



LANDSCAPE AND VISUAL IMPACT ASSESSMENT

For

Proposed Treated Water Storage Tank at Stanley Hill, Slane, Co. Meath



December 2019



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1.0 INTRODUCTION

This landscape and visual impact assessment (LVIA) report has been prepared to assess the potential impact of the proposed development of a new treated water storage tank to replace the existing tank at Stanley Hill, Slane, Co. Meath. The development is required to increase the treated water storage capacity for the growing settlement. The report has been prepared for Nicholas O'Dwyer on behalf of Irish Water, to assess the proposed development and support the application for planning permission.

The proposed pre-cast concrete tank is 25.0m long, 20.0m wide and 6.05m tall above existing ground level (7.15m with the proposed handrail). The tank is proposed to be enclosed by an earth berm (grass-covered) up to its roofline. As part of the development the existing tank on the site would be demolished following the new tank's construction. In parallel with this report, a proposed landscape mitigation plan has been prepared. This plan takes account of the potential visual effects of the development and proposes additional measures to mitigate the visual effects and ensure that the overall effects of the development on the landscape are benign.

1.1 Methodology

The LVIA report was prepared with reference to the Landscape Institute's *Guidelines for Landscape and Visual Impact Assessment 2013* (GLVIA) and the EPA draft *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports 2017*. A detailed methodology is provided in Appendix A.

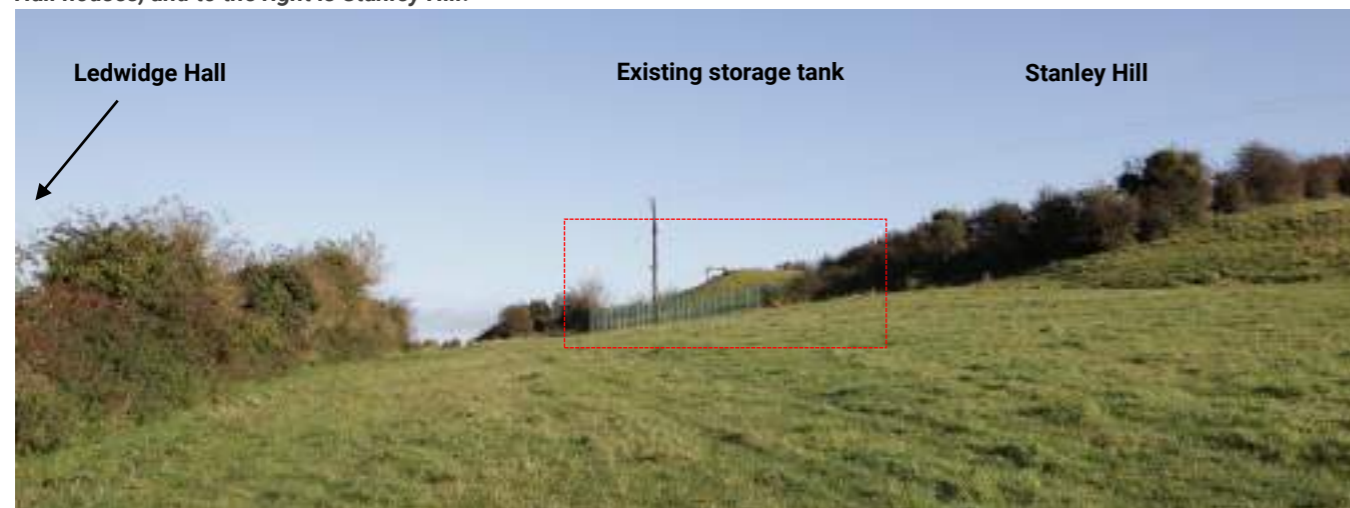
2.0 THE RECEIVING ENVIRONMENT

2.1 The Site

The subject site is located in a field at the eastern edge of Slane, a village in the valley of the Boyne River. Immediately to the west of the site is the Ledwidge Hall residential estate. To the east is a large grassland field which includes Stanley Hill, a prominent landform locally. The site incorporates the existing water storage tank serving Slane, and part of the large grassland field adjacent to the south of the existing utility site. Similar to the proposed tank, the existing tank is enclosed within an earth embankment to minimise its visual impact.

The site is enclosed to the west by a mature hedgerow on the boundary between the agricultural field and the Ledwidge Hall estate. A row of houses in the estate backs onto this boundary. To the east of the site is Stanley Hill, a steep-sided hill with patches of scrubby vegetation on its western flank. The hilltop is several meters taller than the tank, and the form of the hill along with its vegetation provide a degree of containment/enclosure to the site, supplemented by the hedgerow to the west.

A view towards the existing tank from the field to the south. To the left is the hedgerow on the boundary shared with the Ledwidge Hall houses, and to the right is Stanley Hill.



Aerial photograph of the site's immediate environs, showing the Ledwidge Hall Green estate to the west and the field to the east, characterised by its distinctive topography.



2.2 The Site in the Context of Slane

The site is located 450m to the north east of the centre of the Slane, which is at the crossroads of the N2 and N51 national roads (see aerial photo overleaf). The village grew from a small cluster around this crossroads, first in linear form along the roads and then with the construction of residential estates (such as Ledwidge Hall) around the central core. This phase of consolidation of the settlement form is ongoing and an extension to the Ledwidge Hall estate is under construction immediately to the north west of the site.

A view towards the existing tank from the site of a planning permitted Ledwidge Hall Green estate to the north west.



Aerial photography showing the site in the context of the settlement of Slane.



Slane has a distinctive and highly valued landscape characterised by dramatic topography (the Boyne in a wide, steep-sided valley, with tall hills overlooking the valley) and layers of cultural heritage manifest in a number of important sites. These include Slane Castle, located to the west of the village on the valley floor, and the Hill of Slane with its abbey ruins. The Hill is a popular visitor attraction, for its ruins and graveyard - and for the panoramic views it affords over the surrounding landscape (including the village).

The view south from the Slane Hill, in which the site can be perceived on the edge of the urban area.



2.3 Boyne Valley - Brú na Bóinne

Slane falls within the Boyne Valley Landscape Character Area (LCA) as defined in the Co. Meath Landscape Character Assessment, and within this character area is the Brú na Bóinne complex of Neolithic sites. The most significant of these is Newgrange - a UNESCO World Heritage Site - which lies 4.3km to the south east of Slane. Knowth is the nearer to the village at 3km. Dowth is 5.7km from the village. The Meath Landscape Character Assessment assigns the following values to the Boyne Valley LCA: *Landscape Value*: Exceptional; *Landscape Sensitivity*: High; *Landscape Importance*: International.

The site in the context of the Boyne Valley and Brú na Bóinne.



2.4 Summary

With regard to the proposed development's potential impacts, the key elements of the receiving environment (i.e. the potential receptors of landscape and visual change) are as follows:

- **Ledwidge Hall estate** (including permitted estate extension, Ledwidge Hall Green). Some of the houses' gardens adjoin the site boundary and the proposed development may be visible from these houses and gardens - although there is a dense, mature hedgerow running along the site-side of the shared boundary, which forms an effective visual screen. The potential visibility from the communal open spaces in the estate should also be considered.
- **Slane village core.** The village core with 'The Square' (an octagon formed by the crossroads and four houses on the corners, facing the centre) at its centre, is an Architectural Conservation Area (ACA). Due to the built enclosure around the Square it is unlikely that the development could be seen from the village core.
- **The N51.** The road passes 230m to the south of the site. The road carries a large volume of traffic (potential visual receptors) although lateral views from the road towards the site are restricted by a tall hedge along the north side of the road. There are several houses on the south side of the road (none on the north side) facing towards the site. Although these are at lower elevation than the site (so that visibility from the front gardens and ground floor windows is blocked by the roadside hedge), from the first floor windows the site would be visible in the middle distance.
- **The N2.** The road passes 385m to the north of the site, carrying a large volume of traffic. Views from the road towards the site are restricted by the roadside developments (including a school, petrol station and some houses) and the hedgerows of fields in the intervening landscape. There is housing on the hillside above the road however, which has views towards the site.

The Meath County Development Plan (MCDP) written statement for Slane identifies the view north from the N2/Dublin road, across the Boyne towards Slane, as a noteworthy view.

- **Hill of Slane.** The Hill provides panoramic views in all directions including to the south over the village. The site is visible in this view.
- **Brú na Bóinne sites.** These monuments are located in elevated positions affording panoramic views over the surrounding landscape. It is possible that a development affecting the profile of the land could be perceived from these sites, even at a distance of several kilometres.

2.5 Relevant Policy

2.5.1 Water Supply

The Meath County Development Plan 2013-2019 (MCDP) includes the following strategic objectives:

WS SO 2: "To improve and extend the County's water supply and wastewater collection and treatment infrastructure to serve the planned levels of growth, during the lifetime of this plan, in order to facilitate development."

WS SO 3: "To secure the provision of water, wastewater treatment and waste management initiatives to accommodate the future sustainable economic and residential growth of the County in accordance with the Core Strategy and Settlement Strategy and in consultation with statutory agencies and adjoining Local Authorities."

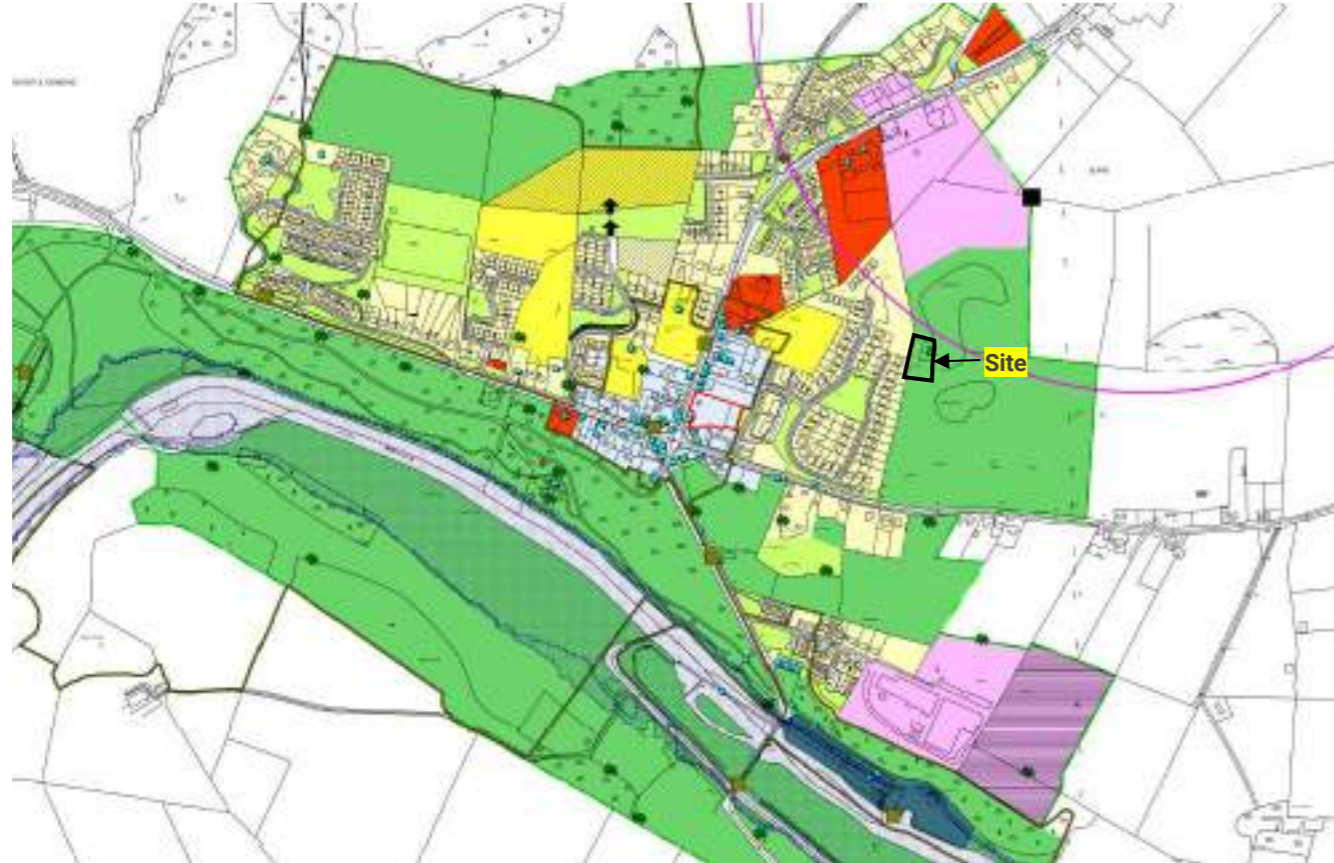
Irish Water as the statutory agency responsible for water infrastructure, is seeking to carry out the development to secure sufficient water supply for the forecast growth of Slane and environs. The development is supported in principle by the above MCDP policy.

2.5.2 Site Zoning

Although partly occupied by an existing water utility site the subject site is zoned "H1 High Amenity". This requires that, were development to take place in the area, particular care should be taken to protect its high amenity value.

Other noteworthy zonings include (a) the large "E2 General Enterprise and Employment" area directly to the north off the N2, (b) the adjacent "G1 Community Infrastructure" area for expansion of the school, and (c) several areas of "A2 New Residential".

Excerpt of MCDP Land Use Zoning Objectives Map for Slane



Implementation of these zoning objectives will expand and diversify the built form of the urban area. Most significant is the enterprise and employment area to the north of the site, as this will be visible in all views towards the site from the north – including from the Hill of Slane. The composition and character of that view will be substantially altered, even if (as may be expected) the enterprise/employment development were of a campus character with substantial planted areas within and around the perimeter.

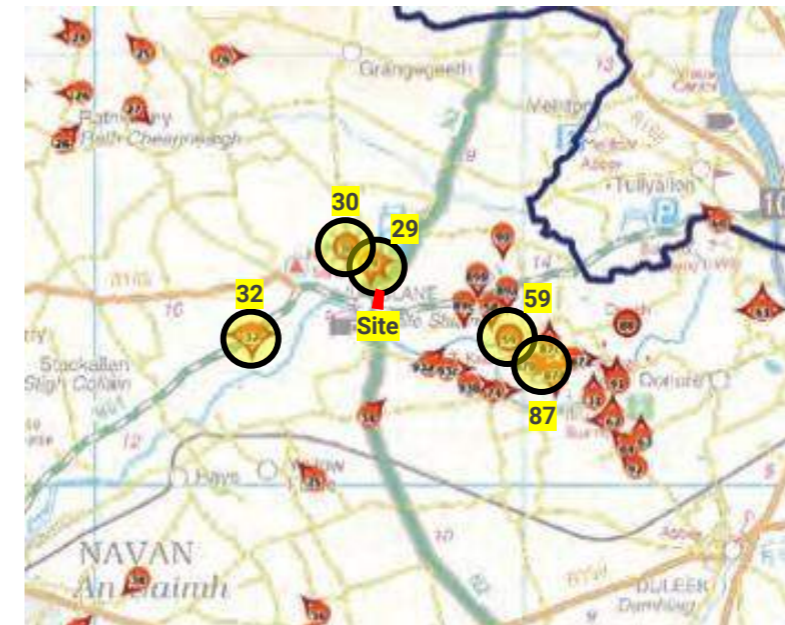
2.5.3 Landscape, Views and Prospects

LC OBJ1: "To seek to ensure the preservation of the uniqueness of all landscape character types, and to maintain the visual integrity of areas of exceptional value and high sensitivity".

LC OBJ2: "To assess development proposals having regard to the recommendations contained in the Meath Landscape Character Assessment 2007".

LC OBJ5: "To preserve the views and prospects and the amenity of places and features of natural beauty or interest listed in Appendix 12 and shown on Map 9.5.1 from development that would interfere with the character and visual amenity of the landscape".

Excerpt of MCDP Map 9.5.1



The following views are potentially relevant:

View 29 "Hill of Slane car park: Extensive view from east to south east across open working and settled landscape. Modern housing and agricultural development visible. National significance."

View 30 "Hill of Slane panorama: Extensive panorama across open working and settled landscape. Modern housing and agricultural development visible. National significance."

View 59 "Knowth Tumulus: Panoramic views in all directions from top of Knowth tumulus. Extensive views across a working countryside. International significance."

View 87 "Newgrange Passage Tomb: Elevated Panoramic View across the landscape within the World Heritage Site of Brú na Bóinne. Note that this is a working landscape containing agricultural structures, dwellings, infrastructure. International significance."

View 32 "At cross off county road to north of N51: East, South and West Extensive view from east to west encompassing woodland and large open fields in foreground. Settled working landscape visible in all directions. Very low density of settlement in foreground to middle ground distance. This View is typical of a series of such views from the N 51 between N53 [Western Boundary] and N53 [Eastern Boundary]. Local significance."

2.5.4 Landscape Treatment

There are no standards or policies for landscape treatment of utility sites in the MCDP. However, the following requirements for other development types give an indication of the Council's concerns and priorities:

"Where trees provide enclosure or a backdrop to a site they should be retained and where necessary augmented by new planting with native or other species characteristic of the area. This will assist the integration of the new building and help promote biodiversity. Care should be taken to ensure that an appropriate distance is maintained between tree root systems and building foundations, so neither is compromised."

"To require the submission of landscape plans where appropriate to accompany planning applications for rural development prepared by competent professionals and to promote the use of native trees for boundary treatment and shelter belts."

"Boundary treatment and landscaping: Proposals should be accompanied by... a suitable landscaping scheme using native species to screen the development from public areas. Existing trees and hedgerows of amenity should be retained where possible. Any security measures shall be in accordance with the overall design of a development."

"Meath County Council acknowledge that Green Infrastructure planning involves a holistic approach and should be provided as an integral part of sustainable development, alongside other infrastructure such as utilities and transport networks, if we are to get the maximum benefit from our natural assets."

3.0 PROPOSED DEVELOPMENT

Construction of New Treated Water Storage Tank

The main element of the proposed development is an above-ground concrete tank measuring 25.0m (north-south) by 20.0m (east-west). The tank height is 6.05m and there is a safety handrail of 1.1m around the perimeter of the roof, giving the structure an overall height of 7.15m. A proposed earth embankment is proposed around the tank, at a gradient of 1:1.5, to conceal the tank's walls. The site will be secured by a new 2.75 metre metal palisade fence.

Decommissioning of Existing Treated Water Storage Tank

Following the commissioning of the proposed new tank, the existing concrete storage tank will be decommissioned and demolished. The existing earth embankment will be reprofiled to approximately the pre-development landform.

Construction of New temporary Access Track

The development requires a new temporary vehicle access to the site from the N51 road to the south. This 4m wide hardcore track will run 300 metres alongside the Ledwidge Hall boundary hedgerow to provide access during the construction phase. These works include roadside reprofiling, associated ground works and the installation of a new gate at the point of access.

Photomontage of the proposed development post-construction, with no landscape/visual mitigation – from a position in the field to the south.



Key aspects of the proposed development with respect to potential landscape and visual impacts include:

- The proposed tank is longer and wider than the existing tank, but the same height as the existing tank. Therefore it would not protrude more extensively (vertically) into any views from the surroundings.
- The proposed tank, like the existing tank, is positioned against the eastern site boundary, tucked against the side of Stanley Hill. This (a) makes use of the visual enclosure provided by taller hill's landform and vegetation (this is significant with regard to potential visibility from Knowth and Newgrange to the east), and (b) separates the tank as far as possible from Ledwidge Hall to the west of the site.
- While the grassed earth embankment surrounding the tank up to roof level would be very effective in minimising the structure's visual impact, the unnatural angular form of the earth embankment itself would be noticeable.
- Another prominent element of the development would be the palisade fence surrounding the site for security.

3.1 Proposed Mitigation Measures for Landscape and Visual Effects

To inform the LVIA and mitigation proposals, photomontages of the proposed development as proposed by Nicholas O'Dwyer were produced (see view to left). These were reviewed along with the plans and the following mitigation objectives were identified:

- To **soften and screen the angular landform of the earth embankment** around the tank, particularly the corners where possible;
- To **minimise visibility of the development with vegetative screening** so that when the development is seen from any position, it would be glimpsed through vegetation rather than fully exposed to view. Views from the west (Ledwidge Hall Green) and north (e.g. Hill of Slane) were considered particularly important;
- The **vegetation should screen the security fence** in addition to the tank, wherever possible.
- **Develop the site as a Green Infrastructure asset**, so that in addition to its essential utility use the site also functions as an engine of biodiversity.

With the above objectives in mind – as well as the site's high amenity zoning and its location within the Boyne Valley LCA - the following key landscape/visual mitigation measures are proposed (refer to the Landscape Mitigation Drawing in **Appendix A**):

1. **Ledwidge Hall Green boundary hedgerow.** There is an existing post and rail fence along the boundary between the site/field and the rear gardens of the estate houses. Inside (site-side) of the fence is a mature hedgerow. This provides an effective visual screen between the houses and the site, although in places there are gaps through which the development might be glimpsed. It is therefore proposed to supplement the hedgerow with additional planting where required, based on detailed inspection during construction. The new planting is to match the existing species composition of the hedgerow.
2. **North and south woodland screening belts.** To provide visual screening and to obscure/soften the unnatural angular form of the earth embankment around the tank, it is proposed to plant broad belts of woodland inside the northern and southern boundaries of the site. The woodland species mix will contain shrub and tree canopies, for screening effect from ground to tree canopy level. The multi-layered structure is also beneficial for wildlife as it provides more species diversity as well as variations in light and shade. As required by the MCDP and in accordance with the Green Infrastructure principles, only native species are proposed in the woodland mix.
3. **North and south boundary hedgerows.** As shown on the photomontage to left, the required security fencing has a significant visual presence in close-up views. It is therefore proposed to shift the fence 1.5m in from the north and south boundaries of the site and plant a hedgerow in front of (i.e. outside of) the fence.
4. **Wildflower meadow.** To maximise the biodiversity value of the site it is proposed to seed the remainder of the site, including the embankments around the tank, with a wildflower meadow mix. This is composed of native perennials, which provide food for pollinators and have the added benefit of being low maintenance.



In summary, the proposed mitigation measures would provide effective screening of the development from the north, west and south, and additionally would increase the site's biodiversity value, improving existing habitats (the western hedgerow) and providing new habitats (woodland and wildflower meadow).

4.0 VISUAL IMPACT ASSESSMENT

13 no. viewpoints were selected for detailed visual impact assessment informed by verified photomontages. The selection of the viewpoints was informed by (a) survey of the site and receiving environment, (b) review of relevant policy, and (c) the Nicholas O'Dwyer's pre-planning consultations with Meath County Council.

The viewpoints are individually assessed below. For the methodology, criteria and terminology used in the assessments refer to Appendix C. In Appendix B, two views are provided for each viewpoint:

- **Existing/baseline view.** These views include a block model of the permitted Ledwidge Hall Green development adjacent to the north west of the site, currently under construction. This development is included in the views as it is material to the assessment of impacts; it changes the site's immediate receiving environment.
- **Proposed view** (including mitigation). These are photomontages of the proposed development approximately 2-3 years after completion, when the woodland, hedgerow and wildflower planting is newly established, yet to mature.

Viewpoint 1 – Ledwidge Hall Amenity Area

Existing View

- The view is taken from the central communal open space in the estate adjacent to the site. The three main elements to the view are the foreground amenity open space, the row of houses and the rounded top of Stanley Hill protruding above the roofline.
- The top of the existing water tank, including the stairs and handrail, can be seen protruding above the nearest dormer house to the left - set against the side of Stanley Hill.
- Representing a residential location with a high visual amenity value, the viewpoint sensitivity is high.

Proposed Change

- The top of the new tank would be visible in the gap between two houses, the handrail more prominent than the tank. It is significant that the tank would be well below the ridgeline of Stanley Hill. More noticeable than the tank/handrail would be the new vegetation inside the site's west boundary.
- In composition and character the change to the view would be minimal, with the increase in vegetation the most noticeable change. The magnitude of change can be classified low.

Significance of Effects

The significance of the visual effects would be slight, and the change would be neutral.

Viewpoint 2 – Ledwidge Hall Green

Existing View

- The view is taken from a space to the side of the existing Ledwidge Hall estate, which is to become an open space in the Ledwidge Hall Green estate currently under construction. The view shows the position of the nearest permitted house.
- Part of the grassed embankment around the existing water tank can be seen through a gap in the site boundary hedgerow, beyond the estate, against the side of Stanley Hill. Ancillary elements such as the security fence and the stairs and handrail up the side of the tank can also be seen.
- In character the view is typically peri-urban, comprised of both rural and urban-generated elements including infrastructure that usually cannot be accommodated within the urban area.
- The viewpoint sensitivity is medium.

Viewpoint 2 Continued

Proposed Change

- The structural elements of the development are mostly hidden by the new vegetation inside the site boundaries, although the new tank (and handrail around the perimeter of the roof) is visible to the right of where the existing tank has been removed. The security fence is also hidden, by the new hedgerow outside of the fence on the site boundary.
- In composition and character the change to the view would be minimal, with the increase in vegetation the most noticeable change. The magnitude of change can be classified low.

Significance of Effects

The significance of the visual effects would be slight. The change would be neutral in the short term, becoming positive in the medium term as the mitigation planting matures further.

Viewpoint 3 – Field to South of Site

Existing View

- This viewpoint was selected to represent the worst case scenario for the rear gardens of the houses of Ledwidge Hall adjacent to the west of the site, and the more distant houses to the south of the N51 (which have views over the road and up the field towards the site from their 1st floor windows).
- The hedgerow between the site and Ledwidge Hall is mature and forms an effective visual screen, especially for views at an angle to the hedgerow (i.e. not straight-on). It is possible however that the existing tank and surrounding security fence are visible through gaps in places, against the backdrop of Stanley Hill.
- In views from the houses fronting the N51, the existing tank would be seen in the middle distance, set against the side of Stanley Hill and against the backdrop of the much taller Hill of Slane forming the horizon.
- The viewpoint sensitivity is medium. Any views of the site that do exist from the houses/gardens would feature the existing development.

Proposed Change

- The new tank is some 30m closer to the viewpoint, and wider (although not taller). Therefore it would be more prominent in the view than the existing tank, although its roofline would still be lower than the ridgeline of Stanley Hill.
- The photomontage shows that the proposed mitigation planting - (a) supplementary planting in the western hedgerow, (b) woodland belt inside the site's southern boundary, (c) hedgerow outside the boundary fence, (d) wildflower mix on the embankments - would be effective in screening and softening the development in the view.
- In time, as the vegetation matures and integrates with the existing landscape, the structural elements of the development would most likely be entirely screened. This would be an improvement on the existing view in which the tank and palisade fence are exposed.
- Neither the composition nor the character of the view would be substantially altered. The increase in vegetation would be the most noticeable change. The magnitude of change can be classified medium.

Significance of Effects

The significance of the visual effects would be moderate. The change would be neutral in the short term, becoming positive in the medium term as the mitigation planting matures further.

Viewpoint 4 – N51 Drogheda to Slane Road.

Existing View

- The N51 carries a large number of potential visual receptors. However there are no field entrances or other gaps in the tall hedge on the north side of the road approaching Slane (passing to the south of the site). The selected viewpoint is the nearest gateway through the hedge. Stanley Hill can be seen on the horizon and the site is behind the hill.
- The viewpoint sensitivity is medium.

Proposed Change

- There would be no change to the view; the development would be hidden behind Stanley Hill.

Significance of Effects

No effect.

Viewpoint 5 – ‘The Square’ Architectural Conservation Area

Existing View

- This view is taken from the diamond (or The Square) at the crossroads in Slane, the centre of the ACA. The viewpoint was selected to establish whether the development would have any effect on the ACA.
- The viewpoint sensitivity is high.

Proposed Change

- There would be no change to the view.

Significance of Effects

No effect.

Viewpoint 6 – N2, St Patrick’s National School Carpark

Existing View

- The view is taken from the N2 directly to the north of the site. This is a typical view from the busy N2 entering/exiting the village through a peri-urban landscape.
- The school car park provides a wide gap through which the site can be seen in the distance, the existing water tank set against the side of Stanley Hill. The houses of Ledwidge Hall are visible around the base of the hill (the planning permitted houses are also shown as white-coloured block models).
- This is a complex view of peri-urban character. The viewpoint sensitivity is medium.

Proposed Change

- The new tank is further away from the viewer and although wider and longer it would be no more prominent than the existing tank.
- The new belt of woodland planting inside the northern boundary and the supplementary planting in the western hedgerow would soften and integrate the site better into the landscape of Stanley Hill.
- The magnitude of change would be low.

Significance of Effects

The significance of the visual effects would be slight and neutral.

Viewpoint 7 – Glenpatrick, Hill of Slane

Existing View

- The view is taken from a housing estate on the lower slope of the Hill of Slane above the N2. The view is multi-layered and complex. The houses in the foreground are prominent, lending the landscape a suburban character. In the middle distance the houses at the eastern edge of Slane can be seen, and beside them Stanley Hill. The existing tank is visible though inconspicuous set against the flank of the hill (below the ridgeline), partly screened by vegetation. The elevation of the viewpoint brings the very distant rural landscape into view.
- The viewpoint sensitivity is medium.

Proposed Change

- The new tank would be visible protruding to the side of Stanley Hill, replacing the existing tank, changing the profile of the landform marginally.
- The new woodland and hedgerow planting would be visible inside the northern and western site boundaries, softening and integrating the site better into the landscape of Stanley Hill.
- The magnitude of change would be low.

Significance of Effects

The significance of the visual effects would be slight and neutral.

Viewpoint 8 – Hill of Slane Carpark

Existing View

- The Hill of Slane carpark is a protected view (no. 29).
- The viewpoint sensitivity is high.

Proposed Change

- There would be no change to this view.

Significance of Effects

No effect.

Viewpoint 9 – Hill of Slane

Existing View

- The Hill of Slane is a popular visitor attraction both for its cultural heritage (abbey ruins and graveyard) and for the panoramic view it affords over the surrounding countryside. It is a protected view described in the MCDP as follows: “*Hill of Slane panorama: Extensive panorama across open working and settled landscape. Modern housing and agricultural development visible. National significance.*”
- In the view south the land falls away steeply from the top of the hill. The N2 and the strip of development along the road are hidden from view but the village is prominent at the base of the hill, the Ledwidge Hall estate in particular. Stanley Hill is also prominent, its full height, extent and complex topography revealed in this view. The existing water tank can be seen protruding from the side of the hill at the urban edge. A vast area of undulating, working rural landscape spreads beyond these elements.
- The viewpoint sensitivity is high.

Proposed Change

- The new tank would be visible protruding to the side of Stanley Hill, replacing the existing tank, changing the profile of the landform marginally. From the elevation of the hilltop the gravel covered roof of the tank would be perceivable, along with the ventilation pipes. The new woodland and hedgerow planting would be visible inside the northern and western site boundaries, partly screening the tank and softening the angular edges of the embankment.
- In the panoramic view the magnitude of change would be negligible; the new tank would be no more prominent than a single new house in the village (and far less prominent than the Ledwidge Hall Green estate currently under construction).
- In the future, with implementation of the enterprise/employment zoning in the field north of the site, it is possible that commercial/industrial buildings will be visible at the nearside foot of Stanley Hill, further reducing the relative prominence of the subject development.

Significance of Effects

The visual effects would be slight, and neutral. There would be no significant change to the composition, character or quality of the view.

Viewpoint 10 – Boyne Valley and the Mill ACA

Existing View

- The view is from the N2/Dublin Road approaching the bridge over the Boyne River. This view is identified in the MCDP written statement for Slane as a significant view.
- The viewpoint sensitivity is high.

Proposed Change

- There would be no change to the view.

Significance of Effects

No effect.

Viewpoint 11 – Knowth

Existing View

- Knowth is 3km to the east of the site on a hill overlooking the Boyne valley. The view from Knowth is protected and designated in the MCDP as being of international significance.
- The viewpoint sensitivity is very high.

Proposed Change

- There would be no change to the view. The proposed development is located on the far side of Stanley Hill and would be entirely screened by Stanley Hill in the view.

Significance of Effects

No effect.

Viewpoint 12 - Newgrange

Existing View

- Newgrange is 4.3km to the east of the site. The view from Newgrange is protected and designated in the MCDP as being of international significance.
- The viewpoint sensitivity is very high.

Proposed Change

- There would be no change to the view. The proposed development is located on the far side of Stanley Hill and would be entirely screened by Stanley Hill in the view.

Significance of Effects

No effect.

Viewpoint 13 – Baronstown Cross on the N51

Existing View

- The view from the cross at Baronstown on the N51 is identified as a protected view in the MCDP.
- There is a panoramic view across the working rural landscape to the south and east, and the urban area of Slane is visible in the view to the east (some 3km distant). The Ledwidge Hall estate is clearly visible on a rise on the far side of the village, the white-coloured houses prominent against a backdrop of Stanley hill. The existing water tank can be discerned above and behind the houses, but below the ridgeline of the hill.
- The viewpoint sensitivity is high.

Proposed Change

- The new tank would be discernible, replacing the existing tank in the view.
- The new woodland and hedgerow planting around the tank would soften the edges and integrate the site better into the landscape of Stanley Hill.
- The magnitude of change would be negligible.

Significance of Effects

The visual effects would be not significant, and neutral. There would be no significant change to the composition, character or quality of the view.

Summary of Visual Effects Assessment

No	Location	Sensitivity	Magnitude of Change	Significance of Effects
1	Ledwidge Hall communal open space	High	Low	Slight, Neutral
2	Ledwidge Hall Green	Medium	Low	Slight, Positive
3	Field to south of site	Medium	Medium	Moderate, Positive
4	N51 Drogheda to Slane Road	Medium	Not Visible	No Effect
5	'The Square' Architectural Conservation Area	High	Not Visible	No Effect
6	N2, St Patrick's national school carpark	Medium	Low	Slight, Neutral
7	Glenpatrick, Hill of Slane	Medium	Low	Slight, Neutral
8	Hill of Slane carpark	High	Not Visible	No Effect
9	Hill of Slane	High	Negligible	Slight, Neutral
10	Boyne Valley and the Mill ACA	High	Not Visible	No Effect
11	Knowth	Very High	Not Visible	No Effect
12	Newgrange	Very High	Not Visible	No Effect
13	Baronstown Cross on the N51	High	Negligible	Not Significant, Neutral

5.0 CONCLUSIONS

5.1 Sensitivity and Capacity for Change

The site is located on high amenity zoned land at the edge of the Slane urban area, adjacent to a residential estate. Slane falls into the Boyne Valley Landscape Character Area, a landscape of high value and sensitivity which includes the complex of Neolithic sites in Brú na Bóinne, 3km to the east of the site. The proposed development's receiving environment is thus highly sensitive, at both the local and wider landscape scale.

The above would be true for most if not all alternative sites for a new treated water storage tank for Slane, and several factors can be considered to make the site relatively suitable for the proposed development. These include:

- **Established use.** The water utility usage on the site is established. Replacement of the tank on the same site would avoid causing landscape and visual disturbance to any currently unaffected area elsewhere (which would result from both the relocation of the tank to another site, and from the redirection of piping to facilitate the its relocation). It should be noted that any alternative site would have to be elevated in the landscape - therefore potentially visually exposed - in order for the tank to function with gravity.
- **Favourable topography.** The site is positioned against the west flank of Stanley Hill. Stanley Hill is taller than the proposed tank and partly covered in vegetation. Therefore it provides a backdrop to the development in views from the west, and – more importantly – it screens the development in views from the east, including the views from Newgrange and Knowth.

In local views (from the north and west), where the tank enclosed by an earth bank would be visible, its position against the side of another, larger and also steep-sided landform feature, would mitigate its visual presence. If the tank was free-standing on an alternative site (and not sucked against the side of Stanley Hill), it would be more prominent.

- **Existing vegetative screening.** There is a mature hedgerow on the boundary between the site and Ledwidge Hall to the west. This hedgerow provides screening for the most sensitive nearby visual receptors, the row of houses whose gardens back on to the site. The hedgerow can be supplemented with additional planting, to fill any gaps, to ensure its effectiveness as a visual screen.

There is also a continuous, tall hedge along the north side of the N51 to the south of the site, which provides a visual screen for road users.

- **Potential for effective landscape and visual mitigation.** The existing vegetation on Stanley Hill and the site's west boundary provide a body of vegetation in the immediate environs with which any proposed mitigation planting on the site could seamlessly integrate. The proposed new woodland and hedgerows would provide visual screening/softening for the tank and would do so without appearing unnatural (or like an island of vegetation, as can be the appearance on some sites).
- **Future land use around the site.** In addition to the Ledwidge Hall Green estate currently under construction adjacent to the site (to the north west), the MCDP has zoned an area to the north off the N2 for enterprise and employment, and an area alongside this for extension of the school. These future developments, along with further expansion/consolidation of the core residential area, will change the landscape of Slane. In this future context the proposed development would represent a minor and neutral change to the landscape.

5.2 Recommended Mitigation

Nicholas O'Dwyer's design of the proposed development incorporated certain important mitigation measures for landscape and visual impacts, most notably (a) the limitation of the new tank's height to the same height as the existing tank, and (b) the enclosure of the tank in an earth embankment, hiding the walls.

While the potential impacts of the proposal were not considered to be very significant, it is nonetheless recommended – in recognition of the inherent sensitivity of the Slane landscape – that additional mitigation measures be implemented. These include (1) supplementation of the Ledwidge Hall boundary hedgerow, (2) planting of belts of multi-layered woodland inside the north and south site boundaries, (3) planting of new hedgerows outside of the security fences on the north and south boundaries, and (4) seeding of the remainder of the site with a wildflower meadow mix.

The intention of these measures is to minimise visibility of the development including the security fence, soften and screen the angular forms of the development where it is visible, and to develop the site as a Green Infrastructure asset.

5.3 No Significant Visual Impacts

The assessment of potential visual impacts found that there would be no significant negative impacts on any of the 13 no. viewpoints assessed.

- **Protected views.** The development would not be visible from Newgrange or Knowth (being hidden behind Stanley Hill), or from the Architectural Conservation Area at the centre of Slane village. It would be visible from the Hill of Slane and from another protected view, from the Baronstown Cross on the N51 to the west of Slane. In both these views the magnitude of change would be negligible and the significance of the visual effects slight at worst, and neutral.

- **Immediate environs.** There are no potential visual receptors immediately to the north, east or south, the site being well removed from any houses or areas of public realm in those directions. The site would be visible from parts of Ledwidge Hall and Ledwidge Hall Green (currently under construction) to the west. In these views, since the tank would be replacing another tank of the same height (albeit longer and wider), in a similar position, the composition and character of views would not be substantially altered. Furthermore, the proposed mitigation planting would improve the appearance of the site, with positive visual effects for the Ledwidge Hall residents.
- **Slane village environs.** The development would be visible from only a few other locations in the wider village environs, including the N2 where it passes to the north and the houses/estates on the hill above the N2. In these views, as in the close-up views, the magnitude of change would be low and the significance of the visual effects slight and neutral.

In conclusion, the proposed development would be an appropriate intervention in the landscape. The provision of sufficient water for Slane's planned residential and economic growth can be achieved on the site with no significant negative landscape or visual impacts.