Application No: 23/4152M

Location: The Dam Embankment of Poynton Pool Reservoir, Poynton Park, London Road North (B5092), Poynton

Proposal: The proposed removal of low points along approximately 480m of the Poynton Pool dam embankment and slightly raising the level of crest to increase the flood resilience of the reservoir. A kerb alongside an enhanced footpath will create the crest level and the works will also include the creation of two 40m wide clearings, to further increase flood resilience.

Applicant: Ms Debra Wrench, Cheshire East Council

Expiry Date: 29-Mar-2024

# SUMMARY

The proposal results in a significant loss of trees from the existing woodland which is prominent in views from London Road North and from within Poynton Park. The loss of these trees is significantly harmful to the amenity of local area and the non-designated heritage assets of Poynton Pool and Poynton Park.

The replacement planting at Walnut Tree Farm over 2km away from the application site, and within Stockport Borough does little to mitigate for the amenity or historic value of the trees within Poynton.

Whilst the new woodland planting would lead to a 10.27% net gain in biodiversity compared to the existing on-site habitat, there would still be significant harm to the LWS and localised harm to a number of species. It is also disappointing that mitigation is not provided for the slight increase in flood risk to the residential properties at 2-10 Anglesey Drive.

The volume and strength of local opposition to the proposals is acknowledged and completely understood. However, the identified harm is considered to be outweighed by the need for the proposal and the lack of any viable alternatives in this case. Accordingly, the application is recommended for approval.

# SUMMARY RECOMMENDATION

# Approve subject to conditions

# DESCRIPTION OF SITE AND CONTEXT

The application site comprises part of the dam embankment along the western side of Poynton Pool. Poynton Pool reservoir is an ornamental lake within the grounds of Poynton Park and it is understood that it was constructed around

1750. The dam embankment comprises a footpath along its crest set within broadleaved woodland and ranges between 1.2m and 1.8m higher than the adjacent London Road North. The application site, and the wider Poynton Pool, is allocated within the Cheshire East Local Plan as an Area of Protected Open Space and a Local Wildlife Site and is located within the Settlement Boundary of Poynton.

# DETAILS OF PROPOSAL

This application seeks full planning permission for the removal of low points along approximately 480m of the western dam embankment of Poynton Pool. This would be achieved by:

- Installing a permanent crest marker (kerb) to set a regulated crest at 91.3mAOD over the 480m stretch.
- Slightly raising and regulating the path to remove low spots to achieve a regulated crest of 91.3mAOD. The current lowest point in the embankment is 90.89mAOD. The ground beyond the path would be infilled to provide a shallow fall to tie into existing ground levels.
- Widening the path to two metres in most places and resurface with compacted gravel.
- Connecting the new path into existing access points from the road footpath.
- Creating two 40m wide clearings, which will further increase resilience, so if trees and shrubs block any overflow of water, there are at least two points where floodwater can safely spill across the bank.
- Constructing a 2m-wide clay verge which will create a buffer to prevent tree root growth from damaging the new kerb.
- Removal of trees to enable the construction works.

# **RELEVANT PLANNING HISTORY**

None relevant to current proposal.

# POLICIES

Cheshire East Local Plan Strategy (CELPS)

MP1 Presumption in Favour of Sustainable Development

PG1 Overall Development Strategy

PG2 Settlement Boundaries

PG7 Spatial distribution of development

SD1 Sustainable development in Cheshire East

SD2 Sustainable development principles

IN1 Infrastructure

**IN2 Developer Contributions** 

SE1 Design

SE3 Biodiversity and geodiversity

SE4 The Landscape

SE5 Trees, Hedgerows and Woodland

SE7 The historic environment

SE12 Pollution, Land Contamination and Land Instability

SE13 Flood risk and Water Management CO1 Sustainable Travel and Transport

Site Allocations & Development Policies Document (SADPD) GEN1 Design Principles GEN5 Aerodrome safeguarding ENV1 Ecological network core areas **ENV2** Ecological Implementation **ENV3 Landscape Character** ENV5 Landscaping ENV6 Trees, hedgerows and woodland implementation ENV7 Climate change ENV12 Air Quality ENV16 Surface water management and flood risk ENV17 Protecting water resources HER1 Heritage assets INF1 Cycleways, bridleways and footpaths INF3 Highway safety and access **INF9** Utilities **REC3** Open space implementation

Poynton Neighbourhood Plan EGB 1 Surface Water Management EGB 2 Open Spaces EGB 3 Natural and Historic Environment EGB 6 Landscape Protection and Enhancement EGB 7 Landscape Enhancement EGB 8 Protection of Rural Landscape Features EGB 9 Nature Conservation EGB 10 Wildlife Corridor TAC 1 Walking and Cycling

# OTHER MATERIAL POLICY CONSIDERATIONS

National Planning Policy Framework (the Framework) National Planning Practice Guidance

# **CONSULTATIONS (External to Planning)**

Lead Local Flood Authority (LLFA) – No comments or objections.

Environmental Protection – No comments received.

**Countryside & Rights of Way –** No objection subject to conditions regarding detailed proposals for the right of way.

**Cheshire Archaeology Planning Advisory Service –** No archaeological requirements for this application.

Head of Strategic Transport – No objection

Countryside / Green Infrastructure – No comments received.

**United Utilities –** No comments received.

Natural England - No objection

Environment Agency – No objection

Cadent Gas – No comments received

**Poynton Town Council –** Object on the following grounds:

- Inaccuracies in planning documentation height of dam
- Volume of reservoir unknown
- Dam properties are unknown
- Catchment area should be monitored to verify modelling
- Missing appendices in Spillway Upgrade Options report
- Increase in freeboard not clear
- Proposals will not prevent flooding to south shown on EA reservoir flood map
- Properties on Anglesey Drive not consulted
- Works to ditch to north may increase flooding to properties
- No maps to show extent of flooding at Vicarage Lane, Tulworth Road and Anglesey Drive after completion of works
- No reference in Flood Study 2023 of dam having significant overtopping from a 3.3% AEP (1:30 year) event
- Baseline figures in Table 5.1 Poynton FRA Model Report vary from original figures in study
- There have been significant flood events in Poynton no reports of overtopping
- Likelihood of dam failing is not set out
- 3500 people impacted and loss of 2 lives are for a wet day
- Table 4.4 from the Initial Options Report shows failure of the dam alone (dry day) would result in 274 people impacted and loss of life is 0.12.
- 1.4 and 1.5 of the Summary Options Report states risk is "unacceptably high" This is an error and is actually in ALARP region
- No figures provided in the FRA in relation to residual risk of dam failure
- More proportionate works should be considered
- Trees are acceptable on dam if managed
- Unclear where view that trees must be removed has come from contrary to S10 report and supervising engineer report
- AIA inaccurate and fails to identify a number of trees and undervalues many
- RPAs uncertain
- Different terms in tree survey and RAG trees impacted in one compromised and likely lost in another
- Impact on retained trees unknown
- Some trees have veteran characteristics require further evaluation

- Assessment of individual trees, rather than as a woodland not consistent with BS5837
- Mitigation ignores impact on impacted trees
- Trees have CAVAT value of over  $\pounds 3m$  should be taken into consideration
- Site is SBI / LWS
- Core area of Ecological Network
- Contrary to Local and Neighbourhood Plan policies
- Desk study and walk over are over 18months old
- Impact on non-designated heritage assets boat house and Pool/Park
- Increased noise and environmental pollution
- Imp[act on LCA 11a Adlington identifies Poynton Park as a high quality feature
- Alternative solutions exist additional outlet, leaky dams
- Legal duty to conserve biodiversity
- 66 protected species found at the site
- Replacement planting inadequate
- Woodland lost will exceed 0.1782ha
- Habitat creation overstated
- As proposals affect SBI BNG should be 20% (currently falls short of 10%)
- Jacobs approach to decision making takes no account of collateral effects and unintended consequences, such as ecosystem impacts, public health and heritage (as in HM Treasury's The Green Book)
- Dated, mechanical approach to risk management (based on 2013 EA's Guide to Risk Assessment for Reservoir Safety Management)
- Suggestion that Poynton Pool debate is about saving lives or trees is inaccurate more appropriately one of uncertain benefits of flood control measures versus certain losses to an established environment
- Approach relegates impacts on environmental and heritage to afterthoughts
- Proportionality assessment excludes consideration of environmental impacts, public health, heritage, amenity etc.
- Does not give an account of uncertainty in estimates can have major impact on proportionality
- Gross disproportion factor of 5 in cost benefit calculations distorts findings
- Risk posed by dam failure might be tolerable in exchange for the benefits of the existing Poynton Pool
- Balmforth Review found that (2021) "The current system for managing reservoir safety has become over reliant on compliance at the expense of ensuring due diligence in managing safety. A different emphasis is now needed to adequately protect the public".

# Poynton Town Council (Response to Technical Note)

• Table 4.4 from the Initial Options Report shows that the failure of the dam alone (dry day) would result in an estimated 274 people in the population being impacted and likely loss of life is 0.12.

- Misleading picture of the dam structure it is a small ornamental lake
- Environment Agency would adopt the loss of a life as 1.04 not 1.97 for likely loss of life
- Size of dam exaggerated, which suggests heightened risk
- The unknown volume of Poynton Pool is problematic
- Catchment map differs from publicly available map
- Inaccuracies in reports
- Missing appendices (A, E and F) in Initial Options Report
- Contradiction in freeboard height within documents
- Will there be more flooding to south of application site?
- Flood maps showing the extent of flooding to properties after the work is
- Completed should be provided
- No explanation on where the 1 in 30 chance figure comes from
- No reports of Poynton Pool ever overtopping

# **OTHER REPRESENTATIONS**

Approximately 1700 letters of representation have been received from local residents, local groups, CPRE, Cheshire Wildlife Trust, the Woodland Trust, the local MP, and other interested parties objecting to the proposal on the following grounds:

- Unnecessary / disproportionate works
- Waste of money (£1.38m)
- Detrimental to visual amenity of much loved natural beauty spot
- Area has never flooded and pool is very shallow
- A larger outlet pipe could be installed
- Evidence is flawed incorrect risk categorisation
- Loss of trees of high amenity value / some Ancient
- In a climate emergency so trees are needed
- Will weaken embankment
- Many more trees at risk than 31 identified for removal
- No risk to housing none opposite the pool no risk to life
- Planting trees in Stockport does not compensate for destruction to local area
- No benefit to Poynton residents
- Impact on wildlife including protected species and red list species
- Impact on community
- No consultation with residents of Poynton
- Pool is not a reservoir
- Alternative proposal put forward by Poynton Town Council
- Money could be better spent elsewhere
- >5700 people have signed petition
- Poynton Park & Pool is a Site of Biological Importance and a Habitat of Principal Importance
- Dam has not failed in last 250 years
- Very low risk of dam failure

- Excessive cost not appropriate expenditure for Council
- Recent flooding in Poynton caused by streams and brooks being breached (not around Poynton Pool) this is where focus should be
- Park will experience more road noise without trees filtering noise
- More efficient method to alleviate flood is to ensure overflow can cope with excess water increase length of existing overflow weir / construct energy dissipators (Used at Hollingworth Lake)
- Independent report is required
- Alternatives not properly considered
- Evidence of failed projects in respect of removal of high amenity value trees is not given appropriate weight in the processes which produced the design e.g. Sheffield Street Trees
- No account of value of trees taken into account (over £3m)
- Mis-classification of Poynton Pool as a reservoir
- Trees absorb a lot of water and carbon dioxide
- Increased soil erosion
- Diminish health and wellbeing of Poynton residents
- Safety implications for users of the path
- When proposals were designed evidence of amenity value was not known and data was not collected ahead of the project specification designs being created. Thus the technical designs for the project are significantly flawed
- Unlike the pool itself, the reasoning behind the proposal simply does not hold water
- Replacing a natural area with 'proper' paths is not an improvement.
- Jacobs own figures show that the risk of an upper dam breach is "tolerable" which means there is no mandatory necessity to carry out the work (ALARP zone)
- Incorrect assessment of the catchment area for water that flows into the pool,
- Inadequate understanding of the effect of mine shafts in the area in directing flow away from the pool
- Inability to take account of the Amenity Value of the trees around the pool
- Please consider FOPP solution "screw-pile wandering crest solution" at approx. 91.5 AOD. Then work out overtopping frequency on the official FEH catchment area.
- The volume of water held is considerably less than the Council has estimated.
- Application form does not clarify where will be affected by this increased risk of flood.
- Will give walkers a rather uninspiring view of the road
- loss of trees has not been acknowledged in the Jacobs initial options report
- Independent report on work required should be carried out
- Proposals should have been developed in consultation with community

- Impact on property values
- Increased air pollution
- Unwillingness to change plans in light of alternative solution proposed
- No evidence provided to support and rationalise the use of 1 in 10,000 event
- Reservoirs Act 1975 does not define a major flood event to be a 1 in 10,000 year event
- Has any long term monitoring of the Poynton Pool water levels have been undertaken?
- Flood protection works could be provided by strengthening and raising the height of existing wall by installing ground anchors
- £1.38M plus project cost is absolutely senseless
- Tranquil setting of pool removed
- Significant differences (50,000m3) in size of pool by applicant and an interested party
- Different results from reports in 2010 and 2019 relating to Probable Maximum Flood of pool (2.64 m3/s and 6.9m3/s respectively)
- Defer this application so that all alternative options can be fully costed and evaluated
- Loss of roots will impact on integrity of dam structure sustaining longterm tree cover may be integral to the stability of the dam
- none of the examples cited in the summary options report pertain to this situation
- The trees are a part of our heritage and town
- Adverse visual impact
- AIA undervalues the trees
- Does Cheshire east have a hidden agenda
- A significant number of the points of ingress can be easily and preemptively diverted away from the pool if required
- lack of any use of the historical flow data (typically involve utilising flow/ rainfall patterns over at least a six-month period)
- No substantive work undertaken to assess the mode and method of construction of the dam
- When the accepted industry standard limits have been applied the current risk is into the acceptable but watch zone
- DEFRA biodiversity offsetting metric is not an alternative to considering the

Capital Asset Value of the trees, it is an addition to that where biodiversity is to be lost to a planning application

- Works will result in water flowing backwards into Anglesey water resulting in flooding of all the surrounding properties including properties on Redacre
- diminish the recreational and social value of the site
- no watertight evidence except information based on an algorithm
- No EIA carried out

- degradation of a wildlife corridor linking Norbury Brook in the north and the Inclines in the south
- No attempt has been made by Jacobs to measure the actual inflows or outflows to and from the Pool; instead, they have made assumptions. As the model input data is incorrect, the flood risk output is also incorrect and cannot be relied upon to justify the proposed works.
- Lack of meaningful consultation from the Council
- Cycles and pedestrians do not mix well
- CEC has not met the requirement to acknowledge the UK Government's guidelines to Local Councils (Listening to communities: Statutory guidance on the duty to respond to petitions)
- Impact on Anglesey Drive properties
- No work done to investigate how dam is constructed
- Jacobs use EA guidance approach to risk management (RARS) which appears to be fundamentally different to "The Green Book (HM Treasury's approach), which ensures consistency across decision making across government, including on risks and safety
- Poynton is a mining village built on a natural fault, which removes excess water from upstream and yet this has not been included within the planning reports from Jacobs
- Contrary to PNP, CELPS and SADPD policies
- Reduce pool volume as an alternative
- Removal of natural barrier to road
- Removal of trees along Poynton Brook has de-stabilised banking
- Mental health impact
- Not know if land is contaminated
- Queries on answers given on application form
- The outflow sluice is adequately sized for any and all rainfall amounts that have been experienced to date
- Inflow from surrounding fields and streams has never overwhelmed that drainage ability as the amounts flowing in are from small areas and sources
- No increases to pool water levels seen
- The Emergency Drawdown Plan for Poynton Pool (2019) makes clear that inflows to Poynton Pool, from the Indirect Catchment area, via the catch-water structure, could easily be stopped completely, using a few simple wooden boards and a 600mm diameter pipe bung.
- Landscape impact
- Loss of carbon capture
- Cheshire East are determined to proceed without taking account of constituents and experts views flagging the incorrect risk categorisation used in technical decision making by Jacobs and CEC.
- Lack of consultation

- DEFRA biodiversity offsetting metric is not an alternative to considering the Capital Asset Value of the trees, it is an addition to that where biodiversity is to be lost to a planning application
- Proposed replacement with 27 trees in Woodford to compensate for the felling of mature trees in Poynton will not compensate/mitigate for the loss
- Application should be deferred to allow for investigation of the structure of the dam, consideration of less damaging interventions, further consultation with community, and investigation of all these matters by an independent arbitrator with no invested interest in current proposal.
- CAVAT value of the trees, in line with the Green Book, and future landscape financial liabilities should be included in the decision-making process.
- Urban in character and will have a negative visual impact
- Levelling of the dam crest and infilling of the low spots to provide the required freeboard could be achieved by gradually adding soil and building up the low spots over an extended period (5 to 10 years or less), allowing trees to acclimatise to the modified levels
- Without ground investigation, it is impossible to know if the existing embankment will tolerate the proposed work
- Tree survey omits several trees to be lost or compromised and likely lost

   proposals contrary to policy SE 5
- If permission is granted it should be conditional upon a legal agreement for the contractor to provide for the long-term management of the trees due to unknown characteristics of existing embankment
- Risk mis-plotted in Jacobs 2021 FN chart (in Initial Options Report), and was revised in 2023 not in unacceptable zone of risk and not included with planning application
- Risk lies in tolerable region of risk not unacceptably high
- Proposals go beyond minimum required options were developed when risk was incorrectly plotted in the unacceptable risk zone – therefore no overriding reasons for allowing the development – contrary to SE5 of CELPS
- Inaccurate to suggest that the debate over Poynton Pool is simply 'a matter of one's preference for saving either lives or trees'. The situation is more appropriately described as one of uncertain benefits of flood control measures versus certain losses to an established environment.
- Jacobs approach takes no account of collateral effects and unintended consequences of the proposed flood mitigation measures when developing and appraising options, which is inconsistent with HM Treasury's "The Green Book" methodology
- Flood risk modelling uses EA modelling rather than Jacobs own modelling. Jacobs more sophisticated modelling gives a lower risk to life and property affected.
- Neither the Environment Agency nor Jacobs used the official Flood Estimation

Handbook (FEH) catchment of around 1 km2 for Poynton Pool with no explanation given, both used a larger catchment of around 2 km2. If the official FEH catchment had been used, then the risk to life would be around half of those stated

- Historic flow and levels data has not been used to calibrate the Jacobs model
- Examples of flooding bear no similarities whatsoever to Poynton Pool other than they involve water
- Flood risk assessment carried out by Jacobs has not accounted for the impact of tree removal on the sandy gravelly soils
- Depth of pool not investigated application relies on previous reports average depth of 2m – volume of 130,000m3
- Objector measured and plotted water depth at 82 points across the length and breadth of the lake and estimates that the average depth is likely to be around 1.2 metres with a maximum of 2.1 metre found at only one point equates to volume of 80,000m3.
- Original proposal for option 3C was acceptable to APRE application proposal includes much more:
  - clearance of all trees from 2 x 40-metre long sections
  - realigned 2-metre wide path
  - $\circ~$  a minimum 2:1 regraded slope between the path and the lake;
  - $\circ$  2-metre wide grass verge to have all tree roots removed and be
  - $\circ$  maintained free of trees.
- Financial cost of the proposed works and the negative impact on the local environment is disproportionate to the projected risk of dam failure at Poynton Pool and is unacceptable to the community
- Alternative less harmful options are:
  - Option 1a: screw piles with stoplogs and clay bunds to both sides.
  - Option 2a: screw piles with stoplogs and sandy clay loam to both sides.
  - Option 3a: sheet pile wall at roadside with sandy clay loam backfill
- Car park excluded from AIA
- Jacobs methodology notes but takes no account of environmental losses in its calculations (including £3m CAVAT value of trees)
- Due the unknown structure of the embankment, the implications of removing and damaging trees as identified in the AIA are unknown
- Proposal is urban in design and would be detrimental to the historical designed landscape
- EA relies on desktop search over 18 months old only valid for 12 months
- No reference to loss of hedgerows, even though there are mature hedgerows to be removed
- Construction impacts on environment not fully considered
- Tree protection is inadequate
- Bat surveys should be completed in the woodland, not just from boathouse

- Bat surveys over 18 months old
- Initial study did not highlight all potential trees that may be used as bat roosts.
- Mitigation Hierarchy has not been considered fully
- Impact on reedbeds not identified in EA report
- BNG overstated due to understating the impact on the woodland and overstating the value of habitat creation
- Understated and inaccurate landscape impact in EA report
- Tree-lined approach to Poynton from the north will be severely fractured and severely degraded by the direct loss of trees and the indirect loss of trees
- Visual enclosure of park will be lost
- 2 category A trees identified for removal by applicant, but third party Arb report identified 34 cat A trees
- Threat to retained trees
- Contrary to BS5837
- Design not evolved to take account of views of community in line with NPPF
- 2016 and subsequent 2019 Environmental Agency Inspection report state that if the works are not completed by December 2023, then the next S10 inspection should be brought forward
- Trees form a natural dam absorbing excess water proposal to remove trees will create a flood risk
- The Environment Agency's Guide to Risk Assessment for Reservoir Safety Management it states in Box 1.1 that if the dam is less than 2 meters in height above natural ground then the hazard is very low and just to continue with periodic inspection
- Petition against proposal signed by 5,721 people (mainly Poynton residents)
- Modelling not tested / verified such as with use of historical flooding data
- Undermines CEC's commitment to carbon neutrality
- CEC notes of meeting held on 26 July 2023 (within SCI) are not an inaccurate representation
- Expand existing spillway as an alternative
- Impact on heritage value of park
- Digging down to increase capacity of lake has not been considered
- Likelihood of the dam currently failing is not set out in the documents
- Unclear where the view that trees must be removed for dam safety has come from
- Historic England should be consulted
- Impact on wildlife corridor
- Application does not identify the number of trees that are affected by each element of the proposed works

- Attenuation features with stream control structures along the route of the rivers in Poynton are another option
- Holding objection from Woodland Trust on account of the potential impact on a number of veteran trees
- 10% BNG not achieved (CWT)
- Flood risk measures should be designed to minimise harm to biodiversity and tree cover; any harm to veteran trees should be minimised or avoided; should achieve BNG of 10%; off-site replanting should be as close to the site as possible and be of sufficient scale and specification to substantially strengthen the ecological network of the area; and robustly drafted planning conditions and/or other mechanisms should be in place to secure the long-term ecological management of the site and to ensure that any compensatory works are promptly delivered and thereafter managed, with any trees or other ecologically important features which are lost or damaged being promptly replaced (CPRE)
- An Otter was recorded at the Pool on 23.01.24, providing clear indication this is an important corridor and feeding site for this species in the local area between Poynton Brook, Norbury Brook and the Canal.
- Re-consultation on additional information should be undertaken
- Factually incorrect to say no bird records were within the proposed scheme boundary, there are records of birds within the proposed scheme boundary and many more within the ZoI.
- Otters have been recorded at Poynton Pool
- Unclear how all bankside trees will be retained and recover from the works
- BNG increased from 9.36% to 10.27% with no summary of how this has been achieved.
- Grading of the woodland as moderate is undervalued and should be reassessed.
- Sections of reports referring to field studies are out of date in being that they were undertaken prior to May 2022
- Records of bluebell, and other notable species, within site boundary
- No proposals to show how common reed and emergent vegetation will be protected
- Area of woodland and area of woodland lost as stated within the Site Habitat Baseline is inaccurate and significantly understates the impact of the proposed works
- Likely overestimation of the claimed BNG at 10.27% is likely to actually only be a 10.02% gain
- Indicators of ancient woodland present
- Affects a ss41 habitat (habitat of principal importance)
- Six veteran trees have been recorded on the Woodland Trust's Ancient Tree Inventory and await verification
- S10 report, 2016 suggests, because Poynton Pool is a small dam, tree management would be acceptable, it does not suggest removal of trees

on mass. – Does this suggest a conflict of understanding Between the Inspection Engineer and the Supervising Engineer?

 guidance by the Institute of Civil Engineers, 'Floods and Reservoir Safety', Chapter 5. Has not been followed. The designer has not carried out, nor to our knowledge has there ever been a survey of the embankment commissioned to ascertain the composition of the embankment. Engineering commonsense suggests this exercise would provide valuable information to carry a design solution forward.

A petition signed by 5721 people has also been submitted, which requests the following action be taken:

Cheshire East Council reviews the Poynton Reservoir Flood Study (2019) and if that identifies that works should be carried out to the dam at Poynton Pool:

- the most environmentally friendly identified solutions are employed, with the objective of causing minimal disruption to the landscape, the ecology and the public enjoyment of the park
- Any cost/benefit analysis of the project includes both a Capital Asset Value for Amenity Trees (CAVAT)to account for the loss of amenity, and the DEFRA biodiversity offsetting metric to calculate a biodiversity net gain resulting from the project
- Any subsequent mitigation planting is within the town boundaries.

This area must be protected as it provides highly important habitats for at least 66 species with protections, including at least 15 Redlist species. The Pool is designated as a Site of Biological importance; it is designated for its woodland, marginal/emergent/inundation vegetation and its ornithological interest. The pool has a good mix of habitat along its banks supporting a wide variety of plant and tree species. We must act now to protect this area, as CEC plan how to mitigate a 1:10000 year flood risk that was raised in the last reservoir inspection.

1 letter of support was received noting:

- Trees reaching age requiring attention
- Opening up area to disabled access
- Trees have been undervalued by the Jacobs AIA
- Trees create a natural barrier to the nearby road sound and pollution.
- No external hydrologist report

# OFFICER APPRAISAL

# Background

A large, raised reservoir holds or has the potential to hold 25,000 cubic metres of water above ground level. Under the Reservoirs Act 1975 (Section 10) these bodies of water must be inspected every 10 years by an independent qualified civil engineer. The inspecting engineer then prepares a report of the result of the inspection, including in it any recommendations they see fit to make as to -

(a) the time of the next inspection;

(b) the maintenance of the reservoir;

(c) any measures required in the interests of safety and the period within which those measures must be taken

Any works required have to be carried out under the supervision of a "Qualified Civil Engineer" (QCE) who is an "All Reservoirs Panel Engineer" (ARPE). There are currently 30 ARPEs listed at:

https://www.gov.uk/government/publications/contact-details-of-engineers-onthe-all-reservoirs-panel.

National guidance is used to promote consistency between panel engineers. The Environment Agency is responsible for enforcing the requirements of the legislation.

The last Section 10 (S10) inspection of Poynton Pool was 11 July 2016, with the last S10 report being issued in August 2016. This report refers to previous reports stating that the surface area of the lake covers around 6.8ha (68,000sqm), with the volume of water retained above natural ground level being 130,000 cubic metres, and an average depth of around 2m. Whilst queries have been raised about the precise volume of water within the pool, as a recent survey has not been carried out, there is no question that the volume exceeds 25,000 cubic metres and it falls to be inspected every 10 years under the Reservoirs Act 1975 (S10).

The key findings of the S10 Inspection were:

- An updated Flood Study to assess the risk of embankment overtopping arising from flood surcharge and concurrent wave action.
- An Emergency Drawdown plan is required.

#### The dam

The S10 report provides details of the existing dam as follows:

"The embankment that impounds the reservoir is approximately 800m long and is orientated in a north to south direction. The reservoir was created on ground that slopes gently towards the west and to close of the basin that forms the lake an embankment height 2 to 3m over most of length was required. This embankment forms the western rim of the reservoir. The maximum height of the embankment is approximately 7m which occurs at a narrow valley near the northern end of the reservoirs. The A523 [now B5092] occupies a berm on the downstream [west] face of the embankment. It is not known whether the berm formed part of the original dam construction, but given the age of the dam it is highly likely that the road has been improved and widened on several occasions, thus providing additional width to the berm is not constant and it varies with respect to the water level in the reservoir within a range of 0.3 to1.0m below TWL [Top Water Level]."



The dam is illustrated in the sketch diagram below.

### The S10 report continues:

"The crest of the embankment varied considerably in width along its length. Typically the crest comprises a nearly level area at a level of 90.92mAOD (200mm higher than TWL). Overall the crest has a width of 10 to 12m over much of its length but widens to around 20m at the southern end. In this area, adjacent to the disused Council Yard, the widened area stands at a higher level than the majority of the crest path."

These higher levels to the south explain why the current proposals relate to the northern section of the dam embankment only.

In his Reservoirs Act Panel Engineer Statement (6 July 2023), the applicant's ARPE (Engineer) states that the S10 Inspection identified the main deficiency at Poynton Pool to be the capacity of the spillway. The dam at Poynton Pool has been assessed as having a hazard classification of Class B as defined in the Guide to Floods and Reservoir Safety (ICE, 2015, 4<sup>th</sup> Edition, (FRS4)). The ARPE's statement explains that this requires the dam and spillway to pass a design flood with an annual chance of 1 in 1,000 per year with no damage, and a safety check flood with an annual chance of 1 in 10,000 per year with no failure of the dam (but with some damage occurring). In addition, the Guide requires a minimum flood freeboard (height of the crest of the dam above the water level during the safety check flood) of 0.6m.

#### **Catchment**

There are two catchments (one direct and one indirect) which drain to the reservoir. The S10 report refers to the direct catchment comprising an area of 1.4km2 and an indirect catchment of approximately 4.5km2. However, the

submitted FRA refers to an estimated direct catchment of 1.96km2 and indirect catchment of 4.0 km2. These are shown in the diagram below:



Third parties have raised objections relating to the catchment areas referred to in the FRA being higher than they should be. Objectors refer to historic flow and levels data not having been used to calibrate the flood modelling which is a potentially significant design weakness.

In response to this, the applicant confirms that they consider the catchment identified in the FRA to be correct. The information comes from the Centre for Ecology and Hydrology and checked by a field visit. The applicant notes that storms are all individual in their nature and can have varying levels of impacts. For example, it depends on where in the catchment the rain falls, the profile and duration of the rainfall and the degree of waterlogging in the catchment prior to the storm. The possible degree of flooding also depends upon the level of water in the reservoir at the time of the event and its additional storage capacity at the time of the storm. In accordance with the guide to Floods and Reservoir Safety ICE (Institution of Civil Engineers) 2015 it has been assumed a catchment wide storm occurs, of a standardised rainfall profile shape with a reasonable worst-case duration, onto a catchment with design assumptions on how wet or dry the ground already is when the rainfall occurs. It has also been assumed that the reservoir is full and just spilling at the time of the event.

Whilst this approach has been queried by third parties no specific evidence to demonstrate that the catchment is incorrect has been provided, and no objections have been raised by the Environment Agency or the Lead Local Flood Authority. On this basis the applicant's catchment area is accepted.

### Flood Risk

Hydrological and hydraulic modelling of Poynton Pool and its direct and indirect catchments was developed based on topographic data and Lidar data and utilising "the current industry standard flood study methodologies" (Poynton Flood Study Report, 2023). The model has been used to estimate peak discharge flows and stillwater levels for the 0.01% and 0.1% Annual Exceedance Probability (AEP) flood events (10,000 year and 1,000 year return period events).

The FRA states that the model results showed that for the 0.1% Design Storm flood event, the peak inflow to the reservoir is 6.9m3/s, and the peak total outflow is 6.4m3/s. In this event, the peak still water level of 91.07mAOD exceeds the minimum dam crest level by 0.19m.

For the 0.01% flood event, the peak inflow to the reservoir is said to be 11.2m3/s, and the peak total outflow is 11.0m3/s. In this event, the peak still water level of 91.10mAOD exceeds the minimum dam crest level by 0.22m. This means that the crest levels are lower than the Design Flood and Safety Check flood event levels and overtopping of the dam is currently expected to occur during these Design and Safety Check flood events. The modelling indicates that overtopping is currently expected to occur during flood events of 5% AEP and greater.

The existing embankment crest level varies from 91.30 to 90.96mAOD, which is 0.33m to 0.67m (the existing freeboard) above the spillway crest level of 90.63mAOD.

Due to the levels of the dam along its length not being consistent with parts of the dam that are lower than others, in a large flood event this would cause water to flow over the dam unevenly, potentially leading to localised damage of the embankment. This could lead to an uncontrolled release of water, leading to extensive flooding impacting people and properties downstream.

The Environment Agency reservoir flood mapping carried out in 2019 shows that the consequence of failure of Poynton Reservoir in a flood is likely to lead to flooding affecting around 3500 people, is likely to lead to loss of around two lives, and cause £79M of property damage.

The map below shows the extent of reservoir flood risk around Poynton Lake.



The applicant's Planning Statement explains that there are primarily two routes that could be taken to address the insufficient spillway capacity and freeboard:

- Modify the reservoir to meet full engineering standards involving either discontinuing the reservoir or increasing the capacity of the overflow and increasing the freeboard; or
- Adopting a risk-based approach, accepting the dam embankment will overtop, but improving its resilience to overflow.

To upgrade the reservoir to meet full engineering standard two options were considered by the applicant:

- To discontinue the reservoir was discounted primarily because Poynton Pool currently serves as an amenity lake for the local community; and
- To increase the capacity of the existing spillway by increasing the length of the weir and increasing the size of the culvert, and in addition either lower the top water level or increase the height of the dam to provide the required freeboard.

The ARPE statement explains that to achieve the 0.6m freeboard requirement, in order to meet the full engineering standard, the crest of the dam would need to be raised along its full length to 0.6m above the flood level, which would require the removal of all the trees on the crest.

In terms of the risk based method, the following options were considered:

- Add an additional pipe to increase service spillway capacity;
- Construct emergency spillways; and

• Increase resilience to overflow.

The options were compared over a range of criteria including cost, reputational risk, risk of dam failure, onset of flooding, onset of damage to the dam, risk of future dam safety works, fluvial flood risk, heritage and visual impact.

The risk-based option to increase resilience to overflow was taken forward as the preferred option for further development. Several variations for the preferred option were then considered, the variation selected to be brought forward was to regulate and slightly raise the crest.

The scheme comprises:

- The removal of low points in the dam embankment, by infilling the low points and slightly raising the level of crest to ensure that water flowing over the dam embankment is spread out along the whole length. A low crest marker (kerb) will also be added to ensure a consistent level. The resultant freeboard, after these works, would then be 91.3mAOD (proposed kerb level) 90.67mAOD (spillway crest) = 0.67m (proposed freeboard)
- The creation of two 40m wide clearings where floodwater can spill across the dam embankment and thus further increase resilience, as trees and shrubs could hinder any overflow of water;
- A 2m-wide grass covered clay verge, which would create a buffer to reduce the risk of tree root growth from damaging the new kerb; and
- Enhancement works consisting of widening the footpath to two metres and resurfacing it with compacted gravel to improve its suitability for wheelchair users and pedestrians.

Cheshire East Council, as the undertaker (owner) of the reservoir, is obliged to carry out necessary improvements against extreme flooding and implement these by the end of 2023 to avoid enforcement action by the Environment Agency.

The extent of the proposed operational development is relatively limited. These works comprise the infilling of the low points along the bank and slightly raising the level of crest with the addition of a kerb along its length to ensure a consistent level and works consisting of widening the footpath to two metres and resurfacing it with compacted gravel. Whilst the extent of operational development works are limited, the environmental impacts associated with it are more significant.

# Trees and hedgerows

Policy SE5 of the CELPS and ENV6 of the SADPD seek to protect trees, hedgerows or woodlands (including veteran trees or ancient semi-natural woodland), that provide a significant contribution to the amenity, biodiversity, landscape character or historic character of the surrounding area, unless there are clear overriding reasons for allowing the development and there are no suitable alternatives. Where such impacts are unavoidable, development

proposals must satisfactorily demonstrate a net environmental gain by appropriate mitigation, compensation or offsetting.

Trees within and immediately adjacent to the application site are not protected by a Tree Preservation Order and do not lie within a designated Conservation Area. The trees that comprise the woodland within the application site make a substantial contribution to the visual amenity of the area and are a significant component of the local landscape.

The application site lies within the boundary of the Poynton Park and Lake Local Wildlife Site (LWS) and its habitat is defined as semi natural broadleaved woodland marginal and open water habitats. The site is also designated as a Priority Woodland in the DEFRA Priority Habitat Inventory and identified as broadleaved woodland in the National Forest Inventory (England). The woodland associated with the application site is not listed in the Ancient Woodland Inventory on the DEFRA MAGIC website (www.magic.defra.gov.uk). The site also does not contain any Ancient and Veteran Trees that are registered in The Ancient Tree Inventory (ATI) (www.ati.woodlandtrust.org.uk). It is noted however that some trees may have veteran tree characteristics which will require further investigation. Although objectors have recently stated that six veteran trees have been recorded on the Woodland Trust's Ancient Tree Inventory and await verification. At the time of writing, they were not shown on the public access version of the ATI.

The Council's Arboricultural officer has reviewed the submitted arboricultural information and has highlighted a number of concerns:

- A substantial number of trees over 75mm in diameter have not been recorded or are missing in the supporting tree survey and tree constraints plan including trees within the proposed spillways.
- The recording of individual trees where trees within the study area are clearly designated as part of a woodland is incompatible with BS5837:2012 which requires trees collectively to be assessed as a woodland or groups.
- The impact on RPAs and Tree Protection cannot be fully verified without an assessment of soils and that a soil analysis should be included as part of the Assessment.
- RPAs should be modified to take account of pre-existing site conditions
- Inconsistencies between the AIA and RAG assessments need to be addressed.
- Clarification should be given as to the presence of Ash and Ash dieback on the site.

Within the original documentation submitted with the application there was some discrepancy in the number of trees proposed to be removed. The AIA (Rev P02) refers to the removal of 31 trees, which includes 27 individual (B) category trees and four (C) category trees, with the partial removal of a further two (C) category groups (Executive Summary first bullet point). This figure is inconsistent with the RAG Report (Appendix E) which states there are 30 B category trees and 4 C category trees (a total of 34 trees). Bullet point 9 of Section 1.4 of the AIA Limitations and assumptions of the Tree Survey states

that the actual impacts on trees will not be known until a detailed design is proposed and mitigation is applied on site. As the impacts on trees are not actually known, then it is considered premature that only 31 trees are expected to be lost. This is consistent with points raised by third parties.

The selective and block removal of trees from within the woodland will likely leave retained trees potentially exposed to prevailing wind forces, increasing the risk of further tree losses within the woodland. The suggestion that some trees could be pruned to reduce this impact has not considered the local site circumstances, in particular species tolerance, soil conditions and site exposure. This is particularly relevant to this site given it is elevated above the road and exposed to the prevailing winds from the west.

Policy ENV6 of the SADPD requires that where the loss of significant trees is unavoidable replacement planting of commensurate amenity value should be provided on site as part of a comprehensive landscape scheme, and where this is not practicable, contributions to off-site provision should be made, prioritised within the locality of the development.

The supporting information to the policy explains that contributions to offsite replacement trees will be calculated using an appropriate cost equivalent replacement calculation such as capital asset valuation of trees (CAVAT). The use of CAVAT is necessary in order to attach a monetary value to the trees as an asset and to compare with other capital costs of the development and assist with weighing up the planning balance. It is noted that no CAVAT or other appropriate cost equivalent replacement calculation has been submitted with this application.

The applicant has proposed native woodland species mix and scrub planting (with individual trees) at an offsite location at Walnut Tree Farm to compensate for the loss of trees within the woodland. The proposed planting will be managed as part of a Landscape Management Plan over a period of 30 years. The general aims of the landscape management plan are to ensure the successful establishment of the proposed woodland with the objective of landscape integration and to create a diversity of habitat and increased biodiversity value.

It is noted that the site at Walnut Tree Farm is located some distance from the application site, is outside the administrative boundary of the Council and has no public access to it nor is the site significantly visible from any public viewpoint.

Whilst it is noted that the Biodiversity Metric Report concludes the offsite compensatory woodland planting would deliver net gain for biodiversity, it should be noted that any BNG calculation is principally a habitat-based approach to mitigation and does not necessarily deliver replacement of Green Infrastructure, visual amenity or canopy cover.

In response to these comments the applicant has provided the following clarification to the potential tree impacts of the proposal.

#### Clarification of Survey Approach

The trees located on the dam wall of Poynton Pool, and included within the survey area are a woodland. Using the categorisation methodology of BS5837:2012 it would be considered to be an A category woodland. If the trees had been surveyed as a single woodland group, the arboriculturist and design team would have lacked sufficient detail of individual trees to produce a design that minimised the impact on the most important trees and enabled the resulting impact on the woodland in terms of numbers of trees lost to be quantified. If plotted as a single group, losses could only be expressed as an area of woodland lost as a percentage of the whole group, or an area, both of which are difficult to visualise.

#### Trees lost within groups

The AIA concluded that 31 trees and part of two tree groups would be lost to facilitate the proposals. The groups correspond to the two spillway clearance areas, and many of the trees in these areas are multi stemmed or arising from coppicing stumps. In such instances, professional judgement was used on whether to count a multi stemmed tree as a single tree or multiple trees.

These trees have been shown on the updated Tree Constraints Plans. Note these stems were plotted with a GPS device and due to the difficulty of obtaining an accurate satellite fix below tree canopies, especially at the northern site, locations should be considered indicative. One significant tree was identified in the southern slipway location. This tree was subjected to a full BS5837:2012 survey and is shown on the updated plans. Its details are also included in the addendum Tree Survey Schedule. Altogether within these groups, 32 trees and a 40m section of Hawthorn hedge (part of group G12) from the Northern spillway, and 15 trees and a 40m section of Hawthorn hedge (part of group G11) from the Southern spillway will be removed. A total of 47 trees within these two groups, which is in addition to the 31 trees previously identified.

|       | Removed                       | Impacted                 | Partially removed                 |
|-------|-------------------------------|--------------------------|-----------------------------------|
| А     | None                          | T06, T47 (2 trees)       | None                              |
|       |                               | T16, T20, T21, T23, T24, |                                   |
|       |                               | T28, T35, T37, T40, T43, |                                   |
|       | T03, T05, T07, T08, T10, T11, | T44, T45, T46, T48, T49, |                                   |
|       | T12, T19, T22, T29, T36, T38, | T50, T52, T56, T57, T62, |                                   |
|       | T42, T53, T58, T59, T60, T61, | T65, T66, T67, T68, T69, |                                   |
|       | T63, T64, T71, T72, T73, T74, | T70, T76, T80, T85, T86  |                                   |
| В     | T75, T78, T79 (27 Trees)      | (30 trees)               | None                              |
|       |                               | T04, T09, T13, T14, T15, |                                   |
|       |                               | T17, T18, T25, T26, T27, |                                   |
|       |                               | T32, T39, T41, T51, T54, |                                   |
|       |                               | T55, T77 (17 trees)      |                                   |
|       |                               | G01, G02, G03, G04, G05, |                                   |
|       |                               | G06, G07, G08, G09, G10  |                                   |
| С     | T30, T31, T33, T34 (4 trees)  | (10 Groups)              | G11, G12 (consisting of 47 trees) |
| U     | None                          | None                     | None                              |
| Total | 31 Trees                      | 49 trees and 10 groups   | Part of 2 groups (47 trees)       |

The table below summarises which trees are to be removed, retained, impacted or partially removed (groups):

#### Anglesey Drive Car Park

This area was not fully included in the original survey, though a number of the trees surrounding it had been plotted and included in the original survey. For clarity the trees immediately adjacent to the car park edge, not previously recorded, were plotted and any necessary works identified. While individual trees have been plotted around the car park, and assigned a BS5837:2012 category, they form a component of the A category woodland which effectively continues along the dam and around the car park before ending alongside a residential property.

The applicant has confirmed that the site compound will be wholly located within the blacktopped area of the car park and securely fenced to prevent damage occurring to surrounding trees. Minor crown lifting works are required to a number of trees surrounding the car park to prevent damage occurring to low hanging limbs.

#### Working methodologies and tree protection

Machinery to carry out the works will be chosen to match the constraints of the site and is expected to include small excavators and dumpers. This will operate upon the existing path network and will not stray beyond the footprint of the new footpath created, other than in the two spillway areas, which may be used for temporary lay down areas and turning heads. It will be possible to install protective fencing along the boundary of the works to protect the retained trees. Where works occur within the spillway areas, suitable protection will be installed.

#### Windthrow Risk

The applicant accepts that an increased susceptibility to wind throw is an inherent risk of removing mature trees growing in a mutually supportive group. In this case they consider the risk relatively low, as the group is not located in a particularly exposed area and the trees in this belt affected are of different ages and species inferring a certain degree of wind firmness. The Forestry Commission's (FC) online GALES program only includes one broadleaved species in the modelling, silver birch. Whichever species the GALES model is run using (assuming a shallow mineral soil) the model returns a wind damage risk status of 1 - low risk. It is acknowledged this is a model for commercial plantation forestry, but it is one of the only readily available tools for assessing wind throw risk in trees. Local site conditions including the elevated aspect of some trees exposing them to winds blowing from the east and the lake offering no protection from winds from the east mean the parts of the site maybe exposed to stronger winds than the FC modelling suggests.

Where trees are suspected of having rooting damage that may affect stability, crown reductions have been recommended to reduce wind loading on the canopy. Despite this there remains a risk some wind damage may occur and the trees stability would require further monitoring, especially after extreme weather events. The applicant has a duty of care and responsibility as a reasonable and prudent landowner when considering the risk posed by the trees and the cost of any future management of those risks and Poynton Park as a whole will need to be taken into consideration.

#### Overall tree impacts

Having regard to the consultation response from the arboricultural officer, objections from third parties and the information from the applicant, it is clear that the 78 individual trees to be removed undoubtedly provide a significant contribution to the amenity, biodiversity, landscape and historic character of the surrounding area. The veteran status of the trees referred to in objections and by the Council's arboricultural officer remains to be confirmed by the Woodland Trust, who also register a holding objection to the proposal on account of the potential impact upon veteran trees. It is also evident that further unavoidable losses are possible.

Policy SE5 states that where such impacts are unavoidable, development proposals must satisfactorily demonstrate a net environmental gain by appropriate mitigation, compensation or offsetting. In terms of environmental gains, replacement planting is being provided at Walnut Tree Farm in the form of a 0.35ha broadleaved woodland (stated by the applicant to amount to around 1,500 trees). Walnut Tree Farm is in the ownership of Cheshire East Council, but within the metropolitan borough of Stockport, approximately 2.25km from the application site. No replacement tree planting can take place within the application site due to its limited size. The wider Poynton Park was also ruled out, due to the ecological designation of the park, the land take required and the potential impacts upon the character and appearance of the park as well as how it is currently used (the Park is understood to hold annual events for the community). Another Council owned site was discounted at Millenium Wood in Disley. This site was discounted as it had a higher habitat value, is a designated local nature reserve, there is an existing management plan and the area identified for planting is in close proximity to an adjacent property. No other sites that could be used for mitigation planting are held by, or known to, the applicant. As detailed further below, the proposed off-site replacement planting will provide a net gain for biodiversity. However, policy ENV 6 of the SADPD goes further than SE5 in terms of mitigation requirements and requires replacement planting to be of a commensurate amenity value to the trees that are lost and to secure a net environmental gain.

The trees to be removed form a significant part of the attractive woodland belt that lines London Road North (the B5092) on the approach into Poynton from Hazel Grove. The removal of trees, and particularly the two 40m sections to be cleared will undermine this continuous belt, creating random large gaps at odds with the linear nature of the woodland. The replacement planting at Walnut Tree Farm will not be visible from public vantage points and in no way relates to the losses visually experienced within Poynton Park, or along London Road North.

As noted above, policy ENV6 requires replacement trees, woodlands and/or hedgerows to be integrated in developments as part of a comprehensive landscape scheme. Where it can be demonstrated that this is not practicable, contributions to off-site provision should be made, prioritised in the locality of the development. The supporting information to this policy explains that contributions to off-site replacement trees will be calculated using an appropriate cost equivalent replacement calculation such as CAVAT. A CAVAT

assessment has not been submitted with the application. However, the Town Council has commissioned and submitted a monetary valuation of trees using the Helliwell, CAVAT and CTLA valuation systems, which found a mean value of £2,980,520. Given the reference to CAVAT in the Council's policy it is worth specifically noting the CAVAT figure, which was very close to this mean figure at £3,081,070.

CAVAT is used to help calculate necessary contributions towards off-site planting. This means that where the loss of significant trees is unavoidable, and replacement planting cannot be provided on site, contributions (informed by a CAVAT assessment) would be sought from applicants for the Council to then spend on replacement tree planting on other sites in the locality of the site. Given that no other mitigation sites are known to exist within the local area, any contributions from the applicant for replacement planting would be of no use, as there is nowhere to spend them. Consequently, satisfactory replacement planting cannot be provided. The proposal is therefore considered to be contrary to policies SE5 of the CELPS and ENV 6 of the SADPD.

# Visual Impacts

CELPS policy SD2 sets out the Sustainable Development Principles for Cheshire East. It states that, amongst other matters, development will be expected to contribute positively to an area's character and identity, creating or reinforcing local distinctiveness in terms of:

- Height, scale, form and grouping
- Choice of materials
- External design features
- Massing of development
- Relationship to neighbouring properties, street scene and the wider neighbourhood

These principles are also reflected within CELPS policy SE1 and GEN1 of the SADPD which deal with design, and Chapter 12 of the Framework.

Policy SE4 of the CELPS notes that the high quality of the built and natural environment is recognised as a significant characteristic of the borough. All development should conserve the landscape character and quality and should where possible, enhance and effectively manage the historic, natural and manmade landscape features that contribute to local distinctiveness of both rural and urban landscapes. Policy ENV3 requires development proposals to respect the qualities, features and characteristics that contribute to the distinctiveness of the local area, as described in the Cheshire East Landscape Character Assessment (2018). Policy SD2 also includes requirements to respect and, where possible, enhance the landscape character of the area, and policy ENV5 sets out requirements for landscaping schemes on development proposals.

Policy EGB3 of the PNP states that the sites of Poynton Pool and Poynton Park are natural assets which shall be permanently protected from any development

but supports modest improvements to improve family use and access. EGB7 seeks to conserve and enhance the diversity of landscape character areas in Poynton to ensure development respects the local character of the area. EGB8 requires landscape features, including woodland and hedgerows, to be conserved and enhanced.

The Landscape chapter of the submitted Environmental Assessment Report refers to a baseline landscape description with reference to National Character Areas and Borough Landscape Character Areas. The Cheshire East Landscape Character Assessment, Cheshire East Borough Council (2018) identifies the application site to be within LCT 11 Higher Wooded Farmland: LCA 11a Adlington. It is acknowledged that "valued landscape features" in this area, relevant to the application site, do include "The high density of broadleaved woodland particularly on historic estates and along the hidden river and brook valleys, which is unusual in Cheshire East and provides a strong sense of place. Areas of woodland, many designated as LWS, provide landscape character and natural heritage value". However, it does need to be noted that but these National and Borough wide LCA areas are very large, and encompass the vastness of the relevant landscapes, but their generalisations over what can be thousands of hectares can offer little in an assessment of a small scheme, such as in this particular case. A more detailed and locally based character assessment of the park and its surroundings would perhaps have been better to demonstrate the real local effects.

The proposed operational development of inserting a new kerb and realignment and resurfacing of the existing footpath are limited in their extent. Whilst these elements would serve to urbanise the lakeside path, they are very low level, limited in scale, and not obtrusive features in their context. It is also noted that the path improvements are also intended to improve accessibility. Given these circumstances, the operational development itself is not considered to be unduly harmful in visual terms.

The associated removal of trees and the clearance of two 40m sections of woodland will, however, be unequivocally visually harmful from vantage points within and outside of the park. The two 40m wide gaps which will comprise of only grassland post-development, which will contrast sharply with the natural, mature woodland either side of them, leaving large gaps into what was previously a relatively enclosed pathway and park beyond. Similarly, the feeling of enclosure, being detached from the highway activity and the natural experience of being within the park will be diluted as passing traffic will be clearly visible through these uncharacteristic gaps.

The landscape character of the area will be harmed by the proposed development, and as such the proposal is considered to be contrary to policies SE4 and SE2 of the CELPS, policies ENV3, and ENV5 of the SADPD, and policies EGB3 EGB7 and EGB8 of the PNP.

# Ecology

The application site is located within an Ecological Network Core Area, Stepping Stone and Corridor Area as identified under policy ENV1 of the SADPD. The application site also forms part of the Poynton Park Lake Local Wildlife Site.

Policy SE3 of the CELPS requires areas of high biodiversity and geodiversity value to be protected and enhanced. All development (including conversions and that on brownfield and greenfield sites) must aim to positively contribute to the conservation and enhancement of biodiversity and geodiversity and should not negatively affect these interests. Policy ENV2 of the SADPD sets out ecological requirements for development proposals.

Policy EGB9 deals with nature conservation in the PNP. The application site is identified as an area of high habitat distinctiveness under this policy and should be protected from development. In exceptional circumstances, where development is to be permitted because of reasons which are judged to outweigh significant harm to nature conservation, appropriate compensation should be made.

Development applications are expected to avoid adverse impact on the nature conservation value of such sites, or if this is not possible minimise such impact and seek mitigation of any residual impacts.

The Environmental Assessment Report submitted with the application was informed by a desk study conducted in May 2022 to obtain ecological information relevant to the study area, and was updated in February 2024. The following filed surveys were also undertaken:

- UK Habitat Classification walkover survey of the proposed Scheme undertaken in May 2022;
- Bat tree roost potential surveys undertaken in May 2022;
- Bat tree roost climb surveys undertaken in June and August 2022;
- GCN Habitat Suitability Index (HSI) and environmental DNA (eDNA) surveys undertaken in May 2022

The nature conservation officer has confirmed the surveys remain valid and provides the following comments on the application.

#### Ecological Network

The application site falls within a Core Area and Stepping Stone and Corridor Area of the CEC ecological network which forms part of the SADPD. SADPD Policy ENV1 therefore applies to the determination of this application. ENV1 requires developments within Core Areas and Stepping-Stone sites to increase the size of core areas, increase the quantity and quality of priority habitat. Due to the loss of areas of existing woodland, the proposal will not comply with this policy objective.

# Poynton Park Lake Local Wildlife Site (LWS)

The proposed development is located within the boundary of this Local Wildlife Site (LWS). The LWS was selected due to the presence of woodland, marginal vegetation and open water habitats. The proposed development will involve the permanent removal of areas of established woodland from within the Boundary of the LWS. This woodland may support important invertebrate species identified as occurring locally as part of the desk study undertaken to inform the submitted ecological assessment. The nature conservation officer advises that the loss of woodland associated with the proposed development will result in a significant adverse effect upon the LWS.

Local Plan Core Strategy Policy SE3 (4) therefore applies to the determination of this application. This policy states that development proposals affecting Local Wildlife Sites will not be permitted except where the reasons for or benefits of the development outweigh the impact of the development.

In accordance with the mitigation hierarchy the flood resistance scheme must look to avoid or mitigate impacts on biodiversity in the first instance, with compensation for adverse effects only being considered as a last resort.

The applicant proposes woodland planting at an offsite location as a means of compensating for the loss of the existing woodland. In the event that the reasons for or benefits the development outweigh the impact of the development and the loss of the woodland is considered unavoidable the nature conservation officer advises that, in principle, the proposed offsite woodland planting is an acceptable means of compensating for the impacts of the proposed development in biodiversity terms. The proposed off-site compensatory planting is discussed further in the Biodiversity Net Gain section below.

No direct impacts on emergent vegetation (a feature for which the Local Wildlife Site was selected) are anticipated. However, if planning consent is granted, a condition is recommended to require the submission and implementation of measures to safeguard the shores of the lake and associated vegetation during the construction process.

# Great Crested Newts

Full access to all appropriate ponds within 250m of the proposed development was not available, however no evidence of great created newts was recorded during the submitted surveys/assessment. Based upon the available evidence this protected species is unlikely to be affected by the proposed development.

# **Badgers**

No evidence of badgers was recorded during the submitted survey. This species has however been recorded in the broad locality of the application site in the past. Based upon the current status of badgers at this site the proposed development is unlikely to result in a significant adverse impact upon it.

As the status of badgers on site can change within a short time scale, it is recommended that if planning consent is granted a condition should be attached which requires the submission of an updated badger survey prior to the commencement of development.

#### Otter and reptiles

The nature conservation officer advises that these priority/protected species are not reasonably likely to be present or affected by the proposed development. However, since these comments were provided, objectors have provided evidence of otters being recorded within the vicinity of the application site. Further advice from the ecologist will be reported as an update.

# Common Toad

There are records at Poynton Pool of Common Toad, a priority species and hence a material consideration. The application site supports suitable habitat for this species. The nature conservation officer advises that the proposed development would result in a localised adverse impact upon this species as a result of the loss of suitable habitat and the risk of animals being harmed during construction works. The submitted ecological assessment includes recommendations to minimise the risk to toads during the construction phase, and the restoration of the application site to tussocky grassland would provide suitable habitat for this species.

### Hedgehog

This priority species, which is a material consideration, is known to be present in the broad vicinity of the application site and may occur on the application site on a transitory basis. The proposed development would result in an adverse impact upon this species, if present, as a result of the loss of habitat and the risk of animals being killed or harmed during the construction phase. The submitted ecological assessment includes proposals to minimise the risk to hedgehogs during the construction phase, which could be conditioned in the event that consent was granted. The proposed development would result in a minor localised impact upon this species due to habitat loss.

# **Bats**

# Roosting Bats

A number of trees were identified on site that offer potential for roosting bats. No evidence of roosting bats was recorded during the surveys of the trees undertaken to inform the submitted ecological assessment. Based upon the current status of roosting bats on site the nature conservation officer advises that the proposed development is unlikely to result in a direct adverse effect on roosting bats.

Due to the number of trees to be removed with potential to support roosting bats and the often-transient nature of bat roosting in trees it is recommended that if planning consent is granted a condition should be attached which requires the pre-commencement submission of an updated bat survey of any trees with bat roost potential that would be removed as a result of the proposed development.

### Foraging/commuting bats

The woodland affected by the proposed development is highly likely to be used for foraging and commuting purposes by a number of bat species. The likely effects of the removal of section of woodland will vary depending on the species of bat concerned, with some species being more significantly affected by the creation of gaps in the woodland than others but is not likely to be significant enough to result in an offence.

The creation of gaps in linear features, such as the woodland affected by the proposed development, is generally detrimental to foraging and commuting bats. The impact of the proposed development upon foraging and commuting bats is likely to be significant in the local context.

### Nesting Birds

The woodland affected by the proposed development is likely to support a number of breeding birds potentially including more widespread priority species, which are a material consideration for planning. There will be a localised adverse impact upon nesting birds as a result of the loss of woodland habitats. The installation of bird boxes is proposed as part of the proposed development would only potentially partially mitigate for the impacts of the proposed development upon nesting birds. If planning consent is granted a condition will be required to safeguard nesting birds during the site clearance process.

### Construction Environmental Management Plan

In the event that planning consent is granted a condition is recommended which requires the submission and implementation of a Construction Environment Management Plan (CEMP). The CEMP should cover the following topics:

- Control of non-native invasive plant species
- Safeguarding of retained emergent vegetation around the pool
- Pollution prevention
- Avoidance of night working and use of artificial lighting.
- Implementation of precautionary mitigation detailed in paragraph 5.10 of the submitted Environmental Assessment Report.

#### **Biodiversity Net Gain**

All development proposals must seek to lead to an overall enhancement for biodiversity in accordance with Local Plan policy SE3(5) and deliver a Biodiversity net gain in accordance with SADPD policy ENV 2. In order to assess the overall loss/gains of biodiversity resulting from the proposed development the applicant has undertaken and submitted the report of an assessment undertaken in accordance with the Defra Biodiversity 'Metric'.

The biodiversity metric report submitted in support of the application concludes that the proposed development would result in a net loss of biodiversity, but the delivery of the offsite compensatory woodland planting, would deliver a net gain for biodiversity.

If planning consent is granted a mechanism to secure the submission and implementation of a habitat creation method statement, and 30-year monitoring

and management strategy for the offsite habitat works and the on-site provision would be required.

### Management Plans

Management plans have been submitted in support of the application for both the on-site and off-site habitat creation proposals. The nature conservation officer advises that the on-site management plan is difficult to follow as it is unclear which section of the management plan refers to which landscape treatment proposed. Despite the management plan dealing with the management of grassland habitats, there is no cutting of the grassland proposed. Recommendations have been made to the applicant for the management of the on-site grassland, but this is a matter that would be dealt with by the management strategy referred to above.

#### Ecology summary

Due to the loss of areas of existing woodland, the proposal will not comply with the Ecological Network policy ENV1 which seeks to secure increases to the size, quality or quantity of priority habitat. There will be an adverse impact upon the LWS, which will only be permitted under policy SE3(4) if the reasons for or benefits of the proposed development outweigh the impact of the development. There will be a localised impact upon Common Toad, Hedgehog, and nesting birds, and a significant impact upon foraging and commuting bats in local context. However, overall, the delivery of the offsite compensatory woodland planting, would deliver a net gain for biodiversity.

# Archaeology and Heritage

Poynton Park and Poynton Pool are identified as Neighbourhood Plan Heritage Sites in the PNP. Poynton Park Boathouse, on the opposite side of the Pool to the proposed works, is also on the Cheshire East Local List of Historic Buildings. These sites should therefore be considered as non-designated heritage assets (NDHA).

Policy SE7 of the CELPS states that all new development should seek to avoid harm to heritage assets and sets out requirements for development proposals that affect designated and non-designated heritage assets. HER1 of the SADPD requires proposals affecting heritage assets and their settings to be accompanied by proportionate information that assesses and describes their impact on the asset's significance. When considering the direct or indirect effects of a development proposal on a non-designated heritage asset, policy HER7 requires a balanced judgement to be made having regard to the significance of the heritage asset and the scale of any loss or harm. HER8 relates to archaeology and scheduled monuments.

Policy EGB 15 of the PNP requires development to aim to conserve and enhance the heritage assets of Poynton, including their setting. If any proposed development has the potential to affect the contribution of a heritage asset or its setting to its significance or an appreciation of its significance, an assessment of its impact shall be undertaken. Similar requirements are set out in paragraph 200 of the Framework.

Policies EGB20 and EGB21 relate to non-designated heritage assets identified in the PNP and set out requirements for development affecting NDHAs.

The Environmental Assessment Report accompanying the application makes reference to PNP policy "EGB3" [EGB15] noting that Poynton Park is identified as a local heritage asset of significance. However, the application provides nothing further in terms of the potential impact of the proposal upon the significance of these heritage assets. The absence of a Heritage Impact Assessment means the proposal is contrary to policies HER7 of the SADPD, EGB15 of the PNP and paragraph 200 of the Framework.

As noted above, it is understood that the pool was constructed around 1750, and given the maturity of some of the vegetation, including the woodland within the application site, this has also been in place for many years. The pool has a longstanding use as a valuable amenity for the local community. The opening up of two sections of the woodland to the main road leading into Poynton will have a significant impact upon the Pool and Park and their setting, by diluting the enclosed and intimate character along the western bank, which is considered to be harmful to these heritage assets identified in the PNP.

Policy SE7 states that proposals that cannot demonstrate that any harm will be outweighed by the benefits of the development shall not be supported. Where loss or harm is outweighed by the benefits of development, appropriate mitigation and compensation measures will be required to ensure that there is no net loss of heritage value. Given the identified harm to these heritage assets, there is considered to be conflict with policies HER7 of the SADPD and EGB21 of the PNP.

Cheshire Archaeology Planning Advisory Service have confirmed that the proposed development is unlikely to significantly impact any below ground archaeological deposits and therefore, there are no archaeological requirements for the application.

#### **Open Space**

The application site, and the wider Poynton Park is allocated as Protected Open Space. Policies SE6 of the CELPS, REC1 of the SADPD and EGB2 of the PNP seek to preserve and protect areas of open space from development to ensure good quality, and an accessible network of green spaces for people to enjoy, providing for healthy recreation and biodiversity and continuing to provide a range of social, economic and health benefits. A number of letters of representation have raised concerns about the impact on the community and highlighting the health benefits associated with the Pool and Park.

In this case, the proposals do not result in the loss of any open space, the Park and the Pool will remain as valued local recreational facilities, albeit with reduced tree cover. As such there is not considered to be any significant health impacts arising from the proposal and no significant conflict with the objectives of these policies is identified.

# Land Contamination, Ground conditions and Pollution

Policy SE12 of the CELPS explains that all development should be located and designed so as not to result in a harmful or cumulative impact upon air quality, surface water and groundwater, noise, smell, dust, vibration, soil contamination, light pollution or any other pollution which would unacceptably affect the natural and built environment, or detrimentally affect amenity or cause harm. Developers will be expected to minimise and mitigate the effects of possible pollution arising from the development itself, or as a result of the development (including additional traffic) during both the construction and the life of the development.

This policy also explains that where a proposal may affect or be affected by contamination or land instability (including natural dissolution and/or brine pumping related subsidence), at the planning application stage, developers will be required to provide a report which investigates the extent of the contamination or stability issues and the possible affect it may have on the development and its future users, the natural and built environment. In most cases, development will only be deemed acceptable where it can be demonstrated that any contamination or land instability issues can be appropriately mitigated against and remediated, if necessary.

Policy ENV17 of the SADPD supplements this policy and makes explicit the protection of groundwater and surface water in terms of their flow and quality.

Given the limited scale of the development there is no significant pollution impacts arising from the proposal in terms of air quality, surface water and groundwater, noise, smell, dust, vibration, soil contamination, light pollution or any other pollution.

Objectors refer to the potential increased noise from passing vehicles being experienced by users of the Park due to the loss of trees. Whilst trees might provide some sound absorbing function, they do not form a solid barrier to eliminate noise, therefore traffic noise is and will continue be an inevitable characteristic of the Park, particularly along the western bank of the Pool. It is accepted that users might experience more sensitivity to traffic noise due to vehicles travelling along London Road North being more visible, but any increase in noise levels is not considered to be so significant to amount to conflict with the noise related policies of the development plan.

Many of the letters of representation raise concern regarding the potential impact upon the stability of the dam if the trees are removed. The Flood Study Report (2023) also notes that the dimensions and make-up of the waterproof element of the dam is not known, and that investigation should be considered to determine the subsurface make-up of the dam, in order to better understand the risk of seepage through the dam.

No land stability information has been provided with the application, however, the submitted Flood Risk Assessment refers to the soil surrounding Poynton

Park (to the west of the pool) as slowly permeable seasonally wet, slightly acid, but base-rich loamy and clayey (https://www.landis.org.uk/soilscapes/). A third party has carried out their own investigations and found the ground to have more of a sandy/gravelly make up. Following this and other concerns raised by objectors and the Town Council on this matter the applicant has confirmed a review of published geological information, as given on British Geological Society, BGS, GeoIndex, was carried out as part of the initial options report, referenced in the submitted Summary Options Report. This suggests that the geology of the reservoir area, likely to be the source of fill to build the dam embankment, was marl and so likely to be relatively low permeability. Ground investigations were considered as part of the development of the scheme but was not found to be necessary given that there was no clear concern as to the stability or permeability of the dam embankment in the last S10 report. Ground investigations are likely to have some impact on nearby trees, so whilst a condition could be used to confirm ground conditions, prior to the commencement of development, it will not be without its own impacts.

# Living conditions

CELPS Policy SE1 states that development should ensure an appropriate level of privacy for new and existing residential properties. Policy HOU12 of the SADPD states development proposals must not cause unacceptable harm to the amenities of adjoining or nearby occupiers of residential properties, sensitive users or future occupiers of the proposed development due to:

- 1. loss of privacy;
- 2. loss of sunlight and daylight;
- 3. the overbearing and dominating effect of new buildings;
- 4. environmental disturbance or pollution; or
- 5. traffic generation, access and parking.

Having regard to the details above relating to pollution, and by virtue of the scale of development and separation distance to the nearest residential properties, there will be no significant impact upon the living conditions of these neighbours.

# Flood Risk and Drainage

Policy SE13 of the CELPS requires developments to integrate measures for sustainable water management to reduce flood risk, avoid an adverse impact on water quality and quantity within the borough and provide opportunities to enhance biodiversity, health and recreation, in line with national guidance.

Policy ENV16 of the SADPD requires development proposals to demonstrate how surface water runoff can be managed, including with the use of sustainable drainage systems (SuDS).

Policy EGB1 relates to surface water management and notes that Poynton is at risk of flooding due to a number of factors. The management of flood risk and management and maintenance of all culverts, streams and brooks within the

town should be co-ordinated into a local Flood Risk Mitigation Plan by the relevant authorities.

The application site is located entirely in Flood Zone 1 and is predominantly at very low risk of flooding from surface water sources according to Environment Agency mapping. The flood map for planning also shows that the site is located over 100m away from the nearest designated Main River, which is Poynton Brook to the west. There is an ordinary watercourse (watercourses that are not designated as Main Rivers), Park Lane Stream, approximately 50m south of Poynton Pool flowing from east to west until its confluence with Poynton Brook

#### Existing Flood Risk

There are no records of historical flood events at the site based on the Environment Agency and Local Authority data. The EA data shows the nearest events to the south west of Poynton Park, along Vicarage Lane and the A523. There was a significant flood event affecting Poynton in June 2016, when 127 properties were internally flooded, and September of 2016, when 3 properties were internally flooded. There were further instances of internal and external property flooding reported during the summer of 2016. The cause of the 2016 summer flooding was reportedly due to prolonged and heavy rainfall resulting in the surface water drainage system exceeding its capacity, along with high water levels in surrounding watercourses which hindered the ability of the sewers to discharge into watercourses and surcharged surface water outfalls. This included residents reporting the Park Lane Stream overflowing and flooding their homes. In July 2019 86 properties were reported being internally flooded in Poynton, and flooding was observed around the "bifurcation" [division] points around Poynton Lake, including along South Park Drive, Anglesey Drive, and from the pond on Towers Road. Several more years have been identified when flooding has been reported in Poynton including: 2011; 2010; 2002; 1994; and 1976.

The EA's Long Term Flood Risk – Surface Water Flood Risk map (below) indicates that the location of the proposed works, between the west of the lake and the A523, appears to be at very low risk of surface water flooding (Figure 3-2) (less than 0.1% chance of flooding each year). Poynton Lake appears to be at high risk of surface water flooding in some areas (greater than 3.3% chance of flooding each year.



Flood risk associated with reservoirs usually occurs as a result of a breach of the embankments or outfall. Reservoir flooding can pose a danger to life due to the sudden onset and large volumes of water that can travel at high velocity. However, all large, raised reservoirs (currently defined as those with a capacity of 25,000m3 and above), fall under the Reservoirs Act 1975 and as such are regularly inspected and supervised by panel engineers. Therefore, the risk of reservoir failure is generally low.

The EA's Reservoir Flood Extents (Dry Day and Wet Day) map (below) shows the maximum flood extents that may occur during reservoir failure.



The map shows two areas where reservoir flooding would originate from Poynton Pool, one to the northwest where the existing overflow arrangement is located (flooding towards Poynton Brook and onto agricultural land), and at another point to the south west of the lake opposite Vicarage Lane (flooding onto properties on affected streets, joining Park Lane stream towards Poynton Brook and Norbury Brook).

The FRA explains that although the EA's reservoir mapping shows the reservoir flood extent originating to the west of the proposed works, when Poynton Lake overtops or breaches, water will flow across the site of proposed works (the dam embankment) before flowing west towards the Poynton Brook.

As noted in the background section of this report, the 2023 Flood Study found that levels along the dam crest are lower at some locations compared to others. This means that the crest levels are lower than the Design Flood and Safety Check flood event levels and overtopping of the dam is currently expected to occur during these Design and Safety Check flood events (0.1% and 0.01% AEP respectively). The modelling also indicates that overtopping is currently expected to occur during flood events of 5% AEP and greater.

Due to the levels of the dam along its length not being consistent with parts of the dam that are lower than others, in a large flood event this would cause water to flow over the dam unevenly, potentially leading to localised damage of the embankment. This could lead to an uncontrolled release of water, leading to extensive flooding impacting people and properties downstream.

Climate Change is expected to increase the frequency and intensity of rainfall across the UK. So, although the site currently lies within Flood Zone 1, it is likely

that the site will experience a higher frequency of flooding in future due to Climate Change.

#### Post development Flood Risk

Whilst the proposal will widen the path along the dam crest to two metres and include the construction of a 2-metre-wide clay verge which may slightly increase the local impermeable surface area, this is not considered to result in any significant increase in flood risk.

The works are being undertaken to reduce reservoir flood risk. The height of the dam crest will be regulated, and low spots removed. The lowest point of the dam is currently 90.86 mAOD and the regulated height after the works will be 91.3mAOD. Tree management will involve creating two clearings for overtopping water to flow over the embankment and removal of trees within 2m of the crest kerb will prevent root damage and encourage grass growth for erosion protection.

Hydraulic modelling show that as a result of raising the crest levels to 91.3mAOD, the water level within the reservoir will increase by 0.18m during the 0.1% AEP Design Flood event and also the 0.01% Safety Flood event (Table 4-1). This means that there may be a higher residual risk in the event of failure due to the increased capacity of the reservoir, however these works will formalise overtopping of the dam, better managing the risk of failure due to concentrated erosion.

The FRA explains that the modelling further demonstrate that as a result of the proposed works, the reservoir will be expected to overtop during the 0.1% AEP event and above, compared to the current scenario where overtopping is expected during events of 5% AEP and above. The peak flow overtopping the dam will be also reduced by 1.35m3/s (from 5.17m3/s to 3.82m3/s) for the 0.1% AEP Design Flood and by 0.59m3/s (from 9.95m3/s to 9.36m3/s) for the 0.01% Safety Flood Event. This means that both the frequency and peak flow overtopping the dam is expected to decrease as a result of the proposed works.

There is a possibility that works in close proximity to the culverted outlet pipe which discharges the reservoir could cause damage to culvert during construction and reduce the ability of the reservoir discharge through the outlet pipe, increasing the risk of the reservoir overtopping. However, safe working practices are all that can be done to minimise this risk.

#### Anglesey Drive properties

The garden areas of numbers 2, 4, 6, 8 and 10 Anglesey Drive appear to have ground levels (closest to the reservoir) below 91.37mAOD, with the lowest levels around 91.05mAOD. The lowest threshold level of these properties is 92.68mAOD.

Consequently, these properties may experience up to approximately 6m in length of garden flooding towards the end of their gardens (at the edge of the reservoir), with flood depths of up to approximately 0.32m. The bottom of these gardens are already below the existing 0.01% AEP maximum flood level of

91.19mAOD so would currently be expected to flood during this event. However, the proposed works are likely to increase these garden flood depths by up to 0.18m (0.14m existing flood depths compared to 0.32m proposed).

Number 2 appears to have the lowest garden ground levels and is therefore used as a "worst case" in the diagram below taken from the FRA.



The diagram shows that approximately a 4m length of garden is currently likely to flood during the 0.01% AEP event compared to 6m as a result of the proposed works (2m increase in length).

Policy SE13 states that FRAs should be submitted to demonstrate that development proposals will not increase flood risk on site or elsewhere. Flood risk is a combination of the probability (likelihood or chance) of an event happening and the consequences (impact) if it occurred. Following the proposed works the frequency and peak flow overtopping of the dam to the west of the pool is expected to decrease as a result of the proposed works, reducing flood risk downstream (to the west). However, it does appear that flood risk will increase to the properties to the north along Anglesey Drive. Whilst these are gardens that are likely to flood in the 0.01% AEP event, it is still disappointing that mitigation is not provided for these properties as part of the proposals when the modelling suggests that the proposed development will increase the flood levels in their gardens during these events.

The image below shows the extent of the area affected to the rear of the properties along Anglesey Drive. The image also shows two potential flow paths (Route A via the car park and Route B towards Anglesey Drive pond). Flow path A will be addressed by the raising of the crest level along the western dam. Flow path B is the route of a ditch which connects Anglesey Drive pond and the reservoir. The FRA states that the nature of the connection between the ditch and Poynton Pool Reservoir is currently unknown however it is possible that water could flow from Poynton Pool along the ditch, under Anglesey Drive and into the pond. The ground levels along the ditch (90.89mAOD) are lower than the existing maximum flood level during the 0.01%

AEP event so the ditch is already expected to flood. The flood depths along this route are expected to increase by 0.18m as a result of the proposed works (0.3m existing flood depths compared to the proposed 0.48m flood depth). The FRA states that this could be partially mitigated by installing a flap valve on the downstream end of the culvert, to prevent the lake entering the pond, and this will be explored as part of the detailed design.



The proposed works will reduce flood risk downstream (to the west) of the reservoir, and the LLFA and the Environment Agency raise no objections to the proposal. However, given that the proposal does increase flood risk elsewhere (to the rear of 2-10 Anglesey Drive, and potentially towards Anglesey Drive pond, there is some conflict with policy SE13 of the CELPS.

# Highways

Policy CO1 of the CELPS sets out the Council's expectations for development to deliver the Council objectives of delivering a safe, sustainable, high quality, integrated transport system that encourages a modal shift away from car travel to public transport, cycling and walking; supportive of the needs of residents and businesses and preparing for carbon free modes of transport. Policy INF1 of the SADPD requires developments to contribute positively to local walking, cycling and public transport objectives. Policy INF3 requires development

proposals to provide safe access to and from the site for all highway users and ensure that development traffic can be satisfactorily assimilated into the safe operation of the existing highway network. TAC 1 of the PNP supports improvements to the existing footpath and cycle network.

In terms of the highway impact of the proposals, the proposed works/contractor compound will use the existing car park off Anglesey Way, which will mean that there would no public parking in the car park during the construction period. All deliveries and materials we use London Road North to access to site compound, and it is indicated that the work will take up to 4 months to complete in 2024.

The construction phase of this application does not raise any significant highway concerns.

The development would affect Public Footpath Poynton with Worth No. 89 as recorded on the Definitive Map and Statement. The Public Rights of Way (PRoW) Team do not object to the proposed 2 metre resurfacing with compacted gravel, and note that a temporary closure will be required whilst the works are undertaken. A condition is recommended requiring further detailed information relating to the works to the PRoW. The proposed alterations to the existing path will also serve to enhance accessibility, and such proposals are supported by the policies listed above.

The Head of Strategic Transport raises no objections to the proposal, and therefore no significant highway issues are raised.

#### Other considerations

#### Alternatives

A number of options have been considered by the applicant, and others have been put forward by interested parties. A summary options report accompanies the application which outlines the other options considered by the applicant.

As noted previously in this report there are two routes that could be taken to address the insufficient spillway capacity and freeboard.

- Upgrade the reservoir to meet full engineering standards. This would involve increasing the capacity of the overflow and increasing the freeboard; or
- Adopt a risk-based approach, accept the dam embankment on the west side of the pool will overflow and improve its resilience to overflowing.

#### Full Engineering Standard Options

Two full engineering options were considered to upgrade the reservoir:

- 1. The reservoir is discontinued so no longer impounds the threshold of water to fall under the Reservoirs Act 1975;
- 2. The spillway capacity is increased

**Option 1 – discontinue the reservoir** – this option was discounted because the lake, which currently serves as an amenity lake for the local community would be lost.

**Option 2 – increase culvert capacity of existing spillway** - this option was discounted because it increases flood risk downstream, has a much higher cost than risk-based options and does not meet engineering standards for freeboard (does not meet the Institute of Civil Engineer's Guide freeboard requirements to increase the freeboard by lowering top water level or raising the crest).

#### **Risk Based Options**

The risk-based approach is judgement based and includes consideration of economic calculations and sensitivity analysis, although these would not in themselves be the sole determinant. The judgement is therefore "risk-informed" following the principles set out in section 3.5 of the Guide to Risk Assessment for Reservoir Safety Management Volume 1" (DEFRA/EA, 2013).

The risk-based options would accept the dam would overflow but look to increase the resilience of the dam to overflow with a subsequent reduction in the likelihood of breach of the dam and release of the reservoir.

One of the factors considered as part of a risk-based approach is a ALARP (as low as reasonably practicable) calculation, which compares the cost of capital works to reduce risk to the benefits. Where cost is disproportionate then investment is not justified.

Another key consideration of the risk-based options is tree removal. The full engineering standards approach would be for removal of all trees on the embankment. This is not desirable due to the public amenity and ecological value of the woodland.

The following risk-based options were considered to upgrade the reservoir:

- 3A. add additional culvert to increase spillway capacity;
- 3B. retain the existing overflow and construct an emergency spillway to convey flood flows that the culvert cannot take;
- 3C. Increase resilience to overflow (Upper)
- 3C. Increase resilience to overflow (Lower)

**Option 3A - add additional culvert to increase spillway capacity** – this would retain the original overflow configuration and supplement it with one additional culvert. The additional culvert would be of similar size to the existing 600mm diameter culvert, and would approximately double the spillway capacity, but it would not be large enough to pass the design flood event (0.1% AEP). There would still be an "intolerable" risk of failure of the embankment, albeit reduced. For these reasons this option was discounted.

**Option 3B - retain the existing overflow and construct an emergency spillway to convey flood flows that the culvert cannot take** – this looked at two spillway options, a 35m wide spillway to pass flows that avoid flooding houses on London Road, and a 140m wide spillway to pass 11m<sup>3</sup>/s (safety

check flood). The shortened spillway was preferred as it avoids the houses. In conjunction with an emergency spillway on the upper embankment, the lower section of the dam embankment below London Road North would also need to be flattened and reinforced with grasscrete surfacing. This would need to extend into the garden of one of the residential properties downstream which creates access and maintenance challenges that were considered unacceptable to the applicant.

**Option 3C Upper - levelling the dam embankment crest and installing a crest marker** - Although Option 3C requires removal of some trees, it was taken forward as the preferred option for further development, when considered against the other options, over a range of criteria including cost, reputational risk (flood risk management, and dam safety), risk of dam failure, onset of flooding, onset of damage to the dam, risk of future dam safety works, fluvial flood risk, heritage and visual impact.

**Option 3C Lower – As with "Upper" works plus works to embankment downstream of London Road North -** Work to the lower embankment would be beneficial to the reservoir but it does impact heavily on the homeowner of the first of the four properties on London Road North and causes disturbance to the garden of the property. It was decided not to progress these works as the works defined in Option 3C Upper alone already addresses the recommendation in the S10(6) Certificate.

| Consideration                                      | Option 2  | Option 3A                        | Option 3B<br>(upper and<br>lower) | Option 3C-<br>Upper               | Option 3C-<br>Lower          |  |  |
|--|---|----------------------------------|-----------------------------------|-----------------------------------|------------------------------|--|--|
|  | Culvert to<br>pass 1 in<br>1,000 year<br>(Note 1) | smaller 0.6m<br>culvert (Note 1) | Emergency<br>spillways            | Regularise crest                  | Reduce risk<br>of damage     |  |  |
| Project Cost                                       | £1.3M   | £750k                            | £730k                             | £540k                             | £340k                        |  |  |
| Cost to prevent a fatality (CPF) £M/<br>life       | 6   | 7                                | 3                                 | 0 (benefits<br>outweigh<br>costs) | see text<br>section<br>6.6.1 |  |  |
| CEC Reputation (flood risk management)             | 111   | V                                | -                                 | V                                 | 2                            |  |  |
| Spillway capacity – dam failure                    | 111   | 22                               | <i>\</i> \                        | 111                               | 222                          |  |  |
| Onset of flooding London Road North                | 222   | ~                                | No change                         | √                                 | V                            |  |  |
| Onset of damage to dam                             | 222   | V                                | 44                                | 1                                 | 2                            |  |  |
| Risk of future dam safety works                    | 2   | XX                               | A                                 | √                                 | V                            |  |  |
| Fluvial flood risk                                 | хх  | ×                                | 111                               | 111                               | 222                          |  |  |
| Heritage   | 24  | 2                                | ххх                               | х                                 | -                            |  |  |
| Visual impact                                      | xxx   | XXX                              | xx                                | ×                                 | x                            |  |  |
| Key (scale of 1 to 3): √ Beneficial, x Detrimental |   |                                  |                                   |                                   |                              |  |  |

The table below provides a summary of the options appraisal for each option.

Project cost and CPF exclude costs to increase freeboard to meet engineering standards, or to mitigate increase in downstream fluvial flood risk

Notes

The minimum requirement for regulating the crest to meet the Reservoirs Act 1975 are that it will:

- Spread out overflow uniformly along the length of the crest and therefore be able to tolerate a larger overflow before a breach occurs
- Have the crest kerb in intimate contact with the clay embankment to prevent flow going under the kerb and removal of roots under the kerb which would provide a flowpath.

Several variations of Option 3C were then considered to achieve these goals:

- i. Raise path remote from waterline including dwarf wall and clear trees.
- ii. Path raising along bank edge and installation of upstream slope wave protection.
- iii. Regulate crest by installing crest marker only.
- iv. Building a new wall along downstream toe.
- v. A meandering path through the Wood forming the level crest.
- vi. Constructing a path above the root zone.

Sub-options (iv) to (vi) were discounted for the following reasons:

**iv - Building a new wall at downstream toe** – This would involve constructing a wall of around 2m in height along London Road North which would need substantial foundations to resist forces imposed on it from the overflow and associated loading from wet soil. There would be disruption to trees on the downstream face and an impact on services running along the footpath. It would also increase the height of the drop on the downstream side and unacceptably increase the risk of scour.

**v** - Meandering path through wood – for this option the path itself would be the crest marker. Over time the path would erode, be subject to settlement and potential disruption from tree routes resulting in regular and costly maintenance. This option was discounted in favour of an option that provides a crest marker that would spread out the overflow evenly.

vi - Raising the path above the root zone – this was discussed with the view that the trees could be retained. This option would see the use of a root protection matting being installed as the foundation for a new path. The path would still need a crest marker. This option was discounted as the risk of root systems of the nearby trees causing the crest marker to become disturbed was high. Additionally, there would be an unacceptable risk of leakage and internal erosion under the kerb, along the roots.

The remaining three sub-options were then identified as possible solutions suitable to be taken forward to a concept design level. These options were: i. Raise path including dwarf wall and clear trees

ii. Path raising and installation of upstream slope wave protection

iii. Regulate crest by installing crest marker only.

All three sub-options include tree clearance for the full width of the crest for a total of 80m, maintained as grass, to provide an overflow route for floods. This

is important to ensure that undergrowth under the trees does not inhibit overflow water and has regard to the fact that the structure is a dam which comes under Reservoir Safety legislation and is therefore subject to periodic safety inspections, which it will need to pass in the future.

Option 3C(iii) was preferred as it meets the minimum Reservoir Safety requirements of increasing resilience to overflow and this reducing the risk to the people downstream of loss of life and property damage; it also has the least environmental impact and lowest loss of trees, particularly along the reservoir edge. This option was also considered to be the lowest cost at the time, although the path works were excluded. This has since been added as the existing path meanders and the kerb must remain relatively straight for reservoir safety inspections. The path works will improve access for all users. The impact on trees has been minimised by locally adjusting the route alignment and path width.

#### Alternatives proposed by third parties

A number of options have been put forward by third parties during the applicant's public consultation exercise and during the planning application consultation. The suggested alternatives are summarised below with reasons given by the applicant why they could not be taken forward.

**Increase outlet culvert with no crest works** – increasing the size of the culvert does not achieve the freeboard requirements, lowering top water level or raising the crest is required.

**Do not widen path** – The design has a kerb set out in a straight line along the downstream side of the existing path to allow preservation of vegetation along the edge of the reservoirs. The path is to be varied in width to avoid trees where possible.

**Improved maintenance of outfalls** – this does not increase spillway capacity for extreme floods or improve resilience to bank overflow.

**Desilting of Poynton Pool** - this does not increase spillway capacity for extreme floods or improve resilience to bank overflow.

**Nature friendly options** – No nature-based solutions which address the public safety issues associated with the dam, increase spillway capacity for extreme floods or improve resilience to bank overflow were identified.

**Create additional storage in Poynton Park** – The Park would not be large enough to store the required volume of water, and this would require extensive excavation and have detrimental impacts on ecology and landscape.

**Meandering path using locally available gritstone** – To spread out overflow evenly along the length of the crest and improve resilience of the bank to overflow a level crest must be installed. This requires a formal marker (kerb/concrete beam) as this can be installed to low tolerances (+6mm/-6mm is

standards Highways spec) and easily surveyed / re-laid of it moves. The overflow in a 1000-year event is calculated to be approximately 40mm. To achieve a uniform overflow and spread the flow out evenly over the full length of the crest a tolerance is required significantly smaller than the depth of the overflow. Otherwise, the crest will not overflow in some places and will have an excessive depth of overflow leading to an increased risk of scour in other places.

With a granular type material it is not possible to achieve this tolerance. This will result in low spots which have an excessive depth of overflow leading to an increased risk of scour in these locations.

A positive cut-off is required from the kerb into the structural fill to prevent water seeping under the path. This will require excavation into the dam structure. This will also require the removal of roots local to the crest marker which could disrupt it.

**Introducing an armoured spillway as a "fail safe"** – This is an auxiliary spillway similar to option 3B above. The flow would be concentrated onto the road, rather than spreading it along the 480m crest as with the proposed design. Additional works would be required to take the flow along the road to the low point and protect the adjacent houses, as concentrated water would flow into the driveways. The downstream embankment would need to be protected from overflow and works would likely be required in private gardens,

The crest of the embankment would still need to be raised to meet the wave freeboard requirement in Floods and Reservoir Safety (2015) with associated tree loss.

**Continue the roadside wall utilising an above ground concrete beam foundation secured by piles** - This is likely to have a significant visual impact as the wall would be the height of the existing embankment.

The wall will have to be structural and watertight to hold back the water, including not allowing flow underneath. Therefore, the steel poles would not be suitable and piling would be required which has the potential to have a structural impact on the existing embankment, piles may go through the roots of trees and result in tree loss.

Water flowing over the wall and dropping onto the pavement (rather than down the embankment slope) potentially may lead to erosion on the path, which may require additional reinforcement.

The following options have also been put forward by Friends of Poynton Pool (FoPP) in their letter of representation:

#### Option 1A Screw piles with stoplogs and clay bunds to both sides



# Option 2A Screw piles with sandy clay loam to both sides



# Option 3A Sheet pile wall at roadside with sandy clay loam backfill



The applicant has stated that screw pile options have been considered. A Screw pile option would be more expensive and can be easily undermined by water. Tree roots would be left in place which would allow flow under the beam, which is likely to cause internal erosion and is another potential failure mode of the dam. Alterations to the roadside wall have also been considered as above.

### **Representations**

With regard to the comments received in representation not addressed above it is acknowledged that the estimated cost of the works of £1.38m is a substantial amount of money, however the financial cost of carrying out development works is not a material planning consideration. Similarly the impact on property values is also not a material planning consideration.

A number of representations make reference to documents not submitted with the planning application. One example of this is missing appendices within the Poynton Pool Initial Options Report. Whilst this document is on the Poynton Pool pages of the Council's website it does not form part of the planning submission. Similarly, reference is made within letters of objection to the incorrect risk categorisation within the same report. Whilst it does not form part of the planning submission, the applicant has accepted that there was an error in that document regarding the position of boundaries of the ALARP zone, but that the risk was correct and remains unchanged. The effect of the change to the ALARP boundaries was that the current risk moved from just into the unacceptable zone into the top of the ALARP (As Low As Reasonably Practicable) zone. This does not mean the risk is tolerable. The ALARP zone is where works should be carried out to reduce the risk where the cost is proportionate to the benefits. In this case, the benefits of the current proposals in terms of reduced property damage outweigh the costs, even without counting the risk to life. It should also be noted ALARP was only one of the criteria considered when the proposed works were being planned.

The Town Council has suggested that Jacobs approach to decision making takes no account of collateral effects and unintended consequences, such as ecosystem impacts, public health and heritage (as in HM Treasury's The Green

Book). This is not considered to be the case, as is evident form the above information on alternatives, a number of factors were considered when arriving at the final solution to address the deficiencies identified in the S10 report, which do include the amenity value of the site, the environmental impact, visual impact, heritage, etc.

It is suggested that evidence of failed projects in respect of removal of high amenity value trees is not given appropriate weight in the processes which produced the design – e.g. Sheffield Street Trees, however, each project is designed and then determined on its own merits.

The safety implications for users of the path has been raised as a concern with the removal of the trees that create a barrier to the road. This is acknowledged, however there are routes through the trees towards the highway. If Members do require additional safety measures to the newly created spillways, this could be dealt with by condition.

Many letters refer to there being no consultation with the local community and the design was not evolved to take account of views of community in line with NPPF. It is also stated that there was a lack of notification of affected properties, and Historic England should be consulted. The applicant ran a public engagement period between 26 September 2022 to 4 November 2022 (prior to the planning application). Press releases were issued on the Council's website and on Facebook and Twitter accounts. Poynton Town Council included details on their website. A number of local interest groups were identified and contacted, such as the local flood working group, and users of the park with a presence in Poynton. This also included relevant Council departments. These groups were identified as having a potential interest in the works and were therefore invited to share their thoughts on the scheme. Houses in the vicinity of the works, on Anglesey Drive and London Road North, were contacted via a letter drop, inviting them to respond to the engagement. Two poster trailers were also positioned in Poynton Park. Publicity on the planning application was carried out in accordance with statutory requirements. A small number of neighbouring properties were notified (mainly on Lond Road) and a site notice was posted. There was no requirement to consult Historic England on the planning application.

Some additional information has been submitted during the course of the planning application and objectors maintain that a re-consultation exercise should be carried out. The additional information provided clarification on points that were raised during the consultation process, and no significant changes to the proposal were made. Consequently, further consultation was not considered to be necessary. However, it is noted that some objector and the Town Council have provided comments on the additional information, which have been considered as part of the assessment of the application.

Some representations allege that the Council has a hidden agenda, perhaps with a view to promoting the land opposite as a future housing development. The land opposite the application site is allocated under policy PYT 2 (Land north of Glastonbury Drive) for sports and leisure development (for 10 ha). The

requirements for the work are set out in the S10 Report, and the Council as the undertaker (reservoir owner) is required to carry them out.

Finally, in terms of representations, many representations state that an independent review of the proposals is required. The Secretary of State for Levelling Up, Housing & Communities received a request from third parties to call-in the application for his consideration. However, the Secretary of State decided not to call-in the application, and was content that it should be determined by the local planning authority. Poynton Town Council have previously instructed an independent reservoir engineer to provide an opinion on the Spillway Improvements. His report followed the applicant's period of public engagement and was published in November 2022. His concluding remarks were, *"In summary, the works to the dam are a legal requirement on the Council. They either have to undertake them or permanently drain the Pool. The option proposed appears proportionate and has less impact in terms of tree loss than potential alternatives."* 

### **Planning Balance**

#### <u>Harm</u>

The extent of the proposed operational development is relatively limited. These works comprise the infilling of the low points along the bank and slightly raising the level of crest with the addition of a kerb along its length to ensure a consistent level and works consisting of widening the footpath to two metres and resurfacing it with compacted gravel. Whilst the extent of operational development works are limited, the environmental impacts associated with it are more significant.

It has been confirmed that 78 trees and two 40m sections of Hawthorn Hedgerow will be removed as a result of the proposed development. 49 trees and 10 groups are also identified to be impacted by the proposals, largely by crown lifting over working areas or by RPA encroachment. Trees adjacent to where the works are taking place are at risk from construction activities and windthrow. Reference by interested parties to six trees awaiting verification as Veteran Trees is noted, as is the arboricultural officer's comments that some trees have Veteran characteristics, but given that this is only an anecdotal report, and has not been confirmed only limited weight can be given to the potential Veteran Tree status. Notwithstanding this, the impact arising from the loss of trees on the site is significant, not only in arboricultural terms, but also visually, as they form part of a woodland that makes a significant contribution to the amenity of the area. In comparison, the replacement planting at Walnut Tree Farm, whilst greater in number and area to those lost, it will not be visible from public vantage points and in no way relates to the losses visually experienced within Poynton Park, or along London Road North. Policy ENV6 requires replacement tree planting to be of a commensurate amenity value to the trees that are lost and (officer emphasis) to secure environmental net gain. The environmental net gain is achieved, but they are not of commensurate amenity value. The proposal is therefore considered to be contrary to policy ENV 6 of the SADPD. The creation of two 40m wide gaps within this prominent roadside woodland that forms the boundary to Poynton Park will be a brutal

intervention, and unequivocally harmful. Substantial weight is given to this harm.

In ecological terms, the loss of these areas of existing woodland conflicts with the objectives of policy ENV1 which relates to the Ecological Network and requires developments within Core Areas and Stepping-Stone sites to increase the size of core areas, increase the quantity and quality of priority habitat. The proposal runs counter to this objective. The proposed development is also located within the boundary of the Poynton Park Lake Local Wildlife Site (LWS). The LWS was selected due to the presence of woodland, marginal vegetation and open water habitats. The loss of woodland associated with the proposed development will result in a significant adverse effect upon the LWS. There will also be localised impacts upon Common Toad, Hedgehog and nesting birds as well as a significant impact upon foraging and commuting bats in the local context.

As the application was submitted before 2 April 2024 it is not subject to the statutory requirement for the development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the onsite habitat. It is however subject to policy SE3(5) which requires development proposals to lead to an overall enhancement for biodiversity, and ENV 2 which requires a net gain in biodiversity to be delivered. The off-site planting provides a 10.27% net gain in biodiversity, and in principle, the proposed offsite woodland planting is an acceptable means of compensating for the impacts of the proposed development as a result of the loss of the existing woodland. 10.27% is greater than currently required by Local Plan policies which does attract some positive weight in favour of the proposal. The BNG proposals do go beyond what can be currently required (in the current policy context) to mitigate for the relative harm arising from the loss of the woodland. But a significant effect upon the LWS will still occur, as well as the local harm to the species listed above which weighs against the proposal. The weight afforded to this harm is tempered by the extent of BNG to be delivered, however it is still considered that moderate to substantial weight should be attached to this ecological harm.

The absence of a Heritage Impact Assessment describing the impact of the proposal on the non-designated heritage assets' significance means the proposal is contrary to policies HER7 of the SADPD, EGB15 of the PNP and paragraph 200 of the Framework. The pool has a longstanding use as a valuable amenity for the local community, and the visual impact described above will result in moderate harm to the heritage assets identified in the PNP. The trees to be removed have served to enclose the pool area and been the setting of the pool and park for many years and their loss will undermine this historical setting and sense of enclosure. Moderate to substantial weight is attached to this harm.

Finally, in terms of harm, the proposals do increase flood risk to the rear gardens of numbers 2 -10 Anglesey Drive, which is contrary to the objectives of policy SE13 of the CELPS. These gardens would flood even if the works

were not carried out, but not to the same extent. Moderate weight is attached to this increased flood risk.

### **Benefits**

The Reservoirs Act is concerned with public safety (preventing loss of life and damage if the dam failed and released the reservoir water). The legislation requires the Inspecting Engineer to make recommendations as to "measures to be taken in the interests of safety" and must give a timescale by which these measures shall be caried out (within their S10 report). The Environment Agency is responsible for enforcing the requirements of the legislation.

Therefore, balanced against the harm identified above is the fact that the proposals address the capacity issues of the spillway identified in the latest S10 Inspection. Section 2A of the Reservoirs Act 1975 designates Poynton Pool as 'high risk'. This means that an uncontrolled release of water from the pool would endanger human life. EA flood maps and data identify that failure of the dam in a flood is likely to lead to flooding affecting around 3500 people, loss of around two lives, and cause £79M of property damage.

As a high-risk reservoir, the dam and spillway at Poynton Pool are required to pass a design flood with an annual chance of 1 in 1,000 per year with no damage, and a safety check flood with an annual chance of 1 in 10,000 per year with no failure of the dam (but with some damage occurring). The proposed works to raise the low points of the crest and increase the spillway ensure this will happen and provide some resilience for the reservoir to pass future S10 inspections, with the next one due in 2026.

Whilst alternative solutions have been put forward by third parties, these and others have been considered, and all have been discounted. No other viable options are known to exist that would achieve the same resilience to flooding as the proposed scheme. The proposed works are supported by the appointed All Reservoirs Panel Engineer. An independent review by an Engineer Appointed to the Reservoir Supervising Engineer Panels for England & Wales and Scotland by Poynton Town Council confirms that the works are proportionate and have less impact than alternatives.

Consequently, the effect that the proposed works have on flood risk and public safety together with the lack of any other viable alternatives to address the issue is given substantial and overriding weight. Overall, the identified benefits of the proposed development are considered to outweigh the substantial environmental, visual and historic harm in this case.

# CONCLUSIONS

The proposal results in a significant loss of trees from the existing woodland which is prominent in views from London Road North and from within Poynton Park. The loss of these trees is significantly harmful to the amenity of the local area and the non-designated heritage assets of Poynton Pool and Poynton Park. The replacement planting at Walnut Tree Farm over 2km away from the application site, and within Stockport Borough does nothing to mitigate for the amenity or historic value of the trees within Poynton. Whilst the new woodland planting would lead to a 10.27% net gain in biodiversity compared to the existing on-site habitat, there would still be significant harm to the LWS and localised harm to a number of species. It is also disappointing that mitigation is not provided for the slight increase in flood risk to the residential properties at 2-10 Anglesey Drive. The volume and strength of local opposition to the proposals is acknowledged and completely understood. However, the identified harm is considered to be outweighed by the need for the proposal and the lack of any viable alternatives in this case. Accordingly, the application is recommended for approval subject to the following conditions.

# RECOMMENDATION

# Approve subject to following conditions.

# Conditions

- 1. Time period for implementation 3 years
- 2. Development to be carried out in accordance with approved plans.
- 3. Materials to be in accordance with application.
- 4. Updated badger survey prior to commencement.
- 5. updated bat survey of any trees to be removed with bat roost potential prior to removal of trees.
- 6. Development to be carried out in accordance with recommendations to minimise the risk to toads in Environmental Assessment Report.
- 7. Development to be carried out in accordance with recommendations to minimise the risk to hedgehogs in Environmental Assessment Report.
- 8. Nesting birds survey to be submitted.
- 9. Submission and implementation of a Construction Environmental Management Plan (Ecology).
- 10. Implementation of off-site replacement planting informed by habitat creation method statement.
- 11. Implementation of on-site habitat works informed by habitat creation method statement.
- 12. Submission and implementation of measures to safeguard the shores of the lake and associated vegetation during the construction process.
- 13.30-year monitoring and management strategy for the offsite and onsite habitat works.
- 14. Tree Retention in accordance with submitted details.
- 15. Tree protection scheme to be submitted.
- 16. Arboricultural method statement to be submitted.
- 17. Public Right of Way scheme of works to be submitted.
- 18. Ground condition survey prior to commencement.
- 19.Landscape scheme, including any required safety measures, to be submitted.
- 20. Implementation of landscape scheme.

