Creating a Professional Network Logic Diagram

A Network Logic Diagram, also known as a Precedence Diagram, is a visual representation of the sequence and interdependencies of construction activities. It is a foundational tool in Critical Path Method (CPM) scheduling and shows how all activities in your project are connected. It's the backbone of your schedule. Your diagram should be neat, legible, and reflect industry standards.

Why Use a Network Logic Diagram?

- Helps visualize the critical path—the longest path through the project, determining the shortest possible duration.
- Clarifies activity relationships, ensuring that tasks are sequenced correctly.
- Serves as a quality check for your Work Breakdown Structure (WBS) and schedule logic.

Industry Best Practices & Requirements

1. 🧭 Layout & Flow
   a. Draw left to right (not top to bottom).
   b. Use horizontal lines for relationships.
   c. Avoid crossing lines whenever possible.
2. 📁 Organize by WBS Level
   a. Group activities by WBS phase or section (e.g., Sitework, Structure, Interiors).
   b. Put one group per page for clarity—even if multiple groups could fit.
   c. Title each page clearly (e.g., 'WBS 1.4 – Sitework Logic').
3. 🧾 Node Format (each activity box should include):
   a. Activity ID
   b. Activity Name
   c. Original Duration

      d. (Optional: Early/Late Start/Finish, Float if helpful)

4. 🔄 Relationships

    a. Show logical links using arrows:

        i.   FS = Finish-to-Start

        ii.   SS = Start-to-Start

        iii. FF = Finish-to-Finish

        iv. (Avoid SF unless you really understand it)

        v.   **Every activity (except the first and last) should have at least one predecessor and one successor.

5. 🖨️ Print-Ready and Legibility

    a. Use software like Excel, PowerPoint, Lucidchart, or draw by hand neatly.

    b. Use page breaks: Don't shrink your work just to squeeze it onto fewer pages.

    c. Make sure text is legible at 100% zoom, no elements are cut off, and fonts are consistent.

    d. Scan hand-drawn diagrams using a scanner or phone scanning app (not just a photo).

6. 💡 Pro Tips

    a. 🟨 Start with sticky notes or index cards to build your diagram before drawing it digitally.

    b. 🎨 Use colors or symbols (sparingly) to highlight critical path or key phases.

    c. 📌 Your Network Logic Diagram is more than a drawing—it's a communication tool. Use it to align expectations between the scheduler, project manager, field teams, and stakeholders.

    d. ✅ Ask yourself: 'If someone else looked at this diagram, could they understand how this job is built—just from this?'