processed without a formal review under part 5 or 6 (see Appendix A). Cumberland would like to proceed with the construction of this airstrip in the summer of 2005, subject to KIA approval, in order to provide better year round access to the camp. The planned airstrip will be approximately 915 m in length and 30 metres in width.

Airstrip construction will be by cut and fill operations to bring the runway to grade at the design elevation. Surfacing material will be crushed aggregate produced from a rock quarry adjacent to the airstrip location. The equipment required for construction of the airstrip will be relocated from its present location, near the exploration camp, during the spring drill program while snow cover exists to prevent damage to the tundra.

Training Opportunities

Construction of the pioneer airstrip is considered an opportunity to train local equipment operators. Local persons interested in heavy equipment training will be encouraged to pursue this training opportunity. Cumberland Resources could provide site accommodation and training by its experienced operators. The intention would be to train equipment operators who would thereby have skills to contribute to the operating mine in subsequent years. Due to the tight schedule for planned earthwork (July 15 to August 31) the actual training time is quite limited. Cumberland will train on a best effort basis.

Design

The proposed airstrip is planned to handle aircraft for ongoing advanced exploration operations at the site. Mining operations, which are the subject of the ongoing Part 5 review process, will require a significant enlargement of the airstrip to accommodate larger aircraft.

Skyward Aviation Ltd. recommended the following airstrip dimensions for the aircraft indicated:

TABLE 1 – AIRPLANE / AIRSTRIP REQUIREMENTS

Aircraft	Recommended strip width - metres	Recommended strip length – metres	Maximum Payload – pounds/personnel
GrandCaravan 208B	30	575-800	**3,000**
Bandierante	30	800-960	**3,000**
DC-3	50	800-960	**6,000**
Beech 1900 Cargo	50	1120-1280	5,500
Hawker 748	50	1120-1280	11,000
Hercules c-130	50	1240-1910	44,000

Note that for any particular flight, payloads may be adjusted due to conditions of weather, strip surface condition at the time, etc.

Construction

It is estimated that with the available equipment a minimum sized airstrip could be constructed in 1.5 months during the summer (July 15 - Sept) season. The construction of the airstrip would be by a combination of cut and fill methods maximizing the use of the

overburden in the vicinity. The airstrip would be built by pushing and hauling till cover and weathered rock downslope to the proposed strip location, spreading it in shallow (<30 cm) lifts, compacting with successive passes with a vibratory compactor to construct the smooth compacted surface to the required surface dimensions to accommodate fixed wing aircraft.

Once the strip has been constructed to the appropriate elevation, the surface of the strip may be capped with crushed gravel to form a smooth and level surface. If crushed rock is required, the material will be sourced from a rock quarry adjacent to the airstrip. The rock will be crushed and screened to the required specifications utilizing a 250 ton per hour crushing plant transported to the site in 2004. It is anticipated that approximately 5000 cubic metres of crushed rock may be required to cap the airstrip. A quantity of explosives will be on hand, if required, for quarrying and/or to assist in loosening frozen overburden. The location of the possible quarry site along with the layout of the airstrip and required roads is shown in figure 3 below.

Primary pushing of overburden material would be with a D7H dozer. The self-propelled vibratory compactor has both a sheeps foot and a smooth steel drum at its disposal. A backhoe would be available to aid in sorting excessively large boulders out of the fill and to establish the perimeter drainage ditches and settling sumps. Three Cat 773B rock trucks are available on site to move crushed gravel from the crushing plant to the airstrip location. A complete list of construction equipment available at the site is provided in Table 2 below.

TABLE 2 - AIRSTRIP EQUIPMENT FLEET

QUANTITY	TYPE	MAKE	MODEL	YEAR	PRESSURE PSI	PRESSURE BAR
1	DOZER	CAT	D7H	1993	11	
1	COMPACTOR	BOMAG	BW124PDB	1998	428	295
1	BACKHOE	CAT	307B	1996	6	
1	BACKHOE	CAT	350L	1997		
3	ROCK TRUCK	CAT	773B	1993	90	
1	LOADER	CAT	966C	1985		
1	CRUSHING PLANT	Cedar Rapids	RC54 Cone			

Access between fuel tanks and airstrip

Access will be constructed between the fuel tanks and the airstrip by similar cut and fill construction as indicated on the plan. The access will be single lane or 5 metres wide (see layout detail map – figure 3).

637600 mE

638000 mE

638400 mE

638800 mE

637668
7214785
POWDER MAG

7214880 mN

CUT - 8,600 cu M

637550.42 E
7214655.67 N

PROPOSED TILL
BORROW AREA

CUT - 36,000 cu M

7214400 mN

CAP MAG
637544
7214483

PIONEER AIRSTRIP 916 m

FILL - 47,000 cu M

CRUSHER

638356.15 E
7214272.08 N

POSSIBLE QUARRY SITE
50 m X 50 m X 2 m

CORE
SHACK

FUEL
STORAGE

KITCHEN

7214000 mN

LEGEND

LAKESHORE
BUILDING
CONTOUR
PROPOSED ROAD

0 50 100 200
metres

CUMBERLAND
RESOURCES LTD.

Meadowbank Gold Project
Nunavut

Meadowbank Exploration
Pioneer Airstrip

Scale: 4000	N.T.S.	Date: Jan 2005
Revised by: JK/RAM	L.O.L. NA	Map No. FIGURE 3
Filename: LandUse05--Appl_AirStrip		

Alternatives

The alternative is to continue with helicopter transport which uses up a disproportionate amount of the exploration dollars instead of allowing those dollars to be used for actual exploration drilling or sampling.

Long Term Development Plans

The airstrip can be expanded into a larger airstrip later as the project develops. A feasibility study is nearing completion and should be ready by the end of the first quarter 2005. If the results are positive and permitting and financing activities are successful, construction could begin in 2006. Production could be expected to begin in late 2007 – early 2008.

Flight / Landing Controls

Radio contact between airplanes and ground control would be made prior to any landings to ensure that ground control confirms that the strip is unrestricted and the surface is in a suitable condition for landing. Ground control will be responsible for a visual inspection of the airstrip in preparation for all landings and take-offs. This duty will be performed only by camp personnel designated by the Site Manager. The Site Manager will be responsible for ensuring that landings only occur if the airstrip is inspected and judged ready.

Fluorescent cone or bag markers (at 50 metre spacings) would line the runway on each side and each end to serve as identification of the landing strip and as a restricted area designation during landing and take-off.

Environmental Impact Assessment

The proposed airstrip has been assessed for possible impact on the following valued ecosystem components: aquatic, wildlife, vegetation, and archaeology. The results of the assessment indicate that the main impacts will be:

1) the loss of a small area of vegetation mapped in 1999 as upland heath tundra, and
2) runoff during construction and operation of the airstrip.

Upland heath tundra represents the dominant vegetation in the area and as such the removal of a small area will not have a significant environmental impact. When the site is no longer required, it will be contoured and re-vegetated. Runoff during the construction and operation will be collected by drainage ditches parallel to the airstrip leading into a sump at the end of the airstrip.

Aquatic Assessment

The boundaries of the proposed airstrip will be approximately 800 m from the closest water body and therefore will not have a direct impact on the aquatic environment or habitat. Indirect impacts, although unlikely due to the distance from a water body, could result from run off during construction and operation of the airstrip.

Aquatic Mitigation

To mitigate the possible impact of run off from the airstrip, ditches will be constructed on both sides of the airstrip draining into a sump at the end of the airstrip.

Wildlife and Habitat Assessment

Wildlife and habitat assessment was completed in 1999. The results of the survey indicate that there are no critical site specific wildlife values at risk due to mine development. Although the occasional small herd of caribou has been observed in the area, the critical calving grounds for the Beverly and Qamanirjuak caribou herds are more than 100 km away. In addition, the site is at least 100 km away from the nearest protected conservation area.

Wildlife and Habitat Mitigation

During the short time (1 month) required for construction of the strip, caribou will likely temporarily avoid the area, however once the construction is complete, caribou will be free to travel over the site. At all times during the construction and operation of the airstrip, the Caribou Protection Measures will be followed.

Archaeological Assessment

The results of the archaeological survey undertaken in 1999 indicated that there are no archaeological features in the area of the proposed airstrip.

Archaeological Mitigation

Due to the lack of archaeology sites in the area of construction, no mitigation is required.

Vegetation Assessment

A vegetation survey conducted in 1999 mapped the site of the airstrip as upland heath tundra, the dominant vegetation type in the area.

Vegetation Mitigation

Given that upland heath tundra is the dominant vegetation type of the area, the loss of a small area due to the airstrip construction will have a minimum impact on the overall quality of the vegetation in the area. As described in the engineering section when the site is no longer needed, the area will be contoured and re-vegetated.

Environmental Controls

The borrow slope will be dozed-down to bedrock leaving a thin cover (likely 10 cm thickness) of overburden/rock debris, depending on the irregularity of the bedrock surface. The D-7H blade is equipped with smooth steel cutting edges and is 3.7 metres wide. It will ride the high spots of bedrock leaving a layer of overburden for the most part. Oversize boulders which cannot be used in the airstrip fill will be left on the borrow slope. The rock trucks and backhoe can be used to haul / load material where the distances are too long for the dozer to push effectively.

The runoff from the borrow slope will be restrained by the toe of the airstrip fill and directed down grade to the east to the upper settling sump, as noted on the plan.

Runoff from the airstrip surface will be restrained by the collection ditch (0.5 metre deep notch in the overburden) along the south side of the airstrip and similarly directed down grade to the east to the lower settling sump, as noted on the plan.

Field tests of leaching potential will be done during the cut and fill dozer operation.

Fuel spill kits will be located in the work area in the event of a diesel spill while re-fueling equipment.

Proposed Reclamation

The surface of both the airstrip and the borrow area will remain a mixture of till and rock similar to the surrounding terrain. The primary difference would be the smoothed surface of both areas. The borrow slope would be a smoothed rock surface covered with a shallow (<30 cm) lift of mixed till and rock cover featuring intermittent oversize boulders that cannot be used in the airstrip fill. The airstrip surface would be a smoothed surface that would serve as a useful emergency landing strip in the absence of mineral exploration or development activity.

Reclamation of the airstrip would involve contouring the fill slopes to a maximum 2.5:1 slope and back-filling the settling sumps with overburden.

The application of sphagnum mosses can be used to accelerate re-vegetation.

Any runway markers, temporary shelters, or temporary fuel storage containers would be removed. It may be determined that the runway markers and/or temporary shelter should remain for emergency use.

Socio-Economic Impact and Proposed Training Initiative

Since 1995, Cumberland Resources Ltd. has invoked a policy of preference for local employment and services. Over the past nine years on-site employment of locals has increased from 5% to 25-30%. Over the same time frame local expenditures have totaled approximately $9.8 million or 25% of total expenditures.

A training program is proposed to coincide with the airstrip construction. This would provide an opportunity for several interested locals to acquire training and supervision on each of the pieces of equipment used (D7H, Compactor, 307B Excavator, 773B Rock Trucks). Cumberland proposes to provide camp facilities, equipment and fuel, training, supervision and assessments in the field. Training will be managed on a best efforts basis, limited by the schedule and fuel availability.

The program could include 20 training hours per day for 45 days or 900 hours, shared by some number of interested trainees. The progress of the training is to be recorded and reported by Cumberland's equipment trainers, providing a written reference for the trainee for his/her use in obtaining future employment anywhere.

The intent of the training would be to prepare locals for continued work with such equipment in the continuing construction and then the operation of the proposed mine. Cumberland considers this a reasonable training opportunity, however, the amount of training time is limited due to the short duration of the work (45 days), tight schedules, and limited fuel supplies.

COMMUNITY CONSULTATION

On June 7th, 2004 a tour of the site was completed by several representatives from Baker Lake. The tour group consisted of four people: David Simailak (MLA), Robert Seeteetnak (Hamlet council), Samson Arnawyok (Hamlet council) and Rod Rudia (RCMP).

In early 2004 a community Liaison Office was opened in Baker Lake and Mr. Michael Haqpi, a local Baker Lake resident, was hired as Community Liaison Officer. Mr. Haqpi's role as Community Liaison Officer is to disseminate information on the Meadowbank Project to the local community, as well as, to provide a presence in Baker Lake for residents to ask questions and/or voice any concerns they may have about the project. The Baker Lake office also contains a Resource Centre which provides information about mineral exploration and mining and mining related activities. The office produces a quarterly newsletter which provides updates on activities at the Meadowbank site and general information on exploration, mining and mine processes. The Baker Lake office also provides information on possible employment opportunities at the site, both present and future, and collects resumes from those people who may be interested in obtaining employment at the site. Mr. Haqpi can be contacted by phone: 867-793-4610, fax: 867-793-4611 or email: michael.haqpi@nv.sympatico.ca

WATER QUALITY

All activities related to water use and water management are consistent with the regulatory guidelines and requirements set out by the Nunavut Water Board. Exploration work at the site is conducted under the approval of the Nunavut Water Board, license NWB2MEA0204. Five samples of potable water taken from water pumped up from Third Portage Lake into the tanks in the kitchen / dry complex were submitted to ALS Environmental for coliform bacteria counts in May, 2004. The results from all five samples returned less than detection limit (see Appendix B).

TRANSPORTATION

Fuel and bulk goods transport is accomplished overland via Delta transporter from Baker Lake to the Meadowbank campsite during the frozen winter months. Diesel and Jet-B fuel is transported by bulk fuel tanks designed for the Delta transporters which are locally owned and operated by Peters Expediting Ltd. of Baker Lake. The winter haulage route has been used successfully for fuel and bulk supply transport over the past nine years without incident.

In conjunction with overland transportation, some fuel and/or bulk goods may be delivered to the site by Hercules aircraft, chartered from First Air, utilizing a landing strip on the lake ice near the camp.

On site crew transportation is provided by snowmobile and/or helicopter during the frozen winter months and by helicopter during the summer. The camp is re-supplied by weekly helicopter flights to Baker Lake that bring in groceries, freight, etc. A Bell 206L Long Ranger helicopter is based at the camp during the field season, under charter from Heli-Max Ltd. of Trois Rivieres, Quebec.

WASTE DISPOSAL

Daily garbage, sewage and other combustible waste products are burned on site in diesel-fired refuse incinerators. The first incinerator was originally installed at the Meadowbank campsite in 1999, with second unit added in 2003 to provide additional burning capacity. Non-combustible refuse is backhauled to Baker Lake for disposal in the municipal dump.

Greywater generated by the kitchen and shower facilities is deposited in a natural sump with is located over 100 metres from the lake shore. A grease trap system will be established for the greywater runoff early in the 2005 program, which will lessen the amount of grease and soap residue released into the sump.

LOCAL EMPLOYMENT

The number of local employees at the site varies throughout the season, but generally 5 to 20 Inuk employees work in the camp at any given time. There were a total of 30 local employees that were hired by Cumberland Resources in 2004. Duties ranged from cook's helper to geological and survey technicians, environmental technicians, heavy equipment operators and construction labourers and tradesmen. See the table provided below for a breakdown of cumulative local employment numbers and the local (Kivalliq) expenditures for the Meadowbank Gold Project from 1995 to present.

Meadowbank Gold Project, Cumulative Local Expenditures

Activity	*2004*	*1995 - 2003*
Local Persons Employed	*30*	*3-33*
Wages	$ 200,346	$ 912,633
Expediting and Transport	$ 1,385,305	$ 2,267,165
Fuel	$ 394,315	$ 1,511,784
Equipment	$ 7,370	$ 337,563
Food and Accomodation	$ 208,502	$ 1,060,835
Construction		$ 22,500
Drilling	$ 286,675	$ 313,783
Aircraft		$ 152,483
Community	$ 80,000	$ -
Environment	$ 250,000	$ 227,743
Other	$ 73,384	$ 126,514
Total (Kivalliq)	$ 2,885,897	$ 6,932,993
Total (Program)	$ 8,869,827	$ 30,477,369
Cumulative(Kivalliq)	$ 9,818,890	
Cumulative(Program)	$ 39,347,196	

CONTRACTORS USED:

Overland Transportation of Bulk fuel and supplies from Baker Lake:

Mr. Peter Tapatai
Peters Expediting Limited
PO Box 74
Baker Lake, NU
Tel: (867) 793-2703 Fax: (867) 793-2988

Diamond Drilling:

Boart Longyear Inc.
403-47th Street East
Saskatoon, Sask., S7K 5H4
Tel. (306) 931-4466 Fax: (306) 931-1150

Helicopter:

Heli-Max Ltd.
3650 Boul. de l'Aeroport
Trois Rivieres, Que. G9A 5E1
Tel. (819) 377-3344

Airstrip construction:

Tercon
100 - 2079 Falcon road
Kamloops, B.C. Canada V2C 4J2
Tel. (250) 372-0922