Bulletin No. JM 15
File: Job Management

Bulletin

Turnover Meetings— Estimating/Sales to Project Management

INTRODUCTION

"The beginning is the most important part of the work." Plato, one of the greatest thinkers of all time, famously said this almost 2,500 years ago. Even though this concept has existed for thousands of years, some still dive head first into a project without much thought about how to start or even a complete understanding of the project to be undertaken.

Pre-project planning is critical to a successful project and MCAA's *Planning for Profitability: Your Guide to Successful Pre-Construction Planning* does an excellent job of discussing the planning process. This Bulletin will expand on one early aspect of the pre-project planning process – the turnover meeting.

WHAT IS A TURNOVER MEETING?

Otherwise known as a kickoff or start-up meeting, the turnover meeting is a transfer of information from one party to another. In this case, the information is transferred from the person or persons who prepared the estimate and proposal to the project management team who will be executing the project. The turnover meeting is effectively a handoff – a turnover of the project.

Sounds simple enough, but the details are critical, and how your company culture addresses turnover meetings can turn a dull and routine meeting into a productive and rewarding planning exercise. The remainder of this Bulletin identifies the traits of highly-effective turnover meetings.

WHAT PROJECTS REQUIRE A TURNOVER MEETING?

Every project that is managed by someone or some team, other than those who estimated and sold the project, requires a turnover meeting.

In some ways small projects often benefit more from a thorough turnover meeting than large jobs. Small jobs – with their quick pace and thin margins – can't afford to get off to a bad start, and there is simply no time to recover from one.

For very small projects, the meeting might involve only one or two people and take 30 minutes, but the concepts of an effective and thorough turnover are the same regardless of the project size.

WHO ATTENDS THE TURNOVER MEETING?

Be wary of the project manager who confuses being in control with being the one who needs to know everything and then dishes out that information on a "need to know basis." By including **the entire project management team in the turnover meeting,** you create a collaborative environment, encourage creative discussion, and accelerate the sharing of information. The presence of the entire team also increases the project experience, and there is no substitute for experience (we'll come back to that later).

On top performing teams, each individual must know and understand the role of every other team member AND how their actions impact the performance of others. Only by understanding how their actions impact others' performance can team members make productive improvements to the overall process. Construction is a team sport, and the team must be together when the initial "game plan" is revealed.

So, who is the "project team?" This can vary widely based on the type and size of the project. On large projects in complex organizations, the team might include the following:

- Project Manager and PM Staff
- Estimator
- Account Manager
- Labor Superintendent
- General Foremen
- Fab Shop Foreman
- Safety and Risk Manager
- Engineering Manager
- Trucking/Tool Room Manager
- Purchasing Manager
- CAD/BIM Supervisor
- Service Sales Supervisor

THE PROJECT MANAGER

The project manager is the most important figure in the turnover process. Highly effective project managers understand that they need a team. They work hard to communicate team roles and expectations and hold individuals accountable. This is true even on small projects – maybe the team is small (perhaps just a foreman, the fab shop supervisor, trucking manager and the labor superintendent), but each team member needs to understand the big picture and how their performance impacts the overall process. The turnover meeting sets the tone for a collaborative process.

Henry Ford said, "Coming together is the beginning, keeping together is progress, but working together is success." At the turnover meeting, the team begins to work together and the project manager must be the team leader and foster productive relationships.

WHEN DOES THE TURNOVER MEETING OCCUR?

The most effective meetings take place after the attendees have an opportunity to review some of the documents and project materials. Ideally, estimating furnishes those materials to project management for their initial review and development of a preliminary understanding of the project. This also allows operations to select appropriate team members and finalize the project staff. The foreman selected should be familiar with this type of work and facility.

HOWEVER, it is critical that project management have a sense of urgency about the turnover meeting. The project review MUST be conducted with a sense of urgency and the team selected without delay. If estimating/sales feels a project award is imminent, they too must

act with urgency and furnish project management with the estimate, proposal and other sales materials as soon as possible.

Once project management has completed a preliminary review and the project team is finalized, the project manager should immediately schedule the turnover meeting.

HOW LONG DO THESE MEETINGS TAKE?

If conducted well, turnover meetings almost always take longer than you think they will. Very small projects can be quick, but large, complex projects can take days to thoroughly turnover. It is important not to rush this process and to focus on DETAILS.

NOTE – there is no question that details are important to project management and labor when we begin a project. An extremely valuable side effect of good turnover meetings is that estimating and sales learn what is important to operations. Operations must seek details in the turnover meeting, and by doing so, they help to improve the estimating process.

WHAT ARE THE TOPICS OF DISCUSSION?

Attached to this Bulletin are a variety of sample forms that can help to guide the discussions at these meetings. But, it is important to think of those forms and checklists in that mindset – as guides and reminders. Each project has unique challenges and subtle differences that become obvious only through discussion and questioning.

Generally the topics covered in the turnover meeting fall into the following categories.

Project Overview: A “big picture” review; the customer, the nature of the work, the type of contract, the schedule, etc.

Estimating Details: What are the numbers? A review of the estimating summary sheet, number of hours, how much money is being carried for the equipment, whether it is taxable, etc.

The Logic Behind the Estimate: This is a critical and often overlooked aspect of the meeting. A good estimate and proposal are more than a collection of numbers; they are a preliminary construction plan. This is a discussion about what is BEHIND the numbers. Why did we use a certain productivity factor? Where do we think the crane will be set? What can we fabricate? Where can we store materials? How did we assume the equipment would be set? What are the most significant risks (financial and safety) in the project? What are the opportunities for gross margin improvement in the project?, etc.

NOTE – Remember that good turnover meetings have the added effect of improving future estimates.

The “Deal”: We are in the *contracting* business. It is very important that in addition to planning how we intend to build the project, we dedicate time and energy to understanding and optimizing “the deal.”

The “deal” as referred to here can be just as important to a successful project as the construction plan. Aspects of the “deal” that need to be discussed and understood by the team might include:

- What are the contract terms and conditions?
- What clarifications, or exclusions, were identified in our proposal?
- Why did we pursue this project?
- What is our relationship with the customer?

- Do we have any special vendor relationships?
- What is the process for change order, or additional, work?
- In what format will we present change orders?
- Can we offer substitutes, provide value engineering?

  NOTE – the turnover meeting is the time to identify cost savings opportunities. The project is in the "honeymoon phase" and partners are most likely to be cooperative. It is important to identify margin and building improvement ideas now, while the project is fresh in the estimator's mind, and with the entire team present.
- Is there a value engineering deduct to offer that can also help to establish the change order format?
- How will the labor rates be established?

A NOTE ON EFFECTIVE COMMUNICATION AND ATTITUDE

The personalities and communication styles of successful project managers can be VERY different than those of estimators. Effective project managers need to understand those differences as they push for sales specifics and details. The turnover meeting can be intimidating for estimators if they feel their work is being scrutinized and criticized.

Estimators typically have a very short time frame and little information with which to prepare proposals and estimates. Their assumptions and plans will normally be very preliminary and perhaps with little or no direction from the customer. Nonetheless, it is always more effective to fully understand an early preliminary plan and build on it instead of starting from scratch. Be supportive of your estimators and encourage them to be open and share all of their thoughts and ideas.

The turnover meeting is not the place to be critical of estimating. The attitude of project management should be understanding, supportive, optimistic and forward thinking. Mistakes will be uncovered, and that is a good thing in the sense that when found early they can often be overcome.

Stay focused on the goal and remember the world is filled with problem finders because that is easy. The most effective project managers look forward, are optimistic and are problem solvers.

Good project managers will try very hard to find BOTH problems (risks) and opportunities at the turnover meeting. Studies show that the earlier these are discovered, the greater the possibility that risks can be overcome and opportunities maximized.

Great project managers enlist the entire team in this effort. They understand that the estimate doesn't determine how the job will end, just where it starts. By involving estimating, they may even help to develop better estimates.

AVOIDING INFORMATION OVERLOAD

There can be an enormous amount of information exchanged at the turnover meeting, particularly for large projects. This makes it important to have an organized approach to the meeting. Here are some techniques that help.

Break down the project into five "sub projects" and review each as though it is a separate, independent job. The stages are:

1. **The Labor Project**. What are the labor-related items and issues, such as the labor estimate, crew make up

and size, material handling plan, fabrication plan, etc.

2. **The Material Project**. What are you buying, who is buying it and for how much, opportunities for value engineering, storage plans, etc.
3. **The Equipment Project**. Who is buying, any relationships, delivery and rig plan, who does start up, warranty details, etc.
4. **The Subcontract Project**. How much did we carry, what is the exact scope, who is qualified, etc.
5. **The General Conditions and Other Costs Project**. What do we need to rent (lifts, cranes, etc.), tools, jobsite office, permits, etc.

Use the team. Operations and project management can ask that individuals take a leadership role in one aspect of the job. For example, they might assign an assistant project manager or purchasing agent to lead the equipment buy-out or assign the labor superintendent or general foreman to spearhead the details of the labor plan.

Checklists and forms can be extremely helpful to thorough and productive meetings (attached to this Bulletin are several examples). Incorporate them into your company procedures and see that they are used consistently.

SUMMARY

Turnover meetings are much more than simply exchanging estimates. These meetings will have a significant positive impact on your business if your company culture embraces three critical strategies and initiates them at turnover meetings:

1. **Planning**. It's really all about planning. Having estimating/sales develop an effective preliminary plan that can be built on and developed by project management. Effective project management looks ahead and tries to take control of future events to manage the outcome. The best way to do that is to develop a sound plan and update it regularly.
2. **Experience**. Use the combined experience of the team to apply best practices, learn from past mistakes and anticipate obstacles. Share like experiences and use them to identify potential hazards and opportunities.
3. **Risk AND Opportunity Management.** Get into the tiniest details of the project and work to find the risks AND the opportunities. The best way to manage the risks and optimize the opportunities is to find them as early as possible.

MAJOR PROJECTS: NEW JOB SETUP CHECKLIST **PROJECT NAME / NO.**_____

ITEM	RESPONSIBILITY (NAME)	DATE COMPLETED
Turnover meeting w/ estimating		
Letter of Intent		
Signed Contract		
Insurance certs to customer		
Contract Abstract (Notice, CO proc, etc)		
Verify contract docs (dwgs, schedule, specs) dates & revs		
Project specific subcontract/ PO terms		
ID and communicate to team unusual General Conditions (temp heat, clean up, drug testing, extended warranties, special testing, X-Ray welding, special safety rules, other work rules, liquidated damages, etc)		
New job setup input form		
Assumptions to customer and GF		
Kickoff meeting w/ general foreman		
Safety program - job specific		
Cost code strategy and breakdown		
Labor Cost ($'s & hours) breakdown		
Equipment Breakdown		
Subcontract Breakdown		
Material Breakdown		
Other Cost Breakdown		
Schedule / milestones		
Manpower loading curve		
Productivity tracking plan		
Crew mix / crew rate breakdown		
Purchasing Log - enter ALL Equipment and subs		
EQ Purchasing Plan - WHO buys what		
Material purchasing plan		
SIGNED subcontracts & insurance certs		
Change order log		
Change order template - breakdown, job specific		
Change order labor rates		
RFI Log		
Shop drawing log		
Set up filing system		
Schedule of Values		
Value Engineering review		
Submit VE - "T" drill shaped nozzles, grapple		
PVF and Hanger standards		
Duct construction standards		
Permits - who and which?		
Jobsite office and tool storage		
Equipment rental plan / special tools		
Construction Plan document		
Turnover meeting with CAD		
Foreman books with safety info		
Initial tool order		
New hire packets - project specific		

Site Risk Assessment

General Contractor:										
Are we Prime Contractor?	Y		N		Job #:					
Job Name:										
Project Manager:										
Piping Foreman	Y		N			Who:				
Sheet Metal Foreman	Y		N			Who:				
Plumbing Foreman	Y		N			Who:				
Laborers	Y		N			Who:				
Boilermakers	Y		N			Who:				
Site Address :										
Start Date:						Finish Date:				
Day Shift:	Y		N			Night Shift:	Y		N	
Weekend Work:	Y		N			Shift or Overtime:	Y		N	
Our Job Scope:										
Roof Work	Y		N			Confined Space	Y		N	
Shut Down Roads	Y		N			Asbestos	Y		N	
Shut Down Sidewalks	Y		N			Lead	Y		N	
Respirators	Y		N			Lockout/Tagout	Y		N	
Ladders	Y		N			Special PPE	Y		N	
Scaffolding	Y		N			Hearing Protection	Y		N	
Rigging	Y		N			Disable Fire Suppression	Y		N	
Weld/cut/grind	Y		N			Lasers	Y		N	
Equipment Storage	Y		N			Mobile Work Force	Y		N	
Aerial Lift	Y		N			Helicopter	Y		N	
Tool Storage	Y		N			Job Site Trailer	Y		N	
Fork Trucks	Y		N			Crane	Y		N	
Trenches/Excavations	Y		N			Who:				
Core Drilling	Y		N			Who:				
Insulator	Y		N			Who:				
Electrician	Y		N			Who:				
Excavator	Y		N			Who:				
Roofer	Y		N			Who:				
Balancer	Y		N			Who:				
Controls	Y		N			Who:				
Demolition	Y		N			Who:				
Special Tools	Y		N			What:				
General Trade	Y		N			Who:				
Other	Y		N			Who:				
Notes:										

ATTACHMENT A

PLANNING TURNOVER REQUIREMENTS

Job Number: _____ Job Name: _____
Meeting Date: _____ Piping Planner:_____
S/M Planner:_____

PLANNING & ADMINISTRATIVE NEEDS:

- ❑ Is the job Competitive Bid or Negotiated?
- ❑ Coordination Drawings (for others) or for Fabrication (HTL) Only
- ❑ Mechanical and Plumbing drawings and Project Specifications
- ❑ Flow diagrams, riser diagrams, or P&ID's available?
- ❑ Architectural background drawings and Structural shop drawings (in AutoCAD) - Must be latest Revision or Revit model (release form required?)
- ❑ Equipment submittals, pre-approved, approved? Available in AutoCAD?
- ❑ Submittals from Owner-furnished equipment or other trades, if required (ex. Lights)
- ❑ Pre-planning Meeting Date: _____, Productivity Meeting Date:_____
- ❑ Estimated planning hours: S/M_____; PIPING _____; ADMIN:_____
- ❑ Are change order hours to be separated?
- ❑ Deadlines for shop drawings / Drawing Schedule, By Project Manager
- ❑ Who will contact GC / CM / Architect/Engineer / Other subs for clarification and coordination and who will document? (PM or Planning) _____
  Note: PM shall forward all RFI's to HTL's Customer (Planning can e-mail to PM)
- ❑ All other contract drawings and shop drawings from other subs
- ❑ Will Planning manage shop drawing log? _____ (Shop drawings distrib. by PM)
- ❑ Who will attend coordination meetings / internal progress meetings
- ❑ What coordination is required with other trades?
- ❑ Foreman input on spooling and subassembly
- ❑ Will additional cost codes be used for changes, meetings, spooling, material lists?

SHEET METAL DRAWINGS INCLUDE:

Areas and systems to be drawn: _____
_____

Background to include:

- ❑ Ceiling height, type of ceiling & light locations, type (note T-bar type if lay-in tile ceiling). Show GRD's.
- ❑ Structural steel elevations (Do we add or show steel on backgrounds?) Model Steel / Label Only
- ❑ Equipment layout

Other Needs:

- ❑ Structural coordination (curbs, framing, openings in walls / roof / floors)
- ❑ Duct standards - HTL Standards **or** Contract specs
- ❑ Specialties, Hanger locations, attachments, and details, what are we hanging from?
- ❑ VAV, FD Schedules (in spreadsheet form, not on drawings)
- ❑ Can duct be streamlined, alternate routing, duct resizing acceptable?
- ❑ Other Value Engineering ideas: _____
- ❑ Coordination meeting required (MEP)
- ❑ Do we need approval before fabricating?
- ❑ As-Built?
- ❑ Seismic - Yes/No Sub_____?
- ❑ Is Planning to include special details such as linear diffusers & custom plenums?
- ❑ Can we minimize transfer ducts? Can we use HTL standard transfer duct?
- ❑ What can be sub assembled?
- ❑ What opportunities are there for modularization?

PIPING DRAWINGS INCLUDE:

Areas and systems to be drawn: _____
_____

Background to include:

- ❑ Ceiling height, type of ceiling & light locations.
- ❑ Structural steel elevations (Do we add or show steel on backgrounds?) Model Steel / Label Only
- ❑ Equipment layout

Other Needs:

- ❑ Structural coordination (curbs, framing, skids, platforms, openings in walls / roof / floors)
- ❑ Sleeve information
- ❑ Piping standards – HTL Standards **or** Contract Specs
- ❑ Specialties, Hanger locations, attachments, and details
- ❑ Do expansion loops, guides and anchors need to be shown?
- ❑ Material takeoff / Bill of Material
- ❑ Alternate routing acceptable?
- ❑ Value Engineering ideas: _____
- ❑ Seismic - Yes / No Sub _____?
- ❑ Coordination meeting required (MEP)
- ❑ Do we need approval before fabricating?
- ❑ Spooling by _____
- ❑ What opportunities are there for modularization?
- ❑ As-Builts?
- ❑ Insulation Sch.

GENERAL NOTES:

Planning will use standard convention for drawings for scale, layering, etc. Show service and access clearances. Provide static pressures for duct.

H.T. LYONS STANDARD CONSTRUCTION PLAN

JOB NO._____ JOB NAME _____
PROJECT MGR._____ACCT. MGR._____

To be developed by the PM after the turnover meeting on every project over $500,000. The plan shall include:

Foremen:_____Planner(s):_____

Customer (Co. Name)_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
Owner : _____ Contact: _____
Phone:
e-mail address:
Architect :_____ Contact: _____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
Mech Engr: _____ Contact: _____
Phone: _____ Cell:_____ Fax: _____
e-mail address:
Consultant: _____ Contact: _____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
CM/GC :___NA_____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
Elec Cont : _____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
ATC Cont (Co. Name):_____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
Insulator (Co. Name):_____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
TAB Sub (Co. Name):_____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
_____ Sub(Co. Name):_____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____
Inspection(Co. Name):_____ Contact:_____
Phone:_____ Cell:_____ Fax: _____
e-mail address:_____

1. Contract Documents – specifications, drawings, addenda, schedules <u>with dates</u> (list below)
   _____
   _____
   _____
   _____
   _____
   _____
2. Pipe and duct standards: H.T. Lyons _____ or Other _____ WHO RESP_____
3. Schedule (the CM, GC's, ours, or both) – attached _____ or PM to provide by _____
4. Pre Construction Manager: _____

5. Pre Construction tasks required:
   _____
   _____
6. Permit requirements
   Authorities having jurisdiction_____
   Codes (by contract) _____
   Permit pulled by H.T. Lyons _____ or CM/GC/Owner _____ Permit No. _____
7. PA One Call: Required _____ or Not Required _____
8. Purchasing log – attached _____ or PM to provide by _____
9. Purchasing responsibilities
   PM shall originate purchase of all equipment and subcontracts
   PM shall delegate to Purchasing Manager to purchase _____
   _____
   Foremen shall originate purchases of all field materials including _____
   _____
   Planning shall take off material for shop fabrication including _____
   _____
   Review Table 2 (also 1 and 3) under section 6 of the Project Manager's manual
10. Submittal and delivery log – attached _____ or PM to provide by _____
11. Job phases – can be areas of work, separate trades, phases set by the GC/CM, or most useful will be our own break down of the project into smaller pieces.

    _____ _____
    _____ _____
    _____ _____
    _____ _____
    _____ _____
    _____ _____

12. Labor breakdown for each trade with detailed description for cost codes – attach.
    A good figure for labor breakdown is an average of 500 to 1000 hours per cost code.
    For example, a project with 12,000 hours would make sense to have 12 to 24 cost codes.
13. Attach manpower loading curve:_____
14. Plan to update manpower loading curve:_____
15. Productivity tracking plan:_____
    _____
16. Any special scope items or special tools required:_____
    _____
17. General condition items:
    Work hours _____
    Break time _____
    Lunch area _____
    Break area _____
    Parking _____
    Trash disposal _____
    Port-a-johns _____
    Temp. power _____
    Temp. heat _____
    Water _____
    Cleanup responsibilities _____
    Refueling of trucks, welding machines, forklifts _____

18. Constraints/restrictions to accessing our work
    _____
    _____
    _____
    _____
19. Key material and equipment deliveries
    _____
    _____
    _____

20. Plan for fabrication and subassembly

_____
_____
_____
_____

21. Tool list – prepared by foremen, attached _____ or foremen will provide by _____

22. Plan for trucking and storage:

_____
_____
_____

23. Plan for material handling to upper or lower levels:

_____
_____
_____

24. Equipment rental plan:

_____
_____
_____

25. Plan for hangers or supports in all areas:
What is the structure type: existing _____, new _____, bar joists _____, steel beams _____, metal purlins _____, concrete slab on Q-deck _____, concrete slab on formed deck _____, precast slabs _____, prestressed or posttensioned slabs _____, metal roof decking only _____, wood _____, or other _____ (describe) _____

Will supplemental steel be required? No _____, Yes _____ Where? _____

Will horizontal pipe be attached with concrete inserts _____, beam clamps _____, drill in anchors _____, welded clips _____, or other _____ (describe)_____

Will horizontal duct be attached with strap inserts _____, beam clamps _____, drill in anchors _____, shot pins _____, or other _____ (describe) _____

Can trapeze hangers be used?_____

Plan for supporting pipe risers _____

Plan for supporting duct risers _____

Are pipe sleeves required in concrete walls _____, masonry walls _____, gypsum bd. walls _____. What type? _____ Will they be firestopped? _____
When will these sleeves be needed? _____

If H.T. Lyons lays out duct openings, describe plan for lay out in
Concrete formed walls _____
Masonry walls _____
Gypsum board walls _____
Concrete floors _____
Roof deck _____

26. Excavation and backfill plan:

_____
_____
_____

27. Safety plan:
    Emergency phone # _____
    Nearest hospital/clinic (attach map) _____
    On site certified 1st aid/CPR _____
    Kevin Lambert's cell number 610-633-9238 _____
    OSHA Posting location _____
    Safety Orientation _____
    Weekly toolbox talks _____
    Hard hats and safety glasses _____
    Steel toed shoes _____
    Fall Protection _____
    Drug testing _____
    MSDS sheets _____
    Confined space entry _____
    Excavation deeper than 4 feet _____
    Crane lift or helicopter lift _____
    Spill kit required _____
    Daily inspections by foremen including recording on daily report _____
    Other_____
    _____
    _____
    _____

28. Planning concerns, list of what information is required on the shop drawings – attach CAD Turnover checklist
    _____
    _____
    _____
    _____

29. Early RFI's, problems, or potential for changes – attach RFI log:

Problems	Potential Solutions
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

30. Pressure testing, ASME, QA/QC, Commissioning plan and procedures summary:
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____

31. Value engineering ideas

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

32. Cost Savings Ideas – include idea, estimated cost to implement, estimated savings

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

33. Administrative issues, contract and scope review notes, billing date, union waivers and procedure for change notification.

Billing date _____
Bill for stored or fabricated materials? _____
Tax exempt project? _____
Job recovery or waivers? _____
Change notification required? _____
Schedule delay notification required? _____
Proceed on verbal or written changes? Use HTL extra work order form
Retention reduction? _____

_____	_____
_____	_____
_____	_____
_____	_____

TURNOVER MEETING

Job Name:		JOB #:
PM:	Date:	Time:
Team:	Sales Engineer:	Value:

Waivers	Y ☐	N ☐	Job Recovery	Y ☐	N ☐	Tax Exempt	Y ☐	N ☐
Permits	Y ☐	N ☐	Cert.of Insurance	Y ☐	N ☐	Specified Billing Date	Y ☐	N ☐

Site/Shipping Address:			
Bill To & Address if New:			
Start Date:		Finish Date:	
Schedule by:			
Who's in Charge of Manpower?		Shift or Overtime?	Y ☐ N ☐

PF Field Hrs	SM Field Hrs	Plumber Hrs	Svc. Tech Hrs
PF Shop Hrs	SM Shop Hrs	Trucking Hrs	Balancing Hrs
PF Plann. Hrs	SM Plann. Hrs	Laborer Hrs	

Design Complete	Y ☐	N ☐	Design By Whom?				
Pipe Fab	Y ☐	N ☐	SM Fab	Y ☐	N ☐		
Pipe Coord. Dwgs/Plann.	Y ☐	N ☐	SM Coord. Dwgs/Plann.	Y ☐	N ☐		
Engineering	Y ☐	N ☐	Engineering By Whom?				
Controls	Y ☐	N ☐	Controls By Whom?				
Commissioning	Y ☐	N ☐	Commiss. By Whom?				
Mobile Work Force	Y ☐	N ☐	ASME	Y ☐	N ☐		
National Maintenance	Y ☐	N ☐	Domestic Steel Req?	Y ☐	N ☐		

PO Log Complete Y ☐ N ☐ Quick Entry Required Y ☐ N ☐

Insulator	Y ☐	N ☐	Balancer	Y ☐	N ☐		
Electrician	Y ☐	N ☐	Controls	Y ☐	N ☐		
Excavator	Y ☐	N ☐		Y ☐	N ☐		
Roofer	Y ☐	N ☐		Y ☐	N ☐		
Crane	Y ☐	N ☐	Trailer(s)	Y ☐	N ☐		
Fork Truck(s)	Y ☐	N ☐	Scrap	Y ☐	N ☐		
Special Tools	Y ☐	N ☐	Equip Storage	Y ☐	N ☐		
General Trade	Y ☐	N ☐		☐	☐		

SAFETY

Job Specific Safety Requirements:

Nearest Medical Help:

Where is Safety Info Posted:

Site Safety Rep:

NOTES: **Attendees:**