



AGENDA ITEM NO. 7

STOCKWOOD, HENGROVE & WHITCHURCH NEIGHBOURHOOD PARTNERSHIP 23rd SEPTEMBER 2015

Report of: Becky Belfin, Nature Conservation Officer

Title: S106 Funding for Ecological Mitigation at Hengrove Mounds & Hawkfield Meadow

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RECOMMENDATIONS

That the Neighbourhood Committee approves the allocation of £33,970 from s106, for the implementation of actions in the Hengrove Mounds and the Hawkfield Meadows Management Plans

1. The development of part of Hengrove Park, (Community Hospital and Leisure Centre etc), resulted in the payment of £33,970 by the developer. The money is restricted for the following use: Towards ecological mitigation measures in the vicinity of the development.
2. At the time of the application, this funding was intended for the management and enhancement of adjacent wildlife sites: Hengrove Mounds and Hawkfield Meadows.
3. Management plans exist for these sites, (attached as Appendix One and Two) which contain a number of habitat management, access improvement, and interpretation actions. These works will help to maintain and enhance these sites for wildlife and for their enjoyment by the public.

4. The total amount of £33,970 is being asked for, to be allocated as follows:

	Hengrove Mounds	Hawkfield Meadow
Habitat Management	£1500	£1500
Signage & Interpretation	£1000	£4000
Furniture	£6000	£0
Access improvements	£19970	£0

Legal Information

When councillors decide how the wellbeing fund is spent they should have due regard to the public sector equality duty that applies to all public bodies. This duty is contained in the Equality Act 2010 and came in to force on 6 April 2011. It replaces previous equality duties under the Sex Discrimination, Race Relations and Disability Discrimination Acts.

The duty means that councillors are required to have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited under the Act
- Promote equality of opportunity between different groups
- Foster good relations between people from different groups

The duty covers the following protected characteristics:

- Disability, Sexual orientation, Age, Gender reassignment, Religion and belief; Sex, Race, Pregnancy and maternity.

It also applies to marriage and civil partnership, but only in respect of the requirement to eliminate discrimination and harassment.

Community Management Plan

For Hengrove Mounds

July 2013

Jim O'Shaughnessy



For further information about Bristol's parks
and Hengrove Mounds
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www.bristol.gov.uk/parks

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aerial photo of Mounds and surrounding area prior to construction of college, leisure centre and hospital



aerial photo of Mounds and surrounding area after construction of college, leisure centre and hospital

Introduction

Reasons for Producing a Community Management Plan

Hengrove Mounds is used by local dog walkers and students from local schools and colleges, but the site could attract many more visitors. Most visitors to the Play Park and Hengrove Leisure Complex don't know Hengrove Mounds exists – hence the need for a Community Management Plan and the Plan the Mounds project.

Most of the developments surrounding Hengrove Mounds have high *access for all* standards, however the connectivity and access into and across the Mounds is poor.

A Wildlife Management Plan and SNCI audit already establishes the sites importance for biodiversity and is being implemented by TCV and South Bristol College students. This plan aims to protect and enhance the wildlife value and increase the community usage and long term cultural benefit. An Access Audit written in tandem also shows how the site could be designed with *access for all* as a guiding principal.

Purpose of the Plan

This plan is written with and for local people, and in particular any future Friends of the Mounds group. Those responsible for The Mounds in the future will benefit from plans and targets to work towards. This plan is visionary and ambitious in the long term, and practical and realistic in the short term. Many of the improvements are modular and can proceed as community capacity and funding grows.

An important potential outcome of this plan and the “Plan the Mounds” project is the establishment of a “Friends of the Mounds” group. Parks need people to work in partnership with Bristol City Council to develop sustainable plans and secure new income streams for improvements and maintenance. The consultation process has helped build a network of people and organisations that can help the Mounds in the future and be responsible for it.

This plan will:

- Assist Bristol City Council to look at additional management of the site by setting a possible timeline for actions and *access for all* improvements.
- Enable the council and partners to work towards establishing a “Friends of the Mounds Group” and in the longer term designate Hengrove Mounds as a Local Nature Reserve.
- Allow Council and other stakeholders to prepare a rolling 5-year work plan that will be reviewed annually to manage the site in the medium term.
- Enable Bristol Parks and Friends of The Mounds (or some similarly named independent group) to prepare funding bids to deliver key improvements and engage immediately in basic management
- Help inform all interested user groups and stakeholders about the future for “The Mounds” and how to get involved.
- Identify resources and people responsible for managing Hengrove Mounds in the future

This plan is supported by an existing Wildlife Management Plan and an Access Audit.

Community Engagement and the Consultation Process

This Management Plan has been funded by Bristol City Council's Wild City Project through Access to Natures Lottery Fund and forms part of the Plan the Mounds Project. Wild City is an exciting project linking people with wildlife sites across the city of Bristol.

This report has been produced by Jim O'Shaughnessy working in partnership with Earthworks and Bristol City Council. The Plan the Mounds Team and the Wild City team have been working with local people finding out what they want to see happen at Hengrove Mounds and how it could be managed in the future (See Appendix 1 Consultation Results).

This consultation process conducted during 2012 and 2013 has informed this plan, - site conditions and Bristol City Plans and Policies have also played a key role. The process of researching and writing this plan and the "Plan the Mounds Project" has been key in creating more "ownership" locally and introducing potential new stakeholders, including corporate sponsors (see Appendix 2 Corporate Communication 2012).

Hengrove Mounds is well used by local dog walkers and students who know the site well and have a detailed day to day knowledge of wildlife on the site and the sites history. Some dog walkers have visited the site everyday for decades. Most people visiting other neighbouring facilities at Hengrove Park and have little knowledge of "The Mounds" existence. Attracting people to the Mounds with events, guided walks, Bristol Physical Activity Chain (BPAC) and school/college visits has been a key priority of the consultation and the management planning process.

The Life of the Plan

- This management plan will be adopted in April 2013.
- It will be implemented from April 2013; it works alongside an Access Audit and a Wildlife Management Plan.
- This plan covers a 5-year period, and the work plan will be reviewed annually.
- The whole document will be reviewed in 5 years time (April 2018).

Site Description

Name of the Site

The site is known as Hengrove Mounds and is often called the Mounds by local people. The site has no signs or name boards.



centre of Mounds in wet conditions



*existing pathway across Cinema car park at G**

Location and Area

Hengrove Mounds is a wild corner of the much larger Hengrove Park. It is disconnected from most of the nearby facilities recently developed at Hengrove Park and has no wheelchair access. The Mounds area is on the western tip of Hengrove Park, and falls within Hengrove and Stockwood Neighbourhood Partnership. The site also has boundaries with the Neighbourhood Partnerships of Dundry View, and Filwood Knowle and Windmill Hill. Grid reference ST590685. Area 4 Ha.



Ownership

The whole of the site is owned by Bristol City Council. Surrounding land is also owned by different Directorates of Bristol City Council.

General Site Description

The site is currently managed for nature conservation and is SNCI. The mounds/embankments were formed about thirty years ago when the site was used as a landfill / land-raising site for demolition rubble. On first impressions the site seems like an iron age fort with a circular embankment.



Cinema Entrance A with desire line up embankment



Whitchurch Lane Entrance D

The Mounds area was farmland, meadows and hedges before it became part of Bristol Airport (Whitchurch Airfield) in the 1930's. The Bristol (Whitchurch) Airport closed in 1957 and a large "brown field" site became available to Bristol City Council for development. Today Hengrove Park has been gradually developed and the Mounds area is a remnant of wildness amongst the Leisure Complex, Hospital, Leisure Centre, College and the acres of runway and green mown grass.

Hengrove Park for some locals is described as "*the shrinking donut*", - an area of open space slowly being developed for housing, schools and leisure.

The tipping of waste at the Mounds has created an amphitheatre style landscape with a depression in the middle sometimes referred to as "*the bowl*". The low lying centre is secluded and quiet and the raised circular bund offers visitors views across the city and to Dundry Hill and the Cotswolds. According to site investigations in 1999 the raised embankments (10-15 metres in height) are made up of builders waste and the lower central area is domestic waste with a clay cap. There is a history of domestic waste disposal dating back to the 1950s with the embankments/mounds being created more recently with builders and road waste in the 1970s and 1980s.

Some areas of the embankments have sharp metal objects protruding indicating incomplete or no capping with top soil. Vents for methane and other gases appear at a number of places across the Mounds also indicating a recent history as a landfill site.

Accessibility

There are a number of "desire lines" giving pedestrian access to the Mounds. These are mainly unplanned routes showing local community use. The site has open access with a spectacular circular path around the top of the mounds offering the able bodied and adventuress visitors spectacular views. There are no actual public rights of way across the site. The site has no signage or name boards and no properly improved paths. Motor cyclists use the site at weekends and cause a danger for walkers and dogs. Accessibility varies with weather and site conditions, and in wet weather the site is difficult for all.

The site is roughly triangular in shape and is bounded to the West, by Hengrove Way, Hartcliffe Roundabout and Whitchurch Lane. These roadside boundaries are marked with a kick rail at the bottom of the embankment. To the East the Mounds are bordered by a multi screen Cinema, a large car park and Hengrove Plaza restaurants. Also on the eastern side of the site there is a high metal fence keeping the Mounds area separate from South Bristol Leisure Centre and South Bristol College. Many college students use the Mounds as a cut through from home to college or from the Cinema and the fast food restaurants.

Accessibility to the Mounds and Hengrove Park is very good with a Bus Stop at entrance D and an off road cycle lane along Whitchurch Lane and ample parking including disabled parking near entrance A (*the Cinema Entrance*).



entering the Mounds from the Cinema Entrance A



entrance B with Leisure Centre on RHS



Whitchurch Lane entrance D





Subway Entrance E



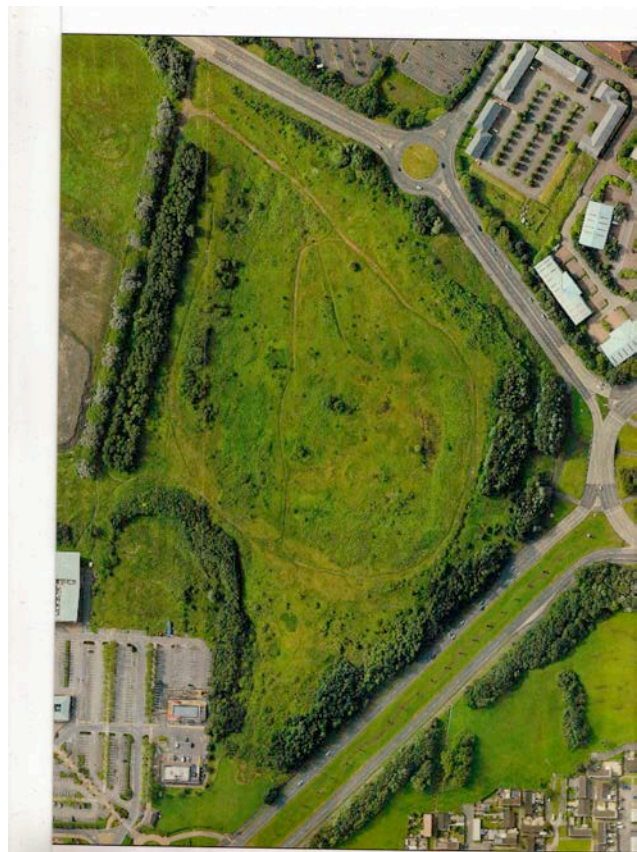
Malago Conservation Society entering site via entrance E

The entrances have been labelled and named below in an aerial sketch which also shows existing paths in pink and potential new / improved paths in yellow / yellow and pink. The site boundary is marked with a red hatched line. There are four main entrances A, B, D and E, and at least 4 possible new entrances (C*, F*, G* and P*). The aerial sketch below is a good summary of potential future access – also see Access Audit for further detail.

- A Cinema Entrance
- B Play Park / Leisure Centre Entrance
- C* Possible new entrance
- D Whitchurch Lane entrance
- E Subway entrance leading to Hengrove Way and roundabout subways
- F* Possible new entrance linking directly to Inns Court and Pelican Crossing
- G* Possible new entrance extending walkway across car park into the Mounds
- P* Possible new entrance at Play Park (not shown on aerial sketch below)



Aerial Sketch showing potential new paths and entrances



aerial photo 2012

At present there is no park furniture, seats, signs, Information/map boards, bins, dog bins etc - some visitors enjoy the challenge of the Mounds, whilst others are unable to enjoy its nature. The desire lines/footpaths on the Mounds are uneven and un-surfaced and are steep in places.

At weekends (usually Sundays) motor bikes use the site, entering and exiting from the Whitchurch Lane entrance D, and the Play Park/Leisure Centre Entrance B.



sharp metal protruding from earth trodden path



entering the Mounds via Subway Entrance E

The Hengrove Mounds Access Audit describes the current access conditions in more detail and suggests proposals to increase accessibility.

The Area Green Space Plan for Stockwood and Hengrove designates the Mounds as a **Natural Green Space** (*site providing people with access to nature. It includes woodland, grassland, scrub, hedgerows and wetland*).

Nature and Biodiversity

Hengrove Mounds is a habitat and species diverse site, and an excellent example of Nature re-colonising an old industrial site. Despite the poor and sometimes non-existent capping a soil layer has slowly grown, even the asphalt is covered in bryophytes (mosses and liverworts)

The sites history as a rubbish tip and now as potential future LNR protect the site from built development.

Translocation of meadow turfs from Hawkfield Meadows in the 80s and natural re-colonisation of the nutrient poor subsoil and rubble has been episodic and only now are trees and brambles extending across the site. The site has a good mix of habitats with grass, scrub and trees all covering about one third of the area. The flora and fauna can be quite spectacular with species rich grassland of wild carrot common across the site. Orchids, Cowslips, knapweed, scabious and veteran buddleia also add too the biodiversity mix.

The Mounds has approximately a third trees, a third scrub and a third grass, - maintaining this mix requires scrub clearance and grass cutting with removal of vegetation keeping nutrients levels low, (this work is ongoing thanks to South Bristol College and TCV). The scrub layer is made up of a variety of brambles and hawthorn and supports many nesting birds and invertebrates.



TCV and South Bristol College clearing scrub



veteran buddleia

Trees along all perimeters form a natural screen from surrounding buildings and roads. Many trees were planted in order to screen the once landfill site – the Poplar trees along path BD for example. Many trees have also naturally seeded and regenerated and are of more wildlife value providing shelter for birds.

Cultural Diversity

Many people use the Mounds today as a place:

- to walk in
- to exercise their dog in
- to walk across
- to run in
- to cycle across
- to be with nature
- to ride their motor bikes in

Some people visiting nearby facilities such as the Hospital, Cinema, Play Park, College, KFC etc don't know *the Mounds* exists.

Local Schools and Colleges use the site for environmental studies and as an open air classroom, South Bristol College also help manage the site in partnership with TCV and Bristol City Council. Work parties on the site also provide people with a chance to learn new skills and develop an understanding of nature conservation management in an urban context.

The wildness and the close proximity to the Play Park make the Mounds an ideal area for natural play and picnics, with parents and children using the Subway Entrance E as a short cut to the Wheels Park and the Play Park.

Healthy Walking Groups use the during dry conditions; often starting walks from the nearby Leisure Centre, Wildlife Groups also offer guided walks around the site.

Dog walkers are prolific and have a useful day to day knowledge of the site and could form part of a new friends group. Litter and dog mess are an issue but could be much worse considering the close proximity to fast food eateries and the absence of dog poo bins (the closest dog poo bin on old runway near Play Park).

Current Management

The main conservation objectives

- Woodland – thin trees and replant with native species and allow some natural regeneration of specimen field grown trees.
- Scrub – annual clearance and removal during winter
- Grassland – annual cutting and removal of hay crop

See Hengrove Mounds Wildlife Management Plan for current management and further species details.

Current management consists of 6 days TCV and South Bristol College bramble cutting and scrub clearance and 4 days WWT grass cutting. Further details available in Hengrove Mounds Wildlife Management plan.

There are no improved paths apart from BD which is now un-maintained (this path was part of the airport infrastructure). The scrub clearance helps the paths remain open and helps them dry out. Some trees need thinning out along pathway BD.

Some gravel has helped improve route DE and the approach to entrance B.

At present Hengrove Mounds is well managed for wildlife.

The day-to-day management of Hengrove Mounds rests with Bristol Parks, - there is no friends group.

Policy Context

Hengrove Mounds is protected by Nature Conservation policy NE5 in the Bristol Plan owing to its status as a Site of Nature Conservation Interest (SNCI).

Bristol City Council has a policy of *access for all* (see Access Audit) and has an ambition for Hengrove Mounds to become a Local Nature Reserve (LNR) (see Area Green Space Plan).

Hengrove Mounds is designated as a Natural Green Space in the Area Green Space Plans.

Plans and Proposals

A number of ideas and plans have been generated by the Plan the Mounds consultation in 2012 and 2013 (see Appendix 1). Previous consultations relating to the Area Green Space Plan have also have generated ideas and suggestions. The site's topography, soil profile and biodiversity also help frame what can and can't happen, for example;

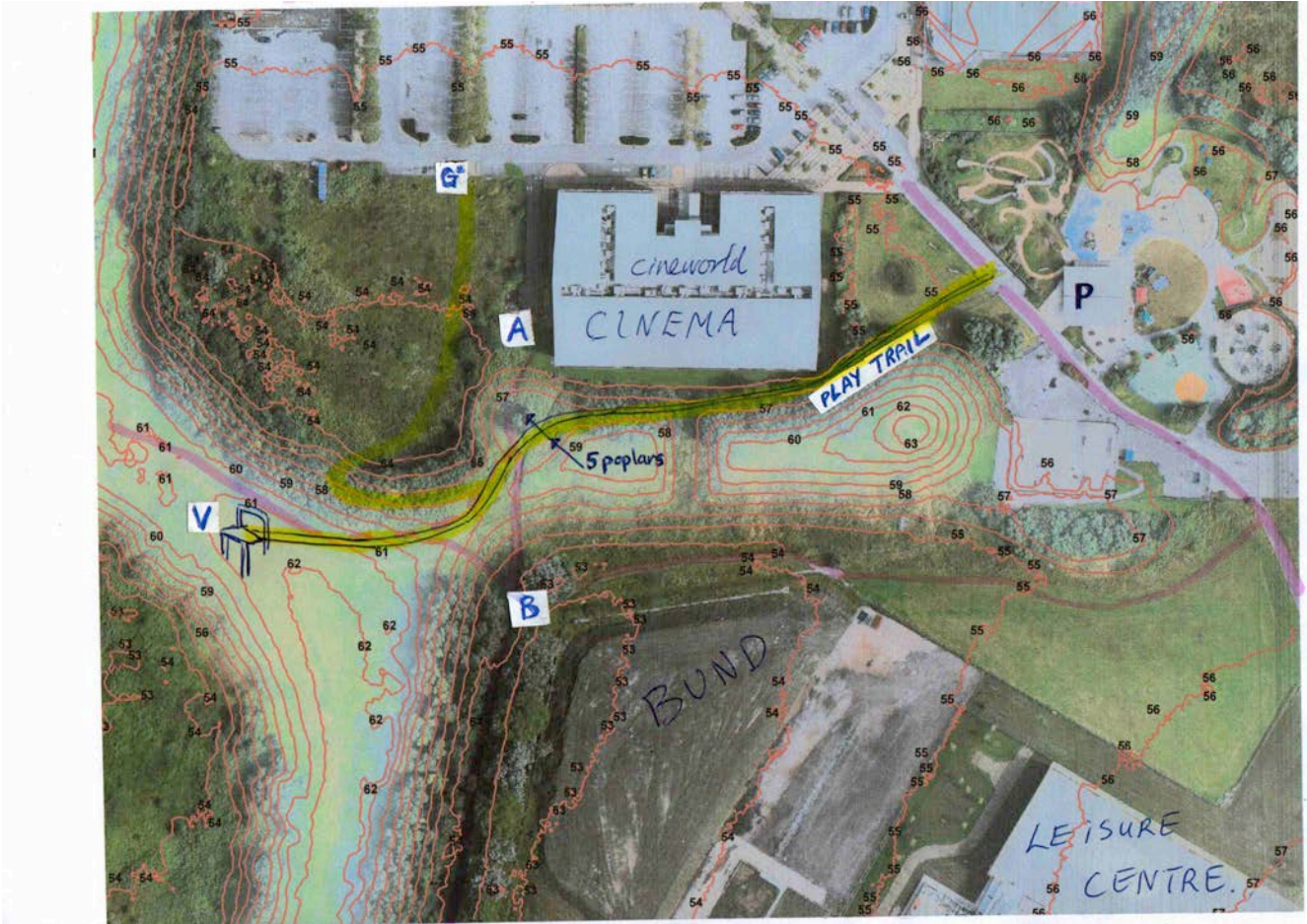
- growing food or excavating may disturb the rubbish beneath our feet.
- laying a new surfaced path may disrupt Slow Worms, and precautions need to be followed.

The designation in the Area Green Space Plan indicates the character of the site should remain natural.

Entrances and Access

There are 4 key entrances into the Mounds (A, B, D and E); they all need to be welcoming and as accessible as possible whilst being secure against motorbikes. Entrances D and B could be wheelchair friendly, entrance D could also have a disabled parking bay and radar key.

A number of possible new entrances and pathways could also improve access for example C*, F*, G* and P*. These new entrances and pathways are “off site” and require a wider cross directorate partnership. All proposed entrances and associated pathways can achieve high access for all standards with slopes on paths less than 1:10 (10%). The Play Trail and P* could achieve a slope less than or equal to 1:20 (5%), and gives direct access to the Play Park and the rest of Hengrove Park.



Proposed new entrance and Access for All Pathway linking Play Park to Viewing Platform

A key feature of the site is the steep embankments which restrict access in and out of the site. This aerial photo of the northern section has a contour overlay showing the embankments which have a 30% slope in some places. The Play Trail can achieve a high access for all standards with an incline of less than 1:20 (5%).

Measured and improved paths would greatly benefit the Healthy Walking Groups based at the Leisure Centre who are unable to use the site when wet.

Now Soon Later

The Plan has been inclusive of ideas from the community and from ideas generated by schools and colleges and part of the process of using the plan is to choose what suits the Mounds Now, Soon and Later. The NOW, SOON, LATER prioritisation is an ongoing process and both relates to necessity and ability to deliver, for example if something is easy to do but important then it's likely to be put into a NOW category. This process needs to be a realistic process as without a responsible person and available resource actions won't happen. Attaching a “who” to an action starts to make the vision become a reality.

To start the process of *time lining* the improvements at the Mounds a 5 year plan is detailed below. The Now timeframe is the 1st six months, SOON up to 18th months and LATER is up to 5 years.

NOW < 6 months	SOON <18 months	LATER < 5 years
Set up Friends of Mounds Group from community and business stakeholders	Spring Event hosted by Friends Group and BCC	Funding bid by Friends Group
Site Safety Check - + Removal of sharp metal objects from paths and any dangerous trees along path BD	Path BD re-surfaced Path BP surfaced (off-site) linking Mounds to runway and rest of Hengrove Park, Play Park, Hospital, Leisure Centre.	New access for all path from Play Area to 5 Poplars and to Viewing Platform V1
Continue current management scrub clearance and grass cutting with TCV South Bristol College	New Entrance D (Whitchurch Lane). Wheelchair friendly with key. – with Cycle parking Improve all existing entrances	Disabled off road driver bay at D, adopted by High Ways for maintenance/instalment (not counted in costings)
Secure site against motor bikes entrance D and B (and Hengrove Park in general). Warnings notices and issue of section 59 by Police	Monthly events walks workshops	Bristol Sculpture Trail around the circular path, plus Play trail linking Mounds with Play Park
	Access for all path up to View Point V2 from entrance D. Picnic bench at V2 and levelled area.	New access for all sealed path from D, V2, E, V1, P. With associated Play Trail linking Play Park to 5 Poplars and Mounds.
Steps at A, B and E	Seats at V E and midway between D and E	Viewing Platform / bird hide / outdoor classroom constructed at V
Sunday Ranger Walk from Play Park	Picnic bench at the 5 poplars Bird Boxes and Bat Boxes with Alzheimer Society	Measured walking, running route from Hospital, College and Leisure Centre.
Encourage dog waste to be taken home / or binned at bin on runway with signs	New dual use bin at Cinema Entrance and or Whitchurch Lane entrance	Site leaflet + Interpretation Boards
Litter Pick	Sign at Subway Entrance E	Signage + way marking linked to “functional art / craft” project
Cut trees back from path BD creating clear walking tunnel (1.2m wide x 2.1m high)	New Entrance / welcome sign at Cinema Entrance A.	Possible new entrances at C*, F*, G* - linked to new developments and levy.

Summary of Costings option 1

ITEM	£ per unit	number	Cost
Pathways			
Path re-construction BD dual use access for all sealed path and cycle way (2m wide)	150 / m2	310m x 2	£ 93,000
Sealed path construction DV2 (2m wide)	200 / m2	150m x 2	£ 60,000
Sealed path construction including drainage V2,E,V1 sealed path with passing places every 50m (1.2 m wide)	200 / m2	760m x 1.2	£182,400
Sealed path V1 to 5 poplars (2m wide)	200 / m2	60m	£ 12,000
Wooden rustic Steps at A, E and from B to 5 poplars and B towards View point one V1 (4 sets of steps)	200 / m2	100m 1.2	£ 24,000
Play Trail from 5 poplars to Play Park (mainly off site costs)	200 / m2	200m x2	£ 80,000
Entrances			
D Whitchurch Lane Entrance Improvements for wheelchair access (key at Leisure Centre, Hospital, BCC Parkview reception – or radar key)	£ 25,000	1	£ 25,000
Signage at A Cinema Entrance and E Subway Entrance	£ 500	2	£ 1,000
Sign / map board at B or in approach to Mounds	£ 1,000	1	£ 1,000
Site Leaflet	£ 1	1,000	£ 1,000
Play Trail entrance + map board at P (off site costs)	£ 5,000	1	£ 5,000
Furniture			
Park Bench / Seating metal	£ 900	3	£ 2,700
Picnic Table at 5 Poplars and V2	£ 1250	2	£ 2,500
Supply install Dual use Park Bin	£ 700	1	£ 700
Viewing Platform / outdoor class room at V	£ 30,000	1	£ 30,000
Sub Total			£ 520,300
Maintenance estimate at approx 10% / year for 5 years	£ 50,000	5	£ 250,000
TOTAL {estimate only}			£ 720,300

New entrances at G* and C* have not been counted as they depend on possible future development and a partnership approach to ensure future integration with the Mounds.

A new entrance at F* and an associated path up to the View Point could link the pedestrian crossing on Hengrove Way connecting Inns Court

The costs could be reduced by;

- not counting “off site” costs
- not installing a bin (instead temporary signs asking people not to drop waste and to pick up their own dog poo and deliver to existing runway bin or take home)
- reducing the length of new Access for All Pathways to BD, DV2, and 5 poplars to V1 (on site portion of Play Trail).
- replacing Viewing Platform and outdoor classroom with a 3rd park bench

The costs are modular and can be added to or subtracted from to suit resources and needs. In this example the viewing platform is replaced by a picnic bench. This re-costing does achieve access for all standards up to the view points V1 and V2 (see vision sketch below), but has not improved accessibility around the top path and does not include an outdoor classroom / hide area at V1.



aerial vision sketch Option 2 showing un-improved top path and no Viewing Platform

Summary of Costings option 2

ITEM	£ per unit	number	Cost
Pathways			
Path re-construction BD dual use access for all sealed path and cycle way (2m wide)	150 / m2	310m x 2	£ 93,000
Sealed path construction DV2 (2m wide)	200 / m2	150m x 2	£ 60,000
Sealed path V1 to 5 poplars (2m wide)	200 / m2	60m	£ 12,000
Wooden rustic Steps at A, E and from B to 5 poplars and B towards View point one V1 (4 sets of steps)	200 / m2	100m 1.2	£ 24,000
Entrances			
D Whitchurch Lane Entrance Improvements for wheelchair access (key at Leisure Centre, Hospital, BCC Parkview reception – or radar key)	£ 25,000	1	£ 25,000
Signage at A Cinema Entrance and E Subway Entrance	£ 500	2	£ 1,000
Sign / map board at B or in approach to Mounds	£ 1,000	1	£ 1,000
Site Leaflet	£ 1	1,000	£ 1,000
Furniture			
Park Bench / Seating metal	£ 900	3	£ 2,700
Picnic Table at 5 Poplars, V2 and V1	£ 1250	3	£ 3,750
Sub Total			£ 222,200
Maintenance estimate at approx 10% / year for 5 years	£ 20,000	5	£ 100,000
TOTAL {estimate only}			£ 322,200

Funds and Resources

Wild City Budget (£ 20,000 available in 2013)
 BCC Parks Maintenance
 Neighbourhood Partnership Funds
 Landfill Tax
 Section 106
 Maintenance charge
 Corporate Sponsorship
 Hello Hengrove
 Local Sustainable Travel Fund
 Local Active Travel Grant (available in 2013)

When future residential/retail development goes ahead in Hengrove Park new entrances could be developed at C* and G*, an additional levy could also be charged for the upkeep and maintenance of the Mounds Nature Reserve.



potential new C entrance looking towards Mounds C* looking from mounds towards College*

A “maintenance charge approach” could also be developed with existing businesses in Hengrove Park, - businesses may wish to sponsor specific items such as gateways, paths and bins (see Appendix 3 Corporate Communications). Section 106 budgets and existing Wild City budgets are currently available

The Local sustainable Travel Fund may fund a new dual use path along path BD.

A friends group is vital as many funding sources require some sort of community organisation to apply.

Appendix

Appendix 1 Consultation Results

PLAN THE MOUNDS – HENGROVE MOUNDS NATURE RESERVE PUBLIC CONSULTATION SUMMARY OF SUGGESTED IMPROVEMENTS

IMPROVEMENTS	SUGGESTED BY:	COMMENTS/IDEAS
<p>PATHWAYS – upgrade perimeter path to ensure ease of access for all – and lends itself upgrading for wheelchair users –</p> <p>disability pathway</p> <p>STEPS from outer ring into bowl area where there is currently a steep path down slope into bowl STEPS for easier access</p> <p>‘Don’t put too many paths in like they did at Vassalls – only just where needed to help people’</p>	<p>Healthy Walks Group, April 11 Playwork workshop participant.</p> <p>26 May event day participant</p> <p>21 Feb event participant</p> <p>BLC geography students</p> <p>South Bristol Academy students</p> <p>BTCV – mid weeks group</p> <p>21 Feb event participants</p> <p>11 April Play park visitor</p>	<p>chippings or even tarmac which will tone down in time</p> <p>nice path for pushchairs</p> <p>gravel or bark for top path and bark path down into bowl</p> <p>post 16 students with learning disabilities would like paths to be less muddy</p> <p>safer than existing steep muddy path</p>
SEATING	<p>11 April Play park Workshop</p> <p>BLC art students</p>	<p>nice walkway with benches</p> <p>seats on top of</p>

	<p>26 May participants</p> <p>Healthy Walks Group, Bridge Learning Campus Primary.</p> <p>21 Feb event participant</p>	<p>Mounds to enjoy views, make from resin not wood (vandalproof)</p> <p>Seating, picnic areas and information boards</p> <p>Benches like the willsbridge mill dramway ones</p>
ENTRANCES with bike racks	BLC Geog and Art Students	Need to be made more welcoming – with signage, sculpture, bike racks and stiles – replace gate with wooden arch
INTERPRETATION	<p>Healthy Walks Group, BLC Geography Students.</p> <p>26 May event participants</p>	<p>Map on board at entrance with information stand on site with wildlife pictures (butterflies)</p> <p>Information posts around site</p> <p>Leaflets</p>
SIGNING	Healthy Walks Group	Waymarking – posts to sign you which way to go using arrows
SCULPTURE/INTERACTIVE/FITNESS TRAIL	<p>26 May event participants</p> <p>BLC Geog Students</p> <p>Tony Watkin, South Bristol Hospital , Public Liaison Lead.</p> <p>Naomi Button/Karen Tremblett, Hengrove Leisure Centre staff</p>	<p>Around site</p> <p>Between site and hospital and leisure centre</p> <p>To promote linkage between Hospital, Leisure Centre and Play park</p> <p>Hospital and Leisure Centre both support</p>

	<p>Elderly participants</p> <p>26 May participant</p> <p>21 Feb event participant</p>	<p>Celebrate the sites past – avian history in any interpretation opportunities</p> <p>Monthly walks and events</p> <p>Friends group to help with maintenance</p>
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Appendix 2 Corporate Communications

Hengrove Mounds – Summary of Corporates

Organisation	Local Contact Details	CSR Agenda	Initial Engagement
Premier Inn Hengrove BS14 0HR	0871 527 8166	Part of the Whitbread Group and their corporate programme 'Good Together'. Their corporate aim is to reduce their impact on the environment but there is nothing that specifically looks at improving the local area beyond their hotel. Source Corporate Website	Website only
Frankie & Benny BS14 0HR	Local Manager Karl 01275 834725	Charity news from employees on the website and nothing specifically on Corporate Social Responsibility (CSR). Source Corporate Website	Visit made to the local manager to talk about the development of a management plan for Hengrove Mounds. The purpose was to raise awareness and enquire whether F&B wanted to contribute to its development. Ideas such as sponsoring an entrance to the mounds was floated. The local manager advised that approaching the Head Office would be the best way forward. Head Office is London 0845 612 5003
KFC	-	The material environmental issues are farming, transfats and litter. 'While you sleep we sweep'. KFC carry out nightly litter picks and are supporters of 'Keep Britain Tidy' and 'Love where you live' campaign. Source Corporate Website. All of which tie in well with the local environment.	Visit made to the local manager to talk about the development of a management plan for Hengrove Mounds. Mark Hoddin is the franchise owner and rarely at the restaurant. In his absence advised to contact Head Office.
Cine World	Local Manager Sarah Boyce	Good examples of CSR but nothing on the local environment. Source Corporate Website	Visit made to the local manager, Sarah Boyce. Advised that approaching Head Office was the way forward. Cine World Head Office 0208 987 5000 corporate@cineworld.co.uk
McDonalds	01275 831271	Litter is a key component of 'Our World' and they sponsor council litter bins and provide bins outside the restaurants. Source Corporate website	Visit made to local store but manager Emma Page not available and advised to contact Head Office. 08705 244622
Gala Bingo	01275 835333	Nothing on their website in relation to CSR issues.	Website only.

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HENGROVE PARK PHASE 1 INFRASTRUCTURE

PLANNING APPLICATION REFERENCE: 07/05074/FB

PLANNING CONDITION NO. 2: NATURE CONSERVATION MANAGEMENT PLAN THE MOUNDS AND HAWKFIELD MEADOWS

1 INTRODUCTION

This management plan for The Mounds and Hawkfield Meadows has been prepared as a part of the mitigation works associated with the development of Phase 1 of Hengrove Park. These two sites have been identified as the most ecologically important in the area and are Sites of Nature Conservation Interest. Both are in need of an established management regime to retain and enhance this interest. Such management would provide partial mitigation for the loss of habitats and species caused by the Phase 1 development and in particular the infrastructure development, which encroaches on both sites. This plan covers a five year period from 2009 to 2014; it will be renewed after five years and at five yearly intervals thereafter.

A single management plan, covering both sites, allows management works to be coordinated, which will bring both ecological and financial benefits. The plan has been informed by the large amount of survey information already existing, some of it dating back to the mid-1980s for Hawkfield Meadows, and by surveys of invertebrates, vegetation and birds carried out in spring and summer 2008 specifically for this purpose. Avon Wildlife Trust and other interested organisations have been consulted.

2 DESCRIPTION

2.1 General

The site is located in South Bristol, close to the southern edge of the city at the base of Dundry Slopes, but within a heavily developed area. Surrounding land uses include both housing and commercial developments, and parts of Hengrove Park are currently being developed. The Mounds, central grid reference ST590 685, is at the south-western corner of Hengrove Park, between Hengrove Way to the north and Whitchurch Lane to the south, with the Hartcliffe Roundabout to the west. Hawkfield Meadows, central grid reference ST594 680, is between Whitchurch Lane to the north and Hartcliffe Campus playing fields to the south.

The approximate extent of the two areas is 4.1 hectares (The Mounds) and 6.4 hectares (Hawkfield Meadows).

The dominant underlying soil type at both sites is a heavy and mildly calcareous clay derived from lower Lias of Jurassic age. The area of the Mounds has been formed from deposited materials and although the soils used for capping contain a high component of native clays at least partially derived from Hawkfield Meadows, other materials, particularly builders' rubble, are present. No water courses are present on either site. There is a former field pond in the north-eastern part of Hawkfield Meadows, which now holds water seasonally. A small low-lying area in the western part of The Mounds holds water intermittently and its soils are sufficiently damp for wetland vegetation to be present here.

Both sites are owned by Bristol City Council and no other body has any legal interest in either.

The Mounds were formed during the late 1980s by landfilling, to a depth ranging between twelve metres at the top of the banks to five metres at the bottom of the banks, with materials including domestic waste. No archaeological remains have been found at either site, although Roman finds have been made in the wider area. The whole area survived as farmland until the 1930s, when Whitchurch airfield covered the whole of what is now Hengrove Park, including the Mounds. Intermittent grazing of Hawkfield Meadows, with horses continued until at least the mid-1980s. A large part of the meadows, to the north-west of the surviving area, was lost to development in the late-1980s.

2.2 Biological

Species lists, with scientific names, are included as appendices.

Vegetation

The history of The Mounds, resulting in a variety of aspects and localised variations in soil types, has led to the area supporting a wide range of vegetation, the main types being tall herb vegetation, tall grassland and scrub.

The tall herb vegetation includes common fleabane, creeping thistle, tufted vetch, bristly ox-tongue, hogweed, corky-fruited water-dropwort, common ragwort and hoary ragwort, some of them forming extensive patches. Grasses are infrequent in this vegetation, but include tussocks of tall fescue and tufted hair-grass.

The tall grassland has frequent false oat-grass, creeping bent and tall fescue, but also supports a high proportion of herbs. Species present in good quantity include agrimony, tall melilot, common fleabane, smooth tare, tufted vetch and corky-fruited water-dropwort. The overall diversity is high, and species present in smaller quantity include bee orchid, pepper saxifrage and grass vetchling. A distinct grassland type is formed by large patches of wood small reed on the southern edge of the area.

The scrub is dominated by bramble, which forms large patches, especially on the inner slopes of the Mounds. In places there are saplings of ash, sycamore, hawthorn and other tree and shrub species growing through the bramble. Other tree species include isolated saplings of hornbeam, white poplar and willow. The eastern edge of the Mounds is formed by a line of mature white poplars, and there are areas of younger tree planting on the outer slopes.

Less extensive vegetation types include sparse grassland and wetland. The sparse grassland occurs mostly on the edge of footpaths. It has frequent creeping bent, but herbs are often dominant. These include black medick, both common and narrow-leaved bird's-foot trefoils, wild carrot and ox-eye daisy. The wetland occurs within a small depression in the western part of the Mounds. This has patches of common spike rush and greater reedmace, and scattered hard rush, silverweed and common fleabane.

The vegetation of Hawkfield Meadows, although still varied, is more homogenous and has developed as a result of neglect of an area of unimproved pasture. The most diverse grassland is present in the central part of the site. This area has substantial patches of common fleabane and glaucous sedge, as well as areas of more mixed grassland. The most frequent grass species here include false oat-grass, tufted hair-grass, red fescue and crested dogtail, with frequent herb species including grass vetchling, meadow vetchling, hoary ragwort and black knapweed. Species present in smaller quantity include dyer's greenweed, agrimony, greater bird's-foot trefoil and pepper saxifrage. There are scattered patches of bramble, bushes of hawthorn and saplings of pedunculate oak through the grassland area.

The eastern part of the site has another area of grassland, which has frequent false oat-grass but also retains good quantities of black knapweed, meadow vetchling, corky-fruited water dropwort and other grassland herb species.

There are areas of scrub at both the eastern and western ends of the site. The area at the western end of the site is dominated by dense hawthorn and blackthorn, with patches of bramble. Grassland survives along small paths through this area, and supports species such as agrimony, black knapweed and glaucous sedge. The scrub in the eastern part of the site is more open and has larger trees, including several mature ash.

Fauna

The mammals of the site have not been well studied, but there are records of several species. A badger sett is present in the eastern part of the Mounds and feeding signs are scattered over both the Mounds and Hawkfield Meadows. No bat roosts have been found in the area, but bats have been recorded foraging over both sites. The species recorded are pipistrelle at both sites and either noctule or leisler's at Hawkfield Meadows. Large populations of field voles are

present at both sites and roe deer signs have been seen at Hawkfield Meadows. Weasel is present at the Mounds.

Birds have been better recorded. The Mounds supports large populations of scrub-breeding species such as whitethroat and linnet, with species such as green woodpecker, kestrel and song thrush in the larger trees. Skylark and stonechat have bred here in recent years. Species present in scrub at Hawkfield Meadows include whitethroat, lesser whitethroat, song thrush and bullfinch. Winter visitors to both sites include redwing, fieldfare, reed bunting, siskin and redpoll, with records of snipe from the wetland area at the Mounds and water rail from the pond at Hawkfield Meadows. Numbers of migrant species can be large in the spring and autumn and, in addition to some of the species mentioned above, have in recent years included quail, whinchat, sedge warbler and willow warbler.

The Mounds is known to support a small population of slow worm, but it is surprising that this species is not more frequent here.

Both sites are known to support significant populations of invertebrates. Grassland butterflies at both include marbled white, common blue and small copper, and moths include six-belted clearwing, latticed heath and narrow-bordered five spot burnet. Both sites are of value for other insect groups, in particular for bees and flies. A high diversity of both groups, including rare species (see Evaluation section below) has been recorded.

2.3 Amenity

Both sites lack any formal facilities for amenity, and neither is crossed by any public right of way, but both are used by local people.

The most heavily used site is the Mounds. A well defined footpath, used by dog walkers and other pedestrians, runs around the rim of the site and there are less well-used paths across the centre of the bowl. The main access points to these paths are from Hengrove Park, at the south-eastern and north-eastern corners of the sites, but there are less well used access points from Hartcliffe roundabout. The site is visited by local birdwatchers and amateur entomologists. The Mounds was formerly heavily used by motor bikes, but this activity has been discouraged and is much less intense than formerly.

Hawkfield Meadows is less heavily used, but there are small informal paths running from Whitchurch Lane to the playing fields of Hartcliffe Campus, although these and other paths on the site are less well used than in the past.

2.4 Cultural

The Mounds, as the result of recent activities, lacks any features of cultural significance. No archaeological finds have been made at Hawkfield Meadows, but it is of some interest as one of the few remnants of the farmland that once dominated the area.

3 EVALUATION

3.1 Biological

Both sites are of nature conservation value in a citywide context for their plant and bird populations, and probably in a regional context for their invertebrate populations. Collectively they provide one of the most important biodiversity resources in the city, with important examples of neutral grassland, scrub and brownfield habitats, all of which are included within the Bristol Biodiversity Action Plan.

Vegetation

The plant communities of the Mounds have developed on nutrient-poor subsoils tipped on the site and these have created suitable conditions for many plant species of unimproved grassland, which is now a rare and threatened habitat. These plant species include dyer's greenweed, wild carrot, black knapweed, pepper saxifrage and common bird's-foot trefoil. Nine of these species, narrow-leaved bird's-foot trefoil, smooth tare, grass vetchling, dyer's greenweed, smooth brome, wood small reed, pyramidal orchid, bee orchid and corky-fruited water dropwort, are identified in the Flora of the Bristol Region as Avon Notable Species. This is a significant concentration of locally rare plant species, and one of the best five such concentrations in Bristol.

Hawkfield Meadows is of value as a remnant area of unimproved grassland and as such supports significant populations of plant species that have become scarce in both urban and rural areas. Examples include pepper saxifrage, black knapweed, purging flax and agrimony. Three of these species, grass vetchling, compact rush and corky-fruited water dropwort, together with corn mint (*Mentha arvensis*), a plant normally associated with disturbed habitats, are defined in the Flora of the Bristol Region as Avon Notable Species. Hawkfield Meadows is one of the best examples in Bristol of unimproved neutral grassland.

Fauna

The breeding bird populations of the Mounds are large and include notable concentrations of locally uncommon species such as whitethroat and linnet. Several of the breeding species on the site, including dunnock, reed bunting, linnet, green woodpecker and song thrush, are of conservation concern due to

recent declines in their populations and are UK Biodiversity Action Plan (BAP) species. Until recently skylark and stonechat bred here at their only sites in Bristol away from the Avonmouth area, and there is potential for them to breed again.

Hawkfield Meadows also supports locally uncommon species of scrub, including whitethroat and lesser whitethroat, and UK BAP species such as bullfinch and song thrush.

The Mounds' invertebrate populations are outstandingly diverse; eighteen species that are nationally rare or scarce were recorded in both 2003 and 2008, an exceptional total. Four of these species are listed in the UK Red Data Book of threatened species. Many of the species recorded are associated with tall herb vegetation, in particular common fleabane, and the small patch of wetland vegetation supports an exceptional number of rare species, including a fly known otherwise only from Northumberland. Twelve of the species are not known at any other site locally. A large number of locally rare species was also recorded, together with three moths and one bumble-bee that are listed in the UK BAP. The Mounds is one of the most important sites in Bristol for invertebrates, and is probably of importance in a regional context.

Hawkfield Meadows also supports an outstanding range of rare invertebrate species, with records of ten species that are nationally rare or scarce, including three Red Data Book species. These include a large population of *Andrena nitiduscula* a solitary bee associated with sparse grassland that is rare and threatened throughout Britain. It occurs here only in the strip alongside Whitchurch Lane. One moth listed in the UK BAP was also recorded. As at the previous area, several of the uncommon species are associated with common fleabane, and other herbaceous plants such as tufted vetch are also important.

3.2 Amenity

Both areas are of some value for amenity in a local context, this value being highest at the Mounds, which provides an opportunity otherwise lacking in the area for people to enjoy a large area of semi-natural vegetation. Although it is situated in an urban area the landform means that the base of the bowl in particular can have a very secluded feel, whilst the rim affords good views across the city and of Dundry Hill. There is undoubtedly potential for higher levels of use.

3.3 Cultural

Hawkfield Meadows is of some value as an example of remnant agricultural land within the city boundaries.

4 MANAGEMENT

4.1 Existing Management

At both sites there has been an absence of formal management for at least twenty years. Unofficial fires have had an impact on the vegetation of both sites, particularly at the Mounds, where they are annual. Trampling around footpaths has maintained areas of sparse grassland, and motorbike scrambling formerly kept patches of vegetation open at the Mounds.

4.2 Trends

Analysis of trends depends on the quality of survey information available. At both sites there is comparable information gathered in 2003, allowing a reasonable comparison with the situation then. At Hawkfield Meadows there is botanical survey information dating back to the mid-1980s, allowing some identification of trends across a longer period.

Since Hawkfield Meadows was first surveyed a large proportion of the site has been lost to development, and the grassland across the remainder has become more rank. This has diminished the site's botanical interest: some species, such as adder's tongue fern, have disappeared and others, such as dyer's greenweed, have become much scarcer.

In the absence of management scrub has spread across both sites, particularly bramble at the Mounds and hawthorn at Hawkfield Meadows. Since 2003 there has been no major change in the distribution of scrub at either site, but patches of bramble have become more dense at the Mounds and paths through the scrub at Hawkfield Meadows have become much more overgrown. Since these paths supported important remnants of grassland this has had a significant adverse impact, and may have reduced scope for grassland restoration. Bushes of hawthorn and saplings of pedunculate oak have become more frequent in the grassland at Hawkfield Meadows, but do not appear to be having an adverse impact at the moment. In the long term and without management, however, they would shade out grassland here, having a major adverse impact.

Another consequence of the absence of management has been the spread of stands of single herb species at Hawkfield Meadows, common fleabane being the most obvious example. In botanical terms this might be considered a negative trend, and there has also been some decline in invertebrate interest since 2003, probably linked to increased coarseness of the sward.

The vegetation at the Mounds is still developing following landfilling of the site. The spread of some species, in particular narrow-leaved bird's-foot trefoil, corky-fruited water dropwort and grass vetchling, since 2003 has been marked. There have been less marked but still notable increases in populations of species such

as pyramidal orchid and bee orchid and smooth brome has colonised the site. Dyer's greenweed is present in very small quantity and is threatened by scrub encroachment. On the whole, the trend in the populations of grassland indicator species and Avon Notable plant species at The Mounds has been positive.

There have been marked changes in breeding bird populations since 2003, and several species have been lost. Some of these changes have probably been the consequence of trends operating across the entire country. Willow warbler and cuckoo, for instance, have suffered marked declines since then and their disappearance from the Mounds and Hawkfield Meadows is probably part of this wider trend. Stonechat and skylark, two of the most significant species at the site, have also ceased to breed at the Mounds. Stonechat has recently declined throughout the Bristol area, after several years of rapid increase, and its disappearance from the Mounds since 2006 might be part of this wider trend, since the habitat here still appears ideal for this species. The disappearance of skylark might be linked to a gradual reduction in the extent of grassland here due to the spread of scrub. On the other hand, there have been some gains, the most significant being colonisation by green woodpecker.

The overall value of both sites for invertebrates has not changed significantly since 2003 but there has been a slight increase in the number of rare species at the Mounds, suggesting that colonisation of this site is ongoing and some decline in interest at Hawkfield Meadows, possibly caused by the spread of coarse grass species in the absence of management.

The main artificial trend affecting the sites is recreational. This has had a greater impact at the Mounds than at Hawkfield Meadows, where the level of usage is lower. Trampling and the effects of motor bikes have maintained areas of sparse vegetation and created patches of bare ground, which are an important feature for several invertebrates. Fires at both sites, and especially at the Mounds, are probably the result of recreational activities. Although these fires have doubtless had adverse impacts, in the absence of other management they have been valuable in containing the spread of bramble. In recent years there seems to have been a decline in walking and, more notably, in motor biking and this has led to the loss of some small areas of open habitat, particularly at Hawkfield Meadows.

Large quantities of litter are deposited at both sites. This has little or no direct adverse impact on wildlife, but it contributes to an uncared for and neglected appearance.

Continued development in the surrounding area is likely to lead to an increase in public pressure on both sites. Some of the impacts associated with this might be positive, but there is also the potential for adverse impacts such as disturbance to birds, excessive trampling of vegetation and soil, vehicular trespass and increased frequency of fires. Formalisation of access might cause problems both

by direct destruction of vegetation through footpath construction, and through the reduction in trampling, which currently keeps patches of sparse grassland open.

4.3 Constraints

Both sites are owned by Bristol City Council and no other body has any legal interest in either. Conditions attached to the planning consent for Phase 1 of the development of Hengrove Park oblige the council to manage the sites for the benefit of their nature conservation and amenity value.

There are two significant legal constraints on management: scrub clearance should not be carried out during the bird breeding season; and works should not be carried out close to badger setts.

Physical constraints are imposed by ground conditions. The ground at both sites is very uneven and, in particular at the Mounds, includes substantial amounts of rubble and other debris. This constrains the extent to which machinery such as tractor-mounted flails can be used. The history of the Mounds as a landfill site means that deep excavations should not be carried out.

4.4 Aims

To maximise the sites' nature conservation value.

To encourage and regulate appropriate recreational activities on the sites.

4.5 Objectives

1 To extend the extent of species-rich grassland and tall herb vegetation on the site

Species-rich grassland is the most important vegetation type on both sites for plant species, whilst tall herb vegetation is of value for invertebrates, particularly at the Mounds. There have been significant losses of this habitat due to scrub encroachment and localised clearance of scrub is required, targeted on areas where there is a realistic chance of restoring grassland. The population of dyer's greenweed at The Mounds is particularly threatened by scrub encroachment, and several grassland species at Hawkfield Meadows now persist only in localities where they are vulnerable to scrub encroachment. At the same time, the importance of scrub in providing a habitat for birds in particular should be recognised and substantial areas should be retained.

2 To retain and enhance the diversity of grassland and tall herb vegetation types on the site.

The invertebrate interest of the site in particular depends on the close proximity of sparse grassland with bare ground, tall grassland, tall herb vegetation and scrub. Active management will be required to retain and enhance this diversity; in particular removal of vegetation from small patches on south-facing slopes to create sparse vegetation, which are of particular value for nesting bees. Opening up of footpath routes through scrub, to encourage light trampling, would be beneficial for both plants such as narrow-leaved bird's-foot trefoil and insects such as solitary bees. The strip of low ground alongside Hawkfield Meadows is particularly important for both plants and invertebrates and requires control of scrub in places, although retention of some fringing trees and scrub is important in maintaining sheltered conditions. Features that might be considered problematic, such as large stands of umbellifers, are of value for invertebrates and should be retained.

3 To enhance the structure of scrub on the site.

Scrub is an important component of the site, as a habitat for invertebrates and in particular for birds such as whitethroat and linnet. The Mounds is particularly important for bramble and Hawkfield Meadows for more mature hawthorn-dominated scrub. Bramble is a successional habitat and in time will be shaded out by tree saplings. In order to retain areas of vigorous bramble scrub areas should be periodically flailed and tree saplings should be felled. The value of hawthorn scrub would be enhanced by periodic coppicing of small areas.

4 To maintain wetland habitat on the site

Wetland is a small component of the site's vegetation, but the area in the Mounds is important for several rare invertebrate species, one of which is known at only one other British locality. It may be threatened by scrub and tree encroachment and this requires control. It appears to require little other management, but should be monitored. In future creation of a similar area may prove necessary, but the need for this within five years is unlikely.

5 To retain slow worm habitat on the site.

The Mounds is potentially an important site for slow worms, and the small size of the population here may be due to recent colonisation. Slow worms will benefit from works to enhance grassland, and will also require retention of potential hibernacula.

6 To provide additional resources for quiet enjoyment of the site.

Access provision to both sites will be considered as part of the strategy for Phase 2 of Hengrove Park.

7 To maintain the site in an attractive and safe condition.

Regular litter clearance will contribute to a looked-after appearance for the site. Periodic assessment of health and safety issues will be required.

8 To secure ongoing management of the site.

This management plan should be reviewed annually and revised as necessary, informed by monitoring of its success. A new management plan should be written after five years. Designation of the site as a Local Nature Reserve would assist in securing its management in the long term. Opportunities to involve local people in site management should be explored.

4.6 Management Proposals

General

No fertilisers should be used on site. Herbicides should only be used as a targeted part of scrub control, and by licenced personnel. Soils and plants should not be imported to site. Scrub and tree clearance should only be carried out between 1st September and 15th February in order to protect birds' nests. No works should be carried out within 20 metres of a badger sett without consulting a specialist. Vegetation in the Mounds should be strimmed no shorter than 200mm, in order to minimise risks to slow worms.

Objective 1: To Extend the Extent of Species-rich Grassland and Tall Herb Vegetation on the Site

1.1 Fell all trees, saplings and shrubs growing in the area of Hawkfield Meadows shown on map 5 in 2009. Treat re-growth with herbicide in summer of 2010. Repeat in 2013.

1.2 Cut back scrub and tree saplings growing on edge of clearing alongside road at Hawkfield Meadows (see map 5) in 2009. Retain a fringe of ash trees along the Whitchurch Lane boundary but remove ten largest trees. Repeat in 2013.

1.3 Fell hornbeam, ash, and sycamore saplings, all but one poplar and all buddleia and cotoneaster bushes in the base of the Mounds in 2009. Treat re-growth in summer of 2010. Repeat in 2013.

1.4 Scrape back bramble from area of the Mounds shown on map 3, aiming to remove roots and leave area of bare soil, in 2009.

1.5 Flail back bramble in areas shown on maps 3 and 5 in the 2009/2010 winter. Repeat in 2011/ 2012 and 2013/2014.

1.6 Flail back bramble in areas shown on maps 3 and 5 in the 2010/2011 winter. Repeat in 2012/2013.

1.7 Widen paths through dense scrub at western and eastern ends of Hawkfield Meadows as shown on map 5 in the 2009/2010 winter in order to create rides. Treat regrowth in summer 2010. Repeat, widening rides, in the 2011/2012 winter, with subsequent treatment of re-growth.

1.8 Fell hawthorn, ash and other saplings in 2010. Treat stumps with herbicide in 2011 summer.

Objective 2: To Retain and Enhance the Diversity of Grassland and Tall Herb Vegetation Types on the Site

2.1 Mow the area of Hawkfield Meadows shown on map 6 annually in mid-August. Gather and remove arisings.

2.2 Mow the area of Hawkfield Meadows shown on map 6 in 2009, 2011, 2013 etc in mid-August. Gather and remove arisings.

2.3 Mow the area of Hawkfield Meadows shown on map 6 in 2010, 2012, 2014 etc in mid-August. Gather and remove arisings.

2.4 Mow or strim the area of the Mounds shown on map 4 in 2009 and 2012 in mid-August. Gather and remove arisings.

2.5 Mow or strim the area of the Mounds shown on map 4 in 2010 and 2013 in mid-August. Gather and remove arisings.

2.6 Create shallow scrapes by digging away small patches of vegetation from the Mounds, shown on map 4 in 2010 and 2013.

2.7 Cut back bramble from informal footpaths in Mounds shown on map 4 annually in August, to create open pathway 2 metres wide.

Objective 3: To Enhance the Structure of Scrub on the Site

3.1 Flail the areas of bramble, and fell any trees saplings, shown on map 4 in the 2009/2010 and aim to repeat every five years.

3.2 Flail the areas of bramble, and fell any tree saplings, shown on map 4 in the 2013/2014 winter and repeat every five years.

3.3 Fell trees growing through other areas of bramble in the Mounds in the 2009/2010 winter. Repeat in the 2012/2013 winter.

3.4 Coppice clearing in scrub in Hawkfield Meadows, as shown on map 6, in the 2011/2012 winter.

3.5 Coppice clearing in scrub in Hawkfield Meadows, as shown on map 6, in the 2013/2014 winter.

Objective 4: To Maintain Wetland Habitat on the Site

4.1 Remove bramble and willow saplings around the edges of the wetland area in the Mounds during the 2009/2010 winter. If possible winch out willow saplings and remove from site.

4.2 Thereafter monitor extent of area and manage as necessary.

Objective 5: To Retain Slow Worm Habitat on the Site

5.1 Retain cement blocks in the Mounds as slow worm hibernacula.

Objective 6: To Provide Additional Resources for Quiet Enjoyment of the Site

6.1 The Phase 2 strategy for Hengrove Park should include provision of a surfaced footpath around the Mounds, an entrance to Hawkfield Meadows via a stile and signposts at the entrances to both sites. Footpaths and entrances should be sited to avoid adverse impacts on features of nature conservation value and ecological input should be provided to all stages of design.

Objective 7: To Maintain the Site in an Attractive and Safe Condition

7.1 Remove litter from both the Mounds and Hawkfield Meadows on a monthly basis.

7.2 Carry out a biennial health and safety audit of the site. Maintain a written record and carry out any works necessary, having regard for features of nature conservation value.

Objective 8: To Secure Ongoing Management of the Site

8.1 Carry out photographic monitoring of both the Mounds and Hawkfield Meadows annually.

8.2 Carry out activity surveys for both bats and badgers along the replacement wildlife corridor (Planning Condition no. 9) in 2010, 2012, 2014 and subsequently every other year until 2018.

8.3 Carry out a walkover assessment of both the Mounds and Hawkfield Meadows annually in June, and maintain a written record.

8.4 Repeat plant, bird and invertebrate surveys in 2012.

8.5 Review management annually, and revise management plan accordingly.

8.6 Produce a new five year management plan in 2014.

8.7 Pursue designation of the sites as a Local Nature Reserve.

8.8 Work with local residents and other interest groups to set up mechanism for community involvement, such as Friends Group.

5 FIVE YEAR WORK PLANNER

	2009	2010	2011	2012	2013
1.1 Fell trees, saplings and scrub in central area of Hawkfield Meadows	Dec				Dec
1.1 Treat felled stumps in Hawkfield Meadows		June			
1.2 Cut back scrub growing edge of roadside clearing in Hawkfield Meadows	Dec				Dec
1.3 Fell hornbeam, ash, sycamore, buddleia, cotoneaster and all but one poplar in base of the Mounds	Dec				Dec
1.3 Treat felled stumps in the Mounds		June			
1.4 Scrape back bramble from bank at Mounds	Dec				
1.5 Flail back areas of bramble at Hawkfield Meadows and Mounds	Dec		Dec		Dec
1.6 Flail back areas of bramble at Hawkfield Meadows and Mounds		Dec		Dec	
1.7 Fell scrub along paths through dense scrub at Hawkfield Meadows to create rides	Dec		Dec		
1.7 Treat re-growth along paths through dense scrub at Hawkfield Meadows, widening ride		June		June	
1.8 Fell hawthorn, ash and other saplings		Dec			
1.8 Treat re-growth from felled stumps			June		
2.1 Mow area of Hawkfield Meadows as shown on map 5, gather and remove arisings	Aug	Aug	Aug	Aug	Aug
2.2 Mow area of Hawkfield Meadows as shown on map 5, gather and remove arisings	Aug		Aug		Aug
2.3 Mow area of Hawkfield Meadows as shown on map 5, gather and remove arisings		Aug		Aug	
2.4 Mow or strim area of Mounds as shown on map 4, gather and remove arisings	Aug			Aug	
2.5 Mow or strim area of Mounds as shown on map 4, gather and remove arisings		Aug			Aug
2.6 Create scrapes on banks in Mounds, shown on map 4		Oct			
2.7 Cut back bramble along informal paths in Mounds	Aug	Aug	Aug	Aug	Aug

	2009	2010	2011	2012	Year 5
3.1 Flail areas of bramble and fell tree saplings as shown on map 4	Dec				
3.2 Flail areas of bramble and fell tree saplings as shown on map 4					Dec
3.3 Fell tree saplings growing through bramble in the Mounds	Dec				
3.4 Coppice clearing in scrub at Hawkfield Meadows			Dec		
3.5 Coppice clearing in scrub at Hawkfield Meadows					Dec
4.1 Remove scrub encroaching on wetland area at Mounds	Dec				
4.2 Monitor extent of wetland area at Mounds		Oct		Oct	
5.1 Retain concrete blocks as slow worm hibernacula	All	All	All	All	All
7.1 Remove litter from both sites	Monthly	Monthly	Monthly	Monthly	Monthly
7.2 Carry out H&S audit	Mar & Oct	Mar & Oct	Mar & Oct	Mar & Oct	Mar & Oct
8.1 Take photographs of both sites	Oct	Oct	Oct	Oct	Oct
8.2 Carry out bat and badger surveys along replacement corridor		July		July	
8.3 Make walkover assessment of both sites and maintain record	June	June	June	June	June
8.4 Repeat plant, bird and invertebrate surveys				April-Sept	
8.5 Review management annually	Oct	Oct	Oct	Oct	Oct
8.7 Pursue designation as LNR		All	All	All	
8.8 Work to ensure community involvement	All	All	All		