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DRAINAGE STATEMENT

Cockenzie

1.0 Legislation & Guidance

The SUDS and drainage strategy for this site has been prepared taking cognizance of the following guidance and legislation:

- Water Environment and Water Services (Scotland) Act 2003, and associated regulations relating to the design and construction of SUDS;
- SUDS Design Manual for Scotland and Northern Ireland (CIRIA C753);
- Sewers for Scotland 4th Edition;
- Water Environment (Controlled Activities) (Scotland) Regulations 2011.
- Planning Advice Note PAN 79 – Water & Drainage, Sept 2008;
- Planning Advice Note PAN 61 – Planning & SUDS;
- Scottish Planning Policy – Planning & Flooding.
- SEPA's Standing Advice for Small Scale Development "Land Use Planning System SEPA Guidance Note 8"

2.0 Surface Water Drainage & SUDS

- The Site falls generally from south to north. Overall site area is 7.14 Ha and the Impermeable area is assumed as 3.4 Ha (47% of gross area).

- Surface water run-off will be directed through the site to the low point in the adjacent ground to the North where a Detention Basin will provide Attenuation and Treatment.

- It is proposed that the Surface Water Outfall from the Detention Basin be subsequently pumped via pump station and rising main to discharge into the existing private sewer to the south of the site.

- All hardstanding areas will receive treatment and attenuation to greenfield levels in accordance with SEPA's requirements.

2.1 Attenuation Requirements

- The discharge rate has been calculated at 10.9 l/s/Ha. It is proposed to discharge the surface water drainage from the development to the existing private sewer to the south of the site.

- Attenuation to the above rate will take place within the Detention Basin. Storms up to and including the 1-in-200yr+40% event should be contained within the drainage & SUDs system without flooding. Storm events over and above this level can overspill provided a safe flood route can be provided.

2.2 Treatment Requirements

- The treatment strategy for this site has been prepared in accordance with Chapter 26 of the SUDS Manual C753 utilizing the Simple Index Approach Tool. Treatment to surface water runoff from hard standing areas.

Low Trafficked Roads (Road within the Battery Areas)

Low trafficked roads are defined as those which will have less than 300 vehicle movements per day.

- These roads will receive one level of treatment in the end-of-line Detention Basin.

- Additional mitigation measures will be put in place to provide bunding to hard standing areas where machinery requiring coolant is located. The surface water run-off from these areas passes via an 'Aqua Sentry' a proprietary system to identify and isolate any contamination if a leak occurs.

- The treatment volume is calculated as follows:

  Vt = 16mm over the impermeable area

  Vt = 16mm x 3.4 ha

  The treatment volume required in the Basin will therefore be 1460 m^3.

2.3 Treatment of Surface Water Runoff During Construction

- During the construction works on site, additional measures will be put in place to cater for any higher levels of contamination generated. These measures will be temporary only and will be in place for the duration of works on the site and will be removed on completion of all site works.

- It will be the responsibility of the contractor to design any additional measures to the approval of the local authority and SEPA.

- Construction phase drainage should be kept separate from final phase drainage and should receive treatment in a separate SUD system in accordance with GBR 11 of the CAR 2011 legislation in order to protect any area of soil draining into a surface water system.