

APPENDIX 4

RELATIONSHIP OF ROTHES FAS TO PLANNING POLICY

a) FLOODING

Structure Plan Policy 2(j)

Local Plan L/ENV26

The Moray Structure Plan policy 2(j) promotes flood schemes to alleviate flooding in a sustainable and sensitive manner. The ES indicates the Rothes FAS represents the most cost-effective investment solution and the most environmentally acceptable and sustainable solution to flood management in Rothes. The proposals reflect intentions of the Rothes settlement statement (Moray Local Plan 2000) to prepare a flood prevention scheme for Rothes (Appendix 3). Subject to conditions as recommended and satisfactory resolution of outstanding issues with SEPA about the risk of flooding on downstream areas (Appendix 5), the proposal complies with policy L/ENV26.

A range of measures are proposed on three Burns which account for the majority of flooding in Rothes (Appendix 1 and 2). These measures are intended to manage flood waters on or adjacent to the Burns, protect property and minimise damage from inundation. These include new or improved defences (to allow increased in-channel flows and remove obstructions), including new floodwalls and embankments, and SUDS-type measures, including the new storage pond to address surface water run-off from the A941 to north and south of Rothes.

Compared with existing standards of defence i.e. 5-10 years (Back Burn), 10-50 years (Burn of Rothes) and 25 years (Black Burn) the proposal will provide the same standard level of protection on all three Burns to at least 1 in 100 years plus an allowance for climate change. Overall, the scheme will have a major beneficial impact on the local community, property and infrastructure, and reduce damage and disruption arising from flooding (Appendix 7)

Whilst these proposals seek to manage and minimise the risk of inundation within Rothes, policy L/ENV26 requires applicants to demonstrate that their proposals will not exacerbate flood risk elsewhere. SEPA require information to demonstrate that the increased peak flows do not increase flood risk to property along the lower Spey Valley downstream of Rothes. (Appendix 5) At the time of writing this report the applicant's consultants are preparing pre- and post-scheme hydrographs to assess the downstream impacts. This information will be submitted to SEPA prior to the meeting. SEPA has undertaken to review the information and if satisfied, withdraw their objection before the meeting.

Preliminary (unchecked) analysis already forwarded to SEPA supports the consultant's contention that the downstream risk of flooding will not be exacerbated. Whilst the Rothes FAS will increase hydraulic conveyance (flows) through Rothes, it will not increase but actually decrease flood risk on the River Spey downstream based on the scenarios examined using different storm duration and return periods. The scheme discharges flows earlier/quicker to the River Spey thus increasing the time gap between peak flow discharge from the Burns and the peak flow on the River Spey.

b) RIVER ENGINEERING

Local Plan: L/ENV25

Subject to conditions as recommended and the satisfactory resolution of information on geomorphological issues as required by SEPA (Appendix 5), the requirements of this policy are addressed. Nature conservation and landscape effects are considered separately below.

During construction, surface flows will be disrupted. This arises principally where intrusive in-channel works disrupt flows, although pumps and flumes may be used to convey water around work elements, for example the culverts under A941. These impacts are restricted to site-specific locations and are of temporary duration. For example, within the overall 22-month construction programme on Back Burn, work will be commenced and completed on a phased basis to minimise impact. Once in operation the works may locally modify flows, hence the provision of revetments and scour protection to reduce velocity and bank erosion. Overall the scheme will not adversely affect the hydraulic process. Rather, it will benefit and improve hydraulics, conveyance and flow capacity in the Burns and reduce the risk of flooding (Appendix 7).

In terms of sediment transfer and in addressing SEPA's geomorphological concerns (Appendix 5), pre-application investigations concluded that sediment transfer or connectivity along the Burns are interrupted for example, by in-channel structures resulting in sedimentation or erosion and morphological instability. According to the ES, the scheme is designed to restore the sediment transport system in each Burns to a more natural regime by re-establishing connectivity between upper and lower reaches of the Burns, improving flow conveyance, sediment transport continuity and enhancing their conservation value including aquatic riparian and floodplain habitats.

During construction, in-channel works and loss of bankside vegetation may alter local sediment dynamics with elevated sediment loads and increased release of fine sediments, which may impact on fish and invertebrate populations. These construction works are assessed as having a moderate adverse impact (Appendix 7). However, a number of mitigation measures are proposed including minimising extent and duration of in-channel works, phased working, regular inspection of watercourse, sediment control e.g. silt layout and straw bales and the preparation of a sediment management plan, as required by SNH (Appendix 5).

Sediment modelling confirms that the scheme will have positive impact on sediment continuity compared to the existing regime. Information already presented to SEPA concludes that the impact of transported sediment downstream of the scheme, including the River Spey is negligible and does not alter existing processes. The only identified impact is the release of the sediment during construction but this will be mitigated, for example by the required/proposed sediment management plan, to be developed in conjunction with SEPA and SNH (Appendix 5).

Despite information being made available, SEPA currently maintain their objection pending further information about the scheme design, in terms of geomorphological processes and their contribution to improving sediment continuity (Appendix 5). This information will be submitted to SEPA prior to the meeting. SEPA has undertaken to review the information and if satisfied, withdraw their objection before the meeting.

During construction minor, no, or negligible adverse impacts are identified regarding disruption of ground water and surface water abstractions, flows and discharges (Appendix 7). To address these impacts various mitigation measures are proposed including consultation and preparation of a management plan, to minimise impact on Distillery operations. Similar levels of impact are anticipated during operation of the scheme with minor beneficial impacts identified for surface water abstractions and quality through reduced sediment loading (Appendix 7).

However, during construction there remains a potential risk of contamination, for example to surface and ground water from accidental discharge of pollutants affecting the chemical and biological quality of the Burns. These are assessed as minor adverse impacts in the ES because of mitigation already built into the scheme design together with the proposed construction method statements and adherence to SEPA's pollution prevention guidelines, etc (Appendix 7).

Appendix 6 indicates that the details of actual measures to quantify attainment and achievement of any mitigation adopted are currently lacking from the submission. Conditions are recommended to address this issue, in particular the requirement for a finalised Environmental Action Plan (EAP). This is not in itself mitigation but it should identify and quantify all the measures, including method statements to be adopted, etc. Subject to the satisfactory identification and adoption of all agreed measures, the risk of polluting events will be minimised.

c) NATURE CONSERVATION

Structure Plan Policy 2 (a) and (b)

Local Plan: L/ENV1, L/ENV2

"Appropriate Assessment" of Rothes FAS on River Spey Special Area of Conservation

The River Spey is designated as a Special Area of Conservation (SAC) and SSSI based on populations of qualifying species: Atlantic salmon, sea lamprey, otter and freshwater pearl mussel. These species are also afforded protection under EU Habitats Directive. In this case the Council, as a competent authority, is required to carry out an "appropriate assessment" of the impacts of the Rothes FAS on the SAC and its qualifying interests.

During construction the ES identifies minor to major adverse impacts depending on the extent or presence of the qualifying species, the availability of habitats and the impact from increased release of fine sediments, etc. Various mitigation measures are identified including the undertaking of works outwith breeding periods, minimising the extent and duration of in-channel works, progressive phasing of works, obtaining licences to disturb species, ensuring construction areas are left safe, ensuring safe storage of chemicals and materials, retaining/protecting vegetation, maintaining or enhancing fish passage by providing or removing obstructions and the development of a sediment management plan. During operation of the scheme, no, minor and moderate beneficial impacts are identified depending on the species and resulting from less disturbance (including reduced maintenance) and an improved quality and availability of habitat (Appendix 7).

However, the ES does not constitute the required 'appropriate assessment' nor specifically address the conservation management objectives of the SAC and its qualifying interests. Although it remains open to the Council to carry out its own assessment, or undertaken further assessment, SNH has provided the Council with an appropriate assessment of the impacts of the Rothes FAS on the SAC. This appraisal considers that whilst there is no adverse impact on the

integrity of the River Spey SAC as a whole, the proposal is likely to have a significant effect on the qualifying interests throughout construction. Operation of the scheme should have beneficial impacts on the species (Appendix 5). Subject to the Council agreeing to adopt the assessment by SNH and thereafter the proposal is undertaken in accordance with the recommended conditions, the Rothes FAS will not adversely affect the integrity of the SAC, nor conflict with planning policy, including L/ENV1. Conditions are recommended to address this issue along with the recommendation that the Council agree to adopt the assessment undertaken by SNH.

Other Habitats and Species

The ES identifies a number of ecological surveys undertaken to assess potential direct and indirect construction and operational impacts on habitats, flora and fauna including LBAP habitats, invasive plant species, bats, badgers, water vole, red squirrel, breeding birds, feeding habitat to foraging birds, aquatic invertebrates, amphibians, reptiles, fish habitat and populations. Although each Burn is considered separately, the ES gives an assessment of impact for the Rothes FAS as a whole (Appendix 7). Impacts on the loss of vegetation are also considered below. The Rothes FAS is not considered to conflict with policy subject to conditions as recommended, including the finalised EAP to ensure natural heritage interests are not adversely affected. On this basis the Rothes FAS is considered to comply with relevant policy including L/ENV2 and L/IMP2.

Construction impacts range from negligible to moderate adverse (Appendix 7). These depend on the magnitude of impact upon the identified species or habitats as well as regard to the extent and area of works, the presence and extent and suitability of the habitat or species, the extent of loss of habitat relative to overall amount of habitat available in the study area, the removal of bed material and release of fine sediment, etc. Proposed mitigation measures include restrictions on in-channel works, activity occurring outwith breeding periods, clearly defined working areas, phased working arrangements, maintaining fish passage, preparation of a sediment management plan, retaining vegetation to protect against erosion and using erosion control such as geo-textile material to protect banks during re-establishment of vegetation. Replacement or compensatory tree planting to restore/re-establish habitats is also proposed, etc.

During operation of the scheme beneficial impacts are identified arising from opportunities for habitat enhancement, for example introducing riparian planting and tree planting of local provenance and native species to enhance bio-diversity, although these may take time to mature and become established (Appendix 7). Reflecting the ES, a condition is recommended that the EAP provide for post-construction monitoring to determine longer-term impacts on aquatic and terrestrial habitats and species.

d) BACK BURN

Structure Plan	Policy 1, Policy 2
Local Plan	Rothes I2, I3, ENV7, ENV8, R2, L/ED4, L/ED5, L/ED13, L/ENV4, L/ENV10, L/ENV12, L/ENV18, L/ENV22, L/T4, L/T7, L/F1, L/F2, L/IMP1, L/IMP2, L/IMP3, L/IMP4, L/IMP5, L/IMP6, L/IMP7

Works along the Back Burn are located within the Rothes settlement boundary except the channel modifications within Glen Grant Distillery gardens upstream of the lade footbridge. Having regard to the nature, scale and location of the proposed works, no significant adverse effects are identified. Together with reasons to support identified departures from the

development plan, the proposals are otherwise considered to comply with planning policy, subject to conditions as recommended.

During construction, the various engineering and other works to form the various channel improvement works, walls and embankments and the demolition and/or replacement of bridges. These result in adverse impacts upon landscape character and visual amenity, together with the disturbance of existing ground cover and vegetation (and ecology and nature conservation as considered above). In addition, there are various impacts associated with construction activity, including storage and movement of machinery and materials and noise upon the local community, residential property and business (especially Distillery interests). These adverse impacts include disturbance and disruption to through and local traffic, parking and access to property, recreation land and footpaths (Appendix 7). Various measures to mitigate against these impacts are identified in the ES.

Apart from localised changes in landscape character and visual appearance, the main beneficial impact from the operation of the Rothes FAS is the provision of flood defences to reduce the risk of flooding and damage and disruption caused by such events

Departures from the development plan

An embankment and silt lagoon are proposed to the south east of Mackessack Park on land between and at the confluence of, the Back Burn and the Burn of Rothes respectively. The proposals conflict with the ENV8 and R2 designations where, subject to addressing infrastructure constraints, the land is designated for housing but is expected to remain as farmland during the plan period (R2) and the farmland is to be kept as such (ENV8). The environmental designation identifies this site as contributing to the amenity of the town and policy L/ENV18 presumes against development threatening to diminish its amenity value (Appendix 3).

A departure can be considered given that these works are related to the nature, function and purpose of the Rothes FAS. In addition, the silt lagoon will be a temporary feature during construction and thereafter the land to be reinstated to its existing condition. The embankment is a permanent feature of the scheme located along the western edge of the designation and will reduce the area available with the designation. With operation of the Rothes FAS, the existing agricultural land-use can continue within the remaining but reduced area. This area will remain liable to flooding both at present and during operation of the scheme.

Proposals immediately outwith the settlement boundary are not normally acceptable (L/ENV10), however the channel modifications upstream of the lade footbridge within Glen Grant Distillery gardens are relatively small-scale in nature, extent and impact. Given the purpose of the works, the proposals do not significantly detract from the appearance and amenity of this area located outwith the built-up area, nor promote the outward expansion of development beyond the settlement boundary. On this basis, the policy objective to maintain the distinction between town and country is maintained and therefore a departure from policy can be considered.

Impact on other designations

Downstream of the A941, the Back Burn abuts the Rothes I2 and I3 designations. Rather than prejudice these designations, the Rothes FAS, once implemented, will reduce the risk of flooding. During construction, access may be restricted or disrupted as a result of channel works and road improvements including replacement bridges at Station Road and Caperdonich Bridge.

Upstream of the A941, the Rothes I3 and ENV7 designations would not be adversely prejudiced by the proposals. By reducing flooding, the works may benefit distillery land and operations and any encroachment into the designation is confined to the area immediately adjacent to the Burn. Within the ENV7 designation there is a minor encroachment along the banks of the Burn, including works to accommodate the new Visitor Centre footbridge which requires the removal of trees. However, this will be compensated by replacement planting, which once established will help maintaining the overall integrity of the designation.

Landscape and visual impact

During construction adverse landscape and visual impacts arise from the various engineering works associated with the scheme, bridge works and the loss of bankside vegetation and trees. Operational impacts include the retention of the works carried out on the channel (except the silt lagoon), the new bridges and the establishment of vegetation and tree planting. Overall and subject to conditions as recommended, no significant adverse impacts are identified (Appendix 7). The proposals are considered to comply with policy including L/IMP1 and L/IMP2 although along this Burn and elsewhere, the impact of each individual works element may be greater within its immediate area.

The intrusive impact of the works is limited as a number are restricted in area, or are small-scale in their nature and extent, including floodwalls contained within the existing channel or located alongside the Burn. The design and material finishes for all the work elements, including patterned concrete or stone clad walls, as opposed to a smooth concrete finish, is considered satisfactory. Downstream of the A941 the concrete channel or works or upstream in the Distillery gardens, the works may appear harsh initially. According to the ES, these will mellow over time and once the vegetation re-establishes, the impact will diminish.

More noticeable changes are associated with the various bridge works along the Burn where changes in location, design and external finishes and removal of trees may alter the local character and appearance of the area, for example views to/from the new Glen Grant Visitor Centre footbridge. The design of this bridge, and others elsewhere along the Burn, is considered acceptable in policy terms, including L/IMP1 and L/IMP3. Although larger, the Glen Grant access bridge seeks to reflect the existing bridge with its stone clad parapet. The new parapet on the A941 bridge gives it a solid appearance to its upstream side compared to the open railings on the downstream side.

Apart from the short-term duration of construction activity, various mitigation measures are proposed to reduce the landscape and visual impacts. Some are already incorporated into the scheme design based on the type, size, design and external finishes of each structure. Other measures include a phased programme of construction, restricted working areas and hours of working, and replanting.

Along the Back Burn vegetation will be removed to implement the scheme. The ES regards the amount or area of vegetation cover being removed as negligible compared to the overall catchment area of the Burn. Mitigation measures include protecting vegetation on land adjacent to the working area and replacing vegetation as soon as possible after construction and as close as possible to the location of removal.

Within the construction footprint area, 114 trees are currently identified for removal at various locations along the Burn, including trees growing in or along the sides of the Burn in the area

where works are proposed. This is considered by the ES as a moderate adverse impact (Appendix 7).

Mitigation measures as identified include on-site identification of trees for removal and retention, plus compensatory planting to ensure no overall loss in tree numbers although trees may not be located exactly in their existing locations, and planting to be carried out as soon as possible after each part of the works are completed. According to the ES, the extent of tree loss and any adverse resultant impact, including the appearance of the Burn along its banks is expected to diminish during operation of the scheme with the establishment and growth of the replacement planting.

For all three Burns there are inconsistencies in the quality of the landscape information presented in the ES and on drawings, including the extent or amount of trees to be removed. For example, the ES states approx. 110 trees to be removed along this Burn yet only 60 are detailed in the text and 120 are listed on drawings. The applicant's consultants are currently undertaking further landscape survey work across the whole of the Rothes FAS area. Once overlaid with the detailed scheme design this should identify specific locations, numbers and species of trees to be retained and removed. The consultant's envisage that the number of trees to be felled will be reduced, thus lessening the extent and impact of tree removal. In light of the above and to address current deficiencies in the quality and standard of landscape information already presented, conditions are recommended requiring a revised landscape scheme to be submitted/approved before development works commence.

Disturbance and Disruption

With construction activity, minor to major adverse impacts of disturbance and disruption upon the local community, residential property and local business are identified across the whole of the Rothes FAS scheme. During operation of the scheme there will be beneficial impacts, in particular the reduced risk of flooding (Appendix 7).

Along the Back Burn an identified local impact is noise. The ES predicts that noise from construction activity, which may include piling, will have a major adverse impact on neighbouring property. To address this, the Environmental Health Manager recommends the provision of additional noise screens at all locations where a major adverse impact arises, for example property on Station Road, together with restricted working hours for construction activity and movement of vehicles (Appendix 5).

These requirements reflect a number of 'generic' measures identified in the ES to mitigate against noise, including restricted working areas, a phased programme of construction works, use of best management methods and observance of BS standards for machinery plus regular liaison with the local community in advance of construction commencing. The ES suggests an honest assessment of noise impact should be given during consultation to make it clear that the works are necessary for the future of the town and hopefully the community will be in favour and less likely to complain. Although this may alter perceptions it will not alter actual noise levels experienced (Appendix 6).

Restrictions on traffic and pedestrian access and parking are also likely to result, for example during replacement of the footbridges within Glen Grant Distillery gardens, or to Mackessack Park during the up-grading of Station Road and replacement of Caperdonich Bridge. The latter works, together with erecting floodwalls in the gardens of residential property, or in forming the maintenance access at Breich Street, will affect vehicle access and parking for local residents

and business and the football ground. Drainage works on the A941 north of the roundabout and parapet works at A941 New Street Bridge will affect through traffic using the A941 and access into Glen Grant Distillery. Within Glen Grant Distillery and to maintain the Distillery operations, a temporary access bridge will be provided whilst the existing access bridge is replaced.

Construction activity will have a moderate to major adverse impact on both through and local traffic in Rothes, including public transport (Appendix 7). Following consultation, the Transportation Manager has not objected to the scheme subject to conditions and informatives as recommended. In addition, a Traffic Management Plan will be required (Appendix 5). This will manage and co-ordinate all traffic activity, including road and carriageway closures during the construction phase.

Other 'general' mitigation measures to address transport impacts include a phased programme of construction, controlled working hours, consultation with the local community and business in advance of construction works commencing and use of best management practices on traffic and access, air quality and noise to minimise the impact on the community and business.

The proposed water proofing to the exterior of buildings is unlikely to affect a known archaeological site at Glen Grant Distillery. However, following consultation and to mitigate against any adverse construction impact on unknown archaeology, assessed as a moderate adverse affect for the whole of the Rothes FAS, a condition requiring an investigation is recommended for example in relation to further construction activity with the ground of Glen Grant distillery (Appendix 5 and 7).

e) **BURN OF ROTHES**

Structure Plan Policy 1, Policy 2

Local Plan Rothes I2, I3, I5, ENV3, ENV7, ENV8, R2, ENV9, L/ED4, L/ED5, L/ED13, L/ENV4, L/ENV10, L/ENV12, L/ENV14, L/ENV18, L/ENV22, L/T4, L/T7, L/CF2, L/CF3, L/F1, L/F2, L/IMP1, L/IMP2, L/IMP3, L/IMP4, L/IMP5, L/IMP6, L/IMP7

Works along the Burn of Rothes are located within the Rothes settlement boundary except the grass/embankment located to the north-east of Provost Christie Drive. Having regard to the nature, scale and location of the proposed works, no significant adverse effects are identified. Together with reasons to support identified departures from the development plan, the proposals are otherwise considered to comply with planning policy, subject to conditions as recommended.

Adverse impacts associated with the construction phase, including the storage and movement of machinery and materials are related to the engineering and other works to form the various channel improvement. These include channel widening within Rothes Park, walls and embankments, revetments and scour protection together with the demolition and/or replacement of bridges and buildings and the formation of amenity areas in the vicinity of the existing A941 bridge. These have impacts upon landscape character and visual amenity together with the disturbance of existing ground cover and vegetation (and ecology and nature conservation as considered above). In addition, adverse construction impacts upon the local community, residential property and business (including Distillery interests) include disturbance and

disruption to through and local traffic, parking and access to property, recreation land and footpaths (Appendix 7). Various measures to mitigate against these impacts are identified.

Apart from localised changes in landscape character and visual appearance, the main beneficial impact from the operation of the Rothes FAS is the provision of flood defences to reduce the risk of flooding and damage and disruption caused by such events.

Departures from the development plan

Parts of the works along the Burn of Rothes are located on the environmental designation Rothes ENV3, Rothes Park. This designation also includes an area of open ground on the opposite bank to the rear of the Primary School. Although the Rothes FAS is not an example of the pressures identified within the policy as threatening the loss of the Park, the scheme works encroach onto this public recreational space. This area is considered to contribute to the amenity of the town and policy L/ENV18 seeks to protect this site from development and presumes against development threatening to diminish its amenity value (Appendix 3). A departure can be considered for the following reasons.

On the right hand bank opposite the main Park area, channel widening and an embankment are proposed. Once works are complete, access to the area will be re-instated and existing trees will be transplanted behind the Primary School.

During construction there is short-term threat to the use of the Park area where, for health and safety reasons, access and use will be restricted, for example during the extensive earth works required to create the two-stage channel and the embankment. This work extends over much of the existing recreational area and involves removal of play facilities, a pavilion, a football pitch area and the tree-lined footpath along the bank of the Burn. After construction the play area, new pavilion and football pitch area will all be reinstated behind the new embankment, thus ensuring there is no conflict with policy L/CF2 and L/CF3. Several footpath links within park and to bridges across the Burn will be re-instated. When the two-stage channel is not in use during any flood event the grass-surfaced new channel area will allow use for informal recreation. Thus, whilst the works encroach onto, and will alter the appearance of the Park, in the longer-term only a small part of the park area is lost. Following consultation, neither the Environmental Protection Manager nor sportscotland have objected to the proposal (Appendix 5).

North-east of the Park, departure considerations associated with the silt lagoon and the embankment within the ENV8/R2 designation have already been considered (see Back Burn).

To the north east of Provost Christie Drive a grass embankment is proposed. This is located beyond the settlement boundary of Rothes, where development proposals are not normally acceptable (policy L/ENV10). In terms of the location, nature and scale of the embankment and its intended function, as a means of affording protection to property from flooding, this proposal is not considered to prejudice the objectives of this policy, including the appearance and character of the locality. A departure from policy can be considered.

Impact on other designations

The scheme works also encroach onto the Rothes ENV9 designation i.e. the small amenity area opposite Burnside Street and upstream of the A941 bridge. Development works threatening the amenity of this area would normally be resisted (ENV9, L/ENV18). During construction this area will be used as part of a temporary bridge arrangement to be provided over the Burn whilst

the existing A941 bridge is being replaced. Thereafter the temporary bridge will be removed and the area of ground will be reinstated as a landscaped amenity area. On this basis and subject to re-instatement, the bridge proposals are not considered to result in a departure from the plan.

Upstream of the A941, the Burn is bordered on both sides by the Rothes I3 designation. Given that the nature and extent of the proposed works are confined principally to the banks of the Burn and replacement bridges for access to the Distillery, the proposals are not considered to prejudice the reserved use for Distillery operations. The designation will benefit from a reduced risk of flooding.

Landscape and visual impact

During construction adverse landscape and visual impacts arise from engineering works associated with the new channel works, the removal of trees growing on or beside the banks, floodwalls in the rear gardens of residential property, extensive excavation within Rothes Park and demolition of property and bridges, not all of which are replaced. In landscape and visual terms there are both moderate and major adverse impacts depending on the area being assessed, whether along the whole length of the Burn, or within the town centre area around the A941 bridge, or within Rothes Park (Appendix 7). In addition to the significant changes within Rothes Park, changes in views and in the appearance and character of the townscape will be experienced in and around the area of the new A941 bridge crossing.

Within Glenrothes Distillery the smooth concrete floodwall arrangements contained within or located alongside the existing channel, and the replacement bridge structures are acceptable in policy terms. Together with the size and scale of the embankment proposed upstream of Glen Spey Distillery, these works are not significantly intrusive features.

Downstream from Glen Spey Distillery towards Rothes Park and beyond the works include the construction of concrete strutted channels immediately up- and down-stream of the A941 bridge plus rock revetment and scour protection within the channel. The ES indicates that once weathered, the latter will fit in with the surrounding landscape and whilst the channel will initially appear harsh, it will mellow with age. On some lengths of floodwall, some relief from a smooth concrete finish is afforded by introducing a patterned surface to the concrete (to resemble stonework). In the immediate area of the A941 bridge, natural stone will be used to reflect the surrounding finishes.

The channel details, the bridge designs including the new concrete A941 bridge, the new pavilion and the public conveniences are all considered satisfactory in policy terms, including L/IMP1 and L/IMP3, subject to conditions as recommended.

During operation of the scheme, identified impacts result from the retained engineered structures and replacement bridges and the lasting effects of tree removal. These are considered to have negligible adverse or beneficial impacts, the latter arising from the gradual re-establishment of replacement tree planting (Appendix 7).

Along the Burn of Rothes vegetation will be removed to implement the scheme. Whilst this could lead to increased surface run-off during construction, the ES considers the area of vegetation cover being removed as negligible compared to the overall catchment area of the Burn. The proposed mitigation measures are the same as those proposed for the Back Burn. According to the ES there will be no significant net loss of vegetation.

Within the construction area footprint, 245 trees will be removed from various locations along the Burn, including trees growing in or along its banks in areas where defences are required or proposed. Within Rothes Park, 30 mature trees along the footpath beside the Burn will be removed through channel widening and 30 trees will be felled behind Provost Christie Drive to provide new floodwalls and embankments. Given the high number of trees removed and the local effect of such removal, a moderate adverse impact is identified (Appendix 7). A number of mitigation measures are identified to address this impact. These are similar to those for the Back Burn although within Rothes Park, semi-mature (5 – 6m) high trees will be planted instead of whips (as proposed elsewhere) to give a more ‘instant’ beneficial impact after construction works are complete. Elsewhere, the adverse impacts of this extensive removal of trees from along the banks will, during the operational phase of the scheme, likely take a much longer time to become established and grow.

Whereas landscape information for the Burn of Rothes is given in much greater detail, compared with the other Burns, similar problems as highlighted for the Back Burn also exist and introduce uncertainty over the extent and amount of trees to be removed. Given that further landscape work is to be undertaken for the Rothes FAS (see Back Burn) and the potential to reduce the amount of tree felling, conditions are recommended regarding a revised landscape scheme to be submitted/approved before development works commence.

Disturbance and Disruption

With construction activity, minor to major adverse impacts of disturbance and disruption upon the local community, residential property and local business are identified across the whole of the Rothes FAS scheme. During operation of the scheme there will be beneficial impacts, in particular the reduced risk of flooding (Appendix 7).

Along the Burn of Rothes identified local impacts include intrusive noise generation. This is predicted to have a major adverse impact on various noise sensitive locations. Even with mitigation, for example using noise barriers, there may remain major adverse impacts. In some cases, the ES indicates that barriers may not be practicable. The Environmental Health Manager has recommended the provision of additional noise screens at all locations where a major adverse impact arises, for example along Provost Christie Drive, together with restricted working hours for construction activity and movement of vehicles (Appendix 5). As indicated for the Back Burn, a number of ‘generic’ or general measures to mitigate noise are identified in the ES.

Disruption and disturbance effects impacts associated with construction are likely on the local community, residential property and local business. These impacts range from loss of a shed (Victoria Bar), relocating/replacing bridges and a fuel tank (Glenrothes Distillery), replacing/relocating amenity facilities (pavilion and toilet block) and removal (without replacement) of two properties at Burnside Street. According to the ES, construction of the scheme is constrained by these two properties whilst the Rothes FAS benefits 80% of property in Rothes from reduced flood damage risk. Although removal will allow a temporary bridge rather than temporary closure of the A941, the weighting restriction on the temporary bridge will still cause disruption to through and local traffic, including commercial deliveries and public transport arrangements.

Construction activity will place other restrictions on traffic movements and parking. As with the Back Burn a number of general measures to mitigate these effects are identified in the ES. A Traffic Management Plan is to be prepared to manage transport during construction phase of the scheme (Appendix 5).

Pedestrian access will also be restricted to Rothés Park during channel widening. Movement across the Burn will be restricted during the replacement of some but not all pedestrian and vehicular bridge crossings although it is intended to phase these works to ensure that one bridge remains available for use at any one time.

Following consultation and to mitigate against any adverse construction impact on unknown archaeology, assessed as a moderate adverse affect for the whole of the Rothés FAS, a condition requiring an investigation is recommended, for example in relation to further construction activity between the new playground footbridge to the confluence with the Back Burn (L/ENV12) (Appendix 3, 5 and 7). The proposed works in the vicinity of the A941 bridge are not considered to prejudice the setting of the listed Parish Church (L/ENV14).

f) BLACK BURN

Structure Plan Policy 1, Policy 2

Local Plan Rothés ENV2, L/ED12, L/ED13, L/ENV4, L/ENV7, L/ENV10, L/ENV12, L/ENV13, L/ENV22, L/T2, L/T4, L/T7, L/F1, L/F2, L/IMP2, L/IMP3, L/IMP4, L/IMP5, L/IMP6, L/IMP7

All works within the Black Burn section of the Rothés FAS are located outwith the Rothés settlement boundary except the new underground surface water drainage system at the southern end of Rothés. Having regard to the nature, scale and location of the proposed works, no significant adverse effects are identified. Together with reasons to support identified departures from the development plan, the proposals are otherwise considered to comply with planning policy, subject to conditions as recommended.

Construction impacts, including the storage and movement of material and machinery are associated with the engineering and other works to form the new or re-aligned drainage channels the outfall, the cascade, the storage pond and embankment. These result in adverse impacts upon landscape character and visual amenity together with the disturbance of existing ground cover and vegetation (and ecology and nature conservation as considered above). In addition, construction impacts are identified upon residential property and business, and agriculture together with disturbance and disruption to agricultural land and practices, through and local traffic, access to property and footpaths (Appendix 7). Various measures to mitigate against these impacts are identified.

Apart from localised changes in landscape character and visual appearance, the main beneficial impact from the operation of the Rothés FAS is the provision of flood defences to reduce the risk of flooding and damage and disruption to property and traffic caused by such events. However, much of the area in the Black Burn catchment is agricultural and will remain susceptible to flooding hence the minor adverse rather than beneficial impact identified for this land-use during operation of the scheme (Appendix 7).

Departures from the development plan

The new storage pond south of Land Street is located immediately outwith the Rothes settlement boundary. Development proposals in such a location are not normally acceptable (policy L/ENV10). The new access formed off the A941 onto the proposed maintenance track on the embankment at the southern end of the storage pond is a departure in terms of policy L/T2 which, outwith settlement boundaries, presumes against new accesses onto the A941 and new development within 50m of the road. This latter restriction would also apply to part of the storage pond arrangement. In both instances a departure from policy can be considered.

The storage pond is an integral part of the scheme intended to address existing surface water drainage and flooding problems in the locality. Run-off will be stored within the pond prior to discharge downstream using existing/modified drainage channels into the River Spey. The pond will be formed by excavation and the surrounding area landscaped, affording views from nearby residences over the pond and to the surrounding rural area. Given its function, location, design and landscaping, the pond area will retain the existing rural character of the locality and not prejudice the objectives of this policy which seeks to maintain the distinction between town and countryside.

The new access formed onto the A941 is essential to the maintenance of the scheme, in particular the embankment and pond, the new railway embankment bridge and other works in the area. It will be closed to vehicular traffic other than maintenance vehicles, including heavy equipment and will be gated and locked. Following consultation, the Transportation Manager has not objected to the location of the access (and/or pond) in terms of road safety or road re-alignment interests (Appendix 5).

Impact on other designations

Downstream of the A941, parts of the re-aligned drainage channel works, the replacement footbridge and outfall to the River Spey are all located within an Area of Great Landscape Value (AGLV). Apart from the short-term construction impacts, the nature and scale of these elements are not significantly intrusive features within the landscape. As such they are not considered to prejudice the character and appearance of the AGLV (policy L/ENV7).

Land to the east of Rothes is designated as a SINS (based on biological and geomorphological interests). The works involved within the SINS area are relatively small-scale in nature and extent. As neither the ES nor any consultee has identified any significant adverse impacts arising from the scheme on the designation, the proposal is not considered to conflict with policy.

Landscape and visual impact

Moderate adverse impacts are identified during construction of the scheme. These include heavy plant and machinery and earth moving operations used to form the storage pond and earth embankment, the cascade, culverts under the A941 and the new or re-aligned drainage channels together with the loss of bankside vegetation and trees along the sides of the Burn, most noticeably at the cascade.

Operational impacts include the retention of the engineered features. Although initially these may appear harsh and unsightly on disturbed ground set within a rural landscape, the ES indicates that they will 'soften' through re-establishment of vegetation and landscape planting, resulting in a minor beneficial impact (Appendix 7). Subject to conditions as recommended, no significant adverse impacts are identified. The proposals are considered to comply with policy

including L/IMP2, although the impact of each individual element may be greater within its immediate area.

Works above the cascade on open farmland above the A941 are relatively small-scale in nature. These will not result in significantly intrusive features within the landscape.

The various drainage channel re-alignments, the footbridge and outfall works located downstream of the culverts under the A941 road are located on low lying land but will not significantly intrude into the landscape. The designs of these structures are considered acceptable in policy terms.

Although more visible from the A941, the construction impact associated with formation of the storage pond and embankment is for a limited duration. Once formed the area will be landscaped, thus reducing its impact in the longer-term. The maintenance track along the embankment will have a grass-reinforced surface.

During construction a number of mitigation measures are proposed. These are similar to those proposed for the other Burns but also include designated construction routes to limit impact on farm land and practices and removal from trees from the cascade area only if necessary.

Existing vegetation cover will be removed to implement the scheme. The ES considers there will be no significant loss of vegetation and any vegetation removed will be replaced. Given the conflicting information within the submission the applicant's consultants now indicate that 200 trees will be removed, including 134 trees from an area surrounding the cascade.

The ES seeks to ensure that the scheme fits in with the existing landscape and causes minimal adverse impact. However, the ES acknowledges that the cascade will be a 'noticeable scar' yet no attempt is made to show how this will be addressed. There is however general statements made about replacing more trees than those being removed (with two trees (whips) to replace each tree being removed) and only to remove trees at the cascade if necessary.

The submitted drawings only indicate an area in which trees are to be felled, which covers a much larger area than the footprint of the cascade. No drawings are presented to show the actual locations of trees being felled or retained, or replacement planting with the area to be clear felled. The route of the cascade is not overlain against the trees to show how the cascade 'fits' with the landscape and/or justifies the extent of proposed felling. The consultant's statement about the cascade being built in stone does not justify removal of trees. Similarly, the statement that the location of the cascade was chosen to avoid removal of more mature beech trees to the south neither justifies the wholesale removal of trees from this adjacent area nor addresses the acknowledged 'scar' that arises.

The applicant's consultants have adopted a 'precautionary principle' across the Rothes FAS based not on retention but on removal of trees, and on a 'worst case' scenario approach where there is uncertainty about the extent of tree/vegetation removal. This principle is unacceptable: had the consultants provided landscaping information to a similar level of detail as that undertaken for the Burn of Rothes, a more considered approach to addressing the landscape/visual impact of the cascade should have been possible. As noted above, further landscaping work is being carried out. Conditions are recommended requiring a revised landscape scheme to be submitted/approved before development works commence. The scheme

should safeguard the appearance of the cascade and demonstrate previously stated intentions to minimise the extent of tree removal and include proposals for replacement planting.

Disturbance and Disruption

With construction activity, minor to major adverse impacts of disturbance and disruption upon the local residential property and business and agricultural practices across the whole of the Rothes FAS scheme. During operation of the scheme there will be beneficial impacts, in particular the reduced risk of flooding to property and infrastructure but as noted above, agricultural land remains liable to flooding (Appendix 7).

For the Black Burn local disturbance and disruption effects include the drainage works on the road leading to the golf course, and the culvert works under the A941, affecting through traffic and access to local property. These impacts are of short-term duration and will require temporary arrangements to be in operation. The required Traffic Management Plan should address these impacts. Pedestrian access along the former railway line will be restricted during construction of the new footbridge.

Minor adverse disruption and disturbance impacts during both construction and operational phases of the scheme are identified in relation to agricultural land and practices through land-take, disturbance to livestock by plant and vehicles, temporary fencing and separation of field and/or altered field shapes/sizes and the remaining liability of agricultural land to flood.

No works will be undertaken within the Rothes Castle Scheduled Ancient Monument (SAM) i.e. the Rothes ENV2 designation. The new drainage ditch is located some 20m beyond and outwith the SAM boundary and this will not adversely affect the setting of the SAM.

A site compound between the ditch and the SAM boundary is proposed. Historic Scotland express concern over the location of the compound, yet the applicant's consultants indicate that there is no other suitable location for the compound (Appendix 5). Given the short-term duration and use of the compound and subject to all compound activity, including materials and machinery being contained within the compound area at all times and the land being re-instated to its existing condition upon completion of construction works in the area, the proposal is not considered to have an adverse long-term impact on the setting of the SAM (policy L/ENV13).

Works in the Chapel Hill area include a new ditch and access track. To mitigate against disturbance to this known archaeological site, an investigation is required (Appendix 5).

At 90 High Street and at Blackburn Cottages, major adverse noise impacts are identified in connection with drainage pipework to the storage basin and the construction of the U-shaped drainage ditch and culvert under the A941 respectively. For most, but not all, of the identified works described in the ES noise barriers would mitigate noise. The provision of additional acoustic screens at certain noise sensitive property forms part of the Environmental Health Manager's recommendations on the proposal (Appendix 5). Other general measures to mitigate noise are considered elsewhere in this report.