



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

February 15, 2018

BOARD OF DIRECTORS

ROBERT E. ALVARADO
Division 1

JOE ESTES
Division 2

MARCO HENRIQUEZ
Division 3

KATHY MAC LAREN
Division 4

VINCENT DINO
Division 5

DENNIS LaMOREAUX
General Manager

ALESHIRE & WYNDER LLP
Attorneys



**AGENDA FOR A MEETING
OF THE FACILITIES COMMITTEE
OF THE PALMDALE WATER DISTRICT**
Committee Members: Vincent Dino-Chair, Joe Estes
to be held at the District's office at 2029 East Avenue Q, Palmdale
TUESDAY, FEBRUARY 20, 2018

3:00 p.m.

NOTE: To comply with the Americans with Disabilities Act, to participate in any Board meeting please contact Dawn Deans at 661-947-4111 x1003 at least 48 hours prior to a Board meeting to inform us of your needs and to determine if accommodation is feasible.

Agenda item materials, as well as materials related to agenda items submitted after distribution of the agenda packets, are available for public review at the District's office located at 2029 East Avenue Q, Palmdale (Government Code Section 54957.5). Please call Dawn Deans at 661-947-4111 x1003 for public review of materials.

PUBLIC COMMENT GUIDELINES: The prescribed time limit per speaker is three-minutes. Please refrain from public displays or outbursts such as unsolicited applause, comments, or cheering. Any disruptive activities that substantially interfere with the ability of the District to carry out its meeting will not be permitted and offenders will be requested to leave the meeting. (PWD Rules and Regulations, Appendix DD, Sec. IV.A.)

Each item on the agenda shall be deemed to include any appropriate motion, resolution, or ordinance to take action on any item.

- 1) Roll call.
- 2) Adoption of agenda.
- 3) Public comments for non-agenda items.
- 4) Action Items: (The public shall have an opportunity to comment on any action item as each item is considered by the Committee prior to action being taken.)

- 4.1) Consideration and possible action on approval of minutes of regular meeting held September 11, 2017.
- 4.2) Consideration and possible action to authorize purchasing materials to complete inventory level determined necessary for emergency response. (\$240,000.00 – Non-Budgeted – Facilities Manager Moore)
- 4.3) Consideration and possible action on declaring District property as surplus and authorizing staff to complete the disposal process. (Revenue anticipated from disposal – Facilities Manager Moore)
- 4.4) Consideration and possible action on the lease of five vehicles. (\$40,000.00 – Budgeted – Facilities Manager Moore)
- 4.5) Discussion and overview of the Leslie O. Carter Water Treatment Plant “Facility Evaluation Results and Recommendations” Report dated December 2017 prepared by Carollo Engineers, Inc. (Operations Manager Masaya)
- 5) Information Items.
 - 5.1) Other.
- 6) Board members’ requests for future agenda items.
- 7) Adjournment.



DENNIS D. LaMOREAUX,
General Manager

DDL/dd

P A L M D A L E W A T E R D I S T R I C T
B O A R D M E M O R A N D U M

DATE: February 14, 2018 **February 20, 2018**
TO: FACILITIES COMMITTEE **Committee Meeting**
FROM: Mr. Tim Moore, Facilities Manager
VIA: Mr. Dennis D. LaMoreaux, General Manager
RE: ***AGENDA ITEM NO. 4.2 – CONSIDERATION AND POSSIBLE ACTION TO AUTHORIZE PURCHASING MATERIALS TO COMPLETE INVENTORY LEVEL DETERMINED NECESSARY FOR EMERGENCY RESPONSE. (\$245,000.00 – NON-BUDGETED – FACILITIES MANAGER MOORE)***

Recommendation:

Staff recommends the Committee authorize purchasing materials to complete the inventory level determined necessary for emergency response in the not-to-exceed amount of \$245,000.00 and that this item be presented to the full Board for consideration.

Alternative Options:

The alternative option is to continue to delay purchases of the needed disaster supplies.

Impact of Taking No Action:

The District will not have the inventory needed in the event of a natural disaster.

Background:

The District's Emergency Supply Inventory has been on short supply for several years. In 2015, District staff reevaluated our system to update fittings, pipe, valves and other supplies needed to replace areas that would be affected (weak points-critical connections of our infrastructure) and the materials necessary to have in place for Emergency Response.

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 3 – Systems Efficiency.
This item directly relates to the District's Mission Statement.

Budget:

This item is not budgeted; however, budget funds can be transferred from the three-month Emergency Reserve to cover these costs.

Supporting Documents:

- Bid Proposals from Core & Main and Industrial Rubber Supply.



Formerly HD Supply Waterworks

Bid Proposal for EARTHQUAKE SUPPLIES

CUSTOMER

PALMDALE WATER DISTRICT

2029 EAST AVENUE Q
PALMDALE, CA 93550

Job

EARTHQUAKE SUPPLIES
Bid Date: 01/30/2018 05:00 p.m.
Bid #: 501908

CONTACT

Sales Representative

Chad Holt
(M) 661-709-8907
(T) 661-945-2881
(F) 661-945-5076
Chad.Holt@coreandmain.com

Core & Main

42839 North Sierra Hwy
Lancaster, CA 93534
(T) 661-945-2881

NOTES



Formerly HD Supply Waterworks

Bid Proposal for EARTHQUAKE SUPPLIES

PALMDALE WATER DISTRICT

Bid Date: 01/30/2018 05:00 p.m.

Core & Main Bid #: 501908

Core & Main

42839 North Sierra Hwy

Lancaster, CA 93534

Phone: 661-945-2881

Fax: 661-945-5076

Seq#	Qty	Description	Units	Price	Ext Price
10		*****			
20		CORE AND MAIN LP			
30		42839 N SIERRA HWY			
40		LANCASTER CA 93534			
50		PHONE:661-945-2881			
60		FAX: :661-945-5076			
70		DOES NOT GUARANTEE THIS QUOTE			
80		TO BE A COMPLETE AND ACCURATE			
90		ACCOUNTING OF ALL MATERIALS			
100		NEEDED TO COMPLETE THIS JOB.			
110		CORE AND MAIN LP STANDARD			
120		TERMS APPLY.			
130		ALL PRICES SUBJECT TO CHANGE			
140		WITHOUT NOTICE.			
150		QUOTATION GOOD FOR 30 DAYS			
160		CORE AND MAIN LP IS NOT			
170		LIABLE FOR DELIVERY DELAYS,			
180		CANCELLATIONS OR PRICE			
190		INCREASES RESULTING FROM ANY			
200		CAUSE BEYOND OUR CONTROL.			
210		THESE INCLUDE BUT ARE NOT			
220		LIMITED TO: MANUFACTURERS			
230		SHORTAGES, AVAILABILITY OR			
240		TIMELINESS OF TRANSPORTATION,			
250		MATERIALS, FUELS, OR SUPPLIES.			
260		THIS QUOTE IS NOT A CONTRACT			
270		TO SUPPLY MATERIAL OR			
280		GUARANTEE OF PRODUCT			
290		AVAILABILITY.			
300		\$50.00 CASH SALE MINIMUM			
310		ALL CASH SALES ARE FINAL			
320					
330	20	KV43-332WNL 5/8X3/4" ANG. KEY VALVE PILW NO LEAD	EA	34.35	687.00
340	50	KV23-332WNL 5/8X3/4 ANGLE KEY METER VALVE CFXMN NO LEAD	EA	32.23	1,611.50
350	10	P24276N 1-1/2 CPXMF ANGLE MTR NO LEAD	EA	215.24	2,152.40
360	4	B24277N 1-1/2 BALL AMS FLRXFLG W/PLN HEAD 1/4 TURN CHECK NO LEAD	EA	258.96	1,035.84
370	4	P24276N 2 CPXMF ANGLE METER NO LEAD	EA	274.35	1,097.40
380	10	B25025N 3/4 BALL CORP MIPXCF AWWA IP X COP FLARE NO LEAD	EA	41.12	411.20
390	20	B25025N 1 BALL CORP MIPXCF AWWA IP X COP FLARE NO LEAD	EA	52.79	1,055.80
400	10	E1935 1-1/2 BALL CORP MXPJCTS NO LEAD	EA	117.21	1,172.10
410	5	B25025N 2 BALL CORP MIPXCF AWWA IP X COP FLARE NO LEAD	EA	219.78	1,098.90
420	5	E1935 2 BALL CORP MIPXJCTS NO LEAD	EA	193.82	969.10
430	6	16" BUTTERFLY VLV BOLT&NUT KIT	EA	24.74	148.44
440	4	20" BUTTERFLY VLV BOLT&NUT KIT	EA	48.61	194.44



Formerly HD Supply Waterworks

Bid Proposal for EARTHQUAKE SUPPLIES

Bid #: 501908

Seq#	Qty	Description	Units	Price	Ext Price
450	2	24" BUTTERFLY VLV BOLT&NUT KIT	EA	62.91	125.82
460	20	245-000400003-800 4"X3" OD CLP	EA	12.38	247.60
470	40	245-00066303-800 6"X3" STD CLP	EA	15.85	634.00
480	20	245-00086303-800 8"X3" STD CLP	EA	18.63	372.60
490	12	226-066307-000 6X7-1/2 CLAMP 6.56-6.96 OD	EA	71.69	860.28
500	5	226-060012-000 6X12-1/2 CLAMP 5.95-6.35 OD	EA	113.31	566.55
510	3	226-066315-000 6X15 CLAMP 6.56-6.96 OD	EA	129.95	389.85
520	25	226-086307-000 8X7-1/2 CLAMP 8.54-8.94 OD	EA	84.93	2,123.25
530	2	226-094015-000 8X15 CLAMP 9.27-9.67 OD	EA	169.62	339.24
540	2	226-094020-000 8X20 CLAMP 9.27-9.67 OD	EA	240.21	480.42
550	10	226-100007-000 8X7-1/2 CLAMP 9.70-10.10 OD	EA	95.55	955.50
560	1	226-107507-000 10X7-1/2 CLAMP 10.64-11.04 OD	EA	104.43	104.43
570	4	226-107512-000 10X12-1/2 CLAMP 10.64-11.04 OD	EA	162.30	649.20
580	2	226-111015-000 10X15 CLAMP 11.04-11.44 OD	EA	208.80	417.60
590	2	227-111015-050 10X15 CLAMP FULL CIRCLE 11.04-12.24 OD	EA	321.03	642.06
600	10	226-132007-000 12X7-1/2 CLAMP 13.10-13.50 OD	EA	120.30	1,203.00
610	4	226-132010-000 12X10 CLAMP 13.10-13.50 OD	EA	160.00	640.00
620	4	226-140010-000 12X10 CLAMP 14.00-14.40 OD	EA	165.69	662.76
630	2	226-127510-000 12X10 CLAMP 12.62-13.02 OD	EA	153.21	306.42
640	2	226-132012-000 12X12-1/2 CLAMP 13.10-13.50 OD	EA	207.78	415.56
650	3	226-127512-000 12X12-1/2 CLAMP 12.62-13.02 OD	EA	190.96	572.88
660	3	227-136510-000 12X10 CLAMP FULL CIRCLE 13.65-14.45 OD	EA	216.53	649.59
670	11	4 WELD SLIP-ON FLANGE 150# FF	EA	11.88	130.68
680	18	6 WELD SLIP ON FLANGE FF 150#	EA	20.20	363.60
690	18	8 WELD SLIP ON FLANGE FF 150#	EA	30.49	548.82
700	6	10 WELD SLIP ON FLANGE FF 150#	EA	35.91	215.46
710	36	12 WELD SLIP-ON FLANGE FF 150#	EA	75.16	2,705.76
720	10	16 WELD SLIP-ON FLANGE FF 150#	EA	123.66	1,236.60
730	5	4 WELD XH SLIP-ON FLG 300# FF	EA	26.89	134.45
740	9	6 WELD XH SLIP-ON FLG FF 300#	EA	43.02	387.18
750	5	8 WELD XH SLIP-ON FLG FF 300#	EA	69.90	349.50
760	1	4 BLIND FLG DI IMP	EA	25.96	25.96
770	10	6 BLIND FLG DI IMP	EA	39.33	393.30
780	2	8 BLIND FLG DI IMP	EA	65.66	131.32
790	2	12 BLIND FLG DI IMP	EA	132.84	265.68
800	4	461-04460560-000 4X5-1/2 QUANTUM CPLG 4.46-5.60 OD EPOXY W/ALLOY B&N	EA	86.33	345.32
810	4	461-06540765-000 6X6 QUANTUM CPLG 6.54-7.65 OD EPOXY W/ALLOY B&N	EA	121.73	486.92
820	4	461-08540985-000 8X6 QUANTUM CPLG 8.54-9.85 OD EPOXY W/ALLOY B&N	EA	142.04	568.16
830	6	461-12751440-000 12X7-1/2 QUANTUM CPLG 12.75-14.40 OD EPOXY W/ALLOY B&N	EA	211.21	1,267.26
840	1800	3/4X60' (K) SOFT COPPER TUBING	FT	4.28	7,704.00
850	200	3/4X100'(K) SOFT COPPER TUBING	FT	4.28	856.00
860	720	1X60' (K) SOFT COPPER TUBING	FT	5.58	4,017.60
870	100	1X100' (K) SOFT COPPER TUBING	FT	5.58	558.00
880	200	1-1/2X20'(K)SOFT COPPER TUBING	FT	11.30	2,260.00
890	20	2X20' (K) SOFT COPPER TUBING	FT	17.58	351.60
900	200	6" 10GA CML & CMC STEEL	FT	18.82	3,764.00
910	340	4 TJ PR350 DI PIPE C/L	FT	16.32	5,548.80
920		ABOVE IS DBL LINED			



Formerly HD Supply Waterworks

Bid Proposal for EARTHQUAKE SUPPLIES

Bid #: 501908

Seq#	Qty	Description	Units	Price	Ext Price
930	1134	6 TJ PR350 CL50 DI PIPE DOUBLE C/L	FT	12.19	13,823.46
940	666	8 TJ PR350 DI PIPE DBL C/ L CEMENT LINED	FT	16.05	10,689.30
950	324	10 TJ PR350 DI PIPE DOUBLE C/L	FT	20.73	6,716.52
960	522	12 TJ PR350 DI PIPE DBLE C/L	FT	26.61	13,890.42
970	234	16 TJ CL50 PR350 DI PIPE C/L	FT	43.06	10,076.04
980		ABOVE IS DBL LINED			
990	5	6 3006P DI STARGRIP RESTR. (I) W/ACC - SGDPPK06	EA	28.56	142.80
1000	5	8 3008P DI STARGRIP RESTR. (I) W/ACC - SGDPPK08	EA	38.92	194.60
1010	5	10 3010P DI STARGRIP RESTR (I) W/ACC - SGDPPK10	EA	55.34	276.70
1020	5	12 3012P DI STARGRIP RESTR (I) WITH ACC - SGDPPK12	EA	74.38	371.90
1030	6	6 MJXFLG ADPT (I) CP DI C153	EA	38.03	228.18
1040	5	8 MJXFLG ADPT (I) CP DI C153	EA	57.40	287.00
1050	4	10 MJXFLG ADPT (I) CP DI C153	EA	99.81	399.24
1060	7	12 MJXFLG ADPT (I) CP DI C153	EA	127.96	895.72
1070	4	912-91094008-000 8 FLG ADAPTER 9.05-9.40 OD EPOXY W/ALLOY B&N	EA	251.68	1,006.72
1080	4	912-91111810-000 10 FLG ADPT EPOXY W/ALLOY B&N 11.65-11.88 (OMNI COMPATIBLE GSKT)	EA	434.91	1,739.64
1090	4	912-91142012-000 12 FLG ADPT 13.90-14.20 OD EPOXY W/ALLOY B&N	EA	483.66	1,934.64
				Sub Total	122,281.58
				Tax	11,616.75
				Total	133,898.33

	Inv. No.	Qty.	Description	Brand Specific or Equivalent	2016 Bid Price	Ext. Price
1	SRVC079	20	3/4" comp. (pack joint) angle-stop	Ford KV43-332W-NL	\$30.77	\$ 615.40
2	SRVC080	50	3/4" flare angle-stop	Ford KV23-332W-NL	\$28.88	\$ 1,444.00
3	SRVC085	10	1-1/2" comp. angle-stop	Mueller P-24276N or =	\$187.98	\$ 1,879.80
4	SRVC086	4	1-1/2" flare angle-stop	Mueller B-24277N or =	\$226.18	\$ 904.72
5	SRVC088	4	2" comp. angle-stop	Mueller P-24276N or =	\$238.48	\$ 953.92
6	SRVC067	10	3/4" MIP x flare corp stop	Mueller B-25025 or =	\$35.92	\$ 359.20
7	SRVC070	20	1" MIP x flare corp stop	Mueller B-25025 or =	\$46.09	\$ 921.80
8	SRVC074	10	1-1/2" MIP x comp. (pack joint) corp stop	Jones j-1935 or =	\$109.89	\$ 1,098.90
9	SRVC076	5	2" MIP x flare corp stop	Mueller B-25025 or =	\$191.95	\$ 959.75
10	SRVC077	5	2" MIP x comp. (pack joint) corp stop	Jones j-1935 or =	\$181.68	\$ 908.40
11		6	16" BFV Bolt kit	For Mueller Linesal type	\$26.67	\$ 160.02
12		4	20" BFV Bolt kit	For Mueller Linesal type	\$50.22	\$ 200.88
13		2	24" BFV Bolt kit	For Mueller Linesal type	\$64.06	\$ 128.12
14	CLMP015	20	4" x 3" o.d. leak clamp	S/B 245-00040003-800 or =	\$10.12	\$ 202.40
15	CLMP027	40	6" x 3" std. leak clamp	S/B 245-00066303-800 or =	\$12.96	\$ 518.40
16	CLMP033	20	8" x 3" std. leak clamp	S/B 245-00086303-800 or =	\$15.23	\$ 304.60
17	CLMP075	12	6" x 7.5" std. full circle clamp	S/B 226-00066307-000 or =	\$59.82	\$ 717.84
18	CLMP078	5	6" x 12" o.d. full circle clamp	S/B 226-00060012-000 or =	\$94.58	\$ 472.90
19	CLMP081	3	6" x 15" std. full circle clamp	S/B 226-00066315-000 or =	\$108.46	\$ 325.38
20	CLMP088	25	8" x 7.5" std. full circle clamp	S/B 226-00086307-000 or =	\$70.89	\$ 1,772.25
21	CLMP099	2	8" x 15" (9.27 - 9.67) f/c clamp	S/B 226-00094015-000 or =	\$141.58	\$ 283.16
22	CLMP102	2	8" x 20" (9.27 - 9.67) f/c clamp	S/B 226-00094020-000 or =	\$200.49	\$ 400.98
23	CLMP105	10	10" x 7.5" o.d. full circle clamp	S/B 226-0010007-000 or =	\$79.76	\$ 797.60
24	CLMP106	1	10" x 7.5" std. full circle clamp	S/B 226-00107507-000 or =	\$87.16	\$ 87.16
25	CLMP110	4	10" x 12" std. full circle clamp	S/B 226-00107512-000 or =	\$135.46	\$ 541.84
26	CLMP112	2	10" x 15" (11.00 - 11.40) f/c clamp	S/B 226-00111015-000 or =	\$174.27	\$ 348.54
27	CLMP113	2	10" x 15" (11.04 - 12.24) f/c clamp	S/B 227-00111015-050 or =	\$267.96	\$ 535.92
28	CLMP117	10	12" x 7.5" (13.15 - 13.55) f/c clamp	S/B 226-00132007-000 or =	\$100.41	\$ 1,004.10
29	CLMP120	4	12" x 10" (13.10 - 13.56) f/c clamp	S/B 226-00132010-000 or =	\$133.55	\$ 534.20
30	CLMP122	4	12" x 10" (14.00 - 14.40) f/c clamp	S/B 226-00140010-500 or =	\$138.29	\$ 553.16
31	CLMP124	2	12" x 10" std. full circle clamp	S/B 226-00127510-000 or =	\$127.88	\$ 255.76

32	CLMP125	2	12" x 12" (13.15 - 13.55) f/c clamp	S/B 226-00132012-000 or =	\$161.61	\$ 323.22
33	CLMP127	3	12" x 12.5" std. full circle clamp	S/B 226-00127512-000 or =	\$159.38	\$ 478.14
34	CLMP141	3	14" x 10" (13.65 - 14.45) f/c clamp	S/B 227-00136510-000 or =	\$134.49	\$ 403.47
35	WELD017	11	4" slip-on/weld-on flange cl. 125		\$15.52	\$ 170.72
36	WELD019	18	6" slip-on/weld-on flange cl. 125		\$25.52	\$ 459.36
37	WELD024	18	8" slip-on/weld-on flange cl. 125		\$38.75	\$ 697.50
38	WELD001	6	10" slip-on/weld-on flange cl. 125		\$66.88	\$ 401.28
39	WELD003	36	12" slip-on/weld-on flange cl. 125		\$99.17	\$ 3,570.12
40	WELD007	10	16" slip-on/weld-on flange cl. 125		\$171.88	\$ 1,718.80
41	WELD016	5	4" slip-on/weld-on flange cl. 300		\$13.51	\$ 67.55
42	WELD022	9	6" slip-on/weld-on flange cl. 300		\$23.42	\$ 210.78
43	WELD023	5	8" slip-on/weld-on flange cl. 300		\$39.97	\$ 199.85
44	FTNG103	1	4" blind flange		\$21.43	\$ 21.43
45	FTNG104	10	6" blind flange		\$32.66	\$ 326.60
46	FTNG106	2	8" blind flange		\$54.77	\$ 109.54
47	FTNG109	2	12" blind flange		\$110.91	\$ 221.82
48	FTNG192	4	4" Quantum coupling	Smith-Blair 461 or =	\$74.61	\$ 298.44
49	FTNG193	4	6" Quantum coupling	Smith-Blair 461 or =	\$105.20	\$ 420.80
50	FTNG194	4	8" Quantum coupling	Smith-Blair 461 or =	\$122.76	\$ 491.04
51	FTNG196	6	12" Quantum coupling	Smith-Blair 461 or =	\$182.54	\$ 1,095.24
52	SRVC001	1800	3/4" (60' rolls) of soft K copper		\$2.29	\$ 4,122.00
53	SRVC002	200	3/4" (100' rolls) of soft K copper		\$2.29	\$ 458.00
54	SRVC003	720	1" (60' rolls) of soft K copper		\$2.99	\$ 2,152.80
55	SRVC004	100	1" (100' roll) of soft K copper		\$2.99	\$ 299.00
56	SRVC005	200	1-1/2" (20' stick) of soft K copper		\$5.97	\$ 1,194.00
57	SRVC006	20	2" (20' stick) of soft K copper		\$9.28	\$ 185.60
58	PIPE042	200	6" CMLC pipe 10 ga.		\$16.91	\$ 3,382.00
59	Non-Inv.	340	4" D.I. pipe cl. 350		\$18.15	\$ 6,171.00
60	PIPE029	1134	6" D.I. pipe cl. 350		\$9.93	\$ 11,260.62
61	PIPE030	666	8" D.I. pipe cl. 350		\$13.39	\$ 8,917.74
62	PIPE031	324	10" D.I. pipe cl. 350		\$17.25	\$ 5,589.00
63	PIPE032	522	12" D.I. pipe cl. 350		\$23.24	\$ 12,131.28
64	PIPE034	234	16" D.I. pipe cl. 350		\$36.15	\$ 8,459.10

65		5	6" MJ Restraint Kit (Megalug)	Ford 1400 or equivalent	\$33.69	\$ 168.45
66		5	8" MJ Restraint Kit (Megalug)	Ford 1400 or equivalent	\$45.72	\$ 228.60
67		5	10" MJ Restraint Kit (Megalug)	Ford 1400 or equivalent	\$65.32	\$ 326.60
68		5	12" MJ Restraint Kit (Megalug)	Ford 1400 or equivalent	\$87.56	\$ 437.80
69	FTNG096	6	6" MJ x Flange Adapter (7" width)		\$33.00	\$ 198.00
70	FTNG097	5	8" MJ x Flange Adapter (7" width)		\$50.01	\$ 250.05
71	FTNG098	4	10" MJ x Flange Adapter (7" width)		\$87.09	\$ 348.36
72	FTNG099	7	12" MJ x Flange Adapter (7" width)		\$111.59	\$ 781.13
73	FTNG175	4	8" 912 Flanged Coupling Adapter	S/B 912-91094008-000	\$197.74	\$ 790.96
74		4	10" 912 Flanged Coupling Adapter	S/B 912-91118810-000	\$357.98	\$ 1,431.92
75	FTNG200	4	12" 912 Flanged Coupling Adpater	S/B 912-91142012-000	\$398.11	\$ 1,592.44

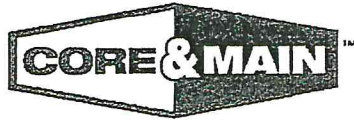
\$ 102,753.25



Formerly HD Supply Waterworks

Bid Proposal for VALVES - *ALREADY PURCHASED*

CUSTOMER	PALMDALE WATER DISTRICT 2029 EAST AVENUE Q PALMDALE, CA 93550	Job VALVES Bid Date: 01/29/2018 05:00 p.m. Bid #: 500755
	Sales Representative Chad Holt (M) 661-709-8907 (T) 661-945-2881 (F) 661-945-5076 Chad.Holt@coreandmain.com	Core & Main 42839 North Sierra Hwy Lancaster, CA 93534 (T) 661-945-2881
CONTACT		
NOTES		



Formerly HD Supply Waterworks

Bid Proposal for VALVES

PALMDALE WATER DISTRICT
 Bid Date: 01/29/2018 05:00 p.m.
 Core & Main Bid #: 500755

Core & Main
 42839 North Sierra Hwy
 Lancaster, CA 93534
 Phone: 661-945-2881
 Fax: 661-945-5076

Seq#	Qty	Description	Units	Price	Ext Price
10		*****			
20		CORE AND MAIN LP			
30		42839 N SIERRA HWY			
40		LANCASTER CA 93534			
50		PHONE:661-945-2881			
60		FAX: :661-945-5076			
70		DOES NOT GUARANTEE THIS QUOTE			
80		TO BE A COMPLETE AND ACCURATE			
90		ACCOUNTING OF ALL MATERIALS			
100		NEEDED TO COMPLETE THIS JOB.			
110		CORE AND MAIN LP STANDARD			
120		TERMS APPLY.			
130		ALL PRICES SUBJECT TO CHANGE			
140		WITHOUT NOTICE.			
150		QUOTATION GOOD FOR 30 DAYS			
160		CORE AND MAIN LP IS NOT			
170		LIABLE FOR DELIVERY DELAYS,			
180		CANCELLATIONS OR PRICE			
190		INCREASES RESULTING FROM ANY			
200		CAUSE BEYOND OUR CONTROL.			
210		THESE INCLUDE BUT ARE NOT			
220		LIMITED TO: MANUFACTURERS			
230		SHORTAGES, AVAILABILITY OR			
240		TIMELINESS OF TRANSPORTATION,			
250		MATERIALS, FUELS, OR SUPPLIES.			
260		THIS QUOTE IS NOT A CONTRACT			
270		TO SUPPLY MATERIAL OR			
280		GUARANTEE OF PRODUCT			
290		AVAILABILITY.			
300		\$50.00 CASH SALE MINIMUM			
310		ALL CASH SALES ARE FINAL			
320					
330	3	4 A2362-6 FLG RW DI GV OL ON	EA	449.04	1,347.12
340	4	6 A2362-6 FLG RW DI GV OL ON	EA	600.26	2,401.04
350	3	6" AVK FLG GATE VALVE FF CL250	EA	1,589.51	4,768.53
360	7	8 A2362-6 FLG RW DI GV OL ON	EA	938.03	6,566.21
370	2	10 A2362-6 FLG RW DI GV OL ON	EA	1,490.62	2,981.24
380	3	12 A2362-6 FLG RW DI GV OL ON	EA	1,799.70	5,399.10
390	3	4 B3211-6 FLG BFV OL N&E (OPER NUT & EPOXY)	EA	475.27	1,425.81
400	2	10 B3211-6 FLG BFV OL N&E (OPER NUT & EPOXY)	EA	864.52	1,729.04
410	2	14 B3211-6 FLG BFV OL EPOXY OPER NUT	EA	1,694.63	3,389.26
420	1	16 B3211-6 FLG BFV OL OP NUT EPOXY IN & OUT	EA	2,016.35	2,016.35
430	2	20 B3211-6 FLG BFV OL N&E (OPER NUT & EPOXY)	EA	3,047.32	6,094.64



Formerly HD Supply Waterworks

Bid Proposal for VALVES

Bid #: 500755

Seq#	Qty	Description	Units	Price	Ext Price
440	2	24 B3211-6 FLG BFV OL N&E (OPER NUT & EPOXY)	EA	4,230.11	8,460.22
				Sub Total	46,578.56
				Tax	4,424.96
				Total	51,003.52

PRE TAX

GMA

1/29/18

Doris LaMunex
1/29/18

PURCHASE NOW 1/29/18 - OUT
OF WATERLINES ONCE EARTHQUAKE
INVENTORY LIST IS REFRESHED
& APPROVED BY BOARD - BACKFILL
SIC BACK TO WATERLINES.

INDUSTRIAL RUBBER & SUPPLY, LLC

275 W Orange Show Lane
San Bernadino, CA92408
Ph# (909) 383-2316

Estimate

2/8/2018

Palmdale Water District
2029 E. Avenue Q
Palmdale, CA 93550

Description	Qty.	Cost	Total
ATTN: Purchasing			
6" HOSES AND CONNECTORS			
EA. RC60-450-100-Y-ARN 100' X 6" [RP-FLOW YELLOW HEAVY DUTY RUBBER COVERED HOSE W/CPLD 6' MXF NST (40 - 100' HOSES)	40	\$1,100.00	\$44,000.00
EA. N35-60F60F 6" DOUBLE FEMALE SWIVEL ROCKER LUG HARD COAT ALUMINUM (SWIVELS FOR CONNECTIONS)	4	\$294.60	\$1,178.40
4" HOSES AND CONNECTORS			
EA. DP440-600-0-100-ARN 100' X 4" DJ FIRE HOSE ORANGE DOMESTIC HOSE CPLD 4" MXF FNST (13 - 100' HOSES)	13	\$648.00	\$8,424.00
EA. N35-40F40F DOUBLE FEMALE SWIVEL ROCKER LUG HARD COAT ALUMINUM (SWIVELS FOR CONNECTIONS)	2	\$243.80	\$487.60
Subtotal			\$54,090.00
Sales Tax (9.5%)			\$5,138.55
TOTAL			\$59,228.55

P A L M D A L E W A T E R D I S T R I C T
B O A R D M E M O R A N D U M

DATE: February 14, 2018 **February 20, 2018**
TO: FACILITIES COMMITTEE **Committee Meeting**
FROM: Mr. Tim Moore, Facilities Manager
VIA: Mr. Dennis D. LaMoreaux, General Manager
RE: ***AGENDA ITEM NO. 4.3 – CONSIDERATION AND POSSIBLE ACTION ON
DECLARING DISTRICT PROPERTY AS SURPLUS AND AUTHORIZING
STAFF TO COMPLETE THE DISPOSAL PROCESS. (GAIN OF SALE OF
EQUIPMENT– FACILITIES MANAGER MOORE)***

Recommendation:

Staff recommends the Committee declare District property as surplus and authorize staff to complete the disposal process.

Alternative Options:

The alternative option is to keep the equipment and vehicles designated by staff as surplus.

Impact of Taking No Action:

No District property will be declared as surplus.

Background:

The following vehicles / equipment are no longer needed for District use and are recommended to be declared as surplus property.

- | | | | | |
|----|------------------------------|------|--|--------------|
| 1. | V-33 | 2000 | Chevrolet C-30 Utility truck w/rack - crane | 131075 miles |
| 2. | V-40 | 2002 | Buick LaSabre 4-door sedan | 86950 miles |
| 3. | V-79 | 2002 | Trailer mounted John Bean weed sprayer | 4 hrs. |
| 4. | V-92 | 2005 | Chev ¾ T Utility truck w/valve turning machine | 83945 miles |
| 5. | V-93 | 2005 | Chev ¾ T Utility truck w/ ladder rack | 126245 miles |
| 6. | V-98 | 2007 | Chev ½ T 4-door pick up | 144950 miles |
| 7. | V-106 | 2007 | Chev Colorado P/U w/ utility shell | 80962 miles |
| 8. | V-107 | 2007 | Chev Colorado P/U w/ utility shell | 92225 miles |
| 9. | Utility shell w/ ladder rack | | | |

February 14, 2018

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 3 – Systems Efficiency.
This item directly relates to the District's Mission Statement.

Budget:

The successful sale of the Vehicles and Equipment will generate revenue for the general fund (Surplus Budget No. 1-00-3110-000). The final value is to be determined.

Supporting Documents:

- Photos of Vehicles and Equipment

P A L M D A L E W A T E R D I S T R I C T
B O A R D M E M O R A N D U M

DATE: February 14, 2018 **February 20, 2018**
TO: FACILITIES COMMITTEE **Committee Meeting**
FROM: Mr. Tim Moore, Facilities Manager
VIA: Mr. Dennis D. LaMoreaux, General Manager
RE: ***AGENDA ITEM NO. 4.4 – CONSIDERATION AND POSSIBLE ACTION ON THE LEASE OF FIVE VEHICLES. (\$40,000.00 – BUDGETED – FACILITIES MANAGER MOORE)***

Recommendation:

Staff recommends the Committee authorize the lease of five District vehicles in the not-to-exceed amount of \$40,000.00 per year and that this item be presented to the full Board for consideration.

Alternative Options:

The alternative option is to not authorize this lease.

Impact of Taking No Action:

No new vehicles will be obtained.

Background:

The District has been leasing vehicles through Enterprise Leasing Fleet Management. These proposed vehicles will be added to the District's lease.

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 3 – Systems Efficiency.
This item directly relates to the District's Mission Statement.

Budget:

This item is under Budget Item No.1-04-7000-200 Leases Fleet

Supporting Documents:

- Enterprise Lease Quote No. 3759631 Quantity 2-2018 Ford F-250 Utility Bed Vehicles
- Enterprise Lease Quote No. 3791415 Quantity 1-2018 Ford Edge Front Wheel drive
- Enterprise Lease Quote No. 3719184 Quantity 2-2018 Ford F-150 Long bed Pick-up



Open-End (Equity) Lease Rate Quote

Quote No: 3759631

Prepared For: Palmdale Water District
Williams, Michael A

Date 01/16/2018
AE/AM ACI/LLM

Unit #

Year 2018 Make Ford Model F-250

Series XL 4x2 SD Regular Cab 8 ft. box 142 in. WB SRW

Vehicle Order Type Ordered Term 60 State CA Customer# 557339

\$ 31,342.00	Capitalized Price of Vehicle ¹
\$ 0.00 *	Sales Tax 0.0000% State CA
\$ 564.25 *	Initial License Fee
\$ 0.00 *	Registration Fee
\$ 285.00	Other: (See Page 2)
\$ 0.00	Capitalized Price Reduction
\$ 0.00	Tax on Capitalized Price Reduction
\$ 0.00	Gain Applied From Prior Unit
\$ 0.00 *	Tax on Gain On Prior
\$ 0.00 *	Security Deposit
\$ 0.00 *	Tax on Incentive(Taxable Incentive Total : \$0.00)

\$ 31,627.00 Total Capitalized Amount (Delivered Price)

\$ 632.54 Depreciation Reserve @ 2.0000%

\$ 113.68 Monthly Lease Charge (Based on Interest Rate - Subject to a Floor)²

\$ 746.22 al Monthly Rental Excluding Additional Services

Additional Fleet Management

Master Policy Enrollment Fees

\$ 0.00 Commercial Automobile Liability Enrollment

Liability Limit \$0.00

\$ 0.00 Physical Damage Management

\$ 39.98 Full Maintenance Program³ Contract Miles 50,000

Incl: # Brake Sets (1 set = 1 Axle) 0

\$ 39.98 Additional Services SubTotal

\$ 70.89 Sales Tax 9.5000%

\$ 857.09 Total Monthly Rental Including Additional Services

\$ -6,325.40 Reduced Book Value at 60 Months

\$ 400.00 Service Charge Due at Lease Termination

All language and acknowledgments contained in the signed quote apply to all vehicles that are ordered under this signed quote.

Order Information

Driver Name	TBD
Exterior Color	(0 P) Oxford White
Interior Color	(0 I) Medium Earth Gray w/HD Vinyl 40/20/40 S
Lic. Plate Type	Unknown
GVWR	0

Quantity: 2

X: _____

Comp/Coll Deductible 0 / 0

OverMileage Charge \$ 0.0350 Per Mile

Tires 0

Loaner Vehicle Not Included

Quote based on estimated annual mileage of 10,000

(Current market and vehicle conditions may also affect value of vehicle)

(Quote is Subject to Customer's Credit Approval)

Notes

Enterprise FM Trust will be the owner of the vehicle covered by this Quote. Enterprise FM Trust (not Enterprise Fleet Management) will be the Lessor of such vehicle under the Master Open - End (Equity) Lease Agreement and shall have all rights and obligations of the Lessor under the Master Open - End (Equity) Lease Agreement with respect to such vehicle.

ALL TAX AND LICENSE FEES TO BE BILLED TO LESSEE AS THEY OCCUR.

Lessee hereby authorizes this vehicle order, agrees to lease the vehicle on the terms set forth herein and in the Master Equity Lease Agreement and agrees that Lessor shall have the right to collect damages in the event Lessee fails or refuses to accept delivery of the ordered vehicle.

Lessee certifies that it intends that more than 50% of the use of the vehicle is to be in a trade or business of the Lessee.

LESSEE Palmdale Water District

BY _____ TITLE _____ DATE _____

* INDICATES ITEMS TO BE BILLED ON DELIVERY.

¹ Capitalized Price of Vehicle May be Adjusted to Reflect Final Manufacturer's Invoice. Lessee Hereby Assigns to Lessor any Manufacturer Rebates And/Or Manufacturer Incentives Intended for the Lessee, Which Rebates And/Or Incentives Have Been Used By Lessor to Reduce the Capitalized Price of the Vehicle.

² Monthly Lease Charge Will Be Adjusted to Reflect the Interest Rate on the Delivery Date (Subject to a Floor).

³ The inclusion herein of references to maintenance fees/services are solely for the administrative convenience of Lessee. Notwithstanding the inclusion of such references in this [Invoice/Schedule/Quote], all such maintenance services are to be performed by Enterprise Fleet Management, Inc., and all such maintenance fees are payable by Lessee solely for the account of Enterprise Fleet Management, Inc., pursuant to that certain separate [Maintenance Agreement] entered into by and between Lessee and Enterprise Fleet Management, Inc.; provided that such maintenance fees are being billed by Enterprise FM Trust, and are payable at the direction of Enterprise FM Trust, solely as an authorized agent for collection on behalf of Enterprise Fleet Management, Inc.

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Open-End (Equity) Lease Rate Quote

Quote No: 3759631

Aftermarket Equipment Total

Description	(B)illed or (C)apped	Price
Utility Body with Ladder Rack - Harbor truck estimate	C	\$ 6,300.00
Total Aftermarket Equipment Billed		\$ 0.00
Total Aftermarket Equipment Capitalized		\$ 6,300.00
Aftermarket Equipment Total		\$ 6,300.00

Other Totals

Description	(B)illed or (C)apped	Price
Pricing Plan Delivery Charge	C	\$ 85.00
Courtesy Delivery Fee	C	\$ 200.00
Total Other Charges Billed		\$ 0.00
Total Other Charges Capitalized		\$ 285.00
Other Charges Total		\$ 285.00



Open-End (Equity) Lease Rate Quote

Quote No: 3759631

VEHICLE INFORMATION:

2018 Ford F-250 XL 4x2 SD Regular Cab 8 ft. box 142 in. WB SRW - US

Series ID: F2A

Pricing Summary:

	INVOICE	MSRP
Base Vehicle	\$ 31,081.00	\$ 32,890.00
Total Options	\$ 266.00	\$ 290.00
Destination Charge	\$ 1,295.00	\$ 1,295.00
Total Price	\$ 32,642.00	\$ 34,475.00

SELECTED COLOR:

Exterior: Z1 - (0 P) Oxford White

Interior: AS - (0 I) Medium Earth Gray w/HD Vinyl 40/20/40 Split Bench Seat

SELECTED OPTIONS:

CODE	DESCRIPTION	INVOICE	MSRP
142WB	142" Wheelbase	STD	STD
425	50-State Emissions System	STD	STD
44S	Transmission: TorqShift-G 6-Spd Auto w/SelectShift	Included	Included
54K	Manual Telescoping/Folding Trailer Tow Mirrors	Included	Included
587	Radio: AM/FM Stereo	Included	Included
600A	Order Code 600A	NC	NC
64A	Wheels: 17" Argent Painted Steel	Included	Included
66D	Pickup Box Delete	\$ -575.00	\$ -625.00
66DRBD	Rear Bumper Delete	Included	Included
66DSPR	Spare Wheel, Tire, Carrier & Jack Delete	Included	Included
90L	Power Equipment Group	\$ 841.00	\$ 915.00
90LACD	Accessory Delay	Included	Included
90LPAA	Perimeter Alarm	Included	Included
90LPLK	Power Locks	Included	Included
90LPTL	Power Tailgate Lock	Included	Included
90LPWN	Power Front Seat Windows	Included	Included
90LRKE	Remote Keyless Entry	Included	Included
996	Engine: 6.2L 2-Valve SOHC EFI NA V8 Flex-Fuel	Included	Included
A	HD Vinyl 40/20/40 Split Bench Seat	Included	Included
AS_04	(0 I) Medium Earth Gray w/HD Vinyl 40/20/40 Split Bench Seat	NC	NC
PAINT	Monotone Paint Application	STD	STD
STDGV	GVWR: 9,950 lb Payload Package	Included	Included
TD8	Tires: LT245/75R17E BSW A/S (4)	Included	Included
X37	3.73 Axle Ratio	Included	Included
Z1_01	(0 P) Oxford White	NC	NC

CONFIGURED FEATURES:

Body Exterior Features:

Number Of Doors: 2
Driver And Passenger Mirror: power remote heated manual folding side-view door mirrors with turn signal indicator
Convex Driver Mirror: convex driver and passenger mirror
Mirror Type: manual extendable trailer mirrors
Door Handles: black
Front And Rear Bumpers: black front and rear bumpers with black rub strip
Front Tow Hooks: 2 front tow hooks
Front License Plate Bracket: front license plate bracket
Body Material: aluminum body material
: class V trailering with hitch
Grille: black grille

Convenience Features:

Air Conditioning: manual air conditioning
Air Filter: air filter
Power Windows: power windows with driver and passenger 1-touch down
Remote Keyless Entry: keyfob (all doors) remote keyless entry
Illuminated Entry: illuminated entry
Integrated Key Remote: integrated key/remote
Steering Wheel: steering wheel with manual tilting, manual telescoping
Day-Night Rearview Mirror: day-night rearview mirror
Front Cupholder: front cupholder
Glove Box: illuminated locking glove box
Driver Door Bin: driver and passenger door bins
Dashboard Storage: covered dashboard storage
IP Storage: bin instrument-panel storage
Retained Accessory Power: retained accessory power
Power Accessory Outlet: 2 12V DC power outlets

Entertainment Features:

radio: AM/FM stereo with seek-scan
Speakers: 4 speakers
1st Row LCD: 1 1st row LCD monitor
Antenna: fixed antenna

Lighting, Visibility and Instrumentation Features:

Headlamp Type: delay-off aero-composite halogen headlamps
Cab Clearance Lights: cargo bed light
Underhood Light: underhood light
Front Wipers: variable intermittent wipers
Tinted Windows: light-tinted windows
Dome Light: dome light with fade
Front Reading Lights: front reading lights
Variable IP Lighting: variable instrument panel lighting
Display Type: analog display
Tachometer: tachometer
Exterior Temp: outside-temperature display
Low Tire Pressure Warning: tire specific low-tire-pressure warning
Trip Computer: trip computer
Trip Odometer: trip odometer
Oil Pressure Gauge: oil pressure gauge
Water Temp Gauge: water temp. gauge
Transmission Oil Temp Gauge: transmission oil temp. gauge
Engine Hour Meter: engine hour meter
Clock: in-radio display clock
Systems Monitor: systems monitor
Rear Vision Camera: rear vision camera
Oil Pressure Warning: oil-pressure warning
Water Temp Warning: water-temp. warning
Battery Warning: battery warning
Lights On Warning: lights-on warning
Key in Ignition Warning: key-in-ignition warning

Low Fuel Warning: low-fuel warning
Door Ajar Warning: door-ajar warning
Brake Fluid Warning: brake-fluid warning

Safety And Security:

ABS four-wheel ABS brakes
Number of ABS Channels: 4 ABS channels
Brake Assistance: brake assist
Brake Type: four-wheel disc brakes
Vented Disc Brakes: front and rear ventilated disc brakes
Daytime Running Lights: daytime running lights
Driver Front Impact Airbag: driver and passenger front-impact airbags
Driver Side Airbag: seat-mounted driver and passenger side-impact airbags
Overhead Airbag: Safety Canopy System curtain 1st row overhead airbag
Height Adjustable Seatbelts: height adjustable front seatbelts
Side Impact Bars: side-impact bars
Perimeter Under Vehicle Lights: remote activated perimeter/approach lights
Tailgate/Rear Door Lock Type: tailgate/rear door lock included with power door locks
Ignition Disable: SecuriLock immobilizer
Security System: security system
Panic Alarm: panic alarm
Electronic Stability: electronic stability stability control with anti-roll
Traction Control: ABS and driveline traction control
Front and Rear Headrests: manual adjustable front head restraints

Seats And Trim:

Seating Capacity max. seating capacity of 3
Front Bucket Seats: front split-bench 40-20-40 seats
Number of Driver Seat Adjustments: 4-way driver and passenger seat adjustments
Reclining Driver Seat: manual reclining driver and passenger seats
Driver Lumbar: manual driver and passenger lumbar support
Driver Fore/Aft: manual driver and passenger fore/aft adjustment
Front Centre Armrest Storage: front centre armrest with storage
Leather Upholstery: vinyl front seat upholstery
Headliner Material: full cloth headliner
Floor Covering: full vinyl/rubber floor covering
Shift Knob Trim: urethane shift knob
Interior Accents: chrome interior accents

Standard Engine:

Engine 385-hp, 6.2-liter V-8 (regular gas)

Standard Transmission:

Transmission 6-speed automatic w/ OD and auto-manual



Open-End (Equity) Lease Rate Quote

Quote No: 3791415

Prepared For: Palmdale Water District
Williams, Michael A

Date 01/26/2018
AE/AM ACI/LLM

Unit #

Year 2018 Make Ford Model Edge

Series SE 4dr Front-wheel Drive

Vehicle Order Type Ordered Term 60 State CA Customer# 557339

\$ 26,493.00	Capitalized Price of Vehicle ¹
\$ 0.00 *	Sales Tax 0.0000% State CA
\$ 437.51 *	Initial License Fee
\$ 0.00 *	Registration Fee
\$ 285.00	Other: (See Page 2)
\$ 0.00	Capitalized Price Reduction
\$ 0.00	Tax on Capitalized Price Reduction
\$ 0.00	Gain Applied From Prior Unit
\$ 0.00 *	Tax on Gain On Prior
\$ 0.00 *	Security Deposit
\$ 0.00 *	Tax on Incentive(Taxable Incentive Total : \$0.00)

\$ 26,778.00 Total Capitalized Amount (Delivered Price)

\$ 361.50 Depreciation Reserve @ 1.3500%

\$ 114.42 Monthly Lease Charge (Based on Interest Rate - Subject to a Floor)²

\$ 475.92 Total Monthly Rental Excluding Additional Services

Additional Fleet Management

Master Policy Enrollment Fees

\$ 0.00 Commercial Automobile Liability Enrollment

Liability Limit \$0.00

\$ 0.00 Physical Damage Management

\$ 37.14 Full Maintenance Program³ Contract Miles 50,000

Incl: # Brake Sets (1 set = 1 Axle) 0

\$ 37.14 Additional Services SubTotal

\$ 45.21 Sales Tax 9.5000%

\$ 558.27 Total Monthly Rental Including Additional Services

\$ 5,088.00 Reduced Book Value at 60 Months

\$ 400.00 Service Charge Due at Lease Termination

All language and acknowledgments contained in the signed quote apply to all vehicles that are ordered under this signed quote.

Order Information

Driver Name

Exterior Color (0 P) Oxford White

Interior Color (0 I) Ebony w/Cloth Bucket Seats

Lic. Plate Type Unknown

GVWR 0

QUANTITY = 1

Comp/Coll Deductible 0 / 0

OverMileage Charge \$ 0.0350 Per Mile

Tires 0

Loaner Vehicle Not Included

State CA

Quote based on estimated annual mileage of 10,000

(Current market and vehicle conditions may also affect value of vehicle)

(Quote is Subject to Customer's Credit Approval)

Notes

Enterprise FM Trust will be the owner of the vehicle covered by this Quote. Enterprise FM Trust (not Enterprise Fleet Management) will be the Lessor of such vehicle under the Master Open - End (Equity) Lease Agreement and shall have all rights and obligations of the Lessor under the Master Open - End (Equity) Lease Agreement with respect to such vehicle.

ALL TAX AND LICENSE FEES TO BE BILLED TO LESSEE AS THEY OCCUR.

Lessee hereby authorizes this vehicle order, agrees to lease the vehicle on the terms set forth herein and in the Master Equity Lease Agreement and agrees that Lessor shall have the right to collect damages in the event Lessee fails or refuses to accept delivery of the ordered vehicle.

Lessee certifies that it intends that more than 50% of the use of the vehicle is to be in a trade or business of the Lessee.

LESSEE Palmdale Water District

BY

TITLE

DATE

* INDICATES ITEMS TO BE BILLED ON DELIVERY.

¹ Capitalized Price of Vehicle May be Adjusted to Reflect Final Manufacturer's Invoice. Lessee Hereby Assigns to Lessor any Manufacturer Rebates And/Or Manufacturer Incentives Intended for the Lessee, Which Rebates And/Or Incentives Have Been Used By Lessor to Reduce the Capitalized Price of the Vehicle.

² Monthly Lease Charge Will Be Adjusted to Reflect the Interest Rate on the Delivery Date (Subject to a Floor).

³ The inclusion herein of references to maintenance fees/services are solely for the administrative convenience of Lessee. Notwithstanding the inclusion of such references in this [Invoice/Schedule/Quote], all such maintenance services are to be performed by Enterprise Fleet Management, Inc., and all such maintenance fees are payable by Lessee solely for the account of Enterprise Fleet Management, Inc., pursuant to that certain separate [Maintenance Agreement] entered into by and between Lessee and Enterprise Fleet Management, Inc.; provided that such maintenance fees are being billed by Enterprise FM Trust, and are payable at the direction of Enterprise FM Trust, solely as an authorized agent for collection on behalf of Enterprise Fleet Management, Inc.

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Open-End (Equity) Lease Rate Quote

Quote No: 3791415

Other Totals

Description	(B)illed or (C)apped	Price
Pricing Plan Delivery Charge	C	\$ 85.00
Courtesy Delivery Fee	C	\$ 200.00
Total Other Charges Billed		\$ 0.00
Total Other Charges Capitalized		\$ 285.00
Other Charges Total		\$ 285.00



Open-End (Equity) Lease Rate Quote

Quote No: 3791415

VEHICLE INFORMATION:

2018 Ford Edge SE 4dr Front-wheel Drive - US

Series ID: K3G

Pricing Summary:

	INVOICE	MSRP
Base Vehicle	\$ 28,198.00	\$ 29,220.00
Total Options	\$ 0.00	\$ 0.00
Destination Charge	\$ 995.00	\$ 995.00
Total Price	\$ 29,193.00	\$ 30,215.00

SELECTED COLOR:

Exterior: YZ - (0 P) Oxford White

Interior: CE - (0 I) Ebony w/Cloth Bucket Seats

SELECTED OPTIONS:

CODE	DESCRIPTION	INVOICE	MSRP
100A	Equipment Group 100A	NC	NC
112WB	112.2" Wheelbase	STD	STD
153	Front License Plate Bracket	NC	NC
425	50-State Emissions System	STD	STD
446	Transmission: 6-Speed Automatic w/SelectShift	Included	Included
999	Engine: Twin-Scroll 2.0L EcoBoost	Included	Included
C	Cloth Bucket Seats	Included	Included
CE_02	(0 I) Ebony w/Cloth Bucket Seats	NC	NC
PAINT	Monotone Paint Application	STD	STD
STDAX	3.36 Axle Ratio	Included	Included
STDGV	GVWR: 5,320 lbs	Included	Included
STDRD	Radio: AM/FM Stereo w/Single CD Player	Included	Included
STDTR	Tires: 245/60R18 AS BSW	Included	Included
STDWL	Wheels: 18" Sparkle Silver Painted Aluminum	Included	Included
SYNC	SYNC Communications & Entertainment System	Included	Included
YZ_01	(0 P) Oxford White	NC	NC

CONFIGURED FEATURES:

Body Exterior Features:

Number Of Doors 4
Rear Cargo Door Type: liftgate
Driver And Passenger Mirror: power remote manual folding side-view door mirrors
Convex Driver Mirror: convex driver and passenger mirror
Spoiler: rear lip spoiler
Door Handles: body-coloured
Front And Rear Bumpers: body-coloured front and rear bumpers with black rub strip
Front License Plate Bracket: front license plate bracket
Body Material: fully galvanized steel body material
Body Side Cladding: black bodyside cladding
Grille: metal-look w/chrome surround grille

Convenience Features:

Air Conditioning manual air conditioning
Air Filter: air filter
Console Ducts: console ducts
Cruise Control: cruise control with steering wheel controls
Power Windows: power windows with driver and passenger 1-touch down
1/4 Vent Rear Windows: power rearmost windows
Remote Keyless Entry: keyfob (all doors) remote keyless entry
Illuminated Entry: illuminated entry
Integrated Key Remote: integrated key/remote
Auto Locking: auto-locking doors
Passive Entry: proximity key
Window FOB Controls: remote window controls
Steering Wheel: steering wheel with manual tilting, manual telescoping
Day-Night Rearview Mirror: day-night rearview mirror
Driver and Passenger Vanity Mirror: illuminated driver and passenger-side visor mirrors
Emergency SOS: 911 Assist emergency communication system
Front Cupholder: front and rear cupholders
Floor Console: full floor console with covered box
Overhead Console: mini overhead console with storage
Glove Box: illuminated locking glove box
Driver Door Bin: driver and passenger door bins
Rear Door Bins: rear door bins
Seatback Storage Pockets: 2 seatback storage pockets
Dashboard Storage: covered dashboard storage
IP Storage: bin instrument-panel storage
Driver Footrest: driver's footrest
Retained Accessory Power: retained accessory power
Power Accessory Outlet: 4 12V DC power outlets

Entertainment Features:

radio AM/FM stereo with seek-scan, single in-dash CD player
MP3 Player: MP3 decoder
Voice Activated Radio: voice activated radio
Speed Sensitive Volume: speed-sensitive volume
Steering Wheel Radio Controls: steering-wheel mounted audio controls
Speakers: 6 speakers
1st Row LCD: 2 1st row LCD monitor
Wireless Connectivity: wireless phone connectivity
Antenna: integrated roof antenna

Lighting, Visibility and Instrumentation Features:

Headlamp Type delay-off projector beam halogen headlamps
Front Wipers: variable intermittent speed-sensitive wipers wipers
Rear Window wiper: fixed interval rear window wiper
Rear Window Defroster: rear window defroster
Tinted Windows: deep-tinted windows
Dome Light: dome light with fade
Front Reading Lights: front and rear reading lights
Ignition Switch: ignition switch light

Variable IP Lighting: variable instrument panel lighting
Display Type: analog display
Tachometer: tachometer
Compass: compass
Exterior Temp: outside-temperature display
Low Tire Pressure Warning: tire specific low-tire-pressure warning
Trip Computer: trip computer
Trip Odometer: trip odometer
Water Temp Gauge: water temp. gauge
Clock: in-dash clock
Systems Monitor: systems monitor
Rear Vision Camera: rear vision camera
Oil Pressure Warning: oil-pressure warning
Battery Warning: battery warning
Low Oil Level Warning: low-oil-level warning
Lights On Warning: lights-on warning
Key in Ignition Warning: key-in-ignition warning
Low Fuel Warning: low-fuel warning
Low Washer Fluid Warning: low-washer-fluid warning
Door Ajar Warning: door-ajar warning
Trunk Ajar Warning: trunk-ajar warning
Brake Fluid Warning: brake-fluid warning

Safety And Security:

ABS four-wheel ABS brakes
Number of ABS Channels: 4 ABS channels
Brake Assistance: brake assist
Brake Type: four-wheel disc brakes
Vented Disc Brakes: front and rear ventilated disc brakes
Daytime Running Lights: daytime running lights
Spare Tire Type: compact spare tire
Spare Tire Mount: spare tire mounted inside under cargo
Driver Front Impact Airbag: driver and passenger front-impact airbags
Driver Side Airbag: seat-mounted driver and passenger side-impact airbags
Overhead Airbag: Safety Canopy System curtain 1st and 2nd row overhead airbag
Knee Airbag: knee airbag
Occupancy Sensor: front passenger airbag occupancy sensor
Height Adjustable Seatbelts: height adjustable front seatbelts
Seatbelt Pretensioners: front seatbelt pre-tensioners
3Point Rear Centre Seatbelt: 3 point rear centre seatbelt
Side Impact Bars: side-impact bars
Tailgate/Rear Door Lock Type: tailgate/rear door lock included with power door locks
Rear Child Safety Locks: rear child safety locks
Ignition Disable: SecuriLock immobilizer
Panic Alarm: panic alarm
Electronic Stability: electronic stability stability control with anti-roll
Traction Control: ABS and driveline traction control
Front and Rear Headrests: manual adjustable front head restraints with tilt
Rear Headrest Control: 3 rear head restraints

Seats And Trim:

Seating Capacity max. seating capacity of 5
Front Bucket Seats: front bucket seats
Number of Driver Seat Adjustments: 6-way driver and passenger seat adjustments
Reclining Driver Seat: manual reclining driver and passenger seats
Driver Lumbar: manual driver and passenger lumbar support
Driver Height Adjustment: manual height-adjustable driver and passenger seats
Driver Fore/Aft: manual driver and passenger fore/aft adjustment
Front Centre Armrest Storage: front centre armrest with storage
Rear Seat Type: rear manual reclining 60-40 split-bench seat
Rear Folding Position: rear seat fold-forward seatback
Rear Seat Armrest: rear seat centre armrest
Leather Upholstery: cloth front and rear seat upholstery
Door Trim Insert: vinyl door panel trim

Headliner Material: full cloth headliner

Floor Covering: full carpet floor covering

Dashboard Console Insert, Door Panel Insert Combination: metal-look instrument panel insert, door panel insert, console insert

Shift Knob Trim: leather/metal-look shift knob

Floor Mats: carpet front and rear floor mats

Interior Accents: chrome and metal-look interior accents

Cargo Space Trim: carpet cargo space

Trunk Lid: plastic trunk lid/rear cargo door

Cargo Tie Downs: cargo tie-downs

Cargo Light: cargo light

Concealed Cargo Storage: concealed cargo storage

Cargo Net: cargo net

Standard Engine:

Engine 245-hp, 2.0-liter I-4 (premium)

Standard Transmission:




Transmission 6-speed automatic w/ OD and auto-manual

(1) Order Quantity: 1

(2) Optional accessories:

- a. Universal T-Harness - \$28: Quantity _____
- b. Extension cable and bracket - \$15: Quantity _____
- c. Driver ID Kit - \$126: Quantity _____
- d. Other: _____ Quantity _____

(3) Requested order date: 5/26/17

-  Basic Fleet Package: \$17 per month per device
-  Pro Fleet Package: \$24 per month per device
-  Pro Plus Fleet Package: \$29 per month per device

Thank you for your business!

Authorized signer: _____

Name: _____

Signature: _____

Company Name: _____

Date: _____



Open-End (Equity) Lease Rate Quote

Quote No: 3719184

Prepared For: Palmdale Water District
Williams, Michael A

Date 01/16/2018
AE/AM ACI/LLM

Unit #

Year 2018 Make Ford Model F-150

Series XL 4x2 Regular Cab Styleside 8 ft. box 141 in. WB

Vehicle Order Type Ordered Term 60 State CA Customer# 557339

\$ 19,386.00 Capitalized Price of Vehicle¹
\$ 0.00 * Sales Tax 0.0000% State CA
\$ 442.85 * Initial License Fee
\$ 0.00 * Registration Fee
\$ 285.00 Other: (See Page 2)
\$ 0.00 Capitalized Price Reduction
\$ 0.00 Tax on Capitalized Price Reduction
\$ 0.00 Gain Applied From Prior Unit
\$ 0.00 * Tax on Gain On Prior
\$ 0.00 * Security Deposit
\$ 0.00 * Tax on Incentive(Taxable Incentive Total : \$0.00)

\$ 19,671.00 Total Capitalized Amount (Delivered Price)

\$ 265.56 Depreciation Reserve @ 1.3500%

\$ 92.80 Monthly Lease Charge (Based on Interest Rate - Subject to a Floor)²

\$ 358.36 Total Monthly Rental Excluding Additional Services

Additional Fleet Management

Master Policy Enrollment Fees

\$ 0.00 Commercial Automobile Liability Enrollment

Liability Limit \$0.00

\$ 0.00 Physical Damage Management

\$ 51.17 Full Maintenance Program³ Contract Miles 75,000

Incl: # Brake Sets (1 set = 1 Axle) 0

\$ 51.17 Additional Services SubTotal

\$ 34.04 Sales Tax 9.5000%

State CA

\$ 443.57 Total Monthly Rental Including Additional Services

\$ 3,737.40 Reduced Book Value at 60 Months

\$ 400.00 Service Charge Due at Lease Termination

All language and acknowledgments contained in the signed quote apply to all vehicles that are ordered under this signed quote.

Order Information

Driver Name

Exterior Color (0 P) Oxford White

Interior Color (0 I) Medium Earth Gray w/Vinyl 40/20/40 Fron

Lic. Plate Type Unknown

GVWR 0

Quantity 2

X: _____

Comp/Coll Deductible 0 / 0

OverMileage Charge \$ 0.0350 Per Mile

Tires 0

Loaner Vehicle Not Included

Quote based on estimated annual mileage of 15,000

(Current market and vehicle conditions may also affect value of vehicle)

(Quote is Subject to Customer's Credit Approval)

Notes

Enterprise FM Trust will be the owner of the vehicle covered by this Quote. Enterprise FM Trust (not Enterprise Fleet Management) will be the Lessor of such vehicle under the Master Open - End (Equity) Lease Agreement and shall have all rights and obligations of the Lessor under the Master Open - End (Equity) Lease Agreement with respect to such vehicle.

ALL TAX AND LICENSE FEES TO BE BILLED TO LESSEE AS THEY OCCUR.

Lessee hereby authorizes this vehicle order, agrees to lease the vehicle on the terms set forth herein and in the Master Equity Lease Agreement and agrees that Lessor shall have the right to collect damages in the event Lessee fails or refuses to accept delivery of the ordered vehicle.

Lessee certifies that it intends that more than 50% of the use of the vehicle is to be in a trade or business of the Lessee.

LESSEE Palmdale Water District

BY

TITLE

DATE

* INDICATES ITEMS TO BE BILLED ON DELIVERY.

¹ Capitalized Price of Vehicle May be Adjusted to Reflect Final Manufacturer's Invoice. Lessee Hereby Assigns to Lessor any Manufacturer Rebates And/Or Manufacturer Incentives Intended for the Lessee, Which Rebates And/Or Incentives Have Been Used By Lessor to Reduce the Capitalized Price of the Vehicle.

² Monthly Lease Charge Will Be Adjusted to Reflect the Interest Rate on the Delivery Date (Subject to a Floor).

³ The inclusion herein of references to maintenance fees/services are solely for the administrative convenience of Lessee. Notwithstanding the inclusion of such references in this [Invoice/Schedule/Quote], all such maintenance services are to be performed by Enterprise Fleet Management, Inc., and all such maintenance fees are payable by Lessee solely for the account of Enterprise Fleet Management, Inc., pursuant to that certain separate [Maintenance Agreement] entered into by and between Lessee and Enterprise Fleet Management, Inc.; provided that such maintenance fees are being billed by Enterprise FM Trust, and are payable at the direction of Enterprise FM Trust, solely as an authorized agent for collection on behalf of Enterprise Fleet Management, Inc.

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Page 1 of 5



Open-End (Equity) Lease Rate Quote

Quote No: 3719184

Aftermarket Equipment Total

Description	(B)illed or (C)apped	Price
Rubberized Bedliner, Back Rack (item #BR-15004), LED Mini Light Bar (AW Direct Item #WB11PA) mounted to top center of Back Rack, 2 Brute Aluminum double tier topside tool boxes (item #TBS200-72BD).	B	\$ 3,080.00
TAX on AME	B	\$ 292.60
Total Aftermarket Equipment Billed		\$ 3,372.60
Total Aftermarket Equipment Capitalized		\$ 0.00
Aftermarket Equipment Total		\$ 3,372.60

Other Totals

Description	(B)illed or (C)apped	Price
Pricing Plan Delivery Charge	C	\$ 85.00
Courtesy Delivery Fee	C	\$ 200.00
Total Other Charges Billed		\$ 0.00
Total Other Charges Capitalized		\$ 285.00
Other Charges Total		\$ 285.00



Open-End (Equity) Lease Rate Quote

Quote No: 3719184

VEHICLE INFORMATION:

2018 Ford F-150 XL 4x2 Regular Cab Styleside 8 ft. box 141 in. WB - US

Series ID: F1C

Pricing Summary:

	INVOICE	MSRP
Base Vehicle	\$ 26,514.00	\$ 27,910.00
Total Options	\$ 2,151.00	\$ 2,335.00
Destination Charge	\$ 1,395.00	\$ 1,395.00
Total Price	\$ 30,060.00	\$ 31,640.00

SELECTED COLOR:

Exterior: YZ - (0 P) Oxford White

Interior: AG - (0 I) Medium Earth Gray w/Vinyl 40/20/40 Front Seat

SELECTED OPTIONS:

CODE	DESCRIPTION	INVOICE	MSRP
100A	Equipment Group 100A Base	NC	NC
141WB	141" Wheelbase	STD	STD
153	Front License Plate Bracket	NC	NC
446	Transmission: Electronic 6-Speed Automatic	Included	Included
50S	Cruise Control	\$ 207.00	\$ 225.00
52P	SYNC	\$ 387.00	\$ 420.00
53B	Class IV Trailer Hitch Receiver	\$ 88.00	\$ 95.00
61X91K	MyKey	Included	Included
64C	Wheels: 17" Silver Steel	Included	Included
76R	Reverse Sensing System	\$ 253.00	\$ 275.00
85A	XL Power Equipment Group	\$ 893.00	\$ 970.00
85AGTE	Power Tailgate Lock	Included	Included
85AILL	Illuminated Entry	Included	Included
85AMIR	Power Glass Sideview Mirrors w/Black Skull Caps	Included	Included
85APAL	Perimeter Alarm	Included	Included
85APLK	Power Door Locks	Included	Included
85APWN	Power Front Windows	Included	Included
96P	Drop-In Bedliner (Pre-Installed)	\$ 323.00	\$ 350.00
99B	Engine: 3.3L V6 PDFI	Included	Included
A	Vinyl 40/20/40 Front Seat	NC	NC
AG_02	(0 I) Medium Earth Gray w/Vinyl 40/20/40 Front Seat	NC	NC
PAINT	Monotone Paint Application	STD	STD
STDGV	GVWR: 6,170 lbs Payload Package	Included	Included
STDRD	Radio: AM/FM Stereo w/4 Speakers	Included	Included
STDTR	Tires: P245/70R17 BSW A/S	Included	Included
X19	3.55 Axle Ratio	Included	Included
YZ_01	(0 P) Oxford White	NC	NC

CONFIGURED FEATURES:

Body Exterior Features:

Number Of Doors: 2
Rear Cargo Door Type: tailgate
Driver And Passenger Mirror: power remote manual folding side-view door mirrors
Convex Driver Mirror: convex driver and passenger mirror
Door Handles: black
Front And Rear Bumpers: black front and rear bumpers with black rub strip
Rear Step Bumper: rear step bumper
Front License Plate Bracket: front license plate bracket
Bed Liner: bed liner
Box Style: regular
Body Material: aluminum body material
: class IV trailering with harness, hitch
Grille: black grille

Convenience Features:

Air Conditioning: manual air conditioning
Cruise Control: cruise control with steering wheel controls
Power Windows: power windows with driver and passenger 1-touch down
Remote Keyless Entry: keyfob (all doors) remote keyless entry
Illuminated Entry: illuminated entry
Integrated Key Remote: integrated key/remote
Auto Locking: auto-locking doors
Steering Wheel: steering wheel with manual tilting, manual telescoping
Day-Night Rearview Mirror: day-night rearview mirror
Front Cupholder: front cupholder
Glove Box: glove box
Driver Door Bin: driver and passenger door bins
Dashboard Storage: dashboard storage
IP Storage: bin instrument-panel storage
Retained Accessory Power: retained accessory power
Power Accessory Outlet: 2 12V DC power outlets

Entertainment Features:

radio: AM/FM stereo with seek-scan
Voice Activated Radio: voice activated radio
Steering Wheel Radio Controls: steering-wheel mounted audio controls
Speakers: 4 speakers
1st Row LCD: 2 1st row LCD monitor
Wireless Connectivity: wireless phone connectivity
Antenna: fixed antenna

Lighting, Visibility and Instrumentation Features:

Headlamp Type: delay-off aero-composite halogen headlamps
Cab Clearance Lights: cargo bed light
Front Wipers: variable intermittent wipers
Tinted Windows: light-tinted windows
Dome Light: dome light with fade
Variable IP Lighting: variable instrument panel lighting
Display Type: analog display
Tachometer: tachometer
Voltmeter: voltmeter
Compass: compass
Exterior Temp: outside-temperature display
Low Tire Pressure Warning: tire specific low-tire-pressure warning
Park Distance Control: rear parking sensors
Trip Odometer: trip odometer
Oil Pressure Gauge: oil pressure gauge
Water Temp Gauge: water temp. gauge
Transmission Oil Temp Gauge: transmission oil temp. gauge
Clock: in-radio display clock
Rear Vision Camera: rear vision camera
Oil Pressure Warning: oil-pressure warning

Water Temp Warning: water-temp. warning
Battery Warning: battery warning
Lights On Warning: lights-on warning
Key in Ignition Warning: key-in-ignition warning
Low Fuel Warning: low-fuel warning
Door Ajar Warning: door-ajar warning
Brake Fluid Warning: brake-fluid warning

Safety And Security:

ABS four-wheel ABS brakes
Number of ABS Channels: 4 ABS channels
Brake Assistance: brake assist
Brake Type: four-wheel disc brakes
Vented Disc Brakes: front and rear ventilated disc brakes
Daytime Running Lights: daytime running lights
Spare Tire Type: full-size spare tire
Spare Tire Mount: underbody mounted spare tire w/crankdown
Driver Front Impact Airbag: driver and passenger front-impact airbags
Driver Side Airbag: seat-mounted driver and passenger side-impact airbags
Overhead Airbag: Safety Canopy System curtain 1st row overhead airbag
Occupancy Sensor: front passenger airbag occupancy sensor
Height Adjustable Seatbelts: height adjustable front seatbelts
Seatbelt Pretensioners: front seatbelt pre-tensioners
Side Impact Bars: side-impact bars
Perimeter Under Vehicle Lights: remote activated perimeter/approach lights
Tailgate/Rear Door Lock Type: tailgate/rear door lock included with power door locks
Ignition Disable: SecuriLock immobilizer
Security System: security system
Panic Alarm: panic alarm
Electronic Stability: electronic stability stability control with anti-roll
Traction Control: ABS and driveline traction control
Front and Rear Headrests: manual adjustable front head restraints

Seats And Trim:

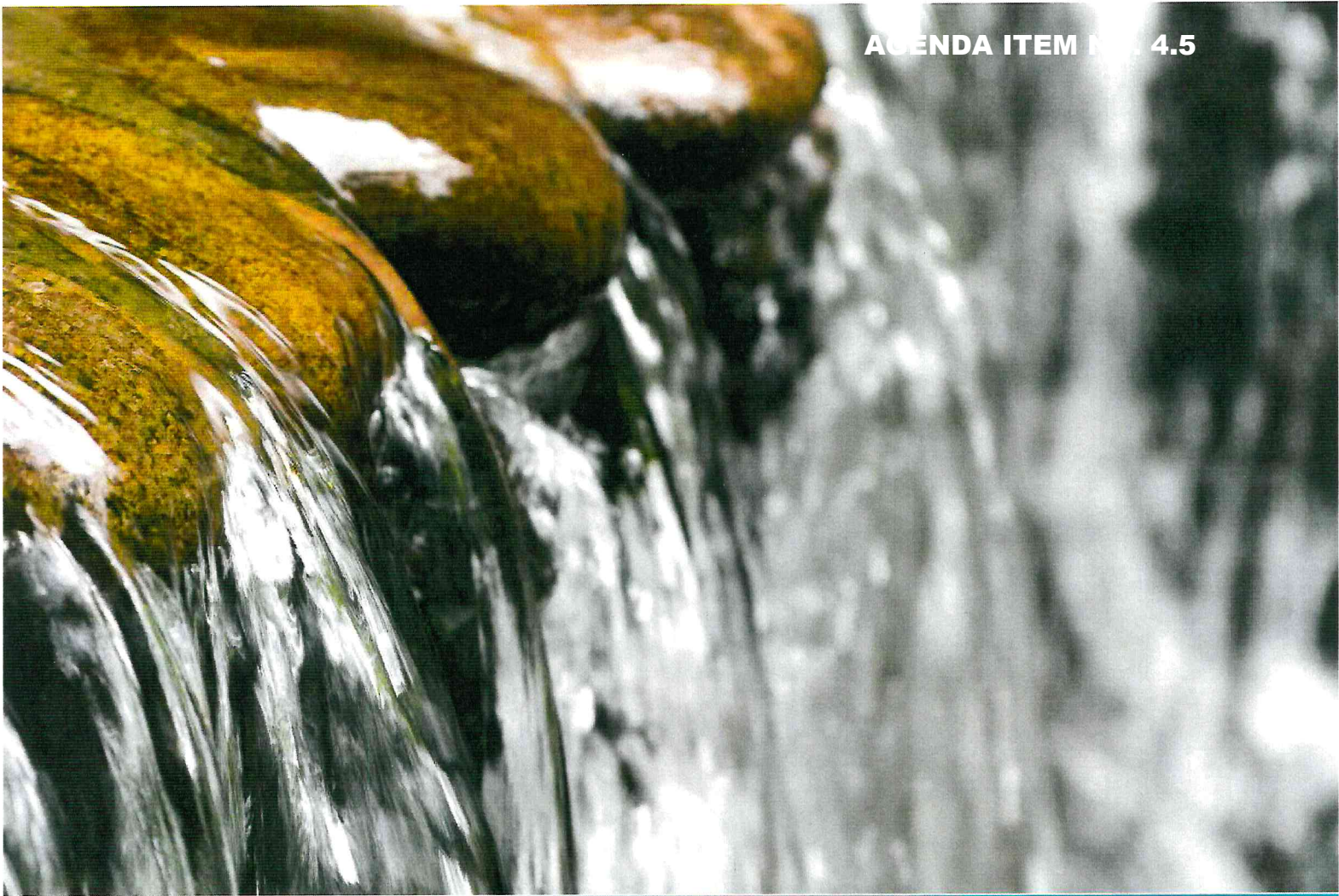
Seating Capacity max. seating capacity of 3
Front Bucket Seats: front split-bench 40-20-40 seats
Number of Driver Seat Adjustments: 4-way driver and passenger seat adjustments
Reclining Driver Seat: manual reclining driver and passenger seats
Driver Fore/Aft: manual driver and passenger fore/aft adjustment
Front Centre Armrest Storage: front centre armrest
Leather Upholstery: vinyl front seat upholstery
Headliner Material: full cloth headliner
Floor Covering: full vinyl/rubber floor covering
Cabback Insulator: cabback insulator
Shift Knob Trim: urethane shift knob
Interior Accents: chrome interior accents

Standard Engine:

Engine 290-hp, 3.3-liter V-6 (regular gas)

Standard Transmission:

Transmission 6-speed automatic w/ OD and auto-manual



Palmdale Water District
Leslie O. Carter WTP Evaluation

FACILITY EVALUATION RESULTS AND RECOMMENDATIONS

FINAL | December 2017



Section 5

RECOMMENDED CAPITAL IMPROVEMENTS

The following projects and equipment purchases will either facilitate operational changes that improve plant performance or extend the lifetime of existing facilities. Class 5 cost estimates for each of these projects are provided in Appendices B through F.

1. Installation of new flocculant aid polymer feed equipment.
2. Replacement of the corroded plate settler support beams in Sedimentation Basin 3 with new stainless steel beams. (Beams in other basins may be repaired or replaced at the discretion of the District.)
3. Application of a protective coating to the concrete walls of the flocculation/sedimentation basins.
4. Installation of a wafer-style check valve to replace the existing 42" butterfly valve between the suction of the IPS and the GAC contactor effluent.
5. Purchase and installation of a sludge concentration monitoring tool.

The following projects should be considered for the 5-10 year time frame.

1. Hypochlorite generator replacement or rehabilitation.

5.1 Flocculant Aid Polymer Feed System

The flocculant aid polymer feed system originally installed during Phase I of the Plant Improvements Project was dismantled as frequent clogging of the feed pipes made it impractical to operate. It is recommended that a new feed system be installed in the same room of the flocculation/sedimentation building. A schematic of the proposed system is shown in Figure 5. Unlike the original installation, the proposed system includes a day tank for the blended polymer solution and individual feed pumps for each application point. With proper blending of the polymer and dedicated pumps and feed lines to each basin, the system should not experience clogging, as occurred with the previous system.

With the addition of a sixth feed pump, it would be simple to include the ability to feed polymer to the sedimentation basin effluent channel to serve as a filter aid. The feed pipe could be routed along the wall of either of the flocculation/sedimentation buildings and would discharge to the settled water channel.

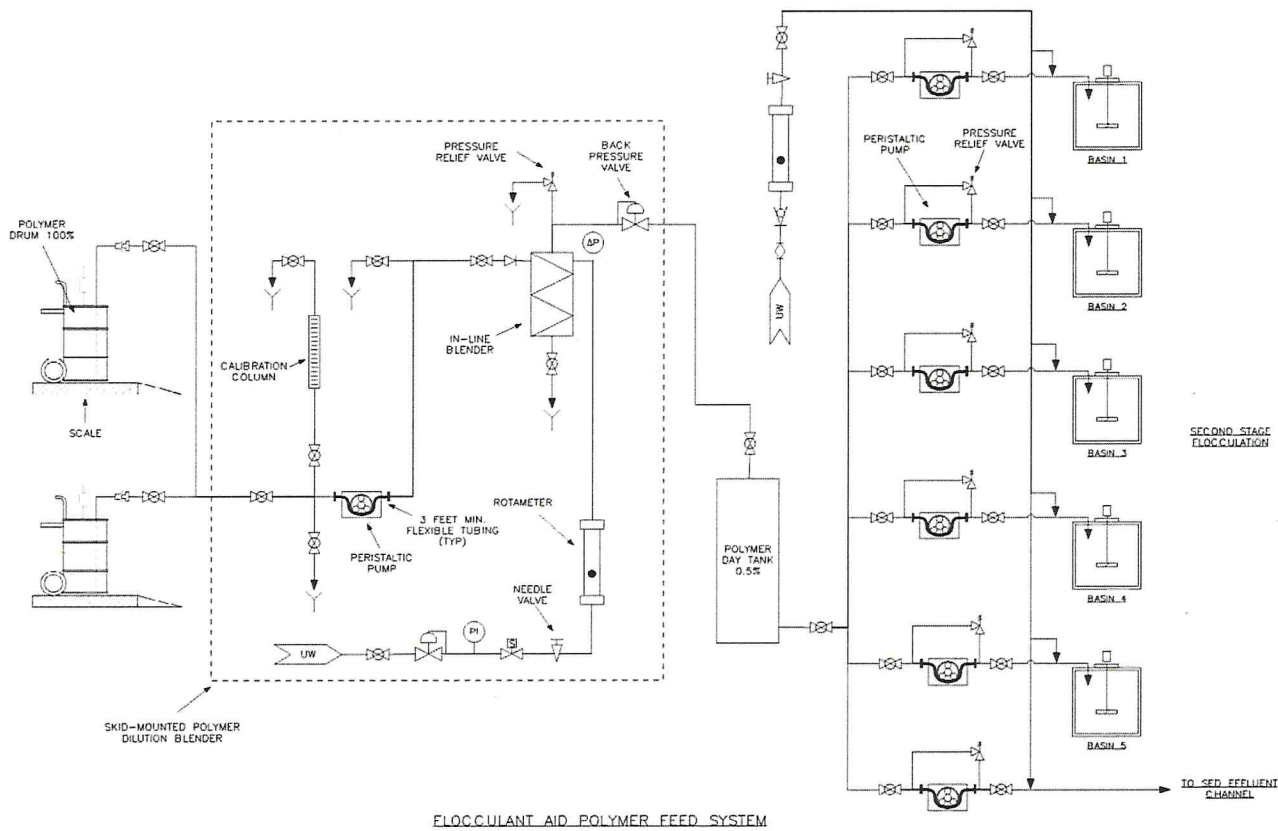


Figure 5 Proposed Flocculant Aid Polymer Feed System Schematic

Preliminary design criteria for sizing components of the flocculant aid polymer feed system are given in Table 2.

Table 2 Flocculant Aid Polymer Feed System Preliminary Design Criteria

Item	Units	Criterion
Minimum Dose	mg/L	0.05
Maximum Dose	mg/L	0.2
Neat Polymer Flow Rate	gph	0.5
Dilution Blender Total Flow Rate	gph	100
Day Tank Volume	gal	100
Feed Pump Maximum Flow Rate	gph	12

Estimated installation cost of the new feed system is \$140,000. The estimate is detailed in Appendix B.

5.2 Plate Settler Support Beams

It is recommended the corroded carbon steel plate settler support beams in Sedimentation Basin 3 be replaced with new stainless steel beams. Meurer Research, Inc., the company that provided the original plate settler systems, can supply the stainless steel beams. Installed replacement cost for one basin is estimated at \$105,000. The estimate is detailed in Appendix C.

The same beams could be installed in the remaining basins to ensure long-term integrity of the plate settler system at a total cost of \$520,000. However, operators reported the beams in the other four basins exhibit only mild corrosion and the damage may not warrant replacement. In those cases, a lower-cost alternative could be to sand-blast and re-apply a protective high-solids epoxy coating in the areas where corrosion is observed. In addition to Basin 3, Carollo inspected the beams in Basin 2 and determined that professionally recoating the existing beams is a viable alternative as long as the work is performed by a professional coating contractor and the coatings are regularly inspected and maintained in the future.

5.3 Flocculation/Sedimentation Basin Coating

It is recommended the District consider applying a protective coating on the concrete walls of the flocculation/sedimentation basins to extend their useful lifetime. Assuming a thorough evaluation reveals no significant deterioration of concrete below the surface, the first step would be removal of the weakened paste from the surface. This can be accomplished with a water jet or abrasive blast.

Once the weakened material has been removed, a thick impermeable film of either 100% solids epoxy or polyurethane can be applied to protect the walls against further deterioration, regardless of the corrosive nature of the coagulated water.

The cost of the surface preparation and coating is estimated at \$280,000 for one basin or \$1,400,000 for all five basins. The estimate is provided in Appendix D. The estimate assumes the entire wetted area of the basin walls will require removal of deteriorated concrete and subsequent coating and assumes the work is performed in conjunction with replacement of the plate settler support beams described above. If this work is performed separate from the plate

settler support beam replacement, additional costs may be incurred to work around the plate settlers, particularly where there is limited access between the plates and the walls.

5.4 Check Valve Installation

Location of the existing 42" butterfly valve to be replaced beneath the road that runs between Lagoon 1 and Lagoon 3 is shown in Figure 6. The invert elevation of the valve is approximately 25 feet below the existing asphalt pavement, so significant excavation will be necessary to access the valve and replace it. A wafer-style swing check valve is recommended as it will fit in the small space between the two tees that lead to the GAC contactors. Cost of the valve replacement is estimated at \$160,000 and includes a precast vault for access as documented in Appendix E.

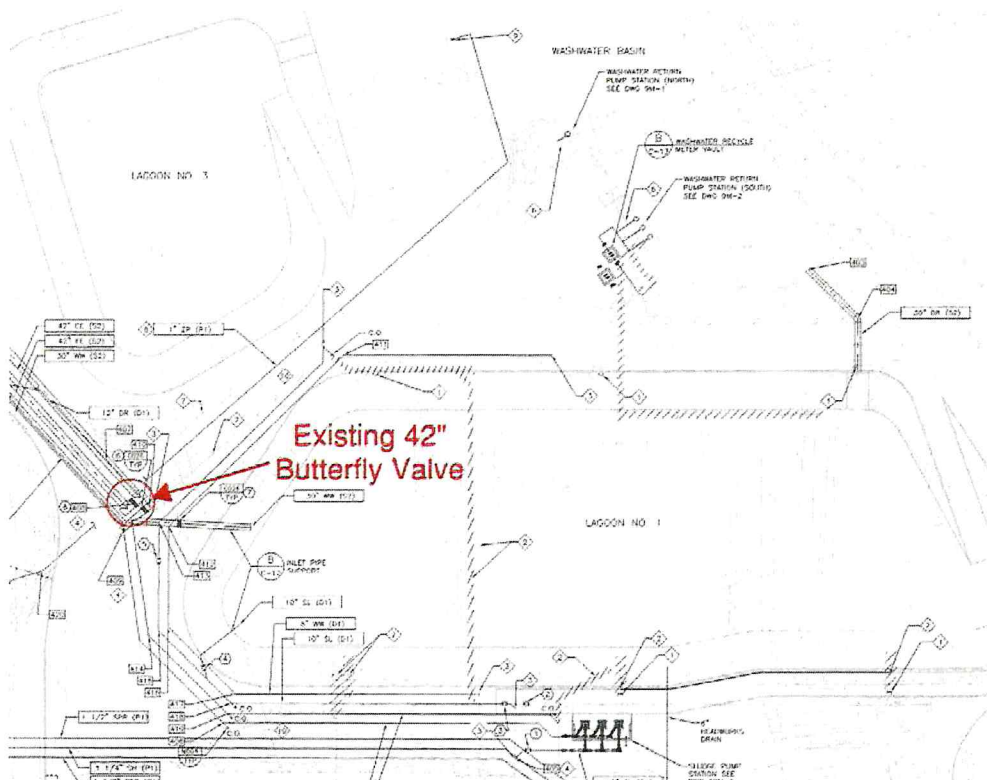


Figure 6 42" Butterfly Valve Location

5.4.1 Microwave Solids Analyzer

A clam-shell type bench-scale microwave solids analyzer is recommended as the most versatile tool for measuring solids concentration of sludge from various points throughout the plant. This could be installed in the existing laboratory facilities.

CEM Corporation produces a microwave solids analyzer model called SMART 6 WWTP that is designed for the water and wastewater industry. The solids concentrations that can be analyzed range from 500 parts per million (ppm) up to 60 percent, which covers any practical application at the Leslie O. Carter WTP. CEM's cost for the instrument, installation, and training is \$11,480.

5.4.2 Hypochlorite Generator Replacement

The existing ClorTec hypochlorite generator system was last refurbished during the Phase II Plant Improvement Project in 2008 and has been in operation for nearly 10 years. The manufacturer has stated this equipment, including the tanks, controls, and rectifier, has a typical useful lifetime of 15 to 20 years. That lifetime can vary depending on duty cycle, maintenance, and water quality. Furthermore, the electrodes are typically replaced once on average during that lifetime. A thorough inspection of this equipment was not completed during this evaluation. It is recommended the District consider replacement of the system in the next five to ten years, and condition of the electrodes be evaluated in the next year to determine whether replacement will be necessary before the rest of the equipment. The District should contact the equipment manufacturer to perform or direct activities related to the evaluation of the electrodes.

5.5 Summary of Recommendations

A summary of the primary recommendations is provided in Table 3.

Table 3 Recommended Operational Changes and Capital Improvements

Recommendation	Improvement				Estimated Project Cost
	Sludge Management	Filter Run Time / Filter to Waste Duration	Reliability of Equipment and Structures	Plant Hydraulics	
Recommended Operational Changes					
1. Dose coagulants to neutralize zeta potential	●	●			
2. Utilize flocculant aid polymer	●	●			
3. Switch to anionic or nonionic filter aid polymer		●			
4. Increased flocculation speed	●	●			
5. Draw down water level prior to filter surface wash		●			
6. Utilize a resting filter configuration		●			
7. Monitor blow down solids concentration	●	●			
Recommended Capital Improvements					
1. New flocculant aid polymer feed system	●	●			\$140,000
2. Basin 3 plate settler support beam replacement			●		\$105,000
3. Protective coating of basin walls			●		\$1,400,000
4. Check valve between IPS suction and contactor effluent		●		●	\$160,000
5. Sludge monitoring instrumentation	●	●			\$12,000
6. Replace or refurbish hypochlorite generation system			●		(no cost info available)