Understanding Construction Accounting

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- Attend 90% of this presentation
- Fill out the online evaluation for this session
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Revenue Recognition

Two generally accepted methods (for GAAP)

- Percentage of Completion
- Completed Contract

They are not acceptable alternatives to each other under the same circumstances
Revenue Recognition

Å Percentage of Completion

ï Most common method
ï Recognizes revenue as progress is made toward contract completion
ï Is the preferable method when all of the following criteria are met:

Revenue Recognition

Å Percentage of Completion (cont.)

ï Estimates are reasonably dependable
ï The presumption is that dependable estimates can reasonably be made if contracting is a significant part of the business.
ï There must be persuasive evidence to the contrary to overcome this presumption.
Revenue Recognition

- Percentage of Completion (cont.)
  - Contract specifies parties’ rights, consideration to be exchanged under the contract and obligations are specified in contract.
  - Owner can reasonably be expected to satisfy its contractual obligations.
  - Contractor can be expected to complete performance under the contract.

Revenue Recognition

- Completed Contract
  - Should only be used when estimates cannot meet the “reasonably dependable” criteria.
  - Or when financial position (balance sheet) and results of operations (income statement) do not vary materially from that which would result under the percentage of completion method (i.e. when contracts are short in duration).
Cost Accumulation

Contract costs include:

- Direct costs (i.e. direct labor, direct materials, subcontract costs, etc.)
- Indirect costs allocable to contracts (i.e. indirect labor, contract supervision, small tools, insurance, depreciation, equipment, repairs and maintenance, etc.)

Selling expenses should be excluded from contract costs.

General and administrative expenses are period expenses.

Cost Accumulation

Estimated costs

- A significant factor in determining revenue earned on contracts
- Should include all elements included above
- Systematic and consistent
- Reviewed periodically and revised to reflect new information
Calculating Revenue Earned

Â Methods of measuring percentage of completion

ï Input methods
  ▪ Cost to Cost
  ▪ Units of Work Performed

ï Output methods
  ▪ Pre-established milestones
  ▪ Units of Delivery

Calculating Revenue Earned

Â The method chosen should be consistently applied
Â Most common method used to calculate percentage completion is Cost to Cost (required for tax)
Â Example:

<table>
<thead>
<tr>
<th>Contract Price</th>
<th>$250,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Costs</td>
<td>$200,000</td>
</tr>
<tr>
<td>Estimated Gross Profit (20%)</td>
<td>$50,000</td>
</tr>
</tbody>
</table>
Calculating Revenue Earned

Two acceptable methods of calculating earnings

A. Total contract price multiplied by the percentage of completion less total estimated costs multiplied by the percentage of completion equals gross profit earned

B. Percentage of completion multiplied by estimated gross profit plus costs incurred to date equals revenue earned

Calculating Revenue Earned

Assume costs incurred to date of $120,000

<table>
<thead>
<tr>
<th>Percentage of Completion:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs Incurred to Date</td>
<td>$120,000</td>
</tr>
<tr>
<td>Divided by Total Estimated Costs</td>
<td>200,000</td>
</tr>
<tr>
<td>Percentage of Completion</td>
<td>60%</td>
</tr>
</tbody>
</table>
Calculating Revenue Earned

Method A:

<table>
<thead>
<tr>
<th></th>
<th>Revenue Earned</th>
<th>$250,000 x 60%</th>
<th>$150,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs Incurred</td>
<td>$200,000 x 60%</td>
<td>$120,000</td>
<td></td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$ 50,000 x 60%</td>
<td>$ 30,000</td>
<td></td>
</tr>
</tbody>
</table>

Revenue earned under both methods is the same when utilizing the cost to cost method.

Calculating Revenue Earned

Method B:

<table>
<thead>
<tr>
<th></th>
<th>Gross Profit</th>
<th>$ 50,000 x 60%</th>
<th>$ 30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plus Costs Incurred to Date</td>
<td>$120,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Earned</td>
<td>$150,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revenue earned under both methods is the same when utilizing the cost to cost method.
Unique Balance Sheet Accounts for Construction Contractors

Â Contract Related Assets
Â Accounts Receivable
  ï Trade
  ï Retainage
  ï Unbilled
Â Costs and Estimated Earnings in Excess of Billings on Uncompleted Contracts (Underbillings)
Â Deferred Contract Costs

Unique Balance Sheet Accounts for Construction Contractors

Â Contract Related Liabilities
  ï Accounts Payable
  ï Trade
  ï Retainage
Â Billings in Excess of Costs and Estimated Earnings on Uncompleted Contracts (Overbillings)
Â Accrued Contract Costs
Â Accrued Losses on Contracts in Process
Financial Statement Analysis

Assets
Â Current assets should be assets collectible in the operating cycle, generally next twelve months
Â Accounts Receivable not collected within one year should be classified as long-term

Financial Statement Analysis

Accounts Receivable Retainage
Â Contract retainage provisions can take many forms, but are generally a percentage of total amounts billed (i.e. 5%, 8%, 10%)
Â Retainage is generally held by the general contractor or owner until the contract has been completed and the work has been accepted by the owner
Financial Statement Analysis

Accounts Receivable Retainage (cont.)
- Should be reported separate from trade receivables
- Skews receivables aging if not reported separately (i.e. significant receivables > 120 days past due)
- Most construction accounting software allows separate reporting

Financial Statement Analysis

Unbilled Contract Receivables
- Represents receivables on completed contracts not yet billed
- Similar to underbillings
Financial Statement Analysis

Costs and Estimated Earnings in Excess of Billings on Uncompleted Contracts ("Underbillings")
- Represents revenues recognized in excess of amounts billed
- A function of a company’s ability to properly and timely invoice customers
- May be indicative of overly aggressive profitability estimates
- Leads to cash flow problems down the road
- Underbillings should be less than 25% of working capital

Financial Statement Analysis

Deferred Contract Costs
- Costs incurred for anticipated contracts (pre-contract costs)
- Future recovery of the cost must be probable otherwise costs should be expensed
Financial Statement Analysis

Liabilities
Â Accounts payable trade is a current liability
Â Accounts payable retainage should be recorded as a current liability if payment is expected to be made within the next twelve months

Financial Statement Analysis

Billings in Excess of Costs and Estimated Earnings on Uncompleted Contracts (Overbillings)
Â Represents an obligation for work to be performed (billings in excess of revenues earned)
Â Generally good to be slightly overbilled,

However:
Â Significant overbillings may be indicative that a contractor is borrowing from one job to pay for another (robbing Peter to pay Paul)
Financial Statement Analysis

Billings in Excess of Costs and Estimated Earnings on Uncompleted Contracts
(“Overbillings”)

• Offset amount should be in accounts receivable
  • Or cash, if already collected
  • Is there sufficient cash to cover overbillings?

• May result in an inability to complete work already paid for by the customer

Financial Statement Analysis

Accrued Contract Costs

• Costs to be incurred on contracts substantially complete at period end (i.e. punch list items)

• Costs incurred on contracts in process for which the vendor has not yet billed for
Financial Statement Analysis

Accrued Losses on Contracts in Process

- If a loss is expected on a contract (cost incurred to date plus estimated costs to complete a contract exceed the total estimated contract revenue)
- The entire anticipated loss should be recognized in the period in which the loss is determined

Financial Statement Analysis

Accrued Losses on Contracts in Process (cont.)

- No profit recognized in future periods
- Provision for losses on contracts in process should be reported separately in Cost of Contract Revenue, if material to the financial statements
Financial Statement Analysis

Deferred Income Taxes

- Typically not seen on S-Corp or LLC

Small contractor exemption of IRC Section 460 allows use of completed contract method of accounting for long term contracts for income tax purposes if all of the following criteria are met:

- The contract is a construction contract
- At the time the contract is entered into, the contract is estimated to be completed within a two year period
- Average annual gross receipts for the three preceding taxable years is < $10 million
Financial Statement Analysis

Deferred Income Taxes (cont.)
- Does not apply to homebuilders
- Defer recognition of revenue and costs until a contract is substantially complete
- Results in a temporary difference between book and tax
- Deferred tax liability required under GAAP on C-Corp entities

Key Financial Ratios for Contractors

Working capital (current assets − current liabilities)

- The contractor’s ability to fund:
  - Operating cash flow needs
  - Problem accounts receivable
  - Is there sufficient working capital to complete backlog?
Key Financial Ratios for Contractors

Adjusted working capital

- Items added back
  - Cash surrender value of life insurance

- Items excluded from working capital
  - Related party receivables and payables
  - Inventory at 50%
  - Prepaid items

Adjusted working capital (cont.)

- Bonding companies will use 10 times adjusted working capital for a single job
- Bonding companies will use 20 times adjusted working capital in total for all jobs
Key Financial Ratios for Contractors

Number of months in backlog (total backlog/(contract revenue/12))
- The number of months to complete work on contracts in process and contracts awarded
- Is there sufficient work to maintain current revenue levels
- Target ratio is 12 months or more

Key Financial Ratios for Contractors

Gross profit percentage
- Target gross profit percentage varies by construction industry
- Company as a whole — compare year to year
Key Financial Ratios for Contractors

Gross profit percentage
- Gross profit on contracts in process versus gross profit on contracts completed
  - Profit fade — decline in gross profit on contracts from year to year
  - Indicative of poor job estimating ability or poor contract management

Key Financial Ratios for Contractors

- Backlog gross profit to general and administrative expense (gross profit in backlog/G&A expense)
  - Target 0.50 to 1.0
Key Financial Ratios for Contractors

Bonding capacity (adjusted stockholders’ equity × 10)
- An indication of a contractor’s credit rating
- Adjusted stockholders’ equity
- Items deducted from total stockholders’ equity
  - Intangible assets (i.e. goodwill)
  - Deferred income tax assets

Questions?

Don’t forget:
- 10:15-11:30am Opening General Session
- 11:30am-5:00pm NECA Show Hours