

# A GUIDE TO CONSTRUCTION PLANNING

BY STAR BUILDING SYSTEMS



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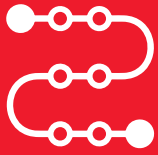
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## Section 1. MAPPING THE TIMELINE

When looking at starting a building project, whether it is an addition to an existing structure or an entirely new and individual building, there are many aspects that need to be considered. From basics like budget to anticipating construction timelines, the building process doesn't need to be an overwhelming endeavor.

By answering the following questions regarding the six stages of the building process—mapping the timeline, financing the build, choosing land to build on (if necessary), determining the utility requirements, considering the details before breaking ground, and finally, budgeting all aspects of the design—the design and build process can run more smoothly, helping you nix problems before they appear.

Before plans for a new or updated building can be put in place, it's important to get the basics in order. Of course, whether you are replacing or adding to an existing facility or creating a new building from the ground up will allow for more or less flexibility if issues should arise, but by having the necessary timeline in mind, you can give your clients a more exact estimated cost and idea of what can be finalized by the open-date.

### QUESTIONS TO ASK:

- 1.1. Have all interested parties approved of the build? If you own the project and land, this can be easily answered, but for a majority of builds, there will be a number of people whose approval will be necessary. If there is a CEO or president, board members, land owner the plot is being leased from, or other responsible parties, getting their approval before moving forward will help decrease any potential roadblocks the project may run into at the beginning.





## Section 1. MAPPING THE TIMELINE



### **The Gathering**

*Located in Beaumont, Texas, received more than 108 inches of rain during construction, causing numerous delays, impacting the project schedule.*

- 1.2. Can plans begin and be completed without interruption? Most of the possible interruptions will be covered in the remainder of this document, but the most common problems are those relating to permits and city codes, funding the project, and weather or natural disasters. The former can be easily circumvented by ensuring you have the answers before breaking ground, but depending on your location and average weather patterns, the timeline could be extended. Planning weather delays into the timeline can help determine whether it can be built on deadline.
- 1.3. What is the open for business date needed? Understanding the potential weather delays can be particularly important if you are in the midst of moving from one building to the one being built, or if work is on hold during construction—such as having to close down a restaurant until the build out is complete. Rarely are there problems if a building is finished early, but a delayed project can oftentimes result in unnecessary and unplanned costs, such as the need to extend a lease or find a temporary location, or the loss of profit from a store being closed longer than expected. Keeping your client from unnecessary extra costs and problems will have a much more positive effect on not only the project, but also on your company's reputation.
- 1.4. When will construction have to start to meet this deadline? After discussing the previous questions, you can often approximate the time needed. Again, being conservative with the estimated time it will take to finalize the build can help mitigate unwanted costs or problems, so have an open and honest conversation with your client.
- 1.5. Having an accurate timeline—rather than a desired timeline that won't allow for wiggle room if a problem arises—will save you and your client time, money, and a headache in the long run.



## Section 2. FINANCING

Figuring out necessary financing will depend on a number of factors: How will the build be financed? Will there be a loss of income during construction? Will employees need to be paid during the timeline? Are there local or state-wide grants or rebates that can be used? In many instances, financing will be necessary.

*(The approximate amount necessary for the project itself can be totaled in Section 6: Budgeting.)*

### QUESTIONS TO ASK:

2.1. Is financing available? There are generally two types of financing that are used in the construction process: construction financing and long-term financing. Interim or construction financing is a short-term loan that is obtained to cover the cost of the build so the project can start before long-term financing is finalized. Often, lenders of construction financing will require a down payment of 20 percent of the long-term mortgage, with the expectation that repayment will happen within 12 to 24 months. Conversely, long-term financing can take more time to secure, but mortgages are typically paid off over the course of 20 years.

Unlike a general home loan where the funds are received as a lump sum, many long-term commercial construction loans are released in parts as the project hits milestones as specified in a schedule worked out between the borrower and lender. Being approved and setting the release calendar takes time—sometimes up to 6 months—so a short-term loan can help you finance preliminary aspects like drawings and permit fees.

2.2. Do we need help obtaining financing? Lenders can come in a variety of types, so utilizing experts to help you go over or obtain financing can be beneficial. Understanding where financing is coming from is one of the most important factors of any construction project, right up with having a build timeline and budget.





## Section 3. CHOOSING LAND

Many builds won't require the purchase or lease of land, but if your project will require a new plot, there are a few boxes that should be checked to keep the project from stalling. Even if you think you're sure, double checking the following can keep the build on budget and moving without interruption.

### QUESTIONS TO ASK:

- 3.1. Is there a clear title to the build site? To ensure that there won't be a lawsuit down the line, it's important to make sure that you have a clear and good title over the land. Even if you have purchased the plot outright, if anyone else can claim entitlement on the land, this needs to be cleared up before building. Failing to do so can result in legal issues during the build or when you attempt to transfer or sell the property down the line.
- 3.2. Has zoning been approved? Zoning is the practice of segregating the uses of land deemed incompatible—either neighboring land or the same plot used for different purposes over time. Typically, zoning is put in place by a city, county or municipality to keep new developments from harming existing homes or businesses, and to keep the user of the new facility from having their well-being harmed by previous land use. For example, you wouldn't want a loud industrial plant to be constructed next to a quiet residential neighborhood or a school built atop a plot that once was the site of a gas station where waste seeped into the ground.

Even if you think you know the zoning laws for your property, it's important to check with your local ordinances. Whether or not a property owner agrees, the city has a right to change zoning as it sees fit.

However, if you plan to use the land for a purpose outside its zoning restrictions, you have options. Most zoning

ordinances allow for special use permits or variance for non-typical use. To have an individual plot rezoned, the owner needs to petition the local zoning board.

A zoning change can also be requested for the entire neighborhood, but this will be more expensive than petitioning for a specific plot. More often than not, a special use permit or variance will be enough to begin a build.

- 3.3. Have surveys been taken? The primary purpose of a land survey is to prevent disputes over property lines. You can research whether a survey has already been performed by visiting your building inspector or land records office. They may also be on file at the county assessor's office in the form of tax maps.

If your land hasn't had a survey conducted, plan to have one done. Even if an existing boundary, like a fence, is dividing the property, it may not be the legal boundary. Only professional property surveys are legally binding.

- 3.4. Have watershed and drainage requirements been checked? Drainage is the amount of water that runs off a property, including the amount that occurs during rain. If more watershed occurs than is expected, there can be wide scale issues such as flooding or an overwhelmed sewer system, so it's important that the requirements be calculated before building begins.
- 3.5. What building code restrictions govern the site? Building codes are a set of rules that structures must adhere to, and like zoning ordinances, are determined by cities, counties, municipalities or states. Your local building inspector or county assessor's office should have the most recent building requirements.



## Section 3. CHOOSING LAND cont.

- 3.6. Are there easements on the site? An easement is a legal right to use someone else's land for a specific limited purpose, such as when land is leased. Usually, an easement contract is used in place of a deed, which remains with the person or entities that own the land. An easement contract will contain specifics, such as how long the easement will last and what can be done with or on the plot. If an easement exists, will it interfere with the build or use of the property? If you aren't sure if an easement exists or what the contract allows for, contacting a property lawyer to review your documentation will allow you to get a clear picture of your rights.
- 3.7. What are the insurance requirements of the site? Most of the time, landowners aren't required to hold insurance during construction, but discussing this matter with your insurance provider will help keep you from incurring costs if someone is hurt on your property and you are found liable.
- 3.8. What is the plan for future development? Even if there isn't a current plan for future development, keeping in mind how the area will grow over time will nix any future problems. Since buildings stand for decades—and the mortgage usually lasts at least 20 years—long-term planning is paramount. Take into consideration the accessibility of the building if the area develops, if there are setback requirements, and if so, will those setbacks inhibit future expansion.
- 3.9. What site preparation work is needed? Build sites are rarely perfect for construction as-is. Discuss the site conditions with your engineer and/or contractor, reviewing the following:
- a) Soil testing: Soil tests give the characteristics of the soil to determine its ability to support your structure, providing you with vital data for informed decision making and planning for your construction work.
  - b) Clearing: Clearing involves getting rid of any vegetation, trees, brush or hazardous substances from a site before construction can begin.
  - c) Grading: Grading creates a smooth landscape free of variations in elevation. Leveling the plot so that the soil is flat provides a level base for a foundation or to slope the land away from the construction site to provide adequate drainage.
  - d) Demolition: Demolition gets rid of any intrusive structures before construction can occur.
  - e) Fill/dirt removal: The plot may need more or less soil, which will need to come from or go to a secondary location.





## Section 3. CHOOSING LAND cont.

- f) Is a retaining wall needed? If your plot has a slope, a retaining wall will help minimize erosion. Building a retaining wall should be considered if you are near a location where the soil is soft or there is flooding, particularly if the building will be downhill.
- g) Is fencing or screening needed? A fence or screen may be necessary if the business will be working with or storing materials or machinery that could damage external property or the general public, such as forklifts left outside. You also may want to install one for privacy, safety, or to decrease outside influence, like theft of goods.

If a fence already exists on the property, remember that it may not be on the true property mark, so a survey may be needed.

**3.10.** What traffic facilities are needed? Keeping potential growth and/or clients and employees in mind, the land chosen should be able to provide plenty of space for any necessary driveways, pedestrian

walkways, traffic signals, parking—including handicapped parking, and whether separate customer parking is needed. If the company is planning to grow, but the increase isn't part of the plan for the parking lot and traffic flow, it can become a costly—and annoying—oversight.

**3.11.** Will paving be asphalt or concrete? While both use gravel, the difference between the two are the adhesive materials used. Concrete is made of cement while asphalt is petroleum based. Make sure to discuss this topic with your engineer to better understand what upkeep will be necessary or issues that may arise.

**3.12.** What is the street load capacity? The street load capacity is used to figure out what the traffic flow will look like throughout the day, particularly during peak hours like when work begins and ends. Calculating—or making sure your contractor calculates—the capacity will allow any build up to be mitigated through secondary lane construction or additional entrances and exits on the property.







## Section 3. CHOOSING LAND cont.

- 3.13. What is part of the general contract? It can seem as if all the details should be covered by your contractor, but double-checking the following—and then hiring a third party where necessary—will keep the project from being pushed back.
- a) Parking lot paving
  - b) Painting parking stripes
  - c) Traffic directional signs
  - d) Curbs and gutters
- 3.14. Is a site plan review required? A site plan is a detailed engineering drawing of the proposed building, including footprint, travel-ways, parking, drainage facilities, sanitary sewer lines, water lines, trails, lighting, landscaping and garden elements. While this isn't always needed, your municipality may require a site plan before construction can begin.
- 3.15. Is an environmental impact study required? There are instances in which a local ordinance will require an environmental study. These are ecological surveys of the local wildlife—including insects and foliage—and what type of impact your building will have on the ecosystem. To avoid fees, legal issues or the denial of building rights on the property before buying a plot or starting a project, check with your local municipality to see if they will require an environmental impact study. Remember: just because a neighboring plot isn't required to do an environmental impact study, that doesn't mean this particular plot isn't a host to differing ecological considerations.





## Section 4. UTILITY REQUIREMENTS



Whether you're creating an entirely new building or renovating an existing structure, if walls are being included, you are most likely going to need to consider what utilities currently exist and what will need to be included.

### QUESTIONS TO ASK:

- 4.1. Is temporary power available during construction? If power is needed for lighting, trailers and/or tools, you'll first need to determine where the source will come from. The electrician on your team should be able to calculate the power that will be needed and where it should run from. Often, this power will need to come from temporary power poles. If you don't have an electrician or you need a temporary pole installed, look for temporary power companies in your local area that can supply you with the correct solution to your project.
- 4.2. What are the building's power requirements? If this project will be the new or secondary structure for an existing company, calculating the power needed can be done more easily by looking at previous electricity bills. But if this is going to be a completely new company or use, you'll want to call in your local utility company to determine the estimated power needed when the structure is finalized.
- 4.3. Are existing power sources adequate for peak operation? Again, you may need to consult your local utility company to determine what power is available to the location already and what may need to be added to reach needs.
- 4.4. What is needed in regard to:
  - a) Gas Mains
  - b) Water Mains
  - c) Anti-pollution devices
  - d) Storm Sewer drainage
  - e) Trenching and back-fill requirements for all underground lines
  - f) Sanitary pits
  - g) Sanitary sewer
  - h) Overhead sprinkler



## Section 4. UTILITY REQUIREMENTS cont.

The answer to many of these will come from your local utilities department to determine what resources are available and what codes need to be met.

- 4.5. Will existing power and/or telephone lines need to be relocated? When determining your available and required energy, the utilities department will be able to figure out whether your power and/or telephone lines will need to be relocated.
- 4.6. Will there be an illuminated sign? More frequently these days, cities are making determinations to decrease light pollution—the amount of man-made light that exists in an environment. Whether or not an illuminated sign can be used will be part of the local codes and ordinances, but if lighted signs can be used in your building's zone, you'll need to decide whether or not one is needed. Illuminated signage is usually a good idea if you need customers or clients to find your building at a distance and/or at night. If you decide to install a lighted sign, plan where it will go on the building to make sure that it can be connected to a power source easily.
- 4.7. Is there any need for flood lighting in outside areas? Flood lighting is usually installed for safety purposes—whether to keep others off of the lot or to make sure employees can easily see their way in the dark. Like illuminated signs, if there aren't ordinances against flood lights, determining where they will go before the build starts can elevate issues down the road when you go to connect the lights to power.
- 4.8. Have the following areas been included:
  - a) Parking lot lighting
  - b) Other needed exterior lighting on grounds
  - c) Illuminated Exit signs, as required by OSHA

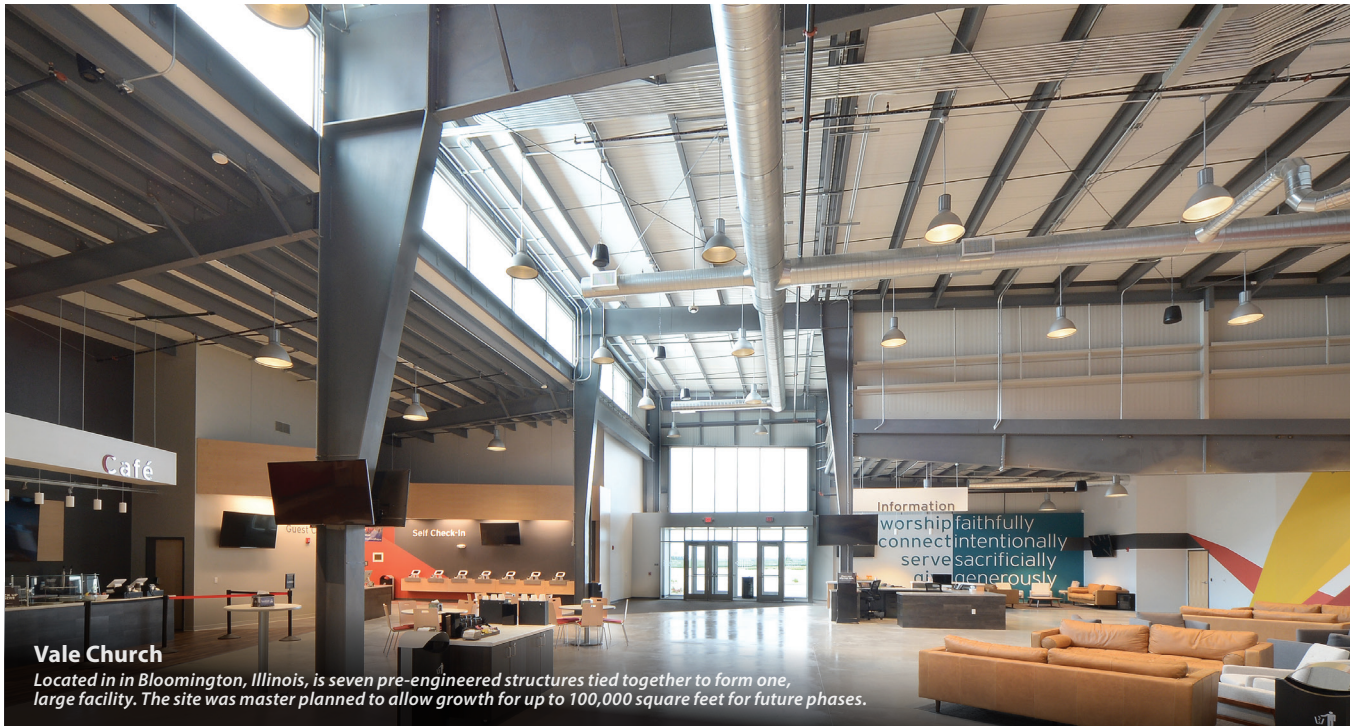


### **Cobalt Stables**

*Located in Kansas City, Kansas, is an unusual combination of horse stables and training facilities with a human residence, all under one roof.*



## Section 4. UTILITY REQUIREMENTS cont.



### Vale Church

Located in in Bloomington, Illinois, is seven pre-engineered structures tied together to form one, large facility. The site was master planned to allow growth for up to 100,000 square feet for future phases.

Each commercial building is required to have illuminated exit signs that can be seen at a distance in case of an emergency. Similarly, exterior lighting may be required, such as parking lot lights, for safety reasons. When checking local codes, make sure to ask about required and allowed exterior lighting so that preparations can be made rather than try to add electricity sources later.

- 4.9. Have all interior wiring requirements been considered for the:
- Lunch room
  - Restrooms
  - Janitor's room
  - Computer requirements
  - Business equipment requirements
  - Other

These can seem self-evident, but dotting the i's and crossing the t's will keep your project from being held up down the line.

- 4.10. Are electrical outlets sufficient for whatever is needed and conveniently placed? Few things are more annoying than getting a space set up just to figure out that there isn't an outlet nearby. While things like cord extensions exist, they can pose a tripping hazard, and they're unsightly. Having your electrician determine the correct placement and number of outlets for the end use of the space will help save time, cost, and potential problems down the line.

- 4.11. Do meters, transformers, circuit breakers, and sub-panels have proper capacity for future mechanical needs? The last thing you'd want is for power to go out and no one can reach the circuit breakers or transformers, or for it to be a hassle every time the meters need to be read. It's a good idea to go over the layout of the building with your electrician to determine the best placement for meters, transformers, circuit breakers and sub-panels so that they are easily accessed.



## Section 4. UTILITY REQUIREMENTS cont.

4.12. What are illumination requirements for:

- a) Foot-candles in plant areas
- b) In office area
- c) At each work station
- d) In warehouse area

There really isn't a one-size-fits-all solution for what your illumination needs will be. Discussing the everyday use of each room with your electrician will help make sure no one is left in the dark or with inadequate lighting.

4.13. What are the requirements for:

- a) Heating
- b) Ventilation
- c) Air conditioning

4.14. Will there be requirements for elevators or escalators?

If so, what are they? Particularly, if your building needs to reach the Americans with Disability Act's codes and regulations, an elevator or escalator may be required. If so, what type of electricity is needed, and where will they be placed? Is there space for one to be installed if need-be in the future?

4.15. Waste disposal requirements including:

- a) Incinerator
- b) Disposal
- c) Trash area/bins

It's important to note how waste will be removed from the property and whether there's the room and ability to add disposal sites in the future depending on occupant needs. Your local utility department should be able to inform you of the types of disposal available in your area and what is needed, such as a back alleyway for garbage bins or local ordinances for incinerators.

4.16. Are there requirements for:

- a) Fire/burglar alarm system
- b) Public address system
- c) Internal music system

While the fire and burglar alarm systems are standard in commercial buildings, more and more companies are opting to include public address systems in case of emergencies, and for places like retail stores or restaurants, an internal music system can help set the mood.





## Section 5. BUILDING



### House of Sports

Located in Ardsley, New York, consists of a parking garage on the ground floor, with four full-size regulation basketball courts on the second floor and an 80-yard long turf-covered indoor soccer field on the top floor.

When the site is ready for the build, there are still a few details that need to be resolved with the client to keep the project from being stalled or to stop any long-term issues from arising.

### QUESTIONS TO ASK:

- 5.1. Is the building use complex enough to employ an individual engineer for layout? If the building will include changes or additions to roofing, walls, plumbing, wiring, or foundations, it's important to bring in a structural engineer—at least to approve the documentation, as found in 5.2.b. If you aren't sure if an engineer is needed, check your local permit office.
- 5.2. What are building code design load requirements?
  - a) Code required and design loads: Another positive aspect of hiring an engineer is that they will be up-to-date on your local codes. Unfortunately, codes aren't necessarily standardized, so it's important to note whether the municipality where the structure will be built requires specific codes,

even if it mirrors another building you already maintain. These codes will give a layout of what type of load requirements are necessary, what type of fire rating your region needs, and more.

- b) Do you need an engineer's seal? An engineer's seal is a physical stamp on the final documents and drawings that show a licensed, professional engineer has looked at and approved them. Even if the drafts were created by someone with a degree in engineering, documentation isn't official until it has an engineering seal affixed to it. The purpose is to show that the building is structurally sound as approved by a certified engineer who has an up-to-date license.

If the project is small enough, an engineer's seal may not be necessary, but for most structures that include electrical, mechanical, plumbing or load-bearing structural support, local ordinances will require approval by an engineer. Even if an architect was hired for the plan, an engineer must look over any plans that will incorporate



## Section 5. BUILDING cont.

electrical, mechanical, and plumbing details. It's important to verify with your local permit office whether you need to have an engineer approve all documents before building begins.

### 5.3. Is a mezzanine needed?

A mezzanine is an intermediate story (or stories), which is open to the floor below; however, it isn't considered a proper "floor," and it won't typically be factored into the building's total square footage. Mezzanines will be 25 percent of the area of the floor it is closest to, and is considered a separate floor rather than a mezzanine if the roof-line is different from the floor below. If the design of your space would benefit from a mezzanine—to be used for reasons such as creating a small office or storage space—this should be discussed with your designer and/or engineer to accommodate the addition.

Any mezzanine will have two load weights that will need to be designed for: the live load and the dead load. The live load means the weight of non-permanent entities,

such as foot traffic, pallets being moved across the floor, or temporary furniture. The dead load is anything that is permanent, such as walls or the weight of safety barriers. In discussing the addition of a mezzanine, it's important to discuss the intended use so that the correct load can be accounted for and added to the floor load.

5.4. Are material handling systems required? For many warehouses and factories, cranes and/or conveyors will be needed to move loads from one area to another. If you intend to have your space use such equipment, you will need to take into consideration the weight, load capacity, and space needed to adequately operate such machinery. For example, if you are planning to use a top-running crane, has enough space been planned overhead so that the wheel and bridge can move freely? If a jib crane is going to be utilized, will a column need to be reinforced to hold its weight, or will it be anchored to the floor?



**King Street Brewery**

*King Street Brewery in Anchorage, Alaska, includes a Star mezzanine, providing multi-level space for the boiler room, office and brewery.*



## Section 5. **BUILDING cont.**

5.5. What are the minimum building clearance requirements? When taking material handling systems into account, additional square footage may have to be added to the overall footprint of the space or when it comes to the maximum vertical crane lift. But even if there won't be any additional machinery taking up room, it's important to consider how much space you will need for:

- a) Vertical clearance
- b) Column spacing
- c) Width
- d) Length
- e) Clear span

Not accounting for needed additional space can result in cramped quarters or the need for a renovation before expected.

5.6. Are there any “must” locations for:

- a) Personnel doors
- b) Overhead doors
- c) Canopies
- d) Windows
- e) Skylights
- f) Sliding doors

Take every day use into consideration. For example, a bay door placed on the far wall from the closest street will result in additional fuel costs and annoyance as drivers need to go the extra distance to the road, or if an employee needs to walk a further distance than necessary from one building to the next, small design flaws can result in long-term time and income loss.

5.7. Special hardware: There may be plenty of special circumstances to take into consideration in the final stages of a design. Does your building need special locks for private or security clearance reasons? Do

emergency exits need alarm devices? Is there need for a panic or hurricane room? For specialized circumstances, unique hardware may be required. It is helpful to take into consideration whether you will need:

- a) Panic doors
- b) Electric door operating equipment
- c) Emergency exit alarm devices
- d) Specialty locks



**Spruce Lake Youth Activity Center**  
Spruce Lake Youth Activity Center includes four  
12' x 10' overhead doors, located in Canadensis, PA.





## Section 5. BUILDING cont.

5.8. Are loading docks required? If loading docks need to be included into the design, take into consideration which type would best serve your building.

These include:

- a) Levelers
- b) Bumpers
- c) Door seals
- d) Canopies
- e) Road scales

5.9. Have office requirements been determined? If the building will be used for more than storage or loading, it may require additional spaces for employees. These may include:

- a) Employee break-room
- b) Conference room
- c) Mail-room
- d) File storage
- e) Restrooms
- f) Kitchen
- g) Waiting area
- h) Cubicles
- i) Lockers
- j) Refrigerator space

5.10. Does the layout offer smooth traffic and production flow? If you have an engineer or architect designing the space, hopefully they understand the traffic and flow needed for your space. Taking a look at the footprint of the space before building can help nix any issues that may arise. When considering the traffic and production flow, take a look at the draft and imagine how the building will be used from day-to-day. For example, a frequently used conference room on the other side of the building from the employee cubicles can result in wasted time, which can add up quickly.

Additionally, take a look at columns planned within the interior to determine if they're going to interfere with normal production or traffic. If a column will require an employee to walk around it to move goods from one place to another on a frequent basis, it would be best to reconsider the layout.





## Section 5. BUILDING cont.

- 5.11. What are my special requirements regarding exterior appearance? City and local ordinances can include exterior appearance that should be considered before building begins. These may include:
- Property location covenants
  - Color
  - Exterior facade
  - Roof profile
  - Signs and identification on buildings
- 5.12. What water removal is needed? Depending on the location's climate, your building may require gutters, downspouts, or underground drainage.
- 5.13. What are my ventilation needs? Particularly for spaces that won't include a HVAC system, you should take ventilation into account. These may be:
- Louvers
  - Circular ventilators
  - Continuous ventilators
  - Exhaust fans
- 5.14. What are my interior finish requirements? Don't wait until the building is going up to consider the interior materials. Depending on the space's needs, what finishes are intended for:
- Floors (i.e. carpet, tile, LVT)
  - Ceilings
  - Interior partitions
- 5.15. What type of exterior walls will serve best? Your choice of exterior walls may require an understanding of either the local climate, historical style, or desired impression. These can include:
- Functional steel paneling
  - Tilt-up concrete
  - Brick and concrete block
  - Brick only
  - Concrete only
  - Insulated panel system





## Section 5. BUILDING cont.

- 5.16. Similarly, the roof's construction will depend on local climate, style, and desired impression. Typical types of roofing include:
- Ribbed metal
  - Standing-seam metal
  - Built-up
  - Membrane

Initial cost, maintenance, and insurance should be included in the determining factors when looking at which roof would best work for your building. You want to plan the most economical choice that will give you the most value over time.

- 5.17. What R-value is required? The R-value is the rate of which an insulating material is able to resist heat flow—both hot and cold temperature transfer. The necessary R-value for a building will depend on the average temperature of the location, the use of the building, and comfort level. A higher R-value means the material has better insulation than that of a lower R-value.

If your building is in a location where temperatures between the coldest days of winter and the hottest days of summer vary widely, you'll want a higher R-value to keep the exterior temperature from affecting the interior of the building. Similarly, if the structure is going to be used for cold storage, you'll want to limit the amount of heat transfer to decrease the amount of refrigeration needed to keep optimal temperatures.

Before breaking ground, consider what type of R-value your building will require and research the type of insulation which can best meet those requirements.

- 5.18. What landscaping is necessary? Whether planning an intricate garden or natural grass, take into consideration what type of landscaping will be needed in the long run. Have you provided space for planting trees, shrubs or grass? Will an automatic sprinkler system be needed? Will landscaping be part of the general contract or will a separate contractor be needed?



**McCluskey Automotive**  
*Exterior landscaping and lighting completes the aesthetic of McCluskey Automotive Headquarters, located in Loveland, Ohio.*



## Section 6. BUDGETING FOR THE PROJECT

Creating and staying on budget shouldn't be the most difficult aspect of a build, but when the details aren't considered before construction starts, you can be met with surprises along the way.

### QUESTIONS TO ASK:

- 6.1. What are the construction costs? These cover more than just the cost of the building. It's important to tally how much the following will cost:
- Land
  - Building costs
  - Permits/fees
  - Land improvements
  - Utility development costs
  - Equipment and furniture costs
  - Soil tests
  - Site demolition (if any)
  - Site preparation/improvements
  - Paving
- 6.2. What are the soft costs? While the construction costs are typically necessary to the build process, soft costs can be extra fees associated with the design of the building and can include:
- Design fees
  - Construction insurance
  - Special construction insurance
  - Brokerage or legal fees
  - Land survey (more information on land surveys can be found in section 3.3)
  - Environmental impact study (more information on environmental impact studies can be found in section 3.15)
  - Traffic study (more information on traffic studies can be found in sections 3.10 and 3.12)

## IN CLOSING

The design and building process doesn't need to be a stressful ordeal. By using a detailed checklist to walk through each consideration of the project, contractors can ensure that even the most detail-oriented client is on track and considering all of the ins-and-outs of their building. Proper handling of a project by the contractor in determining the nitty-gritty aspects before breaking ground can elevate the status of your company through a happy client and beautiful final project that keeps the end-user at ease.

Now what? When you've dotted the i's and crossed the t's, ask STAR Building Systems how their catalog of products can elevate the project even further, providing long-lasting results.



