

### **Outline**

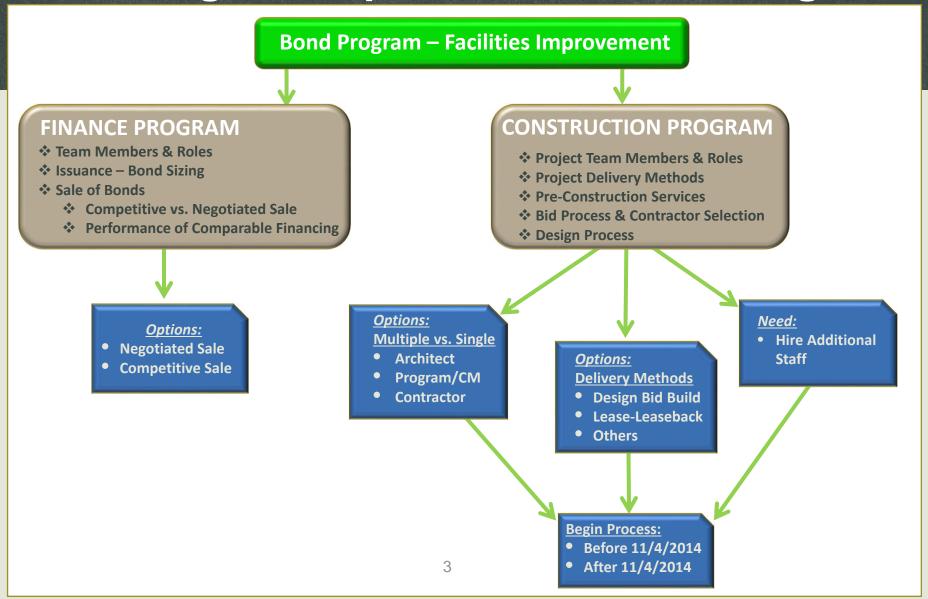
#### • Finance Program:

- Chet Wang Keygent Advisors
  - Team Members & Roles
  - Bond Sizing
  - Sale of Bonds

#### • Construction Program:

- <u>Terry Tao Atkinson Andelson Loya Ruud & Romo</u>
  - Team Members & Roles
  - Project Delivery Methods
  - Pre-construction Services
  - Bid Process and Contractor Selection
- Don Pender LPA
  - Design Process

### **Bond Program Implementation Planning**



# Finance Program

Chet Wang
Keygent Financial Services

#### **Finance Team**

#### **Primary Team**

- Financial Advisor
- Bond Counsel
- Disclosure Counsel
- Underwriter

#### **Other Parties**

- County
- Paying Agent
- Credit Rating Agencies



#### **Bond Program Variables**

#### General obligation bond programs are structured based on:

- District project needs
- District assessed value ("AV") growth
  - Determines statutory bonding capacity
- Available tax rate capacity
  - Annual tax rate ≈ annual bond debt service ÷ fiscal year AV
- Municipal bond interest rates
  - Function of:
    - National and international financial market factors
    - District credit ratings
    - Bond structure, e.g. bond type, financing term, tax status, redemption feature
    - Bond sale methodology
- Legal authority

As the above factors change, the timing of bond sales and the amount of bonds sold are tailored to maintain tax rate targets



#### \$296 Million Bond Program

**Summary:** Request voters to authorize a new tax in an amount of up to \$39 per \$100,000 of AV utilizing **only CIBs** 

#### Assumptions:

- Maximum term: 30 years

- AV growth: 4.0%

- Tax rate: \$39 per \$100,000 of AV

Length of program: 6 yearsInterest rates: 5.5% - 6.5%

Secured AV delinquency: 4.0%

- Unsecured AV delinquency: 12.0%

◆ Compliance with AB 182

#### Illustrative Issuance Schedule

Issue	Issue Date	Proceeds
Series A	March 2015	\$ 98,700,000
Series B	September 2018	98,700,000
Series C	September 2021	98,600,000
Total		\$ 296,000,000



#### Competitive vs. Negotiated Sale

#### Competitive Sale

- An underwriter is not brought into the financing until the sale date of the bonds
- A notice of sale is published 1-2 weeks in advance of the scheduled sale date inviting bids for the bonds specifying terms and structure of bonds
- The bonds are sold to the lowest cost underwriter on the sale date of the bonds
- Less flexibility to make adjustments to the financing structure or timing leading up to the actual sale

#### Negotiated Sale

- The District selects an underwriter prior to the sale date of the bonds
  - Can include a selection process through a request for proposals
- The District enters into a purchase contract with the underwriter on agreed terms and conditions of the bonds
- The underwriter works with potential investors before the sale date of the bonds to "pre-market" the District's bonds
- Allows flexibility to make adjustments to the financing structure or timing leading up to the actual sale
- Interest rates are measured against other recent financing comparables to determine if fair market interest rates are achieved



#### Competitive Sale Comparables

### In a competitive sale, underwriters submit bids to purchase bonds on a scheduled sale date

District: Whittier Union HSD

Sale Date: 2/13/2014 Par: \$18 Million

Underlying Ratings: --/AA-/-Debt Type: General Obligation Bonds

Sale Type: Competitive

Insurance: No Redemption: N/A **District:** Sequoia Union High School District

Sale Date: March 12, 2014 Par: \$116.975 Million

Underlying Ratings: Aa1/AA/--Debt Type: General Obligation Bonds

Sale Type: Competitive

Insurance: No

Redemption: 7/1/2024 @ 100%

**Underlying Ratings:** Aa1/AAA/-- **Debt Type:** General Obligation Bonds

District: Palo Alto Unified School District

Sale Type: Competitive

Sale Date: May 14, 2014

Insurance: No

Par: \$40 Million

Redemption: 8/1/2024 @ 100%

	True	
	Interest	Underwriting
Bidder	Cost (1)	Fee
Raymond James & Associates, Inc.	1.825 %	0.300 %
J.P. Morgan Securities LLC	1.841	0.292
BMO Capital Markets	1.850	0.188
FTN Financial Capital Markets	1.853	0.078
Stifel, Nicolaus & Co., Inc.	1.868	0.200
Citigroup Global Markets Inc.	1.877	0.157
Robert W. Baird & Co., Inc.	1.885	0.511
Bank of America Merrill Lynch	1.893	0.212
FirstSouthwest	1.894	0.326
Hutchinson, Shockey, Erley & Co.	1.911	0.240
Piper Jaffray	1.987	0.551

	Interest	Underwriting
Bidder	Cost (1)	Fee
Citigroup Global Markets Inc.	3.449 %	0.419 %
Bank of America Merrill Lynch	3.518	0.264
Morgan Stanley & Co, LLC	3.536	0.365
J.P. Morgan Securities LLC	3.537	0.582
Raymond James & Associates, Inc.	3.562	0.682
Stifel, Nicolaus & Co., Inc.	3.588	0.324
Hutchinson, Shockey, Erley & Co.	3.595	0.600
Robert W. Baird & Co., Inc.	3.622	1.049
Wells Fargo Bank, N.A.	3.624	0.522

True

	True	
	Interest	Underwriting
Bidder	Cost (1)	Fee
UBS Financial Services Inc.	2.404 %	0.418 %
RBC Capital Markets	2.450	0.314
Morgan Stanley & Co, LLC	2.497	0.341
Stifel, Nicolaus & Co., Inc.	2.498	0.317
William Blair & Company, LLC	2.499	0.281
Janney Montgomery Scott LLC	2.522	0.287
Bank of America Merrill Lynch	2.545	0.163
Robert W. Baird & Co., Inc.	2.546	0.507
J.P. Morgan Securities LLC	2.556	0.397
Hutchinson, Shockey, Erley & Co.	2.583	0.336
Mitsubishi UFJ Securities, Inc.	2.684	0.346

(1) Cost of borrowing metric which accounts for both proposed interest rates and underwriting fees.



#### **Negotiated Sale Comparables**

**Pleasanton Unified School District** 

District:

While financings are not always directly comparable (e.g. different rating(s), principal amount, district location, district name, different market conditions, etc.), financings with similar characteristics provide a gauge for fair market interest rates

San Juan Unified School District

**Glendale Community College District** 

Sale Date:   6/16/2014   S11,100 00 0	District.		cusuiitoi	· Oiicu	301.301 DI		"	citatic coi	-	_	J.50. ICC	II	Jan Jaan (				ll .	ai k O		.oo. Disti	
Marken   M	Sale Date:						6/5/2014				6/5/2014				6/5/2014						
Debt Type:   Sale Type:   Negotiated   Neg	Par:			\$11,100	,000					11											
Sale Type:   Negotia   Nor-call   Nor-call	Underlying Ratings:			Aa 2/	/		Aa 2/.			/		Aa2//									
No	Debt Type:		Genera	al Obliga							General	Obligati	on Bonds	s							
Non-calible   Side  Nicolaus   South   South   South   Side  Nicolaus   South   Sout	Sale Type:			Negotia	ted				Negotia	ted			Negotiated					1	Negotiate	ed	
Characteriteriteriteriteriteriteriteriteriteri	Insurance:			No					No					No					No		
View	Redemption:		1	Non-call	able			8/	1/24 @	100%			8/1	/2023 @	100%			8/1/	′2024 @	100%	
Vear	Underwriter:		Stifel N	Nicolaus	& Co., Inc	<b>:</b> .		RBC	Capital N	∕Iarkets			Keybar	nc Capita	l Market	S		Morga	an Stanle	y & Co.	
Year         Par Coupon         YTM         6.10.14         MMD         Par Coupon         YTM         6.5.14         MMD         Par Coupon         Par Coupon         YTM         6.5.14         MMD         Par Coupon         All 0         2.00         4.00         1.00         4.00         0.01         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	Underwriter's Fee:			0.279	6				0.50%	,				0.33%					0.65%		
2014				Yield/	MMD	Spread to			Yield/	MMD	Spread to			Yield/	MMD	Spread to			Yield/	MMD	Spread to
2015	Year	Par	Coupon	YTM	6.10.14	MMD	Par	Coupon	YTM	6.5.14	MMD	Par	Coupon	YTM	6.5.14	MMD	Par	Coupon	YTM	6.5.14	MMD
2016	2014	210	2.00	0.14		n/a	680	1.00	0.14		n/a	1,105	2.00	0.15		n/a					n/a
2017	2015	1,580	4.00	0.19	0.14	0.05						3,315	4.00	0.22	0.14	0.08	1,400	2.00	0.19	0.14	0.05
2018	2016	1,240	4.00	0.37	0.30	0.07	120	2.00	0.35	0.30	0.05	1,590	4.00	0.41	0.30	0.11	615	2.00	0.37	0.30	0.07
2019	2017	1,725	4.00	0.67	0.62	0.05	1,145	4.00	0.63	0.60	0.03	730	4.00	0.74	0.60	0.14	200	2.00	0.70	0.60	0.10
2020 850 5.00 1.62 1.56 0.06 1,285 5.00 1.55 1.50 0.05 645 3.00 1.74 1.50 0.24 200 4.00 1.68 1.50 0.18 2021 890 3.00 1.93 1.82 0.11 1,370 5.00 1.83 1.76 0.07 665 3.00 2.04 1.76 0.28 200 4.00 1.96 1.76 0.20 2022 925 5.00 2.17 2.03 0.14 1,465 5.00 2.10 1.97 0.13 685 3.00 2.30 1.97 0.33 200 4.00 2.20 1.97 0.23 2023 970 4.00 2.37 2.21 0.16 1,560 5.00 2.49 2.27 0.22 725 3.00 2.76 2.27 0.49 200 5.00 2.62 2.27 0.35 2025 1,770 5.00 2.82 2.38 0.44 745 5.00 3.07 2.38 0.69 200 5.00 2.62 2.27 0.35 2026 1,600 4.50 3.02 2.48 0.54 785 5.00 3.07 2.38 0.69 200 5.00 3.24 2.48 0.76 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.49 2.27 0.28 2.38 0.44 745 5.00 3.61 2.67 0.94 475 5.00 3.03 3.23 2.58 0.65 2028 2.38 0.44 2.67 0.77 860 5.00 3.61 2.67 0.94 475 5.00 3.65 2.67 0.98 2029 2.38 5.00 3.58 2.76 0.82 905 4.00 3.54 2.76 0.78 555 5.00 3.89 2.84 1.05 2031 2.39 2.39 2.39 2.39 2.39 2.39 2.39 2.39	2018	1,320	5.00	1.02	0.98	0.04	1,200	4.00	0.96	0.93	0.03	605	3.00	1.11	0.93	0.18	200	3.00	1.05	0.93	0.12
2021 890 3.00 1.93 1.82 0.11 1,370 5.00 1.83 1.76 0.07 665 3.00 2.04 1.76 0.28 200 4.00 1.96 1.76 0.20 202 925 5.00 2.17 2.03 0.14 1,465 5.00 2.10 1.97 0.13 685 3.00 2.30 1.97 0.33 200 4.00 2.20 1.97 0.23 2023 970 4.00 2.37 2.21 0.16 1,560 5.00 2.31 2.15 0.16 700 3.00 2.52 2.15 0.37 200 4.00 2.43 2.15 0.28 2024 1,660 5.00 2.49 2.27 0.22 725 3.00 2.76 2.27 0.49 200 5.00 2.62 2.27 0.35 2025 1,770 5.00 2.82 2.38 0.44 745 5.00 3.07 2.38 0.69 200 5.00 2.98 2.38 0.60 2026 1,600 4.50 3.02 2.48 0.54 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 285 3.00 3.00 2.48 0.52 2.24 5.00 3.58 2.76 0.28 2.24 5.00 3.58 2.76 0.28 905 4.00 3.54 2.76 0.94 475 5.00 3.65 2.67 0.98 2029 2.245 5.00 3.58 2.76 0.82 905 4.00 3.54 2.76 0.77 860 5.00 3.85 2.84 1.01 640 5.00 3.78 2.76 1.02 2.30 2.30 2.30 2.30 2.30 2.30 2.30 2	2019	1,390	5.00	1.32	1.28	0.04	1,250	4.00	1.26	1.23	0.03	625	3.00	1.46	1.23	0.23	200	4.00	1.38	1.23	0.15
2022       925       5.00       2.17       2.03       0.14       1,465       5.00       2.10       1.97       0.13       685       3.00       2.30       1.97       0.33       200       4.00       2.20       1.97       0.23         2024       97       4.00       2.37       2.21       0.16       1,560       5.00       2.49       2.27       0.22       725       3.00       2.76       2.27       0.49       200       5.00       2.62       2.27       0.35         2025       1,770       5.00       2.82       2.38       0.44       745       5.00       3.07       2.38       0.69       200       5.00       2.98       2.38       0.60         2026       1,600       4.50       3.02       2.48       0.54       785       5.00       3.29       2.48       0.81       200       5.00       3.24       2.48       0.76         2027       1,990       5.00       3.27       2.58       0.69       820       5.00       3.48       2.58       0.90       410       3.00       3.23       2.58       0.65         2028       2,120       5.00       3.54       2.67       0.77       860 <td>2020</td> <td>850</td> <td>5.00</td> <td>1.62</td> <td>1.56</td> <td>0.06</td> <td>1,285</td> <td>5.00</td> <td>1.55</td> <td>1.50</td> <td>0.05</td> <td>645</td> <td>3.00</td> <td>1.74</td> <td>1.50</td> <td>0.24</td> <td>200</td> <td>4.00</td> <td>1.68</td> <td>1.50</td> <td>0.18</td>	2020	850	5.00	1.62	1.56	0.06	1,285	5.00	1.55	1.50	0.05	645	3.00	1.74	1.50	0.24	200	4.00	1.68	1.50	0.18
2023       970       4.00       2.37       2.21       0.16       1,560       5.00       2.31       2.15       0.16       700       3.00       2.52       2.15       0.37       200       4.00       2.43       2.15       0.28         2024       1,660       5.00       2.49       2.27       0.22       725       3.00       2.76       2.27       0.49       200       5.00       2.62       2.27       0.35         2025       1,770       5.00       2.82       2.38       0.44       745       5.00       3.07       2.38       0.69       200       5.00       2.98       2.38       0.60         2026       2.26       1,660       4.50       3.02       2.48       0.54       785       5.00       3.29       2.48       0.81       200       5.00       3.24       2.48       0.76         2027       1,990       5.00       3.27       2.58       0.69       820       5.00       3.48       2.58       0.90       410       3.00       3.23       2.58       0.65         2028       2,120       5.00       3.44       2.67       0.77       860       5.00       3.61       2.67       0.94 </td <td></td> <td>890</td> <td></td> <td></td> <td>1.82</td> <td>0.11</td> <td></td> <td></td> <td>1.83</td> <td></td> <td>0.07</td> <td></td> <td></td> <td>2.04</td> <td>1.76</td> <td>0.28</td> <td>200</td> <td>4.00</td> <td></td> <td>1.76</td> <td></td>		890			1.82	0.11			1.83		0.07			2.04	1.76	0.28	200	4.00		1.76	
2024       1,660       5.00       2.49       2.27       0.22       725       3.00       2.76       2.27       0.49       200       5.00       2.62       2.27       0.35         2025       1,770       5.00       2.82       2.38       0.44       745       5.00       3.07       2.38       0.69       200       5.00       2.98       2.38       0.60         2026       1,600       4.50       3.02       2.48       0.54       785       5.00       3.29       2.48       0.81       200       5.00       3.24       2.48       0.76         2027       1,990       5.00       3.27       2.58       0.69       820       5.00       3.48       2.58       0.90       410       3.00       3.23       2.58       0.65         2028       2,120       5.00       3.44       2.67       0.77       860       5.00       3.61       2.67       0.94       475       5.00       3.65       2.67       0.98         2029       2,245       5.00       3.58       2.76       0.82       905       4.00       3.85       2.84       1.01       640       5.00       3.89       2.84       1.05 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							,														
2025       1,770       5.00       2.82       2.38       0.44       745       5.00       3.07       2.38       0.69       200       5.00       2.98       2.38       0.60         2026       1,600       4.50       3.02       2.48       0.54       785       5.00       3.29       2.48       0.81       200       5.00       3.24       2.48       0.76         2027       1,990       5.00       3.27       2.58       0.69       820       5.00       3.48       2.58       0.90       410       3.00       3.23       2.58       0.65         2028       2,120       5.00       3.44       2.67       0.77       860       5.00       3.61       2.67       0.94       475       5.00       3.65       2.67       0.98         2029       2,245       5.00       3.58       2.76       0.82       905       4.00       3.54       2.76       0.78       555       5.00       3.78       2.76       1.02         2030       2,385       5.00       3.70       2.84       0.86       940       5.00       3.85       2.84       1.01       640       5.00       3.98       2.91       1.07 <t< td=""><td>2023</td><td>970</td><td>4.00</td><td>2.37</td><td>2.21</td><td>0.16</td><td>1,560</td><td>5.00</td><td>2.31</td><td>2.15</td><td>0.16</td><td>700</td><td>3.00</td><td>2.52</td><td>2.15</td><td>0.37</td><td>200</td><td>4.00</td><td>2.43</td><td>2.15</td><td>0.28</td></t<>	2023	970	4.00	2.37	2.21	0.16	1,560	5.00	2.31	2.15	0.16	700	3.00	2.52	2.15	0.37	200	4.00	2.43	2.15	0.28
2026       1,600       4.50       3.02       2.48       0.54       785       5.00       3.29       2.48       0.81       200       5.00       3.24       2.48       0.76         2027       1,990       5.00       3.27       2.58       0.69       820       5.00       3.48       2.58       0.90       410       3.00       3.23       2.58       0.65         2028       2,120       5.00       3.44       2.67       0.77       860       5.00       3.61       2.67       0.94       475       5.00       3.65       2.67       0.98         2029       2,245       5.00       3.58       2.76       0.82       905       4.00       3.54       2.76       0.78       555       5.00       3.78       2.76       1.02         2030       2,385       5.00       3.70       2.84       0.86       940       5.00       3.85       2.84       1.01       640       5.00       3.98       2.91       1.05         2031       2,530       5.00       3.80       2.91       0.89       8,000       5.00       3.93       2.91       1.02       735       5.00       3.98       2.91       1.07	2024						1,660	5.00	2.49	2.27	0.22	725	3.00	2.76	2.27	0.49	200	5.00	2.62	2.27	0.35
285 3.00 3.00 2.48 0.52  2027								5.00				745									
2027       1,990       5.00       3.27       2.58       0.69       820       5.00       3.48       2.58       0.90       410       3.00       3.23       2.58       0.65         2028       2,120       5.00       3.44       2.67       0.77       860       5.00       3.61       2.67       0.94       475       5.00       3.65       2.67       0.98         2029       2,245       5.00       3.58       2.76       0.82       905       4.00       3.54       2.76       0.78       555       5.00       3.78       2.76       1.02         2030       2,385       5.00       3.70       2.84       0.86       940       5.00       3.85       2.84       1.01       640       5.00       3.89       2.84       1.05         2031       2,530       5.00       3.80       2.91       0.89       8,000       5.00       3.93       2.91       1.02       735       5.00       3.98       2.91       1.07         2032       1,480       5.00       4.01       2.98       1.03       2.83       5.00       4.19       3.10       1.09         2034       2039       2034       2034       203	2026						,					785	5.00	3.29	2.48	0.81	200	5.00	3.24	2.48	0.76
2028       2,120       5.00       3.44       2.67       0.77       860       5.00       3.61       2.67       0.94       475       5.00       3.65       2.67       0.98         2029       2,245       5.00       3.58       2.76       0.82       905       4.00       3.54       2.76       0.78       555       5.00       3.78       2.76       1.02         2030       2,385       5.00       3.70       2.84       0.86       940       5.00       3.85       2.84       1.01       640       5.00       3.89       2.84       1.05         2031       2,530       5.00       3.80       2.91       0.89       8,000       5.00       3.93       2.91       1.02       735       5.00       3.98       2.91       1.07         2032       1,480       5.00       4.01       2.98       1.03       2.83       5.00       4.19       3.10       1.09         2034       2039       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2034       2																					
2029       2,245       5.00       3.58       2.76       0.82       905       4.00       3.54       2.76       0.78       555       5.00       3.78       2.76       1.02         2030       2,385       5.00       3.70       2.84       0.86       940       5.00       3.85       2.84       1.01       640       5.00       3.89       2.84       1.05         2031       2,530       5.00       3.80       2.91       0.89       8,000       5.00       3.93       2.91       1.02       735       5.00       3.98       2.91       1.07         2032       1,480       5.00       4.01       2.98       1.03       2.83       5.00       4.19       3.10       1.09         2034       2039       2034 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>																					
2030       2,385       5.00       3.70       2.84       0.86       940       5.00       3.85       2.84       1.01       640       5.00       3.89       2.84       1.05         2031       2,530       5.00       3.80       2.91       0.89       8,000       5.00       3.93       2.91       1.02       735       5.00       3.98       2.91       1.07         2032       1,480       5.00       4.01       2.98       1.03         2033       2034       2,835       5.00       4.19       3.10       1.09         2039       7,305       5.00       4.40       3.30       1.10																					
2031											0.82	905	4.00	3.54	2.76	0.78	555				
2032     1,480 5.00 4.01 2.98 1.03       2033     2034     2,835 5.00 4.19 3.10 1.09       2039     7,305 5.00 4.40 3.30 1.10																	640				
2033 2034 2039 2039 204 205 205 205 207,305 207 208 208 208 208 208 208 208 208 208 208							2,530	5.00	3.80	2.91	0.89						735	5.00	3.98	2.91	1.07
2034       2,835       5.00       4.19       3.10       1.09         2039       7,305       5.00       4.40       3.30       1.10												1,480	5.00	4.01	2.98	1.03					
2039 7,305 5.00 4.40 3.30 1.10																					
																	,				
2044 13,030 5.00 4.48 3.36 1.12																					
	2044																13,030	5.00	4.48	3.36	1.12



**Newark Unified School District** 

#### Conditions for Sale Methodology

- General conditions for a competitive bond sale:
  - Strong credit ratings
  - Strong bond repayment source
  - Large financing size
  - Simple bond structure
  - Stable bond market
  - Recognizable district name
  - Issuer liquidity
- General conditions for a negotiated bond sale:
  - Weak credit ratings
  - Less secure bond repayment source
  - Small financing size
  - Complex bond structure
  - Volatile bond market
  - Unknown district name
  - Lack of issuer liquidity
- Timing



# **Construction Program**

Terry Tao
Atkinson Andelson Loya Ruud & Romo

- District Staff
- Architect
- Bond Program Manager
- Construction/Project Manager
- Contractor
- Inspectors



#### District Staff

- Establishes expectations for project and team performance.
  - Provides district standards.
  - Develops project program and/or performance specifications.
- Contracts for construction inspectors and testing services.
- Monitors progress of project, guides and controls other team members.
- Facilitates governing board approvals of changes, payments to contractors, etc.

#### Architect

- Is in "general responsible charge" of the construction, "observes the construction for general conformance to design requirements, and provides status reports to the DSA.
- Responsible for responding quickly to Requests for Information (RFIs) to keep the project moving.
- Assists school district in complying with legal requirements applicable to the selected construction delivery method.
- Assists school district in preparing bidding and "front end" construction documents.
- For non-bid projects, assists school district in preparing pre-construction services agreements and construction agreements.
- Reviews and advises school district as to contractor claims, stop payment notices, and other legal issues.
- Assists school district with resolution of claims.

### Bond Program Manager

- Assist and supplement District staff :
  - > To provide Program-wide oversight and enforcement of contract documents.
  - > To develop scope, schedule and sequencing of projects.
  - ➤ To develop a communication plan, including the preparation of reports for the Superintendent, Cabinet and bond staff, reports for the Board, reports for the Bond Committee, and participate in the preparation of annual audits.
  - ➤ In developing specific vendor solicitations (RFQ/P's) and vendor "pools" and may maintain a database of qualified firms. Extensive knowledge of the public contract code and public procurement, bidding, and contracting procedures are mandatory.
  - With OPSC/SAB consultant(s) applications for state funding.
  - > To manage District's inventory of "As-Built" documents, working with District to complete files, and may be required to implement a "cloud" storage system.
  - > Regarding various project delivery methods for individual projects, based on goals expressed by the District. Prepare bid documents as appropriate.
  - ➤ To manage agency input including DSA, OSHA, Fire, Water, Sewer, CEQA, SWPPP, and others involved in the design and construction process.

### Construction/ Project Manager

- Augments District staff.
- Serve as school district's representative for purposes of the construction, including providing expertise that district staff may not have.
- Mitigates the district's exposure to risk, overseas general contractor's performance and updates the district with accurate and timely cost and schedule reports.
- Monitors construction and compliance with contract requirements, and attempts to facilitate early identification and resolution of issues.
- Construction manager on multi-prime project takes on scheduling, coordination, and similar duties that otherwise would be performed by a general contractor.

#### Contractor

- Responsible for constructing the project in accordance with all design and contract requirements.
- Prepares and updates construction schedules, and coordinates the work to ensure timely completion.
- Prepares schedules of values, and submits pay applications in conformance with the schedule of values.
- Contracts with subcontractors, and schedules and coordinates all subcontracted work.
- Primarily responsible for compliance with prevailing wage and other labor laws.

### Inspectors

- "Project inspector" or "inspector of record" must be certified by DSA.
- Inspects construction to confirm conformance with DSA-approved plans code and requirements.
- Reports deviations from plans and specifications.
- Maintains set of project records (DSA-approved plans, change orders, submittals, inspection reports, etc.
- Provides regular reports on the project to the DSA.

# **Project Delivery Methods**

### Available Construction Delivery Methods

- Most Prominent
  - Design-Bid-Build (Public Contract Code Section 20111 et seq.)
    - Applies to public projects costing \$15,000 or more.
  - Design-Build (Education Code Section 17250.10 et seq.)
    - Applies when cost of design and construction of school facility combined will exceed \$2.5 million.
  - Lease-Leaseback (Education Code Section 17400 et seq.)
    - Can use for projects of any size/cost.

#### Others Used

- CM at Risk
  - Early involvement in design and establishes a GMP.
- CM Multiple Prime
  - Prime trade packages are established and managed by the CM.

### **Pre-Construction Services**

#### Benefits:

- Manage Design to District Budget
- Constructability Reviews for Tighter Design Documents
- Build Master Project Schedule
- Contractor Outreach LOCAL
- Preparation of Bid/Proposal Documents



### **Bid Process and Contractor Selection**

- Prequalification of Bidders
- Pre-bid Conferences; Industry Days
- Review and Recommend Bid Addenda
- Conduct Bid
- Review Bids and Recommend Awards

# The Design Process



# The Design Process

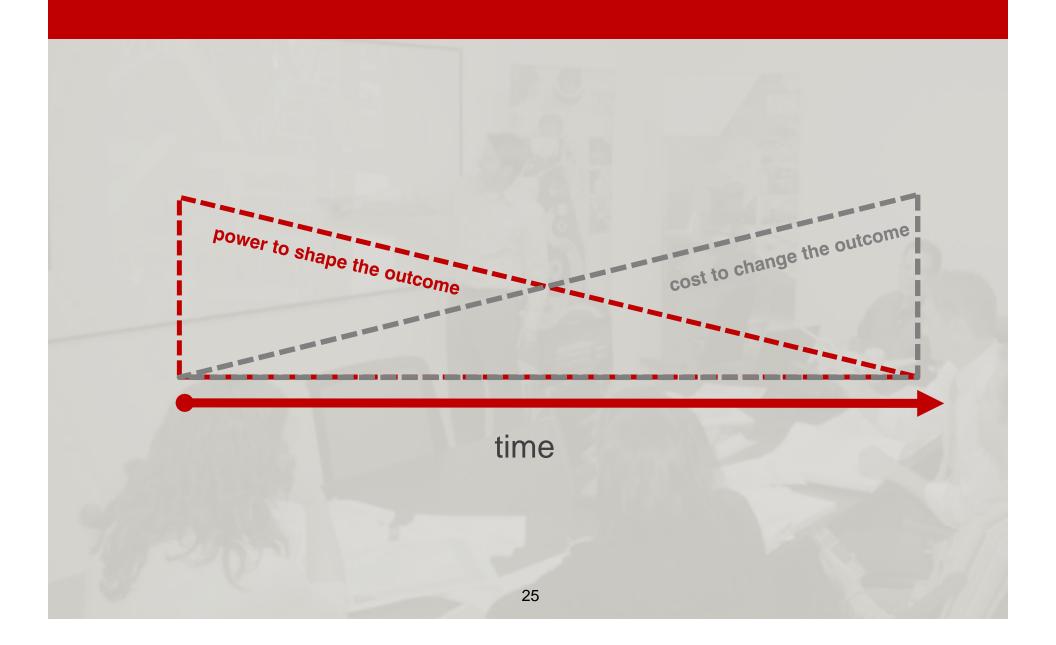
#### What we will discuss:

- 1. How the Design Team is Structured
- 2. Steps in the Design Process
- 3. How long does the process take

#### **Current trends in the Educational Facility Design Process**

- 1. Integrated Design and Delivery
- 2. Focus on Collaboration
- 3. BIM
- 4. Ability to make informed decisions early in the process

# The Design Process



# The Architect

Orange Unified School
District

Project Architect "Single Point of Contact"

#### **Design Team**

Designer
Interior Designer
Landscape Architect
Specifications
BIM Technology

Structural Engineer
Mechanical Engineer
Electrical Engineer
Civil Engineer

**Specialty Consultants** 

**Cost Estimator** 

**Food Service Consultant** 

# **Process Structure**

Project Process Structure	
Master Plan Scope Confirmation	Confirm District Goals. Establish Project Prioritization and Preliminary Budget.
Schematic Design	Establish the general scale and relationships of design elements.  Visualization + ROM Cost Estimating *
Design Development	Documents that fix and describe the size and character of the entire project: Architectural, Structural, Mechanical, Electrical, Materials*
Construction Documents	Drawings and Specifications setting out in detail the requirements for construction.*
Governing Authority Approval	California Dept. of Education, Division of The State Architect, Local Fire Authority, SWPPP, WQMP, Local Health Dept.
Bidding + Negotiation	Assist the District in Obtaining and Evaluating Bids Assist with the Bidding Process
Construction Phase Services	General administration of the contract for construction: Submittals, Change orders, Site observations, Pay Requests

## **Master Plan Confirmation**

Educational Vision Long Term Outlook Budget Prioritization

Schematic Design

Design Development

**Construction Documents** 









### Master Plan Confirmation Educational Vision Long Term Outlook

Long Term Outlook **Budget Prioritization** 

Schematic Design

**FACILITY CONDITION INDEX** 

HIGH SCHOOL EDUCATIONAL SPEC

**EDUCATIONAL PROGRAM** 

**Design Development** 

Construction Documents

#### **GRADING + DRAINAGE**

The campus predominately slopes from northeast to southwest. The ultimate low point and storm drain outlet is located at the southwest corner of the campus. A smaller portion of the north middle campus discharges into East Taft Avenue. The campus buildings and quad area sheet flow to inlets that pipe the runoff to a buried corrugated metal pipe (CMP) located on the west edge of the property adjacent to the tennis courts. The CMP inlet and outlet are in failure mode. appearance of structural collapsing along with the pipe being filled with sediment. The inlet and outlet are accessible to

The north portion of the campus is largely impervious with asphalt and concrete surfaces. Storm water is collected and piped from these areas without a form of water quality treatment. The storm water is discharged to an asphalt paved throughout the campus to address current water quality

#### Stormwater Access:

the Campus site via a 5 foot diameter pipe. Storm water is discharged into the 500-year floodway that cuts through the middle of the site and empties out into the 100-year floodway to the hydrology of this site and the surrounding community Future mitigation of the Pershing Creek will be necessary at









The Vita Park High School campus was constructed in 1964 and is approximately 37 acters in size. The building's determinent of the state of the most many and is approximately 37 acters in size. The building's determinent of the size with enclosured as follows: exterior walls are constructed with concrete manory units and castelline place controlled with concrete manory units and castelline place controlled with concrete manory units and castelline place controlled on steel full-base or glave-flammated beams and supported controlled beams and supported on steel full-base or glave-flammated beams and supported controlled beams and supported controlled beams and supported controlled beams and supported controlled beams and supported suppor have been covered by its users. Extenor doors are steel and are generally not equipped with accessible door hardware or panic devices. Exterior sealant around doors and windows are worn and dried out. Building way-finding and exit signage is lacking and non-accessible. Restroom facilities are in poor condition and are generally non-accessible.

Facility Condition Summary:







Section 2: Context LPA



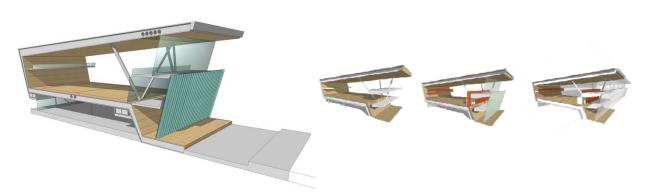




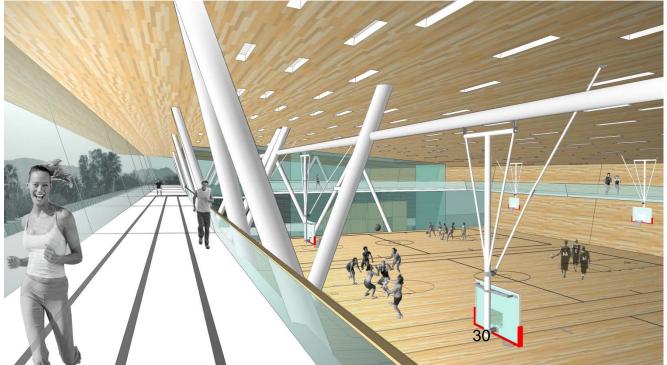
# Schematic Design

Ideation Conceptualization Vision Synthesis













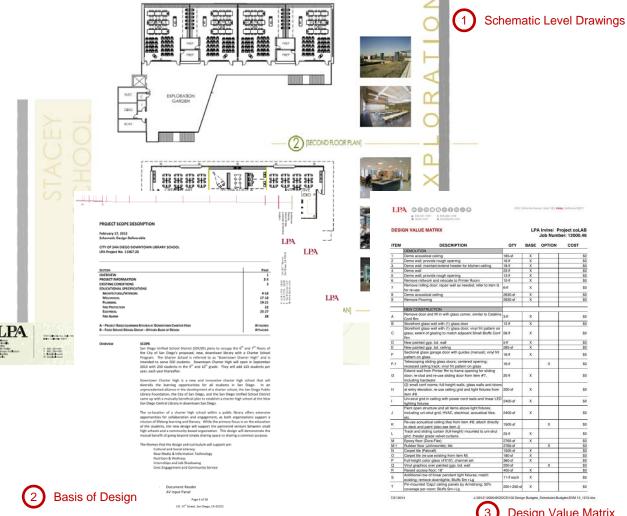
# Schematic Design

Ideation Conceptualization **Vision Synthesis** 

Master Plan

**Design Development** 

**Construction Documents** 









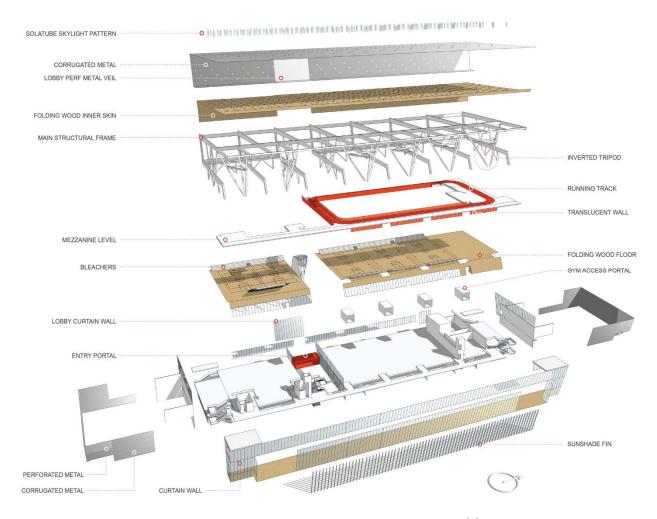
# Design Development

Coordination Engineering Understanding Monitor Cost

Master Plan

Schematic Design

**Construction Documents** 



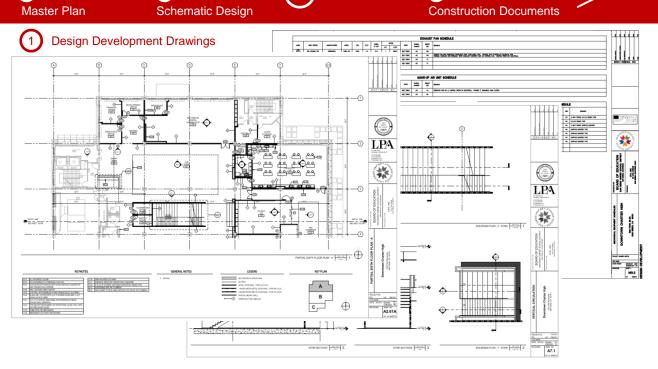






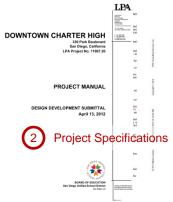
# Design Development

Coordination Engineering Understanding Monitor Cost











	04/27	12	13/21/2					
	Design Developes of Probab				rationer			
Chrest	6SF Named	65,800 Txtsd	GSF bettor	65,000 Total	bance	,	hor	Comments
A) 50x11 (3-5)	l .	\$111,581	1	5250,329			(\$138,740)	
1 Foundations			ı					
2 Vortical Structure								L
3 Floor & Roof Structures	\$81,618		\$210,490		(\$126,972)	-158%		Contrated almost all drywall dipolity aligning walls will walls structure and using piec all parallel conditions.
4 Edwior Cladding								
5 Roofing and Waterproofing	\$30,071		\$39,839		(\$9,766)	-32%		Coranic ble flooring replaced with viryl flooring.
El Interiora (E-D)		52,412,474	ı	\$2,181,590			\$239,883	
6 Martir Partitions, Doors and Olacing	\$1,171,479		\$1,043,763		587.716	7%	*****	NAME THAT DEST WAS ADDRESS.
7 Floor, Wall and Celling Finishes	\$1,240,995		\$1,097,808		\$163.167	12%		Added 19th cost underlayment of hislaum and resided
			l .					net foring to assesse.
C) Equipment and Vertical Transportation (8-9)		\$400,610		\$853,586			(\$194,494)	
8 Function Equipment and Specialties	\$700,575		\$800,902		(\$105,407)	-95%		Drinsted shades at protineter windows.
9 Stains and Vertical Transportation	\$105,005		\$104,122		9913	1%		
D) Nechanical and Electrical (10-53)	ı	82,545,050		\$2,915,174			(\$379,114)	
10 Plumbing Systems	\$263,368		\$263,016		\$352	9%		
11 Heating, Ventilation and Air Conditioning	\$1,075,003		\$1,830,223		\$41,810	4%		
12 Electrical Lighting, Power and Communications	\$1,041,667		\$1,453,835		(\$412,279)	-62%		Replaced appare for costs with detailed extinute.
13 Fire Protection Systems	\$140,100		\$165,100					
E) Site Construction (14-16)			ı					
14 Site Properation and Demolition			ı					
15 Site Paving, Structures & Landscaping			ı					
16 Utilizes on Site			l					
Substanti	-	\$5,877,731	_	\$4,260,190			(\$382,467)	1
General Conditions 10.0%		\$587,773	1	\$424,629			(\$38,247)	1
Duttorial		\$4,445,594		\$4,884,219			(\$429,714)	1
General Contector For 4.5%	ı	\$258,620	1	5275,440			(\$16,829)	1
Substati		54,724,124		\$7,161,667			(5417,543)	1
Bunds & Insurance 2.2%	l .	\$147,931	1	\$157,557			(99,626)	1
Suppose		94,872,651		\$7,319,224			(\$447,169)	1
Design Contingency 2.5%	I	\$171,001	1	\$182,989			(\$11,190)	1
Substantia	-	\$7,643,850	-	\$7,582,295	_		(\$459,\$49)	1
Exceleton 2.80%	I	\$197,226	1	8210,042			(\$12,834)	1
	_	\$7,345,084	-	17.713.367			(\$471,193)	

4 Cost Estimates

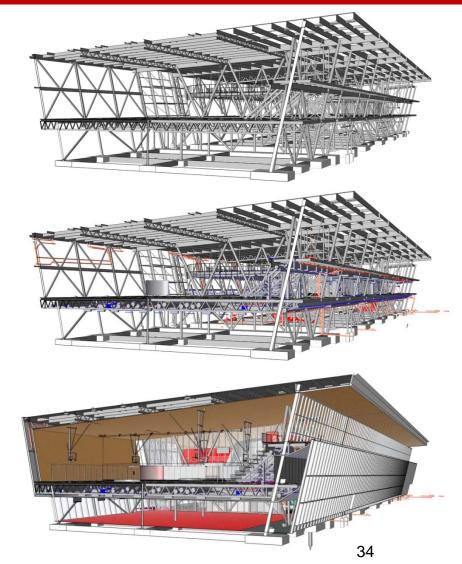
## **Construction Documents**

Detail Quality Control Quantifiable Biddable

Master Plan

Schematic Design

Design Development









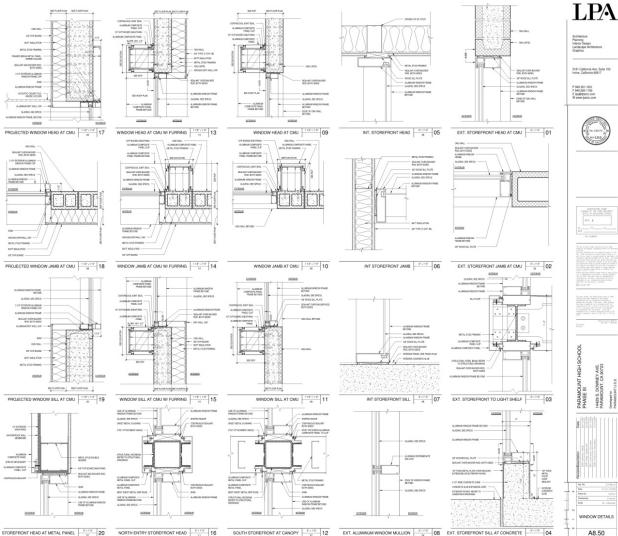
### **Construction Documents**

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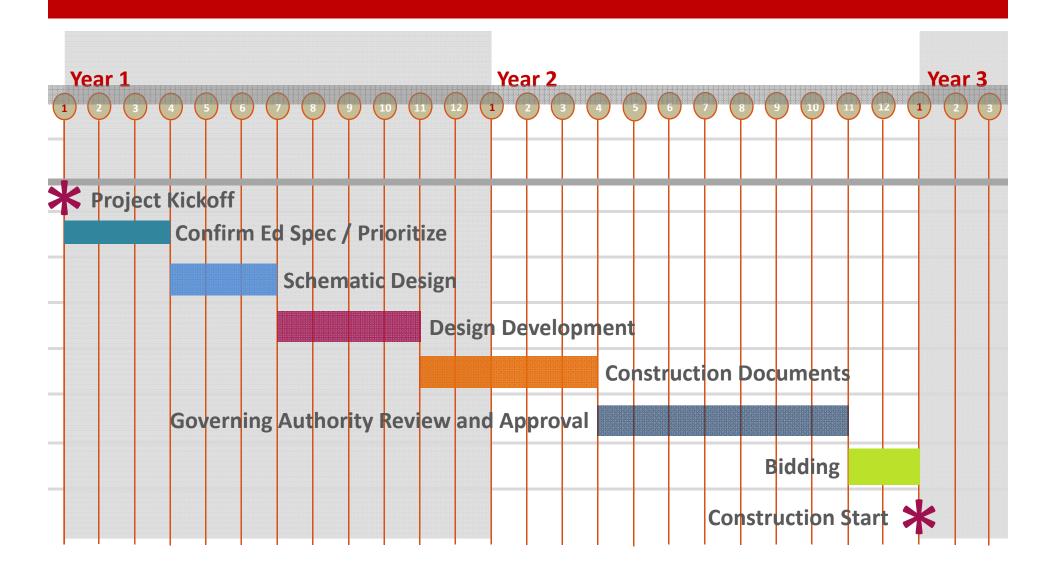








# Sample Schedule



# Occupancy / CELEBRATE!









### **Bond Program Implementation Planning**

