Idle City Builder

Modern Era Building Steps

Phase (Preparation and Leveling)



Machines required:

Bulldozer – For house and road (clears land of trees, debris and uneven texture).

Grader – For **house** and **road** (Clears left over **pieces** and levels land, readying it for construction)

Dumper – For house and road (brings 2 materials: Bricks and Gravel)

Steps:

- → Clear land with bulldozer (Animation required) (see image A)
- → Collect debris pieces and even out land with grader (Animation required) (see image B)
- \rightarrow Assign area to **building** and **road** with plain land (image C)
- → 1 Dumper dumps gravel on road area (see image D) (Animation)
- → 1 Dumper dumps bricks near building area (see image D) (Animation)
- → Workers place bricks and finish wall structure (Animation)

Note:

Machine movement path will be as X to Y as labelled in mock up. X is starting while Y is finishing one loop

These animations will be played simultaneously.

Materials Laid down for usage

Phase (Building and Paving)

Machines required:

Crane – For house (Takes steel rods and places on roof of wall)

Paver - For road (Smoothen out road and apply asphalt)

Concrete Mixer – For house (mixes and applies concrete to walls and roof)

Concrete pump machine – For house roof and walls (A **pipe machine** that applies **concrete** to **roof**)

Dumper (optional) – For house (brings in the material steel rods)

Steps:

- → Dumper comes in with steel rods (optional to show this. Can just spawn rods after wall is done?) (Animation) (see image A)
- → Start crane to transfer steel rods on the roof of the walls (Animation) (See image A)
- → Road paver starts it's route to smoothen out the road gravel / asphalt (Animation) (See image A)
- → When steel rods done, concrete mixer applies concrete on roof and walls with a concrete pump machine (show mixer spinning animation) (See image B)





Phase (Finalize the area)

Machines required:

Plaster spraying machine – for house (applies final plaster and finishes building)

Road roller - For road (comes in after paver and finalizes the road)

Paint rollers – For house (workers will completely paint the building

Glass handler – Installs glass (optional) (can just show glass without animation)

Steps:

- → Workers spray the walls with plaster (Animation)
- → Road roller finishes the road and leaves a finished road look (one loop to smoothen out asphalt) (comes after paver) (See image A)
- → Workers paint the house (Animation) (See image A)
- → Glass container installs glass in the building (Animation) (this step can be optional)
- → Finish area



Steps for flyover

Machines required:

Hydraulic rig - for digging steel cages (comes and makes pile for steel cages to be installed)

Crane - lowers steel cages in the pile

Tremie pipe and hopper - for filling the steel cage with concrete

Concrete mixer

Excavator - breaks pile and ready's it for pier construction

Dumper - brings in material concrete girder

Steps:

- → Hydraulic rig comes in and makes a hole or pile in the ground.
- → Empty piles will be installed with steel cages lowered with a crane
- → Optional animation (Tremie pipe and hopper installed in the pile) (this is how the concrete falls in place)
- → Concrete mixer pours concrete in the piles
- → Excavator comes in and destroys the pile cap (leaves only the hardened concrete behind)
- \rightarrow Apply steel cage on pile cap
- \rightarrow Make piers with concrete
- → Dumper comes in with concrete girders
- → Crane lowers the girders on top of piers
- → Animation for steel cage for road structure on bridge
- \rightarrow Finish flyover with concrete sheet and road and rail



concrete and steel cage

Top part steel is placed with crane and then



Excavator destroys pile cap and pier skeleton is created



Finished



Excavator



Dumper with concrete beams



Flyove

Piers

concrete is added for final look

Crane

Tremie pipe filling

STEEL CAGE

Concrete mixer TREMIE PIPE