





| l | ACCT # | ITEM & DESCRIPTION | KEY QTY'S | MANHOURS | LABOR \$ | MATERIAL \$ | SUB CONT \$ | TOTAL \$ | TAR MH |
|---|--------|----------------------------------|-----------|----------|-----------|-------------|-------------|------------|------------|
| | 0X-XXX | EXCAVATION AND CIVIL WORK | 2,647 CY | 3,329 | 256,401 | 94,928 | 218,093 | 569,422 | |
| | 1X-XXX | CONCRETE | 130 CY | 1,296 | 95,442 | 37,221 | | 132,663 | |
| | 2X-XXX | STRUCTURAL STEEL | 52 TN | 4,399 | 365,157 | 138,427 | | 503,584 | 1,997 |
| | 3X-XXX | ARCHITECTURAL | SF | | | | | | |
| | 4X-XXX | MECHANICAL EQUIPMENT | 1 EA | 4,890 | 427,346 | 4,984,301 | | 5,411,647 | 824 |
| | 5X-XXX | PIPING | 4,167 LF | 19,250 | 1,634,344 | 1,003,634 | | 2,637,978 | 11,513 |
| | 6X-XXX | ELECTRICAL | 8,745 LF | 4,873 | 390,052 | 246,072 | | 636,124 | 758 |
| | 7X-XXX | INSTRUMENTATION | 78 EA | 2,384 | 204,742 | 359,050 | | 563,792 | 1,315 |
| | 8X-XXX | PROTECTIVE COATINGS | 1 LOT | 9,302 | 756,717 | 379,250 | | 1,135,968 | 3,589 |
| | | DIRECT FIELD COSTS (DFC) | | 49,723 | 4,130,202 | 7,242,883 | 218,093 | 11,591,178 | 19,996 |
| | 90-610 | FIELD STAFF | 29% | | 1,199,052 | | | 1,199,052 | |
| | 90-620 | GENERAL CONSTRUCTION EQ | 17% | | 702,781 | | | 702,781 | |
| | 90-630 | TEMPORARY FACILITIES | 5% | | 206,510 | | | 206,510 | |
| | 90-730 | FREIGHT | 2% | | | 126,915 | | 126,915 | |
| | 92-165 | OVERTIME PREMIUM | | | 405,218 | | | 405,218 | |
| | 92-200 | SCAFFOLD | 22% | 11,042 | 1,089,584 | | 110,416 | 1,200,000 | |
| | 93-100 | HEAVY HAUL / HEAVY LIFT | | | | | 3,000,000 | 3,000,000 | |
| | 95-110 | CRANE RENTAL (50TN OR LARGER) | 10% | | | | 413,020 | 413,020 | |
| | 95-120 | SPARE PARTS (WAREHOUSE) | | | | | | | |
| | | INDIRECT FIELD COSTS (IFC) | | 11,042 | 3,603,145 | 126,915 | 3,523,436 | 7,253,496 | |
| | | TOTAL FIELD COSTS (TFC) | | 60,764 | 7,733,347 | 7,369,798 | 3,741,529 | 18,844,674 | |
| | 96-320 | ENGINEERING LABOR, FEL3 | 2% | | 537,000 | | | 537,000 | (% of TPC) |
| | 96-330 | ENGINEERING LABOR, DETAIL DESIGN | 12% | | 3,500,000 | | | 3,500,000 | (% of TPC) |
| | | | | | | | | | |
| | | | | | | | | | |





| D | Activity Name | OD | RD | Start | Finish | Dur % | | | | 2015 | | | |
|-------------------|---|-----|----|-------------|---------------|---------|--------------------------------------|----------------------------|---------------------------------|---------------------------------|--|---------------------------|---------------------|
| | | | | | | | March 02 09 16 23 30 0 | April Ve 1 1 2 1 20 1 2 | May | June | July 20 00 12 20 27 | August | September |
| rudo Towor F | Replacement Project (15006) | 110 | 76 | 18-Mar-15A | 18-Aug-15 | 30,91% | 02 09 16 23 30 0 | 10 13 20 2 | 2 04 11 10 20 | 01 06 15 22 | 28 00 13 20 21 | V 18-Aug-15 | Crude Tower Heplace |
| | teplacement Project (15000) | | 70 | | | | | | | | | 18-Aug-15 | FEL-9 |
| FEL-3 | | 110 | 76 | | 18-Aug-15 | | | | | | | | 1 |
| General | | 110 | 76 | 18-Mar-15A | 18-Aug-15 | 30.91% | | | | | | 18-Aug-15 | General |
| FEL_3-3010 | Commence FEL-3 | 0 | 0 | 18-Mar-15 A | | 100% | nence FEL-3 🔹 🔥 18-Mar-15 A, | L, | | | | | |
| FEL_3-2215 | FEL-3 Front End Engineering (Indirects) | 110 | 76 | 18-Mar-15 A | 18-Aug-15 | | ig (Indirects) | | | | NN (177 | 18-Aug-15 | |
| FEL_3-2225 | FEL-3 Front End Engineering (Directs) | 77 | 45 | 18-Mar-15 A | 06-Jul-15 | \$1.56% | | | | | 06-Jul-15 | | |
| FEL_3-3745 | Engineering Kick Off Meeting | 0 | 0 | 18-Mar-15 A | | 100% | Off Meeting 💲 18-Mar-15A, | | | | | | |
| FEL_3-3840 | CH2M Receive Jacobs FEL 2 Deliverables | 0 | 0 | | 15- Apr- 15 A | | H2M Receive Jacobs FEL 2 Deliverable | | | | | | |
| FEL_3-3945 | Issue RFQ For Bids - Crude Tower 1C-1 | 0 | 0 | | 22- Apr- 15 A | 100% | Issue RFQ For Bids - Crude To | | | | | | |
| FEL_3-3130 | P&ID Review Meeting with P66 | 0 | 0 | | 28- Apr- 15 A | 100% | | Meeting with P66 💈 | | | | | |
| FEL_3-3970 | P66 Confirm CH2M to Develop Crude Twr Internals Data Sheet | 0 | 0 | | 13-May-15A | 100% | P66 Confirm CH2M to Develop C | | V . (| | | | |
| FEL_3-3140 | Preliminary Model Review Meeting with P66 - Crude Twr 1C-1 | 0 | 0 | | 19-May-15 | 0% | | | rude Twr 1 C-1 🏅 19-May-1 | | | | |
| FEL_3-4175 | Issue PO for Heavy Haul & Lift CM Services | 0 | 0 | | 19-May-15 | 0% | | | ft CM Services 💲 19-May-1 | | | | |
| FEL_3-4045 | Preliminary Model Review Meeting with P66 - HVGO Piping | 0 | 0 | | 02-Jun-15* | 0% | Prelimina | | ting with P66 - HVGO Piping | | | | |
| FEL_3-3145 | Constructability Review Meeting with P66 | 0 | 0 | | 04-Jun-15* | 0% | | | ability Review Meeting with P66 | ····¥ | | | |
| FEL_3-3950 | Issue RFQ For Bids - Crude Tower 1C-1 Internals | 0 | 0 | | 05-Jun-15 | 0% | | Issue RFQ For B | ds - Crude Tower 1C-1 Interna | | | | |
| FEL_3-3900 | Issue P&ID's for PHA Review | 0 | 0 | | 19-Jun-15 | 0% | | | | or PHA Review 👌 19-Jun-1 | | | |
| FEL_3-3290 | P66 Reviewed Docs & Prepared to Facilitate PHA | 0 | 0 | 22-Jun-15* | | 0% | | F | 66 Reviewed Docs & Prepared | | | | |
| FEL_3-3160 | Complete PHA | 0 | 0 | | 23-Jun-15 | 0% | | | | Complete PHA 💲 23-Ji | in-15 | | |
| FEL_3-3170 | Complete all Info & Eng'g Budgets to Estimating | 0 | 0 | | 06-Jul-15 | 0% | | | Complete all Infe | & Eng'g Budgets to Estimating | g 🗴 06-Jul-15 | | |
| FEL_3-3960 | Issue PO - Crude Tower 1C-1 | 0 | 0 | | 06-Jul-15 | 0% | | | | Issue PO - Crude Tower 10 | -1 🕇 06-Jul-15 | | |
| FEL_3-4170 | Start Detail Design | 0 | 0 | | 07-Jul-15 | 0% | | | | | ign 💲 07-Jul-15 | _ | |
| FEL_3-3955 | Issue PO - Crude Tower 1C-1 Internals | 0 | 0 | | 03-Aug-15 | 0% | | | | Issue PC | - Crude Tower 1C-1 Internals | | |
| FEL_3-4160 | P66 - TIC Estimate Review | 0 | 0 | | 12-Aug-15 | 0% | | | | | | Review 💲 12-Aug-15 | |
| FEL_3-3755 | Issue FEL3 Check List (Pier Review) | 0 | 0 | | 17-Aug-15 | 0% | | | | | | Pier Review) 🎖 17-Aug-15 | |
| FEL_3-3280 | Issue FEL3 Package to P66 | 0 | 0 | | 18-Aug-15 | 0% | | | | | Issue FEL3 P 06-Jul-15, Process | adkage to P66 💲 18-Aug-15 | |
| Process | | 77 | 45 | 18-Mar-15A | 06-Jul-15 | \$1.56% | | | | | 06-Jul-15 | | |
| FEL_3-3351 | FEL3 Process Admin | 77 | 45 | 18-Mar-15 A | 06-Jul-15 | \$1.56% | poessAdmin | | | | 06-JUE 15 | | |
| FEL_3-3356 | Review Exist Drwgs & Jacobs FEL-2 Deliverables | 20 | 0 | 19-Mar-15 A | | 100% | | | | | | | |
| FEL_3-3360 | Prepare Crude Tower 1C-1 Data Sheet | 10 | 0 | 30-Mar-15 A | | 100% | | | | Process Hydraulics | | | |
| FEL_3-3370 | Process Hydraulics | 20 | 20 | 22-Apr-15 A | · · | 0% | | | | Process Hydraulics | | | |
| FEL_3-4035 | Update & Revise Crude Tower 1C-1 Data Sheets & Numbers | 3 | 0 | | 01-May-15A | 100% | | _ | | P&ID's Review Comments & F | | | |
| FEL_3-3380 | P&ID's Review Comments & Redlines | 20 | 20 | 29-Apr-15 A | | 0% | | • | | Crude Tower 1C-1 Internals | | | |
| FEL_3-3375 | Review Crude Tower 1C-1 Internals Data Sheet for Req | 7 | 7 | 14-May-15 | 22-May-15 | 0% | | | neview | | | | |
| FEL_3-3385 | PHA Prep, Incorp Comments & Resolve any Issues | 25 | 25 | 22-May-15 | 26-Jun-15 | 0% | | | | | A Prep, Incorp Comments & F mplete P&ID's Redlines & Line | | |
| FEL_3-3650 | Complete P&ID's Redlines & Line List | 20 | 20 | 01-Jun-15 | 26-Jun-15 | 0% | | | | | Finalize P&ID's Docs fo | | |
| FEL_3-3620 | Finalize P&ID's Docs for IFD | 5 | 5 | 29-Jun-15 | 06-Jul-15 | 0% | | | | - | | r IFD | |
| FEL_3-3610 | Process Complete FEL3 Docs | 0 | 0 | | 06-Jul-15 | 0% | | | | Process Complete FEL3 Do | as 💲 06-Jul-15 🛡 01-Jul-15, Civil / Structural | | |
| Civil / Structure | | 75 | 43 | 18-Mar-15A | 01-Jul-15 | 42.67% | | | | | | | |
| FEL_3-3329 | FEL3 Civil/Struct Admin | 75 | 43 | 18-Mar-15 A | 01-Jul-15 | \$2.67% | Struct Admin | | | | 01-Jul-15 | | |
| FEL_3-3330 | Piping/ Civil Confirm Site Plan with latest Survey/Geotech/Pothole infi | 37 | 6 | 19-Mar-15 A | 08-May-15 | 33.78% | | | Mping/ CMI Confirm | Site Plan with latest Survey/Ge | | | |
| FEL_3-3815 | U/G Investigation & Prepare Drwgs | 69 | 38 | 19-Mar-15 A | 24-Jun-15 | 14.93% | | | | | Investigation & Prepare Drwg | | |
| FEL_3-3105 | Prepare 3D Model for GA Crude Twr Fdns & Crane/Equipt Pads | 46 | 20 | 26-Mar-15 A | 29-May-15 | 6.52% | | | | | de Twr Fdns & Crane/Equipt P | | |
| FEL_3-3810 | Prepare Fdns Pile Plans & Struct Conc Plans/Sects | 36 | 35 | 21-Apr-15 A | 19-Jun-15 | 2.78% | | | | | dns Pile Plans & Struct Conc I | | |
| FEL_3-4125 | Heavy Crane Lift Constr Services Coordination (CCA 20-001) | 4 | 30 | 01-May-15 A | 12-Jun-15 | 0% | | | | | Constr Services Coordination | | |
| FEL_3-3335 | Pipe Rack Steel Additions & Drwgs | 37 | 37 | 04-May-15* | 24-Jun-15 | 0% | | | | Pipe | Hack Steel Additions & Drwgs | | |
| FEL_3-4145 | Geotech - Borehole Drilled @ Crude Twr new location | 0 | 0 | | 07-May-15A | 100% | Geotech - Borehole Drilled @ | Crude Twr new loca | tion 🗙 07-May-15A | | Complete Civil Deves FOM | | |











An Open Mind is a Good Place to Start

Keep your eyes and mind open, take advantage of opportunities, and embrace new responsibilities. Don't be narrow minded in your career, don't be

"The Unemployable"

"I am graduating with a degree in mechanical engineering with an emphasis on bio-cyclical systems looking to become a leading engineer developing genetic bio-motors utilizing green energy from seaweed photosynthesis"

Instead get that first job, embrace it, learn from it, but don't think that it will be what you are doing for the rest of your career, because the possibilities are instead, endless, and road you'll travel, exciting.





Stay Humble

"I am always learning and working at the margin of my ignorance" Harvey Golub, Former CEO of American Express

- Look for and lean on experienced mentors, use them to bounce off decisions and to back you up when you are challenged.
- Know that you don't know, even if you think you know ("the margin of my ignorance").

"To know that you do not know is the best. To pretend to know when you do not know is a disease." Lao-Tzu

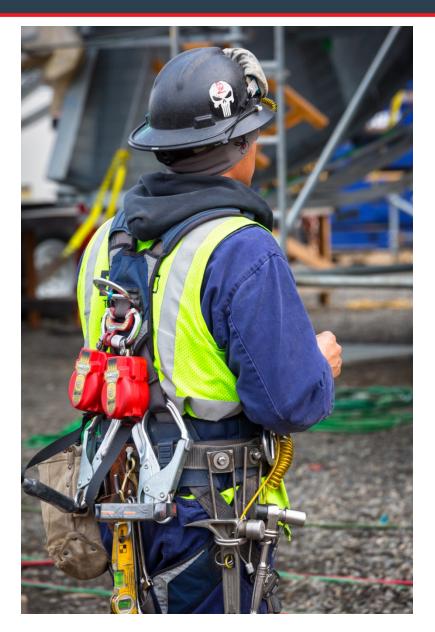
Strike the words "I know..." from your vocabulary. There will be those that desire to teach you but will not teach if you don't have a <u>teachable</u> spirit. You will need to have humility which sometimes doesn't feel very good.





Be Patient

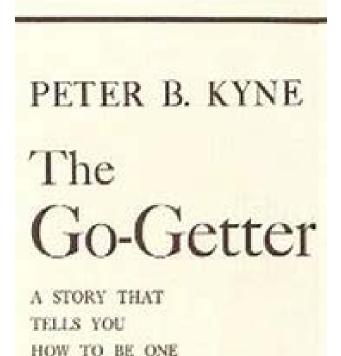
- Building experience and credibility takes time and hard work.
- Promotions will come but must be earned by doing the best job you can at the job you are given plus demonstrating a willingness to do more.
- Resolve to be the best at the job you are given and the rewards will come.







- Have initiative (Be a "Go-Getter")
 - Don't wait for work to come to you. Go get it.
 - If you need something from someone else to get your job done, get up and go get it.
 - If you see something that needs to be done, either do it, or make sure someone does it.
 - Communicate person to person. Don't rely on email or chat etc. Pick up the phone, get up off your duff and go talk to the other person.







Tell the Truth

- Talk Straight, Use Simple Language, Call things what they are.
- Demonstrate Integrity, Don't distort facts or leave false impressions

"whoever is careless with the truth in small matters cannot be trusted with important matters" Albert Einstein

"I look for three things in hiring people. The first is personal integrity, the second is intelligence, and the third is a high energy level. But, if you don't have the first, the other two will kill you." Warren Buffett





Finally, Learn how to work with people, all kinds of people, because you will have to work with people, all kinds of people.

