


Design Outcomes - Vision

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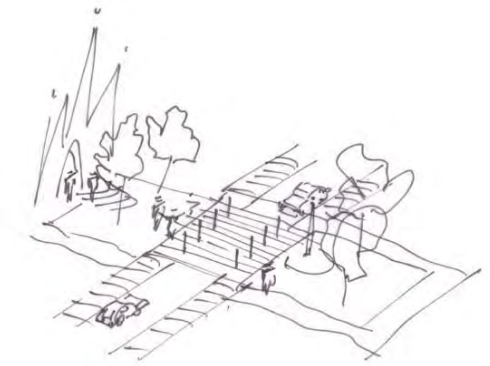
An aerial photograph of a mountain valley. In the background, a range of mountains is covered in snow. The middle ground shows rolling hills with patches of green grass and brown earth. A river winds through the valley, and a small town with many houses is visible in the lower right corner.

During the Callander Charrette, the community agreed 10 Key Principles, that would underpin all plans for the future and could be used to help determine if a development proposal or initiative is 'good for Callander.'

They were used by the Charrette design team as the "brief" for the Masterplan, outlined over the following pages, which will form the basis of the Community Action Plan and future strategic plans.



# Ten Principles for Callander's Future



## 1. Sustainability

Callander will have:

- An holistic approach to sustainability encompassing a sustainable approach to environment, economy and community.;
- Means of generating its own energy;
- Means of dealing with waste responsibly;
- A focus on healthy lifestyle and local produce.

## 2. Community

Callander will:

- Be an inclusive community for all ages;
- Continue to support and nurture the strong existing community; and support further initiatives.

Callander will have:

- Further education opportunities;
- Appropriate community facilities;
- Local health care facilities;
- Superfast broadband.

## 3. Town Environment

Callander will be:

- A capital for the national park;
- A safe, clean and friendly pedestrian environment;
- An attractive well maintained town.

Callander will have:

- A consistent identity and character for the town;
- Accessible local amenities.

People will know where Callander is and where things are.

## 4. Natural Environment

Callander will:

- Encourage the enjoyment of the natural environment for all;
- Look after its natural surroundings and take a lead on promoting responsible use of natural places.

## 5. Tourism and Leisure

Callander will be:

- An attractive visitor destination;
- Capital of the National Park;
- An adventure capital.

Callander will have:

- Leisure facilities for all ages

## 6. Retail

Callander will be:

- A retail hub for the local people, surrounding area and tourists.

Callander will:

- Offer a variety of choice in a quality retail environment;
- Encourage local products.

## 7. Employment

Callander will have:

- A range of job opportunities and training for local people;
- Flexible, affordable premises to sustain a variety of local businesses and business types.

## 8. Housing

Callander will have:

- A diverse range of housing types;
- Adequate provision of affordable housing that remains affordable in the long term and meets local needs;
- A growth strategy that includes the efficient use and improvement of existing housing stock.

## 9. Transport

Callander will have:

- Excellent connections, both within, and to and from the town, including walking, cycling and affordable public transport;
- A parking strategy for all users.

Callander will be:

- An integrated and sustainable transport hub for the area and the National Park;
- Safe for everyone.

## 10. Flooding

Callander will have:

- And continue to develop, a comprehensive flood protection and management strategy including community response.

# Strategic Approach to Delivering the Principles

The issue of future growth evolved out of Charrette discussions regarding Callander's future wellbeing and what was needed to sustain the local economy for future generations.

Callander has come under some pressure to expand to the east and west, in recent years, but this has mainly come from residential developers. Although this has receded in the present economic climate, recent Local Plans have had to address land allocation submissions promoting growth in these areas.

Rather than reacting to these pressures the Charrette considered what Callander needed for the future as the starting point. Attracting tourists, affordable homes for local people, enhancing the environment and sustainability were key issues highlighted in the Ten Principles.

The long term masterplan for Callander has sought to address these issues by proposing expansion to the south to:

- Make the town a sustainable walking town based on concentric growth rather than linear, ribbon, development along the Trunk Road. The town's historic growth has tended to stretch along the road and railway due to the constraints of the Craggs to the north and the River Teith to the south. This has resulted in an unacceptable walking/travel distance between the eastern end of the town and its two main public facilities, the McLaren High School and the Leisure Centre. Further growth to the east would only exacerbate this.
- Open the town up to the River Teith to make it more integrated with this beautiful landscape which is one of Callander's best features. Callander presently turns its back on the river which is generally not evident to visitors until they

are on their way out of the town. New connections need to be made to improve access and river paths.

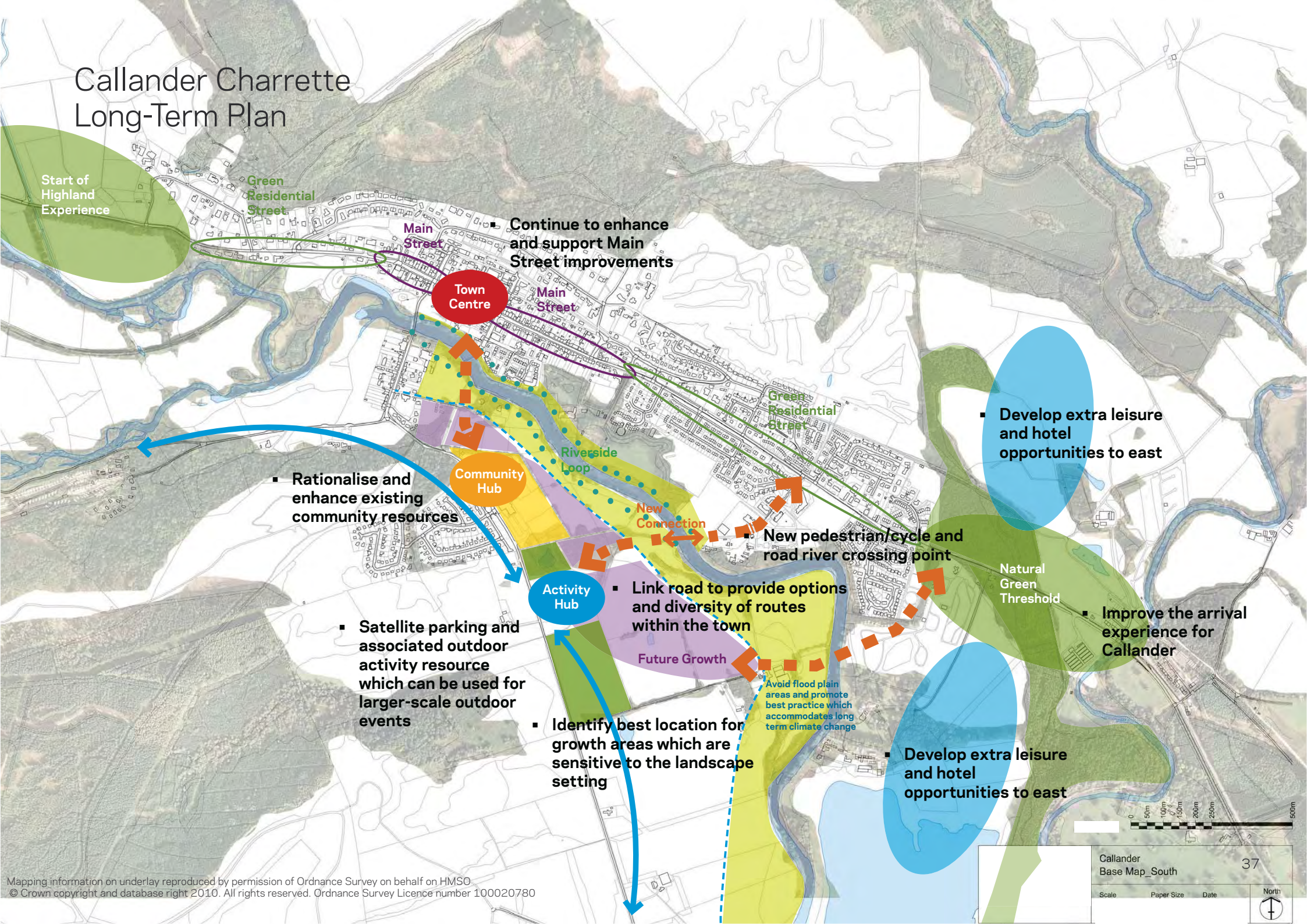
- A new bridge (or bridges) will open up more access to river for visitors and local people and will integrate the south bank with the town. New growth in this direction will create a more compact, walking, town that reinforces the town centre and integrates the High School and Leisure Centre.
- A new road bridge connection to the east will also reduce visitor traffic on the Main Street. Whilst this is not envisaged as a "by-pass" it would offer an increased choice and add flexibility in vehicular and pedestrian routes which would allow visitors and local people to access the new southern development from the east.
- Create an "Activity Hub" for visitors to the south of the river, focused on outdoor activities, in a landscape setting which captures the best feature of Callander, its landscape environment. This is why most visitors go to the National Park and pass through the town. There needs to be a reason for them to stop in Callander and make use of the town's facilities and businesses. This would be a key initiative for future economic wellbeing and local employment.
- The "Activity Hub" can be integrated with an enhanced cluster of community facilities around the High School and Leisure Centre. These two facilities are presently underutilised because they are remote from the majority of the town's population. Integration with the "Activity Hub" will allow these facilities to be more intensively used.
- The demand for new, affordable, housing can be met by a new

neighbourhood sensitively integrated with the green landscape setting to the south of the river. This will reinforce the "Community Hub" being in close proximity to the High School. The Charrette identified a desire for new housing to be sustainable and offer the opportunity for a form of modern agrarian/rural community with home working, home grown produce and renewable energy. There is the potential to create an exemplar sustainable neighbourhood, in a landscape setting, which is the essence of the Charrette proposals.

- New leisure and hotel opportunities are also proposed to the east to complement the "Activity Hub" with a different visitor offer. This reflects proposals arising through the Local Plan and fits with the Charrette Principles in terms of attracting visitors and local employment.
- A key guiding principle for all new development to the south of the river, and to the eastern edge, is that it should be a design response which specifically recognises the special landscape setting in which it will sit. Buildings nestling in a "green fringe" rather than an extension of the town's existing built form.



# Callander Charrette Long-Term Plan



■ Rationalise and enhance existing community resources

■ Satellite parking and associated outdoor activity resource which can be used for larger-scale outdoor events

■ Identify best location for growth areas which are sensitive to the landscape setting

■ Continue to enhance and support Main Street improvements

■ New pedestrian/cycle and road river crossing point

■ Link road to provide options and diversity of routes within the town

■ Develop extra leisure and hotel opportunities to east

■ Improve the arrival experience for Callander

■ Develop extra leisure and hotel opportunities to east

Avoid flood plain areas and promote best practice which accommodates long term climate change



Callander  
Base Map\_South

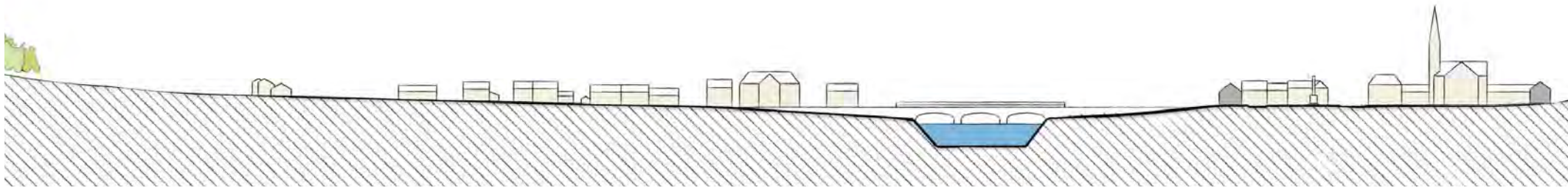
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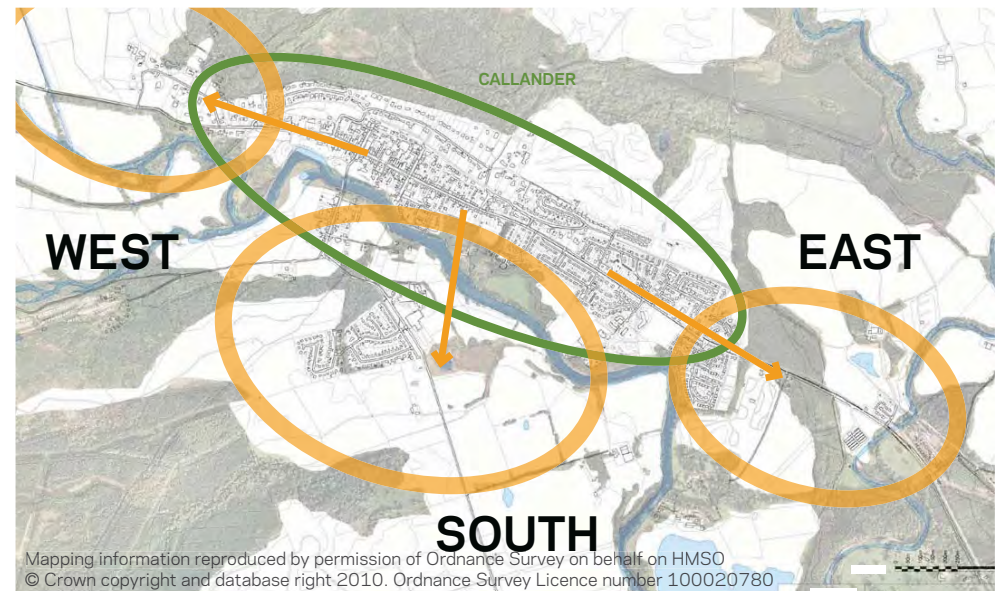
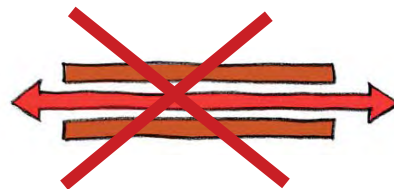
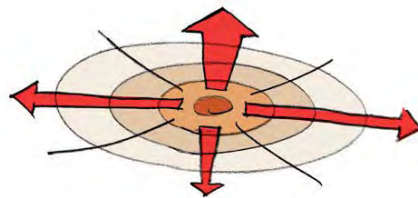




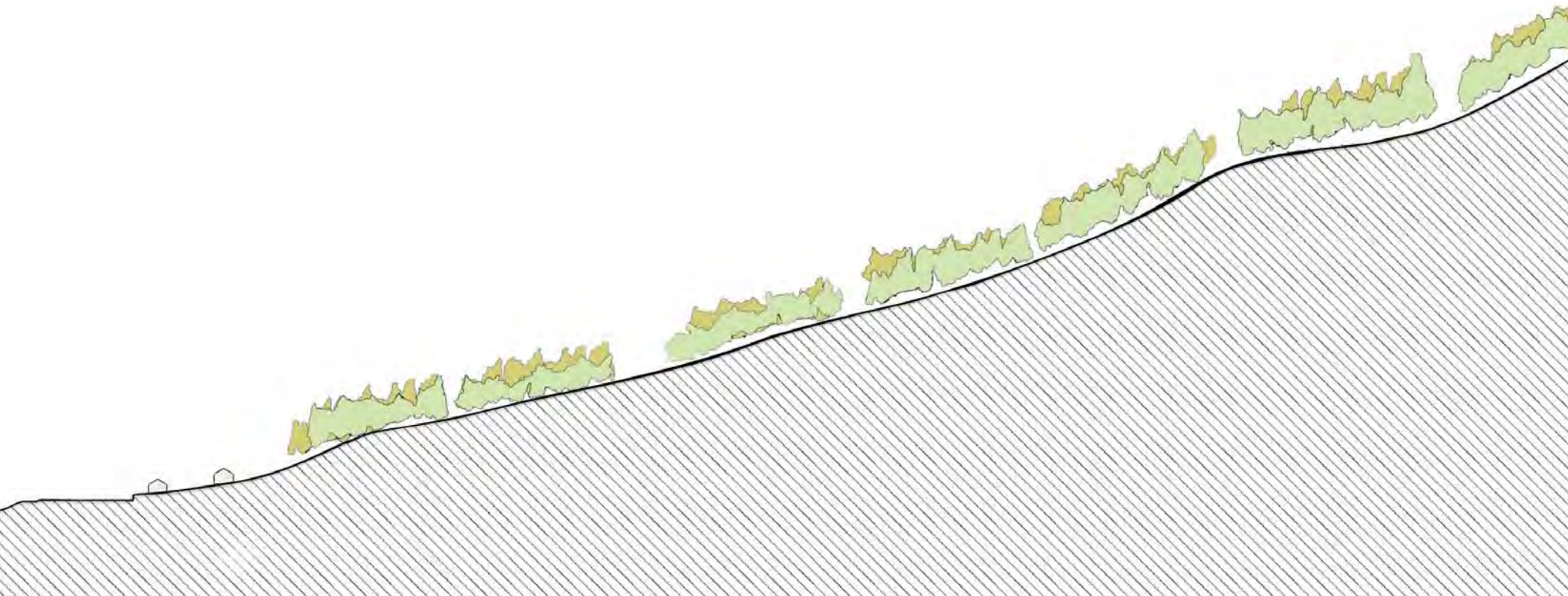
# Callander Charrette Growth Strategy



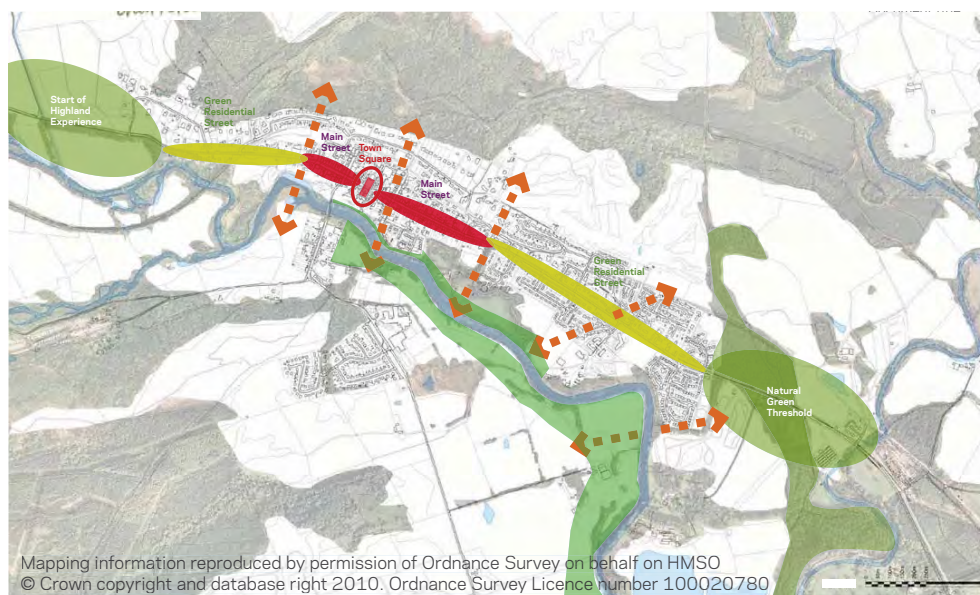
The natural direction for the future growth of Callander is to the south. It offers the opportunity for concentric growth which would allow Callander to develop as a sustainable walking town, reconnected by the River Teith, giving focus to the town centre, and integrating the school and leisure centre. In contrast, linear development to the east or west would be more reliant on car usage.



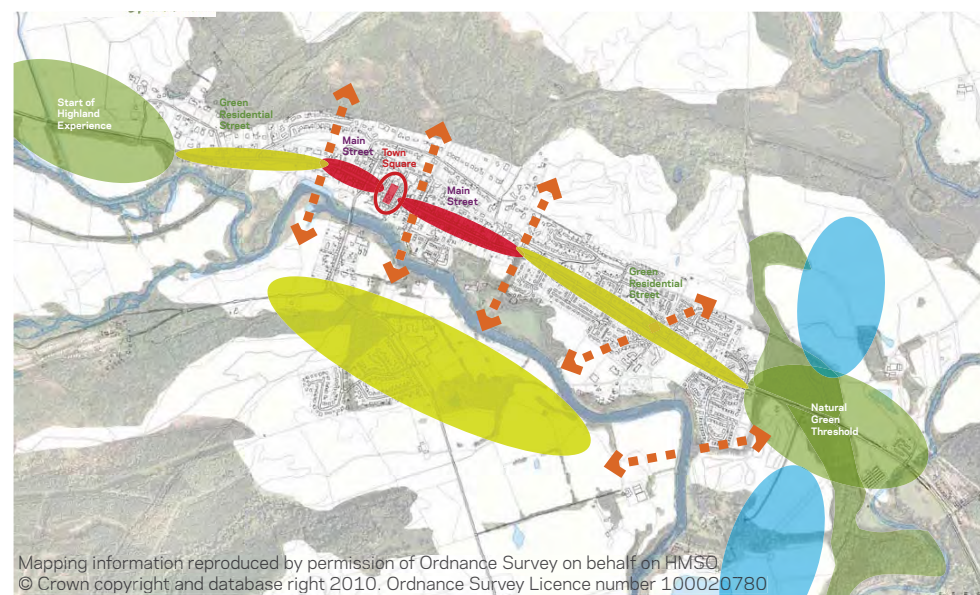




Section through Callander



New Connections to the River

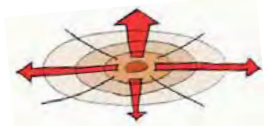


Growth to the South



# Callander Charrette Masterplan

A sustainable approach to  
the growth of Callander



Organic, concentric growth based  
on a walking town. ....

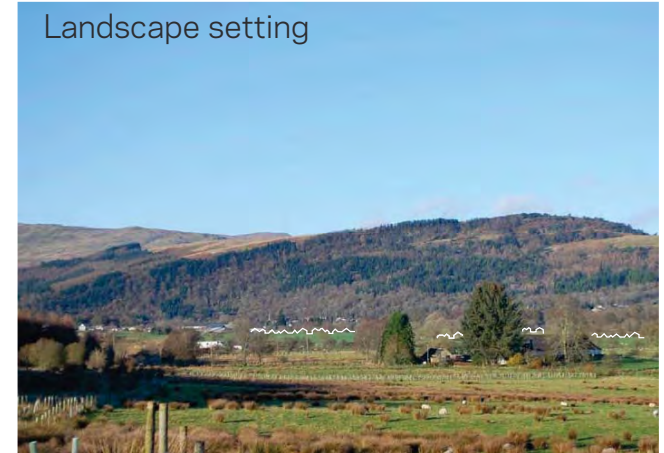
..... rather than linear  
development driven by the car



Making the most of the river



Landscape setting



Outdoor Capital



A sustainable community









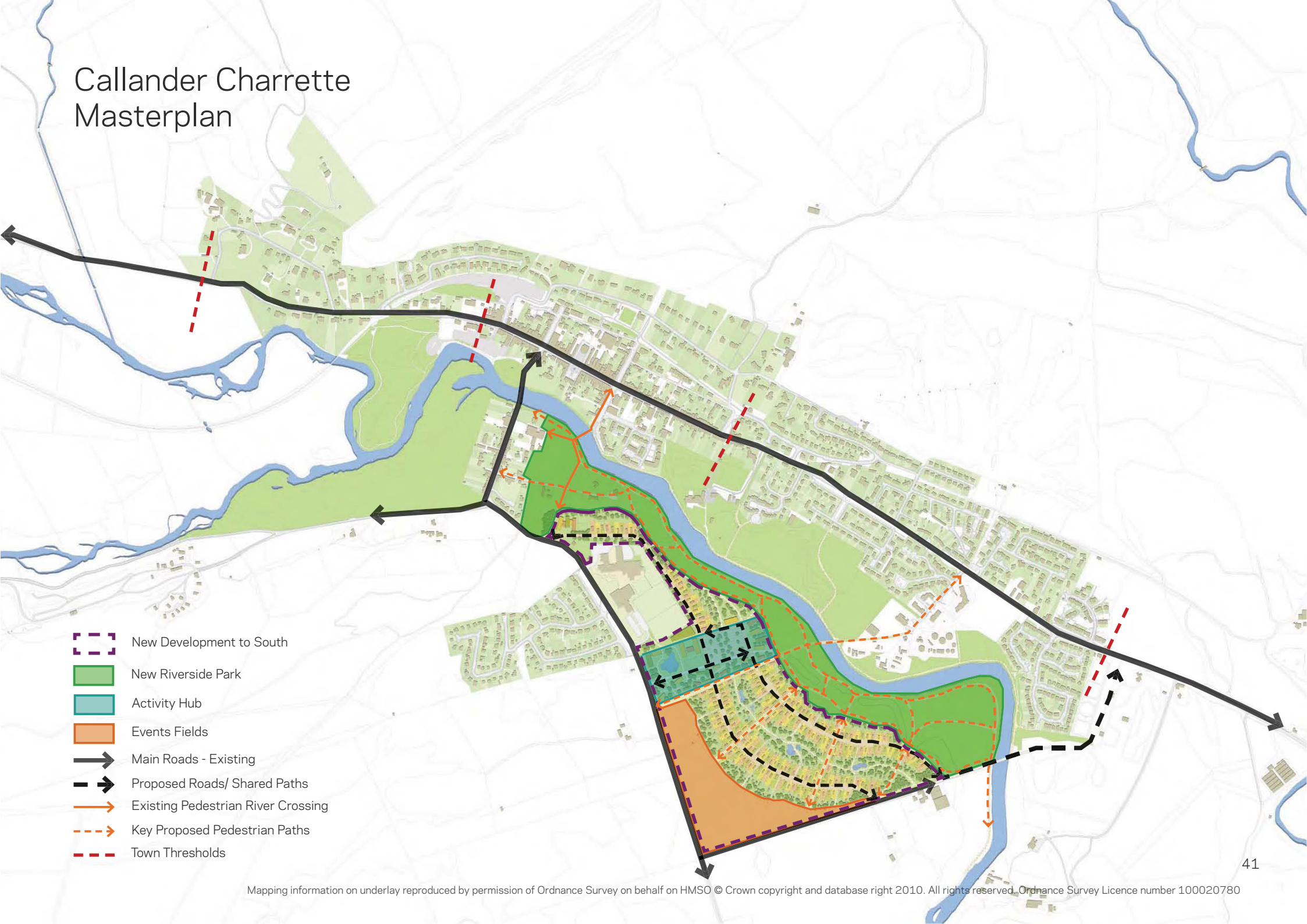
A collaborative civic initiative for  
the benefit of the town





# Callander Charrette Masterplan

-  New Development to South
-  New Riverside Park
-  Activity Hub
-  Events Fields
-  Main Roads - Existing
-  Proposed Roads/ Shared Paths
-  Existing Pedestrian River Crossing
-  Key Proposed Pedestrian Paths
-  Town Thresholds



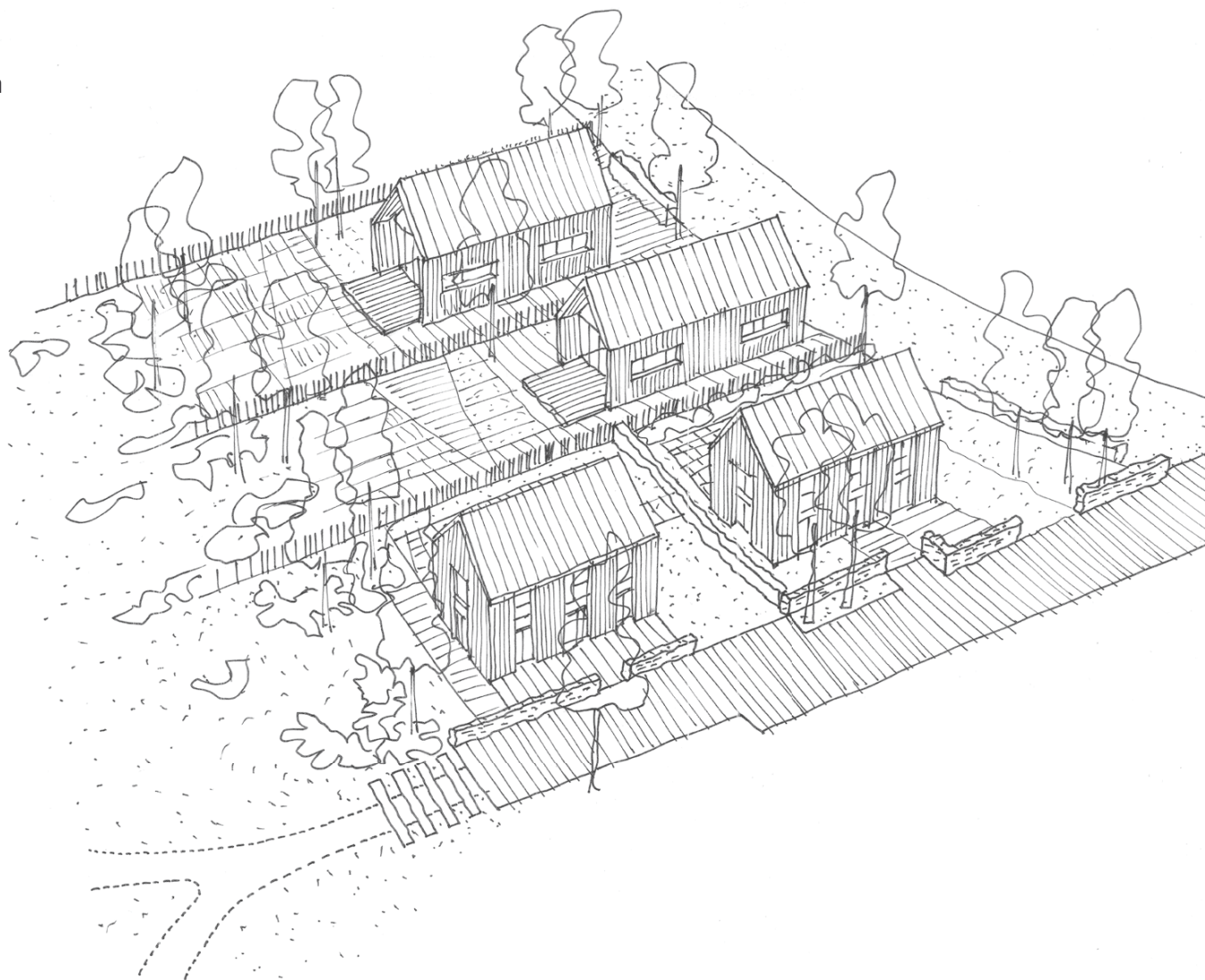


# Callander Growth Plan to South

This holistic plan for Callander's future growth sensitively reconnects Callander with its regional landscape setting within the Trossachs and its local setting by the River Teith. The river can become the new heart of the Callander community and a focus for visitors and activities.

The masterplan lays out the new development along the contours of the terrain in alternating swathes of landscape and rural buildings. Wildlife corridors, community green areas, and allotments are interwoven with outdoor spaces providing everyday focus around community activities and social events at the nearby Activity and Community Hubs.

Integrated with a sustainable urban drainage system (SUDS) green areas offer both flood control, water treatment and additional habitats for flora and fauna.









# Events and Activities Outdoor Hub

Callander is currently lacking in facilities related to the outdoor activities which are the major attractor to visitors to the National Park. The Outdoor Activity Hub will encourage the development of a critical mass of businesses offering services and products in support of outdoor activities and with the capacity for all year round events such as festivals, fairs and Highland Games.





## Attracting Visitors

## The Tourism Product

The Outdoor Activity Hub will provide the necessary draw for visitors to Callander and the Trossachs, by heavily expanding and extending the existing portfolio of activities and events. The key challenge will be in publicizing any existing and new events.

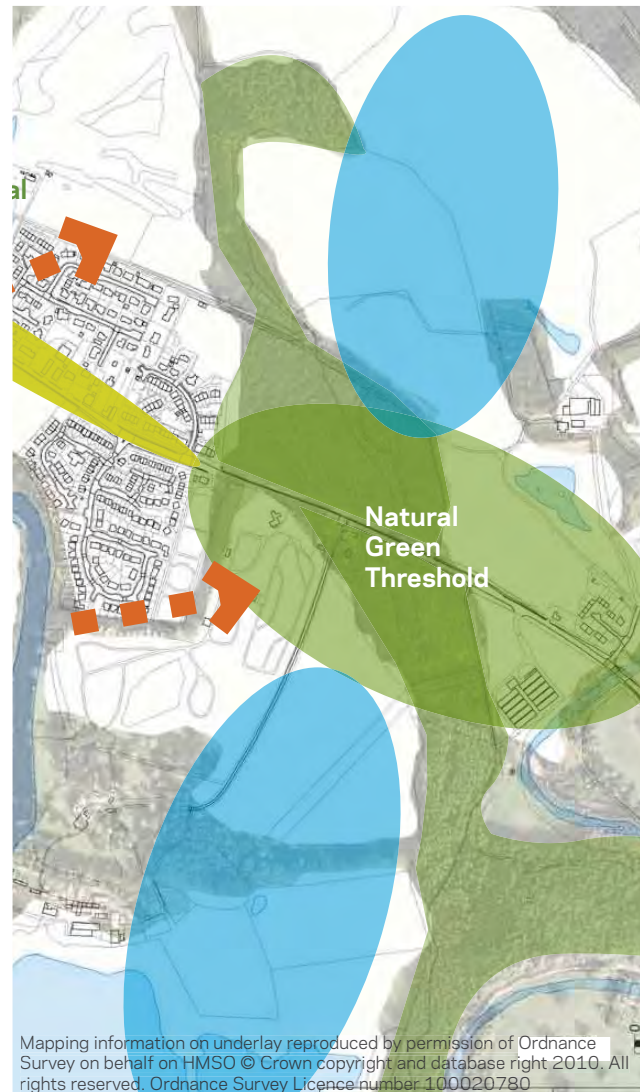
Suggestions:

- o Cycling network and supporting facilities - build on existing businesses (Wheels Cycling Centre), and expand bike rental, hostels and bike storage
- o Paths - repair existing network and create thematic walks, ie. Culture and Heritage Walk
- o Build on existing attractors such as Rob Roy Way and Scott's land project at Loch Katrine
- o Craft and Arts Centre providing gallery and retail (community-based), demonstrations and possibly even classes.
- o Sport & Adventure Project based around leisure centre and Outdoor Activity Hub
- o Festivals: Highland Games (need to re-establish profile as one of Scotland's better events); Fireworks; River Festival with Boat Race; Book/poetry festival; Food/beer festivals eg 'Taste of Scotland'; Fishing competitions;
- o Motor-sport opportunities : rally etc. events rather than regular use.
- o Uplift to the Craggs (view of Lowlands and Highlands)

## Accommodation

Callander needs to provide a varied accommodation offer all year round to cater for its visitors:

- o bunkhouse accommodation
- o expanded hotel offer in mid and higher market segments - both improvement to existing and new
- o encourage a boutique hotel
- o potential for small scale resort at the Cambusmore Estate
- o explore possibilities for a family resort destination



### Location of Key Facilities for Tourism



## Cycling



### Cable Car



## Fireworks



## Community Hub:

The Community Hub concentrates community activities for both individuals and community groups in and around the existing high school, leisure centre and sports grounds and also proposes new community facilities adjacent to the Outdoor Activity Hub.







McLaren High School



McLaren Leisure Centre



Callander Youth Project Centre



Outdoor initiatives for children and youngsters



Allotments, orchards and other initiatives



Local food for local people



# Future Growth - Housing A Sustainable Community

The residential element of the new plan for the south of Callander is conceived as a mixed use, mixed tenure, community which is sensitively integrated with the green landscape setting to the south of the river.

This will reinforce the “Community Hub” being in close proximity to the High School. The Charrette identified a desire for new housing to be sustainable and offer the opportunity for a form of modern agrarian/ rural community with home working, home grown produce and renewable energy.

There is the potential to create an exemplar sustainable neighbourhood, in a landscape setting, which encapsulates the Charrette principles.





# Precedents/ Examples



Todlaw Housing, Berwickshire, Oliver Chapman Architects



Highland Housing Fair, Inverness-shire, Malcolm Fraser Architects



R.House, Isle of Skye, Rural Studio



An example of Sustainable Urban Drainage Systems (SUDS)



Community allotments



Local produce



# New Connections Within Callander

## Callander needs another footbridge

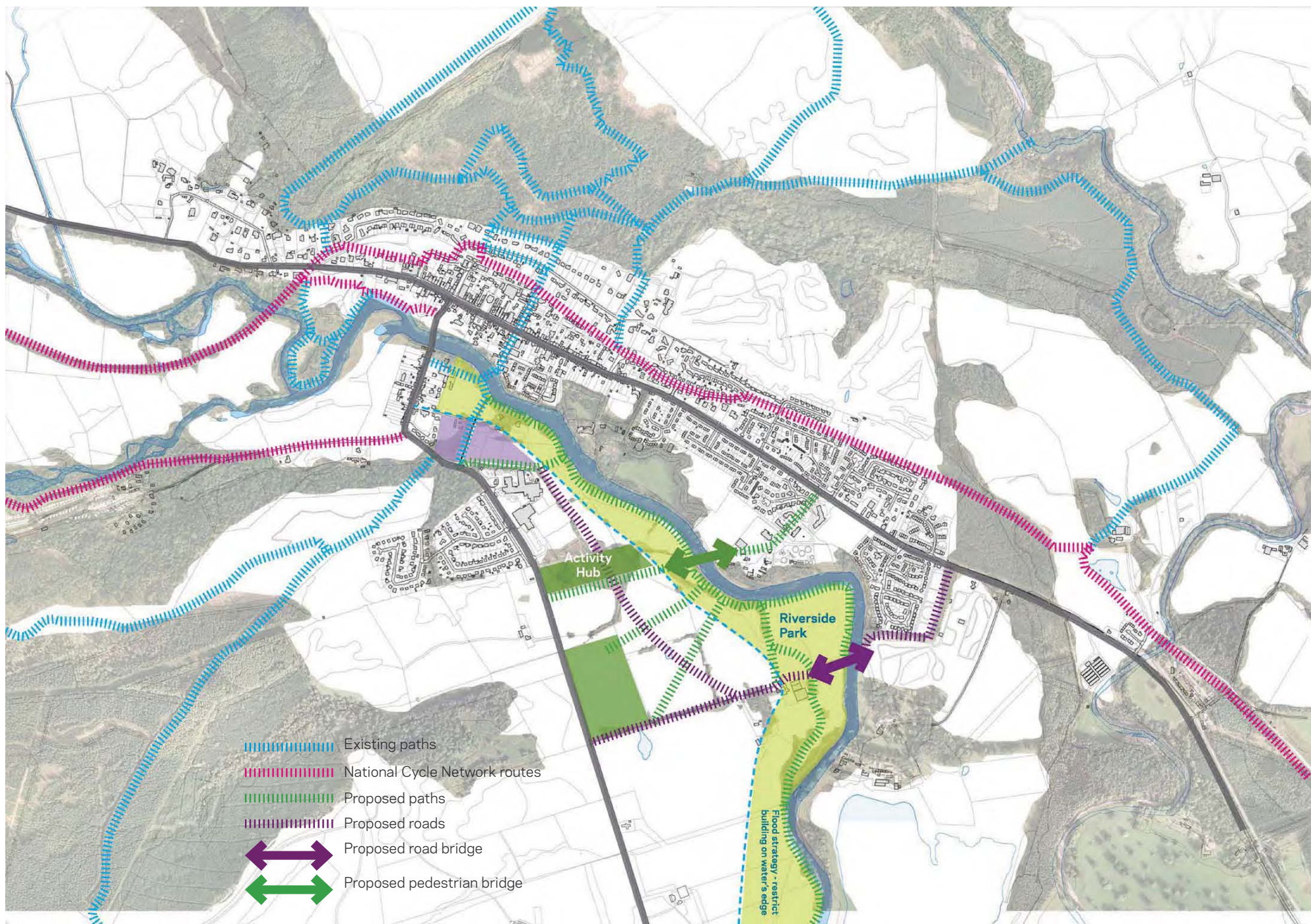
In the short term, an immediate priority should be to provide a pedestrian and cycle link across the river on the east side of town. This need was identified during the Charrette, and reinforced by masterplan proposals. Another bridge allows the creation of a pedestrian/cycle loop along the river, opening up a natural green amenity space on the banks of the river, as well as providing school children with safe alternative routes to school.

## Callander will need another road bridge in the future

An alternative means of vehicular crossing will become more critical in the future if the town intends to grow. Callander is currently extremely reliant on the existing bridge at the Bridgend and having only one crossing point means that the river itself creates a barrier between community uses such as the schools and leisure centre, and the majority of housing and the retail centre. If the town wishes to become more connected, it will need an alternative route across the river, at the east end of town.









# Callander Transport Network

## Wider Links to Callander

### Pedestrian and cycle paths

Callander has under utilised pedestrian and cycle paths which suffer from not being integrated or publicised. A programme should be developed to promote these paths and integrate them in a network to improve local community connections and allow visitors to explore the town and surrounding landscape. Key areas/routes which need to be prioritised are:

- Access to, and along, the river. Callander needs a circuitous river walk.
- Family cycle routes (e.g. to Loch Venachar) to encourage family focused outdoor activity.
- Mountain bike trails for enthusiasts which could extend up the Craggs.

### Public Transport

It emerged at the transport technical session that there could be better linkages of the existing public transport provision, perhaps organised through a dedicated group. There may be untapped opportunities to integrate public transport provision and save money by combining bus fleets.

An integrated Callander public transport group could combine the supply of transport from agencies such as Social Services (now Social Care) transport, Education transport, tendered bus services, DRT, Community Transport, Special Education transport etc into a single integrated planning unit. The group could then allocate these vehicles for use by a number of partner user groups – e.g. Residential Care Homes, Local Education Authority, FE colleges and district councils. Some of the user groups can offer funds – grants, concessionary fare income, statutory Education money etc – to ‘buy’ certain trips, while other users then piggyback on these trips if space is available on the vehicle.

Financially, budgets could remain separated but available for use. This would enable a number of cross sector benefits and increased purchasing power. Public transport services would overlap routes but would not compete. Trips would be prioritised according to funding and Government/SCC objectives e.g. employment, education and health. For non-appointment journeys (e.g. shopping), passengers would be ‘guided’ to times more suitable for the operator.

This type of integrated public transport group has been successfully implemented in Somerset which led to savings in staff costs and the more efficient use of vehicles. However, it did require additional resources for the organisation of services. Such an approach could be applied in Callander.



Community Transport



Family Cycling (stock.xchng).



Mountain-biking. (stock.xchng)







# Flooding Risk Mitigation

## Fluvial flood risks from the River Teith

Stirling Council is currently investigating possible schemes to address fluvial flood risks associated with the River Teith both in Callander and for downstream settlements. At this time, the most feasible and effective schemes are likely to be located upstream of Callander which would aim to reduce the rate and volume of water that flows within the River Teith during flood events. Optioneering of schemes is due to commence this year with a presentation of catchment-wide schemes expected in October 2012. Stirling Council advised that it was unwise to consider flood risk in Callander in isolation as it was unlikely to be cost effective. The best outcomes would be realised by schemes that addressed the whole catchment area and upstream mitigation measures which should be a priority. The key issues are:

### ○ Red Bridge

Red Bridge restricts the flow of water within the River Teith which results in flooding of the Meadows car park, Main Street, Leny Road and adjacent land. Whilst increasing the capacity below the bridge could offer flood relief to these areas, this is not considered a feasible option as the increase in flow through the

River Teith would increase flood risk to downstream sites both within Callander and other settlements.

### ○ River Channel through Bridgend

The reinstatement of an existing river channel through Bridgend (the original route of the River Teith) was discussed but this would require the construction of culverts beneath Bridgend and could increase flood risk downstream. This option was considered problematic and the money required for a scheme such as this could be better spent contributing to a larger, strategic, scheme upstream of Callander.

### ○ Development on the Main Street

Main Street is of great importance to Callander and further development opportunities along Main Street and to the south of Main Street were discussed. Stirling Council, the NPA and SEPA agreed that small developments adjacent to existing development (or on land currently developed) would not result in significant increased flood risk due to lost flood plain storage and small developments are therefore likely to be permitted. Any development in these areas would require robust flood mitigation in the form of land raising and flood defence measures. However,

Stirling Council, the NPA and SEPA all agreed that significant development in this area or on land that is currently undeveloped would not be appropriate.

### ○ Development in General

In other areas of Callander, it was agreed that no new development should take place on land that is deemed to lie within the 0.5% (1 in 200) annual probability fluvial flood plain. Even small developments that are located in the 0.5% annual probability flood plain should be avoided due to the cumulative flood effects of piecemeal developments.

### ○ Redevelopment of existing buildings

Where redevelopment of existing buildings is proposed in areas deemed to lie within the 0.5% (1 in 200) annual probability fluvial flood plain, the type of use should not change to a use considered to be 'more vulnerable' and the development should be resilient to flood risk. For example, a building currently used for retail that is located in the flood plain should not be converted into residential use.



Aerial view of flooding



Main Street flooded



Wetland



# Flooding Risk Mitigation

## o Flood Risk from Other Sources

Callander is also subject to flood risk from other sources, particularly overland flow. Stirling Council has recently implemented a maintenance regime to address common flood issues associated with the blockage of culverts and drains. The majority of historic flood incidents can be attributed to blockages rather than hydraulic capacity of the systems. Stirling Council also confirmed that there is some available funding for local improvement works, predominantly for addressing culvert capacity issues and problem spots.

## o Surface Run-Off - North Callander

Stirling Council is investigating possible schemes that could address overland flow flood risks associated with runoff from the golf course to the north of Callander and from Mellis Burn to the east of Callander. At this stage there are no preferred options, although feasible schemes are likely to comprise a mixture of upstream drainage improvements, attenuation and increased capacity within the above and below ground systems.

The provision of large-scale attenuation to the north of Callander

to alleviate flooding from overland flow was discussed, but this is likely to be restricted by the steep gradients and shallow rock formations that will limit excavation potential.

## o Flood Resilience

'More vulnerable' development should not be located in areas known to regularly suffer from overland flow flooding, for example schools or care homes. Where redevelopment of existing buildings is proposed in areas that suffer from overland flow flooding, the type of use should not change to a use considered to be 'more vulnerable'. Existing flood risks from overland flow sources should be considered in the detailed design of any new or refurbished development and measures incorporated to protect the development.

## o Opening-up Existing Culvert and Drains

Where feasible, it is recommended that opportunities to open existing below ground culverts and surface water drains are explored. Locations where this was identified as an opportunity are at Station Road car park and to the east of Callander along Stirling Road.



Swale



Blocked culvert



Open culvert construction



Swale



# Flooding Risk Mitigation

## Other Issues

### o Emergency Access

Emergency access during times of flooding is considered to be an important issue in Callander. In particular, access from Main Street to the south of Callander is restricted when flooding occurs along Main Street and Bridgend. Consideration should be given to the provision of safe refuges on both sides of the River Teith and an alternative emergency route that allows access from east to west whilst avoiding Main Street.

### o Education

Education is an important tool for reducing flood risk. In particular, the management of leaves, garden waste and debris that often blocks culverts and surface water inlets.

### o Insurance

Obtaining insurance for development located in areas known to suffer from fluvial or overland flow flood risk is problematic. This reinforces the need to avoid development in these areas where possible or design for flood resistance and resilience.

### o Ownership and Responsibility

An issue with understanding ownership and responsibility was raised. Some overland flow originates from below ground culverts and some from below ground public sewers. Little information is known about what Scottish Water is doing to address capacity issues and how this is coordinated with Stirling Council.

## Opportunities

### o Redevelopment of existing sites

For redevelopment of existing sites or brownfield sites, opportunities should incorporate improvements to the flood resistance and resilience of the site over existing conditions. For example, floor levels could be raised to prevent the ingress of flood waters and on site attenuation could be provided to reduce the volume and rate of surface water runoff.

### o New development

Where possible, new development (particularly on currently undeveloped land) should be located outside of the predicted 0.1% (1 in 1000) annual probability event and should incorporate best practice flood management and surface water drainage measures. Surface water runoff should be limited to greenfield runoff rates (at minimum) and allow for an increase in rainfall intensity and duration due to climate change effects. Sustainable Drainage Systems (SUDS) should be used for surface water management. Consideration must also be given to overland flow routes and designing for exceedance, either due to an extreme flood event or blockage of the drainage system.



Detention basin



Golf course SUDS



Golf course drainage



# Flooding

## Summary of Key Points

### o Long-Term Flood Prevention

The most feasible and effective schemes will be upstream mitigations that address the whole catchment area reducing the rate and volume of water that flows through Callander during flood conditions.

### o Design for Resilience and Resistance

Redevelopment of existing sites and buildings should be designed for flood resistance and resilience, and reduce existing flood risk where possible.

### o New Development Location and Use

New development should not be located within the 1 in 200 year fluvial flood extents. New large-scale development should be located outside of the 1 in 1000 year flood extent. More vulnerable development, such as schools and care homes, should not be located in areas known to be affected by flooding.

### o Emergency Access

Emergency access during times of flooding is a key issue in Callander and consideration should be given to the provision of safe refuges on both sides of the River Teith as well as an alternative emergency route.

### o Communication of Community Priorities

A forum needs to be established to make Stirling Council aware of those areas deemed to be critical by the local community.



Callander riverside when flooded



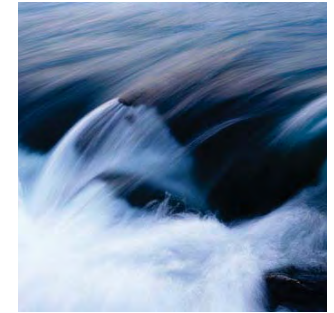
# Sustainability

## An holistic approach

A key outcome from the Charrette was a strong desire that Callander should have a sustainable future. This was expressed as a multi-faceted, holistic, approach which embraces:

- o Environmental sustainability
- o A sustainable local economy
- o A sustainable local community

Future development proposals and initiatives need to be measured against this primary, guiding Key Principle.





# Renewable Energy

## Natural Assets

The people of Callander are very keen on energy self-sufficiency or part thereof and should make the most of the town's natural assets, especially biomass and water. Currently, the use of water is being considered in a local Callander Community Hydro Ltd. scheme, but biomass has not been addressed as a potential resource as yet. The Forestry Commission are keen to ensure that biomass is exploited in future community applications. The provision of wind turbines was not seen as a favourable option for Callander so was not discussed at any length.

For large scale schemes there are opportunities to enter into a joint venture with landowners, such as the Forestry Commission, but prior community acceptance of any such projects is key for successful progression.

## Existing Properties

A focus on improving existing properties is also a necessary initiative. The renewable energy workshop discussed issues such as poor insulation in existing properties as well as future fuel poverty. The main concern with the regeneration of existing built stock is funding, but there are ways to generate the necessary income.

## Income Generation

Income from large scale projects often provides funding for other local initiatives. E.g. The wind farm project in Inverness-shire is providing £1m pa income to community groups. Another option arises through the government's Green Deal financial mechanism which allows for initial investment costs to be covered by energy bill savings. The Callander Community Hydro Ltd. scheme is to be delivered under a DBFM (Design, Build, Finance and Manage) contract which took £1m to develop for a 400kw output. Profits from the scheme will go directly to a community fund although this will fund all kinds of community projects, not energy projects exclusively.

## Lessons Learned

The project team for the Callander Community Hydro Ltd. project are able to disseminate lessons learned to future scheme applications as they had not anticipated many of the requirements that had both financial and time implications.

