

GUIDE FOR TIER 1 CONTRACTORS

SPECIFYING DRONE WORK YOUR ENGINEERS CAN USE.

How to scope, procure and integrate drone inspections, surveys and progress monitoring on highways and major infrastructure schemes.

10km	16	1,000+
OF HS2 EACH VISIT	STRUCTURES TRACKED	IMAGES A MONTH



01

WHERE DRONES ADD VALUE ON A SCHEME

BEFORE WORKS

Pre-construction condition records, topographic and design surveys, access and logistics planning.

DURING WORKS

Bi-weekly or monthly progress monitoring, volumes and stockpiles, traffic management audits, QA photography.

ASSET INSPECTIONS

Structures, lighting, gantries, signs and barriers captured with no closures, scaffold or MEWPs.

HANDOVER AND COMMS

As-built records, completion films and stakeholder content, often captured on the same visit.

> **Combine visits.** One mobilisation can deliver inspection data, survey outputs and communications footage together, which cuts cost and site interfaces.



02

PROOF: HS2 CALVERT FOR EKFB

10km	16	1,000+	100%
OF HS2 EACH VISIT	STRUCTURES, 3 COMPOUNDS	IMAGES A MONTH	SAFETY RECORD

HDS delivers bi-weekly aerial monitoring of the HS2 Calvert section, launched from a slow-moving vehicle under PDRA-01 with a visual observer, with ADS-B and acoustic awareness for nearby helicopter activity. Edited, annotated progress films are delivered within hours of capture and structured in SharePoint.

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SCOPE TEMPLATE

Agreeing these points at the start avoids the most common problem with drone work: data that looks good but cannot be used.

ITEM	AGREE UP FRONT	✓
Purpose	What decision will the data support? Condition, progress, measurement, comms?	☐
Assets and extents	Asset list or plan with references, site boundaries and exclusion zones.	☐
Outputs	Stills, video, orthomosaic, point cloud, surfaces, defect log, report, film.	☐
Accuracy	Required accuracy and whether ground control or RTK is needed.	☐
Formats	File types for CAD, GIS, BIM or your common data environment.	☐
Frequency	One-off, weekly, bi-weekly or monthly, with repeatable capture positions.	☐
Access and permits	Inductions, permits to work, compound access, possession or closure windows.	☐
Airspace	Restrictions, aerodromes, helicopter activity and permissions needed.	☐
Safety	RAMS, take-off and landing positions, and confirmation that flights avoid live traffic.	☐
Turnaround	Delivery time for each output, and who reviews and signs off.	☐
Data handling	Storage, sharing, retention and GDPR for public-space imagery.	☐



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HOW A DRONE PROGRAMME RUNS

STEP	WHAT HAPPENS
01 Desktop review	Scope, asset list, airspace and permissions reviewed. A fixed price is agreed before anyone mobilises.
02 Flight planning	Site-specific RAMS and a capture plan, aligned with your inductions, permits and protocols.
03 Capture	A two-person team captures the site, usually in one visit, from safe positions off the carriageway.
04 Engineering review	Data is processed, quality-checked and structured for your engineers.
05 Delivery	Deliverables issued with secure cloud access, typically within two weeks.

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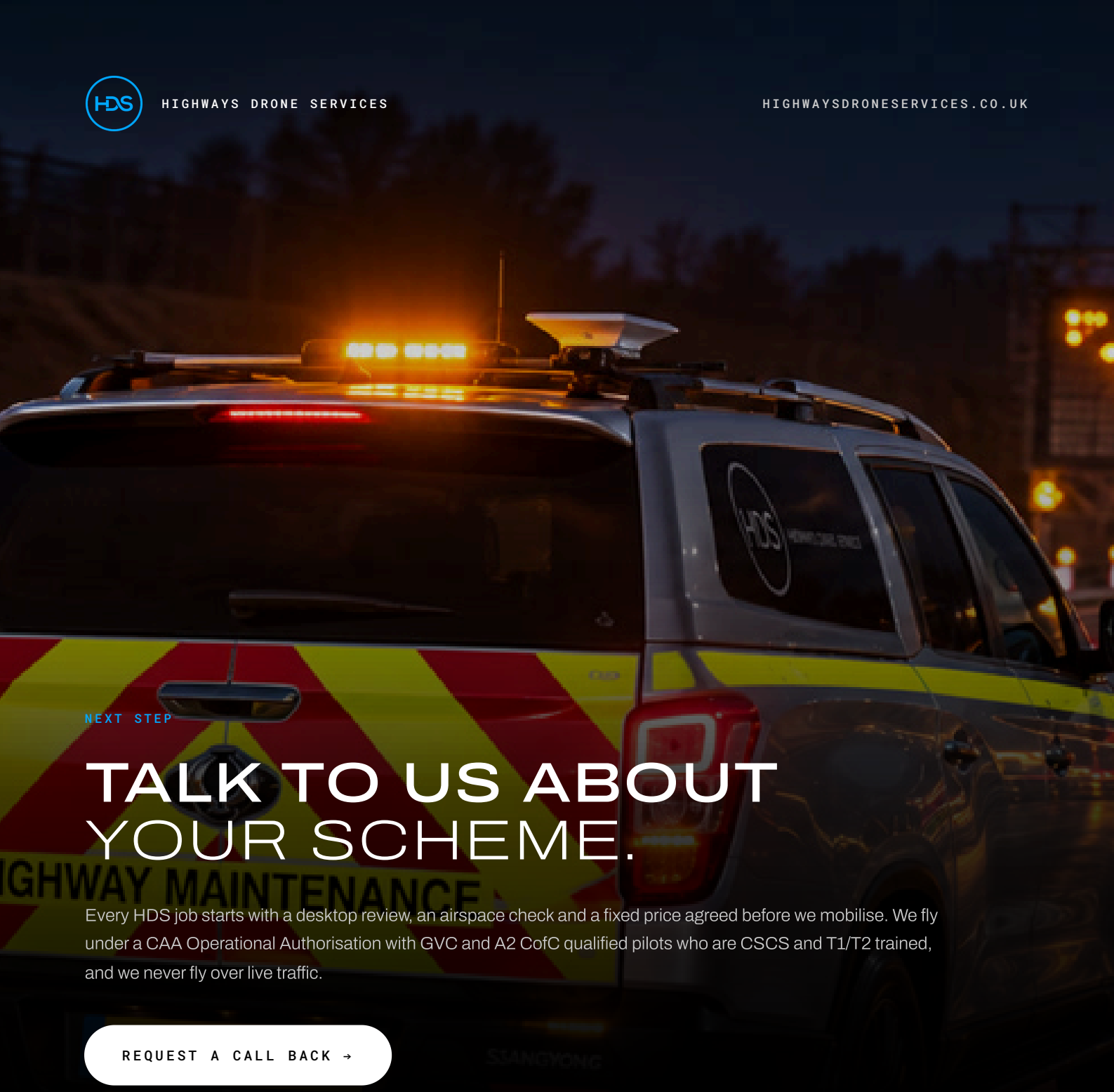
SUPPLIER CHECKLIST

Use these questions when you appoint a drone supplier for a scheme.

QUESTION TO ASK A DRONE SUPPLIER	WHY IT MATTERS	✓
Do you hold a CAA Operational Authorisation for the Specific category?	Most professional infrastructure work near people and roads needs it.	☐
Are your pilots GVC and A2 CofC qualified?	Recognised UK competence for commercial flying.	☐
What public and employers liability do you carry?	Ask for certificates, not just a figure.	☐
Will you provide site-specific RAMS and an airspace assessment?	Generic paperwork is a warning sign.	☐
Do you fly over live traffic?	The answer should be no. Good operators plan positions on verges and compounds.	☐
Are your operatives CSCS and traffic management trained?	They will be on your site and on the highway edge.	☐
What exactly will we receive, and in what formats?	Raw files are not a deliverable. Agree outputs up front.	☐
Can imagery be referenced to our asset list or GIS?	Makes the data usable by your engineers.	☐
How is our data stored, shared and protected?	Public-space imagery has GDPR implications.	☐
Can you show live-network references and case studies?	Highways experience is different from property filming.	☐



NEXT STEP

TALK TO US ABOUT YOUR SCHEME.

Every HDS job starts with a desktop review, an airspace check and a fixed price agreed before we mobilise. We fly under a CAA Operational Authorisation with GVC and A2 CofC qualified pilots who are CSCS and T1/T2 trained, and we never fly over live traffic.

REQUEST A CALL BACK →

CALL BACK	highwaysdroneservices.co.uk/contact
EMAIL	hello@highwaysdroneservices.co.uk
DAY RATES	From £900 for raw capture to £1,800 for fully processed, CAD-ready data
INCLUDED	Two-person team, Chapter 8 vehicle, RAMS, flight planning and insurance
COVER	£10m public and employers liability
COMPANY	Highways Drone Services Ltd · Company number 16621433