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Part C: Southern Leg

Appendix A23.1 - Private Water Supplies

## 1 Land Reference Number: 103

# 1.1 Private Water Supply Number: S52, S53, S55.

This covers the properties of Derbeth Farm, Fairley Home Farm and Dykeside. Mr Thornton (Strutt & Parker) attended the call on 04 April 2007. He requested that a letter be sent to him together with the questionnaire.

# 2 Land Reference Number: 209

# 2.1 Private Water Supply Number: S59

Mrs Annand (Agent) was contacted on 04 April 2007 regarding the property known as Duffshill Farm.

#### Is your water sourced from a well or a spring?

There is one well on the northern side of the bypass, which supplies water to the south of the bypass.

#### Can I confirm the location of the spring/well?

See above

#### (If it is a spring) do you know the exact location of the spring?

N/A

## (If it is a well) how deep is the well?

No information available

## How old is the supply?

100 years approximately

#### How good is the quality of the water supply?

The water is believed to be of good quality.

# Does the water run out in dry periods or fluctuate at certain times or seasons?

Water never runs out during dry seasons.

# How is it conveyed to your house/field/reservoir?

It is conveyed by means of one underground pipe.

## Is this supply only to your house or to other houses/fields/reservoirs?

It is only for the above property.

# Is this supply for domestic use/drinking water for cattle?

It is used as drinking water for cattle but it could be used for domestic purposes as well.

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Approximately what volume/yield of water is consumed per day?

No information available.

Has water analysis ever been undertaken, and if so, may Jacobs see the results?

Water analysis was never undertaken.

# 3 Land Reference Number: 482 (Byways)

# 3.1 Private Water Supply Number: S45

Mr Cowell attended the call on 05 April 2007 and asked to write a letter together with the questionnaire.

# 4 Land Reference Number: 510 (Nether Beanshill)

# 4.1 Private Water Supply Number: S28

Mr Jaffrey attended the call on 02 May 2007 and stated the above property is on mains supply. There is a well but this is no longer used. There are also a number of springs to the west of the proposed route, in the field around the farmhouse ("water bubbles up"). These springs are not used for water supply.

## 5 Land Reference Number: 617

# 5.1 Private Water Supply Number: \$42

Mrs Robinson was contacted on 03 April 2007. A letter has been sent along with the questionnaire.

## 6 Land Reference Number: 1736

# 6.1 Private Water Supply Number: S2, S3, S4

Mr R. J. Groat was contacted on 03 April 2007 regarding the property known as Bishopton Farm.

# Is your water sourced from a well or a spring?

The property is sourced by a single well.

# Can I confirm the location of the spring/well?

The well is located near to the forest, in the field adjacent to Bishopton Cottage. According to Mr Groat it will not be affected by the route.

#### (If it is a spring) do you know the exact location of the spring?

N/A

(If it is a well) how deep is the well?

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About 15 feet (4.6 m).

#### How old is the supply?

150 years approximately

#### How good is the quality of the water supply?

It is good.

#### Does the water run out in dry periods or fluctuate at certain times or seasons?

Usually it does not run out during dry periods; however during the dry season water the water level is quite low. In summer there are 3 feet (0.91 m) of water from the bottom of the well, in winter 4m of water from the bottom (2 feet deep from surface). Therefore the water level fluctuation is about 3 m.

#### How is it conveyed to your house/field/reservoir?

It is conveyed to the Farm/Cottage by a plastic underground pipe.

#### Is this supply only to your house or to other houses/fields/reservoirs?

Farm and Cottage only.

## Is this supply for domestic use/drinking water for cattle?

For both.

## Approximately what volume/yield of water is consumed per day?

Not known.

#### Has water analysis ever been undertaken, and if so, may Jacobs see the results?

Water quality analysis is undertaken each year. Jacobs can eventually see the results.

# 7 Land Reference Number: 556.2 (5171)

# 7.1 Private Water Supply Number: S40

Mr Irvine-Fortescue is owner of land reference 556. Mr Astell tenants part of the above land.

The information below was collected during a meeting held at Mr Astell's residence on 20 April 2007.

#### Is your water sourced from a well or a spring?

There are two springs and a wetland area (pond). Mr Astell's property is on mains supply.

A ditch runs near to Mr Astell's house. This ditch is full of water in winter, while in summer dries up. The ditch is quite shallow and is fed by the hill (Cleanhill Wood hill).

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#### Can I confirm the location of the spring/well?

The first spring (spring No.1) is about 430 m to the east of Mr Astell's residence, while the second one (spring No. 2) is about 670 m to the east of the residence. Mr Astell stated there were no wells inside land ref. 556.

The pond (wetland area) is about 60 m southeast of Mr Astell's house.

(If it is a spring) do you know the exact location of the spring?

See above.

(If it is a well) how deep is the well?

N/A

How old is the supply?

The spring supplies are 400 years old.

#### How good is the quality of the water supply?

In spring No. 1 water quality is good and has been tested in the past by Stonehaven Council (no coliforms were found in the water).

Quality of water in spring No. 2 is supposed to be good and it was also tested in the past by Stonehaven Council.

#### Does the water run out in dry periods or fluctuate at certain times or seasons?

Spring No.1 never dries out, spring No. 2 is not used anymore (perhaps only for cattle).

#### How is it conveyed to your house/field/reservoir?

In spring No.1 water is filtered though sand & gravels and stored in a big container, then distributed by gravity to Kingcausie and Eastland properties through a black 1<sup>1/4</sup> inches pipe. The pipe is always full of water.

Spring No.2 is fed by Craigingless Wood and water runs by gravity through a little pipe down to Canagree, Philip Cottage and The Steading. This spring is not used anymore as these properties are on mains supply. It might be used only for cattle (to be confirmed).

#### Is this supply only to your house or to other houses/fields/reservoirs?

Spring No. 1 feeds Kingcausie and Eastland properties. This spring is also used for domestic use by Mr Astell (bath and washing machine) but also for sheep and cattle.

See above for spring No.2.

The wetland area (pond) supplies water for sheep.

# Is this supply for domestic use/drinking water for cattle?

See above. Most troughs in Mr Astell's land are fed by spring No.1 or a nearby burn (the burn between Craigingles Wood and Cleanhill Wood). This burn is not marked in the OS map but Mr Astell confirmed it is a permanent burn. Near to the spring No. 1, along the burn, an artificial pond was created (pudlled with clay) and used to feed the Sawmill and Frontpark.

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Approximately what volume/yield of water is consumed per day?

Unknown

Has water analysis ever been undertaken, and if so, may Jacobs see the results?

See above. Jacobs may eventually see the water quality results, although Mr Astell does not remember their location.

#### **ADDITIONAL INFORMATION**

Mr Astell was interrogated about the lithological composition of the geological material around the springs. Mr Astell said the rockhead was very shallow and he indicated exposure of rockhead in a number of localities including: (i) Corbie Pot (roughly 500 m east of Kingcausie), (ii) northeast of Cleanhill Wood neat to the burn and (iii) southeast of Craigingles Wood hill, where there is a quarry that is accessed from the road to the Hills of Blairs.

This last quarry was visited and preliminary visual analysis suggests that the material of the quarry is granite. The material exposed was fractured. Time and logistic constrains did not allow for more detailed analysis.

Mr Astell would be interested in knowing about the effects of blasting (for the road cuttings) on spring No.1.

Mr Astell was also interrogated about any eventual spring on the west slope of Cleanhill Wood (in correspondence of the deepest road cutting) Mr Astell stated there were no springs but different patches that are very wet.

## 8 Land Reference Number: 5006

## 8.1 Private Water Supply Number: S56

Mr Hovde was contacted on 0406/07 at 16:00. He's the headmaster of the International School in Aberdeen . The International School do not extract groundwater from well or spring.

However, there is a well or spring on their land from which groundwater is extracted. The water supply belongs to Mr Mitchell of Milltimber Farm (Land Reference 438).

Mr Hovde is happy for us to visit the school to undertake testing as long as we make an appointment.