Burrow Heights Ward Drumlin

Evidence Document

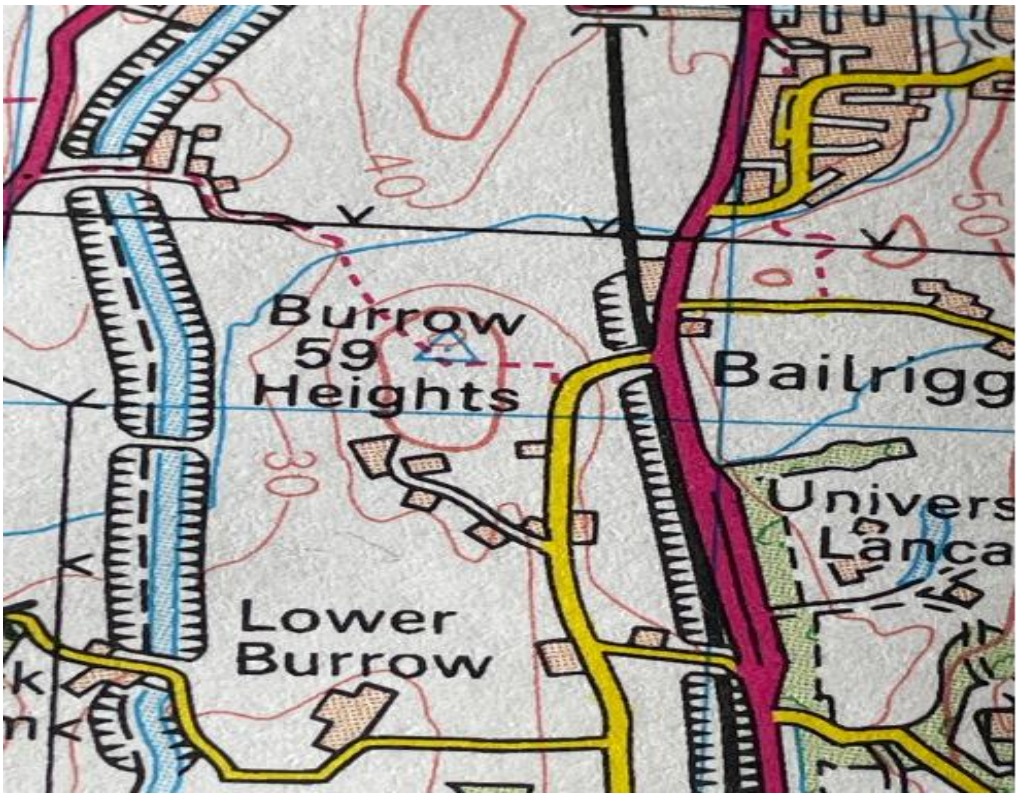
Prepared by Scotforth Rural Neighbourhood Plan Steering Group

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Introduction

1.This document has been prepared to support SRNP Policy SR2: SMALL SCALE DEVELOPMENT IN BURROW HEIGHTS AND LOWER BURROW LOCAL CHARACTER AREA, in order to protect and enhance the area's distinctive drumlin landscape character and the character of the small settlements in Burrow Heights Ward. These comprise the dispersed nature of settlement along Burrow Heights Lane, Burrow Road and Five Acres Lane, as well as the nucleated hamlet of Lower Burrow. These form a linear pattern made up of traditional stone-built, slate-roofed homes and converted farmsteads and agricultural buildings, many of which are screened by large mature deciduous trees on the flanks of the Burrow Heights drumlin ridge. These trees and the established hedgerows serve to anchor the settlements into the rural landscape so that they are nestled into the lower drumlin's slope and are therefore unobtrusive within wider views. The wider landscape benefits of the drumlin to Lancaster are explored, along with clear measures regarding how to balance development and landscape values.

Significance of Burrow Heights Drumlin within Scotforth's Rural Landscape.



Map 1 Extract of OS 1:50000 Map clearly showing the form of the drumlin and contours every 10 metres (OS license number 100066757)

2. The Burrow Heights drumlin lies towards the southern margin of the Docker–Kellet–Lancaster drumlin field and creates a distinctive and nationally rare landscape referred to frequently in geomorphological terms as a "basket of eggs topography" which creates a setting for the city of Lancaster and its university and forms part of the setting of the Forest of Bowland National Landscape (AONB) which lies to the east.

3. During the Ice Age, ice flowed radially away from the Lake District mountains and, on reaching gentler gradients of lowlands to the south, lost its capacity to transport its glacial moraine (boulder clay) where, for example, there were rock outcrops to slow its velocity further. Faster flowing ice around and behind these deposits led to the distinctive elongated oval shape with its steep northern-facing stoss side slope and a gentler lee slope which tapers southwards. Within its drumlin field, Burrow Heights drumlin one of the largest drumlinoid forms – over 1 km in length along its N–S axis, 600 m wide and 59 m in height. It therefore provides a distinctive

landform within the low lying landscape which makes a significant and important contribution to local landscape character.



Figure 1. View from the University's Health Innovation Campus looking westwards which highlights the distinctive drumlin profile highly visible from the A6.



Figure 2. View from the Lancaster Canal northeastwards showing the settlements of Lower Burrow and Burrow Heights discreetly nestling into the flank of the drumlin below the visible summit.

4. A Local Plan for Lancaster District 2020-2031 Part One Strategic Policies and Land Allocations Development Plan Document (climate emergency review adopted 22 January 2025) Policy EN2: Areas Of Outstanding Natural Beauty sets out that the landscape character and visual amenity of both AONBs and their settings will be conserved and enhanced.

5. The Local Plan Part 2: Development Management Plan Document (climate emergency review adopted 22 January 2025) Policy DM46: Development and Landscape Impact advises

that *the Council will require proposals that are within or would impact upon the setting of designated landscapes to be appropriate to the landscape character type and designation…….Development proposals should through their siting, scale, massing materials, landscaping, vernacular style and design seek to contribute positively to the conservation and enhancement of the protected landscape and its setting.*

6. The Policy also provides advice for development outside of Protected and Designated Landscapes: *In addition to nationally protected and locally designated landscapes, the district also has a range of landscapes and townscape which are valued, unique and provide a distinct sense of place which the Council seeks to protect and enhance. Outside of protected and designated landscapes the Council will support development that is in scale and in keeping with the landscape character and is appropriate to its surroundings in terms of siting, scale, massing, design materials, external appearance and landscaping. Consideration will be given to both individual and cumulative impacts of a proposal.*

7. The EPD Landscape Character Assessment[1] undertaken for the SRNP states that the landscape of the parish generally is of medium value, with the exception of the drumlin field and viewing area at Burrow Heights, which is of high value due to its heritage and visual amenity within the landscape.

8. The Landscape Institute states that landscape value is defined as having sufficient landscape qualities to elevate it above more everyday landscapes. Lancaster City Council has previously attributed high value to this landscape according to a Planning Inspector's report (APP/A2335/W/23/3335117) in June 2024, and this was informed by high scores for:

- Natural heritage of the drumlin within its field, sculptured by glacial advance during the Ice Age which ended 10,000 years ago.
- Cultural heritage: the influence of the drumlin brings time depth in determining communication routes: the Lancaster Canal, important in the area's industrial heritage (with its wildlife corridor in Local Plan Part One Policies EN7/EN14) the A6, M6 and west coast railway line following low points between the drumlins. The field patterns are the product of livestock farming dating back to prehistoric times and largely unchanged since 1850.
- Landscape condition: the intact field patterns and hedgerows well maintained by the farming community are considered to be a valued characteristic and the existing mid slope housing nestling into the sheltered hollow and trees along Burrow Heights Lane does not detract from the landscape condition.
- Scenic quality : the Burrow Heights drumlin is one of the largest within the drumlin field, with its distinctive "whaleback" profile and is viewed widely from numerous vantage points particularly along the A6,M6, Williamson Memorial and university campus and, further afield, the Forest of Bowland National Landscape (AONB) from where views westwards and north-westwards capture the Burrow Heights drumlin within the drumlin field setting and the coastal salt marshes of Morecambe Bay beyond.

9. Surface water arises from springs on the mid slopes. The steeper northern flank drains into Burrow Beck. The springs on the southwest flank arise just below 40 m, below Burrow Heights and Burrow Road. These flow into drains that ultimately discharge into the River Condor. However significant rainfall events quickly produce saturated overland flow, ephemeral streams and additional resurgencies which are a source of repeated flood events at Lower Burrow. These are evidenced in the map below from the JBA drainage report[2] for the garden village and has historically influenced the lack of development of the low lying areas receiving surface and subsurface drainage from the drumlin slopes. Any future developments must include drainage schemes that alleviate rather than accentuate surface water flooding.

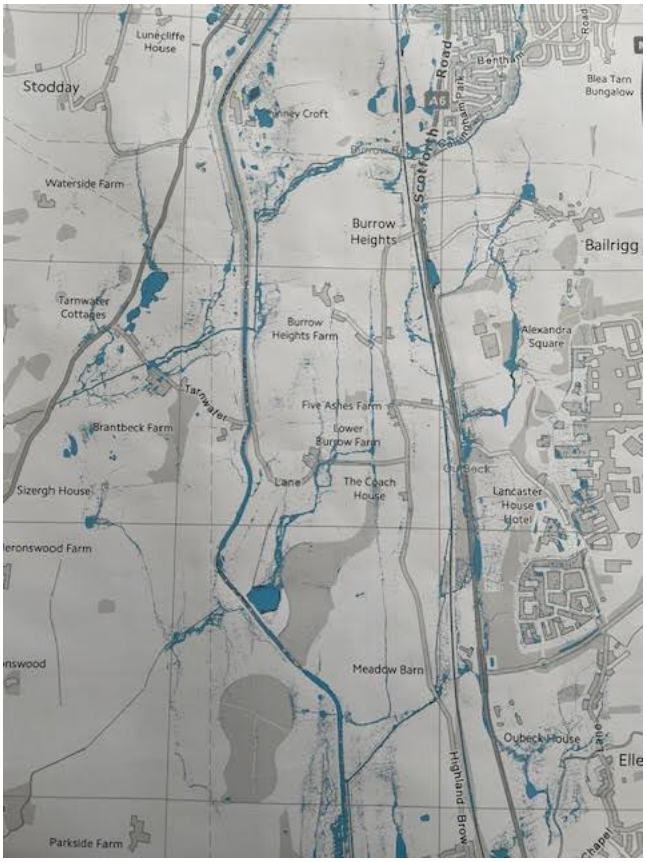


Figure 3: JBA Surface Water Flooding Map

10. The drumlin, accessed by public footpaths, has recreational value as it provides 360° panoramic views from the Triangulation Point on its summit – westwards to the Lune Estuary, northwards to the Lake District and eastwards to the Forest of Bowland. Despite the encroaching urban fringe, the pedestrian route is relatively tranquil with its absence of noise and activity (appreciated by ramblers especially as it enables a rare, safe E–W link to the tranquil canal footpath and its distinctive wildlife.

11. The NPPF (paragraph 187) states that planning policies and decisions should contribute to and enhance the natural and local environment by

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan) (and)
b) recognising the intrinsic character and beauty of the countryside and the wider benefits from natural capital and other benefits of the best and most versatile agricultural land, trees and woodland. The Docker–Kellet–Burrow drumlin field, including the Burrow Heights drumlin is a locally important, attractive and agriculturally versatile landscape.

12.Furthermore, the now withdrawn Bailrigg Garden Village Area Action Plan (AAP) prepared by LUC in September 2021 was supported by a Landscape and Visual Appraisal (Chapter 2 Parcels 4&6)[3] reinforced the need to:

- Retain the pattern of historic field boundary hedgerows wherever possible
- Avoid residential development of drumlins and hillsides
- Respond positively to the drumlin topography and retain the availability of long-distance views towards the salt marshes to the west and Morecambe Bay.

13. In addition, the SRNP is supported by an AECOM report detailing a Design Guide and Codes (sections 3.2-3.3) which all developments should be adhere to so that they are in harmony with their setting. Design Code Appendix 4, section 1 bullet 4 requires that development should not interrupt any long-distance views and sets out that topography should be considered in both the positioning and layout of buildings and that the distinctive drumlin landscape should be protected.

Infrastructure constraints on development

14. Whilst the Ward lies within the Broad Location of Growth (BLG) identified in the Local Plan policy SG1, the implementation of that policy is dependent upon the production of the AAP and funding of the transportation infrastructure (specified in policy SG3), notably a new road from junction 33 of M6 to the A588, bypassing Galgate, feeding the University and providing a spine road through the proposed garden village within the Ward. Both the AAP and road funding from the Housing Infrastructure Fund have been cancelled, so major development is currently unrealistic, and their cancellations are primary drivers for the review of the Local Plan. The Neighbourhood Plan cannot conflict with the principle of development in the BLG, but it is reasonable for the SRNP policy SR2 to establish protected parts of the drumlin top and define where small scale development can be supported by the existing infrastructure and blend with existing patterns of settlement.

15. Access for vehicles and pedestrians to the locality limited to Burrow Road, which has no pavements, no bus services, and is a narrow country lane, made dangerous by blind bends and by its increasing use as a ‘rat run’ to avoid A6 congestion and an A6–A588 shortcut. Consequently, development should be constrained by such transport capacity and road safety issues, and focused upon “ones and twos”, “infilling” or “rounding off” adjacent to existing properties; The policies in the SRNP support this approach to ensure development is small

scale and sensitive to local character in this area.

Conclusion

16.The SRNP does not support any development of the drumlin above the 50 m. contour line, in order to protect and conserve its highly visible characteristic profile, ridge line and rural landscape.

17. Development on the drumlin between the 40 m and 50 m contours should be unobtrusive and limited to “infilling” or “rounding off” within the existing settlements in the ridge, and reflect the character of existing properties, in order to conserve its highly visible characteristic profile, ridge line and the pattern and character of existing rural settlement.

18. Without significantly enhanced transport and other infrastructure and drainage schemes, any development on the drumlin below 40 m should be limited to “ones and twos” of “rounding off” adjacent to existing properties in order to conserve its highly visible characteristic profile, ridge line, the pattern and character of existing rural settlement and reflect constrained infrastructure. Major development supported by new infrastructure should not encroach on existing settlements, in order to protect their character.

References

1. Landscape Character Assessment and Evidence Base to inform Area of Separation, EPD, September 2024,

2. Presentation slide from JBA drainage report, presented at Lancaster City Council Parish Council Liaison Event - Site Assessment of Land in South Lancaster for Development and Non-Development Purposes - Monday 22nd August 2022 at the Storey Institute, Meeting House Lane, Lancaster.

3. Landscape and Visual Appraisal of Landscape Masterplan Framework for Bailrigg Garden Village Area Action Plan, LUC, September 2021