

STANDARD OPERATING

PROCEDURE (SOP)

VERSION 1.1

\*UNLESS TOLD OTHEWISE OUR STANDARDS ARE AS FOLLOWS\*

Table of Contents

Standard Operating Procedure......................................................................................................... 3

**Architecture Folder Structure** ............................................................................................................ 4

Folder Structure Purpose ......................................................................................................................... 5&6

File Naming ..................................................................................................................................................7

**Email Templates**……………… ...........................................................................................................8, 9, 10

**Phases Of Design**...........................................................................................................................................11&12

**Revit Standards** ..........................................................................................................................................13 & 14

**Redlines**………………………………………………………………………………………………………………………………………………………15

**Permitting and Cost Coding**…………………………………………………………………………………………………………….………16

**Construction Review Process**……………………………………………………………………………………………………………..….16

**Asana**

**Proposals**

**Invoices & Pay Applications**

**COMCheck**

**Permitting and Cost Coding**

**Deadlines & Schedules**

**Pool Design**

Standard Operating Procedure

Having a Standard Operating Procedure (SOP) is essential for ensuring efficiency in the workplace, as it promotes consistency, streamlines processes, and minimizes errors. SOPs serve as effective training resources for new employees, clarify roles and responsibilities for accountability, and help maintain compliance with regulatory standards. They also encourage continuous improvement by allowing teams to identify areas for enhancement. If you believe a section needs to be added or amended, please email John Moxley and Derik Jones, and we will discuss your suggestions and implement necessary changes. Your input is crucial in refining our procedures!

**Folder Structure Purpose**

A well-organized folder structure boosts efficiency by enabling quick file access, improving collaboration, reducing redundancy, enhancing productivity, simplifying backup processes, aiding project management, ensuring scalability, and maintaining clear version control. Investing time in organizations leads to smoother workflows and a more productive environment.

**Revit & Cad Files**

The Revit & CAD file folder will contain the following subfolders to ensure effective organization:

CAD: General CAD files.

Comcheck: This folder will store all reports and reference plans. Further instructions on completing a Comcheck will be provided.

InDesign: This folder will include InDesign files and all reference materials.

Pool Calculations: All Excel sheets for sizing equipment will be stored here.

Revit: This will contain the central model. If there is a separate pool in Revit, please combine it with the main model and create a unified central file.

SketchUp: This folder will hold Sketch models and all related reference files.

Please note that we will not store templates in this folder, as there is a dedicated folder for that purpose. Ensuring proper organization will help facilitate easier access and collaboration.

**Meeting Minutes**

In the Meeting Minutes folder, we will store all project-related notes and meeting agendas. It's important to note that if you have a conversation with a client or participate in an internal project meeting, detailed notes must be taken. This practice ensures that all relevant information is documented, promoting accountability and keeping everyone informed. Accurate meeting notes help track decisions, action items, and discussions, which is vital for the project's success. Please make it a priority to record and store these notes in the designated folder.

**Presentation**

The Presentation folder is designated for storing all preliminary designs. Please note that this folder is **not** intended for schematic design files; only PDFs of preliminary designs should be stored here.

**Renderings**

The Fold will serve as the central location for storing all current renderings

**Contracts And Conceptual Budgets**

This folder is designated for storing all contracts, conceptual budgets, change orders, and Sub agreements.

Issued For Planning Approvals

**Construction Drawings**

In the Construction Drawings folder, we will break down each discipline for better organization. When we receive drawings, please first store them in the Incoming and Outgoing folders. After that, we will categorize the drawings into individual discipline folders: Architecture (Arch), Mechanical, Electrical, and Plumbing (MEP), Structural, Trusses, Interior Design (ID), Civil, and Pool. This structured approach helps ensure that all drawings are easily accessible and organized. Please read the incoming and outgoing folder section to get an idea of how to distribute drawings when received

**Issued For Permitting (Ifp)**

The Issued For Permitting folder is designated to contain only stamped drawings and documents related to the permitting process. Additionally, we will store all permit applications in this folder. This focused organization ensures that all necessary materials for permitting are easily accessible and properly documented

**Issued For Bidding (Ifb)**

The Issued For Bidding (IFB) folder will contain all drawings and documents necessary to facilitate a smooth bidding process. The folder will include, but is not limited to, the architectural set, ALL interior and exterior finishes, MEP drawings, structural designs, interior design documents, COMcheck reports, specifications, and any other relevant materials. Organizing all these documents in one place ensures that bidders have easy access to the information they need, promoting clarity and efficiency in the bidding process. Please ensure that all related documents are stored in this folder as specified. When sending drawings to the pre-construction team, please ensure you include a formal email directed to Megan Pearson, with Derik Jones and John Moxley copied (CC). This practice helps maintain clear communication and ensures that all relevant team members are informed. For more information about sending email lout of the dept please reference the email templates section of the architectural standards.

**Issued For Construction (Ifc)**

Will cover later

**Submittals**

Will cover later

**Incoming & Outgoing**

When you receive or send any documents (PDFs, Revit files, CAD files, Word docs, images, etc.), please make sure to add them to the appropriate folder. Be sure to include the date (year, month, day) along with a brief description for easy reference. Please note that this only applies when we receive or send any documents out of the design dept.

**Archive**

Archiving drawings is crucial for maintaining up-to-date files in each project folder and tracking the history of our projects. By systematically organizing our archived files, we ensure that everyone has access to the latest versions while also preserving older versions for reference. For instance, when we receive updated CAD files, it’s important to create a new folder in the archive with the date and a brief description of the update. Additionally, the old CAD files should be moved into this new folder. This practice not only enhances our organization but also provides valuable historical context, making it easier to track changes and decisions over the course of a project. Keeping our archive structured will support better collaboration and decision-making in the future.

**Reference**

This folder will store all reference-related drawings for the project, including images, older projects, and CAD files. Note the files stored in the fold will not be the actual project drawings or files just reference materials

**File Naming**

A consistent file naming structure is essential for maintaining organization and clarity, making it easier to find and manage files. It improves searchability and version control, enhances collaboration, and supports compliance with standards. Ultimately, it saves time and increases productivity across teams. When receiving documents from internal or external sources, place them in the incoming folder and rename each document with the following formats:

Note: See Phase of Design section of SOP for more clarity on each design phase

**Drawings Example:**

We will only add the Phase of Design to internal drawings only.

Date – Project Name – ( XX% Phase of Design)

2024 10 22 – Cadence Meadows (20% SD Arch)

2024 10 22 – Cadence Meadows (20% SD Pool)

External:

2024 11 05 – Cadence Meadows (Civil/Struct/ID/pool/mep)

External lumber example:

2024 11 05 – Cadence Meadows (Truss Quote)

2024 11 05 – Cadence Meadows (Truss Layouts)

2024 11 05 – Cadence Meadows (Truss Engineering)

**Presentation example:**

Date – Project Name – (Presentation)

**Design Proposal example:**

Note: Only add executed if the client has executed the contract. If its only a design proposal, please remove the word “Build”.

Example:

2024 11 04 – Edwards – Clugston Design-Build Proposal

2024 11 04 – Edwards – Clugston Design-Build Proposal – Executed

**Change Order/Subcontractor agreement example:**

Date – Project Name – Change description

20XX XX XX – Edwards – ID Change Order (Executed)

2024 11 07 – Project – Subcontractor agreement (Strut)

2024 11 07 – Project – Subcontractor agreement (MEP)

**Revit**

2023 12 05 - Carolina Riverside Amenity - Pool Plans

2023 12 05 - Carolina Riverside Amenity – Bathhouse

2023 12 05 - Carolina Riverside Amenity – Clubhouse

Carolina Riverside Amenity – Central Model

Please remember to archive the original drawings whenever you publish a new one. This is important for documenting the project’s history. Be sure to follow the archive instructions outlined in the file purpose section of the SOP.

**Email Templates**

**Pre-construction**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

Email to the pre-construction team:

To: Megan Pearson

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location - NC Pre-Construction Handoff

Atwater Amenity - Fuquay Varina, NC Pre-Construction Handoff

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

Body Example:

Hi Megan,

The drawings are now located in the bidding folder and are ready for the pre-construction team. Please let us know if you need anything else.

Thanks!

Note: Make sure all drawings are dropped off in the following folder: O:\#2023XXX - (B) North Gate - DR Horton\03 Building Connected Bid Files

**Lumber request**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

Email to Lumber company:

BCC: The following folks:

Michael Turner [Michael.Turner@comtechfay.com](mailto:Michael.Turner@comtechfay.com)

Carter Lumber Jeff Carroll [jeff.carroll@carterlumber.com](mailto:jeff.carroll@carterlumber.com)

84 Lumber [orders2383@84lumber.com](mailto:orders2383@84lumber.com)

BFS Chris Hays: [chris.hays@bldr.com](mailto:chris.hays@bldr.com)

[tu.nguyen@carterlumber.com](mailto:tu.nguyen@carterlumber.com)

CC: Derik Jones & John Moxley

Subject example: Project – Location – NC – Lumber request

Body Example:

Hi ,

Attached is our (project name) located in (Enter project location), NC. We need truss layouts, Truss profiles, and a Lumber package. In the lumber package be sure to include all lumber quantities (all loose lumber, LVLs, post and etc..). Please confirm when you have received the email and start on the project. We have a tight design development schedule, so we’ll need the information in five days, by [specific date]. Please let me know if you have any questions or if there’s anything I can assist you with!

Attach both Structural (optional) and Engineering

**Engineering Request:**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

BCC:

MEP Engineer:

Jacob Hamilton [jhamilton@kilianengineering.com](mailto:jhamilton@kilianengineering.com)

Sheyla Torres [storres@kilianengineering.com](mailto:storres@kilianengineering.com)

Structural Engineer:

Brian Ross [brian@rosslinden.com](mailto:brian@rosslinden.com)

Grant @ Plan Source

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location – NC – Engineering request

Drawings to attach: Architecture, Pool, and Civil. Please include the truss drawings only of we have them

Body Example:

Hope you’re doing great! We’re officially kicking off [Project Name] & [Location]. Please note this is a reuse of [Project Name]. To keep things rolling, here’s the general flow of deliverables:

Progress set: Date ( only applies for large scale projects)

Final set: Date ( 3 weeks for reuse)

To get the sub-agreement process rolling, we’ll need a proposal from you. Please submit it at your earliest convenience so we can get things moving smoothly. Please have your team email Derik Jones and John Moxley the proposal or replay all to the email. Once you have received out sub-agreement please sign and at your earliest convenience so we can avoid any delays

MEP, when starting the initial design Please coordinate/add the following:

1. We will need to locate where the water, sewer, storm, electrical are entering into the property and making sure this is coordinated properly on the building orientation.
2. We will also need to account for any outdoor showers.
3. Make sure restroom drainpipes don’t overlap with stall partitions
4. Electrical Emergency shutoffs are standard on all products
5. Yard Hydrants are standard on all products

Structural – please make sure we are adding out typical note for sloped floor and note for recessed showers

As we go along, just keep me in the loop on how things are progressing. If anything feels off-track or you need to tweak timelines, don’t hesitate to give me a shout.

Best,  
[Your Name]

**Change order/ Subcontractor agreement:**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

To client: See project contact in Asana

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location – NC – Change order or Subcontract agreement

Client Deliverable

To client: See project contact in Asana

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location – NC – Add % and design Phase

Body:

Hello Client,

The completed CDs for the Project name at Location - Clubhouse and Bathhouse are included in the link below. Please note that any changes made to the plans, apart from the changes required for permit approval, will be subject to a change order. Additional services will be billed hourly.

Link to Plans:

[​Folder iconConservancy at Jordan Lake Traditional](https://dclugstoninc-my.sharepoint.com/:f:/g/personal/john_dclugston_com/EvrAjZgBU7FMhb-l4WYiWJwBGP6E8rVw6jCPNhpAvTyEbQ?e=BtHJH9)

I've forwarded these documents to our estimating department for further bid coordination.

We appreciate the opportunity to complete this project for you, and again, I apologize for the delay.

**Plan and Elevation lock:**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

To client: See project contact in Asana

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location – NC – Plan & Elevation Lock

Hi, (Enter name)

As we move forward with your project, I want to ensure everything is aligned before we proceed. If there are any further changes you'd like to make, now is the time to review the set and the materials chosen. Once we receive your confirmation, we will enter the plan and elevation lock phase and begin engaging the engineers to move the project forward.

Please note that any changes made after we lock the plans and elevations may result in a change order to the design contract.

We appreciate your attention to detail and look forward to your confirmation to proceed.

Thank you,

**Conceptual Budget:**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

To client: See project contact in Asana ( always confirm with manager before sending)

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location – NC – Conceptual Budget

Body:

Hi Client,

Attached is the conceptual budget for Project name. Please note that this is an early estimate and will not be finalized until we’ve completed the construction documents (CDs), held a scoping meeting with the pre-construction team, and received bids from subcontractors. This version of the budget includes all sidewalks and a preliminary allowance for landscaping. Once the construction documents (CDs) are finalized and we have the complete cost figures, we can consider introducing value engineering options. That said, we do take a conservative approach with our conceptual budgets, so we anticipate the numbers will likely come down once the project goes out to bid.

I hope you can see the benefits of working with a design-build company versus a traditional design firm, we’re accountable for the entire process and have real-time access to building costs, both the good and the bad.

Please don’t hesitate to reach out if you have any questions or need additional details.

Best regards,

**Construction Review:**

Note: before sending drawings, please store the file in the outgoing folder with the date and description.

To: Chris Difazio

CC: Derik Jones, John Moxley, and Joey Davis

Subject example: Project – Location, NC 50%DD – Construction Review

Body:

Hi Chris,

I hope you're doing well. We are requesting a full review of the 80% DD set for the (Project name) project. Your feedback will be invaluable in helping identify any potential issues early on, ensuring smoother coordination between the architecture and construction teams. By addressing any concerns now, we can enhance the efficiency of both teams and streamline the overall project timeline.

Please provide any comments or feedback you may have within the next 5 business days, by [insert specific date].

Your input is greatly appreciated as we work towards a successful project.

Thank you!

**Phases Of Design**

Phases of design and architectural fee breakdown will vary on project specific needs and project type. If a client requests multiple design options, a physical model, and 3D renderings, for example, the Schematic Phase may be a bit higher than normal. Different architecture firms may propose a different fee breakdown on the architectural design phases.

For Design:

**1. Pre-Design (Programming) Phase**

* **Purpose:** This initial phase involves understanding the client’s needs, goals, and budget. It sets the foundation for the entire project.
* **Activities:**
  + Client interviews and site analysis.
  + Defining the scope, purpose, and requirements of the project (e.g., space planning, building type, functional needs).
  + Establishing a project budget and timeline.
  + Conducting feasibility studies (site conditions, zoning regulations, etc.).

**Design team:** This would consist of putting together presentations material, setting up revit, starting indesign files, and collecting reference images.

**2. Schematic Design (SD) Phase**

* **Purpose:** This phase focuses on exploring different design options and concepts to meet the client’s goals and requirements.
* **Activities:**
  + Developing initial sketches and design ideas (layout, massing, spatial relationships).
  + Presenting conceptual designs to the client for feedback.
  + Exploring different materials, forms, and spatial arrangements.
  + Establishing the overall design direction but without detailed specifics.

**Design team:** This would consist of putting together design options, starting on planning sheets, rough exterior material, and locking in the floor plan and elevations.

**3. Design Development (DD) Phase**

* **Purpose:** This phase refines the design, making it more detailed and complete while still maintaining the overall design concept.
* **Activities:**
  + Finalizing the layout, floor plans, and elevations.
  + Selecting materials, finishes, and systems (e.g., HVAC, electrical, plumbing).
  + Incorporating feedback from the client and consultants (structural, mechanical, etc.).
  + Preparing preliminary 3D models or renderings to visualize the design.

**Design team:** We will not begin this phase of design till we are in plan and elevations lock. Please ask your project manager if we are officially in plan and elevations lock before starting the task.

Drawings include:

1. Building Floor Plans and Roof Plans, RCP plan, two building sections, wall sections, partial details and schedules, code review, MEP and electrical trade set, lumber package

**4. Construction Documentation (CD) Phase**

* **Purpose:** This phase produces the detailed drawings, specifications, and documents needed to build the project.
* **Activities:**
  + Preparing final working drawings (floor plans, sections, elevations).
  + Creating detailed construction specifications, including material choices and installation methods.
  + Ensuring compliance with building codes, regulations, and accessibility standards.
  + Coordinating with engineers and consultants to finalize technical details.
  + These documents are used by contractors to obtain bids and for the actual construction process.

Drawings include:

1. Documents ready for permitting and construction for a new Building.

**Proposals**

**For Proposal purposes: More will come**

* Pre-Design 5-15% of Architectural Fees (Site Planning)
* Schematic Design 15% of Architectural Fees – Can Range 10% – 25%
* Design Development 20% of Architectural Fees –  Can Range 10% – 25%
* Construction Documents 50% of Architectural Fees –  Can Range 35% – 50%

**Revit Standards**

Keeping plans organized by sheet category is an important part of ensuring that the construction teams know where to access important information. The design team needs to make sure the construction team knows where to look for this information. Therefore, keeping all sheets organized by numerical order based off the sheet function will ensure the project is easily navigable. Sheets shall be organized by the categories listed below:

G0.0 – GENERAL NOTES

* 1. These sheets shall refer to the sheets required for general information, energy compliance, UL Codes, and life safety information. The order of the sheets shall be as follows:
  2. G0.1 – Cover Sheet: It Shall include on every plan
     1. Vicinity Map
     2. Site Plan
     3. Sheet List
     4. Project Name and Location (Address if possible)
     5. Any permit numbers associated with the project
     6. Contact information and logos of all corporations collaborating with the plan set
     7. A rendering or 3D shot of the project
  3. G0.2 – Appendix B: This sheet is reserved for the NC Appendix B.
     1. In the case of submission in non-North Carolina States, this sheet shall remain, and the code references shall be updated to reflect the current state for which the plans are submitted.
     2. Raleigh gets special treatment!
     3. If the energy code summary from a COM-Check Fits, it may be shown on this sheet.
  4. G0.3 – Life Safety Plan: This sheet is reserved for the life safety plan for all projects. If the plan set is large enough, it can expand to further sheets, **adjusting the sheet number count from here on**.
  5. G0.4 - General Notes: This sheet shall be included on all plan sets.
     1. All general notes are on this sheet.
     2. Typical mounting heights should be on this sheet
     3. If space does not allow on the appendix b the COM-Check shall be on this sheet.
  6. G0.5 – Reference Files or UL Details
     1. All sheets from G0.5 on are for reference plans and UL Details.
     2. All fire-resistant UL details shall be on these sheets.
  7. G0.6 – Special Conditions
     1. Special condition permits shall be included on these sheets.

A0.0 – ARCHITECTURAL

1.0 These sheets shall refer to the sheets required for general information, energy compliance, UL Codes, and life safety information. The order of the sheets shall be as follows:

* 1. G0.1 – Cover Sheet: It Shall include on every plan
     1. Vicinity Map
     2. Site Plan
     3. Symbol Legend
     4. Sheet List
     5. List of applicable codes
     6. Project Name and Location (Address if possible)
     7. Any permit numbers associated with the project
     8. Contact information and logos of all corporations collaborating with the plan set
     9. A rendering or 3D shot of the project
        1. If space is available, the typical mounting heights may be applied to this sheet.
        2. If space is available, the planning colors may be applied to this sheet.
  2. G0.2 – Appendix B: This sheet is reserved for the NC Appendix B.
     1. In the case of submission in non-North Carolina States, this sheet shall remain, and the code references shall be updated to reflect the current state for which the plans are submitted.
     2. Raleigh gets special treatment!
     3. If the energy code summary from a COM-Check Fits, it may be shown on this sheet.
  3. G0.3 – Life Safety Plan: This sheet is reserved for the life safety plan for all projects. If the plan set is large enough, it can expand to further sheets, **adjusting the sheet number count from here on**.
  4. G0.4 - General Notes: This sheet shall be included on all plan sets.
     1. All general notes are on this sheet.
     2. Typical mounting heights should be on this sheet
     3. If space does not allow on the appendix b the COM-Check shall be on this sheet.
  5. G0.5 – Reference Files or UL Details
     1. All sheets from G0.5 on are for reference plans and UL Details.
     2. All fire-resistant UL details shall be on these sheets.
  6. G0.6 – Special Conditions
     1. Special condition permits shall be included on these sheets.

**Redlines**

As part of our ongoing efforts to improve our project workflows, we are implementing a new redline process to ensure thoroughness and clarity when addressing feedback. Please take note of the following updated guidelines:

1. **All Comments Must Be Addressed**  
   Whether redlines come from internal teams or external stakeholders, it is crucial that every comment is reviewed and addressed. No comment should be left unaddressed.
2. **Highlight Redline Comments**  
   When picking up redlines, please ensure that each comment is clearly highlighted. This helps ensure that nothing is overlooked and allows for easier tracking of changes.
3. **Seek Clarification if Needed**  
   If any redline comment is unclear or if you need further direction, please reach out to your Project Manager for clarification before proceeding. It's important that all redline comments are fully understood to ensure the necessary corrections are made.
4. **Publish and Archive**   
   Once all redlines have been incorporated, please publish a new set of documents and archive the older or redlined versions. This will help maintain an organized record and ensure we keep track of the project’s history.

**Permitting and Cost Coding**

Cost Coding for Permitting

All, To ensure consistency in handling permitting and billing across both design and construction projects, here are the guidelines:

For Projects We Will Be Constructing:

All time spent on permitting, fees for permitting, Lien NC, and printing (if physical copies are needed) should be charged to the Build (B) job in Sage, not to the Design job.

If we receive comments from the inspection department during permitting, any time spent making corrections should be allocated to the Design (D) job. However, Joey's time for permitting should still be coded to the Build (B) job.

For Projects We Might Not Be Constructing or Are Only Permitting at the Owner’s Request:

When we’re asked to handle permitting for a project that we do not have a contract to build, there should be a change order (CO) for permitting in the Design (D) project, and billed to the owner.

Any comments from the inspection department in these cases should be billed to the Design (D) project.

**Construction Review Process**

As part of our updated workflow, we’re implementing a formal Construction Review Process to catch potential issues early and streamline coordination between design and construction. The goal is to involve construction at the 50% Design Development (DD) stage, once preliminary structural and MEP drawings are ready, so we can identify constructability concerns before they become costly in the field.

Moving forward, we will no longer drop files off in the bid folder. Instead, the design department will issue the review package directly via email to the construction team. This helps ensure a clear point of communication and keeps everything tracked.

Construction will have 2 to 4 business days to review and return comments. Once received, the design team is responsible for addressing all redlines in a timely manner to keep the project moving forward.