neural earth

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Parcel Selection for Infrastructure Development

Hillsborough County, Florida

Environmental constraints layered, multi-variable filters applied, development-ready parcels surfaced. Minutes, not days.

KEY CHALLENGES

What Site Selectors Face Today

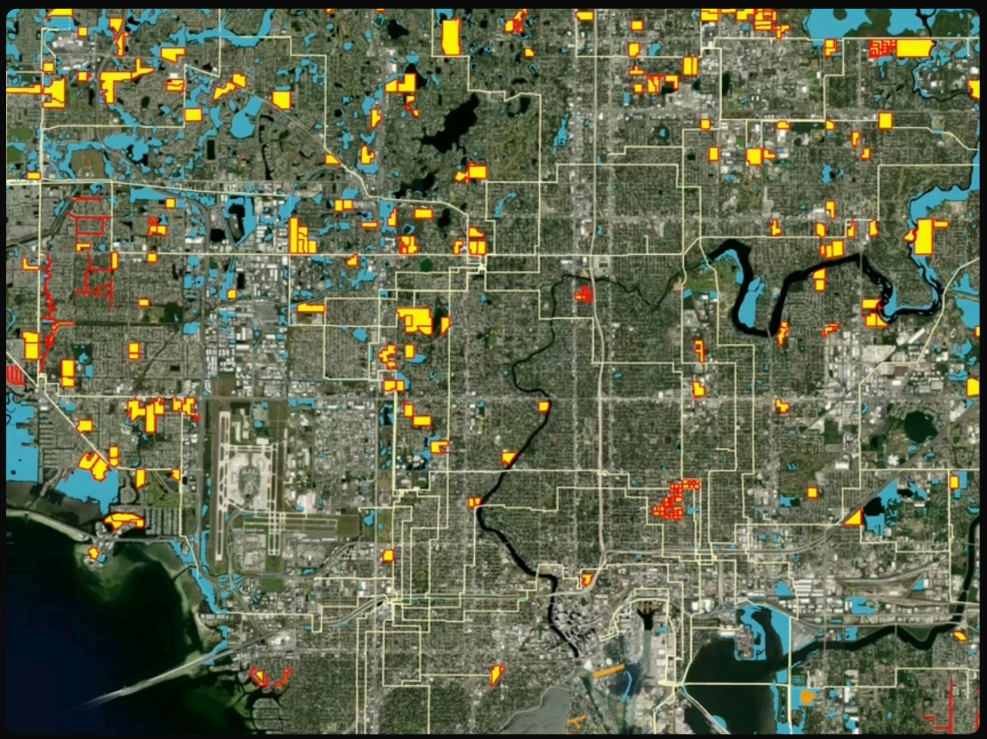
- County parcel databases contain thousands of properties, but identifying which meet environmental, size, and infrastructure criteria requires manually cross-referencing disconnected GIS datasets.
- Wetland boundaries, transmission line easements, and highway proximity are stored in separate systems, making multi-variable spatial filtering slow and error-prone.
- Environmental constraints or inadequate power access are often discovered late in due diligence, wasting weeks of analysis on ineligible sites.

The Complexity Of Site Selection, Solved

Infrastructure site selection is inherently complex: qualifying a parcel requires reconciling environmental constraints, size requirements, and infrastructure access across data that rarely lives in one place.

Traditional workflows mean manually cross-referencing wetland maps, parcel databases, and utility layers in separate tools, one variable at a time.

Neural Earth layers all constraints simultaneously, applies multi-variable spatial filters, and surfaces only the sites that clear every criterion, compressing days of GIS work into minutes.



How It Works.

4-STEP WORKFLOW

1. **Layer: Map Environmental & Infrastructure Context**

   Wetland boundaries and transmission infrastructure loaded county-wide before filtering begins.

2. **Screen: Eliminate by Size and Setback**

   Sites failing minimum acreage or wetland setback requirements are automatically removed.

3. **Filter: Confirm Infrastructure Access**

   Sequential filters narrow candidates to sites with highway access and transmission line proximity.

4. **Surface: Map Qualifying Parcels**

   Only sites clearing every constraint appear on the map, no manual filtering required.

KEY OUTCOMES

Instant Constraint Context.

All relevant environmental and infrastructure constraints surfaced simultaneously, giving analysts full context before any filtering begins.

Automated Multi-Variable Filtering.

Any combination of size, setback, proximity, and access criteria applied in sequence without manual GIS work.

Clear Candidate Shortlist.

Only parcels clearing every constraint shown on the map, compressing weeks of site selection into minutes.

►► Neural Earth layers environmental data, applies multi-variable spatial filters, and surfaces development-ready parcels without manual GIS work. ◄◄

In minutes, not days.

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