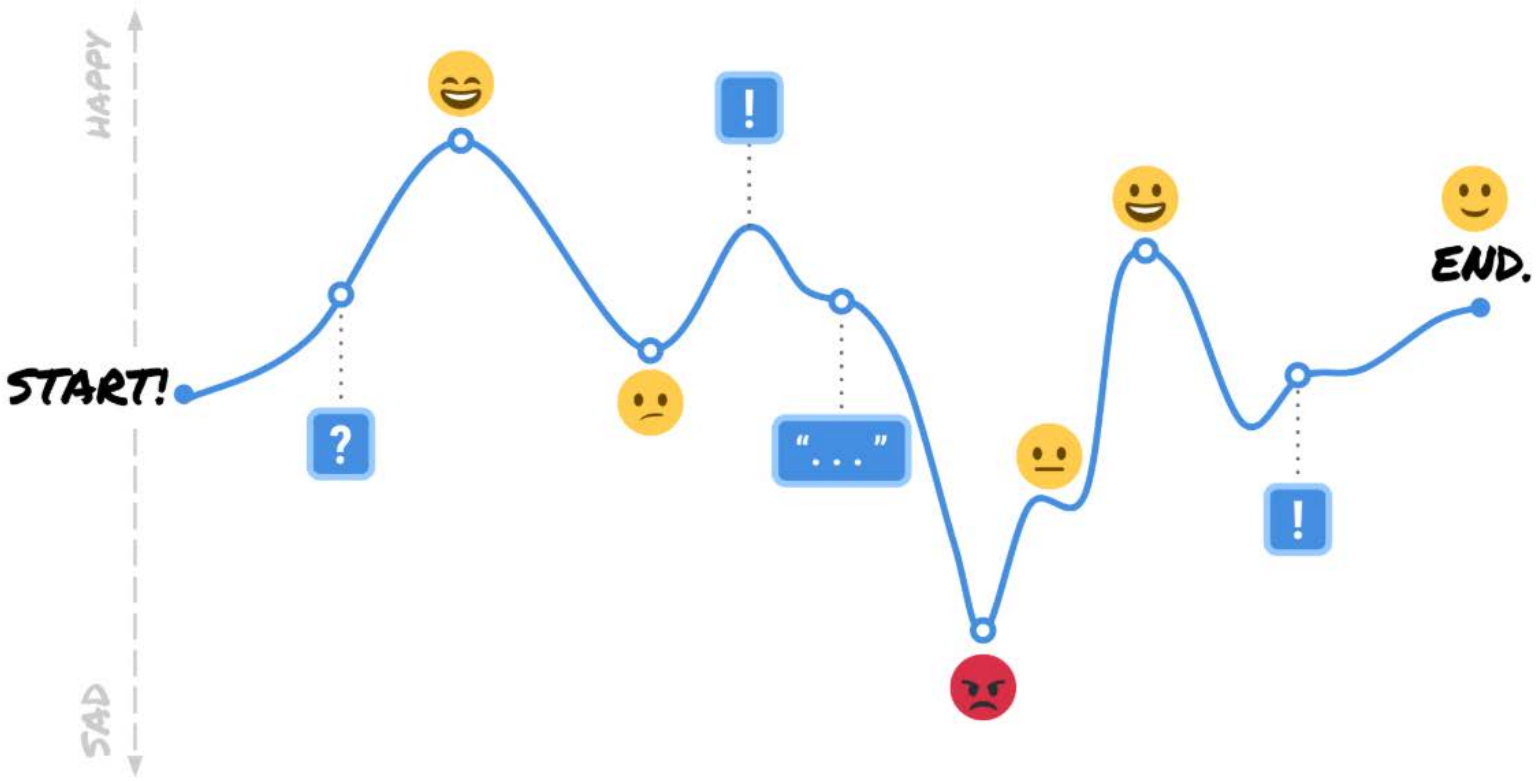
California Grain & Feed Association

Customer/Contractor Relationship from Sales to Finished Project

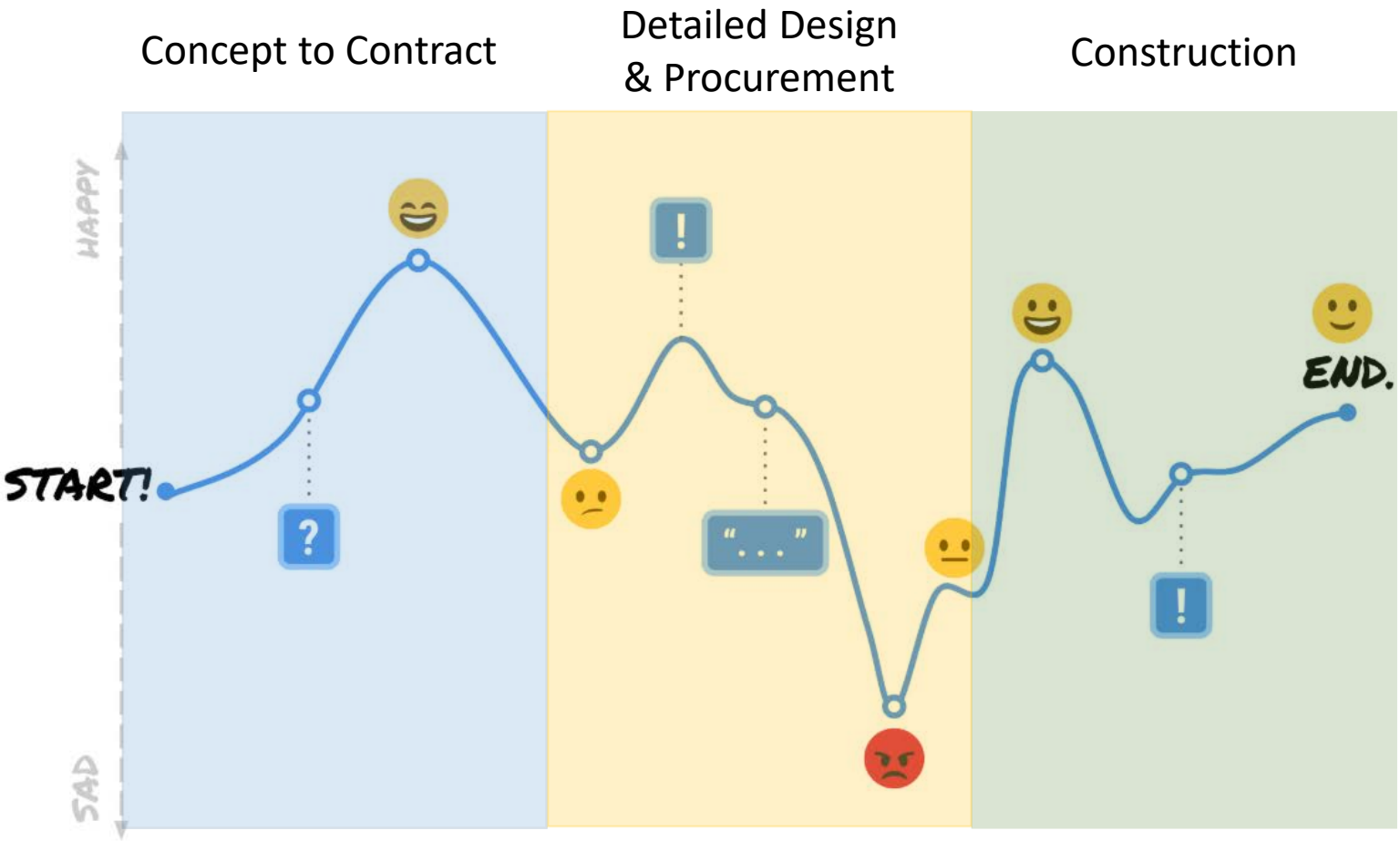
HALVERSON COMPANY

Customer/Contractor Relationship from Sales to Finished Project

Customer/Contractor Relationship from Sales to Finished Project



Customer/Contractor Relationship from Sales to Finished Project



Concept to contract

So, now what?

- This process starts the moment you get a new idea for improvement of your facility.
- What follows the idea is some type of internal process of building a business case through a feasibility study that can include some conceptual design, project cost-savings, and/or revenue generation.
- Yay! Your project has been approved.

Step 1: Choose a delivery method. The delivery method influences the team that is selected to define the scope work, this is a key step to a successful project.

Step 2: Scope development

Step 3: Project documents

Step 4: Contractor selection and contract negotiations

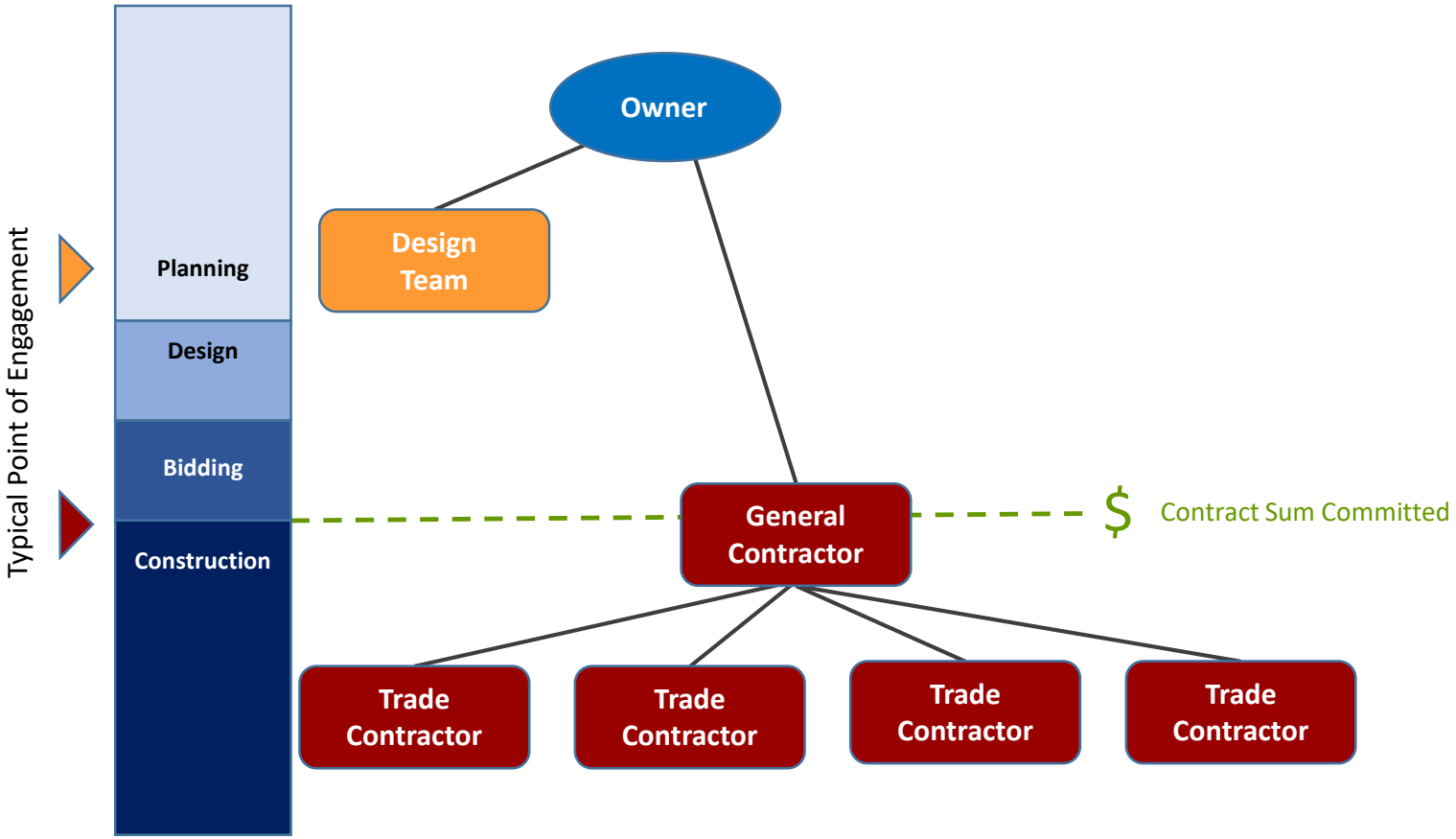
Choosing a Delivery System

DBIA DESIGN-BUILD INSTITUTE OF AMERICA

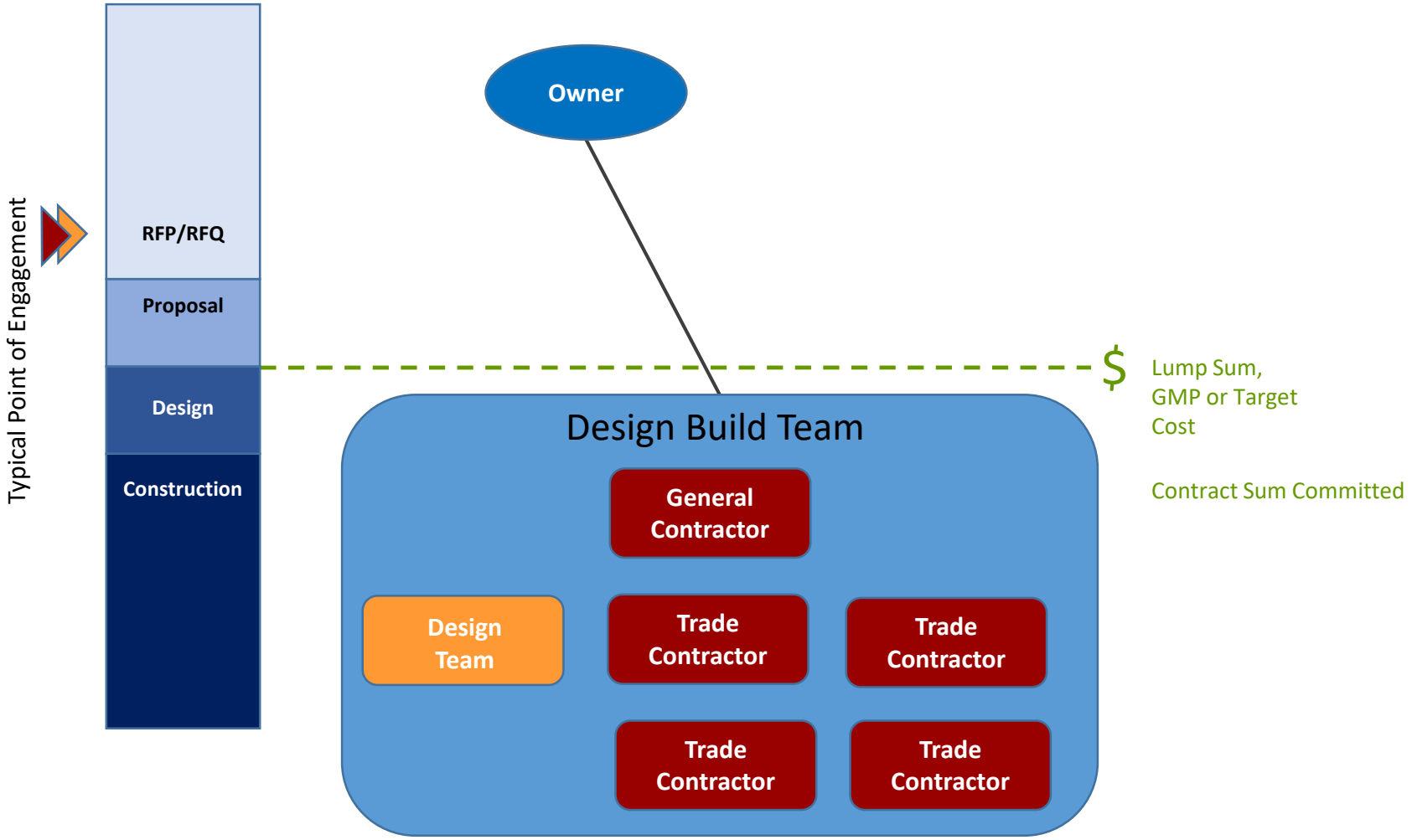
What Project Delivery System? → What Procurement Method? → What Contract Format?

Project Delivery Systems	Procurement Methods	Contract Formats
Construction Management at Risk **(CMR)** also known as CM/GC	Best Value **(BVS)**	Cost Plus Fee
Design-Bid-Build **(DBB)**	Low Bid	Guaranteed Maximum Price **(GMP)**
Design-Build **(DB)**	Negotiated	Lump Sum (or Fixed Price)
Multi-Prime **(MP)**	Qualifications-Based **(QBS)**	Target Price
	Sole Source (or Direct Select)	Unit Price

Design-Bid-Build Project Delivery (DBB)



Design-Build Project Delivery (DB)



Design-Bid-Build

- Three linear phases: Design, bid and build.
- Three prime players: Owner, designer, and contractor.
  - Two separate contracts.
- Owner warrants the sufficiency of the plans and specs to the contractor:
  - The contractor is responsible to build the project as designed.
  - The designer is responsible to design to the professional standard of care.
  - Owner is responsible for any “gaps” between the two.

Design-Build

- Integrated process: overlapped design and construction – typically fast track.
- Two prime players: Owner and design-build team.
- One contract.
- Owner supplies the project performance standards.
- The design-build team is responsible to design and construct the project to meet the owner’s performance standards.
- With respect to prescriptive designs or specifications, the design team is responsible for discovering inconsistencbetween the prescriptive requirements and the performance standards and the owner remains responsible for the cost to reconcile the inconsistent standards.

The above information and more can be accessed at : https://dbia.org/

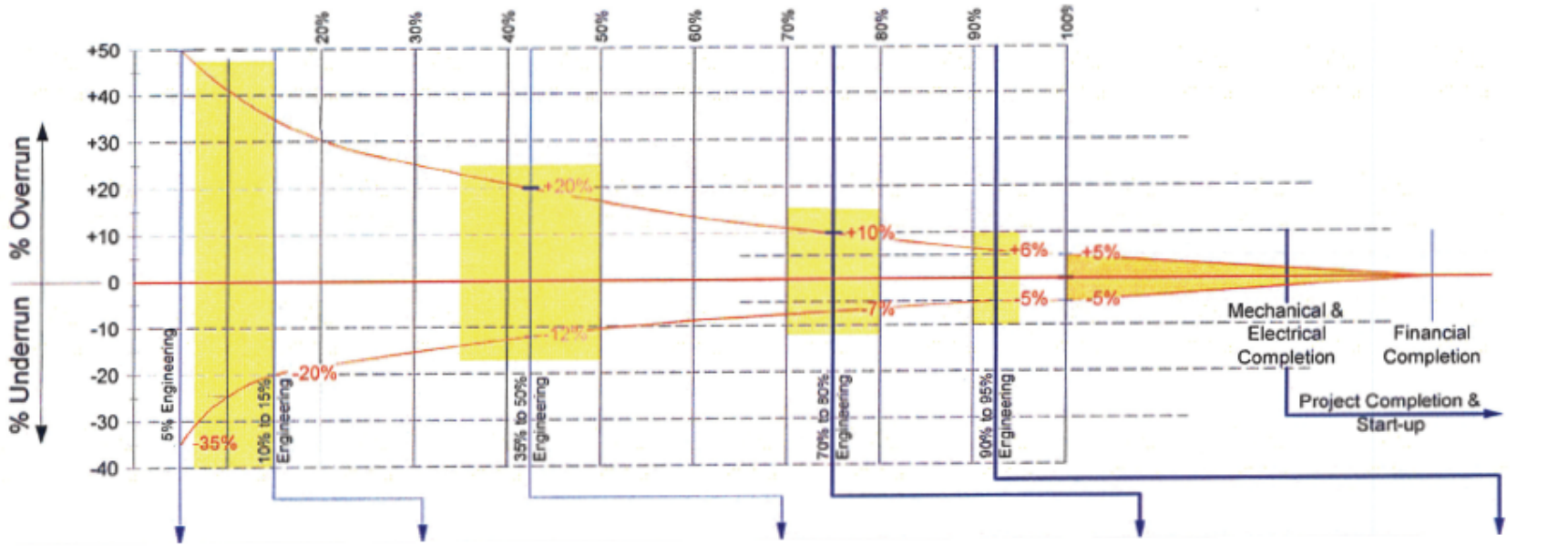
Concept to contract

- ✓ **Step 1:** Choose a delivery method
  Step 2: Scope development

*** Scope Development is Vital ***

Scope Development is vital because it helps other people see clearly your vision.

HALVERSON COMPANY
DESIGN • BUILD • CONFIDENCE



Concept Estimate

Basis of Estimate

- Preliminary, Practical Scope Definition
- Outline of Process Design
- Preliminary Schedule
- Preliminary Site Data

Preliminary Estimate

Basis of Estimate

- More Detailed Projects Scope Definition
- Site Selected
- Output Specified
- Type of Structures Defined

Budget Estimate

Basis of Estimate

- Defined Project Scope
- Approved Process Flow
- Diagrams
- List of Equipment
- Preliminary Plot and Site Plans
- Proposed Project Schedule
- Preliminary Logistics Plan

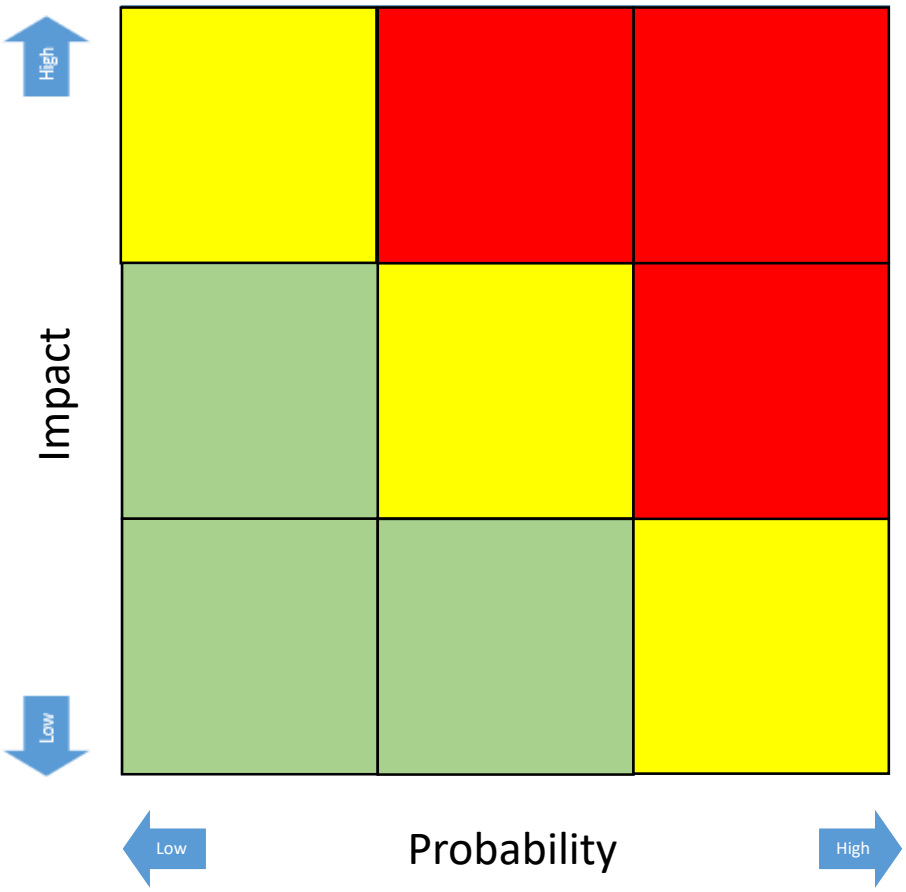
Definitive Estimate

LEVEL ONE

Basis of Estimate

- Defined Project Scope
- Plot, Site Plans and P&IDs Approved
- Approved Engineering Specifications
- Equipment Purchased or Quoted
- Approved Master Project Schedule
- Site and Labor Survey Complete
- Bulk Take-offs Complete
- Logistics Plan Approved

Risk Impact/Probability Chart



Low impact/low probability
Risks in bottom left corner are low, you can and likely should ignore them.

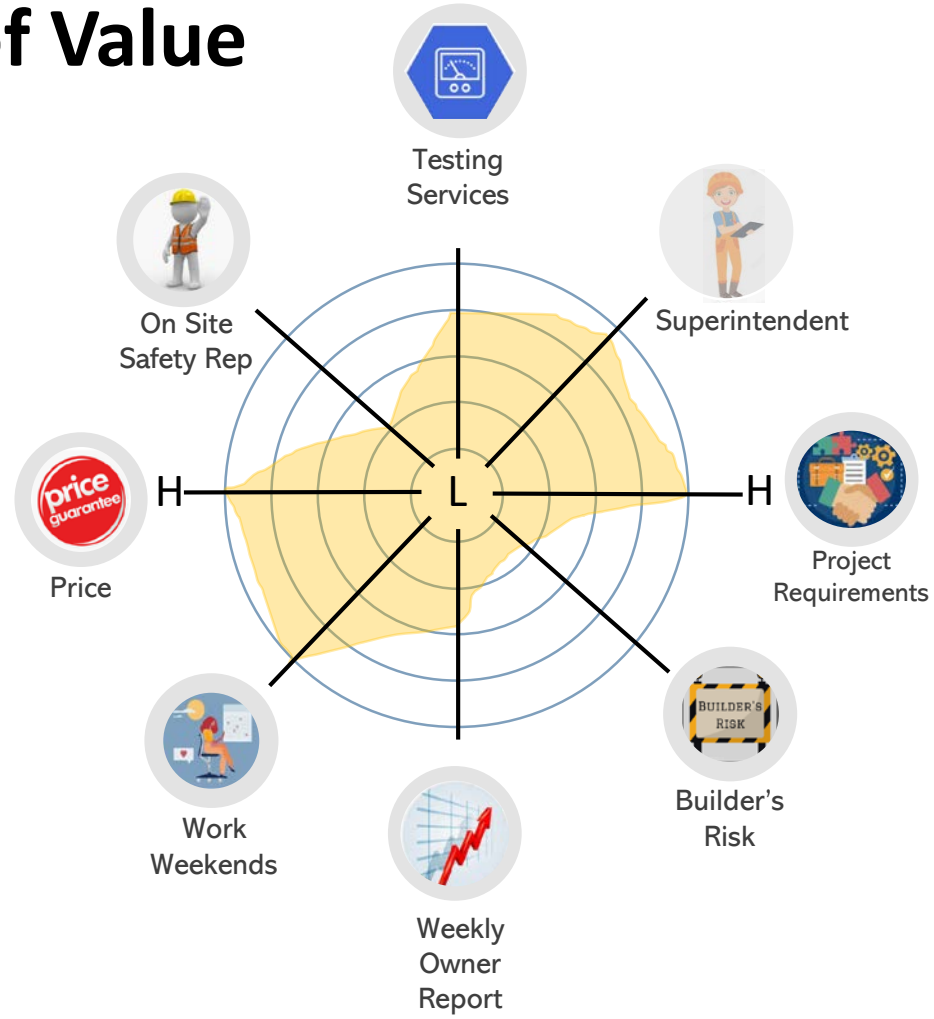
Low impact/high probability
Risks in bottom right corner should managed to reduce likelihood, but if they occur you will be able to cope with them.

High impact/low probability
Risks in upper left corner could have a high impact. Have a contingency plan in place.

High impact/high probability
Risks in upper right corner are likely to have a high impact. Have a contingency plan in place and make these your top priority.

Elements of Value

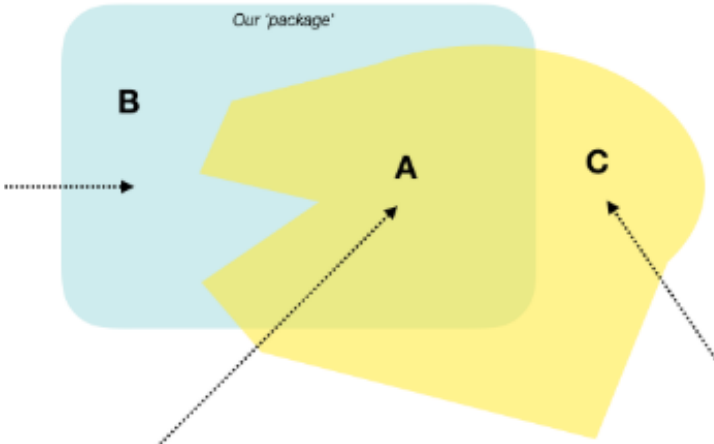
Spider & Radar Graph



Value Fit

Contractor Services

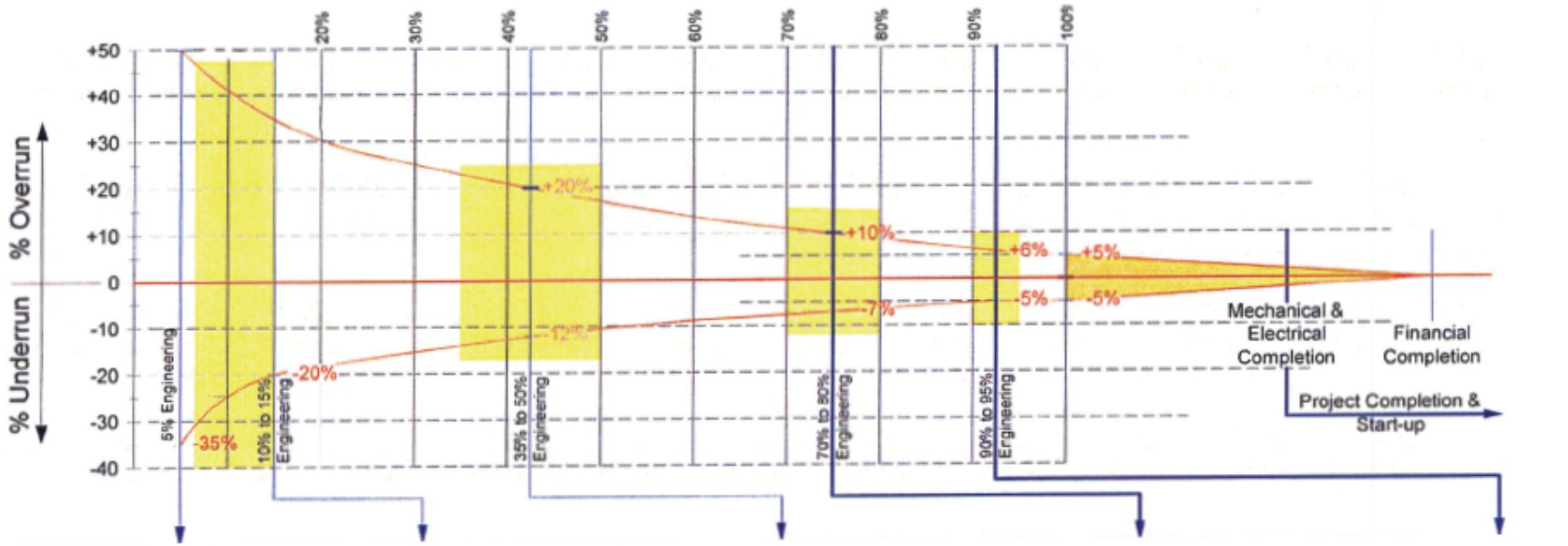
Owner Needs



B = Waste:
What owner doesn't need that contractor charges for.

A = Value Fit

C = Unfulfilled Needs:
Owner needs that are not provided by contractor.



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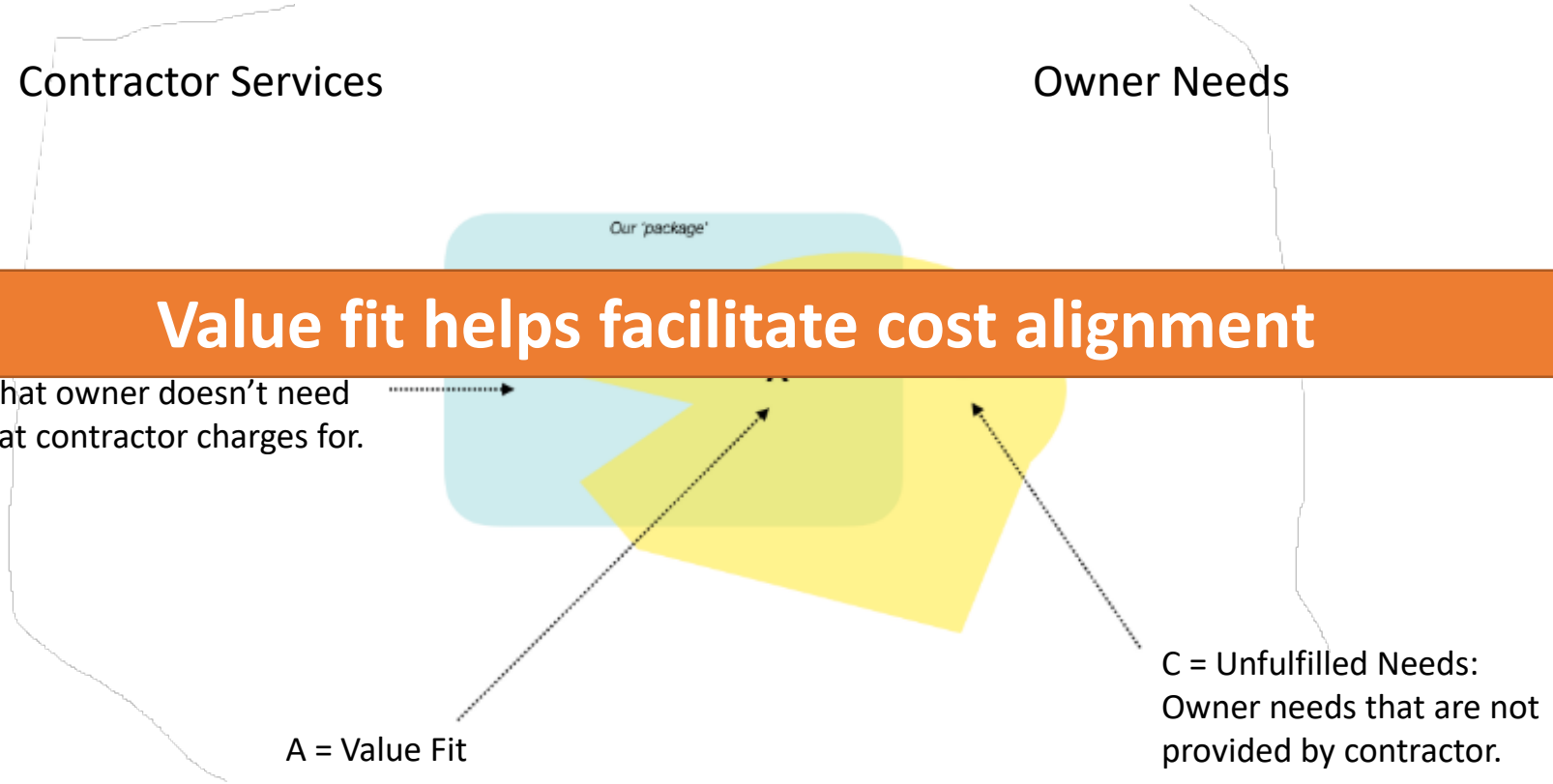
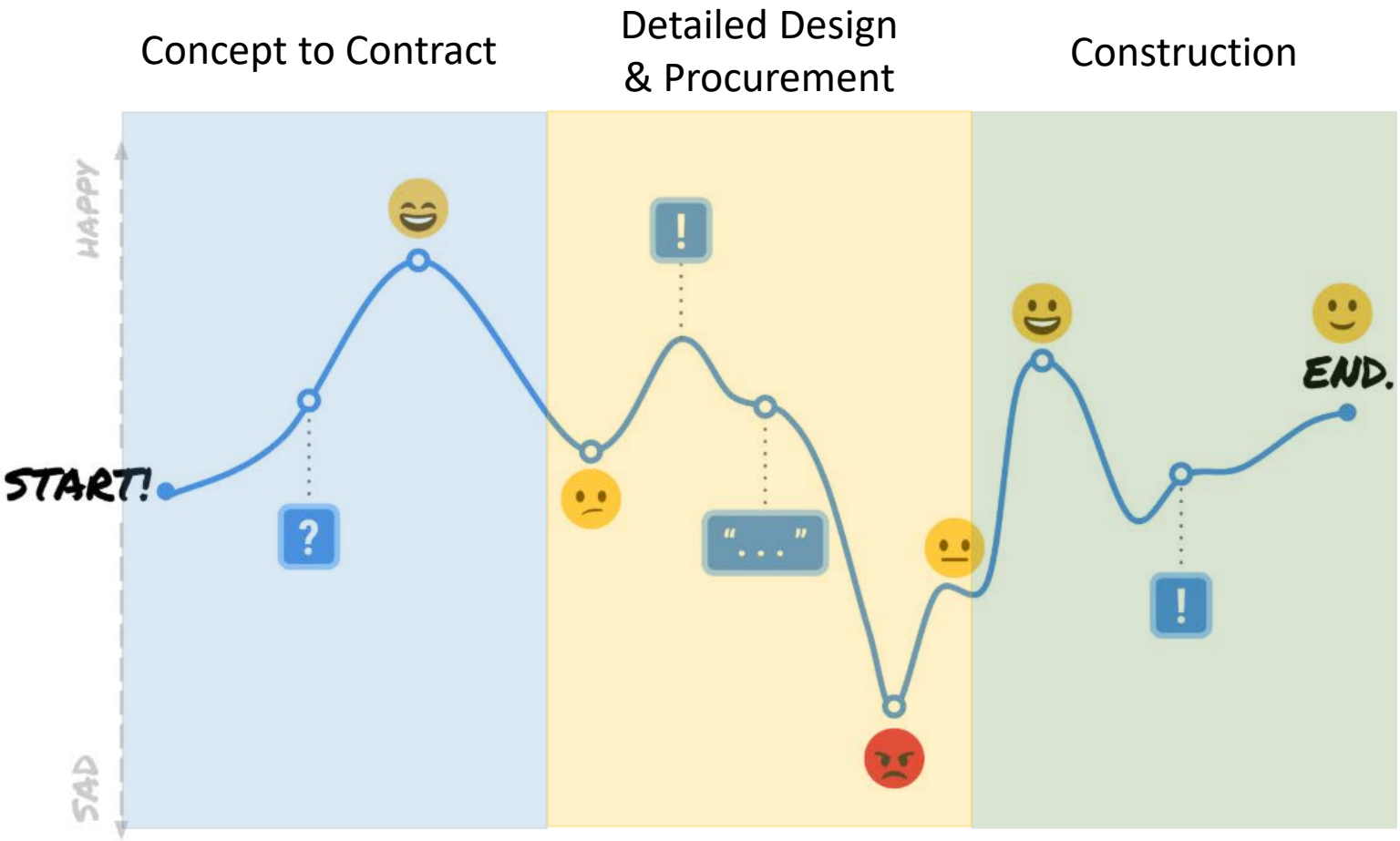


Value fit helps facilitate cost alignment

Once you understand all the dimensions of value to you, you are in a good position communicate your project vision.

Customer/Contractor Relationship from Sales to Finished Project



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- ✓ **Step 2:** Scope development
- **Step 3:** Project documents
- **Step 4:** Contractor selection and contract negotiations

Project Documents

The project documents may be simple or complex depending on the complexity of your vision. The document could include the following:

SECTION 00 01 10

TABLE OF CONTENTS

SECTION 00 21 13
INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. The Bidder must follow the instructions in this section and use the information and forms provided in this bid packet to prepare and submit a final proposal and bid price. The Owner does not assume any responsibility for errors or misinterpretations resulting from the use of an incomplete bid packet. The Owner may also issue clarifications and modifications to the bid packet as it deems necessary.

1.2 QUALITY ASSURANCE

A. Questions about the meaning or intent of information provided in this bid packet are to be directed to the

1.3 SUBMITTALS

A. By Owner's request, the Bidder may be asked to submit the following company information within five (5) business days of invitation to demonstrate their qualification to perform the work:

1. Financial data.
2. Previous experience.
3. Present commitments.
4. Any other data as may be requested

SECTION 00 31 13
CONTRACT TIME

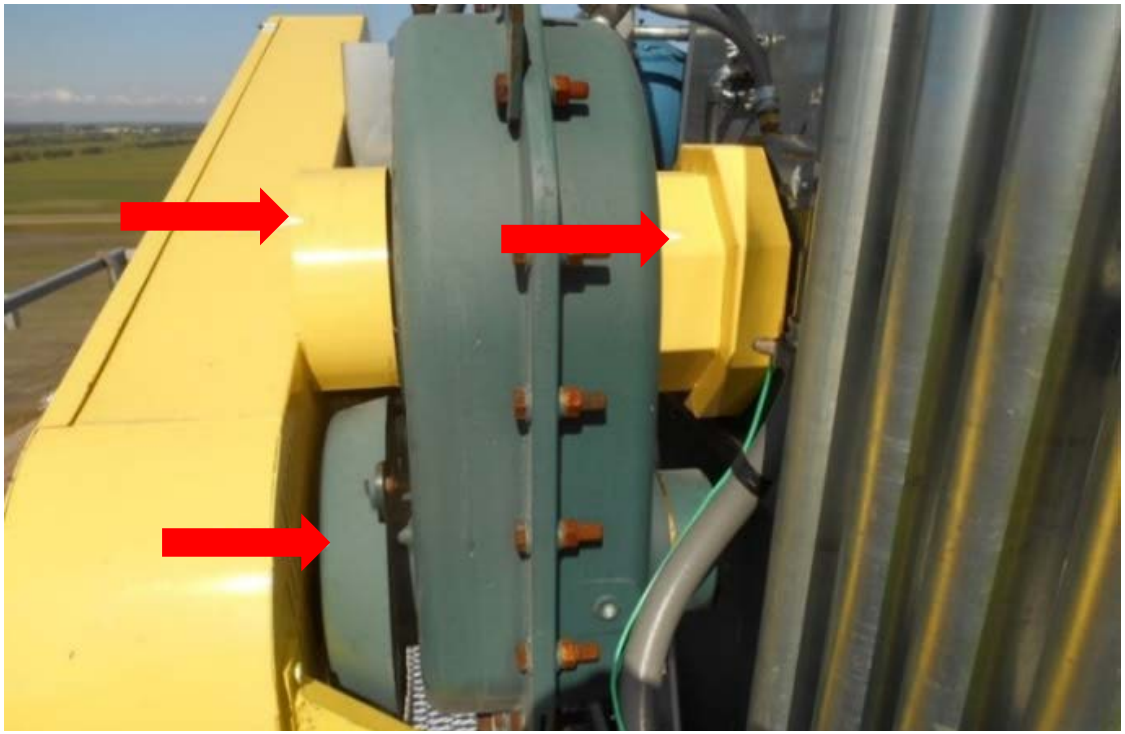
PART 1 - GENERAL

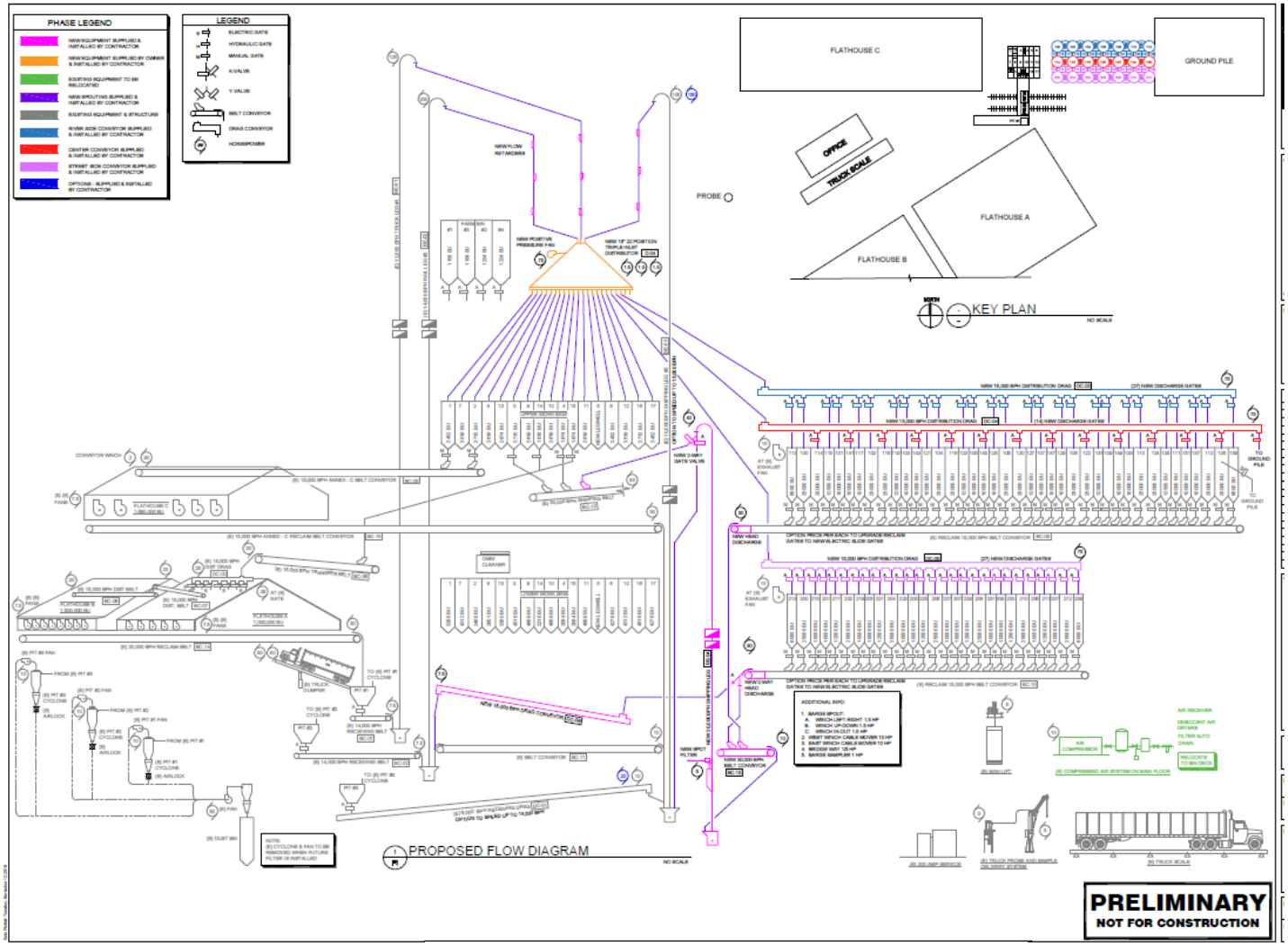
1.1 COMMENCEMENT OF WORK
- A. Refer to General Conditions and amendments thereto for general requirements for commencement of work.
- B. No work shall commence at the site until Contractor has been issued an executed Contract.

1.2 COMPLETION OF THE WORK
- A. General: Refer to the Construction Agreement for general requirements; in particular, 14.2 and 15.3 for definitions of Substantial Completion and Final Inspection; 4.1 for Progress Payments.
- B. Completion Date shall be the number of calendar days or date indicated on Bid Form and incorporated in the Contract.
- C. Contract Conditions: The commencement of work and the time of completion shall be essential conditions of the Contract.

1.3 TIMING OF WORK
- A. In addition to the time of commencement, substantial completion and final completion dates, other events, factors, and constraints shall be carefully considered in establishing the work progress for the Project. Contractor shall work closely in coordination with the Contract Documents and in timing of operations and

Pictures can be a quick and clear way to convey scope items.

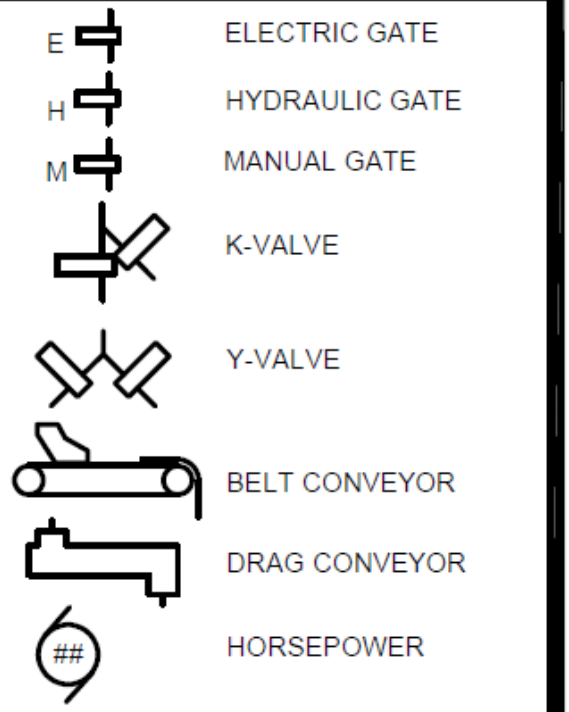


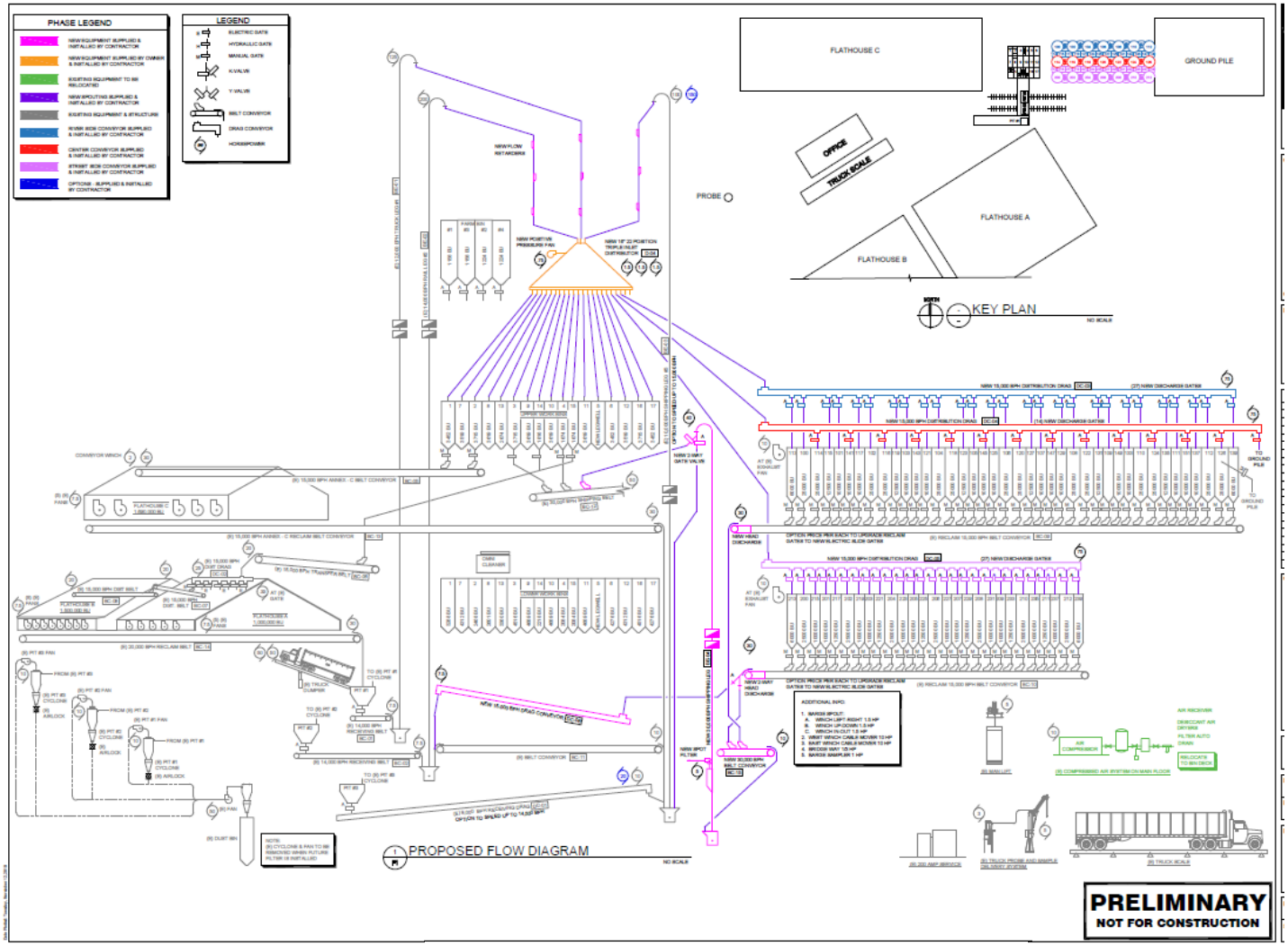

PHASE LEGEND
LEGEND
FLATHOUSE C
GROUND PILE
OFFICE
TRUCK SCALE
FLATHOUSE A
FLATHOUSE B
PROBE
KEY PLAN
PROPOSED FLOW DIAGRAM
PRELIMINARY
NOT FOR CONSTRUCTION

PHASE LEGEND

- NEW EQUIPMENT SUPPLIED & INSTALLED BY CONTRACTOR
- NEW EQUIPMENT SUPPLIED BY OWNER & INSTALLED BY CONTRACTOR
- EXISTING EQUIPMENT TO BE RELOCATED
- NEW SPOUTING SUPPLIED & INSTALLED BY CONTRACTOR
- EXISTING EQUIPMENT & STRUCTURE
- RIVER SIDE CONVEYOR SUPPLIED & INSTALLED BY CONTRACTOR
- CENTER CONVEYOR SUPPLIED & INSTALLED BY CONTRACTOR
- STREET SIDE CONVEYOR SUPPLIED & INSTALLED BY CONTRACTOR
- OPTIONS - SUPPLIED & INSTALLED BY CONTRACTOR

LEGEND

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NOT FOR CONSTRUCTION

SCOPE OF WORK

Halverson - installation of XXX

XXX (OWNER) AND HALVERSON COMPANY

January 11, 2020

LINE I.D.	DESIGN ENGINEERING FUNCTION	HALVERSON	CUSTOMER	REMARKS
1	PROJECT MANAGER	✓		
1a	SITE SUPERINTENDENT	✓		
2	PROJECT ENGINEER	✓		
3	DESIGN ENGINEER	✓		
4	ON-SITE MEETINGS (SCOPE DEVELOPMENT & GENERAL DUE DILLIGENCE)	✓		
5	SOIL BORINGS		✓	
5a	COST		✓	
5b	ENGINEERING SUPPORT		✓	
6	GEOTECH REPORT		✓	
6a	COST		✓	
6b	ENGINEERING SUPPORT		✓	
7	BUILDING PERMIT		✓	
7a	COST		✓	
7b	ENGINEERING SUPPORT	✓		
8	AIR PERMIT		✓	
8a	COST		✓	
8b	ENGINEERING SUPPORT		✓	
9	ELECTRICAL PERMIT	✓		
9a	COST	✓		
9b	ENGINEERING SUPPORT	✓		

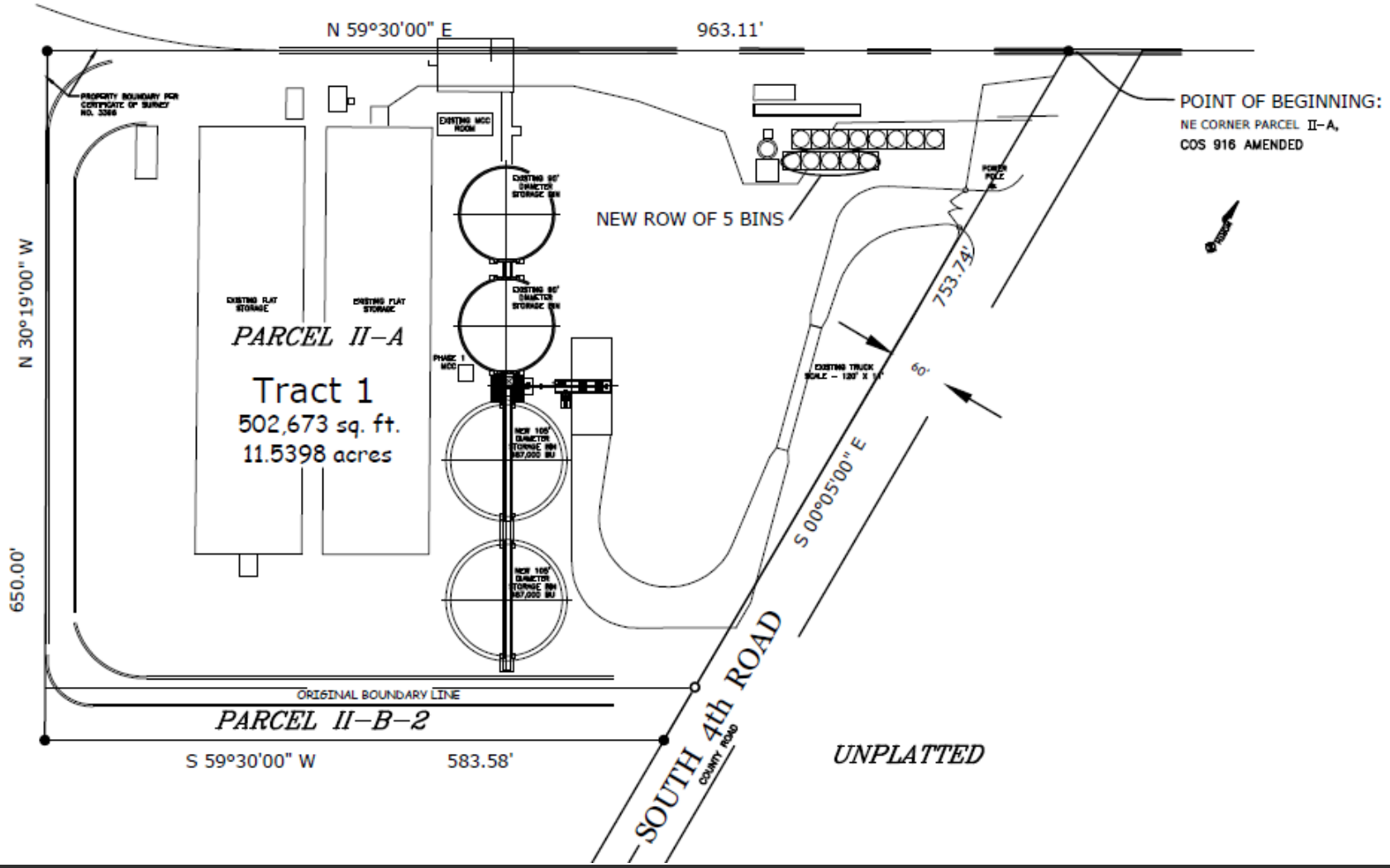
HALVERSON COMPANY

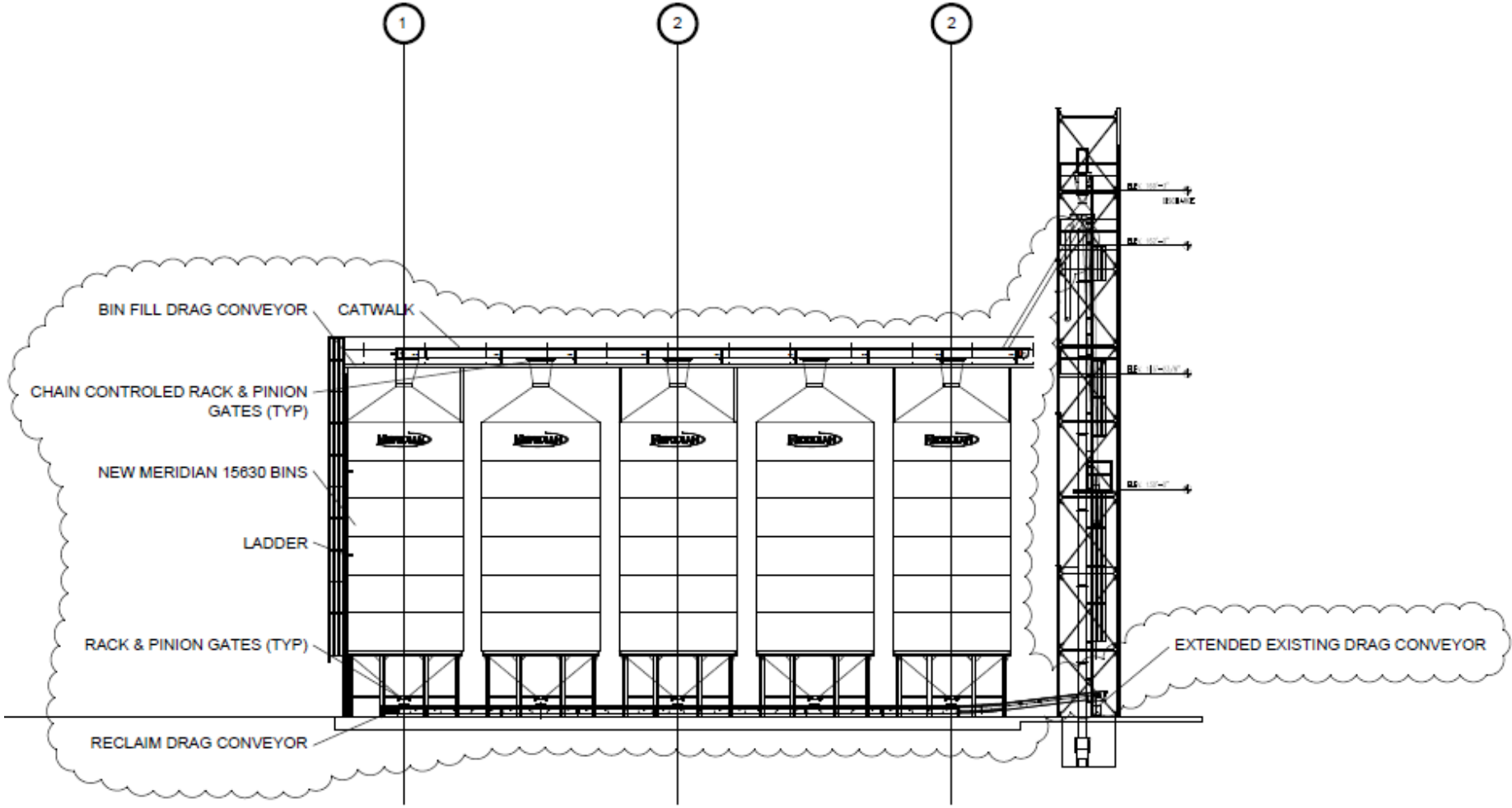
Halverson Company
235 Paxton Avenue
Salt Lake City, Utah 84101
www.halversoncompany.com
801-467-9423

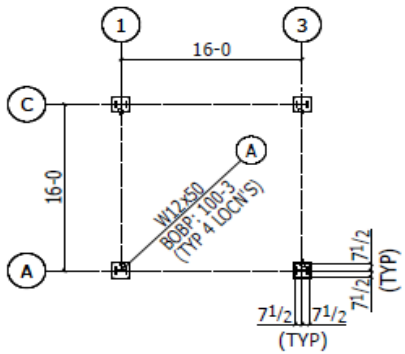
Scope of Work

Halverson scope of work is to supply the following: Supervision, Management, Labor, Engineering support, Materials, Tools, Equipment, Shop fabrication, Electrical, Automation, Excavation, Concrete, Construction drawings, Temporary facilities, Trash dumpsters, Scrap tubs as needed to complete Phases 1 thru 4 as described below.

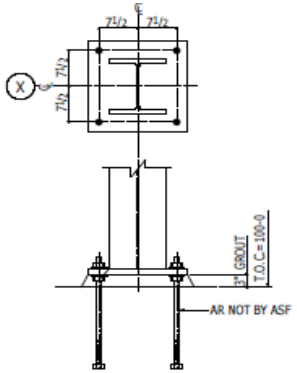
- **Phase 1: Potato Slurry System. Supply and install:**
  - (1) Slurry pump (supplied by owner)
  - Shop fabricated Cantilevered Catwalk structure with handrail and kick plates. (Galvanized)
  - (1) Shop fabricated 2 leg support (Galvanized)
  - Caged Ladder to access from the ground to the platform. (Galvanized)
  - Guide rail system secured to the catwalk structure to allow the pump to move up and down through the slurry as needed. (Stainless Steel construction)
  - (1) monorail crane mounted over the slurry pump to be able to move the pump up and down. The monorail will be used to remove the pump from service for repairs as needed,
  - (1) 1-ton electric hoist W/ push trolley for Monorail.
  - (1) 1-ton jib crane W/ Manual chain hoist and push trolley to move pump up and down from platform to ground.
  - 6" stainless steel pipe and fittings for product flow from the pump to the existing slurry pump. And from the pump to the circulating nozzles. Supported and mounted to the catwalk structure.
  - (4) 2 ½" circulating nozzles W/ butterfly valves, Camlock couplers to lock the nozzle in desired locations.
  - (3) tower supports to carry the pipe from the pump to the existing slurry pit.
  - Excavation and concrete.
  - Electrical
  - Note: start-up and commissioning of the potato slurry pump system is the Owner's responsibility. Halverson will assist as needed.
- **Phase 1A: 1st Shutdown and MCC**
  - Demo Existing Hay Box and temporarily relocating Existing Straw box for the duration of


N 59°30'00" E
963.11'
POINT OF BEGINNING:
NE CORNER PARCEL II-A,
COS 916 AMENDED
NEW ROW OF 5 BINS
N 30°19'00" W
650.00'
PARCEL II-A
Tract 1
502,673 sq. ft.
11.5398 acres
753.74'
60'
S 00°05'00" E
SOUTH 4th ROAD
COUNTY ROAD
ORIGINAL BOUNDARY LINE
PARCEL II-B-2
S 59°30'00" W
583.58'
UNPLATTED

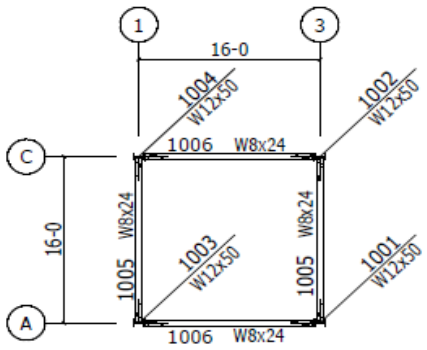

1
2
2
BIN FILL DRAG CONVEYOR
CATWALK
CHAIN CONTROLED RACK & PINION GATES (TYP)
NEW MERIDIAN 15630 BINS
LADDER
RACK & PINION GATES (TYP)
RECLAIM DRAG CONVEYOR
EXTENDED EXISTING DRAG CONVEYOR



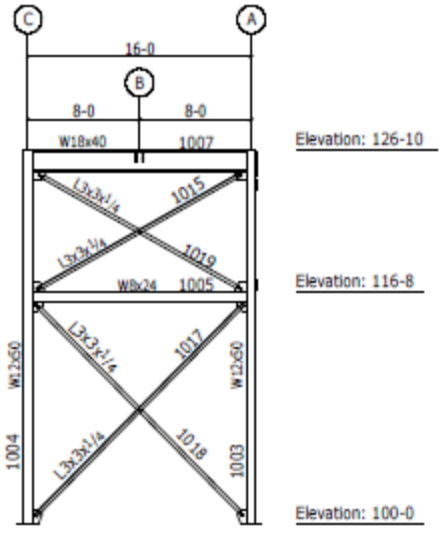
AR SETTING PLAN



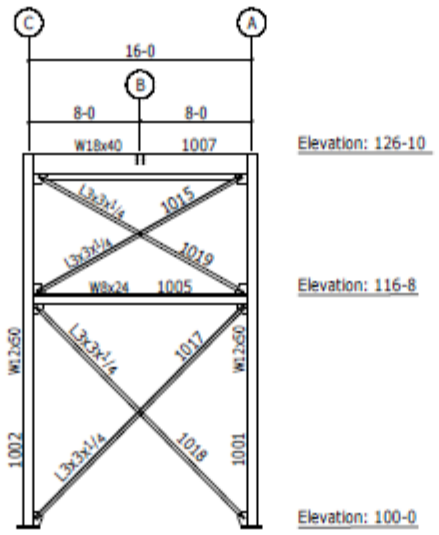
AR SETTING DETAIL - (A)
(4 LOCATIONS)



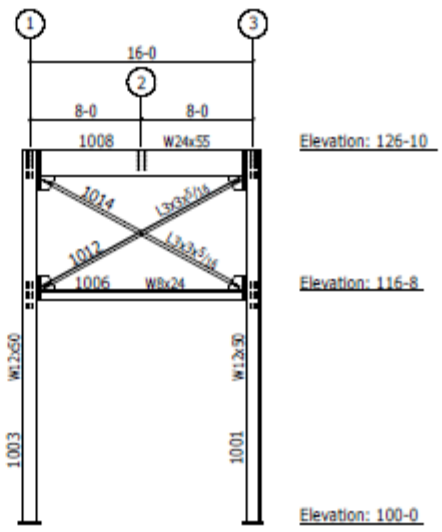
PLAN VIEW
Elevation: 116-8 (U.N.)



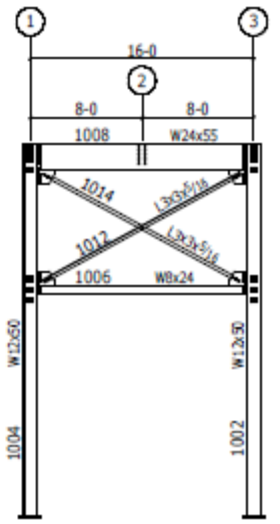
GRID 1 ELEVATION



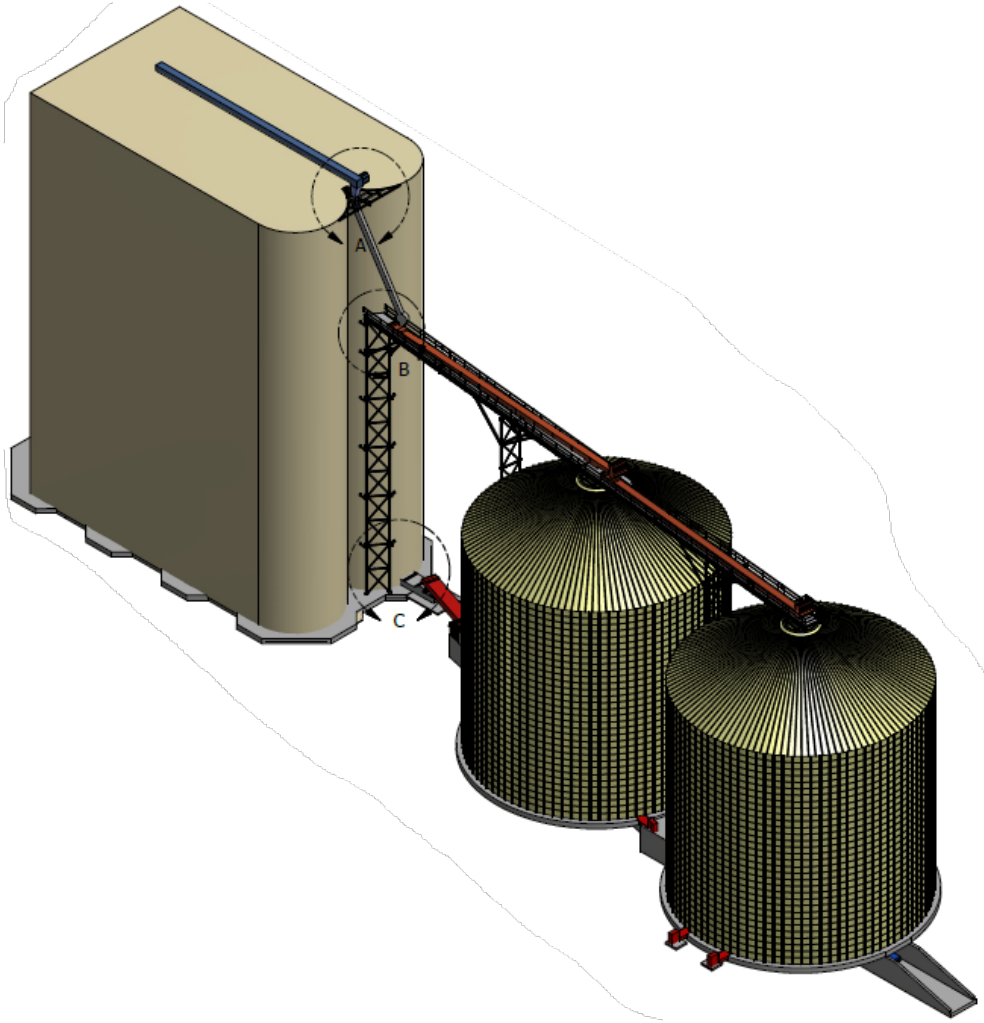
GRID 3 ELEVATION

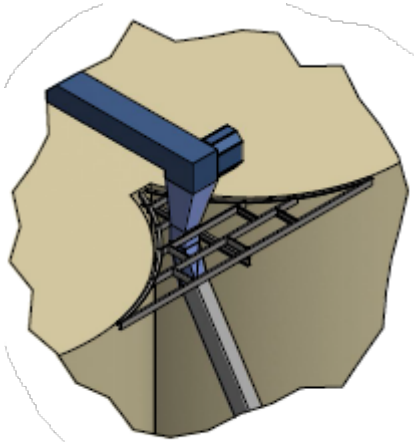


GRID A ELEVATION

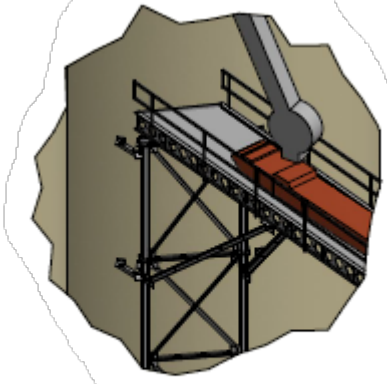


GRID C ELEVATION



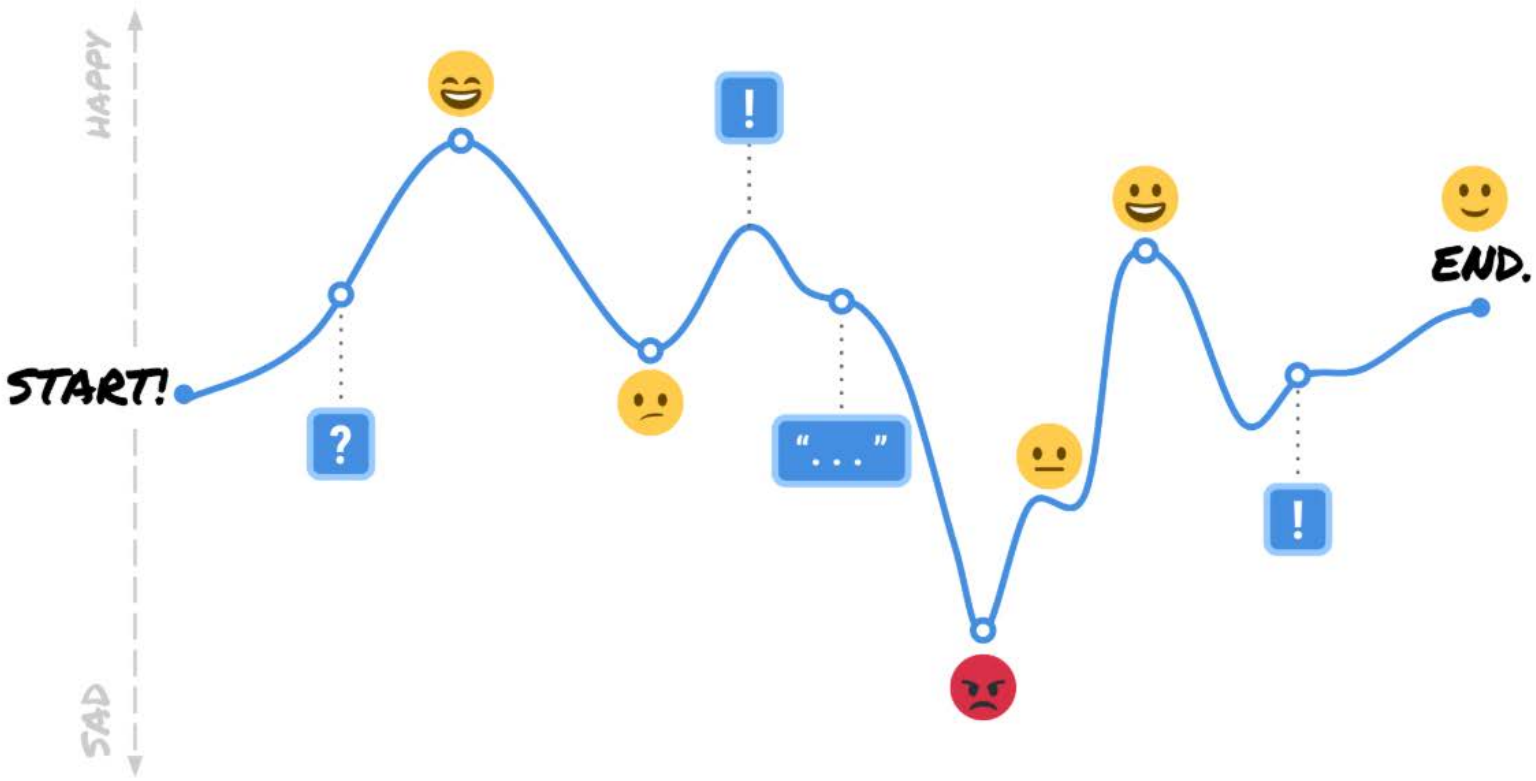


DETAIL A
SCALE 1"=8'



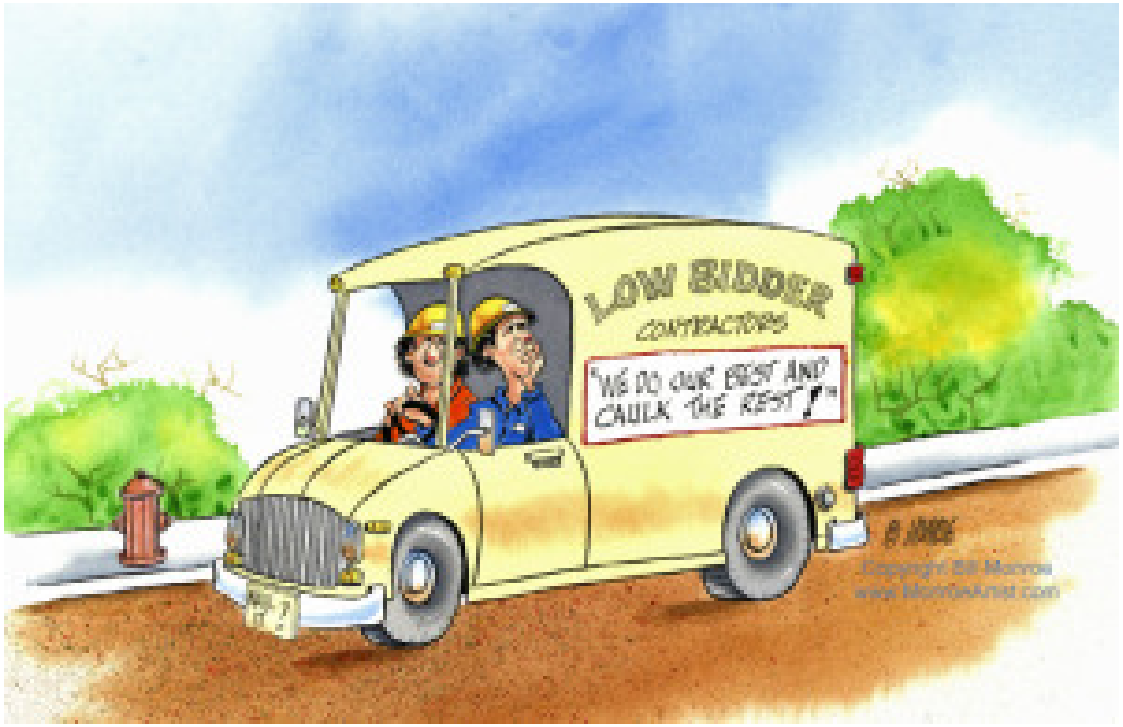
DETAIL B
SCALE 1"=8'

Customer/Contractor Relationship from Sales to Finished Project



Concept to contract

- ✓ **Step 1:** Choose a delivery method
- ✓ **Step 2:** Scope and bid package development
- **Step 3:** Contractor selection and contract negotiations



Contractor selection

Site walk through

- Have all contractors attend a site meeting to walk the site and review the bid requirements found in the bid package.
- After the walk through, as questions come up from various contractors, respond to all bidders with a written answer.

Contractor selection

Contractor Proposal Meeting

- Hold a proposal meeting with each contractor to assess their understanding of scope inclusions, exclusions, assumptions and any clarifications the contractor wants to make.
- Review the schedule during the meeting. Look to see that engineering and procurement time is included as well as permitting time is reflected. Establish key milestones with contractor.

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XXX (OWNER) AND HALVERSON COMPANY

January 11, 2020

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5b	ENGINEERING SUPPORT		✓	
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7a	COST		✓	
7b	ENGINEERING SUPPORT	✓		
8	AIR PERMIT		✓	
8a	COST		✓	
8b	ENGINEERING SUPPORT		✓	
9	ELECTRICAL PERMIT	✓		
9a	COST	✓		
9b	ENGINEERING SUPPORT	✓		

Contract Negotiations

Contract Negotiations

Get both parties' attorneys on the same call and work through any revisions.

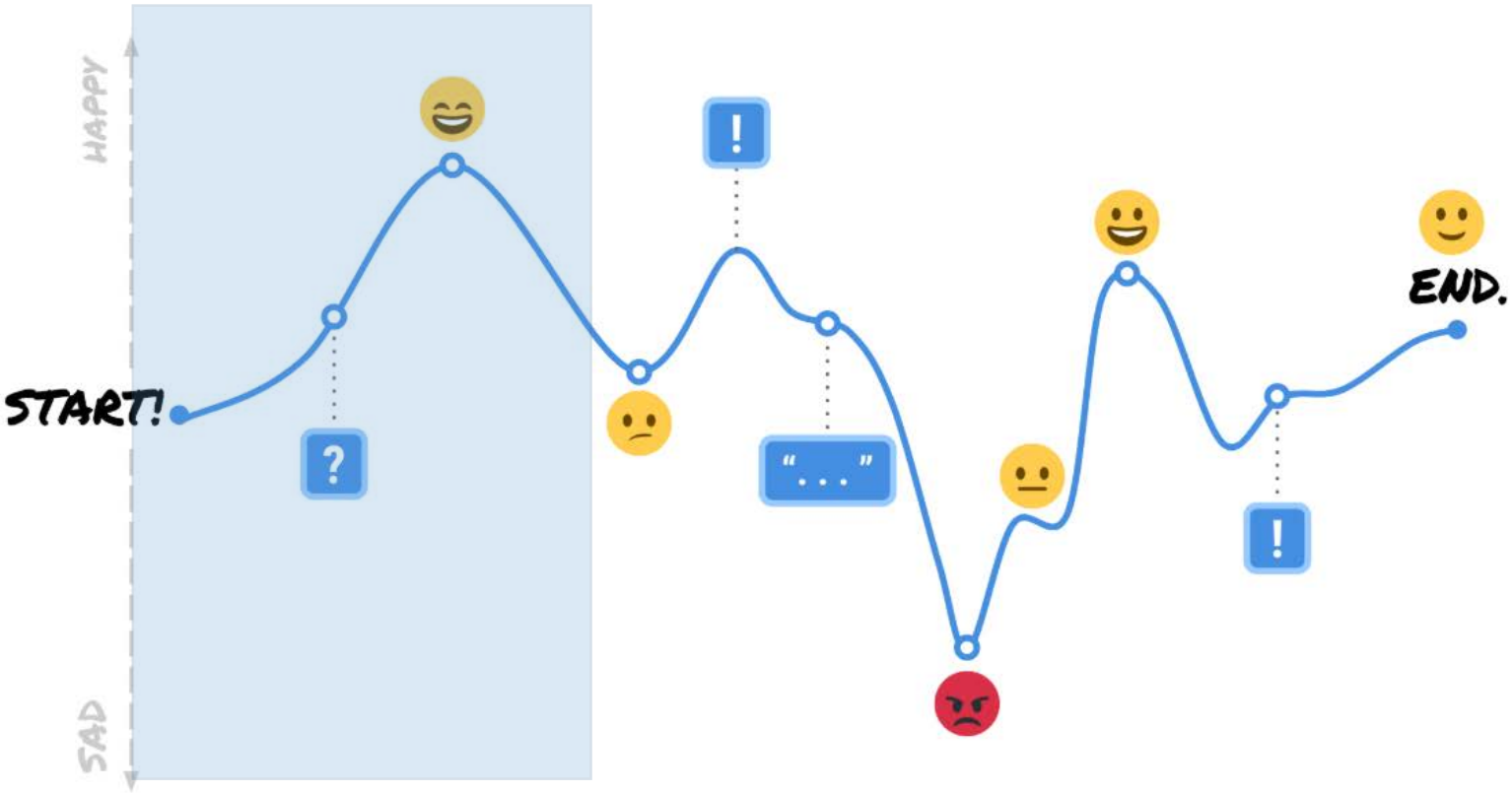
Congratulation, you now have a project to manage.

Customer/Contractor Relationship from Sales to Finished Project

✓ Concept to Contract

Detailed Design & Procurement

Construction



Detailed Design & Procurement

Step 1: Stay engaged

Engineering the foundations occurs towards the end of the design. While foundations are an early step in construction.

Changes in process flow (PFD)and general arrangements (GA) can have schedule impacts. PFD and GA must be locked in early if foundation design requires expediting.

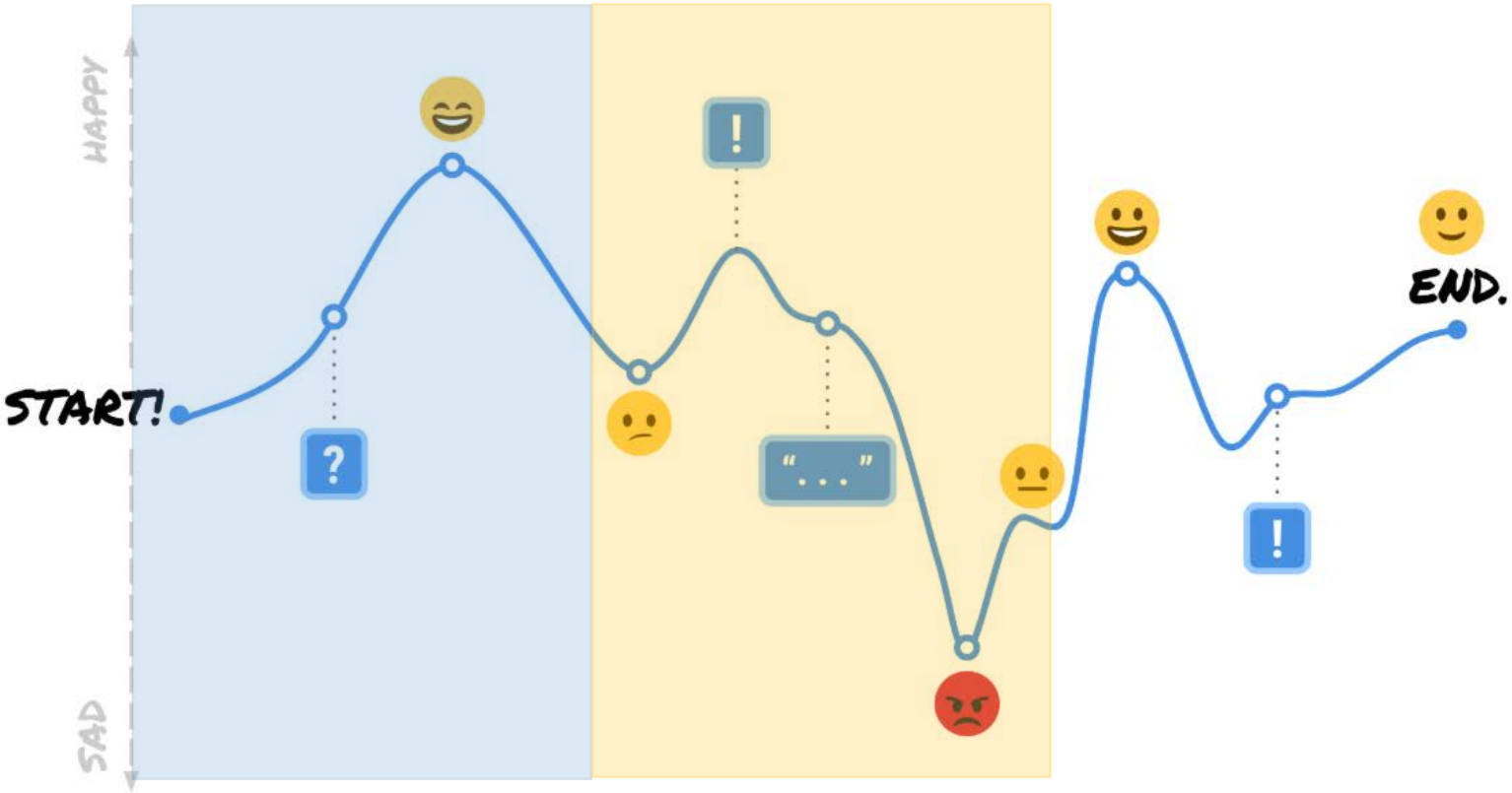
Review and approve drawings expeditiously. Quoted manufacture delivery times are typically based off from receipt of approval drawings.

Customer/Contractor Relationship from Sales to Finished Project

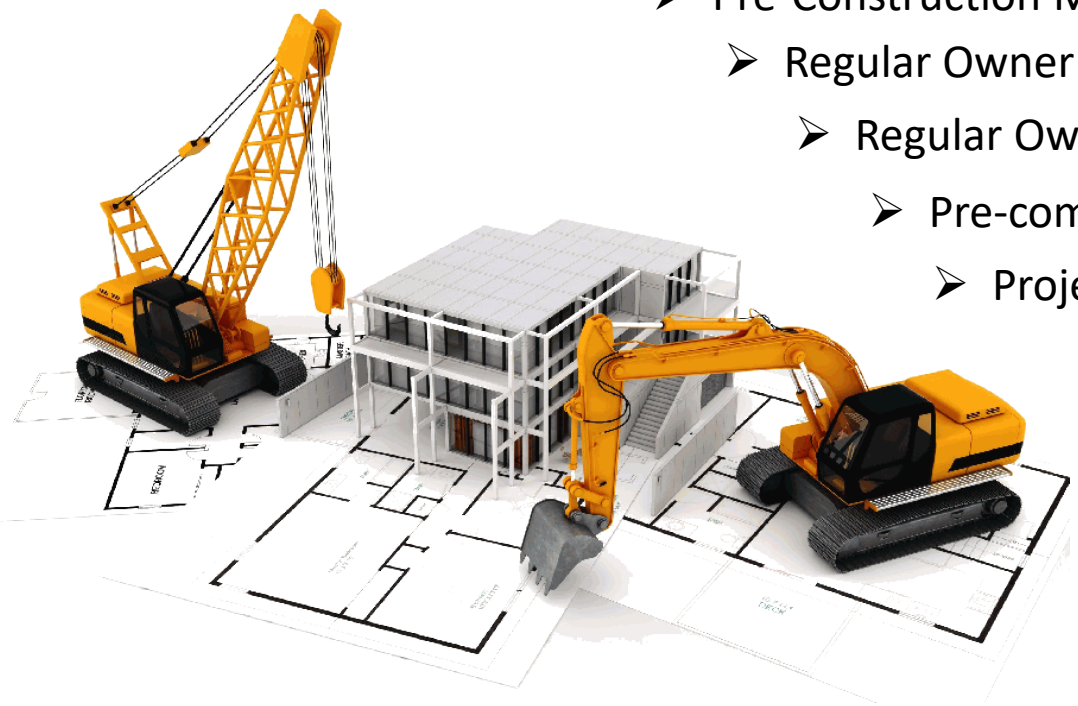
✓ Concept to Contract

✓ Detailed Design & Procurement

Construction



Construction



- Pre-Construction Meeting(s)
  - Regular Owner & Contractor meetings
    - Regular Owner & Contractor site walk through.
      - Pre-commissioning Meeting
        - Project Closeout Meeting

Construction

Pre-Construction Meeting

- Your contractor will likely hold and conduct the meeting but please attend.
- All stakeholders should have a representative attend the meeting.
- General topics could include:
  - Roles and responsibilities with communication channels
  - Site specific concerns and orientation
  - Safety plan and expectations
  - Contract administration and change order process
  - Problem resolution process
  - Project schedule
  - Payment and lien waiver process

Construction

Owner/Contractor Meeting

- Meet regularly. Frequency is dependent on job intensity and pace.
- Your contractor will conduct the meeting.
- General topics could include:
  - Safety plans, issues, and concerns
  - Schedule review
    - Three week look ahead
    - Progress on key milestones
    - Construction impacts on facility
    - Upcoming QAQC testing events
  - Contract administration and change order process including any issues with payment and lien waiver

Construction

Owner/Contractor Site Walk Through

- Conduct walk throughs regularly. Frequency is again dependent job intensity and pace.
- Make a punch list from your observations
- General things to look for could include:
  - Observe safety in action. Note any issues or concerns
  - Observe the quality of workmanship. Note any issues or concerns
  - Observe physical progress and compare to the current schedule

Construction

Pre-commissioning Meeting

- This is an important meeting for any size project that has mechanical equipment.
- Attendees should include:
  - The owner, general contractor, electrical contractor, automation, and mechanical contractor.
- General topics could include:
  - Lockout/Tagout process
  - Roles played the commissioning team
  - Sequence of energizing equipment
    - Dry run test – confirm that labeling on equipment, electrical panels, and automation software are consistent.
    - Product flush
    - Live run of system

Construction

Project Closeout Meeting

- After completing all contract obligations
- Contractor should provide the following:
  - If applicable, present the Certificate of Occupancy
  - If applicable, Consent of Surety
  - Release of Lien
  - Contractors, sub-contractors, and manufacturers warranties
  - Substantial or Mechanical Completion Form
  - Final application for payment

Customer/Contractor Relationship from Sales to Finished Project

✓ Concept to Contract ✓ Detailed Design & Procurement ✓ Construction