Public Consultation Report – Full Version

WA11 (Task 202)

Comrie Flood Protection Scheme

Perth & Kinross Council

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Appendices

1 Introduction

A public exhibition was held in Comrie in April and May 2019 to present the proposed outline design for the Comrie Flood Protection Scheme to the local community.

The purpose of this report is to provide information on the public consultation exercise that has taken place to date. The report summarises the recent public exhibition and;

i) records all of the comments provided by the local community to the Council and the design team prior to, at, and subsequent to, the exhibition;
ii) identifies common themes amongst those comments and;
iii) provides responses to any concerns raised.

2 Consultation

Public consultation is a key to the successful delivery of any flood scheme. The Council aims to encourage public engagement when developing a flood scheme with the intention of allowing the community to inform and 'buy in' to the final proposals.

Overall, this should lead to better decision making and to the establishment of on-going dialogue and relationships with the community well in advance of 'publishing' the scheme or the future construction works. This should lead to better level of satisfaction within the community and a greater chance of successfully implementing the scheme for the good of the local residents and businesses.

An overview of the public consultation activity undertaken to date is provided below.

2.1 Previous Consultation (Feasibility Stage)

A public exhibition was previously held in Comrie during the feasibility stage of the project. This was held in Comrie Community Centre from 2-8pm on 1st and 8th September 2016.

Representatives from the Scottish Environmental Protection Agency (SEPA) and the Scottish Flood Forum (SFF) attended these events to help raise awareness of flooding, to encourage sign up to flood warnings, and to help inform the local community how to become more prepared and resilient to deal with flooding.

These events also provided an opportunity for the Council to inform local residents as to the current understanding of flood risk in Comrie at that time. The Council's consulting engineers, Mouchel, were available to describe the wide range of potential options they had considered for managing flood risk in Comrie. Information on the preferred option (involving walls and embankments) was also provided.

The exhibition was very well attended by the local community demonstrating a high level of interest in the flood scheme proposals. An estimated 120-150 people attended over the two days.

Feedback from the consultation confirmed that the community recognised the need for a flood protection scheme and were generally in favour of the preferred option put forward by the Council's consulting engineers, Mouchel.

A community Question and Answer (Q & A) document was produced following the exhibition. This document and the display materials are still available to view online at;

www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study

2.2 Outline Design

Following the completion of the feasibility phase, consulting engineers, Sweco, were appointed to develop the Council's preferred flood scheme. Their work involves developing the proposed outline design in sufficient detail to allow the scheme to be published under the Flood Risk Management (Scotland) Act 2009.

As the scheme has developed throughout the outline design process, various on-going consultations have taken place. Individual meetings and discussions have been held with the following major interest groups:

- British Horse Society (BHS)
- Comrie Community Council
- Comrie in Colour
- Construction professionals
- Emergency Services (e.g. Scottish Fire and Rescue Service, Police Scotland)
- Scottish Forestry
- Perth & Kinross Council - various internal departments (e.g. Community Greenspace, Planning, Roads, etc)
- Public Utilities (e.g. Scottish Gas, British Telecom, SSE)
- Scottish Environment Protection Agency (SEPA)
- Scottish Water
- Various landowners on/adjacent to land where works are proposed.

The Council has consulted the vast majority of affected landowners but there are still (at the time of writing) a few that we have unfortunately not managed to meet with. This may because the landowner has decided not to meet with us or may live remotely from the Perth and Kinross Council area. The Council will continue to attempt to discuss the flood scheme proposals with those parties.

As well as the various meetings, the Council has also tried to keep the wider community up to date via a dedicated webpage and by issuing community newsletters at key stages in the project.

2.3 Outline Design Public Exhibition Events - 30th April & 8th May 2019

A public exhibition, displaying the proposed outline design, was held in the Comrie Community Centre (known locally as the 'White Church') on 30th April & 8th May 2019. The events were scheduled between 2pm – 8pm on both days.

The local community was invited to attend the exhibition through the distribution of newsletters, personal letters/emails to interested parties and also through advertising posters displayed at local locations. The Council prepared a press release with details of the event appearing in 'The Courier' and on the Council's Twitter and Facebook pages.

Figure 1 – Perth & Kinross Council Facebook post advertising the public exhibition

The exhibition itself comprised the following:

- A central display comprising 11 poster boards explaining the proposed outline design in detail and the legal process;
- A full set of the proposed scheme outline design drawings;
- Proposed scheme computer-generated visualizations at key locations (see Figure 2 below).
- Flood maps showing the river modelling results for the current (baseline) situation and with the proposed scheme in place;
- A looped power point presentation by the Council providing background information on other action to raise awareness of flood risk and improve flood resilience in Comrie.

Figure 2 – Example flood scheme visualization for Strowan Road, Comrie

Tables were also set up to allow those attending to sit and view the available information and to discuss the proposals with the officers present. Members of staff from Perth & Kinross Council's flooding team were available to discuss the proposals; as were members of staff from Sweco. On the 8th May event, SEPA and the Scottish Flood Forum were also in attendance and participated in advisory discussions with the community.

Both exhibitions were well attended, with approximately 80 attendees each day.

At the close of the consultation event, the posters and flood maps comprising the central display were left at the White Church to give the community an opportunity to view them if they had been unable to attend on 30th April and 8th May. Additionally, the materials presented at the exhibition events have been available to view on the Council's project webpage since 30 April. The project webpage is updated regularly as and when new project information becomes available:

www.pkc.gov.uk/comriefloodscheme

The Council also made use of its new Consultation Hub for the public consultation:

https://consult.pkc.gov.uk

Information from the public exhibition, along with a link to the Council's Consultation Hub, can be found at:

www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design

2.4 Opportunity for Comment

Blank comment forms (shown in Appendix A) were provided to allow the local community to formally record their comments. These forms could either be returned on the day of the exhibition or posted back to the Council in a pre-paid envelope. 43 members of the community provided written feedback on these forms or by email directly to the Council's flooding team.

The Council and Sweco have collated all of the comments provided at the public exhibition, in any subsequent meetings and through direct discussions. These are provided in Appendix B together with the Council's response to each comment.

To comply with GDPR and Data Protection requirements, individual consultees have not been named for confidentiality reasons. In some instances the actual comments made have been amended and presented in this report so as to protect the identity of individual consultees. Please note that some of the comments received may have not be presented in Appendix B. They may have been deemed not relevant to the Scheme itself, or we have been unable to be anonymise the comments as they are very localised in nature. Individual responses have been sent to consultees who made comments of this type, but these have not been presented within this report.

Section 3 below provides an overall summary of the comments received following the community consultation exercise.

3 Local Community Feedback

In general, the impression received from the public consultation was that the local community continues to support the flood scheme. It was understood that an 'outline' design has been consulted on at this stage and that further detail has yet to be defined. Many discussions were held with members of the community on the direction in which the scheme is likely to progress during the subsequent detailed design.

A number of questions, comments and concerns were recorded, and the key issues are summarised within this section of the report as 'themes'. A general response to each theme is provided below. This allows those with an interest in the scheme to understand the key issues raised by the community and to see the Council's response to each.

3.1 Themes

This section identifies the key issues or themes that were raised in the community responses to the public consultation. A response is also provided to each of the

themes, which are listed alphabetically alongside the Council and Sweco's joint response.

3.1.1 Access to the River (Boulevard area)

Access to the river was a frequently noted topic; with the area of most interest being the 'Boulevard' – an expanse of green space on the north bank of the River Earn just downstream of the Dalginross Bridge.

The Council and Sweco have attempted to ensure that the area was kept as accessible as possible and that access from one side of the proposed flood defence wall to the other could be maintained. This included the provision of stepped and ramped access points along Commercial Lane. A vehicular access was also provided for Scottish Water towards the end of Ancaster Lane.

Ramps were proposed in the outline design to provide access over the flood wall. However, some consultation responses noted these were felt to be intrusive and cited a preference for flood gates in the area as an alternative.

Some respondents stated that if access ramps must be provided in this area, that there would be a strong preference to have them as hidden from view as possible or to have them located elsewhere.

Access requirements for wheelchair users were also highlighted, including the potential problems associated with unsurfaced paths.

It was also noted that this area is currently used as an event space; particularly in the summer during the Comrie Fortnight and that the flood scheme proposals would potentially affect access to the associated events.

3.1.1.1 Access to the River (Boulevard area) – Response

The Council has noted from the responses received that the proposed access provision in this location was not popular with local residents. The design has therefore been amended in the boulevard area in a number of ways. The visual impact and land take have been reduced by:

1. Removing the 1:20 pedestrian access ramp that had been proposed at Commercial Lane and relocating it elsewhere; and
2. Removing the road access hump proposed at Ancaster Lane.

The revised proposal is shown in Figure 3 below.

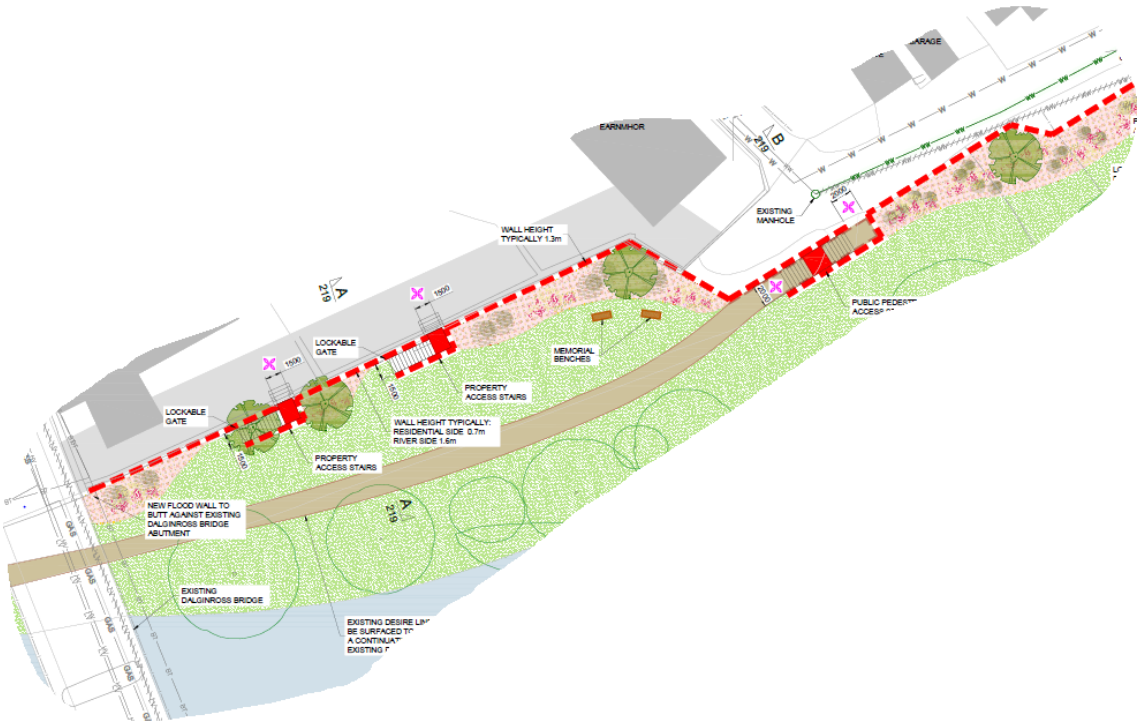

Figure 3 – Revised outline design of boulevard area (including removal of pedestrian access ramp)
Note – Full size versions of the revised drawings are available at www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design

The removal of the pedestrian access ramp originally proposed at this location has meant that the Council has had to seek an alternative way to maintain access to the riverbank for those with mobility issues. The Council's revised proposal is to use the existing access from Bridge Street located at the west side of Dalginross Bridge. There is already an existing ramped access here but it is too steep for some people to use in its current form. This area will therefore be altered and re-landscaped to improve access for wheelchairs, bikes and buggies to the riverbank and the boulevard area.

The proposals still include a stepped pedestrian access at the bottom of Commercial Lane but this has been relocated further away from adjacent properties to help reduce its visual impact. This will also maintain the privacy of those properties by ensuring that they won't be overlooked by those using the steps.

These proposed changes will still not allow vehicular access to the boulevard area and this is required at present for events during the Comrie Fortnight. The Comrie Fortnight committee has been consulted on this matter and are willing to re-locate their events from the 'boulevard' to Legion Park on the understanding that the vehicular access to Legion Park will be improved and a hard standing area will be provided for future events. The Council has agreed to this proposal and has also agreed that any improvements will take place at a time that ensures an events space is always made available. The Council's intention is therefore to carry out this work during the detailed design process (after flood scheme has been confirmed under the Flood Act).

Vehicular access to the Scottish Water assets at the weir on the River Earn must be maintained. We now propose to provide this by way of a flood gate from Manse Lane rather

than via a ramp at Ancaster Lane. This flood gate would remain permanently locked and would only be opened by the Council, upon request from Scottish Water.

A separate, locked, private stairway for access to the riverbank is also proposed at this location to maintain the existing access to the river for the local landowner.

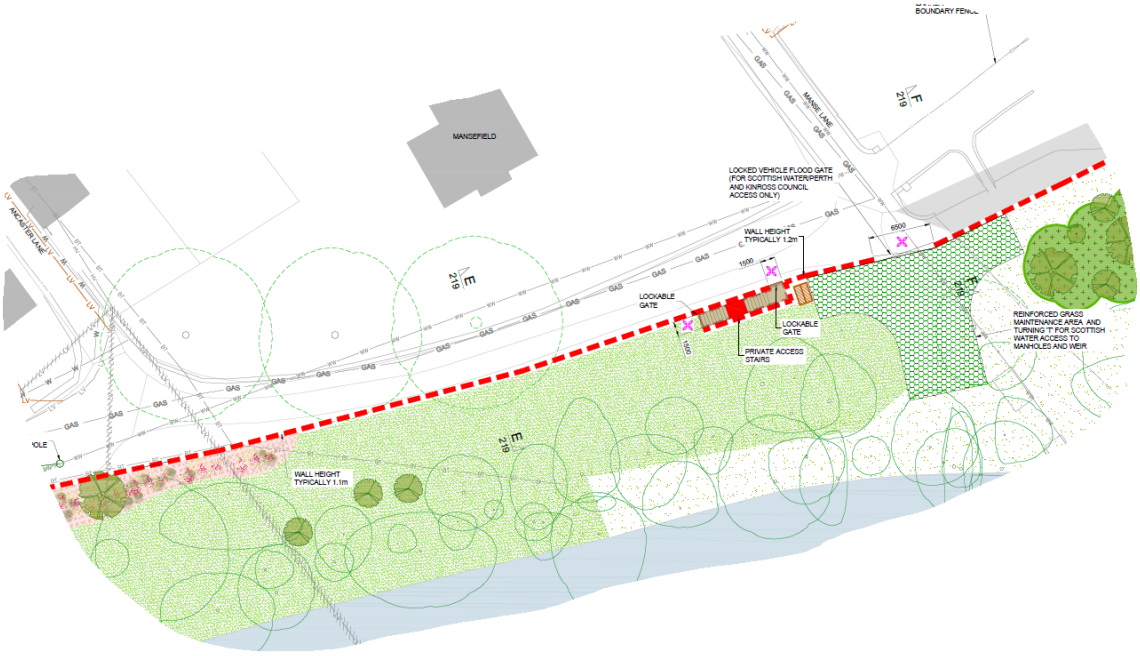

Figure 4 – Re-worked Scottish Water access at the Earn Weir
www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design

In general, flood gates are not the Council's preferred option for providing access to the river bank. This is because the rivers can rise rapidly leaving the Council with insufficient time to respond to close gates. However, in this particular instance, the proposal is to keep this gate closed at all times (other than for short periods of time when required for access) so that this risk is adequately managed.

3.1.2 Biodiversity and Tree loss

Comments were received noting concerns about the numbers of trees which may need to be removed to accommodate the proposed flood scheme.

3.1.2.1 Biodiversity Tree loss – Response

The Council is promoting a scheme that will not only protect people and property from flooding, but will also safeguard the local environment where possible.

The construction of the scheme will result in potential disruption and environmental impacts. The Council is therefore working hard to minimise these impacts and has engaged Sweco to carry out an Environmental Impact Assessment. Vegetation and wildlife surveys have been

carried out over several years to support this process and the findings have been used to inform the outline design of the proposed flood scheme. Sweco's environmental team have considered the natural environment throughout the design process, ensuring that each design decision is tested in an attempt to ensure the Scheme offers the best outcome for Comrie's natural environment, including its biodiversity and trees.

While some tree loss is necessary, this will be mitigated with compensatory planting. The current proposal is to plant three times the number trees that will be lost during construction. Where appropriate, greenspace areas will be planted for wildlife and include glades that are sown with wildflowers to encourage butterflies and other insects. The proposed project will ensure that otters, birds and bats are all encouraged to remain and thrive in the area once the flood scheme is complete.

An Environmental Statement will be published at the same time as the scheme, setting out how these impacts and how they will be minimised.

3.1.3 Climate Change

Climate change was a topic brought up by several people in discussion with the Council and Sweco. Consultees asked if the impacts of climate change may reduce the effectiveness of the flood scheme in the long term.

3.1.3.1 Climate Change – Response

Climate change is predicted to result in more frequent and severe flooding in the future. As such, the most up to date climate change projections can be built into the design of flood defences to make sure they are fit for the future.

The Council and previous consultants, Mouchel, did carefully consider future climate change for Comrie. Appropriate increases to current predicted river flows were agreed with SEPA. These increased flows were considered during the earlier feasibility work carried out for the flood scheme up to 2016. However, a decision was taken at that time to not include a climate change allowance within the flood defence heights. This is because a climate change allowance would typically result in flood defence heights increasing by a further 600mm. It was considered that this would mean the flood defences would be too imposing and would have a high impact on neighbouring properties and the visual appeal of the village.

The Council and Sweco are aware that there is a balance to be found between reducing flood risk and the potential impacts on the local community and landscape. It is therefore considered appropriate for the Scheme to continue with the current proposed (1 in 200 year) standard of protection without a further allowance for climate change. This will provide a high level of protection for the village and is consistent with the public consultation carried out at the feasibility stage of the project in September 2016. This same scheme was also approved by the Council's Environment, Enterprise and Infrastructure Committee in 2017.

3.1.4 Economics and Funding

Questions regarding the potential for the estimated cost of the proposed flood scheme to increase in future were submitted. We were also asked what the Council's plans would be if costs escalated.

3.1.4.1 *Economics and Funding – Response*

Cost-benefit analysis (CBA) is used to justify spending money on flood schemes. The 'cost' within a CBA is the full price of a scheme and includes the design, construction and maintenance costs. The 'benefit' is how much a scheme reduces flood risk and the resulting flood damage (i.e. how much flood damage is avoided). Ideally the benefit of a proposed flood scheme will be greater than its cost. This means that the scheme will return a net benefit to the economy over its lifetime.

A number of factors such as design changes, inflation or unforeseen issues could potentially increase the cost of a flood scheme. This could then result in the cost outweighing the benefit. This would mean that the scheme would result in a net cost to the economy over its lifetime (rather than a benefit). This could potentially lead to the proposed scheme being re-designed (to reduce its cost) or being cancelled altogether.

The proposed flood scheme in Comrie is currently estimated to have a benefit/cost ratio of 1.6, which means that the benefits will outweigh the cost. The estimated costs also include a contingency to allow for potential increases, while making sure that the economic case remains viable.

The Council and Sweco are aware of the balance between meeting the expectations of all parties and maintaining the economic case for the flood scheme. The design team will act to maintain the economic case in the best interests of the households of Comrie.

Funding is in place to deliver the flood scheme. The Scottish Government will fund 80% of the capital cost of the flood scheme (based upon the costs for the design, professional fees and the construction tender) and the Council will fund the remaining costs. Both the Council and the Scottish Government have committed the funds required for this project, subject to the Scheme securing the necessary statutory approvals. The amount of funding required is reviewed on a regular basis.

3.1.5 Feasibility Stage

A number of comments were received regarding the previous feasibility work from 2016 that considered various potential options for the flood scheme. Questions were raised about reasoning behind why certain ideas had been discounted.

Several respondents believed that the concept of floodplain storage and storage in the upper catchment should be looked at before flood defences are constructed in the town. Dredging was also mentioned by some.

Further comments were centered upon the idea that planting trees and reducing surface water run-off in the upper catchment could help the situation.

3.1.5.1 *Feasibility stage – Response*

The feasibility stage of the project explored a wide range of potential flood management options including dredging, walls and embankments, upstream storage, and natural flood management. Walls and embankments were recommended for various reasons with the other options being ruled out. More information on the feasibility study and its outcomes can be found on the Council's website at www.pkc.gov.uk/comriefloodscheme

The feasibility study was concluded when the preferred option (flood walls and embankments) was approved by the Council's Environment, Enterprise and Infrastructure Committee on 6 September 2017. The committee's decision was taken in the light of previous community consultation as well as the technical information available at the time.

3.1.6 Height of the flood embankments (South of Camp Road)

A number of residents noted concern over the proposed height of the flood embankment proposed on the western edge of Dalginross (to the south of Camp Road). They asked specifically why the proposed flood embankment needs to be higher than the existing one.

The need for this flood embankment, along with its potential impact on views and proposed fence lines, were also mentioned.

3.1.6.1 Height of the flood embankments (South of Camp Road) – Response

The existing flood embankment in this location was built in the 1960's. This embankment is therefore nearing the end of its design life. Without intervention, the embankment would degrade over time and would not provide an adequate level of flood protection. Failure of the embankment will become increasingly likely unless it is refurbished and/or replaced in the near future.

In 2012, the flood embankment was overtopped by flood water on two occasions. Works were carried out in 2013 to help reduce the risk this occurring again. However, we have always been aware that the risk of flooding remains if rarer and larger flood events occur. Our flood modelling work has confirmed that in a larger flood event, there remains a risk that the flood embankment could be overtopped resulting in flooding to the residential area behind it. The existing embankment will therefore have to be raised to provide the required (1 in 200 year) standard of flood protection consistent with the wider flood scheme.

The flood embankment built in 2013 at the end of Camp Road (the 'road hump') also requires to be raised to provide the same standard of flood protection.

Unfortunately, the current arrangement of these flood defences, and the condition of the embankment to the South of Camp Road, does not allow them simply to be increased in height. New flood defences are therefore required in this location.

The Council has considered the use of a flood wall at this location as a potential alternative. In general, flood walls require to be built with less freeboard and can be built to a slightly lower height. However this difference in height is unlikely to make a significant difference. A wall would also not be in keeping with the surrounding area and would have a greater impact on the existing landscape than the current embankment proposal.

Replacing the existing flood embankments with a more modern, higher and more robust embankment with an improved standard of flood protection therefore remains the only option available.

3.1.7 Landscaping and visual

Comments were received regarding the landscaping proposals – these were mostly positive. A few concerns remain about the visual impact of the proposed flood defences.

Some respondents noted a preference for whinstone finishes on the flood walls in the vicinity of the River Lednock rather than the pink sandstone that had been proposed as they generally felt this would be more in keeping with the tone of the village.

Some respondents disliked the idea of traffic calming measures being installed on Strowan Road but more responses were received that actually supported this proposal.

There were also some concerns about the potential loss of views in some locations.

3.1.7.1 Landscaping and visual – Response

(1) Stone Cladding

The design team will review the design with respect to the proposed stone cladding and wall finishes. This will be subject to a condition in the planning consent for the flood scheme. The design team will liaise with the Council's Conservation Officer and the Planning Service to select the most appropriate finishes at each location. It is likely that samples of any proposed materials will have to be provided and agreed with the Planning Officer. The Council will take account of the views of the community in this process to ensure that any materials selected are in-keeping with the village.

(2) Traffic Calming

The proposed traffic calming was favoured by a slim majority of consultees. The proposal will enhance the overall design of the flood scheme as it is intended to:

(i) help protect the flood wall from potential vehicle collision;
(ii) provide small areas of improved drainage; and
(iii) soften the visual impact of the proposed flood wall by incorporating some new planting.

These features will therefore remain part of the Council's proposals. We will continue to work with the Council's Road Safety team to ensure that the proposed traffic calming does not create any unforeseen safety issues.

(3) Loss of Views

Loss of views can be a sensitive issue. The Council is aware that introducing flood defences will potentially impact on views in certain locations. The Council has therefore worked with Sweco and local residents to reach a balance between reducing flood risk, the proposed flood defence heights and the potential impact on properties within the village.

The Council has minimised the proposed flood defence heights wherever possible. This helps to prevent them becoming 'imposing'. The proposed flood defence heights have been set to maintain a consistent standard of flood protection throughout the flood scheme. No gaps are proposed in the flood defences at individual properties for instance.

The visual impact of the flood scheme has been considered as part of the Environmental Impact Assessment and appropriate mitigation measures will be taken. This includes landscaping proposals, including the provision of new planting, and the specification of high-quality finishes to mitigate the visual impact of the proposed flood defences. There are a few locations where the available forms of mitigation are limited and there are few options available to the Council if we are to deliver on the primary aim of the flood scheme to protect homes from flooding.

3.1.8 Maintenance

Maintenance of walls, fences and other scheme-related structures attracted several queries. Some consultees were concerned that the Council would not maintain the scheme following construction.

In particular, the area just downstream of the Dalginross Bridge on the north bank of the River Earn (known as 'the boulevard') attracted several comments as the land ownership in this area is relatively complex. Fencing was also noted by several respondents.

3.1.8.1 Maintenance – Response

Once the proposed flood scheme is built the Council will have a duty to maintain and repair the defences under the Flood Risk Management (Scotland) Act 2009. Regular routine inspections of the flood defences will be conducted and operation and maintenance procedures will be implemented. Inspections will also be carried out following flood events and repairs and maintenance works will be carried out as required.

Most areas of garden ground will be returned to homeowners to maintain. For fence lines, maintenance responsibilities will be mixed. If the fence is new and has been built for the purposes of the Scheme only, then the Council will maintain it. Where a new fence is proposed to replace an existing fence or hedge then it may return to the landowner to maintain as part of their garden. This will be discussed residents and landowners individually at detailed design stage.

3.1.9 Natural Flood Management

Some responses asked if the use of Natural Flood Management has been considered as part of the proposed flood scheme.

3.1.9.1 Natural Flood Management - Response

Natural flood management (NFM) typically involves using natural features in the landscape to slow or store flood water. When used in the upper catchment areas of watercourses, this can reduce peak flows in the urban areas downstream. Such works are normally carried out at a small scale, however a large number of separate sites and actions can be implemented to

build up a cumulative effect. This is true even in small catchments. In larger catchments, such as those in Comrie, the effect of NFM on flood levels during extreme events is very difficult to estimate and its effectiveness is still unproven.

As part of the initial feasibility work for the flood scheme, the Council's consulting engineers estimated the potential impact these techniques could have on the catchment in terms of reducing flood risk. They found that even extensive work in the catchment would not to reduce flood levels significantly for large flood events and that other flood defences would still be required. Furthermore, it would take a number of years to implement these measures and their benefit would not be realised for some time. The three river catchments at Comrie are relatively large and are very steep and so NFM measures were discounted as part of the scheme.

3.1.10 River Bank Erosion

A number of responses expressed concern about the ongoing erosion which has been observed in the rivers around Comrie. Consultees asked how these areas may be dealt with as part of the flood scheme.

The comments noted numerous locations throughout the village where river bank erosion has been identified by the community, with particular concerns that bankside paths could potentially be lost in the future. Specific worries were raised with regards to areas on the River Lednock (near the Millennium Footpath), the Water of Ruchill, and the River Earn.

One respondent commented that the proposed 'green matting with plants' was, in their opinion, unlikely to be effective in preventing erosion.

3.1.10.1 River Bank Erosion – Response

River bank erosion is present to some degree on the Water of Ruchill, the River Earn and the River Lednock. This is part of the natural river behavior and results in river bed material being transported downstream and deposited in other parts of the river. In the case of the Water of Ruchill, the river is braided and has changed its position many times.

The proposed flood protection scheme is not intended to prevent, or interfere with, these natural processes as it is better to work with nature, rather than against it. This is one of the reasons why the flood defences have been set back away from the river, where possible.

Erosion protection has been incorporated into the proposals at some locations to protect the proposed flood defence structures as well as the adjacent river bed and banks.

For example, the existing rock armour on the east bank of the Water of Ruchill, (near the Field of Refuge) is currently deteriorating and requires to be replaced. If allowed to deteriorate further, then river bank erosion could threaten the existing and proposed flood walls. This existing structure is therefore proposed to be replaced with much more extensive and natural bank protection.

The proposed use of 'green matting' on the north bank of the River Earn is only designed to protect the river bank for a short time. This will allow the new riverside planting to become established and to prosper. Tree roots will eventually bind the river bank together providing a natural and robust means of erosion protection, similar to the present-day situation on the Dalginross side of the river.

The existing erosion on the River Lednock, upstream of the Laggan Footbridge will not be addressed as part of the flood scheme. The erosion at this location will not be worsened by the flood scheme and any continuing erosion at this location will not compromise the proposed flood defences. The primary responsibility for addressing river bank erosion rests with the riparian landowner and this remains the case at this location.

The materials and planting used in the proposed river bank protection work will be specified by an expert contractor with experience in designing and installing such systems. The Council will monitor the performance of any installed erosion protection and undertake maintenance if required.

3.1.11 River modelling

Some of the comments received noted surprise at the flood extents displayed on the flood mapping. Some thought the hydraulic model was either over-predicting or under representing the actual degree of flooding. There were also some concerns that the flood maps presented at the public exhibition were not the same as shown on SEPA's indicative flood map which can be viewed on line.

Other comments were received noting that:

(i) the effects of water backing-up in the rivers may not have been fully thought about;
(ii) the existing weir on the River Earn is exacerbating the flooding problems, and;
(iii) the flood risk may be passed on further downstream.

Overall, the comments on the flood modelling reflected a need for more clarity on the flood mapping.

3.1.11.1 River Modelling – Response

Hydraulic modelling of the three watercourses in Comrie has been carried out based on ground and river survey data. A large amount of data was gathered and input to ensure that the model accurately represents the actual local conditions. The model has been checked, audited and calibrated against observed flooding and local conditions.

(1) SEPA Indicative Flood Map

SEPA's flood maps provide an indication of the flood hazard across the country. The wide scale national approach required to produce the maps carries some assumptions and inherent uncertainty. The maps are therefore strategic in nature and apply at a community level and are not appropriate for assessing the flood risk to individual properties.

The Council engaged consulting engineers, Mouchel, and more recently Sweco, to develop more detailed hydraulic modelling and flood mapping for the proposed flood scheme. The current flood map, as developed by Sweco, does not match SEPA's medium likelihood flood extent (the 1 in 200 year flood), but it is reasonably similar. The use of the Sweco flood model is considered to be the most appropriate for understanding flood

risk in Comrie and for developing the flood scheme. The differences between the flood maps originate from using more accurate flow inputs and more detailed survey data which is specific to the local area in Comrie.

It should be noted that the flood model and its inputs have been reviewed by SEPA and they will make use of the Council's flood maps in future updates of their on-line indicative flood maps.

(2) Water Backing Up in the Rivers

Sweco have fully considered the upstream and downstream impacts of the flood scheme on potential water levels, velocities and flows. In general the flood scheme will significantly reduce flood risk to properties in the area. However, where flood risk is shown to have increased in any location that may affect property, the Council has agreed to undertake works to mitigate these impacts in the future. There are only a small number of properties affected by the proposed scheme in this way and the impacts are small. The Council has already approached all of those concerned directly.

The rivers have large flood plain areas upstream and downstream of Comrie and these can cope with a very large volume of water. There is no significant change in flood levels in these floodplain areas. The Council will write to the relevant landowners to confirm this.

(3) Weir on the River Earn
Scottish Water have a sewer that crosses the River Earn in the vicinity of the boulevard. The sewer is located beneath the weir. In flood conditions, the weir is 'drowned' and has little effect on river flood levels. It is not exacerbating flooding and its removal, or works to lower it, would have no wider benefits in terms of flood risk. This was studied in detail during the earlier feasibility work carried out by the Council in 2016.

(4) Flood Risk Further Downstream

See response to question 2.

3.1.12 Surface water
Some comments were made with regard to continuing ponding from drainage along roads in Comrie and if this is likely to be resolved.

3.1.12.1 Surface water – Response
Placing a new flood defence between the river and the village creates a barrier for rain water which would normally flow overland and in to the river. This could put more pressure on the drainage systems in the town resulting in surface water gathering behind the defences. The proposed flood defences will therefore include additional drainage to collect and discharge this water to the river. This drainage will be located just behind, i.e. on the dry side of, the flood defences. This will help to reduce the risk of unwanted surface water. However, this drain will only be effective in the vicinity of the flood defences and is not intended to remove all of the localised surface water that may currently exist in other areas of the village.

Surface Water flooding issues reported along the A85 for instance, will remain the responsibility of BEAR Scotland and are outwith the scope of the proposed flood scheme to address.

3.1.13 Timescales

A number of queries were received regarding future phases of work and when these will occur, e.g. when will construction start? How long will it take? Will construction start at one end of the village? etc.

3.1.13.1 Timescales – Response

Details of the project timeline are available on the Councils website at www.pkc/gov/uk/comriefloodscheme.

This community consultation report will bring the informal consultation to a close.

In the coming months the Council will formally publish the proposals for the flood scheme under the Flood Risk Management (Scotland) Act 2009. It was anticipated that this would take place in 2019; but is now scheduled for early in 2020 so as to avoid any overlap with the Christmas holidays.

Once published, there will be a 28 day period for any person who may have an interest in the flood scheme (including local residents and landowners) to object should they so wish. Such objections can take time to resolve, but the Council have sought to minimise these through early consultation with the community.

Once the Scheme is approved (or 'confirmed') the Council will have the legal power to build it and will be able to proceed with securing the remaining statutory consents and to commence the detailed design. This phase is expected to take approximately 12 months.

Tendering and construction will follow on from this. The construction programme will be set out in the successful Contractor's tender. The work will be programmed depending on the availability of labour, plant and materials and the contractor will look to be as efficient as possible in delivering the works. It is likely that several parts of the scheme will be under construction at any one time.

It is anticipated that the main construction works will take between 18 and 24 months. However, it is likely that some preparatory works will take place prior to this period, and that some landscaping works will continue beyond it.

Please be assured that no one will begin construction works on any private ground that without suitable notice being provided.

In summary, due to the large number of issues to be considered, the statutory requirements and the complexity of the engineering work, at this stage it is difficult to provide a fully detailed programme for the works. The Council and Sweco continue to progress the scheme as quickly as possible. At present it is hoped that the main construction works will commence during the 2021/2022 financial year.

3.1.14 Wall alignments and positioning of defences

Some queries were raised about the proposed locations and positioning of the flood defences. We were asked if defences could be moved closer to the river in a number of locations.

3.1.14.1 Wall alignments and positioning of defences – Response

The proposed locations of the flood defences have been optimized using a number of criteria. The Council does not want to segregate people from the river and so the outline design of the flood scheme has been developed so as to maintain connectivity between the town and the river. Maintaining this connectivity generally requires some space to be provided on both of sides of the flood defences.

This approach has the added advantage of working with and making space for the rivers in times of flood. It allows the rivers to break their banks and to flood over a wide area. If the river floodplain was constrained by the new flood defences then water levels would be raised higher and so the flood defences would also have to be built higher. This would also increase the associated visual impact of the proposed scheme and is something we want to avoid.

It is also important to maintain the height of the defences at a relatively continuous level. Even if the adjacent ground levels in an area vary, the flood defences still need to be at a continuous height to keep the water out of the town. As such the outline design has located the defences at changes in the natural contours and breaks in slope were possible. Locating flood walls closer to the riverbank would mean that they would cross these natural slopes as the banks drop towards the river.

Locating flood defences right at the river bank or in the water increases the complexity and cost of the construction works and means that erosion protection measures are also required.

The alignment of flood walls have also been set as to minimise any tree loss and visual impact were possible. Providing some space around the flood defences also provides access for future maintenance works.

The above reasons explain why the flood defences have been located back from the water's edge where possible. However, some minor alterations have been made to the outline design based on community comments. It should also be noted that alterations to the proposed defences on one part of the river can require small alterations elsewhere as well.

4 Conclusion

A public exhibition on the proposals was held in Comrie on 30 April and 8 May 2019. The exhibition was well attended (approximately 150 people over the two days), demonstrating a high level of interest in the proposed flood scheme. Perth & Kinross Council would like to thank those residents who took the time to attend and provide feedback.

The response to the exhibition was generally positive with the majority of the community being supportive of the proposed outline design for the flood scheme. Some concerns were raised and these have been summarised and addressed in this report. The Council and Sweco have responded in writing to any concerns that have been raised and, where possible, amendments have been made to the proposed outline design. Details of the revised outline design have been made available to the community at the same time as this report.

The proposed Comrie Flood Protection Scheme is therefore to be published under the Flood Risk Management (Scotland) Act 2009, in order to secure the necessary statutory consent. Once this is in place, the detailed design of the scheme can proceed.

The Council will continue to consult with the local community and particularly with those landowners who may be directly affected by the proposed scheme.

If anyone wishes to discuss further any aspects of the proposed scheme, then please contact:

Craig McQueen
Engineer (Flooding)
Structures & Flooding
Perth & Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

Telephone: *01738 475000*
Email: *Comriefloodscheme@pkc.gov.uk*

Appendix A – Comment Form

Comrie Flood Protection Scheme
Community Drop-in Sessions – May 2019
Comment Form

Contact Details (optional)

Name:	
Address:	
Email:	

If you have any comments, then please provide details below:

Thank you for your comments. Please either pass this comment form to a representative of Perth and Kinross Council during the drop-in session, send it via email to ComrieFloodScheme@pkc.gov.uk or post it to: Craig McQueen, Engineer (Flooding), Structures & Flooding, Housing and Environment Service, Perth and Kinross Council, Pullar House, 35 Kinnoull Street, Perth, PH1 5GD.

HOW WE USE YOUR PERSONAL INFORMATION

The information provided by you will be used by Perth & Kinross Council to deliver the requirements of the Flood Risk Management (Scotland) Act 2009 and any subsequent action taken to manage flood risk. Where there is a specific need the information may be shared with suppliers, other responsible authorities and government agencies in order to manage flood risk. In addition, the information may be shared with neighbouring landowners affected by flooding or any action taken to manage flood risk.

The Council may check information provided by you, or information about you provided by a third party, with other information held by us. We may also get information from certain third parties or share your information with them in order to verify its accuracy, prevent or detect crime, protect public funds or where required by law.

For further information, please look at our website www.pkc.gov.uk/dataprotection; email dataprotection@pkc.gov.uk or phone 01738 477933.

Appendix B – Individual Feedback Comments

This page is intentionally left blank – comments begin on the following page.

Ref.	Sub-Ref.	Comment	Perth & Kinross Council Response
1a	i	Boulevard proposed gravel path: How suitable will this be for wheelchair users? Suggested a sealed/tarmac path would be better.	The design will be updated to feature a sealed surface path suitable for wheelchairs.
	ii	ER2 flood wall: Lack of clarity of visual impact of protection fencing locally at stairs and ramp high points.	Following consultation, the arrangement in this area has been amended - the 1:20 access ramp and the vehicle access bump have been removed. The path and steps have been re-aligned to minimise visual impact.
	iii	Drawing 244, Hillcrest Housing Association access stairs to field where the existing 'Iron Ladder is': Suggestion that a ramp is provided here to 'future proof' scheme for potential formal path to Cultybraggan Camp.	A ramped access is being provided at the Field of Refuge Car Park. Any future footpath scheme to link Cultybraggan and Comrie could potentially use this feature if they seek agreement from Perth & Kinross Council and the relevant landowner. The access point referred is to be replaced, however it will be a stepped arrangement due to space / land take constraints.
	iv	At the confluence of the Water of Ruchill and River Earn there is a potential for future erosion at a peninsula protruding into the Ruchill side of the confluence. Is there a risk that this could erode resulting in greater erosion to the opposite bank of the Earn and has erosion protection been considered here?	It has been assessed that erosion rates at this location will not be altered as a result of the Scheme. There is bedrock in the area which is resistant to erosion. As is the case in other areas if landowners are concerned about erosion, then they can take their own action to mitigate this if required.
	v	CMRI/14 Path: Should be recognized within scheme with respect to root wad protection and plantings etc.	The Water of Ruchill has areas of erosion and deposition. Natural erosion such as this is not being targeted by the scheme. The cost of trying to prevent erosion everywhere on the river would be prohibitive.
1b	i	Climate change – it should be noted and made known publicly to the community that the flood defence planning has included climate change calculations, but the flood defences proposed do not protect against the projected effects of climate change.	The line of defence has been designed to provide a minimum standard of protection to the 1:200-year flood. Some aspects of the design have required the consideration of climate change. These aspects include (but are not limited to) the economic appraisal to assess the viability of the proposed scheme, and also the residual risk analysis to assist Perth & Kinross Council in planning for events which may exceed the 1:200 year after scheme completion.

	ii	Floodplains – insufficient attention appears to have been given by Mouchel to the potential benefits of floodplains on the very extensive flat field areas adjacent to Comrie's three rivers – along the Water of Ruchill on The Ross, by the River Earn at Tullybannocher West and Aberuchil, and adjacent to the River Lednock at Invergeldie. It seems that the Comrie village flooding is significantly associated with the creation of the Boulevard and the steep embankment to support Strowan Road between Dalginross Bridge and the Fire Station. The pinch point created there through the main village could be replicated immediately before the Ross fields, Aberuchil/Wester Tullybannocher and Invergeldie with artificial embankments designed to create overflow onto those floodplains for a sufficient length of time to enable the narrow channel through the village to deal with higher water flow levels.	The feasibility stage of the project explored the full range of options, including the concept of floodplain storage. Feasibility was concluded in 2017 when Perth & Kinross Council's board have signed off on the preferred option that emerged from the process. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study Despite upstream storage not being selected as the preferred option it should be noted that the floodplains in upstream areas will be left unaltered and will still provide benefit in times of flood. As previously mentioned, Perth & Kinross Council are interested in forming a steering group whose goal is to sustainably manage the catchment; potentially mitigating some or all the effects of climate change. Perth & Kinross Council have funded several investigations/reports to give the group the tools required to seek funding for long term catchment management. It is hoped that once set up the group can access a diverse range of funding to remain self-sufficient.
	iii	Water management – the pressure of water from the rivers Earn and Lednock seems to be significantly affected by man-made constructions and organisational decision-making by Scottish Water and Scottish Hydro-Electric. If not already carried out, the specific implications of their activities for Comrie flood risk should be assessed, with flood mitigation procedures subsequently established and followed.	Upstream of Comrie the Water of Ruchill does not feature any significant hydro-electric impoundments. When the Ruchill provides the worst-case flooding in Comrie, which it frequently does, the effect of the hydro-schemes on the other catchments is largely irrelevant to the water levels in the town. The effect of the Earn hydro-schemes are captured in the gauge records for that river. The reservoir releases are therefore accounted for within the flow records used for modelling and flood mapping. Overall, we have assumed in the model that the 1:200-year flow would not be impeded by any catchment hydro-scheme. In other words, the reservoirs are assumed to be full and that all rainfall will enter the watercourse directly. This is considered reasonable and precautionary. The reservoirs are therefore accounted for in the approach taken to developing the flow inputs to the model. Using the reservoirs to provide storage was considered at feasibility stage but leaving reservoirs with significant draw down (i.e. half empty) would mean that the primary function of the reservoirs would not be viable. In addition, the adaptation of the reservoirs in such away would have provided limited benefit and as such this was discounted as a viable option for the Scheme. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study

	iv	The Boulevard/Riverside Park – further consideration should be given to the design of the flood defences on the Boulevard with particular reference to the merits of access flood gates instead of ramps. Ramps would take up substantial space, with access not needed at times of flooding to a waterlogged Boulevard. Gates would be open most of the time, would be less intrusive than steps and a ramp, could be made more attractive through cladding, and could be operated by Comrie Fire Service after SEPA flood warnings.	This comment has been taken into consideration by the design team, as a group of similar opinions have been identified in the community feedback. The design has been altered in a number of ways in the Boulevard/Riverside Park area, and a decision has been made to make provision for a set of flood gates for vehicle access in lieu of an access ramp. The default position for these gates will need to be that they remain closed and will only be opened when vehicle access is required. This is required as the flood warning time in Comrie is too short (can be less than 1 hour) to enable gates to be left open all of the time. Ensuring that the use of flood gates is restricted in this way means that the line of defence remains robust and the risk of mechanical or operational failure is minimised. Access to this area will be provided via: a) a public set of stairs that face onto Commercial Lane; b) private stairs for residents; and c) the existing ramp at Dalginross Bridge near to the Post Office. This existing ramp and its connection to the Boulevard will be improved and re-graded to make it less steep and more accessible as part of the works. The 1:20 ramps have been removed due to concerns regarding their visual impact.
	v	Strowan Road – at the proposed height of 1.5m, the planned wall along Strowan Road will seriously impact on the sight line of wheelchair users, who will no longer be able to see the river or the bank below the Boulevard. There needs to be a wide well surfaced pavement along the north side of the road, with wheelchair accessible drop kerbs at various points.	The informal footway on the north side of Strowan Road will be preserved. This will help to protect the flood defence from car strikes. However, the footway will be considerably narrower than standard and will likely not be wide enough to accommodate a wheel chair, push chair, buggy etc. (pavement being 450-600mm). The pavement cannot be increased in width without narrowing the road. This is not desirable in this area particularly with the tight turn off the bridge and also with regards to the access requirements for the nearby fire station. Even if the footway could be made accessible there are no plans to install any outcrop features (or similar) which would allow views for people whose sightlines are lower than the wall. Loss of views can be a sensitive issue but there are few options open to the Council in this instance.
	vi	Erosion – the scale of riverbank erosion is very substantial, particularly along the Water of Ruchill. This appears to have been significantly exacerbated by the changes to the river course resulting from the gravel extraction work in recent years across the gravel bank to the west of Dalginross Bridge with consequential loss of a line of trees from the Ross fields and much reduced riverbank to the south former railway embankment. The spit of land/peninsula at the west of the Ruchill/Earn confluence is also subject of this erosion with the likelihood of its complete disappearance and resulting major future erosion of the riverbank west of the southern end of Dundas Street. There is specific risk to the [redacted], which on board six at the consultation meeting need to be deployed in this area, and the map shown in Figure 10 requires to be amended with this inclusion. Consideration also needs to be given to the need for guidance with respect to gravel bank extraction.	It has been assessed that erosion rates at this location will not be altered as a result of the Scheme. There is bedrock in the area which is resistant to erosion. As is the case in other areas if landowners are concerned about erosion, then they can take their own action to mitigate this if required.

	vii	Core path – the designated 'Core Path' west and south from the Field of Refuge requires to be acknowledged in the plans and for protection against erosion, noting also the long standing local intention to create an improved walk and cycleway from the village to Cultybraggan Camp, which has also been discussed in recent months with the Perth & Kinross Council Community Greenspace Team. In recognition of this future development, it would be appropriate to replace the proposed steps at the south-west corner of the Field of Refuge with ramps and take account of this core path development in any erosion mitigation measures.	The Flood Protection Schemes function is to reduce the risk of flooding to people and property. It is not appropriate for the Flood Scheme to provide river bank protection for areas out with the scope of the project. The access point referred is to be replaced, however it will be a stepped arrangement due to space / land take constraints. Should the walk/cycleway scheme referred to progress then they can look to adapt this feature if they feel it appropriate. Alternatively, a ramped access is being provided at the Field of Refuge Car Park. Any future footpath scheme to link Cultybraggan and Comrie could potentially use this feature if they seek agreement from Perth & Kinross Council and the relevant landowner.
1c	I	It was good to be able to have a further conversation with you this afternoon – the way you are going about the consultation is much appreciated. [redacted] I have also attached the village map which shows the River Earn island in the river area to the west of Dundas Street. The map shows this as being slightly further upstream than the 'peninsula' across from our area of riverbank, and so maybe the peninsula does not have a foundation of rock which would provide protection against erosion. It still seems essential to check that out and prevent any exposure of the riverbank area here to the full impact of the Water of Ruchill which would result from the erosion of that peninsula. We would be very grateful for your specific comments and advice about this. We will look forward to seeing the results of this phase of consultation and further planning.	It has been assessed that erosion rates at this location will not be altered as a result of the Scheme. There is bedrock in the area which is resistant to erosion. As is the case in other areas if landowners are concerned about erosion, then they can take their own action to mitigate this if required.
2	i	Pleasantly surprised at the aesthetics of the flood defences. Was very concerned it would detract from the beauty of the village but if as proposed it looks as if it will enhance it.	Thank you for your comments.
3	i	All looks very positive. The landscaping on the boulevard should enhance the area. Traffic calming is a positive idea (would be great if we could have more of the same on Bridge St.)	Unfortunately, traffic calming measures for the wider village are out with the scope of the Flood Scheme. As well as slowing traffic the interventions on Strowan Road provide numerous benefits to the scheme (protection to the flood defence, biodiversity, visual impact and water quality) allowing their inclusion.
4	i	I have found the exhibition most interesting and informative and it all seems to have been very thoroughly thought out. I like the idea that the natural environment has been taken into consideration too.	Thank you for your comments.

5a	i	Whinstone wall would look better to the natural visual aspect of the Lednock walks, also same stone as the Episcopal Church and existing walls.	The design team will review the design with respect to use of stone type and wall finishes at the detailed design stage. This will follow the publication of the flood order. The Conservation Officer within the Council, and the Planning department, will help guide us on the appropriate finishes at each location. We will look to take into account community feedback at this stage and ensure that any materials selected are in-keeping with the village.
5b	i	Concerned about the drains [redacted] along the A85. In times of heavy rainfall or flooding the drains don't work and the water floods right across the road whether the water backs-up or the drains are full of debris they will be no help if the Lednock floods.	An assessment of the carrying capacity of the surface water network has been carried out as part of the flood scheme design. Any areas exacerbated by the provision of the flood scheme will have mitigation measures put in place. Some areas may have adequate capacity, but could be blocked (e.g. by leaves, debris, snow, or for other reasons). Maintenance on this road is carried out by BEAR Scotland, on behalf of Transport Scotland. Please note the Flood Scheme is not designed to prevent ponding or small-scale flooding at the side of a road.
6	i	I definitely want the wall to have finish in View 6 (Whinstone) please! The pink sandstone is just not fitting into the natural landscape. Use of Whinstone for walls along the Lednock River: • Locally available grey stone • Natural colour – colour of local stone • Existing wall stones at my house can be re-used • Cheaper than importing pink sandstone • Will match other walls being put along the Earn and Ruchill • Much more aesthetically pleasing • Use random stonework cladding with whinstone.	The design team will review the design with respect to use of stone type and wall finishes at the detailed design stage. This will follow the publication of the flood order. The Conservation Officer within the Council, and the Planning department, will help guide us on the appropriate finishes at each location. We will look to take into account community feedback at this stage and ensure that any materials selected are in-keeping with the village
7	i	Concerns of potential erosion on the south bank of upper earn, upstream of Ross Bridge. Suggested scheme to include erosion protection at this location.	It has been assessed that erosion rates at this location will not be altered as a result of the Scheme. As is the case in other areas if landowners are concerned about erosion, then they can take their own action to mitigate this if required.
8	i	ER4 Strowan Road: Concern new street lighting might occupy garden space	The new street lighting proposed for Strowan Road will not be located in private property and should not affect any private gardens.

	ii	Concern water in flood can breach Field of Refuge immediately before Dalginross Bridge upstream on the right banks.	The line of defence is proposed to continue along the border of the Field of Refuge Car Park and continue towards the bridge. A small gap is being provided here to allow access to the river. This gap is intentional and is situated on higher ground above the design flood level. It does not compromise the core aim of the Flood Protection Scheme.
9	i	Having witnessed both previous floods I would say that the flood bank proposed on Fig 6.2 is over engineered and an additional height of 1.2m is over the top (literally).	Determining the elevation of the defences correctly is a matter of public safety and hence the technical process has to be defendable. The defence heights have been identified using a hydraulic model of the area in combination with estimates for peak flow. This work is all agreed with SEPA. An allowance has also been made for processes that the model cannot represent (including model uncertainty), this has been carried out using guidance developed by the Environment Agency. The defence is in an area of Dalginross which is key to the whole flood scheme's performance and we know that existing defences have over-topped on two occasions in recent years. We understand there are concerns regarding visual impact of these defences and have looked at ways we can potentially reduce their height without impacting on the overall performance and safety of the Scheme. However, no significant alterations to the defence heights can be made safely. Therefore, the embankment proposals are largely unchanged.
10	i	Happy with the proposals for the wall on Strowan Road and others for access to the rivers.	Thank you for your comments.
11	i	Well laid out exhibition with helpful personnel. The proposed works appear to have been comprehensively thought through and are in keeping with the character of the village.	Thank you for your comments.
12	i	Comment on the traffic calming measure on Strowan Road. The turning in the road is very tight when coming over Dalginross Bridge and turning left onto Strowan Road – large vehicles cannot do this turn neatly enough to stay on the left side of the road, therefore the first proposed tree and traffic calming indent in the road looks too close to the junction for a large vehicle or a vehicle with a trailer to pull in tidily to the left. I also question whether the proposed planting of this tree gives adequate vision of traffic approaching from Queens Road. If really necessary, can the traffic calming be moved closer to the Queens Road junction, or better could the tree be planted the other side of the wall?	At detailed design stage the proposal for Strowan Road will be passed on our Road Safety Engineers within the Council to make sure that what we have planned is appropriate and safe. This may include developing 'sightlines' and making minor tweaks to the arrangement if required. In the meantime, please be reassured that our provisional analysis and discussions on this matter suggest that the there is adequate space for a large vehicle to 'pull-in' as suggested. The location of the tree should not be an issue.
13	i	All looks good, let's do it!	Thank you for your comments.

14	i	Project budget is £25.7m and implementation of the scheme is some time away – by then the cost will have increased so how can the funds be increased to implement?	In terms of funding, 80% of the monies for this project will come from Scottish Government and 20% from Perth & Kinross Council. Both the Council and the Scottish Government have provisionally committed the funds required for this project dependent on the Scheme securing the required statutory approvals. The amount of funding required is reviewed on a regular basis and both organisations are aware that complex engineering schemes can rise in cost as more information becomes available. As such, the budget can be increased if required. It should be noted that some contingency allowances have been made.
15	i	Don't think the traffic calming measures will work – will increase driver frustration!	There should hopefully be little driver frustration on what is a low trafficked and low speed residential street. Overall, the traffic calming measures appear to be favoured by a slim majority of respondents and the provisions of these measures bring multiple benefits for the overall design. Hence, this feature will remain unless they prove to be impracticable during detailed design or construction.
16	i	If fences are being put on the tops of the walls at the rear of properties, who is responsible for the maintenance of these fences; i.e. painting or maintenance of structure?	Once the scheme is built the Council will have a duty to maintain and repair it. The Flood Risk Management (Scotland) Act 2009 places duties on us to inspect and maintain defences once they are in place. They will therefore be inspected regularly and be kept in good condition and repair. To achieve this, an operation and maintenance procedure will be developed and implemented. Areas of garden ground will be returned to homeowners to maintain. For fence lines, maintenance responsibilities will be mixed. Some fences will be with the Council to maintain (such as those onto top of walls) and some will be returned to landowners. It will be made clear, through further individual meetings during the detailed design stage, what each property will be responsible for once the Scheme is built. These discussions will be completed prior to construction commencing.
17	i	It was good to see the exhibition but I would have liked to speak to Jonathan but he was busy at length. I wonder if the River Lednock is affected by backing up with the building of walls by St. Serfs affecting the Lednock [redacted]?	The scheme has been tested under many difference scenarios in a hydraulic model. This model has shown that in certain cases the proposed scheme can result in minor backing-up along the River Lednock. However, this backing up is not predicted to impact upon any properties or on erosion rates. The defences on the Lednock are sited in such a way to minimise this issue.

	ii	Also have you had beavers affecting the River Lednock?	A site walkover was carried as part of the environmental surveys to identify any evidence of beaver use of the site. No beaver lodges, dams or burrows were recorded within the study area; which focussed on the locations required as part of the scheme construction. However, there is widespread evidence of beaver activity (foraging) throughout the village (including on the Lednock) A wider survey upstream or downstream of these locations has not been carried out. Further surveys will likely be required prior to construction.
18	i	The proposed plan seems to provide the flood protection required in a straight forward way, with no adverse impact. The walls and embankments seem to be well designed and should enhance, rather than detract, from the look of Comrie. I am pleased that the access to the South Bank of the river will be preserved.	Thank you for your comments.
19	i	What I saw looked excellent, the only thought I had was because the water will be restricted, will there be more erosion from the fire station along past Garry Place? Lots of people use that path to walk dogs 'stride for life' etc, it would be a great shame if it was lost.	The hydraulic model has been used to estimate areas that are likely to be at increased risk of erosion due to the scheme; and in these areas the design team have specified appropriate erosion protection measures. These locations are shown on Board 6, at https://www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design. It has been assessed that erosion rates at this location will not be altered as a result of the Scheme. There should therefore be no change beyond what is occurring naturally in the area. We are aware the area is well used and we have actively sought to retain the access and public use of this area following construction.

20	i	I and a close friend attended the community drop in session on Tuesday and would like to make the following comments. Note I am moving to Comrie soon (next few months, Tay Ave area) so am very interested in your plans. My friend already lives there but is outside the risky area. Firstly, the session information was excellent, really good boards and large plans and photos/artists impressions plus all the people were very helpful and knowledgeable. Several Points to make: A strategic issue, given the Ruchill Water is more than the other two rivers put together (Lednock and Earn) why don't you consider solving the problem at source, i.e. Build a dam on the Ruchill Water and add some extra controls on the Lednock. This would have significant advantages. I asked a consultant about this and he said they were not involved in earlier stages and couldn't comment! Advantages: a) Less disruption to Comrie village and people, in fact none b) The cost of a new dam and perhaps a small Hydro scheme must be comparable to the complex walls and bunds system that you have planned c) Generating hydroelectricity could get central government grants from the Scottish Government to help pay for a new dam d) Comrie might benefit from cheaper or subsidised electricity e) The new dam would need some extra controls on the Lednock but with the Earn flooding delayed by Loch Earn, the 3 rivers could be 'controlled' to prevent flooding, i.e. let one flow while 2 are dammed and then release the water after the heavy rain subsides f) Disadvantage – the land is Drummond Estates and they may refuse permission but surely could be persuaded. Or maybe would claim all water rights like the hydroelectricity benefits (feed in tariffs) g) The 1:100 flood map showed Comrie essentially cut off like a medieval town by a wall, this plan would not allow any future housing development on the south east side of the village (east of the Tay Ave area), a solution at the source of the Ruchill and improvements to control the Lednock would avoid this issue h) I think this alternative solution should be investigated	The feasibility stage of the project explored a full range of options, including the concept of upstream storage. Feasibility was concluded 2017 when Perth & Kinross Council's board have signed off on the preferred option that emerged from the process. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study Please also find below a series of short answers to the individual points raised. a) There would still likely be disruption to the village however it is acknowledged that the impacts would likely be lesser. b) This is incorrect. The cost of dam structure far exceeds the cost of equivalent walls and embankments. c) A dam built for flood storage would generally not be effective in hydro power generation. The uses are not typically compatible as a flood storage reservoir needs to be empty (or near empty) most of the time to enable it to capture flood flows. d) See point C e) Such a complex management system would rely upon very accurate weather forecasting and the ability to draw-down reservoirs very quickly. The flood warning time for Comrie is often less than an hour. It would be unlikely a reservoir could be drained sufficiently in this time as suggested. We can also have two rainstorms very close to one another; this is further complicated by issues such as rapid thaws/snowmelt. f) The Council has powers under the Flood Rik Management Act (2009) with regards to access of land. We will be using these for the proposed Scheme. g) Flood Protection Schemes are not built to allow future development. This approach is actually not allowed. The Scheme is proposed to protect existing properties and businesses which are currently at risk. h) The feasibility stage of the project is over. This was explained at previous public exhibition events and concluded in 2017. The Scheme, assuming we receive statutory approval, will consist of walls and embankments. Upstream storage in the manner suggested is considered non-viable.
	ii	The drawings of the earth bunds showed no central rigid core and they would just wash away under floor water pressure, an error on the drawing we were told but do look at this. Piles of earth are not strong enough.	This is not an error on the drawing as such – but an omission. Please be re-assured that the earth bunds are designed to contain an impermeable core. The drawings are all produced in AutoCAD format where multiple layers can be made visible (or made invisible) depending on the purpose of the drawing and its intended audience. Drawings presented at the public exhibition cannot show every detail as this would be considered too cluttered for effective communication of the scheme design as a whole. A sketch outlining an earth bund with its impermeable core shown can be seen in Board 5 at https://www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design.

	iii	The south side of the Earn will need some kind of stone blocks or modern form of gabions, the idea as mentioned by one of your team of green matting with plants on the river bank, which would look pretty, will be completely washed away by the Earn when in flood – the idea won't work.	Gabion baskets are generally not considered effective erosion protection measures on high energy rivers. They deform over time and become less effective very quickly. The green matting with plants is designed to result in the establishment of vegetation over time. This will bind the soil to make it stronger and provide a high-friction surface causing water to slow down and lose its energy. Less energy in the water results in lesser erosion potential. This type of solution can also 'recover' after minor damage; unlike gabions. Please be reassured that the material and planting used in the bank protection will be specified by an expert contractor with a good deal of experience designing and installing such systems. The Council will monitor the performance of any installed erosion protection and undertake maintenance if required. We will take particular care during the initial establishment phase when it will be most vulnerable to high flows.

	iv	If what was presented is the only solution then can we do it more quickly, 3 to 5 years is too long to wait for a solution, P&K council need to get a move on! I hope these comments help you in your planning	The scheme is intended to be in place for a design life of 100 years. Therefore, adequate design and build time is needed to provide a scheme of the required quality. In the coming months the Council will formally publish the proposals for the flood scheme under the Flood Risk Management (Scotland) Act 2009. It was anticipated that this would be done in 2019; but it now looks likely that we will be looking to publish in early 2020. This is to avoid any overlap with the Christmas period. Once published, at this stage any person who may have an interest (including local residents and landowners) will have the opportunity to object to the Scheme should they so wish. Such objections can take time to resolve, but the Council have sought to minimise these through early consultation. Once the Scheme is approved (or 'confirmed') the Council will have the legal power to build it and will be able to proceed with securing the remaining consents and commence the detailed design stage. The consents and detailed design phase is expected to take approximately 12 months. Tendering and construction will follow on from this. In terms of construction programme, this will be set by the Contractor once appointed. They will time the work depending on staff and material availability and efficient methods of working. It is likely that several part of the Scheme will be under construction at any one time. It is anticipated that the main construction phase will take between 18 and 24 months. Please note however, that it is likely that some preparatory works will take place prior to this period, and that some landscaping works will continue beyond it. In summary, due to the large number of issues to be considered; the legal process required; the complexity of the engineering work and the statutory requirements, it is difficult to provide a quicker programme for delivery of the works. The Council and Sweco however are working hard to ensure the Scheme is progressed as quickly as possible and a provisional guide for the commencement of the main construction works is 2021/2022. It is not as simple as just 'getting a move on' unfortunately.
21	i	Delighted with scheme overall and information provided. Very pleased private access stops at EH2 will be provided to[redacted]. Liked the visual appearance of ER4, from Comrie side and thought stone blocks (Ashlar) was attractive and liked fact existing trees are to be removed as currently look 'unkept'.	Thank you for your comments.
22	i	The bund in the field at the rear of Garry Pl could easily become a viewing platform at 2m high for people to walk along affecting the privacy of the houses it looks on to. This could easily be stopped by a barbed raise fence to both keep sheep in the field and off the bund as well as people and children using it as a new pathway and attraction!	Fencing will be provided in this location. This is now included in the drawings.

23	i	Good exhibition, with a good update on future planning. More advanced warning, publicising the event in Comrie would be useful. I look forward to seeing works commence including provision for bike access to riverside paths.	Thank you for your comments. The Council did letter drop residents, as well as advertise the events both online and locally. We are sorry you feel that not enough notice was provided. If you would like to be added to the distribution list for upcoming newsletters etc. then please contact comriefloodscheme@pkc.gov.uk with your name and address.
24	i	Comment that the roads drainage for the A85 (east of the Lednock Bridge) discharges through St Serf's ground. Noted that there is a need to ensure that this pipe is maintained and/or re-instated during construction.	Thank you for your comment. We are aware of the drainage outfall in this location and will ensure that this arrangement remains in place following construction.
25	i	St. Serf's field. I have no comment on the proposed displayed on the map presently.	Thank you for your comments.
	ii	Erosion of the bank above the footbridge over the River Lednock: there is considerable concern about the general state of the bank with regards to the millennium footpath (a sight of woes). This is only going to get worse as every time there is a bad storm the water levels rise and more of the bank falls away. This also has an effect on the flow of water lower down along the St. Serf's field. The flow is increasing every time and is considerably faster. Sadly, the trees that were there have also been washed away. It would help if trees such as Willow were added above the footbridge as well as along the lower bank of St. Serf's field.	The current situation will not be worsened by the scheme and continued erosion at this location would not compromise the proposed flood defences. It will therefore remain the responsibility of riparian landowners to maintain riverbanks such as these.
26	i	Very positive about scheme and appreciated equines inclusions.	Thank you for your comments.
27	i	Very positive feedback of scheme in general Appreciated the thought and layout of ER2 at Boulevard Thank you for the very informative display and the opportunity to converse with the engineers, SEPA et al, Many people in the high risk like schools now feel more at ease but schools still be taking their own measures to protect their property as it is likely to be 2021/22 before completion. Not sure if some residents think that way? Sincerely hope there are no major objections which result in delays. No doubt you will discuss 'Boulevard' issue with 'Comrie Fortnight Committee'	Thank you for your comments. We are glad you found the material and format of the events useful. We have passed on your thanks to SEPA for their attendance at the event. You are correct that some homeowners remain at high risk until the Scheme is built. Some people have already installed property level flood protection measures and we would encourage other people in the same scenario to consider the same. The Scottish Flood Forum may be able to provide advice. We have had some early discussions with the Comrie Fortnight Committee and the Community Council. We will look to continue these consultations through the detailed design process.

28	i	First of all, thank you for this drop-in session. It was run by most helpful and knowledgeable staff. I left a letter and pictures of the River Ruchill erosion, floodplain, in which the river banks have sustained further erosion with less not more trees. Having been here 50 years I have noticed that the increase in erosion on the lower Ruchill banks has followed works to straighten the course of the river. This has been unfortunate. Downstream of Comrie alone, The River Earn there is considerable build-up of gravel. As explained to me the main obstruction of flow lies closer to Kinkell Bridge/Crieff but perhaps consultation should be given to the reaches above here to lower flow. Upper Strathearn is a natural flood plain that has probably been well understood by journals in this area.	Thank you for your comments, and for the time taken to write to us and for providing the pictures. There are no plans to include gravel removal in this location as part of the Scheme. There is a large flood plain downstream of Comrie which means that the dredging or removal of gravel in this location would have limited benefit for the flood levels in the town. There are however some plans to stabilise the eroded sections on the Water of Ruchill which you have highlighted. This will hopefully mitigate against the continued change in this location which you have noted.

	ii	The height of the defences at the west of the village along the Cultybraggan field means the excessive width to extent 3ft in height. At the moment previous flood water only just flowed over it, may be an extra 3" at top. So, the 3ft height appears to be an overkill. I understand that the existing earth dyke to be removed to which I have no objection except I have mentioned to your staff that I would like to retain the last part of it after it curves into my garden.	When defences overtop, they very often only overtop by a small depth. Much like an overflowing sink or bath the flow of water is dispersed over a wide area and therefore overtopping depths are restricted at any individual point. Determining the elevation of the defences correctly is a matter of public safety and hence the technical process has to be defendable. The defence heights have been identified using a hydraulic model of the area in combination with estimates for peak flow. This work is all agreed with SEPA. An allowance has also been made for within these heights for processes that the model cannot represent (including model uncertainty, settlement etc.). These heights then determine the required width of embankments as there are maximum gradients on the side slopes we do not wish to exceed. This ensures that we can maintain a stable defence which can be maintained. We understand there are concerns regarding visual impact of these defences and have looked at ways we can potentially reduce their height, and therefore width, without impacting on the overall performance and safety of the Scheme. However, no significant alterations to the embankment can be made without affecting the standard of protection. A flood wall would not be in keeping with the present-day scenario. Whilst it may be lower slightly than an embankment it would potentially have a greater impact on the existing landscape. The achievable reduction in height would also not alter significantly the impacts on views. Therefore, we anticipate that concerns regarding view/amenity would remain. A wall compared to an embankment would also have a substantial impact on the cost of the Scheme. Re-constructing the flood embankment using modern techniques and adhering to modern standards is therefore the best option available. Unfortunately, it won't be possible to maintain access to the bund crest from your garden. The Council have had to take a position to fence off the new embankment to curtail access to it. This is due to damage caused to the existing structure by inappropriate accesses and grazing..
29	i	Helpful graphics and very helpful information direct from staff.	Thank you for your comments.
30	i	This was an excellent presentation and showed clearly area under threat. Well done.	Thank you for your comments.

31	i	We are delighted to learn that, as a result of a reassessment of the flood risk, it is no longer proposed to build a flood wall or embankment along the Dundas Street stretch of the River Earn. It was always our belief that the risk off flooding affecting properties along this road is remote in the extreme. It is good to have this confirmed by expert assessments. This will allow my wife and I to continue to enjoy the use of the riverbank which is of enormous value in terms of the quality of our lives.	Thank you for your comments.
32	i	I had three queries regarding the scheme. First was about how it would look aesthetically. I was worried that there would be white concrete barriers everywhere changing the fabric of the village. This concern was somewhat alleviated by the projected images I was shown. Showing that the concrete structures were going to the fit in the surrounding environment and have an aged appearance to some extent.	Thank you for your comments. The structures will have appropriate finishes. These will of course age and look better over time.
	ii	My second query was also regarding loss of trees in the area because of access for machines and also where the barriers need to go. Again, I can see how there has been thought given to this in the planning trying to minimize tree loss and replacing them and fold and hopefully with some semi nature trees.	Thank you for your comments. We have indeed tried to minimise tree loss where possible.
33	i	After having the intended works clearly shown and explained, I fully support them being carried out and at the earliest possible time. I can see where some may complain from a slight loss of view, the improvement in safety for the village must come before personal views and preferences. I must also commend the member of staff for his patience and professionalism in fully explaining the intended works.	Thank you for your comments.

34	i	**Preliminary comments** 1.1 In the floods of 2012 [redacted] Comrie of which we are proprietors was heavily flooded when the Ruchill burst its banks. As a result: 1.1.1 Insured damage occurred costing in excess of £130,000 to repair; 1.1.2 We required to relocate to Strowan Road for six months; and 1.1.3 We suffered great stress and anxiety. 1.2 As a consequence of these floods, protection measures were put I place at a cost believed to be in excess of £2million, comprising: 1.2.1 Rock armour protection to the bank of the Ruchill; 1.2.2 removal of the old flood embankment; and 1.2.3 creation of new flood embankments at Camp Road and reconfiguration of the roadway to Tomnagaske House with relocation of services. 1.3 As has been stated by the council these measures did not address the risk of flooding from the rivers Earn and Lednock which unquestionably still exists for other parts of Comrie but we had understood that they did address the risk of any flooding from these rivers affecting Camp Road. 1.4 While recognizing that the proposed measures benefit the village as a whole it is our view that in effecting these measures specific recognition should be given to the stresses already incurred by those living in Camp Road such as ourselves and every opportunity taken to minimize their effect. **2. Drop-in Session of 8th May 2019 to allow consultation** 2.1 This was helpful but of necessity due to the number of disciplines involved and the various agents employed not all our points of concern were able to be addressed to our satisfaction and accordingly we have a number of points to be considered. **3. Comments** 3.1 The flood protection measures referred to in 1.2 were understood by us to have addressed the risk of flooding from not only the Ruchill but also the rivers Earn and Lednock to the area of Camp Road and in particular [redacted]. We were surprised to discover that this is not the case. This is particularly important in that the proposed works involve: a) the relocation of service connections to Tomnagaske and otherwise, b) the creation of a new culvert; and c) the regrading of the access roadway to Tomnagaske all of which redo at vast cost works only effected 4 years ago. It has been suggested to us at consultation that these earlier works were of an 'emergency nature' and inadequate in some unexplained way. We do not consider this to be acceptable and request a clear explanation as to why these works need to be redone. We consider them to be unnecessary in the absence of such an explanation.	We acknowledge the impact that the flooding experienced in 2012 had on many residents in Comrie and Dalginross are sorry to hear that you suffered as a result of the flooding. The emergency works undertaken in 2013 cost approximately £860,000. They consisted of a combination of measures including rock armour protection to parts of the river bank and works to the existing flood scheme at the driveway to the private property 'Tomnagaske'. The standard of protection against flooding provided by these works is equivalent to the predicted 1 in 100-year return period flow, with an allowance for climate change. For clarification, this corresponds to the flood event that has a 1% probability of being exceeded in any one year. Properties behind these defences remain at risk from rarer and larger events. The works were designed to reduce the risk of the flood mechanism experienced in 2012 from occurring again and were not intended to address all risk. A letter was sent to you explaining this at the time. The emergency works are not 'inadequate' in terms of their design or construction. They work as intended. The emergency works do however protect to a lower standard than that being sought by the flood protection scheme, hence the reason to upgrade the existing defence at this location. This results in the need to review service locations, the culvert arrangement, etc.

	ii	The proposed works will involve the transportation of vast quantities of materials to and from the site. The optimum access is obviously via Camp Road (which has only recently been adopted after much correspondence). At consultation, it was indicated that alternative routes might be taken over adjacent farmland and routes available thereon. Common sense suggests that workers, managers and suppliers of all kinds will use Camp Road if they can. Camp Road is already heavily used by the current proprietors and the members of Comrie Bowling Club. We request that there should be an express contractual stipulation (enforceable not only by the Council but also at the instance of Camp road proprietors) against all contractors involved placing an embargo against the use of Camp Road.	Camp Road will likely be a preferred access/egress route for at least part of the works. It is unlikely that the Council will bar the selected Contractor from using specific route such as Camp Road. There may be limits imposed on them in terms of traffic movement, vehicle speeds, delivery times etc. but an outright ban on certain access points would be inappropriate. It would lead to increased time required in the construction programme, increased cost, and potentially disproportionate disturbance experienced elsewhere. This does not mean however that access will be unrestricted. Parking for Contractor staff will only be in specified area and will not be on residential streets. Deliveries will also have specified locations. If residents of any particular street do have issues during construction, there will be a Community Liaison Contact on site for the duration of the contract. This person will be supplied by the Contractor. A representative of Perth & Kinross Council will also be on site most of the time. Any residents concerned about site activity during construction will therefore be able to get in touch regarding any issues they are having (dust, noise, parking, bin collections, household deliveries, etc.). It would not be appropriate for local residents to take matters in their own hands backed by some form of contractual stipulation. The construction contract will be between the Council and the Contractor only.

	iii	3.3 Ex adverso [redacted] there is to be erected a bund 3 metres high on the river side and 2.6 metres high on the property side with a base on 9 metres by our calculation. Clearly this will interrupt our view which is a significant amenity. We understand however from the consultation that a wall 2 metres high could be substituted. We request clarification as to why it is necessary to replace the existing bund (see para 1.2 above) and if it is what steps can be taken to reduce its height and area.	The existing flood embankment in this location was built in the 1960's. Even if a new flood scheme is not built elsewhere in the town it is recognised that this existing defence is near the end of its design life. It therefore potentially needs refurbishment and/or replacement in the near future. The embankment previously overtopped in 2012 on two occasions. Works were done immediately after this flooding to help prevent this occurring again if the rivers reached the same the same levels as they did in 2012. This has been successful. However, we have always been aware that a risk of flooding remains if rarer and larger flood events occur. The modelling carried out confirms this. It predicts that in these larger events there is a risk of flood water coming over the existing defence and of water getting in behind. This would result in flooding. We therefore know that for the Scheme to be successful in preventing flooding up to the 1 in 200-year flood that this existing defence will need to be made higher. The condition of the defences as they are at present does not allow them simply to be raised; therefore, a new defence is required in this location. A flood wall would not be in keeping with the present-day scenario. Whilst it may be lower (up to a maximum estimated 600 mm – not the 1 m you have quoted) it would potentially have a greater impact on the existing landscape than a new embankment. The achievable reduction in height would also not alter significantly the impacts on views. Therefore, concerns regarding view/amenity would remain. A wall compared to an embankment would also have a substantial impact on the cost of the Scheme. Re-constructing the flood embankment using modern techniques and adhering to modern standards is therefore the best option available. Embankments should have slopes which are less steep than that of the existing; therefore, to reach the required height a greater footprint is required. It is proposed that the increased width will be gained by taking up more of the bordering farmland. The increased width does not affect the residential properties in this location.

	iv	3.4 A timber fence is to be erected 1.8/2.2 metres high between the proposed bund and [redacted] at a distance of 1.5 metres from the toe of the proposed bund. From its height and form this will be unsightly and is unacceptable. From the consultation, we understand this is to 'protect properties'. In our view it is simply equivalent to a march fence and if it has to be erected should be designed only after discussion with the affected proprietors such as ourselves as to its make, height and location. Please advise if that will be done. We also note that no fence is being erected riverside the ostensible reason as explained to us at the consultation as being for aesthetic reasons (i.e. the view of people walking along the Ruchill riverbank). In our view a strange approach. Clearly a stock proof fence is required which when erected will substantially affect the form of boundary required between the proposed bund/wall and our property which should be altered as suggested.	The Council have had to take a position to fence off the new embankment and to curtail access. This is due to damage caused by a minority of local residents to the existing structure by inappropriate access and grazing. We can potentially reduce the height of the fencing and will look at this further at detailed design stage. However, I would note that 1.8m is akin to the standard 6-foot-high garden fence and would not be considered unsightly. The Council can build such a structure on land that it owns without any consultation with neighbouring residents – much like a homeowner can erect fencing on their ground without need for planning permission in most instances. A fence is not required on the farm side of the bund. The farmland here is currently not 'stocked' and the Fay Burn provides a natural barrier to the toe of the bund. The Council will review this arrangement post-construction if required.
	v	3.5 At consultation (and as stated on the Council's web site) to obtain consents and implementation of the proposed works will take a minimum of 2 and possibly 3 years. During that period any sale of affected properties will require disclosure of these proposals which will impact on marketability. In addition, if proceeded with in their current form the value of properties in Camp Road and in particular [redacted] will potentially be affected permanently. Loss of view as an amenity amongst others is an example.	The Flood Risk Management (Scotland) Act 2009 makes provision for compensation in relation to flood schemes. The Act allows for compensation to be paid if you can show that the value of your interest has been depreciated, or that you have suffered damage as a consequence of the carrying out of the Scheme. There is therefore a mechanism for compensation which may be utilised if you have suffered a loss as a result of the Scheme. However, it should be noted that the onus is on the claimant to demonstrate any loss and to mitigate against it if possible.
	vi	4.4 We consider the proposed works disproportionately affect one small area of the village (Camp Road and its environs), are likely to affect property values permanently and ruin and important amenity currently enjoyed namely the unobstructed view of a beautiful landscape.	We do not consider that the Scheme will disproportionately affect one area of the village. The Scheme is being built to protect properties throughout Comrie and Dalginross and is for the benefit of the whole town; including properties next to existing defences.
35	i	I was very impressed with the content of the drop-in session on the 30th April in Comrie. On being told about flight of steps which were going to be put in the lane to the River from Garry Place, I definitely agreed with the 'flood' man who suggested a handrail might be good – it would be sad if 'oldies' could not go down the lane to the river so please put in a handrail up and down!	Thank you for your comments. Hand rails will be included on all stepped accesses which are located in public areas.

36	i	As a long-term resident of Comrie and a home owner within the potential flooding zone I fully support the proposal outlined in the exhibition held in the White Church on Wed 8th May. I am particularly pleased by the care being taken to engage with local people and groups – and their specific issues – noting, for example, talks ongoing with the community council and Comrie Fortnight (among others) to resolve issues regarding traditional access to an usage of the river frontage which we know as the 'Boulevard' and, more generally, close discussions with affected land owners and individual residents. There is clearly a great deal of understanding, on the part of the Scheme developers, of the need to minimise both environmental impacts and risks to the character and natural beauty of the parts of Comrie likely to be affected by the works. I feel confident that a similar degree of empathy will be deployed in planning for and managing the likely considerable disruption to village life during 1-2 year construction phase.	Thank you for your comments.
	ii	I also hope ongoing maintenance, once the works have been completed, will include measures to deal with further river bank erosion and three falls upstream from the bridge near the White Church – especially likely in the vicinity of the old railway viaduct at the confluence of the Earn and the Ruchill. Finally, I would like to express my approval/thanks for the positive, comprehensive and timely response to the flood risk as initiated by both local and central government and to many other agencies involved. I am pleased by the commitments to involve much a wide spectrum of expertise and to provide for such a substantial budget.	Once the scheme is built the Council will have a duty to maintain and repair it. The Flood Risk Management (Scotland) Act 2009 places duties on us to inspect and maintain defences once they are in place. They will therefore be inspected regularly and be kept in good condition and repair. To achieve this, an operation and maintenance procedure will be developed and implemented.
37	i	I would like reassurance/confirmation that cognisance has been taken of the small burn which seems to run the back of [redacted] has been taken into account within the modelling system. This waterway floods frequently during periods of heavy or sustained rainfall and I am concerned that the proposed defences would simply serve to compromise the burn even further, making the flooding worse.	It is assumed that this comment refers to the unnamed watercourse which passes beneath the A85 approx. 220m to the west of the West Lodge Caravan Park. This watercourse flows past A B Gairns Contractors' yard and enters the River Earn approx. 700m upstream of the wastewater treatment works. This watercourse is contained within the hydraulic model and flood mapping published as part of the scheme takes direct account of flow escaping from this watercourse. Water elevations in this watercourse are already heavily controlled at extreme events by the Earn water level. No change was found here resulting from implementation of the proposed scheme. Flood flows on this watercourse will therefore not be altered by the Scheme.
	ii	2. I still remain very concerned and unconvinced that the proposed defence which runs up the side of Comrie Caravan Park should not be extended to include my property. I have reviewed and understand the modelling system and uncertainty factored in, however this still does not provide a guarantee that my property won't flood, especially given the new proposed defences direct floodwater towards the flood plains (Gairns/farmland) nearer to my property. Water is unpredictable at the best of times and I have no reason why the defence should not extend past my property for reassurance and will ultimately affect my home insurance.	We do not believe your home to be at same level of flood risk as other properties in Comrie. The Scheme is also thought not to change or alter that risk and therefore your property is not included for within the Scheme boundaries. This will be re-checked at detailed design. Following scheme completion, Perth & Kinross Council can provide a letter stating the standard to which the design team believes your property is protected.

38	i	I am responding to the plans displayed at the open meeting in The White Church on the 8th May. My husband has already responded, and I endorse all his comments - so for the purposes of your records please ensure that they make clear that you've received them twice from two respondents. I have further comments: 1. In the event that a flood wall is built along the lines of the current (8/5/19) plan then the ramp would be built up and over the wall to a height of 1.3 metres with a platform to allow for a change of direction. Although this is not clear it is pretty obvious under Health & Safety rules that a protective railing would be required to prevent people / bicycles / wheelchairs falling off. Assuming current handrail requirement of 0.865 metres - then the total height is 2.165 metres. That is 8 1/2 feet. That is insane if there are alternatives - and there are. There is perfectly good access at current standard gradient from behind the public toilet block on the west side of the bridge. This was provided quite recently when the gardens there were re-landscaped. This is a perfectly good way for wheelchairs or bicycles to get down to the riverbank on the river side of the flood wall. There appears to be NO NEED for a ramp at all. Please see photos Except - the council may have heavy duty mowers for which they would like to have a ramp. This is not a good enough reason. The council could easily use smaller mowers which could use the existing paved footpath down from the public toilet block. If it transpires that the council want this ramp mainly for their own purposes then they must state this clearly so that objections can be made meaningfully.	The Council has noted from the responses received that the access provisions in this location were not popular with local residents. The design has therefore been altered in the boulevard area in a number of ways. The rationale for the initial design and the changes made are explained in section 3.1.1.1 above. It is not true to suggest that Council included the ramp for its own purposes, and this is simply unfounded speculation.
	ii	2. The river height builds up because it can't get away fast enough at the east end of the village. The 'weir' - actually the sewer is too high and holds back the river. If the sewer could be lowered then the backing up westwards would be much reduced.	The design standard of protection for the scheme is the 1:200-year flood. At this flood event, the sewer and the weir it forms is completely 'drowned' by the flow. It therefore makes a negligible impact on water levels whilst the river is in flood. While it may look like water is being held back during times of low-flow (i.e. on a typical day-to-day basis); the impact of this effect diminishes towards zero with increasing flow in the river. There is therefore no benefit to removing or lowering the weir and this is not part of the Scheme. This option was examined in detail at the feasibility stage of the project and the removal of the weir was discounted as a viable option for the Scheme. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study

	iii	3. The carrying capacity of the river within the village must be considerably less than it was decades ago. Inevitably large volumes of stones and gravel will have washed downstream. If the riverbed were dredged, then its carrying capacity would increase correspondingly.	The term dredging is used to refer to the systematic removal of accumulated material from river or other watercourse channels. Dredging can increase channel conveyance and reduce water levels during small floods however it is not feasible to dredge the Water of Ruchill and the River Earn to carry the flood flows which are predicted in Comrie. Dredging to the levels required to make a difference in terms of flood risk would also cause substantial damage to the watercourse and the local environment. Dredging is therefore not part of the Scheme. This option was examined in detail at the feasibility stage of the project and dredging was discounted as a viable option for the Scheme. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study
	iv	4. Are the reservoirs part of the 'joined up' thinking? Do the reservoirs i.e. Loch Earn & Lednock fill up to capacity during heavy rains and only release when there is a dry spell so that they are ready for the next heavy rain?	The hydro schemes in the catchment have limited draw-down capacity. In other words, they could not adequately realise water prior to a flooding incident to provide flood storage during a storm. There is also limited control on their operation once they are at capacity. It should also be noted that a strategy to adapt the use of the reservoirs for the use of flood storage would not be compatible with the current primary function of the reservoirs (electricity generation). This option was examined at the feasibility stage of the project and discounted as a viable option for the Scheme. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study

	v	5. Was it considered that a new mini reservoir in Glen Artney would hold back a deluge from Comrie?	Yes, this was considered. Such a reservoir could not have been considered as 'mini' though. A flood storage reservoir to contain and hold 4.1 million cubic metres of water was considered at as part of feasibility. This would have led to temporary flooding land up to 2.6 kilometres upstream of the dam in times of flood. Even with this volume of water stored and realised slowly over time it was noted that flood walls and embankments would still have been required in Comrie as part of any option. This due to the fact that there are 3 rivers in Comrie which can flood independently. This option was examined in detail at the feasibility stage of the project and discounted as a viable option for the Scheme. See Perth & Kinross Council's website for more information. www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study
	vi	The photos below show perfectly adequate access onto the riverbank side of the 'flood wall'. Further to my recent email I have been doing a little research on required ramp gradients in public parks and see that you are suggesting a low gradient - which therefore extends the ramp. The fact sheet below which you will be aware of indicates that 1 in 20 is the desirable gradient. But under the conditions of space availability of the Comrie scheme what is the maximum gradient possible? https://www.sensorytrust.org.uk/information/factsheets/outdoor-access-3-ramps.html	The access shown in the photographs is not adequate for those with the worst mobility issues. The Council had therefore included for a new access ramp at location where there is currently 'at-grade access' to try and ensure the Scheme was as inclusive as possible. We want to ensure it was not separating a section of the community from the greenspace areas close to the river. The access ramp proposed for the Boulevard area has now been removed and it has since been planned that we adapt the photographed area (adjacent to the public toilets) to make the access here less steep and more accommodating. The current gradient of this ramp peaks at 1 in 7; we can achieve a gentler slope of 1 in 16 with significant landscaping effort. Suitable rest areas can be included at this gradient to ensure that ramp is not such a long and continuous run. This means we feel we can deviate from the 1:20 standard without affecting the intended users.
	vii	Alternately or as well as - why are we going for a 1 in a 200-year event - so could the flood wall be lowered and still provide 'reasonable' protection?	A 1:200-year event offers a significant level of protection for the properties in Comrie. New homes in Scotland must be built above this level and the Scheme will offer this retrospectively for the existing homeowners in the area. This is a reasonable public expectation in relation to residential and other urban property. It should also be noted that the standard of protection offered by the Scheme will diminish over time. This will occur as it is expected that there will be an increase in the frequency of extreme storm events in the future brought about by climate change. This 'diminishment' would be accelerated by using a lower initial standard of protection and lead to an overall increased risk of the Scheme overtopping. Therefore, any lowering of the proposed defences could result in a lower design life which would impact upon the viability of the scheme as a whole.

	i	I wish to address the rationale rather than the design here, as we are seeing the same facile thinking across the country, with astronomical costs for very little gain. I suggest the council take a precautionary approach to this and recognise that no amount of flood defences will suffice long term. The climate change factor has been largely ignored due to costs and visual intrusion of defences. However, the guidance does not even factor in the predicted sea level rises of anything up to 40 feet within this century in addition to the heavy flooding predicted from increased evaporation leading to heavier rainfall. We are also likely to suffer crippling droughts on a regular basis. As a consequence, the assumed 1: 200-year event, may indeed be more frequent. The continued rise in sea levels will back up all associated rivers with flooding on low level ground regardless of defences. Even if the world went carbon neutral tomorrow, we still have at least 2-degree rise locked into the system unless we draw down the CO2 via rewilding nature amongst other dramatic changes in lifestyle.	The potential for future climate change has been taken into account in the design of the scheme. It is known that, using the best climate science available in the present-day, that the proposed 1:200-year standard of protection will diminish as a result of the predicted increase in frequency of extreme events. However, we cannot simply build higher and higher walls to accommodate for this. The decision has therefore been made to define the 1:200 year as the minimum standard of protection offered for this scheme because it was felt that this balances the need for flood protection with the public will to retain the town's aesthetics. We have also tested this approach in terms of economics, and it provides the best result in terms of cost-benefit. A risk analysis has been carried out, with the hydraulic model simulating events which exceed the 1:200-year minimum standard of protection (including events taking account of potential future climate change) to understand where flood risk may remain in future following completion of the scheme. Comrie is approximately 50km upstream of where the River Earn discharges into the sea, and potential future sea level rises will not impact upon fluvial flood risk in the town.
39	ii	Even if the world went carbon neutral tomorrow, we still have at least 2-degree rise locked into the system unless we draw down the CO2 via rewilding nature amongst other dramatic changes in lifestyle. The focus here as with any area in the country must be on establishing natural resilience into the landscape. In short - flood prevention, not flood protection. Large scale Rewilding of upper catchments affecting Comrie with millions of broadleaved trees, contour planting on sheep pasture, hydraulic roughness integrated into every available habitat and, beavers utilised as a water management tool. Beaver wetlands can be incorporated into the Rewilding of the uplands, with landowners paid by the council for ecosystem services, rather than throwing money into ill-conceived flood protection measures. The millions of trees planted on the upper catchments and beaver wetlands will more than pay for themselves from carbon sequestration and flood prevention.	The proposed flood protection measures are not 'ill-conceived'. I would also note that trees, man-power, and indeed land are not free. They also do not automatically prevent flooding. Floods still occur in natural forested catchments for instance. Therefore, such an approach would prove prohibitively expensive, take a long time to implement and mature, and would likely leave Comrie at risk of flooding for a long time. There would therefore be limited benefits in terms of flood prevention, particularly in the short term. We cannot take on land management in the way suggested and we cannot leave Comrie at risk for an extended period of time. Walls and embankments are the best option for the town in terms of economics and flood protection.
	iii	All upland roads / tracks, wind farm tracks etc, should have cross drainage on them to divert flow onto vegetation, not merely collated in road side ditches and entering river systems. At present we have hundreds of miles of hard surfaces channelling water into rivers. Forestry is still ploughing / scarifying open land for tree planting, resulting in water pouring off hills when it should be absorbed. Again – this is no longer acceptable, both for water management and carbon loss. Action suggested: The only feasible way to facilitate this essential paradigm shift in thinking is for the council to declare a state of climate emergency – and act on it now, not squander millions of pounds on futile attempts to protect buildings which should never have been built on flood plains in the first place. Pressure must be put on the Scottish Government to back up councils on this.	The design team do not have the power to declare a state of climate emergency. It is advised that this comment is pursued through your local MSP, MP and/or MEP if you feel strongly about it.

40	i	We regret that neighbouring properties have riverbank that is neglected, full of garden rubbish and infested with Japanese Knotweed - which is a notifiable invasion - but no one seems to bother.	The management of invasive weeds is the responsibility of the homeowner. However, in this instance, the Council are aware that we are planning significant construction in Comrie. We therefore do want to inadvertently spread these plants inadvertently. Therefore, an invasive species survey has been carried out and a management plan formulated for the known incidences of Japanese Knotweed and Himalayan Balsam which are present in Comrie. Where appropriate, treatment of affected areas will be carried out. Out with the Scheme areas, and post-construction, the responsibility for invasive weeds will remain with homeowners.
	ii	In 2003 we bought the house because it had uninterrupted views of the riverbank and river, and which we use for leisure activities. We did not buy it so that in 2023 we would look out onto a wall with no views of riverbank or river.	Loss of views can be a sensitive issue. The Council and the Scheme designers are aware that introducing flood defences will potentially have a negative impact on views in certain locations. However, the trade-off is increased flood protection. We have tried to reach a balance with regards to flood risk and defence heights. Overall, we have tried to minimise flood defence heights wherever possible. This helps to prevent them becoming 'imposing'. The required flood defence heights are set to maintain a consistent standard of flood protection along each section of defence i.e. the Council cannot leave gaps at one property or leave some areas with a lesser standard of defence. Provision for planting and the specification of high-quality finishes will mitigate the visual impact of the defences in many places. However, there are locations with limited forms of mitigation are available and where the building of a flood defence will inevitably interrupt the present sightlines. We understand this may remain an issue for some residents but there are few options open to the Council if we want to ensure the Scheme protects homes from flooding. Most of the feedback we have received suggest that flood risk, and protection from it, is the utmost concern for residents. It should also be noted that the Scheme is identified as the Council's highest priority for delivery in the Tay Local Flood Risk Management Plan. It is also ranked 7th in the national priority list.
	iii	We require to retain our parking space for two cars on our land on the riverbank side of the track. This can be achieved by locating the wall nearer the river. Your current plan has allowed for the area in front of the [redacted] to be a place inside the flood wall for them to park their vehicle. We would expect the same. We cannot approve any scheme that denies us these parking spaces on our land that we have used for the past 16 years.	The alignment of the flood defence has been adjusted to accommodate car parking, additionally the 1:20 access ramp has been removed to reduce the visual impact to the area.
	iv	The proposed removal of views at the height shown and the removal of 2 parking spaces would be a disaster for our self-catering bookings.	The alignment of the flood defence has been adjusted to accommodate car parking.

	v	The proposed location of the ramp seems to have moved and is now extending from in front of the garages to the west to in front of the Commercial Lane corner. There is no public footpath along the riverbank. What there is on the Scottish Land Register is a footpath that goes from the corner of Commercial Lane westwards along to and under the road bridge. If the idea is to have wheelchair access then a ramp leading to soft, uneven ground, with long grass for much of the year, it is not going to work. Logically a ramp, if necessary, should be next to this footpath. It should be located facing westwards on the inside of the flood wall at [redacted] and should then continue westwards, over the wall ending on the existing footpath, which has a firm base because it originally had a hard surface. I have never seen a wheelchair being used along the uneven rough riverbank nor along the unmade track that is Ancaster Lane.	The Council has noted from the responses received that the access provisions in this location were not popular with local residents. The design has therefore been altered in the boulevard area in a number of ways. The rationale for the initial design and the changes made are explained in section 3.1.1.1 above.
	vi	The current plan is to have the turning point i.e. the highest part, approximately opposite my neighbour's garage. If we were sitting on our bench seat in front of our house with our heads at a height of approx. 1 metre above ground, we would then be looking straight at the legs of people 1.3 metres above ground who are only 8 metres away. This is not a good idea and most people would be offended. The proposed location of the ramp defies logic because it is in the middle of the 'Boulevard' - it should be hidden as much as possible next to existing walls. If the ramp was located next to [redacted] then the nearby properties would be above it and it would be visually protected by existing walls. I think this is a very important issue to get right.	The Council has noted from the responses received that the access provisions in this location were not popular with local residents. The design has therefore been altered in the boulevard area in a number of ways. The rationale for the initial design and the changes made are explained in section 3.1.1.1 above.
	vii	The riverbank in past years was an open grassed area stretching from the road bridge all the way along to in front of the house 'The Limes'. However about 20 years ago our neighbour [redacted] put up two lines of fencing along his boundary lines. We understand that Perth & Kinross Council asked him the remove it but he did not and Perth & Kinross Council did not enforce their decision. The fences are still there. This has meant that public access and certainly wheelchair access to what the locals call 'The Boulevard' has been impaired all these years. There is no need now to provide access to this part of the riverbank.	The Boulevard area is used as a public space. The design is trying to ensure continuing access to the river on completion of the Scheme. We do not propose to provide unrestricted access along the river bank to those areas maintained as private gardens.

	viii	When my neighbour at [redacted] applied for planning permission in 2013 to demolish a large storeroom and build a new house (13/00239/FLL) with a larger footprint / nearer to our property and the river, he received a letter from Stephen Smith of WDC, Structures and Flooding on 27Feb 2013. He wrote .... "The development does not lie within the 1 in 200-year flood envelope". This scheme was for a house on much the same level as our property and within approximately 20 feet of its north west corner. How can SEPA's flood maps now show in 2019 that a 1.3metre wall is now required? I have looked at the 1 in 30 year, the 1 in 100 year and the 1 in 200 prediction in the vicinity of the house then proposed (they all seem the same to me at this spot) and they all show a slight bluish shading. The advice from SEPA and Perth & Kinross Council then was contradictory.	Any statements with regards to flood risk should be described as 'forecasts. These estimates are based upon: a) the flow which reaches the river resulting from rainfall – 'hydrology'; and b) the accuracy of any hydraulic model which has been built to represent the rivers. The hydrology is based upon statistics which improve as more data are gathered. In particular, with the recent changes in climate which have been observed, an additional 6 years of data are enough to make a difference to the predictions. It should also be noted that the hydraulic modelling methods in the past 6 years have made significant advances and that the previous assessment will have been based on a less detailed methodology. It is therefore not uncommon for information to develop and change as our understanding advances. I would also note that a flood risk assessment for an individual property would not merit the level of detail which is commanded by that carried out for a flood protection scheme. The level of detail we have available to use now is much more authoritative than even 2013. Please be re-assured that for any future planning applications that the information produced for the Scheme will be used as part of any assessment.
	ix	The roadway in front of the houses on the riverbank at Ancaster Lane is not owned by the house owners. If it is a private road then the council should be able to ascertain who this is and the owner should maintain it. We and our neighbours have been filling potholes as best we can at our effort and expense over the years. If there is to be a ramp which is wheelchair friendly then who is going to maintain the roadway leading to it and to ensure that it is also wheelchair friendly. Is the council going to ensure that potholes are dealt with? Will the council be obliged to adopt the road? Further if there is to be a barrier to water naturally draining from the roadway into the ground of the 'Boulevard' does that not inevitably mean that after rain the roadway will remain sodden for longer and this will mean that potholes will worsen. What will the council do to prevent the condition of the roadway worsening?	Perth & Kinross Council are aware that this is a not currently a public road. We are also aware of much of the land ownership in Comrie. However, it is not our role to enforce the maintenance of private assets. You may wish to check your deeds for Rights of Servitude etc. if you wish to know more about the land ownership in relation to your property. The road may be 'taken over' for the duration of construction and used by our Contractor. We would then look to re-instate the road to at least its present-day condition on completion of the works. We are not however obliged to adopt the road. Some residents in this location have actually expressed a preference that the road remain largely as is once construction is finished. Drainage will be incorporated behind all of the proposed flood defences. This is known as back of wall drainage. The Council will maintain and operate this system and it should ensure that no area behind the defences is left in a worse condition upon completion of the Scheme.
	x	Currently the roadway is used by delivery vehicles at some speed and pedestrians seeing cars will walk off onto the grassed areas. If there is a flood wall built right along the current informal edge of the roadway and there is no pavement then where will pedestrians and their dogs, prams and children go? The roadway will only be wide enough for 1 car and there will be no space for pedestrians or for oncoming vehicles to pass.	Space will remain for pedestrians and vehicles to share the roadway. The road should be trafficked at low speeds and on completion of the Scheme it will be no different to the to the access along Commercial Lane for instance.
	xi	If I am not able to see my front garden i.e. rough grassed area and it would be inconvenient to get my lawn mower over to the other side of the flood wall, then I am not going to be inclined to continue to cut my grass and maintain my riverbank. Over the years I have spent on new trees and to fell and remove previous unsuitable trees and have regularly cut the grass or had it cut. It would seem that this will fall to the council to maintain in future. This arrangement already exists for the properties to the west of the Commercial Lane corner get their grass cut under a previous deal which allows the council to drive vehicles over the properties to the road bridge in exchange for the council cutting the grass.	Perth & Kinross Council may take over some areas which become difficult for homeowners to maintain. This will be discussed on a case by case basis and agreed during the detailed design phase. We can provide stepped accesses and storage provisions in other locations if residents so wish it however, homeowners would need to accept that there will be a visual impact to this.

	xii	For 16 years we have accepted that our property insurance costs are very high and our excesses in the event of flooding would be high. We have had one occasion when the water reached our bottom step before receding. On a few other occasions water has crept over some of the grassed areas but got no further. We accept this and our choice would be to continue like this.	While it is appreciated that this has been your choice, Perth & Kinross Council has a responsibility to all the residents of Comrie in terms of flood risk. A break in the defence line to leave one property at risk would not be achievable and would compromise the core aims of the project. I would also note that 16 years is not a particularly long time in terms of rivers and/or flood risk management. You yourself note that your property has almost flooded during this short timescale and just because you have not flooded to date does not mean that you are not at risk of flooding in the future. For example, approximately 150 properties in Comrie flooded in 2012. Some flooded twice within a matter of months. This had a devasting impact other homes and lives. As far as we are aware none of these properties had flooded in the 16 years previous to the first flood of that year. The Scheme is looking to protect these homes, and others like yourselves, from flooding in the future.
	xiii	We understand that for some of our neighbours and generally for many in Comrie the Flooding Scheme proposals will be good for them. For our particular property – [redacted] we feel that the disadvantages as it currently stands far outweigh the advantages and so we do not favour it.	The Flood Scheme will impact on the local area. There will be temporary impacts during construction and also long-lasting impacts on how the village looks on completion of the Scheme. Everyone in the village will feel this in some way. However, we are confident that given time the Scheme will become part of the landscape and fit in nicely with the village. We are working closely with our colleagues in planning and in conservation to ensure we get these aesthetic aspects of the Scheme right. This is also one of the reasons we have consulted on the Scheme and tried to engage with residents. Where possible we have also made amendments and improvements to the design to address the main concerns raised by the local community Overall, the Scheme will bring numerous benefits for local residents in terms of health, security, well-being, insurance, and the marketability of their homes. We may not convince everyone that they should 'favour' the Scheme, but the village would benefit from the proposed flood scheme and therefore the Council will continue to pursue it. As such, the Council intends to seek the necessary statutory approval for the revised scheme under the Flood Risk Management (Scotland) Act 2009 in the near future. This legislation requires the Council to give notice of the proposed scheme and this will take place early in 2020. If you still do not favour the Scheme at this stage, you will have the opportunity to formally 'object'. Notices will appear in The Courier, The Edinburgh Gazette and locally in Comrie and the Council will also formally notify landowners, residents and stakeholders. The scheme documents will then be available for viewing locally and at the Council's offices Pullar House, Kinnoull Street, Perth until a decision is made. The proposals will also be available to view on the Council's web site at www.pkc.gov.uk/comriefloodscheme. Depending on whether any objections are received or not, the scheme may be confirmed (i.e. given statutory consent) by the Council or the Scottish Ministers. Further details of this statutory process, including how to object to the scheme, will be provided with the notification letters that will be issued early next year

41	i	We own a house in the potential flooding zone and I support the proposals outlined. It all looks very sensible with much thought having gone in to the aesthetics. I hope the plans come to fruition as soon as is reasonably possible so many Comrie residents here about being flooded.	Thank you for your comments.
42	i	Great to see at the excellent drop-in session on 8th May this scheme is taking one step further forward towards reality. Noted on the scheme map the proposals thus far show pedestrian, wheelchair and working machine access to riverside at the foot of Commercial Lane along Ancaster Lane as being steps plus twin ramps over the wall. We would submit that this would be unsightly and an unwelcome intrusion for those with dwelling houses nearby, being 1.1m high plus a further 1m or so for safety railings. Unnecessary too, because there already is existing pedestrian and disabled/working access to this area from the west side of the road bridge (B827) path down from public toilets. If you consider both accesses are still required perhaps a less intrusive siting of the ramps and steps at the foot of Ancaster Lane amongst the trees and bushes would be more acceptable.	Thank you for your comments. The Council has noted from the responses received that the access provisions in this location were not popular with local residents. The design has therefore been altered in the boulevard area in a number of ways. The rationale for the initial design and the changes made are explained in section 3.1.1.1 above.
43	i	We hope our current view of the woodland and the river will not be spoiled by the new flood barriers. We hope that as many mature trees can be retained as is possible.	An extensive tree survey has been undertaken which has informed the design process to ensure that as many trees are retained as possible, however tree loss will be inevitable. Any trees which are felled to accommodate the scheme will be replaced within the local area. Replacement planting is proposed to be carried out at a rate of 3 new trees planted for every felled tree. This is to ensure that at least the number of trees lost reach maturity. Areas proposed for compensatory planting will be refined at the detailed design stage. Whilst your view will no doubt be affected, particularly during the works, we hope that at your location it is not significantly impacted long-term.

	ii	We are concerned about the disruption that will ensue. We visit our caravan 12 months of the year for peace and quiet and to enjoy our lovely view. We paid [redacted] for site and rental fees and [redacted] for Council Tax. Whilst the work is being undertaken near our van and across the river from our van it will be inevitable that our enjoyment of the caravan will be affected badly. Are there plans to compensate caravaners via the holiday park management team? A reduction in our rental and Council Tax for the duration of the works is surely being considered?	The Flood Risk Management (Scotland) Act 2009 makes provision for compensation in relation to flood schemes. The Act allows for compensation to be paid if you can show that the value of your interest has been depreciated, or that you have suffered damage as a consequence of the carrying out of the Scheme. There is therefore a mechanism for compensation which may be utilised if you have suffered a loss as a result of the Scheme. However, it should be noted that the onus is on the claimant to demonstrate any loss and also to mitigate against it if possible. Rent for instance will be a matter between you and the owner. We could not expect one party to make a loss as a result of the Scheme at the expense of another. Council Tax deductions or refunds may be available if your home is inhabitable/unusable for a period. Please note that the Contractor will put in place mitigation measures to combat construction related nuisances where possible.
	iii	What measured will be taken to protect our caravan and decking whilst the works are being undertaken? Can we please be kept informed of progress prior to and during the works next to our caravan.	Any caravan owners impacted directly by the works will have a meeting arranged with Perth & Kinross Council before construction begins. Discussion on the protection of property will take place at this stage if required. Anyone who wishes to be added onto the distribution list for newsletter updates should contact ComrieFloodScheme@pkc.gov.uk and request this.
44	i	The photos that follow will illustrate the impact the proposed platform will have on our property. From studying the plans available at the drop-in session, it appears that we are the only domestic property in the whole Comrie Flood Scheme to have this on our boundary. Other properties are in the proximity of a crossing points but no-one else has one on their boundary. It has been pointed out that we cannot be treated differently to any other access but that is exactly what is happening. Other accesses have not been designed on a property boundary.	The design in this location has been adapted following on from a meeting with local residents in the area post-drop-in sessions. We believe we have reached an acceptable design with the local residents. Updated Scheme drawings can be found at *www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design*
	ii	Having no screening at the platform is unacceptable, a point acknowledged by Perth & Kinross Council and the design engineers, hence the proposal for screening of 3.5-4m high, but this will have a severe detrimental effect on our property and our enjoyment of our garden.	The design in this location has been adapted following on from a meeting with local residents in the area post-drop-in sessions. We believe we have reached an acceptable design with the local residents. Updated Scheme drawings can be found at *www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design*

	iii	The bund to the East has been located further away from the boundaries, to lessen the impact on them, because of its height, which is substantially less than the 4m proposed for our boundary screening. Again, we just want to be given the same consideration as to other residents	The design in this location has been adapted following on from a meeting with local residents in the area post-drop-in sessions. We believe we have reached an acceptable design with the local residents. Updated Scheme drawings can be found at *www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design*
	iv	The plans stated the path to our western boundary was 2m wide. It is not currently that width, are there plans to widen it?	The design in this location has been adapted following on from a meeting with local residents in the area post-drop-in sessions. We believe we have reached an acceptable design with the local residents. Updated Scheme drawings can be found at *www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design*
	i	To the west of the Dalginross Bridge, the current access/egress to and from the river bank will remain in situ allowing pedestrian access after the floor defence scheme is completed. Observation: these areas allows for wheelchair access to the riverbank in its current configuration	Thank you for your comments.
45	ii	Commercial Lane vehicular and pedestrian access I am fundamentally opposed to the proposed ramped public access. (a) This will prevent vehicle access to the area currently enjoyed by all residents of Comrie, specifically during the Comrie Fortnight festival, (b) will potentially become a magnet for skateboarders etc. (c) will ruin the aesthetic of the riverbank, specifically, the proposed wall will no longer look like a country/farm feature, but will adopt an urban/industrial look which I assert would be counter to acceptable building standards in this Conservation Area and (d) will impinge upon the privacy of the houses to the north of the proposed structure.	This comment has been taken into consideration by the design team, as a group of similar opinions have been identified in the community feedback. a) Correct. The Scheme proposals will not readily allow vehicle access to the river bank. Early discussions have been held with Comrie Fortnight and Comrie Community Council regarding the relocation of the Comrie Fortnight events to Legion Park. The Council have agreed to undertake some improvement to the park to allow for this. Pedestrian access to the area will be maintained by way of the ramp west of Dalginross Bridge and also the public access steps at Commercial Lane. b) The ramp has been removed. c) The Scheme has been designed to try and ensure it is in keeping with its local surroundings. Suitable wall finishes and planting should help the structure fit into the neighbouring landscape. The Council's planning department and Conservation Officer have been consulted at all stages of the project and will continue to be involved. d) The ramp has now been removed to help address these concerns.

	iv	You noted in our conversation that one of your planned outcomes would be to seek to purchase from me the land to the front of my property. For the avoidance of doubt, my land in its entirety is not for sale. I would expect to work with you to provide access to my garden over the wall via a stile or similar so as to enable me to enjoy the continued use of the area. As I mentioned, depriving me of my garden will leave my property with practically no outdoor recreational area - I have no rear garden, a driveway to the side and only a small formal planted garden area to the front. Loss of my front garden would result in my semi-detached property becoming little more than a two-storey maisonette flat with significant impact to the property value and/or ability to sell it in the future. Please note that I would expect to be compensated for the loss of land for the area taken up by the wall itself as well as for any inconvenience during the proposed works, which to date has included time and incidental costs in liaising with you over the surveying works.	There has been a misunderstanding here. The Council will only look to take over land where it is necessary to do so. We do not want to force sales of land or transference of ownership. This would only potential occur as a last resort where no other suitable solution can be found. We have adapted the design in this location and provided a private access for your continued use of the garden ground. In terms of compensation, the Flood Risk Management (Scotland) Act 2009 makes provision for this in relation to flood schemes. The Act allows for compensation to be paid if you can show that the value of your interest has been depreciated, or that you have suffered damage as a consequence of the carrying out of the Scheme. There is therefore a mechanism for compensation which may be utilised if you have suffered a loss as a result of the Scheme. However, it should be noted that the onus is on the claimant to demonstrate any loss and also to mitigate against it if possible.
	v	I am supportive of the proposed vehicular access to the riverbank at the end of Ancaster Lane subject to this being restricted in such a way as to prevent cars from crossing my property. I am concerned about the environmental impact from the removal of trees to allow Scottish Water to drive to the Manse Lane weir and will wish to see proposals for this at the public consultation. Denuding this area will detract from the current rural aspect of the riverbank.	A high number of comments were received in opposition of the access ramp to The Boulevard from Ancaster Lane. A decision has been taken to remove the access ramp from the scheme design and replace it with a flood gate. This flood gate will, under normal conditions, be closed and locked. Access through the gate can be granted via Perth & Kinross Council. Scottish Water will also have keys to allow them to take access to the weir. Thus, an access restriction will exist through anyone requiring a vehicle to pass through the gate will need to discuss initially with Perth & Kinross Council. No-one should cross your ground with a vehicle without permission from yourself or without a notice being in place.
	vi	Manse Lane is as wide as Ancaster Lane and therefore may be a more effective access point for Scottish Water vehicles. Also, the southern point of Manse Lane is at least 1m higher than the weir area and therefore many be a more effective access point for Scottish Water having already achieved almost all of the height necessary for the roadway to top the proposed wall.	As above, the access ramp has now been removed from the scheme completely and a flood gate has been provided. This is at the location suggested.
	vii	You noted that residents had alluded to an informal one-way system being in place in the area, in the direction of Ancaster Lane and into Commercial Lane. This is not nor ever has been the case. I have three issues with this view and would seek to oppose any enforcement of such in the event that the road became adopted. (a) Any one-way system would inconvenience residents in the Commercial Lane area (b) the "angle of attack" from Ancaster Lane is such that it is virtually impossible to enter my driveway (c) enforcing a one-way system would significantly increase the volume of traffic past the front of my property.	A permanent one-way system is not being proposed as part of the flood scheme. For safety reasons it may be required to implement a system temporarily during construction however a contractor (once appointed) will be best placed to advise on this. Any informal system (or lack thereof) is the sole concern of local residents and is not for the design team to comment on.

	viii	The Lane is currently unadopted and, as I mentioned, is maintained at my own expense, sometimes sharing the costs with my neighbours. In the event that the Council decided to adopt the Lane I would not be fundamentally opposed however, I would wish to prevent it being used as a “turnabout" by traffic wishing to reverse their direction of travel on the A85. This is currently not an issue owing to the rough surface so, in the event of a proposed adoption of the Lane, traffic calming measures would be a mandatory requirement.	Perth & Kinross Council are aware that this is a not currently a public road. The road may be ‘taken over’ for the duration of construction and used by our Contractor. We would then look to re-instate the road to at least its present-day condition on completion of the works. We are not however obliged to adopt the road or to improve it substantially and have no plans to do so. Drainage will be incorporated behind all of the proposed flood defences. This is known as back of wall drainage. The Council will maintain and operate this system and it should ensure that no area behind the defences is left in a worse condition upon completion of the Scheme.
	lx	I note all of your other points regarding: • style and dressing of the proposed wall in keeping with the local environment and in consultation with the local environmental officer • consequential loss, including disruption/amenity during civil engineering works • accommodation works • making good, specifically landscaping and tree replacement • evidence of benefit re: letter of confidence to insurance companies and any future purchaser of the property • eradication of knotweed and other invasive species • moving of drainage • not discussed but implied from closer inspection of the plan: moving of electricity provision I look forward to continuing to work with you collaboratively and constructively to achieve a finalised scheme that all residents support.	Thank you for your comments. It is important to us that we maintain positive relationships with local residents, and we note your comment regarding continued collaborative and constructive work.

46	i	The need for steps to traverse the wall from Garry Place onto the river footpath is not a good use of money. It would be better to provide access at Lochay Drive 100m away. I have recently erected a 6ft fence bordering the river and this will be replaced with a 1.5m flood wall that does not provide security or privacy. Please advise on how this would be rectified. Are measures in place to compensate me for loss of garden and loss of fence.	We are looking to maintain public access in locations where they currently are if possible. We are therefore looking to provide access at both locations mentioned. We have revised the design in this area slightly based upon feedback. We have been able to 'push' the wall towards the river slightly. This means that fence lines can be re-instated along the current ownership boundaries on completion of the Scheme. The wall will be behind this fence as you look from your garden and therefore be unseen. There should therefore be no long-term change in terms of security or privacy as we will put in place a fence of equivalent height to that in place currently. In terms of compensation, the Flood Risk Management (Scotland) Act 2009 makes provision for this in relation to flood schemes. The Act allows for compensation to be paid if you can show that the value of your interest has been depreciated, or that you have suffered damage as a consequence of the carrying out of the Scheme. There is therefore a mechanism for compensation which may be utilised if you have suffered a loss as a result of the Scheme. However, it should be noted that the onus is on the claimant to demonstrate any loss and also to mitigate against it if possible. Where you have not suffered a loss i.e. where a fence has been taken down and replaced then you will not receive compensation. The Council will ensure any ground we access is reinstated appropriately including replacing fences of comparable quality and height where required.


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