KILKENNY CITY AND COUNTY
DRAFT DEVELOPMENT PLAN
PROPOSED MATERIAL ALTERATIONS

ADDENDUM TO THE DRAFT SFRA

June 2021

Addendum to SFRA for Kilkenny City and County Draft Development Plan 2021

This document sets out the Proposed Material Amendments to the Draft Strategic Flood Risk Assessment and should be read in conjunction with the *Strategic Flood Risk Assessment of the Draft Plan*, dated December 2020.

Deletions to the Draft SFRA in ~~strikethrough~~

Insertions to the Draft SFRA in *red italics*

3 Data Collection and Review

3.1.3.1 Flood Studies, Reports and Flood Relief Schemes

Flood relief schemes are proposed in Ballyhale, Freshford, Graiguenamanagh, Inistioge, Piltown and Thomastown.

Table 3.1 **Summary of available datasets**

Historical event outlines and point observations and reports	Various, taken from ~~www.floodmaps.ie~~ *www.floodinfo.ie*

~~Arterial Drainage~~ *Land Commission* Benefiting land maps

New section *3.3 Main causes of Flooding*

As can be seen in Table 3.1 above, the main sources of flooding in Kilkenny are fluvial. Other sources are Pluvial and Groundwater flooding.

Table 3.2 Flood Risk Indicator Matrix

Available Data by source
~~www.floodmaps.ie~~ *www.floodinfo.ie*
Freshford - *Flood event in December 2015 and March 2018 (From OPW info, but currently not available on the OPW flood portal; www.floodinfo.ie.)*
Inistioge *Flood event in in December 2015 (From OPW info, but currently not available on the OPW flood portal; www.floodinfo.ie.)*

5 Settlement Zoning Review

New section *5.1.1 Consideration of Climate Change*

Through the CFRAM Studies, both MRFS and HEFS model runs have been completed on all study watercourses, providing flood extent and depth maps. This information was used to examine the areas that may be impacted with climate change. For watercourses that are not part of the CFRAM programme, fluvial flood extents were qualitatively assessed by using the Flood Zone B outline as a surrogate for 'Flood Zone A with allowance for the possible impacts of climate change', as suggested in the 'Planning System and Flood Risk Management' Guidelines.

In line with the OPW's move towards requiring that Flood Relief schemes are accompanied by Scheme Climate Change Adaptation Plans, the Council will work with the OPW to examine the preparation of Scheme Climate Change Adaptation Plans for proposed schemes under the 2018-2027 Flood Risk Management Plans National Programme.

5.3.2 Kilkenny City Zoning Proposals

Open Space/Biodiversity

Therefore Justification Tests at this plan-making stage are not required for ~~Agriculture~~ *Open Space* zoning.

6 Recommendations

Section 6.1.4.1 Minor Developments

Section 5.28 of the Planning Guidelines on Flood Risk Management identifies certain types of development as being 'minor works' and therefore exempt from the Justification Test. Such development relates to works associated with existing developments, such as ~~extensions, renovations and rebuilding of the existing development, small scale infill and changes of use.~~

small extensions to houses, and most changes of use of existing buildings and or extensions and additions to existing commercial and industrial enterprises. Since such applications concern existing buildings, the sequential approach cannot be used to locate them in lower-risk areas and the Justification Test will not apply. However, a commensurate assessment of the risks of flooding should accompany such applications to demonstrate that they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities. These proposals should follow best practice in the management of health and safety for users and residents of the proposal. Where it is determined that there will be an increase in risk as a result of changes in occupation levels or use, the development should be assessed as Major development. In this context it should be noted that the Plan Making Justification Test has not been applied and development should avoid Flood Zones A and B.

~~Despite the 'Sequential Approach' and 'Justification Test' not applying, as they relate to existing buildings, an assessment of the risks of flooding should accompany such applications. This must demonstrate that the development would not increase flood risks, by introducing significant numbers of additional people into the flood plain and/or putting additional pressure on emergency services or existing flood management infrastructure. The development must not have adverse~~

~~impacts or impede access to a watercourse, floodplain or flood protection and management facilities.~~

6.3 Incorporating Climate Change into Development Design

4th Paragraph

As set out in Section 5.1.1 Consideration of Climate Change, through the CFRAM studies, both ….

6.5.1 Surface Water Drainage

~~The proposed text is set out below.~~

Surface water drainage systems are designed to channel stormwater (rainwater) to the nearest suitable river. Rain falling on impervious surfaces is usually directed into surface water drainage systems. Best practice is to separate the surface water drainage system from the foul drainage system to maximise the efficiency of our waste water treatment plants.

Surface water drainage systems are effective at transferring surface water quickly, but they can cause the volume of water in the receiving watercourse to increase more rapidly thereby increasing flood risk. Sustainable Drainage Systems (SuDS) can play a role in reducing and managing run-off to surface water drainage systems as well as improving water quality.

Development Management Requirements:

The Planning Authority will have regard to the Inland Fisheries Ireland guidance on 'Planning for Watercourses in the Urban Environment' in assessing applications.

- *Development must, so far as is reasonably practicable, incorporate the maximum provision to reduce the rate and quantity of runoff e.g.: -*
    - *Hard surface areas (car parks, etc.), should be constructed in permeable or semi-permeable materials,*
    - *On site storm water ponds to store and/or attenuate additional runoff from the development should be provided,*
    - *Soak-aways or french drains should be provided to increase infiltration and minimise additional runoff.*
    - *The Planning Authority will normally require that all new developments, include rainwater harvesting and/or grey water recycling in their design. except where not practical or feasible*
- *Individual developments shall be obliged, in all cases where surface water drainage measures are required, to provide a surface water drainage system separated from the foul drainage system.*
- *In the case of one-off rural dwellings or extensions, except in circumstances where an existing surface water drainage system is available to the proposed site for development and which, in the opinion of the planning authority has adequate capacity to accommodate the identified surface water loading, surface water shall be disposed of, in its entirety within the curtilage of the development site by way of suitably sized soak holes.*
- *In the case of driveways, drainage measures shall be provided to a detail acceptable to the planning authority so as to avoid run-off from the site to the adjoining public road.*

- *For all other green-field developments in general the limitation of surface water run-off to pre-development levels will be required. Where a developer can clearly demonstrate that capacity exists to accommodate run-off levels in excess of green-field levels then the planning authority shall consider such proposals on a case by case basis.*
- *In the case of brown-field development, while existing surface water drainage measures will be taken into account, some attenuation measures for surface water may be required at the discretion of the planning authority in the interests of balanced and sustainable development.*
- *In line with the above Kilkenny County Council will consider all drainage proposals consistent with SuDS (Sustainable Drainage Systems).*
- *For developments adjacent to watercourses of a significant conveyance capacity any structures (including hard landscaping) must be set back a minimum of 5-10m from the edge of the watercourse to allow access for channel clearing/maintenance. Any required setback may be increased to provide for habitat protection. Development consisting of construction of embankments, wide bridge piers, or similar structures will not normally be permitted in or across flood plains or river channels.*
- *The culverting of water courses is discouraged. Where culverting is unavoidable, the use of ecologically friendly box culverts is required. A development proposal requiring culverting should document open watercourse habitat lost and provide compensatory habitat.*
- *Adequate allowance shall be made for climate change; in designing surface water proposals a multiplication factor of 1.2 shall be applied to all river return periods up to 100 years except in circumstances where the OPW have provided advice specifying the particular multiplication factor for return periods up to 100 years. In the case of rainfall a multiplication factor of 1.1 shall be applied to rainfall intensities to make allowance for climate change requirements.*
- *In the design of surface water systems, regard shall be had to the Greater Dublin Regional Code of Practice for Drainage Works[1] and associated GDSDS technical documents.*
- *For larger scale developments a report will be required specifying the SUDS measures considered in principle. If natural measures are not included, the reasons why not should be outlined.*

[11] Greater Dublin Local Authorities, Greater Dublin Regional Code of Practice for Drainage Works, 2006

7 Maps

The maps as published for the Draft Plan included the Mid Range Future Scenario (MRFS) for CFRAM, whereas the more appropriate maps should include the Current Scenario. The revised maps are included here.

Figure 1 Ballyhale amend settlement boundary to reflect Draft and change from MRFS to Current.

Figure 3 Bennettsbridge - change from MRFS to Current.

Figure 5 Fiddown - change from MRFS to Current.

Figure 7 Goresbridge change from MRFS to Current.

Figure 10 Johnstown - amend settlement boundary to reflect Draft – Also, see Volume 2 - the SFRA of the Proposed Material Alterations

Figure 11 Kells change from MRFS to Current.

Figure 12 Kilmacow change from MRFS to Current.

Figure 17 Mullinavat amend settlement boundary to reflect Draft and change from MRFS to Current.

Figure 18 Paulstown amend settlement boundary to reflect Draft Also, see Volume 2 - the SFRA of the Proposed Material Alterations

Figure 19 Piltown change from MRFS to Current.

Figure 20 Slieverue – areas as highlighted are Pluvial only – remove from map

Figure 22: Urlingford – inclusion of site near stream in centre

Figure 24b: New Ross

For the following maps, see Volume 2, the SFRA of the Proposed Material Alterations:

Figure 2 Ballyragget

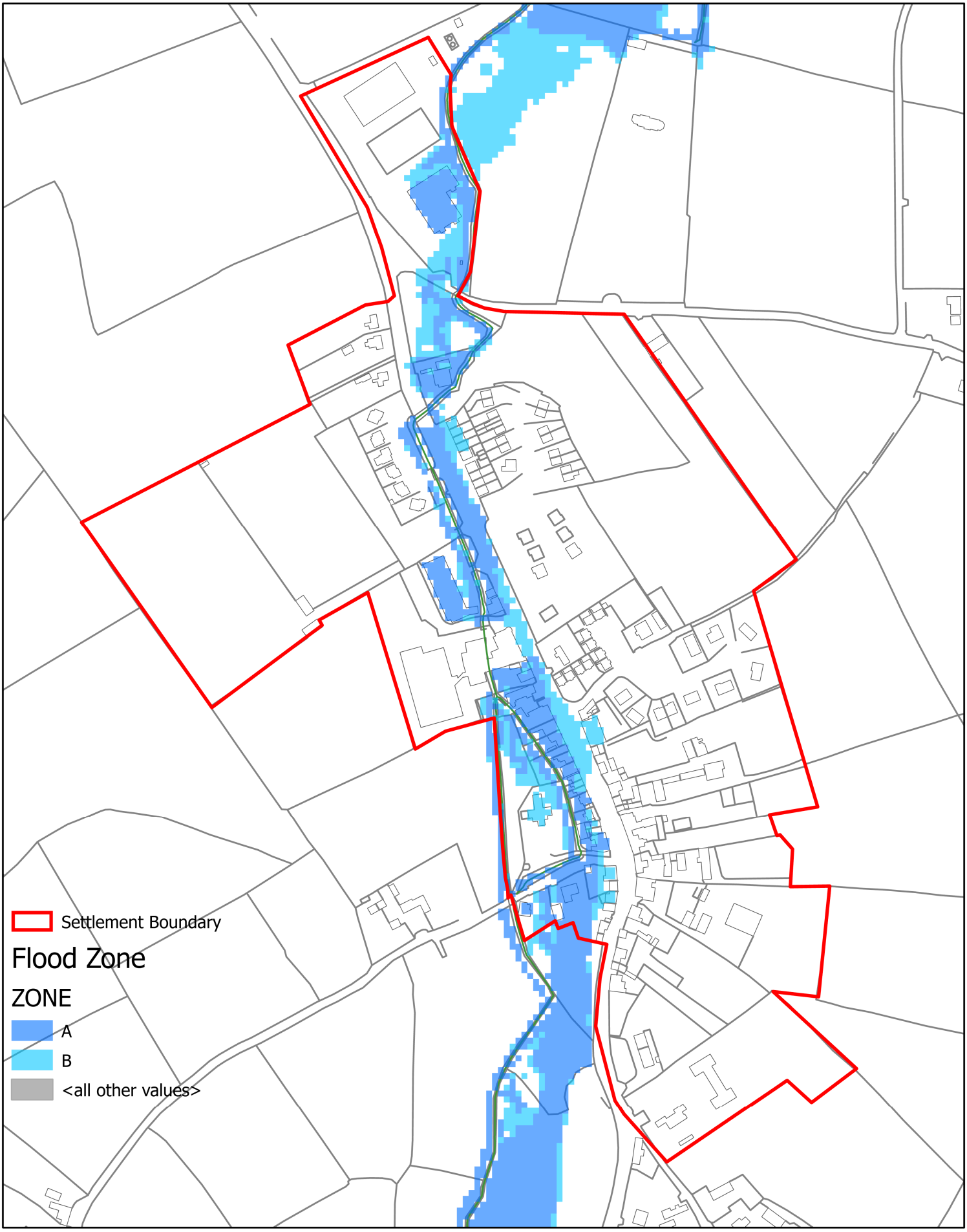
Figure 6 Freshford

Figure 9 Inistioge

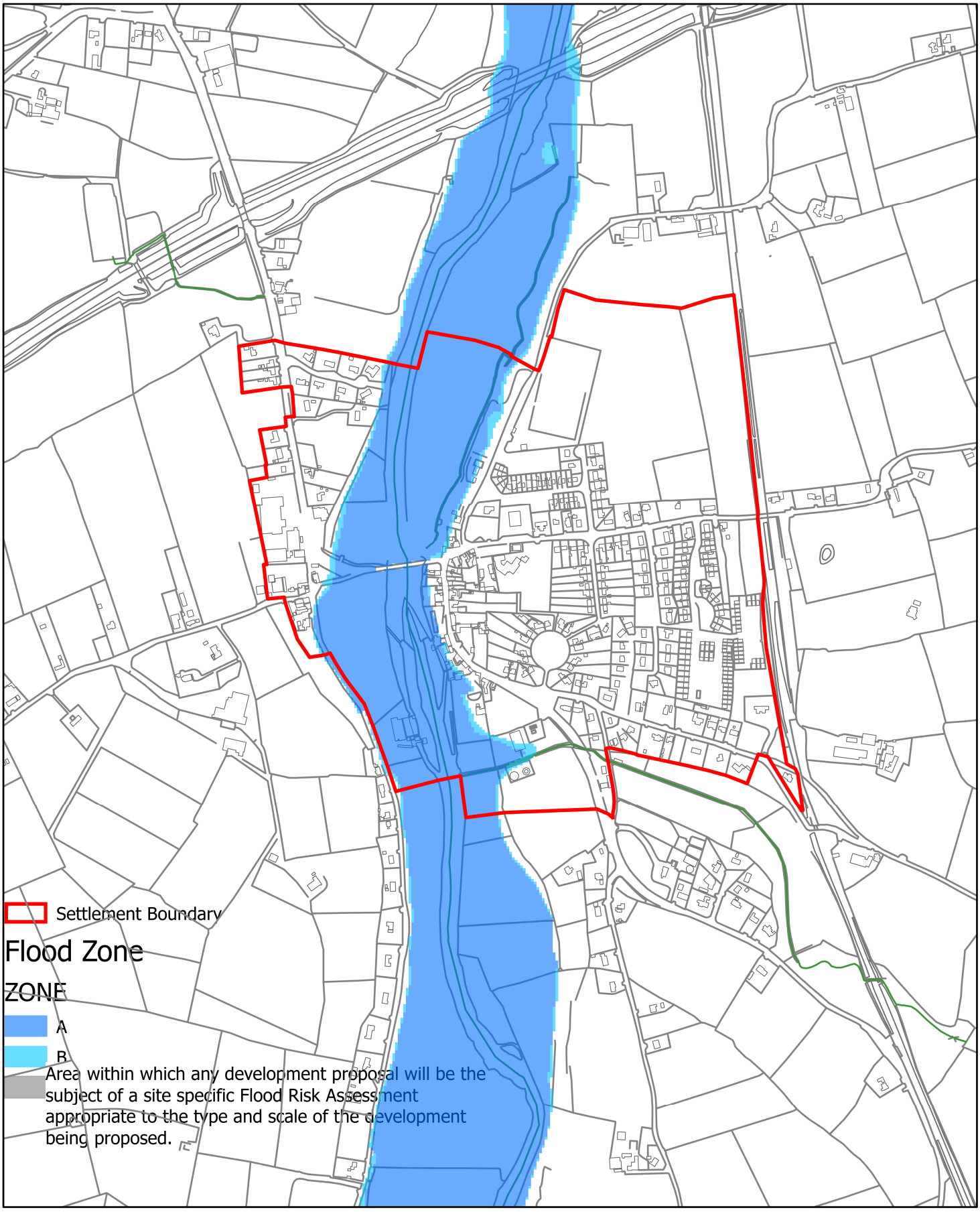
Figure 10 Johnstown

Figure 13 Kilmaganny

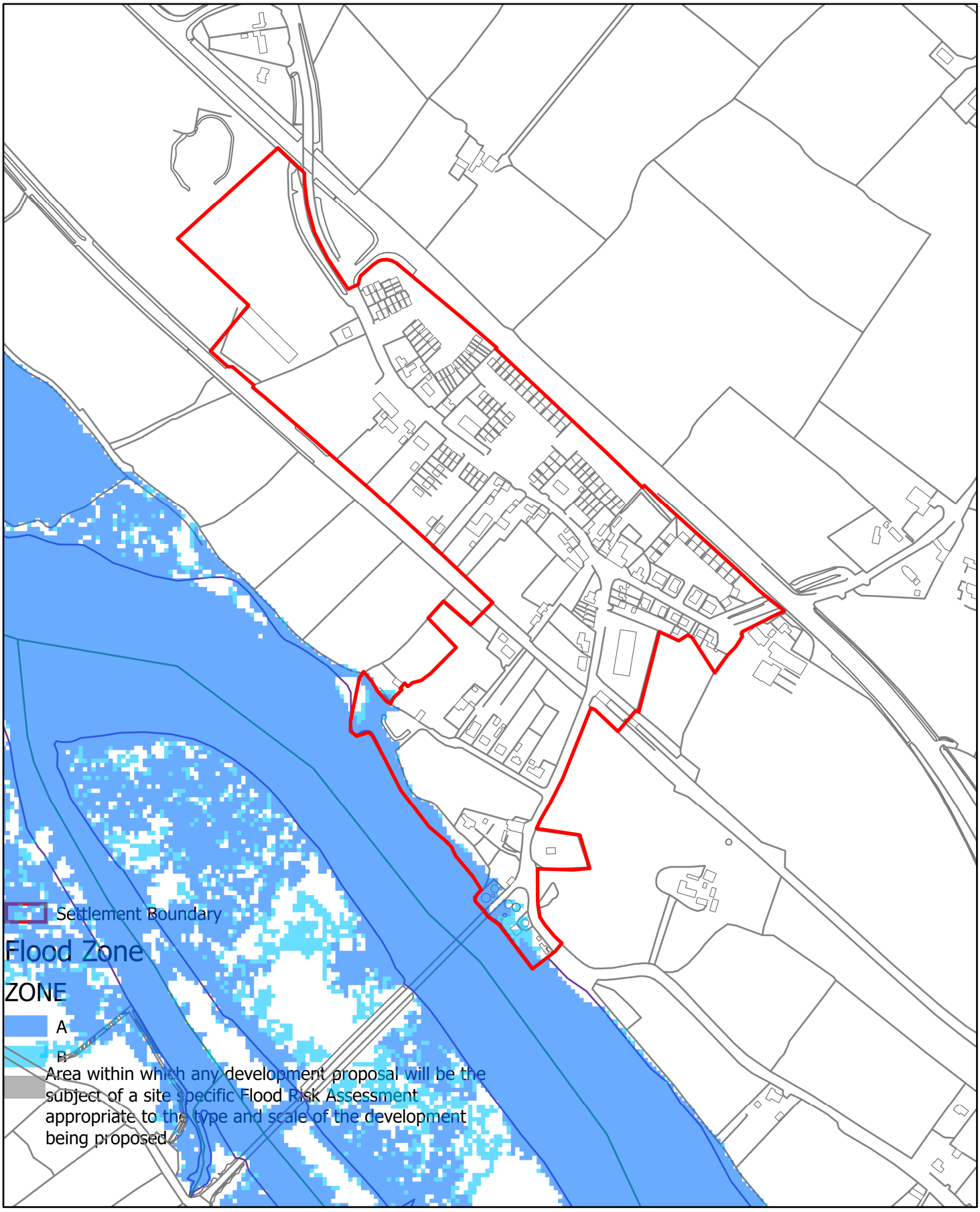
Figure 18 Paulstown



Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 1: Ballyhale Settlement Boundary



Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 3: SFRA Bennettsbridge Settlement Boundary
Date: June 2021



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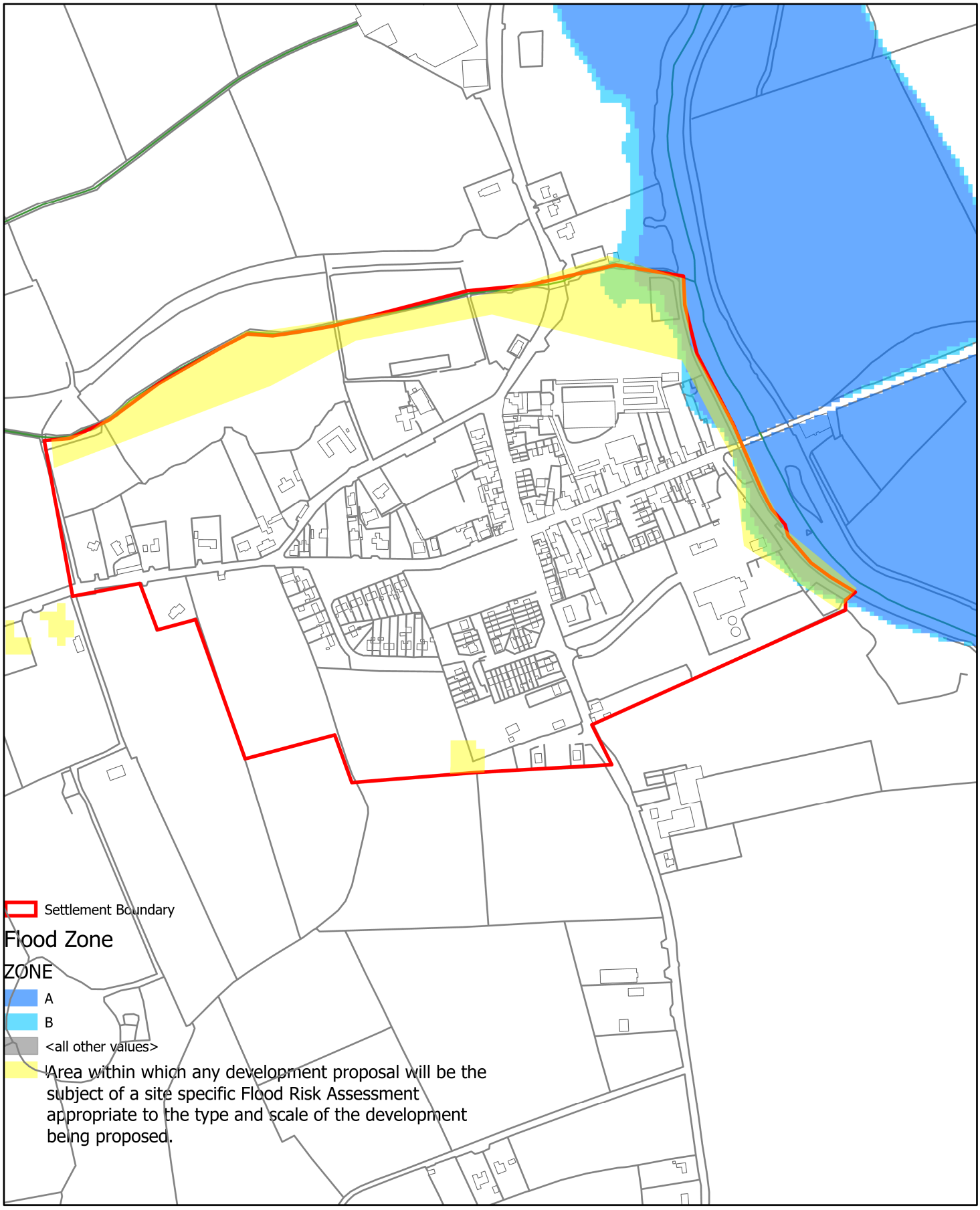
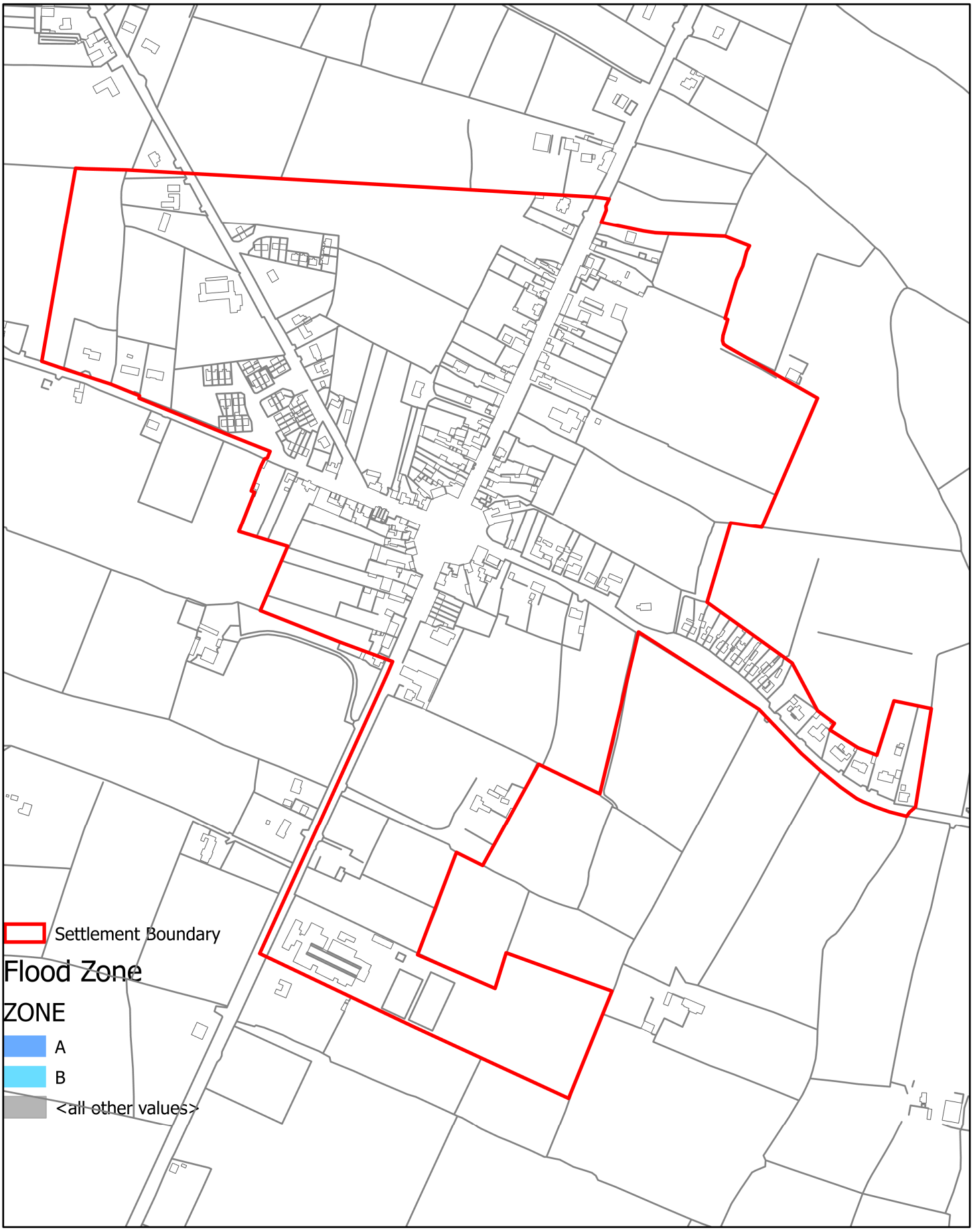
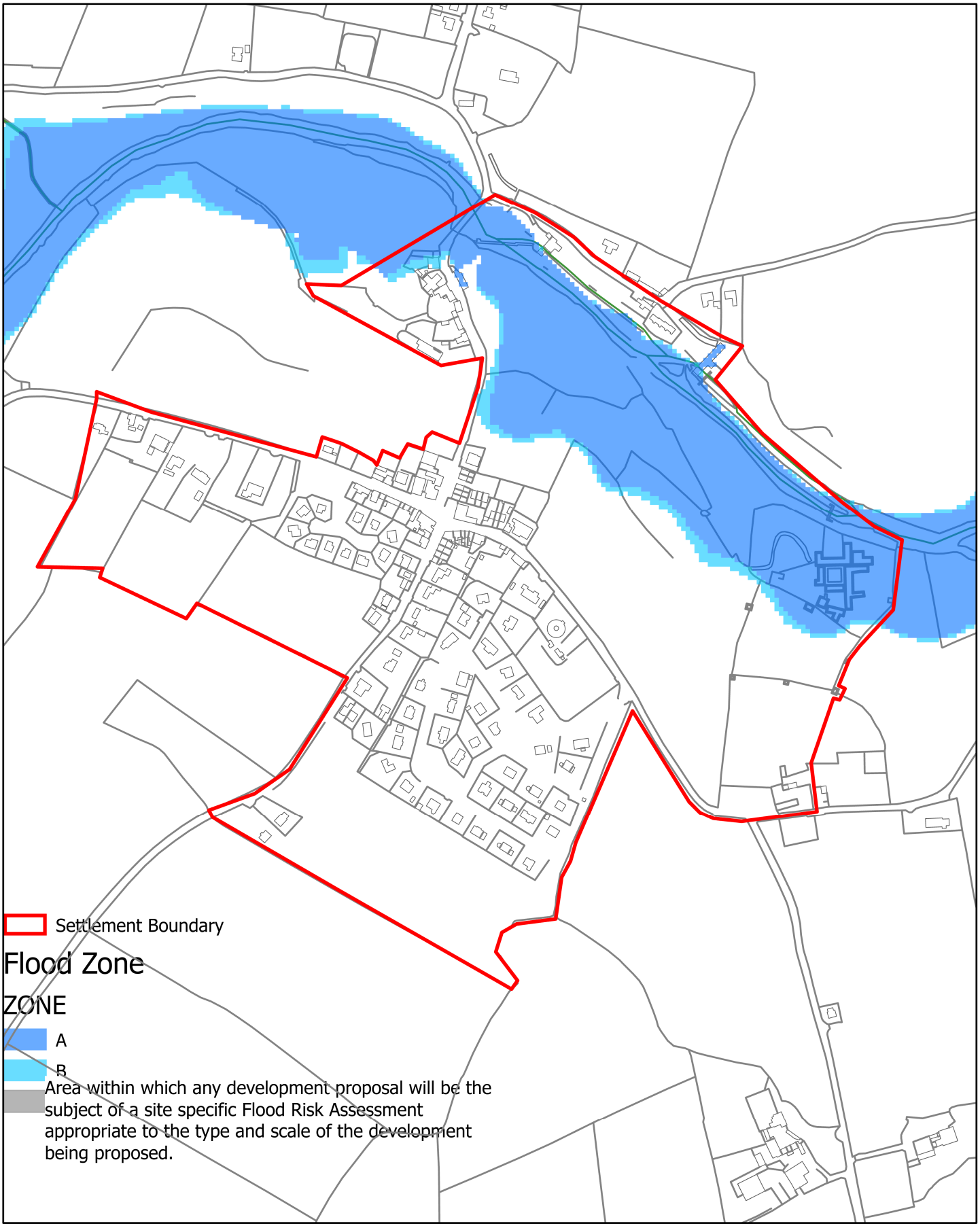
Map 3: SFRA Bennettsbridge Settlement Boundary
Date: June 2021



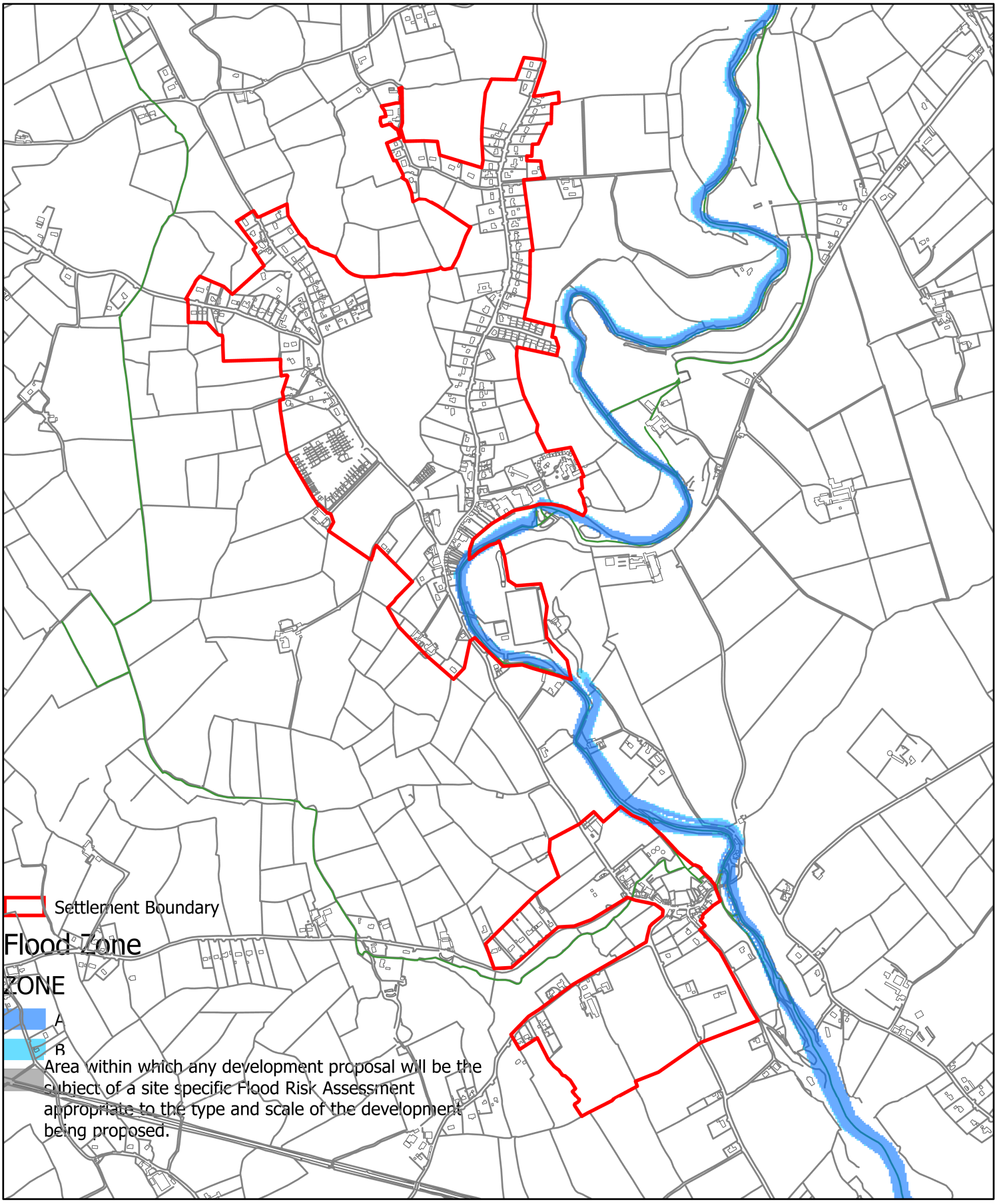
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 7: SFRA Goresbridge Settlement Boundary
Date: June 2021



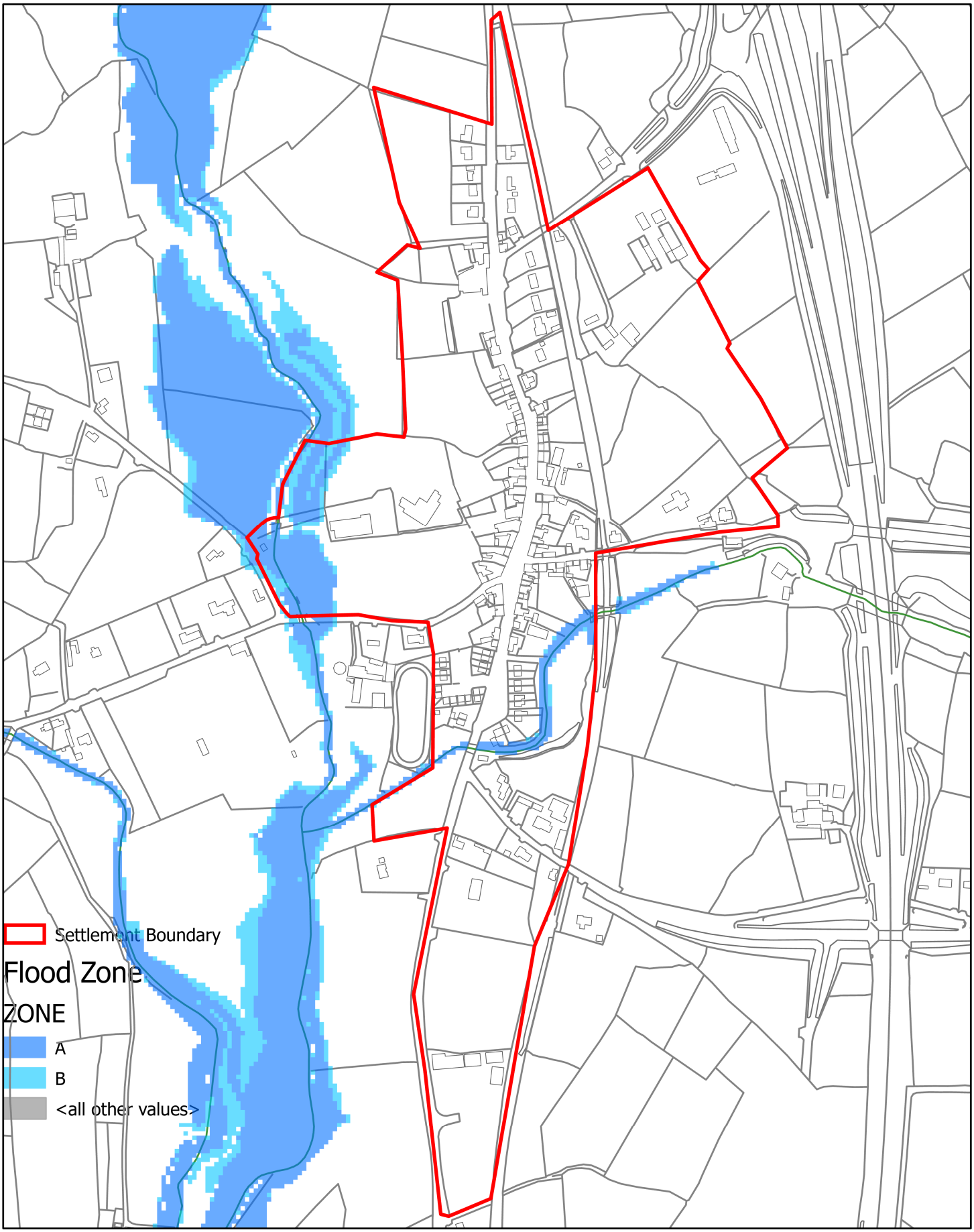
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 10: Johnstown Settlement Boundary
Date: June 2021



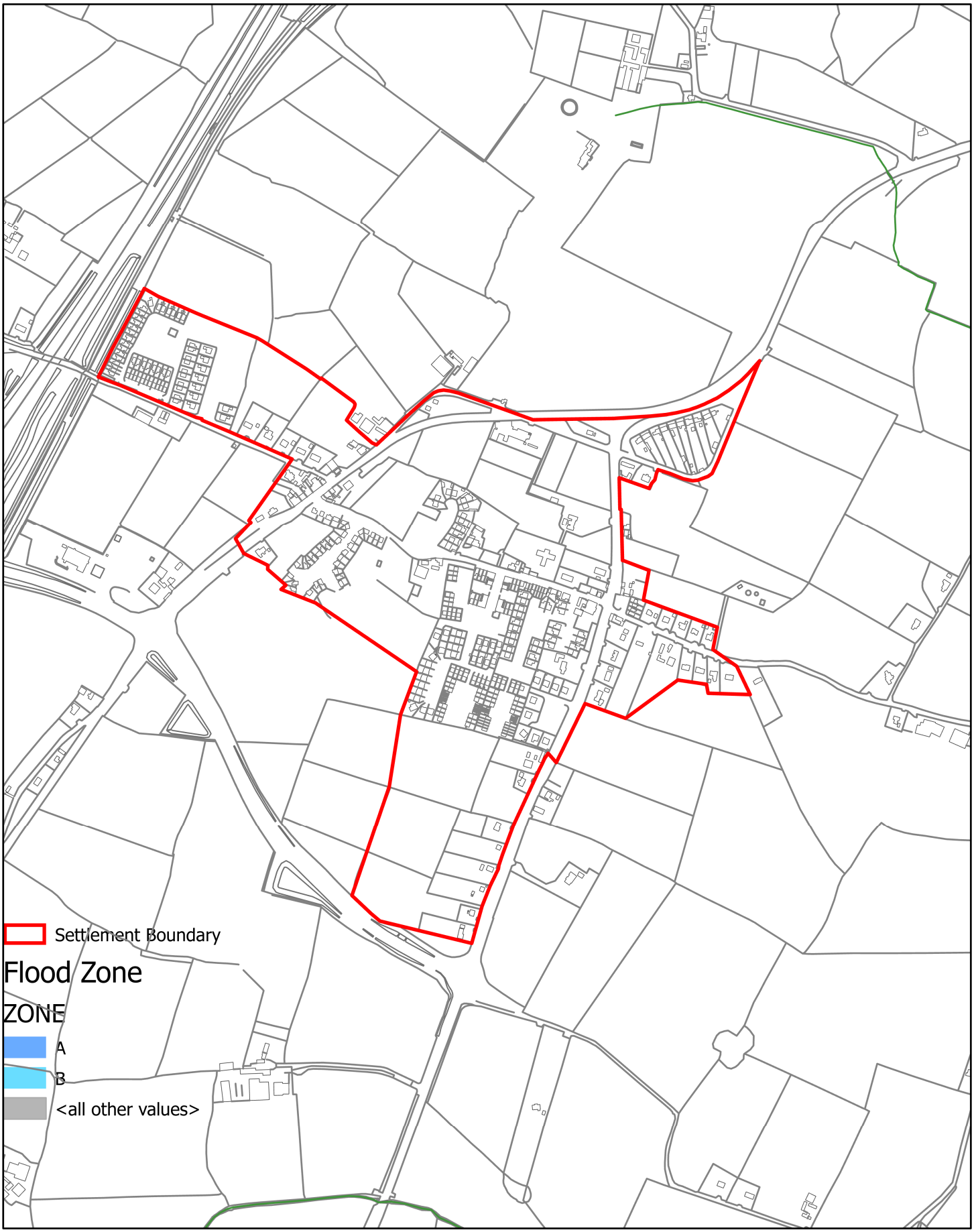
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 11: SFRA Kells Settlement Boundary
Date: June 2021



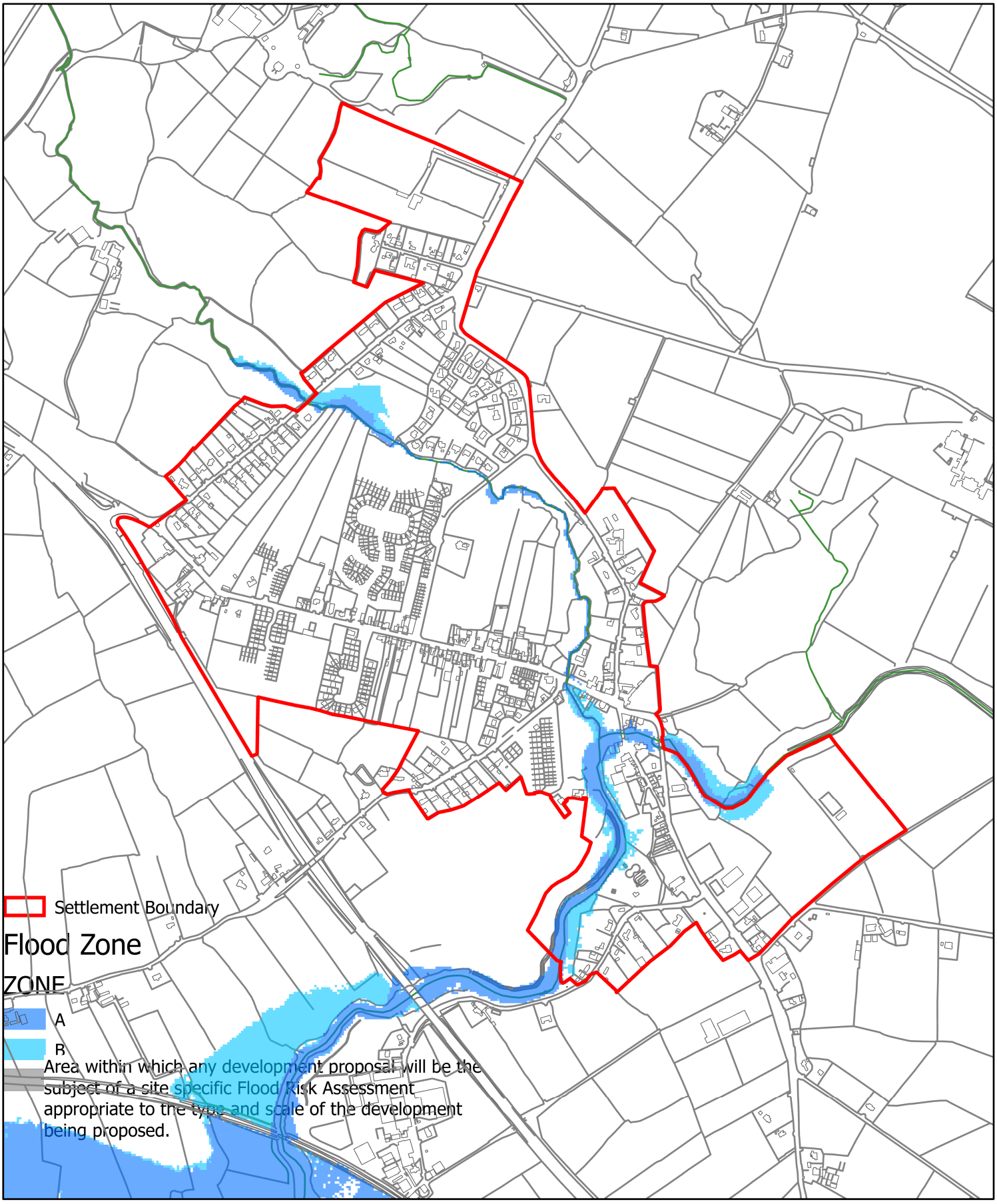
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 12: SFRA Kilmacow Settlement Boundary
Date: June 2021



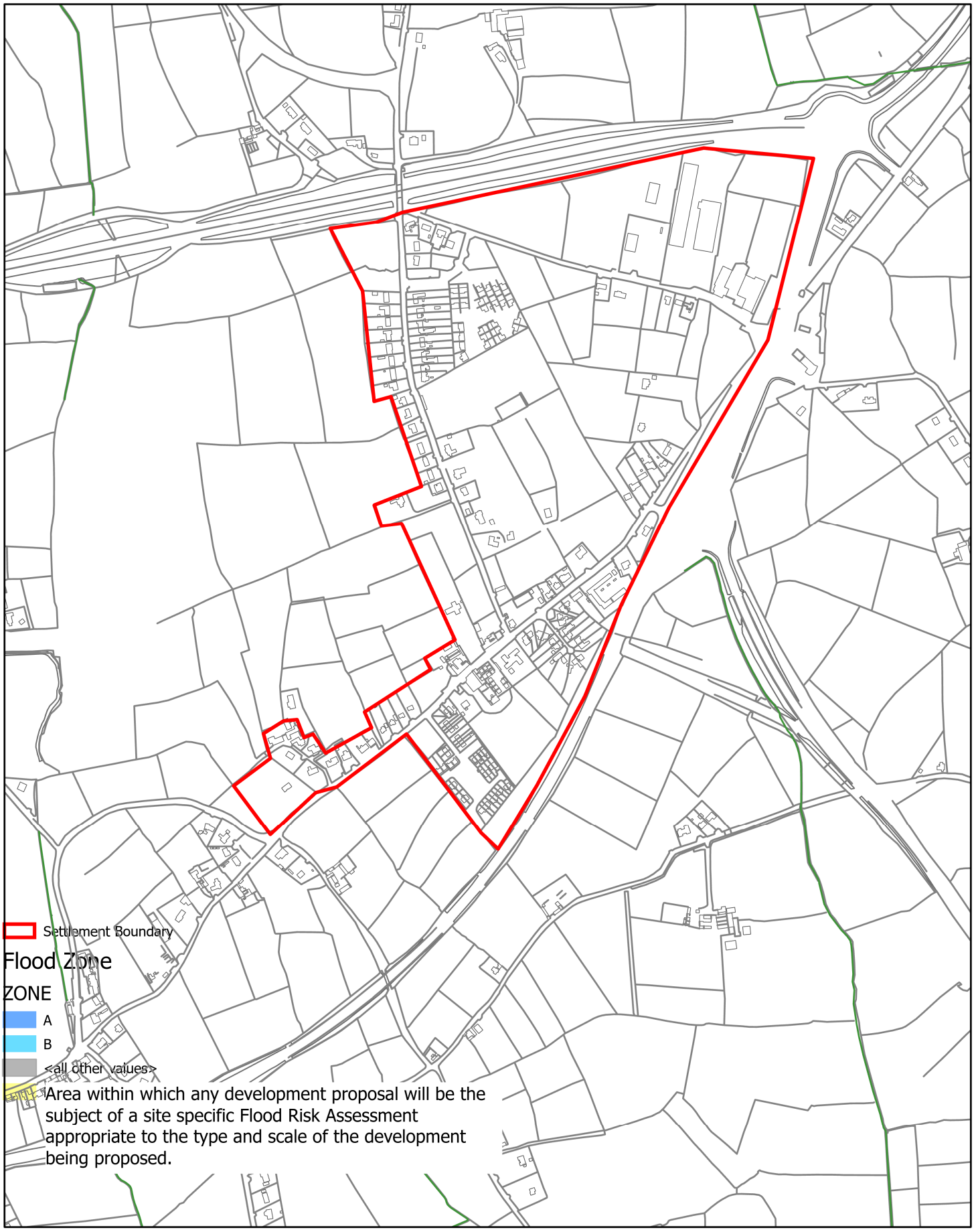
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 17: Mullinavat Settlement Boundary
Date: June 2021



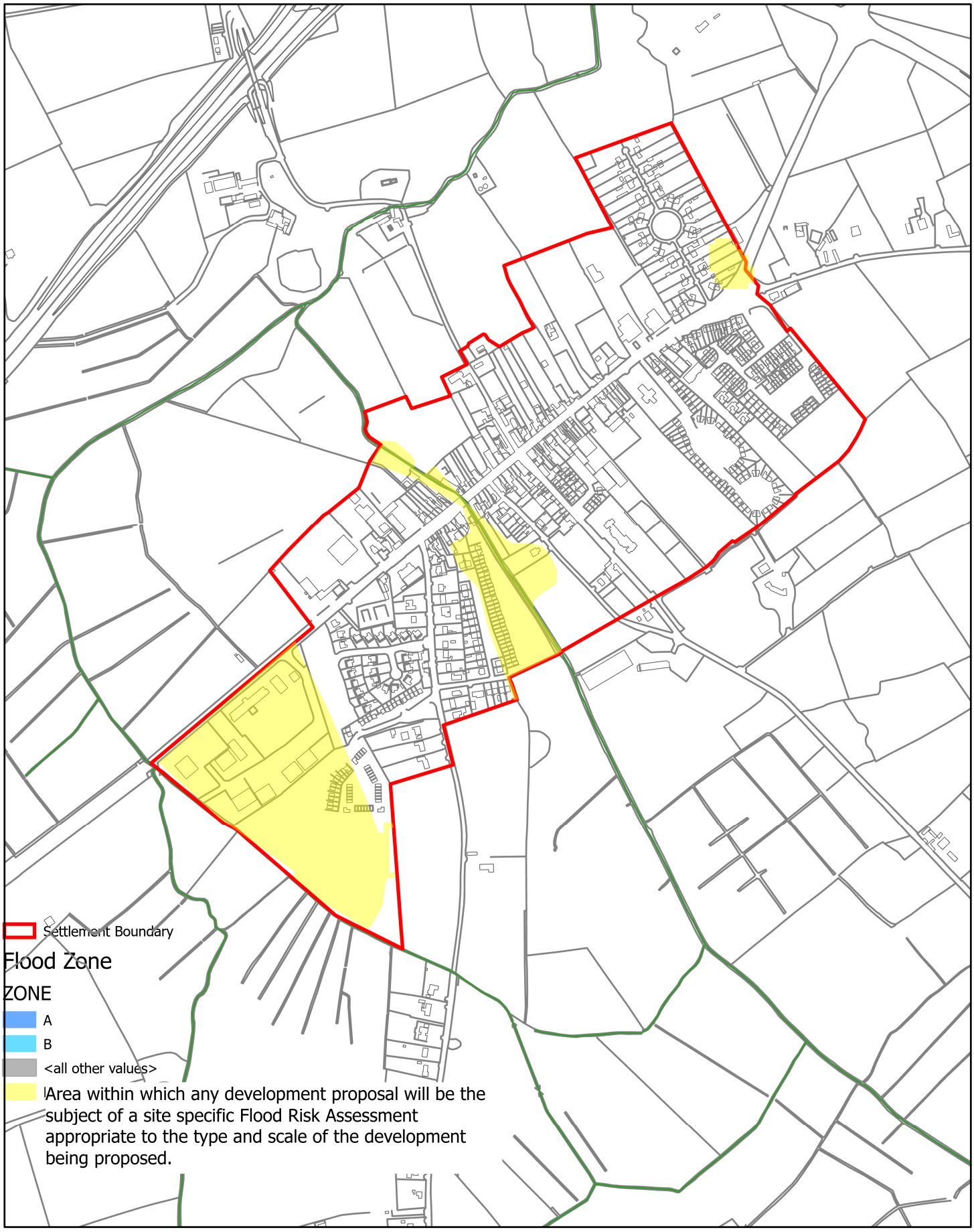
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 18: Paulstown Settlement Boundary
Date: June 2021



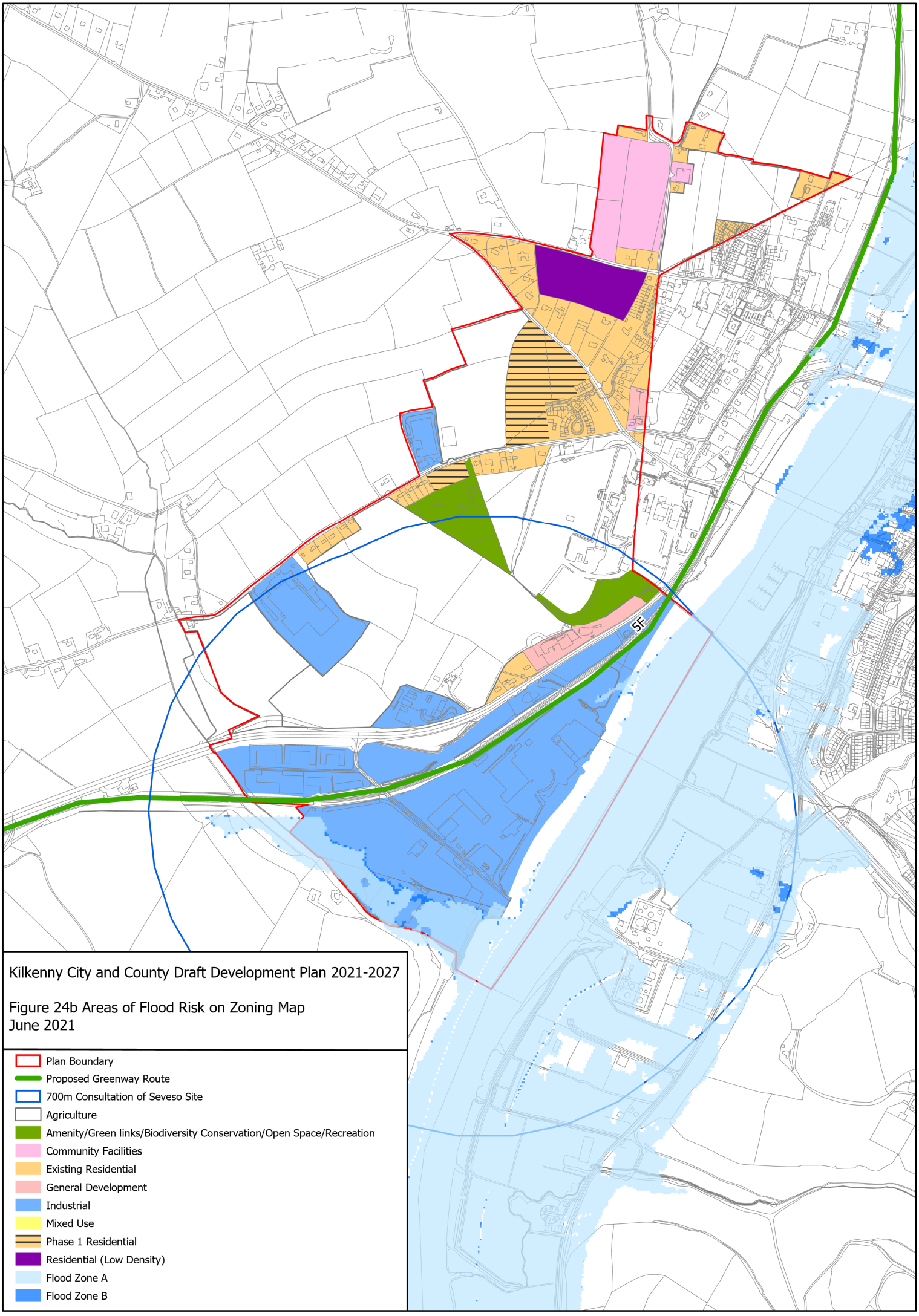
Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 19: SFRA Piltown Settlement Boundary
Date: June 2021



Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 22: SFRA Urlingford Settlement Boundary
Date: June 2021



Strategic Flood Risk Assessment of Kilkenny Draft City and County Development Plan 2021
Map 22: SFRA Urlingford Settlement Boundary
Date: June 2021



Kilkenny City and County Draft Development Plan 2021-2027

Figure 24b Areas of Flood Risk on Zoning Map
June 2021

- Plan Boundary
- Proposed Greenway Route
- 700m Consultation of Seveso Site
- Agriculture
- Amenity/Green links/Biodiversity Conservation/Open Space/Recreation
- Community Facilities
- Existing Residential
- General Development
- Industrial
- Mixed Use
- Phase 1 Residential
- Residential (Low Density)
- Flood Zone A
- Flood Zone B