

## Sample Best Practice Checklist

*Use the following list as a template to modify based on the requirements of your project. It is not intended to be inclusive or exhaustive but instead to introduce the main considerations for producing a building that will last and with minimal defects.*

### **PROJECT TEAM**

- Utilize a Development Task List (see sample) to assign project responsibilities. The typical project team would include:
  - Owner/Sponsor
  - Owner's Rep/Project Manager
  - Property Management
  - Maintenance team
  - A & E team – Architect, Engineers (Structural, Civil, Mechanical, Electrical), Landscape Architect, Geotechnical,
  - Owner's Legal
  - Owner's Insurance provider
  - General Contractor
  - Envelope Consultant
  - Environmental Consultant
  - Green Building Consultant
  - Special Inspections and Testing Agencies
  - Other consultants/participants per project requirements – Historic, Accessibility, Hazardous Materials, Tenants, Surveyor, Marketing, Accountants, Traffic Studies
- Establish Document Discovery Checklist (see sample) and rigorously maintain during the entire development process

### **SITE SELECTION**

- Pre-Purchase Due Diligence (purchase and sale agreement should allow sufficient time for the following – min. 2 months):
  - Environmental Review
  - Zoning Review including discussions with governing agencies
  - Utilities availability
  - Geotechnical analysis
  - Storm water control requirements
  - Market analysis
  - Title search/review
  - Transportation opportunities (or lack of)
- Existing Project (i.e. acquisition rehab) would require similar analysis plus:
  - Capital Needs Assessment
  - Envelope Assessment
  - Operations review

- ❑ Opportunity for Brown/Grey field remediation
- ❑ Contact Neighborhood Associations for project feedback

## **DESIGN**

- ❑ Involve as much of entire team as appropriate as early as possible
  - Develop and utilize an Owner's standard specification:
  - Include items project management/maintenance prefer – have history of successful use, parts inventory, standardized systems, low maintenance
  - Work with A&E team and GC to incorporate this specification – as applicable – into the Project specification
- ❑ Site design decisions are paramount:
  - Tend to be set for the life of the project – very difficult and expensive to alter in the future.
  - Buildings/structures locations govern solar gain, response to weather, accessibility, interface with neighboring structures, impact on urban design, pedestrian and vehicular access and movement, quality of outdoor space, recreation and landscaping, storm water impact, utilities placement, etc.
- ❑ Pre-Application Meeting with Building Dept. to discuss project goals and parameters/requirements; expect input from all development agencies – building, land use, storm water/sewer, utilities, transportation, fire
- ❑ Project Team develops Green Building Plan – usually a charrette process
  - Required on publicly funded projects and now required statewide in recently adopted International Green Building code
  - Decisions of compliance path need early buy-in and adoption by project team
  - has impacts on life of building, maintainability, and tenant health/comfort and satisfaction
- ❑ Main Building Components impacting long term Maintenance and potential Construction Defects:
  - Site grading and drainage
  - Building envelope – roof, exterior walls (surface transitions and flashings), and penetrations (doors, windows, vents) – impacted by water and air intrusion
  - Heating and Ventilation Systems – impacts tenant health and comfort and potential organic growth
  - Interior build-out – finished surfaces, cabinets, appliances, plumbing fixtures, lighting, etc.

## **BIDDING & CONTRACTS**

- ❑ Maintain strict adherence to specified systems and products and follow a rigorous substitution process

- Cost reduction is not Value Engineering (VE) - eliminating items or choosing less costly materials does not necessarily result in equivalent value
- Industry standard contracts such as AIA A series are a good starting point
- Match your contracts to your business practices
- Get the right insurance and verify that your partners have the correct insurance
- Educate team members about key contract provisions
- Review by Owner's legal and representative imperative
- Insure consistency between construction documents and contract language

### **CONSTRUCTION**

- Utilize a Project Responsibility Matrix for construction (see sample)
- Pre-construction meeting with lender (and building officials if required) to discuss construction draws, change order procedures, signing authority, decision making chain/ responsible personnel
- Pre-construction meeting with major sub-contractors to discuss schedule, communication protocol, specific owner requirements, green building goals
- Pre-installation meetings for major systems - envelope, roofing, HVAC, etc.
- Mockups and Testing procedures per specifications
- Review meeting minutes and field and special inspections reports
- Address potential problems promptly (even if it means a call to your attorney)
- Maintain accurate, up to date, as-built documentation including drawings and specifications.
- assemble binder of required green building product submittals which can later be used in producing the tenant information manual

### **LEASE UP/CLOSE OUT**

- Utilize a Project Responsibility Matrix for closeout (see sample)
- Architect & Owner review of O & M manuals
- Thorough maintenance training - conduct turnover walk-thru with key maintenance staff and appropriate sub-contractors
  - Performed in conjunction with O & M Manuals
  - Should be filmed with sound and burned to DVD for future reference
- Warranties - place warranty periods on a master calendar and review condition of respective items prior to end of warranty
- General Contractor to provide point of contact for 1 year warranty requests
- Establish maintenance contracts with outside vendors as necessary

- ❑ Codify replacement reserve; coordinate with operations budget and potential refinance scenarios
- ❑ Collect and permanently file all documents listed in the project document discovery checklist
- ❑ Tenant Education - prepare tenant information manual and carefully walk through the manual during leasing.
- ❑ Property management to keep detailed record of warranty items and maintenance/repair requests and logs and periodically audit
- ❑ One year walkthrough - Owner, owner's rep, owner's property manager and maintenance head, general contractor, and architect (include sub-contractors as necessary)
- ❑ Perform periodic project inspections coordinated with warranty expirations and the expiration of the statute of limitations

Owner	Owner's Rep	Arch.	GC	Other
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**Supervise Professionals**

Accountants					
Appraisers					
Architects					
Attorneys					
Building inspectors					
Engineers					
Environmental consultants					
Escrow officers					
Pest and dry-rot inspectors					
Property management					
Realtors					
Surveyors					
Special testing companies					

**Purchase Negotiation**

Negotiate with seller, including wording of purchase agreements					
negotiation through closing					
Review tenant leases					

**Assemble Development Team**

Select Accountant					
Select Attorney					

Development Task Grid

Project Name: \_\_\_\_\_

Owner	Owner's Rep	Arch.	GC	Other
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Select Architect (more detail below)					
detail below)					
Select Property Manager					
Select Surveyor (request bids, review proposals and select provider, negotiate contract, review completed work)					
Select Environmental Level I provider (same as above)					
Select Geotechnical/Soils consultant (same as above)					
Select Special Testing firm					

**Financial Packaging - Predevelopment**

Assess financial feasibility / estimate operating expenses					
letters, community outreach, local fund raising					
Prepare and maintain financial pro formas					
Predevelopment loan application, disbursements, and repayment					
Identify potential funding sources					

Owner	Owner's Rep	Arch.	GC	Other
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Prepare grant applications to:					
1) Local HOME/CDBG					
2) State					
3) Private Foundation / Other					
Perform market study					
Order appraisal					

**Financial Packaging – Construction**

Inspect the property and/or preliminary plans					
improvements or 'development program' for new construction					
Provide preliminary project cost estimate					

**Financial Packaging - Partners**

of interest, commitmetn letters, loan documents, due diligence, closing					
interest, commitment letters, document review, due diligence and					
service provider partners, formalize relationships					
interest, commitment letters, Partnership Agreements, due					

Owner	Owner's Rep	Arch.	GC	Other
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with attorney to create the L.P., set up books w/ the accountant					
carry forward, cost certification, IRS 8609 form and first annual audit					

**Financial Packaging - Closing**

funding sources including loans, interest subsidies and grants					
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**Project Accounting / Bookkeeping**

Prepare chart of accounts					
Track expenses					
Process invoices					
Prepare checks					
Sign checks					
Maintain bookkeeping software, assist with annual audits					

**Selection of Architect, Plan Development**

Request proposals from Architects					
Organize selection committee to review submittals					
Recommend which Architect to use					
Convene and chair meetings with the Owner and Architect					



Owner	Owner's Rep	Arch.	GC	Other
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**Design Work**

Conceptual Design					
Design Development					
Contract Documents: Plans					
Contract Documents: Specifications					
Structural Design/Documentation					
Mechanical Design/Documentation					
Plumbing Design/Documentation					
Electrical Design/Documentation					
Civil Design/Documentation					
Landscape Design/Documentation					
Interior Design/Documentation					
Renderings					
Model Construction					
FF&E Services					

**Drawings & Specifications**

Write					
Review					
Approve					
Produce _____ copies					

**Design Build**

Owner	Owner's Rep	Arch.	GC	Other
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Project schedule					
Conceptual design					
Specifications					
Schematic design					
Select design build partners					
Conduct bidding					
Screen successful bidder					
Negotiate contract					
Review design work					
Supervise construction					
Supervise bidding process					

**Selection of General Contractor**

Select procedure for hiring General Contractor					
A. Competitive Bid					
Prepare bid documents					
Request bids					
Submit addendum as necessary					
Conduct site walk-through (Rehab)					
B. Negotiated Bid					
Write & distribute RFP or RFQ					
Review contractors' written proposals					

Owner	Owner's Rep	Arch.	GC	Other
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Screen and conduct interviews with successful applicants					
Select contractor					
Draft contract between Contractor and Owner					

**Zoning and Building Adjustments**

Apply for and manage					
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**Permits**

Apply for permit fee waiver, if available					
Walk plans through permit process					
Pick up and pay for permits					

**Demolition Services**

Plan scope of demolition activities					
Demolition permit					
Obtain demolition bids					
Oversee demolition work					

**Mobilization for Construction**

Review contract documents					
Prepare Schedule of Values					
Prepare Construction Schedule					
Conduct Pre-Construction conference					

Owner	Owner's Rep	Arch.	GC	Other
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**Construction Oversight**

check for compliance with Contract Documents					
Convene and chair periodic on-site meetings					
Attend on-site meetings					
Record and distribute meeting minutes					
Coordinate testing and inspection services					
Arrange access to inhabited units during construction					
Photograph construction progress					

**Construction Finance**

Review progress payments					
Approve progress payments					
Approve Change Orders under _____					
Approve Change Orders over _____					
documentation as required during construction					

**Construction Close-out**

Perform punch list inspections (initial and follow-up)					
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Development Task Grid

Project Name: \_\_\_\_\_

Owner	Owner's Rep	Arch.	GC	Other
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Designate project as "Substantially Complete"				
Review lien waivers and respond to active liens if necessary				

**Warranty Review**

Conduct warrantee inspection				
Follow through with contractor to perform necessary work				

**Miscellaneous**

Administer requirements of the Davis-Bacon Act				
compliance with the Uniform Relocation Act requirements				
Plan project ceremonies (ground-breaking, grand opening)				
Apply for weatherization rebates				

## Document Discovery Checklist

### 1. PRE-BID DOCUMENTS

- Publications, articles, and correspondence about the pending project
- Documents regarding project funding and design
- Engineering and financial study reports
- Other:

### 2. ESTIMATE AND BID DOCUMENTS

- Request for qualifications and proposals, or invitation to bidders
- Minutes and notes from pre-bid meetings
- Contractor's prebid site inspection and findings report
- Geotechnical reports
- Bid/estimate files
- Record of MIWBE contacts, if required by the bid documents
- Bid form or proposal with prices o Bid tabulations by the owner listing all contractor bids (if publicly bid)
- Other:

### 3. OTHER PRE-CONSTRUCTION DOCUMENTS

- Correspondence, bond documents, insurance, award, other:
- Correspondence and other documents regarding mobilization
- Minutes of pre-construction meeting, handwritten notes
- Permit applications, permits and related correspondence
- Other:

### 4. CONTRACT DOCUMENTS

- Plans and specifications with all addenda and approved changes
- The contract (the subcontract for subcontractors)
- The general contractor's contract with the owner
- Superseded contract documents - drawing revisions, etc.
- Referenced industry standard specifications and codes
- Subcontracts and purchase orders o Approved change orders
- Design clarifications, sketches and supplementary design information
- Drawing issuance logs, if provided by the designer
- Other:

### 5. CLARIFICATIONS, NOTICES OF CHANGE, CORRS, CLAIMS AND CHANGE ORDERS

- Requests for information (RFIs)
- RFI Log or Index
- Documents attached/related to the individual RFIs
- Notices of change, requests for proposals, etc.

- Logs for the above o Change Order Requests (CORs)
- COR Log or Index o Owner responses to the CORs requested
- All documents referenced in the CORs
- Claim files with all documents related to each claim
- Claim Log or Index
- Change Order (CO) files with related documents
- CO Log or Index
- Other:

#### **6. PAYMENT RECORDS**

- Schedule of values (lump sum) or bid schedule (unit price)
- Progress payment requests
- Approved progress payments
- Supporting calculations/records for progress payments, lien release forms
- Records of when payments were actually requested and received
- Cash flow forecasts and actual cash flow chart
- Reconciliation of revenues, invoices, payments & retainage (sub & vendors)
- Other:

#### **7. CORRESPONDENCE AND ADMINISTRATIVE DOCUMENTS**

- Correspondence
- Correspondence Logs
- Facsimiles
- Memorandums and other written communications
- Telephone conversation notes
- E-mail files o Backups from computers
- Transmittal forms
- Weekly and monthly reports to company management
- Other:

#### **8. MEETING RECORDS**

- Weekly and monthly progress meeting agendas and minutes
- Handwritten notes, recordings, transcripts, and any other records of meetings
- Minutes and notes of periodic meetings with the owner's representative
- Minutes and notes of special meetings with any party
- Other:

#### **9. SHOP DRAWINGS AND OTHER SUBMITTALS**

- Submittals with transmittal forms and attachments
- Submittal Log
- Other:

**10. SCHEDULES AND PROGRESS REPORTS**

- Electronic copies of all requested schedules
- First schedule submittal and all revisions thru approval of baseline schedule
- Baseline schedule as approved/accepted (with resource & cost data if included)
- The latest (or final) schedule update
- All schedule updates, including recovery schedules and schedules to completion
- Draft contractor schedules not submitted to the owner
- Short interval (look-ahead) schedules (printed copy if not on computer)
- Weekly or monthly progress reports from the project team, owner, or designer Subcontractor schedules and record of subcontractor schedule input
- All fragments (partial or preliminary schedules) and what-if analyses
- Other:

**11. COST ACCOUNTING RECORDS**

- Budgeting files (converting estimate into chart of accounts for job cost accounting)
- The project budget, with all available detail
- Weekly labor cost reports, with details
- The final/latest job cost report
- Monthly job cost summary reports with details
- General ledger reports: sorted/subtotaled by vendor, cost code, category
- Cost ledgers for the project
- Balance sheets
- Monthly/quarterly project profit & loss statements, cost-to-complete analyses, etc.
- Weather remediation/site protection costs (heaters, erosion control, etc.)
- Overtime hours and rates
- Home office overhead cost data necessary to develop home office overhead markup and extended home office overhead costs for delays:
  - detailed G&A expenses for corporation and subsidiaries for each contract year
  - total company billings/revenues and all other revenues for each year
- Jobsite overhead cost data necessary to develop jobsite overhead markup and extended jobsite overhead costs for delays:



- amount bid with details and duration (copy of original bid documents)
  - estimated costs with detail, and backup as appropriate
  - actual cost from job cost reports with non-time-dependent costs removed
- Labor rate calculations for each craft & skill-level claimed (base, taxes, insurance)
- Salaried employee labor cost (project manager, superintendent, etc.)
- Payroll registers
- Certified payroll reports
- Expected/actual labor escalation costs due to delay
- Equipment operating and standby rates for equipment claimed, with backup
- Material cost backup (paid invoices or other backup)
- Materials and equipment cost reports
- Subcontractor and vendor invoices
- Time sheets, especially if annotated
- Special audits, cost studies, cost-to-complete analyses
- Internal or external auditor's reports and work papers
- Financial statements, income analyses (if prepared), and tax returns
- Job financial reports
- Invoices
- All other accounting reports relevant to the project
- Annual corporate financial reports for each year of the contract duration
- Other:

## 12. FIELD RECORDS

- Daily diaries by all project personnel
  - Superintendent's/foremen's' daily reports, with subcontractor crew sizes, etc.
  - Subcontractors' daily reports
- Equipment use logs, for equipment claimed (incl. cranes, welders, dozers, etc.)
- Designer and owner representative reports
- Inspection, quality control, & test reports - concrete placement, soil tests, etc.
- Field survey notes
- Delivery tickets for specified materials/suppliers
- Estimated or actual hours or extra time by salaried employees
- Weather records including rainfall, temperature, wind, other:
- Other:

## 13. OTHER RECORDS

- Photographs and videotapes

- News clippings about the project
- Safety plan, safety reports, accident reports, etc.
- Union agreement and labor relations files
- Quality assurance and quality control plans and records
- Other:

**14. SUBCONTRACT FILES AND SUBCONTRACTORS' RECORDS**

- Subcontracts and all records of quotes and negotiations with all proposers Correspondence
- Other files, similar to those above
- Other:

**15. PURCHASE ORDERS AND MATERIAL SUPPLY RECORDS**

- Purchase orders for specified vendors or items
- Release orders for specified vendors or items
- Change orders for vendors for specified vendors or items
- Submittals and approvals for specified vendors or items
- Correspondence and other communication for specified vendors or items
- Packing slips for specified vendors or items
- Delivery tickets and receiving reports for specified vendors/items
- Invoices, statements and records of payment for specified vendors or items
- All other documents related to materials (designer & owner's rep.)
- Other:

**16. RECORDS FROM THE OWNER OR DESIGNER**

- Clerk, resident engineer's, and inspectors' diaries and daily reports
- Inspection and test reports
- Correspondence between the owner and the designer or other third parties Memorandums and internal documents of the owner and designer
- Subcontractor correspondence between the owner and general contractor
- Other:

**17. COMPUTER RECORDS**

- Print-out of all directory contents
- E-mail
- Files
- Other:

Project Name

## PROJECT RESPONSIBILITY MATRIX

Project Name

Ap = Approval, Rs = Responsible, Rv = Review

In = Input, As = Assist, Rc = Recommend

		PARTICIPANTS					
		Client	Owner's Rep	Architect	General Contractor	Funders	Other
CONSTRUCTION PHASE							
1	Pre-Construction Conference						
2	Bonds and Insurance						
3	Coordination and Communication Procedures						
4	Construction Administration Procedures						
5	DCVR Management						
6	Shop Drawings, Log Maintenance and Review						
7	Project Site Meetings with Minutes						
8	Coordinate Owner-Provided Consultants						
9	Change Order Authority						
10	Owner-Initiated Changes						
11	Prepare Change Orders						
12	Issue Change Orders						
13	Site Observations and Reports						
14	Rejection of Work						
15	Contractor Safety Program						
16	Contractor's CPM Construction Schedule						
17	Effect of Change Orders on Schedule						
18	Recovery Schedule						
19	Schedule of Values						
20	Pay Request Review and Acceptance						
21	Project Cost Reports						
22	Program Pay Request Log Reports						
23	Change Order Log Reports						
24	Proposed Request Log Reports						
25	Submittal Log Report						