High-Rise Building — What WaiMAP Does at Every Stage

From empty site to operation · the modules behind each step

What WaiMAP does
#01 · Construction

1 Site Screening

- Earthquake, flood, slope, land use
- Grid, roads and services nearby
- Satellite history and data trust level

▶ **Project Brain · Data Trust**

2 Ground & Hazards

- Rock head, groundwater, boreholes
- Piles, pad footings, settlement
- Seismic, flood and climate loads

▶ **Ground model · Hazards**

3 Survey & Base Map

- Neighbours with heights, sun and shadows
- Field GPS, drone orthophoto, LiDAR
- DXF / DWG / IFC in and out

▶ **Base map · Point cloud · CAD/BIM**

4 Earthworks & Drainage

- Excavation pit, dewatering
- Mass haul: borrow, spoil, fleet, CO_2
- Catchments, peak flows, culverts

▶ **Terrain Studio · Mass haul · Drainage**

5 Structural Checks

- Wind, snow and seismic loads
- Beams, columns, bolted joints
- Retaining walls and slopes

▶ **Engineering calculators**

6 Concrete & Materials

- Mix, quantities, formwork
- Maturity and pour planning
- Rebar laps and steel weights

▶ **Concrete & materials**

7 Services

- Fire-water mains, hydrants, pumps
- Power supply, short circuit, cables
- Storm sewers

▶ **Water & fire · Electrical**

8 Cost, Schedule & Cash

- BoQ, CPM schedule, crews
- Earned value, cash flow, payments
- Technical due diligence

▶ **BoQ · Schedule · EVM · TDD**

9 Lifting & Site Safety

- Crane capacity and lifting checks
- Construction noise at neighbours
- Drone progress by floor

▶ **Lifting · Noise · Orthophotos**

10 3D & Hand-over

- Project 3D with sections
- IFC exchange with the design team
- As-built records

▶ **Project 3D · CAD/BIM**

Questions WaiMAP answers on the map

1. How deep is the rock — piles or raft?
2. How much shadow on the neighbours?
3. Which wind and seismic loads govern?
4. How many m³ of concrete, how many t of rebar?
5. Is the crane right for the heaviest lift?
6. Are we on schedule and on cash?

Honest limits & coming

- Engineering checks support, not replace, the structural designer
- Coming: building energy model
- Screening level on open data and your inputs