

Multi Family New Construction Process

1. Pre-Construction Phase

1.1 Project Kickoff

- **Client Engagement:** Meet with the client/developer to understand the project scope, budget, timelines, and expectations.
- **High Level Budget:** Develop a high-level budget using unit pricing and include other factors that may be unique to the project
- **Preconstruction Contract:** Negotiate the pre-construction contract, including tasks specific to the general contractor and associated budgets
- **Design Review:** Work with architects, engineers, and other design professionals to review the blueprints, engineering reports, and specifications.
- **Permits and Approvals:** Apply for and secure all necessary building permits, zoning approvals, and environmental clearances. Ensure compliance with local building codes and regulations.
- **Subcontractor Selection:** Identify and prequalify subcontractors, suppliers, and vendors. Obtain competitive bids, and finalize subcontractor agreements.

1.2 Site Analysis

- **Site Survey:** Conduct a thorough site survey to confirm property boundaries, existing utilities, and any obstacles.
- **Geotechnical Testing:** Perform soil testing and environmental studies as needed to assess the site's suitability for construction.
- **Site Preparation Plan:** Develop a site preparation plan, which may include clearing, grading, and installing temporary facilities like trailers, fences, and utilities.

1.3 Scheduling

- **Master Schedule:** Develop a detailed project timeline using tools like Gantt charts or project management software. Coordinate schedules with the project team, subcontractors, and suppliers.
- **Critical Path Method (CPM):** Identify critical milestones that could impact the project's completion date and establish contingency plans.

1.4 Budgeting

- **Cost Estimating:** Finalize the project budget, breaking down costs for materials, labor, permits, fees, and overhead.
- **Value Engineering:** Propose alternative materials or methods to reduce costs without compromising quality.
- **Cash Flow Projections:** Prepare a cash flow analysis to ensure the project remains financially viable throughout its lifecycle.

1.5 Entitlements Support

One of the key ways Earthtone can add value early in the process is by supporting the developer in obtaining the necessary entitlements for your project. Entitlements are legal approvals from the local government that allow the project to proceed in compliance with zoning laws, land use regulations, and other ordinances.

1.5.1 Consultation on Entitlement Requirements

- **Zoning and Land Use Research:** Earthtone can assist the developer by conducting preliminary research on zoning laws, land use restrictions, and required permits specific to the project site.
- **Advising on Feasibility:** Earthtone provides insight on how local regulations (such as density limits, height restrictions, parking requirements, etc.) may impact the design and construction approach. This can help the developer determine the feasibility of the project early on.

1.5.2 Coordination with Authorities

- **Pre-Application Meetings:** Earthtone can participate in meetings with local planning departments, building officials, and other authorities alongside the developer to ensure the project aligns with city and county regulations.
- **Permit Application Support:** Provide assistance in preparing documents and supporting materials required for submitting entitlement applications, including site plans, construction phasing plans, and environmental impact assessments.

- **Managing Public Hearings and Community Engagement:** If the project requires public hearings or community outreach (especially for rezoning or variances), Earthtone can support the developer by attending public meetings, presenting technical aspects of the project, and addressing construction-related concerns from community members.

1.5.3 Value Engineering During Entitlement Phase

- **Cost and Schedule Analysis:** While the developer is working through the entitlement process, Earthtone can provide preliminary cost estimates and timeline projections based on the project's design and the known entitlement requirements. This helps the developer make informed decisions about adjustments to the project scope to ensure that construction remains within budget and on schedule.
- **Alternative Solutions for Compliance:** If the initial project plan faces challenges in securing entitlements, Earthtone can propose construction modifications or alternative design options that comply with local requirements, such as adjusting the building footprint or height.

1.5.4 Environmental and Infrastructure Considerations

- **Site Investigations:** Earthtone can perform site assessments to identify potential environmental issues, such as wetlands or contaminated soil, that could impact entitlements. This ensures that necessary mitigation plans are in place and incorporated into the project schedule and budget.
- **Infrastructure Impact Studies:** Earthtone can coordinate studies on the impact the project will have on local infrastructure (roads, utilities, etc.), which are often required for entitlement approvals.

1.5.5 Expediting the Process

- **Relationships with Authorities:** Leveraging established relationships with local authorities and permitting agencies, Earthtone can help expedite the entitlement process, facilitating quicker approvals.
- **Managing Revisions:** Should the entitlement process require design changes, the Earthtone can collaborate with architects and engineers to make the necessary adjustments without significantly impacting the overall project timeline or budget.

1.6 Constriction Contract and Buy out:

Timing is critical, for in inflationary times it's imperative to get commitments as soon as possible. Not only the prime contract between the owner and GC, but as many of the subcontracts and materials should be committed to avoid costly delays and/or price escalation

- 1.6.1 Prime Contract:** Negotiate and finalize the construction contract, which includes payment schedules, milestones and deliverables.
- 1.6.2 Subcontracts:** Where possible subcontracts should be executed and commitments to schedule agreed upon. Subcontractors should also start producing shop drawings
- 1.6.3 Material vendors:** where materials have been selected purchase orders need to be written and shop drawings and submittal s need to be in the works.

It's not uncommon for the design team and owner to be still selecting materials after the prime contract is written. In this case, the material will be labeled as an "Allowance" until such time as the selection is finalized. Once that is done, there may be an adjust to the contract sum should the finalized material be more or less than the allowance.

2. Construction Phase

2.1 Mobilization

- **Site Setup:** Set up the construction site, including site access, temporary fencing, office trailers, security systems, and utilities.
- **Materials Delivery:** Coordinate the timely delivery of materials and equipment to the site.
- **Construction Logistics Plan:** Plan for storage of materials, safety measures, and site traffic to minimize delays and disruptions.

2.2 Foundation and Site Work

- **Site Clearing:** Remove vegetation, debris, and any existing structures from the site.
- **Excavation and Grading:** Begin excavation for foundations, basements, and utilities as per design specifications.
- **Underground Utilities:** Install water, sewer, gas, and electrical lines.
- **Foundation Work:** Pour concrete or construct other types of foundations (e.g., piles, slabs, footings) based on the site conditions and design.

2.3 Structure

- **Framing:** Erect the building's framework (wood, steel, or concrete). Install beams, columns, walls, and floor systems.

- **Exterior Work:** Construct exterior walls, install windows, and begin roofing work. Weatherproof the building by installing barriers, insulation, and exterior cladding.
- **MEP (Mechanical, Electrical, Plumbing) Systems:** Coordinate the installation of HVAC systems, electrical wiring, plumbing, and fire safety systems.

2.4 Interior Work

- **Rough-ins:** Begin rough installation of MEP systems within walls, floors, and ceilings before drywall installation.
- **Drywall and Insulation:** Install insulation and drywall for interior walls and ceilings.
- **Finishes:** Apply interior finishes such as paint, flooring, cabinetry, and countertops.
- **Fixtures:** Install plumbing fixtures, electrical outlets, light fixtures, and appliances.

2.5 Safety and Quality Control

- **On-Site Supervision:** A superintendent will be on site throughout duration to oversee daily operations, ensuring quality control and adherence to the project schedule. The superintendent is supported by the Project Manager who handles the buy outs, oversees subcontract negotiations and payment requests and manages the prime contract billing along with any changes
- **Safety Protocols:** Ensure all personnel comply with safety protocols, including the use of personal protective equipment (PPE) and adherence to OSHA standards.
- **Inspections:** Conduct routine inspections for structural integrity, MEP systems, and safety compliance at each phase of construction.

3. Project Management

3.1 Communication

- **Weekly Meetings:** Hold regular meetings with the project team, subcontractors, and the client to provide updates, discuss issues, and plan upcoming work.
- **Documentation:** Keep accurate records of all communications, contracts, permits, change orders, and daily reports in project management software or filing systems.

3.2 Change Orders

- **Request Process:** Document and review all client-requested changes through formal change orders.

- **Impact Analysis:** Analyze the impact of each change order on the project's schedule, cost, and scope.
- **Approval:** Obtain written approval from the client before proceeding with any changes that affect the project's original scope.

3.3 Risk Management

- **Identify Risks:** Identify potential risks to the project, including supply chain disruptions, subcontractor performance issues, and unforeseen site conditions.
- **Mitigation Plans:** Develop risk mitigation strategies to handle delays, budget overruns, and quality issues.
- **Insurance:** Ensure that appropriate insurance policies, such as builders' risk, general liability, and workers' compensation, are in place for all parties.

4. Project Closeout

4.1 Punch List

- **Inspection:** Conduct a final inspection of the project with the client and architect to identify any remaining work or corrections.
- **Punch List Completion:** Address all punch list items promptly, ensuring that the work meets the client's expectations.

4.2 Final Inspections and Certifications

- **Municipal Inspections:** Coordinate final inspections by building inspectors for occupancy certificates, fire safety, and other regulatory approvals.
- **MEP Testing:** Test the mechanical, electrical, and plumbing systems to ensure they function correctly.

4.3 Handover

- **Owner's Manual:** Provide the client with a project closeout package, including as-built drawings, warranties, operations manuals, and a maintenance schedule.
- **Occupancy:** Once all punch list items are addressed and inspections are passed, hand over the project to the client and assist with any move-in logistics.

5. Post-Construction

5.1 Warranty

- **Warranty Period:** Ensure all construction work is backed by a warranty as stipulated in the contract. Address any issues that arise during the warranty period.
- **Follow-Up:** Conduct follow-up inspections at the end of the warranty period to resolve any outstanding issues.

5.2 Client Support

- **Service Contracts:** Offer ongoing service and maintenance contracts for the building, especially for MEP systems, roofing, and structural components.
- **Post-Occupancy Review:** Conduct a post-occupancy review with the client to ensure satisfaction with the building's performance.

Conclusion:

This process document outlines the comprehensive approach required for the successful execution of a multifamily project. By adhering to these steps, Earthtone can manage timelines, maintain quality standards, and ensure client satisfaction throughout the project lifecycle.