

Cost Estimates for improvement and upgrade

The Corrieyairack Pass



at Culachy, Fort Augustus

October 2003

**Cost estimates for improvement and upgrade of Corrieyairick Pass
Lower section at Culachy, Fort Augustus**

Further to the condition survey conducted in January 2003, a request has been made by the Estate, SNH and The Highland Council for a cost estimate in relation to the work required to rectify the hazards and improve the route for recreational access.

The main points raised in the condition survey the current risks which included:

- High risk of wall collapse
- High risk of slips and falls
- Low risk of flood

The recommendations were for four main work areas to be addressed:

- Drainage
- Surface work
- Wall repair
- Vegetation clearance

Recent inspection by an experienced contractor also noted that the main drainage problems are created by failed culverts higher on the track between the deer gate and the estate entrance. Burns which were previously intercepted by these failed culverts have resulted in much greater down flow of water than the lower drainage system was intended to carry. An additional problem may be created by the overflow from the mill pond, which may create additional flow to the lower section.

It has also been noted that the culvert under the Ardachy Road and lower at the A82 will require attention in future due to flood damage and silt build up caused by the flooding of this route. This work is not be included in the estimates.

Having discussed the main issues and the result required, HAPM and Mr Cairns have produced provisional estimates for the work required. There are two options; Option 1 is for the reinstatement to allow non-motorised use, and Option 2 is for limited motorised use. It is likely that motorised use will adversely affect the sustainability of this work, and that preferred use should be non-motorised.

Option 1 estimated cost is £20,152 and Option 2 is £25,147 excl VAT, which compare favourably with the £14,000 estimated in 1993. These estimates are based on all aggregate materials for the construction being won on site from borrow pits which were used in the original construction, subject to estate approval.

DE Andrews
Highland Access Project Manager
31.10.2003

Option 1 Non-motorised access.

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE £	AMOUNT + VAT £
1	Between 5m-63m & 175m-286m reconstruct route of width 1.5m with 950mm as raised sub-base and 25mm graded surfacing compacted to form a 1:40 crossfall draining to ditch.	M	169	35.00	5,915.00
2	Between 63m-148m & 350m-470m scrape vegetation of width 1.5m and resurface with 75mm as raised sub-based and 25mm graded surfacing compacted to form a 1:40 crossfall draining to ditch	M	205	7.00	1,435.00
3	Between 148m-175m reconstruct route of width 1.5m with 1475mm as raised sub-base and 25mm graded surfacing compacted to form a 1:40 crossfall draining to ditch.	M	27	50.00	1,350.00
4	Between 286m-350m reconstruct route with 375mm+25mm as above.	M	64	20.00	1,280.00
5	At 109m and between 263m-274m rebuild drystone wall to same section and dimensions as existing wall	M	13	100.00	1,300.00
6	Between 160m-175m install retaining wall to retain field edge of height 10.5m	M	15	50.00	750.00
7	At 160m and 175m renovate existing wall ends as necessary to consolidate.	No	2	100.00	200.00
8	Between 64m-148m rebuild burn side revetment as necessary to consolidate.	M ²	20	50.00	1,000.00

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT + VAT
9	Remove existing culvert pipes in ditch to a licensed tip.	M	34	10.00	340.00
10	Between 0m-324m clear all encroaching vegetation and trees from route and ditch to create a clear walking tunnel of width 4m and height 3m	M	324	0.50	162.00
11	Between 0m-470m clear out/redefine and reprofile ditch sensitively to avoid damage to existing stonework and create a low profile ditch whole appropriate with vegetated sides	M	470	7.00	3290.00
12	At 507m, 1040 and 1180 install 3 no. new culvert pipes (twin walled polypropyln) of diameter 500mm and length 6m with stone loadwalls	M	18	40.00	720.00
13	At 507, 1040 and 1180 break ditch at culverts with rock arour	M ²	6	50.00	300.00
14	At 5m and 63m remove barrier including field gates and bollards and remove to a licensed tip.	No	2	100.00	200.00
15	Allowance for replacement of new barriers/gates.		Sum		500.00
16	Landscape route margins and disturbed ground with even battered slopes and graded margins and split turfs between 0m-470m	M ²	470	3.00	1410.00

TOTAL 20,152
(based on locally won aggregate)

Option 2 Motorised access

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE £	AMOUNT + VAT £
1	Between 5m-63m & 175m-286m reconstruct route of width 2.25m with 950mm as raised sub-base and 25mm graded surfacing compacted to form a 1:40 crossfall draining to ditch.	M	169	35.00	8,870
2	Between 63m-148m & 350m-470m scrape vegetation of width 2.25m and resurface with 75mm as raised sub-based and 25mm graded surfacing compacted to form a 1:40 crossfall draining to ditch	M	205	7.00	2,150
3	Between 148m-175m reconstruct route of width 2.25m with 1475mm as raised sub-base and 25mm graded surfacing compacted to form a 1:40 crossfall draining to ditch.	M	27	50.00	2,025
4	Between 286m-350m reconstruct route with 375mm+25mm as above.	M	64	20.00	1,920
5	At 109m and between 263m-274m rebuild drystone wall to same section and dimensions as existing wall	M	13	100.00	1,300.00
6	Between 160m-175m install retaining wall to retain field edge of height 10.5m	M	15	50.00	750.00
7	At 160m and 175m renovate existing wall ends as necessary to consolidate.	No	2	100.00	200.00
8	Between 64m-148m rebuild burn side revetment as necessary to consolidate.	M ²	20	50.00	1,000.00

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT + VAT
9	Remove existing culvert pipes in ditch to a licensed tip.	M	34	10.00	340.00
10	Between 0m-324m clear all encroaching vegetation and trees from route and ditch to create a clear walking tunnel of width 4m and height 3m	M	324	0.50	162.00
11	Between 0m-470m clear out/redefine and reprofile ditch sensitively to avoid damage to existing stonework and create a low profile ditch whole appropriate with vegetated sides	M	470	7.00	3290.00
12	At 507m, 1040 and 1180 install 3 no. new culvert pipes (twin walled polypropyln) of diameter 500mm and length 6m with stone loadwalls	M	18	40.00	720.00
13	At 507, 1040 and 1180 break ditch at culverts with rock arour	M ²	6	50.00	300.00
14	At 5m and 63m remove barrier including field gates and bollards and remove to a licensed tip.	No	2	100.00	200.00
15	Allowance for replacement of new barriers/gates.		Sum		500.00
16	Landscape route margins and disturbed ground with even battered slopes and graded margins and split turfs between 0m-470m	M ²	470	3.00	1410.00

TOTAL 25,147
(based on locally won aggregate)

PATH NAME: CORRIE AIRACK PASS	PATH NO./ SECTION NO.: CULACHY LOUET	TOTAL PATH LENGTH: 1224
G.R. START:	G.R. END:	SURVEY SHEET NO.:

162					
160			END WALL		
156			TREE		
148			48m-162m BUILDUP ROUTE 1800mm		6m x 500mm METAL
148			109m-148m ROUTE OK RESURFACE 100mm		109m-148m RESTRUCTURE ALONG DITCH REPAIR 10m ²
112				MINOR V. RUTTING	
109			HOLE IN WALL 2m ²		64m-109m RESTRUCTURE ALONG DITCH REPAIR 10m ²
64			63m-109m ROUTE OK RESURFACE 100mm	MINOR V. RUTTING	
64			BOLLARDS RESTRICTING ACCESS		FENCE
63			METAL FIELD GATE		FENCE
					11m x 500mm METAL.
52			5m-63m BUILDUP ROUTE 1000mm		11m OPEN
41					7m x 500mm METAL
34					21m OPEN
13					
5	1.5m		METAL FIELD GATE	ROADSIDE FENCE	
3			BOLLARDS RESTRICTING ACCESS	10m x 500mm METAL.	
0				3m OPEN UNEVEN THRU REPAIR	
			ARDACHY ROAD		
				CULVERT FAILING AT EXIT	
DIST. (m)	G (°)	P.W. (m)	WORK REQUIRED		DESCRIPTION

ABBREVIATIONS: G.R. = GRID REFERENCE, DIST (m) = DISTANCE IN METRES, G (°) = GRADIENT IN DEGREES,
P.W. (m) = PATH WIDTH IN METRES

PATH NAME: COURIEY AIRACK PASS	PATH NO./ SECTION NO.: CULACHY COURT	TOTAL PATH LENGTH: 1224
G.R. START:	G.R. END:	SURVEY SHEET NO: 2

286			WARNING SIGN ON PATH		
283			BULKING ON PATH		
274					
263			263m-274m WALL FAILING		
250			175m-286m BUILD UP ROUTE 1000MM		124m OPEN
236					
224					
216					
209					BURN
175					
			162m-175m BUILD UP ROUTE 1500MM	REBUILD WALL 20m ²	
162					
DIST. (m)	G (°)	P.W. (m)	WORK REQUIRED		DESCRIPTION

ABBREVIATIONS: G.R. = GRID REFERENCE, DIST (m) = DISTANCE IN METRES, G (°) = GRADIENT IN DEGREES, P.W. (m) = PATH WIDTH IN METRES

PATH NAME: COURCYAIRACK PASS	PATH NO./ SECTION NO.: CUACHY/LANDOR	TOTAL PATH LENGTH: 1224
G.R. START:	G.R. END:	SURVEY SHEET NO: 3

1224			DEER FENCE	VEHICLE + KISSING GATE)
1180			20M FAILED CULVERT REPLACE	BLOCK DITCH WITH ROCK
1040			BURN FAILED CULVERT REPLACE	BLOCK DITCH WITH ROCK DITCH OK
715			MILL POND TRACK TO HOUSE	INSTALL CULVERT TO LINK ADD BLOCK DITCH WITH ROCK WATER THROUGH
507			OVERFLOW FROM POND PIPED TO ACCESS TRACK ACCESS TRACK	
470			PATH OK RESURFACE 100MM	
445			GATE IN DYKE	184m OPEN
356			236m - 350m BUILD UP ROUTE 400MM	
324				REMOVE TREE
286				
DIST. (m)	G (°)	P.W. (m)	WORK REQUIRED	DESCRIPTION

ABBREVIATIONS: G.R. = GRID REFERENCE, DIST (m) = DISTANCE IN METRES, G (°) = GRADIENT IN DEGREES,
P.W. (m) = PATH WIDTH IN METRES