

3

DESIGN EVOLUTION & ALTERNATIVES

Chapter 3 - Design Evolution and Alternatives

ES figure no.	Drawing title
3.1	Turbine Layout Evolution
3.2	Infrastructure Design Evolution
3.3	Combined Constraints and Infrastructure



UNSHINAGH

FIGURE 3.1 TURBINE LAYOUT EVOLUTION

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- ⊕ Turbines
- Land Under Applicant's Control
- Exclusion Zones

Layout 1 - PNIRuns003
13 turbines x 136 m rotor diameter

Layout 2 - PNIRuns007
16 turbines x 136 m rotor diameter

Layout 3 - PNIRuns023
15 turbines x 136 m rotor diameter

Layout 4 - PNIRuns024
14 turbines x 136 m rotor diameter



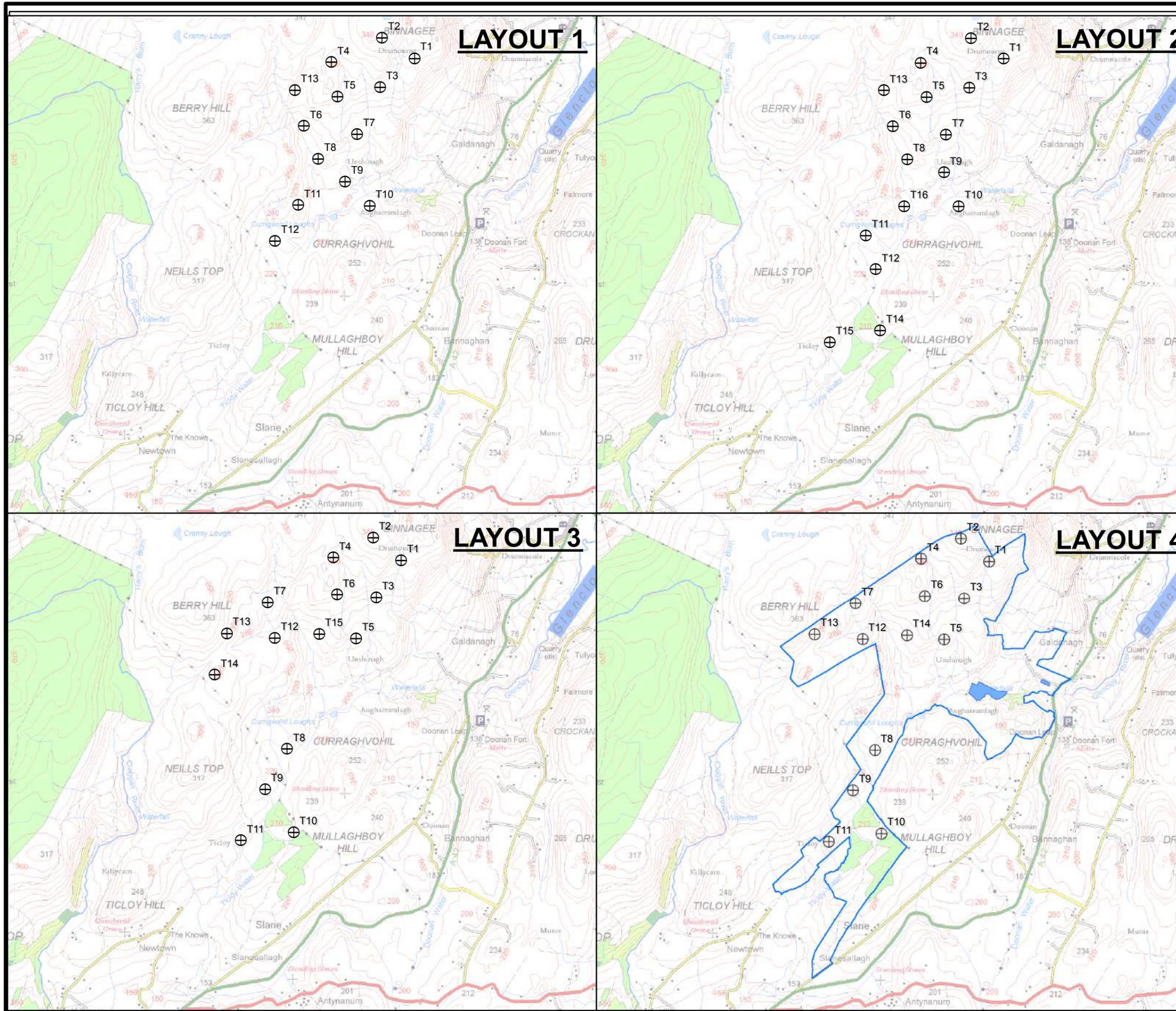
LAYOUT DWG: N/A F-LAYOUT NO.: N/A

DRAWING NUMBER
04291-RES-LAY-DR-TE-011

SCALE - 1:45,000 @ A3

**ENVIRONMENTAL STATEMENT &
PLANNING APPLICATION 2021**

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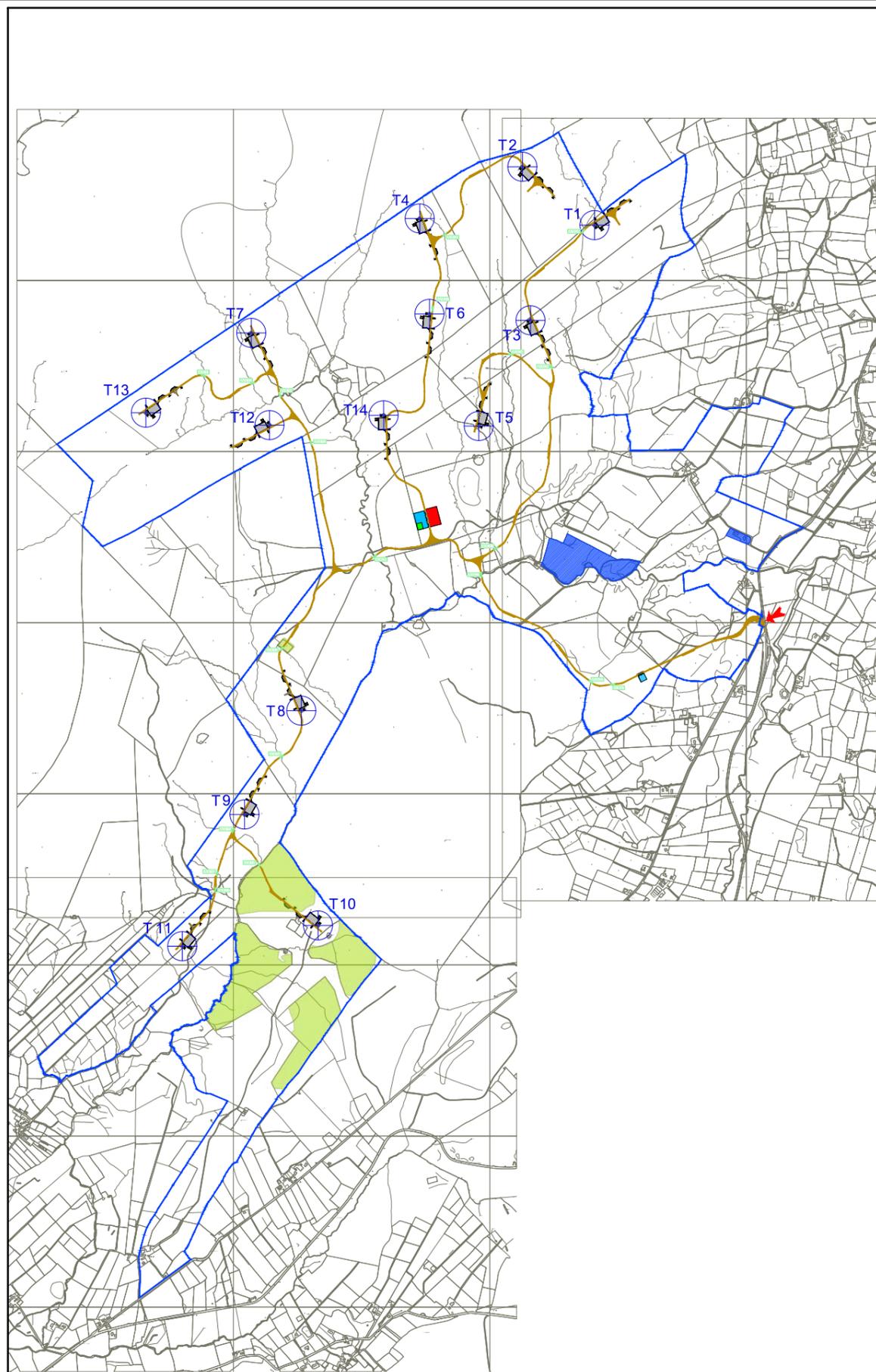
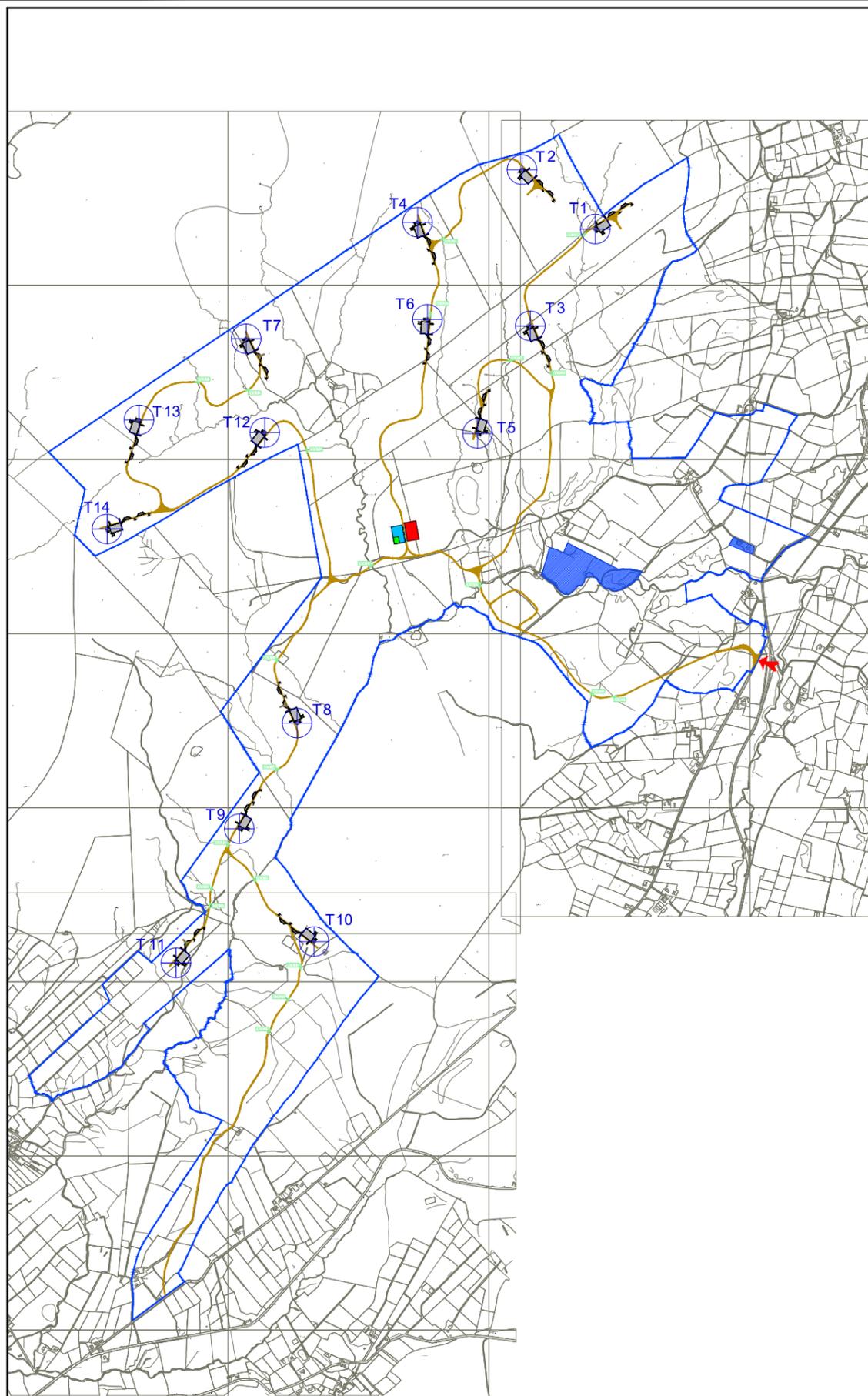


UNSHINAGH WIND FARM

FIGURE 3.2

INFRASTRUCTURE DESIGN EVOLUTION

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KEY

- LAND UNDER APPLICANTS CONTROL
- LAND NOT INCLUDED
- ⊕ WIND TURBINE LOCATION
- NEW SITE TRACKS
- WATERCOURSE CROSSING
- CRANE HARDSTANDING AREA
 - PERMANENT
 - TEMPORARY
- TEMPORARY CONSTRUCTION COMPOUND
- ENERGY STORAGE COMPOUND
- TEMPORARY ENABLING WORKS COMPOUND
- WATERLESS WHEEL WASH
- CONTROL BUILDING & SUBSTATION COMPOUND WITH PERMANENT HARDSTANDING AREA
- ➔ SITE ENTRANCE LOCATION
- FORESTRY TO BE REMOVED



DESIGN 1: 04291-RES-LAY-DR-PE-002 (REV 2)
(PNIRuns014)

DESIGN 2: 04291-RES-LAY-DR-PE-002 (REV 3)
(PNIRuns024)

LAYOUT DWG N/A T-LAYOUT NO. AS SHOWN

DRAWING NUMBER
04291-RES-LAY-DR-PE-002

SCALE - 1:25,000 @ A3

ENVIRONMENTAL STATEMENT
2021

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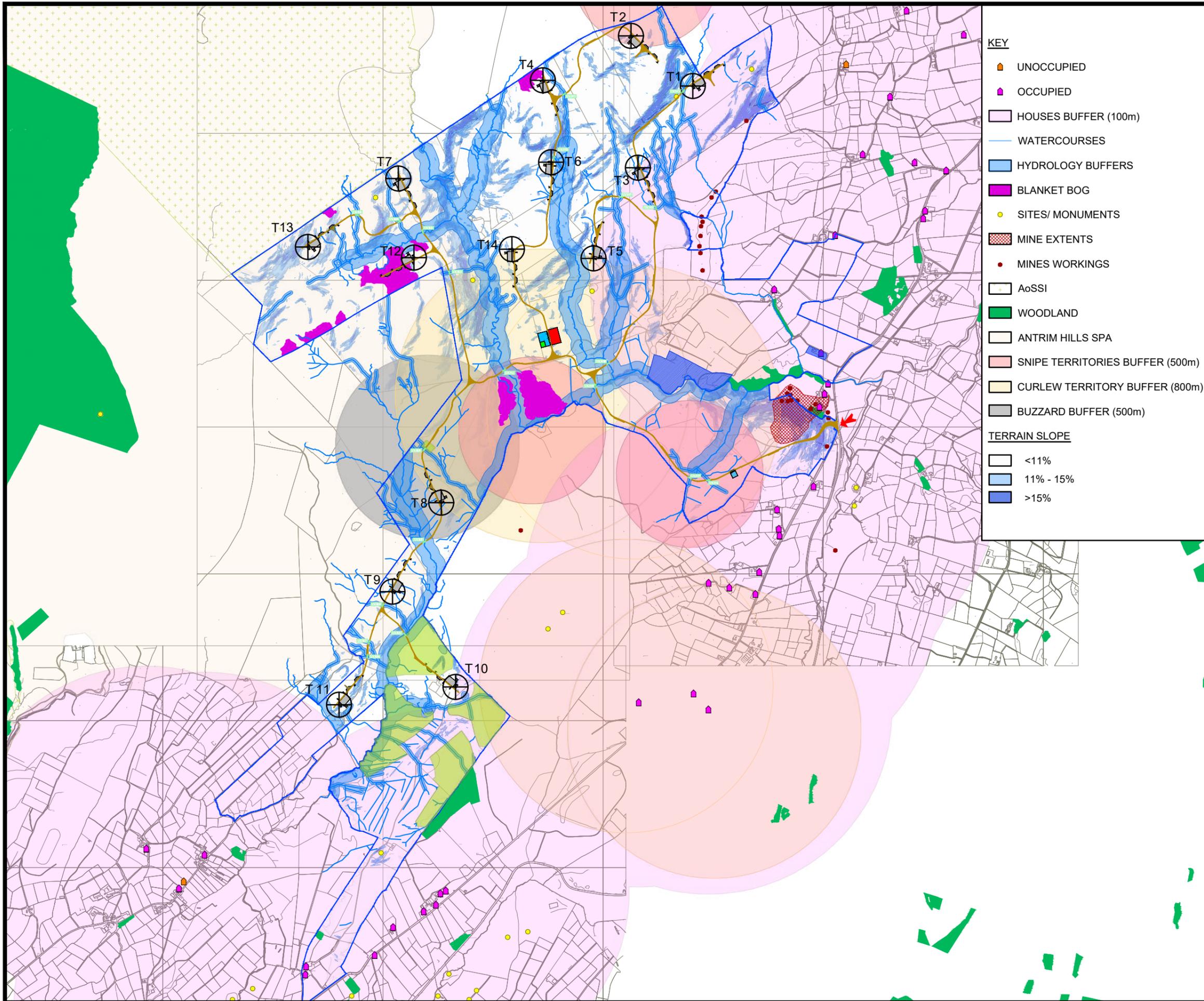


UNSHINAGH WIND FARM

FIGURE 3.3

COMBINED CONSTRAINTS & INFRASTRUCTURE LAYOUT

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- KEY**
- UNOCCUPIED
 - OCCUPIED
 - HOUSES BUFFER (100m)
 - WATERCOURSES
 - HYDROLOGY BUFFERS
 - BLANKET BOG
 - SITES/ MONUMENTS
 - MINE EXTENTS
 - MINES WORKINGS
 - AoSSI
 - WOODLAND
 - ANTRIM HILLS SPA
 - SNIFE TERRITORIES BUFFER (500m)
 - CURLEW TERRITORY BUFFER (800m)
 - BUZZARD BUFFER (500m)
- TERRAIN SLOPE**
- <11%
 - 11% - 15%
 - >15%

- KEY**
- LAND UNDER APPLICANTS CONTROL
 - LAND NOT INCLUDED
 - WIND TURBINE LOCATION
 - NEW SITE TRACKS
 - WATERCOURSE CROSSING
 - CRANE HARDSTANDING AREA
 - PERMANENT
 - TEMPORARY
 - TEMPORARY CONSTRUCTION COMPOUND
 - ENERGY STORAGE COMPOUND
 - TEMPORARY ENABLING WORKS COMPOUND
 - WATERLESS WHEEL WASH
 - CONTROL BUILDING & SUBSTATION COMPOUND WITH PERMANENT HARDSTANDING AREA
 - SITE ENTRANCE LOCATION
 - FORESTRY TO BE REMOVED



LAYOUT DWG	N/A	T-LAYOUT NO.	PNIRuns024
DRAWING NUMBER	04291-RES-LAY-DR-EN-001		
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ENVIRONMENTAL STATEMENT 2021			
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