Floods Capital Programme

Capital Flood Programme which commenced in 2015 and has grown from strength to strength, increasing in size and incomes from external partners. The total amount invested by ECC over this period is **£16.3m** and this has been match funded by **£7.8m** of external funding bringing the total investment in flood prevention to **£25.6m** over the 9-year period to date. The programme has upskilled ECC and its partners over that period whilst protecting Essex residents and communities from the economic and personal trauma of flooding. ECC has shown to be a national lead recognised by the EA and seeks to remain as a trail blazer in flooding and improving Essex as a place to live, work and play. At the end of year 9 of the programme we will have reduced surface water flood risk to over 1800 residential homes in Essex.

Year 9 objectives

Reduce surface water flood risk to 215 residential properties

Genrate £2m worth of external funding

Deliver 7 priority schemes

75% of our projects delivered will incorporate Natural Flood Management (NFM) measures

Previously completed projects

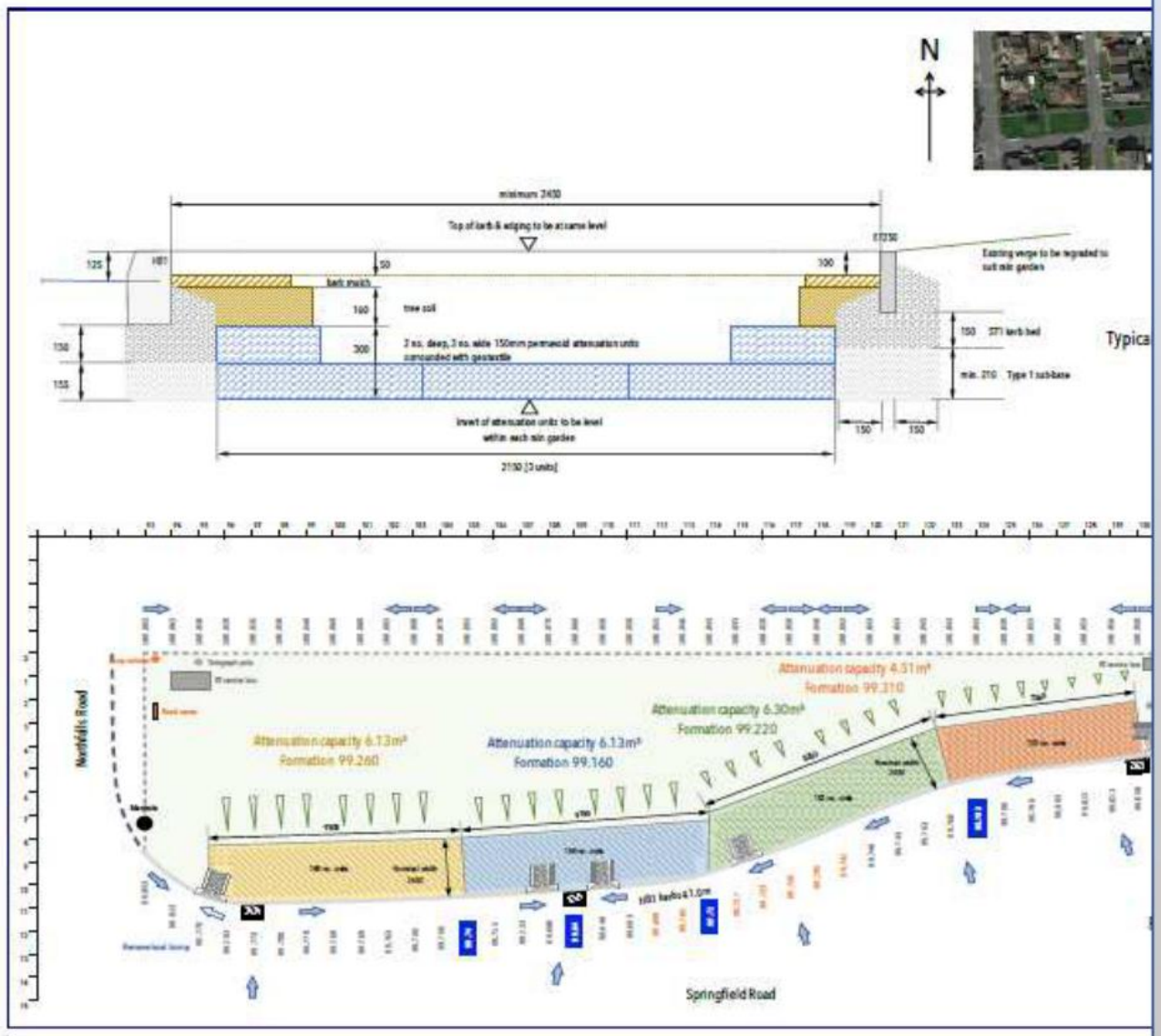
A look at

Raingardens

In

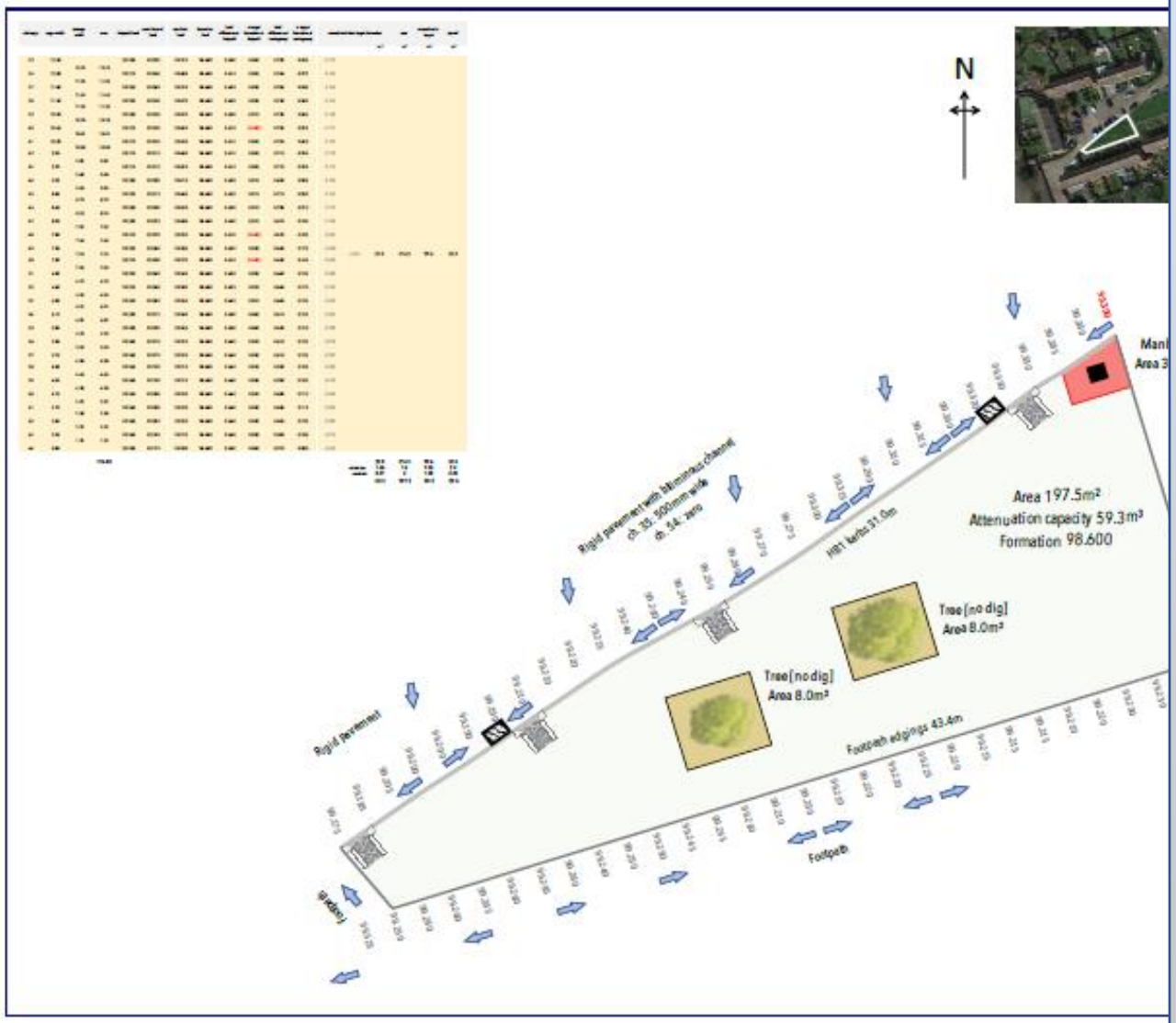
Highway Verges

Springfield Road, Canvey



- Surface water ponds significantly along Springfield Road. By retrofitting raingardens into the existing highway verges, excess surface water will flow into them. This reduces surface water flood risk, by taking water out of the existing piped systems during heavy rainfall events.
- The raingardens will infiltrate an increased volume of water as well as allowing the plants to intercept and absorb further water.
- landscape specialists have designed the gardens with a mix of planting that is water compatible and ensures flowering year-round.
- When established, the raingardens should have a reduced maintenance burden as they do not require regular mowing and are self-watering.
- These raingardens will also have additional parking implemented using permeable surfaces. This is to reduce people parking on the raingardens.

Tyrrells Road, Billericay



- Tyrrells Road was brought to our attention on the back of a S19 Flood Investigation.
- During periods of excess rainfall, surface water will flow into the raingardens which have been retrofitted into the existing Highway verge which is owned and maintained by Basildon BC.
- The surface water will then infiltrate through the raingarden into storage crates and then into the ground.
- This reduces the frequency of excess rainfall running overland into properties, as well as into existing surface water systems.
- When established, the raingardens should have a reduced maintenance burden as they do not require regular mowing and are self-watering.

Raingardens during construction

Completed Raingardens

Utilising a biodiversity assessment tool created by Natural England. The table highlights the benefits of retrofitting raingardens into existing highway verges.

Key takeaways:

- Aesthetic value, educational value, pollination, sense of place all have a large increase
- Flood regulation is greatly improved
- Cooling and shading in an urban environment is improved

Whole area	1 year	10 year	30 year
Food production	→	→	→
Wood production	→	→	→
Fish production	→	→	→
Water supply	↑	↑	↑
Flood regulation	↗	↗	↗
Erosion protection	↗	↗	↗
Water quality regulation	↑	↑	↑
Air quality regulation	→	→	→
Cooling and shading	↗	↗	↗
Noise reduction	→	→	→
Pollination	↑	↑	↑
Pest control	↑	↑	↑
Recreation	→	→	→
Aesthetic value	↑	↑	↑
Education	↑	↑	↑
Interaction with nature	↑	↑	↑
Sense of place	↑	↑	↑