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July 29, 2011

RECEIVED
By Licensing Administrative Assistant at 3:40 pm, Aug 02, 2011

Phyllis Bealieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0E 1J0
(867) 360-6338

Re: 2AM-DOH0713 – Interim Water Management Plan

Dear Ms. Beaulieu,

Please find enclosed with this letter the revised Doris North Project Interim Water Management Plan (July 2011) (the "Plan"). The revised Plan is submitted in order to meet the requirement of Part F, Item 1 of Water Licence No. 2AM-D0H0713 (the "Water Licence") to submit to the Water Board a revised Water Management Plan. The revised Plan has been revised to address all of the requirements in Part F, Item 1 which are the following:

a. A requirement to continuously monitor Doris Lake levels and outflow during the two (2) years of mining and beyond to confirm water balance model predictions;
b. Requirements for on-going monitoring and calibration of the water quality model;
c. A strategy to monitor and remove where necessary snow accumulation in the Pollution Control Pond, roads, ditches, and drainage channels; and
d. The Plan shall consider the monitoring requirements set out in Parts J and K.

The previous draft of the Plan (December 2010) did not explicitly address Items (a) and (b); however, both are being conducted. As part of the environmental baseline data collection, Rescan Environmental Services monitors Doris Lake water levels and outflows. SRK receives this monitoring data and uses the data to calibrate the water balance and quality model.

Also enclosed with the revised Plan is a table addressing each of the comments submitted by KIA, INAC and Environment Canada. Attached to the comment-response table are drawings and additional information regarding the Sedimentation Pond, Pollution Control Pond and Temporary Holding Pond.

We believe the revised Plan now meets all of the requirements of the Water Licence. Should you have any questions regarding this submission, please do not hesitate to contact me at chris.hanks@newmont.com.

Sincerely,

Léa-Marie Bowes-Lyon

Digitally signed by Léa-Marie Bowes-Lyon
DN: cn=Léa-Marie Bowes-Lyon, o=Hope Bay Mining Ltd., ou=ESR, email=lea-marie.bowes-lyon@newmont.com, c=CA
Date: 2011.08.02 13:51:39 -07'00'

for

Chris Hanks
VP, Environmental Affairs
Hope Bay Mining Ltd.

Interim Water Management Plan – Comment Responses

DATE	ORG./ NAME	ID#	COMMENT/ISSUE	HOPE BAY MINING LIMITED RESPONSE
24 March 2011	KIA/ Luigi Torretti	1.	HBML should standardize the terms used to define areas. Terms are sometimes used interchangeably, and sometimes not defined properly defined, causing confusion.	We have standardized the terms used to describe the basins and sub-basins from which the runoff originates.
24 March 2011	KIA/ Luigi Torretti	2.	HBML should clarify the design life of the facility, and whether the facilities would or could expand to meet future development needs.	The purpose of the plan is to describe how the facilities will be operated during this interim period before impacted water can be discharged to Tails Lake.
24 March 2011	KIA/ Luigi Torretti	3.	As-built or IFC details of the facilities are needed, including: a. pump sizes, capacity and backup plans, as well as discharge protocol; b. clarification of where the diversion pumps divert water to, and how the water is collected; c. confirmation that construction materials are geochemically benign and free from blasting residues; d. liner details (the pads, Pollution Control Pond and the Sedimentation Pond should be lined with an impervious liner in order to direct flow and store potentially contaminated water); confirmation of design capacity for the current pond size, and that capacity can be increased as and when needed.	Issued for construction drawings of the Sedimentation and Pollution Control Ponds are attached. a. Pumps for the pump stations are portable units and mobilized as needed. The largest pump is a Godwin 4" HL4M pump and the smallest is a 2" trash pump. Attached are the specs on the Godwin pump.Pumping from Pollution Control Pond to Temporary Holding Pond Protocol is as follows: "*Once the Pollution Control Pond has accumulated a volume equivalent to 24 hours of pumping capacity or approximately 240 m^3 the accumulated water will be pumped via a pipeline to a Temporary Holding Pond.*" b. The diversion pumps pump water to the diversion outfall above the sedimentation berm for the Overburden Stockpile. The diverted water is collected in collection areas adjacent to the pumps. c. The materials used in the construction of the plan are characterized in the following report: SRK, 2007. Geochemical Characterization of Quarry Materials, Doris North Project, Hope Bay, Nunavut, Canada. Prepared for Miramar Hope Bay Limited. d. The Pollution Control and Sedimentation Ponds are partially lined. Details are shown in Attachment 1 to these comments. e. Attachment 1 shows the Sedimentation and Pollution Control Ponds and their stage-storage curves.

Interim Water Management Plan – Comment Responses

24 March 2011	KIA/ Luigi Torretti	4.	HBML should explain the reasoning for using a 1:25 year 24 hour event rather than a 1:100 year 24 hour event.	Our reasoning for using the 1:25 year 24 hour storm event is an appropriate design event for the interim water management plan because the purpose of the plan is only to manage water for the interim period before water is discharged to Tails Lake. The probability of this size precipitation event occurring during the interim period for which the plan was prepared is only 4%.
24 March 2011	KIA/ Luigi Torretti	5.	The Plan should provide more details regarding mitigation options in the event that the Pollution Control Structure and the Sedimentation Pond are full of contaminated water due to a storm event. Has HBML considered a scenario where the Land Farm Pond (mitigation option 3) may also be full, and therefore unavailable?	The Temporary Holding Pond's capacity is 6,786 m^3. The estimated runoff volume for the design storm event for the Mine Area is 6,124 m^3. The Temporary Holding has sufficient volume to retain the runoff volume for the design storm event from the entire Mine Area.
24 March 2011	KIA/ Luigi Torretti	6.	The Plan figures suggest that Pad R reports to the Sedimentation Pond. Is this correct, or does it report to the Pollution Control Pond?	Pad R reports to the Sedimentation Pond.
24 March 2011	KIA/ Luigi Torretti	7.	Details are needed regarding the Reverse Osmosis (RO) Plant: a. HBML should confirm that the RO plant will be built and ready to use prior to the need to treat contaminated/non-compliant water; b. Waste stream flows need to be detailed; c. How will HBML manage contaminated/non-compliant water that requires further treatment? d. IFC designs are needed. A geotechnical engineer should supervise construction, and an independent geotechnical engineer should inspect the facility annually.	a. Commissioning of the RO plant began on 12 July 2011. b. The RO plant treated/treats impacted water collected by the Pollution Control Pond and stored in the Temporary Holding Pond. c. In accordance with the Plan, water that does not meet discharge objectives will not be discharged. Water that does not meet quality objectives can be retained within the Temporary Holding Pond which has sufficient holding capacity for the design storm runoff volume from the Mine Area. d. Comment acknowledged. Specifications for the RO plant are Attachment 2 to this response to comments.
24 March 2011	KIA/ Luigi Torretti	8.	The Interim Plan should incorporate additional details regarding snow removal and management.	Additional details regarding snow removal and management are provided in the plan. Snow removed from the Mine Area is stockpiled near the Overburden Stockpile upgradient of the sedimentation berm.
24 March 2011	KIA/ Luigi Torretti	9.	Water quality and freeboard monitoring frequency should increase after a storm event and/or when ponds approach maximum carrying capacity.	Water level and flow monitoring requirements are outlined in Section 9 of the Plan and will be conducted in accordance with the water licence.

Interim Water Management Plan – Comment Responses

23 March 2011	INAC/J. Rogers	10.	1. The Interim Water Management Plan proposed by HBML appears reasonable but is missing information and explanations to determine if potential environmental effects and potential environmental liabilities will be minimized until the use of Tail Lake is approved. INAC Water Resources Division believes that HBML should implement Part F, Item 1 a) and b) of the WaterLicence to gather sufficient baseline information.	Part F, Item 1 a) and b) of the water licence are now included in the Plan. Doris Lake water levels and outflows are monitored as part of the baseline hydrologic study. These data are shared with SRK and are used to calibrate the water balance and quality model.
23 March 2011	INAC/J. Rogers	11.	2. Operation of Pollution Control and Sedimentation Ponds Greater clarification on how effluent from the Pollution Control and Sedimentation Ponds will be managed by operating a reverse osmosis water treatment facility (RO Plan) should be provided. Specifically, the INAC Water Resources Divisions questions if and why treated water will be directed to the Sedimentation Pond other than to dilute the concentrations of parameters of concern in the sediment pond. Also, the plan does not clearly indicate that the remaining water with high concentration will be handled. Returning the sludge/ return water from the RO Plant to the pollution control pond would increase the total load and concentrations within the pond making treatment more difficult although increasing the storage space. HBML should perhaps indicate the risks involved in Option 1 and the probability of that option being implemented.	The RO plant will treat the water to remove dissolved constituents from impacted water to meet the quality objectives prior to discharge to the Sedimentation Pond. Treated water is discharged to the Sedimentation Pond because the Sedimentation is the only permitted discharge location within the Mine Area specified in the water licence. HBML is willing to discharge treated water directly onto the tundra if permitted by the water board. RO reject (concentrate) will be/is returned to the Temporary Holding Pond. When Tails Lake can receive impacted water, water in the Temporary Holding Pond will be discharged to Tails Lake.
23 March 2011	INAC/J. Rogers	12.	3. The Pollution Control Pond's Retention Capacity The INAC Water Resources Division questions the climate estimates used to determine the volume of water that the Pollution Control Pond must be capable of managing during design events. Section 4.1 design rainfall events have been exceeded more than once at Kugluktuk. INAC was unable to access the more recent Golder reports and, during the previous technical hearings, the project operator was reminded to consider the July 2007 rainstorm at Kugluktuk. HBML should review their climate data and clarify their design retention capacities of both the Pollution Control Pond and Sedimentation Ponds.	Design storm event were estimated based on the information supplied in the draft Doris Project Area 2008 Hydrology Baseline Update. This report uses climatic data from Kuglutuk as well as 7 other climatic monitoring locations much closer to the site than Kugluktuk.

Interim Water Management Plan – Comment Responses

23 March 2011	INAC/J. Rogers	13.	4. Referenced Draft 2009 Golder Report In my review I noted that the December 2009 Golder report titled, "Doris Project Area 2008 Hydrology Baseline Update," referenced in the submitted plan is a draft version. This report should be finalized taking into account the comments provided in Item No. 3 (above) and HBML should ensure that accurate climate data are used in the design of their project's Sedimentation and Pollution Control Ponds. Also, whenever possible, future HBML submissions should not reference draft reports/ plans.	Comment acknowledged.
23 March 2011	INAC/J. Rogers	14.	5. Reverse Osmosis Water Treatment Facility (RO Plant) HBML should describe the conditions that would necessitate the installation of a RO Plant, such as a specified volume of effluent within the Pollution Control Pond and/or maximum freeboard level. The plan should also include general design specifications of the RO Plant such as treatment capacity, membrane type, filtration size, plant specific operations and the time required to commission a facility.	The reverse osmosis plant was commissioned starting on 12 July 2011 to proactively manage impacted water. The capacity of the RO plant is 20 m^3/hr. Other specifications of the RO plant are Attachment 2 to these comments.
23 March 2011	INAC/J. Rogers	15.	6. Scope of Water Management Plan The submitted plan is specific to the Doris North Project's central mine area and, to a limited extent, the project's land farm facility. Although HBML has stated that their plan will be updated to include provisions concerning the tailings impoundment area before it is commissioned, not all water management provisions specific to the project have been included in the submitted plan. Examples include, • Water usage (e.g., potable water, water for construction purposes/ mine development, and dust control); • Storm water management, especially for areas with a higher risk of contamination such as the fuel transfer station, fuel storage facilities, and land farm facility; • Sewage treatment and disposal; and, • The Aquatic Effects Monitoring Program. The INAC Water Resources Division recommends that future amendments to this plan address all known water management provisions associated with the project and reference all applicable management plans and reporting requirements associated with the Water Licence.	This Plan is only for the period before impacted water can be discharged to Tails Lake. The final water management plan will address the items listed in this comment.

Interim Water Management Plan – Comment Responses

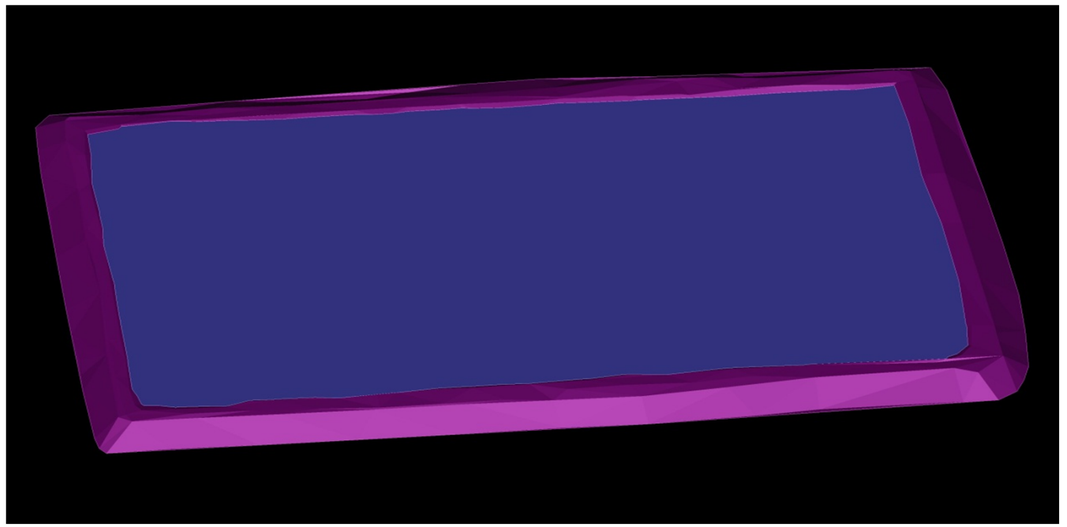
23 March 2011	INAC/J. Rogers	16.	7. Amendment No. 2 to the Water Licence Pending the Minister of Indian Affairs and Northern Development's approval of the Board's Amendment No. 2 to the Water Licence issued February 15, 2011, water management practices applicable to the expansion of the Roberts Bay fuel storage and containment facility; expansion to the project's all-weather airstrip and construction of a bypass road; and, revised location of the cyanide and reagent storage facility, should be included in a revised plan.	The Plan is only for the period before impacted water can be discharged to Tails Lake. The final water management plan will address the items listed in this comment.
24 March 2011	Environment Canada/ Paula Smith	17.	The storage capacity (in m³) of the sedimentation and pollution control ponds have not been provided anywhere in this Plan. This information is critical to determining the adequacy of this plan. EC recommends providing this information in figure 1 (areas are currently provided in figure 1). This information should also be added to Sections 7.2.2 and 7.2.3 so comparisons can be made between anticipated annual runoff volumes and the respective storage capacities of each Pond.	The Pollution Control Pond and Sedimentation Pond are designed as event ponds to detain the 1 in 25 year, 24 hour storm and as such their capacity should not be compared to average annual runoff estimates. For the 1 in 25 year, 24 hour precipitation event, 3100 m^3 will report to the Pollution Control Pond and 3024 m^3 will report to the Sedimentation Pond. This estimate has been added to Section 7.2.1. The capacity of the Sedimentation Pond is 2,636 m^3 and, respectively. This has been added to Section 7.2.2. The full storage level of the Temporary Holding Pond is 6,786 m^3. This has been added to Section 7.2.3.
24 March 2011	Environment Canada/ Paula Smith	18.	According to Section 4.3 of the Plan, the mine area is expected to generate ~38 000m³ of runoff annually. However the plan indicates the Pollution Control Pond has only been designed to manage 14 700 m³ of runoff. Will the remaining 23 300 m³ of runoff water report to the Sedimentation Pond? In any event, the amount of water reporting to the Sedimentation Pond should be conveyed in Section 7.2.2.	The runoff estimate of 14,700 m^3 is an annual estimate of the total runoff intercepted by the Pollution Control Pond during a 1 in 20 wet year, in which a 1 in 25 year, 24 hour storm occurs and 25% of the snow water equivalent melts. The 38,000 m^3 is the average annual runoff for the mine area. The two estimates are derived for different reasons and should not be compared. The 38,000 m^3 estimate is derived as a general description of the site and the 14,700 m^3 estimate is derived to characterize a low probability maximum annual volume of contact water that could need to be managed. Neither pond is intended or designed to retain the annual runoff volume from the portion of the Mine Area that reports to it.

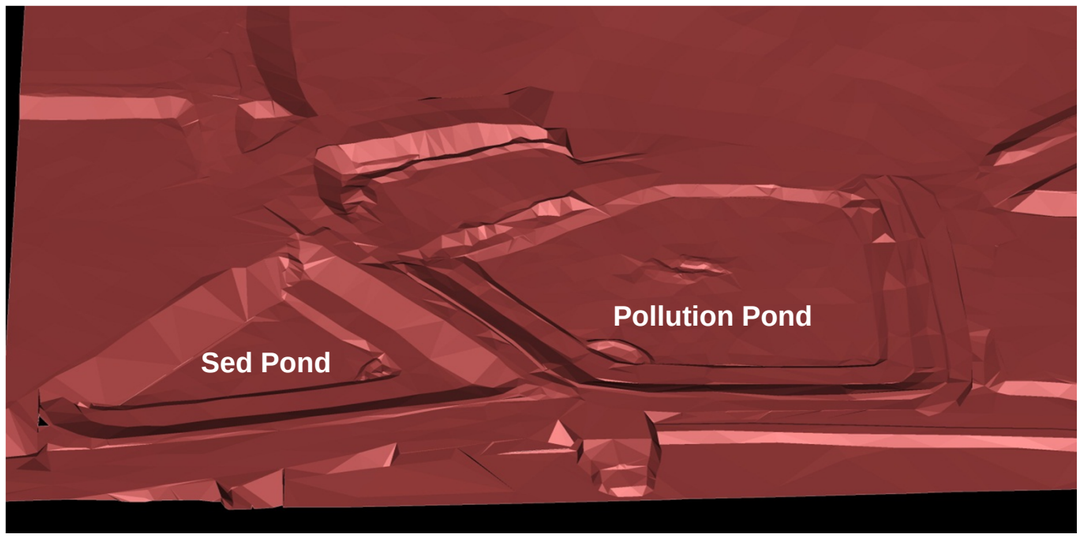
Interim Water Management Plan – Comment Responses

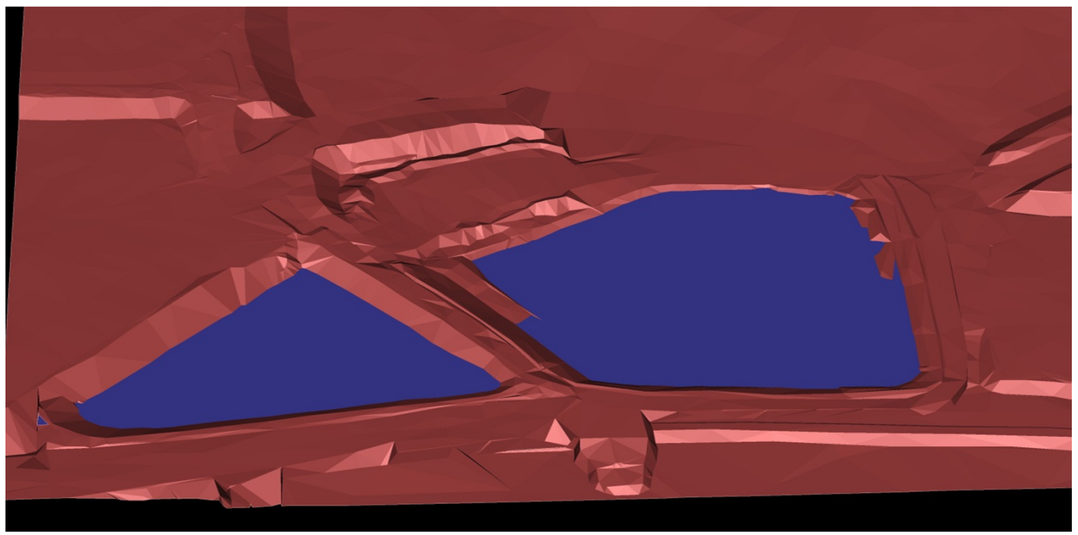
24 March 2011	Environment Canada/ Paula Smith	19.	Section 7.2.1 makes reference to the area of land being drained by the Sedimentation and Pollution Control Ponds. For clarity, it would be helpful if volumes of water reporting to each pond were also provided so it can be easily determined if capacities are exceeded and by what amount.	The Pollution Control Pond and Sedimentation Pond are designed as event ponds for the 1 in 25 year, 24 hour storm and as such their capacity should not be compared to average annual runoff estimates. For the 1 in 25 year, 24 hour precipitation event, 3100 m^3 will report to the Pollution Control Pond and 3024 m^3 will report to the Sedimentation Pond. This estimate has been added to Section 7.2.1.
24 March 2011	Environment Canada/ Paula Smith	20.	With respect to mitigation option 3 under Section 7.2.3, the storage capacity (in m^3) of the landfill should be provided. If this option is exercised, what measures are in place to ensure landfarm water won't seep and how will water from the landfarm be extracted for future treatment and discharge.	No water from the Mine Area will be directed to the landfill. Since the Plan was initially prepared a fully lined Temporary Holding Pond was constructed on Pad D. The Temporary Holding Pond was/will be used to retain water instead of the landfarm ponds.
24 March 2011	Environment Canada/ Paula Smith	21.	Section 9 indicates that discharge from the RO Plant will be monitored for quality once daily while discharging. Will similar accommodations be made for water discharged to the tundra from the Sedimentation Pond to confirm compliance with water license conditions prior to discharge?	Sedimentation Pond monitoring will be conducted in accordance with the water licence.

Attachment 1:

Sedimentation Pond, Pollution Control Pond and Temporary Holding Pond Drawings and Storage Curves



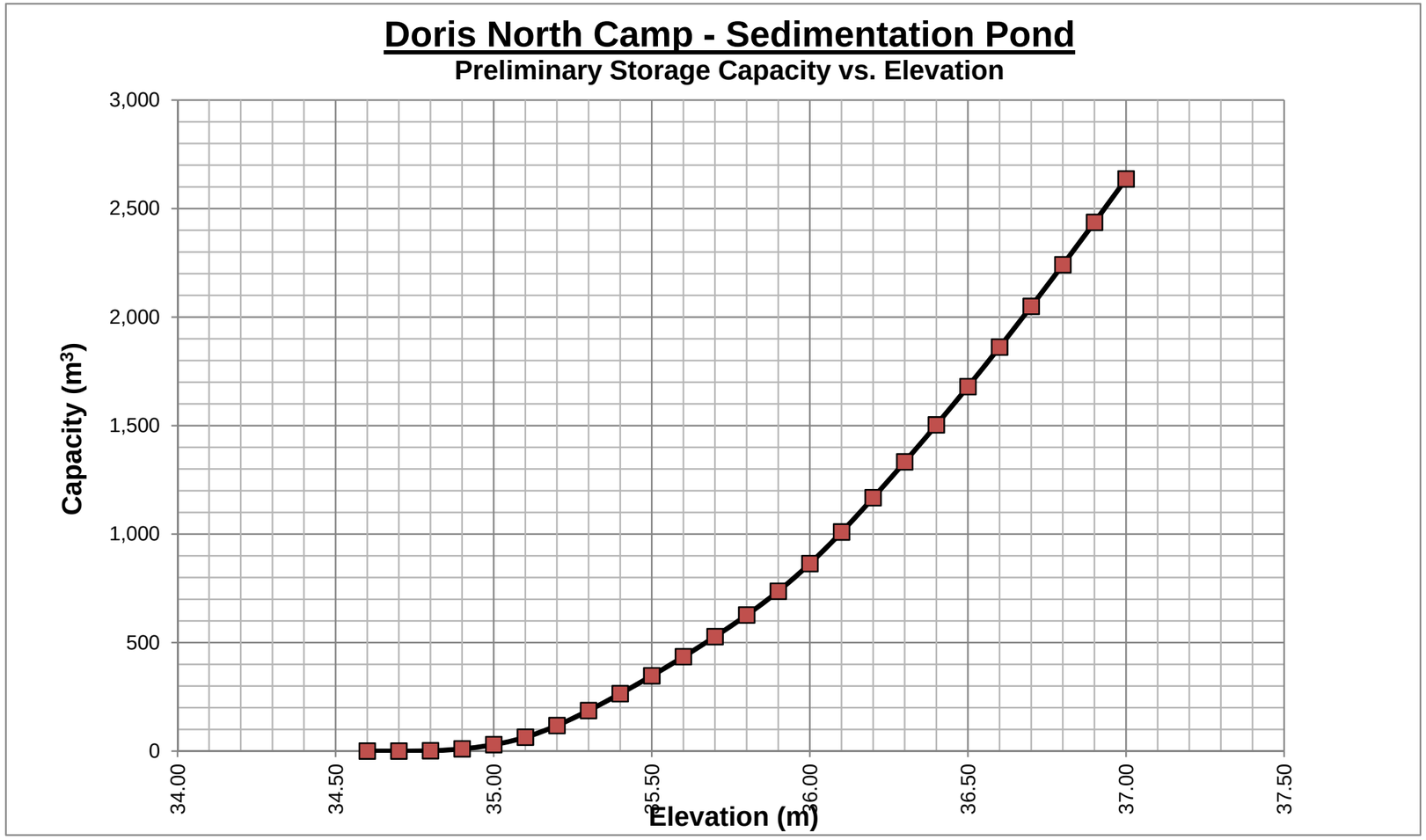




srk consulting	NEWMONT NORTH AMERICA	Doris North Camp
Job No: 1CH008.033 File: Sed&PollPond+PadDTempPondLiner_AB_20110725	HOPE BAY MINING INC	**Screenshots of Sed, Pollution and Temp Pond As-Built Models**
		Date: July 25, 2011 / Approved: JBK / Figure: 1

Report 1:Sed Pond

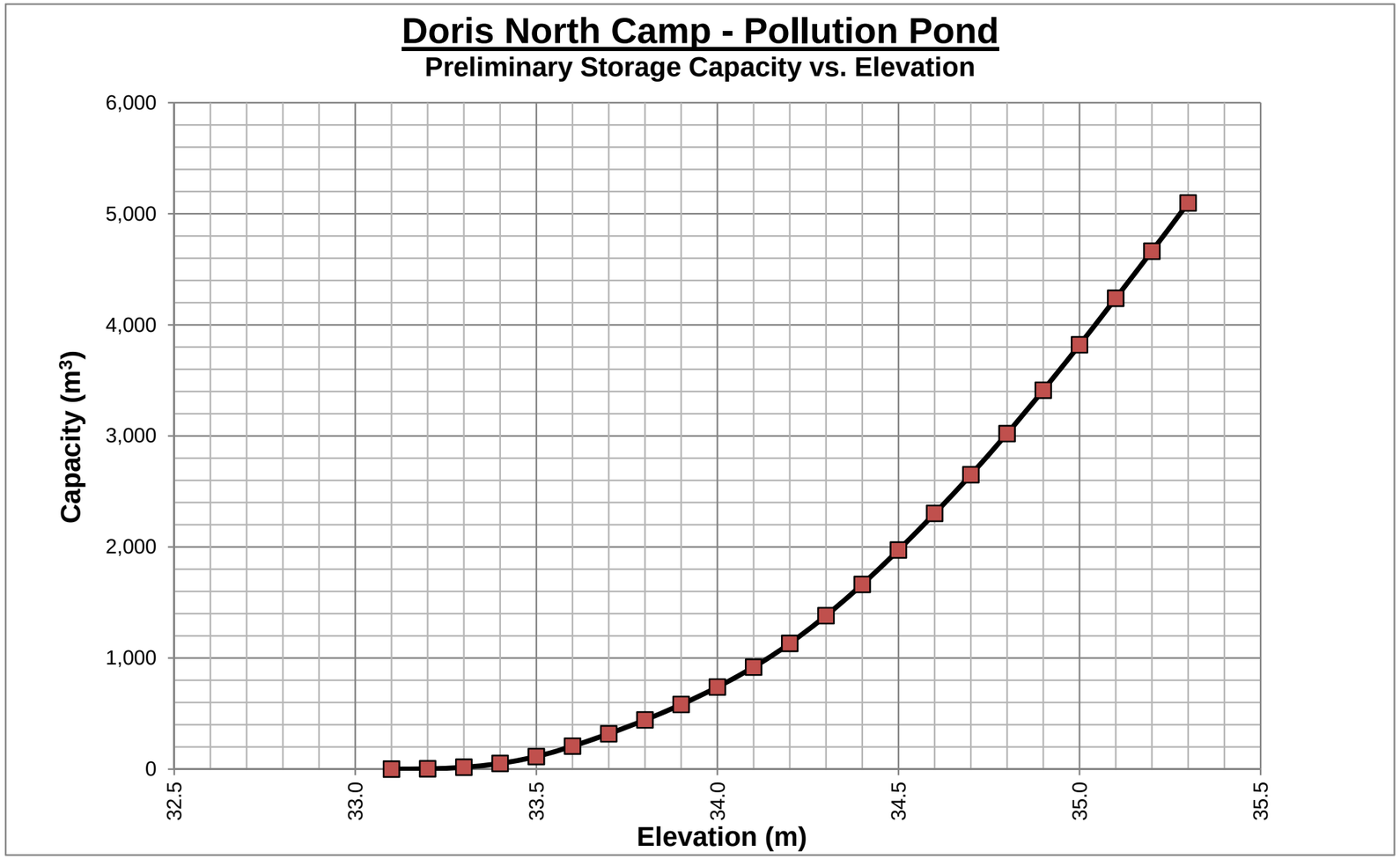
PLANE From	PLANE To	Volume M**3 Incremental	Volume M**3 Cumulative
36.9PD	37.00	199.84	2,636.38
36.8PD	36.90	195.66	2,436.54
36.7PD	36.80	191.78	2,240.88
36.6PD	36.70	187.46	2,049.10
36.5PD	36.60	182.14	1,861.63
36.4PD	36.50	176.35	1,679.49
36.3PD	36.40	170.50	1,503.14
36.2PD	36.30	165.27	1,332.64
36.1PD	36.20	158.03	1,167.37
36.0PD	36.10	145.77	1,009.34
35.9PD	36.00	126.88	863.57
35.8PD	35.90	109.82	736.70
35.7PD	35.80	99.31	626.87
35.6PD	35.70	92.93	527.57
35.5PD	35.60	87.68	434.63
35.4PD	35.50	82.65	346.96
35.3PD	35.40	77.54	264.30
35.2PD	35.30	68.94	186.76
35.1PD	35.20	54.04	117.82
35.0PD	35.10	34.17	63.78
34.9PD	35.00	19.49	29.61
34.8PD	34.90	8.51	10.12
34.7PD	34.80	1.58	1.61
34.6PD	34.70	0.03	0.03
	34.60	0.00	0.00
	Total	**2,636**	



srk consulting	NEWMONT NORTH AMERICA	Doris North Camp **Stage Storage for**
Job No: 1CH008.033 File: Sed&PollPond+PadDTempPondLiner_AB_20110725	HOPE BAY MINING INC	Date: July 25, 2011 / Approved: JBK / Figure: 2

Report 2: Pollution Pond

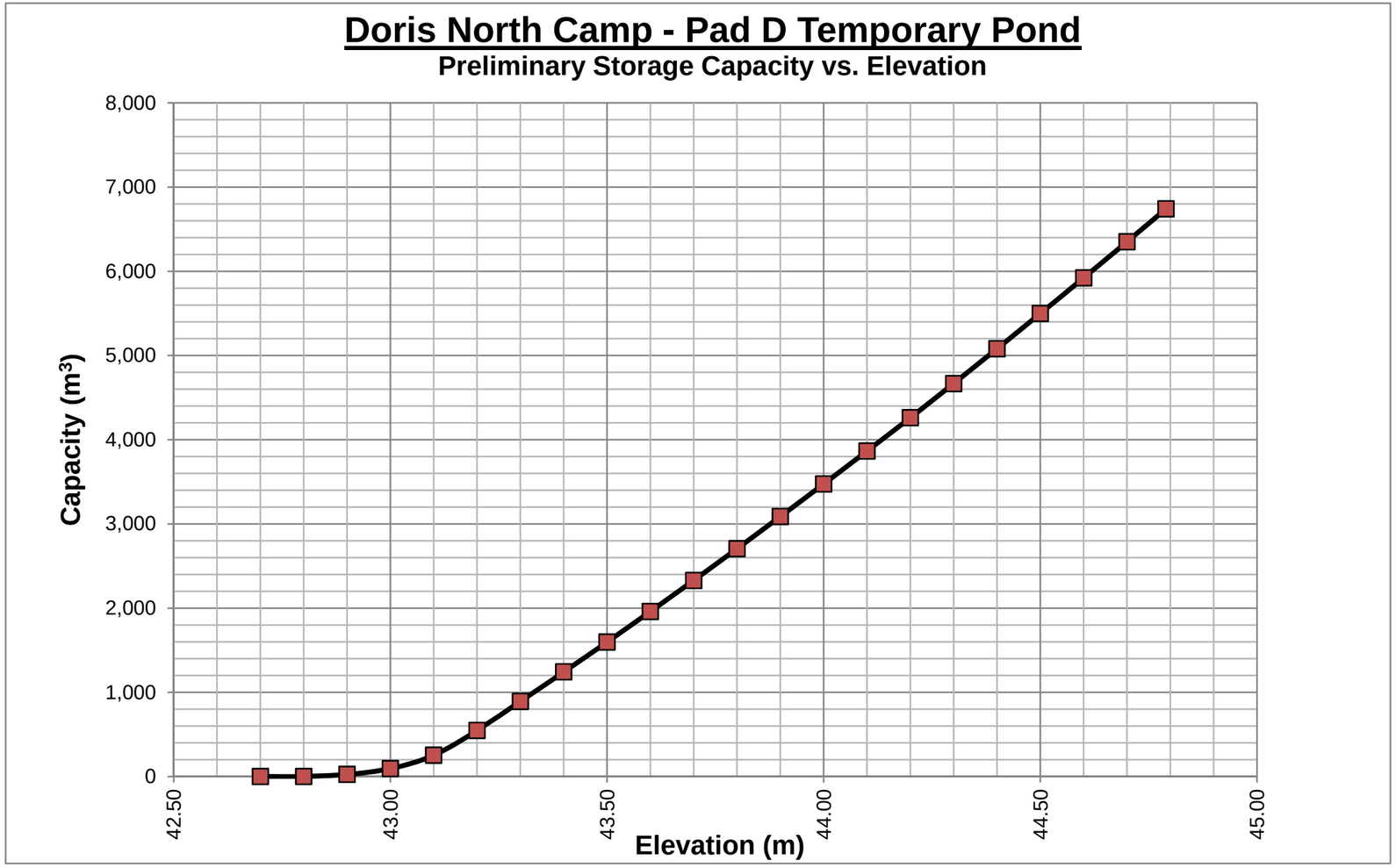
PLANE	PLANE	Volume M**3	Volume M**3
From	To	Incremental	Cumulative
35.2PD	35.3	433.13	5,096.40
35.1PD	35.2	424.64	4,663.27
35.0PD	35.1	418.13	4,238.62
34.9PD	35.0	409.03	3,820.50
34.8PD	34.9	390.92	3,411.47
34.7PD	34.8	370.11	3,020.55
34.6PD	34.7	348.22	2,650.44
34.5PD	34.6	329.91	2,302.21
34.4PD	34.5	309.25	1,972.30
34.3PD	34.4	281.01	1,663.04
34.2PD	34.3	250.30	1,382.03
34.1PD	34.2	213.76	1,131.73
34.0PD	34.1	178.99	917.98
33.9PD	34.0	157.04	738.99
33.8PD	33.9	139.36	581.96
33.7PD	33.8	124.83	442.59
33.6PD	33.7	110.93	317.76
33.5PD	33.6	93.46	206.83
33.4PD	33.5	62.47	113.36
33.3PD	33.4	34.33	50.90
33.2PD	33.3	13.35	16.57
33.1PD	33.2	3.22	3.22
	33.1	0	0.000
	Total	**5,097**	



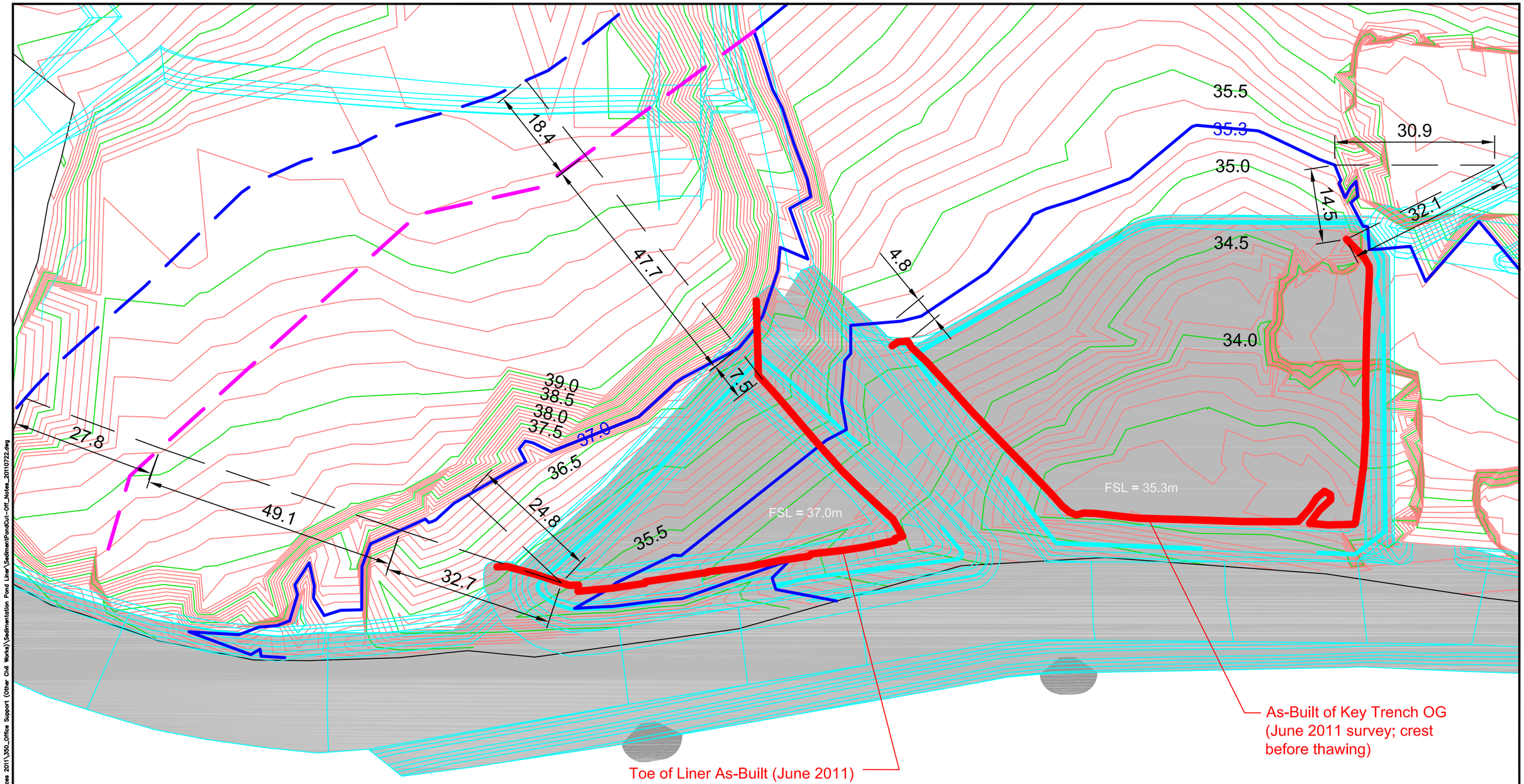
srk consulting	NEWMONT NORTH AMERICA	Doris North Camp **Stage Storage for**
Job No: 1CH008.033 File: Sed&PollPond+PadDTempPondLiner_AB_20110725	HOPE BAY MINING INC	Date: July 25, 2011 / Approved: JBK / Figure: 3

Report 3: Pad D pond

PLANE From	PLANE To	Volume M**3 Incremental	Volume M**3 Incremental
44.7PD	44.79	391.5	6,741.8
44.6PD	44.70	428.3	6,350.2
44.5PD	44.60	422.9	5,921.9
44.4PD	44.50	418.6	5,499.0
44.3PD	44.40	413.7	5,080.4
44.2PD	44.30	405.8	4,666.8
44.1PD	44.20	395.6	4,260.9
44.0PD	44.10	390.6	3,865.3
43.9PD	44.00	386.4	3,474.7
43.8PD	43.90	382.8	3,088.4
43.7PD	43.80	377.0	2,705.5
43.6PD	43.70	369.2	2,328.6
43.5PD	43.60	362.5	1,959.4
43.4PD	43.50	353.9	1,596.8
43.3PD	43.40	350.6	1,242.9
43.2PD	43.30	344.6	892.3
43.1PD	43.20	294.9	547.7
43.0PD	43.10	158.9	252.8
42.9PD	43.00	68.6	93.9
42.8PD	42.90	24.3	25.2
42.7PD	42.80	1.0	1.0
	42.70	0.0	0.0
	Total	**6,786**	



srk consulting	NEWMONT NORTH AMERICA	Doris North Camp **Stage Storage for**	
Job No: 1CH008.033 File: Sed&PollPond+PadDTempPondLiner_AB_20110725	HOPE BAY MINING INC	Date: July 25, 2011	Approved: JBK / Figure: 4



LEGEND

- Design Lines
- October 2010 OG Survey
- 37.0m Contour From Aerial OG Survey (pre 2010)
- Estimated ground 37.0m contour (below previously existing overburden dump,; based on 2010 OG survey)

0 10 20 30 40 50

Scale in Metres

srk consulting

SRK JOB NO.: 1CH008.033

FILE NAME: SedimentPondCut-Off_Notes_20110722.dwg

NEWMONT NORTH AMERICA

HOPE BAY MINING LTD

Pond Leak Mitigation

Pollution/ Sedimentation Pond Cut-off Wall Notes

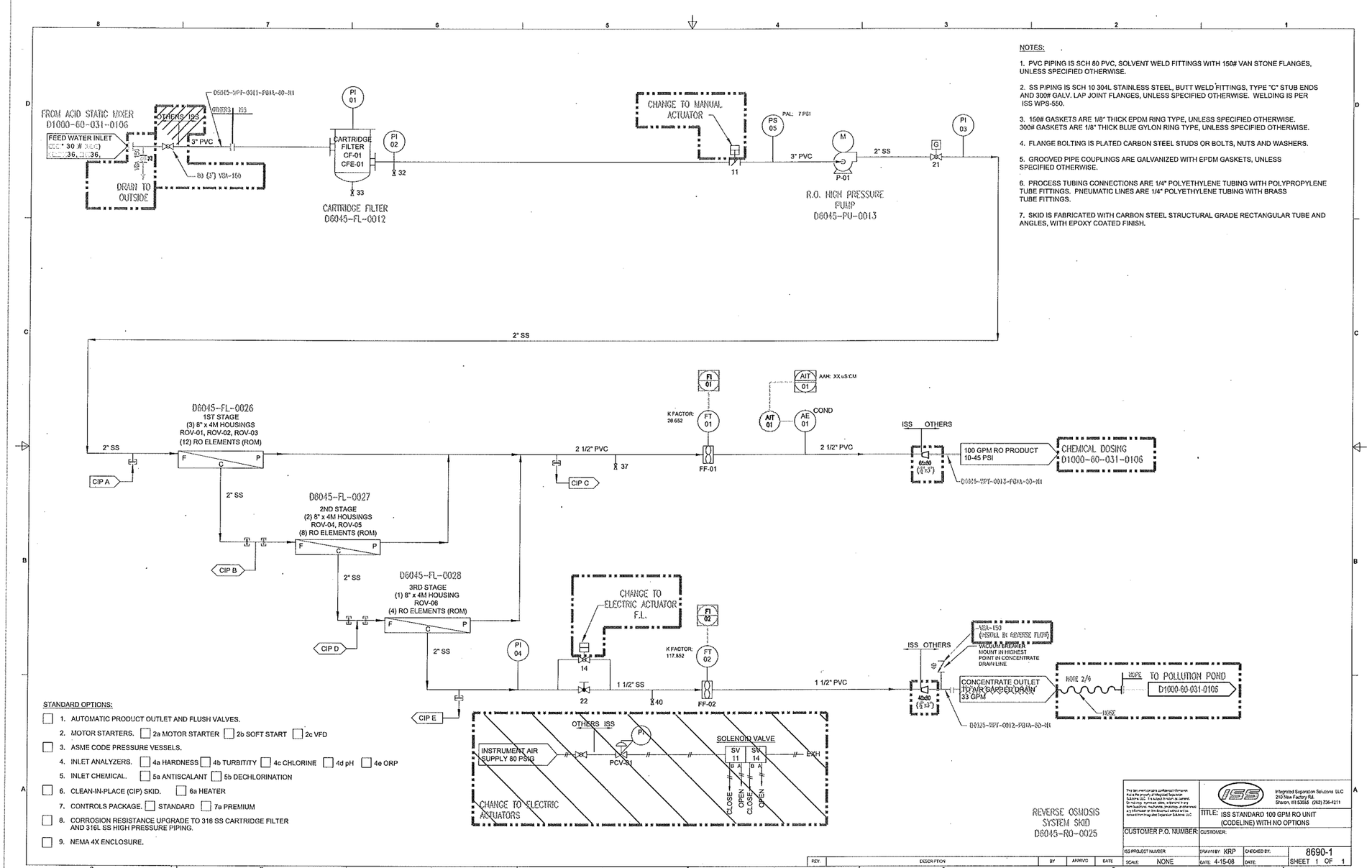
DATE:	APPROVED:	FIGURE:
July 22, 2011	JK	1 - Draft

J:\01_SITES\Hope Bay\1CH008.033 Infras. Design Support Services 2011\350_Office Support (Other Civil Works)\Sedimentation Pond Liner\SedimentPondCut-Off_Notes_20110722.dwg

Attachment 2:

Reverse Osmosis Treatment System Specifications

DWG. NO. H337888-D1000-60-031-0107



INDICATES HOPE BAY PROJECT CHANGES/ADDITIONS

-FOR GENERAL NOTES SEE PID DWG. D1000-60-031-0106

NOTES:

1. PVC PIPING IS SCH 80 PVC, SOLVENT WELD FITTINGS WITH 150# VAN STONE FLANGES, UNLESS SPECIFIED OTHERWISE.
2. SS PIPING IS SCH 10 304L STAINLESS STEEL, BUTT WELD FITTINGS, TYPE "C" STUB ENDS AND 300# GALV. LAP JOINT FLANGES, UNLESS SPECIFIED OTHERWISE. WELDING IS PER ISS WPS-550.
3. 150# GASKETS ARE 1/8" THICK EPDM RING TYPE, UNLESS SPECIFIED OTHERWISE. 300# GASKETS ARE 1/8" THICK BLUE GYLON RING TYPE, UNLESS SPECIFIED OTHERWISE.
4. FLANGE BOLTING IS PLATED CARBON STEEL STUDS OR BOLTS, NUTS AND WASHERS.
5. GROOVED PIPE COUPLINGS ARE GALVANIZED WITH EPDM GASKETS, UNLESS SPECIFIED OTHERWISE.
6. PROCESS TUBING CONNECTIONS ARE 1/4" POLYETHYLENE TUBING WITH POLYPROPYLENE TUBE FITTINGS. PNEUMATIC LINES ARE 1/4" POLYETHYLENE TUBING WITH BRASS TUBE FITTINGS.
7. SKID IS FABRICATED WITH CARBON STEEL STRUCTURAL GRADE RECTANGULAR TUBE AND ANGLES, WITH EPOXY COATED FINISH.

STANDARD OPTIONS:

- ☐ 1. AUTOMATIC PRODUCT OUTLET AND FLUSH VALVES.
- 2. MOTOR STARTERS. ☐ 2a MOTOR STARTER ☐ 2b SOFT START ☐ 2c VFD
- ☐ 3. ASME CODE PRESSURE VESSELS.
- 4. INLET ANALYZERS. ☐ 4a HARDNESS ☐ 4b TURBITITY ☐ 4c CHLORINE ☐ 4d pH ☐ 4e ORP
- 5. INLET CHEMICAL. ☐ 5a ANTISCALANT ☐ 5b DECHLORINATION
- ☐ 6. CLEAN-IN-PLACE (CIP) SKID. ☐ 6a HEATER
- 7. CONTROLS PACKAGE. ☐ STANDARD ☐ 7a PREMIUM
- ☐ 8. CORROSION RESISTANCE UPGRADE TO 316 SS CARTRIDGE FILTER AND 316L SS HIGH PRESSURE PIPING.
- ☐ 9. NEMA 4X ENCLOSURE.

REVERSE OSMOSIS SYSTEM SKID D6045-RO-0025

Integrated Separation Solutions LLC
210 New Factory Rd.
Sharon, WI 53585 (262) 736-4211

TITLE: ISS STANDARD 100 GPM RO UNIT (CODELINE) WITH NO OPTIONS

CUSTOMER P.O. NUMBER: CUSTOMER:

ISS PROJECT NUMBER: 8690-1 | DRAWN BY: KRP | CHECKED BY: | SCALE: NONE | DATE: 4-15-08 | DATE: | SHEET 1 OF 1

REV.	DESCRIPTION	BY	APPVD	DATE

HBP01-DA-J-DIA-6030-00002

DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
0	ISSUED FOR CONSTRUCTION	SN	GS	RR	11/06/30
C	ISSUED FOR HAZOP	SN	GS	RR	11/06/20
A	ORIGINAL DRAWING	SN	GS	RR	11/06/13
A	ORIGINAL DRAWING	SN	GS	RR	11/06/13

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
0	CONSTRUCTION	JJ	11/06/30
C	HAZOP	JJ	11/06/20
B	CLIENT REVIEW	JJ	11/06/15
A	INTERNAL REVIEW	JJ	11/06/13

ISSUE AUTHORIZATION

HATCH™

PLANNED BY:	DRAWN BY: MC	
DATE: 11/06/30	DATE: 11/06/30	
CHECKED BY: G.S.	DISCIP. ENGR.	
DATE: 11/06/30	DATE: 11/06/30	
PROJ. RES. COORD. S.N.	PROJ. ENGR. G.S.	
DATE: 11/06/30	DATE: 11/06/30	
PROJ. MGR. B.R.	CLIENT APPROVAL	
DATE: 11/06/30	DATE: 11/06/30	

NEWMONT. The Gold Company

HOPE BAY MINING LTD.
DORIS PROCESS AREA

POLLUTION CONTROL POND
FRESHET WATER TREATMENT PLANT
ISS R.O. P&ID

SCALE: NONE OR AS NOTED

DWG. NO. H337888-D1000-60-031-0107

REV. 0

DWG. NO. H337888-D6045-10-035-0001

HBP01-DA-A-DWG-6045-00001

433100 E

433125 E

433150 E

7558975 N

7558950 N

POWER FROM MAINT. BLDG

W.P. – CONTAINER CORNER
N 7 558 970.0 N
E 433 110.0 E

AZ 45° 00'

ELECTRICAL CONTAINER

2.50 TYP. SPACING

R.O. CONTAINER

BAG FILTER/CHEMICAL

CARBON FILTERS

1500 WIDE ALLOW. FOR PIPING/ELECTRICAL

EL. 40.00+–

SAFETY BERM

RO PERMEATE TO SEDIMENTATION POND (75 DIA)

SEDIMENTATION POND
MAX. WATER LEVEL = 36.70

POND ROAD

PROVIDE 2-300 CSP WITH MIN. 300 COVER AND RAMP OVER UTILITIES (ALT. USE WOOD TIMBERS TO STRADDLE AND PROTECT HOSE) – ORIENT TO SUIT

RO CONCENTRATE TO POLUTION CONTROL POND–120m OF 75 DIA

DISCHARGE PIPE ONTO POND RIPRAP ANCHOR PIPE AS REQ'D (TYP. ALL DISCHARGES)

RO PERMEATE TO POLLUTION CONTROL POND–60m OF 75 DIA

WATER SUPPLY FROM POND LOW POINT–102m OF 75 DIA (SEE KEY PLAN)

POLLUTION CONTROL POND
MAX. WATER LEVEL = 35.30

SCALE IN METRES 0 1 2 3 4 5

MINE MAINTENANCE BLDG

WASTE ROCK AREA

W.T.P. CONTAINERS
SEE PLAN

RO CONCENTRATE DISCHARGE POINT

BURIED ELECTRICAL CABLE

POLLUTION CONTROL POND

SILT CONTROL WEIRS AT 10m RADIUS FROM PUMPS. BOTTOM OF POND TO BE LINED INSIDE / WEIR, DETAILS BY SRK/NEWMONT

SEDIMENTATION POND

FEED PUMP

10m HOSE FROM PUMP DISCHARGE (TYP.)

SEDIMENTATION PUMP

RUN DISCHARGE PIPE THRU EXISTING CULVERT (95m OF 75 DIA)

NOTES:

1. ALL PIPE TO BE 75 DIA (3") INSULTATED HDPE PIPE SDR11
2. HOSE SHALL BE GREENLINE 373 WITH 316 S.S. ENDS TO SUIT PUMPS/HDPE PIPE GENERALLY FLANGES

KEY PLAN
SCALE 1:750

SCALE IN METRES 0 10 20 30 40 50

PERMIT TO PRACTICE
HATCH LTD.
Signature
Date J-2011
PERMIT NUMBER: P 512
The Association of Professional Engineers, Geologists and Geophysicists of NWT/NU

CONSTRUCTION
JUNE 09/2011

DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
0	ORIGINAL DRAWING				09/06/2011

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
0	CONSTRUCTION		09/06/2011

ISSUE AUTHORIZATION

HATCH

DESIGNED BY D.L.N. DATE MAY 2011	DRAWN BY D.L.N. DATE MAY 2011
CHECKED BY DATE June 10/11	DISCIP. ENGR. DATE June 10/11
PROJ. DES. COORD. DATE JUNE 10/11	PROJ. ENGR. DATE June 10/11
PROJ. MGR. DATE	CLIENT DATE

NEWMONT. The Gold Company

HOPE BAY MINING LTD.

RO SYSTEM/ACID WATER TREATMENT
SITE LOCATION AND GA – PLAN

SCALE 1:100 OR AS NOTED

DWG. NO. H337888-D6045-10-035-0001

REV. 0

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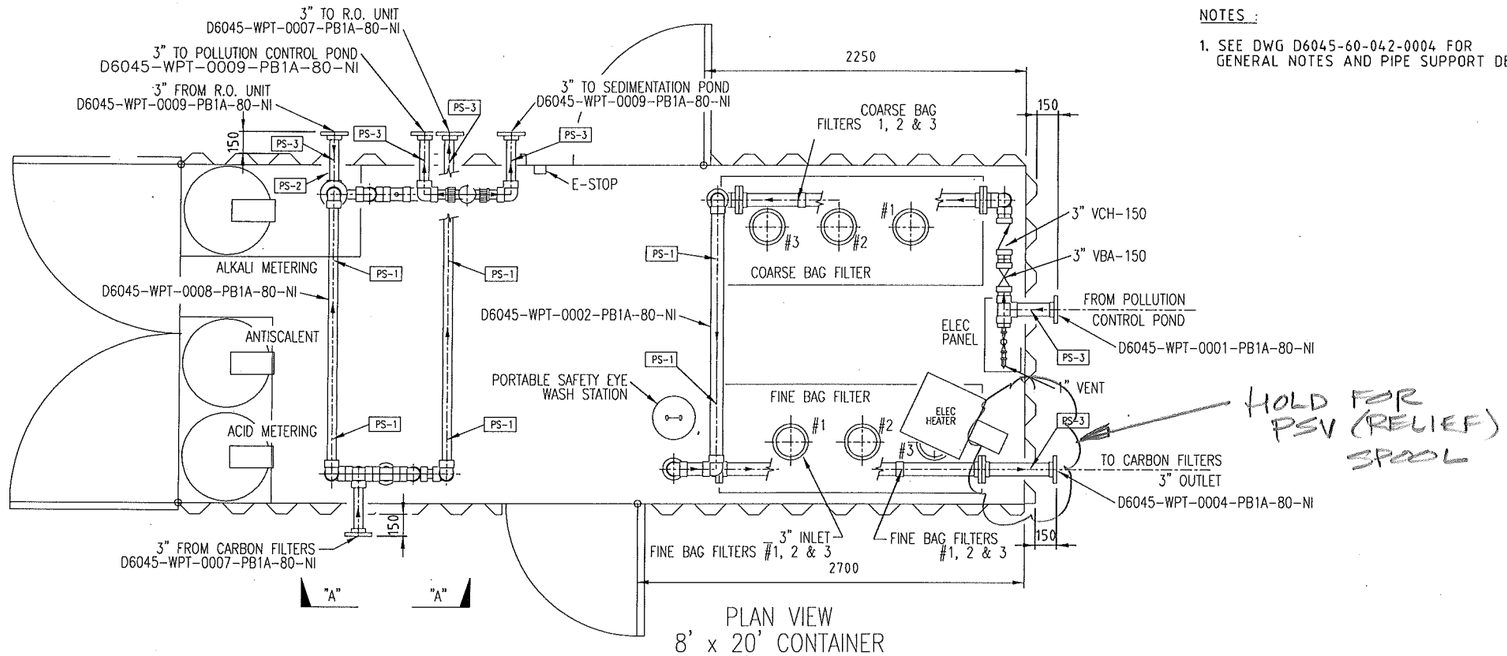
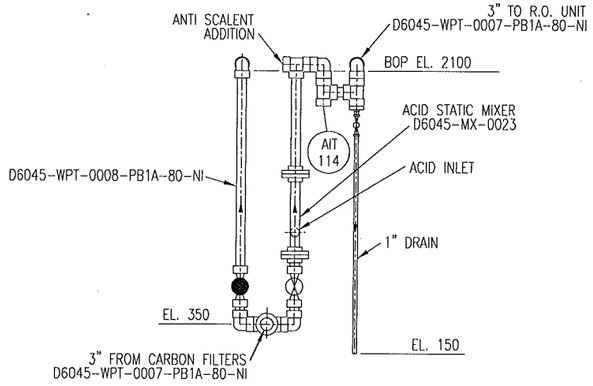
DWG. NO. H337888-D6045-60-042-0001



PLAN VIEW
8' x 20' CONTAINER
BAG FILTER/CHEMICAL DOSING SKID

NOTES :

1. SEE DWG D6045-60-042-0004 FOR GENERAL NOTES AND PIPE SUPPORT DETAILS.



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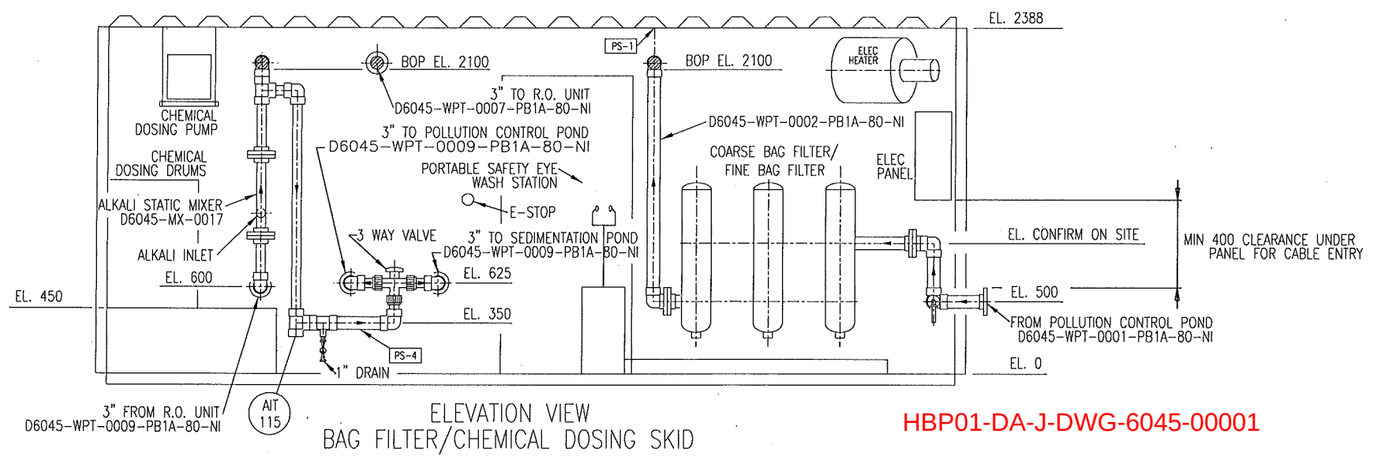

ELEVATION VIEW
BAG FILTER/CHEMICAL DOSING SKID

HBP01-DA-J-DWG-6045-00001

01000-60-031-0106	FRESHET WPT P&ID
DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

FOR CONSTRUCTION

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
0	ISSUED FOR CONSTRUCTION	MS	JJ	JJ	11/06/20
B	ISSUED FOR CLIENT REVIEW	MS	JJ	JJ	11/06/13
A	ISSUED FOR INTERNAL REVIEW	MS		JJ	11/05/30

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
0	CONSTRUCTION	JJ	11/06/20
B	CLIENT REVIEW	JJ/GS	11/06/13
A	INTERNAL REVIEW	JJ	11/05/30

ISSUE AUTHORIZATION

HATCH

DESIGNED BY / DATE	DRAWN BY / DATE
CHECKED BY / DATE 13 Jun 22	DISCIP. ENGR. J. JOUSTRA / DATE 11/06/13
PROJ. DES. COORD. / DATE 13 JUN 22	PROJ. ENGR. / DATE 13 Jun 22
PROJ. MGR. / DATE	CLIENT / DATE 22/6/14

NEWMONT
The Gold Company

HOPE BAY MINING LTD.

DORIS PROCESS AREA
FRESHET WATER TREATMENT PLANT
BAG FILTER / CHEMICAL DOSING G.A.

SCALE	DWG. NO.	REV.
1 = 20 OR AS NOTED	H337888-D6045-60-042-0001	0

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June 22, 2011
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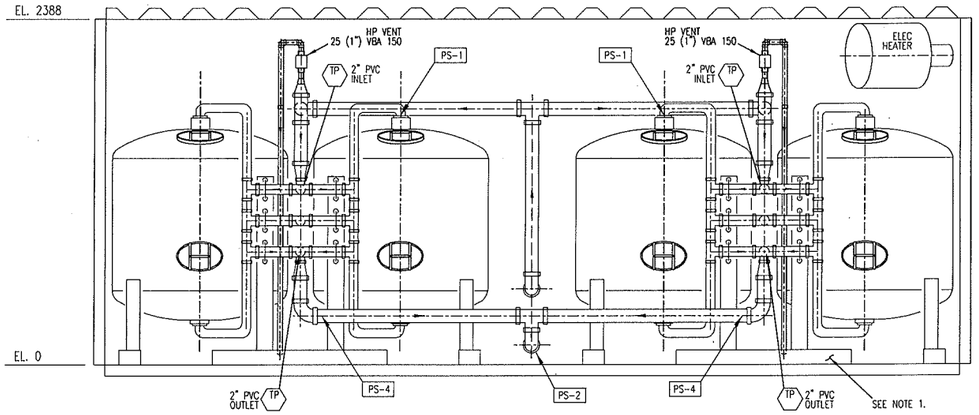
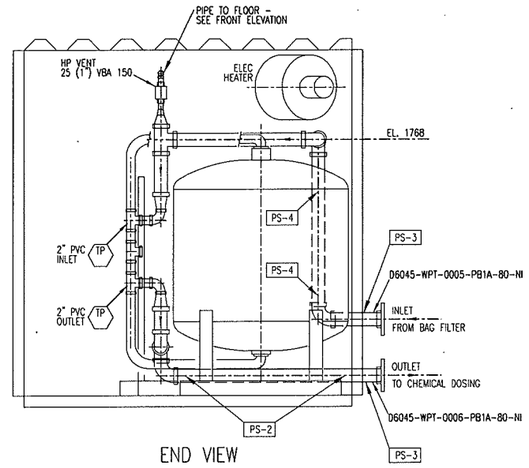
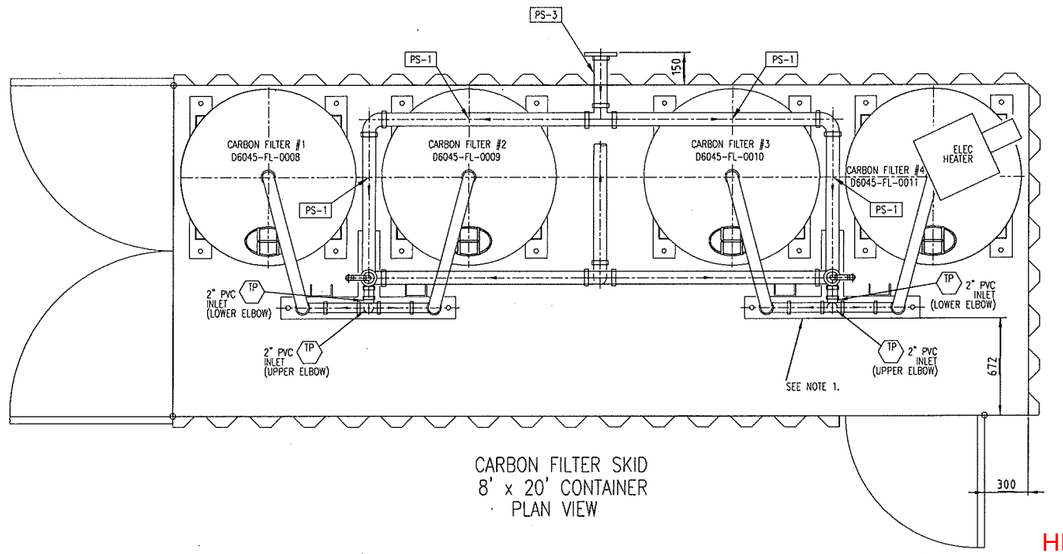
DWG. NO. H337888-D6045-60-042-0002



CARBON FILTER SKID
FRONT ELEVATION



END VIEW



CARBON FILTER SKID
8' x 20' CONTAINER
PLAN VIEW

NOTES :

1. FOR GENERAL NOTES SEE DWG H337888-D6045-60-042-0004.
2. SITE TO MODIFY SIEMENS PIPE SKID BASES FROM AN 'H' TO A 'T' CONFIGURATION TO ALLOW FOR ACCESS TO VALVE CONTROL STATION.

HBP01-DA-J-DWG-6045-00002

REFERENCE DRAWINGS	
DRAWING NO.	DRAWING TITLE
D1000-60-031-0106	FRESHET WTP P&ID

FOR CONSTRUCTION

REVISIONS					
NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
0	ISSUED FOR CONSTRUCTION	MC	JJ	JJ	11/06/20
B	ISSUED FOR CLIENT REVIEW	MC	JJ	JJ	11/06/15
A	ISSUED FOR INTERNAL REVIEW	MC		JJ	11/05/30

ISSUE AUTHORIZATION			
REV.	ISSUE FOR	AUTH. BY	DATE
0	CONSTRUCTION	JJ	11/06/20
B	CLIENT REVIEW	JJ	11/06/15
A	INTERNAL REVIEW	JJ	11/05/30

HATCH™

DESIGNED BY	DRAWN BY
DATE	DATE
CHECKED BY	DISCIP. ENGR. J. JOUSTRA
DATE 11/22/22	DATE 11/06/15
PROJ. DES. COORD.	PROJ. ENGR.
DATE 11/22/22	DATE 11/22/22
PROJ. MGR.	CLIENT
DATE 11/22/22	DATE 22/11/11

NEWMONT
The Gold Company

HOPE BAY MINING LTD.
DORIS NORTH

FRESHET WATER TREATMENT PLANT
CARBON FILTER CONTAINER
GENERAL ARRAGEMENT

SCALE	DWG. NO.	REV.
1 : 20 OR AS NOTED	H337888-D6045-60-042-0002	0

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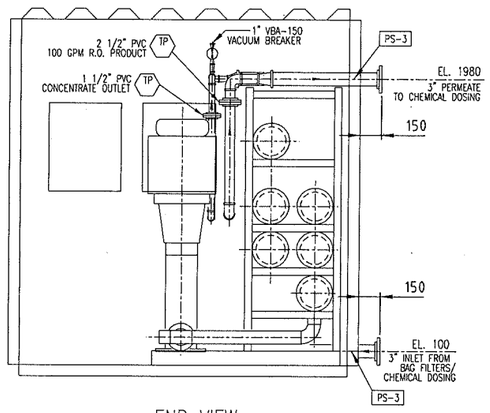
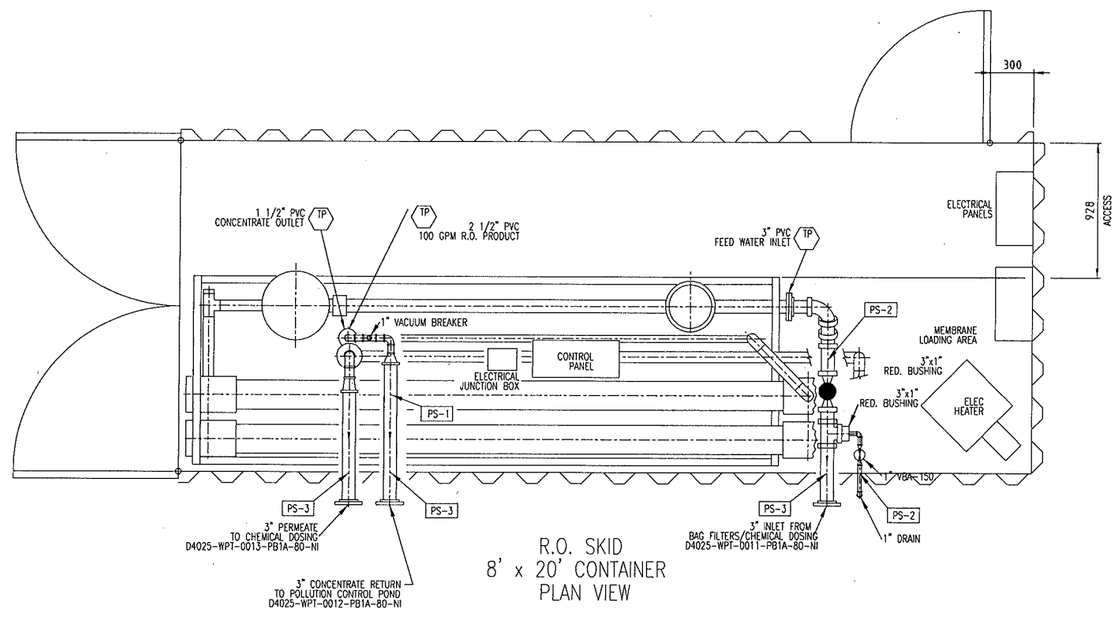
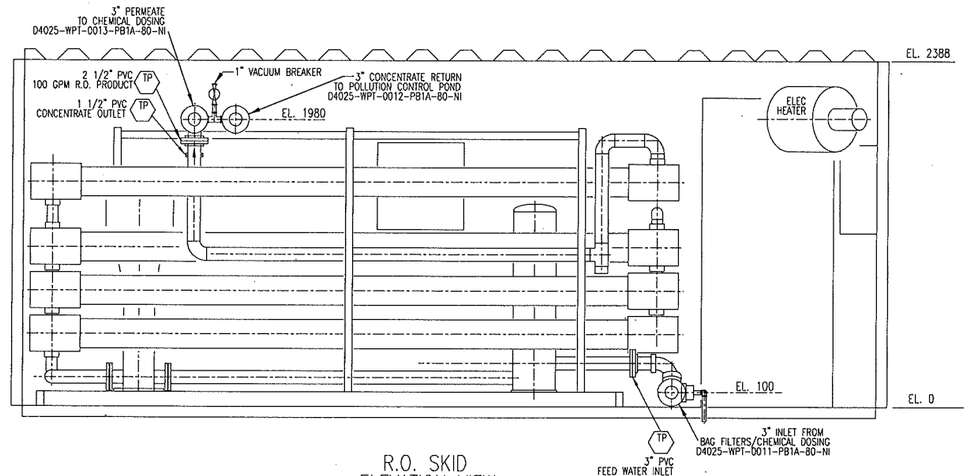
DWG. NO. H337888-D6045-60-042-0003



END VIEW



R.O. SKID
8' x 20' CONTAINER
PLAN VIEW



R.O. SKID
ELEVATION VIEW

NOTES :

1. FOR GENERAL NOTES SEE DWG H337888-D6045-60-042-0004.

HBP01-DA-J-DWG-6045-00003

D1000-60-031-0107	FRESHET R.O. P&ID
DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

FOR CONSTRUCTION

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
0	ISSUED FOR CONSTRUCTION	MC	JJ	JJ	11/06/20
B	ISSUED FOR CLIENT REVIEW	MC	JJ	JJ	11-06-15
A	ISSUED FOR INTERNAL REVIEW	MC		JJ	11/05/30

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
0	CONSTRUCTION	JJ	11/06/20
B	CLIENT REVIEW	JJ	11/06/15
A	INTERNAL REVIEW	JJ	11/05/30

ISSUE AUTHORIZATION

HATCH™

DESIGNED BY / DATE	DRAWN BY / DATE
CHECKED BY / DATE 21 JUN 22	DISCIP. ENGR. J. JOUSTRA / DATE 11/06/15
PROJ. DES. COORD. / DATE 21 JUNE 22	PROJ. ENGR. / DATE 21 JUN 22
PROJ. MGR. / DATE	CLIENT / DATE 20/6/11

NEWMONT
The Gold Company

HOPE BAY MINING LTD.
DORIS NORTH

FRESHET WATER TREATMENT PLANT
RO SKID CONTAINER
GENERAL ARRANGEMENT

SCALE	DWG. NO.	REV.
1 = 20 OR AS NOTED	H337888-D6045-60-042-0003	0

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