

View of estuary from existing bridge adjacent to the former Methil power station

# SECTION 4 | LOOKING FORWARD



## Looking forward

The following section outlines a series of additional threads to the primary and secondary layers of the concept design masterplan. These threads have been explored initially for their potential suitability to the Connectivity Project and further research will be developed during Stage 3 - Detailed Design to establish how they can be implemented.

This section also includes deliberation on the significance of detail: how considered interventions can reference the local vernacular and create a distinctive project with a sense of place. Several examples with an emphasis on light-touch, minimal intervention are provided for their relevance to the sensitive landscapes of the river valley.

A series of phased diagrams are provided to illustrate the initial thoughts about how the river park might evolve over a period of 15 years. Costings information is also included which outlines broad associated costs for the Concept Design Masterplan proposals.

The report concludes with a synopsis of how the proposals address the six masterplan principles defined in the Executive Summary on page 5.

Year 1

Year 5

Year 10



∧ Extract from Grassland Habitat Toolkit





#### IMAGES >

- 1 Eelgrass meadow near Ord, Skye. © Project Seagrass Scottish Wildlife Trust
- 2 Seagrass image © Marine Conservation Society: Lancashire area group
- 3 Lochore Meadows, Willie Clark Centre, © Copyright Fife Council
- 4 Kamikatz Public House, Kamikatsu, Japan © Laurian Ghinitoiu

## Seagrass - carbon capture / carbon neutral landscapes

"A million seagrass seeds are being planted as part of Britain's largest project to save the 'wonder plant'."

https://www.bbc.co.uk/news/uk-wales-51804404

Seagrass is important to the planet as,

- It helps tackle the effects of climate change by absorbing carbon from the atmosphere up to 35 times faster than tropical rainforests
- It accounts for 10% of annual ocean carbon storage globally, despite only taking up 0.2% of the seafloor
- It protects coasts from coastal erosion
- It is a habitat for many types of fish like cod, plaice and pollock providing a nursery for young fish and a habitat for invertebrates.
- It produces oxygen
- It cleans the ocean by absorbing polluting nutrients

"Planting seagrass is an opportunity to reverse loss and start to kick into action a recovery for our seas around the UK."

Dr Richard Unsworth, of Swansea University https://www.bbc.co.uk/news/uk-wales-51804404

Project Seagrass, World Wildlife Fund (WWF), Sky Ocean Rescue and Swansea University, are currently seeding a 4.9-acre (2 hectare) project at Dale Bay in Wales and are working along the Edinburgh coastline. They are looking at a further three potential sites on the West Coast of Wales and Scotland. Ecologist Leonie Alexander, (part of the Iglu Studio team) has been involved in the seagrass seeding along the Edinburgh coastline and has been in contact with Dr Richard Lilley, the Founding Director of Project Seagrass, about the possibility of seagrass seeding in the Firth of Forth, and Leven in particular. Initial reaction has been that it could be a potential site, as well as a good site for community engagement. As the seeds are gathered from around the UK coast, and then transferred into small hessian sandbags and lowered onto the seabed, the seeding process could involve schools, community groups, various stakeholders and educational establishments.

Project Seagrass have started the permissions process with SNH about Scottish sites and funding, a process that would help in any potential programme at Leven.

# **ADDITIONAL THREADS** | ZERO WASTE





### ParkPower - sustainable energy

"The heat pumps providing low carbon heat to the visitor centres at Lochore Meadows Country Park (Fife) and Saughton Park (Edinburgh) demonstrate the key principle that renewable energy projects can be implemented without any long-term visual impact on the park. Indeed, they have no obvious detrimental impact on the normal functions of parks in terms of their amenity or ecological value."

Greenspace Scotland, ParkPower: An Introduction, January 2020, p9

One of the additional threads that Iglu Studio have been researching is ParkPower, a multi-phase programme run by Greenspace Scotland to investigate the potential for hosting green energy infrastructure within parks and greenspaces in Scotland.

In line with the Nesta Rethinking Parks report (2013), the River Park area is seen as having some potential to generate renewable energies due to its large open greenspace and river. Furthermore, without the constraints of buildings in the river valley there is sufficient open space to consider further review. As the park is surrounded by urban development with high demand for heat and electricity, any renewable energies can either help local energy use and / or generate funding to maintain the longer-term proposals.

In the Stage 3 - Detailed Design phase it is suggested that discussions with Greenspace Scotland are progressed to explore how the open greenspace within the park area can be used to generate energy through water, solar, thermal and wind power, all of which are potentially available in the park and adjacent docklands area. Iglu Studio have looked into the Phase 2 categorisation of greenspaces across Scotland.

The greenspace would play a key role in improving the health and well-being of the Levenmouth community, whilst providing renewable energy and potential project funding. ParkPower opportunities can directly address this challenge through a series of measures, including:

- New, long-term income streams can be generated
- Long-term financial savings can be made by reducing annual greenspace running costs.
- Their value as vital public assets is enhanced making them less vulnerable to other forms of development.
- They can play a key role in climate change mitigation through supporting the decarbonisation and decentralisation of our energy systems

(Greenspace Scotland, ParkPower: An Introduction, January 2020, p5)

## Zero Waste - materiality and recycling

"Zero waste is the conservation of all resources by means of responsible production, consumption, reuse and recovery of products, packaging and materials without burning, and with no discharges to land, water or air that threaten the environment or human health".

Definition of Zero Waste as adopted by the Zero Waste International Alliance (2019)

Iglu Studio have been working with project partner Zero Waste Scotland (ZWS) to explore how the masterplan can be under-pinned by the joint principles of zero waste and circular economy, where the products, services and systems in the design, delivery and maintenance of the River Park are designed to maximise their value and minimise waste. 'Make, use, remake' as opposed to 'make, use, dispose'. Not only will this include the careful selection and use of materials, but it will also include the energy required to grow, make, process and transport them, whether they are made here in Scotland or elsewhere. Not only should products and resources be chosen and used responsibly but materials, labour and manufacture should be local.

ZWS have exemplar architectural projects based on circular economy principles, but no landscape architecture projects, yet. The River Park could be the first circular economy landscape project in the UK if the principles are embedded from the start of Stage 3 - Detailed Design.





## Community Focus - Hub + Productive Growing Spaces

A key desired outcome from the engagement process was the realisation of new community facilities.

The following facilities have been suggested by the community:

- a new community hub building
- toilet facilities
- shelters for young people
- fishing platforms
- cafes
- outdoor exercise equipment
- new play provision
- bbg areas with seating
- kayak hire

The development and evolution of the Concept Design Masterplan has been influenced through these suggestions made by the public though the community feedback. As such Iglu Studio have been researching community programmes and social enterprises, including Shettleston Community Growing Project (SCGP-set up in 2009) and the Ridge in Dunbar (see image above).

The Ridge, originally set up as a single social enterprise, was formed in 2012 and has seen its scope of work expand to include referrals from the nine Community Response Groups in Dunbar and West Barns. Work and programmes include:

- Crisis support
- Apprenticeships
- Volunteering
- Schools programmes
- Training
- Community growing
- Food Bank
- Debt Advisory Service
- Children in need
- Families in need including those living with a family member with dementia
- Adult and child mental health
- Support for health needs

Initial sites for community focus included the proposed rail stations, a former steelworks site (now under development for social housing), and the Creosote site. The Creosote site is the current most likely location for proposed facilities.

One of the guiding masterplan principles under-pinning the development of the proposals centred around empowering communities through a sense of ownership. The sixth masterplan principle set out at the start of the report,

"A **community focused** project – helping to create a sense of ownership and a resilient economy through locallyproduced food and community self-sufficiency".

To start this process Iglu Studio have endeavoured to develop community focused guidance. The initial work has included a set of habitat toolkits, including grassland, woodland, scrub, wetland and open mosiac habitat. The toolkits provide simple and clear guidance (see adjacent images) that community groups and organisations can follow and implement. We believe that community focus is another potential thread for collaboration with Inspire Scotland and other similar organisations.

As mentioned earlier in the report, initial conversations have been held with the Grounds Maintenance Service department at Fife Council.









## Community Ownership - Habitat Toolkits



## Temporary landscapes – Temporary nurseries, Pop-ups (café, cycle library)

Temporary landscapes are places that can express current events, that may or may not be repeated, but allow the local community to shape and mould them. They can be beneficial spaces that convey memories, facilitate rituals and social interaction, garner community engagement and provide opportunities for learning and education.

In a similar fashion to the Stalled Spaces Scotland national programme commissioned by the Scottish Government and delivered by Architecture and Design Scotland (A+DS), the River Park provides opportunities to facilitate the temporary use of under-used green spaces, stalled development sites or vacant and derelict land within the Connectivity Project area.

The programme would be focused on supporting community groups to temporarily use currently underutilised spaces within the river park. The intention would be to help kick start vital community-based projects with a focus on education, social interaction and health and wellbeing.

The Leven Partnership have already been involved in the development of outdoor classrooms in conjunction with Fife Council, an aspect integrated in the Concept Design Masterplan and Green Network workstream. Other potential programmes that have been part of discussions include temporary plant nurseries, pop-up cafes and



### MAGES $\land <$

- 1-2 The Ridge, Dunbar
- Step-by-step guide to plug-planting extract from Grassland Habitat Toolkit
- 4-5 Bicycle Library, London

cycle lending libraries, similar to the Bicycle Library (see images above), located at Netil Market, 1 Westgate Street, London, itself based in a temporary, moveable, converted double decker bus.

## Architecture - Hub

The provision of a new community hub for the area has constituted part of the masterplan discussions since Stage 1 - Visioning. It is envisaged that this will be realised through the traditional device of a multi-functional building with a garden that provides a place for everyone and anyone to be, to meet, to exchange views, opinions and just to talk. However this may not necessarily be the final iteration as the community needs to determine what is needed for the benefit of all - a space of co-operative relationships and opportunities that improves community welfare?

The hub could provide a focus for social enterprise projects on arts, health, social well-being and community cohesion, contributing to community ownership and a sense of self. Key though to the success of the hub will be the involvement, participation and reflection of the community, of its needs and values, as well as the ability to engender flexible responses to their evolving needs.

The hub has been at the centre of the masterplan right from the start, reflected by the early inclusion of Collective Architecture to the design team for Stage 3 - Detailed Design, one of the most respected architectural practices in Scotland.

Aspirationally the architecture should be recyclable following zero waste principles, climate aware, low maintenance and inspirational. These all tie in with Collective's ethos and approach.

## Outdoor Classrooms

"Historically, geographically, climatically and culturally, Scotland offers schools and their pupils one of the richest and most varied outdoor classrooms in the world. Our own back yard – whether rural, urban or suburban – is one of the greatest resources available in taking forward the aims, principles and values of the Curriculum for Excellence. Outdoor Learning may be seen as an 'extended classroom', encompassing all learning environments beyond the school wall."

Outdoor Learning: The Extended Classroom - Architecture + Design Scotland

A Children at Ark Franklin Primary Academy in London collect creatures for their insect hotel

The project team have been exploring a number of lines of enquiry and opportunities in relation to outdoor learning. As pupils have returned to school after a summer of lockdown and as the pandemic continues to impact resources and 'normal' activities, schools, pupils and staff are faced with significant challenges, in particular the requirement to maintain social distancing. The use of outdoor learning spaces or temporary outdoor shelters within school grounds, and the wider landscape, is seen as an asset that can help reduce those pressures.

Of particular note, the project team has secured an opportunity to work in partnership with Fife Council's Education Department in developing and delivering a pilot project to demonstrate how The Leven and delivery partners can support the restart of education and embed outdoor learning in schools for the long term. The pilot project is being tested with East Wemyss Primary and aims to prove and develop the concept for wider roll out across the River Leven catchment area.

The river valley appears to lend itself to outdoor learning and education activity. Through the survey and site exploration process the project team have identified a number of potential locations for outdoor classrooms, areas that are easily accessible, safe and in close proximity to nature and wildlife. These locations should be further assessed for feasibility during Stage 3 - Detailed Design.

Survey work by the Forth Rivers Trust (FRT), and consultants, have also started to identify potential learning programmes. These include outdoor classroom and picnic areas, safe fry release areas, foraging, Disability Discrimination Act (DDA) Compliance, dipping ponds, community wildflower meadows, wetland learning, otter city, kids angling areas, bird hide / viewpoint, bat box alleys and a school bus layby.





## Health & Well-being

"What we are doing is focusing on the problems people have and trying to fix those problems for them.....It is not the right way to do things. People become passive recipients of services rather than active agents in their own lives. We need to turn that around, and start thinking afresh.....developing the assets that local communities have, which sustain and create health....I would argue here that what we are talking about is not about health improvement. It is something more significant. It is life improvement."

The tenth Kilbrandon lecture (2012) - Sir Harry Burns. Former Chief Medical Officer for Scotland. The words of Sir Harry Burns resonate with the ethos behind the River Park proposals. Health and well-being is at the heart of the project, but more than providing new paths and improving connections between communities, or opportunities to access the River Leven, it is about changing and improving the lives of the people who live in Levenmouth.

This is an extremely ambitious goal, and one that is difficult and complex to achieve, particularly in the uncertain times of Covid\_19. This will not happen without the participation of all, community, stakeholders, the government, funders and requires ambition and strong leadership. The Landscape Institute identifies the term 'healthy landscapes' as well-planned and designed landscapes, designed to promote good health and wellbeing. The LI position statement 'Public Health and Landscape: creating healthy places' sets out five principles (see below) that create these 'healthy landscapes'. These principles, supported by the aforementioned leadership and ambition, should be followed to realise the life improvement needed in Levenmouth. This is the strategic approach of the Concept Design Masterplan.

- 1. Healthy places improve air, water and soil quality, incorporating measures that help us to either adapt to climate change or mitigate its impact on us.
- 2. Healthy places help overcome health inequalities and promote healthy lifestyles.
- Healthy places relax people, increase social interaction

   and reduce anti-social behaviour, isolation and stress.
- 4. Healthy places optimise opportunities for working, learning and development.
- 5. Healthy places are restorative, uplifting and healing for both physical and mental health conditions.

### **Back Gardens**

The River Park Masterplan has defined boundaries, but the project has always been about the wider context, looking beyond edges and to connect communities, landscapes and habitats. This is no different at the edges of the masterplan where we would like to have a conversation with neighbouring communities and owners of properties that are in close proximity to, back on to, face, or interact with the river park.

Urban gardens can contribute to bird, mammal and pollinator (bees, moths, butterflies) populations as they can provide a wide range of trees, fruits, vegetables, flowers, and even areas of bare soil for ground nesters throughout the year. Recent research has found that urban areas are amongst some of the most populous places for trees, even placing Camden and Croydon in the top 20 places in England and Wales for most tree cover (Bluesky International Ltd, Esri UK, Wesley Stephenson BBC web article, 18 October 2020). Trees increase biodiversity, provide shelter and food sources for bats, birds and pollinators, as well as playing an important role in cooling urban areas, improving air quality (through the capturing of airborne pollutants such as carbon dioxide) and the mental and physical well-being of people (see research by Sir Harry Burns, former Chief Medical Officer for Scotland).

Yet there is an ongoing discussion about the exact value that urban gardens can provide, particularly to native species such as bee populations, where there is evidence that exotic plant species provide a relatively low attraction for native bees.

As the River Park Masterplan develops we would like to continue the discussion with local residents and community groups about what more can be done to make the gardens of Levenmouth beneficial to animals, bats, birds and insects. Some measures include ensuring that the right plants are planted in the right places, planting native species of trees, shrubs, flowers, grasses and wildflowers, collecting local native seeds, ensuring that there is ample bare, loose soil for ground nesters and using natural measures to control pests.



"University of Pittsburgh biologists found that the non-native and native plants used for pollinator habitats could have a variety of deleterious effects not only on urban native plant remnants but also the native bee specialists that depend on them. Unless they are grown from seed collected locally — almost never the case in commercial horticulture — native plantings could swamp unique gene pools in nearby urban fragments."

Janet Marinelli, YaleEnvironment 360, Yale School of the Environment, November 9, 2017

Back gardens near the Burn Mill Dam

# ADDITIONAL THREADS | LOCALISM, CLIMATE CHANGE AND SUSTAINABLE LANDSCAPES

## Localism

The global impact of Covid 19 has devastated economies and communities alike. Amidst the turmoil the crisis has crashed supply chains, severely restricted travel and caused a constriction in globalisation. Consequently, consumers have started looking to local producers for local products, services and activities, which have given support to localism (noun: localism - preference for one's own area or region – Oxford languages).

Globaldata, 19 May 2020, identified a number of trends behind consumers turning to their local community and shops during the pandemic,

- Trust and transparency
- Fresh produce
- Nostalgia
- Sense of community
- Online options

Even before Covid 19, closer scrutiny of globalised consumerism revealed a lack of accountability over food supply chains, an ever-increasing carbon footprint and the negative impact on local economies. The pandemic has provided an impetus to the localism movement and local producers are adapting accordingly. This will hopefully continue to gain momentum in Levenmouth.

Whilst a core tenet of the River Leven Project has always been about improving the local economy, the Concept Design Masterplan looks at particular opportunities to build and strengthen localism. Primary strategies include,

- creating local productive areas agroforestry and community hub arowing areas
- encouraging and facilitating the seeting up of a Social Enterprise (Friends of the River Park group)
- enabling the installation of pop-up shops and cafes as local start-ups
- providing apprenticeships building elements of the River Park through local jobs, skills, materials and communities.

## **Climate Change**

"The scientific evidence is that if we have not taken dramatic action within the next decade, we could face irreversible damage to the natural world and the collapse of our societies."

Sir David Attenborough - BBC programme Climate Change - The Facts

The generally held scientific view is that increased levels of atmospheric carbon dioxide produced by the use of fossil fuels is causing the earth's climate to change. The effects are already visible throughout the world: the loss of sea ice, accelerated sea level rise and longer, more intense heat waves. Humanity's impact on ecosystems is causing bird, animal and plant extinctions through deforestation and destruction of habitats.

Designing landscapes that mitigate and adapt to climate change by sustaining biodiversity and allowing species to thrive in connected habitats can contribute to reversal. "To conserve a representative network of resilient, connected lands and waters that will allow nature to adapt to climate change". (Dr. Mark Anderson Director of Conservation Science at the Nature Conservancy).

Iglu Studio believes that the River Park could play a small but innovative role through the implementation of landscape interventions such as tiny forests, wildflower meadows and natural flood management measures including wet woodlands, secondary flows and wetland creation. Underpinning the strategic decisions and proposals for the Concept Design Masterplan is a joint approach of climate change mitigation and adaptation. Mitigation addresses the root cause of the problem (lowering GHG emissions), and adaptation addresses the consequences of the problem.

Mitigation interventions seek to reduce the release of greenhouse gas emissions, or to increase the capacity of carbon sinks. These include using renewable sources of energy, using open space for ground source heating/ cooling and introducing carbon capture measures such as new woodland/tree planting, wildflower meadows and sea grass seeding. At the centre of this approach is encouraging traffic-free movement through walking, cycling and wheeling.

Climate adaptation measures tackle physical impacts including flooding and increasing temperatures. Whilst the overall expansion of woodland will help in terms of mitigating rising urban temperatures (the river park as a whole acts as a green oasis regulating temperatures), the adaptation of the riparian corridor to allow periodic future flood events and ameliorate surface run-off is important. This adaptation includes the creation of wetlands in the Creosote Garden, re-opening the historic mill lade in the Methil Garden and the expansion of wet woodlands.

In addition to the measures identified in the earlier reference to localism the Concept Design Masterplan proposes to address climate-related threats to food security and the pandemic through the establishment of a community focused productivity area, based on the principles of agroforestry. This will include learning and education, training, new jobs as well as wider benefits in recreation, community development, biodiversity, food provision and placemaking. Agroforestry, and expansion of woodland / forestry, is one of the ways in which the Scottish Government aims to meet its statutory five year programme for adapting to climate change as set out in The Scottish Climate Change Adaptation Programme 2019-2024.

## Sustainable Landscapes

Sustainable landscapes cover a range of different factors, from placemaking, economy, climate change, education and health, as set out in the UN 17 sustainable development goals (national performance indicators), many of which overlap with the Leven Programme themes. Perhaps more pertinent are the ten principles comprising the One Planet Living sustainability framework,

- Health and Happiness
- Equity and local economy
- Culture and Community
- Land and nature •
- Sustainable water •
- Local and sustainable food
- Travel and transport
- Materials and products •
- Zero waste
- Zero carbon energy

All of these principles are addressed in one form or another within the Concept Design Masterplan proposals.

## Creating a sense of place

The River Park provides a unique opportunity to create an accessible, memorable and verdant public space which accommodates people and nature. The heavily vegetated riverbanks throughout the valley provide the perfect habitat for wildlife to thrive while human users of the site mostly stick to the existing desire lines for walking or running. This has effectively minimised intrusion into the surrounding habitat areas: the proposed path network within the river valley predominantly adheres to the existing grass and mud routes to maintain habitat protection.

As with the integration of the upgraded path network, any interventions to be installed within the garden areas should be light-touch, minimalist and sensitive to the landscape and its inhabitants. For example, the initial concept design proposals for the Burn Mill Garden include a bird hide/ shelter with a green roof overlooking the wetland area. The hide will enable bird spotting for all ages and the green roof will contain pollinator friendly planting to attract bees and butterflies, thereby increasing biodiversity.

There will be many opportunities to create detailed landscape interventions both within the garden areas and perhaps in more subtle locations, at the edges of a path, or within a woodland. To design a park that is distinctive to Levenmouth, these details should reference elements of the landscape, heritage and local vernacular which distinguish the area from others. For example, the play features suggested for the Iron Brig Garden take the form of large circular tunnels as a nod to the sheet metal fabrications visible in the industrial yard opposite the garden. This could also include engravings of local dialect, poetry and stories onto new features such as benches, bridges, paths and signage.

Referencing the local culture and heritage of Levenmouth will be a fundamental aspect of Stage 3 - Detailed Design with particular emphasis on community engagement to further inform the narrative.



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View from wetland boardwalk looking east at proposed bird hide green roof in the Burn Mill Garden

![](_page_5_Picture_12.jpeg)

![](_page_5_Picture_13.jpeg)

![](_page_5_Picture_14.jpeg)

## 1. Parc du Lancy

This project is a subtle example of how stategically located features can reveal the history of a site whilst encouraging the visitor to explore and use their imagination. Before being levelled and drained for farming purposes, the River Aire in Lancy, Geneva was an undulating waterbody in the foothills of the plain, surrounded by native vegetation and it is this historic state that the project seeks to reference and celebrate.

The steps shown in the image above both visually and physically lead the visitor down into the dense, riparian corridor. This intervention provides an element of mystery and encourages exploration whilst accentuating the topography of the valley through the placement of the steps along the contours. The steps also reorientate this forgotten landscape towards the river which originally formed it.

### 2. Girona's Shores

There are many relevant and applicable initiatives of EMF's Girona's Shores to the Connectivity Project, including a pioneering differentiated landscape management regime though it is their approach to the path network which provides inspiration for detailed interventions of a temporal nature.

The paths within the park act as 'tellers of the landscape,' highlighting views and encouraging moments of reflection through bordering 'confetti' - defined by EMF as ad-hoc micro-interventions that allow the visitor to identify and celebrate distinctive footprints of the place.

One example intervention would be the timber loungers in the image above which were designed and constructed to echo traditional seating found along the shores of Girona and allude to further interventions within the surrounding area. Furthermore they were carefully situated in a quiet and tranquil space by the project team after hours of walking and analysing potential sites.

![](_page_5_Picture_24.jpeg)

#### ∧ IMAGES

Steps which lead the visitor to the river at Parc du Lancy
 Shore loungers in Girona
 Re-purposed ovster posts

## 3. Parc du Grand Pré

This park in Brittany is a good example of landscape design drawing inspiration from the surrounding context to create a connection between greenspace and a nearby estuary.

An experimental pine tree nursery was created in 36 equal sized test plots: 5,000 seeds were sown of varying combinations of a vast array of pine species such as Austrian pine, Scots pine and Monterey pine and covered with different types of mulching (eg flax waste, gorse, sheep fescue). Natural succession within each varying plot will eventually leave approximately five trees per plot.

Each test plot has been demarcated through the painting of colour-coded recycled posts from local mussel farms, providing a protective barrier and immediate visual impact through height and colour. The posts also allow locals to easily monitor the growth of the trees and includes them in the phasing process.

# **13 PHASING** | YEARS 1-3

The Concept Design Masterplan illustrates a 'vision' of the final proposed River Park. The following phasing diagrams are provided as a starting point for conversations to establish and agree an optimum timetable for development.

Phasing and implementation will be influenced by factors including land ownership, funding, planning, utilities and community needs, and as such should be flexible. However an agreed phasing programme (strategy) will establish a framework, and reference point, for the project partners and community to set goals and targets.

The phasing programme should be accompanied by a development capacity and financial model, in order to test the feasibility and impact of different assumptions and scenarios.

The phasing programme considers a number of key factors and influences including,

- the proposed rail line and station implementation date of 2023,
- the establishment of the Levenmouth Active Travel Network.
- projects that can be delivered early,
- masterplan framework elements that provide structure without limiting flexibility.

## Year 1 (2021)

- Site investigation of masterpan area including
  - a line and level survey across entire site,
  - a structural investigations of key structures (bridges etc),
  - a 3D laser survey
  - a Flood Risk Assessment further study of Methil Mill lade, Kirkland Dam environs and Creosote area.
- Full survey of agreed projects, including the Burn Mill area, and key priority path routes.
- Development of interim community programmes with FRT and Project Team, including wildflower seeding, woodland/ tiny forest planting and outdoor classrooms.
- Planning programme to remove existing Local Development Plan (LDP) allocation of Creosote site (currently industrial).
- Compensatory planting of trees removed from rail corridor in agreement with Network Rail (NR).
- Continued re-development of Kirkland and Burn Mill dams

![](_page_6_Figure_20.jpeg)

![](_page_6_Picture_21.jpeg)

![](_page_6_Figure_22.jpeg)

![](_page_6_Figure_23.jpeg)

## Year 2 (2022)

- Planting of new woodland blocks,
- Continued replanting of compensatory trees removed from rail corridor.
- Detailed design development of primary river park routes (paths for all / traffic free routes),
- Detailed design development of rail and river crossings (new and existing bridges),
- Detailed design development of Burn Mill Garden area,
- On-going community projects and planting programmes,
- Establishment and installation of temporary works at Creosote site (subject to landowner agreement) including community productive spaces, workshops, tool library, cycle library etc.
- Establishment and planting of temporary nursery (location to be agreed),
- Detailed reconfiguration of Kirkland and Burn Mill Dams.
- Identification of off-road biking facility location.

# Year 3 (2023)

- Tender issue of Burn Mill Garden,
- Tender issue of primary river park routes,
- Establishment of project construction parameters including sample sections and comparative panels,
- On-going community projects and planting programmes,
- Continued re-configuration of Kirkland and Burn Mill Dams,
- biking facility.

Note: Detailed design development stages will likely straddle years subject to survey and site investigation works.

![](_page_6_Figure_48.jpeg)

Proposed priority development areas

Proposed temporary

community space

- A Bridge across rail + river at Methil Garden B Burn Mill Garden
- Bridge across rail + river at Creosote Garden
- D Bawbee Bridge upgrade

Continued development of detailed construction packages,

- Potential tender return and construction start of selective initial priority projects or route sections,
- Detailed design development and construction of off-road

### Years 4 - 9 (2024 - 29)

- Continued exploration and representation to Fife Council for removal of current LDP allocation for Creosote Garden
- Detailed design and development of Secondary and Tertiary river park routes
- River / riparian corridor improvement works
- Reinforcement planting works to existing woodland areas
- Continued planting of new woodland areas
- Continued development and implementation of community and social enterprise works
- Renewable energy resource, and sustainable landscape project development, such as seagrass seeding in the Firth of Forth

![](_page_6_Figure_64.jpeg)

![](_page_6_Figure_65.jpeg)

## Years 10 - 15 (2030 - 35)

- Development and construction of permanent proposals for Creosote Garden including community hub
- The Docks Garden development, including recreation and watersports hub
- Renewable energy resource, and sustainable landscape project development,
  - 1. Agroforestry
  - 2. Ground heat source
  - 3. Solar, wind and tidal power
- Green bridge development of existing former rail bridge.

![](_page_6_Figure_76.jpeg)

Levenmouth Active Travel and River Park Concept Design - Masterplan Report

oodland / tinv forest

- - 3 Solar, wind and tidal power

- K Millenium wood water events area
- Docks Garden development area

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## Costings

Having produced the Concept Design Masterplan, an estimate of the likely construction costs was prepared by Thomson Gray Quantity Surveyors. The costing was based on the masterplan proposals and allocated under the three suggested development phases.

Phase 1 – Year 1 to 3 Phase 2 – Year 4 to 9 Phase 3 – Year 10 to 15

The estimate breaks the construction costs down into a range of key elements including paths, bridges and green infrastructure. For a more detailed breakdown refer to River Leven Connectivity Project Cost Estimate of Infrastructure / Public Realm – 13 November 2020.

#### 2.0 KEY FACTS SHEET (Cont'd)

Summary of Estimate

Average uplift of 3.35% per annum using BCIS Forecast

		2.44%	6.02%	10.05%	
PHASE 1	Overall Construction Cost	year 1	year 2	year 3	TOTAL STAGE 1 COST
Remove Existing Path Network	£76,000	-	£40,288	£41,819	£82,107
Bridges	£3,919,000	-	-	£4,312,860	£4,312,860
New Paths	£4,870,000	-	£2,581,587	£2,679,718	£5,261,305
Woodland	£321,000	-	£340,324	-	£340,324
Grassland	£151,000	-	£80,045	£83,088	£163,133
Wildflower	£36,000	-	£18,000	£18,000	£36,000
Play	£375,000	-	-	£206,344	£206,344
Options (Skate Park etc)	£2,280,000	-	-	£2,509,140	£2,509,140
Surveys and Legal Costs	£240,000	£122,928	£63,612	£66,030	£252,570
Design Costs	твс	****	*****	****	
PHASE 1 - TOTAL CONSTRUCTION COST	£12,268,000	£122,928	£3,123,856	£9,916,998	£13,163,781

		13.93%	15.80%	19.15%	22.50%	25.85%	29.20%	
PHASE 2	Overall Construction Cost	year 4	year 5	year 6	year 7	year 8	year 9	TOTAL STAGE 2 COST
Remove Existing Path Network	£99,000	£56,395	£57,321	-	-	-	-	£113,716
Bridges	£370,000	£210,771	£214,230	-	-	-	-	£425,001
New Paths	£5,206,000	£2,965,598	£3,014,274	-	-	-	-	£5,979,872
Woodland	£1,974,000	£742,163	£754,344	£776,167	-	-	-	£2,272,674
Grassland	£151,000	£56,771	£57,703	£59,372	-	-	-	£173,847
Wildflower	£36,000	£13,535	£13,757	£14,155	-	-	-	£41,447
Wetland	£173,000	£57,090	£57,090	£57,090	-	-	-	£171,270
Incubator Spaces	£25,000	£9,399	£9,554	£9,830	-	-	-	£28,783
River Restoration	£5,482,000	£1,249,129	£1,269,631	£1,306,361	£1,343,090	£1,379,819	-	£6,548,030
Play	£219,000	£62,377	£63,401	£65,235	£67,069	-	-	£258,081
Heritage	£168,000	£95,701	£97,272	-	-	-	-	£192,973
Lade	£132,000	£75,194	£76,428	-	-	-	-	£151,622
Active Travel Hubs	£438,000	£124,753	£126,801	£130,469	£134,138	-	-	£516,161
Cycle/ e Cycle	£78,000	£22,216	£22,581	£23,234	£23,888	-	-	£91,919
Street Furniture	£45,000	£12,817	£13,028	£13,404	£13,781	-	-	£53,030
Surveys and Legal Costs	£105,000	£19,938	£20,265	£20,851	£21,438	£22,024	£22,610	£127,125
Design Costs	твс	****	****	****	****	****	****	£0
PHASE 2 - TOTAL CONSTRUCTION COST	£14,701,000	£5,773,847	£5,867,679	£2,476,169	£1,603,403	£1,401,843	£22,610	£17,145,550

#### Appying Average uplift of 3.35% per annum using BCIS Forecast from year 6 onward

		32.55%	35.90%	39.25%	42.60%	45.95%	49.30%	
PHASE 3	Overall Construction Cost	year 10	year 11	year 12	year 13	year 14	year 15	TOTAL STAGE 3 COST
Woodland	£1,073,000	£237,044	£243,035	£249,025	£255,016	£261,007	£266,998	£1,512,125
Wildflower	£17,000	£3,756	£3,851	£3,945	£4,040	£4,135	£4,230	£23,957
Wetland	£50,000	£11,046	£11,325	£11,604	£11,883	£12,163	£12,442	£70,463
Play	£99,000	£21,871	£22,424	£22,976	£23,529	£24,082	£24,635	£139,516
Community Hub	£477,000	£105,377	£108,041	£110,704	£113,367	£116,030	£118,694	£672,212
Street Furniture	£100,000	£22,092	£22,650	£23,208	£23,767	£24,325	£24,883	£140,925
Surveys and Legal Costs	£75,000	£16,569	£16,988	£17,406	£17,825	£18,244	£18,663	£105,694
Design Costs	твс	*****	****	****	****	****	****	£0
PHASE 3 - TOTAL CONSTRUCTION COST	£1,891,000	£417,753	£428,312	£438,870	£449,428	£459,986	£470,544	£2,664,892

#### Appying Average uplift of 3.35% per annum using BCIS Forecast from year 6 onward

#### Summary

The development of the Concept Design Masterplan has taken much longer and been more complex than imagined at the inception in January 2020, thanks in the main to the impact of the Covid-19 pandemic. Nevertheless an initial masterplan proposal has been realised, one that we believe aligns with the Masterplan Principles that we started with in January 2020 (detailed on the following page). Most importantly the masterplan has been presented to the community, commented on and discussed, and whilst there is always more consultation that can be done, more people to talk with and more voices to be heard, the response has been overwhelmingly supportive of the River Park proposals.

The Concept Design Masterplan is of place: it has been shaped by locals who live and work in Levenmouth, both through their suggested improvements and through the desire lines they have carved into the landscape. It is a plan that fulfils the core principles of the Leven Programme to reconnect communities, to regenerate the river and its immediate environs, and significantly has the potential to revitalise the economy of the area.

Perhaps most intriguing at a small scale is the potential for the project to incorporate localism, social enterprises and a community focus. This is a unique project though which can also play its own small role in addressing national and global issues such as renewable energy generation, climate change and health and well-being.

To achieve any of this for the long-term, it is paramount that the Connectivity Project is a community focused project enabling the community to help themselves and to create a sense of ownership and a resilient economy through local production, enterprise and community selfsufficiency. This is reflected in the Next Steps.

#### **Next Steps:**

- Secure funding for project team and workstreams for Stage 3 Detailed Design.
- Continued community engagement establish a Stage 3 - Detailed Design strategy and programme.
- Investigating the potential formation of a Friends of the River Park group to establish an administrative structure to manage aspects of the park and enable community stewardship. This development of programmes could share practical skills, training, planting and maintenance of the River Park.
- Review, identify and agree the priority detail design projects in conjunction with Network Rail / the Levenmouth Rail link and Blueprint programmes.
- Establish a project team to deliver the proposed programme - members / partners to include community and social enterprise organisations (e.g. Inspire Scotland)
- Further exploration and development of the additional threads including seagrass and temporary programmes such as temporary nurseries, bike lending libraries etc.
- Identify and programme interim activities to raise awareness including FRT river-based work and as previously proposed archaeological dig in north west area of site (Kennoway).
- Identify, fund and enact a programme of site survey and site investigations, collated into a central data base.
- Identify and establish land ownership, continue ongoing conversations and embark on new relevant conversations with landowners.
- Continued research and development of upstream programme.

![](_page_8_Picture_1.jpeg)

A **connected** project – embracing walking, cycling, and wheeling.

As we delved further into the valley, through boggy grassland, across train tracks, discovering desire lines carved by locals we realised that the basis for a coherent path network was already in place. Following discussions with the community though it became clear that the steep slopes, dense vegetation and often unstable routes rendered this verdant and peaceful landscape often impassable. The proposed upgraded, widened and accessible for all path network will allow safe passage to, along and across the river for people of all abilities to connect with nature.

![](_page_8_Picture_4.jpeg)

A green energy project – integrating public transport, renewable energies and energy production.

One of the primary framework layers for the masterplan is the rail-line. The re-opening of the line and construction of two stations will bring a much needed source of public transport to the area. The stations will essentially bookend the river park and provide direct access for visitors, connecting Levenmouth to Edinburgh in 70-75 minutes.

An additional thread to be developed in Stage 3 -Detailed Design is the **potential hosting of green energy** infrastructure (water, solar, thermal and wind power) within the river park as part of the Park Power programme.

![](_page_8_Picture_8.jpeg)

A social justice project – endeavouring to tackle broader social themes of inequality, particularly for those seldom heard and most at risk.

Research has shown that regular access to green spaces can improve health and wellbeing: the River Park will be a fully accessible and beautiful public park with a wide range of facilities to provide a **meaningful and generous** green space for one of the most deprived areas of Scotland/

The proposed outdoor education programme to be developed further during Stage 3 - Detailed Design is a unique opportunity for children and young adults to **learn** new skills and knowledge in an inspiring environment.

![](_page_8_Picture_12.jpeg)

A **spatial** project – providing a new network of public green spaces.

The central concept of the masterplan is to **provide a** series of social spaces around key crossing points of the river. These six garden areas will provide **meeting places for** communities to socialise, relax, play, learn and explore. Each garden has a distinctive character of its own - where the Methil Garden focuses on heritage, includes a wet woodland and allows access close to the river the Iron Brig Garden will be a community co-designed play area at the top of the valley within a large broadleaved woodland.

A climate aware project – working towards zero waste goals with the introduction of climate adaptation and mitigation measures.

Many of the proposals within the River Park will address climate change: re-opening the mill lade in the Methil Garden will **accommodate periodic flooding**, the planting of pollinator corridors will **improve biodiversity** and the planting of native tree species and tiny forests will **sequester** carbon.

Furthermore, the materials used for paths and interventions will adhere to zero waste guidance with an emphasis on re-using and recycling.

A **community focused** project – helping to create a sense of ownership and a resilient economy through locallyproduced food and community self-sufficiency.

The formation of a Friends of the River Park group has been suggested to create an administrative structure to manage aspects of the park and enable community stewardship. This could include the development of **programmes to** share practical skills, training, planting and maintenance, potentially as part of the guidance included in the Habitat Toolkits.

Finally, building and tending to extensive growing spaces would **improve food security** during this uncertain period of time when it's most needed.

![](_page_8_Picture_26.jpeg)

![](_page_8_Picture_27.jpeg)

![](_page_8_Picture_28.jpeg)

)	
out Creosote Garden	128
visualisations 131	

# A.1 APPENDIX | RESEARCH PROJECTS

# **RESEARCH PROJECT 1**

## AKERSELVA

PROJECT TYPE : Public realm, river restoration

LOCATION : Oslo, Norway

CLIENT : Oslo kommune

SCALE COMPARISON :

Akerselva

![](_page_9_Picture_7.jpeg)

The Connectivity Project

#### PROJECT SYNOPSIS

During heavy industrialisation in the 19th century, the Akerselva powered many saw mills, textile factories and mechanical workshops located along its riverbanks. Since de-industrialisation in the 1970s many of the structures and buildings were left abandoned and the river was left heavily contaminated after over 100 years of industrial and sewage discharge.

In the 1980s, a local drive was instigated to limit emissions and revive the flora and fauna of the river. This was followed by the transformation of the traditional industrial structures into cultural venues, food markets, cafes and schools, the installation of colourful street art and sculpture and the development of an integrated pedestrian and cycle path network.

The river and its associated public space is now perceived as Oslo's active, green heart providing opportunities to rest, walk, run, cycle, swim, fish, and kayak.

#### RELEVANCE TO THE CONNECTIVITY PROJECT -----

- Installation of cantilevered pedestrian bridges and walkways
- Public realm creates access to the river
- Post-industrial heritage

![](_page_9_Picture_17.jpeg)

![](_page_9_Picture_18.jpeg)

#### $\wedge >$ SITE IMAGES

1 This public realm intervention uses a distinctive coloured line which is repeated throughout the city to delineate the waters edge

- 2 A regenerating fallen tree trunk indicates how
- ecology has been allowed to naturally thrive
- 3 Cantilevered pedestrian bridge over the water

![](_page_9_Picture_24.jpeg)

# A1 APPENDIX | RESEARCH PROJECTS

## **RESEARCH PROJECT 2**

## VISTULA BOULEVARDS

PROJECT TYPE : Public realm, urban park, flood mitigation

LOCATION : Warsaw, Poland

CLIENT : The Capital City of Warsaw

SCALE COMPARISON :

Vistula Boulevards

![](_page_9_Picture_35.jpeg)

PROJECT SYNOPSIS 

The Connectivity Project

The large public realm project to create a new riverside park in the centre of Warsaw has won numerous landscape design awards across Europe.

Prior to the project, the river was an underutilised asset, almost totally inaccessible with large undeveloped riverbank spaces. The public realm improvements have created a unique and accessible to all public space which reconnects neighbourhoods, allows the site to periodically flood and offers recreational and social activities to locals and visitors alike.

### RELEVANCE TO THE CONNECTIVITY PROJECT

- Natural periodic flooding has been acknowledged and factored into the design of the space
- Public realm creates access to the river
- Mixture of playful and calm public spaces

![](_page_9_Picture_43.jpeg)

![](_page_9_Picture_44.jpeg)

flooding

Image credits: 2-3 © RSAk

## **RESEARCH PROJECT 3**

## WALTHAM FOREST

PROJECT TYPE : Public realm, pedestrian / cycle green network

LOCATION : London, UK

CLIENT : Waltham Forest Council

SCALE COMPARISON :

Waltham Forest

![](_page_10_Picture_8.jpeg)

The Connectivity Project

#### PROJECT SYNOPSIS

This multi award-winning green transport scheme has created 24km of segregated cycle paths, dramatically improving air quality in an area previously dominated by vehicles. In addition to the long-term effect of huge reductions in carbon emissions more people in Waltham Forest are now using active travel instead of vehicles, the benefits of which include improved mental and physical health.

The public realm improvements associated with the transport network include new public spaces, growing spaces, parks and crossing points. Many of these areas are co-maintained by residents eager to take care of their community spaces.

As part of the community engagement an interactive website was set up which provided an anonymous messaging board to allow residents to comment on issues.

![](_page_10_Picture_14.jpeg)

![](_page_10_Picture_15.jpeg)

## RELEVANCE TO THE CONNECTIVITY PROJECT

- Implementation of segregated pedestrian and cycle routes
- Robust street furniture using mostly natural materials
- Community management of green infrastructure

#### $\wedge >$ SITE IMAGES

1 Segregated cycle paths have replaced previously vehicular access roads 2 Pocket parks provide safe places for children to 3 The edges of the cycle routes also provide opportunities for new planting and street furniture

![](_page_10_Picture_22.jpeg)

# A1 APPENDIX | RESEARCH PROJECTS

## **RESEARCH PROJECT 4**

## SEVEN LOCHS WETLAND PARK

PROJECT TYPE : Public realm, urban park, green infrastructure

LOCATION : Glasgow, Scotland

CLIENT : Glasgow and Clyde Valley Green Network Partnership

SCALE COMPARISON :

Seven Lochs Wetland Park

The Connectivity Project

#### PROJECT SYNOPSIS

The Seven Lochs Wetland Park is a large urban park in the north of Glasgow which provides a vast network of walking and cycling routes around an array of local nature reserves and the afore-mentioned seven lochs.

The project strives to manage the existing green infrastructure to protect wildlife habitats whilst also providing opportunities for humans to co-exist in harmony.

The education programme encourages locals to learn about the cultural heritage of the site and the environmental significance of wetlands. The extensive programme of events includes nature activities, den-building, crafts events, nature photography workshops, night walks and guided walks around the park based on a wide range of themes such as edible plants, birds of prey, wildflowers.

#### RELEVANCE TO THE CONNECTIVITY PROJECT

- Strategy for water management integrated with creation and management of the park
- Existing wildlife habitats carefully managed
- Emphasis on education and active travel

![](_page_10_Picture_43.jpeg)

![](_page_10_Picture_44.jpeg)

 $\wedge >$ SITE IMAGES

- Stopping points are situated to frame views across the lochs
   A selection of water-based activities are provided for visitors

Levenmouth Active Travel and River Park Concept Design - Masterplan Report

3 Visitor centres have been constructed at gateways into the park

Image credits: 1-2 Glasgow and Clyde Valley Green Network Partnership

![](_page_10_Picture_52.jpeg)

## **RESEARCH PROJECT 5**

## **GLASGOW CLYDE GATEWAY**

PROJECT TYPE : Public realm, urban woodland park

LOCATION : Glasgow, Scotland

CLIENT : Glasgow Clyde Valley Green Network Partnership

SCALE COMPARISON :

![](_page_11_Picture_7.jpeg)

Glasgow Clyde Gateway

The Connectivity Project

![](_page_11_Picture_10.jpeg)

#### PROJECT SYNOPSIS

The Glasgow Clyde Gateway is an area of 3.3 square miles sitting on the boundary between the city of Glasgow and South Lanarkshire. The recent interventions in the area include new pedestrian bridges, an upgraded active travel network and the creation of a new urban woodland and activity park.

The new pedestrian bridges allow access across the Clyde and there are over 3 miles of pedestrian routes in and around the Cuningar Loop which are accessible to all. Activities within the park include bouldering, a bike activity track and adventure play equipment.

The Forestry Commission (now Forestry and Land Scotland) were a key partner in the Cuningar Loop project, and instigated the planting of 15,000 native trees to further improve the wildlife habitat.

#### RELEVANCE TO THE CONNECTIVITY PROJECT

- Installation of pedestrian bridges and walkways
- Forestry and Land Scotland managed woodland
- Use of Sustainable Urban Drainage Systems (SUDS)

![](_page_11_Picture_19.jpeg)

![](_page_11_Picture_20.jpeg)

#### $\wedge >$ SITE IMAGES

1 The Cuningar Loop Woodland Park contains one of the first bouldering parks in the country

2 SUDS has been implemented throughout the new active travel route network
3 A non-slip timber raised boardwalk provides access for all and views of the River Clyde around the park

Image credits: 2 GCV

![](_page_11_Picture_28.jpeg)

# **A1** APPENDIX | RESEARCH PROJECTS

## **RESEARCH PROJECT 6**

## **BALTIC STREET ADVENTURE PLAYGROUND**

PROJECT TYPE : Adventure playground, community facilities

LOCATION : Glasgow, Scotland

CLIENT : Baltic Street Adventure Playground

SCALE COMPARISON :

Baltic Street Adventure Playground

![](_page_11_Picture_37.jpeg)

# PROJECT SYNOPSIS

The Connectivity Project

The success story of this small charity-run playground in Dalmarnock highlights the importance of community-based projects led by motivated and dedicated local champions.

Baltic Street Adventure Playground was created to provide a supervised environment which encourages children to use their imagination to build their own play space. The ethos behind adventure playgrounds is to trust children to assess their own risk and build confidence in their own abilities.

Baltic Street is expanding its scope to include community growing with the recent construction of wheelchair accessible raised planters within the playground and a University of Glasgow led research project looking at the logistics of setting up a community food hub in Dalmarnock.

#### RELEVANCE TO THE CONNECTIVITY PROJECT

- Similar context of communities suffering high levels of deprivation
- Links to educational institutions create a knowledge-sharing culture
- Mixture of play and community growing

![](_page_11_Picture_46.jpeg)

![](_page_11_Picture_47.jpeg)

#### $\wedge >$ SITE IMAGES

1 Supervisors / playworkers help the children to build treehouses, swings and other play equipment 2 The growing space is aimed at both providing food for the community and educating children 3 The construction of a WikiHouse has provided a base for the team and was

built in collaboration with the community

Image credits: 1 Assemble 2 Baltic Street 3 Civic Soup

![](_page_11_Picture_54.jpeg)

# **RESEARCH PROJECT 7**

## FLANDERS MOSS NATIONAL NATURE RESERVE

PROJECT TYPE : National Nature Reserve

LOCATION : Stirlingshire, Scotland

CLIENT : Scottish Natural Heritage

SCALE COMPARISON :

![](_page_12_Picture_7.jpeg)

Flanders Moss

The Connectivity Project

# PROJECT SYNOPSIS

Flanders Moss National Nature Reserve is the largest lowland raised bog in the UK, containing a whole host of specialist plants and animals. One of the key reasons to visit is to see how access has been realised with minimal impact on the sensitive landscape and the assets that draw people to the place; in particular the all-abilities boardwalk and viewing tower that provides views out across the reserve.

The boardwalk crosses the remote and water-logged landscape, the hues of which change across the seasons and is home to a range of animals and plants, in a similar fashion to the River Leven. Nesting birds, frogs, toads, and invertebrates.

![](_page_12_Picture_14.jpeg)

![](_page_12_Picture_15.jpeg)

![](_page_12_Picture_16.jpeg)

- Natural landscape rich in diverse plants and animals
- Boardwalks, lookout tower and other structures including signage
- Access to the countryside, open green space and wayfinding for tourists and visitors

#### $\wedge >$ SITE IMAGES

- Wide panorama of nature reserve landscape showing mosses and heathers
   Boardwalk and viewing tower

- 3 Viewing tower structure

![](_page_12_Picture_25.jpeg)

# A2 APPENDIX | FLOODING PHOTOS

![](_page_12_Picture_29.jpeg)

![](_page_12_Picture_30.jpeg)

![](_page_12_Picture_31.jpeg)

![](_page_12_Picture_32.jpeg)

![](_page_12_Picture_33.jpeg)

![](_page_12_Picture_35.jpeg)

![](_page_13_Picture_0.jpeg)

# A4 APPENDIX | TRIP GENERATORS

![](_page_13_Picture_5.jpeg)

Levenmouth Active Travel and River Park Concept Design - Masterplan Report

#### TRIP GENERATOR LIST

#### Schools / Education

- (1) Milton of Balgonie Primary School
- Levenmouth Academy Aberhill Primary School
- Buckhaven Primary school
- Denbeath Primary School
- Mountfleurie Primary School St Agatha's RC Primary School
- Parkhill Primary School
- Methilhill Primary School 9
- 10 Balcurvie Primary School
- 11 Woodlands Nursery
- 12 Paxton Nursery
- 13 Methil Community Education Centre

40

- 14 Viewforth Nursery
- 15 Peekaboo Nursery

#### Parks / Open Space

- (16) King George Memorial Park
- 17 Viewforth Playground
- 18 Starkies Wood
- 19 Sandwell Street Playground
- 20 Herd Park
- 21 Savoy Park
- 22 Spruce Grove Playground
- 23 Memorial Park
- 24 Shepherds Park
- 25 Toll Park
- 26 Silverburn Park
- 27 Mountfleurie Crescent Playground
- 28 Denbeath Playing Field
- 29 Ossian Park

#### **Community Facilities**

- 30Fife Renewables Innovation Centre (FRIC)31East Fife Football Club
- 32 Leven Bus Station
- 33 Levenmouth Swimming Pool + Sports Centre
- 34 Methil Recycling Centre
- 35 Methil Heritage Centre
- **36** Fife Heritage Railway
- 37 Leven Links Golf Course
- 38 Scoonie Golf Course
- 39 The Centre Community Centre

#### Healthcare

- (40) Scoonie House Care Home
- 41 Cameron Hospital
- **42** Randolph Wemyss Memorial Hospital
- 43 The Canons Surgery
- 44 Methilhaven Surgery

#### Retail / Employment

- (45) Aldi Supermarket
- **46** Blacketyside Farm
- **47** Sainsburys Supermarket
- 48 Diageo
- 49 Diageo Cameron Bridge Distillery
- **50** Banbeath Industrial Estate
- 51 Leven Retail Park
- 52 Town Centre
- 53 Fife Energy Park
- 54 Burntisland Fabrications (Bifab)
- 55 James Donaldson & Sons Timber Engineering Ltd

# A4 APPENDIX | TRIP GENERATORS

#### TRIP GENERATOR LIST

- Schools / Education Milton of Balgonie Primary School
- Levenmouth Academy
- Aberhill Primary School
- 4 Buckhaven Primary school
- 5 Denbeath Primary School
- 6 Mountfleurie Primary School
- 7 St Agatha's RC Primary School
- 8 Parkhill Primary School
- 9 Methilhill Primary School
- 10 Balcurvie Primary School
- 11 Woodlands Nursery
- 12 Paxton Nursery
- 13 Methil Community Education Centre
- 14 Viewforth Nursery
- 15 Peekaboo Nursery

#### Parks / Open Space

- (16) King George Memorial Park
- 17 Viewforth Playground
- 18 Starkies Wood
- 19 Sandwell Street Playground
- 20 Herd Park
- 21 Savoy Park
- 22 Spruce Grove Playground
- 23 Memorial Park
- 24 Shepherds Park
- 25 Toll Park
- 26 Silverburn Park
- 27 Mountfleurie Crescent Playground
- 28 Denbeath Playing Field29 Ossian Park

#### **Community Facilities**

30 Fife Renewables Innovation Centre (FRIC) 31 East Fife Football Club

(10)

(49)

41

- 32 Leven Bus Station
- 33 Levenmouth Swimming Pool + Sports Centre
- 34 Methil Recycling Centre
- 35 Methil Heritage Centre
- 36 Fife Heritage Railway 37 Leven Links Golf Course
- 38 Scoonie Golf Course
- **39** The Centre Community Centre

#### Healthcare

- 40 Scoonie House Care Home
- 41 Cameron Hospital
- 42 Randolph Wemyss Memorial Hospital
- 43 The Canons Surgery
- 44 Methilhaven Surgery

#### Retail / Employment

- 45 Aldi Supermarket
- 46 Blacketyside Farm
- 47 Sainsburys Supermarket
- 48 Diageo
- 49 Diageo Cameron Bridge Distillery50 Banbeath Industrial Estate
- 51 Leven Retail Park
- 52 Town Centre
- 53 Fife Energy Park
- 54 Burntisland Fabrications (Bifab)
- 55 James Donaldson & Sons Timber Engineering Ltd

![](_page_14_Figure_61.jpeg)

# A5 APPENDIX | ACTIVE TRAVEL NETWORK WORKING VISUALISATIONS

![](_page_14_Picture_65.jpeg)

![](_page_14_Picture_66.jpeg)

Levenmouth Active Travel and River Park Concept Design - Masterplan Report

![](_page_15_Picture_0.jpeg)