BCN 4753 Construction Finance - Fall 2023

Construction Financing
BCN 4753

Monday 5th-6th period, Wednesday 5th period

Instructor:	Russ Walters, Ph.D, P.E., LEED AP
Office Location:	329 Rinker Hall
Email:	rwalters@ufl.edu
Phone:	352-354-2896

Office Hours are Tuesday, Wednesday, and Thursday 5th period or by appointment

Course Communications: For questions outside of class, please use the email system within Canvas.

Required Text: None

Additional Resources: *Construction Accounting and Financial Management*, Third Edition, Steven J. Peterson ISBN-13: 9780132675055

Course Description: Basic principles and applications of construction finance with an emphasis on the acquisition and management of construction loans, mortgages and construction accounting.

Purpose of Course: Construction Finance was developed to enhance your understanding of financing and managing a company's money to better evaluate its' profitability. Whether you decide to open your own construction company or work for someone else, Construction Financing will be an important factor contributing to your success. The phrase "Construction Financing" is broadly construed to include all aspects of the business of construction contracting and construction financial management.

Course Learning Objectives

1. Recognize techniques to assess and manage all types of risk. (SACS 4, ACCE SLO 13, 17)
2. Understand Contractor's Balance Sheet, Income Statement, and Bonding Capacity Ratios. (SACS 4, ACCE SLO 14)
3. Understand the importance of maximizing Cash Flow. (SACS 4, ACCE SLO 14)
4. Understand business organizations, basic accounting concepts, classification of direct and indirect cost, Labor Laws, Lien Laws (SACS 5, ACCE SLO 14, 17)
5. Recognize the importance of accurately calculating Overhead and Profit. (SACS 4, ACCE SLO 14)

Course Policies:

Students are expected to attend every class session and make up all work missed because of legitimate absences. Unexcused or unexplained absences will automatically lower a student's grade if they exceed the equivalent of one week's worth of class time.

Please observe basic etiquette by being to class on time, not leaving during the class period, silencing electronic devices, etc. Laptop/tablet use is restricted to taking notes and other activities allowed by the instructor.

UF Policies:

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php.

Getting Help:

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Grading Policies:

Assignment	Percentage
Assignments	10%
Quizzes	80%
Cash Flow Project	10%

Grading Scale:

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D
Course Percentage	93%+	90-92.9%	87-89.9%	83-86.9%	80-82.9%	77-79.9%	73-76.9%	70-72.9%	67-69.9%	63-66.9%
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0

Course Schedule:

The course schedule is posted on the course website.

Assessment Methods:

Course Learning Objective (CLO)	Assignment(s)	Student Learning Outcomes (SLO) *SACS*	*ACCE*	Percent students passing with a 70% or higher
1. Recognize techniques to assess and manage risk	Quiz	4	13,17	70%
2. Understand Contractor’s Balance Sheet, Income Statement, and Bonding Capacity Ratios	Quiz	4	14	70%
3. Understand the importance of maximizing Cash Flow	Quiz	4	14	70%
4. Understand business organizations, basic accounting concepts, classification of direct and indirect cost, Labor Laws, Lien Laws	Quiz	5	14,17	70%
5. Recognize the importance of accurately calculating Overhead and Profit	Quiz	4	14	70%

Fall 2023 Course Schedule

31-Aug	Construction Accounting Systems
2-Sep	Simplified Financial Feasibility Analysis
7-Sep	Memorial Day
9-Sep	Simplified Financial Feasibility Analysis
14-Sep	Accounting Transactions
16-Sep	Equipment Costs, Cost Coding, Accounting Transactions
21-Sep	Time Value of Money
23-Sep	Financing a Company's Financial Needs
28-Sep	Financing a Company's Financial Needs
30-Sep	Financial Documents
5-Oct	Financial Documents
7-Oct	Lien Law
12-Oct	Overhead / Cash Flow
14-Oct	Cash Flow
19-Oct	Depreciation
21-Oct	Davis Bacon
26-Oct	Labor Supply / FLSA
28-Oct	Workers' Comp
2-Nov	Project Cash Flow
4-Nov	Project Cash Flow
9-Nov	Project Cash Flow
11-Nov	Veterans' Day
16-Nov	Pay Apps
18-Nov	Pay Apps
23-Nov	Pay Apps
25-Nov	Thanksgiving
30-Nov	Over/under billings; Committed Costs
2-Dec	Incorporation
7-Dec	Bonding Capacity
9-Dec	Tools for Making Financial Decisions

CLO 1

Recognize techniques to assess and manage risk

Time Value

This is a preview of the published version of the quiz

Started: Oct 28 at 3:36pm

Quiz Instructions

Question 1

2 pts

What is the present value of $1,725, received ten years from now, using a periodic interest rate of 9.9% compounded annually?

Question 2

2 pts

What is the future value, ten years from now, of ten $109 cash flows using a periodic interest rate of 9.1% compounded annually? The cash flows are made at the end of each year.

Question 3

2 pts

What is the future value, five years from now, of 1,437 invested today at a periodic interest rate of 1.7% compounded monthly?

Question 4

2 pts

What is the future value, four years from now, of $1,475 invested today at a periodic interest rate of 10.6% compounded annually?

Question 5

2 pts

What uniform series of cash flows is equivalent to a $160,945 cash flow, ten years from now, if the uniform cash flows occur at the end of the year for the next ten years and the periodic interest rate is 13.2% compounded annually?

Quiz - Simplified Financial Feasibility Analysis

(!) This is a preview of the published version of the quiz

Started: Oct 28 at 3:21pm

Quiz Instructions

Question 1

4.5 pts

You are planning to build a 26 unit apartment building on a 1.5 acre lot. The cost of the land is $450,000. The estimated rent will be $1,328/month and you estimate the vacancy rate at 5%. The operating expenses will be $103,740 per year. Taxes are $61,325, and the replacement reserve will be $36,400 per year. The lender will loan up to 75% of value (LTV), and requires a debt coverage service ratio of 1.5. The annualized mortgage constant is 0.074. What is the maximum amount that you can spend on development (i.e. hard + soft costs)?

Question 2

4.5 pts

You are considering to build a 9,906 SF office in Hawthorn, FL on land valued at $475,000. You are estimating the cost of construction at $143/SF, engineering at $21.45/SF, and site work at $14.30/SF. The net rental area will be 9,000 SF. The local market averages a 5% vacancy rate. You lender will loan up to 0.75 of the property value (LTV), and requires a debt coverage service ratio (DCSR) of 1.78. The annualized mortgage constant is 0.070. The annual operating expenses and taxes are $2,400 (O&M), $45,250 (Tax), and $11,167 (replacement reserve). Using the simplified financial feasibility analysis, what is the minimum rent ($/NSF/month) to break even?

Financing Needs - Part 1

This is a preview of the published version of the quiz

Started: Oct 28 at 3:38pm

Quiz Instructions

Answer the following questions

Question 1 — 2.5 pts

Determine the interest due on an $52,870 short-term loan, with a term of 281 days and a simple interest rate of 10%.

Question 2 — 2.5 pts

Determine the monthly interest rate for an APR of 6%. Enter the number as a percentage, not a decimal.

Question 3 — 2.5 pts

Determine the interest rate for a billing period with 30 days for a loan that charges an APR of 7%.

Question 4 — 2.5 pts

Determine the APY for an APR of 8.6% for monthly compounding periods. Enter the number as a percentage, not a decimal.

Financing Needs - Part 2

This is a preview of the published version of the quiz

Started: Oct 28 at 3:39pm

Quiz Instructions

Answer the following questions. Numeric questions generally allow for a 5% error margin, so do not round off answers unless the question specifically requests that.

Question 1 — 1 pts

Determine the monthly payment for a 30-year real estate loan with an APR of 9% and an initial principal of $189,003

Question 2 — 1 pts

Determine the interest paid over the life of a 30-year real estate loan with an APR of 5% and an initial principal of $167,126.

Question 3 — 1 pts

How much interest is paid in the 2nd month for a 15 year real estate loan at 6.7% APR for $234,263.

Question 4

2 pts

The bank charges $3,412 for closing costs on a $187,352 loan with an APR of 7.3% compounded monthly with a term of 15 years. The bank will not allow the closing costs to be added to the $187,352 borrowed. What is the effective yield? (enter as a percent, not a decimal)

Question 5

2 pts

You have a 15 year real estate loan for $214,325 at an APR of 4.6%. The closing costs were $5,412. If you pay off the loan at the end of the 10th year, what is the effective annual yield? Enter the answer as a percent, not a decimal.

Question 6

2 pts

Determine the actual annual yield on a $97,000 line of credit with an APR of 8.1% compounded monthly. The bank requires that a 5% compensating balance be placed in an interest-bearing account that pays an APR of 1.5% compounded monthly. There is no commitment fee. The average daily balance is anticipated to be $72,924, excluding the compensating balance and interest due on the line of credit. Enter the answer as a percent, not as a decimal.

Question 7

1 pts

A supplier has offered your company a 0.5% discount for all bills that are paid 10 days after they are billed. The bills would normally be due 30 days after they are billed. If you can borrow money from a line of credit at a 9.5% effective yield, should you pay early and take the discount?

- ○ Do not pay early
- ○ Take the early payment discount

CLO 2

Understand Contractor’s Balance Sheet, Income Statement, and Bonding Capacity Ratios

Financial Document Ratios

This is a preview of the published version of the quiz

Started: Oct 28 at 3:41pm

Quiz Instructions

Calculate the ratios for the given financial documents

Question 1

10 pts

Using the this income statement and balance sheet, calculate the following financial ratios.

Total Assets

Quick Ratio

Current Ratio
Current Liab / Net Worth
Debt / Equity
Fixed Assets / Net Worth
Cur. Assets / Tot. Assets
Collection Period
Receivable Turns
Avg. Age of AP
Assets / Rev
Working Cap Turns
AP / Rev
Gross Profit Margin
General OH Ratio
Profit Margin - Before Tax
Profit Margin - After Tax
Return on Assets
Pretax Return on Equity
PostTax Return on Equity
Deg. Of Fix Asset Newness

Upload Choose a File

Income Statement

East Mountain Construction
1/1/2016 - 12/31/2016

Financial Statements in U.S. Dollars

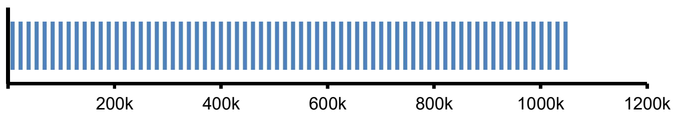
Revenue		
Revenues	3,900,299	
Total Revenue		3,900,299
Construction Costs		
Materials	782,212	
Labor	972,303	
Subcontract	1,485,868	
Equipment	120,048	
Other	5,287	
Total Construction Costs		3,365,718
Equipment Costs		
Rent and Lease Payments	36,267	
Depreciation	31,954	
Repairs and Maintenance	22,503	
Fuel and Lubrication	28,061	
Taxes, Licenses, and Insurance	1,263	
Equipment Costs Charged to Jobs	120,048	
Gross Profit (Loss)		-
Gross Profit		534,581
Overhead		
	408,107	
Total Expenses		408,107
Net Operating Income		126,474
Other Income		
Gain (Loss) on Sale of Assets	-	
Interest Income	23,538	
Total Other Income		23,538
Profit Before Taxes		150,012

BALANCE SHEET -CURRENT

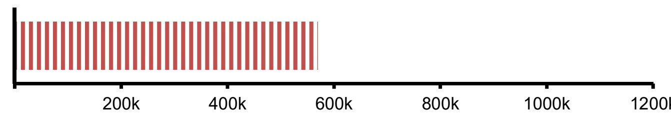
East Mountain Construction

12/31/2016

CURRENT RATIO
QUICK RATIO



WORKING CAPITAL



ASSETS

CURRENT ASSETS	
Cash	215,569
Accounts receivable - Trade	432,784
Accounts receivable - Retention	26,566
Inventory	-
Costs and Profits in Excess of Billings	29,669
Notes Receivable	12,018
Prepaid Expenses	5,615
Other current assets	10,559
Total current assets	732,780
FIXED AND OTHER ASSETS	
Land	68,055
Buildings	100,329
Construction equipment	87,287
Trucks and Autos	47,786
Office Equipment	52,673
Total Fixed Assets	356,130
Less Acc. Depreciation	(210,000)
Net fixed assets	146,130
Other assets	173,430
Total fixed and other assets	319,560
TOTAL ASSETS	**$1,052,340**
	983840

LIABILITIES

CURRENT LIABILITIES	
Accounts payable - trade	312,808
Accounts payable - retention	23,774
Billings in excess of costs and profits	5,572
Notes payable	16,799
Accrued payables	14,662
Accrued Taxes	11,094
Accrued Vacation	3,742
Capital Lease Payable	-
Warranty Reserves	-
Other current liabilities	24,283
TOTAL CURRENT LIABILITIES	412,733
OTHER LIABILITIES	
Long-term debt	156,955
TOTAL OTHER LIABILITIES	156,955
TOTAL LIABILITIES	**$569,689**

OWNER'S EQUITY

Capital Stock	10,000
Retained earnings	472,651
Current period net income	-
Total Equity	482,651
TOTAL LIABILITIES AND EQUITY	**$1,052,340**

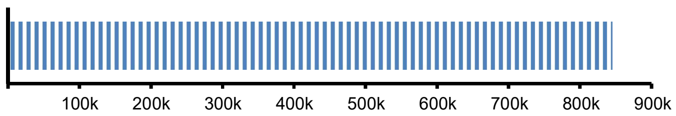
BALANCE SHEET - PREVIOUS YEAR

East Mountain Construction

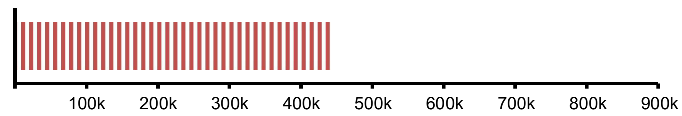
12/31/2015

CURRENT RATIO

QUICK RATIO



WORKING CAPITAL



ASSETS

CURRENT ASSETS	
Cash	154,963
Accounts receivable - Trade	300,426
Accounts receivable - Retention	23,773
Inventory	-
Costs and Profits in Excess of Billings	13,945
Notes Receivable	-
Prepaid Expenses	4,939
Other current assets	7,142
Total current assets	505,187
FIXED AND OTHER ASSETS	
Land	77,009
Buildings	102,414
Construction equipment	91,151
Trucks and Autos	33,536
Office Equipment	43,939
Total Fixed Assets	348,050
Less Acc. Depreciation	(179,820)
Net fixed assets	168,230
Other assets	172,063
Total fixed and other assets	340,293
TOTAL ASSETS	**$845,481**

LIABILITIES

CURRENT LIABILITIES	
Accounts payable - trade	219,248
Accounts payable - retention	16,988
Billings in excess of costs and profits	11,012
Notes payable	41,972
Accrued payables	15,337
Accrued Taxes	8,300
Accrued Vacation	3,252
Capital Lease Payable	-
Warranty Reserves	-
Other current liabilities	32,211
TOTAL CURRENT LIABILITIES	348,321
OTHER LIABILITIES	
Long-term debt	93,037
TOTAL OTHER LIABILITIES	93,037
TOTAL LIABILITIES	**$441,358**

OWNER'S EQUITY

Capital Stock	10,000
Retained earnings	394,123
Current period net income	-
Total Equity	404,123
TOTAL LIABILITIES AND EQUITY	**$845,481**

CLO 3

Understand the importance of maximizing Cash Flow

Pay Apps

Publish Edit

Fill out and submit a pay application. You will use the forms as required by the Capital Development Board of the State of Illinois, which is called the Contractor's Affidavit and Sworn Statement (CASS).

- Contractors Name = Your choice
- Architect-Engineer Name = Your choice
- Project Name: Bedford Lunatic Asylum
- CDB Contract No. 123-456-789
- Contract Work: General
- Application No: 1, 2, and 3
- Project Number: 909425

Schedule of Values

Fill out a pay request app for April, May, and June. Use this template for the CASS. Use this schedule for the work completed each month.

State of Illinois

CAPITAL DEVELOPMENT BOARD

CASS

Contractor's Affidavit and Sworn Statement

Application No.:		Payment Approved	
Project Number		Date of Pay Meeting	
Period From	to	A/E	
		Using Agency	
		Coor. Contractor	
		Project Manager	

IMPORTANT NOTICE

DISCLOSURE OF THIS INFORMATION IS MANDATORY IN ACCORDANCE WITH THE STANDARD DOCUMENTS FOR CONSTRUCTION. FAILURE TO COMPLETE THIS WILL PREVENT PAYMENT FOR WORK COMPLETED AND/OR BE A MATERIAL BREACH OF CONTRACT.

CONTRACTOR: Name, Address

ARCHITECT-ENGINEER: Name

PROJECT: Name Location

CDB CONTRACT NO:

ITEMS B & D INCLUDE CHANGE ORDER #

CONTRACT WORK

1 Names of Contractor, Subcontractor & Material Suppliers for the Several Parts of the Work	3 Name of the Several Parts of the Work & Material Use same breakdown as CSV (Contractor's Sched. of Values)	E. Total Contract to Date Schedule of Values Plus Change Orders	F Work Completed & Material Stored %		G Total Retained Including this Application	I Previous Payments	J New Amount Requested Col. F minus (Col. G+I)	K Balance to Become Due Col. E minus (Col. I + J)
	Bonds						$ -	$ -
	Insurance						$ -	$ -
Capital Development Board	Const. Admin. Fee						$ -	$ -
	Overhead & Profit						$ -	$ -
							$ -	$ -
							$ -	$ -
							$ -	$ -
SUBTOTAL		$ -		$ -		$ -	$ -	$ -
TOTAL (All Pages)		$ -		$ -		$ -	$ -	$ -

A. Original Contract Sum	
B. Change Orders - Total Additions	
C. Subtotal	
D. Change Orders -Total Deletions	
E. Total Contract to Date	
F. Total Complete to Date	
G. Less 10.0% Retainage	
H. Net Amount Requested	
I. Less Previous Payments	
J. New Amount Requested	
K. Balance to Become Due	

AFFIANT SWEARS

1. that he is the duly authorized agent of

☐ Corporation ☐ Sole Proprietorship
☐ Partnership ☐ Joint Venture

2. that any accompanying waivers of lien or previously presented waivers of lien are genuine and have not been delivered conditionally.
3. that a lien waiver has been sumitted for any subcontractor or material supplier whose participation exceeds $1000.
4. that all subcontractors have been disclosed as required by Article 00 21 50.2C. of the Standard Documents for Construction.
5. that the contractor shall save and hold harmless the State of Illinois or any claimant by, through or under the State of Illinois for any misstatement in the above.

Further Affiant sayth nought

Authorized Agent

Subscribed and sworn to before me this ______ day of ______

Notary Public

Sample Documentation Required for Schedule of Values
Bow Mar Building Permit Application

Bow Mar's Building Permit Application requires the applicant to state the total project valuation including all labor and material for the building and mechanical, plumbing, electrical, gas piping and all other permanent systems as well as the profit and commissions to complete the work for which the building permit applies.

A complete line item schedule is required for all new construction, scrapes and re-builds, additions and major remodels which exceed $50,000 in Project Valuation. The initial fee for the building permit will be based on these values. These stated values are subject to independent review at any time and any additional building permit fees as a result of increased values must be paid before issuance of the Certificate of Occupancy. Per Bow Mar Ordinance 18-5(b) the cost of the independent review shall be added to the permit fee and shall be paid by the applicant.

The following sample **SCHEDULE OF VALUES** is presented as an example of what should be present in the schedule accompanying the Building Permit Application.

Please note that the final paragraph signifying understanding and acceptance of these requirements must be included and signed by the applicant.

SAMPLE SCHEDULE OF VALUES:

The following Schedule of Values is for the scrape and re-build of the property at 5500 Sample Street

DEMOLITION

Asbestos Testing	2,200
Tree Removal	7,800
Demolition	16,700

SITEWORK

Sitework	3,000
Silt fence and security fence	1,900
Excavation / Backfill	11,524
Dirt export (haul excess)	8,400
Water and Sewer Service	6,600
Gas laterals (Xcel)	2,500
Electrical Laterals (Xcel)	1,500

CONCRETE

Garage slab	2,320
Basement slab	12,429
Patio slabs / stoops	2,872
Entry porch slab	983
Concrete Drive	4,376
Concrete walk and steps	8,107
Foundation	55,950

MASONRY

Masonry labor and materials	26,815

METALS / STRUC STEEL

Structural & Misc Metals	1,840
Metal Railing	8,758

SPECIALTIES

Master Shower Doors	1,248
Mirrors	833
Medicine Cabinets	3,850
Phantom Screens	15,500
Window Coverings	9,924
Fireplace & Insert	21,452
Finish Hardware	4,975
Cabinet Knobs & Pulls	1,719
Bath Accessories	1,597

EQUIPMENT

Appliances / hoods	42,168
Security Equipment	3,500

MECHANICAL

Plumbing labor	29,550
Plumbing Fixtures	17,146
Steam Unit	3,182
Guardian Wine Cooler	1,820
H V A C	43,880

ELECTRICAL

Electrical Labor	47,400
Light Fixtures	27,000
Master in-floor elec heat	1,550
Security Pre-Wire	1,500
Phone / TV Pre Wire	2,500

SAMPLE SCHEDULE OF VALUES CONT'D

FRAME & TRIM CARPENTRY

Frame & Trim Lumber	59,882
Cedar Ceiling Inside (Ceiling)	6,150
Framing Labor	79,000
Misc labor & Carpentry	6,400
Interior Trim Labor	10,300
Interior Trim Material	4,160

THERMAL /MOISTURE

Perimeter Drain	3,500
Damp proof	1,200
Insulation	15,495
Roofing	26,750
Gutters / Downspouts	4,000

DOORS & WINDOWS

Entry door	6,165
Interior Doors	7,990
Garage Doors	4,000
Windows & Exterior Doors	33,720

PROJECT CLEAN UP

Job Cleaning	4,000
Dump Charges	2,500
Window Cleaning	1,650
Final Clean up	1,095

FINISHES

Stucco	12,410
Drywall	20,780
Master Bath Floor/Wall	16,852
Master Bdrm Niche Tile	1,129
Kid's bath floor & wall	8,742
Baths 1 & 2 Flr & Wall Tile	5,872
Wine Room Tile	1,213
Laundry Room Floor Tile	3,234
Mud Room Floor	2,735
Powder Rm Flr & wall tile	3,160
Office / Dining Wall Tile	9,084
Counter Tops Kitchen	22,160
Counter Top Laundry	4,865
Counter Top Master Bath	4,021
Counter Tops other baths	6,173
Wine Room Tops	2,321
Wood Floors	43,491
Carpet – lower level	4,800

GENERAL CONDITIONS

Surveyor	2,357
Blueprinting	350
Supervision	40,000
Material Handling	1,200
Temporary Toilet	760
Temp Elec Service	440
Temp Fence	800
Small Tool Rentals	660
Concrete Pump	3,000
Builder's Risk Ins	2,275
General Liability Ins	7,500
General Overhead	75,000

TOTAL PROJECT VALUATION: 1,054,209

STATEMENT OF UNDERSTANDING AND ACCEPTANCE

The above valuations for the project at .__________5500 Sample Street_______.are submitted to the Bow Mar Building Commissioner for the purpose of applying for the Building Permit. I certify that these values are complete and correct to the best of my knowledge. I understand that the Building Permit Fees are based on the total project valuation and that the above stated values are subject to independent review at any time and that any additional Building Fees must be paid prior to the issuance of the Certificate of Occupancy. I further understand that per Bow Mar Ordinance the cost of such independent review shall be added to the permit fee and shall be paid by me.

____ ____________________

Applicant Date

Cash Flow

This is a preview of the published version of the quiz

Started: Oct 28 at 3:46pm

Quiz Instructions

Determine the maximum amount of cash needed to cashflow the following project.

Question 1

10 pts

Determine the maximum amount of cash needed to cash flow the following project.

Overhead and Profit will be 10%

Retention will be 10%

You will submit pay requests at the end of each month. The owner will pay you at the end of the next month less retainage. Retainage will be released to you along with the final payment.

You will pay labor in the month that the expense occurs. All of the expenses will occur before you receive payment from the owner.

You will pay material vendors the next month after receiving the payment from the owner.

You will pay subcontractors the next month after receiving the payment from the owner. You will hold retainage from subcontractors until the owner released the project's retainage.

Month	Costs Materials ($)	Labor ($)	Sub. ($)
1	19,600	20,700	42,600
2	39,300	41,700	80,300
3	59,100	60,600	116,600
4	62,200	63,300	122,600
5	42,500	38,700	84,400
6	19,400	19,800	39,100
7	19,300	19,600	42,400

Company Cash Flow

This is a preview of the draft version of the quiz

Started: Oct 28 at 4:10pm

Quiz Instructions

You must submit you answer as an excel spreadsheet, and clearly state any assumptions that you make.

Prepare a cash flow projection for a construction company that currently has one project under contract and anticipates picking up two more projects during the year.

The company uses the percentage of completion method of accounting. Revenues are received before the end of the month after the month the company bills its clients. Labor costs are paid weekly. Material bills are paid in full when the payment is received from the owner. Subcontract bills are paid - less retention - when payment is received from the owner. The retention withheld from the subcontract payments is based on the same retention rate that is held by the project's owner and will be paid to the subcontract when the owner releases the retention. Other costs are paid at the end of the month the costs are incurred.

Include in the general overhead budget the following: The budget for advertising is 0.6% of revenues. The budget for promotions is to include $4,500 in June for a company picnic and $1,050 in December for Christmas gifts. The monthly fuel and maintenance cost for the company vehicle driven by the owner is estimated to be $450 per month. In March, the company plans to buy a new computer for $2,800, which will be fully depreciated in the current year.

Employee wages and salaries will be $11,000/month, which includes the costs of benefits and taxes.

The company is charged 0.45% of revenues, 1% of wages (including benefits and taxes) for employees for general liability insurance. It is anticipated that office supplies will cost $150 per month. Rent for the office space is $625 per month and includes water and sewer. Office utilities are expected to run $163 per month for power in June, July, and August and $117 per month during the remaining months of the year; and $130 per month for natural gas during November, December, January, and February and $30 per month during the remaining months of the year. It is anticipated that the company will spend $40 per month on postage and $75 per month on janitorial services. The estimate telephone costs are $125 per month plus $100 per month to provide mobile phone service for the owner. The company plans on spending $250 at the first of each quarter for accounting services and an additional $500 in April for tax services. Assume all overhead costs - except labor - are paid at the end of the month they occur. Labor will be paid throughout the month that the costs occur. Assume all months are the same length - four and one-thirds weeks.

The company is an C corp, and will pay estimated quarterly taxes at the end of March, June, September, and December. The corporate tax rate of 21%.

Perform cash flow projections for this company. You will submit an excel spreadsheet of your solution. Identify how much cash the company needs at the beginning of the year finance the projected cash flows.

Question 1

100 pts

Job #1 Continues from previous year

Final payment will be made in July

12%	O&P
10%	Retainage
32600	Prevous year retention held by owner
15100	Previous year retention held from subcontractors

	Costs			
Month	Material	Labor	Sub	Other
Dec.	29300	27700	60900	11900
Jan.	10300	10600	23700	4200
Feb.	18100	18300	36500	7500
March	6100	5400	12800	2400
April	8800	9400	13100	1600
May	7300	8100	13500	1700

Job #2 Starts in current year

Final payment will be made in October

12%	O&P
10%	Retainage
0	Prevous year retention held by owner
0	Previous year retention held from subcontractors

	Costs			
Month	Material	Labor	Sub	Other
March	30500	43000	28000	19000
April	39500	56500	36500	21500
May	51500	64500	40500	28000
June	61000	93000	55000	36500
July	42000	48500	35000	21000
August	33000	41500	30500	16000

Job #3 Starts in current year

Continues into next year

12%	O&P
10%	Retainage
0	Prevous year retention held by owner
0	Previous year retention held from subcontractors

	Costs			
Month	Material	Labor	Sub	Other
Oct.	18600	25600	9900	8400
Nov.	21700	21400	12500	8400
Dec.	41500	34100	17500	13100

CLO 4

Understand business organizations, basic accounting concepts, classification of direct and indirect cost, Labor Laws, Lien Laws

Construction Accounting Systems

This is a preview of the published version of the quiz

Started: Oct 28 at 3:28pm

Quiz Instructions

Answer the following questions base on the lecture on Construction Accounting Systems

Question 1 — 1.67 pts

Which accounting method requires that all income and expenses be allocated on a per-job basis?

- Cash
- CCM
- EPCM
- PCM

Question 2 — 1.67 pts

Which accounting system is the most simple?

- Cash
- EPCM
- Acrual
- CCM
- PCM

Question 3 — 1.67 pts

Which accounting system is the least effective method for financial management?

- Cash
- PCM
- Acrual
- CCM
- EPCM

Question 4

1.67 pts

Which of the following require you to recognized receipt of revenues when they are earned but not yet received?

- [ ] EPCM
- [ ] Acrual
- [ ] PCM
- [ ] CCM
- [ ] Cash

Question 5

1.67 pts

What are the two requirements for a construction company to use cash accounting?

- [ ] Estimated time for the contract completion must be 2 years or less
- [ ] Capital expenditures must not exceed $5 million
- [ ] The number of craft workers must be 20 or less
- [ ] Annual revenues for the last 3 years must be $10 million or less

Question 6

1.67 pts

Which accounting system allows taxes to be deferred by having the owner hold payment until the next year?

- ○ EPCM
- ○ CCM
- ○ Acrual
- ○ PCM
- ○ Cash

Accounting Transactions

This is a preview of the published version of the quiz

Started: Oct 28 at 3:33pm

Quiz Instructions

For each of the following questions, determine the changes to the balance sheet, income statement, job cost ledger, and equipment ledger. Enter the changes into this excel template, and upload the answers.

Question 1

2 pts

The following invoices are being entered into the accounting system. Using the chart of accounts from class, determine the changes to the balance sheet, income statement, job cost ledger, and equipment ledger as the result of entering each of the following:

Determine the changes when a $2,000 payment is made on a truck loan. The payment includes $500 of interest and $1,500 of principal.

Upload Choose a File

Question 2

2 pts

Determine the charges that occur on the balance sheet when a contractor obtains a $300,000 loan to build an strip mall. The loan will be replaced with permanent financing in less than one year.

Upload Choose a File

Question 3

2 pts

Determine the changes to the balance sheet from the purchase of $1,000 of lumber on credit for the use on future projects. The lumber will be held in inventory until it is needed on a job.

Upload Choose a File

Question 4

2 pts

Determine the changes to the balance sheet and income statement for the sale of a pickup truck. The truck was sold for $6,000 in cash. The truck was purchased for $30,000 and $25,000 of depreciation has been taken. There are no outstanding loans for the truck.

Upload Choose a File

Question 5

2 pts

Determine the charges to the income statement, the job cost ledger, and the equipment ledger of a $3,000 equipment charge from backhoe #3 to job 105, phase 1, cost code 31100 Grading and Excavation

Upload Choose a File

Equipment Costs & Cost Coding

This is a preview of the draft version of the quiz

Started: Oct 28 at 3:52pm

Quiz Instructions

Answer the following questions

Question 1

5 pts

A contractor owns a backhoe and uses the equipment of several jobs. The contractor repairs the hydraulics in June at a cost $8,000. Depreciation, taxes, and insurance cost $1,500 per month. Operation and maintenance estimated at $35/hour.

The backhoe is used as follows

Job 1: 40 hours in march, 80 hours April, 80 hours in May.

Job 2: 80 hours in April, 120 hours in June, 160 hours in July, 160 hours in August, 80 hours in September, and 40 hours in October.

What hourly rate should be used to most accurately account for the job costs for the backhoe? Round the answer to the nearest dollar.

Question 2

2.5 pts

Using the structure presented in class, assign a cost code for the following job cost.

You paid your crew $10,000 for the installation of metal studs for phase 3 of job 221.

Lien Law

This is a preview of the published version of the quiz

Started: Oct 28 at 3:44pm

Quiz Instructions

Answer the following questions

Question 1

1.25 pts

6. When the contract for improving real property is made with a husband or wife who is not separated and living apart from his or her spouse and the property is owned by the other or by both, the spouse who contracts shall be deemed to be the agent of the other to the extent of subjecting the right, title, or interest of the other in said property to liens under this part unless such other shall, within ______ days after learning of such contract, give the contractor and record in the clerk's office, notice of his or her objection thereto.

Question 2

1.25 pts

The order of priority on a lien for persons not in privity is the recordation of the notice of ____________.

- Commencement
- Information
- Noticing
- Intent

Question 3

1.25 pts

No lien shall exist in favor of a contractor that is

- unpaid
- unorganized
- unrepentent
- unlicensed

Question 4 — 1.25 pts

1. The claim of lien may be recorded at any time during the progress of the work or thereafter but not later than ___ days after the final furnishing of the labor or services or materials by the lienor.

- 90
- 180
- 10
- 45

Question 5 — 1.25 pts

10. After submitting notice of a lien, litigation must be initiated within _______

- 1 year
- 3 months
- 90 days
- 10 days

Question 6 — 1.25 pts

The notice must be served before commencing, or not later than ___ days after commencing.

- 45
- 30
- 60
- 15

Question 7 — 1.25 pts

When serving notice by actual delivery to the person to be served of a corporation, the person must be a(n) _________, director, managing agent, or business agent.

- supplier
- subcontractor
- officer
- employee

1 of 1 DOCUMENT

Raphael Blanco, Employee/Claimant, v. Lawrence Wright & Partners, LLC, West Construction Services Inc., Production Construction, Inc., Employer, and Claims Center, Carrier/Servicing Agent

OJCC Case No. 09-019231GBH

State of Florida
Division of Administrative Hearings
Office of the Judges of Compensation Claims
Ft. Lauderdale District Office

2010 Fla. Wrk. Comp. LEXIS 7534

October 22, 2010

July 15, 2009, Accident Date

CORE TERMS: claimant, subcontractor, contractor, general contractor, painting, painter, workers' compensation, hired, manage, coverage, drywall, carrier, job site, supervise, certificate of occupancy, deposition transcript, extra work, completion, designated, jobsite, license, shell, conclusions of law, evidence presented, written contract, communicate, contracted, coordinate, manager, framing

JUDGES: Geraldine B. Hogan
Judge of Compensation Claims

OPINION: [*1]

FINAL COMPENSATION ORDER

INTRODUCTION

This matter came before the undersigned Judge of Compensation Claims (JCC) on July 15, 2010. It was undisputed that the Claimant fell from a scaffold on 7/15/2009 while working on a construction project. West Construction Services, Inc. was the general contractor, but asserted that the Claimant was not an employee for purposes of providing workers' compensation benefits. The parties agreed to bifurcate the issue of compensability and the only issue addressed at the July 15 hearing was whether West Construction Services was the Claimant's statutory employer.

A. Stipulations: The parties stipulated to the following:

1. The undersigned has jurisdiction over the parties and subject matter.

2. That venue of the claim is in Broward County.

3. Workers' compensation insurance coverage was in effect on the date of accident.

B. Claims and Defenses: Claimant asserted that he sustained a work related accident and requested medical and indemnity benefits. E/C asserted that there was no Employer/ Employee relationship between the Claimant and West Construction Services, Inc.

C. Documentary Evidence: The following documentary matters were **[*2]** offered, accepted and/or placed into evidence. Documents offered by the Claimant are designated as (C). Documents offered by the Employer/Carrier are designated as (E/C). Documents offered by the Claimant and Employer/Carrier as joint exhibits are designated as (J). Documents placed into evidence by the JCC are designated as (Judge).

Exhibit #

1. Pretrial Stipulation (Judge)

1 of 1 DOCUMENT

JAN GROCHOWSKI, JERZY KLOSEK, SLAWOMIR LIZEWSKI, RAMON KAKOL, MIROSLAV SIDOR, JAN STATKIEWICZ, HENRYK SUPINSKI, ANDRZEJ WIKTORUK, JANUSZ WYSOCKI, and ANDRZEJ ZMIJEWSKI, Plaintiffs, - against - AJET CONSTRUCTION CORP., PHOENIX CONSTRUCTION CORP., YPSILON CONSTRUCTION CORP., INC., COS CONSTRUCTION CORP., SPIRO GAZGALIS, JOHN GIAVRIS, GEORGE GIZANIS, SEBASTIANOS DIAKOGIANNIS, INTERNATIONAL FIDELITY INSURANCE CORP., REPUBLIC WESTERN INSURANCE CO. and UTICA MUTUAL INSURANCE CO., Defendants.

97 Civ. 6269 (NRB)

UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

2000 U.S. Dist. LEXIS 11632; 8 Wage & Hour Cas. 2d (BNA) 583

August 15, 2000, Decided
August 16, 2000, Filed

CASE SUMMARY:

PROCEDURAL POSTURE: Defendants separately filed two motions for summary judgment under Fed R. Civ. P. 56 in action filed by plaintiffs to recover unpaid wages and benefits under the Fair Labor Standards Act of 1938, 29 U.S.C.S. § 201 et seq., the Contract Work Hours and Safety Standards Act, 40 U.S.C.S. § 327 et seq., and under the laws of the State of New York.

OVERVIEW: Plaintiff alleged they were owed compensation for work on four separate public works projects and filed suit under the Fair Labor Standards Act of 1938, 29 U.S.C.S. § 201 et seq. (FLSA), the Contract Work Hours and Safety Standards Act, 40 U.S.C.S. § 327 et seq., and under state laws. Defendants were contractors, officers, and insurance companies and in two separate motions sought summary judgment. The court denied the motions in so far as it was contended that plaintiffs failed to exhaust their administrative remedies because the FLSA did not require exhaustion and denied staying the action pending completion of the administrative proceedings for the same reason. Defendants' motion for summary judgment was granted in part. Since the court was limited to the record and plaintiffs were paid at or above minimum wage for the first 40 hours of each workweek, their overtime claims were limited to one and one-half times the actual rate of pay. However, plaintiffs were able to seek recovery in an administrative proceeding both for unpaid prevailing wages and overtime pay computed on the basis of the statutory prevailing wage rates.

OUTCOME: Defendants' motions for summary judgment were denied in part and granted in part. Plaintiffs' statutory remedies for their claims were limited to unpaid minimum wages and unpaid overtime at one and one half times the wages actually paid, rather than one and one-half times the prevailing wage rate.

CORE TERMS: unpaid, minimum wage, prevailing wages, overtime, prevailing, Davis-Bacon Act, regular rate, summary judgment, overtime compensation, rate of pay, wage rate, administrative remedies, federally funded, actually paid, regular, times, oral argument, wage claims, administrative proceedings, exhaustion, exhaust, Fair Labor Standards Act, private right of action, non-overtime, straight, workweek, computed, hourly, owed, overtime pay

LexisNexis(R) Headnotes

Labor & Employment Law > Wage & Hour Laws > Administrative Proceedings & Remedies > Enforcement
Labor & Employment Law > Wage & Hour Laws > Administrative Proceedings & Remedies > Investigative Authority
Labor & Employment Law > Wage & Hour Laws > Remedies > Private Suits
[HN1] The Fair Labor Standards Act of 1938 (FLSA), 29 U.S.C.S. § 201 et seq., can be enforced by private lawsuits or by investigations and actions initiated by the Secretary of Labor. 29 U.S.C.S. § 216(b), (c). A private action may be maintained for violations of the FLSA against any employer (including a public agency) in any federal or state court of competent jurisdiction by any one or more employees for and in behalf of himself or themselves and other employees similarly situated. 29 U.S.C.S. § 216(b).

NOTICE: This opinion is subject to formal revision before publication in the bound volumes of NLRB decisions. Readers are requested to notify the Executive Secretary, National Labor Relations Board, Washington, D.C. 20570, of any typographical or other formal errors so that corrections can be included in the bound volumes.

Keller Construction, Inc. ***and*** **Scott William Hammock**

Laborers International Union of North America, Local 397 (Keller Construction, Inc.) ***and*** **Scott William Hammock.** Cases 14–CA–122352 and 14–CB–116188

July 30, 2015

DECISION AND ORDER

BY CHAIRMAN PEARCE AND MEMBERS JOHNSON AND MCFERRAN

On June 10, 2014, Administrative Law Judge Arthur J. Amchan issued the attached decision. The Respondents filed exceptions and supporting briefs, and the General Counsel filed an answering brief. In addition, the General Counsel filed cross-exceptions and a supporting brief.

The National Labor Relations Board has delegated its authority in this proceeding to a three-member panel.

The Board has considered the decision and the record in light of the exceptions, cross-exceptions, and briefs, and has decided to affirm the judge's rulings, findings,[1] and conclusions only to the extent consistent with this Decision and Order.[2]

We adopt the judge's findings, for the reasons stated in his decision, that Respondent Laborers Local 397 violated Section 8(b)(1)(A) and (2) by requesting that Respondent Keller Construction lay off Scott Hammock,[3] and that Keller Construction violated Section 8(a)(3) and (1) by acquiescing in Local 397's request. For the reasons discussed below, we also adopt the judge's finding that Local 397 did not violate Section 8(b)(2) by failing to assist GRP Mechanical in its efforts to hire Hammock for work in Skiatook, Oklahoma. Contrary to the judge, however, we further find that Local 397's failure to assist GRP Mechanical in hiring Hammock for work outside Local 397's jurisdiction did not violate Section 8(b)(1)(A).

Facts

Respondent Laborers Local 397 operates a hiring hall which refers laborers to work for various employers throughout Southern Illinois. GRP Mechanical, an industrial piping and construction contractor based in Bethalto, Illinois, is signatory to a multiemployer agreement that Local 397 negotiated with the Southern Illinois Builders Association (SIBA). The SIBA contract provides guidelines with which signatory employers must comply when hiring laborers in Local 397's geographical jurisdiction. One such guideline prohibits signatory employers from transferring "key employees" from one local union's geographical jurisdiction to another local's geographic jurisdiction.

From September 2013 to March 2014, GRP Mechanical's vice president of pipeline services and fabrication, Richard Torres, managed a pipeline project in Skiatook, Oklahoma. On about September 30, 2013, after Local 397 caused Keller Construction to lay off Scott Hammock, Torres called Local 397 to hire Hammock for the pipeline project. Local 397's vice president and field representative, William Traylor, answered the call. Torres told Traylor that GRP Mechanical had a project and needed a laborer, but he did not disclose the project's location, and he did not request Hammock by name. Per Local 397's practice, Traylor asked if Torres would rehire the most recently referred laborer, Carey Carveiro. Torres responded that Carveiro did not have the skill set needed for the project. Torres mentioned that he heard Hammock was unemployed, and stated he "would like to have Scott." Traylor asked how Torres learned of Hammock's availability, and Torres responded that a superintendent at Keller Construction told him that Hammock

[1] The Respondents have excepted to some of the judge's credibility findings. The Board's established policy is not to overrule an administrative law judge's credibility resolutions unless the clear preponderance of all the relevant evidence convinces us that they are incorrect. *Standard Dry Wall Products*, 91 NLRB 544 (1950), enfd. 188 F.2d 362 (3d Cir. 1951). We have carefully examined the record and find no basis for reversing the findings.

[2] We shall modify the judge's recommended Order to conform to our findings below, to include the Board's standard remedial language for the violations found, and in accordance with *Don Chavas, LLC d/b/a Tortillas Don Chavas*, 361 NLRB No. 10 (2014). We shall substitute new notices to conform to the Order as modified.

[3] In adopting this finding, we note that the record supports the finding of a violation under the duty-of-fair representation framework as well as the framework set forth in *Wright Line*, 251 NLRB 1083 (1980), enfd. 662 F.2d 899 (1st Cir. 1981), cert. denied 455 U.S. 989 (1982), approved in *NLRB v. Transportation Management Corp.*, 462 U.S. 393 (1983). Further, we observe, as did the judge, that no party objected to the admission of out-of-court statements made by Keller Construction Superintendent Gary Marco. Thus, we need not pass on the judge's discussion of whether they constitute hearsay under Federal Rules of Evidence 801 or 807.

In adopting the judge's finding that Local 397 requested Hammock's layoff, Chairman Pearce does not rely on Hammock's testimony about his conversations with Keller Construction Superintendent Gary Marco. Instead, he finds that the circumstances of Hammock's layoff, fully discussed in the judge's decision, support a reasonable inference that Local 397 made the request. See generally *Avon Roofing & Sheet Metal Co.*, 312 NLRB 499, 499 (1993) ("direct evidence of an express demand by the [u]nion is not necessary where the evidence supports a reasonable inference of a union request").

362 NLRB No. 153

CLO 5

Recognize the importance of accurately calculating Overhead and Profit

Depreciation

Published

Edit

1. A piece of equipment is purchased for $110,000 and has an estimated salvage value of $10,000 at the end of the recovery period. Prepare a depreciation schedule for the piece of equipment using the straight-line method with a recovery period of seven years.
2. A piece of equipment is purchased for $110,000 and has an estimated salvage value of $10,000 at the end of the recovery period. Prepare a depreciation schedule for the piece of equipment using the 200% declining-balance method with a recovery period of seven years.
3. Prepare a depreciation schedule to be used for tax purposes for $40,000 of computer equipment using the 150% declining-balance method and a half-year convention. Ignore any special depreciation allowances.
4. Prepare a depreciation schedule to be used for tax purposes for a $1,170,000 office building. The office building is placed in service in the fifth month of the company's tax year. The cost of the land is not included in the $1,170,000. Ignore any special depreciation allowances.
5. The truck in class example ($50,000) was sold for $4,000 at the end of the fifth year. What is the capital gain or loss on the sale of the truck?

Committed Costs

Publish Edit

Your construction company has been hired to act as a construction manager for the construction of a bookstore for a fixed fee of $32,000. When the design was 90% complete, you prepared a budget for the project, which is shown below. During the buyout, the subcontracts (shown below) were signed and the purchase orders (shown below) were issued. No additional costs are expected for the contracts and purchase orders. In addition, a purchase order for concrete has been issued at $115/CY. This price is 4% below the costs used in the budget.

You have a meeting with the project's owner to discuss the financial status of the project. Using the committed cost worksheet from class, update the estimated cost at completion and determine if the project is over or under budget.

Budget

Code	Description	Budget
01100	Supervision	36,000
01700	Temporary Utilities	6,700
01900	Cleanup	4,600
03300	Footing and Foundation—Labor	3,400
03400	Footing and Foundation—Concrete	3,500
03450	Concrete Pump	1,700
03500	Slab/Floor—Labor	2,100
03600	Slab/Floor—Concrete	6,800
03900	Rebar	1,100
04100	Masonry	44,000
05100	Structural Steel	11,000
05300	Joist and Deck	15,500
05900	Erection	8,600
06110	Rough Carpentry	500
06120	Lumber	900
07200	Insulation	1,700
07500	Roofing	9,000
07700	Roof Specialties	1,000
08110	Metal Doors and Frames	2,900
08400	Store Fronts	9,500
08700	Hardware	1,900
09100	Drywall	6,700
09200	Ceramic Tile	2,100
09300	Acoustical Treatment	7,200
09400	Carpet and Vinyl	5,500
09800	Paint	8,200
10400	Signage	500
10800	Toilet & Bath Accessories	1,000
12300	Cabinetry and Countertops	10,000
21100	Fire Sprinklers	6,700
22100	Plumbing	24,000
23100	HVAC	23,000
26100	Electrical	19,000
31100	Grading and Excavation	6,300
32100	Asphalt	17,000
32200	Site Concrete—Labor	1,000
32300	Site Concrete—Concrete	1,000
32500	Landscaping	1,000
33100	Sanitary Sewer	1,000
33200	Water Line	1,000
	Profit and Overhead	32,000
	TOTAL	346,600

Subcontracts

Code	Description	Contract Amount
04100	Masonry	42,136
05900	Erection	8,200
07200	Insulation	1,802
07500	Roofing	8,875
08400	Store Fronts	9,100
09100	Drywall	6,898
09200	Ceramic Tile	1,999
09300	Acoustical Treatment	6,995
09400	Carpet and Vinyl	5,354
09800	Paint	8,000
12300	Cabinetry and Countertops	9,865
21100	Fire Sprinklers	7,000
22100	Plumbing	22,115
23100	HVAC	23,850
26100	Electrical	17,825
31100	Grading and Excavation	6,150
32100	Asphalt	17,569
33100	Sanitary Sewer	1,359
33200	Water Line	1,125

Purchase Orders

Code	Description	PO Amount
05100	Structural Steel	10,250
05300	Joist and Deck	15,500
06120	Lumber	875
07700	Roof Specialties	945
08110	Metal Doors and Frames	2,725
08700	Hardware	1,864
10400	Signage	486
10800	Toilet & Bath Accessories	965