THE **OWNER'S GUIDE** TO CONSTRUCTION

WHAT OWNERS NEED TO KNOW TO NAVIGATE THE CONSTRUCTION PROCESS WITH EASE.

HORST CONSTRUCTION

TABLE OF **CONTENTS**

PURPOSEFUL STEPS FROM **START TO FINISH**

HERE ARE THE SIX CRUCIAL STEPS TO A CONSTRUCTION PROJECT.

DEFINE YOUR VISION

Start by creating a well-defined concept of what needs your building will serve and what it may look like.

Consider both the short and long-term needs of the property from the perspective of all who will use it. Obtaining expert insight can offer savvy strategies for maximizing your space and resources in unique ways that may not be initially obvious.

One such option for working with an expert is known as master planning, and involves a deep dive into the needs of your project for more intensive planning.

CHOOSE YOUR TEAM

The team selection process will vary based on the project delivery method you choose for your project.

- **Design-Build**: You select a design-build contractor and an architect in the beginning to act as your partners in fulfilling your project vision.
- **Design-Bid-Build**: You first select an architect who designs your project, followed by a contractor selected through the bidding process.

Other team members brought in early may include engineers, consultants, or specialty subcontractors.

DESIGN THE BUILDING

Architects will first create conceptual sketches of the building. From there, they'll integrate your feedback and flesh out the design. Drawings will typically be released in three stages, each building upon the last to refine the design.

If you chose a **design-build** approach, a design-build contractor will be involved throughout this stage, lending their insight into cost and feasibility — as well as keeping the design aligned with your vision.

With **design-bid-build**, your contractor won't see the design until it's finalized, making changes more costly and difficult.

4

START PRECONSTRUCTION

Once you have selected a contractor and drawings are completed, preconstruction begins.

This is where your construction team creates a plan to accomplish all the required work, including schedules, scopes, logistics, and permitting. They'll begin purchasing the supplies needed to complete the project, and they'll look for methods to mitigate potential challenges.

The better your team understands your project, the more effective they can be at proactively managing schedule and costs.

5

BEGIN CONSTRUCTION

With a plan now established, work on site can begin. The construction team will actively manage subs, ensure work is performed correctly, keep things safe, and maintain the schedule.

The design team will perform regular quality inspections and will be on hand to answer requests for information (RFIs).

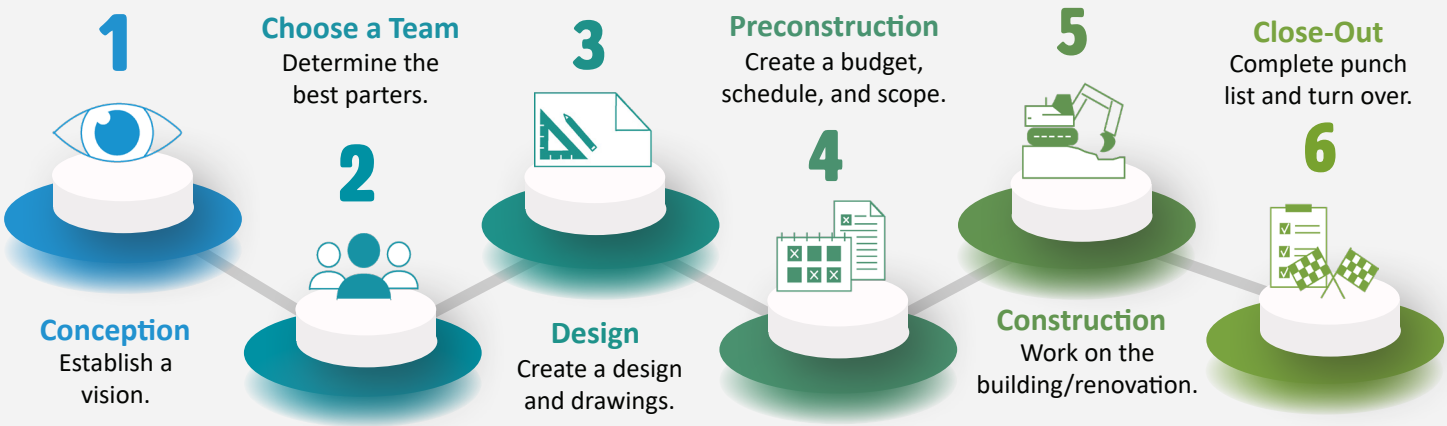
Your construction team should establish methods of regular communication to give you the information you need without overwhelming you with every small detail. You should feel safe in their ability to advocate on your behalf.

6

FINISH CLOSE-OUT

As your construction team is wrapping up, they'll create and execute a punch list to ensure the building is turned over with all the finishing touches completed. You, as the owner, will receive all the project closeout information, including equipment warranties, manuals, and as-built documents.

Additionally, a building inspector will inspect the new project to ensure everything meets the requirements. Then, you'll be granted a certificate of occupancy and permission to fully occupy the new space! Your construction team's warranty policies will define how any potential hiccups are addressed as you acclimate to your new space.



PROJECT **DELIVERY** METHODS

A project delivery method is the process that dictates how the design and construction professionals will be chosen — and ultimately — how they work together to complete your project.

DESIGN-BUILD

With a design-build approach, you'll select one entity to manage both the design and the construction of a project. In most cases, you will only hold one contract — the one with your design-build partner. In turn, the design-builder holds the contracts with all the other firms on the team.

This creates one streamlined point of contact for you, and it also minimizes your risk as the owner. You'll generally experience fewer change orders, reduced administrative burdens, lower overall project costs, and fewer disputes that result in litigation. Additionally, this method is typically more efficient in that design changes can be vetted and executed more quickly.

A cohesive strategy that is clearly defined and upheld by a design-build partner you can trust is the best way to have a smoother, less stressful project. Your partner should be your advocate and keep you informed of important updates and milestones.

OTHER METHODS

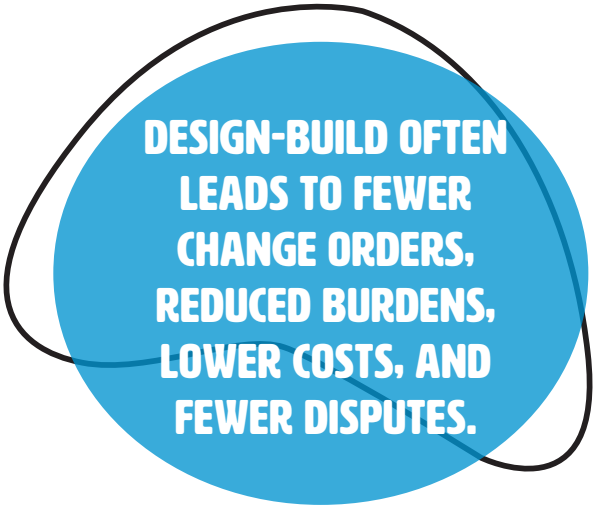
Other delivery methods, like ***construction management, general contracting, or the integrated project delivery method*** can also be a good fit in some cases. These teams typically consist of multiple entities such as the architect, contractor, consultants, and other specialty subcontractors. These methods require the owner to have resources dedicated to handling multiple contracts, with most of the burden falling to you as the owner, in keeping the process aligned and moving forward.

DESIGN-BID-BUILD

With design-bid-build, you'll first select an architect to complete the project's design. Then, you'll send out those drawings to a select list of general contractors. They'll collect bids from individual subcontractors, and then submit the overall bid for the whole project. From there, you'll choose a contractor.

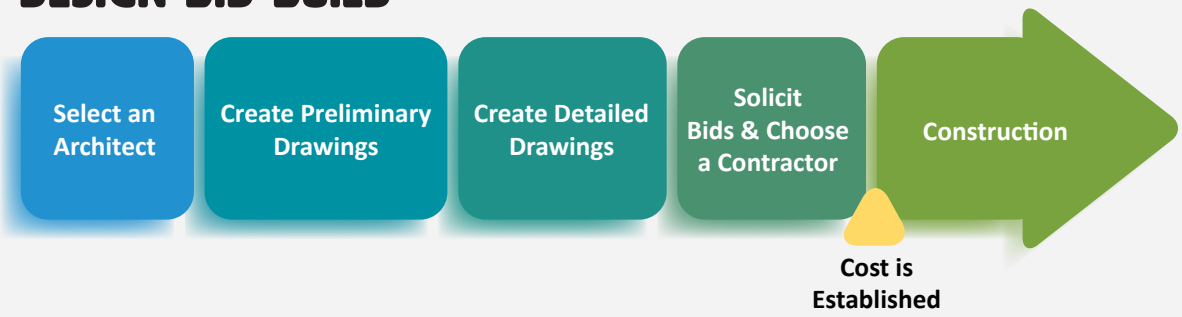
As the owner, you'll hold contracts for both the architect and the contractor separately. Each firm works independently, removing the baked-in collaboration inherent in design-build. The contractor will have less influence over the design stage, which can lead to costly problems down the road. You'll likely spend more time and energy managing the project and may experience more change orders.

The burden of time and energy can be great, so these methods are best for owners who have ample time and resources to manage the project's intricate details.

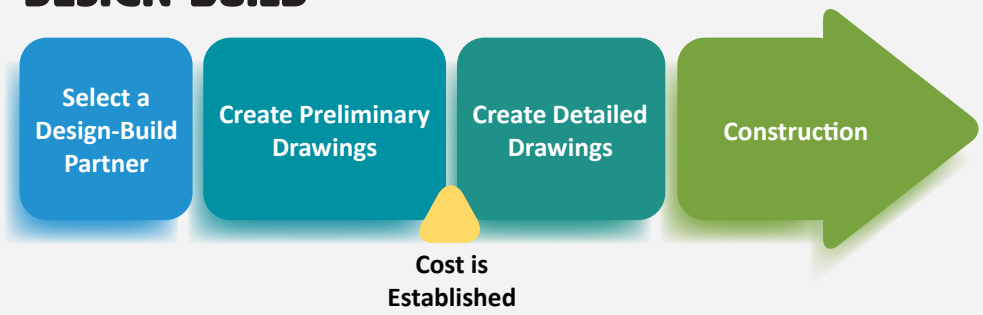


COSTS ARE ESTABLISHED EARLIER ON IN A DESIGN-BUILD PROJECT.

DESIGN-BID-BUILD



DESIGN-BUILD



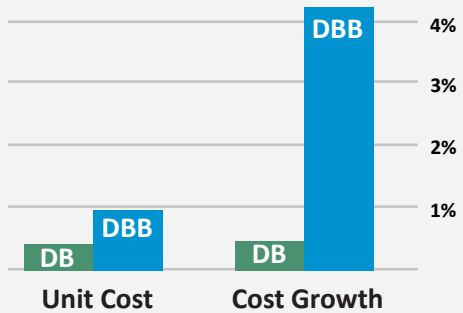
BUT WILL "SKIPPING" THE BID PROCESS LEAD TO HIGHER PROJECT COSTS?

Design-bid-build gives some owners false confidence in project costs, based on the idea that soliciting prices from multiple subcontractors and vendors will save them money. However, this method lacks many early benefits of design-build and is based on a few misconceptions.

Design-build does not strip you of competitive bidding — it enhances it. At Horst, we still get bids from several well-vetted subcontractors to ensure fair pricing that keeps quality and experience in mind. It's just done earlier in the process, empowering the construction team to work cohesively to bring more value to you.

Additionally, data analyzing cost outcomes for hundreds of projects shows the design-build approach leads to ***lower*** costs overall. This graph shows the cost performance comparison for the design-build (DBB) and design-bid-build (DBB) approaches.

Cost Performance Comparison



https://dbia.org/wp-content/uploads/2018/11/Cost_Performance_Research-CII_Pankow2018.pdf

Click here to discover the ins-and-outs of design-build!

OPTIMIZING YOUR PROJECT'S *VALUE*

Staying on a budget without compromising quality is a concern for many owners. In today's economic climate, it's important to ensure you're doing the most you can with the resources you have.

Here are expert-backed, experienced-based tips on how to optimize your budget to create a high-quality building that meets the needs of your organization.

1. PLAN INTENSIVELY

The foundation of any successful project lies in detailed planning. This involves two major things. This first is a **clarified scope**, which is an accurate and detailed document that ensures there's synergy between your expectations and your contractor's interpretation. It helps your budget by avoiding potentially costly mid-project changes. The second is a **comprehensive estimate**. Asking for a detailed cost breakdown over a more general figure will help highlight areas for potential savings.

2. ASSEMBLE AN EXPERIENCED DESIGN-BUILD TEAM

Design-build continues to prove itself as the project delivery method of choice for budget-conscious clients. A study analyzing 350 construction projects revealed those that utilized design-build consistently cost less and finished sooner than projects that used design-bid-build and construction manager at risk[i].

When you're out to optimize your project's budget, the right design-build team can help get you there.

3. USE VALUE ENGINEERING TO ITS FULL ADVANTAGE

Value engineering isn't simply a cost-cutting exercise. Instead, it's the strategic analysis of how much benefit you're receiving from the money you're spending. If there's a way to enhance that value, it should be explored in value engineering. Your team should look to optimize the elements of the project through an analysis of all factors, like cost, upkeep, wear-and-tear, and aesthetic value.

4. REGULARLY REVIEW & UPDATE THE BUDGET

Circumstances and prices can change. Keeping tabs on your budget helps.

Address potential overflows in a timely manner, and make informed decisions as the project progresses. Choosing a construction team that's committed to open-book finances will make this process a lot easier. At Horst Construction, our open-book policy gives owners access to all job cost reports and information related to the project.

5. AVOID OR REDUCE CHANGE ORDERS

Change orders don't have the best reputation in the industry. While they're important tools to ensure your needs and vision are fulfilled, they can lead to extended schedules and additional costs. To optimize your resources, it's best to ensure your vision for the project is fully fleshed out before construction starts, and your team has a solid understanding of what that vision is.

Creating a detailed project scope, fostering a collaborative environment, and using a design-build approach can all help this.

6. LEVERAGE TECHNOLOGY

Modern construction management software can help you and your construction team track the budget, allocate resources, and manage time. Partnering with a construction firm committed to using technology to enhance their efficiency and communication can translate directly into savings and avoided costs.

7. CONSIDER PHASING

If your budget is low but your needs are immediate, consider phased construction. Breaking down your project into a few different phases allows you to address immediate concerns with the resources you have available now. Then, as cash flows rebound, you can revisit the less-pressing updates. This approach allows for better cash flow management and can reduce the burden of a significant one-time expenditure.

8. ALWAYS PLAN WITH CONTINGENCIES

No matter how experienced, careful, or collaborative your project team is, unforeseen conditions, challenges, and expenses can arise. Whether it's unexpected soil conditions, changing material costs, or something else, it's always a good idea to have an owner's contingency fund. This can be a small percentage of your project's total cost, but it will help you avoid funding issues should something unexpected come up.

An experienced construction team can help advise you on how much should be set aside for contingencies.

YOUR TEAM SHOULD LOOK TO OPTIMIZE THE ELEMENTS OF THE PROJECT THROUGH AN ANALYSIS OF ALL FACTORS, LIKE COST, UPKEEP, WEAR-AND-TEAR, & AESTHETIC VALUE.

[i] https://dbia.org/wp-content/uploads/2018/11/Cost_Performance_Research-CII_Pankow2018.pdf

A **VISION-LED** PROJECT

Every successful project starts with a clear vision. It embodies your organization's needs and wants while creating an exceptional environment for those who will inhabit it.

However, sometimes this vision can get muddied up in the minutia of the project. This list will help you stay the course.

1. START WITH A CLEAR PURPOSE

Before diving into designs or selecting materials, take time to reflect on what the purpose is for the building you envision.

Ask yourself what functions the new space will serve. Who will use the new space, and what should it look like? What message will the building communicate about your organization and brand?

2. VISUALIZE AND DOCUMENT

With a purpose defined, start thinking about the specifics. Research other buildings and interiors to find what resonates.

Your design team will guide you and will use their expertise to ensure you get a skillfully designed building that's beautiful and functional. But having clear examples of what you like can help.

3. SETTING YOUR BUDGET AND SCHEDULE

Homing in on the ideal physical components of your building is an essential step in crafting your vision. But there are a few confining factors to consider. Namely, your budget and time frame.

A well-defined budget allows you to make informed decisions regarding design and materials. It will illuminate what costs need to be prioritized and what features are open for changes. Take note of any time restraints that could influence the project's schedule.

4. COLLABORATE WITH EXPERTS

From design to construction and everything in between, it's your project team's job to understand your vision. They'll be there to offer tangible insights and practical solutions on how to best accomplish it, guided by their wealth of industry knowledge.

Look for firms that understand what you want to accomplish, as well as ones with a track record of experience with similar projects.

5. LOOK AHEAD

Chances are that your organization's needs aren't fixed or static. That said, building projects can be a substantial investment, and are something you'll want to get use out of for many years.

When crafting the vision for your project, think about the future. While it's impossible to know exactly what lies ahead, keeping the future in mind and incorporating some flexibility can pay off down the road.

6. CONSIDER OPERATING COSTS

Take time to consider what this new building will take to maintain. Ask yourself questions like how long the components last, and how will cleaning, maintenance, and replacement work. Looking at the total life cycle cost of your building's components can help ensure your envisioned project benefits your organization for years to come.

7. BE OPEN TO ADAPTATIONS

As construction begins to ramp up, there may be instances where you'll need to make adjustments. While staying true to your vision is vital, site constraints, material availability, or unforeseen challenges can pop up. Being open to changes can lead to more robust and practical solutions.

"THE VISION WOULD GUIDE US ALL THE WAY ALONG THE WAY, AND HELP US MAKE THOSE CLEAR AND CHALLENGING DECISIONS."

- PASTOR KEVIN ESHLEMAN

Watch this project video on our website.

8. REVIEW AND REVISE

As things begin to take shape, discuss any concerns you might have with your construction team. Ask for updates and clarifications, walk through the structure, and ensure everything is aligning with your vision. If change orders are needed, the sooner they're made, the easier and more affordable they are.

CREATING A **SUCCESSFUL** PROJECT

As a project owner, there are crucial elements to consider when working towards a successful project. From resource management to ensuring work is done correctly, the brunt of this falls on your project management team or your contractor.

Here are five markers of a successful construction project, along with advice on how to achieve them.

1. MEETING THE BUDGET

For many clients, staying on budget is paramount. To achieve this, you need a team that's as committed to keeping costs in check as you.

Success in this area starts early in the project process. Your construction team will work with you to create a budget that's a realistic reflection of what it will take to complete the scope.

Throughout the project, your construction team should track expenses, manage costs, and provide transparent financial reporting to ensure unexpected costs don't drive up the bottom line. You should make sure costs are managed by requesting regular budgetary updates.

At Horst, we offer an open-book approach to all our clients. We fully believe in and embrace transparency, and strive to be responsible stewards of your resources.

2. MAINTAINING THE SCHEDULE

The old cliche still rings true: time is money. The longer your project is under construction, the longer your organization's operations are on hold.

Your construction team is responsible for creating a project schedule that's comprehensive and outlines key milestones and deadlines. They'll also manage the project to ensure these markers are met.

Regular project updates in whichever form your organization prefers should identify potential delays and bottlenecks. Recognizing them is the first step to getting ahead of and preventing or minimizing their impact.

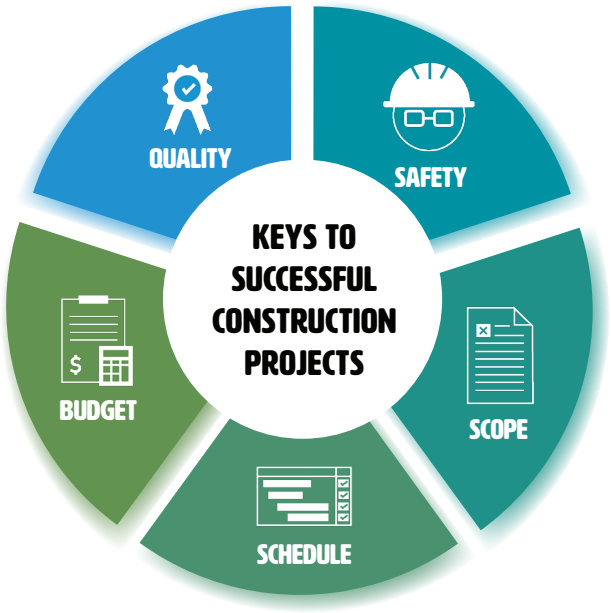
3. STICKING TO THE SCOPE

The scope of work is an agreement between you and the construction team. It outlines all the work to be completed on the project.

Its importance cannot be overstated. The scope needs to be clear, detailed, and understood by everyone.

Once construction begins, your contractor should give you regular updates that compare the work put in place to the demands of the scope. If changes to the scope are needed, they should clearly show the impact on budget and schedule.

This approach can help reduce costly change orders and scope creep as the project progresses.



4. DELIVERING ON QUALITY

Building new or renovating is an investment in the future of your organization. The work your construction team does needs to stand the test of time, leading to an attractive and functional facility.

In order to achieve this, strict adherence to quality is key.

Your construction team will implement quality assurance processes to ensure the work their subcontractors put in place meets quality standards.

This includes regular inspections and promptly addressing issues.

5. COMPLYING WITH SAFETY STANDARDS

Creating and maintaining a safe construction environment is a key marker of success for all involved with the project.

Your construction team needs to make it a priority through the implementation of a robust safety plan that's well communicated with everyone who enters the site and is enforced by both trained safety specialists and job site management.

The success of a project is dependent on several key factors. Each of these are the responsibility of your construction team, and require consistent updates and communication with you to ensure the project is progressing towards a successful end.

CHOOSING THE **BEST** *TEAM*

Choosing a construction partner is a big decision. The wrong choice could cost you a lot of time and money.

Choosing the right one can make the project process easier, faster, and more affordable.

While price is important, there are several other factors that will impact project success. Here are eight things to look for in a team.

1. RELEVANT EXPERIENCE

One of the best markers of future success is past success. If a construction company recently completed a project with similar elements to your own, there's a good chance they can do it again. They'll have learned how to approach the project successfully and how to deal with common issues that may arise. To evaluate their expertise, ask the companies you're considering to provide examples of previously completed projects that are similar to yours.

2. PROJECT TEAM

While the company's project experience is certainly important, the experience of the individuals running your project may be even more so.

Ask them to provide resumes for key people, like the project executive, project/preconstruction manager, and superintendent. These resumes should include projects these individuals have worked on in the past, allowing you to evaluate how suited they are to your project.

3. TESTIMONIALS, REFERENCES, & REVIEWS

See what past clients and other business partners are saying about them. Testimonials, references, and reviews all give you insight into what it's really like to work with the company.

4. RESPECT FOR YOUR BUDGET

When evaluating costs, it's important to look at them holistically — not just at the bottom line. If one bid is significantly lower than others, look into why. In some cases, the lower price could be due to missed details, which could cause major headaches (and costs) down the road.

That said, price is an important factor, and if a company can deliver the same results at a lower cost, it's a win.

5. THEIR SUBCONTRACTORS

A construction team that has good relationships with the local subcontractor market can bring significant advantages to your project. They should have a network of tried and true partners they work with time and time again because of their dependability, great work, and fair pricing.

Your construction team should also have a plan in place to prequalify new subcontractors to ensure they're bringing a reputable company onto your job site.

6. LICENSING, BONDING, & INSURANCE

Be sure a construction partner is fully licensed to do work in your state by asking for a copy of their license or identification number in their proposal or qualification responses.

Other key documents will be bonding letters if desired, and proof of insurance, including liability, property damage, and workers' compensation. Ask for copies in your request for qualifications or proposal.

PRICE ISN'T THE ONLY FACTOR WHEN CHOOSING A CONTRACTOR.

YOU NEED A TEAM THAT CAN COMPLETE YOUR PROJECT SUCCESSFULLY & DRIVE VALUE THROUGHOUT THE PROCESS.

7. SAFETY

Get a clear picture of their commitment to safety by asking for various safety-related markers, like EMR (Experience Modifier Rate) and OSHA 300 and 300a logs.

You can also ask for information on their company safety policy and their safety team. If they have these assets, it's often a sign that the company takes safe work practices seriously, and they actively take steps to educate their employees and implement effective safety programs.

8. UNDERSTANDING & VALUING YOUR GOALS

The last, but probably most important thing you'll want to look for in a construction team, is that they are committed to understanding and carrying out your vision for the project.

You need a construction company that fully understands what your goals are for the project, both short-term and long-term. They'll be able to help guide you through the process, ensuring you end up with a completed project that fulfills the needs of your organization.

CONSTRUCTION TERMINOLOGY YOU NEED TO KNOW

Architectural Drawings A detailed graphical representation created by architects that communicates design concepts, construction plans, and specifications for buildings.

As-Builts Architectural drawings that depict the final constructed elements of a building. They document modifications from the original design plans.

Bid Formal proposal submitted by a contractor that outlines the cost and terms for completing a project.

BIM (Building Information Modeling) A 3D model of a building, integrating information about its physical and functional characteristics to enhance visualization and project life cycle management.

Change Orders Formal amendments to the construction contract dealing with modifications, additions, or deletions to the scope of work, schedule, or cost.

GC/CM (General Contractor/Construction Manager) Project delivery method in which the GC is involved in the project early on, providing input during design. They then assume the responsibility for managing the construction phase.

Design-Bid-Build Project delivery method where the design phase occurs first and independently from the construction phase. Contractor is chosen through the bidding process.

Design-Build Project delivery method where a single entity, typically a contractor or design-build firm, is responsible for both the design and construction phases of the project, streamlining communication and reducing project duration and cost.

Estimate An approximate calculation of the cost, time, and resources required to complete a project, providing stakeholders with an informed prediction of the project's overall requirements and scope.

FF&E (Furniture, Fixtures, & Equipment) The movable items that are not part of the building structure but are essential for the functionality and aesthetics of the space, such as lighting fixtures, appliances, and decorative items.

Floor Plans Architectural drawings that show a detailed layout of a building's interior space, including the arrangement of rooms, walls, doors, windows, and more from a top-down perspective.

Foreman Supervisory role responsible for overseeing and coordinating the work of construction crews and tradespeople on-site. They ensure each task is completed safely and correctly.

General Contractor The firm responsible for overseeing and managing the project. They typically hire subs, obtain permits, coordinate schedules, manage budgets, and ensure the work in completed correctly.

GMP (Guaranteed Maximum Price) An agreement between the owner and the contractor specifying that the final cost of the project will not exceed a predetermined price. This provides financial certainty to the owner while allowing the contractor to manage costs efficiently.

IPD (Integrated Project Delivery) A collaborative project delivery approach where all stakeholders work together from the early stages of the project to maximize efficiency, minimize waste, and achieve shared project goals.

Lean Construction Project approach that emphasizes maximizing value and minimizing waste throughout the entire project. It focuses on improving efficiency, productivity, and collaboration to deliver high-quality results for less money over less time.

Master Planning Comprehensive process of envisioning and strategizing for the long-term development of a site or facility to create a cohesive plan for future use and growth.

MEP (Mechanical, Electrical, Plumbing) Refers to the systems responsible for heating, ventilating, cooling, electrical, and plumbing.

MEP Drawings Drawings that focus specifically on the mechanical, electrical, and plumbing systems within a building. They provide precise diagrams and specs for the layout, installation, and connections of these components.

Pay Application Sometimes shortened to pay app, this is a formal document submitted by a contractor to request payment for work completed on a construction project. It is typically reviewed by the owner, and upon approval, the payment is issued to the contractor according to the terms of the contract.

Preconstruction Phase of a construction project that includes planning, design development, budgeting, scheduling, permitting, and other activities before construction begins.

Project Coordinator May also be called a project engineer or assistant project manager, this role is responsible for assisting project managers in organizing and coordinating various aspects of a project. This includes meetings, documentation, progress tracking, communication, and ensuring the schedule and budget are maintained.

Project Delivery Method An approach used to execute a construction project, typically involving how contracts are awarded, how responsibilities are allocated among participants, and how risks are managed. Examples include design-build, design-bid-build, IPD, and construction management at risk.

Project Manager The professional responsible for overseeing and coordinating all aspects of a project including planning, budgeting, scheduling, resource allocation, risk management, communication, and quality control. Often the central point of contract and the leader.

Punch List A document used to wrap up construction on a project. It outlines any incomplete or deficient work items that need to be addressed before completion. Typically includes minor finishing touches, repairs, and adjustments.

Purchase Orders Documents issued to suppliers or vendors to formally request materials, equipment, or services needed for the project. They specify quantity, price, date, and other relevant terms.

RFI (Request for Information) A formal document used to gather clarifications of additional details about aspects of the project. They're typically submitted by contractors or subs, and are directed at the owner, architect, or engineer.

RFP (Request for Proposal) A formal document issued by a project owner to solicit bids and/or proposals from qualified contractors or vendors for the provision of construction work. It outlines the project requirements and submission instructions. The contractors will respond with a detailed proposal outlining their qualifications, project approach, and estimates for the client to evaluate.

RFQ (Request for Qualifications) A formal document issued by a project owner to solicit a qualifications package from various contractors. The responses will reflect general information about the contractor and their ability to complete the project. It serves to help narrow down a list of contractors before a bid is issued.

Schedule of Values A comprehensive breakdown of the entire scope of work for a construction project, organized into various categories or line items, each assigned a specific value. It's a detailed financial road map for the project and may be used for billing, progress tracking, and ensuring payments are tied to the completion of work as outlined in the contract.

Scope Creep The gradual expansion or addition of project requirements or deliverables beyond the original scope at the start of the project. It can lead to delays, budget overruns, and increased risks.

Scope of Work A document that outlines specific tasks, activities, deliverables, and requirements of a project. It provides a detailed description of the work to be performed and serves as an agreement between the client and contractor to ensure alignment and clarity regarding the project goals and responsibilities.

Site Plan Detailed drawings that provide an overview of a project site/property, including its boundaries, structures, landscaping, and other features. It typically shows the layout of buildings, parking, access roads, utilities, and relevant zoning/regulatory information.

Specifications Detailed written descriptions of materials, equipment, workmanship, and quality standards required for a project. They provide specific instructions and requirements for contractors to follow when completing various aspects of the construction work, ensuring consistency, quality, and compliance.

Structural Drawings Detailed graphical representations that depict structural components and systems of a building, including columns, beams, foundations, walls, slabs, and other elements.

Subcontractors Companies or individuals hired by the primary contractor to perform specific tasks, including plumbing, electrical, HVAC, painting, roofing, and more. They are responsible for completing their assigned portion of the project within the agreed-upon time frame and quality standards.

Submittal The process of submitting documents, drawings, samples, or other materials to the project owner, architect, or engineer for review and approval.

Superintendent Often the key on-site manager on a project, responsible for overseeing day-to-day operations, coordinating construction activities, managing subcontractors and suppliers, and ensuring work progresses according to the schedule, budget, and quality expectations.

Value Engineering A systematic approach used on a project to optimize the value of a project by analyzing its functions and components to find opportunities for cost reduction, performance improvement, and efficiency enhancement.

Zoning Refers to the division of land within a municipality into different areas or districts, each with specific regulations and restrictions regarding land use, building height, density, setbacks, and other factors.

BUILDING WHAT MATTERS TO YOU®

Since the 1890s, Horst has been building up communities through a doctrine of kept promises and a “no surprises” construction experience.

Start your project with us today.

HORST CONSTRUCTION

866-467-7848 | HORSTCONSTRUCTION.COM

Let’s stay in touch!

Click the icons to check out our socials, where you’ll find construction behind-the-scenes, project tips, and industry insights.