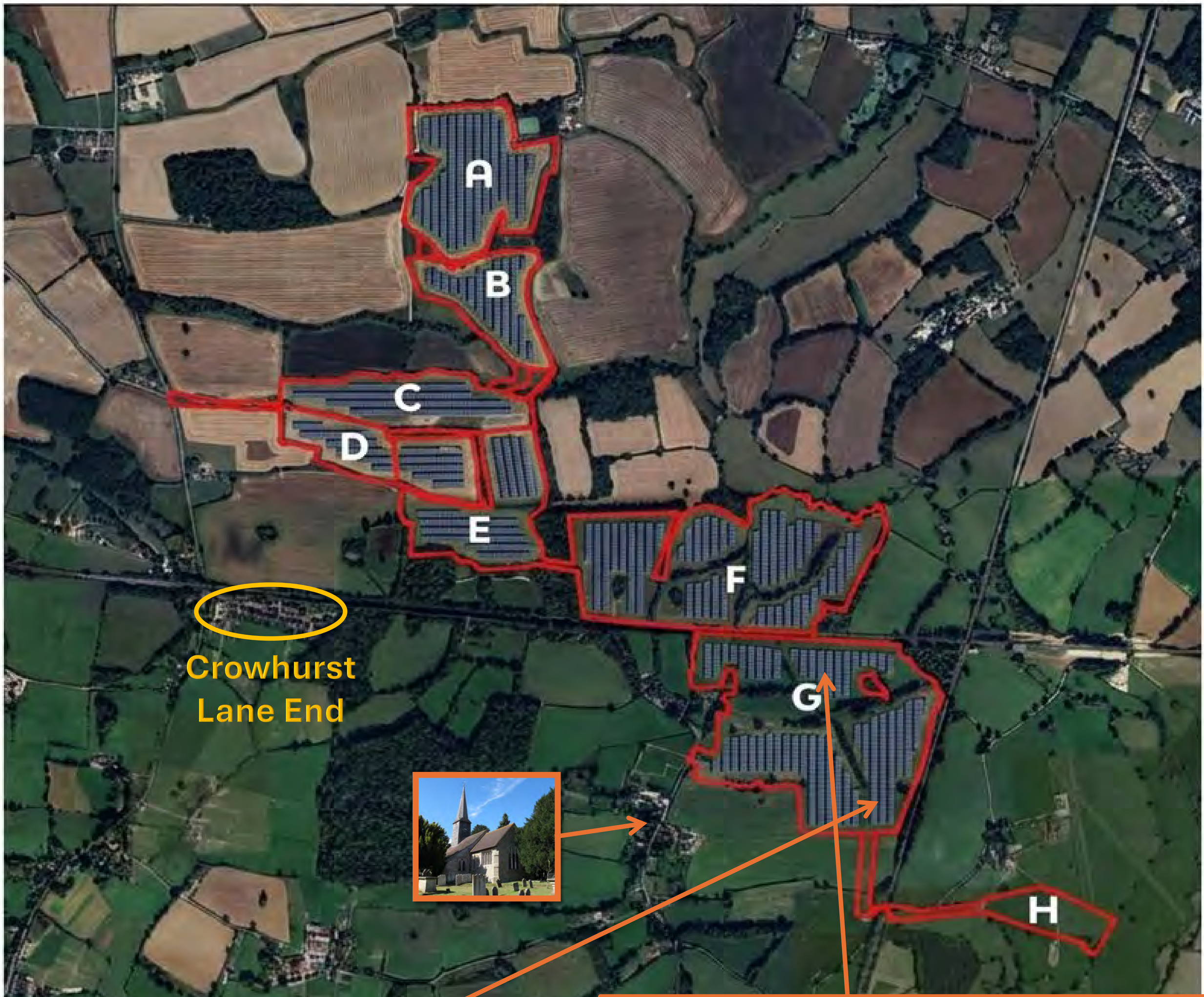
SPECKLED WOOD – CROWHURST SOLAR PV AND BESS SITE PARCEL PLAN (40MW with OPERATIONAL LIFESPAN of 40 YEARS)

(BESS = BATTERY ENERGY STORAGE SYSTEM)

116.2 Ha (APPROX. 300 ACRES)

0.5% OF TANDRIDGE GREEN BELT
12% OF PARISH GREEN BELT



POINT OF SERVICE COMPOUND
sited in Parcel G East

AI GENERATED IMAGES BASED ON DETAILS FROM EIA

Surrey Wildlife Trust

SARG

Surrey Dormouse Group
giving a helping hand to dormice in Surrey

Surrey Badger Protection Society

WOODLAND TRUST

Forestry England

CROWHURST COMMUNITY STAKEHOLDERS

RSPB

NATURAL ENGLAND

SURREY BIRD CLUB

CPRE Campaign to Protect Rural England

Historic England

Butterfly Conservation

London Green Belt Council

SURREY BOTANICAL SOCIETY

Surrey Nature Partnership
Healthy Environment | Healthy People | Healthy Economy

EAST SURREY WALKERS

BRITISH CYCLING

SURREY CYCLE RACING LEAGUE

1971 - 2021 CATERHAM DISTRICT MODEL FLYING CLUB 50th ANNIVERSARY

lightsource bp (WOODHAM WALTER)
MALDON SOLAR FARM 49.9MW, 238 ACRES

Solar Panels

Solar panels (or modules) are arranged in rows with wide margins to prevent shading. Our standard solar panels are non-toxic and fully recyclable made from silicon, silver and aluminium.

Mounting Frames

Fixed-Tilt Frames: Panels are attached to mounting frames at a fixed angle.

Single Axis Tracker: The tracking system rotates the panels slowly from east to west.

Cabling

All cabling is weather proofed and securely attached to the structure or buried underground.

Inverters

Inverters convert the DC power into AC (Alternating Current) flowing on the local consumer's private network. Shown here are 'inverter cabinets' which house the equipment.

Transformer

From the inverters, the electricity flows to a transformer which 'steps-up' the voltage of the electricity to match that of the existing network.

Substation

This is the on-site point of connection to the grid. From here, a high voltage cable buried underground, connects the solar farm to the existing overhead line grid network. The design of the substation will depend on the voltage and requirements of the network operator.

Security

Security measures including fences (c.2m), and CCTV cameras are installed and positioned to provide good coverage without impinging on local properties.

Ancillary Infrastructure

A few smaller cabinet units are installed as monitoring houses for communications equipment and the storage of spares and equipment for our engineers.

Site preparation & groundworks

Before construction starts, the Lightsource bp Project Manager oversees the preparation and groundworks to get the site ready.

Framing installation

The frames for the solar panels are pile driven into the ground to ensure minimal ground disturbance.

Cabling & trenching

Trenches for the cables are dug, and the electrical wires are safely protected and buried underground.

Panel assembly

The panels are fitted to the frames, which are laid out in evenly spaced rows.

Electrical component foundation preparation and installation

Foundations are prepared for the electrical components (inverters, transformers, substation). Pre-fabricated components are then installed, others are built on site.

Security installation

Fencing is installed around the solar farm, alongside CCTV cameras which are positioned to monitor the fence line and solar farm interior.

High voltage works

Highly trained electrical engineers undertake the high voltage work needed for the solar farm to produce electricity.

Commissioning

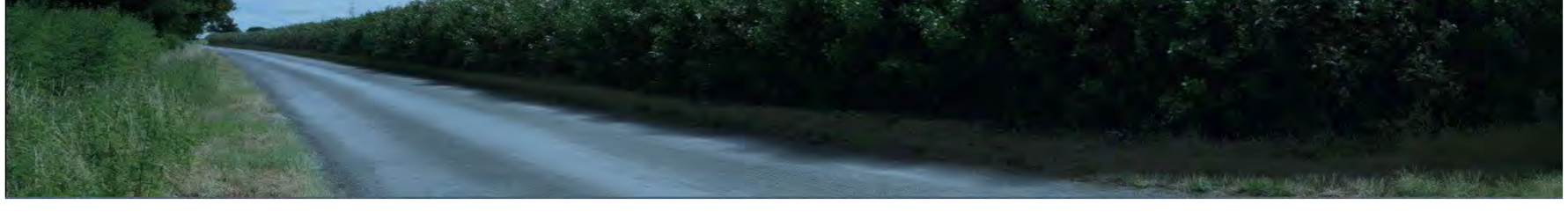
The solar farm undergoes final testing and is connected to the grid.

Construction decommissioning & civil works

Once the site is successfully commissioned, all construction equipment is removed and any necessary restoration works to the site and the road system are completed.

Landscaping (according to planting season)

Depending on whether or not the season is appropriate for planting, the site and boundaries will be seeded and planted as per the bespoke planting plan. If the site is completed outside of ideal planting seasons, the planting will take place at the next opportunity.



VIEW TODAY

VIEW @ YEAR 1

VIEW @ YEAR 10

GAYWOOD EAST SOLAR FARM (KYBO)
LITTLE BROWNS RAILWAY BRIDGE, EDENBRIDGE.
(12.4 Ha; 31 acres)

VIEWS BEFORE

VIEWS TODAY SOLAR PANELS 3M HIGH

GREEN BELT or GREY BELT?

Green Belt Purposes (Table TG1)

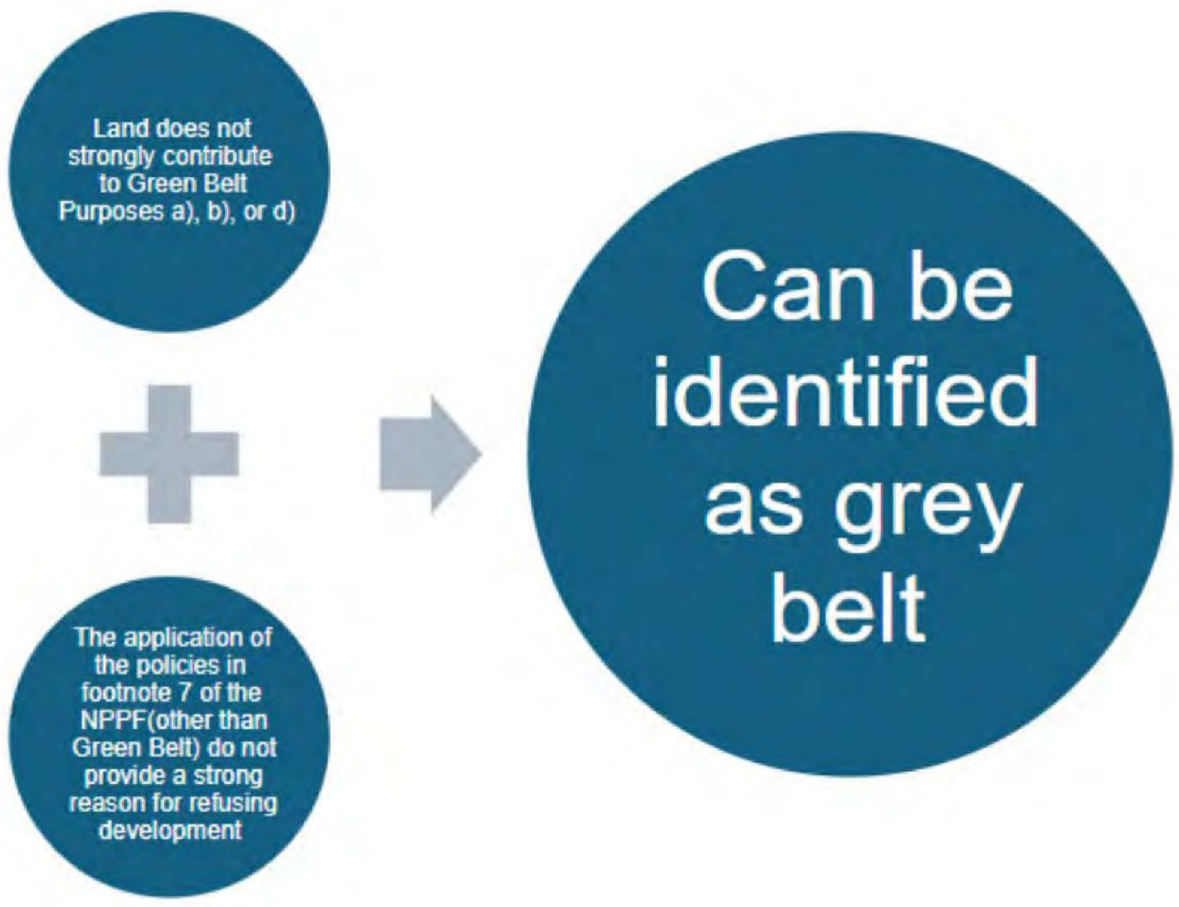
Purpose	lightsource bp Analysis	Contribution
a: Check unrestricted sprawl of large built-up areas	Site not adjacent to large built-up area; nearest settlements are small villages/towns (e.g., South Godstone 1.2km west, Oxted 1.9km north, Edenbridge 3km east).	Weak to None —
b: Prevent neighbouring towns merging	Nearest towns (Edenbridge, Oxted) 3.66km apart; site not in gap, development won't cause coalescence.	Weak to None
c: Safeguard countryside from encroachment	Greenfield site causes some encroachment, but limited views due to topography/vegetation; existing infrastructure (railways) nearby; proposed planting mitigates.	Moderate
d: Preserve setting/special character of historic towns	Not in setting of historic town; distant from conservation areas (e.g., Broadham Green/Spring Lane 1.15km north); limited visual links.	Weak to None —

TABLE TG1 assesses the site's contribution to Green Belt purposes.

Grey Belt Criteria (Table TG2)

Criteria (NPPF Annex 2/PPG)	Discussion	Site Passes?
Development wouldn't fundamentally undermine remaining Green Belt (para 155a)	Well-contained by vegetation/topography; proposed planting enhances; won't affect sprawl prevention or coalescence elsewhere.	Yes
Footnote 7 policies (beyond Green Belt) don't strongly restrict	Minor ancient woodland strip (access route, no impacts); no strong refusal reasons.	Yes
Doesn't strongly contribute to purposes a, b, or d	Assessed as weak/none for a, b, d (moderate for c only).	Yes
Overall	Meets Grey Belt definition.	Grey Belt

TABLE TG2 evaluates it against NPPF criteria for Grey Belt classification.



Grey Belt Assessment

The February 2025 updated PPG (Planning Policy Guideline) states that:

"After consideration of the above criteria, any assessment area that is not judged to strongly contribute to any of purposes a, b, or d can be identified as Grey Belt land, subject to the exclusion of land where the application of the policies relating to the areas or assets in footnote 7 to the NPPF (other than Greenbelt) would provide a strong reason for refusing or restricting development."

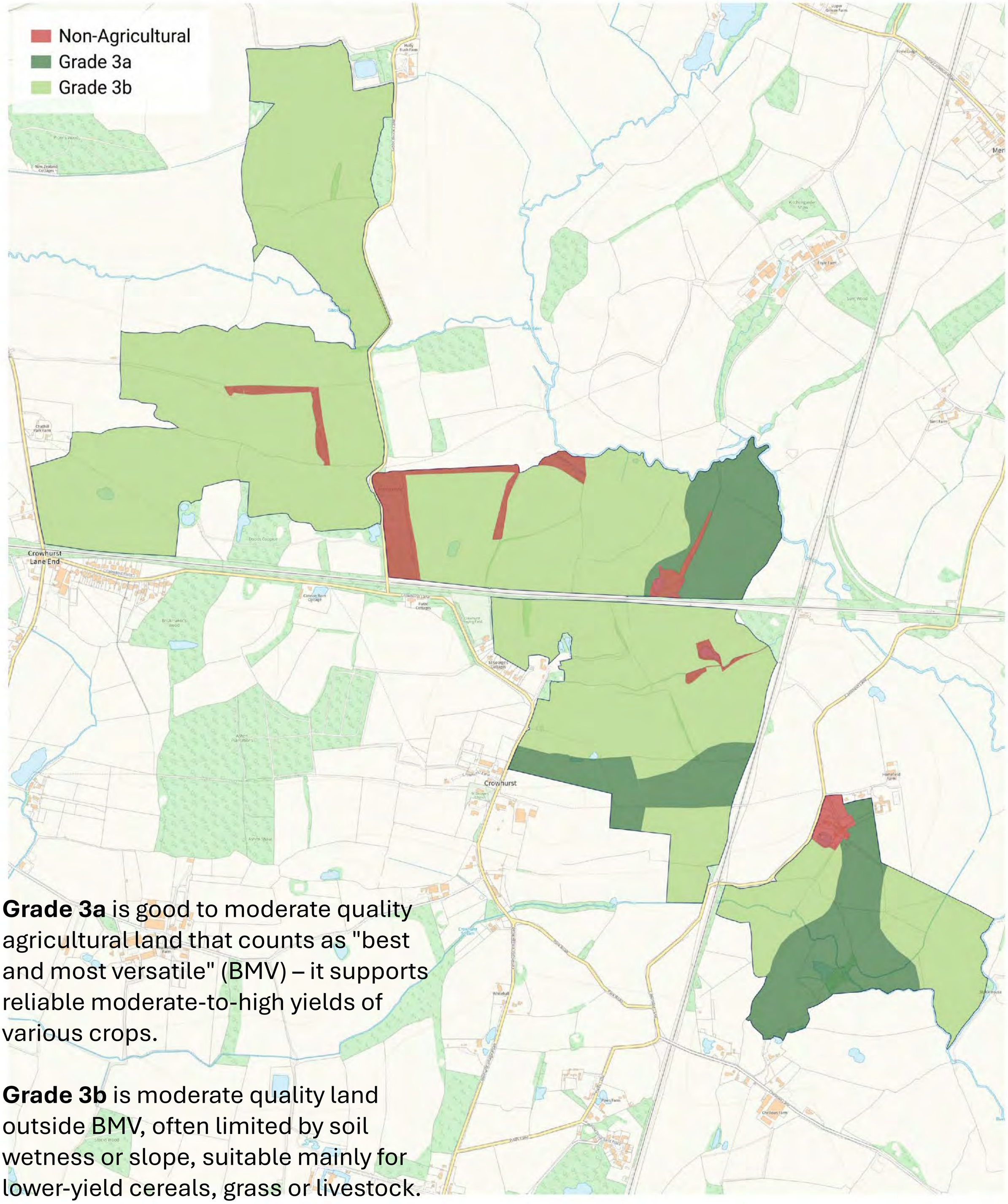
Footnote 7 in the NPPF is the list of highly protected designations that can disapply the usual presumption in favour of sustainable development (for example SSSIs, National Parks/National Landscapes, designated heritage assets, irreplaceable habitats, etc.)

AGRICULTURAL LAND CLASSIFICATION (ALC) OF SITE

Site surveyed: 178.5 Ha (441 acres)
Grade 3a => 30.2 Ha (75 acres)
Grade 3b => 140.6 Ha (347 acres)
Non-Agricultural => 7.7 Ha (19 acres)

Land in Red Line = 116.2 Ha (287 acres)
Grade 3a => 5.3 Ha (13.1 acres)
Grade 3b => 108.6 Ha (268 acres)
Non-Agricultural => 1.6 Ha (4.0 acres)

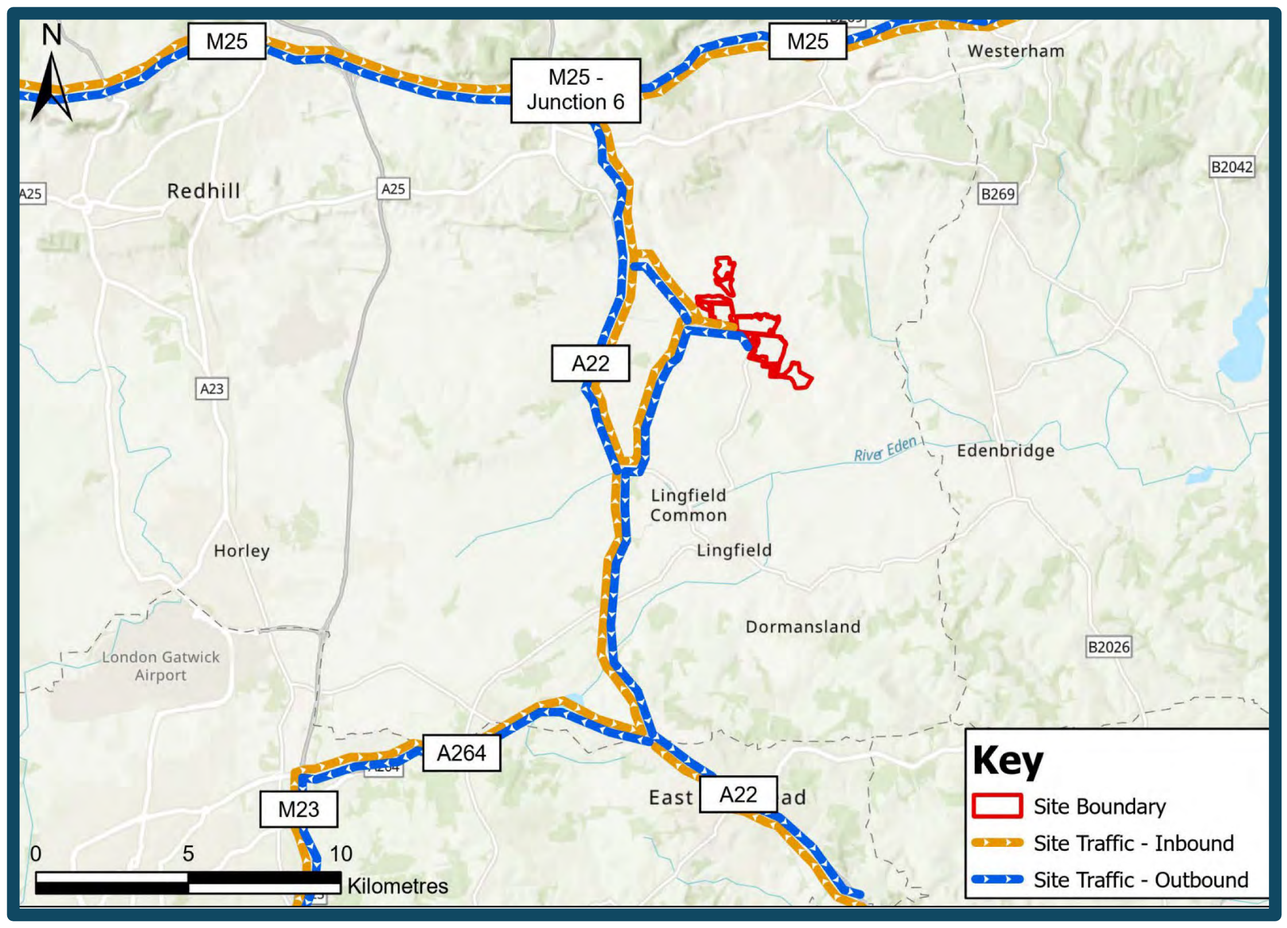
Land in dev fence => 78.7 Ha (194.5 acres)
Grade 3a => 0.3 Ha (0.74 acres)
Grade 3b => 77.9 Ha (192.5 acres)
Non-Agricultural => 0.5 Ha (1.2 acres)



Grade 3a is good to moderate quality agricultural land that counts as "best and most versatile" (BMV) – it supports reliable moderate-to-high yields of various crops.

Grade 3b is moderate quality land outside BMV, often limited by soil wetness or slope, suitable mainly for lower-yield cereals, grass or livestock.

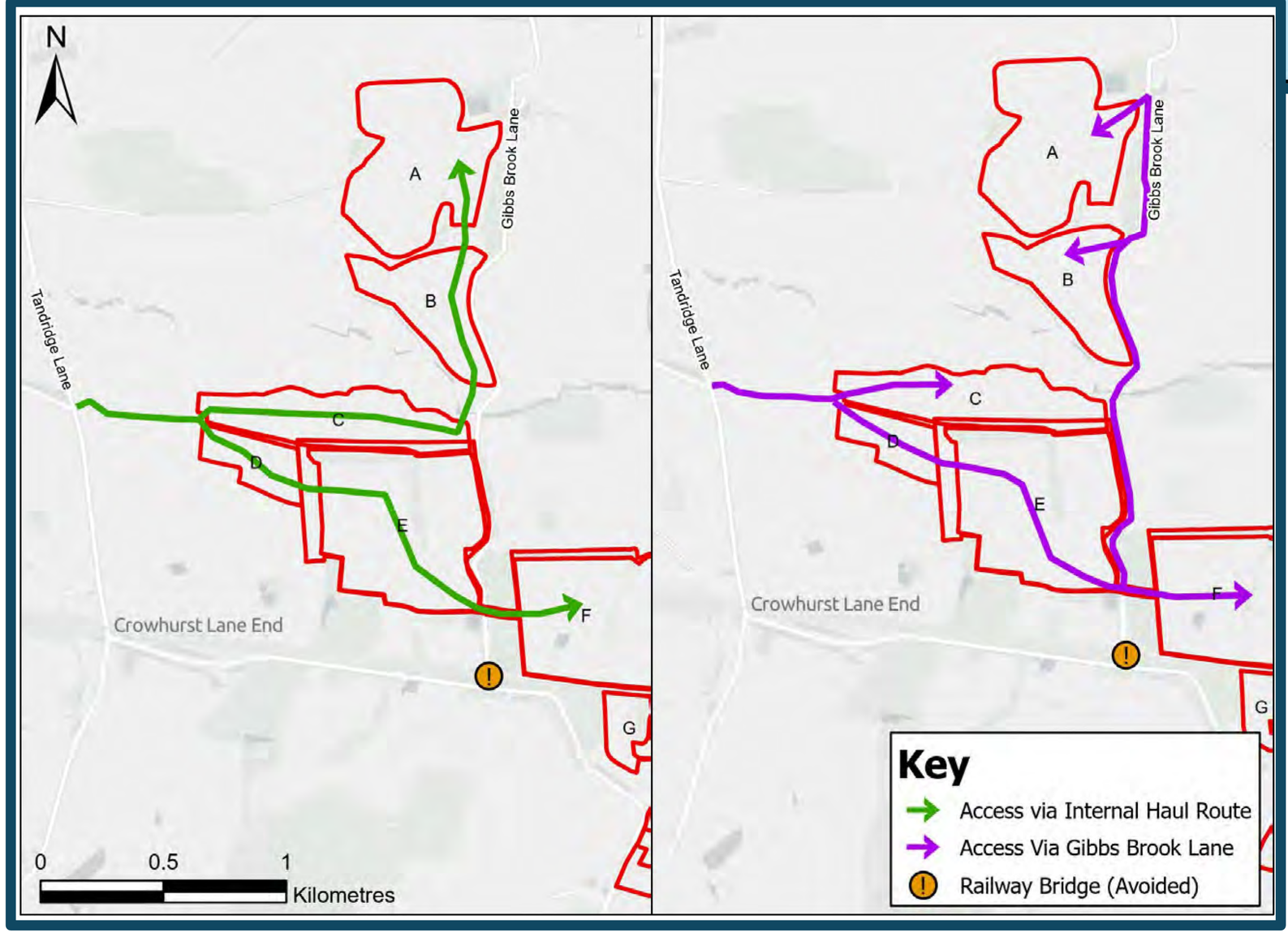
CROWHURST (SPECKLED WOOD) SOLAR & BESS FARM TRANSPORT AND ACCESS OPTIONS



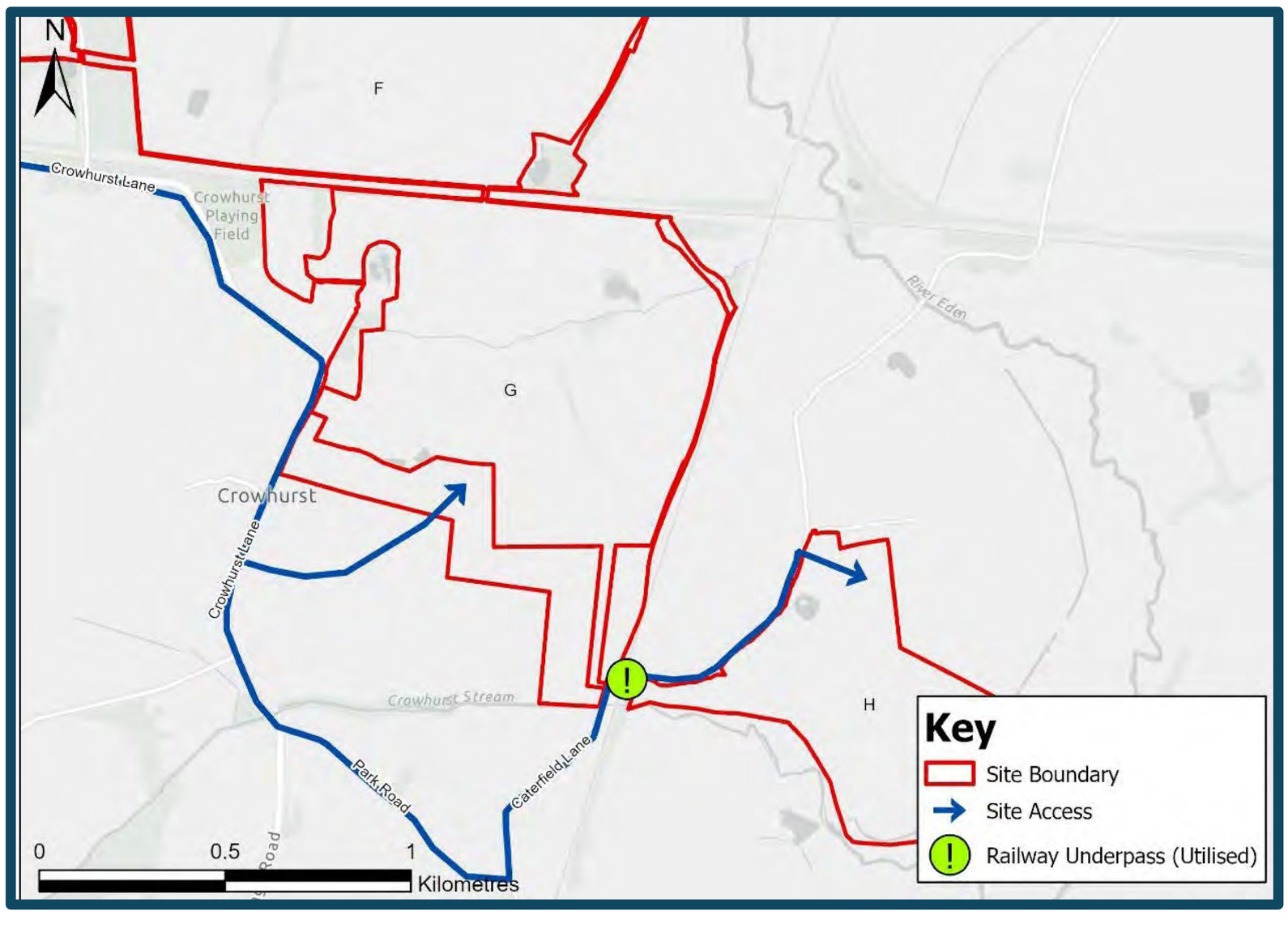
SITE ACCESS VIA THE STRATEGIC ROAD NETWORK (SRN)

PHASE	TIMESCALE	TYPICAL VEHICLE TYPES	FREQ. & SCALE OF MOVEMENTS
CONSTRUCTION	APPROXIMATELY 18 MONTHS CONSTRUCTION PERIOD.	HGVS FOR MATERIALS, PLANT AND EQUIPMENT; LGVS/VANS AND STAFF MINIBUSES; OCCASIONAL ABNORMAL INDIVISIBLE LOAD IF REQUIRED.	AVG. ~6–8 HGVS / DAY (12–16 MOVEMENTS), WITH PEAK PERIODS OF ABOUT 15 HGVS / DAY (30 MOVEMENTS) & 4–6 LGVS / DAY (8–12 MOVEMENTS); PEAK WORKFORCE AROUND 100 PERSONNEL / DAY.
OPERATION	UP TO 40 YEARS OPERATIONAL LIFE.	MAINLY LGVS OR FOUR-WHEEL DRIVE VEHICLES; OCCASIONAL HGV FOR EQUIPMENT REPLACEMENT.	AROUND 2–3 MAINTENANCE VISITS / MONTH, TYPICALLY 2–4 VEHICLE MOVEMENTS / VISIT; SEVERAL ADDITIONAL VISITS / YEAR FOR PANEL CLEANING AND HABITAT/LANDSCAPE MANAGEMENT.
DECOMMISSIONING	APPROXIMATELY 12 MONTHS DECOMMISSIONING PERIOD.	SIMILAR MIX TO CONSTRUCTION: HGVS FOR REMOVAL OF EQUIPMENT AND MATERIALS; LGVS FOR STAFF AND SMALLER LOADS.	VEHICLE MOVEMENTS ANTICIPATED TO BE SIMILAR IN SCALE TO THOSE DURING THE CONSTRUCTION PHASE, BUT OVER A SHORTER (~12-MONTH) PERIOD.

SUMMARY OF TRANSPORT MOVEMENTS OVER SOLAR FARM LIFETIME



ACCESS OPTIONS FOR PARCELS NORTH OF THE REDHILL TO TONBRIDGE RAILWAY LINE



ACCESS OPTIONS FOR PARCELS SOUTH OF THE REDHILL TO TONBRIDGE RAILWAY LINE