

Preconstruction: Bidding

Pre-Bid Work

- “Bid Strategy”
- Bidding Procedures Checklist
- Local Conditions
- Bid Information
- Finding subcontractors, follow-up process, get more than you need some will drop out
- Filling out the Bid Form
- Bid Document Review & Check Sets
- Bid Tab Setup – reviewing specifications and adding sections, general conditions, fee
- Bid Forms (Negotiated Projects)

Preconstruction: Bidding

Bid Strategy (What is our Insight?)

- Develop a plan on how to win the project
- How are you going to win the project?
 - Different subs
 - Better VE
 - Better Schedule
- Don't waste yours (and others) time by not having a plan

Preconstruction: Bidding

Bidding Procedures Checklist



ESTIMATING/BIDDING PROCEDURES & SCORECARD

Preparation for Bid Day:

-Bid Strategy

1. Have a discussion with the Project Manager/Director on what the bid strategy is going to be. We must find a way to separate ourselves from the other bidders through either Value Engineering or better subcontractor pricing. _____

-Bidding Documents

1. Setup a P-File through the Preconstruction Department, DO NOT setup yourself. You will need the project info such as name, owner, address, & type of project. Be sure to get a yellow P-File Folder to keep job information. _____
2. Review the bidding documents (Specification Book, Geo Report, Drawings, Phase 1, Owner Contract Form, etc.) and generate a check set if applicable. All documents should be saved in the P-File in the "Drawings" folder. _____
3. Familiarize yourself with the scope of work to be included in the bid/estimate. _____
4. Start looking for any potential Value Engineering ideas that you may propose (check the list of standard VE on the network). _____
5. Review the Geotechnical report for specific subsurface conditions (water table, _____



Preconstruction: Bidding

Local Conditions:

- Union or Non-Union
- Local Taxes or Fees
- Permit Rates
- State Specific Insurance Requirements

State Specific Tax Information

Alabama

Alaska

Arizona

- Projects are taxed based on the entire contract amount at the rates located here: <https://www.azdor.gov/Portals/0/TPTRates/201410.pdf>. Use Business Class 015 and the county the project is located in. The taxes must be paid by the General Contractor, so taxes should be excluded from all subcontractor bids.

Arkansas

- All Contractors and Subcontractors are required to have an Arkansas License for work over \$50,000, which can take a while to get, so be aware if using traveling subcontractors.

California

- All Contractors and Subcontractors are required to have a California Subcontractor's License, which can take a while to get, so be aware if using traveling subcontractors.

Colorado

- Some cities require payment of the Use Tax upfront by the General Contractor/Owner along with the permit costs. Check with the city your project is bidding in as this could affect the amount of taxes included in the subcontractor's bids.
<https://www.colorado.gov/pacific/sites/default/files/DR1002.pdf>

Connecticut

Delaware

District of Columbia

Florida

Georgia

Hawaii

Idaho

Illinois

- <http://www.revenue.state.il.us/TaxRates/Use.htm>

Indiana

Iowa

Kansas

Preconstruction: Bidding

Bid Information

- Bid Date & Time
- Specific Bid Format
- Bond Requirements
- Who's the Competition
- How's the Selection Made?
- Project Schedule

Preconstruction: Bidding

Subcontractor Solicitation

- Use the phone when soliciting bidders, not just email
- Follow-Up with “Yes” bidders
- Use Material Suppliers to fill gaps and find Qualified Subs
- Accurate Call Lists

Brinkmann		Project-P-3922 Morgantown Student Apartments - Invited - List Selected			
		4/14/2017			
04 20 00 - Unit Masonry					
Project-P-3922 Morgantown Student Apartments - - List Selected					
Rejected	Advanced Masonry Inc	Tom	724-966-2636	advancedmasonrydc@gmail.com	Pennsylvania 15320 MSG 2/28
Accepted	Arch Masonry	Drew	412-568-5713	drew@archmasonry.com	Pennsylvania 15224 Will budget shafts, 514/xf, Non-
	BACIMVD	Scott Garvin	(240) 695-9463	sgarvin@baclocal1.org	Maryland 20746
	Braganier Masonry Contractors	Don Braganier	(301) 842-3700		21722
	Buckner & Son Masonry, Inc.	John Bennett	(614) 279-9777		Ohio 43228
	Caretti Inc	Rick Olcese	(717) 737-6759		Ohio 17011
	Carlisle Masonry Construction, Inc.	Chief Estimator	(740) 966-5045		Ohio 48031
	Cobalt Construction Co.	Roger Welton	(440) 344-7049	cc14004@gmail.com	Ohio 44004
	Continental Cast Stone	Shaun D.	(913) 422-7575	ShaunD@continentalcaststone.com	Kansas 66227
Accepted	Cost Company	Mick Nardozi	(412) 271-0420	mick@costcompany.com	Pennsylvania 15221
	Exact Match Masonry Staining, LLC	Erika Musselman	(877) 416-2824	erika.m@masonrystaining.com	Pennsylvania 17062
	Fox & Austin Masonry & Concrete	Kent Murphy	(217) 774-3302	info@foxandastin.com	Illinois 62565
	Global Granite & Marble	Sean Nathel	(314) 426-1466	sean@globalgranite.com	Missouri 63132
	GYPSP HILL STONE, LTD.	Chris Long	(717) 299-1402	chris@gypsihillstone.com	Pennsylvania 17603-7000
Accepted	Harris Masonry	Scott Harris	(412) 922-7276	scott@harrismasonry.com	Pennsylvania 15220 Bidding Massaro
	IMI-SMC Masonry Contractors	MITCHELL CARVEY	(614) 469-8338	mitchc@imi-smc.com	Ohio 43216
	INLET PRESSURE CLEANING	James Carroll	843-251-4531	jcarroll@thebrickcleaner.com	South Carolina 29588
	Keener, Inc	Paul Keener	(717) 697-0420		17050
Rejected	Kusler Masonry	Carolyn Kusler	(412) 279-6507	carolyn@kuslermasonry.com	Pennsylvania 15106 Too Busy
	Lang Masonry Contractors, Inc.	Mike King	(740) 749-5833		Ohio 45786
	Leroy E Meyers	John Meyers	(301) 791-9662		21740
Accepted	Manheim	Charlie	(412) 306-0534		Pennsylvania 15220 MSG 2/28
Rejected	Marsa, Inc.	David Neuhaus	(412) 341-3400	dave@marsainc.com	Pennsylvania 15234 Too Busy
Accepted	Mardo Masonry	Geno Virgili	(724) 710-4822	genov@mardomasonry.com	Pennsylvania 15370

Preconstruction: Bidding

Subcontractor Solicitation

- SmartBidNet, BlueBook, etc...
- Maintaining the Database
- Adding new bidders when out of town
- Updating the Contact Info
- Selecting Call Priority


The screenshot displays a web application interface for Brinkmann Constructors. The main content area shows the profile for 'Vee-Jay Cement Contracting Co. Inc.'. The interface is organized into several sections:

- Physical Address:** Country (United States), Address 1 (8053 Chivola Dr.), Address 2, Zip/Postal (63123), Plus Four (2333), City (Saint Louis), County (Saint Louis), State (Missouri).
- Location:** Location Name (St. Louis, MO), Phone ((114) 351-3366), Fax ((114) 351-5468), My Rating (5.0), Managed by (Brinkmann Constructors), Internal Office (Brinkmann Constructors), Shared Offices (Select Shared Office...), General Note (4/19/18 mlh).
- Licenses:** A table with columns for State, License Number, License Class / Type, and Expiration Date. It shows 'No Data Found'.
- Certifications:** A table with columns for Certification, Type, Cert. #, Expiration, and Agency. It shows 'No Data Found'.
- Contacts:** A table with columns for Name / Email / Title, Position, Phone / Fax / Mobile, and Project status. It lists two contacts: Marissa Ashabrammer and Marissa Ashabrammer, both with Project status 'Yes' and General status 'Yes'.
- Company Fields:** A list of fields including Call Priority (01 - Call, Responsive & Competitive) and Travel (Select).
- Area of Work:** A section with a map and a 'Select My Area Text' field.

Preconstruction: Bidding

Subcontractor Pre-Qualification

- Use to help determine qualifications of subcontractor



**Contractor & Vendor
Qualification Statement**

COMPANY INFORMATION

Please fill out and return to Brinkmann Constructors via email bids@brinkmannconstructors.com

1. Company Name: _____

2. Address: _____

3. Contact Name: _____

Phone: _____ Fax: _____

E-Mail: _____

4. Other Office Locations: _____

5. Supplier or Contractor

6. Trade or Type of Work (list all applicable divisions and sections):

Preconstruction: Bidding

Bid Forms

- Filling out Owner Bid Forms
 - Do this ahead of time
 - Check the formatting and Internal Math

NorthPoint DEVELOPMENT						
Project:	HCL5 & HCL6			General Contractor:		
Building SF:	HCL5 - 148,483 SF HCL6 - 289,545 SF			Date:		
Building Dimensions:	HCL5 - 104' x 372' HCL6 - 310' x 882'					
Building Clear Height:	HCL5 - 32' HCL6 - 32'					
Site Average:	HCL5 - 10 AC HCL6 - 20 AC					
SY	FE	W	D	B	K	
HCL5		HCL6		SUBCONTRACTOR		COMMENTS
COST	COST	COST	COST	COST	COST	
PAVEMENT						
DIV 2100						
Demolition	\$	123,760	\$	8,861	\$	304,200
Asph Cut & Fill	\$	-	\$	-	\$	1,133
Import/Export Material	\$	-	\$	-	\$	100,000
Rock Excavation	\$	-	\$	-	\$	-
Pad Remediation/Charge	\$	-	\$	-	\$	-
Miscellaneous	\$	-	\$	-	\$	-
NIC	\$	-	\$	-	\$	-
Earthwork - Misc., Fine Grading, Etc.	\$	-	\$	-	\$	-
Temporary Roads	\$	48,370	\$	8,333	\$	63,960
Other	\$	1,000	\$	1,000	\$	1,000
PAVEMENT TOTAL	\$	173,130	\$	2,094	\$	13,853
PAVING						
DIV 2400						
Normal Duty Asphalt Paving	\$	234,000	\$	1,181	\$	474,870
Heavy Duty Asphalt Paving	\$	-	\$	-	\$	-
Access Road Asphalt Paving	\$	-	\$	-	\$	-
Striping	\$	-	\$	-	\$	1,300
Wheel Stops	\$	-	\$	-	\$	-
Signage	\$	-	\$	-	\$	11,800
Other	\$	-	\$	-	\$	-
PAVING TOTAL	\$	234,000	\$	1,181	\$	486,670
REINFORCED CONCRETE						
DIV 2500						
Deck Areas	\$	216,421	\$	1,481	\$	344,820
Single Floor	\$	-	\$	-	\$	-
Concrete Paving	\$	-	\$	-	\$	-
Concrete Forms, etc.	\$	-	\$	-	\$	-
Concrete Schedules	\$	-	\$	-	\$	-
Concrete Curb	\$	-	\$	-	\$	-
Joint Services	\$	-	\$	-	\$	-
Other	\$	-	\$	-	\$	-
REINFORCED CONCRETE TOTAL	\$	216,421	\$	1,481	\$	344,820
UTILITIES						
DIV 2600						
Site Water Main - Complete System	\$	118,000	\$	8,500	\$	487,700
Site Fire Loop - Complete System	\$	-	\$	-	\$	-
Sanitary Sewers	\$	5,000	\$	0,000	\$	48,322
Storm Sewers & Roof Leaders	\$	200,000	\$	1,000	\$	750,422
Storm Detention/Retention/Water Quality	\$	80,000	\$	8,000	\$	174,192
Gas Service	\$	-	\$	-	\$	-
Electric Service	\$	-	\$	-	\$	-
Phone & Data Services	\$	-	\$	-	\$	-
Other	\$	-	\$	-	\$	-
UTILITIES TOTAL	\$	403,000	\$	13,500	\$	760,744
OTHER MOVEMENTS						
DIV 2700						
Site Lighting	\$	-	\$	-	\$	-
Track Enclosures/Dumpster Screens	\$	-	\$	-	\$	-
Fencing	\$	-	\$	-	\$	29,773
Guard Rail	\$	-	\$	-	\$	-
Pipe Bullheads	\$	-	\$	-	\$	-
Retaining Walls	\$	-	\$	-	\$	144,280
Flag Posts	\$	-	\$	-	\$	-
Miscellaneous Sign	\$	-	\$	-	\$	-

Preconstruction: Bidding

Bid Document Review / Check Set

- Important to know what you're bidding
- Yellow and Red Colored Pencils
- Do this with you Bid Tab open, add items as needed
- Full size set of drawings

- **Bidding a project successfully requires a comprehensive understanding of the project.**

Preconstruction: Bidding

Bid Tab Setup

- Do it early
- Start by going through the spec, adding line items
- Add items as you do your check set
- Hide rows of items that don't apply to the project
- Identify the file version, “-GMP, -SUBMITTED”

OST CODE	DESCRIPTION	WILLOWBROOK, TX BID AMOUNT \$1,000K	WOODLANDS, TX BID AMOUNT \$5,646K	VARIANCE (WOOD-Will)	Cost per SF	Qty	Unit
DIVISION 8 ROOFING & PROTECTION							
7132	Membrane Waterproofing - Elevator Pits	4,500	5,600	1,100	0	50.07	Exposed
7164	Polymer Modified Cement Parge		0	0	0	50.00	
7175	High Build Coating (SW Locom)	In 9900		0	0	50.00	
7214	Foamed In Place Insulation		0	0	0	50.00	
7218	Batt Insulation - exterior Walls and Ceilings	39,085	39,085	0	0	50.46	Insproof
	Sound Batt Insulation					50.00	
7220	Roof Deck Insulation - R-24	In 7540		0	0	50.00	
7230	Perimeter Insulation		=N/A	0	0	50.00	
0740	EIFS	194,238	187,548	3,300	0	52.19	TR Brick
7260	Weather Barrier	In 4200		0	0	50.00	
7412	Pre-Fabricated Metal Roofing		=N/A	0	0	50.00	
7425	Metal Safety Panels - By Image One	Contracted By DSG	0	0	0	50.00	
7511	Single Ply Reinforced PVC Membrane Roofing	N/A	Alternate	0	0	50.00	
7540	Single Ply Reinforced 60 mil TPO Membrane Roofing	187,400	143,800	44,500	0	52.11	MDC
	(Demolish at roof hatch)		In 7540	0	0	50.00	
	Cut Roof for steel and exhaust fan removals		=N/A	0	0	50.00	
	TPO Under Sheemental to dry in Building		N/A	0	0	50.00	
07600	Flashing and Sheet Metal	In 7540		0	0	50.00	
	Composite Metal Panels - By Image One	Contracted By DSG	0	0	0	50.00	
	2 Piece counter flashing at cleanstory	In 7540		0	0	50.00	
	IMM Systems Roof Expansion Joint	In 7540		0	0	50.00	
	Gutters & Downspouts	In 7540		0	0	50.00	
7651	Laminated Sheet Flashing	In 7540		0	0	50.00	
7662	Pre-Fabricated Coping	In 7540		0	0	50.00	
07700	Roof Specialties & Accessories	In 7540		0	0	50.00	
7724	Roof Hatch w/ Ladder Up Safety Post	In 7540		0	0	50.00	
7841	Painting			0	0	50.00	
7900	Sealants and Caulking	24,000	7,800	16,200	0	50.09	Southwest
	IMM Systems Ridge Expansion Joint to Existing Building		3,850	3,850	0	50.04	Southwest
DIVISION 9 DOORS AND WINDOWS							
8110	Metal Doors, Frames & Hardware - Girtman	Contracted By DSG	0	0	0	50.00	
8111	Wood Doors, Frames & Hardware - Girtman	Contracted By DSG	0	0	0	50.00	
8305	Access Doors	5,500	5,500	0	0	50.00	
8330	Double Acting Traffic Door - Ellison/Chase - Girtman	Contracted By DSG	0	0	0	50.00	
8331	Upward Acting Service Door - Cornell	Contracted By DSG	0	0	0	50.00	
8332	Upward Acting Service Door (Metal Entrance Only) - Cornell	Contracted By DSG	0	0	0	50.00	
8410	Aluminum Entrances & Storefronts	378,440	352,960	26,540	0	54.11	Signature
	Curtain Wall		In 8410	0	0	50.00	
8710	Finish Hardware - Girtman	Contracted By DSG	0	0	0	50.00	
8721	Automatic Doors - Stearnly	Contracted By DSG	0	0	0	50.00	
8810	Glazing	In 8410		0	0	50.00	
	Automatic Door Glass	4,500	4,500	0	0	50.00	
8900	Aluminum Curtain Wall System		In 8410	0	0	50.00	
DIVISION 9 FINISHES							
09200	Framing and Drywall	689,000	544,900	144,100	0	54.34	Scheerhampton
9270	Exterior Gypsum Sheathing		In 9250	0	0	50.00	
	Lane's Tapes at Corniches		In 9250	0	0	50.00	
	Layout		In 9250	0	0	50.00	
	Ceiling Suspend		In 9250	0	0	50.00	
	Exterior Wall Framing, Gypsumboard, & Insul.		In 9250	0	0	50.00	
09300	Ceramic Tile Flooring & Walls - Inside Edge	40,000	25,000	15,000	0	50.29	
	Thin Brick on Team Sports/Footwear	Contracted By DSG	0	0	0	50.00	
	Walls		In 4200	0	0	50.00	
	Base	Contracted By DSG	0	0	0	50.00	
9510	Acoustical Ceilings	7,400	In 9250	17,400	0	50.00	
9610	Concrete Floor Sealer	5,500	In 9600	65,500	0	50.00	Southwest
9652	Resilient Plank Flooring - Inside Edge	Contracted By DSG	0	0	0	50.00	
9653	Resilient Tile Flooring - Inside Edge	Contracted By DSG	0	0	0	50.00	
	Vinyl Base - Inside Edge	Contracted By DSG	0	0	0	50.00	
9660	Carpeting - Inside Edge	Contracted By DSG	0	0	0	50.00	
09900	Painting	69,300	72,850	2,950	0	50.84	CCMAY

Preconstruction: Bidding

Bid Forms

- Must go out with every negotiated project, for every scope
- Helps with unit pricing sheets
- Used to evaluate accuracy of bidders

Brinkmann
CONSTRUCTORS

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Bid Proposal

03 Building Concrete

PROJECT

Project Name: Ubocomm Flagstaff Bid Due Date: 5/16/2019

Location: Flagstaff, AZ

Submitted By: _____ Date: _____

Company Name: _____ Phone: _____

Email: _____ Fax: _____

Furnish all labor, material, equipment, safety protection, insurance, and taxes necessary to provide complete all Concrete and Foundation work in accordance with plans, specifications, bid documents and bid instructions.

Total Base Bid: \$ _____

Foundations

1) Foundation Excavation	_____ CY	@ \$ _____ / CY	= \$ _____
2) Provide approximate Spots Quantity	_____ CY		
3) Footing for Perimeter Foundation Wall at LL2 & LL1	_____ CY	@ \$ _____ / CY	= \$ _____
4) 2-Sided Perimeter Foundation Walls at LL2 & LL1 (See Alternate Section)			Included as CMU in Base Bid
5) Perimeter CMU Wall Footing at L1	_____ CY	@ \$ _____ / CY	= \$ _____
6) Spread at Mat Footings (Not including continuous wall footing listed above)	_____ CY	@ \$ _____ / CY	= \$ _____
7) Vertical Elevator, Stairs and Shear Walls at LL2 & LL1 (include forming, reinforcing, concrete, and finishing)	_____ CY	@ \$ _____ / CY	= \$ _____
8) Vertical Elevator, Stairs and Shear Walls at L1, L2 & L3 (include forming, reinforcing, concrete, and finishing)	_____ CY	@ \$ _____ / CY	= \$ _____
9)	_____	@ \$ _____ /	= \$ _____

Flatwork

10) 4" Rock Base Material for Slab on Grade	_____ SF	@ \$ _____ / SF	= \$ _____
11) 4" Slab on Grade	_____ SF	@ \$ _____ / SF	= \$ _____
12) Fill Bolards	25 EA	@ \$ _____ / EA	= \$ _____
13) Equipment Pads for mechanical units	4,000 SF	@ \$ _____ / SF	= \$ _____
14)	_____	@ \$ _____ /	= \$ _____

Elevated Decks

15) Elevated Mildly Reinforced Concrete Decks & Columns at LL1 (include all forming, reinforcing, concrete, finishing, and rephoting)	_____ SF	@ \$ _____ / SF	= \$ _____
16) L1 Elevated Mildly Reinforced Concrete Decks & Columns at L1 (include all forming, reinforcing, concrete, finishing, and rephoting)	_____ SF	@ \$ _____ / SF	= \$ _____

Preconstruction: Bidding

Bid Forms

- List alternates and value engineering ideas
- Establish schedule for use in subcontract writing
- Require completed bid forms prior to buy-out meeting

8) 4.5" Elevated Slab on Deck - Roof	_____ SF @ \$ _____ /SF = \$ _____
9) Infill Pan Stairs	_____ FLR @ \$ _____ /FLR = \$ _____
10) MEP Housekeeping Pads	_____ SF @ \$ _____ /SF = \$ _____
11) 12" Thick Generator Pad	_____ SF @ \$ _____ /SF = \$ _____
12) Set, Fill, & Finish Pipe Bollards	_____ EA @ \$ _____ /EA = \$ _____

ALTERNATES

1) Square Concrete Column Wrap @ Garage (Detail 77/A2.3.1)	_____ EA @ \$ _____ /EA = \$ _____
2) Haul-Off of Spoils in Lieu of Stockpiling	_____ CY @ \$ _____ /CY = \$ _____
3) Winter Concrete Premium	_____ CY @ \$ _____ /CY = \$ _____
4) Winter Protection of Concrete (Blankets)	_____ SF @ \$ _____ /SF = \$ _____
5) Credit to Swap Epoxy Rebar at 2 nd Floor Slab on Deck with Typical Grade 60 Rebar	Lump Sum = \$ _____
6) Credit to Eliminate Corrosion Inhibiter at 2 nd Floor Slab on Deck	Lump Sum = \$ _____

SCHEDULE

1. Grade Beams/Pier Caps : _____ Days
2. 1st Floor Slab on Grade : _____ Days
3. Slab on Deck 2nd : _____ Days
4. Slab on Deck 3rd : _____ Days
5. Slab on Deck - Pool: _____ Days
6. Typical Slab on Deck 4th - 10th : _____ Days per Floor
7. Slab on Deck Roof : _____ Days


SPECIFIC INSTRUCTIONS

- 1) Includes all hoisting of materials as required.
- 2) Include all excavation from subgrade elevations, sub-base materials, reinforcing, forming, vapor barriers, water stops, insulation, setting of embeds/anchor bolts, grouting of base plates, etc. for a complete concrete scope of work.
- 3) Include all special conditions for slab pours as listed in the Bidding Documents such as, but not limited to, rock sub-base and vapor barrier (Under Finished Spaces Only) at 1st floor slab, ramps and slab-steps at 1st floor slab, epoxy coated rebar at 2nd floor slab, 4,500 PSI concrete with corrosion inhibitor at 2nd floor slab, etc.
- 4) Be aware of the 10' wide slab leave-out at the Retail area.
- 5) At the 1st floor, the 4" slab on grade is for all areas other than the Trash and Generator areas (Northeast Corner of the building). The 8" slab is at the Trash and Transformer area (Column lines 2 to 6 and DD to HH).

Preconstruction: Bidding

Bid Review Process

- If received via email, be sure to print the email and attach to the back of the bid
- Correct Project?
- Per Plans and Specs?
- Reference Addendums (if necessary)
- Copy Complete Price to the front page

 **Bret's Electric, LLC** *#525,077*
May 15, 2013

Project: New Dawn - Fort Collins, Colorado

Listed below is our scope of work and pricing for the project listed above. Our proposal is based upon our interpretation of the project drawings dated 1.17.13 by Lantz-Boggio Architects and JCAA Engineering, **Addendum 1, 2 and 3**, and the 2011 National Electrical Code. This information is proprietary and confidential and may not be disclosed to others without prior written consent.

INCLUSIONS:

I. TEMPORARY SERVICES

- Provide (1) 200A, 3-phase temporary service from Utility provider transformers on site.
- Provide connection of (1) construction office trailer on site.
- Provide (1) temporary power panels per bldg for construction use.
- Provide temporary lighting to meet OSHA minimum standards within bldg. All task lighting and cords to be supplied by respective trades.

II. SERVICE EQUIPMENT

A. Generator

- Provide and install **125kva 120/208V generator** system.
- Provide and install **EB 50A automatic transfer switch** at each building's emergency EM panel.
- Provide and install **Remote Annunciator** panels at building C.
- Provide and install emergency EPO at generator.
- Provide crane set of **generator** unit.

B. Distribution C箱

- Provide and install (3) **600A** rated service MSD with main breakers for A, A2, A3, TVSS, and EM. One Nema 3R MSD at each building.
- Provide and install (1) **225A MLO** rated Panel A. One at each building.
- Provide and install (1) **225A MLO** rated Panel A2. One at each building.
- Provide and install (1) **225A MLO** rated Panel A3. One at each building.
- Provide and install (1) **150A Main Breaker 3R** Panel EM. One at each building.
- Provide and install **600A** rated MLO 3R QBR at generator CMU wall.
- Provide and install **200A** rated 3R EMDP with 200A main breaker at generator CMU wall.
- All panelboards are sized as per **IEEE** AIC ratings, bussing and circuit quantities.

III. SERVICE FEEDERS

- Provide and install **3-phase feeders from utility transformer**. Route all service feeders per One-line from transformer located near generator.
- Provide and install **aluminum feeders as shown on feeder schedule**.
- Provide and install main service bonding as per 2011 NEC.

IV. THE ELECTRICAL

- Provide **120V power** to irrigation controller at one building. Provide **2" PVC sleeve** into building for irrigation control.
- Provide and install lighting as per **Addenda 2** sheet E1.0. All circuitry taken to closest building and controlled through disconnect, contactors and photoctrl within each building.
- Provide **120v power** to (12) gate locations fed from local building's EM panel.
- Provide **120V power** to (2) monument signs

V. BUILDING LIGHTING

- Provide lighting fixtures as specified on Addenda 2 sheet E0.5.
- Provide lighting control for site as: Time Clock, contactors and Photoctrl for control of site, building perimeter and landscape lighting.
- Flag pole light allowance (addenda 2) to be carried by GC.
- All lighting to be controlled by local wall switches, occupancy sensors, or lighting control when applicable.


VI. BUILDING POWER

P.O. Box 950 Frederick, CO, 80530
Phone: (720) 494-8944 Fax: (720) 494-9008
Confidential and Proprietary

Preconstruction: Bidding

Bid Review Process

- Taxes included?
- Exclusion or Deviations?



Bret's Electric, LLC

A. Provide duplex and GFCI receptacles per 2011 NEC.
B. Provide weatherproof GFI receptacles near HVAC equipment and at general exterior of structure.
C. Provide (1) four-plex receptacle for every telephone IDF closet.
D. Provide kitchen equipment shut down contactors for power to equipment under kitchen hood per drawings.
E. Provide 120v connection to PAC at teledata room.
F. Provide 120v connection to fireplace.
G. Provide receptacles throughout buildings for WAP and ECALL system connections.

VII. HVAC AND PLUMBING EQUIPMENT

A. Provide connections to (3) RTU-1 and (6) RTU-2 200v 3-phase connections per mechanical schedule.
B. Provide connections to (15) 120v 1-phase exhaust fan connections, (5) per building.
C. Provide connections to (1) 120v bathroom exhaust fan connection per client restroom.
D. Provide connections to (3) 120v air compressor per building.
E. Provide connections to (54) 208v 1-phase PTAC connections.
F. Provide connections to (1) 120v 1-phase Unit Heaters rated at <20A.
G. Provide connections to (1) 120v 1-phase circulating pump per mechanical room.
H. Provide connections to (1) 120v 1-phase GWH per mechanical room.
I. Provide and install 100w 161 heat lamp unit at each client restroom.
J. Provide electrical and fire alarm connections to Kitchen Hood with Amul system.

VIII. FIRE ALARM

A. Provide and install design/build fire alarm system as per local AHJ requirements.
B. Provide underground conduit system to link all buildings.
C. Provide connection to sound system at kitchen.
D. Provide separate fire alarm control panels at each building.
E. Provide interlock for fire dampers to fire alarm system.
F. Provide and install (3) magnetic-door holders per building.

IX. SPECIAL SYSTEMS

A. Telephone and CATV Distribution

1. Provide (2) 4" conduits from building C MDF room to telephone utility pedestal assumed to be located near transformer location.
2. Provide (1) 2" conduit from building C MDF room to telephone utility pedestal assumed to be located near transformer location.
3. Provide (3) 3" conduits from each building's IDF room to link building C's MDF room.
4. Provide (1) 2" conduit with weatherhead at MDF to roof for antenna.
5. TV and Phone: provide to apply and install backbone and make final connections at MDF location.
6. Cat5e Phone/Data and TV System Installation:
 - a) Provide and install 2-post rack at MDF in building C.
 - b) Provide and install 16 wall rack at each IDF location in (1) buildings.
 - c) Provide fiber in underground conduits to each IDF from MDF. Terminate on fiber switch.
 - d) Provide and install (2) CAT5e riser rated cables to each data location shown on drawings.
 - e) Provide patch panel with patch cords for all CAT5e cables at rack.
 - f) Provide and install RG-11 from MDF to each IDF. Terminate with amplified splitters per drawings.
 - g) Provide (1) RG-6 to each TV location shown on drawings.

X. INCLUSIONS:

A. All interior wiring to be NM-B Romex cable and non-metallic box assemblies and Hospital Grade MC within areas of patient contact per NEC article 517. FVC and EMT raceways also used.
B. Daily Clean up with trash disposed in container by others.
C. Trenching, backfilling, compaction of conduits installed.
D. Taxes at 7.35%

7.35%


*Full Allowances
3x \$60,000 - \$65,000*

P.O. Box 950 Frederick, CO. 80530
Phone: (720) 494-8944 Fax: (720) 494-9008
Confidential and Proprietary

Preconstruction: Bidding

Bid Review Process

- Look for Specific Items to Generate Questions



Bret's Electric, LLC

EXCLUSIONS:

Bret's Electric specifically excludes the following items from our proposed scope of work:

- A. Formed concrete or asphalt construction, repair or disposal (including pole bases, equipment pads, demolition, etc.)
- B. Bid Payment/Performance Bond.
- C. Utility, Design and Engineering Fees.
- D. CAD drawings for As-Builts and coordination drawings.
- E. Asphalt/Concrete curing, cutting, pours and placement.
- F. Electrified door hardware.
- G. Access control, Ecall, and Nurse call system wiring and installation.
- H. Mechanical equipment, controls, devices, cabling, starters, electric heaters, vfd's and thermostats.
- I. Roof penetrations, jacks, cutting, patching or repairing.
- J. We are basing our pricing on a standard 40-hour work week. Premium time and Davis Bacon wages are NOT included.
- K. Unforeseen conditions, underground obstructions, engineering omissions and owner changes.
- L. Commodity material price escalations. With the ever changing increases in copper pricing we cannot, nor will our suppliers, hold their pricing for more than one week at a time.

We hereby propose to furnish labor and materials, complete in accordance with the above scope and clarifications for the sum of:

BASE BID: All Power, Lighting, Fire Alarm, TV/Phone/Data/Fiber **\$525,077**

If you have any questions regarding our proposal please call me at 720-494-8944 or email me at justin@bretselectric.com. Any feedback you can provide will be greatly appreciated. Thank you!

Sincerely,
Justin Marsh / Bret's Electric

(Handwritten in red ink: (720) 494-8944 call with an arrow pointing to the contact information)

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Phone: (720) 494-8944 Fax: (720) 494-9008
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Preconstruction: Bidding

Sub Bid Analysis

- Should be done for all scopes of work
- Helpful to quickly compare large scopes
- Should be typed up for negotiated projects

Brinkmann CONSTRUCTORS		SUB BID ANALYSIS				
Project Name: Rise Apartments		Bid Date: 2/11/2016		CSI Division: Structural Steel		
Company	Estimate		Wilson's Steel & A&H Erectors		Ben Hur	
	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
Furnish:						
Structural Steel	1,183 TONS	\$2,070,250	1,194 TONS	\$2,160,871	1,227 TONS	\$1,879,713
Steel Decking	202,000 SF	\$212,100		\$188,890	202,000 SF	\$193,000
Steel Pan Stairs	36 FLIGHTS	\$198,000	36 FLIGHTS	\$178,470	36 FLIGHTS	\$173,000
Stairs Railings/Mandrill			645 LF = 436 LF	Incl. Above	562 LF = 480 LF	Incl. Above
Misc. Steel (101)	118 TONS	\$144,000		Incl. Above		Incl. Above
Shop Drawings/Engineering	230,000 SF	\$138,000		\$179,604		\$135,000
Welded Studs			28,684 EA	Incl. Above	28,819 EA	Incl. Above
Bollards	25 EA	\$6,250	None Incl.	\$6,250	None Incl.	\$6,250
Safety Cable Removal	318,000	By GC	318,000	By GC	318,000	By GC
Connection Engineering	72 EA	\$25,200	By GC	\$25,200	By GC	\$25,200
Window Washing Supports	72 EA	\$25,200	By GC	\$25,200	By GC	\$25,200
Erection:						
Structural Steel	230,495 SF	\$1,071,800		\$732,775		\$975,811
Hoisting Equipment Necessary	By GC	\$198,800	By GC	\$498,400	By GC	\$198,800
Sub-Part R Requirements	By GC	\$25,000	By GC	\$25,000	By GC	\$25,000
Steel Decking	202,000 SF	\$282,800		\$421,810		\$288,000
Steel Stairs	36 FLIGHTS	\$90,000		\$112,275		\$96,000
Window Washing Supports	72 EA	\$28,800		\$19,400		\$27,000
		\$45,000		\$36,320		\$42,360
TOTAL COST		\$ 4,891,000		\$ 4,639,480		\$ 4,401,616
Comparison of Low Bid						
			5.40%	\$ 237,864	0.00%	\$
Unit Pricing						
6" Pipe Bollards - 7' Long			Each	\$125	Each	\$150
Welded Studs - 1/2" Dia			Each	\$174	Each	\$275
Pre-Cast Concrete Stairs				No Bid	Add	\$55,000
Column Splice Detail 4			Add	\$140	Add	\$105
Schedule						
2nd Floor - Ready to Pour			28 Days		20 Days	
3rd Floor			36 Days		30 Days	
4th			47 Days		42 Days	
5th			51 Days		54 Days	
6th			61 Days		66 Days	
7th			66 Days		78 Days	
8th			75 Days		90 Days	
9th			78 Days		102 Days	
10th			86 Days		114 Days	Done with Crane
Roof			93 Days		126 Days	

Preconstruction: Bidding

Sub Bid Analysis

- For hard bid projects, can be done by hand

Brinkmann CONSTRUCTORS		Project Name: PROJECT NAME										Trade / SCOPE OF WORK
		Project #:										Cost Code:
		City/State:										Building Size (GSF):
												Average:
												Unit Cost:
TRADE:	TRADE / SCOPE OF WORK	Drinkmann Budget	SUB #1	SUB #2	SUB #3	SUB #4	SUB #5	SUB #6	SUB #7	SUB #8	SUB #9	SUB #10
ESTIMATE:	\$ 20,000		contract	contract	contract	contract	contract	contract	contract	contract	contract	contract
LOW BID:	\$ 12,500		phone	phone	phone	phone	phone	phone	phone	phone	phone	phone
DELTA:	\$ 7,500		email	email	email	email	email	email	email	email	email	email
TRADE / SCOPE OF WORK												
BASE BID (IF ALLUMP SUM)												
BASE BID - SCOPE OF WORK		\$ -	(Y/N)	\$ -	(Y/N)	\$ -	(Y/N)	\$ -	(Y/N)	(Y/N)	(Y/N)	(Y/N)
1 Scope Item #1	\$5,000	v	n	\$0	v	\$5,000	n	\$12,500	v	n	v	v
2 Scope Item #2	\$5,000	n	n	\$5,000	v	\$2,500	n	v	v	n	v	v
3 Scope Item #3	\$5,000	v	v	\$1,500	v	\$3,500	n	v	v	n	v	v
4 Scope Item #4	\$5,000	v	v	\$5,000	v	\$3,500	n	v	v	n	v	v
5												
6												
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15												
16												
17												
18												
19												
20												
21												
22												
23												
24	Acknowledgement of Addenda											
25	Verify Applicable Tax Rate											
TOTAL EVALUATED BID VALUE		\$ 20,000	\$ 17,500	\$ 14,500	\$ 12,500	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
RIBBONS OF		\$0.13	\$0.12	\$0.10	\$0.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAC-RC		\$20,000	\$17,500	\$14,500	\$12,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BUNIT		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DELTA FROM BRINKMANN ESTIMATE CONTRACT		\$ -	\$ (2,500)	\$ (5,500)	\$ (7,500)	\$ (20,000)	\$ (20,000)	\$ (20,000)	\$ (20,000)	\$ (20,000)	\$ (20,000)	\$ (20,000)
DELTA FROM LOW BIDDER		Not Applicable	\$ 5,000	\$ 2,000	\$ (7,500)	\$ (7,500)	\$ (12,500)	\$ (12,500)	\$ (12,500)	\$ (12,500)	\$ (12,500)	\$ (12,500)
DELTA FROM LOW BIDDER AS %		Not Applicable	40%	16%	0%	-100%	-100%	-100%	-100%	-100%	-100%	-100%

Preconstruction: Bidding

Post-Bid

- Give the bid book to Miranda Hill
- Buy-out meetings (covered under Operations)
- Bid Results – only after scope is bought-out and awarded to a sub, notify the unsuccessful bidders
- Bid Results – Provide honest results, percentages are best