

SEDONA
FIRE
DISTRICT



AGENDA



About CORE



Station Cost Projections



Project Risk Awareness

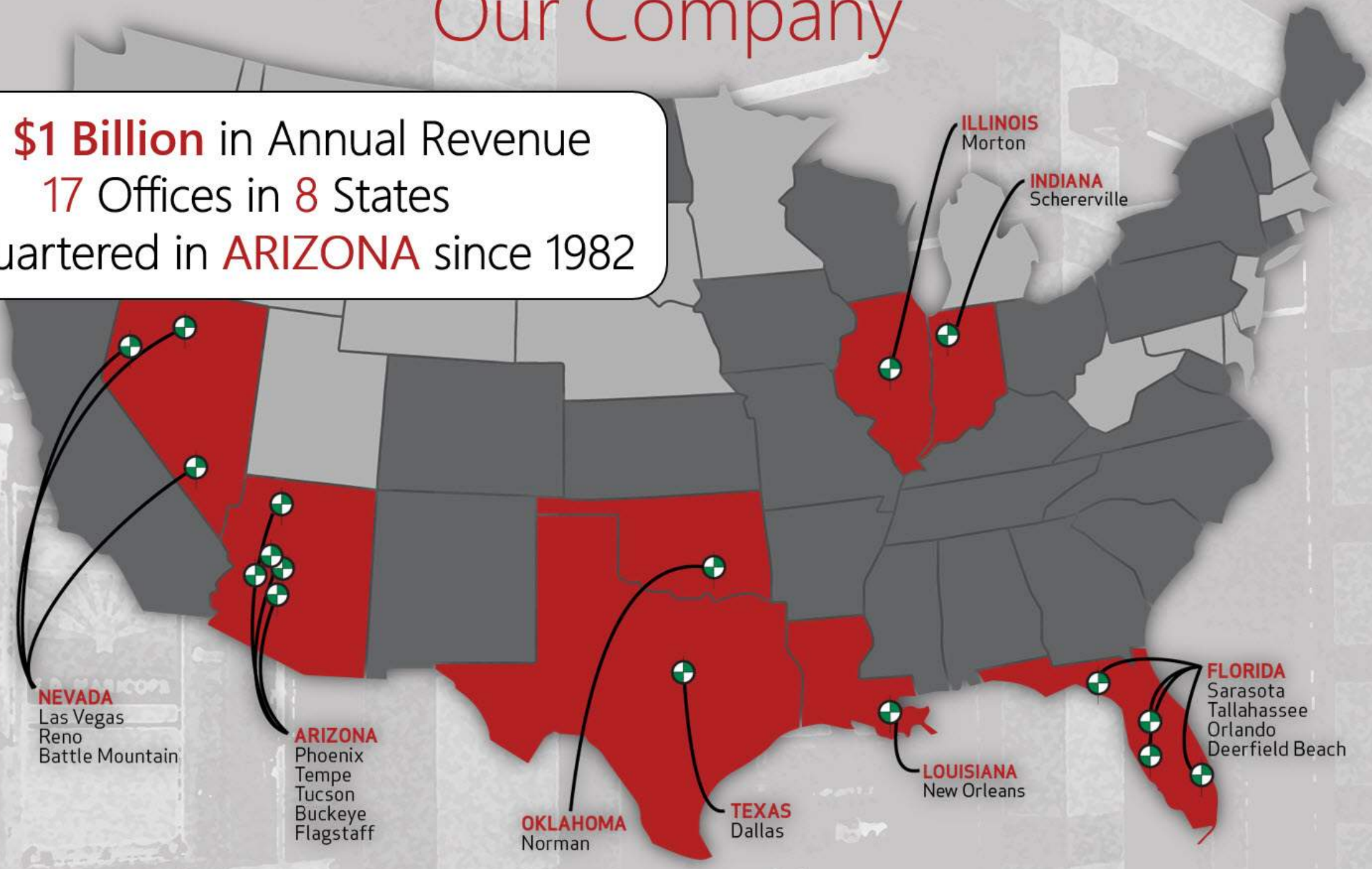


Next Steps

ABOUT CORE

Our Company

Over **\$1 Billion** in Annual Revenue
17 Offices in **8** States
Headquartered in **ARIZONA** since 1982



ABOUT CORE

Our Company

Over \$1
Headqu



ABOUT CORE

Our Company

Over \$1
Headqu



ABOUT CORE

Fire Station Experience



FIRE STATIONS

ARIZONA FIRE STATIONS

STATION COST PROJECTIONS

CORE's Process

1. Leverage Historical Cost Data



The screenshot displays a software interface with a grid of data. The columns are labeled with project names: BAYVIEW, BAYVIEW, BAYVIEW, BAYVIEW, BAYVIEW, and BAYVIEW. The rows contain various cost-related metrics such as 'Total Cost', 'Construction Cost', and 'Equipment Cost'. The data is presented in a structured table format with alternating row colors for readability.

PROJECT:	Pinetop Fire Station		Superstition Fire & Medical Station		Florence Fire Station #2		Buckeye Firehouse #704		Queen Creek Fire Station #411		Daisy Mtn Fire Station 145 (Replacement)	
TOTAL ADJUSTED COST:	\$4,573,660		\$2,427,230		\$3,308,706		\$5,733,783		\$4,997,277		\$4,104,253	
Project Category:	Fire Station (New)		Fire Station (New)		Fire Station (New)		Fire Station (New)		Fire Station (New)		Fire Station (New)	
Building Size:	12,717 SF		5,460 SF		10,672 SF		15,950 SF		13,409 SF		10,445 SF	
Site Size:	1.19 Acres		0.9 Acres		2.6 Acres		3.2 Acres		3 Acres		2.2 Acres	
Project Start:	Nov-08		May-11		Jul-13		Oct-15		Jul-16		Apr-17	
Project Duration:	10 Months		7 Months		8 Months		10 Months		8 Months		8 Months	
Total Adj. Cost / SF:	\$360 /SF		\$445 /SF		\$310 /SF		\$359 /SF		\$373 /SF		\$393 /SF	
Demo/ Off Site	\$0	\$0 /Acre	\$0	\$0 /Acre	\$0	\$0 /Acre	\$0	\$0 /Acre	\$0	\$0 /Acre	\$233,739	\$106,245 /Acre
Site Work Rough	\$177,717	\$149,342 /Acre	\$404,684	\$449,649 /Acre	\$210,711	\$81,043 /Acre	\$268,034	\$83,761 /Acre	\$355,370	\$118,457 /Acre	\$307,491	\$139,769 /Acre
Site Work Finish	\$91,780	\$77,126 /Acre	\$280,677	\$311,864 /Acre	\$213,937	\$82,284 /Acre	\$520,823	\$162,757 /Acre	\$371,025	\$123,675 /Acre	\$382,358	\$173,799 /Acre
Structure	\$932,047	\$73.29 /SF	\$326,208	\$59.74 /SF	\$467,754	\$43.83 /SF	\$744,746	\$46.69 /SF	\$848,293	\$63.26 /SF	\$510,911	\$48.91 /SF
Enclosure	\$250,434	\$19.69 /SF	\$120,148	\$22.01 /SF	\$333,831	\$31.28 /SF	\$528,399	\$33.13 /SF	\$370,577	\$27.64 /SF	\$307,810	\$29.47 /SF
Interior Finishes	\$420,685	\$33.08 /SF	\$199,473	\$36.53 /SF	\$364,346	\$34.14 /SF	\$775,764	\$48.64 /SF	\$676,252	\$50.43 /SF	\$377,877	\$36.18 /SF
Specialties	\$89,045	\$7.00 /SF	\$45,562	\$8.34 /SF	\$45,437	\$4.26 /SF	\$106,744	\$6.69 /SF	\$56,054	\$4.18 /SF	\$39,187	\$3.75 /SF
Equipment	\$79,653	\$6.26 /SF	\$91,334	\$16.73 /SF	\$26,686	\$2.50 /SF	\$196,616	\$12.33 /SF	\$33,050	\$2.46 /SF	\$41,617	\$3.98 /SF
MEP Systems	\$835,101	\$65.67 /SF	\$369,751	\$67.72 /SF	\$654,574	\$61.34 /SF	\$1,324,428	\$83.04 /SF	\$907,910	\$67.71 /SF	\$867,637	\$83.07 /SF
Special Systems	\$100,346	\$7.89 /SF	\$0	\$0.00 /SF	\$41,274	\$3.87 /SF	\$76,638	\$4.80 /SF	\$89,297	\$6.66 /SF	\$40,246	\$3.85 /SF
General Conditions & Fee	\$1,541,958	\$121.25 /SF	\$546,704	\$100.13 /SF	\$657,820	\$61.64 /SF	\$1,025,665	\$64.31 /SF	\$1,159,233	\$86.45 /SF	\$800,977	\$76.69 /SF
Contingency	\$54,895		\$42,690		\$292,337		\$165,927		\$130,217		\$194,404	

STATION COST PROJECTIONS

CORE's Process

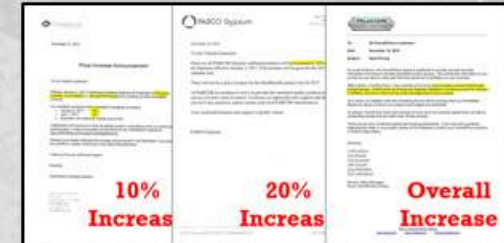
1. Leverage Historical Cost Data



Item	Unit	Cost	Unit	Cost	Unit	Cost		
Excavation	sq ft	1.50	Foundation	sq ft	2.00	Formwork	sq ft	1.20
Concrete	cu yd	120.00	Rebar	lb	0.50	Steel Decking	sq ft	1.00
Formwork	sq ft	1.20	Steel Decking	sq ft	1.00	Brickwork	sq ft	1.50
Brickwork	sq ft	1.50	Paint	sq ft	0.20	Roofing	sq ft	1.80
Paint	sq ft	0.20	Roofing	sq ft	1.80	Insulation	sq ft	0.80
Roofing	sq ft	1.80	Insulation	sq ft	0.80	Electrical	sq ft	0.50
Insulation	sq ft	0.80	Electrical	sq ft	0.50	Plumbing	sq ft	0.60
Electrical	sq ft	0.50	Plumbing	sq ft	0.60	Mechanical	sq ft	0.70
Plumbing	sq ft	0.60	Mechanical	sq ft	0.70	Interior Finishes	sq ft	0.90
Mechanical	sq ft	0.70	Interior Finishes	sq ft	0.90	Exterior Finishes	sq ft	1.10
Interior Finishes	sq ft	0.90	Exterior Finishes	sq ft	1.10	Site Work	sq ft	0.40
Exterior Finishes	sq ft	1.10	Site Work	sq ft	0.40	Landscaping	sq ft	0.30
Site Work	sq ft	0.40	Landscaping	sq ft	0.30	Utilities	sq ft	0.50
Landscaping	sq ft	0.30	Utilities	sq ft	0.50	Other	sq ft	0.20
Utilities	sq ft	0.50	Other	sq ft	0.20			
Other	sq ft	0.20						



2. Adjust for Current Market Conditions

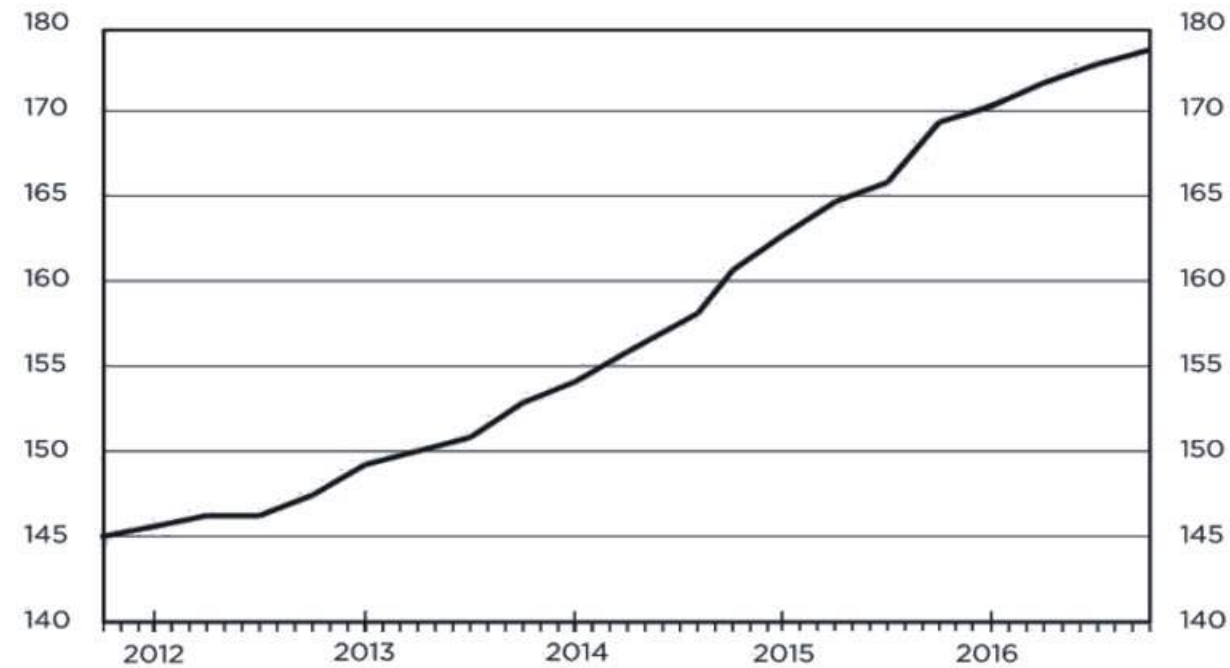


Category	Adjustment
Material	10% Increase
Labor	20% Increase
Overall	Overall Increase

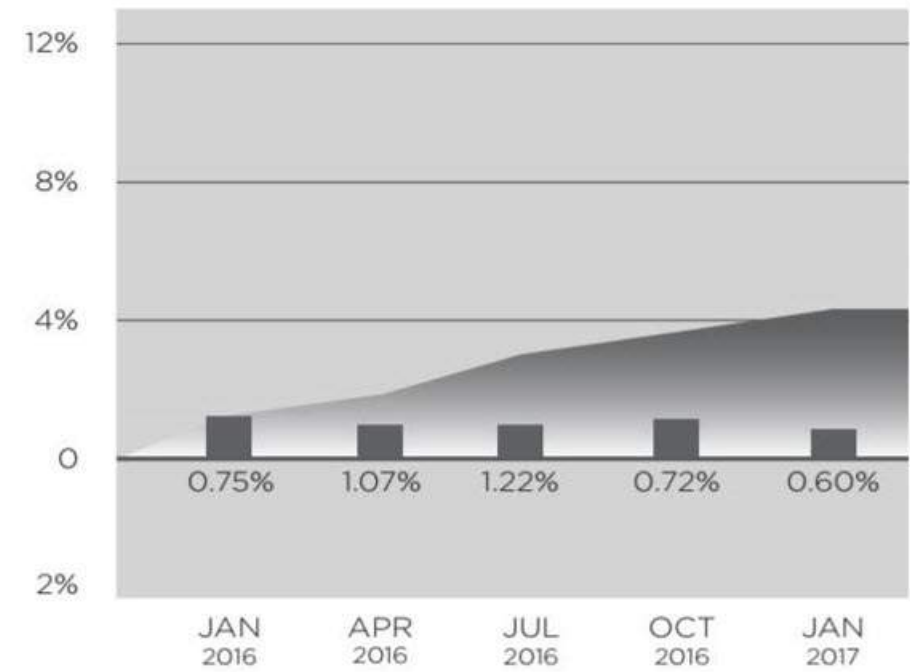
STATION COST PROJECTIONS

CORE's Process

NATIONAL CONSTRUCTION COST INDEX



COST INDEX Phoenix



Source: RLB Construction Cost Report Q1 2017



November 21, 2016

Price Increase Announcement

To Our Valued Customers:

Effective January 2, 2017 ClarkDietrich Building Systems will implement a 10% price increase, in all markets, on all metal framing products including our lath and plaster products.

Our escalation schedule will be amended immediately as follows:

- January 2, 2017: 10%
- April 1, 2017: 5%
- Escalators are subject to change at any time.

ClarkDietrich will continue to honor all existing quotes in accordance with our current job quoting policy. A copy of our policy can be found on our ClarkDietrich website at www.clarkdietrich.com/support-tools/sales-forms.

Revised price sheets reflecting this increase will be issued in mid-December. If you have any questions, please contact your local Sales Representative.

Thank you for your continued support.

Sincerely,

ClarkDietrich Building Systems

9100 Centre Pointe Dr.
Suite 210
West Chester, OH 45069
P 513.879.1100
F 513.879.1300
clarkdietrich.com

10% Increase



November 16, 2016

To Our Valued Customers:

Prices on all PABCO® Gypsum wallboard products will be increased on all shipments effective January 2, 2017. This increase will be good for the calendar year.

There will not be a price increase for the QuietRock® product line for 2017.

At PABCO® we continue to strive to provide the consistent quality and service you have come to expect. As always we appreciate your support. If you have any questions, please contact your local PABCO® representative.

Your continued business and support is greatly valued.

PABCO Gypsum

20% Increase

PABCO® Gypsum a division of PABCO® building products, LLC



To: All Vulcraft/Verco customers

Date: November 18, 2016

Subject: Steel Pricing

As a part of Nucor, the Vulcraft/Verco group is positioned to provide you with accurate information from Nucor's broadly diversified product groups. We provide this information to you so that you are able to make well informed decisions to profitably run your business.

Steel makers, including Nucor, have recently announced price increases across several steel product groups. Order books are firming and capacity utilization is climbing across the industry. In addition, key input costs such as scrap are beginning to move upward.

As a result, our material costs are increasing and we will be moving prices up immediately. Please be aware of this as you prepare new budgets and estimates.

As always, Vulcraft and Verco will continue to honor all of our previous agreements, as well as outstanding quotes that are within their 30-day window.

Thank you for your continued support and ongoing partnership. If you have any questions regarding this letter or any project, please do not hesitate to contact your Vulcraft/Verco division or District Sales Office.

Sincerely,

*Carlos Galvan
Ken Bowden
Karl Geesaman
John Grayson
Greg Mittendorf
Tom Schlickhernd*

Division Sales Managers
Nucor Vulcraft/Verco Group

Overall Increase

Nucor Vulcraft/Verco Group

www.nucor.com www.vulcraft.com www.vercodeck.com

STATION COST PROJECTIONS

CORE's Process

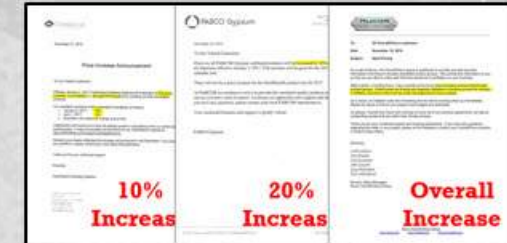
1. Leverage Historical Cost Data



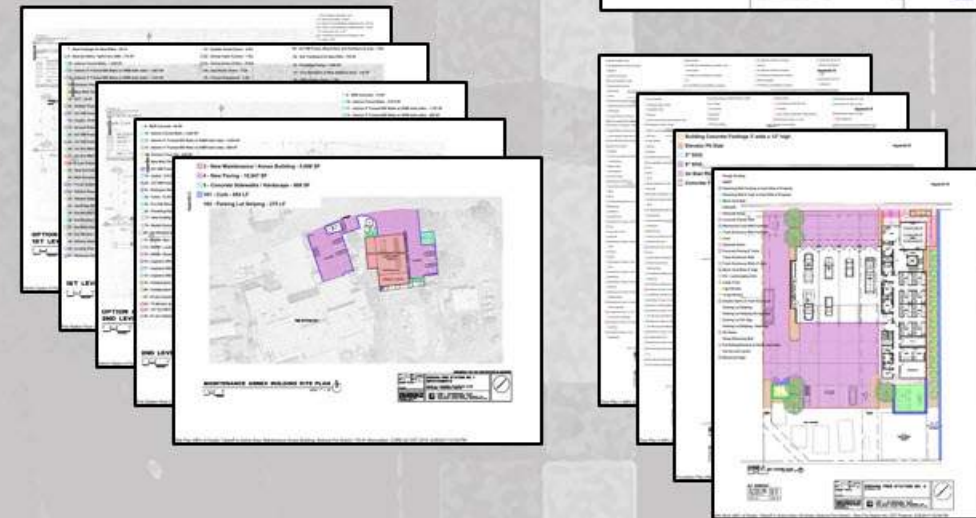
Project Name	Year	Cost (\$)	Unit
Project A	2015	1,200,000	10,000 sq ft
Project B	2016	1,500,000	12,000 sq ft
Project C	2017	1,800,000	15,000 sq ft
Project D	2018	2,100,000	18,000 sq ft
Project E	2019	2,400,000	20,000 sq ft
Project F	2020	2,700,000	22,000 sq ft



2. Adjust for Current Market Conditions



3. Study Needs Assessment



- Elevator Pit Walls 9' high
- Int Railing/Handrail at Stairs and Ramp
- Map Sign
- Sealed Concrete Floor
- Elevator Shaft Walls 14' High
- Polished Concrete Floors
- Shower Door
- Carpets
- Exterior Living Quarters Side CMU Walls 14' high
- Sealed Concrete Floor at App Bays
- TP Dispenser
- Ceramic Tile Floors at Showers
- Exterior Apparatus Bay CMU Walls 12"x12" x 14' High
- Hand Dryer / PT Dispenser / Trash Combo
- Ceramic Wall Tile at Showers and Restrooms full height 9' high
- Lower Cabinets w/ Solid Steel Tops
- Interior Metal Stud Walls and Drywall both sides 10' high
- Upper P-Lam Cabinets
- Grab Bars
- Lower P-Lam Cabinets w/ P-Lam Top
- 1' wide opening
- Washer / Dryer
- Soap Dispenser
- Turn Out Lockers
- Bi-Fold Doors at Exits 14'x14'
- P-Lam Cabinets w/ Solid Surface Top in Restrooms
- Mirror
- Barack
- Overhead Sectional Doors w/ 1 row Glazing 14'x14'
- Display Case
- Ice Machine
- 2-stop Elevator
- Ext Storefront 10' high x 14' wide
- Toilet
- Decor Sink / SS Top
- Sink at RR
- Ext Storefront 10' high x 10' wide
- Urinal
- Extractor
- Shower
- Ext Storefront 10' high x 3' wide
- Dryer
- Ext Storefront 10' high x 4' wide
- SCBA Equip
- Ext Storefront 10' high x 12' wide
- Slide Pole
- Ext Storefront 10' high x 10' wide
- Flashing Piping
- Int Storefront 9' high x 3'-0" wide
- HVAC at App Bays
- Int Storefront 9' high x 11' wide
- Trench Drains at App Bays
- Int Storefront 9' high x 4'-0" wide
- Cord Reels
- Int Storefront 9' high x 6' wide
- Pipe Bolts

- P-Lam Countertop
- 3"x7" HM Frame, Solid
- Corner Guards
- 3"x7" HM Frame, Solid
- TV
- 3"x7" Ext HM Frame, Solid
- P-Lam Countertop
- Tall Storage Cabinet / Pantry
- 2-compartment Sink
- Dishwasher
- Exterior Living Quarters Side CMU Walls 4' high
- Ext Storefront 10' high x 10' wide
- Exterior Lower Cabinets w/ Solid Steel Top at BBO
- Microwave
- 1' wide opening
- Map Sign
- Grab Bars
- Tall Double Storage Cabinet
- Full Length Mirror at Fitness Room
- Toilet
- Barack
- Urinal
- Elevator Shaft Walls 20' high
- Sink at RR
- Hand Dryer / PT Dispenser / Trash Combo
- Ext Bakery Framed Low Walls
- Mirror
- Int Railing/Handrail at Stairs and Ramp
- Soap Dispenser
- Cable Guardrail at 2nd Level Opening
- TP Dispenser
- Rubber Flooring
- Lower P-Lam Cabinets w/ P-Lam Top
- Sealed Concrete Floor
- Int Storefront 9' high x 10' wide
- Carpets
- Ceramic Wall Tile at Showers and Restrooms full height 9' high
- Polished Concrete Floors
- Flashing Piping
- 3"x7" HM Frame, SCW Doors, Hardware
- Calling Fans
- 3"x7" HM Frame, SCW Doors, Hardware w/ Lits
- Int Storefront 10' high x 10' wide
- 3"x7" HM Frame, SCW Doors, Hardware w/ Lits
- Ext Storefront 10' high x 10' wide
- Epoxy Floor / Roofing at Bakery
- Ext Storefront 10' high x 14' wide
- 3"x7" HM Frame, Solid HM Doors, Hardware
- Ext Storefront 10' high x 3' wide
- 3"x7" HM Frame, Solid HM Doors, Hardware
- Ext Storefront 10' high x 4' wide
- Int Storefront Door 3"x7"
- Ext Storefront 10' high x 12' wide
- Ext Triple Stacking Slider Glass Door 10' high x 10' wide
- TV
- Interior Metal Stud Walls and Drywall both sides 10' high
- P-Lam Cabinets w/ Solid Surface Top in Restrooms

- Ext Building Signage *FIRE STATION NO. 4 XXXX
- Oven / Range
- Corner Guards
- Range Hood
- Refrigerator
- ADA Room Signage
- Building Concrete Footings 3' wide x 12" high
- Elevator Pit Slab
- 5" SOG
- 8" SOG
- Int Stair Riser/Landing Panel
- Concrete Filled Stair Pans

- Rough Grading
- SWPP
- Retaining Wall Footing on East Side of Property
- Retaining Wall 8' high on East Side of Property
- Mech Yard Slab
- Sidewalk
- Sidewalk Ramp
- Concrete Planter Wall
- Mechanical Yard Wall Footings
- Trash Enclosure Wall Footings
- Curb
- Sidewalk Stairs
- Concrete Paving 8" thick
- Trash Enclosure Slab
- Trash Enclosure Walls 6' high
- Mech Yard Walls 8' high
- DG - Landscaping Area
- Large Trees
- 5 gal Shrubs
- 15 gal Shrubs
- Double Gates at Trash Enclosure
- Parking Lot Striping
- Parking Lot Striping HC Symbol
- Parking Lot HC Sign
- Parking Lot Striping - Hatching
- HC Ramp
- Ramp Retaining Wall
- Ext Railing/Handrail at Stairs and Ramp
- Survey and Layout
- Monument Sign

SCHEME 02
OPTION 01 - 1ST FLOOR PLAN

S.F. SUMMARY

1ST FLOOR LVNG: 4,216 SF
2ND FLOOR LVNG: 3,360 SF
APPURTEN. DEV: 4,404 SF
TOTAL SF: 11,980 SF

SCHEME 02
OPTION 01 - 2ND FLOOR PLAN

S.F. SUMMARY

1ST FLOOR LVNG: 4,216 SF
2ND FLOOR LVNG: 3,360 SF
APPURTEN. DEV: 4,404 SF
TOTAL SF: 11,980 SF

SCHEME 02
OPTION 01 - 1ST FLOOR PLAN

S.F. SUMMARY

1ST FLOOR LVNG: 4,216 SF
2ND FLOOR LVNG: 3,360 SF
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SCHEME 02
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S.F. SUMMARY

1ST FLOOR LVNG: 4,216 SF
2ND FLOOR LVNG: 3,360 SF
APPURTEN. DEV: 4,404 SF
TOTAL SF: 11,980 SF

Station 4 Re-Build

<p>SEDONA FIRE STATION NO. 4 Sedona, AZ</p> <p>LEA - Architects, LLC 1700 EAST HORTONWAY PHOENIX, AZ ARCHITECTURE PLANNING INTERIOR SUBDIVISION SIGNS</p>	<p>SEDONA FIRE STATION NO. 4 Sedona, AZ</p>
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STATION COST PROJECTIONS

CORE's Process


1. Leverage Historical Cost Data



Station	Year	Cost	Year	Cost	Year	Cost
101	2015	\$1,200,000	2016	\$1,300,000	2017	\$1,400,000
102	2015	\$1,100,000	2016	\$1,200,000	2017	\$1,300,000
103	2015	\$1,000,000	2016	\$1,100,000	2017	\$1,200,000
104	2015	\$900,000	2016	\$1,000,000	2017	\$1,100,000
105	2015	\$800,000	2016	\$900,000	2017	\$1,000,000



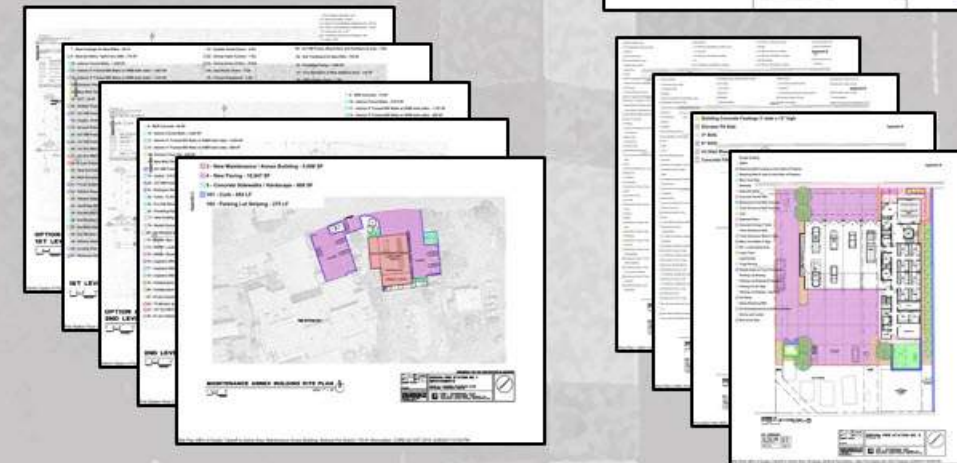
2. Adjust for Current Market Conditions



Category	Adjustment
Material	10% Increase
Labor	20% Increase
Overall	Overall Increase



3. Study Needs Assessment



4. Arrive at Conceptual Estimate Range



Station	Year	Estimate Range
101	2018	\$1,500,000 - \$1,800,000
102	2018	\$1,400,000 - \$1,700,000
103	2018	\$1,300,000 - \$1,600,000
104	2018	\$1,200,000 - \$1,500,000
105	2018	\$1,100,000 - \$1,400,000

1. Lever



2. Adjus



3. Study



4. Arriv





Project Name:	Sedona Fire District - Fire Station #1 Reno		Sedona Fire District - Fire Station #3 Reno		Sedona Fire District - Fire Station #4 Demo / Rebuild		Sedona Fire District - Fire Station #5 New Build	
Total % Escalation:	4%		4%		4%		4%	
Project Category:	Fire Station (Reno)		Fire Station (Reno)		Fire Station (New)		Fire Station (New)	
Building SF:	11,200 SF		16,065 SF		12,000 SF		5,500 SF	
Site In Acres:	1 Acres		1.5 Acres		0.8 Acres		2 Acres	
Project Start:	Jan-18		Jan-18		Jan-18		Jan-18	
Project Duration:	6 Months		6 Months		10 Months		6 Months	
Demo/ Off Site	\$67,600	\$67,600 /Acre	\$31,200	\$20,800 /Acre	\$124,800	\$156,000 /Acre	\$0	\$0 /Acre
Site Work Rough	\$34,320	\$34,320 /Acre	\$37,960	\$25,307 /Acre	\$105,352	\$131,690 /Acre	\$194,064	\$97,032 /Acre
Site Work Finish	\$84,760	\$84,760 /Acre	\$158,600	\$105,733 /Acre	\$199,160	\$248,950 /Acre	\$236,600	\$118,300 /Acre
Structure	\$62,920	\$5.62 /SF	\$78,000	\$4.86 /SF	\$587,600	\$48.97 /SF	\$322,400	\$58.62 /SF
Enclosure	\$98,800	\$8.82 /SF	\$59,800	\$3.72 /SF	\$268,320	\$22.36 /SF	\$166,400	\$30.25 /SF
Interior Finishes	\$441,480	\$39.42 /SF	\$256,360	\$15.96 /SF	\$677,560	\$56.46 /SF	\$256,360	\$46.61 /SF
Specialties	\$52,520	\$4.69 /SF	\$35,360	\$2.20 /SF	\$67,184	\$5.60 /SF	\$37,440	\$6.81 /SF
Equipment	\$145,600	\$13.00 /SF	\$67,600	\$4.21 /SF	\$176,800	\$14.73 /SF	\$67,600	\$12.29 /SF
MEP Systems	\$524,784	\$46.86 /SF	\$430,040	\$26.77 /SF	\$879,840	\$73.32 /SF	\$413,400	\$75.16 /SF
Special Systems	\$104,000	\$9.29 /SF	\$78,000	\$4.86 /SF	\$67,600	\$5.63 /SF	\$31,200	\$5.67 /SF
GC's & Fees	\$674,960	26.50%	\$605,280	29.63%	\$1,296,880	26.23%	\$632,320	24.14%
Contingency	\$254,800	10%	\$204,880	10%	\$494,000	10%	\$262,080	10%
LOW RANGE	\$2,300,000		\$1,800,000		\$4,450,000		\$2,300,000	
LOW COST / SF	\$205.36		\$112.04		\$370.83		\$418.18	
HIGH RANGE	\$2,546,544		\$2,043,080		\$4,945,096		\$2,619,864	
HIGH COST / SF	\$227.37		\$127.18		\$412.09		\$476.34	
Additional Scope	\$1,000,000		\$0		\$0		\$0	
	<i>Maint & Storage Building ~ 5,000 SF</i>							
TOTAL LOW RANGE COST	\$10,850,000							
TOTAL HIGH RANGE COST	\$12,154,584							

20% Increase Overall Increase



Item	Quantity	Unit	Cost

CONCEPTUAL ESTIMATE
Sedona Fire District Stations

Project Name:	Sedona Fire District - Fire Station #1 Reno	Sedona Fire District - Fire Station #3 Reno	Sedona Fire District - Fire Station #4 Demo / Rebuild	Sedona Fire District - Fire Station #5 New Build
				
Building SF:	11,200 SF	16,065 SF	12,000 SF	5,500 SF
LOW RANGE	\$2,300,000	\$1,800,000	\$4,450,000	\$2,300,000
LOW COST / SF	\$205.36	\$112.04	\$370.83	\$418.18
HIGH RANGE	\$2,546,544	\$2,043,080	\$4,945,096	\$2,619,864
HIGH COST / SF	\$227.37	\$127.18	\$412.09	\$476.34
TOTAL LOW RANGE COST	\$10,850,000			
TOTAL HIGH RANGE COST	\$12,154,584			

PROJECT RISK AWARENESS

Station Specific Risks

Station 1

ADA, Plumbing and Electrical Code, Abatement



Station 3

ADA and Structural



Station 4

*Site Retaining Wall, Easements, Sitework,
Existing Underground Utilities, Abatement (Transite Pipe)*



PROJECT RISK AWARENESS

Managing Overall Project Costs

- Design & Engineering
- Materials Testing & Special Inspections
- Geotechnical Survey
- Permits & Utility Tap Fees
- Preconstruction Fee
- Traffic Signal Work (if required)
- Dispatch/ Alerting Devices Systems (rough-in only)
- Temporary Housing (during rebuild projects)

Recommend assuming 10-15% above construction costs for these project costs

Overall Project Budget			
Dairy Mountain Fire District Firehouse 145 Replacement 4/26/2017			
Description	Cost	Responsible	Comments
A) Professional Services			
1) Design	TBD	Design Team	
2) Preconstruction Fees	TBD	CORE	
3) Materials Testing & Special Inspections			
4) Geo-Tech			
5) Permit & Utility Fees			
Subtotal of Section A		\$0	
B) Construction			
1) Construction Costs (Including Soft Costs & GC's)	TBD	CORE	
2) Demo Existing Structure	TBD	CORE	
3) New Storage Tank for Fire Water	TBD	CORE	
4) Fueling Station	TBD	CORE	
5) Kitchen Equipment, Hood & Appliances	TBD	CORE	
6) Cabling for Dispatch (Alerting) System	TBD	CORE	
Subtotal of Section B		\$0	
C) Additional Items/Upgrades			
1) Four Fold Doors	TBD		
2) Solutubes	TBD		
3) North Parking Lot	TBD		
4) Built-in Millwork (Dorms)	TBD		
5) Solar Hot Water Heater	TBD		
Subtotal of Section C		\$0	
D) DMFD Direct Construction Costs			
1) Traffic Signal	Not Required		
2) Dispatch System	TBD	DMFD	GMP to include Infrastructure & Cabling
3) Extractor	TBD		
4) SCBA Fill Equipment	TBD		
5) Salvage Existing Trees	TBD		
6) Technology (AV, Cabling & Security)	TBD		
8) Athletic Equipment	TBD		
9) New Training Facility Building	TBD		
10) Temporary Facility	TBD	Separate Budget	
11) Propane Tank	TBD		
12) Owner Contingency	TBD	DMFD	
Subtotal of Section D		\$0	
E) FF&E Direct Costs			
1) Janitor Room Cleaning Items and Materials	TBD	DMFD	
2) Kitchen Pots, Pans, Utensils, Coffee Pot, Toaster, etc.	TBD	DMFD	
3) Closets	TBD	DMFD	
4) Phones	TBD	DMFD	
5) Computers/Printers	TBD	DMFD	
6) Dorm Room Furniture & Mattress	TBD	DMFD	
7) Lazy Boys	TBD	DMFD	
8) Kitchen Bar Stools	TBD	DMFD	
9) Dining Room Table & Chairs	TBD	DMFD	
10) Exam Room Bed	TBD	DMFD	
Subtotal of Section E		\$0	
OVERALL PROJECT TOTAL			

NEXT STEPS

- Verify priorities
- Inform public and achieve consensus
- Identify the correct procurement method

NEXT STEPS

CMAR Process

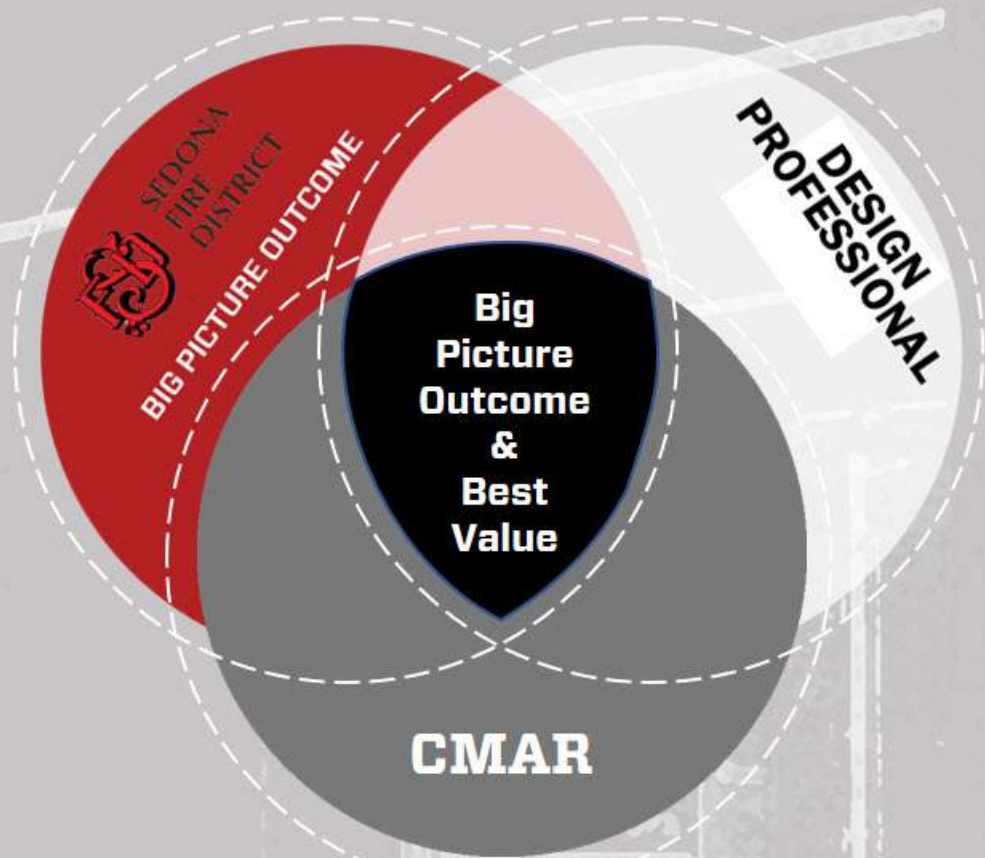
What is CMAR?

Construction Manager at Risk (CMAR) is a project delivery system that seeks to meet the Owner's Big Picture Outcome in a manner that brings Best Value through a collaborative, team-based approach. The team members include the Owner, Contractor, Architect & Engineers, and key Subcontractors.

NEXT STEPS

CMAR Process

Why CMAR Works...



- Allows for Contractor input during design
- Allows for Subcontractor input during design
- Keeps project on budget throughout design
- Mitigates project risks through constructability reviews and sub coordination
- Allows for recognition of wishes and constraints (Value Engineering)
- Competitive bidding still exists with subcontractors in every trade
- Costs are managed in an Open-Book process

NEXT STEPS

CMAR Process

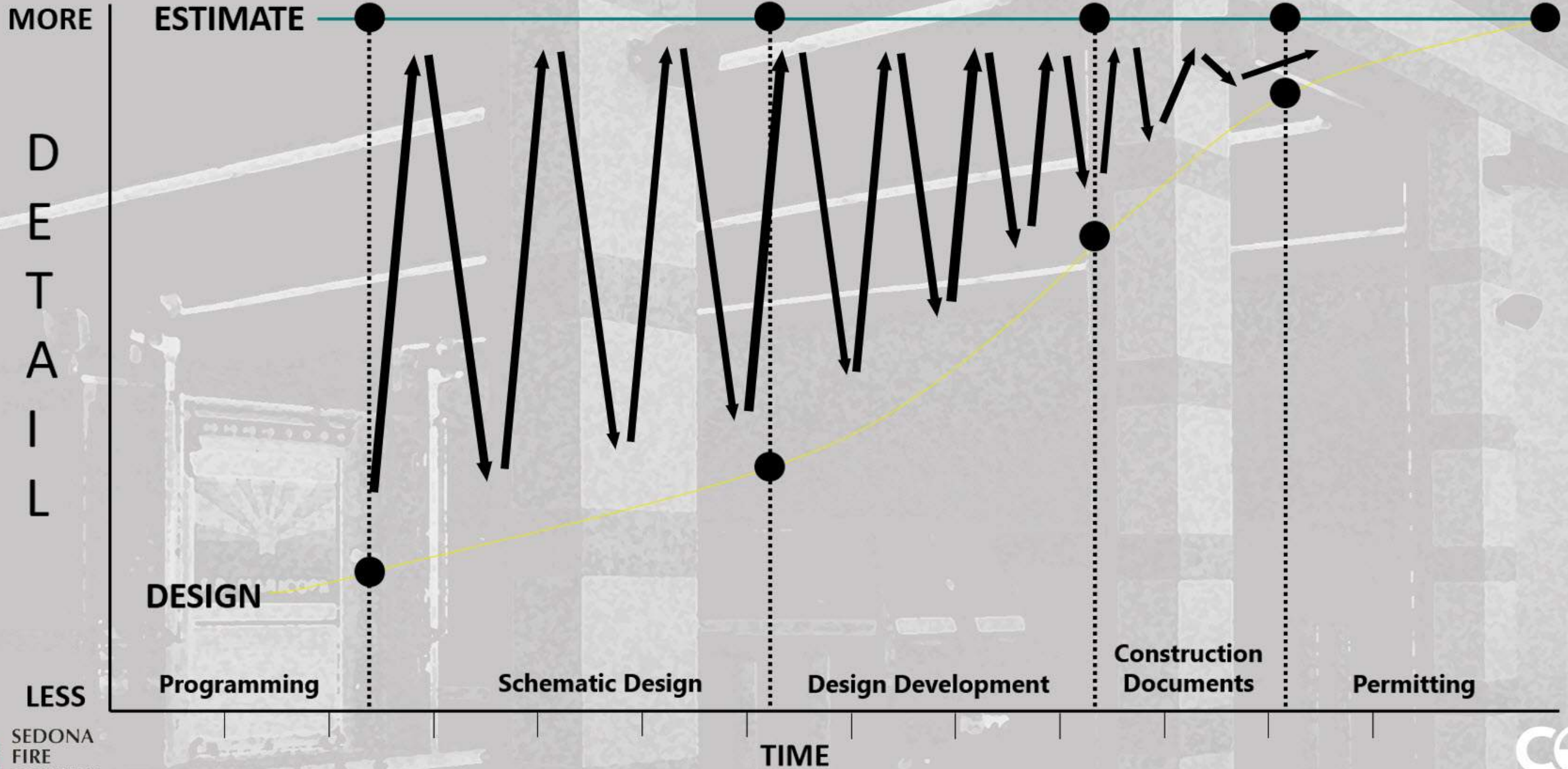
- Living Estimate
- + Options
- + Qualified Subs
- + Competition
- + Transparency
- + Guaranteed Maximum Price



BEST VALUE

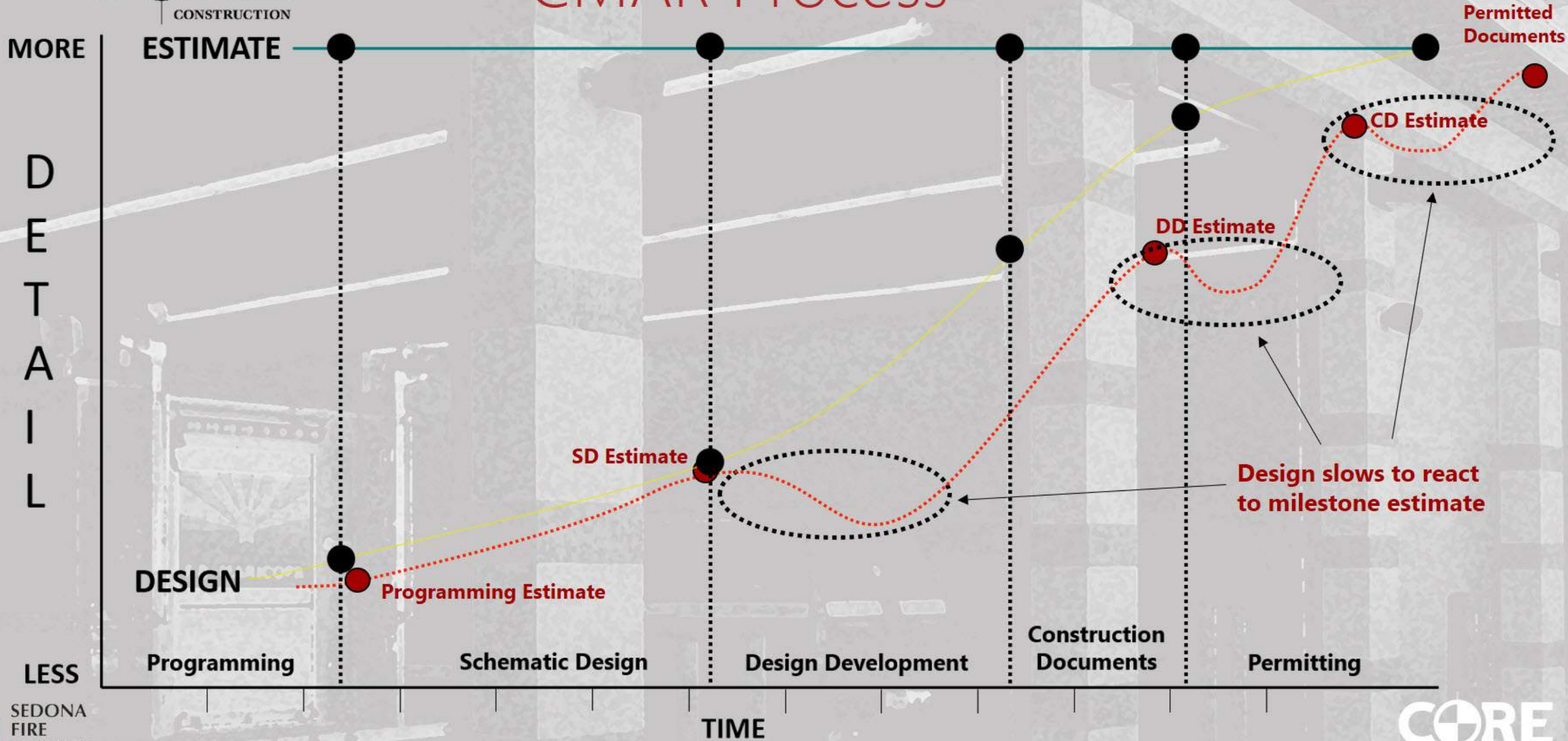
NEXT STEPS

CMAR Process



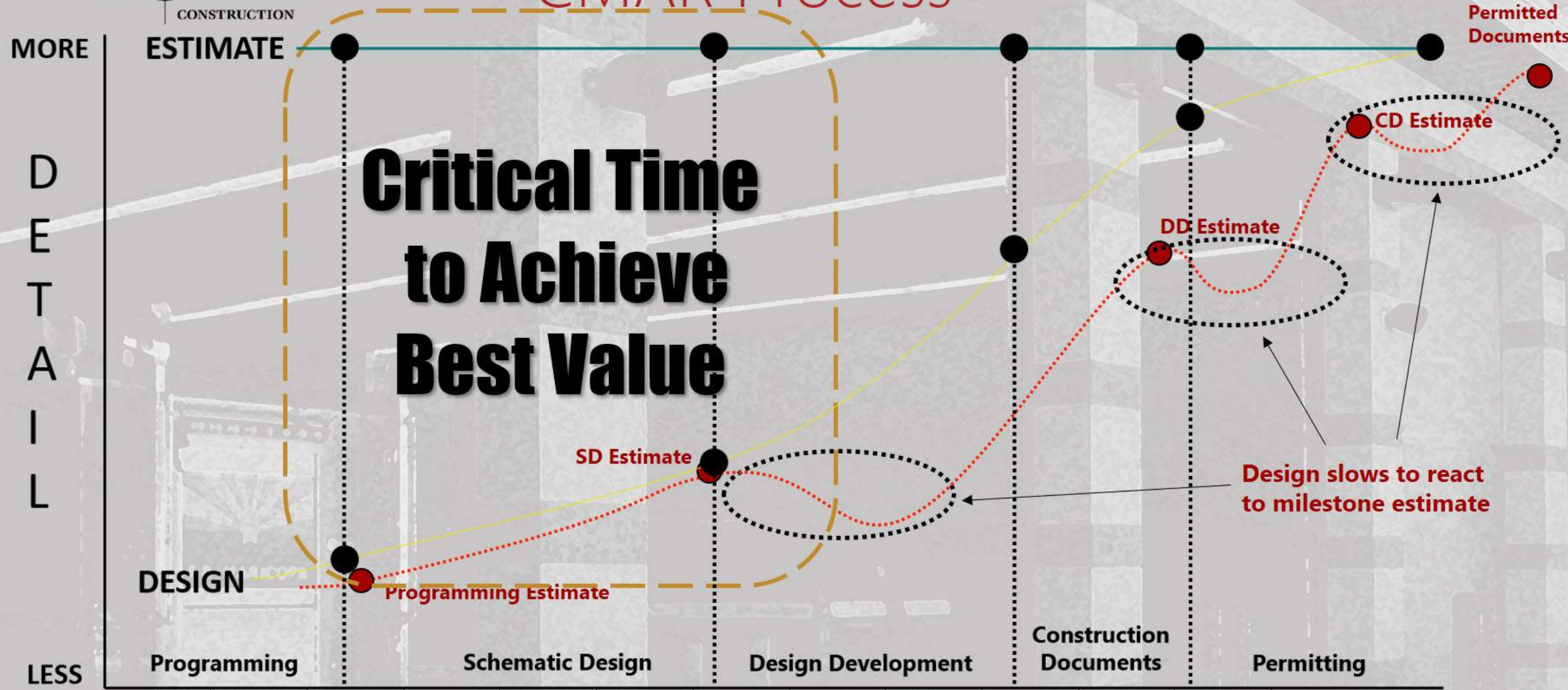
NEXT STEPS

CMAR Process



NEXT STEPS

CMAR Process



Critical Time to Achieve Best Value

Design slows to react to milestone estimate

NEXT STEPS

CMAR Process

Living Estimate

+ Options

2. For the pur below.

Metal Detailing



Apparatus Bay Doors

3. There is app

4. The options

Options
Option 1 - METAL STUDS
Option 2a - CMU
Option 2b - CMU (exposed)
Option 3 - AAC
Option 4 - ICF
Option 5 - WOOD FRAMING

Options

In this section, the option contains a list of components is intended to be compared to the other options in terms of insulation, floor and roof framing structure and the roof

Option 1 - Metal Studs

Description – This option is created with 6” light weight drywall on the metal studs. The exterior side of the studs is clad with a decorative cladding.

Option 1 - Steel framing

Scope Item
Structural Steel "Post and Beam" (housing area)
6" x 16" gauge @ 16" o.c. (truck bay area)
Interior Drywall
Impact Resistant Finish
Exterior Densglass Gypsum Board
Decorative Cladding

Option 1 Pro's & Con's

Option 1 appears to be the most cost-effective frame and metal studs

Option 2 - CMU

Description Option 2a is a concrete masonry block wall. The block will contain a rebar. The block will be furred out with 4" CMU. There will be an 4" CMU on the two CMU walls. The exterior side of the CMU will be siding, or a concrete siding product such as HardiePlank. **Description** Option 2b is a concrete masonry block wall (the same as Option 2a) and assumes that the truck bay housing and office are insulated with rigid insulation and a drywall

provide durability. The block is left exposed.

Option 2a - Load bearing CMU

Scope Item
Standard Grey CMU
Decorative Cladding
3 5/8" Metal Studs
Rigid insulation

Option 2b - Load bearing CMU

Scope Item
Split-faced or Gypsum Board
3 5/8" Metal Studs
housing area
Rigid insulation

Option 2 Pro's & Con's

Option 2b, employing rigid insulation, the truck bay area is approved by the Fire Department.

Option 3 - AAC

Description – This option is a AAC block wall. AAC is a lightweight, fire resistant material. AAC has the most effective thermal insulation, the most sound absorption, and the most fire resistance. AAC is a good choice for exterior walls. AAC is a good choice for exterior walls. AAC is a good choice for exterior walls. AAC is a good choice for exterior walls.

Option 3 - AAC

Scope Item
AAC Load bearing
Decorative Cladding
Direct Applied Drywall
Impact Resistant Finish

Option 3 Pro's & Con's

The AAC option has good thermal properties, it is a good choice for exterior walls.

Option 4 - Insulated Concrete Formwork

Description – This option uses a concrete masonry block wall. ICF is a Styrofoam system that allows the concrete to be poured in place. The forms remain in place permanently. Because the ICF system is a permanent form, it allows for the direct application of drywall to the interior (truck bay area). The exterior side of the ICF system is a concrete siding product such as HardiePlank.

Option 4 - ICF walls, w/ Decorative Cladding

Scope Item
ICF Blocks w/ rebar and concrete
Decorative Cladding (Stone, Wood Siding)
Direct Applied Drywall
Impact Resistant Finish for Truck Bay

Option 4 Pro's & Con's

Like AAC, the ICF option's cost is high. The ICF option is a thermal, sound, and fire resistant material. The City of Phoenix has been building ICF walls for many years.

Option 5 - Wood Framing

Description – This option has wood framing with batt insulation in the walls. The exterior side of the wood framing is drywall being used in the truck bay area. The exterior side of the wood framing is weather resistant building wrap. The exterior side of the wood framing is a concrete siding product such as HardiePlank.

Option 5 - Wood Framed Structure

Scope Item
Structural Wood Framing System
Exterior Plywood Sheathing and Weather Resistant Building Wrap
Decorative Cladding (Stone, Wood Siding)
Interior Drywall w/ Batt Insulation
Impact Resistant Finish and Batt Insulation

Option 5 Pro's & Con's

Wood framing was considered because it is a common building material. The component cost is more of a common building material. However, there are escalation costs. However, there are escalation costs. However, there are escalation costs.

What is the "Decorative Cladding"?

All of the options above (with the exception of Option 2a) include using a "Decorative cladding". Some of the ideas for this cladding include "stick stone", wood siding/paneling, or a fiber-cement board paneling product such as HardiePlank. Based on their average unit costs (shown below), we will assume a unit cost of \$16/sf for the use of these materials on the options with an exterior "Decorative cladding".

Decorative Cladding Options	
Scope Item	Cost/SF
Masonry "Stick Stone" façade	\$35-45
Wood Siding/Paneling	\$3-4
Fiber-Cement Board Paneling (HardiePlank)	\$5-6
Average Cost of Decorative Cladding to use for analysis	\$16

CONCLUSION

Summary

	Option 1 - METAL STUDS	Option 2a - CMU	Option 2b - CMU (exposed)	Option 3 - AAC	Option 4 - ICF	Option 5 - WOOD FRAMED
Subtotal	\$462,985	\$416,960	\$280,710	\$380,945	\$375,495	\$371,325
Exterior Wall Assembly \$/SF	\$38.58	\$34.75	\$23.39	\$31.75	\$31.29	\$30.94

As shown above, this analysis clearly concludes that Option 2b (with exposed decorative CMU) is the most economical way to construct this facility. We feel this option will also provide for a durable and well-insulated interior for the truck-bay portion of the facility.

It also has become apparent that it would be very worthwhile to study the AAC and ICF materials (options 3 & 4) as potential building materials. They are both in the median cost range and would provide other benefits such as superior thermal, fire, and sound properties.

Another important consideration is the "decorative cladding". There could be a wide swing in cost for "decorative cladding" of different type and quality. As the \$16/sf cost that we currently have plugged in is brought down, the cost of options with cladding would get closer to the cost of Option 2b.

It is important to remember that the costs shown above represent incomplete portion of the structure, and are intended only to compare the structure and skin options being considered.

- END -

NEXT STEPS

CMAR Process

Living Estimate

+ Options


+ Qualified Subs

NEXT STEPS

CMAR Process

Formstack (107) x CORE AZ Pre-qualification x

coreconstruct-uknep.formstack.com/forms/bid_form_ter



Subcontractor Professional Services

CORE AZ Pre-qualification

CORE Construction, Inc. requires a Pre-qualification Form to be completed by all Subcontractors order to bid on future projects and be awarded contracts on upcoming projects.

Please fill in Pre-qualification form completely.

NOTE:
If you are unable to complete the form, please use the [Save and Return](#) button, copy the link provided and send to your email.

Pre-qualification is*
 New Renewal

Date/Time:*
Apr 15 2015

Business Information

Company Name*

Address (no PO boxes)*

NEXT STEPS

CMAR Process

- Living Estimate
- + Options
- + Qualified Subs
- + Competition

NEXT STEPS

CMAR Process

**CORE has over 1,400
Prequalified Subcontractors in
Arizona**

NEXT STEPS

CMAR Process

- Living Estimate
- + Options
- + Qualified Subs
- + Competition
- + Transparency



Project Name
 Insert ESTIMATE DATE & DATE
 LOCATION
 PROJECT
 DRAWING NUMBER
 WORK PLAN
 SET NUMBER
 SQUARE FOOTAGE

#	Description	Base Price	Previous Estimate	Variance	ALTERNATES	
					Alt #1	Alt #2
PRELIMINARY SITE INVESTIGATIONS						
1	Overview	\$0	\$0		\$0	\$0
SITE WORK (GENERAL)						
6	Survey & Layout	\$0	\$0		\$0	\$0
7	Earthwork & Paving	\$0	\$0		\$0	\$0
7	Sanitation & Storm Water Systems	\$0	\$0		\$0	\$0
SITE WORK (SPECIAL)						
12	Site Grading & Drains	\$0	\$0		\$0	\$0
13	Excavation & Retention	\$0	\$0		\$0	\$0
14	Fencing	\$0	\$0		\$0	\$0
15	Site Remediation	\$0	\$0		\$0	\$0
16	Site Containment	\$0	\$0		\$0	\$0
STRUCTURE						
20	Building Concrete	\$0	\$0		\$0	\$0
21	Reinforced Concrete	\$0	\$0		\$0	\$0
22	Concrete Formwork	\$0	\$0		\$0	\$0
23	Masonry	\$0	\$0		\$0	\$0
24	Structural Steel Package	\$0	\$0		\$0	\$0
25	Applied Insulation	\$0	\$0		\$0	\$0
ENCLOSURE						
30	Overhead / Storage / Air Beam	\$0	\$0		\$0	\$0
31	Insulation	\$0	\$0		\$0	\$0
32	Aluminum Glass & Clerestory	\$0	\$0		\$0	\$0
33	Metal Wall Panels	\$0	\$0		\$0	\$0
34	Lighting Fixtures	\$0	\$0		\$0	\$0
40	Light Fixtures	\$0	\$0		\$0	\$0
41	Light Fixtures	\$0	\$0		\$0	\$0
42	Light Fixtures & Accessories	\$0	\$0		\$0	\$0
INTERIOR FINISHES						
46	Interior Concrete & Millwork	\$0	\$0		\$0	\$0
47	Door Frames & Hardware	\$0	\$0		\$0	\$0
48	Interior Wall Finish: Drywall & Board	\$0	\$0		\$0	\$0
49	Woodwork & Ceiling Package	\$0	\$0		\$0	\$0
50	Acoustic Ceiling	\$0	\$0		\$0	\$0
51	Site Package	\$0	\$0		\$0	\$0
52	Roofing Package	\$0	\$0		\$0	\$0
53	Concrete Scaffolding & Scaffolding	\$0	\$0		\$0	\$0
54	General Trade Services	\$0	\$0		\$0	\$0
55	Painting	\$0	\$0		\$0	\$0
EXTERIOR FINISHES						
62	Wood Finish Details	\$0	\$0		\$0	\$0
63	Window of walls & Curtains	\$0	\$0		\$0	\$0
64	Concrete Package	\$0	\$0		\$0	\$0
65	Interior Mill & Panels	\$0	\$0		\$0	\$0
66	Door Hardware & Accessories	\$0	\$0		\$0	\$0
67	Wall Protection & Corner Guards	\$0	\$0		\$0	\$0
68	Fire Protection & Systems	\$0	\$0		\$0	\$0
69	Painting	\$0	\$0		\$0	\$0
70	Other Building Services	\$0	\$0		\$0	\$0
71	Signs	\$0	\$0		\$0	\$0
72	Signs	\$0	\$0		\$0	\$0
EQUIPMENT						
73	Equipment Details	\$0	\$0		\$0	\$0
74	Equipment Installation	\$0	\$0		\$0	\$0
75	Mobile Office Equipment	\$0	\$0		\$0	\$0
76	Laboratory Cabinets & Equipment	\$0	\$0		\$0	\$0
77	Other Office Equipment	\$0	\$0		\$0	\$0
MISC SYSTEMS						
83	Fire Sprinkler Systems	\$0	\$0		\$0	\$0
84	Plumbing Systems	\$0	\$0		\$0	\$0
85	HVAC Systems	\$0	\$0		\$0	\$0
86	MEP Systems	\$0	\$0		\$0	\$0
87	Electrical Systems	\$0	\$0		\$0	\$0
88	Security Systems	\$0	\$0		\$0	\$0
89	Fire Alarm Systems	\$0	\$0		\$0	\$0
90	Other Systems	\$0	\$0		\$0	\$0
91	Signs	\$0	\$0		\$0	\$0
SPECIAL SYSTEMS						
92	Structural Lighting Systems	\$0	\$0		\$0	\$0
93	Security/Access Control Systems	\$0	\$0		\$0	\$0
94	Audio Visual Systems	\$0	\$0		\$0	\$0
95	IT/AV Control Systems	\$0	\$0		\$0	\$0
CONTINGENCY						
99	Construction Contingency	\$0	\$0		\$0	\$0
Subtotal		\$0	\$0		\$0	\$0
SECTOR EXPENSES		SECTOR	MARKET		LABOR	PERMITS
Subtotal (with Service Contracting)		\$0	\$0		\$0	\$0
Subtotal (with GC's Insurance, Tax, & Fee)		\$0	\$0		\$0	\$0
Subtotal (with GC's Insurance, Tax, & Fee)		\$0	\$0		\$0	\$0
Subtotal (with GC's Insurance, Tax, & Fee)		\$0	\$0		\$0	\$0
Estimate Total		\$0			\$0	\$0



NEXT STEPS

CMAR Process



Project Name
Insert Estimate Level & Date

LOCATION:
 ARCHITECT:
 DURATION(mnths): 12
 WARRANTY(yrs): 1
 SITE ACREAGE: 4.0
 SQUARE FOOTAGE: 25,000

#	Description	Base Price	Previous Estimate	Variance	ALTERNATES	
					Alt #1	Alt #2
	DEMOLITION/ OFF-SITE INFRASTRUCTURE	\$0	\$0		\$0	\$0
1	Demolition					
	SITE WORK (ROUGH)	\$0	\$0		\$0	\$0
5	Survey & Layout					
6	Earthwork & Paving					
7	Site Utilities & Storm Water Systems					
	SITE WORK (FINISH)	\$0	\$0		\$0	\$0
12	Site Signage & Striping					
13	Landscaping & Irrigation					
14	Fencing					
15	Site Furnishings					
16	Site Concrete					
	STRUCTURE	\$0	\$0		\$0	\$0
20	Building Concrete					
21	Hollow Core Planks					
22	Concrete Tilt Panels					
23	Masonry					



Demolition

1

Project Name

Insert Estimate Level & Date

	Subcontractor 1	Subcontractor 2	Subcontractor 3	Subcontractor 4	Subcontractor 5
Contact Name:	Chris	John	Jim	Joe	
Phone:	602-902-0202	602-030-2020	480-222-4492	623-053-8382	
Email:	Chris@ofickers.com	John@swdemo.com	jim@bcs.com	joe@joes.com	
PQ Status:	PQ'd - 3	PQ'd - 3	PQ'd - 2.5	PQ'd - 3	

TOTAL

\$0

Section	Description						
02 41 19	Selective Structural Demo						
	Interior Demolition						
	Demo Flooring						
	Demo Walls						
	Demo Ceilings						
	Exterior Demolition						
	Demo Exterior Furnishings						
	Demo Sidewalk						
	Demo Canopies						
	Warranty						

CORE Recommended Sub-Contractor: _____ Bid Price: _____ Date: 4/15/2015

Why: _____

Reason for not obtaining three bids?: _____

Reason for marking Subcontractor "Incomplete": _____



Casa Grande Public Safety Facility		CYR Budget	DDA Construction	Banked Asphalt	Ellison Mills	DMA A Construction	Knobel Bros	Rount	Young and Sons	Hansen Construction	Northland Paving	ACE Asphalt	Markham Contracting											
Estimate #5 - GMP - 9/23/09		P: (518,836-8048)	P: (518,836-8048)	P: (518,836-7108)	P: (518,876-4084)	P: (518,836-3866)	P: (621)581-9080	P: (480)195-1111	P: (520) 887-5499	P: (480) 211-0917	P: (480) 241-8954	P: (480) 204-4854	P: (513) 868-8108											
SEC	DESCRIPTION	INCOMPLETE	COMPLETE	INCOMPLETE	COMPLETE	COMPLETE	COMPLETE	COMPLETE	COMPLETE	COMPLETE	INCOMPLETE	COMPLETE	COMPLETE											
	General Excavation on site		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES											
	General Excavation		2.8	2	2	2	2	2	2	2	2	2.8	2.8											
	Grass and Seem																							
	Suburban 11		✓		✓		✓																	
	Suburban 12		✓		✓		✓																	
	Grading		✓	541,810	Q	✓	574,853	✓	568,608	✓	532,480	✓	512,301	✓	507,549	✓	518,253	✓	517,603	✓	514,455	✓	514,784	
	Remove 4' top soil/Grass		✓		Q	✓	311,319	✓		✓		✓		✓		✓		✓		✓		✓	38,999	
	Mass Gravel		✓		Q	✓		✓		✓		✓		✓		✓		✓		✓		✓		
	Concrete Retain (4.5'x4'x7')		✓		Q	✓		✓		✓		✓		✓		✓		✓		✓		✓		
	Reinforcing		✓		Q	✓		✓		✓		✓		✓		✓		✓		✓		✓		
	Reinforcing (480 CF)		✓	512,353	Q	✓	578,876	Q	515,608		✓	551,796		✓		✓		✓		✓		✓		
	Regrade Landscape Areas							✓	514,308															
	Paving																							
	Prep Subgrade in paving areas		✓		✓	533,511	✓		✓		✓		✓											
	Base and Curbs 48"		✓		✓	51,788	✓		✓		✓		✓											
	1" Asphalt on 3" ABC (full duty area)		✓	3715,971	✓	3128,121	✓	3152,984	✓	3173,808	✓	3178,587	✓	3175,831	✓	3179,887	✓	3184,897	✓	3176,818	✓	3178,708	✓	3171,658
	1" Asphalt on 3" ABC (curry duty area)		✓	489,815	✓	462,485	✓	478,218	✓	460,495	✓	477,691	✓	468,475	✓									474,075
	Demolition and Removal of existing Val Vista Half Road		Q	53,753	Q	53,753	✓		✓		✓	53,753	?	53,753	Q	53,753	Q	53,753	Q	53,753	✓		Q	53,753
	14" x 14" steel reinforcing paving (1" on 3" per 14'x14')		Q	365,814	Q	365,814	✓	3111,312	✓	369,662	✓	369,019	Q	365,004	✓	3184,809	Q	365,814	Q	365,814	✓		Q	365,814
	Rebar Taper back to roadway at East and West side of driveway		✓		Q	506,218	✓		✓		✓	516,218	Q	516,218	Q	516,218	Q	516,218	Q	516,218	✓		Q	516,218
	Install Grading (curry)		Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04	Q	see sheet 04
	Add for Val Vista per 12/5/13 later check out to 3/10/14		Q			✓	462,485	✓	515,835	Q	516,000		✓	462,485							Q	588,477		
	Rebar/Reinforce		Q	300,808	Q	300,808	✓	51,808	Q	38,808	✓	57,628	Q	518,000	✓	515,700	✓		Q	518,808	✓		Q	518,808
	Parking and Flow-down areas		✓	51,317	Q		✓	58,193	✓		✓													
	Reinforcing Curbs 48"		✓	5857	Q		✓	5857	Q		✓	51,000												
	12" x 12" steel reinforcement (14' x 21')		✓	51,317	Q		✓	51,317	✓		✓													
	Parking Rebar, concrete (48" x 51')		✓	55,808	Q	55,808	Q	55,808	Q	55,808	✓	51,718	Q	55,000	Q	55,000	Q	55,000	Q	55,000	Q	55,000	Q	55,808
	Reinforcing Metal		Q	300,808	Q	300,808	Q	300,808	Q	300,808	Q	318,000	✓	318,000	Q	318,000	Q	318,000	Q	318,000	Q	318,000	Q	300,808
	Traffic Control		Q	55,808	Q	55,808	✓		Q	55,808	Q	55,808	✓	55,808	Q	55,808	Q	55,808	Q	55,808	Q	55,808	Q	55,808
	Modular		✓	511,117	✓	56,826	✓		✓	55,100	✓	55,551	✓											
	24" x 24"		Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808	Q	51,808
	Rebar and		Q	55,808	Q	55,808	✓	55,808	Q	55,808	Q	55,808	✓	55,808	Q	55,808	Q	55,808	Q	55,808	✓		✓	51,808
	Concrete Reinforcing Pad		Q	55,808	Q	55,808	✓	55,808	Q	55,808	Q	55,808	✓	55,808	Q	55,808	Q	55,808	Q	55,808	✓		✓	55,808
	Gravel emergency path to Waigo development		Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808
	Used 4g for compacted calcitic bedrock, with 1/2" top surface		Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808	Q	518,808
	Value Engineering																							
	Reduce Impact by deeper or larger Retention Basin			TBD		-	TBD	TBD	TBD	TBD	TBD	TBD	TBD											
	TOTAL	INCOMPLETE	5021,517	INCOMPLETE	5521,059	5524,517	5548,415	5572,509	5515,100	5618,177	INCOMPLETE	5520,511	5587,875											

CORE Recommended Sub Contractor: Ellison Mills Bid Price: \$523,186 Date: 12/3/2014

Why: _____
 Architect Review: _____
 Owner Review: _____



NEXT STEPS

CMAR Process

- Living Estimate
 - + Options
 - + Qualified Subs
 - + Competition
 - + Transparency
- + Guaranteed Maximum Price

NEXT STEPS

CMAR Process

GMP means

There are no surprises.

There are no change orders.

Everything is open book.

100% of savings is returned to YOU.

NEXT STEPS

CMAR Process

- Living Estimate
- + Options
- + Qualified Subs
- + Competition
- + Transparency
- + Guaranteed Maximum Price



BEST VALUE