

## **Lenzie Moss Local Nature Reserve**

**Streetscene Technical Support Update from J.Gillespie, StreetScene Project Officer**

**June 2023**

### **Lenzie Moss Path and Boardwalk Upgrade Works**



This contact comprised of the following upgrade works which was contracted out to McGeady Ltd through the EDC Procurement process.

- Construct one raised causeway Pavetrec paths: 60 linear meters in length
- Resurface existing Pavetrec paths: 800 linear meters in length
- Remove and replace existing small bridge
- Earthworks to achieve even path gradient
- Install drainage ditches alongside and culverts under paths
- Relocate existing signage and litter bins where necessary
- Remove existing trees and vegetation where necessary for path construction/resurfacing/ditching works
- Remove existing raised boardwalk and replace with new: 440 linear meters in length
- Install passing places and seating within new boardwalk construction
- Reinstatement and associated landscaping

## **Boardwalk Construction**

The decking boards for the boardwalk are made from heat treated Thermopine timber.

Thermopine is a product with enhanced stability and durability, produced by modifying European-grown Scots Pine, using only heat, steam and pressure. This results in reducing the wood's tendency to shrink and swell and also reduces its vulnerability to wood destroying organisms. This means that no chemicals have been used in its production thus reducing the chemical impact upon Lenzie Moss and the overall sustainability of the product.

Thermal treatment results in substantially reduced swelling and shrinking of the timber, reducing dimensional movement by up to 50% making Thermopine a very stable timber. The heat treatment also reduces the vulnerability to wood decomposing organisms.

The boardwalk width was extended to a working width of 2 linear meters. This was to allow ease of movement by all users including walkers, cyclists etc. Extended areas with seating were included to afford views of Lenzie Moss and to allow visitors the opportunity to take time to enjoy the locale.

## **Path Upgrade**



The path upgrade was in the main a top dress of Pavetrec. This product consists of milled road planings and is the original material used on the Lenzie Moss paths. Sixty linear meters of path were upgraded into a raised path causeway due to that section of path flooding on a regular basis. Associated ditching was carried out to move water away from that section of pathway.

### **Drainage Works North Woods**

Drainage ditches were cleaned in the North Woods to assist with water flow away from certain areas of housing. In addition, and to assist in slowing down water flow a number of drainage ditch dams were installed.



### **Water Vole Habitat Provision**



Pond immediately after construction March 2023



Pond constructed in Spring 2022

Water Voles are a species in serious decline due to loss of habitat and predation by non-native species such as Mink. They are highly protected and are classed as a European Protected Species. It is a wildlife crime to damage either their habitat or the Water Voles themselves. Any works within 10 linear meters of a Water Vole entrance have to be licenced by Nature Scot (Scottish Natural Heritage)

At Lenzie Moss, Water Voles have recently been discovered living as what is termed Fossorial Water Voles. They have developed the behaviour to live underground in grasslands in a mole like way. 2022 saw bunds being created in the Heather Drive area. These bunds have proved to be extremely successful with many Water Vole tunnels being observed in them. The bunds help protect the Water Voles from predation and provide for them a drier winter habitat. In addition, ponds were created in 2022 and 2023 to provide additional Water Vole habitat and for other wildlife such as Amphibians and Dragonflies. The bunds are wider at the sides of the newest ponds to provide enhanced protection from predators.

Fossorial Water Voles live underground in shallow tunnels. This means that they are very vulnerable to being crushed. Please take extreme care on the East Side of Lenzie Moss in the open grassland and scrub areas and do not walk in the Heather Drive open grassland area.

## **Future Works**

It is the intention to carry out ongoing habitat management works to ensure that the raised peat bog area and other habitats of Lenzie Moss LNR are maintained and enhanced.

Weed wiping of the scrub is essential to prevent the regenerating peat bog areas becoming overwhelmed with wind borne Birch seedlings. Maintenance of the dams is ongoing, and repairs will be made as necessary.

The unimproved meadows to the East of the site are becoming overwhelmed with scrub. This is of concern as there is a strong population of Fossorial Water Voles present within this area. Invasion of scrub has also led to loss of native wild plants. Moonwort which was once recorded on this site appears to be extinct. Careful removal of scrub is a definite management consideration.

The creation of small pools within the peat bog will provide habitat for both amphibians and Odonata (dragonfly and damselfly species). If carefully placed by the boardwalk these will have the double benefit of removing surface water away from the boardwalk and also will provide visitors, the opportunity to see dragonfly and damselfly species.

## **Lenzie Moss Management Plan and Hydrological Survey**

It is the intention to produce an updated Lenzie Moss LNR Management Plan and separate Hydrological Survey this financial year. These will inform any future management of Lenzie Moss LNR.

