

PI SKETCH

One Sketch. All Devices.

A New Approach to Property Sketching

Bervane Engineering

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Planned Initial Release: **Q1 2027**

Executive Summary

Property sketching has been part of assessment, appraisal, field inspection and building-data workflows for decades. Yet many sketching systems still reflect an earlier generation of computing: they are tied to particular devices, require rigid drawing sequences, or make relatively simple field corrections more complicated than they need to be.

Pi Sketch was created around a different idea: the software should adapt to the person doing the work.

Its core philosophy can be expressed in three principles:

One Sketch. All Devices.

Easy Edit in Place.

Draw Any Way You Want.

Pi Sketch combines many years of practical experience in property sketching and large-scale property-data operations with a new generation of web-based software development.

The underlying sketching concepts did not begin with artificial intelligence. They evolved from earlier software created through real-world experience with property sketches and production workflows. Modern AI-assisted development, including **OpenAI Codex**, has helped transform those ideas into a contemporary product designed for today's desktop, tablet and mobile environments.

The result is Pi Sketch: a new property-sketching platform designed around flexibility, continuity and simplicity.

1. The Experience Behind Pi Sketch

Pi Sketch did not begin as an attempt to enter an unfamiliar software market.

Its roots go back many years.

The people behind Pi Sketch have extensive experience developing property-sketching technology and working with large volumes of real property data. That experience includes digitization of paper sketches, verification of existing sketches against imagery, correction workflows and the practical problems encountered when sketches are created and maintained at scale.

Working with millions of property records provides a different perspective on sketching software.

Small inefficiencies become significant when repeated hundreds of thousands of times.

A workflow that requires unnecessary tool changes, forces a particular drawing sequence or makes corrections difficult can substantially affect production.

Pi Sketch therefore started with a simple question:

If we were designing property sketching again today, knowing what we have learned from years of real production, how should it work?

2. Sketching Should Follow the User

Traditional CAD thinking often assumes that geometry should be created according to a particular sequence.

Property sketching in the real world is different.

An inspector may begin with one side of a building, move to another section, return to an earlier location, discover an extension, correct a dimension or complete an area later.

The software should accommodate that reality.

Pi Sketch is therefore designed around **drawing freedom**.

Draw Any Way You Want

Start at one location.

Stop when necessary.

Begin somewhere else.

Return later.

Complete the geometry first and define areas when appropriate.

The objective is to allow the person creating the sketch to think about the **building**, rather than continually thinking about the rules of the drawing software.

3. One Sketch. All Devices.

Modern property work no longer happens on a single type of computer.

A sketch may be reviewed in an office on a large monitor, changed on a tablet in the field and referenced from a phone while standing beside a building.

Pi Sketch is being developed around this reality.

The sketch should belong to the project—not to the device on which it was created.

The goal is a consistent sketching experience across:

Desktop → Tablet → Mobile

Rather than developing disconnected versions of the same workflow, Pi Sketch is being

designed so that the same fundamental sketch can move naturally through different working environments.

This also creates opportunities for future workflows in which office and field activities become much more closely connected.

4. Easy Edit in Place

Buildings change.

Measurements change.

Mistakes happen.

Existing records need correction.

Editing therefore cannot be treated as a secondary feature of professional property-sketching software.

Pi Sketch places significant emphasis on **direct editing of the existing drawing**.

The user should be able to identify what needs changing, make the correction where it exists and continue working.

The principle is straightforward:

Select it. Change it. Continue.

Reducing unnecessary reconstruction is particularly important when working with existing property databases where the objective is often to correct or update a sketch rather than create everything again.

5. Designed for Real Property Work

Pi Sketch is not intended to become a general-purpose CAD system.

Its focus is much narrower.

It is being designed specifically around property and building sketching.

That distinction matters.

General CAD software must accommodate an enormous range of engineering and design activities. Property sketching has a much more focused objective: representing building geometry clearly, efficiently and accurately while supporting the measurements, areas and modifications required by property workflows.

Keeping that focus allows Pi Sketch to concentrate on the actions users perform repeatedly rather than surrounding them with functionality they rarely need.

6. From Established Software to a Modern Platform

Pi Sketch represents both continuity and change.

Many of its ideas originate from earlier generations of property-sketching software and

workflows developed through years of practical experience.

Those concepts provided an important foundation.

But computing has changed dramatically.

Browsers have become application platforms. Mobile devices have become powerful field computers. Touch interfaces have matured. Modern software can operate across device categories that once required entirely separate applications.

Most recently, AI-assisted software engineering has introduced another major change.

Instead of discarding years of accumulated knowledge and beginning again, the Pi Sketch project has used modern development tools to **bring proven ideas forward into a new environment**.

7. AI-Assisted Development

Artificial intelligence has played an important role in the development of Pi Sketch, but it is important to describe that role accurately.

Pi Sketch is not simply an application generated by asking AI to create a sketching program.

The product combines established domain knowledge, existing software concepts, human design decisions, extensive testing and AI-assisted engineering.

OpenAI Codex has been used as a development partner in the modernization process—helping analyze software, implement carefully defined changes, test behavior and accelerate development.

Human experience defines what the product needs to do.

AI helps accelerate the process of turning those requirements into modern software.

That combination represents an important part of Bervane Engineering's approach to AI: **use AI to extend experience, not replace it.**

8. Bringing Measurement Into the Sketch

A major objective for the initial Pi Sketch generation is to reduce the separation between **measuring a building and drawing it**.

Modern mobile devices provide capabilities that were unavailable when earlier property-sketching systems were designed.

Pi Sketch intends to take advantage of those capabilities through **AR-assisted measurement**.

The intended interaction is deliberately simple:

Point to one corner.

Point to another.

Capture the wall measurement.

Rather than attempting to make field work more complicated through technology, the objective is to make measurement a natural extension of the sketching process.

AR functionality is being developed and evaluated for inclusion in the first commercial release.

9. A Foundation for Future Field Sketching

AR measurement is only one part of the longer-term direction.

Property professionals have worked successfully with paper sketches for generations because paper provides something software sometimes removes: **freedom**.

You can begin anywhere.

You can make a note anywhere.

You can return to an unfinished portion.

You can draw according to what you see rather than according to what the software expects next.

Pi Sketch aims to bring more of that natural freedom into digital property sketching.

Future development will continue exploring ways to make electronic sketching feel less like operating software and more like simply **recording the building in front of you**.

10. Built for Evolution

Pi Sketch is deliberately being developed as a platform that can continue evolving.

The first public version is not intended to represent the end of development.

Before commercial release, Bervane Engineering is concentrating on areas including **stability, extensive testing, offline working capabilities, licensing, device compatibility, security, commercial deployment and AR-assisted measurement**.

These are important because professional software must do more than demonstrate innovative features.

It must be dependable when somebody needs to use it for real work.

For this reason, the current target for the first commercial release is **Q1 2027**, subject to successful completion of development and testing.

11. The Pi Sketch Philosophy

Technology changes quickly.

The fundamental requirement does not.

A property professional needs to represent a building accurately and efficiently.

Pi Sketch therefore follows several simple principles:

One Sketch. All Devices.

The drawing should move with the user.

Easy Edit in Place.

Correct what needs correcting without unnecessary reconstruction.

Draw Any Way You Want.

The software should accommodate the building and the user's workflow rather than forcing a rigid sequence.

Measure Where You Work.

Modern mobile technology should help connect real-world measurements directly with the sketch.

Together, these ideas define what Pi Sketch is intended to become.

12. Experience + AI + Engineering

The development of Pi Sketch also represents something broader for Bervane Engineering.

Artificial intelligence makes it possible to revisit valuable engineering ideas that might otherwise remain locked inside older technologies.

But AI alone does not provide decades of domain knowledge.

It does not automatically know which workflow matters, which inconvenience becomes costly at production scale or which apparently small feature makes a substantial difference to someone working in the field.

That knowledge comes from experience.

Pi Sketch brings the two together:

Years of real-world sketching experience.

Modern AI-assisted engineering.

A product designed for the next generation of property work.

Conclusion

Pi Sketch began with experience accumulated long before today's generation of artificial intelligence.

AI has now provided powerful new tools for transforming that experience into something new.

The objective is not to create the most complicated sketching system.

It is the opposite.

Make property sketching simpler.

Let people draw naturally.

Let them correct their work easily.

Let the same sketch follow them across devices.

And increasingly, let the technology around them help capture the real building itself.

That is the direction behind Pi Sketch.

Pi Sketch

One Sketch. All Devices.

Sketch the building your way.

A Bervane Engineering product