

County of San Mateo
Department of Public Works
Job Order Contracting
Mandatory Pre-bid Conference
General Construction – JOC 1701-1704
Mechanical Works – JOC 1705-1707

November 18, 2016



Pre-Bid Meeting Agenda



JOC Overview

JOC Contract Documents

JOC Process

Solicitation Details

Benefits

Understanding the Construction Task Catalog[®] (CTC)

Calculating the Bid

Bid Considerations & Review

Contractor Adjustment Factors

Risk of Low Adjustment Factors

Questions

JOC Overview



A Job Order Contract Is a Firm, Fixed Priced, Competitively Bid, Indefinite Quantity Contract

- JOC Is Designed to Accomplish Small-medium Size, Multi-trade, Minor Construction, Repair and Remodel Projects
- A Fundamentally Different Construction Procurement Relationship
 - Performance-Based Contract
 - Contractor is only guaranteed a minimum amount of work
 - Non-adversarial relationship between Owner & Contractor
 - Contractor has a continuing financial incentive to provide Responsive services and Quality work
- JOC does not replace traditional methods for construction procurement – it is another tool the County can use to procure work



JOC is an Umbrella Contract

Part 1 Bidding the Umbrella Job Order Contracting Contract

Owner Advertizes Job Order Contracting Contract



Contractors Submit Bids



Owner Awards Umbrella Job Order Contracting Contract

Part 2 Procuring Individual Projects From Owner

Owner Project A

Subcontracting Opportunities

Owner Project B

Subcontracting Opportunities

Owner Project C

Subcontracting Opportunities

JOC Contract Documents



Project Manual
Construction Task Catalog®
Technical Specifications



JOC Contract Documents



Project Manual

Bidding Requirements

- Notice to Contractors
- Instruction to Bidders
- Bid Documents

Contract Requirements

- Agreement
- Bonds/Insurance
- General Conditions

Ordinances

- Equal Benefits
- Jury Service
- Recycling
- Etc.

COUNTY OF SAN MATEO

STATE OF CALIFORNIA

PROJECT MANUAL

and

CONTRACT DOCUMENTS

for

JOB ORDER CONTRACT
FOR
GENERAL CONSTRUCTION

Project No. JOC-1701
Project No. JOC-1702
Project No. JOC-1703
Project No. JOC-1704

APPROVED: October 2016

Department of Public Works
County of San Mateo
555 County Center, 5th Floor
Redwood City, California 94063-1665

JOC Contract Documents



Construction Task Catalog® (CTC)

- Catalog of Pre-Priced Construction Tasks
- Organized by Construction Specifications Institute (CSI)
- Based on Local Labor, Material & Equipment Costs
- The tasks represent the “Scope of Work” for the contract



JOC Contract Documents



Construction Task Catalog® (CTC)

		Exterior Improvements		32
		Bases, Ballasts, And Paving		32 10
		Unit Paving		32 14
				32
MINOR	CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST	
	32 16 Curbs, Gutters, Sidewalks, And Driveways <small>(32 10)</small>			
	32 16 13 Curbs And Gutters <small>(32 16)</small>			
	Note: Includes transitions. Demolition Includes two saw cuts (each end) of curbs and gutters for lengths up to 100'. See CSI section 02 41 19 13-00-03 for additional saw cuts within the 100'.			
	32 16 13 13 Cast-In-Place Concrete Curbs And Gutters <small>(32 16 13)</small>			
	Note: Includes concrete, forms, rebar, chairs (where necessary), expansion joints, finish and curing.			
	32 16 13 13-0001 Concrete Curb, Cast In Place <small>(32 16 13 13)</small>			
	Note: Includes delivered concrete, forms, rebar, chairs (where necessary), expansion joints, finish and curing.			
32 16 13 13-0002	LF 6" X 12" Cast In Place Concrete Curb	7.18	3.23	
	For Up To 20, Add	4.03		
	For >20 To 50, Add	2.27		
	For >50 To 100, Add	0.88		
	For >500 To 1,000, Deduct	-0.88		
	For >1,000, Deduct	-1.50		
32 16 13 13-0003	LF 6" X 12" Cast In Place Concrete Curb - Radius	8.18	3.72	
	For Up To 20, Add	4.63		
	For >20 To 50, Add	2.61		
	For >50 To 100, Add	1.01		
	For >500 To 1,000, Deduct	-1.01		
	For >1,000, Deduct	-1.72		

CSI MasterFormat

Full description of task

Price includes labor, material + equipment for your location

Demolition price

Section + task notes

Modifiers for variations or quantity discounts

JOC Contract Documents



Technical Specifications

- Specifies Quality of Materials and Workmanship
- Corresponds with Tasks in the Construction Task Catalog[®]



Bid Requirements

- **Award Based Upon Competitive Bid**
 - **Must Bid Six Adjustment Factors -**
 - Normal Working Hours; Shift Work 6:00 AM to 6:00 PM Monday-Friday;
 - Other than Normal Working Hours; after Hours Monday-Friday; All Day Saturday, Sunday and Holidays
 - Normal Working Hours - Detention Facilities
 - Other than Normal Hours - Detention Facilities
 - Normal Working Hours - OSHPD Facilities
 - Other than Normal Hours - OSHPD Facilities
 - **Same Adjustment Factors Apply to All Tasks in the CTC**
 - Adjustment Factors Must Include All Indirect Costs and Profit
 - Adjustment Factors Fixed for the Duration of Contract Term
 - **Lowest Adjustment Factor From a Responsive, Responsible Bidder Wins!**
- | | |
|----------|---|
| 1 | WORK PERFORMED DURING NORMAL WORKING HOURS |
| 2 | WORK PERFORMED DURING OTHER THAN NORMAL WORKING HOURS |
| 3 | DETENTION FACILITIES – NORMAL WORKING HOURS |
| 4 | DETENTION FACILITIES - OTHER THAN NORMAL WORKING HOURS |
| 5 | OSHPD FACILITIES – NORMAL WORKING HOURS |
| 6 | OSHPD FACILITIES – OTHER THAN NORMAL WORKING HOURS |



Solicitation Details

Internet Based Software Provided with Contract

- eGordian Software Automates the Proposal Process

The screenshot displays the eGordian web application interface. The browser address bar shows 'egordian.com/userpage.aspx?tab'. The navigation menu includes 'eGORDIAN', 'Apps', 'Tools', 'estQC', 'Videos', and 'Help'. The current company is identified as '(65abDmG0abuy)' and the user is 'Welcome #d4aR Field'.

The main content area is divided into two panels:

- Job Orders:** A table listing various job orders with columns for Project Number, Job Order Number, Title, and Project Status. The table shows 10 items, with a total of 105 job orders displayed.
- Price Proposal List (Beta):** A table listing price proposals with columns for Project Number, Job Order Number, Name, and Total \$. The table shows 10 items, with a total of 105 price proposals displayed.

Both panels include search filters, sorting options, and pagination controls. The footer of the application includes 'Chat Support', 'Email Support', and 'All Rights Reserved ©2014 The Gordian Group, Inc.' along with several utility icons.



Contractor license fee

Access to eGordian[®], Construction Task Catalog[®], other proprietary materials

- Paperless
- Efficient
- Tasks and prices input directly... no fishing through old files and estimating books for costs

JOC process training

eGordian[®] software training

Follow-up process and/or software training as necessary

24-hour support software support.

Included in the Contractor's Adjustment Factor

- Consider with the Bid as an Overhead cost
- 1% of Job Order Price after NTP issued



JOC Process - How is Work Done?



Joint Scope Meeting (JSM) With County, Contractor, and Others to define the Detailed Scope of Work

County PM Issues Request for Proposal for the Agreed Upon Detailed Scope of Work

Proposal Development

- Typical Proposal Due Date will be 2 weeks from RFP

Proposal Review

Issuance of Job Order (Notice to Proceed)

Total Time Goal: Average 3-5 weeks



Solicitation Details

Prior to Bidding County of San Mateo Cannot:

- Identify or Commit to any Specific Project or Location
- Identify or Commit to any Specific CTC Tasks or Quantities

Contract	Contract Type	Minimum Contract Value	Maximum Contract Value	Maximum Value may be increased to	Contract Term	Payment & Performance Bonding (Each)
1701-1704	General Construction	N/A	\$1,000,000	\$4,500,000	1 Year	\$1,000,000
1705-1707	Mechanical Works	N/A	\$1,000,000	\$4,500,000	1 Year	\$1,000,000



Solicitation Details

Differing Site Conditions or Changes in Scope

- Priced from Construction Task Catalog[®]
- Supplemental Job Order
- No Negotiated Change Orders

Filings and Permits

- Fees paid for all Permits reimbursed 100% - **No Markup**

Liquidated Damages

- On a Job Order - by - Job Order basis
- Defined on the request for proposal

Bid Security: \$25,000

CTC Based on the County of San Mateo Prevailing Wages

- Contractors Must Pay Prevailing Wages

DIR Registration

- Bidders must be registered with DIR (Department of Industrial Relations) to bid public works projects

Contractor Benefits



Why JOC Works for The Contractors

- Good work is rewarded with more work
 - Profit is a function of volume
 - Volume is driven by performance
 - JOC provides a steady flow of work
 - Do not have to chase the next project
- Long-term relationship with the County
 - Good work is rewarded with more work
 - Develop partnership with the County
- Reduced Risk
 - Payment for every element of work performed
 - Ability to provide input during scope development

County Benefits



Why JOC Works for the County of San Mateo

- A Fixed Priced, Fast Track Procurement Process
- Job Orders are Lump Sum
- The Ability to Accomplish a Substantial Number of Individual Projects with a Single Competitively Bid Contract
- On-Call Contractors Ready to Perform a Series of Projects at Different Locations for Competitively Bid Prices
- Contractor Has A Continuing Financial Incentive To Provide
 - Responsive Services
 - Accurate Proposals
 - Quality Work on Time
 - Timely Close Out
- Future Job Orders Tied to Contractor Performance
 - No Obligation To Award Specific Projects
 - The County can Use All Other Methods For Accomplishing Projects

Understanding the Construction Task Catalog®



Using the Construction Task Catalog

Rules of the game

- The Unit Prices Include
- The Adjustment Factors Include: Overhead, Profit, Sub Costs, Taxes, Fringe Benefits, Financing, Business Risk, 1% CLF
- Construction Related Costs: Permit Services, Submittal Preparation, Incidental A&E, Vehicles, Temporary Utilities, Excess Waste, Daily & Final Clean-up, Etc.
- General Interpretations

THE GORDIAN GROUP

Using The Construction Task Catalog®

About the CTC:

- ❑ This Construction Task Catalog® (CTC) was developed and customized by The Gordian Group, Inc. specifically for priced locally using current labor, material and equipment costs, and published in July 2016.
- ❑ The Gordian Group, Inc. licenses the use of this CTC and other proprietary information and software for the sole purpose of providing Job Order Contracting services to Use of this CTC and other proprietary information and software for any other purpose, or for any other entity, is expressly prohibited without the express written consent of The Gordian Group, Inc.

MasterFormat™

- ❑ The tasks in this Construction Task Catalog are organized using CSI's MasterFormat.

CSI MasterFormat is a product jointly by CSI and Construction Specifications Institute (CSI), a U.S. organization that sets standards and specifications for the construction industry. For more information on MasterFormat visit www.MasterFormat.com.

The Unit Prices Include:

LABOR COSTS:

- ❑ Labor costs include direct labor through the working foreperson level at straight-time prevailing wage rates including fringe benefits and an allowance for Social Security, Medicare taxes, worker's compensation, unemployment insurance, and employee benefits.
- ❑ Labor costs include unloading equipment, materials, and tools, and transporting the same up or down 2 1/2 stories and 125' to reach the project site; layout, measuring and cutting to fit; performing the task; disposal of excess material, and time for lunch and breaks.

EQUIPMENT COSTS:

- ❑ Equipment costs include all equipment required to accomplish the task.
- ❑ Mobilization is included for all equipment except large equipment (e.g. cranes, bulldozers, excavators, backhoes, bobcats etc.), which exclude mobilization.
- ❑ Equipment costs include all operating expenses such as fuel, electricity, lubricants, etc.

MATERIAL COSTS:

- ❑ Material costs include the cost of the material, delivery, and all incidentals and accessories integral to the installation.
- ❑ Material costs include manufacturer's and/or fabricator's shop drawings.
- ❑ Material costs for roofing, drywall, VCT, carpet, wall covering, ceiling tile, pipe, conduit, concrete, etc. include an allowance for waste. This list is not intended to be all inclusive, but descriptive of the types of construction materials that are typically sold in standard lengths, sizes and weights.
- ❑ Material costs for imported materials (e.g. aggregate, sand, soil, etc.) include delivery up to 15 miles from the closest approved source.

The Adjustment Factors Include:

The Adjustment Factors include the following costs, unless specifically excluded by the terms of the Contract Documents:

BUSINESS COSTS:

- ❑ Office overhead, including, but not limited to, office space, office equipment, office and management personnel, office supplies, and employee transportation.

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Understanding the Construction Task Catalog®



Include All Appropriate Tasks:

32 16 23 00-0002	4" Cast In Place Concrete Sidewalk	SF	\$5.06	400	\$2,024.00	
	For Quantities 100 to 500, Add	SF	\$2.04	400	\$816.00	
32 11 16 00-0015	4" Crushed Aggregate Base	SF	\$0.63	400	\$252.00	
	For Quantities Under 1000	SF	\$0.18	400	\$72.00	
01 71 13 00-0003	Mobilize Backhoe	EA	\$402.63	1	\$402.63	
31 23 16 36-0006	Excavation by Backhoe	CY	\$3.75	11	\$41.25	
	For Quantities Under 20 CY, Add	CY	\$3.75	11	\$41.25	
31 23 16 36-0028	Loading Excess Materials	CY	\$3.42	13.75	\$47.03	
	For Quantities Under 20 CY, Add	CY	\$3.42	13.75	\$47.03	
01 74 19 00-0029	Hauling to Dump Site	CYM	\$0.51	207	\$105.57	
01 74 19 00-0021	Landfill Dump Fee	CY	\$15.14	13.75	\$208.18	\$4,056.93
						/400
						\$10.14

Compare these prices

* Sample only

Methods to Calculate Bid – Adjustment Factors



Recommended Method

Use Historical Project Data

- Select a Completed Project
 - You Know Scope and Direct Costs
- Price Project From CTC
- Add on Overhead and Profit
- Calculate the Adjustment Factor

Alternative Method

Create a Representative Project

- Create a Scope of Work
- Get Sub Quotes or Estimate Cost
- Price Project From CTC
- Add on Overhead and Profit
- Calculate the Adjustment Factor

Sample Project - Detailed Scope of Work



Tenant Improvement

- Doors and Hardware
 - Replace 12 interior doors, hinges and hardware
 - Doors shall be 3x7, solid core wood doors
 - Grade 2 locksets with knobs
 - Replace 2 push bar exist devices and door closers on exit doors
- Interior Lighting
 - Replace all lay-in troffer fixtures on first and second floors. 48 in total
 - Replace 4 exit fixtures
 - Replace 12 industrial fixtures in shop area
- Plumbing Fixtures
 - Replace 8 bathroom sinks, 8 faucets, and 8 toilets in men's and women's bathroom in admin building and shop area
 - Replace 4 water fountains
- Replace Boiler
 - Demo existing boiler and as much piping and venting to accommodate new boiler. Install a new 1028 mbh oil fired cast iron boiler. Weil-McLain Model 88. No access for packaged boiler. Must field assemble sections. Provide new piping as required.
- Normal Working Hours Apply

Sample Project – CTC Price vs. Quotes



Direct Cost of Work from CTC

- Replace Boiler \$ 48,911.43
- Doors/Hardware \$ 9,748.46
- Lighting \$ 15,845.00
- Plumbing \$ 14,986.76

TOTAL = \$ 89,491.65

Direct Cost of Work from Quotes or Estimates

- Replace Boiler \$ 47,500.00
- Doors/Hardware \$ 9,250.00
- Lighting \$ 16,750.00
- Plumbing \$ 12,500.00

TOTAL = \$ 89,000.00

Sample Project – Putting It All Together



A.	Direct Cost of Work from Quotes	\$89,000.00
B.	Overhead 10%*	<u>\$ 8,900.00</u>
C.	Subtotal (Cost & O/H)	\$97,900.00
D.	Profit 10%*	<u>\$ 9,790.00</u>
E.	Subtotal (Cost & O/H & Profit)	\$107,690.00
F.	Price From CTC	\$89,491.65

Adjustment Factor (= E / F) = 1.2034

*Sample Only. Contractor to determine O/H & Profit.
Prepare this calculation for more than one sample project.

Filling Out the Bid Form



Line 1.	General Facilities Normal Working Hours	1. 1.2034
Line 2.	Multiply Line 1 by 40%	2. 0.4814
Line 3.	General Facilities Other than Normal	3. 1.2300
Line 4.	Multiply Line 3 by 10%	4. 0.1230
Line 5.	Detention Facilities Normal Working Hours	5. 1.2400
Line 6.	Multiply Line 5 by 15%	6. 0.1860
Line 7.	Detention Facilities Other Than Normal	7. 1.3150
Line 8.	Multiply Line 7 by 10%	8. 0.1315
Line 9.	OSHPD Facilities Normal Working Hours	9. 1.2800
Line 10.	Multiply Line 9 by 15%	10. 0.1920
Line 11.	OSHPD Facilities Other Than Normal	11. 1.3500
Line 12.	Multiply Line 11 by 10%	12. 0.1350
Line 13.	Add Lines 2, 4, 6, 8, 10 & 12 (This is the Award Criteria Figure)	ACF = 1.2489

Bid Considerations



Contractors Should Expect To

- Prepare incidental drawings or sketches for some projects
 - Justify Quantity Calculations
 - Explain Detail of Work
- Prepare proposals for some projects that may be canceled
- Margins on CTC tasks vary
- Some projects are more profitable than others
- Maintain a fully functioning office
- Maintain a fully functioning staff
- Hold required licenses
- Meet participation goals



Contractor Adjustment Factors

Importance of Adjustment Factors

- Determines winning bidder AND
- Used to price individual Job Orders
- Price proposal total becomes the lump sum Job Order amount

$$\begin{array}{rcccccc} \text{UNIT PRICE} & \times & \text{QUANTITY} & \times & \text{ADJUSTMENT FACTOR} & = & \text{TOTAL FOR TASK} \\ \text{UNIT PRICE} & \times & \text{QUANTITY} & \times & \text{ADJUSTMENT FACTOR} & = & \text{TOTAL FOR TASK} \\ \text{UNIT PRICE} & \times & \text{QUANTITY} & \times & \text{ADJUSTMENT FACTOR} & = & \text{TOTAL FOR TASK} \end{array}$$

TOTAL JOB ORDER PRICE



Risks of Low Adjustment Factor

Leads to Arguments in Proposal Review

- Unsupportable Tasks
- Exaggerated Quantities

Leads to Delays in Job Order Development

- Takes Longer to Review Proposals

Creates an Adversarial Relationship

- Reduced Volume of Work
- Will Shorten Contract
- Lost Profitability

No Second Chance to Improve Margin



Review / Key Points

Focus on Total Potential Value of Contract

Evaluate Construction Task Catalog[®]

- Analyze Unit Prices
- Know the General Guidelines for Using the CTC

Contractor Performance Drives Volume

- Responsive Service
- Accurate Proposals
- Safe and Clean Project Sites
- High Quality Construction
- On-Time Completion
- On-Time Close Out

Bids



Download Bid package from

<http://publicworks.smcgov.org/projects-out-bid>

The Bid Package contains:

Project Manual, CTC and Technical Specifications

For General Construction contracts, Contractor must hold a 'B; License

For Mechanical Works contracts, Contractor must hold a 'C-20' License

Make sure you signed the pre-bid sign-in sheet

Questions?



Bids Due

December 9, 2016

2:00 PM

Clerk of the Board of Supervisors
Hall of Justice and Records,
400 County Center, (formerly 401 Marshall Street)
1st Floor,
Redwood City, California