GREEN INFRASTRUCTURE STRATEGY

VEGETATIVE CORRIDORS - The site has a minimal degree of internal tree planting or hedgerows. Where species occur, tree health and ditch integrity are variable from poor to good. Converse to the internal planting, the boundary hedgerows are of high quality and contain a very high percentage of mature Oak. As a result, the boundary hedgerows are generally being kept intact, with broad open space buffers to ensure viability, public access and maintenance.

The scheme is designed to incorporate quality existing trees that have good biodiversity value. This adds instant character and enables fauna to acclimate to the modified environs. In addition to retention, the landscape will be designed with new native planting to link the east and west boundary hedgerows. This allows fauna to access the western stream and return to their desired habitat under safe cover.

EXISTING - Centrally located existing Oak and Willow trees will be retained within the scheme, while the dilapidated ditch will be restructured and enhanced with new planting.

EXAMPLE - Mature hedgerow trees retained within an estate green as a focal point (Carrigaline, Co. Cork).

GREENFIELD RUNOFF AND AMENITY - The existing field drain running through the centre of the site is a man-made element, but serves a purpose in collecting stormwater from the hillside. It is well defined at the upper elevations. However, in the flat areas it is poorly graded, with stagnant water for much of the year. Coupled with nitrogen from the pastures, this leads to heavy buildup of non-native riparian weeds.

Conceptually, a biodiverse, open swale that links 2 ends of the site is a desirable piece of green infrastructure. To achieve a functioning natural system while creating an attractive feature, the scheme is incorporating a native grass and wildflower swale. This will filter flows for improved water quality and attenuate a larger volume of greenfield runoff, reducing pressure on the west boundary stream during storm events.

EXISTING - Centrally located, the field drain provides a wet link to other portions of the site, yet is limited due to lack of flow.

EXAMPLE - The restructured swale will mimic the broad character of the existing drain, yet will improve flow as a result of site ground levels and significantly increase filtration and water-holding capacity with deep filter beds. The swale will be designed in layers for capture and attenuation during high rainfall events. (UK).

DAMP and DRY WOODLAND HABITAT - As a habitat with different biodiversity and amenity attributes, much of the existing damp woodland (WN6) will be retained for amenity use. It is a woodland with quick regrowth, catering for bird varieties and fauna not seen elsewhere on site. It is a quiet spot, sheltered from current roadside noise.

The scheme concept respects the serenity of the woodland, separating it from development and retaining it as an amenity. The damp portion is only 20m wide before the amenity path climbs the hill to dry woodland. The intent is to retain the damp character and span the 20m with an elevated footpath (with guardrail). Upon reaching the dry woodland at the top of the hill, users are presented with a natural play area. This includes logs, boulders and structures made of natural elements to foster imaginative play.

EXISTING - Between the developed site and the R617 is a fabricated woodland (likely as a result of road improvements decades ago) with perennially damp ground and uniform coverage by Willows.

EXAMPLE - An elevated footpath can pass through the damp woodland with minimal impact on the habitat. Users come face to face with the internal workings of an otherwise inaccessible environment. (Glendalough, Co. Wicklow).

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Notes
1. For location of green instrastructure concepts in plan, refer dwg. L107 (overview) and L108 (detail).

Job no.	Drawn by	Scale	Date	Status	Revision
2017	MW	N/A	23.JUN.2021	PLANNING	B

Job Title: MIXED-USE DEVELOPMENT AT CLOGHROE, TOWER, CORK
Client: CLOGHROE DEVELOPMENT LTD.
Drawing Set: LANDSCAPE DEVELOPMENT PACKAGE
Drawing Title: Green Infrastructure
Drawing No.: L105