



Assignment 01: Site Analysis and East River Precedent

Understanding the site is the foundation of any meaningful design project. This assignment introduces students to the Long Island City waterfront and establishes a shared analytical base that will inform all work throughout the semester. Students will analyze the physical, cultural, and urban conditions of a forty-three-acre site along the East River, while situating it within a broader lineage of East River waterfront development.

Students will work in pairs throughout the semester. For this assignment, each pair will be assigned to one of seven analytical groups. Together, the class will build a collective understanding of the site through focused, in-depth research rather than repetitive documentation. This mirrors professional urban design practice and allows for deeper, more intentional readings of the site.

In addition to site analysis, each pair will complete a precedent study of one East River waterfront project discussed in lecture. The precedent study is intended to inform design thinking, not simply document precedent conditions. Students should identify how landscape, housing, public space, and urban life are composed and expressed.

This assignment emphasizes analysis as an interpretive and design-driven act. Mapping, diagrams, and drawings should reveal opportunities, tensions, and latent spatial ideas that may inform future design work.

Group Structure and Topics

Each student pair will be assigned to one of the following seven groups. Each group is responsible for conducting deep analysis within its topic and sharing findings with the class.

Group 1: Ground, Topography, and the Waterline

This group examines the physical conditions that shape how the site meets the river. Focus areas include topography and elevation changes, shoreline condition and edge typologies, flood zones and tidal influence, sectional relationships between land and water, and ground material conditions. The work of this group establishes the physical limits and opportunities that will shape form throughout the studio.

Possible outputs might include:

- Sectional cuts from city to river
- Diagrams showing elevation change and flood zones
- Studies of edge typologies along the shoreline
- Ground material and surface condition maps

Focus on how ground shapes form and experience.

Group 2: Surrounding Urban Fabric and Density

This group studies the urban context around the site to understand what the site is being set up to become. Focus areas include adjacent building typologies, height and massing patterns, residential density in surrounding Long Island City, podium and tower relationships, and ground-floor conditions in nearby developments. This group addresses housing and urban form through context rather than existing site conditions.

Possible outputs might include:

- Massing and height comparisons in surrounding blocks
- Diagrams of tower, podium, and ground-floor relationships
- Figure-ground studies of density
- Sectional relationships between buildings and open space

Focus on how housing form influences public life.

Group 3: Access, Movement, and Connectivity

This group analyzes how people reach, move through, and experience the site. Focus areas include pedestrian and bicycle circulation, transit and ferry connections, vehicular access and service routes, physical barriers such as bridges and infrastructure, and opportunities for continuous waterfront access. Movement should be understood as spatial and experiential, not simply circulatory.

Possible outputs might include:

- Pedestrian and bicycle desire-line diagrams
- Threshold and barrier maps
- Movement sequences from street to waterfront
- Transit catchment or walking-distance diagrams

Focus on movement as lived experience.

Group 4: Culture, Community, and Everyday Life

This group examines the cultural and social context surrounding the site. Focus areas include adjacent neighborhoods and demographics, cultural institutions and public life, historic identity and working waterfront legacy, patterns of daily and seasonal activity, and existing relationships to the river. This analysis grounds the studio in lived experience and prevents generic design responses.

Possible outputs might include:

- Time-based diagrams of activity patterns
- Mapping of cultural institutions and informal uses
- Photo essays of daily life along the waterfront
- Narrative diagrams showing how people occupy space

Focus on people, not statistics.

Group 5: Policy, Rezoning, and Development Pressure

This group studies the forces driving change at the site. Focus areas include the rezoning framework, anticipated housing numbers, affordable housing requirements and set-asides, public realm obligations, and political and economic drivers of transformation. The goal is to understand how policy shapes opportunity without turning the studio into a policy exercise.

Possible outputs might include:

- Diagrams translating zoning into massing envelopes
- Maps showing areas of change versus stability
- Comparative density diagrams
- Visualizations of housing targets or set-asides

Focus on implications, not regulations.

Group 6: Working Edge and Civic Infrastructure

This group investigates the systems that allow the waterfront to function as an urban edge. The focus is not on hidden utilities, but on the visible, spatial, and operational infrastructure that shapes access, form, and experience along the East River. Focus areas include maritime infrastructure and water access such as bulkheads, seawalls, piers, slips, docking zones, water depth near shore, ferry access, and navigational constraints. Students should also examine bridges and heavy infrastructure, including the Queensboro Bridge and its approaches, under-bridge conditions, ramps, viaducts, and infrastructural thresholds. Generic mapping of subsurface utilities should be avoided unless it directly influences form, access, or experience. This analysis should directly inform future design decisions related to sectional relationships, waterfront access, docks and ferries, and the integration of infrastructure into public space.

Possible outputs might include:

- Sectional diagrams showing bulkheads, piers, and water depth
- Maps of maritime access and ferry potential
- Diagrams of bridge impact and under-bridge spaces
- Operational diagrams showing service and access zones

Focus on systems that shape space and possibility.

Group 7: Base Model Coordinators (CAD and Rhino)

This group is responsible for creating the shared base drawings and models that will be used throughout the semester. Responsibilities include assembling a clean AutoCAD base with site boundaries, parcels, streets, curb lines, surrounding building footprints, shoreline geometry, and topography where available. This group will also build a shared Rhino model including terrain, water plane, shoreline, major surrounding buildings, bridges, infrastructure, and simplified context massing. These shared files will be used by all students for diagrams, analysis, and future design work. This group plays a critical leadership role within the studio.

East River Precedent Study

In addition to site analysis, each pair will complete a precedent study of one East River waterfront project discussed in lecture. Precedents may include Brooklyn Bridge Park, Domino Park, The Edge at North 5th Street Pier and Park, Greenpoint Landing, Hunters Point South, Gantry Plaza State Park, and the Roosevelt Island Waterfront.

The precedent study should identify design intentions, spatial strategies, and lessons relevant to housing, landscape, and urban life. Descriptive summaries alone are not sufficient.

Possible outputs might include:

- Clean CAD base with consistent layers
- Rhino site model with readable massing
- Section-ready terrain model
- Clear documentation of model assumptions

Focus on accuracy, clarity, and usefulness.

Deliverables

- Create a digital slide presentation on your topic including sources.
- Drawings, diagrams, maps, photographs, etc. to provide a thorough analysis of your topic.
- One 10 minute visual presentation.
- Print out of Precedent Study Slides 11x17 - This will be presented separately from the site analysis.

Deadline: Tuesday, February 3, 2025

Each group will present their research to the class using slides, maps, visual diagrams, etc. Each presentation should be 10-15 minutes long, followed by a class discussion where students synthesize key takeaways and identify major site constraints and opportunities.

Resources

- [NYC OpenData](#)
- [NYC Department of City Planning](#)
- NYC 3D Model by Community District
- Open Street Maps
- CAD Mapper
- ArcGIS NYC
- Google Earth Pro

Evaluation Criteria

- Clarity of analysis and communication
- Depth of research and critical insight
- Relevance to site and studio themes
- Quality and intention of visual representation
- Strength of precedent interpretation
- Collaboration and engagement