

Property Infrastructure Readiness Audit

Demo 02 - Does a property asset have infrastructure-linked value beyond its current asset-class label?

REPORT TYPE	DOMAIN	DEMO ENTITY
Single Question Review	Property	Northgate West, a synthetic industrial site with possible data-centre optionality
STATUS	PREPARED FOR	ADVICE STATUS
Synthetic GBP 800 demonstration report	Public website demo	Not legal, financial, valuation or investment advice

This demo uses synthetic values to show the fixed-scope review style: evidence, limits, risk and next checks.

AUDIT SUMMARY

1. Executive dashboard

Northgate West has credible infrastructure option value, but it is not yet a confirmed data-centre asset. Power and fibre proximity are supportive; grid capacity, planning and cooling feasibility remain the decision gates.

Client decision: separate the current income case from the infrastructure option case. Validate grid, fibre and planning before pricing upside.

73/100 Readiness score Promising but conditional.	Open Grid gate Capacity not verified.	Strong Fibre signal Carrier evidence supportive.	Med Fallback value Industrial use protects downside.
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Section	What it shows
1 Executive dashboard	Headline conclusion, demo scores and practical implication.
2 Question and pipeline	Bounded GBP 800 scope and the repeatable review cycle.
3 Data views	Market, usage, developer, infrastructure and geography evidence.
4 LSS and metrics	How features become local structures and comparable risk signals.
5 Drift and risk	Concordance, divergence, temporal movement and heatmap.
6 Recommendations	Immediate actions, monitoring triggers and next checks.
7 Limits	Assumptions, exclusions and terms.

SCOPE

2. Question and pipeline

Core audit question: Does the property asset have infrastructure-linked value that is not visible from its current asset-class label?

- Synthetic review of one site using property, infrastructure and spatial evidence.
- Focuses on screening, option value, constraints and due diligence sequence.
- Excludes RICS valuation, engineering survey, environmental assessment and legal planning opinion.

Framework cycle

01 Entity	02 Features	03 View vectors	04 LSS	05 Global metrics	06 Temporal	07 Dashboard
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Pipeline stage	What happens	Example output
Preprocess entity	Align site, parcel, region, infrastructure corridor and comparable asset identifiers.	Clean entity profile
Features	Extract income, occupancy, power, fibre, planning, access and geography signals.	Comparable signal set
View vectors	Build property, usage, infrastructure, geography and temporal vectors.	Market / usage / developer / infrastructure / geography views
LSS	Compare the site to local industrial, logistics and data-centre-adjacent peers.	Nearest peers, local density and structural position
Global metrics	Score exposure, concordance, constraint severity and option-value risk.	Concordance, clustering and divergence
Temporal	Track planning status, grid evidence, regional demand and comparable movement.	Drift, persistence and transition signal
Dashboard	Return decision gates, validation sequence and monitoring dashboard.	Risk score, decision gates and next checks

EVIDENCE REGISTER

3. Data views

The audit does not rely on one headline metric. Each view contributes a different test of the claim.

View	Evidence used	Why it matters	Example metrics
Financial value	Income quality, rent trend, vacancy, comparable demand	Tests the current property case.	Income stability, yield proxy, vacancy drift
Usage activity	Occupancy, tenant type, site utilisation, fallback use	Tests resilience of current use.	Occupancy persistence, tenant concentration
Developer/maturity	Planning stage, redevelopment path, design maturity	Tests whether the option is actionable.	Planning gate, maturity score
Infrastructure	Grid proximity, power capacity proxy, fibre, cooling, access	Tests compute and digital infrastructure feasibility.	Grid confidence, fibre redundancy
Geography	Corridor location, land use, heat/light proxies, regional demand	Tests spatial concentration and external demand.	Regional exposure, comparable drift

Quality controls

Control	Demo check	Purpose
Identifier alignment	Entities, sites, providers and regions matched across views.	Prevents false divergence.
Fixed windowing	Time windows are set before comparison.	Prevents cherry-picking.
Missingness labels	Unknown/private data is marked as caveat.	Prevents false certainty.
Source hierarchy	Direct, proxy and inferred evidence separated.	Keeps weak evidence from becoming the headline.

STRUCTURE

4. LSS and metric layer

Features are turned into view vectors. View vectors form a local state space around the entity. The review then asks whether the entity sits where the public narrative says it should sit.

Metric group	Example metrics	What it answers
Representation	PCA, UMAP, explained variance, trustworthiness	Can the evidence views be compared without losing structure?
Local state space	kNN graph, local density, nearest neighbours, centroid distance	Which assets, sites or systems are structurally close?
Taxonomy	Hierarchical clustering, spectral clustering, silhouette	Does the observed grouping match the stated label?
Concordance	ARI, NMI, Jaccard overlap, Cramer's V	Do views agree or contradict each other?
Anomaly	LOF, robust z-score, view-disagreement entropy	Where is the entity unusual or unstable?

Domain interpretation

Finding	Interpretation	Decision value
Label understatement	Industrial label misses power/fibre optionality.	Screen as infrastructure-adjacent.
Gating constraint	Planning and grid evidence decide whether option value is real.	Do not overprice narrative.
Downside support	Fallback industrial/logistics use limits binary risk.	Preserve optionality.

RISK TRANSLATION

5. Concordance, drift and risk

Concordance shows whether views agree. Drift shows whether structure is changing. Risk turns both into decision priorities.

Comparison	Relationship	Interpretation	Status
Asset class vs infrastructure	Partial divergence	Industrial label understates digital infrastructure relevance.	Watch
Power vs fibre	Agreement	Both support optionality, subject to capacity proof.	Stable
Occupancy vs option value	Divergence	Current use does not prove future compute use.	Flag
Planning vs opportunity	Constraint	Planning can override the opportunity.	Flag

Risk	Severity	Likelihood	Why it matters	Control
Grid capacity	High	Medium	Power proximity may not equal available capacity.	Technical validation
Planning	High	Medium	Permission can block redevelopment.	Planning pre-review
Cooling/design	Medium	Medium	Operational feasibility can weaken.	Engineering review
Narrative overreach	Medium	High	Infrastructure story may be over-priced.	Separate cases

NEXT CHECKS

6. Recommendations and monitoring

Priority	Action	Reason	Cadence
Immediate	Split underwriting into income and option cases.	Avoids narrative confusion.	Now
Immediate	Validate grid and fibre capacity.	Core assumption in option value.	30 days
30 days	Run planning constraint review.	Planning is the gating risk.	Milestone
Quarterly	Monitor regional data-centre demand.	External demand changes readiness.	Quarterly

Indicator	Cadence	Escalation trigger	Meaning
Grid evidence	Milestone	Confirmed or rejected	Validates thesis
Fibre provider evidence	Milestone	Redundancy confirmed	Supports digital use
Occupancy	Quarterly	Vacancy rises	Income risk
Planning status	Event-driven	Constraint identified	Actionability

7. Limitations and terms

- All entities, scores and values are synthetic demo examples.
- A real paid review requires client context, source validation and agreed scope.
- This is not legal, financial, investment, valuation, tax, security, engineering or regulatory advice.
- The GBP 800 style is one bounded question, one report and one clarification round unless agreed otherwise.

Commercial value: the client is paying for a traceable evidence trail, not a generic opinion.

Glossary: View = evidence layer. LSS = local state space. Concordance = agreement between evidence views. Drift = movement in structure, behaviour or risk over time.