

(INDIRECT COSTS UN-ALLOCATED)

JEA, FL

Well No.15

Opinion of Probable Construction Cost, April, 2017, IFB Design-Part 1

Project name

Well No. 15 Jacksonville FL

CDM Smith Client

Estimator RWR

Labor rate table FL17 Jacksonville

00 17 Equip Rate BF Equipment rate table

> 750 VLF Job size

Well 15 Project OPCC Type Design Level OPCC Issued for Bid CAG ENR 20 City CCI April, 25: 10,678.15

Notes

This is an Opinion of Probable Construction Cost (OPCC) only, as defined by the documents provided at the level of design indicated above. CDM Smith has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding (at least 3 each both prime bidders and major subcontractors), market conditions or negotiating terms. CDM Smith does not guarantee that this opinion will not vary from actual cost, or contractor's bids.

There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Impact Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

Assumptions:

No rock excavation is required. Only nominal dewatering is needed.

No consideration for contaminated groundwater/soils or hazardous materials is included (i.e. asbestos, lead, etc).
Temporary parking/storage/staging is available within the limits of construction.

Based on a normal 40 hour work week with no overtime.

Sorted by 'Area/95CSI Sctn/Element' Report format

'Detail' summary



JEA, FL Well No.15 (INDIRECT COSTS UN-ALLOCATED)

Spreadsheet Level	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount
1a Well Construction Permit								
01210 Project Permits								
01210.4605 Well Construction Permit	1.00 ls					0	0.01 /ls	
01210 Project Permits	4.00.1.0					0	0.04 // 0	
1a Well Construction Permit	1.00 LS					0	0.01 /LS	
2a Site Restoration 02300 Earthwork								
05.02300.4605 Site Grading	1.00 ls	1,575	624		896		3,095.17 /ls	3,09
02300 Earthwork		1,575			896		0,000111 710	3,09
2a Site Restoration	1.00 LS	1,575	624		896		3,095.17 /LS	3,09
2b Temporary Site Security Fence		,					•	,
02520 Wells								
02520.3105 Temporary Site Security Fence				6,250			/If	6,25
02520 Wells				6,250				6,25
2b Temporary Site Security Fence	1.00 LS			6,250			6,250.00 /LS	6,25
2c Fluid Management								
02520 Wells		4.054	4.000		2.000		n-	F 67
02520.3150 Fluid Management 02520 Wells		1,851 1,851	1,800 1,800		2,020 2,020		/ls	5,67 5,67
2c Fluid Management	500.00 LF	1,851	1,800		2,020		11.34 /LF	5,67
3a Mobilization/Demobilization Maximum 10% Of Total Well Cost	300.00 LF	1,001	1,000		2,020		11.57 /27	3,07
02520 Wells								
02520.4605 Mobilize/Demobilize Drilling Crew	1.00 ea			29,717			29,717.10 /ea	29,71
02520 Wells				29,717				29,71
3a Mobilization/Demobilization Maximum 10% Of Total Well Cost	1.00 LS			29,717			29,717.10 /LS	29,71
3b Drill and Grout In Place 36" 0.375" Casing Pipe 0' to 35'(±)								
02520 Wells								
01200.4605 Survey & Stake Well Location	1.00 ea	864				500	1,363.90 /ea	1,36
02520.4606 Install 36" Diameter Surface Casing	35.00 lf	864		8,750		500	250.00 /lf	8,75
02520 Wells 2h Drill and Crout In Place 25" 0.275" Cooling Bins 0' to 25"(1)	35.00 FT	864		8,750		500 500	200 07 /ET	10,11
3b Drill and Grout In Place 36" 0.375" Casing Pipe 0' to 35'(±)	35.00 F1	804		8,750		500	288.97 /FT	10,11
3c Drill 10 - 12.25" Pilot Boring 95' Into Hawthorn Group 02520 Wells								
02520.4608 Drill Pilot Hole	95.00 If			3,325			35.00 /lf	3,32
02520 Wells				3,325				3,32
3c Drill 10 - 12.25" Pilot Boring 95' Into Hawthorn Group	95.00 FT			3,325			35.00 /FT	3,32
3d Perform Geophysical Logging (Caliper, Gamma and Electric to 95' +/-)								
02520 Wells								
02520.4610 Conduct Geophysical Log	95.00 If			1,710			18.00 /lf	1,71
02520.4680 Conduct Caliper Log	95.00 If			1,710			18.00 /lf	1,71
02520.4681 Conduct Video Survey	95.00 lf			1,710			18.00 /lf	1,71 5,13
02520 Wells 2d Perform Coophysical Logging (Coliner Commo and Electric to 05' 1/)	100.16			5,130 5 130			E 120 00 // C	
3d Perform Geophysical Logging (Caliper, Gamma and Electric to 95' +/-)	1.00 LS			5,130			5,130.00 /LS	5,13
3e Ream 36" Nominal Borehole By Mud-Rotary Method to 95'± 02520 Wells								
02520.4612 Ream 39" Diameter Borehole	70.00 If			4,725			67.50 /lf	4,72
02520 Wells				4,725				4,72
3e Ream 36" Nominal Borehole By Mud-Rotary Method to 95'±	70.00 FT			4,725			67.50 /FT	4,72
3f Drill and Grout In Place 30" 0.375" Casing Pipe 0' to 95'±								
02520 Wells								
02520.4614 Install 30" Diameter Intermediate Casing	100.00 If			27,700			277.00 /lf	27,70
02520 Wells				27,700				27,70
3f Drill and Grout In Place 30" 0.375" Casing Pipe 0' to 95'±	95.00 FT			27,700			291.58 /FT	27,70
3g Drill 10 - 12.25" Pilot Boring to Approx. 530'± Into Florida Aquifer								
02520 Wells 02520.4608 Drill Pilot Hole	430.00 If			15,050			35.00 /lf	15,05
02520.4608 Drill Pilot Hole 02520 Wells	430.00 If			15,050			35.00 /11	15,05
3g Drill 10 - 12.25" Pilot Boring to Approx. 530'± Into Florida Aquifer	430.00 FT			15,050			35.00 /FT	15,05
3h Perform Geophysical Logging (Caliper, Gamma and Electric)	.55.50 11			,			55.55 /i i	. 3,00
02520 Wells								
02520.4610 Conduct Geophysical Log	430.00 If			2,086			4.85 /lf	2,08
02520.4680 Conduct Caliper Log	430.00 lf			1,356			3.15 /lf	1,35
02520 Wells				3,441				3,44
3h Perform Geophysical Logging (Caliper, Gamma and Electric)	1.00 LS			3,441			3,441.29 /LS	3,44
3i Ream 29" Nominal Borehole By Mud-Rotary Method To 530'±								



JEA, FL Well No.15 (INDIRECT COSTS UN-ALLOCATED)

Spreadsheet Level	Takeoff Quantity	Labor Amount M	aterial Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount
02520.4616 Ream 29" Diameter Borehole	430.00 lf			21,500			50.00 /lf	21,500
02520 Wells				21,500				21,500
3i Ream 29" Nominal Borehole By Mud-Rotary Method To 530'±	430.00 FT			21,500			50.00 /FT	21,500
3j Perform Geophysical Logging (Caliper, Gamma and Electric)								
02520 Wells								
02520.4610 Conduct Geophysical Log	430.00 If			2,150			5.00 /lf	2,150
02520.4680 Conduct Caliper Log	430.00 lf			1,398			3.25 /lf	1,398
02520 Wells	4.00.1.6			3,548			2 5 4 7 5 0 // 0	3,541
3j Perform Geophysical Logging (Caliper, Gamma and Electric)	1.00 LS			3,548			3,547.50 /LS	3,548
3k D & G In Place 20" 0.375" Casing(From Surface to Upper Floridian Aquif								
02520.4618 Install 20" Diameter Final Casing	530.00 If			106,000			200.00 /lf	106,00
02520 Wells	330.00 11			106,000			200.00 /11	106,00
3k D & G In Place 20" 0.375" Casing(From Surface to Upper Floridian Aquif	530.00 FT			106,000			200.00 /FT	106,000
3I Drill 10-12.25" Pilot Bore By Reverse Air Drilling To 1300'±				100,000				
02520 Wells								
02520.4608 Drill Pilot Hole	770.00 If			26,950			35.00 /lf	26,950
02520 Wells				26,950				26,950
3l Drill 10-12.25" Pilot Bore By Reverse Air Drilling To 1300'±	770.00 FT			26,950			35.00 /FT	26,950
3m Static and Dynamic Geophysical and Full Video Logging Section 02853								
02520 Wells								
02520.4620 Conduct Static & Dynamic Geophysical/Video Logging	1,300.00 lf			6,500			5.00 /lf	6,500
02520.4680 Conduct Caliper Log	1,300.00 If			4,225			3.25 /lf	4,22
02520.4681 Conduct Video Survey	1,300.00 lf			4,550			3.50 /lf	4,550
02520 Wells	4.00.1.0			15,275			45.075.00 # 0	15,27
3m Static and Dynamic Geophysical and Full Video Logging Section 02853	1.00 LS			15,275			15,275.00 /LS	15,275
3n Ream 18" Borehole By Reverse Air Drilling to 1,280'± 02520 Wells								
02520 Wells 02520.4622 Ream 18" Diameter Borehole	750.00 If			26,950			35.93 /lf	26,950
02520 Wells	730.00 11			26,950			33.33 /11	26,950
3n Ream 18" Borehole By Reverse Air Drilling to 1,280'±	750.00 FT			26,950			35.93 /FT	26,950
3o Perform Geophysical Logging (Caliper, Gamma and Video)	700.00 11			20,000			00.50 71 1	
02520 Wells								
02520.4610 Conduct Geophysical Log	750.00 If			2,138			2.85 /lf	2,138
02520.4680 Conduct Caliper Log	750.00 If			1,390			1.85 /lf	1,390
02520.4681 Conduct Video Survey	750.00 If			1,496			2.00 /lf	1,490
02520 Wells				5,024				5,024
3o Perform Geophysical Logging (Caliper, Gamma and Video)	1.00 LS			5,024			5,023.50 /LS	5,024
3p Perform Plumbness and Alignment Test								
02520 Wells								
02520.4624 Perform plumbness and alignment test	1.00 ls			4,000			4,000.00 /ls	4,000
02520 Wells	4.00.1.0			4,000			4 000 00 // 0	4,000
3p Perform Plumbness and Alignment Test	1.00 LS			4,000			4,000.00 /LS	4,000
3q Develop Well With Temporary Pump Flowing To 3,000 GPM								
02520 Wells 02520.4626 Develop Well With Temporary Pump Flowing To 3,000 GPM	14.00 hr			8,350			596.43 /hr	8,350
02520 Wells	14.00 111			8,350			330.43 /111	8,350
3q Develop Well With Temporary Pump Flowing To 3,000 GPM	14.00 HR			8,350			596.43 /HR	8,350
3r Conduct Step Drawdown Test and Field Water Samples per Section 02863				0,000			000.10 /1.11	
02520 Wells								
02520.4628 Conduct step drawdown test and field water samples	1.00 Is			6,800			6,800.00 /ls	6,800
02520 Wells				6,800			.,	6,80
3r Conduct Step Drawdown Test and Field Water Samples per Section 02863	1.00 LS			6,800			6,800.00 /LS	6,800
3s Collect Primary and Secondary Water Samples per Section 02863								
02520 Wells								
02520.4632 Collect Primary and Secondary Water Samples	1.00 ls			6,000			6,000.00 /ls	6,000
02520 Wells				6,000				6,00
3s Collect Primary and Secondary Water Samples per Section 02863	1.00 LS			6,000			6,000.00 /LS	6,000
3t Install Temporary Wellhead per Contract Documents								
02520 Wells								
02520.4640 Temporary Tapped Plug w/Welded O-Let, 20" x 2"	1.00 ea			2,400			2,400.00 /ea	2,40
02520 Wells				2,400				2,40
13420 I&C Instruments 13420.4605 Pressure Gauge	1.00 ea	91	120			120	330.79 /ea	33
13420 I&C Instruments	1.00 ea	91	120			120	330.19 /ea	33
15117 Ball Valve			120			120		



JEA, FL Well No.15 (INDIRECT COSTS UN-ALLOCATED)

Spreadsheet Level	Takeoff Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount
·	· · · · · · · · · · · · · · · · · · ·			Sub Amount	Equip Amount			
15117.4605 2" PVC Ball Valve FL x FL	2.00 ea	115	1,919			24	1,028.76 /ea	2,058
15117.4608 1/2" PVC Ball Valve	1.00 ea	24				12	49.05 /ea	49
15117.4610 1/4" Bronze Ball Valve	2.00 ea	51	136			24	105.66 /ea	211
15117 Ball Valve		190	2,068			60		2,318
15241 PVC Pipe & Fittings								
15241.4605 2" PVC SCH80 Pipe & Fittings	1.00 ls	138	328		0		465.58 /ls	466
15241.4610 1/2" & 1/4" PVC SCH80 Fittings	1.00 ls	36	41				76.51 /ls	77
15241 PVC Pipe & Fittings		174	368		0			542
3t Install Temporary Wellhead per Contract Documents	1.00 LS	455	2,556	2,400	0	180	5,590.76 /LS	5,591
4a Contractor's Provision for Equipment Standby Time								
02520 Wells								
02520.4655 Standby Time	24.00 hr			3,600			150.00 /hr	3,600
02520 Wells				3,600				3,600
4a Contractor's Provision for Equipment Standby Time	24.00 HR			3,600			150.00 /HR	3,600
4b Contractor's Provision for Equipment and Crew Standby Time								
02520 Wells								
02520.4655 Standby Time	24.00 hr			6,600			275.00 /hr	6,600
02520 Wells				6,600				6,600
4b Contractor's Provision for Equipment and Crew Standby Time	24.00 HR			6,600			275.00 /HR	6,600
4c Supplemental Work Authorization								
01220 Allowances								
01000.4699 Supplemental Work Authorization	1.00 ls					30,000	30,000.01 /ls	30,000
01220 Allowances						30,000		30,000
4c Supplemental Work Authorization	1.00 LS					30,000	30,000.01 /LS	30,000

Estimate Totals

Description	Amount	Totals	Houre	P	ate	
Labor	4,745	iotais	116		ale	
Material	4,980					
Subcontract	347.084					
Equipment	2,916		45	hrs		
Other	30,680					
Subtotal Direct Costs:	390,405	390,405				
ndirect Costs						
Permits	2,500					
Sales Tax (MEO)-Duvall Cty	506				7.00 %	
Bldr's Risk Ins - Not Regd	300				7.00 70	
· ·	4.070				1.00 0/	
Gen Liab Ins (% total cost)	4,972				1.00 % 1.50 %	
GC Bonds (% total cost)	7,458				1.50 %	
Subtotal Prior to OH&P:	15,436	405,841				
GC General Conditions	18,792				5.00 %	
Contractor Total OH&P	30,067				3.00 %	
Subtotal with OH&P:	48,859	454,700				
Estimate Contingency	42,470			1	0.00 %	
OPCC Total:	42.470	497,170				