2011	365156	1281
1282	SF 1259	207629	Lode	MGI	09/21/2011	MGI	11/22/2011	365157	1282
1283	SF 1260	207630	Lode	MGI	09/21/2011	MGI	11/22/2011	365158	1283
1284	SF 1261	207631	Lode	MGI	09/21/2011	MGI	11/22/2011	365159	1284
1285	SF 1262	207632	Lode	MGI	09/20/2011	MGI	11/22/2011	365160	1285
1286	SF 1263	207633	Lode	MGI	09/20/2011	MGI	11/22/2011	365161	1286
1287	SF 1264	207634	Lode	MGI	09/20/2011	MGI	11/22/2011	365168	1287

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1288	SF 1265	207635	Lode	MGI	09/20/2011	MGI	11/22/2011	365169	1288
1289	SF 1266	207636	Lode	MGI	09/20/2011	MGI	11/22/2011	365170	1289
1290	SF 1267	207637	Lode	MGI	09/20/2011	MGI	11/22/2011	365171	1290
1291	SF 1268	207638	Lode	MGI	09/20/2011	MGI	11/22/2011	365172	1291
1292	SF 1269	207639	Lode	MGI	09/20/2011	MGI	11/22/2011	365173	1292
1293	SF 1270	207640	Lode	MGI	09/20/2011	MGI	11/22/2011	365174	1293
1294	SF 1271	207641	Lode	MGI	09/20/2011	MGI	11/22/2011	365175	1294
1295	SF 1272	207642	Lode	MGI	09/20/2011	MGI	11/22/2011	365176	1295
1296	SF 1273	207643	Lode	MGI	09/20/2011	MGI	11/22/2011	365177	1296
1297	SF 1274	207644	Lode	MGI	09/20/2011	MGI	11/22/2011	365178	1297
1298	SF 1275	207645	Lode	MGI	09/20/2011	MGI	11/22/2011	365179	1298
1299	SF 1276	207646	Lode	MGI	09/20/2011	MGI	11/22/2011	365180	1299
1300	SF 1277	207647	Lode	MGI	09/20/2011	MGI	11/22/2011	365181	1300
1301	SF 1278	207648	Lode	MGI	09/20/2011	MGI	11/22/2011	365182	1301
1302	SF 1279	207649	Lode	MGI	09/20/2011	MGI	11/22/2011	365183	1302
1303	SF 1280	207650	Lode	MGI	09/20/2011	MGI	11/22/2011	365184	1303
1304	SF 1281	207651	Lode	MGI	09/20/2011	MGI	11/22/2011	365185	1304
1305	SF 1282	207652	Lode	MGI	09/20/2011	MGI	11/22/2011	365186	1305
1306	SF 1283	207653	Lode	MGI	09/20/2011	MGI	11/22/2011	365187	1306
1307	SF 1284	207654	Lode	MGI	09/20/2011	MGI	11/22/2011	365188	1307
1308	SF 1285	207655	Lode	MGI	09/20/2011	MGI	11/22/2011	365189	1308
1309	SF 1286	207656	Lode	MGI	09/20/2011	MGI	11/22/2011	365190	1309
1310	SF 1287	207657	Lode	MGI	09/20/2011	MGI	11/22/2011	365191	1310
1311	SF 1288	207658	Lode	MGI	09/20/2011	MGI	11/22/2011	365192	1311
1312	SF 1289	207659	Lode	MGI	09/20/2011	MGI	11/22/2011	365193	1312
1313	SF 1290	207660	Lode	MGI	09/20/2011	MGI	11/22/2011	365194	1313
1314	SF 1291	207661	Lode	MGI	09/20/2011	MGI	11/22/2011	365195	1314
1315	SF 1292	207662	Lode	MGI	09/20/2011	MGI	11/22/2011	365196	1315

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1316	SF 1293	207663	Lode	MGI	09/20/2011	MGI	11/22/2011	365197	1316
1317	SF 1294	207664	Lode	MGI	09/20/2011	MGI	11/22/2011	365198	1317
1318	SF 1295	207665	Lode	MGI	09/20/2011	MGI	11/22/2011	365199	1318
1319	SF 1296	207666	Lode	MGI	09/20/2011	MGI	11/22/2011	365200	1319
1320	SF 1297	207667	Lode	MGI	09/20/2011	MGI	11/22/2011	365201	1320
1321	SF 1298	207668	Lode	MGI	09/20/2011	MGI	11/22/2011	365202	1321
1322	SF 1299	207669	Lode	MGI	09/20/2011	MGI	11/22/2011	365203	1322
1323	SF 1300	207670	Lode	MGI	09/20/2011	MGI	11/23/2011	365209	1323
1324	SF 1301	207671	Lode	MGI	09/20/2011	MGI	11/23/2011	365210	1324
1325	SF 1302	207672	Lode	MGI	09/20/2011	MGI	11/23/2011	365211	1325
1326	SF 1303	207673	Lode	MGI	09/19/2011	MGI	11/23/2011	365212	1326
1327	SF 1304	207674	Lode	MGI	09/19/2011	MGI	11/23/2011	365213	1327
1328	SF 1305	207675	Lode	MGI	09/19/2011	MGI	11/23/2011	365214	1328
1329	SF 1306	207676	Lode	MGI	09/19/2011	MGI	11/23/2011	365215	1329
1330	SF 1307	207677	Lode	MGI	09/19/2011	MGI	11/23/2011	365216	1330
1331	SF 1308	207678	Lode	MGI	09/19/2011	MGI	11/23/2011	365217	1331
1332	SF 1309	207679	Lode	MGI	09/19/2011	MGI	11/23/2011	365218	1332
1333	SF 1310	207680	Lode	MGI	09/19/2011	MGI	11/23/2011	365219	1333
1334	SF 1311	207681	Lode	MGI	09/19/2011	MGI	11/23/2011	365220	1334
1335	SF 1312	207682	Lode	MGI	09/19/2011	MGI	11/23/2011	365221	1335
1336	SF 1313	207683	Lode	MGI	09/19/2011	MGI	11/23/2011	365222	1336
1337	SF 1314	207684	Lode	MGI	09/19/2011	MGI	11/23/2011	365223	1337
1338	SF 1315	207685	Lode	MGI	09/19/2011	MGI	11/23/2011	365227	1338
1339	SF 1316	207686	Lode	MGI	09/19/2011	MGI	11/23/2011	365228	1339
1340	SF 1317	207687	Lode	MGI	09/19/2011	MGI	11/23/2011	365229	1340
1341	SF 1318	207688	Lode	MGI	09/19/2011	MGI	11/23/2011	365230	1341
1342	SF 1319	207689	Lode	MGI	09/19/2011	MGI	11/23/2011	365231	1342
1343	SF 1320	207690	Lode	MGI	09/19/2011	MGI	11/23/2011	365232	1343

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
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1345	SF 1322	207692	Lode	MGI	09/19/2011	MGI	11/23/2011	365234	1345
1346	SF 1323	207693	Lode	MGI	09/19/2011	MGI	11/23/2011	365238	1346
1347	SF 1324	207694	Lode	MGI	09/19/2011	MGI	11/23/2011	365239	1347
1348	SF 1325	207695	Lode	MGI	09/19/2011	MGI	11/23/2011	365240	1348
1349	SF 1326	207696	Lode	MGI	09/19/2011	MGI	11/23/2011	365241	1349
1350	SF 1327	207697	Lode	MGI	09/19/2011	MGI	11/23/2011	365242	1350
1351	SF 1328	207698	Lode	MGI	09/19/2011	MGI	11/23/2011	365243	1351
1352	SF 1329	207699	Lode	MGI	09/19/2011	MGI	11/23/2011	365244	1352
1353	SF 1330	207700	Lode	MGI	09/19/2011	MGI	11/23/2011	365245	1353
1354	SF 1331	207701	Lode	MGI	09/19/2011	MGI	11/23/2011	365246	1354
1355	SF 1332	207702	Lode	MGI	09/19/2011	MGI	11/23/2011	365248	1355
1356	SF 1333	207703	Lode	MGI	09/19/2011	MGI	11/23/2011	365249	1356
1357	SF 1334	207704	Lode	MGI	09/19/2011	MGI	11/23/2011	365250	1357
1358	SF 1335	207705	Lode	MGI	09/19/2011	MGI	11/23/2011	365251	1358
1359	SF 1336	207706	Lode	MGI	09/19/2011	MGI	11/23/2011	365252	1359
1360	SF 1337	207707	Lode	MGI	09/19/2011	MGI	11/23/2011	365253	1360
1361	SF 1338	207708	Lode	MGI	09/19/2011	MGI	11/23/2011	365254	1361
1362	SF 1339	207709	Lode	MGI	09/19/2011	MGI	11/23/2011	365255	1362
1363	SF 1340	207710	Lode	MGI	09/19/2011	MGI	11/23/2011	365256	1363
1364	SF 1341	207711	Lode	MGI	09/19/2011	MGI	11/23/2011	365257	1364
1365	SF 1342	207712	Lode	MGI	09/19/2011	MGI	11/23/2011	365258	1365
1366	SF 1343	207713	Lode	MGI	09/19/2011	MGI	11/23/2011	365259	1366
1367	SF 1344	207714	Lode	MGI	09/19/2011	MGI	11/23/2011	365260	1367
1368	SF 1345	207715	Lode	MGI	09/19/2011	MGI	11/23/2011	365261	1368
1369	SF 1346	207716	Lode	MGI	09/19/2011	MGI	11/23/2011	365262	1369
1370	SF 1347	207717	Lode	MGI	09/19/2011	MGI	11/23/2011	365269	1370
1371	SF 1348	207718	Lode	MGI	09/19/2011	MGI	11/23/2011	365270	1371

Count	Claim Name	IMC No.[1]	Claim Type	Owner[2]	Location Date	Locator[3]	Recorded Date	Instrument No.[4]	Count
1372	SF 1349	207719	Lode	MGI	09/19/2011	MGI	11/23/2011	365271	1372
1373	SF 1350	207720	Lode	MGI	09/19/2011	MGI	11/23/2011	365272	1373
1374	SF 1351	207721	Lode	MGI	09/19/2011	MGI	11/23/2011	365273	1374
1375	SF 1352	207722	Lode	MGI	09/19/2011	MGI	11/23/2011	365274	1375
1376	SF 1353	207723	Lode	MGI	09/19/2011	MGI	11/23/2011	365275	1376
1377	SF 1354	207724	Lode	MGI	09/19/2011	MGI	11/23/2011	365276	1377
1378	SF 1355	207725	Lode	MGI	09/20/2011	MGI	11/23/2011	365277	1378
1379	SF 1356	207145	Lode	MGI	10/05/2011	MGI	10/31/2011	363890	1379
1380	SF 1357	207146	Lode	MGI	10/05/2011	MGI	10/31/2011	363891	1380
1381	SF 1358	207147	Lode	MGI	10/05/2011	MGI	10/31/2011	363892	1381
1382	YP1	186740	Lode	IGR	10/15/2003	Vista	12/02/2003	278442	1382
1383	YP2	186741	Lode	IGR	10/15/2003	Vista	12/02/2003	278443	1383
1384	YP3	186742	Lode	IGR	10/15/2003	Vista	12/02/2003	278444	1384
1385	YP4	186743	Lode	IGR	10/15/2003	Vista	12/02/2003	278445	1385
1386	YP5	186744	Lode	IGR	10/15/2003	Vista	12/02/2003	278446	1386
1387	YP6	186745	Lode	IGR	10/15/2003	Vista	12/02/2003	278447	1387
1388	YP7	186746	Lode	IGR	10/19/2003	Vista	12/02/2003	278448	1388
1389	YP8	186747	Lode	IGR	10/19/2003	Vista	12/02/2003	278449	1389

Notes:
1. *IMC = Bureau of Land Management (BLM) Recordation Serial Number.*
2. *MGI = Midas Gold, Inc., IGR = Idaho Gold Resources LLC.*
3. *MGI = Midas Gold, Inc., MGIAC = MGI Acquisition Corp., Niagara = Niagara Mining and Development Co., Inc., Vista = Vista Gold Corp.*
4. *Certificate of Location recorded in Valley County, Idaho with listed Instrument Number.*

APPENDIX III: FINANCIAL MODEL

Mining and Processing
All Cases

Stibnite Gold Project
Midas Gold Corporation

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Mine															
Yellow Pine															
High Antimony	kst	6,750	225	1,358	1,310	666	1,688	748	519	236					
Gold grade	oz/st	0.065	0.061	0.072	0.073	0.062	0.055	0.058	0.066	0.085					
Silver grade	oz/st	0.21	0.25	0.21	0.22	0.17	0.26	0.15	0.17	0.12					
Antimony grade	%	0.59%	0.66%	0.52%	0.60%	0.58%	0.71%	0.52%	0.68%	0.22%					
Contained Gold	kozs	438	14	97	95	41	94	43	34	20					
Contained Silver	kozs	1,420	56	292	291	112	442	112	88	29					
Contained Antimony	klbs	80,011	2,951	14,098	15,591	7,699	23,902	7,734	7,017	1,020					
Low Antimony	kst	37,235	213	3,133	5,963	6,346	5,542	6,308	5,749	3,981					
Gold grade	oz/t	0.056	0.046	0.066	0.062	0.052	0.053	0.052	0.053	0.061					
Silver grade	oz/t	0.07	0.15	0.13	0.08	0.06	0.07	0.06	0.05	0.05					
Antimony grade	%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%					
Contained Gold	kozs	2,085	10	206	371	329	292	327	306	244					
Contained Silver	kozs	2,553	31	407	503	349	405	366	305	187					
Contained Antimony	klbs	6,365	55	1,035	1,196	888	887	1,135	690	478					
Total Yellow Pine	kst	43,985	438	4,491	7,273	7,012	7,230	7,056	6,268	4,217					
Gold grade	oz/st	0.057	0.054	0.067	0.064	0.053	0.053	0.053	0.054	0.063					
Silver grade	oz/st	0.09	0.20	0.16	0.11	0.07	0.12	0.07	0.06	0.05					
Antimony grade	%	0.10%	0.34%	0.17%	0.12%	0.06%	0.17%	0.06%	0.06%	0.02%					
Contained Gold	kozs	2,523	23	303	466	371	386	371	340	264					
Contained Silver	kozs	3,973	87	699	794	461	847	478	392	216					
Contained Antimony	klbs	86,376	3,007	15,132	16,787	8,587	24,789	8,870	7,707	1,497					
Waste Rock	kst	124,304	5,544	10,343	19,712	27,751	31,457	18,945	8,249	2,303					
Hangar Flats															
High Antimony	kst	4,284			3	27	10		137	736	2,755	500	116		
Gold grade	oz/st	0.056			0.044	0.033	0.029		0.061	0.051	0.059	0.045	0.046		
Silver grade	oz/st	0.17			0.06	0.06	0.06		0.16	0.13	0.20	0.09	0.12		
Antimony grade	%	0.43%			0.11%	0.13%	0.11%		0.46%	0.45%	0.47%	0.19%	0.26%		
Contained Gold	kozs	238			0.1	0.9	0.3		8.3	37.8	162.5	22.7	5.3		
Contained Silver	kozs	712			0.2	1.7	0.6		21.2	92.7	537.2	44.5	13.8		
Contained Antimony	klbs	36,438			6	71	22		1,255	6,653	25,897	1,940	594		
Low Antimony	kst	11,146			113	351	150	336	722	1,963	3,626	2,625	1,260		
Gold grade	oz/st	0.040			0.032	0.033	0.027	0.027	0.053	0.039	0.043	0.038	0.043		
Silver grade	oz/st	0.06			0.05	0.04	0.03	0.03	0.06	0.06	0.07	0.04	0.06		
Antimony grade	%	0.02%			0.02%	0.01%	0.02%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%		
Contained Gold	kozs	449			3.6	11.6	4.0	9.1	38.4	75.8	154.1	99.0	53.7		
Contained Silver	kozs	615			5.3	14.0	5.1	9.7	46.2	117.8	235.7	110.3	70.6		
Contained Antimony	klbs	4,319			48	84	72	40	332	746	1,595	998	403		
Total Hangar Flats	kst	15,430			116	378	160	336	859	2,699	6,381	3,125	1,376		
Gold grade	oz/st	0.045			0.032	0.033	0.027	0.027	0.054	0.042	0.050	0.039	0.043		
Silver grade	oz/st	0.09			0.05	0.04	0.04	0.03	0.08	0.08	0.12	0.05	0.06		
Antimony grade	%	0.13%			0.02%	0.02%	0.03%	0.01%	0.09%	0.14%	0.22%	0.05%	0.04%		
Contained Gold	kozs	687			3.7	12.5	4.3	9.1	46.8	113.6	316.7	121.7	59.0		
Contained Silver	kozs	1,327			5.5	15.7	5.7	9.7	67.4	210.5	772.9	154.8	84.4		
Contained Antimony	klbs	40,757			55	155	94	40	1,587	7,399	27,492	2,938	997		
Waste Rock		86,696	2,246	-	2,190	3,679	1,547	9,900	10,659	21,005	26,247	7,479	1,744		

Stibnite Gold Project
Midas Gold Corporation

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
West End															
Low Antimony	kst	24,914							249	453	904	3,652	5,094	7,245	7,317
Gold grade	oz/st	0.041							0.038	0.057	0.048	0.041	0.037	0.041	0.043
Silver grade	oz/st	0.04							0.02	0.02	0.02	0.03	0.05	0.06	0.05
Contained Gold	kozs	1,024							9.6	26.0	42.9	148.6	185.9	299.2	311.7
Contained Silver	kozs	1,090							5.5	7.7	18.1	91.3	239.4	398.5	329.3
Oxide Feed	kt	10,736	129	1,782	660	660	660	658	674	681	765	1,273	1,580	805	409
Gold grade	oz/st	0.022	0.033	0.022	0.024	0.022	0.021	0.021	0.016	0.019	0.018	0.023	0.023	0.025	0.023
Silver grade	oz/st	0.03	0.05	0.02	0.02	0.03	0.03	0.02	0.01	0.02	0.02	0.03	0.04	0.05	0.05
Contained Gold	kozs	233	4.3	39.5	15.5	14.5	13.9	13.8	11.1	12.7	13.8	28.6	36.5	19.8	9.3
Contained Silver	kozs	314	6.6	41.2	16.2	17.2	17.2	13.2	9.4	15.7	15.3	39.5	63.2	41.1	18.4
Total West End	kst	35,650	129	1,782	660	660	660	658	923	1,134	1,669	4,925	6,674	8,050	7,726
Gold grade	oz/st	0.035	0.033	0.022	0.024	0.022	0.021	0.021	0.022	0.034	0.034	0.036	0.033	0.040	0.042
Silver grade	oz/st	0.04	0.05	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.05	0.05	0.05
Contained Gold	kozs	1,257	4.3	39.5	15.5	14.5	13.9	13.8	20.6	38.7	56.8	177.3	222.4	319.0	321.0
Contained Silver	kozs	1,404	6.6	41.2	16.2	17.2	17.2	13.2	14.9	23.4	33.4	130.8	302.6	439.5	347.7
Waste Rock		125,217	-	830	5,606	1,508	1,374	946	5,105	15,042	10,642	7,703	26,470	31,277	18,714
Historic Tailings	kst	3,001		477	916	916	692								
Gold grade	oz/st	0.034		0.034	0.031	0.037	0.032								
Silver grade	oz/st	0.08		0.08	0.07	0.08	0.11								
Contained Gold	kozs	101		16.4	28.9	33.9	22.1								
Contained Silver	kozs	252		37.5	60.9	76.0	77.5								
Spent Ore and Inferred Historic Tailings		5,752	5,752												
Process Plant															
Yellow Pine															
High Antimony	kst	6,750		1,583	1,310	666	1,688	748	519	236					
Gold grade	oz/st	0.065		0.070	0.073	0.062	0.055	0.058	0.066	0.085					
Silver grade	oz/st	0.21		0.22	0.22	0.17	0.26	0.15	0.17	0.12					
Antimony grade	%	0.59%		0.54%	0.60%	0.58%	0.71%	0.52%	0.68%	0.22%					
Contained Gold	kozs	438		111	95	41	94	43	34	20					
Contained Silver	kozs	1,420		347	291	112	442	112	88	29					
Contained Antimony	klbs	80,011		17,049	15,591	7,699	23,902	7,734	7,017	1,020					
Gold Bullion Recovery	%	87.2%		87.8%	87.9%	86.8%	86.0%	86.3%	87.3%	89.5%					
Silver Bullion Recovery	%	8.5%		8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%					
Recovered Gold	kozs	382		97.4	83.6	35.7	80.4	37.2	29.7	17.9					
Recovered Silver	kozs	121		29.5	24.7	9.5	37.6	9.5	7.5	2.4					
Antimony - Gold Recovery	%	2.7%		2.60%	2.66%	2.69%	2.89%	2.72%	2.69%	2.04%					
Antimony - Silver Recovery	%	43.0%		43.0%	43.0%	42.9%	43.1%	42.9%	43.1%	43.1%					
Antimony Recovery	%	87.3%		86.7%	87.1%	87.1%	88.4%	86.0%	88.1%	77.6%					
Antimony Concentrate	kst	59.2		12.5	11.5	5.7	17.9	5.6	5.2	0.7					
Antimony Concentrate Grade	%	59%		59%	59%	59%	59%	59%	59%	59%					
Recovered Gold	kozs	12		2.9	2.5	1.1	2.7	1.2	0.9	0.4					
Recovered Silver	kozs	611		149	125	48	191	48	38	12					
Recovered Antimony	klbs	69,822		14,776	13,584	6,705	21,137	6,648	6,180	792					
Low Antimony	kst	37,235		3,346	5,963	6,346	5,542	6,308	5,749	3,981					
Gold grade	oz/st	0.056		0.064	0.062	0.052	0.053	0.052	0.053	0.061					
Silver grade	oz/st	0.07		0.13	0.08	0.06	0.07	0.06	0.05	0.05					
Antimony grade	%	0.01%		0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%					
Contained Gold	kozs	2,085		216	371	329	292	327	306	244					
Contained Silver	kozs	2,553		438	503	349	405	366	305	187					
Contained Antimony	klbs	6,365		1,090	1,196	888	887	1,135	690	478					
Gold Bullion Recovery	%	90.2%		90.6%	90.6%	89.7%	90.2%	90.1%	89.9%	90.6%					
Silver Bullion Recovery	%	8.5%		8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%					
Recovered Gold	kozs	1,881		195	336	296	264	295	275	221					
Recovered Silver	kozs	217		37	43	30	34	31	26	16					

Stibnite Gold Project
Midas Gold Corporation

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Total Yellow Pine	kst	43,985		4,929	7,273	7,012	7,230	7,056	6,268	4,217					
Gold grade	oz/st	0.057		0.066	0.064	0.053	0.053	0.053	0.054	0.063					
Silver grade	oz/st	0.09		0.16	0.11	0.07	0.12	0.07	0.06	0.05					
Antimony grade	%	0.10%		0.18%	0.12%	0.06%	0.17%	0.06%	0.06%	0.02%					
Contained Gold	kozs	2,523		327	466	371	386	371	340	264					
Contained Silver	kozs	3,973		785	794	461	847	478	392	216					
Contained Antimony	klbs	86,376		18,139	16,787	8,587	24,789	8,870	7,707	1,497					
Gold Bullion Recovery	%	89.7%		89.6%	90.0%	89.4%	89.2%	89.7%	89.7%	90.5%					
Silver Bullion Recovery	%	8.5%		8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%					
Recovered Gold	kozs	2,263		293	419	331	344	332	305	239					
Recovered Silver	kozs	338		67	67	39	72	41	33	18					
Antimony - Gold Recovery	%	0.5%		0.89%	0.54%	0.30%	0.70%	0.32%	0.27%	0.15%					
Antimony - Silver Recovery	%	15.4%		19.0%	15.8%	10.4%	22.5%	10.1%	9.6%	5.7%					
Antimony Recovery	%	80.8%		81.5%	80.9%	78.1%	85.3%	75.0%	80.2%	52.9%					
Antimony Concentrate	kst	59		12.5	11.5	5.7	17.9	5.6	5.2	0.7					
Antimony Concentrate Grade	%	59%		59%	59%	59%	59%	59%	59%	59%					
Recovered Gold	kozs	12		2.89	2.53	1.11	2.70	1.17	0.91	0.41					
Recovered Silver	kozs	611		149	125	48	191	48	38	12					
Recovered Antimony	klbs	69,822		14,776	13,584	6,705	21,137	6,648	6,180	792					
Hangar Flats															
High Antimony	kst	4,284			3	27	10		137	736	2,755	500	116		
Gold grade	oz/st	0.056			0.044	0.033	0.029		0.061	0.051	0.059	0.045	0.046		
Silver grade	oz/st	0.17			0.06	0.06	0.06		0.16	0.13	0.20	0.09	0.12		
Antimony grade	%	0.43%			0.11%	0.13%	0.11%		0.46%	0.45%	0.47%	0.19%	0.26%		
Contained Gold	kozs	238			0.13	0.89	0.29		8.34	37.83	162.55	22.70	5.34		
Contained Silver	kozs	712			0.17	1.67	0.59		21.24	92.74	537.23	44.50	13.80		
Contained Antimony	klbs	36,438			6	71	22		1,255	6,653	25,897	1,940	594		
Gold Bullion Recovery	%	84.0%			89.5%	88.7%	86.1%		83.5%	83.9%	83.6%	86.5%	86.9%		
Silver Bullion Recovery	%	5.1%			5.1%	5.1%	5.0%		5.1%	5.1%	5.1%	5.1%	5.1%		
Recovered Gold	kozs	200			0.12	0.79	0.25		6.97	31.75	135.83	19.64	4.64		
Recovered Silver	kozs	36			0.01	0.08	0.03		1.08	4.75	27.40	2.25	0.70		
Antimony - Gold Recovery	%	2.2%			1.30%	1.03%	0.85%		2.17%	1.93%	2.41%	1.78%	1.80%		
Antimony - Silver Recovery	%	49.1%			48.7%	49.4%	49.0%		49.1%	49.1%	49.1%	48.8%	49.0%		
Antimony Recovery	%	82.4%			71.7%	73.5%	72.2%		83.0%	82.6%	82.9%	76.3%	78.5%		
Antimony Concentrate	kt	25			0.00	0.04	0.01		0.88	4.66	18.20	1.26	0.40		
Antimony Concentrate Grade	%	59%			59%	59%	59%		59%	59%	59%	59%	59%		
Recovered Gold	kozs	5			0.002	0.009	0.003		0.181	0.729	3.912	0.405	0.096		
Recovered Silver	kozs	349			0.08	0.83	0.29		10.43	45.56	263.65	21.70	6.76		
Recovered Antimony	klbs	30,030			5	52	16		1,041	5,496	21,472	1,481	466		
Low Antimony	kst	11,146			113	351	150	336	722	1,963	3,626	2,625	1,260		
Gold grade	oz/st	0.04			0.032	0.033	0.027	0.027	0.053	0.039	0.043	0.038	0.043		
Silver grade	oz/st	0.06			0.047	0.040	0.034	0.029	0.064	0.060	0.065	0.042	0.056		
Antimony grade	%	0.02%			0.02%	0.01%	0.02%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%		
Contained Gold	kozs	449			3.6	11.6	4.0	9.1	38.4	75.8	154.1	99.0	53.7		
Contained Silver	kozs	615			5.3	14.0	5.1	9.7	46.2	117.8	235.7	110.3	70.6		
Contained Antimony	klbs	4,319			48	84	72	40	332	746	1,595	998	403		
Gold Bullion Recovery	%	88.3%			89.1%	90.8%	89.8%	89.6%	86.3%	87.8%	88.1%	88.9%	88.8%		
Silver Bullion Recovery	%	5.1%			5.1%	5.1%	5.0%	5.3%	5.0%	5.1%	5.1%	5.1%	5.2%		
Recovered Gold	kozs	397			3	11	4	8	33	67	136	88	48		
Recovered Silver	kozs	31			0.27	0.72	0.26	0.51	2.33	6.01	12.02	5.58	3.64		

Mining and Processing
All Cases

Stibnite Gold Project
Midas Gold Corporation

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Total Hangar Flats	kst	15,430			116	378	160	336	859	2,699	6,381	3,125	1,376		
Gold grade	oz/st	0.04			0.032	0.033	0.027	0.027	0.054	0.042	0.050	0.039	0.043		
Silver grade	oz/st	0.09			0.047	0.042	0.036	0.029	0.079	0.078	0.121	0.050	0.061		
Antimony grade	%	0.13%			0.02%	0.02%	0.03%	0.01%	0.09%	0.14%	0.22%	0.05%	0.04%		
Contained Gold	kozs	687			3.7	12.5	4.3	9.1	47	114	317	122	59		
Contained Silver	kozs	1,327			5.5	15.7	5.7	9.7	67	211	773	155	84		
Contained Antimony	klbs	40,757			55	155	94	40	1,587	7,399	27,492	2,938	997		
Gold Bullion Recovery	%	86.8%			89.1%	90.6%	89.5%	89.6%	85.8%	86.5%	85.8%	88.4%	88.7%		
Silver Bullion Recovery	%	5.1%			5.1%	5.1%	5.0%	5.3%	5.1%	5.1%	5.1%	5.1%	5.1%		
Recovered Gold	kozs	597			3.33	11.30	3.82	8.19	40.13	98.29	271.65	107.61	52.32		
Recovered Silver	kozs	68			0.28	0.80	0.28	0.51	3.42	10.76	39.42	7.83	4.34		
Antimony - Gold Recovery	%	0.8%			0.05%	0.07%	0.06%	-	0.39%	0.64%	1.24%	0.33%	0.16%		
Antimony - Silver Recovery	%	26.3%			1.5%	5.3%	5.1%	-	15.5%	21.6%	34.1%	14.0%	8.0%		
Antimony Recovery	%	73.7%			8.3%	33.6%	16.9%	-	65.6%	74.3%	78.1%	50.4%	46.8%		
Antimony Concentrate	kt	25.45			0.00	0.04	0.01		0.88	4.66	18.20	1.26	0.40		
Antimony Concentrate Grade	%	59%			59%	59%	59%		59%	59%	59%	59%	59%		
Recovered Gold	kozs	5			0.002	0.009	0.003		0.181	0.729	3.912	0.405	0.096		
Recovered Silver	kozs	349			0.08	0.83	0.29		10.43	45.56	263.65	21.70	6.76		
Recovered Antimony	klbs	30,030			4.6	52.0	15.9		1,041	5,496	21,472	1,481	466		
West End															
Low Antimony	kst	24,914							249	453	904	3,652	5,094	7,245	7,317
Gold grade	oz/st	0.041							0.038	0.057	0.048	0.041	0.037	0.041	0.043
Silver grade	oz/st	0.04							0.02	0.02	0.02	0.03	0.05	0.06	0.05
Contained Gold	kozs	1,024							10	26	43	149	186	299	312
Contained Silver	kozs	1,090							5	8	18	91	239	398	329
Gold Bullion Recovery	%	87.8%							88.6%	87.8%	87.8%	88.7%	89.0%	87.5%	87.0%
Silver Bullion Recovery	%	49.8%							49.5%	50.0%	48.9%	49.3%	50.1%	49.9%	49.7%
Recovered Gold	kozs	899							8	23	38	132	165	262	271
Recovered Silver	kozs	543							3	4	9	45	120	199	164
Oxide Feed	kst	10,736		1,911	660	660	660	658	674	681	765	1,273	1,580	805	409
Gold grade	oz/st	0.022		0.023	0.024	0.022	0.021	0.021	0.016	0.019	0.018	0.023	0.023	0.025	0.023
Silver grade	oz/st	0.03		0.03	0.02	0.03	0.03	0.02	0.01	0.02	0.02	0.03	0.04	0.05	0.05
Contained Gold	kozs	233		43.8	15.5	14.5	13.9	13.8	11.1	12.7	13.8	28.6	36.5	19.8	9.3
Contained Silver	kozs	314		47.8	16.2	17.2	17.2	13.2	9.4	15.7	15.3	39.5	63.2	41.1	18.4
Gold Bullion Recovery	%	81.9%		73.1%	69.9%	76.7%	74.6%	74.6%	86.5%	88.0%	86.6%	89.5%	88.9%	89.1%	87.0%
Silver Bullion Recovery	%	44.1%		44.1%	44.2%	44.8%	43.5%	43.8%	44.3%	44.3%	44.2%	43.6%	44.4%	44.0%	44.2%
Recovered Gold	kozs	191		32.0	10.8	11.1	10.3	10.3	9.6	11.1	12.0	25.6	32.4	17.6	8.1
Recovered Silver	kozs	138		21.1	7.2	7.7	7.5	5.8	4.2	6.9	6.8	17.2	28.1	18.1	8.1
Total West End	kst	35,650		1,911	660	660	660	658	923	1,134	1,669	4,925	6,674	8,050	7,726
Gold grade	oz/st	0.035		0.023	0.024	0.022	0.021	0.021	0.022	0.034	0.034	0.036	0.033	0.040	0.042
Silver grade	oz/st	0.04		0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.05	0.05	0.05
Contained Gold	kozs	1,257		44	16	15	14	14	21	39	57	177	222	319	321
Contained Silver	kozs	1,404		48	16	17	17	13	15	23	33	131	303	440	348
Gold Bullion Recovery	%	86.7%		73.1%	69.9%	76.7%	74.6%	74.6%	87.5%	87.9%	87.5%	88.8%	89.0%	87.6%	87.0%
Silver Bullion Recovery	%	48.5%		44.1%	44.2%	44.8%	43.5%	43.8%	46.2%	46.2%	46.7%	47.6%	48.9%	49.4%	49.4%
Recovered Gold	kozs	1,090		32.0	10.8	11.1	10.3	10.3	18.0	34.0	49.7	157.4	197.9	279.5	279.4
Recovered Silver	kozs	681		21.1	7.2	7.7	7.5	5.8	6.9	10.8	15.6	62.2	148.0	217.0	171.7
Historic Tailings	kst	3,001		477	916	916	692								
Gold grade	oz/st	0.032		0.032	0.032	0.032	0.032								
Silver grade	oz/st	0.08		0.08	0.08	0.08	0.08								
Contained Gold	kozs	97		15	30	29	22								
Contained Silver	kozs	239		38	73	73	55								
Gold Bullion Recovery	%	74.5%		70.5%	69.7%	77.0%	80.3%								
Silver Bullion Recovery	%	8.5%		8.5%	8.5%	8.5%	8.5%								
Recovered Gold	kozs	72		11	21	23	18								
Recovered Silver	kozs	20		3.2	6.2	6.2	4.7								

Case A
Payables and Revenue

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,200/oz
Silver - $20.00/oz
Antimony - $4.00/lb

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Payable Metals															
Dore Metals															
Payable Gold - Dore	kozs	4,002		334	452	375	374	349	361	370	320	264	249	278	278
Payable Silver - Dore	kozs	1,085		89	79	53	83	46	43	39	54	69	149	213	168
Antimony Concentrate Payable Metals															
Antimony Concentrate	kst	84.6		12.5	11.5	5.7	17.9	5.6	6.1	5.3	18.2	1.3	0.4		
Payable Gold - Concentrate	kozs	3.2		0.43	0.49	0.43	0.50	0.15	0.16	0.22	0.67	0.08	0.02		
Payable Silver - Concentrate	kozs	382		54.3	46.8	53.7	68.0	18.3	11.6	23.5	94.6	8.8	2.8		
Payable Antimony - Concentrate	klbs	67,900		10,048	9,240	4,595	14,384	4,521	4,911	4,276	14,601	1,007	317		
Revenues							**Thounsands of US dollars ($000s)**								
Metal Prices															
Gold	$/oz	$1,200.00		$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00
Silver	$/oz	$20.00		$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
Antimony	$/lb	$4.00		$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00	$4.00
Dore															
Gold		$4,802,897		$400,573	$542,088	$449,482	$448,934	$418,817	$433,245	$443,603	$383,696	$316,433	$298,751	$333,669	$333,605
Silver		$21,697		$1,785	$1,590	$1,056	$1,655	$919	$856	$782	$1,078	$1,373	$2,986	$4,253	$3,365
Refining/Transport Cost															
Gold		$8,605		$718	$971	$805	$804	$750	$776	$795	$687	$567	$535	$598	$598
Silver		$1,790		$147	$131	$87	$136	$76	$71	$65	$89	$113	$246	$351	$278
Antimony Concentrate															
Gold		$3,782		$512	$589	$515	$600	$185	$189	$269	$806	$92	$26		
Silver		$7,645		$1,085	$935	$1,073	$1,359	$366	$233	$470	$1,891	$176	$57		
Antimony		$271,598		$40,190	$36,960	$18,380	$57,536	$18,083	$19,643	$17,103	$58,405	$4,028	$1,268		
Treatment/Transport Cost		$13,861		$2,051	$1,886	$938	$2,936	$923	$1,002	$873	$2,981	$206	$65		
Total Revenues		$5,083,363		$441,229	$579,173	$468,676	$506,206	$436,621	$452,316	$460,495	$442,120	$321,217	$302,242	$336,973	$336,095

Case A
Expenses and Results

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,200/oz
Silver - $20.00/oz
Antimony - $4.00/lb

	Total	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Operating Cost								**Thousands of US dollar ($000s)**								
Mining	$889,999		$1,999	$23,105	$62,065	$87,256	$92,092	$99,799	$88,174	$82,987	$69,083	$68,578	$70,381	$65,794	$47,885	$30,803
Process Plant	$1,416,809				$107,738	$124,488	$122,912	$124,017	$117,470	$117,015	$120,502	$116,896	$115,219	$115,447	$118,681	$116,426
G&A	$306,936				$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578
Total Operating Cost	$2,613,745		$1,999	$23,105	$195,380	$237,322	$240,581	$249,394	$231,222	$225,580	$215,162	$211,052	$211,178	$206,818	$192,145	$172,806
Royalty	$81,567				$6,806	$9,209	$7,636	$7,628	$7,110	$7,355	$7,532	$6,525	$5,371	$5,070	$5,662	$5,661
Property Taxes	$3,665				$315	$427	$389	$380	$317	$366	$346	$389	$137	$204	$167	$230
Salvage Value	-$26,524															
Reclamation/Closure																
Production Cost	$2,672,454		$1,999	$23,105	$202,502	$246,957	$248,607	$257,402	$238,650	$233,301	$223,040	$217,965	$216,686	$212,092	$197,973	$178,697
Net Operating Income	$2,410,909		-$1,999	-$23,105	$238,727	$332,216	$220,069	$248,804	$197,971	$219,015	$237,455	$224,154	$104,532	$90,149	$139,000	$157,398
Depreciation																
Initial Capital	$970,254			$171	$139,264	$237,132	$169,967	$121,993	$87,663	$85,587	$85,683	$42,793				
Sustaining Capital	$154,385				$299	$680	$2,314	$3,693	$4,434	$10,434	$14,129	$12,310	$11,494	$9,664	$8,123	$7,642
Total Depreciation	$1,124,639			$171	$139,563	$237,812	$172,281	$125,686	$92,098	$96,021	$99,812	$55,103	$11,494	$9,664	$8,123	$7,642
Net Income after Depreciation	$1,286,271		-$1,999	-$23,276	$99,164	$94,404	$47,788	$123,118	$105,873	$122,995	$137,643	$169,051	$93,037	$80,485	$130,877	$149,756
Idaho Mine License Tax	$7,259				$471	$462	$236	$616	$529	$615	$688	$981	$465	$402	$802	$992
Idaho Corporate Income Tax	$44,232							$3,717	$3,917	$4,551	$5,093	$7,258	$3,442	$2,978	$5,934	$7,342
Federal Income Tax	$193,725							$16,281	$17,157	$19,931	$22,305	$31,788	$15,077	$13,043	$25,989	$32,154
Net Income after Taxes	$1,041,055		-$1,999	-$23,276	$98,694	$93,942	$47,552	$102,503	$84,270	$97,898	$109,557	$129,024	$74,053	$64,062	$98,152	$109,268
Cash Flow																
Net Operating Income	$2,410,909		-$1,999	-$23,105	$238,727	$332,216	$220,069	$248,804	$197,971	$219,015	$237,455	$224,154	$104,532	$90,149	$139,000	$157,398
Working Capital																
Account Receivables					-$18,133	-$5,669	$4,541	-$1,542	$2,860	-$645	-$336	$755	$4,969	$780	-$1,427	$36
Accounts Payable					$8,029	$1,724	$134	$362	-$747	-$232	-$428	-$169	$5	-$179	-$603	-$795
Inventory (Parts)				-$7,500	-$7,500											
Total Working Capital	$0			-$7,500	-$17,603	-$3,945	$4,675	-$1,180	$2,113	-$877	-$764	$586	$4,974	$601	-$2,030	-$759
Capital Expenditures																
Initial Capital	$970,254	$137,371	$341,335	$491,548												
Sustaining Capital	$154,385				$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Total Capital Expenditures	$1,124,639	$137,371	$341,335	$491,548	$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Cash Flow before Taxes	$1,286,271	-$137,371	-$343,334	-$522,153	$219,030	$327,102	$213,117	$244,966	$190,168	$177,572	$231,101	$216,797	$100,467	$90,051	$135,172	$151,894
Cummulative Cash Flow before Taxes		-$137,371	-$480,705	-$1,002,858	-$783,829	-$456,727	-$243,609	$1,356	$191,524	$369,096	$600,197	$816,994	$917,461	$1,007,512	$1,142,684	$1,294,578
Taxes	$245,216				$471	$462	$236	$20,614	$21,603	$25,097	$28,086	$40,027	$18,984	$16,423	$32,725	$40,488
Cash Flow after Taxes	$1,041,055	-$137,371	-$343,334	-$522,153	$218,559	$326,640	$212,881	$224,351	$168,564	$152,475	$203,015	$176,770	$81,483	$73,628	$102,447	$111,406
Cummulative Cash Flow after Taxes		-$137,371	-$480,705	-$1,002,858	-$784,299	-$457,659	-$244,778	-$20,426	$148,138	$300,613	$503,628	$680,398	$761,881	$835,509	$937,956	$1,049,362

Economic Indicators before Taxes		
NPV @ 0%		$1,286,271
NPV @ 5%	5.0%	$662,398
NPV @ 7%	7.0%	$488,090
NPV @ 10%	10.0%	$281,855
IRR		16.2%
Payback	Years	4.0

Economic Indicators after Taxes		
NPV @ 0%		$1,041,055
NPV @ 5%	5.0%	$512,978
NPV @ 10%	10.0%	$187,239
IRR		14.4%
Payback	Years	4.1

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,200/oz
Silver - $20.00/oz
Antimony - $4.00/lb

Thousands of US dollar ($000s)

	Total	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
Operating Cost										
Mining	$889,999									
Process Plant	$1,416,809									
G&A	$306,936									
Total Operating Cost	$2,613,745									
Royalty	$81,567									
Property Taxes	$3,665									
Salvage Value	-$26,524		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122
Reclamation/Closure										
Production Cost	$2,672,454		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122
Net Operating Income	$2,410,909		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122
Depreciation										
Initial Capital	$970,254									
Sustaining Capital	$154,385	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743
Total Depreciation	$1,124,639	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743
Net Income after Depreciation	$1,286,271	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622
Idaho Mine License Tax	$7,259									
Idaho Corporate Income Tax	$44,232									
Federal Income Tax	$193,725									
Net Income after Taxes	$1,041,055	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622
Cash Flow										
Net Operating Income	$2,410,909		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122
Working Capital										
Account Receivables		$13,812								
Accounts Payable		-$7,102								
Inventory (Parts)				$15,000						
Total Working Capital	$0	$6,710		$15,000						
Capital Expenditures										
Initial Capital	$970,254									
Sustaining Capital	$154,385	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771
Total Capital Expenditures	$1,124,639	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771
Cash Flow before Taxes	$1,286,271	-$1,303	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649
Cummulative Cash Flow before Taxes		$1,293,275	$1,286,235	$1,297,183	$1,296,664	$1,296,469	$1,296,048	$1,295,666	$1,294,981	$1,294,333
Taxes	$245,216									
Cash Flow after Taxes	$1,041,055	-$1,303	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649
Cummulative Cash Flow after Taxes		$1,048,059	$1,041,019	$1,051,967	$1,051,448	$1,051,253	$1,050,832	$1,050,450	$1,049,765	$1,049,117

	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Operating Cost									
Mining									
Process Plant									
G&A									
Total Operating Cost									
Royalty									
Property Taxes									
Salvage Value	-$1,857	-$1,857							
Reclamation/Closure									
Production Cost	-$1,857	-$1,857							
Net Operating Income	$1,857	$1,857							
Depreciation									
Initial Capital									
Sustaining Capital	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Total Depreciation	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Net Income after Depreciation	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Idaho Mine License Tax									
Idaho Corporate Income Tax									
Federal Income Tax									
Net Income after Taxes	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Cash Flow									
Net Operating Income	$1,857	$1,857							
Working Capital									
Account Receivables									
Accounts Payable									
Inventory (Parts)									
Total Working Capital									
Capital Expenditures									
Initial Capital									
Sustaining Capital	$4,177	$4,111	$1,716	$332	$249	$1,190			
Total Capital Expenditures	$4,177	$4,111	$1,716	$332	$249	$1,190			
Cash Flow before Taxes	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow before Taxes	$1,292,013	$1,289,758	$1,288,042	$1,287,710	$1,287,461	$1,286,271	$1,286,271	$1,286,271	$1,286,271
Taxes									
Cash Flow after Taxes	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow after Taxes	$1,046,797	$1,044,542	$1,042,826	$1,042,493	$1,042,245	$1,041,055	$1,041,055	$1,041,055	$1,041,055

Economic Indicators before Taxes		
NPV @ 0%		$1,286,271
NPV @ 5%	5.0%	$662,398
NPV @ 7%	7.0%	$488,090
NPV @ 10%	10.0%	$281,855
IRR		16.2%
Payback	Years	4.0

Economic Indicators after Taxes		
NPV @ 0%		$1,041,055
NPV @ 5%	5.0%	$512,978
NPV @ 10%	10.0%	$187,239
IRR		14.4%
Payback	Years	4.1

Case B (Base Case)
Payables and Revenue

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,350/oz
Silver - $22.50/oz
Antimony - $4.50/lb

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Payable Metals															
Dore Metals															
Payable Gold - Dore	kozs	4,002		334	452	375	374	349	361	370	320	264	249	278	278
Payable Silver - Dore	kozs	1,085		89	79	53	83	46	43	39	54	69	149	213	168
Antimony Concentrate Payable Metals															
Antimony Concentrate	kst	84.6		12.5	11.5	5.7	17.9	5.6	6.1	5.3	18.2	1.3	0.4		
Payable Gold - Concentrate	kozs	3.2		0.43	0.49	0.43	0.50	0.15	0.16	0.22	0.67	0.08	0.02		
Payable Silver - Concentrate	kozs	382		54.3	46.8	53.7	68.0	18.3	11.6	23.5	94.6	8.8	2.8		
Payable Antimony - Concentrate	klbs	67,900		10,048	9,240	4,595	14,384	4,521	4,911	4,276	14,601	1,007	317		
Revenues								**Thounsands of US dollars ($000s)**							
Metal Prices															
Gold	$/oz	$1,350.00		$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00	$1,350.00
Silver	$/oz	$22.50		$22.50	$22.50	$22.50	$22.50	$22.50	$22.50	$22.50	$22.50	$22.50	$22.50	$22.50	$22.50
Antimony	$/lb	$4.50		$4.50	$4.50	$4.50	$4.50	$4.50	$4.50	$4.50	$4.50	$4.50	$4.50	$4.50	$4.50
Dore															
Gold		$5,403,259		$450,644	$609,849	$505,668	$505,050	$471,169	$487,401	$499,054	$431,658	$355,987	$336,095	$375,378	$375,306
Silver		$24,409		$2,008	$1,788	$1,188	$1,861	$1,034	$963	$880	$1,213	$1,545	$3,359	$4,784	$3,786
Refining/Transport Cost															
Gold		$8,605		$718	$971	$805	$804	$750	$776	$795	$687	$567	$535	$598	$598
Silver		$1,790		$147	$131	$87	$136	$76	$71	$65	$89	$113	$246	$351	$278
Antimony Concentrate															
Gold		$4,255		$576	$662	$579	$675	$208	$212	$303	$907	$104	$29		
Silver		$8,601		$1,221	$1,052	$1,208	$1,529	$411	$262	$529	$2,128	$198	$64		
Antimony		$305,548		$45,214	$41,580	$20,677	$64,728	$20,344	$22,098	$19,241	$65,706	$4,532	$1,427		
Treatment/Transport Cost		$13,861		$2,051	$1,886	$938	$2,936	$923	$1,002	$873	$2,981	$206	$65		
Total Revenues		$5,721,816		$496,747	$651,944	$527,489	$569,966	$491,417	$509,087	$518,273	$497,854	$361,480	$340,128	$379,213	$378,216

Case B (Base Case)
Expenses and Results

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,350/oz
Silver - $22.50/oz
Antimony - $4.50/lb

	Total	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Operating Cost									**Thousands of US dollar ($000s)**							
Mining	$889,999		$1,999	$23,105	$62,065	$87,256	$92,092	$99,799	$88,174	$82,987	$69,083	$68,578	$70,381	$65,794	$47,885	$30,803
Process Plant	$1,416,809				$107,738	$124,488	$122,912	$124,017	$117,470	$117,015	$120,502	$116,896	$115,219	$115,447	$118,681	$116,426
G&A	$306,936				$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578
Total Operating Cost	$2,613,745		$1,999	$23,105	$195,380	$237,322	$240,581	$249,394	$231,222	$225,580	$215,162	$211,052	$211,178	$206,818	$192,145	$172,806
Royalty	$91,781				$7,659	$10,362	$8,593	$8,584	$8,001	$8,276	$8,476	$7,342	$6,044	$5,705	$6,371	$6,370
Property Taxes	$3,665				$315	$427	$389	$380	$317	$366	$346	$389	$137	$204	$167	$230
Salvage Value	-$26,524															
Reclamation/Closure																
Production Cost	$2,682,668		$1,999	$23,105	$203,354	$248,110	$249,563	$258,358	$239,540	$234,222	$223,983	$218,782	$217,358	$212,727	$198,683	$179,406
Net Operating Income	$3,039,148		-$1,999	-$23,105	$293,393	$403,833	$277,926	$311,609	$251,877	$274,865	$294,290	$279,072	$144,122	$127,400	$180,531	$198,810
Depreciation																
Initial Capital	$970,254			$171	$139,264	$237,132	$169,967	$121,993	$87,663	$85,587	$85,683	$42,793				
Sustaining Capital	$154,385				$299	$680	$2,314	$3,693	$4,434	$10,434	$14,129	$12,310	$11,494	$9,664	$8,123	$7,642
Total Depreciation	$1,124,639			$171	$139,563	$237,812	$172,281	$125,686	$92,098	$96,021	$99,812	$55,103	$11,494	$9,664	$8,123	$7,642
Net Income after Depreciation	$1,914,509		-$1,999	-$23,276	$153,830	$166,021	$105,645	$185,923	$159,779	$178,844	$194,478	$223,968	$132,628	$117,736	$172,408	$191,168
Idaho Mine License Tax	$11,426				$744	$820	$525	$953	$844	$1,007	$1,151	$1,441	$780	$665	$1,154	$1,343
Idaho Corporate Income Tax	$75,072					$2,089	$3,887	$7,053	$6,244	$7,449	$8,520	$10,665	$5,769	$4,920	$8,538	$9,939
Federal Income Tax	$328,797					$9,147	$17,023	$30,892	$27,348	$32,623	$37,314	$46,712	$25,265	$21,550	$37,396	$43,528
Net Income after Taxes	$1,499,214		-$1,999	-$23,276	$153,086	$153,965	$84,210	$147,025	$125,344	$137,766	$147,493	$165,150	$100,814	$90,602	$125,320	$136,359
Cash Flow																
Net Operating Income	$3,039,148		-$1,999	-$23,105	$293,393	$403,833	$277,926	$311,609	$251,877	$274,865	$294,290	$279,072	$144,122	$127,400	$180,531	$198,810
Working Capital																
Account Receivables					-$20,414	-$6,378	$5,115	-$1,746	$3,228	-$726	-$378	$839	$5,604	$878	-$1,606	$41
Accounts Payable					$8,029	$1,724	$134	$362	-$747	-$232	-$428	-$169	$5	-$179	-$603	-$795
Inventory (Parts)				-$7,500	-$7,500											
Total Working Capital	$0			-$7,500	-$19,885	-$4,654	$5,249	-$1,383	$2,481	-$958	-$806	$670	$5,610	$698	-$2,209	-$754
Capital Expenditures																
Initial Capital	$970,254	$137,371	$341,335	$491,548												
Sustaining Capital	$154,385				$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Total Capital Expenditures	$1,124,639	$137,371	$341,335	$491,548	$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Cash Flow before Taxes	$1,914,509	-$137,371	-$343,334	-$522,153	$271,414	$398,010	$271,548	$307,567	$244,442	$233,340	$287,895	$271,798	$140,693	$127,400	$176,524	$193,311
Cummulative Cash Flow before Taxes		-$137,371	-$480,705	-$1,002,858	-$731,444	-$333,434	-$61,886	$245,681	$490,123	$723,464	$1,011,359	$1,283,157	$1,423,850	$1,551,250	$1,727,774	$1,921,085
Taxes	$415,295				$744	$12,056	$21,434	$38,898	$34,436	$41,078	$46,985	$58,818	$31,814	$27,135	$47,088	$54,810
Cash Flow after Taxes	$1,499,214	-$137,371	-$343,334	-$522,153	$270,670	$385,954	$250,114	$268,669	$210,007	$192,262	$240,910	$212,980	$108,879	$100,265	$129,436	$138,501
Cummulative Cash Flow after Taxes		-$137,371	-$480,705	-$1,002,858	-$732,188	-$346,234	-$96,121	$172,549	$382,555	$574,818	$815,728	$1,028,708	$1,137,587	$1,237,852	$1,367,288	$1,505,790

Economic Indicators before Taxes		
NPV @ 0%		$1,914,509
NPV @ 5%	5.0%	$1,093,174
NPV @ 7%	7.0%	$862,974
NPV @ 10%	10.0%	$589,719
IRR		22.0%
Payback	Years	3.2

Economic Indicators after Taxes		
NPV @ 0%		$1,499,214
NPV @ 5%	5.0%	$831,755
NPV @ 10%	10.0%	$418,353
IRR		19.3%
Payback	Years	3.4

Case B (Base Case)
Expenses and Results

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,350/oz
Silver - $22.50/oz
Antimony - $4.50/lb

	Total	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Operating Cost		Thousands of US dollar ($000s)																	
Mining	$889,999																		
Process Plant	$1,416,809																		
G&A	$306,936																		
Total Operating Cost	$2,613,745																		
Royalty	$91,781																		
Property Taxes	$3,665																		
Salvage Value	-$26,524		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122	-$1,857	-$1,857							
Reclamation/Closure																			
Production Cost	$2,682,668		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122	-$1,857	-$1,857							
Net Operating Income	$3,039,148		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122	$1,857	$1,857							
Depreciation																			
Initial Capital	$970,254																		
Sustaining Capital	$154,385	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Total Depreciation	$1,124,639	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Net Income after Depreciation	$1,914,509	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Idaho Mine License Tax	$11,426																		
Idaho Corporate Income Tax	$75,072																		
Federal Income Tax	$328,797																		
Net Income after Taxes	$1,499,214	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Cash Flow																			
Net Operating Income	$3,039,148		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122	$1,857	$1,857							
Working Capital																			
Account Receivables		$15,543																	
Accounts Payable		-$7,102																	
Inventory (Parts)				$15,000															
Total Working Capital	$0	$8,442		$15,000															
Capital Expenditures																			
Initial Capital	$970,254																		
Sustaining Capital	$154,385	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771	$4,177	$4,111	$1,716	$332	$249	$1,190			
Total Capital Expenditures	$1,124,639	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771	$4,177	$4,111	$1,716	$332	$249	$1,190			
Cash Flow before Taxes	$1,914,509	$428	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow before Taxes		$1,921,513	$1,914,473	$1,925,422	$1,924,902	$1,924,708	$1,924,287	$1,923,904	$1,923,220	$1,922,571	$1,920,251	$1,917,996	$1,916,280	$1,915,948	$1,915,699	$1,914,509	$1,914,509	$1,914,509	$1,914,509
Taxes	$415,295																		
Cash Flow after Taxes	$1,499,214	$428	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow after Taxes		$1,506,218	$1,499,178	$1,510,126	$1,509,607	$1,509,412	$1,508,991	$1,508,609	$1,507,924	$1,507,276	$1,504,956	$1,502,701	$1,500,985	$1,500,652	$1,500,404	$1,499,214	$1,499,214	$1,499,214	$1,499,214

Economic Indicators before Taxes		
NPV @ 0%		$1,914,509
NPV @ 5%	5.0%	$1,093,174
NPV @ 7%	7.0%	$862,974
NPV @ 10%	10.0%	$589,719
IRR		22.0%
Payback	Years	3.2

Economic Indicators after Taxes		
NPV @ 0%		$1,499,214
NPV @ 5%	5.0%	$831,755
NPV @ 10%	10.0%	$418,353
IRR		19.3%
Payback	Years	3.4

Case C
Payables and Revenue

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,500/oz
Silver - $25.00/oz
Antimony - $5.00/lb

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Payable Metals															
Dore Metals															
Payable Gold - Dore	kozs	4,002		334	452	375	374	349	361	370	320	264	249	278	278
Payable Silver - Dore	kozs	1,085		89	79	53	83	46	43	39	54	69	149	213	168
Antimony Concentrate Payable Metals															
Antimony Concentrate	kst	84.6		12.5	11.5	5.7	17.9	5.6	6.1	5.3	18.2	1.3	0.4		
Payable Gold - Concentrate	kozs	3.2		0.43	0.49	0.43	0.50	0.15	0.16	0.22	0.67	0.08	0.02		
Payable Silver - Concentrate	kozs	382		54.3	46.8	53.7	68.0	18.3	11.6	23.5	94.6	8.8	2.8		
Payable Antimony - Concentrate	klbs	67,900		10,048	9,240	4,595	14,384	4,521	4,911	4,276	14,601	1,007	317		
Revenues								**Thounsands of US dollars ($000s)**							
Metal Prices															
Gold	$/oz	$1,500.00		$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00	$1,500.00
Silver	$/oz	$25.00		$25.00	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00
Antimony	$/lb	$5.00		$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00
Dore															
Gold		$6,003,621		$500,716	$677,610	$561,853	$561,167	$523,521	$541,557	$554,504	$479,620	$395,542	$373,439	$417,086	$417,006
Silver		$27,121		$2,231	$1,987	$1,320	$2,068	$1,149	$1,070	$977	$1,348	$1,716	$3,733	$5,316	$4,207
Refining/Transport Cost															
Gold		$8,605		$718	$971	$805	$804	$750	$776	$795	$687	$567	$535	$598	$598
Silver		$1,790		$147	$131	$87	$136	$76	$71	$65	$89	$113	$246	$351	$278
Antimony Concentrate															
Gold		$4,728		$640	$736	$644	$750	$231	$236	$336	$1,008	$116	$32		
Silver		$9,556		$1,356	$1,169	$1,342	$1,699	$457	$291	$587	$2,364	$221	$71		
Antimony		$339,498		$50,238	$46,200	$22,975	$71,920	$22,604	$24,554	$21,379	$73,006	$5,035	$1,585		
Treatment/Transport Cost		$13,861		$2,051	$1,886	$938	$2,936	$923	$1,002	$873	$2,981	$206	$65		
Total Revenues		$6,360,268		$552,265	$724,714	$586,302	$633,727	$546,213	$565,858	$576,052	$553,589	$401,743	$378,014	$421,454	$420,338

Case C
Expenses and Results

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,500/oz
Silver - $25.00/oz
Antimony - $5.00/lb

	Total	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Operating Cost								**Thousands of US dollar ($000s)**								
Mining	$889,999		$1,999	$23,105	$62,065	$87,256	$92,092	$99,799	$88,174	$82,987	$69,083	$68,578	$70,381	$65,794	$47,885	$30,803
Process Plant	$1,416,809				$107,738	$124,488	$122,912	$124,017	$117,470	$117,015	$120,502	$116,896	$115,219	$115,447	$118,681	$116,426
G&A	$306,936				$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578
Total Operating Cost	$2,613,745		$1,999	$23,105	$195,380	$237,322	$240,581	$249,394	$231,222	$225,580	$215,162	$211,052	$211,178	$206,818	$192,145	$172,806
Royalty	$101,996				$8,511	$11,515	$9,549	$9,539	$8,891	$9,197	$9,419	$8,159	$6,717	$6,340	$7,080	$7,079
Property Taxes	$3,665				$315	$427	$389	$380	$317	$366	$346	$389	$137	$204	$167	$230
Salvage Value	-$26,524															
Reclamation/Closure																
Production Cost	$2,692,882		$1,999	$23,105	$204,206	$249,264	$250,519	$259,313	$240,431	$235,143	$224,927	$219,600	$218,031	$213,362	$199,392	$180,115
Net Operating Income	$3,667,386		-$1,999	-$23,105	$348,059	$475,450	$335,783	$374,414	$305,783	$330,715	$351,125	$333,989	$183,712	$164,651	$222,062	$240,223
Depreciation																
Initial Capital	$970,254			$171	$139,264	$237,132	$169,967	$121,993	$87,663	$85,587	$85,683	$42,793				
Sustaining Capital	$154,385				$299	$680	$2,314	$3,693	$4,434	$10,434	$14,129	$12,310	$11,494	$9,664	$8,123	$7,642
Total Depreciation	$1,124,639			$171	$139,563	$237,812	$172,281	$125,686	$92,098	$96,021	$99,812	$55,103	$11,494	$9,664	$8,123	$7,642
Net Income after Depreciation	$2,542,747		-$1,999	-$23,276	$208,496	$237,638	$163,502	$248,728	$213,685	$234,694	$251,313	$278,886	$172,218	$154,988	$213,939	$232,581
Idaho Mine License Tax	$16,299				$1,167	$1,232	$815	$1,481	$1,299	$1,478	$1,631	$1,902	$1,115	$980	$1,506	$1,694
Idaho Corporate Income Tax	$111,130					$8,266	$6,027	$10,956	$9,613	$10,939	$12,073	$14,073	$8,249	$7,256	$11,143	$12,535
Federal Income Tax	$486,719					$36,204	$26,398	$47,984	$42,103	$47,908	$52,877	$61,635	$36,128	$31,777	$48,803	$54,902
Net Income after Taxes	$1,928,599		-$1,999	-$23,276	$207,329	$191,937	$130,262	$188,308	$160,669	$174,369	$184,732	$201,276	$126,727	$114,974	$152,488	$163,449
Cash Flow																
Net Operating Income	$3,667,386		-$1,999	-$23,105	$348,059	$475,450	$335,783	$374,414	$305,783	$330,715	$351,125	$333,989	$183,712	$164,651	$222,062	$240,223
Working Capital																
Account Receivables					-$22,696	-$7,087	$5,688	-$1,949	$3,596	-$807	-$419	$923	$6,240	$975	-$1,785	$46
Accounts Payable					$8,029	$1,724	$134	$362	-$747	-$232	-$428	-$169	$5	-$179	-$603	-$795
Inventory (Parts)				-$7,500	-$7,500											
Total Working Capital	$0			-$7,500	-$22,167	-$5,363	$5,822	-$1,587	$2,850	-$1,039	-$847	$754	$6,245	$796	-$2,388	-$749
Capital Expenditures																
Initial Capital	$970,254	$137,371	$341,335	$491,548												
Sustaining Capital	$154,385				$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Total Capital Expenditures	$1,124,639	$137,371	$341,335	$491,548	$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Cash Flow before Taxes	$2,542,747	-$137,371	-$343,334	-$522,153	$323,798	$468,918	$329,979	$370,169	$298,716	$289,109	$344,689	$326,800	$180,919	$164,749	$217,876	$234,728
Cummulative Cash Flow before Taxes		-$137,371	-$480,705	-$1,002,858	-$679,060	-$210,142	$119,837	$490,006	$788,722	########	$1,422,520	$1,749,320	$1,930,239	$2,094,988	$2,312,864	$2,547,592
Taxes	$614,148				$1,167	$45,702	$33,240	$60,420	$53,016	$60,325	$66,581	$77,610	$45,491	$40,013	$61,451	$69,132
Cash Flow after Taxes	$1,928,599	-$137,371	-$343,334	-$522,153	$322,631	$423,216	$296,738	$309,749	$245,701	$228,784	$278,108	$249,190	$135,428	$124,735	$156,425	$165,597
Cummulative Cash Flow after Taxes		-$137,371	-$480,705	-$1,002,858	-$680,227	-$257,010	$39,728	$349,477	$595,178	$823,962	$1,102,069	$1,351,259	$1,486,687	$1,611,423	$1,767,848	$1,933,444

Economic Indicators before Taxes		
NPV @ 0%		$2,542,747
NPV @ 5%	5.0%	$1,523,949
NPV @ 7%	7.0%	$1,237,858
NPV @ 10%	10.0%	$897,583
IRR		27.2%
Payback	Years	2.6

Economic Indicators after Taxes		
NPV @ 0%		$1,928,599
NPV @ 5%	5.0%	$1,128,756
NPV @ 10%	10.0%	$632,542
IRR		23.4%
Payback	Years	2.9

Case C
Expenses and Results

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,500/oz
Silver - $25.00/oz
Antimony - $5.00/lb

	Total	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Operating Cost		Thousands of US dollar ($000s)																	
Mining	$889,999																		
Process Plant	$1,416,809																		
G&A	$306,936																		
Total Operating Cost	$2,613,745																		
Royalty	$101,996																		
Property Taxes	$3,665																		
Salvage Value	-$26,524		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122	-$1,857	-$1,857							
Reclamation/Closure																			
Production Cost	$2,692,882		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122	-$1,857	-$1,857							
Net Operating Income	$3,667,386		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122	$1,857	$1,857							
Depreciation																			
Initial Capital	$970,254																		
Sustaining Capital	$154,385	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Total Depreciation	$1,124,639	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Net Income after Depreciation	$2,542,747	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Idaho Mine License Tax	$16,299																		
Idaho Corporate Income Tax	$111,130																		
Federal Income Tax	$486,719																		
Net Income after Taxes	$1,928,599	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Cash Flow																			
Net Operating Income	$3,667,386		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122	$1,857	$1,857							
Working Capital																			
Account Receivables		$17,274																	
Accounts Payable		-$7,102																	
Inventory (Parts)				$15,000															
Total Working Capital	$0	$10,173		$15,000															
Capital Expenditures																			
Initial Capital	$970,254																		
Sustaining Capital	$154,385	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771	$4,177	$4,111	$1,716	$332	$249	$1,190			
Total Capital Expenditures	$1,124,639	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771	$4,177	$4,111	$1,716	$332	$249	$1,190			
Cash Flow before Taxes	$2,542,747	$2,159	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow before Taxes		$2,549,751	$2,542,711	$2,553,660	$2,553,140	$2,552,946	$2,552,525	$2,552,142	$2,551,458	$2,550,809	$2,548,489	$2,546,234	$2,544,518	$2,544,186	$2,543,937	$2,542,747	$2,542,747	$2,542,747	$2,542,747
Taxes	$614,148																		
Cash Flow after Taxes	$1,928,599	$2,159	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow after Taxes		$1,935,604	$1,928,563	$1,939,512	$1,938,992	$1,938,798	$1,938,377	$1,937,994	$1,937,310	$1,936,661	$1,934,341	$1,932,086	$1,930,370	$1,930,038	$1,929,789	$1,928,599	$1,928,599	$1,928,599	$1,928,599

Economic Indicators before Taxes		
NPV @ 0%		$2,542,747
NPV @ 5%	5.0%	$1,523,949
NPV @ 7%	7.0%	$1,237,858
NPV @ 10%	10.0%	$897,583
IRR		27.2%
Payback	Years	2.6

Economic Indicators after Taxes		
NPV @ 0%		$1,928,599
NPV @ 5%	5.0%	$1,128,756
NPV @ 10%	10.0%	$632,542
IRR		23.4%
Payback	Years	2.9

Case D
Payables and Revenue

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,650/oz
Silver - $27.50/oz
Antimony - $5.50/lb

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Payable Metals															
Dore Metals															
Payable Gold - Dore	kozs	4,002		334	452	375	374	349	361	370	320	264	249	278	278
Payable Silver - Dore	kozs	1,085		89	79	53	83	46	43	39	54	69	149	213	168
Antimony Concentrate Payable Metals															
Antimony Concentrate	kst	84.6		12.5	11.5	5.7	17.9	5.6	6.1	5.3	18.2	1.3	0.4		
Payable Gold - Concentrate	kozs	3.2		0.43	0.49	0.43	0.50	0.15	0.16	0.22	0.67	0.08	0.02		
Payable Silver - Concentrate	kozs	382		54.3	46.8	53.7	68.0	18.3	11.6	23.5	94.6	8.8	2.8		
Payable Antimony - Concentrate	klbs	67,900		10,048	9,240	4,595	14,384	4,521	4,911	4,276	14,601	1,007	317		
Revenues								**Thounsands of US dollars ($000s)**							
Metal Prices															
Gold	$/oz	$1,650.00		$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00	$1,650.00
Silver	$/oz	$27.50		$27.50	$27.50	$27.50	$27.50	$27.50	$27.50	$27.50	$27.50	$27.50	$27.50	$27.50	$27.50
Antimony	$/lb	$5.50		$5.50	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50	$5.50
Dore															
Gold		$6,603,983		$550,788	$745,371	$618,038	$617,284	$575,873	$595,713	$609,954	$527,582	$435,096	$410,783	$458,795	$458,707
Silver		$29,834		$2,454	$2,186	$1,452	$2,275	$1,264	$1,177	$1,075	$1,483	$1,888	$4,106	$5,847	$4,627
Refining/Transport Cost															
Gold		$8,605		$718	$971	$805	$804	$750	$776	$795	$687	$567	$535	$598	$598
Silver		$1,790		$147	$131	$87	$136	$76	$71	$65	$89	$113	$246	$351	$278
Antimony Concentrate															
Gold		$5,200		$704	$809	$708	$824	$254	$259	$370	$1,108	$127	$35		
Silver		$10,512		$1,492	$1,286	$1,476	$1,869	$503	$320	$646	$2,600	$243	$78		
Antimony		$373,447		$55,262	$50,820	$25,272	$79,112	$24,864	$27,009	$23,517	$80,307	$5,539	$1,744		
Treatment/Transport Cost		$13,861		$2,051	$1,886	$938	$2,936	$923	$1,002	$873	$2,981	$206	$65		
Total Revenues		$6,998,720		$607,783	$797,484	$645,116	$697,487	$601,010	$622,628	$633,830	$609,323	$442,006	$415,900	$463,694	$462,459

Case D
Expenses and Results

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,650/oz
Silver - $27.50/oz
Antimony - $5.50/lb

	Total	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Operating Cost								**Thousands of US dollar ($000s)**								
Mining	$889,999		$1,999	$23,105	$62,065	$87,256	$92,092	$99,799	$88,174	$82,987	$69,083	$68,578	$70,381	$65,794	$47,885	$30,803
Process Plant	$1,416,809				$107,738	$124,488	$122,912	$124,017	$117,470	$117,015	$120,502	$116,896	$115,219	$115,447	$118,681	$116,426
G&A	$306,936				$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578	$25,578
Total Operating Cost	$2,613,745		$1,999	$23,105	$195,380	$237,322	$240,581	$249,394	$231,222	$225,580	$215,162	$211,052	$211,178	$206,818	$192,145	$172,806
Royalty	$112,210				$9,363	$12,669	$10,505	$10,494	$9,781	$10,118	$10,362	$8,976	$7,389	$6,975	$7,789	$7,788
Property Taxes	$3,665				$315	$427	$389	$380	$317	$366	$346	$389	$137	$204	$167	$230
Salvage Value	-$26,524															
Reclamation/Closure																
Production Cost	$2,703,096		$1,999	$23,105	$205,059	$250,417	$251,475	$260,268	$241,321	$236,064	$225,870	$220,417	$218,704	$213,997	$200,101	$180,824
Net Operating Income	$4,295,624		-$1,999	-$23,105	$402,725	$547,067	$393,640	$437,219	$359,689	$386,564	$407,960	$388,907	$223,303	$201,903	$263,593	$281,635
Depreciation																
Initial Capital	$970,254			$171	$139,264	$237,132	$169,967	$121,993	$87,663	$85,587	$85,683	$42,793				
Sustaining Capital	$154,385				$299	$680	$2,314	$3,693	$4,434	$10,434	$14,129	$12,310	$11,494	$9,664	$8,123	$7,642
Total Depreciation	$1,124,639			$171	$139,563	$237,812	$172,281	$125,686	$92,098	$96,021	$99,812	$55,103	$11,494	$9,664	$8,123	$7,642
Net Income after Depreciation	$3,170,985		-$1,999	-$23,276	$263,162	$309,255	$221,359	$311,533	$267,591	$290,544	$308,148	$333,803	$211,808	$192,239	$255,470	$273,993
Idaho Mine License Tax	$21,516				$1,627	$1,836	$1,219	$2,008	$1,754	$1,950	$2,112	$2,362	$1,450	$1,296	$1,858	$2,045
Idaho Corporate Income Tax	$149,737				$2,554	$13,583	$9,024	$14,859	$12,982	$14,429	$15,626	$17,480	$10,729	$9,591	$13,747	$15,132
Federal Income Tax	$655,807				$11,185	$59,491	$39,523	$65,076	$56,859	$63,193	$68,439	$76,559	$46,990	$42,005	$60,209	$66,276
Net Income after Taxes	$2,343,925		-$1,999	-$23,276	$247,796	$234,345	$171,592	$229,590	$195,995	$210,972	$221,971	$237,402	$152,639	$139,347	$179,656	$190,539
Cash Flow																
Net Operating Income	$4,295,624		-$1,999	-$23,105	$402,725	$547,067	$393,640	$437,219	$359,689	$386,564	$407,960	$388,907	$223,303	$201,903	$263,593	$281,635
Working Capital																
Account Receivables					-$24,977	-$7,796	$6,262	-$2,152	$3,965	-$888	-$460	$1,007	$6,876	$1,073	-$1,964	$51
Accounts Payable					$8,029	$1,724	$134	$362	-$747	-$232	-$428	-$169	$5	-$179	-$603	-$795
Inventory (Parts)				-$7,500	-$7,500											
Total Working Capital	$0			-$7,500	-$24,448	-$6,072	$6,396	-$1,790	$3,218	-$1,120	-$888	$838	$6,881	$894	-$2,567	-$744
Capital Expenditures																
Initial Capital	$970,254	$137,371	$341,335	$491,548												
Sustaining Capital	$154,385				$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Total Capital Expenditures	$1,124,639	$137,371	$341,335	$491,548	$2,094	$1,169	$11,627	$2,658	$9,916	$40,566	$5,589	$7,944	$9,039	$699	$1,797	$4,746
Cash Flow before Taxes	$3,170,985	-$137,371	-$343,334	-$522,153	$376,182	$539,826	$388,409	$432,771	$352,991	$344,877	$401,483	$381,801	$221,145	$202,097	$259,229	$276,145
Cummulative Cash Flow before Taxes		-$137,371	-$480,705	-$1,002,858	-$626,676	-$86,850	$301,559	$734,331	$1,087,321	$1,432,199	$1,833,681	$2,215,483	$2,436,628	$2,638,725	$2,897,954	$3,174,099
Taxes	$827,060				$15,366	$74,910	$49,767	$81,943	$71,596	$79,572	$86,177	$96,401	$59,169	$52,892	$75,814	$83,454
Cash Flow after Taxes	$2,343,925	-$137,371	-$343,334	-$522,153	$360,817	$464,916	$338,642	$350,828	$281,395	$265,306	$315,305	$285,400	$161,976	$149,206	$183,414	$192,692
Cummulative Cash Flow after Taxes		-$137,371	-$480,705	-$1,002,858	-$642,041	-$177,125	$161,517	$512,345	$793,740	$1,059,046	$1,374,351	$1,659,751	$1,821,727	$1,970,933	$2,154,347	$2,347,039

Economic Indicators before Taxes		
NPV @ 0%		$3,170,985
NPV @ 5%	5.0%	$1,954,725
NPV @ 7%	7.0%	$1,612,742
NPV @ 10%	10.0%	$1,205,447
IRR		31.9%
Payback	Years	2.2

Economic Indicators after Taxes		
NPV @ 0%		$2,343,925
NPV @ 5%	5.0%	$1,413,808
NPV @ 10%	10.0%	$836,479
IRR		27.0%
Payback	Years	2.5

Stibnite Gold Project
Midas Gold Corporation

Gold - $1,650/oz
Silver - $27.50/oz
Antimony - $5.50/lb

	Total	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Operating Cost		Thousands of US dollar ($000s)																	
Mining	$889,999																		
Process Plant	$1,416,809																		
G&A	$306,936																		
Total Operating Cost	$2,613,745																		
Royalty	$112,210																		
Property Taxes	$3,665																		
Salvage Value	-$26,524		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122	-$1,857	-$1,857							
Reclamation/Closure																			
Production Cost	$2,703,096		-$3,979	-$3,183	-$3,183	-$2,918	-$2,652	-$2,652	-$2,122	-$2,122	-$1,857	-$1,857							
Net Operating Income	$4,295,624		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122	$1,857	$1,857							
Depreciation																			
Initial Capital	$970,254																		
Sustaining Capital	$154,385	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Total Depreciation	$1,124,639	$6,533	$6,419	$7,111	$6,278	$5,324	$4,955	$4,749	$4,388	$3,743	$3,351	$3,434	$3,263	$2,614	$1,937	$1,616	$1,393	$975	$1,085
Net Income after Depreciation	$3,170,985	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Idaho Mine License Tax	$21,516																		
Idaho Corporate Income Tax	$149,737																		
Federal Income Tax	$655,807																		
Net Income after Taxes	$2,343,925	-$6,533	-$2,440	-$3,928	-$3,096	-$2,406	-$2,303	-$2,097	-$2,266	-$1,622	-$1,494	-$1,577	-$3,263	-$2,614	-$1,937	-$1,616	-$1,393	-$975	-$1,085
Cash Flow																			
Net Operating Income	$4,295,624		$3,979	$3,183	$3,183	$2,918	$2,652	$2,652	$2,122	$2,122	$1,857	$1,857							
Working Capital																			
Account Receivables		$19,005																	
Accounts Payable		-$7,102																	
Inventory (Parts)				$15,000															
Total Working Capital	$0	$11,904		$15,000															
Capital Expenditures																			
Initial Capital	$970,254																		
Sustaining Capital	$154,385	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771	$4,177	$4,111	$1,716	$332	$249	$1,190			
Total Capital Expenditures	$1,124,639	$8,013	$11,019	$7,234	$3,703	$3,112	$3,073	$3,035	$2,806	$2,771	$4,177	$4,111	$1,716	$332	$249	$1,190			
Cash Flow before Taxes	$3,170,985	$3,890	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow before Taxes		$3,177,990	$3,170,949	$3,181,898	$3,181,378	$3,181,184	$3,180,763	$3,180,380	$3,179,696	$3,179,047	$3,176,727	$3,174,473	$3,172,757	$3,172,424	$3,172,175	$3,170,985	$3,170,985	$3,170,985	$3,170,985
Taxes	$827,060																		
Cash Flow after Taxes	$2,343,925	$3,890	-$7,040	$10,949	-$520	-$194	-$421	-$382	-$685	-$649	-$2,320	-$2,255	-$1,716	-$332	-$249	-$1,190			
Cummulative Cash Flow after Taxes		$2,350,929	$2,343,889	$2,354,838	$2,354,318	$2,354,124	$2,353,703	$2,353,320	$2,352,636	$2,351,987	$2,349,667	$2,347,412	$2,345,696	$2,345,364	$2,345,115	$2,343,925	$2,343,925	$2,343,925	$2,343,925

Economic Indicators before Taxes		
NPV @ 0%		$3,170,985
NPV @ 5%	5.0%	$1,954,725
NPV @ 7%	7.0%	$1,612,742
NPV @ 10%	10.0%	$1,205,447
IRR		31.9%
Payback	Years	2.2

Economic Indicators after Taxes		
NPV @ 0%		$2,343,925
NPV @ 5%	5.0%	$1,413,808
NPV @ 10%	10.0%	$836,479
IRR		27.0%
Payback	Years	2.5