

**SUBMITTAL TO THE FLOOD CONTROL AND
WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

806B



FROM: General Manager-Chief Engineer

SUBMITTAL DATE:
October 21, 2014

SUBJECT: Project Award - Palm Springs MDP Line 43 and Lateral 43A, Stage 1, Project No. 6-0-00163, 200 Working Days, 4th District/4th District, [\$4,995,874] District Funds 100%

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the low bid submitted by the firm of Granite Construction Company for \$4,995,874, for the construction of the above referenced project.
2. Authorize the Chairman to execute the contract on behalf of the District.

BACKGROUND:

Summary

The bid documents have been reviewed and approved for award by County Counsel.

P8\164198

WARREN D. WILLIAMS
General Manager-Chief Engineer

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 1,998,350	\$ 2,997,524	\$ 4,995,874	\$	Consent <input type="checkbox"/> Policy <input type="checkbox"/>
NET DISTRICT COST	\$ 1,998,350	\$ 2,997,524	\$ 4,995,874	\$	

SOURCE OF FUNDS: 25160 947500 527980 Zone 6 Const/Maint/Misc-Contracts	Budget Adjustment: No
	For Fiscal Year: 14/15 & 15/16

C.E.O. RECOMMENDATION:

APPROVE

County Executive Office Signature

MINUTES OF THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT

On motion of Supervisor Benoit, seconded by Supervisor Stone and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Stone and Benoit
Nays: None
Absent: Tavaglione and Ashley
Date: October 21, 2014
xc: Flood

Kecia Harper-Ihem
Clerk of the Board
By:
Deputy

FORM APPROVED COUNTY COUNSEL 10/16/14
DATE
BY: GREGORY P. PRIAMOS

JEANINE J. REY, FINANCE DIRECTOR
BY: REGINA L. NEAL 10/16/14
Departmental Concurrence

A-30 Positions Added
4/5 Vote Change Order

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

FORM 11: Project Award - Palm Springs MDP Line 43 and Lateral 43A, Stage 1, Project No. 6-0-00163,
200 Working Days, 4th District/4th District, [\$4,995,874] District Funds 100%

DATE: October 21, 2014

PAGE: Page 2 of 2

Impact on Residents and Businesses

This project will construct drainage infrastructure to remedy ongoing flooding problems. This project is funded by ad valorem property tax revenue and entails no new fees, taxes or bonded indebtedness. Moreover, this project in conjunction with the Eagle Canyon Dam will enable revision of the FEMA Flood Insurance Rate Maps in the impacted area resulting in a significant reduction in flood insurance premiums. Owners with Federally insured home loans will realize savings of several thousand dollars per year.

Contract History and Price Reasonableness

Pursuant to Public Contract Code 21091, invitation of sealed bids was solicited by advertising in print and digital media.

P8\164198

Riverside County Flood Control & Water Conservation District
 1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax: 951.788.9965



Bid Summary

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 09/11/2014

<i>Total</i>	<i>Contractor Name</i>	<i>Phone</i>
\$4,995,874.00	GRANITE CONSTRUCTION COMPANY 38000 Monroe Street Indio CA 92203	760.775.7500
\$5,458,811.00	WEKA, INC. 27075 5th Street Highland CA 92346	909.425.8700
\$5,594,479.00	H & H GENERAL CONTRACTORS, INC. Post Office Box 536 Highland CA 92346-0536	909.425.3907
\$5,623,180.97	USS CAL BUILDERS, INC. 8051 Main Street Stanton CA 90680	714.828.4882
\$5,654,954.00	PRO-CRAFT CONSTRUCTION, INC. 31597 Outer Hwy. 10 S., Suite B Redlands CA 92373	909.790.5222
\$5,911,911.00	POWELL ENGINEERING CONSTRUCTION 974 N. Morgan Orange CA 92867	714.639.8040
\$6,346,763.00	GRFCO, INC. Post Office Box 7689 Moreno Valley CA 92552	951.657.8887
\$6,462,583.00	BELCZAK & SONS, INC. 3510 E. Enterprise Drive Anaheim CA 92807	714-998-5920
\$6,475,854.11	MURRAY COMPANY 2919 E. Victoria Street Rancho Dominguez CA 90221	310.928.7129
\$6,959,605.00	RIVERSIDE CONSTRUCTION COMPANY, INC. 4225 Garner Road Riverside CA 92501	951.682.8308
\$5,304,867.00	RCFC Engineer's Estimate	

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

ENGINEER'S ESTIMATE **GRANITE CONSTRUCTION COMPANY**

WEKA, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
1	MOBILIZATION	L.S.	1	\$100,000.00	\$100,000.00	\$315,000.00	\$315,000.00	\$144,908.00	\$144,908.00
2	WATER CONTROL	L.S.	1	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$20,000.00	\$20,000.00
3	TRAFFIC CONTROL	L.S.	1	\$60,000.00	\$60,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00
4	CLEARING AND MISCELLANEOUS WORK	L.S.	1	\$80,000.00	\$80,000.00	\$125,000.00	\$125,000.00	\$20,024.00	\$20,024.00
5	EXCAVATION	C.Y.	20,179	\$15.00	\$302,685.00	\$13.00	\$262,327.00	\$10.00	\$201,790.00
6	MASS EXCAVATION	C.Y.	12,438	\$10.00	\$124,380.00	\$7.00	\$87,066.00	\$1.00	\$12,438.00
7	ROCK EXCAVATION	C.Y.	700	\$200.00	\$140,000.00	\$180.00	\$126,000.00	\$100.00	\$70,000.00
8	ASPHALT CONCRETE EXCAVATION	S.F.	17,556	\$1.00	\$17,556.00	\$1.25	\$21,945.00	\$0.25	\$4,389.00
9	BACKFILL	C.Y.	8,174	\$15.00	\$122,610.00	\$23.00	\$188,002.00	\$10.00	\$81,740.00
10	DEBRIS BASIN GRADING	L.S.	1	\$7,000.00	\$7,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
11	CONTROLLED LOW STRENGTH MATERIAL (CLSM) BACKFILL	C.Y.	820	\$125.00	\$102,500.00	\$75.00	\$61,500.00	\$85.00	\$69,700.00
12	LEVELING BED MATERIAL	C.Y.	826	\$30.00	\$24,780.00	\$60.00	\$49,560.00	\$30.00	\$24,780.00
13	TRENCH SAFETY SYSTEM AND FALSEWORK	L.S.	1	\$150,000.00	\$150,000.00	\$50,000.00	\$50,000.00	\$59,470.00	\$59,470.00
14	CLASS "A" CONCRETE, REINFORCED CONCRETE BOX	C.Y.	61	\$700.00	\$42,700.00	\$950.00	\$57,950.00	\$1,650.00	\$100,650.00
15	CLASS "A" CONCRETE	C.Y.	22	\$600.00	\$13,200.00	\$1,100.00	\$24,200.00	\$2,500.00	\$55,000.00
16	CLASS "A" CONCRETE, MINOR STRUCTURES	C.Y.	93	\$800.00	\$74,400.00	\$900.00	\$83,700.00	\$1,150.00	\$106,950.00
17	CLASS "B" CONCRETE, MISCELLANEOUS	C.Y.	57	\$400.00	\$22,800.00	\$544.00	\$31,008.00	\$650.00	\$37,050.00
18	1'-8" FLOODWALL	L.F.	550	\$100.00	\$55,000.00	\$78.00	\$42,900.00	\$100.00	\$55,000.00
19	8" FLOODWALL	L.F.	320	\$35.00	\$11,200.00	\$51.00	\$16,320.00	\$48.00	\$15,360.00
20	TRANSITION STRUCTURE NO. 1	EACH	1	\$7,000.00	\$7,000.00	\$5,250.00	\$5,250.00	\$7,000.00	\$7,000.00
21	TRANSITION STRUCTURE NO. 3	EACH	1	\$6,000.00	\$6,000.00	\$2,700.00	\$2,700.00	\$6,800.00	\$6,800.00
22	JUNCTION STRUCTURE NO. 1	EACH	1	\$4,000.00	\$4,000.00	\$3,250.00	\$3,250.00	\$4,800.00	\$4,800.00
23	JUNCTION STRUCTURE NO. 3	EACH	9	\$1,500.00	\$13,500.00	\$500.00	\$4,500.00	\$2,000.00	\$18,000.00
24	MANHOLE NO. 2	EACH	2	\$5,000.00	\$10,000.00	\$6,000.00	\$12,000.00	\$6,000.00	\$12,000.00

Riverside County Flood Control & Water Conservation District

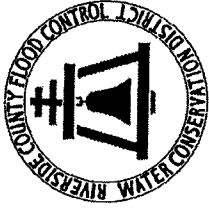
1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



ENGINEER'S ESTIMATE GRANITE CONSTRUCTION COMPANY

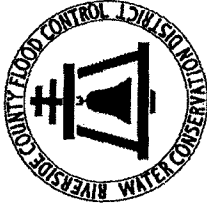
WEKA, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
25	PRESSURE MANHOLE NO. 2	EACH	2	\$6,000.00	\$12,000.00	\$7,500.00	\$15,000.00	\$8,000.00	\$16,000.00
26	MANHOLE NO. 3	EACH	6	\$2,500.00	\$15,000.00	\$3,000.00	\$18,000.00	\$2,200.00	\$13,200.00
27	66" RCP, 2200D	L.F.	316	\$325.00	\$102,700.00	\$300.00	\$94,800.00	\$320.00	\$101,120.00
28	66" RCP, 1600D	L.F.	390	\$300.00	\$117,000.00	\$260.00	\$101,400.00	\$300.00	\$117,000.00
29	60" RCP, 1600D	L.F.	199	\$280.00	\$55,720.00	\$225.00	\$44,775.00	\$270.00	\$53,730.00
30	42" RCP, 1400D	L.F.	910	\$180.00	\$163,800.00	\$150.00	\$136,500.00	\$220.00	\$200,200.00
31	30" RCP, 1400D	L.F.	106	\$160.00	\$16,960.00	\$110.00	\$11,660.00	\$210.00	\$22,260.00
32	24" RCP, CLASS IV	L.F.	214	\$140.00	\$29,960.00	\$85.00	\$18,190.00	\$190.00	\$40,660.00
33	18" RCP, CLASS IV	L.F.	60	\$120.00	\$7,200.00	\$68.00	\$4,080.00	\$180.00	\$10,800.00
34	AGGREGATE BASE, CLASS 2	C.Y.	819	\$70.00	\$57,330.00	\$75.00	\$61,425.00	\$51.00	\$41,769.00
35	HOT MIX ASPHALT (HMA) TYPE A	TONS	1,426	\$100.00	\$142,600.00	\$102.00	\$145,452.00	\$112.00	\$159,712.00
36	TEMPORARY RESURFACING	TONS	505	\$100.00	\$50,500.00	\$65.00	\$32,825.00	\$115.00	\$58,075.00
37	MISCELLANEOUS IRON AND STEEL	LBS.	10,078	\$2.00	\$20,156.00	\$1.50	\$15,117.00	\$2.00	\$20,156.00
38	TRAFFIC SIGNAL CONDUIT RELOCATION	L.F.	350	\$50.00	\$17,500.00	\$40.00	\$14,000.00	\$135.00	\$47,250.00
39	TRASH RACK	L.S.	1	\$3,000.00	\$3,000.00	\$5,500.00	\$5,500.00	\$6,000.00	\$6,000.00
40	3-FOOT CABLE RAILING	L.F.	22	\$15.00	\$330.00	\$113.00	\$2,486.00	\$75.00	\$1,650.00
41	BLOCK WALL	L.S.	1	\$4,000.00	\$4,000.00	\$8,000.00	\$8,000.00	\$14,000.00	\$14,000.00
42	REMOVE AND REINSTALL IN-PAVEMENT FLASHING CROSSWALK SYSTEM	L.S.	1	\$8,000.00	\$8,000.00	\$20,000.00	\$20,000.00	\$25,000.00	\$25,000.00
43	INSTALL ELECTRIC CONDUIT	L.S.	1	\$5,000.00	\$5,000.00	\$35,000.00	\$35,000.00	\$3,500.00	\$3,500.00
44	EXTRA DIRECTED WORK	L.S.	1	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
45	DUST ABATEMENT	L.S.	1	\$30,000.00	\$30,000.00	\$60,000.00	\$60,000.00	\$10,000.00	\$10,000.00
46	STORMWATER AND NON-STORMWATER POLLUTION CONTROL	L.S.	1	\$20,000.00	\$20,000.00	\$50,000.00	\$50,000.00	\$11,000.00	\$11,000.00
47	NON-STORMWATER DISCHARGE OR DEWATERING	L.S.	1	\$5,000.00	\$5,000.00	\$506.00	\$506.00	\$3,000.00	\$3,000.00

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

ENGINEER'S ESTIMATE GRANITE CONSTRUCTION COMPANY WEKA, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
48	8-INCH VITRIFIED CLAY PIPE (VCP) SEWER RELOCATION AND LATERALS	L.S.	1	\$328,000.00	\$328,000.00	\$149,000.00	\$149,000.00	\$450,000.00	\$450,000.00
49	24-INCH CML/C STEEL WATERMAIN RELOCATION	L.S.	1	\$125,000.00	\$125,000.00	\$70,000.00	\$70,000.00	\$100,000.00	\$100,000.00
50	HIGHWAY 111 UTILITY PROTECTION PLAN	L.S.	1	\$5,000.00	\$5,000.00	\$15,000.00	\$15,000.00	\$4,000.00	\$4,000.00
51	14' W x 4.5' H PRCB	L.F.	1,244	\$1,250.00	\$1,555,000.00	\$995.00	\$1,237,780.00	\$1,300.00	\$1,617,200.00
52	12' W x 3.5' H PRCB	L.F.	248	\$925.00	\$229,400.00	\$950.00	\$235,600.00	\$1,240.00	\$307,520.00
53	8.5' W x 5' H PRCB	L.F.	416	\$650.00	\$270,400.00	\$625.00	\$260,000.00	\$760.00	\$316,160.00
54	5' W x 4' H PRCB	L.F.	420	\$325.00	\$136,500.00	\$480.00	\$201,600.00	\$450.00	\$189,000.00
55	DAM OUTLET CHANNEL	L.S.	1	\$70,500.00	\$70,500.00	\$47,000.00	\$47,000.00	\$61,000.00	\$61,000.00

Riverside County Flood Control & Water Conservation District

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Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



ENGINEER'S ESTIMATE
H & H GENERAL CONTRACTORS, INC.

USS CAL BUILDERS, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
1	MOBILIZATION	L.S.	1	\$100,000.00	\$100,000.00	\$465,000.00	\$465,000.00	\$520,000.00	\$520,000.00
2	WATER CONTROL	L.S.	1	\$10,000.00	\$10,000.00	\$17,250.00	\$17,250.00	\$15,000.00	\$15,000.00
3	TRAFFIC CONTROL	L.S.	1	\$60,000.00	\$60,000.00	\$100,000.00	\$100,000.00	\$75,000.00	\$75,000.00
4	CLEARING AND MISCELLANEOUS WORK	L.S.	1	\$80,000.00	\$80,000.00	\$117,000.00	\$117,000.00	\$50,000.00	\$50,000.00
5	EXCAVATION	C.Y.	20,179	\$15.00	\$302,685.00	\$14.00	\$282,506.00	\$24.00	\$484,296.00
6	MASS EXCAVATION	C.Y.	12,438	\$10.00	\$124,380.00	\$15.50	\$192,789.00	\$19.19	\$238,685.22
7	ROCK EXCAVATION	C.Y.	700	\$200.00	\$140,000.00	\$591.00	\$413,700.00	\$61.00	\$42,700.00
8	ASPHALT CONCRETE EXCAVATION	S.F.	17,556	\$1.00	\$17,556.00	\$1.00	\$17,556.00	\$2.50	\$43,890.00
9	BACKFILL	C.Y.	8,174	\$15.00	\$122,610.00	\$32.00	\$261,568.00	\$26.00	\$212,524.00
10	DEBRIS BASIN GRADING	L.S.	1	\$7,000.00	\$7,000.00	\$29,000.00	\$29,000.00	\$15,000.00	\$15,000.00
11	CONTROLLED LOW STRENGTH MATERIAL (CLSM) BACKFILL	C.Y.	820	\$125.00	\$102,500.00	\$84.00	\$68,880.00	\$90.00	\$73,800.00
12	LEVELING BED MATERIAL	C.Y.	826	\$30.00	\$24,780.00	\$41.50	\$34,279.00	\$60.00	\$49,560.00
13	TRENCH SAFETY SYSTEM AND FALSEWORK	L.S.	1	\$150,000.00	\$150,000.00	\$57,000.00	\$57,000.00	\$75,000.00	\$75,000.00
14	CLASS "A" CONCRETE, REINFORCED CONCRETE BOX	C.Y.	61	\$700.00	\$42,700.00	\$829.00	\$50,569.00	\$1,100.00	\$67,100.00
15	CLASS "A" CONCRETE	C.Y.	22	\$600.00	\$13,200.00	\$716.00	\$15,752.00	\$1,600.00	\$35,200.00
16	CLASS "A" CONCRETE, MINOR STRUCTURES	C.Y.	93	\$800.00	\$74,400.00	\$994.00	\$92,442.00	\$800.00	\$74,400.00
17	CLASS "B" CONCRETE, MISCELLANEOUS	C.Y.	57	\$400.00	\$22,800.00	\$585.00	\$33,345.00	\$60.00	\$3,420.00
18	1'-8" FLOODWALL	L.F.	550	\$100.00	\$55,000.00	\$43.00	\$23,650.00	\$65.00	\$35,750.00
19	8" FLOODWALL	L.F.	320	\$35.00	\$11,200.00	\$27.00	\$8,640.00	\$60.00	\$19,200.00
20	TRANSITION STRUCTURE NO. 1	EACH	1	\$7,000.00	\$7,000.00	\$6,900.00	\$6,900.00	\$10,000.00	\$10,000.00
21	TRANSITION STRUCTURE NO. 3	EACH	1	\$6,000.00	\$6,000.00	\$27,000.00	\$27,000.00	\$7,500.00	\$7,500.00
22	JUNCTION STRUCTURE NO. 1	EACH	1	\$4,000.00	\$4,000.00	\$2,990.00	\$2,990.00	\$7,000.00	\$7,000.00
23	JUNCTION STRUCTURE NO. 3	EACH	9	\$1,500.00	\$13,500.00	\$1,456.00	\$13,104.00	\$4,000.00	\$36,000.00
24	MANHOLE NO. 2	EACH	2	\$5,000.00	\$10,000.00	\$4,830.00	\$9,660.00	\$10,000.00	\$20,000.00

Riverside County Flood Control & Water Conservation District

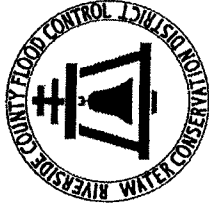
1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



ENGINEER'S ESTIMATE

H & H GENERAL CONTRACTORS, INC.

USS CAL BUILDERS, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
25	PRESSURE MANHOLE NO. 2	EACH	2	\$6,000.00	\$12,000.00	\$7,015.00	\$14,030.00	\$12,000.00	\$24,000.00
26	MANHOLE NO. 3	EACH	6	\$2,500.00	\$15,000.00	\$1,763.00	\$10,578.00	\$4,000.00	\$24,000.00
27	66" RCP, 2200D	L.F.	316	\$325.00	\$102,700.00	\$276.50	\$87,374.00	\$320.00	\$101,120.00
28	66" RCP, 1600D	L.F.	390	\$300.00	\$117,000.00	\$263.00	\$102,570.00	\$310.00	\$120,900.00
29	60" RCP, 1600D	L.F.	199	\$280.00	\$55,720.00	\$229.00	\$45,571.00	\$280.00	\$55,720.00
30	42" RCP, 1400D	L.F.	910	\$180.00	\$163,800.00	\$171.00	\$155,610.00	\$150.00	\$136,500.00
31	30" RCP, 1400D	L.F.	106	\$160.00	\$16,960.00	\$142.00	\$15,052.00	\$125.00	\$13,250.00
32	24" RCP, CLASS IV	L.F.	214	\$140.00	\$29,960.00	\$117.00	\$25,038.00	\$95.00	\$20,330.00
33	18" RCP, CLASS IV	L.F.	60	\$120.00	\$7,200.00	\$165.00	\$9,900.00	\$82.00	\$4,920.00
34	AGGREGATE BASE, CLASS 2	C.Y.	819	\$70.00	\$57,330.00	\$80.00	\$65,520.00	\$45.00	\$36,855.00
35	HOT MIX ASPHALT (HMA) TYPE A	TONS	1,426	\$100.00	\$142,600.00	\$81.00	\$115,506.00	\$120.00	\$171,120.00
36	TEMPORARY RESURFACING	TONS	505	\$100.00	\$50,500.00	\$80.00	\$40,400.00	\$75.75	\$38,253.75
37	MISCELLANEOUS IRON AND STEEL	LBS.	10,078	\$2.00	\$20,156.00	\$2.00	\$20,156.00	\$1.50	\$15,117.00
38	TRAFFIC SIGNAL CONDUIT RELOCATION	L.F.	350	\$50.00	\$17,500.00	\$135.00	\$47,250.00	\$125.00	\$43,750.00
39	TRASH RACK	L.S.	1	\$3,000.00	\$3,000.00	\$8,418.00	\$8,418.00	\$6,000.00	\$6,000.00
40	3-FOOT CABLE RAILING	L.F.	22	\$15.00	\$330.00	\$131.00	\$2,882.00	\$110.00	\$2,420.00
41	BLOCK WALL	L.S.	1	\$4,000.00	\$4,000.00	\$21,700.00	\$21,700.00	\$25,000.00	\$25,000.00
42	REMOVE AND REINSTALL IN-PAVEMENT FLASHING CROSSWALK SYSTEM	L.S.	1	\$8,000.00	\$8,000.00	\$24,200.00	\$24,200.00	\$24,000.00	\$24,000.00
43	INSTALL ELECTRIC CONDUIT	L.S.	1	\$5,000.00	\$5,000.00	\$17,500.00	\$17,500.00	\$28,000.00	\$28,000.00
44	EXTRA DIRECTED WORK	L.S.	1	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
45	DUST ABATEMENT	L.S.	1	\$30,000.00	\$30,000.00	\$11,500.00	\$11,500.00	\$50,000.00	\$50,000.00
46	STORMWATER AND NON-STORMWATER POLLUTION CONTROL	L.S.	1	\$20,000.00	\$20,000.00	\$23,000.00	\$23,000.00	\$20,000.00	\$20,000.00
47	NON-STORMWATER DISCHARGE OR DEWATERING	L.S.	1	\$5,000.00	\$5,000.00	\$11,000.00	\$11,000.00	\$10,000.00	\$10,000.00

Riverside County Flood Control & Water Conservation District

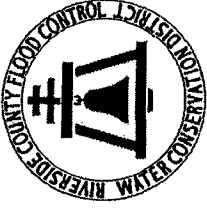
1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



ENGINEER'S ESTIMATE

H & H GENERAL CONTRACTORS, INC.

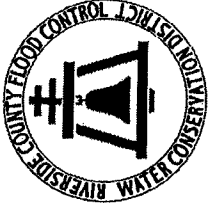
USS CAL BUILDERS, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
48	8-INCH VITRIFIED CLAY PIPE (VCP) SEWER RELOCATION AND LATERALS	L.S.	1	\$328,000.00	\$328,000.00	\$289,000.00	\$289,000.00	\$220,000.00	\$220,000.00
49	24-INCH CML/C STEEL WATERMAIN RELOCATION	L.S.	1	\$125,000.00	\$125,000.00	\$89,000.00	\$89,000.00	\$65,000.00	\$65,000.00
50	HIGHWAY 111 UTILITY PROTECTION PLAN	L.S.	1	\$5,000.00	\$5,000.00	\$7,820.00	\$7,820.00	\$15,000.00	\$15,000.00
51	14' W x 4.5' H PRCB	L.F.	1,244	\$1,250.00	\$1,555,000.00	\$869.00	\$1,081,036.00	\$1,020.00	\$1,268,880.00
52	12' W x 3.5' H PRCB	L.F.	248	\$925.00	\$229,400.00	\$942.00	\$233,616.00	\$740.00	\$183,520.00
53	8.5' W x 5' H PRCB	L.F.	416	\$650.00	\$270,400.00	\$667.00	\$277,472.00	\$625.00	\$260,000.00
54	5' W x 4' H PRCB	L.F.	420	\$325.00	\$136,500.00	\$310.00	\$130,200.00	\$425.00	\$178,500.00
55	DAM OUTLET CHANNEL	L.S.	1	\$70,500.00	\$70,500.00	\$71,000.00	\$71,000.00	\$50,000.00	\$50,000.00

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

ENGINEER'S ESTIMATE **PRO-CRAFT CONSTRUCTION, INC.** **POWELL ENGINEERING CONSTRUCTION**

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
1	MOBILIZATION	L.S.	1	\$100,000.00	\$100,000.00	\$70,000.00	\$70,000.00	\$505,657.50	\$505,657.50
2	WATER CONTROL	L.S.	1	\$10,000.00	\$10,000.00	\$2,500.00	\$2,500.00	\$5,000.00	\$5,000.00
3	TRAFFIC CONTROL	L.S.	1	\$60,000.00	\$60,000.00	\$180,000.00	\$180,000.00	\$200,000.00	\$200,000.00
4	CLEARING AND MISCELLANEOUS WORK	L.S.	1	\$80,000.00	\$80,000.00	\$170,000.00	\$170,000.00	\$80,000.00	\$80,000.00
5	EXCAVATION	C.Y.	20,179	\$15.00	\$302,685.00	\$8.00	\$161,432.00	\$27.00	\$544,833.00
6	MASS EXCAVATION	C.Y.	12,438	\$10.00	\$124,380.00	\$10.00	\$124,380.00	\$14.00	\$174,132.00
7	ROCK EXCAVATION	C.Y.	700	\$200.00	\$140,000.00	\$170.00	\$119,000.00	\$130.00	\$91,000.00
8	ASPHALT CONCRETE EXCAVATION	S.F.	17,556	\$1.00	\$17,556.00	\$0.50	\$8,778.00	\$2.25	\$39,501.00
9	BACKFILL	C.Y.	8,174	\$15.00	\$122,610.00	\$8.00	\$65,392.00	\$30.00	\$245,220.00
10	DEBRIS BASIN GRADING	L.S.	1	\$7,000.00	\$7,000.00	\$12,200.00	\$12,200.00	\$8,000.00	\$8,000.00
11	CONTROLLED LOW STRENGTH MATERIAL (CLSM) BACKFILL	C.Y.	820	\$125.00	\$102,500.00	\$50.00	\$41,000.00	\$100.00	\$82,000.00
12	LEVELING BED MATERIAL	C.Y.	826	\$30.00	\$24,780.00	\$45.00	\$37,170.00	\$70.00	\$57,820.00
13	TRENCH SAFETY SYSTEM AND FALSEWORK	L.S.	1	\$150,000.00	\$150,000.00	\$50,000.00	\$50,000.00	\$170,000.00	\$170,000.00
14	CLASS "A" CONCRETE, REINFORCED CONCRETE BOX	C.Y.	61	\$700.00	\$42,700.00	\$960.00	\$58,560.00	\$1,500.00	\$91,500.00
15	CLASS "A" CONCRETE	C.Y.	22	\$600.00	\$13,200.00	\$950.00	\$20,900.00	\$1,700.00	\$37,400.00
16	CLASS "A" CONCRETE, MINOR STRUCTURES	C.Y.	93	\$800.00	\$74,400.00	\$690.00	\$64,170.00	\$1,100.00	\$102,300.00
17	CLASS "B" CONCRETE, MISCELLANEOUS	C.Y.	57	\$400.00	\$22,800.00	\$480.00	\$27,360.00	\$750.00	\$42,750.00
18	1'-8" FLOODWALL	L.F.	550	\$100.00	\$55,000.00	\$85.00	\$46,750.00	\$50.00	\$27,500.00
19	8" FLOODWALL	L.F.	320	\$35.00	\$11,200.00	\$40.00	\$12,800.00	\$25.00	\$8,000.00
20	TRANSITION STRUCTURE NO. 1	EACH	1	\$7,000.00	\$7,000.00	\$6,000.00	\$6,000.00	\$11,000.00	\$11,000.00
21	TRANSITION STRUCTURE NO. 3	EACH	1	\$6,000.00	\$6,000.00	\$2,800.00	\$2,800.00	\$7,000.00	\$7,000.00
22	JUNCTION STRUCTURE NO. 1	EACH	1	\$4,000.00	\$4,000.00	\$3,000.00	\$3,000.00	\$9,000.00	\$9,000.00
23	JUNCTION STRUCTURE NO. 3	EACH	9	\$1,500.00	\$13,500.00	\$500.00	\$4,500.00	\$450.00	\$4,050.00
24	MANHOLE NO. 2	EACH	2	\$5,000.00	\$10,000.00	\$4,500.00	\$9,000.00	\$8,000.00	\$16,000.00

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

ENGINEER'S ESTIMATE PRO-CRAFT CONSTRUCTION, INC. **POWELL ENGINEERING CONSTRUCTION**

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
25	PRESSURE MANHOLE NO. 2	EACH	2	\$6,000.00	\$12,000.00	\$5,800.00	\$11,600.00	\$8,500.00	\$17,000.00
26	MANHOLE NO. 3	EACH	6	\$2,500.00	\$15,000.00	\$900.00	\$5,400.00	\$1,900.00	\$11,400.00
27	66" RCP, 2200D	L.F.	316	\$325.00	\$102,700.00	\$320.00	\$101,120.00	\$300.00	\$94,800.00
28	66" RCP, 1600D	L.F.	390	\$300.00	\$117,000.00	\$300.00	\$117,000.00	\$275.00	\$107,250.00
29	60" RCP, 1600D	L.F.	199	\$280.00	\$55,720.00	\$280.00	\$55,720.00	\$250.00	\$49,750.00
30	42" RCP, 1400D	L.F.	910	\$180.00	\$163,800.00	\$260.00	\$236,600.00	\$130.00	\$118,300.00
31	30" RCP, 1400D	L.F.	106	\$160.00	\$16,960.00	\$200.00	\$21,200.00	\$130.00	\$13,780.00
32	24" RCP, CLASS IV	L.F.	214	\$140.00	\$29,960.00	\$180.00	\$38,520.00	\$90.00	\$19,260.00
33	18" RCP, CLASS IV	L.F.	60	\$120.00	\$7,200.00	\$130.00	\$7,800.00	\$75.00	\$4,500.00
34	AGGREGATE BASE, CLASS 2	C.Y.	819	\$70.00	\$57,330.00	\$50.00	\$40,950.00	\$50.00	\$40,950.00
35	HOT MIX ASPHALT (HMA) TYPE A	TONS	1,426	\$100.00	\$142,600.00	\$120.00	\$171,120.00	\$110.00	\$156,860.00
36	TEMPORARY RESURFACING	TONS	505	\$100.00	\$50,500.00	\$85.00	\$42,925.00	\$120.00	\$60,600.00
37	MISCELLANEOUS IRON AND STEEL	LBS.	10,078	\$2.00	\$20,156.00	\$1.50	\$15,117.00	\$1.25	\$12,597.50
38	TRAFFIC SIGNAL CONDUIT RELOCATION	L.F.	350	\$50.00	\$17,500.00	\$125.00	\$43,750.00	\$50.00	\$17,500.00
39	TRASH RACK	L.S.	1	\$3,000.00	\$3,000.00	\$5,500.00	\$5,500.00	\$10,000.00	\$10,000.00
40	3-FOOT CABLE RAILING	L.F.	22	\$15.00	\$330.00	\$120.00	\$2,640.00	\$100.00	\$2,200.00
41	BLOCK WALL	L.S.	1	\$4,000.00	\$4,000.00	\$6,500.00	\$6,500.00	\$23,000.00	\$23,000.00
42	REMOVE AND REINSTALL IN-PAVEMENT FLASHING CROSSWALK SYSTEM	L.S.	1	\$8,000.00	\$8,000.00	\$23,000.00	\$23,000.00	\$28,000.00	\$28,000.00
43	INSTALL ELECTRIC CONDUIT	L.S.	1	\$5,000.00	\$5,000.00	\$26,000.00	\$26,000.00	\$30,000.00	\$30,000.00
44	EXTRA DIRECTED WORK	L.S.	1	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
45	DUST ABATEMENT	L.S.	1	\$30,000.00	\$30,000.00	\$5,000.00	\$5,000.00	\$20,000.00	\$20,000.00
46	STORMWATER AND NON-STORMWATER POLLUTION CONTROL	L.S.	1	\$20,000.00	\$20,000.00	\$7,500.00	\$7,500.00	\$25,000.00	\$25,000.00
47	NON-STORMWATER DISCHARGE OR DEWATERING	L.S.	1	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$1,000.00	\$1,000.00

Riverside County Flood Control & Water Conservation District

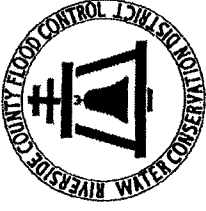
1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



ENGINEER'S ESTIMATE

PRO-CRAFT CONSTRUCTION, INC.

POWELL ENGINEERING CONSTRUCTION

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
48	8-INCH VITRIFIED CLAY PIPE (VCP) SEWER RELOCATION AND LATERALS	L.S.	1	\$328,000.00	\$328,000.00	\$456,800.00	\$456,800.00	\$185,000.00	\$185,000.00
49	24-INCH CML/C STEEL WATERMAIN RELOCATION	L.S.	1	\$125,000.00	\$125,000.00	\$108,500.00	\$108,500.00	\$100,000.00	\$100,000.00
50	HIGHWAY 111 UTILITY PROTECTION PLAN	L.S.	1	\$5,000.00	\$5,000.00	\$40,000.00	\$40,000.00	\$10,000.00	\$10,000.00
51	14' W x 4.5' H PRCB	L.F.	1,244	\$1,250.00	\$1,555,000.00	\$1,180.00	\$1,467,920.00	\$1,000.00	\$1,244,000.00
52	12' W x 3.5' H PRCB	L.F.	248	\$925.00	\$229,400.00	\$1,120.00	\$277,760.00	\$975.00	\$241,800.00
53	8.5' W x 5' H PRCB	L.F.	416	\$650.00	\$270,400.00	\$1,020.00	\$424,320.00	\$700.00	\$291,200.00
54	5' W x 4' H PRCB	L.F.	420	\$325.00	\$136,500.00	\$850.00	\$357,000.00	\$325.00	\$136,500.00
55	DAM OUTLET CHANNEL	L.S.	1	\$70,500.00	\$70,500.00	\$38,000.00	\$38,000.00	\$80,000.00	\$80,000.00

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

ENGINEER'S ESTIMATE

GRFCO, INC.

BELCZAK & SONS, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
1	MOBILIZATION	L.S.	1	\$100,000.00	\$100,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
2	WATER CONTROL	L.S.	1	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$20,000.00	\$20,000.00
3	TRAFFIC CONTROL	L.S.	1	\$60,000.00	\$60,000.00	\$40,000.00	\$40,000.00	\$200,000.00	\$200,000.00
4	CLEARING AND MISCELLANEOUS WORK	L.S.	1	\$80,000.00	\$80,000.00	\$50,000.00	\$50,000.00	\$100,000.00	\$100,000.00
5	EXCAVATION	C.Y.	20,179	\$15.00	\$302,685.00	\$12.00	\$242,148.00	\$25.00	\$504,475.00
6	MASS EXCAVATION	C.Y.	12,438	\$10.00	\$124,380.00	\$10.00	\$124,380.00	\$10.00	\$124,380.00
7	ROCK EXCAVATION	C.Y.	700	\$200.00	\$140,000.00	\$200.00	\$140,000.00	\$100.00	\$70,000.00
8	ASPHALT CONCRETE EXCAVATION	S.F.	17,556	\$1.00	\$17,556.00	\$1.00	\$17,556.00	\$2.00	\$35,112.00
9	BACKFILL	C.Y.	8,174	\$15.00	\$122,610.00	\$10.00	\$81,740.00	\$30.00	\$245,220.00
10	DEBRIS BASIN GRADING	L.S.	1	\$7,000.00	\$7,000.00	\$75,000.00	\$75,000.00	\$10,000.00	\$10,000.00
11	CONTROLLED LOW STRENGTH MATERIAL (CLSM) BACKFILL	C.Y.	820	\$125.00	\$102,500.00	\$75.00	\$61,500.00	\$70.00	\$57,400.00
12	LEVELING BED MATERIAL	C.Y.	826	\$30.00	\$24,780.00	\$40.00	\$33,040.00	\$30.00	\$24,780.00
13	TRENCH SAFETY SYSTEM AND FALSEWORK	L.S.	1	\$150,000.00	\$150,000.00	\$600,000.00	\$600,000.00	\$392,000.00	\$392,000.00
14	CLASS "A" CONCRETE, REINFORCED CONCRETE BOX	C.Y.	61	\$700.00	\$42,700.00	\$1,200.00	\$73,200.00	\$3,000.00	\$183,000.00
15	CLASS "A" CONCRETE	C.Y.	22	\$600.00	\$13,200.00	\$1,500.00	\$33,000.00	\$5,000.00	\$110,000.00
16	CLASS "A" CONCRETE, MINOR STRUCTURES	C.Y.	93	\$800.00	\$74,400.00	\$1,000.00	\$93,000.00	\$1,000.00	\$93,000.00
17	CLASS "B" CONCRETE, MISCELLANEOUS	C.Y.	57	\$400.00	\$22,800.00	\$600.00	\$34,200.00	\$3,000.00	\$171,000.00
18	1'-8" FLOODWALL	L.F.	550	\$100.00	\$55,000.00	\$75.00	\$41,250.00	\$50.00	\$27,500.00
19	8" FLOODWALL	L.F.	320	\$35.00	\$11,200.00	\$65.00	\$20,800.00	\$30.00	\$9,600.00
20	TRANSITION STRUCTURE NO. 1	EACH	1	\$7,000.00	\$7,000.00	\$6,000.00	\$6,000.00	\$10,000.00	\$10,000.00
21	TRANSITION STRUCTURE NO. 3	EACH	1	\$6,000.00	\$6,000.00	\$4,000.00	\$4,000.00	\$10,000.00	\$10,000.00
22	JUNCTION STRUCTURE NO. 1	EACH	1	\$4,000.00	\$4,000.00	\$3,000.00	\$3,000.00	\$10,000.00	\$10,000.00
23	JUNCTION STRUCTURE NO. 3	EACH	9	\$1,500.00	\$13,500.00	\$3,000.00	\$27,000.00	\$2,000.00	\$18,000.00
24	MANHOLE NO. 2	EACH	2	\$5,000.00	\$10,000.00	\$4,000.00	\$8,000.00	\$15,000.00	\$30,000.00

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



ENGINEER'S ESTIMATE

GRFCO, INC.

BELCZAK & SONS, INC.

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
25	PRESSURE MANHOLE NO. 2	EACH	2	\$6,000.00	\$12,000.00	\$6,000.00	\$12,000.00	\$5,000.00	\$10,000.00
26	MANHOLE NO. 3	EACH	6	\$2,500.00	\$15,000.00	\$3,000.00	\$18,000.00	\$3,000.00	\$18,000.00
27	66" RCP, 2200D	L.F.	316	\$325.00	\$102,700.00	\$400.00	\$126,400.00	\$400.00	\$126,400.00
28	66" RCP, 1600D	L.F.	390	\$300.00	\$117,000.00	\$350.00	\$136,500.00	\$300.00	\$117,000.00
29	60" RCP, 1600D	L.F.	199	\$280.00	\$55,720.00	\$325.00	\$64,675.00	\$250.00	\$49,750.00
30	42" RCP, 1400D	L.F.	910	\$180.00	\$163,800.00	\$225.00	\$204,750.00	\$200.00	\$182,000.00
31	30" RCP, 1400D	L.F.	106	\$160.00	\$16,960.00	\$190.00	\$20,140.00	\$150.00	\$15,900.00
32	24" RCP, CLASS IV	L.F.	214	\$140.00	\$29,960.00	\$200.00	\$42,800.00	\$140.00	\$29,960.00
33	18" RCP, CLASS IV	L.F.	60	\$120.00	\$7,200.00	\$150.00	\$9,000.00	\$130.00	\$7,800.00
34	AGGREGATE BASE, CLASS 2	C.Y.	819	\$70.00	\$57,330.00	\$40.00	\$32,760.00	\$100.00	\$81,900.00
35	HOT MIX ASPHALT (HMA) TYPE A	TONS	1,426	\$100.00	\$142,600.00	\$90.00	\$128,340.00	\$100.00	\$142,600.00
36	TEMPORARY RESURFACING	TONS	505	\$100.00	\$50,500.00	\$100.00	\$50,500.00	\$150.00	\$75,750.00
37	MISCELLANEOUS IRON AND STEEL	LBS.	10,078	\$2.00	\$20,156.00	\$3.00	\$30,234.00	\$2.00	\$20,156.00
38	TRAFFIC SIGNAL CONDUIT RELOCATION	L.F.	350	\$50.00	\$17,500.00	\$125.00	\$43,750.00	\$20.00	\$7,000.00
39	TRASH RACK	L.S.	1	\$3,000.00	\$3,000.00	\$30,000.00	\$30,000.00	\$10,000.00	\$10,000.00
40	3-FOOT CABLE RAILING	L.F.	22	\$15.00	\$330.00	\$100.00	\$2,200.00	\$100.00	\$2,200.00
41	BLOCK WALL	L.S.	1	\$4,000.00	\$4,000.00	\$25,000.00	\$25,000.00	\$15,000.00	\$15,000.00
42	REMOVE AND REINSTALL IN-PAVEMENT FLASHING CROSSWALK SYSTEM	L.S.	1	\$8,000.00	\$8,000.00	\$25,000.00	\$25,000.00	\$5,000.00	\$5,000.00
43	INSTALL ELECTRIC CONDUIT	L.S.	1	\$5,000.00	\$5,000.00	\$26,000.00	\$26,000.00	\$10,000.00	\$10,000.00
44	EXTRA DIRECTED WORK	L.S.	1	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
45	DUST ABATEMENT	L.S.	1	\$30,000.00	\$30,000.00	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00
46	STORMWATER AND NON-STORMWATER POLLUTION CONTROL	L.S.	1	\$20,000.00	\$20,000.00	\$6,000.00	\$6,000.00	\$20,000.00	\$20,000.00
47	NON-STORMWATER DISCHARGE OR DEWATERING	L.S.	1	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$500.00	\$500.00

Riverside County Flood Control & Water Conservation District

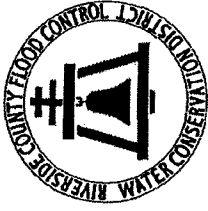
1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965

Bid Abstract

Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014



BELCZAK & SONS, INC.

GRFCO, INC.

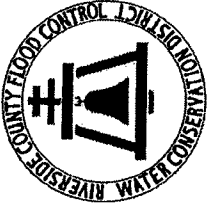
ENGINEER'S ESTIMATE

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
48	8-INCH VITRIFIED CLAY PIPE (VCP) SEWER RELOCATION AND LATERALS	L.S.	1	\$328,000.00	\$328,000.00	\$600,000.00	\$600,000.00	\$350,000.00	\$350,000.00
49	24-INCH CML/C STEEL WATERMAIN RELOCATION	L.S.	1	\$125,000.00	\$125,000.00	\$70,000.00	\$70,000.00	\$180,000.00	\$180,000.00
50	HIGHWAY 111 UTILITY PROTECTION PLAN	L.S.	1	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00
51	14' W x 4.5' H PRCB	L.F.	1,244	\$1,250.00	\$1,555,000.00	\$1,275.00	\$1,586,100.00	\$1,000.00	\$1,244,000.00
52	12' W x 3.5' H PRCB	L.F.	248	\$925.00	\$229,400.00	\$1,175.00	\$291,400.00	\$1,200.00	\$297,600.00
53	8.5' W x 5' H PRCB	L.F.	416	\$650.00	\$270,400.00	\$900.00	\$374,400.00	\$850.00	\$353,600.00
54	5' W x 4' H PRCB	L.F.	420	\$325.00	\$136,500.00	\$500.00	\$210,000.00	\$750.00	\$315,000.00
55	DAM OUTLET CHANNEL	L.S.	1	\$70,500.00	\$70,500.00	\$100,000.00	\$100,000.00	\$50,000.00	\$50,000.00

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

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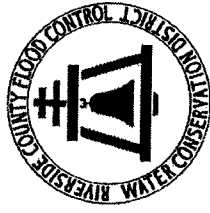
ENGINEER'S ESTIMATE **MURRAY COMPANY** **RIVERSIDE CONSTRUCTION COMPANY, INC.**

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
1	MOBILIZATION	L.S.	1	\$100,000.00	\$100,000.00	\$178,043.20	\$178,043.20	\$500,000.00	\$500,000.00
2	WATER CONTROL	L.S.	1	\$10,000.00	\$10,000.00	\$1,999.28	\$1,999.28	\$6,000.00	\$6,000.00
3	TRAFFIC CONTROL	L.S.	1	\$60,000.00	\$60,000.00	\$306,408.49	\$306,408.49	\$280,000.00	\$280,000.00
4	CLEARING AND MISCELLANEOUS WORK	L.S.	1	\$80,000.00	\$80,000.00	\$32,288.62	\$32,288.62	\$135,000.00	\$135,000.00
5	EXCAVATION	C.Y.	20,179	\$15.00	\$302,685.00	\$33.41	\$674,180.39	\$12.00	\$242,148.00
6	MASS EXCAVATION	C.Y.	12,438	\$10.00	\$124,380.00	\$40.51	\$503,863.38	\$6.00	\$74,628.00
7	ROCK EXCAVATION	C.Y.	700	\$200.00	\$140,000.00	\$211.71	\$148,197.00	\$375.00	\$262,500.00
8	ASPHALT CONCRETE EXCAVATION	S.F.	17,556	\$1.00	\$17,556.00	\$6.03	\$105,862.68	\$1.00	\$17,556.00
9	BACKFILL	C.Y.	8,174	\$15.00	\$122,610.00	\$16.95	\$138,549.30	\$22.00	\$179,828.00
10	DEBRIS BASIN GRADING	L.S.	1	\$7,000.00	\$7,000.00	\$69,952.65	\$69,952.65	\$12,000.00	\$12,000.00
11	CONTROLLED LOW STRENGTH MATERIAL (CLSM) BACKFILL	C.Y.	820	\$125.00	\$102,500.00	\$116.94	\$95,890.80	\$125.00	\$102,500.00
12	LEVELING BED MATERIAL	C.Y.	826	\$30.00	\$24,780.00	\$30.06	\$24,829.56	\$45.00	\$37,170.00
13	TRENCH SAFETY SYSTEM AND FALSEWORK	L.S.	1	\$150,000.00	\$150,000.00	\$55,145.13	\$55,145.13	\$115,000.00	\$115,000.00
14	CLASS "A" CONCRETE, REINFORCED CONCRETE BOX	C.Y.	61	\$700.00	\$42,700.00	\$2,919.92	\$178,115.12	\$1,600.00	\$97,600.00
15	CLASS "A" CONCRETE	C.Y.	22	\$600.00	\$13,200.00	\$1,557.14	\$34,257.08	\$2,000.00	\$44,000.00
16	CLASS "A" CONCRETE, MINOR STRUCTURES	C.Y.	93	\$800.00	\$74,400.00	\$1,622.40	\$150,883.20	\$1,650.00	\$153,450.00
17	CLASS "B" CONCRETE, MISCELLANEOUS	C.Y.	57	\$400.00	\$22,800.00	\$483.52	\$27,560.64	\$645.00	\$36,765.00
18	1'-8" FLOODWALL	L.F.	550	\$100.00	\$55,000.00	\$163.85	\$90,117.50	\$70.00	\$38,500.00
19	8" FLOODWALL	L.F.	320	\$35.00	\$11,200.00	\$158.20	\$50,624.00	\$28.00	\$8,960.00
20	TRANSITION STRUCTURE NO. 1	EACH	1	\$7,000.00	\$7,000.00	\$5,650.00	\$5,650.00	\$8,000.00	\$8,000.00
21	TRANSITION STRUCTURE NO. 3	EACH	1	\$6,000.00	\$6,000.00	\$5,650.00	\$5,650.00	\$7,600.00	\$7,600.00
22	JUNCTION STRUCTURE NO. 1	EACH	1	\$4,000.00	\$4,000.00	\$4,520.00	\$4,520.00	\$12,000.00	\$12,000.00
23	JUNCTION STRUCTURE NO. 3	EACH	9	\$1,500.00	\$13,500.00	\$4,520.00	\$40,680.00	\$1,850.00	\$16,650.00
24	MANHOLE NO. 2	EACH	2	\$5,000.00	\$10,000.00	\$7,910.00	\$15,820.00	\$7,000.00	\$14,000.00

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

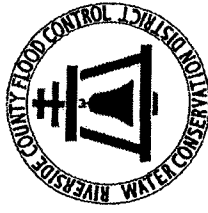
ENGINEER'S ESTIMATE **MURRAY COMPANY** **RIVERSIDE CONSTRUCTION COMPANY, INC.**

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
25	PRESSURE MANHOLE NO. 2	EACH	2	\$6,000.00	\$12,000.00	\$11,300.00	\$22,600.00	\$12,000.00	\$24,000.00
26	MANHOLE NO. 3	EACH	6	\$2,500.00	\$15,000.00	\$7,910.00	\$47,460.00	\$1,425.00	\$8,550.00
27	66" RCP, 2200D	L.F.	316	\$325.00	\$102,700.00	\$328.45	\$103,790.20	\$440.00	\$139,040.00
28	66" RCP, 1600D	L.F.	390	\$300.00	\$117,000.00	\$312.63	\$121,925.70	\$355.00	\$138,450.00
29	60" RCP, 1600D	L.F.	199	\$280.00	\$55,720.00	\$281.71	\$56,060.29	\$335.00	\$66,665.00
30	42" RCP, 1400D	L.F.	910	\$180.00	\$163,800.00	\$161.48	\$146,946.80	\$245.00	\$222,950.00
31	30" RCP, 1400D	L.F.	106	\$160.00	\$16,960.00	\$109.94	\$11,653.64	\$175.00	\$18,550.00
32	24" RCP, CLASS IV	L.F.	214	\$140.00	\$29,960.00	\$88.85	\$19,013.90	\$145.00	\$31,030.00
33	18" RCP, CLASS IV	L.F.	60	\$120.00	\$7,200.00	\$74.46	\$4,467.60	\$165.00	\$9,900.00
34	AGGREGATE BASE, CLASS 2	C.Y.	819	\$70.00	\$57,330.00	\$58.76	\$48,124.44	\$145.00	\$118,755.00
35	HOT MIX ASPHALT (HMA) TYPE A	TONS	1,426	\$100.00	\$142,600.00	\$280.24	\$399,622.24	\$117.00	\$166,842.00
36	TEMPORARY RESURFACING	TONS	505	\$100.00	\$50,500.00	\$105.09	\$53,070.45	\$176.00	\$88,880.00
37	MISCELLANEOUS IRON AND STEEL	LBS.	10,078	\$2.00	\$20,156.00	\$2.09	\$21,063.02	\$1.00	\$10,078.00
38	TRAFFIC SIGNAL CONDUIT RELOCATION	L.F.	350	\$50.00	\$17,500.00	\$107.35	\$37,572.50	\$30.00	\$10,500.00
39	TRASH RACK	L.S.	1	\$3,000.00	\$3,000.00	\$3,520.18	\$3,520.18	\$13,000.00	\$13,000.00
40	3-FOOT CABLE RAILING	L.F.	22	\$15.00	\$330.00	\$135.60	\$2,983.20	\$110.00	\$2,420.00
41	BLOCK WALL	L.S.	1	\$4,000.00	\$4,000.00	\$6,780.00	\$6,780.00	\$25,000.00	\$25,000.00
42	REMOVE AND REINSTALL IN-PAVEMENT FLASHING CROSSWALK SYSTEM	L.S.	1	\$8,000.00	\$8,000.00	\$7,331.85	\$7,331.85	\$15,000.00	\$15,000.00
43	INSTALL ELECTRIC CONDUIT	L.S.	1	\$5,000.00	\$5,000.00	\$7,331.85	\$7,331.85	\$15,000.00	\$15,000.00
44	EXTRA DIRECTED WORK	L.S.	1	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
45	DUST ABATEMENT	L.S.	1	\$30,000.00	\$30,000.00	\$30,600.80	\$30,600.80	\$100,000.00	\$100,000.00
46	STORMWATER AND NON-STORMWATER POLLUTION CONTROL	L.S.	1	\$20,000.00	\$20,000.00	\$35,200.00	\$35,200.00	\$100,000.00	\$100,000.00
47	NON-STORMWATER DISCHARGE OR DEWATERING	L.S.	1	\$5,000.00	\$5,000.00	\$16,498.00	\$16,498.00	\$2,500.00	\$2,500.00

Bid Abstract

Riverside County Flood Control & Water Conservation District

1995 Market St. Riverside, CA 92501 Phone: 951.955.1200 Fax 951.788.9965



Project Name: PALM SPRINGS MDP LINE 43 AND LATERAL 43A, STAGE 1

Project Number: 6-0-0163-01

Bid Open Date: 9/11/2014

ENGINEER'S ESTIMATE **MURRAY COMPANY** **RIVERSIDE CONSTRUCTION COMPANY, INC.**

Item No.	Description	Unit	Quantity	Unit Bid	Total Bid	Unit Bid	Total Bid	Unit Bid	Total Bid
48	8-INCH VITRIFIED CLAY PIPE (VCP) SEWER RELOCATION AND LATERALS	L.S.	1	\$328,000.00	\$328,000.00	\$103,236.72	\$103,236.72	\$366,000.00	\$366,000.00
49	24-INCH CML/C STEEL WATERMAIN RELOCATION	L.S.	1	\$125,000.00	\$125,000.00	\$108,598.75	\$108,598.75	\$208,000.00	\$208,000.00
50	HIGHWAY 111 UTILITY PROTECTION PLAN	L.S.	1	\$5,000.00	\$5,000.00	\$13,560.00	\$13,560.00	\$10,000.00	\$10,000.00
51	14' W x 4.5' H PRCB	L.F.	1,244	\$1,250.00	\$1,555,000.00	\$946.04	\$1,176,873.76	\$1,160.00	\$1,443,040.00
52	12' W x 3.5' H PRCB	L.F.	248	\$925.00	\$229,400.00	\$890.90	\$220,943.20	\$1,420.00	\$352,160.00
53	8.5' W x 5' H PRCB	L.F.	416	\$650.00	\$270,400.00	\$795.10	\$330,761.60	\$790.00	\$328,640.00
54	5' W x 4' H PRCB	L.F.	420	\$325.00	\$136,500.00	\$331.37	\$139,175.40	\$590.00	\$247,800.00
55	DAM OUTLET CHANNEL	L.S.	1	\$70,500.00	\$70,500.00	\$40,000.00	\$40,000.00	\$75,000.00	\$75,000.00

000001

**BOARD OF
SUPERVISORS**

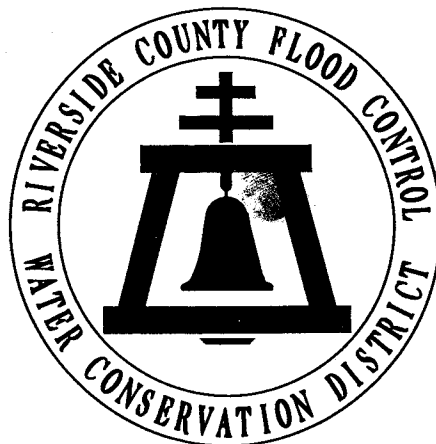
SPECIFICATIONS and CONTRACT DOCUMENTS

for the CONSTRUCTION of

**PALM SPRINGS MDP LINE 43
AND LATERAL 43A
STAGE 1**

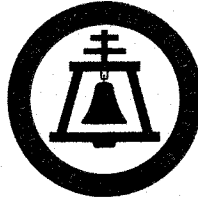
PROJECT NO. 6-0-00163

RIVERSIDE COUNTY, CALIFORNIA



FORM APPROVED COUNTY COUNSEL
BY: *[Signature]* DATE: *7/29/14*
NEAL R. KIPNIS

JUL 29 2014 11-6p+s
OCT 21 2014 11-2 am.



RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

August 28, 2014

ADDENDUM NO. 1

TO

**PALM SPRINGS LINE 43 AND LATERAL 43A, STAGE 1
RIVERSIDE COUNTY, CALIFORNIA**

Bid Opening Date: Thursday, September 4, 2014 at 2:00 p.m.

BID OPENING

CHANGE Bid Opening Date to: Thursday, September 11, 2014 at 2:00 p.m.

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REPLACE Page Ig in its entirety to reflect new Section 32.

PROPOSAL

REPLACE PROPOSAL in its entirety (Pages VIII, VIIIa, and VIIIb) to accommodate:

- **Addition** of new Item No. 55 Dam Outlet Channel.
- **Addition** of a signature line on the bottom of Page VIIIb for acknowledgment of the addendum.

EXHIBIT A

REPLACE EXHIBIT A Page XIXb to accommodate:

- **Addition** of new Item No. 55 Dam Outlet Channel.

DETAILED SPECIFICATIONS

REPLACE DETAILED SPECIFICATIONS Pages 51 and 96 with the attached sheets to accommodate:

- **Addition** of Items 10 through 12 of Section 13.2 Clearing and Miscellaneous Work.
- **Addition** of SECTION 32 – DAM OUTLET CHANNEL.

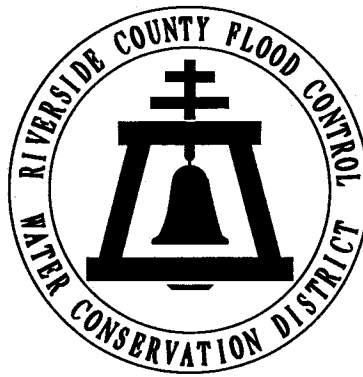
DRAWING NO. 6-395

ADD Sheets 10A and 10B to plan set (40 sheets in total).

REMOVE Item 1 of Note to Contractor on Traffic Plan Sheets 25, 26, 27, 31, 32 and 33. See Section 6.24 Palm Canyon Drive (Highway 111) and Perez Road Intersection Construction of the Special Provisions for scheduling requirements for work within Highway 111.

NOTE: Bidders are required to acknowledge receipt of all addenda at the bottom of **Sheet VIIIb** of the **PROPOSAL**. Failure to acknowledge all addenda on the bid form may cause the bid to be considered not responsive to the invitation, which would require rejection of the bid.

WARREN D. WILLIAMS
General Manager-Chief Engineer

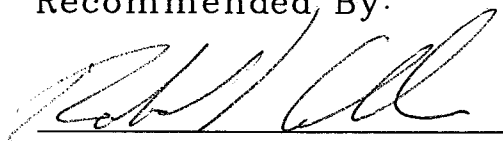


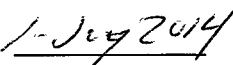
SPECIFICATIONS and CONTRACT DOCUMENTS
for the CONSTRUCTION of
PALM SPRINGS MDP LINE 43
AND LATERAL 43A
STAGE 1

PROJECT NO. 6-8-00163

These specifications and contract documents have been prepared under the direction of the following Registered Civil Engineers:

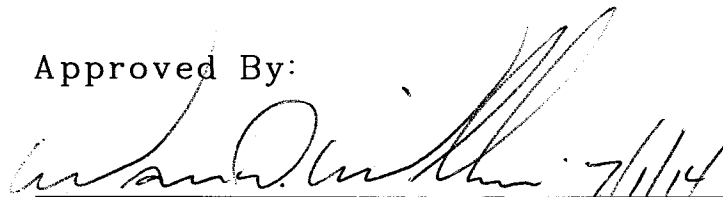
Recommended By:


Design Engineer


Date



Approved By:


General Manager—Chief Engineer


Date



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NOTICE TO CONTRACTORS

Riverside County Flood Control and Water Conservation District hereinafter called "District", invites sealed proposals for construction of:

Palm Springs MDP Line 43 and Lateral 43A, Stage 1

Project No. 6-0-00163-01

located in the city of Cathedral City,

Riverside County, California

Specifications and Contract Documents may be examined at the District's office at 1995 Market Street, Riverside, California, and may be obtained upon payment to District of \$60.00 per set, received at the District's office and \$65.00 per set if mailed. The Specifications and Contract Documents are also offered on CD-ROM for \$10.00 received at the District's office and \$15.00 if mailed. No refund.

Each proposal must be accompanied by a certified or cashier's check or bid bond equal to ten percent (10%) of the amount bid, payable to the Riverside County Flood Control and Water Conservation District as a guarantee that the Contractor will, if awarded the contract, execute a satisfactory contract and furnish the required bonds and proof of insurance.

Proposals must be in accordance with the instructions and filed with District by 2:00 p.m. on Thursday, September 4, 2014 at the District office at the above address which time and place are fixed for the public opening of bids.

The Contractor's attention is directed to Section 6.16 of the Special Provisions. A Mandatory Pre-Bid Site Inspection Tour will be held on Wednesday, August 20, 2014 at 9:30 a.m. on Perez Road, just south of Palm Canyon Drive (Highway 111), in the city of Cathedral City, CA 92234.

General prevailing rate per diem wages and general prevailing rate of per diem wages for holiday and overtime work, including employer payments for health and welfare, pension, vacation, apprentices

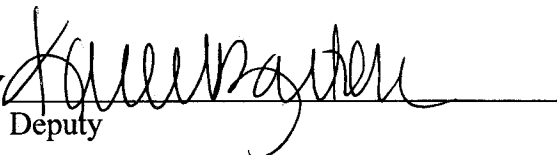
and similar purposes for each craft, classification or type of workman needed for execution of contracts under the jurisdiction of District have been obtained by the Board of Supervisors of the District from the Director of Industrial Relations of the State of California for the area where the work is to be done. The said determinations are on file in the principal office of the District, and will be made available to any interested person upon request.

Contractors submitting proposals for this project shall have an "A" Contractors license from the State of California in order to be considered eligible for the contract award.

Dated: July 29, 2014

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

KECIA HARPER-IHEM
Clerk of the Board

BY 
Deputy

INSTRUCTIONS TO BIDDERS

QUANTITIES: The amount of work to be done or materials to be furnished under the Contract as noted in the proposal, are but estimates and are not to be taken as an expressed or implied statement that the actual amount of work or materials will correspond to the estimate.

The right is reserved to increase or decrease or to entirely eliminate certain items from the work or materials if found desirable or expedient.

The Contractor will be allowed no claims for anticipated profits, loss of profits or for any damages of any sort because of any difference between the estimated and the actual amounts of work done, or materials furnished or used in the completed project.

The Contractor is cautioned against unbalancing of his bid by prorating his overhead into one or two items only when there are a number of items on the schedule. The overhead and indirect charges should be prorated on all items in schedule.

DISCREPANCIES AND OMISSIONS: Discrepancies, omissions, ambiguities, or requirements likely to cause disputes between trades and similar matters shall be promptly brought to the attention of the Engineer. When appropriate, Addenda will be issued by District. No communication by anyone as to such matters except by an Addendum affects the meaning or requirements of the Contract Documents.

WITHDRAWAL OF PROPOSALS: Any proposal may be withdrawn at any time prior to the hour fixed in the Notice to Contractors for the opening of proposals, provided that a request in writing, executed by the bidder or his duly authorized representative, for the withdrawal of such proposal, is filed with the Chief Engineer. The withdrawal of a proposal shall not prejudice the right of a bidder to file a new proposal.

AGREEMENT OF FIGURES: If the unit prices and the total amounts named by the bidder in the proposal do not agree, the unit prices alone will be considered as representing the bidder's intention.

INVALID PROPOSALS: Proposal submitted by telegraph or fax transmission and those which fail to reach the place fixed for opening of proposals prior to the date and hour set for opening same, will not be considered.

INSPECTION OF SITE: Bidders must examine the site and acquaint themselves with all conditions affecting the work.

Information derived from maps, plans or specifications, or from the Chief Engineer or his assistants, will not relieve the successful bidder from properly carrying out all the terms of the written contract.

By the submitting of a proposal, the bidder will be held to have personally examined the site and the drawings, to have carefully read the specifications and to have satisfied himself as to his ability to meet all the difficulties attending the execution of the proposed contract before the delivery of his proposal and agrees that if he is awarded the contract, he will make no claim against the Board of Supervisors based on ignorance or misunderstanding of the contract provisions.

QUALIFICATIONS OF BIDDERS: No proposal will be accepted from a contractor who is not licensed under laws of California, as evidenced by the submittal of the Statement of Licensure. No award will be made to any bidder who cannot give satisfactory assurance to the Board of Supervisors as to his own ability to carry out the contract, both from his financial standing and by reason of his previous experience as a contractor on work of the nature contemplated in the contract. The bidder is required to submit his record of work of similar nature to that proposed under these specifications, and unfamiliarity with the type of work may be sufficient cause for rejection of a proposal.

A bid shall be rejected and a bidder shall be disqualified to bid on a District project if the bidder or any officer, manager, partner or shareholder of the bidder within the eighteen month period prior to the bid date shall have been an officer or employee of the District.

PROPOSAL FORMS: Attention of all bidders is called to the proposal affidavit forms attached hereto and bidders are cautioned that all proposals submitted must be accompanied by the proper affidavit, properly executed. Proposals will be made on forms furnished by District.

REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES OR IRREGULARITIES: Proposals may be rejected if they show any alterations of form, additions not called for, conditional proposals, incomplete proposals, erasures or irregularities of any kind. Erasures or interlineations in the proposal must be explained or noted over the signature of the bidder.

PUBLIC OPENING OF PROPOSALS: Proposals will be opened and read publicly at the time and place indicated in the Notice to Contractors. Bidders or their authorized agents are invited to be present.

DISQUALIFICATION OF BIDDERS: More than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different names will not be considered. Reasonable ground for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is any reason for believing that collusion exists among the bidders, none of the participants in such collusion will be considered in awarding the contract. Proposals in which the prices obviously are unbalanced may be rejected.

ADDENDA: District reserves the right to issue Addenda to the Contract Documents at any time prior to the time set to open bids. Each potential bidder shall leave with the District its name and address for the purpose of receiving Addenda. District will cause copies of Addenda to be mailed or delivered to such names at such addresses. To be considered, a Contractor's proposal must list and take into account all issued Addenda.

AWARD OF CONTRACT: The right is reserved to reject any and all proposals and to waive technical defects as the best interests of the District may require.

The award of the Contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with the requirements prescribed. The award, if made, will be made within sixty (60) days after the opening of the proposals.

All proposals will be compared on the basis of the Engineer's estimate of the quantities of work to be done.

RETURN OF PROPOSAL GUARANTEES: Within ten (10) days after the award of the contract, the Clerk will return the proposal guarantees accompanying such of the proposals as are not considered in making the award. All other proposal guarantees will be held until the contract has been fully executed, after which they will be returned to the respective bidders whose proposal they accompany.

CONTRACT BONDS: The Contractor shall furnish two (2) surety bonds in duplicate, one as a security for the faithful performance of the contract in the amount equal to one hundred percent (100%) of the contract price, and one as security for the payment of all persons performing labor and furnishing materials in connection with the contract in an amount equal to one hundred percent (100%) of the contract price. All bonds must be submitted on forms provided by the District. Bonds submitted in any other form will not be accepted.

SUBLETTING AND SUBCONTRACTING: Bidders are required, pursuant to the Subletting and Subcontracting Fair Practices Act (commencing with Section 4100 of the Public Contract Code) to list in their proposal the name and location of place of business of each subcontractor who will perform work or labor or render services in or about the construction of the work or improvement or a subcontractor who specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Plans and Specifications, in excess of one-half (½) of one percent (1%) of the prime Contractor's total bid. Failure to list a subcontractor for a portion of the work means that the prime contractor will do that portion of the work.

IRAN CONTRACTING ACT: In accordance with Public Contract Code Section 2204(a), prior to bidding on, submitting a proposal or executing a contract or renewal for a District contract for goods or services of \$1,000,000 or more, a Contractor must either:

- a) Certify it is not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code Section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or
- b) Demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code Section 2203(c) or (d).

To comply with this requirement, please insert your Contractor or financial institution name and Federal ID Number (if available) and complete one of the options on Page XV. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code section 2205.)

CONTRACTOR'S PROPOSAL

TO THE BOARD OF SUPERVISORS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT:

The undersigned hereby declare:

(a) That the only persons or parties interested in this proposal as principals are the following:

Name of Company (and dba if applicable): Granite Construction Company

See Appendix A1

(If the Contractor is a corporation, give the name of the corporation and the name of its president, secretary, treasurer, and manager. If a copartnership, give the name under which the copartnership does business, and the names and addresses of all copartners. If an individual, state the name and address under which the contract is to be drawn.)

(b) That this proposal is made without collusion with any other person, firm or corporation.

(c) That he has carefully examined the location of the proposed work, and has familiarized himself with all of the physical and climatic conditions, and makes his proposal solely upon his own knowledge.

(d) That he has carefully examined the attached specifications as referred to, and the plans, and makes this proposal in accordance therewith.

(e) That, if this proposal is accepted, he will enter into a written contract with the Riverside County Flood Control and Water Conservation District, Riverside, State of California.

(f) That he proposes to enter into such contract and to accept in full payment for the work actually done thereunder the prices shown in the attached schedule. It is understood and agreed that the quantities set forth are but estimates, and that the unit prices will apply to the actual quantities whatever they may be.

Accompanying this proposal is a certified or cashier's check or bid bond payable to the order of the Riverside County Flood Control and Water Conservation District, Riverside, California, in the sum of Ten Percent (10%) of bid amount - - - - - Dollars (\$10% of bid amount)

It is understood and agreed that should the Contractor within ten (10) days after the prescribed forms are presented to him for signature fail to return the contract and furnish acceptable surety bond and insurance, then, at the discretion of the District, the proceeds of said check shall become the property of the District, the Contractor shall be found in default and the project may be awarded to another contractor. The bid bond or check shall be held subject to payment to the District of the difference in money between the amount of the contract with another party to perform the work, together with the cost to the District of redrafting, redrawing and publishing documents and papers necessary to obtain new bids on said work. The bid bond or check shall, in addition, be held subject to all other actual damages suffered by the District. But if the contract is entered into and said bonds and insurance are furnished, or if the proposal is not accepted, then the said check shall be returned to the undersigned.

RECEIVED
SEP 11 2014
1:56 pm
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

PROPOSAL

For the Construction of **Palm Springs MDP Line 43 and Lateral 43A, Stage 1**, located in the city of Cathedral City, Riverside County, consisting of the following estimated quantities:

SECT. NO.	ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST	KG
10	1.	Mobilization	L.S.	---	\$15,000	\$399,206.00	
11	2.	Water Control	L.S.	---	---	\$5,000.00	
12	3.	Traffic Control	L.S.	---	---	\$100,000.00	
13	4.	Clearing and Miscellaneous Work	L.S.	---	---	\$125,000.00	
14	5.	Excavation	C.Y.	20,179	\$13.00	\$262,327.00	
14	6.	Mass Excavation	C.Y.	12,438	\$7.00	\$87,066.00	
14	7.	Rock Excavation	C.Y.	700	\$180.00	\$126,000.00	
14	8.	Asphalt Concrete Excavation	S.F.	17,556	\$1.25	\$21,945.00	
14	9.	Backfill	C.Y.	8,174	\$23.00	\$188,002.00	
14	10.	Debris Basin Grading	L.S.	---	---	\$10,000.00	
14	11.	Controlled Low Strength Material (CLSM) Backfill	C.Y.	820	\$75.00	\$61,500.00	
14	12.	Leveling Bed Material	C.Y.	826	\$60.00	\$49,560.00	
15	13.	Trench Safety System and Falsework	L.S.	---	---	\$50,000.00	
16	14.	Class "A" Concrete, Reinforced Concrete Box	C.Y.	61	\$950.00	\$57,950.00	
16	15.	Class "A" Concrete	C.Y.	22	\$1,100.00	\$24,200.00	
16	16.	Class "A" Concrete, Minor Structures	C.Y.	93	\$900.00	\$83,700.00	
16	17.	Class "B" Concrete, Miscellaneous	C.Y.	57	\$544.00	\$31,008.00	
16	18.	1'-8" Floodwall	L.F.	550	\$78.00	\$42,900.00	
16	19.	8" Floodwall	L.F.	320	\$51.00	\$16,320.00	

PROPOSAL contd.

SECT. NO.	ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
16	20.	Transition Structure No. 1	EACH	1	\$5,250 ⁰⁰	\$5,250 ⁰⁰
16	21.	Transition Structure No. 3	EACH	1	\$2,700 ⁰⁰	\$2,700 ⁰⁰
16	22.	Junction Structure No. 1	EACH	1	\$3,250 ⁰⁰	\$3,250 ⁰⁰
16	23.	Junction Structure No. 3	EACH	9	\$500 ⁰⁰	\$4,500 ⁰⁰
16	24.	Manhole No. 2	EACH	2	\$6,000 ⁰⁰	\$12,000 ⁰⁰
16	25.	Pressure Manhole No. 2	EACH	2	\$7,500 ⁰⁰	\$15,000 ⁰⁰
16	26.	Manhole No. 3	EACH	6	\$3,000 ⁰⁰	\$18,000 ⁰⁰
17	27.	66" RCP, 2200D	L.F.	316	\$300 ⁰⁰	\$94,800 ⁰⁰
17	28.	66" RCP, 1600D	L.F.	390	\$260 ⁰⁰	\$101,400 ⁰⁰
17	29.	60" RCP, 1600D	L.F.	199	\$225 ⁰⁰	\$44,775 ⁰⁰
17	30.	42" RCP, 1400D	L.F.	910	\$150 ⁰⁰	\$136,500 ⁰⁰
17	31.	30" RCP, 1400D	L.F.	106	\$110 ⁰⁰	\$11,660 ⁰⁰
17	32.	24" RCP, Class IV	L.F.	214	\$85 ⁰⁰	\$18,190 ⁰⁰
17	33.	18" RCP, Class IV	L.F.	60	\$68 ⁰⁰	\$4,080 ⁰⁰
19	34.	Aggregate Base, Class 2	C.Y.	819	\$75 ⁰⁰	\$61,425 ⁰⁰
19	35.	Hot Mix Asphalt (HMA) Type A	TONS	1,426	\$102 ⁰⁰	\$145,452 ⁰⁰
19	36.	Temporary Resurfacing	TONS	505	\$65 ⁰⁰	\$32,825 ⁰⁰
21	37.	Miscellaneous Iron and Steel	LBS.	10,078	\$150 ⁰⁰	\$15,117 ⁰⁰
21	38.	Traffic Signal Conduit Relocation	L.F.	350	\$40 ⁰⁰	\$14,000 ⁰⁰
21	39.	Trash Rack	L.S.	---	---	\$5,500 ⁰⁰
21	40.	3-Foot Cable Railing	L.F.	22	\$113 ⁰⁰	\$2,486 ⁰⁰
21	41.	Block Wall	L.S.	---	---	\$8,000 ⁰⁰
21	42.	Remove and Reinstall In-Pavement Flashing Crosswalk System	L.S.	---	---	\$20,000 ⁰⁰

PROPOSAL contd.

SECT. NO.	ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
21	43.	Install Electric Conduit	L.S.	---	---	\$ 35,000 ⁰⁰
21	44.	Extra Directed Work	L.S.	---	---	200,000.00
27	45.	Dust Abatement	L.S.	---	---	\$ 60,000 ⁰⁰
29	46.	Stormwater and Non-Stormwater Pollution Control	L.S.	---	---	\$ 50,000 ⁰⁰
29	47.	Non-Stormwater Discharge or Dewatering	L.S.	---	---	\$ 506 ⁰⁰
30	48.	8-Inch Vitrified Clay Pipe (VCP) Sewer Relocation and Laterals	L.S.	---	---	\$ 149,000 ⁰⁰
30	49.	24-Inch CML/C Steel Watermain Relocation	L.S.	---	---	\$ 70,000 ⁰⁰
30	50.	Highway 111 Utility Protection Plan	L.S.	---	---	\$ 15,000 ⁰⁰
31	51.	14' W x 4.5' H PRCB	L.F.	1,244	\$ 995.00	\$ 1,237,780.00
31	52.	12' W x 3.5' H PRCB	L.F.	248	\$ 950.00	\$ 235,600.00
31	53.	8.5' W x 5' H PRCB	L.F.	416	\$ 625.00	\$ 260,000.00
31	54.	5' W x 4' H PRCB	L.F.	420	\$ 480.00	\$ 201,600.00
32	55.	Dam Outlet Channel	L.S.	---	---	\$ 47,000 ⁰⁰
					TOTAL	\$ 4,995,874.00

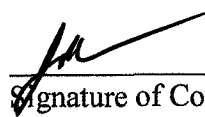
Granite Construction Company
Name of Company

38000 Monroe Street
Address

Indio, CA 92203
City, State, Zip

(760) 775-7500 (760) 775-8229
Telephone Number Fax Number

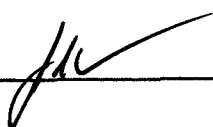
Joe. Richardson @ gcinc. com
Email


Signature of Contractor Joseph P. Richardson
Senior Estimator

94-0519552
S.S.N. or E.I.N.

89 A,B
Contractor's License No. and Classification

ADDENDUM NO. 1 ACKNOWLEDGED


Signature Joseph P. Richardson
Senior Estimator



State Of California

CONTRACTORS STATE LICENSE BOARD
ACTIVE LICENSE



License Number **89**

Entity **CORP**

Business Name **GRANITE CONSTRUCTION COMPANY**

Classification(s) **C36 C10 A B C57 C-2 C-8 C12**
C21 C27 C29 C35 C42 C45 C39
C50 C51 C31

Expiration Date **05/31/2015**

www.cslb.ca.gov



GRANITE CONSTRUCTION COMPANY

CERTIFICATE OF SECRETARY

RESOLVED, that, effective April 10, 2014 through December 31, 2014, the individuals named on the attached Exhibit 1 are authorized to negotiate, execute and/or attest electronic and paper documents and contracts necessary for the conduct of the Company's affairs with respect to the submission and execution of construction project bids, bid proposals, bid addenda and all other bid-related documents prepared and submitted on behalf of the Company not to exceed \$25 million, relating to any and all domestic construction projects arising out of the Company's operations.

RESOLVED, that, effective April 10, 2014 through December 31, 2014, the individuals named on the attached Exhibit 2 are authorized to negotiate, execute and attest electronic and paper documents and contracts necessary for the conduct of the Company's affairs with respect to the submission and execution of construction project bids, bid proposals, bid addenda and all other bid-related documents prepared and submitted on behalf of the Company not to exceed \$75 million, relating to any and all domestic construction projects arising out of the Company's operations.

RESOLVED FURTHER, that the authority provided for herein shall be in accordance with applicable policies, procedures and limits of authority previously approved and the Granite Construction Incorporated Delegation of Authority and Policy then in effect.

I, Richard A. Watts, do hereby certify that I am duly qualified as Secretary of GRANITE CONSTRUCTION COMPANY, a California corporation (the "Company"); that the foregoing is a true and correct copy of resolutions duly adopted effective April 10, 2014 by unanimous written consent of the Executive Committee of the Board of Directors, held without a meeting in accordance with the provisions of Article III, Section 9 of the Bylaws of the Company; that the Directors acting were duly and regularly elected; and that the resolution adopted has not been modified or repealed and is still in full force and effect.

Dated: April 10, 2014



Richard A. Watts

EXHIBIT 1

AUTHORIZED SIGNERS
Granite Construction Company
Southern California Region
Indio/San Diego Areas

AUTHORIZED SIGNERS

Michael A. Hedding, Area Manager
Jerry Lusich, Regional Chief Estimator
Patrick C. Kelly, Chief Estimator
Mike Boer, Chief Estimator
Joseph P. Richardson, Senior Estimator
Matt Beiswenger, Construction Manager
Jeff J. Mercer, Construction Manager
Mark A. Chalfa, Construction Manager
Pike Riegert, Construction Manager
Lon Dillman, Regional Controller
Jennifer Francis, Regional Office Manager

ATTESTORS

Michael A. Hedding, Area Manager
Jerry Lusich, Regional Chief Estimator
Patrick C. Kelly, Chief Estimator
Mike Boer, Chief Estimator
Joseph P. Richardson, Senior Estimator
Matt Beiswenger, Construction Manager
Jeff J. Mercer, Construction Manager
Mark A. Chalfa, Construction Manager
Pike Riegert, Construction Manager
Lon Dillman, Regional Controller
Jennifer Francis, Regional Office Manager
Susan Corkill, Senior Administrative Assistant
Tamara Speer, Project Pursuit Coordinator
Nelly Menjivar, Estimating Assistant
Carolyn Maness, Estimating Assistant

EXHIBIT 2

AUTHORIZED SIGNERS
Granite Construction Company
California Group

AUTHORIZED SIGNERS
Jim Radich, VP Coastal Region
Michael Tatusko, VP Valley Region
Bruce McGowan, VP Central California Region
David A. Donnelly, VP Southern California Region

LIST OF SUBCONTRACTORS

Contractor Granite Construction Company

**Palm Springs MDP Line 43
and Lateral 43A, Stage 1
Project No. 6-0-00163-01**

Give the name and the location of the place of business of each Subcontractor who will perform work or labor or render service to the General Contractor in or about the construction of the work or improvement, or a Subcontractor who specially fabricates and installs a portion of the work or improvement, in an amount in excess of one-half (1/2) of one percent (1%) of the General Contractor's total bid. List the bid item numbers of the work each subcontractor will do. If a portion of an item is to be subcontracted, show what percentage of that item is to be subcontracted.

Item No. (s) 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 37, 39, 55
Name of Subcontractor CMB Construction and Engineering
Address/City/Phone 10572 Acacia Street Suite C3, Rancho Cucamonga 91049-9800
License No. 613977 4538

Item No. (s) _____
Name of Subcontractor _____
Address/City/Phone _____
License No. _____

Item No. (s) _____
Name of Subcontractor _____
Address/City/Phone _____
License No. _____

Item No. (s) _____
Name of Subcontractor _____
Address/City/Phone _____
License No. _____

Item No. (s) _____
Name of Subcontractor _____
Address/City/Phone _____
License No. _____

STATEMENT OF LICENSURE

Pursuant to California Public Contract Code §3300, the undersigned does certify as follows:

1. That the pocket license/certificate of licensure I have presented to owner as of this date is my own license, being State of California, Contractors License No. 89; and
2. That said Contractors License is current and valid; and
3. That said Contractors License is of a classification appropriate to the work to be undertaken for owner, a Class A,B license.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

DATED: 09/04/2014

J.P.R.
Signature Joseph P. Richardson

Senior Estimator
Title

STATE OF CALIFORNIA) §
COUNTY OF RIVERSIDE)

On this the 4th day of September, 2014, before me

T. Speer, Notary Public

the undersigned Notary Public, personally appeared

Joseph P. Richardson

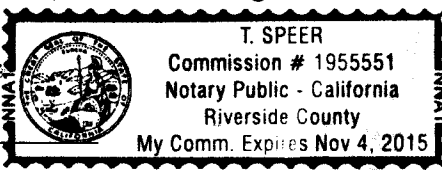
personally known to me

proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that he/she executed it.

WITNESS my hand and official seal.

T. Speer

Notary's Signature



AFFIDAVIT FOR INDIVIDUAL CONTRACTORS

STATE OF CALIFORNIA) §
COUNTY OF RIVERSIDE)

N/A

_____, being first duly sworn, deposes and says:

That he or she is the party making the foregoing proposal or bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the Riverside County Flood Control and Water Conservation District or anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

His or Her signature

Subscribed and sworn to before me

this _____ day of _____, 20____.

Signature and stamp of Notary
administering oath

AFFIDAVIT FOR JOINT VENTURE OR COPARTNERSHIP CONTRACTOR

STATE OF CALIFORNIA) §
COUNTY OF RIVERSIDE)

N/A

_____, being first duly sworn, deposes and says:

That he or she is a member of the joint venture or copartnership firm designated as

which is the party making the foregoing proposal or bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the Riverside County Flood Control and Water Conservation District or anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

That he has been and is duly vested with authority to make and sign instruments for the joint venture or copartnership by

who constitute the other members of the joint venture or copartnership.

His or Her signature

Subscribed and sworn to before me

this _____ day of _____, 20____

Signature and stamp of Notary
administering oath

AFFIDAVIT FOR CORPORATE CONTRACTOR

STATE OF CALIFORNIA) §
COUNTY OF RIVERSIDE)


Joseph P. Richardson, being first duly sworn, deposes and says:

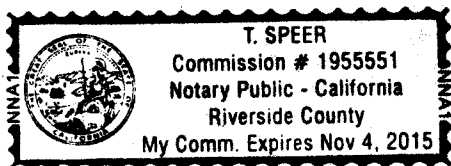
That he or she is Senior Estimator
of Granite Construction Company

a corporation which is the party making the foregoing proposal or bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the Riverside County Flood Control and Water Conservation District or anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.


His or Her signature Joseph P. Richardson

Subscribed and sworn to before me this 4th day of September, 20 14.


Signature and stamp of Notary administering oath



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Page 1
Order No. 1000000000
Date of order 10/10/2004
Amount 1000000000
Currency USD

IRAN CONTRACTING ACT


In accordance with Public Contract Code Section 2204(a), prior to bidding on, submitting a proposal or executing a contract or renewal for a District contract for goods or services of \$1,000,000 or more, a Contractor must either:

- c) Certify it is not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code Section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or
- d) Demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code Section 2203(c) or (d).

To comply with this requirement, please insert your Contractor or financial institution name and Federal ID Number (if available) and complete one of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code Section 2205.)

Option #1 – Certification

I, the official named below, certify I am duly authorized to execute this certification on behalf of the Contractor/financial institution identified below, and the Contractor/financial institution identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

<i>Contractor Name/Financial Institution (Printed)</i> Granite Construction Company		<i>Federal ID Number (or n/a)</i> 94-0519552
<i>By (Authorized Signature)</i> 		
<i>Printed Name and Title of Person Signing</i> Joseph P. Richardson		
<i>Date Executed</i> 09/04/2014	<i>Executed in</i> Indio, CA	

Option #2 – Exemption

Pursuant to Public Contract Code Sections 2203(c) and (d), a public entity may permit a Contractor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

<i>Contractor Name/Financial Institution (Printed)</i>		<i>Federal ID Number (or n/a)</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		
<i>Date Executed</i>	<i>Executed in</i>	

BID BOND

Recitals:

1. Granite Construction Company (Contractor), has submitted its Contractor's Proposal to the Riverside County Flood Control and Water Conservation District, (District), for the construction of public work for **Palm Springs MDP Line 43 and Lateral 43A, Stage 1** in accordance with a Notice to Contractors dated July 29, 2014.

2. Federal Insurance Company a Indiana corporation, hereafter called (Surety), is the surety on this Bond.

Agreement: We, Contractor as principal and Surety as surety, jointly and severally agree and state as follows:


1. The amount of the obligation of this Bond is 10% of the amount of the Contractor's Proposal and inures to the benefit of District.

2. This Bond is exonerated by (1) District rejecting said Proposal or, in the alternate, (2) if said Proposal is accepted, Contractor executes the Agreement and furnishes the Bonds and Insurance as agreed to in its Proposal, otherwise it remains in full force and effect for the recovery of loss, damage and expense of District resulting from failure of Contractor to act as agreed to in its Proposal. Some types of possible loss, damage and expense are specified in the Contractor's Proposal.

3. Surety for value received, stipulates and agrees that its obligations hereunder shall in no way be impaired or affected by any extension of time within which District may accept the Proposal and waives notice of any such extension.


4. This Bond is binding on our heirs, executors, administrators, successors and assigns.

Dated: August 11th, 2014

By 

Ashley Stinson / Attorney-in-Fact
(Printed Name)

Title Federal Insurance Company
(Surety)

By 

JOSEPH P. RICHARDSON, SENIOR ESTIMATOR
(Printed Name)

Title Granite Construction Company
(Contractor)

**NOTARY ACKNOWLEDGEMENT REQUIRED
FOR EACH SIGNATURE PLEASE ATTACH
SEPARATE FORM**

**NOTARY ACKNOWLEDGEMENT REQUIRED
FOR EACH SIGNATURE PLEASE ATTACH
SEPARATE FORM**

ACKNOWLEDGMENT

State of California
County of Riverside)

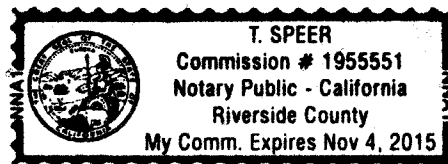
On August 25, 2014 before me, T. Speer, Notary Public
(insert name and title of the officer)

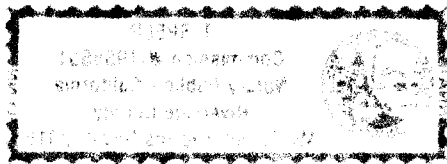
personally appeared Joseph P. Richardson,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature *T. Speer* (Seal)





ACKNOWLEDGMENT

State of California
County of Santa Cruz)

On August 11, 2014 before me, V.J. Fox, Notary Public
(insert name and title of the officer)

personally appeared Ashley Stinson,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature  (Seal)
V.J. Fox, Notary Public





**Chubb
Surety**

**POWER
OF
ATTORNEY**

**Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company**

**Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059**

Know All by These Presents, That **FEDERAL INSURANCE COMPANY**, an Indiana corporation, **VIGILANT INSURANCE COMPANY**, a New York corporation, and **PACIFIC INDEMNITY COMPANY**, a Wisconsin corporation, do each hereby constitute and appoint Jigisha Desai, John D. Gilliland, Catherine Gustavson, Kathleen Schreckengost, Ashley Stinson and Lillian Tse of Watsonville, California

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business on behalf **GRANITE CONSTRUCTION INCORPORATED** and all Subsidiaries alone or in joint venture as principal, in connection with bids, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation. And the execution of such bond or obligation by such Attorney-in-Fact in the Company's name and on its behalf as surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof, be valid and binding upon the Company.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY** have each executed and attested these presents and affixed their corporate seals on this 18th day of July, 2014.

Dawn M. Chloros, Assistant Secretary

David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

ss.

County of Somerset

On this 18th day of July, 2014 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY**, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY** and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 16, 2019

Notary Public

CERTIFICATION

Extract from the By-Laws of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY**:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

I, Dawn M. Chloros, Assistant Secretary of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY** (the "Companies") do hereby certify that

- (i) the foregoing extract of the By-Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in American Samoa, Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this August 11, 2014



Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903-3493 Fax (908) 903-3556 e-mail: surety@chubb.com

GRANITE CONSTRUCTION COMPANY

List of Officers

Name	Present Office Position
Roberts, James H.	President Chief Executive Officer
Donnino, Michael F.	Senior Vice President Group Manager Assistant Secretary
Desai, Jigisha (NMN)	Vice President Treasurer Assistant Financial Officer Assistant Secretary
Watts, Richard A.	Senior Vice President General Counsel Corporate Compliance Officer Secretary
Case, Thomas S.	Senior Vice President Operations Services Manager Assistant Secretary
Richards, James D.	Senior Vice President Group Manager Assistant Secretary
Krzeminski, Laurel J.	Senior Vice President Chief Financial Officer Assistant Secretary
Matheson, Martin P.	Senior Vice President Group Manager Assistant Secretary
Graham, Bradley G.	Vice President Controller Assistant Financial Officer Assistant Secretary
Marshall, Kent H.	Vice President Director of Development & Strategy Assistant Secretary
DeCocco, Philip M.	Senior Vice President of Human Resources Assistant Secretary
Blackburn, Nicholas B.	Director of Corporate Taxation Assistant Secretary
Smith, Kenneth M.	Group Counsel Assistant Secretary
Jasper, Jason M.	Group Counsel Assistant Secretary
Lenhardt, Heather J.	Group Counsel Assistant Secretary

(NMN) = No Middle Name

GRANITE CONSTRUCTION COMPANY
2011 Complete Jobs Greater than \$3 Million

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Contract Start Date	Actual Completion Date
201173	University of California Santa Cruz Physical Planning & Construction 1156 High Street, Barn G Santa Cruz, CA 95064	UCSC McHenry Library Renovation Contract #: 1810-101 Santa Cruz, CA University campus sitework. Work included: site demolition, erosion control, earthwork (22,250 SF finished subgrade, 2,200 of curb backfill, and 4,482 SF landscape grading), 12,000 CY lime treatment, 2,390 TN structural backfill, placement of 1,356 TN aggregate base, 373 TN AC paving, 1,080 LF AC dike, signage and striping.	Bowman & Williams, Civil Engineer (831) 426-3560	4,758,963	5/1/2008	5/31/2011
202547	CA Department of Transportation Office Engineer, MS 43 1727 30th Street Sacramento, CA 95816	Hwy 101 Left Turn @Hartnell Rd Contract #: 05-0E4704 / SARRA-Q101(151)E Salinas, CA Installation of left turn channelization lane, including: 100,015 SF asphalt grinding; 6,077 SY cold planing; 16,498 CY roadway excavation; 6,988 LF of 18", 24" & 30" storm drainage system; 6 ea concrete catch basins; 11,684 TN aggregate base; 23,308 HMA AC; QC/QA; signage and striping.	Tyler Lavering (831) 375-1621 tyler.lavering@dot.ca.gov	4,285,000	8/10/2009	4/11/2011
202579	County of Santa Cruz 701 Ocean Street, Room 410 Santa Cruz, CA 95060	SCR 2010 Cape Seal & Overlay Contract #: ESPL-5936(081) / CW93625 Santa Cruz County, CA County-wide roadway rehabilitation, including: 4,000 cy roadway excavation; 396,659 SF pavement grinding; 41,125 SY engineered pavement mat; 6,747 TN Class 2 aggregate base; 24,128 TN Type A asphalt concrete; 115,188 SY scrub seal & 115,188 SY Type II slurry seal; 376 TN shoulder backing; utility adjustment; and pavement striping.	Russel Albrecht (831) 454-2160 (831) 454-2385 (F)	3,427,190	8/3/2010	4/29/2011
205548	Sacramento Water Treatment Agency 827 7th Street Sacramento CA 95814	Vineyard Water Treatment Plant Contract #: 3926 Sacramento, CA Structural excavation, earthwork, site grading, subgrade, agg base, concrete curbs / curb & gutter, AC paving, AC coloring & stamping, striping	Chris Rutherford (916) 789-0944 (916) 789-0959 (F)	8,817,000	4/21/2008	12/31/2011
205583	CA Department of Transportation 11323 Sanders Drive Rancho Cordova, CA 95742	Highway 50 Bonded Wearing Project Contract #: 03-3M5504 Siskiyou County, CA This project consisted of milling and repaving digout areas, a Bonded Wearing Course overlay over the entire project, Metal Beam Guardrail, and striping.	Brandon Miller (530) 919-7946 brandon_miller@dot.ca.gov	3,334,000	7/1/2010	10/28/2011
205592	USDA Forest Service Rogue River-Siskiyou National Forest 3040 Biddle Road Medford, OR 97504	Blue Ledge Mine Removal Action Contract #: None Rogue River-Siskiyou Natural Forest Excavation and embankment work at an inactive underground copper mine on the Rouge River. Project included rip rap and hazardous waste.	Peter A. Jones, Reg. 6 Coord. (541) 951-1429 645 Washington St. Ashland, OR 97520	8,051,000	6/28/2010	10/28/2011
205598	Sacramento Municipal Utility Dist PO Box 15830 Sacramento, CA 95852	Machida Import Grading Project Contract #: None Sacramento, CA This project consisted of milling and repaving digout areas, a Bonded Wearing Course overlay over the entire project, Metal Beam Guardrail, and striping.	Glen Shuder (916) 732-5565 (916) 732-6049 (F) Gshuder@smud.org	5,408,510	11/1/2010	11/4/2011
205608	Central Valley Gas Storage LLC, NICOR PO Box 632 Aurora, IL 60568	Central Valley Gas Paving Contract #: A5MR-9-K001 / 1471 Sacramento, CA This project consisted of stripping 22,500 CY of existing topsoil, 62,700 CY of existing soil to a depth of 3 FT, supplying, placing, compacting and finishing 95,000 tons of imported engineered fill, construction of buffer fence berms and placing 4500 tons of class 2 aggregate base.	Chris Lamar (630) 353-4041 (630) 353-7777 (F)	3,832,644	4/5/2011	12/13/2011
207118	City of Santa Paula PO Box 569 Santa Paula, CA 93060	Santa Paula Branch Bike Trail Project#502; Contract#11-10064 Santa Paula, CA Construction of new bike trail for 2 miles between Peck Road and 12th Street. Work includes AC bike path, utilities and appurtenances.	Brian Yanez, Dir. Of Public Works (805) 933-4212 (805) 525-6278 PW@ci.santa-paula.ca.us	3,805,147	3/7/2011	12/1/2011
207122	Santa Maria Public Airport District 3217 Terminal Drive Santa Maria, CA 93455	SM Airport Runway 12 & Taxiway Contract#: AIPs 3-06-0237-30;3-06-0237-31 Santa Maria Airport Extension of Runway 12 and Taxiway A. Work included earthwork, grading, hydroseeding and P-209 base, sub base. Demolition of existing AC and PCC pavements. Construction of new and modified drainage facilities. Modification of existing utilities. Service road marking and striping. Taxiway Pavement and marking. Joint and crack sealing of existing Runway 12-30.	John Smith (805) 466-5660 john@lartaglia-engineering.com	3,564,503	10/18/2010	10/30/2011

GRANITE CONSTRUCTION COMPANY
2011 Complete Jobs Greater than \$3 Million

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Contract Start Date	Actual Completion Date
207133	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	HWY 101 Gaviota Overlay Project Contract#: 05-0T6104 Gaviota, CA Grind and Overlay 6 miles of Highway 101 from 0.9 miles south of Gaviota Tunnel to 0.1 mile north of Old Coast Highway . Grind 306,000 SY, repave with AC 21,100 TN. Performed roadway restriping and installed new rumble strip.	David Beard, P.E. (805) 549-3318 david.beard@dot.ca.gov	4,420,454	7/5/2011	9/7/2011
207791	CA Department of Transportation Office Engineer, MS 43 1727 30th Street Sacramento, CA 95816	HWY 101 & 41 Interchange Contract#: 05-402804 Atascadero, CA Replace two existing Highway 101 two lane steel girder bridges with one eight lane box girder bridge. Surcharge existing and new embankments prior to abutment construction. Construct new on ramp and reconstruct three other on/off ramps. Drainage improvements consist of 18", 24" & 36" RCP, 12" & 18" CSP, drainage inlets and headwalls. 20,000 tons of AC paving.	Rick Silva - RE (805) 226-8279 rick_silva@dot.ca.gov	16,708,517	10/15/2007	2/8/2011
208057	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	HWY 99 Rio Bonito Contract#: 03-366904 Sacramento County, CA Roadway widening and overlay project on highway 99 near Biggs. Work consists of grading, paving, drainage, electrical, excavation, aggregate base, dense grade AC, open grade AC and striping.	Al Coburn (530) 534-9046 (530) 534-7197 (F) al_coburn@dot.ca.gov	7,954,898	8/3/2009	11/30/2011
208064	City of Chico 411 Main Street Chico, CA 95928	Route 99 / Skyway Interchange Contract#: MAJGC/16036-300-4150 Chico, CA Earthwork, grading, aggregate base, paving (type A & type O), concrete curb, gutter & sidewalk, underground drainage utilities, retaining walls, concrete demo, k-rail, signal & lighting installation, sign structures, concrete barrier, MBGR, slurry seal, striping, landscaping, hydroseeding.	Bob Greenlaw, Sr. Civil Engineer (530) 879-6930 (530) 895-4899 (F)	6,289,671	4/15/2010	10/27/2011
211705	City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534	Street Resurfacing Phase 2 Contract #: 09-014 Lancaster, CA Repair and resurface 52 miles of City streets with new asphalt pavement. Streets resurfaced include 40th Street West, Avenue K, and 60th Street West. Work included recycled asphalt, aggregate base, AC paving, minor concrete.	Jon Cantrell (661) 945-6862 jcantrell@cityoflanasterca.org	4,330,681	10/1/2009	1/31/2011
211711	U S Army Corps of Engineers P.O. Box 326 Edwards, CA 93523	Edwards AFB IDIQ Contract#: W912PL-09-D-0032 *ISS 162131** Edwards, CA This contract is for miscellaneous maintenance on a military installation. Fourteen task orders were awarded. The scope for the existing road was to pulverize the existing AC, use the recycled AC for the base. The scope for the new road was to use recycled AC from a previously generated stockpile of AC Grindings/Millings. We ended up Cement Treating a section of roadway that was "pumping". We were able to change the scope around and stay within budget even though the original scope did not include Cement Treating. We also installed additional storm drain and striped all of the new AC.	Ken Crawford (661) 277-3509 kenneth.crawford@edwards.af.mil	7,931,552	7/27/2009	5/27/2011
211726	U S Army Corps of Engineers P.O. Box 326 Edwards, CA 93523	Edwards AFB IDIQ Contract #: W912PL-09-D-0032 Edwards, CA This contract is for miscellaneous maintenance on a military installation. Reconstructing a parking lot with over 900 parking stalls at Loma Linda VA Hospital, Granite was allowed to close only small portions of the parking lot at a time and normally worked Friday through Monday to minimize the impacts to the VA customers. This took a great deal of coordination with the VA Hospitals Public Affairs person, the VA Hospital police and the Corps of Engineers. Every Wednesday we would meet and decide on the best way to facilitate the work. This took substantial traffic control means and methods as we not only dealt with the traveling public through our work but an enormous amount pedestrian traffic as well.	Ken Crawford USAF (661) 277-3509 kenneth.crawford@edwards.af.mil Matt McKenna (661) 277-7581 Matthew.G.McKenna@usace.army.mil	5,232,130	8/14/2010	12/1/2011
211730	CA Department of Transportation 464 West Fourth Street, Suite 354 San Bernadino, CA 92401	SR58 Kramer Junction Widening Project Contract #: 08-0E8504 San Bernadino County, CA Road widening and realigning a 13 mile segment of SR-58 near the Kramer Junction intersection with US 395. This section of highway increased from 2 lanes of highway to 4. Work involved coordination with railroads, at grade signalization and HMA overlay.	Taghreed Al-Khateeb, RE (951) 232-7792 (760) 843-5843 (F) taghreed_al-khateeb@dot.ca.gov	11,466,163	4/18/2011	8/19/2011

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Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Contract Start Date	Actual Completion Date
2122028	County of Kern 2700 M Street Suite 400 Bakersfield, CA 93301	7th Standard Road Phase 2 Contract #: 10011 Kern County, CA Construction a seperation grade (overpass) on Seventh Standard Road at the BNSF Railroad crossing between Santa Fe Way and Coffee Road. Road widening, construction of new box girder bridge over 3 canals.	John Palmer (661) 862-8890 Bakersfield, CA 93301 roads@co.kern.ca.us	12,263,806	3/15/2010	9/27/2011
2122052	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway 203 Mammoth Lake Overlay Contract #: 09-346904 / ACSTP-P203(010)E Mammoth Lakes, CA Project consisted of pavement grinding.11' (334,000 SY) of existing AC. Placement .11' (25,300 TN) of HMA Type A with Warm Mix asphalt overlay.	Joe Blommer, RE (760) 648-7906 Fax# not available joe_blommer@dot.ca.gov	3,652,879	7/25/2011	10/22/2011
2122069	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway 395 & Obsidian Dome Road Project Contract #: 09-343404 Lee Vining, CA Project consisted of preforming Cold In-Place Recycling (.34' x 122,000 SY) of RHMA roadway on HWY 395 near Lee Vining, CA from SR 158 North to Obsidian Dome Road. The CIR was then overlaid .25' with HMA (26,900 TN) along with 9,950 LF of Type E Dike.	Joe Blommer, RE (760) 648-7906 Fax# not available joe_blommer@dot.ca.gov	3,449,088	6/6/2011	8/26/2011
2122072	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway 43 Shafter Overlay Project Contract #: 06-460004 Kern County, CA Construction on State Highway 43 in Wasco and Shafter from .3 mile north of Los Angeles Street to Route 46. Work involved placemnt of HMA (Type G) on existing surface, traffic controls system, electrical and signalization, striping and lighting.	Haidar Haddadin, RE (559) 243-3599 (559) 243-3881 (F) haidar_haddadin@dot.ca.gov	5,808,054	4/11/2011	7/22/2011
2122091	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway 65 HMA Overlay Contract #: 06-0E0604 Kern County, CA Removal and replacement of HMA in Kern County near Bakersfield from Route 65/99 grade seperation to .1 mile north of 7th Standard Road.	Blas Martinez , RE 559-917-2597 Fax# not available blas_martinez@dot.ca.gov	5,316,947	9/1/2011	12/27/2011
214619	US Department of Transportation 12300 W. Dakota Avenue, Suite 360 Lakewood, CO 80228	Wawona Road Reconstruction Contract #: DTFH68-10-C-00013 Yosemite National Park, Madera County, CA Road Reconstruction - Includes the pulverization and overlay of 24.4 miles of road in Yosemite National Park. Project included constructing concrete curb and sidewalk, constructing concrete bus pads, removing asphalt concrete roadway surfacing by pulverization, preparing sub-grade materials for new pavement structural sections, placing and compacting aggregate base material, placing hot mix asphalt overlays, adjusting utility facilities, installing signs, applying painted traffic stripes and pavement markings.	Brent Nagen (720) 963-3424 Fax# not available brent.nagen@dot.gov	18,629,188	5/3/2010	5/23/2011
214625	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway 41 Ramp Metering Project Contract #: 06-0E9704 Fresno, CA On Ramp Widening and signalization at 4 Locations along Hwy 41 in Fresno. Approximately 2800 LF of Type 1 Retaining Wall on 2 locations. All 4 freeway on-ramps were reconstructed, signalized, new fiber optic and electrical backbone installation along with concrete and metal barrier rails. Project also included minor drainage improvements.	Mark Mejoni (559) 243-3543 (559) 243-2345 (F)	4,026,000	6/7/2010	9/30/2011
214638	County of Fresno 2220 Tulare St. Sixth Floor Fresno, CA 93721	Fresno County Overlay Contract #: 10-28-C Fresno, CA Grind conforms at eight locations and full depth grinding of .15' at four locations. Place a .15' or .20' asphalt overlay on the twelve different locations amounting to approximately sixty thousand tons. Apply painted striping, thermo marking, reflective pavement markers, and new loop detectors.	Elna Ogden (559) 905-8449 Fax# not available eogden@co.fresno.ca.us	5,207,000	6/20/2011	8/1/2011
214639	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway Improvements on Routes 33,45, and 198 Contract #: 06-0M5004 Coalinga, CA Removing asphalt concrete roadway surfacing by cold planning, performing full-depth hot mix asphalt base repairs of various depths, crack sealing, replacing traffic signal detector loops, placing hot mix asphalt and rubberized hot mix asphalt overlays, adjusting utility facilities, applying thermoplastic traffic stripes and pavement markings and placing reflective pavement markers.	Oscar Sherrill 559-355-7868 (O) 559-243-3595 (F)	3,111,000	8/5/2011	11/18/2011

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2161125	NV Department of Transportation 310 Galletti Way Sparks, NV 89431	US 395 Golden Valley Contract #: 3358 Golden Valley, NV County of Washoe, RT section US 395-2 Milepost US 395 WA-31.70 to 38.37 for constructing a portion of a highway on US 395 from the beginning of asphalt at the Golden Valley Interchange to 0.43 miles south of the Cold Springs interchange from station "O" 79+34.91 P.O.C. "C1m" 24=18,564 P.O.T. A distance approximately 6.52 miles. 332,060 SQ YD of Coldmilling, 4,212 LF removal of shoulder dike, 2,360 LF Drainage Excavation, 37,560 CU YD Borrow Embankment, Re-Shape Roadway Ditches, 32 acres of hydro seeding on a Divided/Multi lane with little to no delays to the traveling public.	Shane Cocking R.E. P.E. scocking@dot.state.nv.us 775-691-9429 775-687-3000 (Fax)	8,359,796	9/2/2008	3/1/2011
2161193	NV Department of Transportation 310 Galletti Way Sparks, NV 89431	I-80 Painted Rock Contract #: 3419 NV Interstate 80 between Wadsworth and Patrick, Route 080-1, Mileposts WA-26.75 to 41.49 for constructing a portion of a highway on I-80 from 0.92 miles west of the McCarran Scenic Overlook to 1.41 miles east of the Painted Rock Interchange described as station "LE" 500+00.00 P.O.T. to station "XE" 602+13.16 P.O.C. a distance approximately 14.74 miles. 704,380 SQ FT of cold milling, 28,556 LF of shoulder dike, 79,050 tons of Type 2 asphalt paving, 26,970 tons of plantmix open grade surfacing, 2,150 Rigid Guide Posts, 3,458 LF of guardrail, 32 miles of epoxy pavement striping.	None	11,195,959	7/20/2010	12/29/2011
2161198	Reno-Tahoe Airport Authority P.O. Box 12490 Reno, NV 89510	Stead Airport RSA Improvement Project Contract #: S08008 Stead Airport - Reno, NV Mass earthwork, grading, drainage, rock slope protection. 120,000 cy of mass grading and 34,000 TNS rock slope protection .	Tony Curatolo 775-328-6461 tcuratolo@renoairport.com 775-328-6000 (Fax)	3,302,828	9/20/2010	5/5/2011
2161199	Regional Transportation Commission 1105 Terminal Way Reno, NV 89502	Veterans Parkway Contract #: WA-2010-10 Reno, NV Veterans Parkway Extension to Gieger Grade Roundabout. Remove 85,400 SQ FT of sod, remove guardrail and storm drain pipe, Pulverize 101,050 Sq Ft of roadway, 159,000 Sq Ft of Base material, box culverts, manholes, storm drains, barrier rail, 7,000 tons of type 2 asphalt, curb, gutter and and concrete/landscape a new traffic roundabout	Blaine Petersen, PM 775-335-1860 (Fax) 775 348 0171 bpetersen@rtcwashoe.com	3,814,446	9/20/2010	6/1/2011
2161206	City of Reno P.O. Box 1900 Reno, NV 89505	2011 Montello Carville Contract #: 1417 Reno, NV Montello Ave and Carville Ave - Underground, residential roadway rehab on city streets located in Washoe County, Nevada, flatwork and curb and gutter. 19,446 tons type 2 plantmix, 888 tons of type 3 plantmix, adjust and lower utilities, 19,600 SQ YD of coldmilling, 422,910 SQ FT of roadway pulverizing, 536,229 SQ FT of Concrete treated base material. All residential work - with very little delay to residents.	Carrie Kosky - P.E. 775-334-4636 775-334-3100 (Fax) no email	7,533,933	3/1/2011	11/9/2011
217533	Gila River Indian Community 525 West Gu u Ki, P O Box 97 Sacaton, AZ 85247	Pima-Maricopa Irrigation Project Contract #: C3337 Coolidge, AZ Work performed on 1 Bridge, 11 Structures. Additional work includes Structure earthwork and grading, riprap and channel lining, 30,000 CY borrow, check structure concrete 3,279 CY, check structure riprap 8,738 CY, bridge lining concrete 1,034 CY riprap at bridge 1,240 CY.	Gonzolo Romero (602) 763-9394 (520) 562-6795 (F) GMRomero@gilariver.com	20,231,800	9/19/2007	1/30/2011
217578	Gila River Indian Community 525 West Gu u Ki Sacaton, Arizona 85247	Reaches ST-1C&ST-ID Phase III Contract#: Reach BW-IA Pima, AZ This is a new concrete lined canal 4.87 miles in length starting approximately 1000' SE of Desert View Rd and SR-87. This portion of the project nearly parallels highway 87 for the majority of it reach and ends approximately 12,010 feet NE of Statonic Road. Reach ST-ID This is a partially built canal 3.61 miles in length. This portion of work begins where ST-1C ends and continues along the existing alignment to the Memorial turnout which is the turnout for the existing PMP pipeline that delivers water to the western portion of the community. This project consisted of 8.5 miles of concrete canal along with 33 structures, 16 stilling wells, 2,095' of 10'x10' box culvert siphons, over 2000' of pipe ranging from 24"-60" used for irrigation turnouts, and 2 roadway realignments.	Gonzolo Romero (602) 763-9394 (520) 562-6795 (F) GMRomero@gilariver.com	22,550,000	10/27/2009	4/21/2011

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217595	AZ Department of Transportation 1651 W Jackson St. Room 121F Phoenix, AZ 85007	I-10 Houghton to Mountain View Contract #: ARRA-010-E(205)A Tucson, AZ I-10 MP 276 to 281.3, Mill 3.5" AC and pave 3" -3/4" EP AC and .5" AR-ACFC on inside travel lanes, Mill 5" AC and pave 4.5" -3/4" EP and .5" AR-ACFC on outside travel lanes, Mill and pave 2" -3/4" EP on outside shoulder, Mill and pave 3" -3/4" EP on inside shoulders, mill and repave Colossal Cave Road T.I. and Ramps, install ground-in rumble strip, reconstruct GET Pads, install pavement markings, and install traffic loops.	James Gomes, P.E. (520) 603-9826 (520) 628-5603 (F) jgomes@azdot.gov	3,828,000	6/23/2010	3/30/2011
217597	Bureau of Indian Affairs P.O. Box 1060 Gallup, NM 87305	NM Rehab and Reconstruct Proj Contract #: RA000910187 Pinedale, Pueblo Pintado, Newcomb, Farmington, Crownpoint, NM This Best Value procured project consisted of constructing 61.79 miles of roadway in six different locations. The approximate length of each of the location in miles was 17, 12.5, 12.3, 11.5, 7 and 0.31. The primary scope for two locations was a complete roadway pulverization and reconstruct utilizing pulverized asphalt as base for new hot asphalt paving. The other four project locations consisted of 28 reconstruct areas totaling 84,112 SY (utilizing the same method as above). Additionally, seven miles of hot-in-place recycle was performed, over two miles of guard rail was installed, three bridges were repaired, and over 35 miles of rubberized chip seal was applied	Lynelle Benalie (505) 863-8404 (505) 863-8382 (F)	33,594,000	8/16/2010	9/16/2011
217600	AZ Department of Transportation 1739 W Jackson St Suite A Phoenix, AZ 85007	Santan Frwy 202 - Design Build Project Contract #: 044 H745701C Chandler, AZ The Santan Freeway (SR202L) HOV Lanes Design-Build project included the design and construction of new HOV lanes within the median of the SR202L through Chandler, Arizona. The PGJV construction and design team successfully provided ADOT with rapid implementation of the design and construction documents while maintaining cost, quality and safety. Our Team integrated design solutions and construction techniques that addressed the principal challenge to maintain traffic. PGJV phased the design and construction to maximize access for freeway and local commuters, respect the adjacent businesses, surrounding communities, and the many project stakeholder interests. With construction complete, nearly 25 lane-miles of new HOV access have improved traffic flow, reduced freeway congestion, encouraged carpooling, and enhanced the ever-expanding regional transportation network in the Phoenix Metro area. In addition to the ground-level work, a new 5-span AASHTO girder bridge and 2-span post-tensioned box girder bridge were designed and constructed to provide a fly-over connection between the I-10 and SR202L HOV lanes. A 17-span AASHTO girder bridge was also designed and constructed to provide a fly-over connection between the SR101L and SR202L HOV lanes. Additional tasks included the widening of the Price Road service interchange bridge that is embedded within the SR101L/SR202L TI, numerous retaining walls with heights exceeding 45-feet, on-site drainage improvements, upgraded freeway signing, pavement marking and lighting, concrete median barriers, landscaping modifications and restorations, a new utility crossing, and comprehensive design surveys.	James Windsor (602) 768-4546 (480) 649-3463 (F) jwindsor@azdot.gov	84,688,000	8/18/2010	10/9/2011
217603	Bureau of Indian Affairs-Western Region Division of Transportation 2600 North Central Avenue Phoenix, AZ 85004	2011 Road/Bridge Repair Contract #: RA001110198 Arizona and California This project was spread across Arizona and two locations in California. The Arizona locations were Tucson, Whiteriver, Tuba City, Yuma, Payson, San Carlos, Gila Bend, Sells, and Hopi. The two California locations were Lake Havasu and Winter Heaven. The main purpose of this project was to restore and repair bridges and roads to provide access for the local native communities. The work consisted of chip seal, crack seal, replace striping, install new signs, patch potholes, repair/replace guardrail, repair structural steel bridges, clean ditches and culverts. The project placed 1,531,370 SY of Rubberized chip seal, 1,132,357 LF of crack seal, 43 bridge repairs, 2,060,520 LF of thermo and epoxy striping.	Santiago Almaraz, Contract Specialist (602) 379-3796 (602) 379-6763 (F) santiago.almaraz@bia.gov	12,357,000	3/21/2011	9/21/2011

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217606	U.S. Air Force 3180 Craycroft Road Davis Monthan AFB, AZ 85707	Airforce Repair-Resurface Runway Project Contract #: FA4877-10-C-C007 Tucson, AZ Major items of work were as follows: +68,038 SY AC, 41,610 SY 2" AC Milling, 2,838 CY PCCP removal, 41,996 TN ¾ EP Asphalt Paving, and 3,016 CY PCCP Paving The greatest challenge this project faced was the schedule. The Air Force base was able to close their sole runway for 30 days while it was being re-surfaced. Scheduling the work based on a 5-40 work week gave Granite very little room for error. This was amplified by the \$70,000 / day liquidated damages Granite would incur if they did not finish on time. Therefore it was decided that working 7 days / week allowed for some float if it was in fact needed.	James Johnsen (520) 228-5138 Fax # Not Available James.johnsen@dm.af.mil	4,504,000	12/13/2010	4/22/2011
217607	Bureau of Indian Affairs P.O. Box 1060 Gallup, NM 87305	Dine College RD and Park Paving Project Contract #: CMN00100012 Tsaile, AZ The BIA Diné College Project was a roadway, drainage, and infrastructure improvement project. The project was contracted with the Bureau of Indian Affairs; the Navajo Nation's Diné College was the end user. The project included the following major items of work: Removal of flatwork, 40,000 SY pulverizing of existing asphalt, removal of existing light pole foundations, 56,988 CY of cut to fill, 75,955 SY of Subgrade (balance / finish), 45,720 TN of ABC import / place & compact / finish, 120 TN of MC-70 Prime Coat, 18,000 TN asphaltic concrete paving, 1,500 LF of Storm Drain Installation, 203 LF trench drain installation, 9,291 LF Concrete Curb Construction, 16,850 SF of Sidewalk Construction, 6 cattle guard installations	Lynelle Benallie (505)863-8404 (505) 863-8382 (F) Gallup, New Mexico 87301	6,820,360	11/15/2010	10/27/2011
217608	AZ Department of Transportation 1651 W Jackson St. Room 121F Phoenix, AZ 85007	I-10 Kino to Valencia Pavement Repair Project Contract #: ARRA-010-E(206)A Tucson, AZ Kind of work- PCCP Slab repairs, mill and fill on ramps and streets with no lifts to asphalt from mile post 262 to 267 on interstate 10. 416 EP mix and 414 ARACFC mix was used on the job.	James Gomes, P.E. (520) 603-9826 (520) 628-5603 (F) Jgomes@azdot.gov	5,942,000	1/18/2011	11/20/2011
217611	US Army Corp of Engineers 819 Taylor St. RM 2A19 Fort Worth, TX 761020300	Nogales Fence Replacement Contract #: W912BV-07-D-2024-DY01 Nogales, AZ Project consisted of removing and replacing approximately 6 miles of landing mat style fence with bollard panels. Work was performed in the middle of Nogales, AZ (urban setting). 14 new concrete low water crossings were also constructed to mitigate erosion issues. Included were 54 drainage gates, 9 mangates for border monuments and 1 double swing gate for UPRR's border crossing.	Shari Brandt (520) 584-1673 (520) 584-1690 (F) shari.j.brandt@usace.army.mil	11,335,000	3/15/2011	8/8/2011
217613	Tucson Airport Authority 7005 South Plumber Avenue Tucson, AZ 85757	Reconstruction of Runway Project Contract #: 10108949 Tucson, AZ Reconstruct asphalt (P-401) 7000' x 150' Runway including 25' AC shoulders (local mix), 25' AC Erosion Control (local mix), runway lighting improvements, runway signage improvements, infield grading, infield drainage improvements, multiple asphalt (P-401) taxiway reconstructs, pavement grooving, and airfield pavement markings. Runway / taxiway reconstruction consisted of 3" mill & fill. Shoulder and erosion control reconstruction consisted of 2"-3" AC removal to subgrade, recompaction, grading, and paving.	Micheal Johnson (520) 573-4856 (520) 573-8006 (F)	8,606,944	9/1/2011	12/7/2011
217615	Arizona Department of Transportation 1651 W Jackson St. Room 121F Phoenix, AZ 85007	Nogales Primary Connection SR189 Contract #: STP-189-A(202)A Nogales, AZ Located in Santa Cruz County on state route 189 beginning at milepost 0.73 and extending northerly to milepost 3.70. The work consisted of milling asphaltic concrete and replacement with asphaltic concrete (3/4" Mix) (End Product), reconstructing guardrail, constructing sidewalk ramps and sidewalk, repairing bridge, placing pavement marking.	Jeremy Moore RE (520) 209-4521 (520) 628-5603 (F) JMoore3@azdot.gov	3,181,181	7/21/2011	12/15/2011
219478	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	RTE 92/880 interchange Contract#: 04-016014 Hayward, CA Existing interchange reconstruction including 9 bridges, widenings, numerous retaining /sound walls, MSE walls, all related earthwork, underground, Type A AC (~80,000 ton) and OGAC (~10,000 ton). FCI is our joint venture partner and is the lead. The project is heavily phased to include ~18 Stage/Phase to occur within the 813 working days (A+B bid with TRO line item).	Ray Balallo 650-280-4546 PH 510-670-4912 FAX raymundo_balallo@dot.ca.gov	72,889,200	10/8/2007	11/14/2011

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219493	Peninsula Corridor Joint Powers Board 1250 San Carlos Ave San Carlos, CA 94070-1306	Caltrain Signal Optimization Contract #: 08-PCJPB-C-035 Santa Clara & San Mateo County, CA installation of new intermediate signals, retirement of existing intermediate signals, conversion of spring switch to power switch, signal pre-test and cutover, crossing signal upgrade/modifications, calibration and testing, RF DAX'ing at associated crossings and signal locations and tilt down tower installations	Hubert Chan, Caltrain Engineer 650-508-7786 PH chanh@samtrans.com	6,677,000	06/01/09	1/31/2011
219523	City of Fremont P.O. Box 5006 Fremont, CA 94537	Fremont 2011 Asphalt Overlay Contract #: 8234-L(PWC) Fremont, CA Constructing concrete curb ramps, constructing concrete curb, gutter, and sidewalk, constructing concrete bus pads, removing asphalt concrete roadway surfacing by excavating and cold planing, preparing sub-grade materials for new pavement structural sections, placing and compacting aggregate base material, performing full-depth hot mix asphalt base repairs of various depths, crack sealing, placing of hot mix asphalt leveling course, replacing traffic signal detector loops and related facilities, placing hot mix asphalt and rubberized hot mix asphalt overlays, adjusting utility facilities, installing signs, applying thermoplastic traffic stripes and pavement markings and placing reflective pavement markers.	Craig Johnson (510) 494-4702 Fax# not available cjohnson@fremont.gov	3,144,000	6/1/2011	10/30/2011
226436	City of Oceanside 300 North Coast Highway Oceanside, CA 92054	Annual Overlay 2010-11 Contract #: 902754200212 Oceanside, CA Repair and asphalt overlay of arterial streets. Drain modification, curb and gutter removal and replacement, AC trench patching (3500 SF) and striping (18000 LF). Grind roadways (92,000 SY) and replace with rubberized AC.	Ron Perdue 760-435-5119 760-435-6119 (F)	4,445,590	4/18/2011	11/16/2011
232607	Tooele County 47 South Main Tooele, UT 84074	Wendover Taxiway Contract #: AIP 3-49-0046-21/22 Wendover, NV Construct new airport taxiway. 7,600 FT parallel taxiway, 68000 cubic yards unclassified excavation, 52000 tons various aggregate base courses, 36000 tons asphalt concrete, new taxiway edge lights, pavement markings, new storm drain culverts/boxes	James Peterson (435)-665-2308	5,937,114	9/27/2010	7/22/2011
232610	UT Department of Transportation 4501 S 2700 W Salt Lake City, UT 84114	Bridge Deck Repair Region 2 Contract #: F-R299(112) Salt Lake County, UT 19 Bridge Deck repairs including pothole patching, bridge joint removal/replacement, parapet sealing, asphalt removal on approach slabs, waterproof membrane and asphalt overlay. We also had a change order to remove and replace 32 pins on one flyover bridge.	John Montoya (801)910-2570 (801) 975-4841 (F) johnmontoya@utah.gov	3,636,584	3/1/2011	9/6/2011
241152	AK Department of Transportation PO Box 196900 Anchorage, AK 99519	Glenn Hwy: Airport Heights to Hilland Resurfacing Contract #: ARA-0A1-6(40)/51945 Anchorage, AK Planning and resurfacing driving lanes, ramps and bridges approximately 10 miles, 507,000 SY of milling, 11,450 tons of Type IIIA paving on ramps and overpasses and 45,925 tons of Type IVR rubberized mainline paving, replace guardrail, improve curb ramps, pavement markings.	Steve Ryan (907) 269-0400 / 269-0668 (907) 269-0473 (F) steve.ryan@alaska.gov	10,666,707	5/3/2010	6/29/2011
241153	AK Department of Transportation PO Box 196900 Anchorage, AK 99519	AMATS: Old Glenn Hwy S Birchwood Loop to Peter Creek Contract #: ARA-0558(7)/50946 Anchorage, AK Rehabilitate and repave highway, widen roadway to include shoulders, improving sight distances - EX 152,200 CY, Borrow 310,000 TN, CABC 20,000 TN, ATB 12,000 TN, and HMA 9,500 TN, install gabion retaining walls 2,800 CY, drainage improvements, replace bridge and tributary culverts, install guardrail - 9,000 LF, bus stop waiting areas, pathway - 2,600 TN	Tom Dougherty (907) 269-0450 (907) 243-5092 (F) tom.dougherty@alaska.gov	13,837,101	4/19/2010	9/1/2011
241165	AK Department of Transportation PO Box 196900 Anchorage, AK 99519	Glenn Highway MP 109 to 118 Resurfacing Contract #: IM-0A1-5(27) / 52095 Glenn Highway MP 109-118, AK Level pavement with imported rock, reclaim existing material in place with foamed asphalt, overlay with 2" HMA, rebuild damaged dikes, replace stream culvert, MMA striping, upgrade signing and guardrail end treatments.	Tom Dougherty (907) 269-0450 (907) 243-5092 (F) tom.dougherty@alaska.gov	9,329,299	4/1/2011	12/22/2011
241166	AK Department of Transportation PO Box 196900 Anchorage, AK 99519	Seward Highway MP 115-124 Resurfacing Contract #: IM-0A3-1(45) / 52491 Anchorage, AK Approximately 8.5 miles of resurfacing - overlay two lane portion, planing and resurface four lane portion of highway, plane and resurface all ramps and mainline bridges, replace waterproofing membrane on one interchange, guardrail replacement, replace all signs and pavement markings	Tom Dougherty (907) 269-0450 (907) 243-5092 (F) tom.dougherty@alaska.gov	7,908,449	3/16/2011	9/11/2011

GRANITE CONSTRUCTION COMPANY
2011 Complete Jobs Greater than \$3 Million

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Contract Start Date	Actual Completion Date
242111	AK Department of Transportation - Northern 2301 Peger Road Fairbanks, AK 99709-5399	Tok Cutoff Gakona River Bridge Contract#: IM-OA1-3(14)61713 Fairbanks, AK Temporary bridge, remove existing bridge, build 3 span bulb T girder bridge in existing alignment, construct approx 1000' approaches on each side	Maureen Carey (907) 451-5405 (907) 451-5487 (F) mauren.carey@alaska.gov	7,760,230	7/1/2009	8/26/2011

GRANITE CONSTRUCTION COMPANY
2012 Completed Jobs Greater than \$3 Million

Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Final Contract Amount	Original Estimated Completion Date	Actual Completion Date
241150	AK Department of Transportation - 2301 Peger Road Fairbanks, AK 99709-5399	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622 Dalton Highway MP 260-321, AK Replace seven undersized and failing culverts with 4.1 miles of grade change and roadway reconstruction, 854,860 tons of borrow, 121' Bulb Tee Bridge	Frank Ganley (907) 451-5466 (907) 451-5487 (F) frank.ganley@alaska.gov	18,834,875	10/31/2011	7/31/2012
375608	AK Department of Transportation-Centra PO BOX 196900 ANCHORAGE, AK 99519-6900	Parks Highway Mp 52 To 57 Contract #: IM-OA4-1(28)/53469 Parks Highway 52-57 Resurfacing, includes digouts and upgrade drainage striping, signage, detectible warning tiles added to the existing separated path to meet ADA guidelines.	Jonathan Tague (907)376-9001 (907) 376-9098 (F) (907) 360-9264 (C) jonathan.tague@alaska.gov	6,673,048	8/31/2012	10/7/2012
376281	Conocophillips Alaska, Inc. P.O. Box 2200 Bartlesville, Ok 74005-2200	Kuparuk Landing Area Phase 4 Paving Contract #: 107236.0-SA-AKR Kuparuk, Ak Runway Paving 46,000 T, Grading 180,000 SY, Lighting 249 Cans, Concrete Backfill 420 CY, Grooving 114,000 SY, Striping	Ed Lightwood (907) 263-4606 (907) 440-6741 © edward.p.lightwood@contractor.conocophillips.com	13,608,791	9/1/2012	9/10/2012
381865	AK Department of Transportation-Centra Po Box 196900 Anchorage, Ak 99519-6900	Anc Taxiway E & Ron 2 Reconstruction Contract #: AIP 3-02-0016-156-2012/51149 Anchorage International Airport Reconstruct Taxiway and apron to ADG VI standards. Create a secondary storm drain network to segregate deicing fluid contaminated runoff from non-contaminated storm runoff in anticipation of required EPA treatment standards.	James Lombardo (907) 243-4169 (907) 243-5092 james.lombardo@alaska.gov	13,428,887	9/30/2012	10/31/2012
217584	US Army Corp of Engineers 819 Taylor St. RM 2A19 Fort Worth, TX 761020300	Various Streets in Sacramento County, CA Contract #: 275 GRA Douglas, Naco, Sonoita, Nogales, Lukeville, AZ This project is to repair breaches in the Tucson Sector. The total length of the project is over 262 miles located in Douglas, Naco, Sonoita, Nogales and Lukeville. It is an on call basis. Work is 7 days a week including Holidays. The contract has a 24hr response time from the time of notification (e-mail). The type of repairs are on Pedestrian Picket, mesh, landing mat and bollard fence, as well as Vehical Fence, Normandy, post and Rail, and post and Cable. Basically any and all that is found on the border	James A. Moye (602) 230-6872 (602) 640-5382 (F) james.a.moye@usace.army.mil	4,347,460	11/30/2010	1/31/2012
217617	US Army Corp of Engineers 819 Taylor St. RM 2A19 Fort Worth, TX 761020300	Douglas Fence Replacement Contract #: W912BV-07-D-2024-DY02 City of Douglas in Cochise County, AZ Remove and replace 6 miles of landing mat style fence with PV-1 style bollard panels 3 miles east and 3 miles west of the Douglas Port of Entry. Work performed in an urban setting. Scope also included 6,100 LF of concrete lined channel, 5 mangates for border monuments, 51 drainage gates and 2 concrete low water crossings.	Shari Brandt (520) 584-1673 (520) 584-1690 (F) shari.j.brandt@usace.army.mil	14,211,630	3/12/2012	3/12/2012
217620	Freeport McMoran Corporate 333 North Central Avenue Phoenix, Az 85004	Burro Alley/Basha Parking Lot Contract #: 3302110003-001-000 Greenlee County - Morenci Road reconstruct, retaining wall: • 26,000 man hours • 4,500 tons of asphalt • 12,000 SF of retaining walls • 15,000 SF of sidewalk • 8,500 CY of excavation • 10,000 tons of aggregate base • 4,500 LF of curb	Freeport McMoran Jim Plyler (928) 865-7606 (928) 865-4723	3,650,595	4/27/2012	7/31/2012
383649	US Army Corp Of Engineers Po Box 12539 Fort Huachuca, Az 85670-2539	Az Douglas Fence Repl Ph 3 Contract #: W912BV-07-D-2024 DY03 Intl Border East of Douglas Az Remove and replace 3.44 miles of a 18' tall pedestrian International Border Fence. The project included removal of existing landing mat fence and manufacture and installation of pedestrian fence with owner supplied 6x6 bollards. The specs had contractor supply cross members of the fence. The project included 42 drainage gates manufactured and installed. The project had 120 calendar days and was a lump sum job with the exception of 3 unit priced items for unexpected earthwork.	Mike Brown 520-538-0640 PO BOX 12539 Fort Huachuca, AZ 85670-2539	6,847,766	10/18/2012	11/15/2012
386847	AZ Department of Trans 1651 W. Jackson Street Room 121F Phoenix, Az 85007-3217	Adot I-10 Valencia To Rita Contract #: 010 PM 267 H805601C ADOT I-10 VALENCIA TO RITA Project is located in Pima County on Interstate 10. The project starts at mile post 267.51 and ends at mile post 272. Work consists of milling existing pavement, filling with asphalt concrete, placing ar-acfc and fog coat, crack sealing of pavement shoulders, replacing pavement markings, replacing/reconstructing guardrail and end treatments.	Mindy Teague 520-838-2985 mteague@azdot.gov	5,092,165	11/26/2012	11/29/2012

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241150	AK Department of Transportation - 2301 Peger Road	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622	Frank Ganley (907) 451-5466	18,834,875	10/31/2011	7/31/2012
202592	City of Morgan Hill 17575 Peak Avenue Morgan Hill, CA 95037	West Dunne Avenue Safety Improvements Contract #: None Morgan Hill, CA Road reconstruction & widening, including: 24,255 SF of concrete demo; 2,600 SF of pavement cold plane; 394,356 SF grading; 1,010 CY cut to fill; 4,115 tn Class 2 aggregate base; asphalt paving; 15,140 SF PCC sidewalks, driveways & ramps; 3,655 LF curb & gutter; 529 LF concrete V-ditch; wet & dry underground utilities; Cast in Place retaining wall; striping; signs and traffic loops.	Yat Chuen Cho (408) 778-6480 (408) 779-7236 (F) yat.cho@morganhill.ca.gov	5,597,519	4/1/2012	9/22/2012
203142	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	HWY 101 Replace Concrete Panel Contract #: 01-449404 Hwy 101 near Ukiah, Mendocino County, CA Remove & Replace PCC Pavement approximately 29,000 CY; Grind out to remove asphalt concrete shoulder, replace with asphalt concrete (Type A) approximately 6,300 TN; Profile grind for smoothness approximately 50 lane miles of concrete roadway; Final striping, markings, and dikes on 50 miles of concrete roadway; Remove and replace approximately 25 approach slabs	Imran Fazal, R.E. (707) 485-0876 (707) 485-8346 (F)	12,099,972	4/1/2011	3/1/2012
203159	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Hwy 29-175 RHMA Overlay Contract #: 01-3994U4 Lake and Mendocino Counties, CA Place rubberized asphalt concrete (Type G) on various state highways in Lake County, approximately 70,000 tons; Place asphalt Concrete (Type A) on various state highways in Lake and Mendocino Counties, approximately 40,000 tn; Perform asphalt concrete replacement approximately 200 locations in same areas; Final striping, markings, signs, and dikes on approximately 90 lane miles of roadway	Oungkar Narine, R.E. (707) 496-1086 (707) 279-2573 (F)	16,550,717	6/1/2012	7/31/2012
219507	City of Belmont One Twin Pines Lane Belmont, CA 94002	Ralston Avenue Bikeway Overcrossing Contract #: 433; ESPLEHP 5269 (004)&(016) Belmont, CA Ralston AVE WEST OG Hwy 101 at-grade pathway along the north side of Ralston Avenue, west of Highway 101, leading to an elevated ramp along the southbound Ralston Avenue off-ramp, and then to a cast-in-place, pre-stressed concrete box girder bridge crossing over Highway 101 east of Highway 101, the overcrossing transitions to an elevated ramp and then to a prefabricated steel truss bridge structure bikeway will be asphalt concrete (AC) and the ramp bikeway will be AC for a portion of its length and Portland cement concrete (PCC) for the remainder. Project including but not limited to, bridge and elevated ramp structures, retaining walls, sound walls, pathway, drainage, architectural features, landscaping and lighting.	Gilbert Yau (650) 595-7467 (650) 593-8394 (F) gyau@belmont.gov	5,999,593	10/31/2011	6/13/2012
205612	Recurrent Energy 17140 Bernardo Center Dr., Ste. 216 San Diego, CA 92128-2088	SMUD-Recurrent Solar- MH Contract #: 11059002,3,4 Elk Grove, CA Overall project was for the Engineering, Procurement & Construction of a 39.4 megawatt photovoltaic solar generating facility consisting of 3 individual sites. Granite's site preparation portion consisted of Double discing of site interiors, Earthwork / Grading, Construction Entrances with Tire Cleaning Systems, Minor demolition, Clearing, Lime treatment / subgrade for roads & substation pads, Place / compact / finish of AB for roads & storage areas, Crushed rock installation for Substation pads, Storm drain system installation (Piping, Flared end sections & Headwalls), Landscape irrigation piping installation, Asphalt concrete paving for access driveways	Kevin Kaanehe (916) 383-4825 (916) 383-6014 (F) kkaanehe@swinerton.com	3,225,102	11/30/2011	9/11/2012
205617	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	I-80 HWY Pavement Rehab and Overlay Contract #: 03-2F0304 Placer County near Rocklin, CA This Interstate 80 Pavement Rehabilitation & Overlay project consisted of AC surface replacement, pavement cold planing, crack treatment, rubberized HMA open grade overlay, fog seal, vegetation control (minor concrete), removal & installation of new HMA overside drains / HMA dike, shoulder backing, erosion control (compost blankets), MBGR removal / reconstruction, striping, and highway electrical	Sam Vandell, PE (916) 624-2852 Fax #: Not Available sam_vandell@dot.ca.gov	5,686,456	10/25/2012	12/3/2012
214635	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Phillip S. Raine Rest Area Reconstruction Contract #: 06-0A9704 Tipton, CA Reconstruction of Rest Area - Includes demolition of existing facilities and reconstruction of restrooms and vending areas, construction of new CHP office buildings, removal and replacement of existing concrete improvements, replacement of storm drainage and sewer systems, cold plane and HMA overlay of parking areas, paint striping and signing of parking areas.	Daniel Chapa (559) 906-8727 Fax #: Not Available daniel_chapa@dot.ca.gov	8,987,165	9/1/2012	10/12/2012

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241150	AK Department of Transportation - 2301 Peger Road	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622	Frank Ganley (907) 451-5466	18,834,875	10/31/2011	7/31/2012
214636	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Highway 41 Kettleman Rehabilitation Contract #: 06-415904 Kettleman City, CA Earthwork involving pulling down existing earthen slopes up to 23' tall to widen existing Highway 41 eight feet. Constructing concrete curb ramps, constructing concrete curb, gutter, and sidewalk through business district. Cold plane 9 miles of existing highway variable depths and then cold-in-place recycle the existing structural section of asphalt. Perform full-depth hot mix asphalt base repairs at one foot depth. Excavate new eight foot shoulders, compact subgrade, and install new base rock and compaction of base rock. Pave first lift of asphalt shoulders and then place asphalt leveling to prepare road and shoulders for final overlay. Place 35' of asphalt over the new 40' roadway to produce final roadway surface. Remove existing asphalt and base at Bernard and Highway 41 intersection and I-5 and Highway 41 off ramp and replace with concrete paving with a depth of 1.2'. Install new RCP and CSP drain systems with new drain inlets and rock slope protection. Install tapered inlets and flume down drains for new slope drain system. Adjusting utility facilities, installing signs, applying thermoplastic traffic stripes and pavement markings, place reflective pavement markers, and asphalt dike. Install new signals and lighting systems at Bernard intersection and install new permanent changeable message board.	Haidar Haddadin/Caltrans (559) 897-7233 (559) 897-2066 (F)	15,270,765	7/5/2012	7/5/2012
384033	Sacramento County County Administration Center 700 "H" Street, Suite 2450 Sacramento, CA 95814	Sacramento County AC Overlay PROP 1B Contract #: 4119 Various Street in Sacramento County, CA Project includes the furnishing of all labor, materials, and equipment for doing all the work associated with placing conventional asphalt concrete pavement overlay, placing paving fabric, repairing failed pavement (base repairs), grinding the pavement to accommodate the overlay (cold planning), adjusting the manholes to grade, installing sidewalk accessibility ramps, replacing signal detector loops, placing pavement striping, markings, and markers.	Ken Wick (916) 875-5336 Fax #: Not Available kwick@saccounty.net	4,281,331	11/16/2012	11/6/2012
383891	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Route 180 Kerman HMA & Overlay Contract #: 06-0M7204 Fresno, CA Overlay 28 miles of two lane highway with rubberized hot mix asphalt.	Mark Mengoni (559) 243-3543 (559) 243-3545 (F)	4,083,883	11/1/2012	10/31/2012
205710 & 205711	Los Angeles World Airports 1 World Way Los Angeles, CA 90045	LAX Bradley West Gates Concourse & Core Contract #: 10387.1006 & 10390.1002 Los Angeles Airport, CA This project consists of apron paving around the new Tom Bradley terminal at LAX. The pavement section is 20" of portland cement concrete pavement	N/A	8,799,616	12/10/2012	12/14/2012
207115	Pacific Gas & Electric Company P.O. Box 7760 San Francisco, CA 94120-7760	2071 Diablo Canyon IDS Project Contract #: PO #3500855722 Avila Beach, CA Miscellaneous site improvements including: earthwork, concrete flatwork, structural concrete, structural steel, underground utility installation, and roadway reconstruction. Installation of: approximately 5,500 LF of chain-link fence, 6 elevated security towers with pcc footings, 2 actuating security entrances, 4,800 LF of electrical trenching, placement of 1,200 tons of asphalt concrete, 1,300 LF of drainage conveyance, 200 CY of concrete flatwork, 50 camera foundation and poles, placement of concrete modular blast barriers and misc. roadway construction	Richard Vanderlinden (805) 545-6648 (805) 545-3632 (F) rvj1@pge.com	60,395,507	6/30/2011	12/31/2012
207125	County of San Luis Obispo Government Center, RM 207 San Luis Obispo, CA 93408	Willow Road Extension Phase II & US Hwy 101 Interchange Contract #: 300129/300142 Nipomo, CA Construct Willow Road undercrossing consisting of two 2 lane box girder bridges for NB and SB 101, multi-span 188' flat slab bridge over the Nipomo Creek, 2,000 LF of retaining walls up to 25' tall, and 4 new on/off ramps. 250,000 CY of roadway excavation, 27,000 tons of HMA, various sized HDPE, RCP and 3x3 box culvert drainage and 3,200 LF of waterline.	Mike Zen, Resident Engineer (805) 787-0326 Fax #: Not Available mzen@mnsengineers.com	16,856,753	11/30/2012	10/26/2012
207144	County of Ventura, Department of Airports 555 Airport Way, 2nd Floor Camarillo, CA 93010	Parallel Taxiway H Construction Contract #: 11-12; Proj.CMA-134 Camarillo, CA Construction of a 50' wide parallel taxiway at Oxnard Airport in Ventura County, CA. Construction includes approximately 375,000 SF of asphalt paving, base rock, lime treated subgrade, drain pipe installation, catch basins, seeding and taxiway lighting.	Todd McNamee (805) 388-4200 (805) 388-4274 (F) todd.mcnamee@ventura.org	3,666,715	2/1/2012	9/30/2012
207137	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Santa Barbara-Hwy 101 Overlay Contract #: 05-0T7204 Gaviota, Santa Barbara, CA Grind and Overlay 10 miles of Highway 101. Grind 368,000 SY of roadway and repave with 31,900 tons of AC. Restripe road way and install new Rumble Strip.	Kelly McClain, RE (805) 549-3278 Fax #: Not Available kelly_mcclain@dot.ca.gov	4,896,731	2/14/2012	2/14/2012
211723	Department Of Water Resources 1416 Ninth Street Sacramento, Ca 94236	DWR 2010 Seal & Pave Roads Contract #: C51409 Santa Barbara, CA Work Description: Parking lot and Road reconstruction, slope repairs, and striping at several locations thru out the Antelope Valley.	David Sale (661) 945-9560 Ext. 32 Fax #: Not Available dsale@water.ca.gov	3,268,861	6/30/2011	10/31/2012

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241150	AK Department of Transportation - 2301 Peger Road	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622	Frank Ganley (907) 451-5466	18,834,875	10/31/2011	7/31/2012
211724	Los Angeles, County Of 900 Fremont Avenue Alhambra, Ca 91802	Sierra Hwy 14 To Pearblossom Contract #: RDC00015214 Alhambra, CA Work Description: Reconstructed 4 lane highway for 2 miles, install a 12' median buffer, with two new 8x3 RCB Pre-cast systems 100 LF in length diverting drainage from the eastside to a stream on the west side. 4,000 LF of new MBGR	Zaven Abrahamian (626) 688-8267 Fax #: Not Available zabraham@dpw.lacounty.gov	3,121,952	11/30/2011	8/26/2012
211728	Cutting Edge Concrete Services, Inc. P.O. Box 398 Oro Grande, Ca 92368	Range Roads China Lake Contract #: N62473-06-D-1064-0006 Vista, CA Pulverize, grade, pave, crack seal, slurry seal, striping	Mike Flood (760) 955-2888 (760) 955-2922 (F) mike@cecsinc.net	3,199,570	7/31/2012	7/11/2012
371426	Santa Barbara, County Of 123 East Anapamu Street Rm240 Santa Barbara, Ca 93101-2079	Sb Co Gallegly HMA & Overlay Contract #: 863045 / HPLUL-5951(127) Santa Barbara, CA Rubberized chip seal and overlay of various roads in Santa Barbara County. The project included 5,400 tons of AC Leveling, and 15,600 tons of overlay. 2,500 LF of AC Dike was then reinstalled and 1,300 tons of shoulder backing placed	Cliff Repogle (805) 739-8776 (805) 739-8773 (F) creplog@co.santa-barbara.ca.us	3,019,100	5/15/2012	6/22/2012
379370	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	CDOT SR33/I-5 RHMA Overlay Contract #: 06-0N8104 Maricopa County, CA Overlay in various locations with rubberized hot mix asphalt	Peter Mullaly (661) 720-0971 Fax #: Not Available peter_mullaly@dot.ca.gov	3,670,442	10/31/2012	11/7/2012
380034	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Bk Cdot I-5/Grapevine Rhma OI Contract #: 06-0P7804 Grapevine Underpass, CA Rubberized HMA Overlay on 6 mile stretch of southbound I-5	Hisham Alnatour (661) 391-4747 Fax #: Not Available hisham_alnatour@dot.ca.gov	3,869,997	10/15/2012	10/28/2012
225029	Riverside County Department of Transpoc 3525 14th Street Riverside, CA 92501	MSH Riverside County Indian Cyn Interchange Contract #: A8-0372/ESPLHPLU-5282(034) Palm Springs, CA This job was the complete reconstruction of a congested freeway interchange. The work included the construction of a 3 span precast girder bridge spanning I-10, the demolition of the existing bridge structure, 40,000 CY of roadway excavation, 90,000 CY of imported borrow, 19,000 CY of aggregate base, 35,000 tons of hot mix AC, and 5,500 CY of concrete pavement, along with associated electrical & striping work. The job had to be completed in multiple phases.	Mojahed Salama, Eng. Division Mgr (951) 955-6899 (951) 955-6832 (F)	17,961,250	3/31/2012	5/8/2012
225048	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	SCS RT 62 Vidal Overlay Contract #: 08-0P3604 Vidal Junction, CA Cold in-place recycling, overlay with HMA (Type A) and shoulder backing. This job consists of rehabilitation of a 2 lane roadway in the Southern California Desert. The quantities consisted of 263,000 SY of cold-in-place recycling at 0.3' thick, an overlay which consisted of 35,000 tons of HMA (Type) A and the placement of 4,000 TN of shoulder backing. There was also associated signing and striping.	Vu Nguyen, RE (951) 232-3784 Fax #: Not Available nguyen@dot.ca.gov	5,097,116	12/31/2011	5/18/2012
372891	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	RT 15 Rhma Overlay & Grind Pcc Contract #: 11-265304 / NH-P015(017)E San Diego PM .5 TO M 4.0 Project included 6 miles of Highway maintenance. Remove and replace rubberized AC, PCC grind, Anchor blocks, MBGR and Ramp Termini work, prepare water pollution control plan, construct, maintain, and remove temporary drainage inlet protection and portable temporary concrete washout, install and maintain flagging, signs, and temporary traffic control.	Jason Alsheik (858) 688-1473 Fax# Not Available jason_alsheikh@dot.ca.gov	5,433,505	6/15/2012	11/30/2012
226449	City of San Diego 1200 Third Avenue, Suite 200 San Diego, Ca 92101-4195	San Diego Montgomery Field Runway Rehab Contract #: K-12-5054-DBB-C Runway 10L/28R, San Diego Runway Rehabilitation. Preparation of existing pavement surface overlay, removal of exiting pavement. Pulverized in place the existing bituminous pavement and recompact 74,000 SYD to existing asphalt pavement and overlay with 16,000 tons of new hot mix asphalt (FAA P-401 specification)	Hiep Hoang (619) 980-3678 Fax# Not Available hhoang@sandiego.gov	3,765,448	11/14/2012	11/13/2012
227175	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	JGN RT 78.86 Brawley Bypass Contract #: 11-167894 Imperial County, CA Construction of a new 4-lane highway in Imperial County. Includes 417,000 cubic meters of import borrow, 56,000 metric tons of asphalt, 33,900 cubic meters of continually reinforced concrete paving, one overpass bridge over Kalin Rd and associated underground utilities. Project Located in State highway in Imperial County near Brawley on RT 78 .Completion Date 12/10/12. UDBE Goal is 5%	Shawn Rizzutto (760) 355-8666 (760) 355-0987 (F)	30,374,897	6/15/2011	12/10/2012

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241150	AK Department of Transportation - 2301 Peger Road	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622	Frank Ganley (907) 451-5466	18,834,875	10/31/2011	7/31/2012
228200	U S Army Corps of Engineers P.O. Box 532711 Los Angeles, CA 90053	JEC USACE Surf Fence Contract #: W912BV-07-D-2020 CQ07 Imperial Beach, CA This project was the replacement of an existing section of the International Border Fence located approximately 300 LF to the Pacific Ocean and extends approximately ½ mile on to the shore adjacent to Tijuana. There were 4 different types of fencing installed including two completely new designs that were not built anywhere else along the international border. We demolished the existing fence in small segments to prevent a security risk and a heightened danger to the Border Patrol and national security. We constructed a 400' long temporary trestle into the Pacific Ocean in order to remove the surf fence and install over 300 newly designed piles coated with 6 different layers of state-of-the-art corrosion inhibiting coatings. Every pile was monitored prior to and after installation to monitor the coating integrity and insure the fence will last the designed 25 years. In addition, we removed a very dated park and installed new stamped, colored concrete, 64 retractable bollards, and hundreds of yards of stainless steel crowd control equipment while maintaining the integrity of several historic time capsules and historic monuments and vegetation. All of the project was completed in close partnership with the USACE, USBP, California State Parks, The Coastal Commission, USCG, and California Department of Fish and Wildlife to insure the safety of workers, agents, the wildlife, and the coastal environment.	Ron Weltzheimer (405) 478-5353 Fax #: Not Available ronald.g.weltzheimer@saic.com	5,269,409	4/31/12	5/31/2012
227187	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Interstate Overlay Project Contract #11-266104 San Diego County, CA This is a pilot project that the California Department of Transportation did in an effort to find an HMA mix that will last longer. The project consisted of cold planning 433,000 SQYD of HMA and fill with Rubberized Warm Mix Asphalt and Rubberized Hot Mix Asphalt, totaling up to 54,000 tons of concrete asphalt. In these mixes, four technologies had to be incorporated into the mix. Evothorn, Advera, Sasobit and Rediset. This project was 20 miles long and it was placed in segments of 1.8 miles whole width. The project also required the installation of a layer of 3/8" screening, new MBGR.	Julio Reyes (858) 688-1091 (760) 355-0987 (F) julio_reyes@dot.ca.gov	13,668,243	11/9/2012	11/9/2012
376751	NV Department of Transportation 1263 So. Stewart Street Carson City, NV 89712	SR 443 CLEAR ACRE LANE Contract #: 3503 Washoe County, NV Urban Highway System, State of Nevada, Washoe County, SR 443, Mileposts SR 443 WA-0.57 to 3.55. SR 443 Clear Acre Lane from North of US 395 to 7th 144,000 SQ YD Cold Milling. 137,250 Pavement Fabric, 15,800 tons of Type 2 Plantmix, 185 LF of Conduit.	Shane Cocking R.E. P.E. (775) 691-9429 (775) 687-3000 (F)	4,291,769	12/4/2012	12/4/2012
2161168	Nevada Department of Transportation 4600 Kietzke Lane, Bldg. 1, Ste. 210 Reno, NV 89502	395 Moana to I-80 Contract #: 3401 Washoe County, NV Section 395-2 Mileposts WA-22.97 to 25.86 for construction a portion of a highway on I-580 from Moana Lane to I-80 described as extending from station "X" 372+12.12 P.O.T. to station "X" 539+69.13 P.O.T. a distance of approximately 2.867 miles. The addition of 3 lanes to existing highway. Bridge widening, retaining walls, landscaping, to include 4,529 LF of removal of Guardrail, 2,816 :in FT of removal of concrete barrier, 67,637 LF of removing painted surface traffic line, 72,490 CY of roadway excavation, 75,630 CY Borrow Embankment, 21,147 CY of Structure Excavation, 21,113 CY of Granular Backfill, 6,000 SY Hydroseeding. Decorative painting on Bridge Decks to include native american basket weave designs, Decorative metal structures along freeway approach lanes. 23,470 tons of Type 2 plantmix (asphalt)	Shane Cocking R.E. P.E. (775) 691-9429 (775) 687-3000 (F) scocking@dot.state.nv.us	36,171,173	5/31/2012	5/31/2012
2161207	NV Department of Transportation 1263 So. Stewart Street Carson City, NV 89712	Cave Rock Slope Stabilization Contract #: NDOT 3433 Glenbrook, Douglas County, NV - Hwy US 50 Lake Tahoe Route section US 50, Milepost DO-7.00 to 12.35 for constructing a portion of highway on US 50 from Cave Rock to SR 28 from station "LN" 124+48.78 to station "L2" 406+96.85 a distance of approximately 5.35 miles to include Erosion Control, water quality improvements. Removal of 200 trees, 1,200 CY type 2 drain rock, 3,260 CY top soil, 3 acres of hydroseeding, Steel grates, rock slopes, traffic control, 7,960 SY Reinforced Soil Slope and 18,220 CY Stabilized Earth Backfill.	John Angel - RE (775) 687-3376 (775) 687-3000 (F) jangel@dot.state.nv.us	3,661,661	12/31/2011	12/31/2012
2161214	Regional Transportation Commission 1105 Terminal Way Reno, NV 89501	SE McCarran Phase 1 Contract #: WA-2011-163 Reno, NV SE McCarran Blvd - Phase 1, Virginia to Mira Loma Road Road Rehabilitation, Roadway Widening, Asphalt Paving, PCC Paving, Site Concrete. 1,000,000 SQ FT of roadway pulverization, 1,300,000 SQ FT of Concrete Treated base material, Stormdrain pipe, manholes. This project was originally designed to be done during the daytime hours, but with the heavy traffic volume and location, Granite negotiated with owner to turn into	Brenda Lee (775) 335-1863 (775) 335-1860 (F) blee@rtcwashoe.com	11,505,397	9/1/2012	10/1/2012
2161217	Great Basin Transmission, LLC c/o LS Power Development, LLC Two Tower Center, 11th Floor East Brunswick, NJ 08816 Telephone for LS Power 732-249-6750	Robinson Summit Substation Contract #: Sub5468SC-GCC Remote location in Ely, Nevada Prepare the project site for all transportation, storage, construction, assembly and installation of a ONE NEVADA TRANSMISSION LINE - Mass excavation, drainage, access road construction and final grading for building pad. Construct all foundations, grounding and fencing.	LS Power Development LLC Walt Saner - On Site Person (702) 402-5057 (732) 249-7290 (F) waltsaner@nvenergy.com	8,459,511	12/31/2011	11/16/2012

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Final Contract Amount	Original Estimated Completion Date	Actual Completion Date
241150	AK Department of Transportation - 2301 Peger Road	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622	Frank Ganley (907) 451-5466	18,834,875	10/31/2011	7/31/2012
450001	MS Department of Transportation P. O. Box 1850 Jackson, MS 39215-1850	US 82 Ms River Bridge Demo Contract#: BDRP-9205-00(07)/100332306&7 Jackson, Mississippi Latex modified concrete wearing surface was applied to the new Mississippi River Bridge & opened to traffic. Demolition of Old US 82 River Bridge, 1.9 miles long , with 3 River piers, and 83 plate girder spans over land. Two river crossing spans (1,480 LF) removed by mechanically lowering to barges, and one river crossing span (640 LF) demolished by explosives.	Steele Davis (662) 686-4919 Fax #: Not Available sdavis@mdot.state.ms.us	23,126,747	9/21/2012	4/2/2012
232493	UT Department of Transportation 4501 S 2700 W Salt Lake City, UT 84114	Bonanza Drive Phase 2 Contract #: F-LC43(28) Park City, UT This project was a low bid build roadway reconstruct and utility replacement project in Park City, UT. This was a local city project with Federal Funding, which brought UDOT in the picture to manage the project. The job was a complete reconstruct with all new utilities. There were some small drainage structures and a new 130' precast concrete pedestrian tunnel with retaining walls. This project was in the middle of a busy commercial district in Park City. The job was tough for many reasons and here are some examples: keep road open at all times, sewer line got to depths of 25', very busy with pedestrians, and many local politics involved. The end product was a success and the owner was very happy with Granite's execution of the project.	UDOT / Park City Matt Cassel (435) 615-5075 Fax #: Not Available matt.cassel@parkcity.org	4,622,623	11/30/2010	4/22/2012
232608	Kennecott Utah Copper P.O. Box 6001 Magna, UT 84044	Kennecott Magna Reservoir Contract #: P-0400305 MOC 11860 Magna, UT The purpose of the project is to replace an existing 4.3 Million Gallon reservoir which receives up to 62,000 GPM of water from the mine's Smelter, Tailings, and onsite coal fired power plant. The original reservoir was constructed in 1906 and is concrete lined. It is thought to have some severe cracking and has no backup or overflow system in case of failure. The reservoir is the main source of water to the concentrator, the Power Plant, and the Smelter. The intent of the project is to construct an HDPE/concrete lined reservoir to take the place of the existing reservoir. Once the new reservoir is constructed, the piping and valve system will be switched over to the new reservoir and the existing will be demolished and rebuilt with another HDPE lined reservoir.	Erik Franco (801) 569-6345 Fax #: Not Available francoe@kennecott.com	6,739,457	7/27/2011	4/30/2012
232616	UT Department of Transportation 4501 S 2700 W Salt Lake City, UT 84114	I-215 at 3500 South Realignment Project Contract #: S-I215(139) Salt Lake City, UT Realignment of SB I215 on/off ramps (17,000 SY 9" -PCCP), 2400 LF new frontage road construction, 3000 LF 18" RCP, new ATMS, electrical, & signals. 4 EA - 110' Overhead Sign Structures, 16,000 SF retaining wall, 3000 LF constant slope barrier, 1400 LF precast barrier, 9,000 ton HMA, 1,600 TN OGSC	Bryan Chamberlain (801) 887-3405 (801) 975-4841 (F) bchamberlain@utah.gov	7,125,334	10/30/2011	10/12/2012
232619	UT Department of Transportation 4501 S 2700 W Salt Lake City, UT 84114	Bangerter @ 4100 South Contract #: F-0154(57)14 Salt Lake City, UT Construct continuous flow intersection (CFI) on Bangerter Highway. Work consisted of reconstructing and widening existing roadway including: roadway excavation, granular borrow, UTB, 12 traffic signals, highway lighting, PCCP, concrete flatwork, Precast Noise Wall, PCCP Grinding,	Marwan Farah (801) 910-2590 (801) 975-4841 (F) mfarah@utah.gov	3,103,448	12/31/2012	N/A
232623	UT Department of Transportation 4501 S 2100 W Salt Lake City, UT 84104	SR 201 Aux Lanes; SR154 Contract #: F-0201(22)14 Salt Lake City, UT Project added two miles of auxiliary lanes including improved drainage and ATMS. 1000 LF of retaining wall with barrier, 1.5 miles of precast barrier. Additionally the intersection of SR-154 and Bangerter ramps were widened and modified to facilitate Region 2's first diverging diamond interchange. Flatwork, C&G, Drainage and Landscaping were included as well as the new signal for the DDI.	Deryl Mayhew (385) 208-0266 (801) 975-4841 (F) derylm@horrocks.com	7,428,587	11/15/2011	6/15/2012
232639	UT Department of Transportation 4501 S 2700 W Salt Lake City, UT 84104	SR-71; Hillcrest High Drive Contract #: F-0071(28)12 Salt Lake City, UT We had to prelower utilities & mill 4" of existing asphalt (170K SY), pave 3" new HMA -(29K Ton), raise utilities, microsurface (170K SY). We also performed structural pothole patching on one structure within the project. This structure also included parapet surface repair and waterproofing membrane before overlay.	Marwan Farah (801) 910-2590 (801) 975-4841 (F) mfarah@utah.gov	3,305,644	7/8/2012	7/2/2012
232643	Slc Department Of Airports Po Box 145550 Salt Lake City, UT 84114	North Cargo Apron Expansion Contract #: 54-2-11-4990 Salt Lake City Airport Cargo Apron Expansion consisting of: 10,000 CY of excavation, aggregate import of 250,000 tons, 2000' of HDPE pipe, 960 LF of channel drain, 68,500 sy lean concrete base, 68,500 SY of 16" PCCP, and 2500 tons of HMA	Mike Widdison - SLFDA (801) 575-2027 Fax #: Not Available Mike.Widdison@slcgov.com	8,600,367	9/22/2012	9/26/2012

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Final Contract Amount	Original Estimated Completion Date	Actual Completion Date
241150	AK Department of Transportation - 2301 Peger Road	Dalton Hwy Culverts MP 260-321 Contract #: IM-065-6(4)/62622	Frank Ganley (907) 451-5466	18,834,875	10/31/2011	7/31/2012
376173	Uintah Transportation Special Srvc Dist 320 North Aggie Blvd Suite 138R Vernal, UT 84078	Seep Ridge Road Surfacing 63G-6-505-507 Vernal, UT Surfacing of 18 miles of a newly constructed roadway on the UTBC grade of 5 separate eatherowk contracts. Originally bid as a Plant Mix Oils Sand Asphalt mix but due to shortage of rich oil sand supply a change order was executed to pave the job with HMA. Portable plant setup in pit 200 miles East of Salt Lake City. Project completed on time 136, 394 TN Total.	Troy Ostler CIVCO Engineering (435) 789-5448 Fax #: Not Available	9,100,102	10/15/2012	10/30/2012
384035	Wadsworth, Ralph L Construction 71 E Wadsworth Park Drive Draper, UT 84020-8996	I-80 WANSHIP TO COALVILLE Contract #: Draper, UT PLACE 3' OF WMA	Matt Zundel (801) 975-4854 (801) 910-2580 (F)	4,655,296	8/31/2012	9/17/2012
267140	OR Department of Transportation 5681 Artic Drive Beaverton, OR 97005	Sunset Hwy26: 185Th To Cornell Contract #: GNW256026;14228:STPS-S047(085) Cornell, OR Highway reconstruction from 2 lanes to 3 lanes in each direction. The work includes structure section additions, drainage, lighting, guardrail, striping, and erosion control.	Ron Larson (503) 641-8723 (503) 646-5938 (F) ronald.larson@odot.state.or.us	8,875,000	6/29/2012	12/14/2012
267144	Wilson Construction Company P.O. Box 1190 Canby, OR 97013-1190	Van Wilson - Bpa Ostrander Contract #: 44259 Oregon City 6500CY concrete 130 footings 35000 tons rock import 13000 CY Export, 5000' pipe, oil containment system. Clear perennial wetland, strip the site and import base rock. Footings to support substation bus work	Jason Carpenter (503)263-6882 (503)263-6946 (F)	3,140,027	10/1/2011	4/30/2012
267152	WA Department of Trans 2400 Talley Way Kelso, WA 98626-5515	SR503 E. Fork Lewis / Todd Rd Contract #: 8150 Kelso, WA 98626 Highway pavement rehabilitation on I-5. In addition to 24,000 tons of HMA, there is guardrail, signs, lighting, bridge joint reconstruction, sidewalk, and crossover construction.	Denys Tak / WSDOT (360) 442-1341 Fax #: Not Available takd@wsdot.wa.gov	4,604,523	12/31/2011	6/30/2012
371794	Haskell Corporation P.O. Box 917 Bellingham, Wa 98227-0900	Evt Tesoro Crup / Crude Unload Contract #: N/A N Texas Rd Anacortes, WA Concrete platform for railcar off load. 180,000 CY excavation, 500,000 tons embankment, 17800 SF Twall installation, 5600 CY concrete platform and wash pad. 180000 SF wick drain, survey, liner install below concrete pad.	Terry Corrigan (360) 734-1200 Fax #: Not Available tcorrigan@haskellcorp.com	24,223,741	10/16/2012	10/7/2012
379708	WA Department of Transportation P.O. Box 47420 Olympia, Wa 98504-7420	WEN - REGION WIDE C SEAL 2012 Contract #: WSDOT 8275 Kittitas, Yakima, Benton, Wall Chip Seal. Excavation, fog seal, crushed screenings, crushed choke stone, crack sealing, BST, HMA, traffic control, pavement markings.	Moe Davari (509) 577-1600 Fax #: Not Available	5,562,921	9/1/2012	10/19/2012
380554	Yakima, County Of 128 North 2Nd Street Yakima, Wa 98901-2639	Sel Summitview Rd Improvements Contract #: C 2958 Yakima County Catch basins, rock, pave, water main, curb, gutter, traffic control, seeding, fertilizing, top soil, traffic control and other work.	Gary Ekstedt (509) 574-2300 Fax #: Not Available Gary.ekstedt@co.yakima.wa.us	3,058,693	8/1/2012	10/26/2012

GRANITE CONSTRUCTION COMPANY
2013 Completed Jobs Greater than \$3 Million
Qualification of Contractor

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Actual Completion Date
241167	AK Department of Transportation-Northern 2301 Peger Road Fairbanks, AK 99709-5399	Richardson Highway MP 148-159 Contract #: NH-071-3(12)/76727 Richardson Highway MP 148-159, AK Highway Reconstruction of 10 miles of highway including widening, grade raises, replacement of drainage structures and surfacing with hot mix asphalt, 187 acres of clearing, 1,220,870 CY unclassified exc, drill and shoot 950,000 CY rock, 125,000 T d-1, 53,500 T ATB and 26,000 T of Type IIB	Frank Ganley (907) 451-5466 (907) 451-5487 (F) frank.ganley@alaska.gov	29,857,024	9/24/2013
241168	AK Department of Transportation-Central PO Box 196900 Anchorage, AK 99519-6900	King Salmon Airport Lighting Contract #: AIP 3-02-0148-12-2011/52673 King Salmon, Alaska Reclaiming paved shoulder, electrical lighting demo, electrical upgrades, grading and paving of 10,000 T of HMA and pavement markings	Bob Lundell (907) 269-0450 (907) 243-5092 (F) robert.lundell@alaska.gov	5,691,674	6/21/2013
408289	Conocophillips Alaska, Inc. P.O. Box 2200 Bartlesville, OK 74005-2200	Kuparuk East Creek Culverts Contract #: 270037, So4517902353 Kuparuk, Ak Spine Road Install 7 Multi-Culverts	Ed Lightwood (907) 263-4606 (907) 440-6741 © edward.p.lightwood@contractor.conocophillips.com	4,011,980	9/15/2013
372844	Old Pueblo Trackworks 4115 E Illinois Street Tucson, AZ 85714	Tucson Modern Streetcar Contract #: 120367 Downtown Tucson Arizona Old Pueblo Trackworks: Located in the City of Tucson, Pima County connecting the west side of I-10, Downtown, 4th Avenue entertainment district, the University of Arizona, and the University Medical Center. The work consists of an assortment of removals, asphaltic concrete and Portland cement concrete paving, concrete streetcar guideway and tracks, drainage improvements, furnishing and installing traffic control devices, electrical and traffic signal elements, Overhead Contact System (OCS), traction power substations (TPSS), box culverts, median and curb side station platforms and structures, retaining walls, station concrete curbs, sidewalk, curb access ramps, driveways, signing and striping, dry utility relocations and modifications to the existing water and sewer systems, quality control, aesthetic enhancements, and other related incidental work and coordination with local artists, businesses, events, and entities.	Jose Chase 520-904-1176 or 520 837-6619	38,842,811	11/21/2013
378892	Intrepid Potash New Mexico LLC 1996 Potash East Plant Carlsbad, NM 88221-0101	HB Solar Solution Mine Project Contract #: C-705 169490 Potash Mine Rd, Carlsbad, NM Install HDPE Pipe	Don Wasmuth 575-499-3032 don.wasmuth@intrepidpotash.com	7,002,029	3/23/2013
205607	City of Sacramento 915 I Street, Room 2000 Sacramento, CA 95814	Sacramento Railyards Track Relocation Contract #: T15029005 Sacramento, CA Work consists, in general, of relocating approximately 2.3 track miles of heavy rail to a new passenger station that includes all new platforms with grade separated access via a new tunnel and ramp complex. It also includes the construction of a pedestrian tunnel, a maintenance and fueling truck service tunnel, various utility modifications and new utility installations (which includes a new 42" welded steel water transmission main). Other specifics include the construction of structural steel canopies, HVAC systems, underground and above ground detention basin structures, a pump station, various architectural finishes and site furnishings. The project includes networks of electrical power and lighting, telephone, signaling, fiber, data, CCTV, alarm and passenger information display systems. Other utility installations include domestic and fire water systems, fire sprinkler systems, sewer, combined sewer, storm water, fuel systems, oil water separation systems, track pan and under-drain systems. Utilities will be installed by cut and cover, bore and jack, micro-tunneling and via directional bore methods. Grading operations include extensive over-excavation and re-compaction and require moving more than 200,000 CY of soil. The tunnels require a full wrap of waterproofing and will be comprised of over 15,000 CY of structural concrete. The project requires extensive coordination with various government and regulatory agencies and stakeholders. The site requires protection of historic structures and coordination with ongoing soil and ground water remediation.	Jon Blank (916) 808-7914 (916) 808-7903 (F) jblank@cityofsacramento.org	50,873,535	8/13/2013
205609	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	I-5 Pavement Restoration Project Contract #:03-0F5904 Elk Grove, CA Project consists of: HMA overlay (150,000 tons), removal of concrete pavement (28,000SY), guard railing, cold plane AC (217,000 SY) RSC slab replacement, roadway excavation (333,000 CY), Class 2 Base and Sub Base (299,000 CY), replacement of concrete pavement (10,500 CY), PCC grinding, jointed plain concrete pavement (11,000 CY). Shoulder and median reconstruction	Meshak Okpala (916) 718-8051 Fax #: Not Available meshak.okpala@dot.ca.gov	61,372,695	8/2/2013
215798	CA Department of Corrections & Rehabilitation 9838 Old Placerville Rd Sacramento, CA 95816	CA Health Care Facility Contract #: None San Joaquin County, CA This Design Build project consisted of mass excavation, building and lime treating 1 million sf of building pads for future contractor. Installation of underground: storm, sewer, water, gas, concrete: curb, gutter, sidewalk, and paving for outside the secure perimeter.	Mike Meredith (916) 255-3838 Fax #: Not Available mike.meredith@cddcr.ca.gov	32,909,137	7/18/2013

Qualification of Contractor

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Actual Completion Date
214649	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Hwy 99 Tipton Reconstruct Contract #: 06-0E0704 Hwy 99 North of Ave 152 to Elk, CA Project consists of widening inside: outside shoulders of Hwy 99 for approximately 5.25 miles in Tulare County. Work included remove and replace widening existing shoulder, crack existing concrete roadway, HMA and Rhma Overlay with grade corrections adjust Thrie Beam Barriers, Widen 4 Bridge Decks , Polyester Concrete Overlay, Rumble Strip, Striping and Electrical Upgrades.	Haidar Haddadin/Caltrans (559) 897-7233 (559) 897-2066 (F) haidar_haddadin@dot.ca.gov	9,232,081	5/31/2013
407900	CA Department of Transportation 1727 30th Street, Sacramento, CA 95816-7005	Hwy 180 Squaw Valley Contract #: 06-0P9304 Hwy 180, Squaw Valley Overlay, CA 40,000 Ton HMA Overlay with Digtouts, Shoulder Backing, Crack Filling, Capping HMA Dike and Striping.	Mohammad Samimi 559-243-3814 559-243-3825 (F) mohammad_samimi@dot.ca.gov	4,682,269	11/18/2013
378901	City of Delano P.O. Box 3010 Delano, CA 93216-3010	Woolomes Ave Interchange Improvements Contract #: None City of Delano, CA Interchange improvements including bridge widening, roadway reconstruction, traffic signals, water pipelines and traffic control	Pedro Nunez, City of Delano (661) 721-3300 Fax #: Not Available pnunez@cityofdelano.org	5,186,075	3/22/2013
2122073	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Kern County at Fort Tejon from Los Angeles Contract #: 06-460604 LA County South to Grapevine Bridge, CA Replace existing concrete pavement and construct concrete shoulder along 5.8 miles of SB/NB SR-99; remove & replace southbound lanes(3 & 4), remove replace outside shoulder with concrete pavement	Hisham Alnatour (661) 391-4747 Fax #: Not Available	12,078,040	5/20/2013
219525	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Hwy 101/84 Roadway Widening Contract #: 04-235634 San Mateo, CA Add auxillary lanes between Marsh Rd and University Ave on Route 101 in San Mateo County. Work generally consists of 13,400 CY roadway excavation, 21,200 CY ADL excavation, 14,400 TN HMA, 26,100 TN RHMA, and 9,000 LF of underground. Other work includes construction of new pedestrian overcrossing, demo of old pedestrian overcrossing, retaining wall construction, at grade bridge for protection of the Hetch Hechy water main.	Fernando Abela (650) 573-3831 (650) 573-3807 (F) fernando_abela@dot.ca.gov	15,849,684	1/12/2013
377317	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	CA DOT Rt 101 Embarcadero Contract #: 04-235644 / HPLUL-6204(096)E Embarcadero University, CA Highway Widening Caltrans A+B project to add auxillary lanes between Embarcadero Road and University Avenue on Route 101 in San Mateo County. Work generally consists of 14,000 CY of roadway excavation, 6,800 CY of Base, 3,700 CY of LCB, 6,800 tons of HMA, and 11,500 tons of RHMA.	Fernando Abela (650) 573-3831 (650) 573-3807 (F) fernando_abela@dot.ca.gov	6,281,409	11/9/2013
203162	CA Department of Transportation 1727 30th Street Sacramento, CA 95816-7005	Hwy 20 Roundabout Near Nice Contract #: 01-480504 Lake County, CA Construct new concrete roundabout at existing 4-way intersection. Work consists of new curb, gutter, sidewalk all around; 30' diameter raised median island with shotcrete sides & fish architectural stencils; concrete drive lanes and truck apron; asphalt concrete approaches on 4 legs.	Scott Baker Susan Tappan, Area Const. Mgr. (707) 274-9451 (707) 274-9793 (F)	3,035,806	6/1/2013
389738	City of Indio 100 Civic Center Mall Indio, CA 92201	Downtown Indio Improvements Contract #: N/A Indio, CA Reconstruction of downtown Indio City streets including but not limited to the removal and installation of asphalt pavement, concrete sidewalks, concrete curbs water main, sewer main, storm drain, landscaping and signage. Also included in project is a new 2 acre asphalt parking lot	Jeremy Frey (760) 399-0888 Fax #: Not Available jfrey@indio.org	5,294,500	7/17/2013
395439	Coachella Valley Water District 75-515 Hovely Lane East Palm Desert, CA 92260	Whitewater Canal Lining Contract #2012-55 Palm Desert, CA Reinforced concrete canal lining and all associated earthwork, sluicing structure and diversion structures including reinforced box culverts and check structures, complete with reinforces concrete transition structures, roadway, rip rap, sheet piling, control buildings, metal work, stilling wells, safety cable and floats, chain link fencing, commercially designed radial and sluice gates and all electrical	Ty Mull (760) 398-2651 (760) 398-3711 (F) tmull@cvwd.org	8,988,964	12/5/2013
383178	Arch Insurance Company 1102596 Three Pakway, Suite 1500 Philadelphia, PA 19102-1301	Adams Street Bridge Improvements Contract #: 2006-06 / Br-Nbil(503) La Quinta, CA Bridge Improvements Project built a 4 span bridge across the Whitewater Channel on Adams Street. The project included adjacent street improvements, storm drain pipe, catch basis, drywells and slope paving on the north and south facing slopes. The project also mirrored metal rail on the concrete barrier. The bridge approximately 440' long, using 3,000+ CY of concrete and 1,600,000 lbs of rebar. The columns are set on 120"	Brian McKinney (760) 777-7000 Fax #: Not Available bmckinney@la-quinta.org	7,736,764	10/20/2013
6785	Federal Highway Administration 12300 West Dakota Avenue Lakewood, CO 80228-2595	Pinto Basin Road Reconstruction Contract #: DTFH68-13-C-00008 Joshua Tree National Park, Riverside CA Clear and grub, demoliton of existing road, roadway excavation, aggregate base placement, asphalt paving (superpave), concrete curb and sidewalk and associated improvement to repair flood damage in Joshua Tree National Park	No Name Contact (720) 963-3721 (720) 963-3596 (F)	7,098,230	7/22/2013

Qualification of Contractor

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Actual Completion Date
400359	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	I-10 Overlay- Monterey to Jefferson Contract #: 08-0P8604 Riverside County, CA Cold plane approximately 534,000 SF of pavement and overlay with 36,000 tons of Superpave rubber asphalt and 9,800 tons of Type A HMA. Stripes, install signs and electrical work.	Siong Yap (951) 232-3922 Fax #: Not Available	5,329,330	12/19/2013
401950	City of Palm Springs 3200 East Tahquitz Canyon Way Palm Springs, CA 92262-6959	Terminal Apron & Taxiway G Rehabilitation Contract #: 2013-16 Palm Springs International Airport, CA Remove asphalt concrete, over excavate and pave 67,000 tons of asphalt concrete on Terminal Aprons and Taxiway G.	Chris Swonke, PE, QSD (909) 888-1106 Fax #: Not Available swonke@pbworld.com	11,256,167	10/18/2013
402922	City of Palm Desert 73510 Fred Waring Drive Palm Desert, CA 92260	Monterey & Fred Waring Intersection Improvements Contract # C29780A Fred Waring Drive, Palm Desert, CA Provide a constant right turn traffic flow at the intersection of Monterey and Fred Waring. The project included clearing, palm tree removal, roadway excavation storm drain pipe and catch basin installation, surface flow improvement, paving, landscaping improvements and street signal modification. The storm drain improvements included connection to an existing line at 32' below existing street grade. The storm drain included 2 300 LF to 18" to 20" RCP, 9 catch basins and 6 manholes. The project consisted of 3,000 tons asphalt and 800 CY of concrete.	Joel Montalvo (760) 636-5860 Fax #: Not Available	2,988,995	9/11/2013
376241	CA Department of Transportation 1727 30th Street Sacramento, CA 95816	Route I-805 Hov Lanes Contract #: 11-2T1804 San Deigo County, CA Widen 4-miles of freeway with new JPCP and AC for HOV lanes. Add new Concrete barrier, electrical systems and striping. 16,400-CY of Agg Base, 13,900-TON HMA, 17,200-CY of Jointed Plain Concrete Pavement(JPCP), 16,000-LF of Storm Drain Pipe, 341-EA Drainage Inlets, 12000-Lf of Grated Line Drain, 74,900 SQYD temporary hydraulic mulch, 43,700 LF Temporary Railing Type K. Remove 21,200 LF concrete barrier. 42,300 CY Roadway excavation, 43,300 LF Seal pavement joint, 36,300 LF Seal isolation joint. Grind 49,700 SQYD of existing concrete pavement. Furnish and install 6,000 LB sign structure(Lightweight), Furnish and install 58,710 LB sign structure(Truss), 11,000 LF 24" alternative pipe culvert. 3,840 LF 24" reinforced concrete pipe. 111,161 LB miscellaneous iron and steel, 11,500 LF concrete barrier type 60, and modify traffic monitoring station, ramp metering systems at various locations.	Paul Hsu (619) 644-3525 (858) 688-1497 Cell Fax #: Not Available paul_y_hsu@dot.ca.gov	17,513,669	11/27/2013
377007	CA Department Of Transportation 1727 30Th Street, Sacramento, CA 95816-7005	CA DOT Ski Run Blvd-S Lake Tahoe Contract #: 03-1A7344/Acnh-P050(128) E Cold Plane & HMA Overlay. Install drainage inlets El Dorado County in So Lake Tahoe from 0.2 miles west of Ski Run Blvd to Wildwood Ave. 28,900 SY Cold Plane Asphalt Concrete and 12,300 FT 4" thermoplastic Traffic Stripe	Jaret Montolaisir, RE 530-682-5837 530-582-9106 (F) jaret.montolaisir@dot.ca.gov	3,137,305	10/15/2013
387238	Reno Tahoe Airport Authority Po Box 12490 Reno, NV 89510-2490	Taxiway Q Reconstruction Reno-Tahoe Airport Contract #: AIP 3-32-0017-94 Taxiway "Q" Reconstruction Washoe County, Reno, NV 16" PCCP, 6" ATPB, signs, Asphalt paving and pavement markings	Joe Mactutis 775-398-1288 775-850-0787 (F) joseph.mactutis@stantec.com	3,033,107	7/18/2013
232642	Kennecott Utah Copper 8362 West 10200 South Bingham Canyon, UT 84006-1197	Kucc Flotation Rough Grade Contract #: Kucc Mine Bingham UT The rough grading phase of the project consisted 50,000 CY of excavation, 60,000 tons of imported structural fill, the construction of 5 cast-in-place collection boxes varying in heights up to 33 feet tall. All of the cast-in-place boxes had to be constructed while they were actively running which created a multitude of confined spaces and lock out requirements where our excellent safety procedures shined. This phase also included 1,000 LF of 48 and 60 inch RCP pipe laid over 25 feet deep as well as the relocation of the concentrate lines that run all of Kennecott's precious metals for processing.	Rob Watson (801) 569-6881 rwatson@riotinto.com	5,401,677	10/31/2013
383185	Kennecott Utah Copper 8362 West 10200 South Bingham Canyon, UT 84006-1197	Flotation Expansion Phase II Contract #: 560021079 (CW2001702) Kucc Concentrator This was a very fast track project to construct the concrete foundation for the Flotation Building, Pipe Rack and Pump House along with associated site-work: clear & grubbing along with topsoil stripping of the existing ground (18,000 SF); re-routing of existing piping around the new Pump House and Pipe Rack (450 LF); installation of new sewer, fire water, and storm drain (3,683 LF); excavation of the existing site for Flotation Building, Pump House and Pipe Rack (14,080 CY); over-excavation of unsuitable materials discovered during site preparation (600 CY); placing of imported structural fill to sub-grade of new Flotation Expansion Building, Pipe Rack and Pump House (32,100 CY); constructing concrete foundations walls, slabs, grade beams, stem walls and sumps including all anchor bolts, shear keys and embedded items (12,500 CY); placement of feed tank steel and rubber liners and finishes to the project site (road paving, guardrail, striping, bollards, signs, etc.)	Rob Watson (801) 569-6881 rwatson@riotinto.com	25,190	12/31/2013
2836	UT Department of Transportation PO Box 14 8220 Salt Lake City, UT 84107-0007	I-15; Bridge Rehab Lehi Contract #: F-I15-6(207)280 Bridge Deck Rehab This project consisted of re-habilitating 4 structures along 3 miles of I-15 in Lehi, Utah. The rehabilitation work consisted primarily of expansion joint modifications, structural pothole patching, membrane and new SMA pavement. All areas also received profile milling and new SMA tie ins to improve the smoothness of the transition through the structures. The original project bid during the late Fall of 2011.	Greg Searle (801) 374-5773 (801) 374-5771 gsearle@utah.gov	3,147,588	12/1/2013

Qualification of Contractor

Job Number	Name and Address of Owner	Name, Location of Project, and Kind of Work	Name of Engineer in Charge (Owner), Phone, Fax, and E-mail (if available).	Contract Amount	Actual Completion Date
395395	SLC Department Of Airports PO Box 145550 Salt Lake City, UT 84114	Runway 16L/34R Pavement Rehab Contract #: 54-1019-1278 Aip: 3-49-0033-1 Salt Lake City Airport Salt lake City Airport project involved 3D milling to an elevation and 3D echelon paving to an elevation. Other major items of work involved electrical work for runway lighting, asphalt grooving, paint obliteration and paint markings, infield clearing and grubbing, soil sterilization of the infields and asphalt pavement grooving.	Steve Smith	9,987,788	7/13/2013
402900	UT Department of Transportation 4501 South 2700 West Salt Lake City, UT 84107-1430	Sr-32 Jct 40 To Jordanelle Contract #: F-0032(39)0 Sr-32 From .00 To 7.7 The SR-32 roadway project is located on SR-32 in Wasatch County along the Jordanelle Reservoir. The project included, but not limited to, 34,000 tons of cold in-place recycled asphalt, 23,000 tons of Warm Mix Asphalt, 207,000 square yards of micro surfacing and 14,000 linear feet of concrete barrier replacement.	Jack Lyman UDOT Region 3 658 North 1500 West Orem, UT 84057 (801) 222-3470	4,337,057	9/10/2013
403168	UT Department of Transportation 4501 South 2700 West Salt Lake City, UT 84107-1430	I-80 Coalville To Echo Contract #: F-R299(167) I-80 Coalville To Echo Rotomill and Overlay with a small bridge rehab. Also include a 3500 LF under drain system.	Matt Zundel UDOT Region 2 4501 South 2700 West Salt Lake City, Utah 84114 (801) 965-4346	3,199,210	7/27/2013
403257	UT Department of Transportation 4501 South 2700 West Salt Lake City, UT 84107-1430	I-15 S. Cedar To N. Cedar Contract #: F-15-2(62)58 I-15 Mp 58-61.37 Mill and overlay of 3 miles of I-15 both directions. A structural rehab of 8 bridge decks. The rehabilitation work consisted primarily of structural pothole patching, membrane and new SMA pavement. All areas also received profile milling and new SMA tie ins to improve the smoothness of the transition through the structures.	Jim McConnel UDOT Region 4 210 West 800 South Richfield, Utah 84701 (435) 893-4799	3,425,057	9/3/2013
267145	WA Department of Transportation 11018 NE 51ST CIRCLE Vancouver, WA 98682	TAPANI - SR14 Camas Contract #: 11121-0002 WSDOT Contract # 8105 Washougal, WA Supplied and placed 74,086 tons of HMA pavement for Prime in approximately 10 mobilizations over a 3 year period. Surfaced/resurfaced more than 23 miles of lanes/shoulders	Christopher H. Tams, PE (866) 279-0730 (360) 905-2062 (F) tams@wsdot.wa.gov	4,995,564	6/6/2013
265150	WA Department of Transportation 1043 Goldenrod Road Burlington, WA 98233	I-5 Joe Leary Slough to Nulle Road Vic Paving Contract #: 8016 Burlington, WA along Interstate 5 - Design-Build Project Rehabilitation of 12 miles NB Interstate 5, associated interchange on/off ramp, arterials, two rest areas north and south bound. 2 miles was retrofitted by milling existing HMA, installing 12000 dowel bars and repaving with 0.35 HMA. Ten miles HMA was removed, concrete panels cracked and sealed then overlaid with HMA. This was the first pavement preservation project for WSDOT using the crack in seal method. 115,000 tons of HMA plus 60,000 LF of guardrail was installed. Two bridge approach slabs were removed and replaced. Several awards were received.	Jay Drye (360) 757-5993 (360) 707-5050 (F) dryej@wsdot.wa.gov	14,954,926	2/8/2013
373055	Bonneville Power Administration 8399 SW 3 Springs Rance Rd Butte, OR 97753	Van Ponderosa Substation Expan Contract #: Bpa 47917-004 8399 Sw 3 Springs Ranch Rd Substation expansion Civil Site and Concrete Foundations	N/A	6,711,633	2/15/2013
404737	Clark County, WA 1300 Franklin Street Vancouver, WA 98660-2865	2013 County Wide Hma Overlays Contract #: 323122 17 Locations In Clark County 54,000 tons of HMA, 600,000 SF cement treated base, 500,000 SF pavement grinding throughout the county	Bart Arthur (360) 397-6118 bart.arthur@clark.wa.gov	7,732,308	12/1/2013
405289	OR Department Of Transportation 455 Airport Road Se Building K Salem, OR 97301-5348	Us26: 111Th Ave - 176Th Ave Contract #: 14574 Hsip-S026(110) East Portland 20,000 tons asphalt paving, 1,000,000 SF asphalt pavement grinding, 65 concrete pedestrian ramps	Mark Beeson (503) 618-6766 mark.r.beeson@odot.state.or.us	3,519,218	11/1/2013
251071	Apollo, Inc. Po Box 7305 Kennewick, WA 99336	Valley Mall Blvd-Interchange Contract #: #7858 / Arra-0822(128) / Tpa Union Gap / Yakima County Roads/Streets	Paul Gonseth WSDOT (509) 577-1810 gonsetp@WSDOT.WA.GOV	4,556,759	4/15/2013
406745	WA Department of Transportation P.O. Box 47420, Olympia, WA 98504-7420	Se12013 Scr Region Wide C Seal Contract #: 8449 South Central Region WA Chip Seal And Paving	Alex Sanguino (509) 222-2402 (509) 222-2400 (F) sn/Aga@wsdot.wa.gov	5,644,683	10/28/2013
388801	Port of Walla Walla 310 A Street Walla Walla, WA 99362-2269	PAS Walla Walla Airport Rehab Contract #: 3-53-0083-28 Walla Walla, Walla Walla County Airport Paving	Port of Walla Walla Jennifer Skoglund 509-783-2144 js@portwallwalla.com	3,341,246	10/28/2013
0018	FL Department of Transportation 11201 N. Malcolm McKinley Drive Tampa, FL 33612	Lee Roy Selmon Contract #: E-7F49 Tampa, FL The project will widen the existing elevated expressway from four lanes to six for approximately a 1.5 mile stretch, crossing 17 city streets. Construction will involve both inside and outside widening, 240 drilled shafts (42" and 48" diameter), redecking a portion of the existing expressway, new barrier walls, new and repurposed beams, tie-in to existing drainage system, and one sign structures.	Rico Lepore (801) 248-9400 (801) 248-9406 (F) leporer@pbworld.com	64,830,629	10/23/2013

Updated: March 2014

AGREEMENT

THIS AGREEMENT is made as of October 21, 2014 and is between RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT (District) and GRANITE CONSTRUCTION COMPANY (Contractor).

IT IS AGREED BY THE PARTIES AS FOLLOWS:

1. The Work. Contractor shall furnish all tools, equipment, apparatus, facilities, labor and material necessary to perform the work for **Project No. 6-0-00163-01, Palm Springs MDP Line 43 and Lateral 43A, Stage 1** of District, in exact conformity with the Contract Documents (identified below) for the Project, subject to such inspection as District deems appropriate and pursuant to orders and instructions, drawings, etc., issued by District in accordance with the Contract Documents.

2. Contract Documents. The Contract Documents for **Project No. 6-0-00163-01, Palm Springs MDP Line 43 and Lateral 43A, Stage 1** of District are: (a) Notice to Contractors; (b) Instructions To Bidders; (c) Contractor's Proposal; (d) Agreement; (e) General Provisions; (f) Special Provisions; (g) Detailed Specifications; (h) Plans; (i) Bid Bond; (j) Performance Bond; (k) Payment Bond; (l) Appendices and any other documents included in or incorporated into the contract documents; (m) Orders, Instructions, Drawings and Plans issued by District during the course of the work in accordance with the provisions of the Contract Documents.

Each of the above-mentioned documents presently in existence are by this reference incorporated herein and each of said documents not now in existence are incorporated herein as of the time of their issuance.

The Bid Bond is exonerated upon execution and delivery to District in a form satisfactory to District, of the following, duly executed by Contractor and also by its Surety as to the Bonds, Agreement, Certificate of Insurance, Payment Bond, and Performance Bond.

3. Bonds - Insurance. Prior to commencement of the work, Contractor must deliver to District and District must approve, a fully executed Performance Bond in the amount of 100% of the estimated contract price, a fully executed Payment Bond in the amount of 100% of the estimated contract price, and fully executed certificates of insurance evidencing the existence of the insurance required by Subsection 8.02 of the General Provisions. The Payment Bond and Performance Bond must be on forms furnished by District.

Should any surety on the Payment Bond or Performance Bond be deemed unsatisfactory by the Board of Supervisors of District, Contractor shall upon notice promptly substitute new Bonds in form satisfactory to District.

4. Contract Price - Payment. Attached hereto, marked Exhibit A and by this reference made a part hereof, is provision for the Contract Price and its payment.

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

By Marion Ashley
Chairman of its Board of Supervisors
Marion Ashley

ATTEST:

KECIA HARPER-IHEM
Clerk of the Board

By Kecia Harper-Ihem
Deputy

FORM APPROVED COUNTY COUNSEL
BY: Neal R. Kipnis DATE 10/6/14
NEAL R. KIPNIS

(Seal)



Granite Construction Company
Contractor

By Jigisha Desai
Jigisha Desai
Title Vice President

(If corporation affix corporate seal)

EXHIBIT A

(To Agreement for Riverside County Flood Control and Water Conservation District's Project No. 6-0-00163-01, Palm Springs MDP Line 43 and Lateral 43A, Stage 1, located in the city of Cathedral City, Riverside County, California.)

Contract Price - Payment - District shall pay Contractor the following sums for the items set forth below in accordance with Contractor's Proposal as accepted by District, which sums shall be paid as provided in the General Provisions and subject to additions and deductions as provided in the Contract Documents.

It is understood that the quantities listed, except for those shown as "Final" or "Lump Sum" are but estimates only and final payment will be based on actual work performed, subject to such adjustments and alterations as elsewhere provided.

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
1.	Mobilization	L.S.	---	---	\$315,000.00
2.	Water Control	L.S.	---	---	5,000.00
3.	Traffic Control	L.S.	---	---	100,000.00
4.	Clearing and Miscellaneous Work	L.S.	---	---	125,000.00
5.	Excavation	C.Y.	20,179	\$13.00	262,327.00
6.	Mass Excavation	C.Y.	12,438	\$7.00	87,066.00
7.	Rock Excavation	C.Y.	700	\$180.00	126,000.00
8.	Asphalt Concrete Excavation	S.F.	17,556	\$1.25	21,945.00
9.	Backfill	C.Y.	8,174	\$23.00	188,002.00
10.	Debris Basin Grading	L.S.	---	---	10,000.00
11.	Controlled Low Strength Material (CLSM) Backfill	C.Y.	820	\$75.00	61,500.00
12.	Leveling Bed Material	C.Y.	826	\$60.00	49,560.00
13.	Trench Safety System and Falsework	L.S.	---	---	50,000.00
14.	Class "A" Concrete, Reinforced Concrete Box	C.Y.	61	\$950.00	57,950.00
15.	Class "A" Concrete	C.Y.	22	\$1,100.00	24,200.00

EXHIBIT contd.

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
16.	Class "A" Concrete, Minor Structures	C.Y.	93	\$900.00	83,700.00
17.	Class "B" Concrete, Miscellaneous	C.Y.	57	\$544.00	31,008.00
18.	1'-8" Floodwall	L.F.	550	\$78.00	42,900.00
19.	8" Floodwall	L.F.	320	\$51.00	16,320.00
20.	Transition Structure No. 1	EACH	1	\$5,250.00	5,250.00
21.	Transition Structure No. 3	EACH	1	\$2,700.00	2,700.00
22.	Junction Structure No. 1	EACH	1	\$3,250.00	3,250.00
23.	Junction Structure No. 3	EACH	9	\$500.00	4,500.00
24.	Manhole No. 2	EACH	2	\$6,000.00	12,000.00
25.	Pressure Manhole No. 2	EACH	2	\$7,500.00	15,000.00
26.	Manhole No. 3	EACH	6	\$3,000.00	18,000.00
27.	66" RCP, 2200D	L.F.	316	\$300.00	94,800.00
28.	66" RCP, 1600D	L.F.	390	\$260.00	101,400.00
29.	60" RCP, 1600D	L.F.	199	\$225.00	44,775.00
30.	42" RCP, 1400D	L.F.	910	\$150.00	136,500.00
31.	30" RCP, 1400D	L.F.	106	\$110.00	11,660.00
32.	24" RCP, Class IV	L.F.	214	\$85.00	18,190.00
33.	18" RCP, Class IV	L.F.	60	\$68.00	4,080.00
34.	Aggregate Base, Class 2	C.Y.	819	\$75.00	61,425.00
35.	Hot Mix Asphalt (HMA) Type A	TONS	1,426	\$102.00	145,452.00
36.	Temporary Resurfacing	TONS	505	\$65.00	32,825.00
37.	Miscellaneous Iron and Steel	LBS.	10,078	\$1.50	15,117.00
38.	Traffic Signal Conduit Relocation	L.F.	350	\$40.00	14,000.00

EXHIBIT contd.

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
39.	Trash Rack	L.S.	---	---	5,500.00
40.	3-Foot Cable Railing	L.F.	22	\$113.00	2,486.00
41.	Block Wall	L.S.	---	---	8,000.00
42.	Remove and Reinstall In-Pavement Flashing Crosswalk System	L.S.	---	---	20,000.00
43.	Install Electric Conduit	L.S.	---	---	35,000.00
44.	Extra Directed Work	L.S.	---	---	200,000.00
45.	Dust Abatement	L.S.	---	---	60,000.00
46.	Stormwater and Non-Stormwater Pollution Control	L.S.	---	---	50,000.00
47.	Non-Stormwater Discharge or Dewatering	L.S.	---	---	506.00
48.	8-Inch Vitrified Clay Pipe (VCP) Sewer Relocation and Laterals	L.S.	---	---	149,000.00
49.	24-Inch CML/C Steel Watermain Relocation	L.S.	---	---	70,000.00
50.	Highway 111 Utility Protection Plan	L.S.	---	---	15,000.00
51.	14' W x 4.5' H PRCB	L.F.	1,244	\$995.00	1,237,780.00
52.	12' W x 3.5' H PRCB	L.F.	248	\$950.00	235,600.00
53.	8.5' W x 5' H PRCB	L.F.	416	\$625.00	260,000.00
54.	5' W x 4' H PRCB	L.F.	420	\$480.00	201,600.00
55.	Dam Outlet Channel	L.S.	---	---	47,000.00
				TOTAL	\$4,995,874.00

Premium: \$23,310.00

PERFORMANCE BOND

Bond Nos.: 82379786 Federal
106121306 Travelers
09137748 F&D

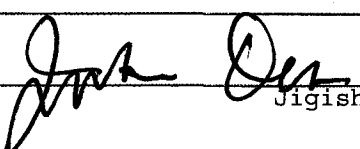

Recitals:

1. Granite Construction Company (Contractor) has entered into an Agreement dated _____ with the Riverside County Flood Control and Water Conservation District (District) for construction of public work known as **Project No. 6-0-00163-01, Palm Springs MDP Line 43 and Lateral 43A, Stage 1.**
2. Federal Insurance Company*, a Indiana** corporation (Surety), is the surety under this Bond.

Agreement: We, Contractor as principal, and Surety as surety, jointly and severally agree, state, and are bound unto District, as obligee, as follows:

1. The amount of the obligation of this Bond is 100% of the estimated contract price for the Project of \$ 4,995,874.00 and inures to the benefit of District.
2. This Bond is exonerated by Contractor doing all things to be kept and performed by it in strict conformance with the Contract Documents for the Project, otherwise it remains in full force and effect for the recovery of loss, damage and expense of District resulting from failure of Contractor to so act. All of said Contract Documents are incorporated herein.
3. This obligation is binding on our successors and assigns.
4. For value received, Surety stipulates and agrees that no change, time extension, prepayment to Contractor, alteration or addition to the terms and requirements of the Contract Documents or the work to be performed thereunder shall affect its obligations hereunder and waives notice as to such matters, except the total contract price cannot be increased by more than 25% without approval of Surety.

THIS BOND is executed as of September 22nd, 2014

<u>Granite Construction Company</u>	<u>Federal Insurance Company</u>
By: <u></u>	By: <u></u>
<u>Jigisha Desai</u>	Type Name <u>Ashley Stinson</u>
Title <u>Vice President</u>	<u>Its Attorney in Fact (Surety)</u>
<u>(Contractor)</u>	



NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledged (attach acknowledgments).

Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Jointly and Severally Liable
**Connecticut, Maryland, respectively

- XX -

ACKNOWLEDGMENT

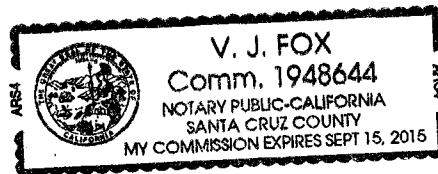
State of California
County of Santa Cruz)

On September 22, 2014 before me, V.J. Fox, Notary Public
(insert name and title of the officer)

personally appeared Jigisha Desai,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.



Signature  (Seal)
V.J. Fox, Notary Public

ACKNOWLEDGMENT

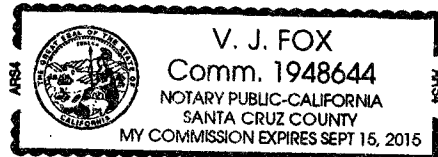
State of California
County of Santa Cruz)

On September 22, 2014 before me, V.J. Fox, Notary Public
(insert name and title of the officer)

personally appeared Ashley Stinson,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.



Signature  (Seal)
V.J. Fox, Notary Public

PAYMENT BOND

(Public Work - Civil Code, Section 3247 et seq.)

The makers of this Bond are Granite Construction Company as Principal and Original Contractor and Federal Insurance Company* a corporation, authorized to issue Surety Bonds in California, as Surety, and this Bond is issued in conjunction with that certain public works contract dated _____, between Principal and Riverside County Flood Control and Water Conservation District (District), a public entity, as Owner, for \$ 4,995,874.00, the total amount payable. THE AMOUNT OF THIS BOND IS 100 PERCENT OF SAID SUM. Said contract is for public work generally consisting of the construction of **Palm Springs MDP Line 43 and Lateral 43A, Stage 1** project. The beneficiaries of this Bond are as is stated in Section 3248 of the Civil Code and the requirements and conditions of this Bond are as is set forth in Sections 3248, 3249, 3250 and 3252 of said Code. Without notice, Surety consents to extension of time for performance, change in requirements, amount of compensation, or prepayment under said contract.

DATED: September 22, 2014

Granite Construction Company
Original Contractor - Principal

Federal Insurance Company
Surety

By: Jigisha Desai
Jigisha Desai

By Ashley Stinson
Its Attorney in Fact

Title Vice President
(If corporation, affix seal)

(Corporate Seal)

*Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Jointly and Severally Liable

STATE OF CALIFORNIA § See Attached Acknowledgment
COUNTY OF _____)



SURETY'S ACKNOWLEDGMENT

On _____ before me personally appeared _____ known to me to be the person whose name is subscribed to the within instrument as attorney in fact of, _____ a corporation, and acknowledged that he subscribed the name of said corporation thereto, and his own name as its attorney in fact.

Notary Public

(Seal)

ACKNOWLEDGMENT

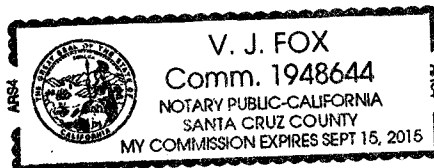
State of California
County of Santa Cruz)

On September 22, 2014 before me, V.J. Fox, Notary Public
(insert name and title of the officer)

personally appeared Jigisha Desai,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.



Signature  (Seal)
V.J. Fox, Notary Public

ACKNOWLEDGMENT

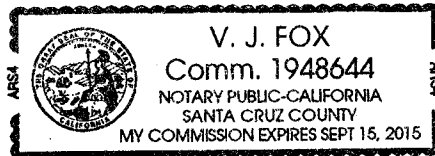
State of California
County of Santa Cruz)

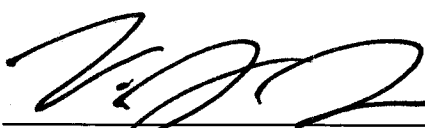
On September 22, 2014 before me, V.J. Fox, Notary Public
(insert name and title of the officer)

personally appeared Ashley Stinson,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.



Signature  (Seal)
V.J. Fox, Notary Public



**Chubb
Surety**

**POWER
OF
ATTORNEY**

**Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company**

**Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059**

Know All by These Presents, That **FEDERAL INSURANCE COMPANY**, an Indiana corporation, **VIGILANT INSURANCE COMPANY**, a New York corporation, and **PACIFIC INDEMNITY COMPANY**, a Wisconsin corporation, do each hereby constitute and appoint **Jigisha Desai, John D. Gilliland, Catherine Gustavson, Kathleen Schreckengost, Ashley Stinson and Lillian Tse of Watsonville, California**

each as their true and lawful Attorney- in- Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business on behalf **GRANITE CONSTRUCTION INCORPORATED** and all Subsidiaries alone or in joint venture as principal, in connection with bids, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation. And the execution of such bond or obligation by such Attorney- in- Fact in the Company's name and on its behalf as surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof, be valid and binding upon the Company.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY** have each executed and attested these presents and affixed their corporate seals on this **18th** day of **July, 2014**.

Dawn M. Chloros, Assistant Secretary

David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

ss.

County of Somerset

On this **18th** day of **July, 2014** before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY**, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY** and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By- Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By- Laws and in deponent's presence.

Notarial Seal



**KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316686
Commission Expires July 16, 2019**

Notary Public

CERTIFICATION

Extract from the By- Laws of **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY**:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys- in- Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

I, Dawn M. Chloros, Assistant Secretary of **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY** (the "Companies") do hereby certify that

- (i) the foregoing extract of the By- Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in American Samoa, Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this **September 22, 2014**



Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@ chubb.com



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In-Fact No. 228138

KNOW ALL MEN BY THESE PRESENTS: That St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc. is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint John D. Gilliland, Jigisha Desai, Kathleen Schreckengost, Catherine Gustavson, Ashley Stinson, and Lillian Tse of the City of Watsonville, State of California, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power of Attorney is limited to bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof for Granite Construction Incorporated and all subsidiaries and affiliates, alone or in joint venture.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 26th day of June, 2014.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut

City of Hartford ss.

By:

Signature of Robert L. Raney, Senior Vice President

On this the 26th day of June, 2014, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2016.



Signature of Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

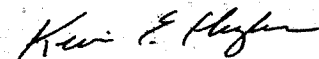
FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this **September 22, 2014**



Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **Geoffrey Delisio, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Jigisha DESAI, Catherine GUSTAVSON, Cynthia P. JOHNSON, Kathleen SCHRECKENGOST, John D. GILLILAND, Ashley STINSON and Lillian TSE**, each its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings, issued on behalf of Granite Construction Incorporated, Watsonville, California and all subsidiaries alone or in a joint venture** and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 1st day of **March**, A.D. 2013.



Geoffrey Delisio

By: _____
Vice President – Geoffrey Delisio

Gerald F. Haley

By: _____
Assistant Secretary – Gerald F. Haley

State of Maryland
County of Baltimore

On this 1st day of **March**, A.D. 2013, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Geoffrey Delisio, Vice President and Gerald F. Haley, Assistant Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn

By: _____
Constance A. Dunn - Notary Public
My Commission Expires: July 14, 2015

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

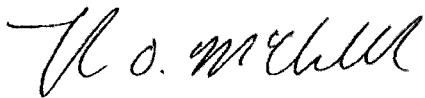
RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies,

This **September 22, 2014**



Thomas O. McClellan, Vice President





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
09/25/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LIC #0G62759 Aon Risk Insurance Services West, Inc. 199 Fremont Street, Suite 1500 San Francisco, CA 94105	1-415-486-7000	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:	FAX (A/C, No):
INSURED GRANITE CONSTRUCTION COMPANY P. O. BOX 50085 Watsonville, CA 95077		INSURER(S) AFFORDING COVERAGE	
		INSURER A: VALLEY FORGE INS CO	NAIC # 20508
		INSURER B: CONTINENTAL CAS CO	20443
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

COVERAGES CERTIFICATE NUMBER: 41584627 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability <input checked="" type="checkbox"/> XCU Hazards GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	X	X	GL 2074978689	10/01/12	10/01/15	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 2,000,000 MED EXP (Any one person) \$ NIL PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 10,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> Contractual	X	X	BUA 2074978692	10/01/12	10/01/15	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB DED RETENTION \$	X		L2068209453	10/01/13	10/01/14	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 9,000,000 FOLLOW FORM \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		X	WC 274978630 WC 274978644 (AOS)	10/01/12 10/01/12	10/01/15 10/01/15	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 2,000,000 E.L. DISEASE - EA EMPLOYEE \$ 2,000,000 E.L. DISEASE - POLICY LIMIT \$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
2250 493091 Riverside County Flood Control and Water Conservation District, Palm Springs MDP Line 43 and Lateral 43A, Stage 1, Project No. 6-0-00163. County of Riverside, City of Cathedral City and Desert Water Agency, its officers, agents, employees and servants are included as additional insured but only with respect to work performed for Riverside County Flood Control and Water Conservation District, Palm Springs MDP Line 43 and Lateral 43A, Stage 1, Project No. 6-0-00163 under this contract or permit.
GL PER ISO FORM CG0001 10/01; AL PER ISO FORM CA0001 03/10

CERTIFICATE HOLDER 2250 493091 Riverside County Flood Control and Water Conservation District Attn: Ed Lotz - Permit Engineer 95 Market Street Riverside, CA 92501 USA	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
--	---

SUPPLEMENT TO CERTIFICATE OF INSURANCE

DATE
09/25/2014

NAME OF INSURED: GRANITE CONSTRUCTION COMPANY



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.
BLANKET ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS
- WITH PRODUCTS-COMPLETED OPERATIONS COVERAGE

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE (OPTIONAL)

Name of Additional Insured Persons Or Organizations
(As required by "written contract" per Paragraph A. below.) The insurance afforded to the additional insured only applies to the extent permitted by law.

Locations of Covered Operations
(As per the "written contract," provided the location is within the "coverage territory" of this Coverage Part.)

- A. Section II - Who Is An Insured** is amended to include as an additional insured:
1. Any person or organization whom you are required by "written contract" to add as an additional insured on this Coverage Part; and
 2. The particular person or organization, if any, scheduled above.
- B. The insurance provided to the additional insured is limited as follows:**
1. The person or organization is an additional insured only with respect to liability for "bodily injury," "property damage," or "personal and advertising injury" caused in whole or in part by:
 - a. Your acts or omissions; or
 - b. The acts or omissions of those acting on your behalf
 in the performance of your ongoing operations specified in the "written contract"; or
 - c. "Your work" that is specified in the "written contract" but only for "bodily injury" or "property damage" included in the "products-completed operations hazard," and only if:
 - (1) The "written contract" requires you to provide the additional insured such coverage; and
 - (2) This Coverage Part provides such coverage.
 2. We will not provide the additional insured any broader coverage or any higher limit of insurance than the least that is:
 - a. Required by the "written contract";
 - b. Described in B.1. above; or
 - c. Afforded to you under this policy.
 3. This insurance is excess of all other insurance available to the additional insured whether on a primary, excess, contingent or any other basis. But if required by the "written contract," this insurance will be primary and non-contributory relative to insurance on which the additional insured is a Named Insured.
 4. The insurance provided to the additional insured does not apply to "bodily injury," "property damage," or "personal and advertising injury arising out of:
 - a. The rendering of, or the failure to render, any professional architectural, engineering, or surveying services, including:
 - (1) The preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and
 - (2) Supervisory, inspection, architectural or engineering activities; or
 - b. Any premises or work for which the additional insured is specifically listed as an



additional insured on another endorsement attached to this Coverage Part.

C. SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS is amended as follows:

1. The **Duties In The Event of Occurrence, Offense, Claim or Suit** condition is amended to add the following additional conditions applicable to the additional insured:

An additional insured under this endorsement will as soon as practicable:

- (1) Give us written notice of an "occurrence" or an offense which may result in a claim or "suit" under this insurance, and of any claim or "suit" that does result;
- (2) Except as provided in Paragraph B.3 of this endorsement, agree to make available any other insurance the additional insured has for a loss we cover under this Coverage Part;
- (3) Send us copies of all legal papers received, and otherwise cooperate with us in the investigation, defense, or settlement of the claim or "suit"; and
- (4) Tender the defense and indemnity of any claim or "suit" to any other insurer or self insurer whose policy or program applies to a loss we cover under this Coverage Part. But if the "written contract" requires this insurance to be primary and non-contributory, this provision (4) does not apply to insurance on which the additional insured is a Named Insured.

We have no duty to defend or indemnify an additional insured under this endorsement until we receive from the additional insured written notice of a claim or "suit."

2. With respect only to the insurance provided by this endorsement, the first sentence of Paragraph 4.a. of the Other Insurance Condition is deleted and replaced with the following:

4. Other Insurance

a. Primary Insurance

This insurance is primary and non-contributory except when rendered excess by endorsement G-140331-C, or when Paragraph b. below applies.

- D. Only for the purpose of the insurance provided by this endorsement, **SECTION V – DEFINITIONS** is amended to add the following definition:

"Written contract" means a written contract or written agreement that requires you to make a person or organization an additional insured on this Coverage Part, provided the contract or agreement:

1. Is currently in effect or becomes effective during the term of this policy; and
2. Was executed prior to:
 - a. The "bodily injury" or "property damage"; or
 - b. The offense that caused the "personal and advertising injury"

for which the additional insured seeks coverage under this Coverage Part.

G-140331-C
(Ed. 10/10)

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Page 2 of 2

Notice of Cancellation

In the event of cancellation or material change that reduces or restricts the insurance afforded by the General Liability Coverage Form, the Company agrees to mail prior written notice of cancellation or material change to the person or organization named in the Schedule.

Schedule

Name: Any person or organization the named insured is required by written contract or agreement to mail prior written notice of cancellation or material change.

Number of days advance notice

10 (or 20 if in Alaska) days notice for non-payment of premium or

60 (or fewer, as required by written contract) days notice for any other reason

Waiver of Subrogation

The Company waives any right of subrogation against any additional insured because of payments the Company makes for injury or damage arising out of operations performed for such additional insured by the named insured but, only if a written contract requires such a waiver.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED CONSTRUCTION PROJECT(S) GENERAL AGGREGATE LIMIT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Project(s):

PROJECTS WHERE REQUIRED BY WRITTEN CONTRACT

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under Coverage A, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard," and for medical expenses under Coverage C regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits."
 3. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.

B. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:

1. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.

C. When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.

D. If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.

E. The provisions of Section III – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

POLICY NUMBER: BUA2074978692
Granite Construction Incorporated
Effective 10-01-12

COMMERCIAL AUTO
CA2048 02 99

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.
DESIGNATED INSURED**

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM
GARAGE COVERAGE FORM
MOTOR CARRIER COVERAGE FORM
TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

SCHEDULE

Name of Person(s) or Organization(s):

Any person or organization whom the named insured is required by written contract to add as an additional insured on this policy.

The coverage afforded to the additional insured shall operate as **primary insurance** only if the written contract requires that this insurance be primary. No other insurance maintained by the additional insured shall be called upon to contribute to a loss hereunder if the written contract requires that such other insurance shall be non-contributory.

The insurance afforded to the additional insured only applies to the extent permitted by law.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to the endorsement.)

Each person or organization shown in the Schedule is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in **Section II** of the Coverage Form.

CA 20 48 02 99

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Waiver of Subrogation

The Company waives any right of recovery the Company may have against the person or organization shown in the Schedule because of payments the Company makes for injury or damage arising out of the named insured's activities under a contract with that person or organization.

Schedule

Name of Person or Organization: Any person or organization with whom the named insured agrees in writing prior to the date of any loss to waive the named insured's right to recover against them.

Notice of Cancellation

In the event of cancellation or material change that reduces or restricts the insurance afforded by the Business Auto Coverage Form, the Company agrees to mail prior written notice of cancellation or material change to the person or organization named in the Schedule.

Schedule

Name: Any person or organization the named insured is required by written contract or agreement to mail prior written notice of cancellation or material change.

Number of days advance notice

10 (or 20 if in Alaska) days notice for non-payment of premium or

60 (or fewer, as required by written contract) days notice for any other reason

Notice of Cancellation

In the event of cancellation or other material change of the Workers' Compensation and Employers' Liability Insurance policy, the insurer will mail advance notice to the person or organization named in the Schedule. The number of days advance notice is shown in the Schedule. This endorsement does not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Name: Any person or organization the employer named in Item 1 of the Information Page is required by written contract or agreement to mail prior written notice of cancellation or material change.

Number of days advance notice:

10 (or 20 if in Alaska) days notice for non-payment of premium or

60 (or fewer, as required by written contract) days notice for any other reason

BLANKET WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT – CALIFORNIA

It is agreed that Part One – Workers Compensation Insurance G. Recovery From Others and Part Two – Employers Liability Insurance H. Recovery From Others are amended by adding the following:

We will not enforce our right to recover against persons or organizations. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

Endorsement Effective: 10/01/12

Policy No. WC274978630 (CA)

Insurance Company: Valley Forge Insurance Co

G-19160-B
(ED. 11/97)

UTAH WAIVER OF SUBROGATION ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Utah is shown in item 3.A of the information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule. Our waiver of rights does not release your employees' rights against third parties and does not release our authority as trustee of claims against third parties.

Schedule

Person or Organization:

Any person or organization for whom the named insured has agreed by written contract prior to date of any loss to furnish this waiver

This endorsement changes the policy to which is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparations of the policy.)

Endorsement Effective: 10/01/12

Policy No. WC 274978644

Insurance Company: Valley Forge Insurance Co.

WC 43 03 05
(Ed. 7-00)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT – ALL OTHER STATES

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Person or Organization:

Any person or organization for whom the named insured has agreed by written contract prior to the date of any loss to furnish this waiver

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated. The information below is required only when this endorsement is issued subsequent to preparation of the policy.

Endorsement Effective: 10/1/12

Policy No. WC274978644

Insurance Company: Valley Forge Insurance Company

Endorsement Effective: 10/1/12

Policy No WC274978658 (NY Only)

Insurance Company: Transportation Insurance Company

WC 000 313
(Ed-4-84)

GENERAL PROVISIONS

GENERAL PROVISIONS

SECTION I - DEFINITION OF TERMS

1.01 Whenever in these specifications, or in any documents or instruments where these specifications govern, the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

(a) DISTRICT: The Riverside County Flood Control and Water Conservation District of the State of California, as created by law, also sometimes referred to as the Flood Control District, or party of the first part.

(b) BOARD OF SUPERVISORS: The Board of Supervisors of the Riverside County Flood Control and Water Conservation District as created by law, also sometimes referred to as the Board.

(c) ENGINEER: The Chief Engineer of the Riverside County Flood Control and Water Conservation District, also sometimes referred to as the Flood Control Engineer, the Chief Engineer, or the General Manager-Chief Engineer, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

(d) LABORATORY: The established laboratory of the Riverside County Road Department or laboratories authorized by the District to test materials and work involved in the contract.

(e) BIDDER: Any individual, firm or corporation submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

(f) CONTRACTOR: The person or persons, copartnership or corporation, private or municipal, who have entered into a contract with the District, as party or parties of the second part or his or their legal representatives.

(g) SUPERINTENDENT: The Executive representative of the Contractor, present on the work at all times during progress, authorized to receive and execute instruction from the Engineer.

(h) PLANS: The official plans, profiles, typical cross sections, general cross sections, working drawings, and supplemental drawings, or exact reproductions thereof, approved by the Engineer, which show the location, character, dimensions and details of the work to be done, and which are to be considered as a part of the contract supplementary to these specifications.

(i) SPECIFICATIONS: The directions, provisions, and requirements contained herein as supplemented by such special provisions, as may be necessary, pertaining to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under the contract. The Special Provisions are specific clauses setting forth conditions

or requirements peculiar to the project under consideration and covering work or materials involved in the proposal and estimate but not satisfactorily covered by these General Provisions. Supplemental agreements or contract change orders are written agreements executed by the Contractor and by the District, covering alterations, amendments or extensions to the project, as hereinafter provided.

(j) CONTRACT: The written agreement covering the performance of the work and the furnishing of labor and materials in the construction of the work. The contract shall include the Notice to Contractors, the Proposal, Plans, Specifications, Special Provisions, and Contract Bonds, also, any and all supplemental agreements or contract change orders amending or extending the work contemplated and which may be required to complete the work in a substantial and acceptable manner.

(k) CONTRACT PRICE: Shall mean either the lump sum, unit price, or unit prices to be named in the contract, or the total of all payments under the contract at the lump sum, unit price, or unit prices, as the case may be.

(l) SURETY OR SURETIES: The bondsmen or party or parties, approved by the Engineer, who may guarantee the fulfillment of the contract by bond, and whose signatures are attached to said bond.

(m) RIGHT OF WAY: The whole right of way which is reserved for and secured for use in constructing the improvement.

(n) THE WORK: All the work specified in the Special Provisions, proposal and contract, or indicated on the plans as the contemplated complete improvement covered by the contract.

1.02 Wherever in the specifications or upon the plans the words directed, required, permitted, ordered, designated, prescribed, or words of like import are used, it will be understood that the direction, requirements, permission, order, designation, or prescription of the Flood Control Engineer is intended, and similarly the words approved, acceptable, satisfactory, or words of like import, shall mean approved by, or acceptable to, or satisfactory to, the Flood Control Engineer, unless otherwise expressly stated.

SECTION II - SCOPE OF WORK

2.01 WORK TO BE DONE

It is the intent of these General Provisions, Special Provisions, Detailed Specifications, and the plans herein referred to, to provide for and include all labor, power, light, water, materials, tools, scaffolding, machinery, plant transportation, insurance, permits, bonds, temporary protection, watchmen, and superintendence necessary to construct and complete all work, and to furnish all materials included in the contract, except those furnished by the District and as specifically mentioned in these specifications.

The contract documents are complementary, and the work called for by any one shall be as binding as if called for by all.

2.02 CONSTRUCTION SCHEDULE

The Contractor shall submit at such times as may be requested by the Engineer, a schedule which shall show the order and dates in which the Contractor proposes to carry on the various parts of the work; including estimated completion dates.

2.03 DRAWINGS AND SPECIFICATIONS ON THE WORK

The Contractor shall keep one copy of all drawings and specifications on the work, in good order, available to the Engineer and his representatives.

2.04 ESTIMATE OF QUANTITIES

The quantities of work to be done and the materials to be furnished under this contract are approximate only. The District is not to be held responsible for the accuracy of the estimate of quantities.

The Contractor shall judge for himself, after considering all circumstances and conditions, the costs and quantities of materials involved in the contract. The Contractor shall not at any time assert that there was any misunderstanding in regard to the depth or class of the excavations to be made, or the nature or kind or amount of materials to be furnished for the work.

The Contractor herewith agrees that he will not ask, demand, sue for, or seek to recover, for compensation in excess of the amounts payable for the various unit costs or lump sum charges for the work, as stipulated in the proposal, which he actually performs as specified.

2.05 PROTESTS

If the Contractor considers any work demanded of him to be outside of the requirements of the contract, or considers any record or ruling of the Engineer to be unfair, he shall immediately, upon such work being demanded or such record or ruling being made, ask, in writing, for written instructions covering protested items of work. Immediately on receipt of written instructions from the Engineer he shall proceed without delay to diligently perform the work in conformance with the written record or ruling. Within ten (10) calendar days after date of receipt of the written instructions or ruling, the Contractor shall file a written protest with the Engineer stating clearly and in detail the basis of his protest. Except for such protests as are made of record in the manner herein specified and within the time limit stated, the records, rulings, instructions, or decisions of the Engineer shall be final and conclusive.

2.06 ALTERATIONS

It must be distinctly understood that such reasonable alterations and modifications may be made by the Chief Engineer, as may be deemed desirable, and that this may be done without notices to the Sureties on the Contractor's bonds. If such changes result in increased or decreased quantities under the items specified in the proposal, the Contractor will be paid on the basis of actual quantities as measured by the Engineer, and such changes shall not affect the unit prices bid by the Contractor. If, however, such changes result in delay to the work, the

Contractor will be given such extension of time on the completion of his contract as the Chief Engineer may deem equitable.

2.07 EXTRA WORK

A. General

The District reserves and shall have the right, when confronted with unpredicted conditions, unforeseen events, or emergencies, to revise the details of the contemplated work, or to add work of a different character or function and have the Contractor perform such revised or added work as "Extra Work", when such extra work is considered by the Chief Engineer to be virtually appurtenant to the satisfactory completion of the project.

"Extra Work" is defined as added work of a different character or function and for which no basis for payment is prescribed; or that involving revisions of the details of the work in such manner as to render inequitable payment under items upon which the Contractor bid; or that work which is indeterminate at the time of advertising and is specifically designated as extra work in the plans and Special Provisions.

The signing of the contract by the Contractor will be deemed to be an agreement on his part to perform extra work, as and when ordered by the Chief Engineer. Notice to the Sureties on the Contractor's bonds will not be given unless the estimated total value of the contract, as changed or supplemented, shall exceed the original total bid price by more than 25 percent.

If required extra work results in delay to the work, the Contractor will be given an equivalent extension of time.

Approval of extra work shall be obtained from the Board of Supervisors before such work is authorized to be done, if:

- a. For contracts with a total contract price of \$250,000 or less, a change due to extra work exceeds ten percent (10%) of the original contract amount; or
- b. For contracts with a total contract price of more than \$250,000, a change due to extra work exceeds \$25,000 plus one percent (1%) of the original contract amount in excess of \$250,000; or
- c. An individual change exceeds \$100,000; or
- d. Cumulative contract changes exceed ten percent (10%) of the original contract amount.

Extra work specially authorized by the Board of Supervisors shall not be included in the cost limitations above stated.

B. Procedure for Extra Work

1. Upon decision of the District to have extra work performed, the Chief Engineer will so inform the Contractor, acquainting him with the essential details of the new work. The Contractor shall thereupon prepare a price for said work based upon his estimate of cost and submit said price and estimate to the Chief Engineer whose approval shall be secured before work is started; excepting that the Chief Engineer may, when in the best interest of the District, order the Contractor to proceed with the extra work in advance of the submission of such prices, provided that preliminary estimates, as made by the District, show that the cost will not exceed \$1,000.

2. Prices for extra work shall be prepared by the Contractor on one or both of the following methods, as requested by the District, and submitted to the Chief Engineer for approval:

a. For a stated unit price or lump sum amount based upon current prevailing fair prices for materials, labor, plant, overhead and profit.

b. On a cost basis (force account by the Contractor). The cost of all work done by the Contractor will be computed in the manner described in Section 7.03, and the compensation thus provided shall be accepted as payment in full by the Contractor, and no additional payment will be allowed for the use of small tools, superintendent's services, timekeeper's services, pickup or yard trucks, except as specifically essential to the work, nor any other overhead expenses incurred in the prosecution of the force account work.

3. Upon receipt of the Contractor's price, the Chief Engineer will make an analysis thereof and adopt one of the following procedures:

a. Accept the Contractor's price for lump sum or unit price amount in the original or amended form and direct him to proceed with the work; or direct him to perform the work on a cost plus basis.

b. Have the work performed by District's forces or separate contract, without undue interference or hindrance to the Contractor and without claim or suit by the Contractor for damages on account thereof.

c. Direct the Contractor to proceed with the work and accept payment therefor in the amount as adjudicated later in a court of law.

2.08 PAYMENT FOR EXTRA WORK

At the end of each month the Contractor shall make and deliver to the Chief Engineer a statement of the cost of the extra work completed during the current month, itemized and in a form satisfactory to the Chief Engineer. Upon verification of said statement by the Chief Engineer, the Contractor's claim for the full amount, as shown on said statement, will be added to the monthly partial payment made in accordance with Paragraph 7.06 of the General Provisions.

2.09 RIGHTS OF WAY

The District shall provide the rights of way upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his material, together with right of access to same. The District will not be responsible for any delay in furnishing the rights of way and such delay shall not be made the basis for a claim for additional compensation by the Contractor. However, in case the failure of the District to furnish the required rights of way delays the prosecution of the work, the time allowed for completion will be extended by a period of time equal to that lost by the Contractor due to such delay.

2.10 CLEANING UP

The Contractor shall, as directed by the Engineer, remove from the District's right of way and from all public and private property, at his own expense, all temporary structures, rubbish and waste materials resulting from his operations.

SECTION III - CONTROL OF THE WORK

3.01 AUTHORITY OF THE ENGINEER

The Engineer shall have general supervision and direction of the contract under authority of the Board of Supervisors. He has the authority to stop the work whenever such stoppage may be necessary to ensure the proper execution of the contract. The Engineer shall decide all questions which may arise as to the quality or acceptability of materials furnished, work performed, and rate or progress of the work; all questions which may arise as to the interpretation of the plans and specifications; all questions as to the acceptable fulfillment of the contract on the part of the Contractor; and all questions as to compensation.

His determination and decision thereon shall be final and conclusive; and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

3.02 DETAIL DRAWINGS

The approved plans shall be supplemented by such working drawings as are necessary to control the work adequately. All authorized alterations affecting the requirements and information given on the approved plans shall be in writing. No changes shall be made of any plan or drawing after the same has been approved by the Engineer, except by his direction.

It is expressly understood, however, that approval by the Engineer of the Contractor's working drawings does not relieve the Contractor of any responsibility for accuracy of dimensions and details. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of his working drawings with the approved plans and specifications.

Full compensation for furnishing all working drawings shall be considered as included in the prices paid for the various contract items of work, and no additional allowance will be made therefor.

3.03 CONFORMITY WITH PLANS AND ALLOWABLE DEVIATIONS

Finished surfaces in all cases shall conform with the lines, grades, cross-sections, and dimensions shown on the approved plans. Deviations from the approved plans and working drawings, as may be required by the exigencies of construction, will in all cases be determined by the Engineer and authorized in writing.

3.04 INTERPRETATION OF PLANS AND SPECIFICATIONS

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications and the Special Provisions, the Contractor shall apply to the Engineer for such further explanations as may be necessary and shall conform to the same part of the contract, so far as may be consistent with the original specifications; and in the event of any doubt or questions arising respecting the true meaning of the specifications; reference shall be made to the Engineer, whose decision thereon shall be final.

In the event of any discrepancy between any drawings and the figures written thereon, the figures shall be taken as correct. The Contractor will not be allowed to take advantage of errors and omissions in the drawings and specifications. When errors or omissions are found, they will be corrected or supplied by the Engineer.

3.05 SUPERINTENDENCE

The Contractor shall keep on his work, continually during its progress, a competent Superintendent responsible for the construction of the work, and any necessary assistants; all satisfactory to the Engineer. The Superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor. Important directions shall be confirmed in writing to the Contractor. Other directions shall be so confirmed on written request in each case.

3.06 LINES AND GRADES

The Contractor shall provide reasonable and necessary opportunities and facilities for setting points and making measurements. He shall not proceed until he has made timely demand upon the Engineer for, and has received from him, such lines and grades as may be necessary as the work progresses. The work shall be done in strict conformity with such lines and grades.

The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

3.07 INSPECTION OF WORK

The Engineer and his representatives shall at all times have access to the work during its construction, and shall be furnished with every reasonable facility for ascertaining that the stock and materials used and employed, and the workmanship, are in accordance with the requirements and intentions of these specifications. All work done and all materials furnished shall be subject to the Engineer's inspection and approval to ensure design objectives.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contracts as prescribed, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such defective work and materials have been previously overlooked by the Engineer and accepted or estimated for payment.

3.08 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

All work which has been rejected shall be remedied, or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed him for such removal or replacement. Any work done beyond the lines and grades shown on the plans or established by the Engineer, or any extra work done without written authority, will be considered as unauthorized and will not be paid for. Work so done may be ordered removed at the Contractor's expense. Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to cause defective work to be remedied, or removed and replaced, and unauthorized work to be removed and to deduct the costs for this work from any monies due or to become due the Contractor.

3.09 EQUIPMENT AND PLANT

Equipment not suitable to produce the quality of work required will not be permitted to operate on the project. Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity and of such character to ensure the production of sufficient material to carry the work to completion within the time limit.

The Contractor shall provide adequate and suitable equipment and plants to meet the above requirements and, when ordered by the Engineer, shall remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants. No worn or obsolete equipment shall be used, and in no case shall the maker's rating of the capacity for any equipment be exceeded.

All vehicles used to haul materials over existing highways shall be equipped with pneumatic tires.

3.10 FINAL INSPECTION

The Engineer will not make the final inspection until the work provided for and contemplated by the contract has been completed and the final cleaning up performed.

SECTION IV - CONTROL OF MATERIAL

4.01 DISTRICT FURNISHED MATERIALS

The Contractor shall furnish all materials required to complete the work, except those specified in the Special Provisions to be furnished by the District. Materials furnished by the District will be delivered to the Contractor at the points specified in the Special Provisions.

The Contractor will be held responsible for all materials so delivered to him, and deductions will be made from any monies due him to make good any shortages and deficiencies,

from any cause whatsoever, which may occur after such delivery, or for any demurrage charges due to delinquency in unloading.

4.02 SOURCE OF SUPPLY AND QUALITY OF MATERIALS

At the option of the Engineer the source of supply of each of the materials shall be approved by him before the delivery is started. Only materials conforming to the requirements of these specifications and approved by the Engineer shall be used in the work. All materials proposed for use may be inspected or tested at any time during their preparation and use. If, after trial, it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. No material which, after approval, subsequently becomes unfit for use shall be used in the work.

4.03 SAMPLES AND TESTS

All tests of materials furnished by the Contractor shall be made by the District in accordance with commonly recognized standards of national organizations, and such special methods and tests as are in use at the District's approved laboratory and described in the Detailed Specifications.

Field tests of materials will also be made by the Engineer when deemed necessary and these tests shall be made in accordance with standard practices of the District.

The Contractor shall furnish such samples of all materials as are requested by the Engineer without charge. No material shall be used until it has been approved by the Engineer. Samples will be secured and tested whenever necessary to determine the quality of the material.

Promptly after the approval of the contract, the Contractor shall notify the Engineer of the proposed sources of supply of all materials to be furnished by him, using a form which will be supplied by the Engineer upon request.

Whenever reference is made in these specifications to standard tests or requirements of the laboratory of the District, the American Society for Testing Materials, the American Railway Engineering Association, or the American Association of State Highway Officials, the reference shall be construed to mean the standards that are in effect at the date of these specifications with subsequent amendments, changes, or additions as thereafter adopted and published by the organization referred to.

4.04 STORAGE OF MATERIALS

Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary by the Engineer, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. They shall be placed under cover when so directed. Stored materials shall be so located as to facilitate prompt inspection.

4.05 DEFECTIVE MATERIALS

All materials not conforming to the requirements of these specifications shall be considered as defective and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work unless otherwise permitted by the Engineer. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the Engineer. Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

4.06 ASSIGNMENT OF CLAIMS

In submitting a bid on this public works project, or any subcontractor agreeing to supply goods, services, or materials, and entering a contract pursuant thereto, the Contractor and/or subcontractor do offer and agree to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

SECTION V - LEGAL RELATIONS AND RESPONSIBILITY

5.01 LAWS TO BE OBSERVED

(a) Compliance with Applicable Law. Reference to and/or incorporation into the Contract Documents of a particular law, statute, ordinance, rule or regulation is not, nor is it intended to be, a definitive statement of the law applicable to the Contract Documents and the accomplishment of the work. Contractor must keep informed as to all such applicable law - Federal, State, County, Municipal, District - as it affects the conduct of the work and comply with such law, including, but not limited to, having requisite licenses, obtaining necessary permits, paying necessary fees and taxes, posting notices and installing, operating and maintaining safety precautions and facilities. It is likewise Contractor's responsibility to see to it that his subcontractors also fully comply with such applicable law.

If at any time Contractor is of the opinion that there is a discrepancy or inconsistency in the plans, drawings, specifications or other Contract Documents, he shall immediately cease work involving such alleged discrepancies or inconsistencies and report the same in writing to the Chief Engineer and shall not proceed with such work until ordered so to do, and in the manner instructed by the Chief Engineer.

Contractor shall protect and defend District, its officers, agents and employees against any claim or liability arising from or based upon any alleged violation of such applicable law. See also Subsection 8.02.

(b) Labor Code - Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here set forth in full. The parties recognize that said Chapter 1 deals with, among other things, discrimination, penalties and forfeitures, their disposition and enforcement, wages, working hours and securing workers' compensation insurance and directly affect the method of prosecution of the work by Contractor and subject it under certain conditions to penalties and forfeitures. Execution of the Agreement by the parties constitutes their agreement to abide by said Chapter 1. Their stipulation as to all matters which they are required to stipulate as to by the provisions of said Chapter 1, constitutes Contractor's certification that it is aware of the provisions of said Chapter 1 and will comply with them and further constitutes Contractor's certification as follows: "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract." Contractor and its subcontractors shall comply with the provisions of S1777.5 of the Labor Code regarding apprentices.

Contractor shall post at each job site during the course of the work a copy of County's "Determination of Prevailing Wage Rates", copies of said Determination are available from County for this purpose.

(c) Equal Employment Opportunity

General - Contractor shall not discriminate in its recruiting, hiring, promotion, demotion or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age or physical handicap in the performance of this Contract and shall comply with the provisions of the Government Code Section (commencing with §12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), as amended, and all administrative rules and regulations issued pursuant to said Acts and Order. See particularly 41 Code of Federal Regulation (CFR) Chapter 60.

Contractor shall require each of its subcontractors to comply with the preceding paragraph and shall include in each subcontract language similar to the preceding paragraph.

Contractor shall permit access to its records of employment, employment advertisement, application forms and other pertinent data and records by Owner and any state or federal agency having jurisdiction for the purpose of investigation to ascertain compliance with this Section.

Owner may assign an affirmative action representative to monitor Contractor and its subcontractor(s) conduct required by this Section, including the right of entry to the construction site for the purpose of obtaining information from persons performing work on the project providing such inspection does not interfere with the progress of the work.

Elsewhere in the Contract Documents specific requirements may be contained covering the same subject matter of this Section. If so, such specific requirements prevail over this Section in case of conflict.

Transactions of \$10,000 or under - Contracts and subcontracts not exceeding \$10,000 are exempt from the requirements of this Section. No Contractor or subcontractor shall procure supplies and/or services in less than usual quantities to avoid applicability of this Section. With respect to contracts and subcontracts for indefinite quantities, this Section applies unless the amount required in any one year under such contract will reasonably be expected not to exceed \$10,000.

Transactions in Excess of \$10,000 but less than \$50,000 - At Owner's request, Contractor shall certify that it has in effect an affirmative action plan and agrees to comply with all state and federal laws and regulations regarding Fair Employment Practices. Contractor shall maintain a written copy of its affirmative action plan and furnish Owner a copy of the plan upon request. Owner may require Contractor to complete an Affirmative Action Compliance Report, on a form furnished by Owner, setting forth definite goals during the term of this contract.

Transactions of \$50,000 or more - If Contractor has 50 or more employees and a contract for \$50,000 or more, it shall develop and submit to Owner, within 30 days after award, a written affirmative action compliance program providing in detail specific steps to guarantee equal employment opportunity. Contractor shall include in its affirmative action program a table of job classifications, which table shall include but need not be limited to job titles, duties and rates of pay.

Contractor shall in each subcontract let to do a portion of the work covered hereunder, where the subcontractor involved has 50 or more employees and the subcontract is for \$50,000 or more, impose in the subcontract the above requirements.

For the purpose of determining the number of employees, the average of the Contractor's or its subcontractor's employees for the 12 month period immediately prior to award, or the total number of employees Contractor or its subcontractor will have when performing this contract, whichever is higher, shall be used.

Federally Assisted Construction - If this project is a Federally assisted construction project, then the contract provisions contained 41 CFR S60-1.4(b) are incorporated herein and Contractor shall likewise incorporate said provisions in each subcontract entered into by Contractor to perform the work. Federally assisted construction is identified as such in the Notice Inviting Bids.

(d) Registration of Contractors - In order to be considered a prospective bidder must be licensed in accordance with Division 3, Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(e) Accident Prevention - Particular attention shall be given to relevant Division of Industrial Safety Construction and Electrical Safety Orders. Said Orders are contained in Title 8 of the California Administrative Code, Chapter 4, Subchapters 4 and 5. Specific attention shall be taken of the California Occupational Safety and Health Act of 1973 (commencing with Section 6300 of the Labor Code) and the Federal Occupational Safety and Health Act of 1970 (P.L. 91-596) and rules and regulations issued pursuant to said Acts. Specific reference is made to Article 6 of said Construction Safety Orders. Contractor shall submit to Engineer, who will

accept in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping of the sides of trenches, or other provisions to be made for protection of personnel during earthwork operations. In event the Contractor's plan does not conform with the shoring system requirements of Article 6, the Contractor's proposed shoring design shall be prepared and signed by a civil or structural engineer registered in the State of California.

The Contractor shall also impose the foregoing requirements on all subcontractors involved and enforce compliance therewith.

The duties here set forth are nondelegable by Contractor who shall protect and defend District, its officers, agents and employees in connection therewith. See Subsection 8.02.

5.02 CONTRACTOR'S RESPONSIBILITY

Contractor is under the absolute duty in fulfilling its contractual obligations hereunder to proceed, and cause its subcontractors to proceed, in a safe, workmanlike manner, with adequate safeguards for the protection of the public, the workmen and persons from time to time inspecting the work. If at any time Contractor finds any of its subcontractors are allowing work to proceed in an unsafe manner and contrary to the intent of these Contract Documents, Contractor shall immediately cause such action to stop and immediately take all action necessary to protect workmen, inspectors and the general public and cause the work to proceed in a safe manner.

Contractor shall protect and defend District, its officers, agents and employees in reference to acts or omissions contrary to the above. See particularly Subsection 8.02.

District may withhold funds otherwise due Contractor whenever, in its judgment, this subsection is not being complied with.

5.03 CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the formal acceptance of the work by the District, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the nonexecution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expense thereof, except for such injuries or damages as are occasioned by acts of the Federal Government and the public enemy. In case of suspension of work from any cause whatever, the Contractor shall be responsible for all materials and shall properly store them if necessary and shall erect temporary structures where necessary.

5.04 PROPERTY RIGHTS IN MATERIALS

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil. All such materials shall become the property of the District upon being so attached or affixed.

5.05 PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

5.06 ROYALTIES AND PATENTS

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated on the work, and agrees to indemnify and save harmless the Riverside County Flood Control District, the Board of Supervisors, the Flood Control Engineer, and their duly authorized representatives, from all suits at law, or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

5.07 SANITARY PROVISIONS

Necessary conveniences, properly secluded from public observation shall be provided by the Contractor where needed for the use of laborers on the work. Their location, construction and maintenance shall be subject to the approval of the Engineer, and their use shall be strictly enforced. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the State Department of Health or other authorities having jurisdiction.

5.08 PUBLIC SAFETY

The Contractor at his own expense shall furnish, erect, and maintain such fences, barriers, lights, and signs as are necessary to give adequate warning to the public at all times that the bridges, culverts, and work along public highways are under construction; and of any dangerous conditions to be encountered as a result thereof; and he shall erect such warning and directional signs and employ such flagmen as are required and maintain same throughout the construction period.

Full compensation for the work involved in carrying out the precautionary measures above specified shall be considered as included in the prices paid for the various contract items of work and no additional allowance will be made therefor.

5.09 USE OF EXPLOSIVES

When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property.

All explosives shall be stored in accordance with the provisions of Division II, Part I, Chapter 3, of the Health and Safety Code of the State of California.

5.10 PROVISIONS FOR EMERGENCIES

Unusual conditions may arise on the work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect the public from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service, or from the failure of partly completed work.

Whenever work is undertaken pursuant to the above provisions, Contractor shall promptly file with District a verified report setting forth the nature of the emergency and the action taken by the Contractor by reason of the emergency.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever, in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private, personal or real property interests, or prevent likely loss of human life or damage on account of the operations under the contract, then and in that event the Engineer may provide suitable protection to said interests by causing such work to be done and material to be furnished as, in the opinion of the Engineer, may seem reasonable and necessary.

The cost and expense of all such emergency work shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefor, duly certified by the Engineer, then said cost and expense will be paid by the District and shall thereafter be deducted from any amounts due, or which may become due said Contractor. Failure of the District, however, to take such precautionary measures, shall not relieve the Contractor of his full responsibility for public safety.

5.11 UNFORESEEN DIFFICULTIES

All loss or damages, except as noted in Section 8.03, arising out of the nature of the work to be done under the contract, or from any unforeseen obstructions or difficulties which may be encountered during the progress of the work and in the prosecution of the same, or from the action of the elements, or from encumbrances in the line of work, shall be sustained by the Contractor.

5.12 ACCESS TO THE WORK

Access to the work from existing roads shall be provided by the Contractor at his expense and maintained in a manner so as not to create a public nuisance. The Board of Supervisors, Flood Control District and Engineer assume no responsibility for the condition or maintenance of any existing road or structure thereon that may be used by the Contractor for performing the work under these specifications and for traveling to and from the site of the work. No direct payment will be made to the Contractor for constructing temporary roads used for construction operations or for improving, repairing, or maintaining any existing road or structure thereon that may be used by the Contractor for performance of the work under these specifications. The cost of all work described in this paragraph shall be included in the prices bid in the schedule for other items of construction work.

5.13 GUARANTEE OF WORK

All work is guaranteed by Contractor for a period of one year from the recordation of the Notice of Completion against defects resulting from the use of inferior materials, equipment, or workmanship. Upon notice from District, Contractor shall promptly remedy such defects at his expense, including payment to District of its expenses in connection with remedying such defects, otherwise District shall proceed to remedy such defects and Contractor shall upon demand reimburse District for its expenses in connection therewith.

The above one year guarantee is in addition to any specific guarantee(s) provided for elsewhere in the Contract Documents.

5.14 DAMAGES BY ACT OF GOD

If the construction of the project herein is damaged, which damage is determined to have been proximately cause by an act of God, in excess of 5% of the contract amount, provided that the work damaged is built in accordance with applicable building standards and the plans and specifications, then the District, may, without prejudice to any other right or remedy, terminate the contract.

SECTION VI - PROSECUTION AND PROGRESS

6.01 PROGRESS OF THE WORK

The Contractor shall begin the work within ten (10) calendar days after the date of the receipt by him of notice to proceed from the Chief Engineer and shall diligently prosecute the same to completion within the time limit provided in the Special Provisions.

6.02 OVERTIME WORK AND WORK AT NIGHT

It is intended that the Contractor prosecute the work on a five (5) day, forty (40) hour work week with no work on legal holidays. If the Contractor feels it is necessary to work more than the normal 40 hour work week, he will make a written request for permission from the Engineer, outlining the reasons for such request. The decision of granting permission for overtime work shall be made by the Engineer and shall be final. A condition will be imposed on the granting of a request to work overtime, requiring the Contractor to pay the District the cost incurred at overtime rates for additional inspection and engineering time required in connection with the overtime work.

When any work is performed at night, only such classes of work shall be done as can be properly inspected. Adequate light must be provided for the safety of the men and for proper inspection.

6.03 SUBCONTRACTING

Reference is made to the Subletting and Subcontracting Fair Practice Act contained in the Public Contract Code (commencing §4100). By this reference, said Act is incorporated herein with like effect as if it were here set forth in full and the parties shall abide by its terms and substitution shall be only as allowed by that Act.

Contractor shall be responsible for the acts and omissions of its subcontractors and shall make certain that at all times its subcontractors comply with the terms of the Contract Documents and applicable law insofar as such compliance relates to the work.

District reserves the right to approve all subcontractors whether or not they are required to be listed in the Contractor's Proposal. As used in this Section "subcontractor" includes any person who fabricates or manufactures any article for incorporation into the work whether or not they install or test after installation or contract to install or test after installation, but does not include suppliers of fungible goods for incorporation into the work unless such supplier also installs or tests or contracts to install or test.

The Contractor shall give his personal attention to the fulfillment of the contract and shall keep the work under his control. The Contractor shall perform with his own organization work of a value amounting to not less than 60 percent of the remainder obtained by subtracting from the total original contract value the sum of any item designated herein or in the Special Provisions as Specialty Items. The furnishing and placing of reinforcing steel, when placing is performed by the supplier, will be considered as a Specialty Item for this purpose; however, he shall be designated in the list of subcontractors. The value of the work subcontracted will be based on the contract item bid price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

Where a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the District, the subcontractor shall be removed immediately on the requisition of the Engineer and shall not again be employed on the work.

6.04 CHARACTER OF WORKMEN

If any subcontractor or person employed by the Contractor shall fail or refuse to carry out the directions of the Engineer or shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the requisition of the Engineer, and such person shall not again be employed on this work.

6.05 TEMPORARY SUSPENSION OF THE WORK

The Engineer shall have the authority to suspend the work wholly or in part, for such period as he may deem necessary, due to unsuitable weather, or to such other conditions as are

considered unfavorable for the suitable prosecution of the work, or for such time as he may deem necessary due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the contract. The Contractor shall immediately comply with the written order of the Engineer to suspend the work wholly or in part. The work shall be resumed when conditions are favorable and methods are corrected, as ordered or approved in writing by the Engineer.

6.06 TIME OF COMPLETION AND DAMAGES

The Contractor shall complete the work called for under the contract in all parts and requirements within the number of working days specified in the Special Provisions.

A working day is hereby defined as any day; except Saturdays, Sundays, and legal holidays and days on which the Contractor is specifically required by the Special Provisions to suspend construction operations; on which the Contractor is not prevented by inclement weather or conditions resulting immediately therefrom adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 60 percent of the normal labor and equipment force engaged in such operation or operations for at least five hours toward completion of such operation or operations.

The Engineer will furnish the Contractor a weekly statement showing the number of working days charged to the contract for the preceding week, the number of working days specified for completion of the contract, and the number of working days remaining to complete the contract. The Contractor will be allowed one week in which to file a written protest setting forth in what respects said weekly statement is incorrect, otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

The following holidays will be considered as legal holidays: New Year's Day; Martin Luther King Jr.'s Birthday, Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Columbus Day; Veteran's Day; Thanksgiving Day; Christmas; and such other days as are declared holidays by ordinance passed by the Board of Supervisors of Riverside County.

Contractor acknowledges that failure to perform in strict accordance with the Contract Documents and within the time limit specified in the Special Provisions will cause District to suffer special damages in addition to cost of completion of the work in accordance with the provisions of the Contract Documents. Such special damage could include, but is not limited to, lease and rental cost, additional salaries and overhead, interest during construction, attorney expense, additional engineering, inspection expense, cost of maintaining or constructing alternate facilities and injury to the property of the District or others. The daily cost to the District for inspection and superintendence by the District shall be the amount specified in the Special Provisions. The District may withhold from any money due or that may become due the Contractor under the contract, such amount as the District may elect to offset the damages incurred and any withholding or failure to withhold shall not in any way limit recovery for damages actually incurred.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the Board of Supervisors shall have the right to extend the time for completion or not, as may seem best to serve the interest of the District, and if it decides to extend the time limit for the completion of the contract, it shall further have the right to charge to the Contractor, his heirs, assigns or sureties and to deduct from the final payment for the work all or any part, as it may deem proper, of the actual cost of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the contract, and which accrue during the period of such extension, except that cost of final surveys and preparation of final estimate shall not be included in such charges.

The Contractor shall not be assessed damages nor the cost of engineering and inspection during any delay in the completion of the work caused by acts of God or of the public enemy, acts of the District, encountering unknown utility facilities, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather or delays of subcontractors due to such causes, provided that the Contractor shall notify the Engineer in writing of the causes of delay within ten (10) days from the beginning of any such delay, and his findings of the facts thereon shall be final and conclusive. Contractor shall not be assessed damages for delay in the completion of the project, when such delay was caused by the failure of the District or the owner of the utility facilities.

The term "severe weather" shall be construed to mean only such weather as is unreasonable or extraordinary and in the opinion of the Engineer, the work could not be prosecuted by the Contractor during the period throughout which such weather prevailed.

6.07 DELAYS AND EXTENSION OF TIME

If delays are caused by unforeseen causes beyond the control of either the Contractor or the District, such as war, strikes, fire, floods, or other action of the elements, such delays will entitle the Contractor to an equivalent extension of time for the completion of the contract, but the Contractor shall not be entitled to damages or additional payments over and above the contract price due to delay caused by any of the above-mentioned causes. Furthermore, if the Contractor suffers any delay caused by the failure of the District to furnish the necessary right of way or materials agreed to be furnished by it, or by failure to supply necessary plans or instructions concerning the work to be done after written request therefor has been made, the Contractor shall be entitled to an extension of time equivalent to the time lost for any of the above-mentioned reasons, but shall not be entitled to any damages for such delay.

6.08 ASSIGNMENT

The contract may be assigned only upon written consent of the District. Such written consent to sublet, assign or otherwise dispose of any portion of the contract, shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

6.09 TERMINATION OF CONTRACT

Subject to all applicable provisions of these specifications and/or the contract to be entered into hereunder, the Engineer is hereby empowered to direct the time and rate of delivery of materials at the site of work and to direct the time, rate and sequence of work. If the Contractor fails to begin delivery of material and equipment or to commence work within the

time specified herein, and/or in the contract, or to maintain the rates of delivery of materials, or to execute the work in the manner and at such locations as directed by the Engineer, or fails to maintain a program of work in such a manner as will, in the judgment of the Engineer inure to interests of the District, or, if in the judgment of the Engineer, the Contractor is not carrying out the provisions of the contract in their true intent and meaning, written notice by the Chief Engineer may be served upon him and the Surety on his faithful performance bond demanding a satisfactory compliance with the contract, and with these specifications. If the Contractor and/or his Surety refuses or neglects to comply with such notice within five (5) days after receiving same, or after commencing so to do, fails to continue so to do, or has assigned or sublet the contract without the consent of the District, then the District may exclude him from the premises and take possession thereof, together with all material and equipment thereon, and may complete the work itself, either by force account or by letting the unfinished portion of the work to another Contractor or by a combination of such methods. In any event, the cost of the completion of said work shall be a charge against the Contractor and his Surety and may be deducted from any money due or becoming due from the District, and if the sums due under the contract are insufficient, said Contractor and/or his Surety shall pay to the District within five (5) days after the completion of the work all of such cost in excess of the contract price.

The Surety, in the event that it assumes part of the work, shall take the Contractor's place in this contract in all respects for that part and shall be paid by the District for all work performed by it in accordance with the terms of this contract. If the Surety assumes the entire contract, all monies remaining due the Contractor at the time of his default shall be made payable to the Surety as the work progresses, subject to the terms of the contract.

SECTION VII - PAYMENT

7.01 SCOPE OF PAYMENTS

The Contractor shall accept compensation, as herein provided, in full payment for furnishing all materials, labor, tools, and equipment necessary to the completed work and for performing all work contemplated and embraced under the contract; also for loss or damage arising from the nature of the work, or from the action of the elements, except as hereinbefore provided, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the final acceptance by the Board of Supervisors; and for all risks of description connected with the prosecution of the work, also for all expenses incurred in consequence of the suspension or discontinuance of the work as herein specified; and for completing the work according to the plans and specifications. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

7.01A Measurement and Computation of Quantities - All items of the work to be paid for at a contract price per unit of measurement will be measured by the Engineer in accordance with United States Standard Measures. A ton shall mean 2,000 pounds, avoirdupois. Except as otherwise expressly provided in the specifications, the methods of measurement and computation of quantities of such items will be determined by the Engineer, taking into account the price of the item relative to its quantity and the costs of measurement.

The weights of metalwork, pipe, and other metal parts to be paid for by weight will be determined by the Engineer on the basis of handbook weights, scale weights, or manufacturer's

catalog weights, or in the absence of any of the foregoing, on the basis of estimated weights; provided, that weights of nonmetallic coatings will be excluded.

7.01B Payment at Contract Prices - The contract price for an item of the work shall include full compensation for all costs of that item, including the costs of any work, materials and equipment incidental to the item but not specifically shown or described in the drawings and specifications, subject only to such express limitations as may be stated in the specifications defining the item or prescribing payment therefor.

The contract prices shall include full compensation for all costs of any work, materials, and equipment required by the drawings and specifications at the time of contract award, but not covered by a contract price or otherwise expressly made the subject of direct payment.

7.02 PAYMENT AND COMPENSATION FOR ALTERED QUANTITIES

When alterations in plans or quantities of work are ordered and performed, the Contractor shall accept payment in full at the contract unit price for the actual quantities of work done and no allowance will be made for anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as stipulated in such agreements.

7.03 FORCE ACCOUNT PAYMENT

When extra work is to be paid for on a force account basis, compensation will be determined as follows:

7.03A Work Performed by Contractor - The Contractor will be paid for labor, materials, and equipment rental as hereinafter provided, except where agreement has been reached to pay in accordance with Section 7.03B. Only materials incorporated in the work will be paid for.

To the total computed as provided in Sections 7.03A(1), 7.03A(2) and 7.03A(3) will be added the following percentages:

Labor	-	24 percent
Materials	-	15 percent
Equipment Rental	-	15 percent

It is understood labor, materials, and equipment may be furnished by the Contractor or by the subcontractor or by others on behalf of the Contractor.

When extra work paid for on a force account basis is performed by forces other than the Contractor's organization, the Contractor shall reach agreement with such other forces as to the distribution of the payment made by the District for such work and no additional payment therefor will be made by the District.

7.03A(1) Labor - The Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the Engineer), used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be the sum of the following:

7.03A(1a) Actual Wages - The actual wages paid will be as published by the Director of Industrial Relations of the State of California for the region where work is performed and that are in effect at the time of award of the contract. The classification of workmen used shall not be in excess of the industry standard for the region where work is performed. Copies of the published labor rates are on file at the District office.

7.03A(1b) Labor Surcharge - To the actual wages as defined in Section 7.03A(1a), will be added a labor surcharge set forth in the Special Provisions, which labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 7.03A(1a) and subsistence and travel allowance as specified in Section 7.03A(1c).

7.03A(1c) Subsistence and travel allowance paid to such workmen as required by collective bargaining agreements.

7.03A(2) Materials - The cost of materials incorporated in the work will be the cost to the purchaser, whether Contractor, subcontractor or other forces, from the supplier thereof, except as the following are applicable:

7.03A(2a) If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to the District notwithstanding the fact that such discount may not have been taken.

7.03A(2b) If the materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the Engineer. No markup except for actual costs incurred in the handling of such materials will be permitted.

7.03A(2c) If the materials are obtained from a supply or source owned wholly or in part by the purchaser, payment therefor will not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or on the current wholesale price for such materials delivered to the job site whichever price is lower.

7.03A(2d) If the cost of such materials is, in the opinion of the Engineer, excessive, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided in Section 7.03(2a).

7.03A(2e) If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost shall then be determined in accordance with Section 7.03A(2d).

The District reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and profit on such materials.

7.03A(3) Equipment Rental - The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Special Provisions, regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the Engineer to use equipment not listed in the Special Provisions, a suitable rental rate for such equipment will be established by the Engineer. The Contractor may furnish any cost data which might assist the Engineer in the establishment of such rental rate.

The rental rates paid as above provided shall include the cost of fuel, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Operators of rented equipment will be paid for as provided under Section 7.03A(1).

All equipment shall, in the opinion of the Engineer, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools having a replacement value of \$25.00 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

In computing the rental time of equipment, less than 30 minutes shall be considered ½ hour.

7.03A(3a) Equipment on the Work - The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed, and in addition, shall include the time required to move the equipment to location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.

7.03A(3b) Equipment not on the Work - For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Special Provisions or as agreed to as provided

in Section 7.03A(3) and for the cost of transporting the equipment to the location of the work and its return to its original location, all in accordance with the following provisions:

- (1) The original location of the equipment to be hauled to the location of the work shall be agreed to by the Engineer in advance.
- (2) The District will pay the costs of loading and unloading such equipment.
- (3) The cost of transporting equipment on low bed trailers shall not exceed the hourly rates charged by established haulers.
- (4) The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.
- (5) The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and legal holidays unless the extra work is performed on such days, and shall terminate at the end of the day on which the Engineer directs the Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

<u>Hours Equipment is in Operation</u>	<u>Hours to be Paid</u>
0.....	4
0.5.....	4.25
1.....	4.5
1.5.....	4.75
2.....	5
2.5.....	5.25
3.....	5.5
3.5.....	5.75
4.....	6
4.5.....	6.25
5.....	6.5
5.5.....	6.75
6.....	7
6.5.....	7.25
7.....	7.5
7.5.....	7.75
8.....	8
Over 8.....	hours in operation

When hourly rates are listed, less than 30 minutes of operation shall be considered to be 1/2 hour of operation.

When daily rates are listed, payment for 1/2 day will be made if the equipment is not used. If the equipment is used, payment will be made for one day.

The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

(6) Should the Contractor desire the return of the equipment to a location other than its original location, the District will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.

(7) Payment for transporting, loading and unloading equipment, as above provided, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.

7.03B Work Performed by Special Forces or Other Special Services - When the Engineer and the Contractor, by agreement, determine that a special service or an item of extra work cannot be performed by the forces of the Contractor or those of any of his subcontractors, such service or extra work item may be performed by a specialist. Invoices for such service or item of extra work on the basis of the current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization. In those instances wherein a Contractor is required to perform extra work necessitating a fabrication or machining process in a fabrication or machine shop facility away from the job site, the charges for that portion of the extra work performed in such facility may, by agreement, be accepted as a specialist billing.

To the specialist invoice price, less a credit to the District for any cash or trade discount offered or available, whether or not such discount may have been taken, will be added 15 percent in lieu of the percentages provided in Section 7.03A.

7.03C Records - The Contractor shall maintain his records in such a manner as to provide a clear distinction between the direct costs of extra work paid for on a force account basis and the costs of other operations.

The Contractor shall furnish the Engineer report sheets in duplicate of each day's extra work paid for on a force account basis no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the Contractor, subcontractor, or other forces, except for charges described in Section 7.03B. The daily report sheets shall provide names or identifications and classifications of workmen, the hourly rate of pay and hours worked, and also the size, type and identification number of equipment, and hours operated.

Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily report sheets, or if not available, they shall be submitted with subsequent daily report sheets. Should said vendor's invoices not be submitted within 15 days after acceptance of the work, the District reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available in the quantities concerned delivered to the location of the work, less any discounts provided in Section 7.03A(2a).

Said daily report sheets shall be signed by the Contractor or his authorized agent.

The Engineer will compare his records with the daily report sheets furnished by the Contractor, make any necessary adjustments, and compile the costs of work paid for on a force account basis on daily extra work report forms furnished by the District. When these daily extra work reports are agreed upon and signed by both parties, they shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit.

The Contractor's cost records pertaining to work paid for on a force account basis shall be open to inspection or audit by representatives of the District, during the life of the contract and for a period of not less than 18 months after the date of acceptance thereof, and the Contractor shall retain such records for that period. Where payment for materials or labor is based on the cost thereof to forces other than the Contractor, the Contractor expressly guarantees that the cost records of such other forces shall be open to inspection and audit by representatives of the District on the same terms and conditions as the cost records of the Contractor. If an audit is to be commenced more than 60 days after the acceptance date of the contract, the Contractor will be given a reasonable notice of the time when such audit is to begin.

7.03D - Payment as provided above in Sections 7.03A and 7.03B shall constitute full compensation to the Contractor for performance of work paid for on a force account basis and no additional compensation will be allowed therefor.

7.04 ACCEPTANCE

The work shall be inspected for acceptance by the Engineer promptly upon receipt of notice in writing from the Contractor that the work is ready for such inspection.

The structures will not be finally accepted until the completion of the entire work under the contract.

7.05 DEDUCTIONS FROM PAYMENTS

The Riverside County Flood Control and Water Conservation District, by and through the Board of Supervisors or other appropriate District officer or officers, may at its option and at any time retain out of any amounts due the Contractor sums sufficient to cover any unpaid claims, provided that sworn statements of said claims shall have been filed in the office of the District or in the office of any other District officer or officers having jurisdiction thereover.

7.06 PARTIAL PAYMENTS

On or about the last day of each month, the Engineer shall make an estimate in writing of the total amount of work done by the Contractor to the time of such estimate and the value thereof. The District shall retain 5 percent (5%) of such estimated value of the work done as part security for the fulfillment of the contract by the Contractor. At no time shall the amount retained by the District be less than 5 percent (5%) of the total value of the work completed at the time such payments are made.

After deducting all previous payments and all sums to be kept or retained under the provisions of the contract, the District shall make monthly progress payments to the Contractor.

No such estimate or payment shall be required to be made when, in the judgment of the Chief Engineer, the work is not proceeding in accordance with the provisions of the contract.

In accordance with Public Contract Code Section 22300 and other applicable law, the Contractor may substitute securities for any monies withheld to ensure performance under the contract. Such substitution shall be made only upon a separate agreement between the District and the Contractor which contains terms and conditions in compliance with all laws applicable to monies withheld under the contract.

7.07 DELAYED PAYMENTS

All the monies due the Contractor under the contract will be paid by demand on the Treasurer of the District, prepared and approved as required by law, and it is understood that any delay in the preparation, approval and payment of these demands will not constitute a breach of contract on the part of the District.

7.08 FINAL PAYMENT

The Engineer, after the completion of the contract, shall make a final estimate in writing to the Board of Supervisors of the amount of work done thereunder, and the value of such work, and the District shall pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the contract. All prior partial estimates and payment shall be subject to correction in the final estimate and payment. The final payment shall not be due and payable until the expiration of forty-five (45) days from the date of acceptance of the work by the Board of Supervisors.

It is mutually agreed between the parties to the contract that no certificate given or payments made under the contract, except the final payment, shall be conclusive evidence of the performance of the contract, either wholly or in part against any claim of the party of the first part, and no payment shall be construed to be an acceptance of any defective work or improper materials.

And the Contractor further agrees that the payment of the final amount due under the contract, and the adjustment and payment for any work done in accordance with any alterations of the same, shall release the Riverside County Flood Control and Water Conservation District, the Board of Supervisors, and the Engineer from any and all claims or liability on account of work performed under the contract or any alteration thereof.

7.09 CLAIMS RESOLUTION

In accordance with Public Contract Code Section 20104 - 20104.6 and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and the District shall be resolved following the statutory procedure unless the District has elected to resolve the dispute pursuant to Public Contract Code § 10240 et seq.

1. All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed on or before the date of final payment unless other notice requirements are provided in the contract. "Claim" means a separate demand by the claimant for

(1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by the District.

- (a) Claims under \$50,000. The District shall respond in writing to the claim within 45 days of receipt of the claim, or, the District may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the District may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of the District and the claimant. The District's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.
- (b) Claims over \$50,000 but less than or equal to \$375,000. The District shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims the District may have against the claimant. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between the District and the claimant. The District's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater.

2. If the claimant disputes the District's response, or if the District fails to respond within the statutory time period, the claimant may so notify the District within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, the District shall schedule a meet and confer conference within 30 days.

3. If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code § 900 et seq. and Government Code § 910 et seq. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the claimant submits the written claim until the time the claim is denied, including any time utilized for the meet and confer conference.

4. If a civil action is filed to resolve any claim, the provisions of Public Contract Code § 20104.4 shall be followed, providing for nonbinding mediation and judicial arbitration.

SECTION VIII - GENERAL

8.01 COOPERATION BETWEEN CONTRACTORS

The Contractor shall be required to cooperate fully with all utility and public agency representatives engaged in construction, relocation, altering or otherwise rearranging any facilities interfering with the progress of the work.

Full compensation for any delay or inconvenience to the Contractor's operation due to such operations as described above shall be considered included in the unit price paid for other items of work and no additional allowance will be made therefor.

8.02 INSURANCE - HOLD HARMLESS

Contractor shall not commence work under this contract until he has obtained the insurance required hereunder and satisfactory proof of said insurance has been submitted to District and has been approved as to form by Riverside County Counsel.

Compensation Insurance - Contractor shall procure and maintain during the life of the contract Workers' Compensation Insurance as required by the State of California. Contractor shall further require each of its subcontractors to procure Workers' Compensation Insurance as required by the State while working on the project.

Liability Insurance - Contractor shall take out and maintain during the course of the work combined single limit liability insurance covering bodily injury and property damage insurance and blanket contractual coverage as to the work and obligations covered hereunder in an amount not less than \$2,000,000, or the equivalent thereof. Said insurance must contain an endorsement that District, County of Riverside, and any municipal corporation in which the work is to be accomplished, are named as an additional insured as respects the work covered hereunder. Said insurance must not contain, as respects the work covered hereunder, any exclusions as to bodily injury or death or property damage arising out of blasting, explosion, or underground damage to wire, pipes, conduits, mains, sewers, tank tunnels or any similar property, i.e., the so-called "x c u" exclusions. The insurance certificate evidencing such insurance must affirmatively state that the insurance carrier(s) will give Owner thirty (30) days written notice prior to cancellation of the insurance or a reduction in coverage; must state that the "x c u" exclusions are waived or do not exist in the policy(s); and that District, County of Riverside, and any municipal corporation in which the work is to be accomplished, are named as an additional insured as respects the work covered hereunder.

In the alternate to naming Owner and County of Riverside, and any municipal corporation in which the work is to be accomplished, as additional insured, Contractor may take out and maintain during the course of the work and until acceptance by Owner, Owner's Protective Liability Insurance amount not less than \$2,000,000 covering District, County of Riverside, and any municipal corporation in which the work is to be accomplished.

The cost of this insurance shall be included in the prices bid for the various items of work and no additional compensation will be made therefor.

Hold Harmless - Contractor shall hold District, County of Riverside and any municipal corporation in which the work is to be accomplished, together with the officers, agents and employees of each, free and harmless from any liability whatsoever, including wrongful death, based or asserted upon any act or omission of Contractor, its officers, agents, employees or subcontractors, relating to or in any way connected with or arising from the accomplishment of the work, whether or not in furtherance of the work; and Contractor agrees to protect and defend, including all attorney fees and other expenses, each of the foregoing bodies and persons in any legal action based or asserted upon any such acts or omissions.

Obligations - The obligations assumed by Contractor cover all obligations set forth in this Subsection and elsewhere in the Contract Documents, such as Subsections 5.01, 5.02, 5.05, 5.06, 5.08, 5.09, 5.10, 10.01, and 10.02.

8.03 PUBLIC UTILITIES

The locations of all pipelines, power lines, communication lines and other utility components known to District to exist within the limits of the work, are indicated on the drawings and may be the subject of a specific Special Provision(s). Size, location and characteristics of such utilities is based upon information made available to District - primarily from the owner of the utility in question. The exactness of such information is not guaranteed but may be assumed to have been accomplished with reasonable accuracy.

In addition to the drawings and any such provision regarding utilities, Contractor is under a duty to take into account the location of service laterals or other appurtenances which can be inferred from the presence of facilities such as buildings, meters and junction boxes in or about the limits of the work.

Unless otherwise directed by the Contract Documents, all existing utilities - where shown or described or not - shall be left in place and Contractor must conduct its operations so that such utilities are protected from damage at all times during the course of the work and the work must be accomplished so as to give such utilities proper protection and support upon completion of the work by Contractor.

If during the course of the work, Contractor discovers underground utility components not indicated in the drawings, the Special Provisions or elsewhere in the Contract Documents, Contractor must immediately notify, in writing, the Engineer and the utility company (public or private) involved, stating with exactness the condition found.

When Contractor encounters a utility not shown or described in the Contract Documents, Contractor shall cease all work which would disturb such utility and its support until given specific instructions as to how to proceed regarding such utility by Engineer. All work done by Contractor to protect existing utilities shown or described in the Contract Documents, or which can be reasonably inferred from the presence of other visible facilities, is at Contractor's expense, the cost of which is deemed included in Contractor's Proposal to do the work.

Contractor's cost of locating, repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating utility components and facilities not indicated in the drawings, specifications or elsewhere in the Contract Documents with reasonable accuracy, shall be paid Contractor as Extra Work as provided in Subsection 2.07 and Subsection 7.03 of the General Provisions. Compensation for idle time of equipment shall be paid as provided in Section 8-1.07C, "Payment Adjustments", of the State Standard Specifications. No surcharge rates for equipment will be applied for idled equipment.

District may direct the Contractor to do such repair or relocation work as required. When such repair or relocation work is not elsewhere provided for in these Contract Documents, or reasonably inferred therefrom, a requirement of District that Contractor perform such work shall be compensated for as Extra Work pursuant to Subsections 2.07 and 7.03 of these General Provisions.

Contractor shall not be assessed liquidated damages for delay in completion of the project, if such delay is caused by failure of District, or the owner of the utility in question, to provide for removal or relocation of the utility involved.

8.04 PROTECTION OF EXISTING STREET FACILITIES

The Contractor shall be responsible for the protection of existing signs, fences, concrete curbs, gutters and other facilities which may be encountered. The replacement or repair of any facilities which the District deems necessary as a result of the Contractor's operations shall be done by the Contractor at his own expense and to the satisfaction of the Engineer.

Excavation within the street right of way shall be conducted in a manner to cause the least interruption to traffic. Where traffic must cross open trenches, the Contractor shall provide suitable bridges at street intersections and driveways. Hydrants under pressure, valve pipe covers, valve boxes, curb stop boxes, fire or police call boxes, or other utility controls shall be left unobstructed and accessible during construction.

8.05 DIVERSION AND CONTROL OF WATER

Unless otherwise provided in the Proposal, no separate payment will be made for diversion and control of surface or groundwater. All costs incidental to maintaining dry working areas shall be included in the unit prices paid for other items of work in the schedule.

8.06 DUST ABATEMENT

During the performance of all work included in the contract, the Contractor shall take the necessary precautions to save the District free and harmless from any loss or damage resulting from his operations that raise or produce dust in such amounts that will be objectionable, and/or cause damage to adjacent property or property owners.

The Contractor will be required to have a positive and continuous method of dust control which is satisfactory to the Engineer. The methods to be used for controlling dust in the

construction area and along haul roads shall be approved by the Engineer prior to starting any of the work included in the contract. All costs incidental to dust control shall be included in the unit prices paid for other items of work in the schedule.

8.07 PROJECT SIGNS

The Contractor shall erect project signs at the locations designated by the Engineer.

No separate payment will be made for erecting the project signs and all costs in connection therewith will be considered a subsidiary obligation of the Contractor.

8.08 EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT, AND SITE OF WORK

The bidder shall examine carefully the site of the work contemplated, the plans and specifications, and the proposal and contract forms therefor. The submission of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work to be performed, the quantities of materials to be furnished, and as to the requirements of the proposal, plans, specifications, and the contract.

Where the District has made investigations of subsurface conditions in areas where work is to be performed under the contract, or in other areas, some of which may constitute possible local material sources, such investigations are made only for the purpose of study and design. Where such investigations have been made, bidders or Contractors may, upon request, inspect the records of the District as to such investigations subject to and upon the conditions hereinafter set forth. Such inspection of records may be made at the office of the District.

The records of such investigations are not a part of the contract and are shown solely for the convenience of the bidder or Contractor. It is expressly understood and agreed that the District assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretations set forth therein or made by the District in its use thereof and there is no warranty or guarantee, either expressed or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered.

When a log of test borings showing a record of the data obtained by the District's investigation or subsurface conditions is included with the contract plans, it is expressly understood and agreed that said log of test borings does not constitute a part of the contract, represents only the opinion of the District as to the character of the materials encountered by it in its test borings, is included in the plans only for the convenience of bidders and its use is subject to all of the conditions and limitations set forth in this Section 8.08.

No information derived from such inspection of records of investigations or compilation thereof made by the District or from the Engineer, or his assistants, will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the contract.

SECTION IX - WATERING

9.01 DESCRIPTION

This work shall consist of developing a water supply for all water required for the work. The application of the water shall be under the control of the Engineer at all times and shall be applied in the amounts and at the locations approved by the Engineer.

At least one mobile unit of at least 1,000-gallon capacity for applying water shall be available on the project at all times.

Water for compacting embankment material and for laying dust shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses with nozzles that will ensure a uniform application of water.

No separate payment or additional allowances will be made for this work and all costs in connection therewith will be considered as included in other items in the schedule.

SECTION X - PUBLIC CONVENIENCE, TRAFFIC CONTROL AND DETOURS

10.01 GENERAL

The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to the public and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights of the public.

Unless otherwise provided in the Special Provisions, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately at the Contractor's expense.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.

Convenient access to driveways, houses and buildings along the line of work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition.

10.02 SIGNS

It shall be the responsibility of the Contractor to provide and maintain all lights, barricades and signs, both on and off the site of work, as required by the Engineer, and all such devices shall be of a type approved by him.

If, in any case, the Engineer finds it necessary to replace, add to or erect said barricades, signs, or lights, when the Contractor fails to do so when informed, the Contractor shall be billed for all costs thereof including a daily rental fee for signs.

No separate payment, unless otherwise provided for under the Special Provisions, will be made for traffic control and detour signing and all costs incidental to these items shall be included in the unit prices paid for other items of work.

10.03 MATERIALS STORAGE

Storing or stockpiling of excavated material, imported backfill material or construction materials on any street or highway will not be permitted except as approved in writing by the Engineer.

SPECIAL PROVISIONS
AND
DETAILED SPECIFICATIONS

SPECIAL PROVISIONS

SECTION 1 - GENERAL

1.1 Drawings and Specifications - These documents are for the construction of **Palm Springs MDP Line 43 and Lateral 43A, Stage 1**, located in the city of Cathedral City, Riverside County, California. This work shall conform with the contract drawings indexed on the cover sheet of the drawings included herewith.

Referenced standard drawings are available on the District web site.

The Contractor shall copy any of the referenced District standard drawings from <http://www.rcflood.org>.

The Contractor shall be responsible to obtain referenced standard plans/drawings of various agencies from their respective office or web site.

References made in these Special Provisions or Detailed Specifications to the "Standard Specifications" refer to the "Greenbook" Standard Specifications for Public Works Construction, current edition, including supplements. Standard Specifications of the American Society for Testing and Materials shall be designated by ASTM and the appropriate number of the standard. Unless otherwise specified, wherever the words "State Standard Specifications" are used in these Special Provisions or Detailed Specifications they shall mean the Standard Specifications of the State of California, Department of Transportation, current edition. Whenever the words "Caltrans Standards" are used they shall mean the Standard Plans of the State of California, Department of Transportation, 2006 edition.

In the event that discrepancies are encountered, the option that provides the method, item or material with the greatest strength or utility shall be chosen, as directed by the Engineer.

Requirements on the construction plans for Portland Cement Concrete are modified to the PCC Class designations, as described in Section 90-1.01 of the 2006 State Standard Specifications, as follows:

Class "A" shall mean Class "2"

Class "B" shall mean Class "3"

Class "C" shall mean Class "4"

Class "D" shall mean Class "1"

In case of conflict between the drawings and the specifications, the drawings shall govern; in case of conflict between the referenced specifications and these specifications, the latter shall govern.

SECTION 2 - TIME OF COMPLETION, DAMAGES AND
LEGAL HOLIDAYS

2.1 General - The Contractor shall begin work within ten (10) calendar days after the date of receipt of Notice to Proceed from the Engineer and shall diligently prosecute the same to completion before the expiration of

TWO HUNDRED (200) WORKING DAYS

from the date of receipt of Notice to Proceed.

2.2 Damages - The Contractor and the District expressly agree that the cost to the District for inspection and superintendence of the work for this contract is \$800.00 per working day.

2.3 Legal Holidays - The Contractor will not be permitted to work on Legal Holidays (Reference Sections 6.02 and 6.06 of the General Provisions), except in cases of emergency as directed by the Engineer.

SECTION 3 - FORCE ACCOUNT PAYMENT

3.1 Labor Surcharge - Attention is directed to the provisions of Section VII, Article 7.03A (1b) of the General Provisions. The labor surcharge percentage to be applied to the actual wages paid as defined in Paragraph 7.03A (1a) will be twenty-four percent (24%).

3.2 Equipment Rental - Attention is directed to the provisions of Section VII, Article 7.03A (3) of the General Provisions. The equipment rental rates to be applied will be the rates published by the California Department of Transportation and in effect at the time of the award of the contract. A copy of said Equipment Rental Rates is on file at the District Office.

SECTION 4 - PROTECTION OF EXISTING UTILITIES

4.1 General - All existing underground utility lines, power poles and overhead wiring shall be protected in place at all times, except as noted otherwise on the plans. Any damage to utilities caused by the Contractor's operation shall be repaired or replaced at the Contractor's expense.

Prior to the commencement of any construction activities, the Contractor shall contact all utility companies and local municipalities servicing the project area to review as-built utility drawings and determine appropriate means of protecting utilities. **The Contractor shall provide to the Engineer and affected utility companies, a special utility protection plan for all utilities to be protected in place in the traveled way for Highway 111. No construction work shall be performed within the intersection of Highway 111 and Perez Road, prior to approval of the utility protection plan, see Section 30 for details. Also, see Section 6.21 of these Special Provisions for additional restrictions regarding schedule for work on Highway 111.**

At the discretion of the Engineer, the Contractor may be required to verify, by potholing, the location of potentially affected utilities.

4.2 Cooperation with Utilities Relocated by Others – Some utilities will require relocation by others prior to or during construction as shown on the drawings and as specified in these specifications and Special Provisions.

Supplement to Section 8.01 of the General Provisions. The Contractor shall coordinate and cooperate with the various utilities or their contractors to ensure the work proceeds in an orderly manner.

The Contractor shall stage his work as required to accommodate the following utility construction or relocations:

- (a) Desert Water Agency (DWA) - The following waterlines and laterals will be relocated by DWA during construction:

Station 15+24 - One (1) 10" Water Lateral
Station 15+27 - One (1) 2" Water Lateral
Station 15+31 - One (1) 6" Water Lateral
Station 15+33 - One (1) 2" Water Lateral
Station 17+70 - One (1) 8" Water Lateral
Station 18+09 - One (1) 10" Water Lateral
Station 18+10 - One (1) 2" Water Lateral
Station 18+14 - One (1) 2" Water Lateral
Station 25+75 - One (1) 2" and One (1) 1" Water Lateral
Station 28+41 - One (1) 6" Water Lateral
Station 30+75 - One (1) 1" Water Lateral

The Contractor shall notify DWA in writing at least two (2) months prior to construction reaching DWA's facilities.

- (b) Sempra Utilities - The following gas lines will be relocated by Sempra Utilities:

Station 11+29 - One (1) 2" Gas Line
Station 30+36 - One (1) 2" Gas Line
Station 30+76 - One (1) 2" Gas Line

The Contractor shall notify Sempra Utilities in writing at least two (2) months prior to construction reaching Sempra's facilities.

- (c) Southern California Edison (SCE) - The following electrical lines will be relocated by SCE:

Station 16+80 - Electrical Conduit
Station 30+78 - Electrical Conduit 2" x 4"

Station 30+80 - Electrical Conduit 3" x 3"

The Contractor shall notify SCE in writing at least two (2) months prior to construction reaching SCE's facilities.

- (d) Verizon Communications - The following telephone lines will be relocated by Verizon Communications:

Station 17+08 - Telephone Conduit

Station 24+15 - Telephone Conduit

The Contractor shall notify Verizon Communications in writing at least two (2) months prior to construction reaching Verizon's facilities.

Should any utility relocation result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idled equipment or additional payment over and above the agreed upon contract unit prices.

SECTION 5 - PROJECT SITE MAINTENANCE

Through all phases of construction, the Contractor shall comply with the provisions of Section 7-8 of the Standard Specifications. Before final acceptance of the work, the Contractor shall clean the work and the site of the work of all falsework, temporary structures, other construction materials and equipment, excess materials and rubbish, and shall leave the work and the site in a neat and presentable condition. Such final cleanup work shall be performed within the time specified for completion of all of the work.

SECTION 6 - SPECIAL REQUIREMENTS

6.1 National Pollutant Discharge Elimination System (NPDES) - The Contractor shall comply with the requirements of Board Order No. R7-2008-0001 (NPDES No. CAS617002), NPDES Area-Wide Municipal Stormwater Permit, hereafter referred to in this Section as the "Permit", issued by the California Regional Water Quality Control Board (CRWQCB) - Colorado River Basin Region. This Permit regulates both stormwater and non-stormwater discharges associated with Contractor's construction activities. The Contractor shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Section 29 "Stormwater and Non-Stormwater Pollution Control" of the Detailed Specifications.

The Contractor's attention is directed to: 1) Section 29.2 "General Requirements" which allows the Engineer to withhold progress payments if the Contractor fails to fully implement Section 29 "Stormwater and Non-Stormwater Pollution Control" or is deemed to be in non-compliance with the provisions of the Permit; 2) Section 29.3 "Stormwater Pollution Prevention Plan Preparation and Approval" which requires that a SWPPP be prepared and approved prior to the Pre-Construction meeting; and 3) Section 29.7

"SWPPP Implementation" which allows the Engineer to suspend construction operations if the Contractor fails to implement the approved SWPPP and any amendments thereto.

6.2 Sanitation - Sewage flows shall not be interrupted. Should the Contractor disrupt existing sewer facilities, sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. If pumping is required it shall be done at the expense of the Contractor. A backup pumping system with equal capacity shall be provided at all times. Sewage shall not be permitted to flow in trenches or be covered by backfill.

6.3 Confined Space Compliance - The Contractor shall comply with all Cal/OSHA safety regulations including regulations concerning confined space and for maintaining a safe working environment for Contractor and District employees on the site. The Contractor shall develop and maintain a confined space procedure specific to this contract that complies with the requirements contained in California Code of Regulations, Title 8, Section 5158, Other Confined Space Operations and the District Confined Space Procedure, SOM-18. A copy of SOM-18 can be obtained from the District office, 1995 Market Street, Riverside upon request.

Within five (5) days after the award of the contract, the Contractor shall submit three (3) copies of the procedure to the Engineer for review and approval. The Contractor shall allow five (5) working days for the Engineer to review the procedure. If revisions are required as determined by the Engineer, the Contractor shall revise and resubmit the procedure within three (3) working days of receipt of the Engineer's comments and shall allow four (4) working days for the Engineer to review the revisions. The Contractor must submit three (3) copies of the approved procedure to the Engineer prior to the pre-construction meeting.

The procedure shall provide for recording of data to develop a history of acceptable atmosphere within the confined space. That history will include:

1. Calibration schedule of a direct reading confined space meter by trained personnel.
2. Daily monitoring and recording of the confined space atmosphere with a calibrated direct reading confined space meter.
3. Records of Items 1 and 2 shall be maintained onsite and copies given to the Engineer.
4. The records shall indicate if readings are of natural or mechanically enhanced ventilation.

In addition, the procedure shall include daily tours of the job site with the Engineer to ensure inlets to the confined space are free of obstruction or substances that might affect the atmosphere of the confined space.

The Contractor will be required to keep a direct reading confined space meter onsite for the duration of the contract. The meter shall be calibrated according to the schedule specified in

the Contractor's confined space procedure and shall be made available for the Engineer's use upon request.

6.4 Heavy Equipment Working Hours - Heavy construction equipment shall be allowed to work from 7:00 a.m. to 3:30 p.m. each normal working day, unless otherwise approved by the Engineer.

6.5 Encroachment Permits - The Contractor is required to obtain an encroachment permit from the City of Cathedral City for work within City right of way. The City of Cathedral City will not require the Contractor to pay a fee for the encroachment permit. A copy of the encroachment permit shall be provided to the Engineer prior to commencement of work.

6.6 Toxic Material Disposal - Toxic materials including oil, fuel oil, gasoline, coolant, fluid filters and other contaminants shall not be discharged within the project site. All such materials shall be transported offsite and disposed of at a County approved facility.

6.7 Survey Crew - The Contractor shall notify the Engineer in writing at least 48 hours prior to new construction staking.

Survey Crews will be available Monday through Thursday from 7:00 a.m. to 3:30 p.m., with a half-hour off for lunch. If the Contractor requires the Survey Crew to work beyond the specified time mentioned above, it shall be considered as overtime and shall be paid by the Contractor at 1.5 times the Survey Crew's hourly rates.

6.8 Survey Monuments - The Contractor shall salvage and give to the District all survey monuments and wells removed during construction. The District will reset monuments after construction.

6.9 Job Trailer Site - The Contractor is required to provide a site and install an office trailer for District personnel. This trailer shall be in good condition and located in a place acceptable to the District. The trailer shall be for the sole use of the District and shall not be used by the Contractor for any activity, including storage. The Contractor shall make provisions for the privacy and security of the office, and provide air conditioning, drinking water and electrical service. The Contractor shall also provide two office chairs and a desk suitable for reviewing plans. The Contractor shall pay the monthly billings for these services. The trailer shall be fully operational and available to District personnel on the first day of work. Should the trailer or office not be available and in working condition, it is agreed by both parties at the time of entering this contract that damages in the amount of \$3,000 per month shall be assessed. It is agreed that this amount may be prorated and shall be deducted from the first contract payment and any successive payments covering any period that the facilities are unavailable.

6.10 Construction Tolerances - Variation in alignment, grade and dimensions of the structures and structural components from the established alignment, grade and dimensions shown on the drawings shall be within the tolerances specified in the following:

Table A – Tolerances for Grading Unlined Channels, Levees and Access Roads		
Departure from established alignment		2 inches on tangents 4 inches on curves
Departure from established profile grade	Channel bottoms, channel sideslopes in cut and fill, levee and access road sideslopes in cut	Zero <u>above</u> and 3 inches <u>below</u> the specified grade
	Top surfaces of levees and access roads in both cut and fill, levee and access road sideslopes in fill	Zero <u>below</u> and 3 inches <u>above</u> the specified grade

Regardless of the construction tolerances specified, the excavation and grading shall be performed so that the finished surfaces are in uniform planes with no abrupt breaks in the surface.

Table B - Tolerances for Trapezoidal Concrete Lined Channels and Levees		
Departure from established alignment		2 inches on tangents 4 inches on curves
Departure from established profile grade		1 inch
Variation in thickness of lining, sideslopes and invert		5 percent of specified thickness provided average thickness is maintained
Variation from specified width of section at any height		0.0025 times specified width W plus 1 inch. 0.0025W + 1 inch
Variation from specified height of lining		0.005 times specified height H plus 1 inch. 0.005H + 1 inch
Variation in surfaces (gradual)	Invert	¼ inch in 10 feet
	Sideslopes	½ inch in 10 feet
Variation in surfaces (abrupt)		¼ inch

Gradual Variation tolerance shall be measured by placing a 10-foot straightedge anywhere on the finished concrete structure within 72 hours after concrete placement. The gap at any point between the straightedge and the concrete shall not exceed the specified amount.

Table C - Tolerances for Formed, Cast-in-Place Concrete Structures		
Departure from established alignment		1 inch on tangents 2 inches on curves
Departure from established profile grade		1 inch
Inside dimensions		0.005 times specified dimension
Variation from the plumb or the specified batter in the lines and surfaces of walls, piers and in arises	Exposed, in 10 feet	½ inch
	Backfilled, in 10 feet	1 inch

Variation in cross-sectional dimensions		Minus ¼ inch Plus ½ inch
Variation in surfaces (gradual)	Invert Soffits, Walls, Sideslopes	¼ inch in 10 feet ½ inch in 10 feet
Variation in surfaces (abrupt)		¼ inch

Table D - Tolerances for Reinforcing Steel Placement		
Variance from indicated position	Spacing between adjacent bars and the distance between layers of bars	one bar diameter nor more than one inch
Concrete cover measured perpendicular to steel in the direction of tolerance		¼ inch

6.11 Surplus Excavated Material - Any stockpiling, grading or disposal of material outside of the project limits is not covered under the District's permits and is the sole responsibility of the Contractor. Regulatory permits that may be required include, but are not limited to, Federal Clean Water Act (Sections 401 and 404), California Fish and Game Code (Section 1602) and Federal/State Endangered Species Acts. All costs to obtain these Regulatory Permits shall be borne by the Contractor.

6.12 Sewer Line Inspection - Prior to the commencement of construction, the Contractor is required to video record all sewer mains (8" diameter and larger) within the project limits. Additionally, the Contractor shall video record the sewer mains after the backfilling of the storm drain has been completed. All costs associated with this requirement shall be included in the contract price bid for Clearing and Miscellaneous Work. The Contractor is required to replace and/or repair at his own expense, any sewers damaged or misaligned as a result of his construction activities.

6.13 Pipe Order Notification - The Contractor shall submit to the District the invoice from the pipe and precast box companies stating, (1) pipe and precast box order date, (2) pipe and precast box quantity, and (3) estimated date of pipe and precast box delivery within five (5) calendar days of the award of the contract.

6.14 Project Signs - Supplementing Section 8.07 of the General Provisions, the Contractor shall be required to provide two new project signs. The Contractor shall install and maintain the project signs at locations specified by the Engineer, with painting and lettering as shown in Appendix "B" of these Special Provisions. The signs shall be installed as directed by the Engineer within five (5) days after District issuance of the Notice to Proceed. Upon completion of construction, the signs shall be removed.

6.15 Liability Insurance - The Contractor's attention is directed to Section 8.02, Insurance Hold Harmless, of the General Provisions. The City of Cathedral City and Desert Water Agency shall also be named as additional insureds with the liability insurance coverage required to be maintained by the Contractor.

6.16 Mandatory Pre-Bid Site Inspection Tour - The Contractor's attention is directed to Section 8.08 of the General Provisions. To facilitate the Contractor's site examination, the District has scheduled a Mandatory Site Inspection Tour on Wednesday, August 20, 2014. The tour will begin at 9:30 a.m. on Perez Road, just south of Palm Canyon Drive (Highway 111), in the city of Cathedral City, CA 92234. A record of attendees will be maintained by the District. It is the responsibility of the Contractor to ensure that attendance is noted by the District. Any bid submitted by any Contractor who was not in attendance at the Mandatory Pre-Bid Site Inspection Tour will be considered non-responsive and disqualified.

6.17 1602 Permit Compliance - A Streambed Alteration Agreement (Agreement) was issued by the California Department of Fish and Wildlife (CDFW) on September 18, 2012. A copy of the Agreement will be provided to the Contractor prior to start of construction. The Contractor shall comply with the following conditions described in the Agreement:

1. A copy of the Agreement shall be kept onsite at all times.
2. Coordinate with the District for District to conduct pre-construction burrowing owl surveys between 14 and 30 days prior to construction and a second pre-construction survey within 24 hours of ground disturbance of potential owl habitat, if potential habitat is present in the project area. See Section 6.21 "Burrowing Owl Pre-Construction Survey" and Section 6.22 "Burrowing Owl Avoidance Measures" for further details.
3. Coordinate with the District for District to conduct pre-construction surveys for nesting birds if project activities and/or vegetation removal occurs during the nesting bird season. See Section 6.23 "Nesting Bird Pre-Construction Survey" for further details.

6.18 Corps of Engineers Section 404 Permit Compliance - A Section 404 permit was issued by the U.S. Army Corps of Engineers (Corps) on November 1, 2012. The Contractor shall keep onsite at all times a copy of the permit which will be provided to the Contractor prior to start of construction.

6.19 Clean Water Act Section 401 Water Quality Certification Compliance - A Section 401 Water Quality Certification (WQC) was issued by the U.S. Environmental Protection Agency (USEPA) on August 27, 2012. The Contractor shall keep onsite at all times a copy of the WQC which will be provided to the Contractor prior to start of construction. The Contractor shall comply with Condition Nos. 9, 13, and 14 which state:

1. **Condition 9** - To minimize sedimentation and sediment transport, no work shall occur within areas where flowing and/or standing water is present. Additionally, in-channel work shall not be performed during or immediately following high flow events.

2. **Condition 13** - A spill containment plan shall be kept onsite to ensure that pollutants are prevented from entering North Cathedral Canyon Channel and the Eagle Canyon Dam outlet channel. Areas must be designated entirely outside North Cathedral Canyon Channel and the outlet channel for chemical and petroleum or oil storage. A spill response kit will be maintained in these areas to mitigate any spills.
3. **Condition 14** - All temporary fills shall be removed in their entirety. Any excess materials must be appropriately disposed of outside of North Cathedral Canyon Channel and the outlet channel.

6.20 Accidental Discovery - In the event that any human remains, hazardous materials, historical, archeological, or paleontological resources are accidentally discovered within project limits, the Contractor shall immediately cease all construction or ground disturbance activity in the vicinity of the find and notify the Engineer. District will provide the appropriate professional to assess the significance of the discovery and, if necessary, develop appropriate management and treatment measures. The Contractor shall not resume construction in the affected area without Engineer's approval.

Per State Health and Safety Code 7050.5, if human remains are encountered during construction, no further disturbance shall occur until the Riverside County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Riverside County Coroner must be notified within 24 hours by the Engineer. If the County Coroner determines that the remains are not historic, but prehistoric, the Native American Heritage Commission (NAHC) must be contacted by the Engineer to determine the most likely descendent for this area. Once the most likely descendent is determined, treatment of the Native American human remains will proceed pursuant to Public Resources Code Section 5097.98. The NAHC may become involved with decisions concerning the disposition of the remains.

Should any of the above mentioned discoveries result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idle equipment or additional payments over and above the agreed upon contract prices.

6.21 Burrowing Owl Pre-Construction Survey - The District is required to conduct a Burrowing Owl protocol survey between 14 and 30 days prior to construction and a second pre-construction survey within 24 hours of ground disturbance of potential owl habitat, if potential habitat is present in the project area. The Contractor shall not commence any work onsite, including equipment staging, clearing, grubbing, etc., until the District determines that Burrowing Owl is absent from the project site, or that an avoidance plan has been initiated should Burrowing Owl be detected onsite. Once the District determines that Burrowing Owl is absent from the project site, the Contractor shall begin construction within 24 hours of said determination or notify the Engineer that another pre-construction survey is needed.

6.22 Burrowing Owl Avoidance Measures - If Burrowing Owl(s) is found within the project site, the Contractor shall not conduct any construction activities within a buffer area of occupied

burrows during the breeding season (February 1st through August 31st). The buffer area (i.e., specific distance from occupied burrows) will be established between 600 and 1,500 lineal feet according to CDFW guidelines referenced in the 1602 Agreement Section 2.1. A modified buffer distance reduction may be used with CDFW concurrence. Any active burrow found during survey efforts will be mapped on the construction plans. Any Burrowing Owl(s) found within the project site that cannot be avoided will be relocated by the District during the non-breeding season (September 1st through January 31st).

Should Burrowing Owl result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idle equipment or additional payments over and above the agreed upon contract prices.

6.23 Nesting Bird Pre-Construction Survey - In order to avoid impacts to migrant bird species, no native vegetation shall be removed between March 15th and September 15th unless a pre-construction survey of the project area and a 500-foot buffer area indicates no nesting activity. If active nests are identified, the District will establish a buffer approximately 150 to 500-feet around the vegetation containing the active nest. A modified buffer distance reduction may be used with CDFW concurrence.

6.24 Palm Canyon Drive (Highway 111) and Perez Road Intersection Construction - Intersection Construction shall not occur within the calendar window extending from November 1, 2014 to May 26, 2015. Intersection Construction includes excavation, precast RCB installation from Station 23+00 to Station 24+70 of Line 43, Lateral 43-1, waterline relocation, sewer line relocation, backfill, pavement restoration, striping of the intersection and all other work items necessary to complete all construction through the intersection to make Highway 111 ready for traffic. In addition, the Contractor shall coordinate the timing of Intersection Construction with the Engineer and City of Cathedral City and receive written approval of the Intersection Construction dates prior to the commencement of Intersection Construction. The Contractor shall incorporate all means necessary to ensure that Intersection Construction is completed within the designated time period.

SECTION 7 - SOILS REPORT

In conjunction with the soils investigation report prepared by CHJ, Incorporated dated September 13, 2010, the Contractor's attention is directed to Article 8.08 of the General Provisions. The logs of the soil borings for this report are included for the convenience of the bidders, in conformance with Section 8.08 of the General Provisions, as Appendix "C" of these specifications. The soils report is on file in the District office, 1995 Market Street, Riverside and is available for review upon request.

SECTION 8 - NOT USED

SECTION 9 - PAYMENT

The contract prices shall include full compensation for all costs incurred under these Special Provisions and Detailed Specifications.

DETAILED SPECIFICATIONS

SECTION 10 - MOBILIZATION

10.1 Description - The contract item Mobilization shall consist of expenditures for all preparatory work and operations, including but not limited to, those costs necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings, construction yards and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site as well as the related demobilization costs anticipated at the completion of the project.

10.2 Payment - The amount credited for Mobilization on each monthly progress payment shall be equal to the total of the amounts credited for work on all the other contract items for that monthly progress payment, up to a cumulative limit of eighty percent (80%) of the lump sum price bid for Mobilization. The remaining twenty percent (20%) of the lump sum price bid for Mobilization will be paid with the final payment.

Payment of the lump sum contract price for Mobilization shall constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to completion of this item of work.

The deletion of work or the addition of extra work as provided for herein shall not affect the price paid for Mobilization.

SECTION 11 - WATER CONTROL

11.1 Description - This section covers the contract item Water Control. Watersheds and/or urban runoff areas are tributary to the project site at various locations, but do not necessarily follow the alignment of the project under current conditions. Surface water in varying quantities can be expected at any time of the year, and substantial runoff can be expected during periods of rainfall. Groundwater was not indicated at the time of the soils investigation for this project. All bidders shall make their own determination regarding what the surface and/or groundwater conditions will be at the time of construction, and their impact on the bidder's operations and construction phasing.

11.2 Water Control - The contract item Water Control includes the control and/or diversion of surface runoff as well as groundwater within the work area as required to complete the work. All work shall be carried on in areas free of water. Care should be exercised so that runoff or diversion flows do not erode, undermine or otherwise damage either facilities which have been constructed or adjacent private properties. The responsibility for the protection of all existing and proposed improvements lies with the Contractor.

11.3 Measurement and Payment - The methods of controlling both surface and groundwater will be the responsibility of the Contractor. The contract lump sum price paid for Water Control shall include full compensation for all direct and indirect costs incurred under this section, and

for doing all the work involved in controlling surface runoff and groundwater within the construction area, as specified in these Detailed Specifications, and as directed by the Engineer.

Payment will be made on a basis of the percentage of the work completed on the entire project.

SECTION 12 - TRAFFIC CONTROL

12.1 Description - The contract item Traffic Control shall include labor, flagmen, lights, barricades, signs, materials, temporary bridges and equipment necessary to ensure that the vehicular and pedestrian traffic conforms to requirements as set forth in this section and as shown on the drawings.

12.2 Notification of Agencies - The Contractor shall notify the following agencies a minimum of 48 hours in advance of start of any street work and inform them of the proposed construction schedule and provide any additional pertinent information they may request:

Cathedral City Chamber of Commerce	760.328.1213
Cathedral City - City Engineer (Bill Simons)	760.770.0360
Cathedral City Police Department	760.770.0362
Cathedral City Public Works (Kevin Lockwood)	760.770.0366
Coachella Valley Water District (Tyler Hull)	760.398.2651
Desert Water Agency (Steve Johnson)	760.770.0366
Palm Springs Unified School District (Joan Boiko)	760.416.6010
Public Transit (Anita Petke)	760.343.3456
Southern California Edison (Derrick Zietz)	760.202.4229
The Gas Company (Bruce Waddell)	909.335.7507
Time Warner Cable (Placido Lopez)	760.250.2469
Underground Service Alert	811 or 800.227.2600
United States Postal Service	760.202.8848
Verizon (UtilityQuest)	760.778.3620
Waste Disposal Service	760.340.2113

The Contractor is not relieved of his responsibility of notifying the various departments and agencies mentioned above, even if their telephone numbers may have changed without notice.

The above agencies shall also be advised by the Contractor of any major change in the construction schedule that could restrict pedestrian or vehicular traffic.

The Contractor shall notify the public including adjacent businesses a minimum of ten (10) working days prior to start of road closure. The Contractor is also required to notify, in writing, the following as applicable: Fire Department, CHP, local newspaper, Trash pickup, School Districts, RTA, Post Master, UPS, Colleges, Local businesses, Local residents, State and local agencies involved, if affected.

12.3 Public Convenience and Access - The Contractor shall comply with the requirements of Section X of the General Provisions and shall provide continuous access to all private property. Additional provisions shall be made as necessary to protect the public and accommodate traffic with a minimum of inconvenience.

Closures or partial closures of the traveled way implemented by the Contractor shall be related to actual work being performed at the time. Closures shall not be maintained if work is not being performed. If the existing closure is not essential to the type of work being performed at the time, the traveled way shall immediately be restored to a safe condition for public use.

The Contractor shall provide temporary bridge crossings for all driveway entrances to be closed to vehicular access for any period exceeding 4 hours.

Temporary bridges shall have a minimum width of 12 feet for residential driveways and 24 feet for business driveways, and shall be designed for an AASHTO H20 truck loading. Steel plates placed over the trench shall have a minimum thickness of 1.25" and the surface shall be roughened or coated to provide a non-skid surface. For spans greater than 4 feet, a structural design shall be prepared by a Registered Civil Engineer and submitted to the District for review and approval.

The Contractor shall notify each resident and business in writing 3 days in advance of excavating past the affected driveway entrance. Such notice shall contain the expected day and period of time (not to exceed 4 hours) that the driveway is to be out of service. A copy of each letter shall be submitted to the Engineer.

12.4 Construction Signs and Traffic Control Plans - All construction signs, barricades, delineators, etc., shall conform with the U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), Part 6, latest edition", and the MUTCD California Supplement, Part 6 along with the Uniform Sign Chart as shown on the drawing.

The Contractor shall cover existing signs, traffic signals, and pedestrian signals should said controls conflict with temporary traffic control plan as directed by the Engineer.

The Contractor shall post temporary no parking signs on affected streets 24 hours prior to work on those streets. The temporary parking signs shall state the anticipated dates and hours of work on those streets.

12.5 Flaggers - All personnel utilized as flaggers must be trained in the proper fundamentals of flagging and signaling.

12.6 Striping and Pavement Marking - Temporary and permanent striping shall be performed by the Contractor at his expense as directed by the Engineer. The Contractor shall restore the permanent striping immediately after resurfacing of the streets is completed. The Contractor shall notify the City of Cathedral City, Telephone: 760.770.0390 at least 48 hours prior to restriping.

All temporary traffic striping and pavement markings shall conform to Section 84 of the State Standard Specifications and shall be acceptable to the City of Cathedral City.

All pavement markings such as arrows, "STOP", "ONLY", reflectors, etc., shall be replaced by the Contractor using thermoplastic. Thermoplastic crosswalk, traffic stripes and pavement markings shall conform to the provisions in Section 84-1, "General" and 84-2, "Thermoplastic Traffic Stripes and Pavement Markings" of the State Standard Specifications and these Detailed Specifications.

12.7 Payment - The contract prices paid for Traffic Control shall include full compensation for all material and labor costs incurred under this section. Contractor is advised that traffic plans as shown on the drawings may be modified as field conditions require. No additional payment shall be made for modifications to the traffic plan.

This payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 13 - CLEARING AND MISCELLANEOUS WORK

13.1 Description - This section covers the contract item Clearing and Miscellaneous Work as required for construction of the work. All objectionable materials shall be removed and disposed of outside of the limits of the construction easements and permanent rights of way.

13.2 Clearing and Miscellaneous Work - The contract item Clearing and Miscellaneous Work includes the removal and disposal of all vegetation, trees, roots, stumps, fences, pipes, all abandoned facilities, culverts, rocks, structures, concrete and asphalt excluding those items defined specifically as excavation in the appropriate section.

Included in this item are the following:

1. The Contractor shall leave all improved parkways undisturbed where possible. When this is impractical he shall replace in kind, areas disturbed in the parkways including removing and replacing interfering portions of sprinkler systems. Sod shall be used to restore disturbed grass. All work is to be done to the satisfaction of the Engineer.
2. The temporary relocation of signs and mailboxes, and their reinstallation. Work involving mailboxes shall be coordinated with the Postal Service.
3. The stenciling and signage on top of all catch basins and drop inlets. Stenciling and signage will be provided by the District.
4. The removal and replacement of existing landscape, groundcover, shrubs, and trees in kind as shown on the plans and as directed by the Engineer. The

replacement of existing irrigation systems is also included if the existing system cannot remain viable as a result of storm drain installation.

5. The sawcut and removal of portion of existing concrete channel.
6. The removal and reinstalling of existing chain link fence as needed.
7. The sawcut and removal of interfering portion of sidewalks, cross gutters, curb and gutters as shown on plans.
8. The active stabilization of all areas disturbed, stripped or tracked by Contractor. This is intended to cover the designated TCE area and the Contractor's storage and staging yard. Active stabilization measures include but are not limited to hydroseeding, chemical binding/bonding agents, geotextiles, etc. Compaction of native cohesionless soils is not acceptable as a sole means of stabilization.
9. Removal and replacement in-kind of existing 4" PVC roof drain and outlet at approximately Station 16+30 of Lateral 43A.
10. Removal of existing riprap and slope paving surrounding 24" RCP shown on Sheet 10A.
11. Removal and replacement of existing fence, in kind, at approximately Station 39+75 as directed by the Engineer.
12. Backfill existing daylight outlet channel, approximately 825 feet, roughly 3,500 cubic yards of fill.

Finally, included in this item are those types of work as shown on the drawings not specified for pay under any other individual contract item.

13.3 Payment - The contract price paid for Clearing and Miscellaneous Work shall be full compensation for all costs incurred under this section.

This payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 14 - EARTHWORK

14.1 Description - This section covers the contract items Excavation; Mass Excavation; Rock Excavation; Asphalt Concrete Excavation; Backfill; Debris Basin Grading; Controlled Low Strength Material (CLSM) Backfill; and Leveling Bed Material.

14.2 General Excavation Requirements - Pipe/RCB Excavation shall be in conformance with Section 306 of the Standard Specifications. Access to trenches shall be in conformance with Section 306-1.1.4 and the manner of bracing excavations shall be in conformance with Section 306-1.1.6 of the Standard Specifications.

Excavation shall be kept to the minimum widths required for efficient placing of the pipe, box, or structure and the construction of the various other concrete structures. However, for pipe placement the minimum width of trench shall be 24 inches greater than the outside diameter of the pipe or as shown on the drawings. The maximum length of open trench shall be in conformance with Section 306-1.1.2 of the Standard Specifications.

replacement of existing irrigation systems is also included if the existing system cannot remain viable as a result of storm drain installation.

5. The sawcut and removal of portion of existing concrete channel.
6. The removal and reinstalling of existing chain link fence as needed.
7. The sawcut and removal of interfering portion of sidewalks, cross gutters, curb and gutters as shown on plans.
8. The active stabilization of all areas disturbed, stripped or tracked by Contractor. This is intended to cover the designated TCE area and the Contractor's storage and staging yard. Active stabilization measures include but are not limited to hydroseeding, chemical binding/bonding agents, geotextiles, etc. Compaction of native cohesionless soils is not acceptable as a sole means of stabilization.
9. Removal and replacement in-kind of existing 4" PVC roof drain and outlet at approximately Station 16+30 of Lateral 43A.

Finally, included in this item are those types of work as shown on the drawings not specified for pay under any other individual contract item.

13.3 Payment - The contract price paid for Clearing and Miscellaneous Work shall be full compensation for all costs incurred under this section.

This payment will be made on a basis of the percentage of work completed on the entire project.

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14.2 General Excavation Requirements - Pipe/RCB Excavation shall be in conformance with Section 306 of the Standard Specifications. Access to trenches shall be in conformance with Section 306-1.1.4 and the manner of bracing excavations shall be in conformance with Section 306-1.1.6 of the Standard Specifications.

Excavation shall be kept to the minimum widths required for efficient placing of the pipe, box, or structure and the construction of the various other concrete structures. However, for pipe placement the minimum width of trench shall be 24 inches greater than the outside diameter of the pipe or as shown on the drawings. The maximum length of open trench shall be in conformance with Section 306-1.1.2 of the Standard Specifications.

In excavating for surfaces against which concrete is to be placed, care shall be exercised in removing the final lift. Upon completion of excavation for structures and pipe, surfaces against which concrete is to be placed shall be free of debris, mud or ponded water.

The foundation for all concrete structures including concrete channels and sideslopes will be inspected and tested after excavation. The subgrade shall be compacted to ninety percent (90%) relative compaction prior to the placement of concrete.

Material which will not provide a suitable foundation shall be removed and replaced with compacted select material as directed by the Engineer.

Any overexcavation shall be filled with select material compacted to ninety percent (90%) relative compaction and meeting the material requirements for backfill.

The Contractor shall remove slides and materials eroding into the work, and the slopes and grades refinished to original grades as specified.

The Contractor shall dispose of all surplus excavated material outside of the limits of the construction easements and permanent rights of way.

Blasting, when necessary, as approved by the Engineer shall be in accordance with Section 19-2.03 of the State Standard Specifications.

Excessive blasting will not be permitted. Any material outside the authorized cross section which may be shattered or loosened because of blasting shall be removed by the Contractor at the Contractor's expense. The Contractor shall discontinue any method of blasting which leads to overshooting or is dangerous to the public or destructive to property or to natural features. Further, velocity monitoring during the blasting operation should be performed by the Contractor.

Excavated rock slopes should be flattened to prevent vertical or overhanging rock slopes.

The Contractor's attention is directed to the General Provisions, Section V, Article 5.09 on the use of explosives and Article 5.11 in regard to unforeseen difficulties.

Prior to any blasting, a blasting plan developed by a qualified blasting engineer shall be submitted to the Engineer for approval. The Contractor is responsible for obtaining all necessary permits associated with blasting from local and State authorities. The cost of blasting plan and permits will be paid for under the contract item Rock Excavation and no additional compensation will be allowed.

The Contractor's attention is directed to the General Provisions, Section V, Article 5.09 on the use of explosives and Article 5.11 in regard to unforeseen difficulties.

14.3 Excavation - The contract item Excavation covers the removal of all material including asphalt, aggregate base, abandoned pipelines and concrete from within the trench excavation

paylines as specified and as required for the construction and installation of the reinforced concrete box, junction structures, headwalls, manholes, transitions and pipe as shown on M815 of the standard drawings, and the disposal of all surplus material. All A.C. and P.C.C. shall be sawcut unless otherwise specified.

14.4 Mass Excavation - The contract item Mass Excavation covers the removal of all material required to bring the existing surface to the proposed finished surface as shown on the drawings or as directed by the Engineer. Any material located between the existing surface and proposed finished surface which in the opinion of the Engineer cannot be excavated with conventional equipment shall be treated as Rock Excavation. Included in the contract item Mass Excavation is the restoration of the Eagle Canyon Dam and Debris Basin maintenance access road per the Eagle Canyon Dam as-built plans.

14.5 Rock Excavation - The contract item Rock Excavation shall include the removal and disposal of any material which in the opinion of the Engineer cannot be excavated with conventional excavation equipment, such as 235C Caterpillar excavator with a medium stick and rock ripping bucket, or equivalent equipment and is removed by drilling and blasting, or mechanically fracturing by means other than conventional excavating equipment and occupies an original volume of at least one half cubic yard. When rock is encountered, it shall be stripped of earth and the Engineer shall be notified and given proper time to observe the rock before removal. Any rock removed which has not been measured by the Engineer will not be classified as Rock Excavation. Excavation in excess of the depths required for the structures shall be corrected by placing leveling material compacted, at no additional expense to the Engineer. Should the Contractor exhaust conventional equipment and methods for Rock Excavation and removal and desire to use explosives, it shall comply with Section 14.2 of these specifications and the following:

1. Blasting, storage and handling of explosives shall be in accordance with the Construction Safety Orders of the Division of Industrial Safety of the California Department of Industrial Relations, Federal Safety Requirements, and other authorities which have jurisdiction.
2. Blasting shall be done only by skilled operators under the direction of a licensed foreman.
3. The Contractor shall identify all property and structures which may be affected by blasting and shall take all safety precautions and protective measures to prevent damage or injury. All personal injury or damage to persons or property of any nature shall be the responsibility of the Contractor.
4. The Contractor agrees to indemnify and hold the Engineer, its officers, agents and employees harmless from any and all liability claims, costs, and expenses.

Included in this contract item is the blasting plan and permits.

14.6 Asphalt Concrete Excavation – The contract item Asphalt Concrete Excavation covers the header cut and removal of asphalt concrete pavement to a depth of 0.12' and dimensions as specified and as shown on the drawings and the disposal of all surplus material.

Exclusive of this contract item is the asphalt concrete excavation within the trench excavation limits which will be measured and paid by the contract item Excavation.

Included in this contract item is the recompaction of the existing Aggregate Base to 95% relative compaction should the Aggregate Base be exposed after removal of existing asphalt concrete.

The cold planing machine shall have a cutter head at least 72 inches wide and shall be operated so as not to produce fumes or smoke.

The final cut shall result in a uniform surface conforming to the typical cross sections. The outside lines of the planed area shall be neat and uniform. The road surfacing to remain in place shall not be damaged in any way.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be immediately removed from the work site and disposed of outside the right of way. The removal crew shall follow within 50 feet of the planer unless otherwise directed by the Engineer.

14.7 General Backfill Requirements - Whenever fill is specified or required (except for pipe backfill) the work shall be performed as set forth in Sections 300-4.1 to 300-4.8 of the Standard Specifications. Backfill for pipe and box shall conform to Section 306-1.3 of the Standard Specifications.

No backfill materials shall be placed against the outside walls of cast-in-place concrete structures until the concrete has developed eighty percent (80%) of its design strength. No fill or traffic will be permitted on the top of any cast-in-place concrete structure until the concrete in the structure has attained its design strength. Compressive strength will be determined by test cylinders taken by the Engineer.

Regardless of the method of densification, backfill material shall not be placed against any reinforced concrete structure until the structure has been inspected and approved for backfilling by the Engineer.

Densification of backfill will be accomplished by either mechanical methods or water densification methods as described in (1) and (2) below. All relative compaction tests will be made by the Engineer in conformance with California Test 216. Whenever relative compaction is specified to be determined by California Test 216, the in-place density may be determined by California Test 231. The wet weight or dry weight basis and English units of measurement may be used at the option of the Engineer.

- (1) Mechanical Compaction - Backfill shall be mechanically compacted by means of tamping rollers or other mechanical tampers. Impact-type pavement breakers (stompers) will not be permitted unless otherwise approved by the Engineer.

All backfill material for structures shall be placed in uniform layers and shall be brought up uniformly on each side of the structure. The thickness of each layer of backfill shall not exceed 8 inches before compaction unless otherwise approved by the Engineer. For hand directed mechanical compactors, the thickness of each layer shall not exceed 4 inches before compaction.

- (2) Water Densification - Water Densification of bedding and backfill shall be by jetting and shall be used when approved by the Engineer. Jetting for bedding and backfill shall conform to Section 306-1.3.3 of the Standard Specifications except as modified as follows:

- a. Jetting may be allowed for bedding, when approved by the Engineer, in conditions where soils of the trench walls have a sand equivalent less than 15, provided the Contractor takes appropriate action to drain the water.
- b. Undensified lifts shall not exceed 4 feet.
- c. Suitable backfill material to be jetted shall have a sand equivalent of 30 or greater.
- d. Jetting of the top 4 feet of backfill measured from the subgrade plane will not be permitted in roadway areas.

The work shall be performed in such a manner that water will not be impounded. Backfill shall be brought up uniformly on each side of the structure. Jetting methods shall be supplemented by the use of vibratory or other compaction equipment when necessary to obtain the required compaction.

Tongue and groove concrete pipe joints shall be mortared in conformance with Section 306-1.2.4 of the Standard Specifications prior to jetting.

Tongue and groove precast reinforced concrete box joints shall be mortared in conformance with Section 306-1.7.5.1 of the Standard Specifications prior to jetting.

Approval to use specific methods and compaction equipment shall not be construed as guaranteeing or implying that the use of such methods and equipment will not result in damage to adjacent ground, existing improvements or improvements installed under the contract, nor shall it be construed as guaranteeing proper compaction. The Contractor shall make his own determination in this regard.

All backfill and bedding around structures and pipe shall be compacted to not less than ninety percent (90%) relative compaction. Where such material is placed under existing or proposed paved roadways, the top 3 feet, measured from the subgrade plane, shall be compacted to ninety-five percent (95%) and shall be compacted by Method (1).

Trench bottoms for structures and pipe shall be graded to provide firm and uniform bearing throughout the entire length of the structures and pipe.

Pipe and box bedding shall consist of well graded granular material having a sand equivalent value of not less than 30 and be capable of being readily consolidated by jetting and vibrating. Jetting shall be as described by Method (2) Water Densification and the jet pipe shall be inserted at intervals of three (3) feet maximum continuous along each side of the pipe. Gravel of crushed aggregate shall not be used for bedding materials. Pipe and box bedding shall be placed to one foot above the top of the reinforced concrete pipe or box as shown on the drawings. The Contractor may use onsite material for pipe and box bedding subject to the approval of the Engineer and provided it meets the requirements as set forth above.

The Contractor's attention is directed to Section 7 – Soils Report. The Contractor may use onsite material for pipe and box bedding subject to the approval of the Engineer provided it meets the requirements as set forth above. The Contractor shall make his own determination as to the availability of suitable onsite material. Should onsite material be unsatisfactory, the Contractor will be required to import suitable material.

Backfill material placed above the bedding shall consist of either select material from the excavation or imported material, as approved by the Engineer.

14.8 Testing – District personnel shall perform compaction tests as described below. These tests represent the minimum required. Additional tests may be taken at the Engineer's discretion.

1. Mainline Trenches – A complete series of compaction tests will be taken for each 4-foot thickness of backfill placed. Each series will consist of tests taken at approximate maximum intervals of 300 feet. Each series will begin at the top of the bedding zone.
2. Connector Pipe Trenches – Compaction tests will be taken on 50% of the laterals, one test for each 4-foot of depth.
3. Any failed test will result in a retest.

When water densification is requested, sand equivalent tests representing foundation soils and proposed backfill material shall be obtained at approximate maximum intervals of 1,000 feet. Additional tests may be necessary to define limits of suitable backfill material.

14.9 Backfill - The contract item Backfill includes all backfill, and pipe and box bedding material compacted as specified around the various concrete structures and pipe within the

paylines as shown on M815 of the standard drawings and plans. Included in this contract item is the backfill needed to bring the ground surface to the proposed elevations as shown on the plans.

14.10 Debris Basin Grading - The contract item Debris Basin Grading covers all labor and equipment required to complete the required regrading of the debris basin to the lines and grades as shown on the drawings or as directed by the Engineer. No extra payment will be made for excavation and disposal of excess material.

14.11 Controlled Low Strength Material (CLSM) Backfill - The contract item Controlled Low Strength Material (CLSM) Backfill shall include the placement of CLSM Backfill around the box/pipe structure as directed by the Engineer.

CLSM backfill shall be in conformance with Section 201-6 of the Standard Specifications and shall:

1. Be hand excavatable.
2. Contain a minimum of one quarter (1/4) sack of cement per cubic yard.
3. Have a **maximum** 28-day compressive strength of 100 psi.

14.12 Leveling Bed Material - The contract item Leveling Bed Material is necessary to make a smooth uniform foundation. The leveling bed material shall be sand, crushed aggregate or crushed miscellaneous base, free from roots, vegetation, and other deleterious materials, free draining granular material having a sand equivalent not less than 35. The leveling bed material shall be moistened, spread, consolidated with a lightweight vibratory plate compactor or approved equivalent method, and trimmed to final grade as directed by the Engineer.

14.13 Measurement - Excavation; Mass Excavation; Rock Excavation; Asphalt Concrete Excavation; Backfill; Controlled Low Strength Material (CLSM) Backfill; and Leveling Bed Material beyond the limits established by the drawings, unless ordered in writing by the Engineer, will not be measured for payment.

The excavated material shall be measured from the ground surface existing at the start of excavation, as determined from surveyed cross sections taken by the District, to the lines, grades and dimensions shown on the drawings. Longitudinal limits of the excavations as shown on the profile drawings terminate at a vertical plane at the limits of the structure, measured along the longitudinal axis of the various structures.

Measurement for payment for the contract item Excavation will be the number of cubic yards of material excavated as shown on the drawings. Longitudinal limits of the excavations terminate at a vertical plane at the limits of pipe or structures, measured along the longitudinal axis of the pipe or structure.

Measurement for payment for the contract item Mass Excavation will be the number of cubic yards excavated as shown on the drawings or as directed by the Engineer.

Measurement for payment for the contract item Rock Excavation will be the number of cubic yards of excavated rock and will be made only if the Engineer has determined that it qualifies as Rock Excavation per the guidelines set forth in Section 14.5. Areas deemed such shall be cleaned of all loose material and the surface cross sectioned based on survey data to create an upper limit. After excavation, the area will again be cross sectioned based on survey data to form the lower limit. The volume in cubic yards will be determined by the average end area method. Volume for large boulders declared as Rock Excavation may be measured by taking the average circumference and using the volume formula for a sphere.

Measurement for payment for the contract item Asphalt Concrete Excavation will be the number of square feet of material excavated as shown on the drawings or as directed by the Engineer.

Measurement for payment for the contract item Backfill will be the number of cubic yards of material placed in final position as specified and within the limits of the payment lines shown on the drawings. The longitudinal limits shall terminate at a vertical plane at the limits of the pipe or structure, measured along the longitudinal axis of the various pipe or structures. Volumes occupied by structures, aggregate base, asphalt concrete and other feature for which a separate payment is made will be deducted from the gross volume.

No measurement will be made for payment for the lump sum contract item Debris Basin Grading.

Measurement for payment for the contract item Controlled Low Strength Material (CLSM) Backfill will be the number of cubic yards of material placed in final position as specified and within the limits of the payment lines as shown on the drawings. The longitudinal limits for CLSM shall terminate at a vertical plane at the limits of the pipe or structure, measured along the longitudinal axis of the various pipe/box or structures unless shown on the drawings otherwise. Volume occupied by structures, aggregate base, asphalt concrete and other features for which a separate payment is made will be deducted from the gross volume.

Measurement for payment for the contract item Leveling Bed Material will be the number of cubic yards of material placed in final position as specified to the lines, grades and dimensions as shown on the drawings or as directed by the Engineer.

14.14 Payment - The contract prices paid for Excavation; Mass Excavation; Rock Excavation; Asphalt Concrete Excavation; Backfill; Controlled Low Strength Material (CLSM) Backfill; and Leveling Bed Material shall include full compensation for all costs incurred under this section.

Payment of the lump sum contract price for Debris Basin Grading shall constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to completion of this item of work.

SECTION 15 - TRENCH SAFETY SYSTEM AND FALSEWORK

15.1 Description - This section covers the contract item Trench Safety System and Falsework. This item is defined as a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Trench safety systems include support systems, sloping and benching systems, shield systems and other systems that will provide necessary protection. The item includes the furnishing and implementation of the safety system as required by Section 306-1.1.6 of the Standard Specifications or as directed by the Engineer.

15.2 Trench Safety System - Excavation for any trench five (5) feet or more in depth shall not begin until the Contractor has provided to the Engineer, a detailed plan for worker protection from the hazards of caving ground during the excavation of the trench. The plan shall show the details of the design of shoring, bracing, sloping or other provisions to be made for worker protection including any design calculations done in the preparation of the plan. No such plan shall allow the use of shoring, sloping or a protective system less effective than that required by the Construction Safety Orders of the California Department of Industrial Relations, Division of Occupational Safety and Health Administration (Cal-OSHA). The plan shall be prepared and signed by an engineer who is registered as a civil engineer in the State of California, and the plan and design calculations shall be submitted for review at least two (2) weeks before the Contractor intends to begin trenching operations.

All safety plans shall reflect surcharge loadings imparted to the side of the trench by equipment and stored materials. Surcharge loads shall be monitored to verify that such loads do not exceed the design assumptions for the system.

The Contractor should not assume that only one type of trench safety system such as a shield or "trench box" will be adequate for all trenching situations encountered on a given project. The Contractor should be prepared with alternative safety system designs (such as solid sheeting) should construction circumstances dictate the use of such.

Trench safety system designs for support systems, shield systems or other protective systems whether drawn from manufacturers' data, other tabulated data or designed for this particular project must be signed by a civil engineer registered in the State of California prior to submittal to the District for review. A shoring plan for the specific use of a shield shall be prepared. Catalogs or engineering data for a product should be identified in the plan as supporting data. All specific items or applicable conditions must be outlined on the submittal.

The State of California Department of Transportation "Trenching and Shoring Manual" will be used as a guide for plan review and approval.

Also included in this item is the fencing and barricading of the open trench as required for the safety of pedestrians and vehicular traffic as directed by the Engineer.

15.3 Falsework - Falsework for the construction of reinforced concrete boxes shall conform with Section 51-1.06 Falsework of the State Standard Specifications.

The Falsework plan shall be prepared and signed by an engineer who is registered as a civil engineer in the State of California, and the plan and design calculations shall be submitted for review at least 4 weeks before the Contractor intends to begin Falsework construction.

The State of California Department of Transportation "Falsework Manual" will be used as a guide for plan preparation and review.

15.4 Measurement and Payment - The contract lump sum price paid for the item Trench Safety System and Falsework shall include full compensation for all costs incurred under this section.

This payment will be made on a basis of the percentage of the work completed on the items related to trenching operations.

SECTION 16 - CONCRETE CONSTRUCTION

16.1 Description - This section includes the contract items related to the various classes of Concrete.

16.2 General Requirements - Concrete for all purposes shall be composed of Portland Cement, aggregates and water of the quantities and qualities herein specified, and in the required proportions. The ingredients are to be well mixed and brought to the proper consistency and to have a compressive strength at the age of 28 days of not less than the amount shown in the following tabulation for each type of work listed:

<u>CONCRETE CLASS</u>	<u>MINIMUM SACKS CEMENT/C.Y.</u>	<u>TYPE OF WORK</u>	<u>POUNDS PER SQUARE INCH</u>
A	6	Boxes, Transition Structure Nos. 1, 2, and 3, Concrete Bulkhead	4000*
A	6	Slope Paving, Trapezoidal Channel, Catch Basins, Junction Structure Nos. 1, 3, 4, Manholes, Flood Walls, Concrete Collars, Headwalls, Wing Walls, Parapet Beam, Invert and Cross Gutters, Box Culvert Wing Wall	3250*
B	5	Local Depressions, Cutoff Walls, Curb and Gutter, Driveways, Sidewalk, Concrete Support, Concrete Pad and Miscellaneous Concrete not otherwise specified	3000*

E

1/4

Controlled Low Strength Material
(CLSM) Backfill

100 max.

*Note: Concrete for use in structures constructed from State of California, Department of Transportation Standard Plans shall have compressive strengths as called for on those plans.

16.3 Material and Methods - All concrete materials, methods, forms and proportioning shall conform to Sections 51 and 90, and additionally, curb construction shall conform to Section 73 of the State Standard Specifications. Concrete test specimens will be made in accordance with ASTM Designation C-31 and C172. Test for concrete compressive strengths will be performed in accordance with ASTM Designation C-39. Combined aggregate grading for all concrete shall be in conformance with Section 90-3.04 of the State Standard Specifications and the following tabulation for each type of work listed:

<u>TYPE OF WORK</u>	<u>COMBINED AGGREGATE GRADING</u>
The inverts of: Trapezoidal Channels, Reinforced Concrete Box, Junction Structures, Transition Structures and Manholes.	1-1/2" Maximum
Slope Paving, Trapezoidal Channel, Box Deck and Walls, Headwalls, Wing Walls, Catch Basins, Drop Inlets, Flood Walls, Local Depressions, Curb and Gutter, Driveways, Sidewalk, Cutoff Walls, Bulkheads, Collars and other Miscellaneous Concrete not otherwise specified.	1" Maximum
Controlled Low Strength Material (CLSM)	3/8" Maximum

Fly Ash, Class F may be substituted for cement, up to a maximum of 15 percent by weight for all concrete. Fly Ash shall meet the standards of ASTM Designation: C-618. Water reducing agents meeting ASTM Designation: C-494 will be permitted in amounts recommended by the supplier and approved by the Engineer in writing.

No other admixture shall be used in any class of concrete without written permission from the Engineer.

The Contractor at his option may elect to use reclaimed concrete material for the CLSM. Reclaimed concrete material meeting gradation requirements in the Standard Specification Section 201-6.2.2 may be used for CLSM. The Contractor may also elect to use an air entrainment, or an accelerator such as 2% polar set or equivalent in order to speed up the set time of the CLSM. The Contractor shall submit CLSM mix designs for review and approval.

Supplementing Section 90-1.01 of the State Standard Specifications, prior to placement of any concrete the Contractor shall submit mix designs, for all types of concrete to be placed, to

the Engineer for approval. Supplementing Section 90-6.03 of the State Standard Specifications, concrete delivered to the job site shall be accompanied by a ticket containing the weight of each of the individual ingredients in the mix.

16.4 General Reinforcing Steel Requirements - Reinforcing steel for all reinforced concrete structures shall be Grade 60 Low-Alloy or Grade 60 Billet-Steel. The reinforcing steel for use in structures constructed from State of California, Department of Transportation Standard Plans shall be of Grade 60 or as called for on those plans. Cleaning, bending, placing and spacing of reinforcement shall conform to the applicable provisions of Section 52 of the State Standard Specifications and to the drawings. The Contractor shall furnish a "Certificate of Compliance" with the specification of ASTM Designation: A-706/A or A-615/A. All splices shall conform to the requirements of A.C.I. Manual, Standard 318, latest edition. Splices requested by the Contractor for his convenience shall be subject to approval by the Engineer. Longitudinal lap shall be 16 inches minimum for #4 bars and 19 inches minimum for #5 bars.

16.5 Consistency - The consistency of the concrete shall be such as to allow it to be worked into place without segregation. Unless otherwise specified, the slump shall be 3 inches plus or minus 1 inch for all concrete, except the concrete for the cast-in-place concrete pipe which shall have a slump of 2 inches plus or minus 1 inch.

The slump test shall be performed in accordance with the requirements of ASTM Designation: C-143. Slumps greater than those specified may be cause for rejection of the concrete by the Engineer.

16.6 Placing - Supplementing Section 51-1.09 of the State Standard Specifications, concrete shall not be placed except in the presence of the Engineer. The Contractor shall give reasonable notice to the Engineer each time he intends to place concrete. Such notice shall be far enough in advance to give the Engineer adequate time to inspect the subgrade, forms, steel reinforcement and other preparations for compliance with the specifications before concrete is delivered for placing.

Formed concrete shall be placed in horizontal layers in lifts of not more than 20 inches. Hoppers and chutes, pipes and "elephant trunks" shall be used as necessary to prevent segregation of the concrete.

16.7 Form Removal and Finish - Forms shall be removed only when the Engineer has given his approval. Forms shall be removed in such a way as to prevent damage to the concrete. Supports shall be removed in a manner that will permit the concrete to take stresses due to its own weight uniformly.

Forms shall not be removed sooner than the following minimum time or strength after the concrete is placed. These times represent cumulative number of days and fractions of days, not necessarily consecutive, during which the temperature of the air adjacent to the concrete is above 50 degrees Fahrenheit. If the temperature falls below 50 degrees Fahrenheit at any time after the concrete is placed in the forms, the Engineer will advise the Contractor of additional time required before forms can be removed.

<u>Element</u>	<u>Strength or Time</u>
Reinforced concrete boxes with spans equal to or greater than 14 feet	3000 psi or 7 days
Reinforced Concrete Boxes with spans less than 14 feet, and not at pavement grade, Transition Structure Nos. 1 and 2	1600 psi
All other structures	16 hours

The finish on all exposed formed surfaces shall conform to Section 51-1.18B Class 1 Surface Finish of the State Standard Specifications. A tight wood float finish will be required on the surface of trapezoidal channels and excessive surface working will not be permitted. The exposed concrete surfaces shall be broomed in a transverse direction with a fine textured hair push broom to produce a uniform surface and eliminate float marks. Brooming shall be done when the surface is sufficiently set to prevent deep scarring. If directed by the Engineer, a fine spray of water shall be applied to the surface immediately in advance of brooming.

Exposed corners of all concrete structures shall be finished with a 3/4" chamfer.

Concrete flatwork shall match adjacent surfaces. The concrete shall be struck off and tamped or vibrated until a layer of mortar has been brought to the surface. The top surface and face of curbs, gutters, catch basins and sidewalks shall be finished to match adjacent surfaces.

16.8 Curing - All concrete shall be prevented from drying for a curing period of at least seven (7) days after it is placed. Surfaces exposed to air during the curing process shall be kept continuously moist for the entire period or until curing compound is applied.

Formed surfaces shall be thoroughly wetted immediately after forms are removed and shall be kept wet until patching and repairs are completed. Water or covering shall be applied in such a way that the concrete surface is not eroded or otherwise damaged. Water for curing shall be clean and free from any substances that will cause discoloration of the concrete.

Concrete may be coated with curing compound in lieu of the continued application of moisture. The curing compound shall comply with the requirements of Section 90-7.01B of the State Standard Specifications. The curing compound shall be No. 5 White Pigmented Curing Compound conforming to the requirements of ASTM Designation: C-309, Type 2, Class B for all concrete surfaces other than for flatwork which shall be coated with a clear or translucent curing compound containing a red fugitive dye.

The curing compound shall be sprayed on the moist concrete surfaces as soon as free water has disappeared, but shall not be applied to any surface until patching, repairs and finishing of that surface are completed. The curing compound shall be thoroughly mixed immediately before applying, and shall be applied at a uniform rate of not less than one gallon per 150 square feet of surface. No separate payment will be made for the curing compound or its application.

16.9 Joints - Joints shall be made at the locations shown on the drawings, or as approved by the Engineer.

The Contractor shall construct, in one continuous concrete placing operation, all work comprised between such joints. Joints shall be kept moist until adjacent concrete is placed.

All construction joints having a keyed, stepped, or roughened surface shall be cleaned by sandblasting prior to placement of the adjacent concrete, unless otherwise directed by the Engineer.

The sandblasting operations shall be continued until all unsatisfactory concrete, laitance, coatings, stains, debris, and other foreign materials are removed. The surface of the concrete shall be washed thoroughly to remove all loose material.

Transverse weakened plane joints shall be required in the trapezoidal channel at 10-foot spacing or as directed by the Engineer. The joints may be formed by placing a continuous strip of plastic or other material which will not react adversely with the chemical constituents of the concrete or bond with the concrete. The strip shall have a minimum thickness of 0.013 foot, a width of not less than 0.12 foot nor more than 0.13 foot for the six-inch thick channel slope and invert. After placement, the vertical axis of the joint material shall be within 10 degrees of a plane normal to the surface of the concrete. The tops of the strip shall not be above nor more than 0.02 foot below the finished concrete. Final alignment of the strip for the transverse weakened plane joints shall not vary more than 0.04 foot from the edge of a 12-foot straight edge. After installation of a joint material the concrete shall be free of segregation, rock pockets or voids and the finished concrete surface on each side of the joint shall be in the same plane.

The Contractor may elect to form the weakened plane joints in the channel surface by cutting a groove in the surface with a power driven saw. The grooves shall be cut to a minimum depth of 0.17 foot and the width shall be the minimum width possible with the type of saw being used, but in no case shall the width exceed 0.02 foot. The weakened plane joints shall be sawed within 12 hours after the concrete has been placed.

Construction joints, when required, shall be located between the transverse joints and, unless otherwise specified on the plans, shall utilize 1/2 inch diameter deformed bars 30 inches long, spaced at 18-inch centers as tie bars. The construction joints shall be straight and finished in a workmanlike manner.

Surfaces of construction joints shall be cleaned as set forth in Section 51-1.13 of the State Standard Specifications.

For reinforced concrete boxes, keyed transverse construction joints shall be placed not more than 50 feet or be less than 10 feet. Transverse joints in the invert, walls and deck shall be in the same plane. Transverse construction joints shall be constructed per details on the Standard Drawings. Refer to Section 31 for precast box joints.

16.10 Weepholes - Weepholes shall be constructed in accordance with the drawings and at locations directed by the Engineer. All weepholes shall be 2-1/2 inches in diameter unless noted otherwise on the drawings.

Weepholes may be formed by removable round wooden dowels, Schedule 40 PVC Pipe or greater, or by other methods acceptable to the Engineer.

All weepholes shall have a rodent screen consisting of 1/4-inch mesh, 16-gauge galvanized hardware cloth securely and permanently attached over the drain opening in a manner approved by the Engineer.

Filter material for the weepholes shall be one inch (1") nominal size crushed rock conforming to the gradation of Section 200-1.2 of the Standard Specifications. Filter material shall also meet the quality requirements of Sections 200-1.1 and 200-1.2 of the Standard Specifications.

Filter material shall be wrapped in a single layer of filter fabric as shown on the drawings or approved by the Engineer. Filter fabric shall conform to that specified for underdrains per Section 88-1.03 of the State Standard Specifications.

Filter fabric shall be furnished in protective wrapping which shall protect the fabric from ultraviolet radiation and from abrasion due to shipping and handling. The fabric shall also be ultraviolet stabilized.

The fabric shall be placed in the manner and at the locations shown on the drawings. The surface to receive the fabric shall be prepared to a smooth condition free of obstructions and debris.

The fabric shall be covered within 72 hours of its placement. Should the fabric be damaged during construction, the torn or punctured section shall be repaired or replaced as directed by the Engineer.

No separate payment will be made for the installation of the weepole, hardware cloth, filter material or filter fabric.

16.11 Class "A" Concrete, Reinforced Concrete Box - The contract item Class "A" Concrete, Reinforced Concrete Box covers the concrete and reinforcing steel incorporated in the construction of the reinforced concrete boxes, Transition Structure No. 2, and Modified Transition Structure No. 2. Included in this item is the material needed for the construction of the concrete support detail shown for the protection of the sewer lines at Station 17+53±.

Reinforced concrete box walls shall be constructed by placing the concrete directly against timber or steel sheeting used as the outside form and shoring. Sheeting shall be closely fitted and extend a minimum of 12 inches above the ground surface. Unless otherwise directed, once the sheeting is removed the void created shall be immediately backfilled with a well graded sand and thoroughly jetted to the relative densities specified in Backfill.

The Contractor has an option of forming both sides of the reinforced concrete box walls, however, due to additional loads on the box structure resulting from this trench condition, the Contractor will be required to submit an alternate box design prepared by a civil engineer registered in the State of California. All alternate box designs are subject to the approval of the Engineer and no additional payment will be made for the alternate box if approved.

If the box is constructed from State of California, Department of Transportation Standard Plans, either method of forming noted in the above paragraphs may be used without an alternate box design being submitted.

Loading and vehicular use of box deck slab shall comply with the requirements of Section 51-1.11 of the State Standard Specifications.

Included in the pay item is all reinforcing steel but exclusive of earthwork.

Also included in this item of work will be the construction of the weepholes if required in the invert slab or sides of the reinforced concrete box.

16.12 Class "A" Concrete - The contract item Class "A" Concrete covers the concrete and reinforcing steel to be used in the construction of the box culvert wing walls, parapet beam, channel, pipe headwalls, wing walls and invert.

16.13 Class "A" Concrete, Minor Structures - The contract item Class "A" Concrete, Minor Structures includes the complete construction of the catch basins, collars, cross gutters, and concrete bulkhead. Included in the pay item is all earthwork and reinforcing steel required for these structures, but exclusive of the required miscellaneous iron and steel.

16.14 Class "B" Concrete, Miscellaneous - The contract item Class "B" Concrete, Miscellaneous includes the complete construction of the curb and gutters, sidewalks, driveways, local depressions, concrete support, concrete pads and any other concrete not specified. Included in the pay item is all earthwork and reinforcing steel required. The subgrade for cross gutters and driveways shall be recompacted to ninety-five percent (95%) relative compaction prior to the placement of concrete.

16.15 1'-8" Floodwall - The contract item 1'-8" Floodwall covers the complete construction of the floodwall, including reinforcing steel and the required drilling.

16.16 8" Floodwall - The contract item 8" Floodwall covers the complete construction of the floodwall, including reinforcing steel and the required drilling.

16.17 Transition Structures - The contract items Transition Structure Nos. 1 and 3 covers the complete construction of these various structures, including reinforcing steel, exclusive of earthwork.

16.18 Junction Structure No. 1 - The contract item Junction Structure No. 1 covers the complete construction of these structures, including reinforcing steel, exclusive of earthwork.

16.19 Junction Structure No. 3 - The contract item Junction Structure No. 3 covers the complete construction of these structures, including reinforcing steel, exclusive of earthwork.

No separate payment will be made for Junction Structure No. 4.

16.20 Manholes - The contract items Manhole No. 2, Pressure Manhole No. 2; and Manhole No. 3 cover the complete construction of these various structures, including reinforcing steel, exclusive of earthwork and the miscellaneous iron and steel.

The manhole rings are required and shall conform to ASTM Designation: C-478, and the drawings. The rings shall be laid up, using Type II modified cement with a 1:2 mix mortar and with 1/2-inch minimum thickness pointed joints. On completion, vertical wall section shall not be out of plumb by more than 1/2-inch in 10 feet of vertical height. The manhole rings shall also be accurately aligned. The cast iron manhole frame and cover shall be installed, with frame accurately set to finished grade of pavement, in mortar well tamped around the perimeter of frame to ensure full bearing.

16.21 Measurement - Measurement for payment for the contract items Class "A" Concrete, Reinforced Concrete Box; Class "A" Concrete; Class "A" Concrete, Minor Structures; and Class "B" Concrete, Miscellaneous will be the number of cubic yards placed as specified, measured to the neat lines as shown on the drawings.

Measurement for payment for the contract items 1'-8" Floodwall and 8" Floodwall will be the number of lineal feet placed, measured parallel to the top of the wall.

Measurement for payment for the contract items Transition Structure No. 1; Transition Structure No. 3; Junction Structure No. 1; Junction Structure No. 3; Manhole No. 2; Pressure Manhole No. 2, and Manhole No. 3 will be the number of each type constructed as specified.

No measurement or payment will be made for Junction Structure No. 4.

16.22 Payment - The contract prices paid for the various Concrete items shall include full compensation for all costs incurred under this section.

SECTION 17 - CONCRETE PIPE

17.1 Description - This section covers the contract item Reinforced Concrete Pipe of the various sizes as required for the work.

17.2 General Pipe Requirement - Pipe materials, manufacture and quality, shall conform to ASTM Designation: C-76 or C-655. The Engineer shall be furnished a "Certificate of Compliance" signed by the manufacturer of the pipe certifying that the pipe conforms to the ASTM requirements. All pipe and pipe material supplied by the Contractor shall be new.

The District will also require the D-load bearing strength test conforming to ASTM C497 for new pipe 48" or greater, in conformance with Sections 207-2.9.1(1) and 207-2.9.2 of the Standard Specifications as a basis for acceptance of the pipe. The test shall be performed in the presence of the Engineer.

Pipe shall be laid in a trench free of ponded water in conformance with Section 306-1.2.2, with joints in conformance with Section 306-1.2.4 of the Standard Specifications.

Pipe ends shall be cleaned and moistened prior to making up joint.

17.3 Reinforced Concrete Pipe - The contract items for the various Reinforced Concrete Pipe include the furnishing and installing of the various pipe as specified, exclusive of earthwork.

17.4 Pipe on Curves - Unsymmetrical closure of pipe joints shall not exceed 1 inch pull on the outside of the curve when pull is measured at the springline on the inside of the pipe. Mortar joints on curves shall conform in strength, texture of mortar finish and tightness to the joints for straight ended pipe.

When beveled pipe is used the maximum deflection angle shall not exceed 6 degrees unless shown on the plans or approved by the Engineer.

17.5 Video Inspection - All concrete pipe (cast-in-place and reinforced) with inside diameters of 30 inches or less shall be videotaped prior to final inspection. Copies of the videotapes shall be provided to the Engineer. For pipe placed within roadway area, video inspection shall be performed and the results approved by the Engineer prior to paving.

17.6 Measurement - Measurement for payment of the contract items Reinforced Concrete Pipe of the various sizes and classes will be the number of lineal feet of each class installed as specified measured along the centerline of the pipe in place including curves.

17.7 Payment - The contract prices paid for the Reinforced Concrete Pipe shall include full compensation for all costs incurred under this section.

SECTION 18 - NOT USED

SECTION 19 - FLEXIBLE PAVEMENT CONSTRUCTION

19.1 Description - This section covers the contract items Aggregate Base, Class 2; Hot Mix Asphalt (HMA) Type A; and Temporary Resurfacing.

19.2 Aggregate Base, Class 2 - The contract item Aggregate Base, Class 2 includes furnishing and placing such material as indicated on the drawings. Aggregate Base, Class 2 shall be clean and free from roots, organic material and other deleterious substances, and be of such character that when wet it will compact to form a firm stable base. Material and placing shall be in accordance with Section 26 of the State Standard Specifications using ¾-inch maximum size.

The aggregate base shall also have a sand equivalent value of not less than 35 when tested in conformance with California Test Method 217.

The aggregate base material shall be spread as specified in Sections 26-1.03A and 26-1.03C of the State Standard Specifications. The aggregate base material shall be compacted as specified in Section 26-1.03D of the State Standard Specifications.

19.3 General Hot Mix Asphalt (HMA) Requirements - The Contractor shall not pave any or start paving Hot Mix Asphalt (HMA) until all compaction on the aggregate base is tested and approved by the Engineer.

The HMA shall be proportioned, mixed, spread and compacted in accordance with the applicable provisions in Section 39 of the State Standard Specifications and these Detailed Specifications.

The Contractor shall ensure the safe transportation, storage, use and disposal of HMA.

The Contractor shall prevent the formation of carbonized particles caused by overheating HMA during manufacturing or construction.

19.4 Hot Mix Asphalt (HMA) Aggregate - Aggregates shall be clean and free from decomposed materials, organic material, and other deleterious substances. Coarse aggregate is material retained on the No. 4 sieve and fine aggregate is material passing the No. 4 sieve. Supplemental fine aggregate is added fine material passing the No. 30 sieve including, but not limited to, cement and stored fines from dust collectors.

The aggregate grading of the different types of Hot Mix Asphalt (HMA) shall conform to the following, unless otherwise specified on the plans:

HMA Type	Grading
A	¾-inch

The base course of the HMA Type A shall consist of ¾-inch aggregate, and the final course shall consist of ½-inch aggregate.

The combined aggregate gradation and quality characteristics for HMA Type A aggregate(s), prior to addition of asphalt binder, shall conform to the requirements found in the following tables:

**Aggregate Gradation HMA Type A
(Percentage Passing)**

¾-inch HMA Type A

Sieve Sizes	Target Value Limits	Allowable Tolerance
1-inch	100	-
¾-inch	90-100	TV ±5
½-inch	70-90	TV ±6
No. 4	45-55	TV ±7
No. 8	32-40	TV ±5
No. 30	12-21	TV ±4
No. 200	2-7	TV ±2

HMA Type A Aggregate Quality

Quality Characteristic	Test Method	Requirement
Percent of crushed particles ¹ Coarse aggregate (% min.) One fractured face Two fractured faces	CT 205	90 75
Fine aggregate (Passing No. 4 Sieve and retained on No. 8 Sieve) (% min.) One fractured face		70
Los Angeles Rattler (% max.) ¹ Loss at 100 rev. Loss at 500 rev.	CT 211	12 45
Sand equivalent ^{1,2} (min.)	CT 217	47
Fine aggregate angularity (% min.) ¹	AASHTO T 304 Method A	45
Flat and elongated particles (% max. by weight at 5:1) ¹	ASTM D 4791	10

Note: ¹Combine aggregate in the job mix formula proportions.

²Reported value must be the average of three (3) tests from a single sample.

19.5 Asphalt Binder - The asphalt binder to be mixed with aggregate shall conform to these Detailed Specifications and shall be as designated below or as determined by the Engineer:

- Grade PG 70-10 (Desert)

The Contractor shall furnish and place the HMA with all asphaltic emulsions required.

Asphalt binder shall consist of refined petroleum or a mixture of refined liquid asphalt and refined solid asphalt, prepared from crude petroleum. Asphalt binder shall be:

- Free from residues caused by the artificial distillation of coal, coal tar or paraffin
- Free from water
- Homogeneous

The Contractor shall furnish asphalt binder from a supplier that conforms to the State of California Department of Transportation's "Certification Program for Suppliers of Asphalt". The Department maintains the program requirements, procedures, and a list of approved suppliers at <http://www.dot.ca.gov/hq/esc/Translab/ofpm/fpmcoc.htm>.

The amount of asphalt binder to be mixed with the mineral aggregate shall be between three percent (3%) and seven percent (7%) by weight, of the dry mineral aggregate. The exact amount of asphalt binder to be mixed with the mineral aggregate shall be determined by a special mix design.

Performance grade paving asphalt shall conform to the testing requirements in the table below:

Performance Graded Asphalt Binder

Property	AASHTO Test Method	Specification Grade			
		PG 64-10	PG 64-16	PG 70-10	PG 64-28PM ⁱ
Original Binder					
Flash Point, Minimum °C	T48	230	230	230	230
Solubility, Minimum % ^b	T44	99	99	99	98.5
Viscosity ^c at 135 °C, Maximum, Pa·s	T316	3.0	3.0	3.0	3.0
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G [*] /sin(delta), kPa	T315	64 1.00	64 1.00	70 1.00	64 1.00
RTFO Test ^e , Mass Loss, Maximum, %	T240	1.00	1.00	1.00	1.00
RTFO Test Aged Binder					
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G [*] /sin(delta), kPa	T315	64 2.20	64 2.20	70 2.20	64 2.20
Ductility at 25 °C Minimum, cm	T51	75	75	75	-
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum (delta), %	T315	-	-	-	Note g 80
PAV ^f Aging, Test Temperature, °C	R28	100	100	110	100

Elastic Recovery ^h , Test Temp., °C Minimum recovery, %	T 301	-	-	-	25 75
RTFO Test and PAV Aged Binder					
Dynamic Shear, Test Temp. at 10 rad/s, °C Maximum G*/sin(delta), kPa	T315	31 ^d 5000	28 ^d 5000	34 ^d 5000	31 5000
Creep Stiffness, Test Temperature, °C Maximum S-value, Mpa Minimum M-value	T313	0 300 0.300	-6 300 0.300	0 300 0.300	-12 300 0.300

Notes:

- a. Not used.
- b. The Engineer will waive this specification if the supplier is a Quality Supplier as defined by Department's "Certification Program for Suppliers of Asphalt".
- c. The Engineer will waive this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- d. Test the sample at 3 °C higher if it fails at the specified test temperature. G* sin(delta) shall remain 5000 kPa maximum.
- e. "RTFO Test" means the asphaltic residue obtained using the Rolling Thin Film Oven Test, AASHTO Test Method T240 or ASTM Designation: D2827.
- f. "PAV" means Pressurized Aging Vessel.
- g. Test temperature is the temperature at which G*/sin(delta) is 2.2 kPa. A graph of log G*/sin(delta) plotted against temperature may be used to determine the test temperature when G*/sin(delta) is 2.2 Kpa. A graph of (delta) versus temperature may be used to determine delta at the temperature when G*/sin(delta) is 2.2 kPa. The Engineer also accepts direct measurement of (delta) at the temperature when G*/sin(delta) is 2.2 kPa.
- h. Test without a force ductility clamp may be performed.
- i. Do not modify PG Polymer Modifier using acid modification.

Certificates of compliance shall be furnished to the Engineer certifying that the asphaltic emulsions and paving asphalts conform to the referenced standard specifications.

19.6 Hot Mix Asphalt (HMA) Prime Coat - Prime coat shall consist of refined petroleum and shall conform to the provisions in Section 93 "Liquid Asphalts" of the State Standard Specifications. Prime coat shall be applied only to those areas designated by the Engineer. The application rate shall be 0.25 gallon per square yard of surface covered. The exact rate and number of applications will be determined by the Engineer.

19.7 Hot Mix Asphalt (HMA) Paint Binder/Tack Coat - Asphaltic emulsion for paint binder (tack coat) shall conform to the provisions in Section 94 "Asphaltic Emulsion" of the State Standard Specifications for the rapid-setting or slow-setting type and grade approved by the Engineer. Grade CQS1 shall be used if not otherwise specified by the Engineer. Tack coat shall be applied to all vertical surfaces of existing pavement, curbs, gutters, and construction joints in the surfacing against which additional material is to be placed, to a pavement to be surfaced, and to other surfaces designated in the Special Provisions. The application rate shall be from 0.02 to

0.10 gallon per square yard of surface covered. The exact rate and number of applications will be determined by the Engineer.

19.8 Hot Mix Asphalt (HMA) Placement - Hot Mix Asphalt (HMA) shall be spread and compacted in the number of layers of the thicknesses indicated in the following table:

Total Thickness Shown on Plans ¹	Minimum No. of Layers	Top Layer Thickness (ft.)		Next Lower Layer Thickness (ft.)		All Other Lower Layer Thickness (ft.)	
		Min.	Max.	Min.	Max.	Min.	Max.
0.24-foot or less	1	-	-	-	-	-	-
0.25-foot	2	0.12	0.13	0.12	0.13	-	-
0.26 - 0.46-foot	2	0.12	0.21	0.14	0.25	-	-
0.47-foot or more	3 or more	0.15	0.21	0.15	0.25	0.17	0.25

¹When pavement reinforcing mat is shown to be placed between layers of HMA, the thickness of HMA above the pavement reinforcing mat shall be considered to be the "total thickness shown on plans".

The straightedge for smoothness determination on the top layer of HMA pavement shall conform to the tolerance specified in Section 39-1.12B, "Straightedge" of the State Standard Specifications.

Areas of the top surface of the uppermost layer of HMA pavement that do not meet the specified surface tolerances shall be brought within tolerance by abrasive grinding. Areas which have been subjected to abrasive grinding shall receive a seal coat. The corrective method for each area shall be selected by the Contractor and shall be approved by the Engineer prior to beginning the corrective work.

When abrasive grinding is used to bring the top surface of the uppermost layer of HMA surfacing within the specified surface tolerances, additional abrasive grinding shall be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel with, the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement centerline, within a ground area. Ground areas shall be neat rectangular areas of uniform surface appearance.

19.9 Hot Mix Asphalt (HMA) Type A - The contract item Hot Mix Asphalt (HMA) Type A covers the furnishing and installation of HMA necessary for the repair and resurfacing of streets damaged or removed due to construction operations, or as otherwise specified on the plans, including all aggregate, asphalt binder, prime coat, and tack coat/paint binder as specified herein, exclusive of any excavation or pavement grinding. Included in this contract item is the additional paving shown beyond the trench limits, shown as AC overlay limits. The thickness of this paving shall be .12 feet.

19.10 Temporary Resurfacing - The contract item Temporary Resurfacing is required for short reaches of the mainline and connector pipe trenches whenever excavation is made through pavement on which traffic must be allowed immediately after backfilling, only as directed by the

Engineer. Otherwise the leveling course of the HMA may be used to open the work area to traffic until the final paving is completed. Measurement and payment of the leveling course will be made as a HMA item, not Temporary Resurfacing.

Temporary Resurfacing shall be 2" (0.17') and in conformance with Section 306-1.5 of the Standard Specifications.

19.11 Measurement - Measurement for payment of the contract item Aggregate Base, Class 2 will be the number of cubic yards placed to the lines, grades and dimensions shown on the drawings. **No allowance will be made for aggregate base placed outside said dimensions unless otherwise ordered by the Engineer.**

Measurement for payment of the contract item Hot Mix Asphalt (HMA) Type A will be the number of tons placed to the lines, grades and dimensions shown on the drawings. The HMA pay quantity shall be determined by using a conversion factor of 144 pounds per cubic foot for all HMA placed within standard paylines. No measurement for payment will be made for asphalt emulsions, including asphalt binder, HMA prime coat, HMA tack coat/paint binder required for this portion of the work, all costs for these items shall be included in the price paid for HMA. **No allowance will be made for HMA placed outside said dimensions unless otherwise ordered by the Engineer.**

Measurement for payment of the contract item Temporary Resurfacing will be the number of tons placed as specified in Section 19.10 and as directed by the Engineer.

19.12 Payment - The contract prices paid for Aggregate Base, Class 2; Hot Mix Asphalt (HMA) Type A; and Temporary Resurfacing shall include full compensation for all costs incurred under this section.

SECTION 20 - NOT USED

SECTION 21 - MISCELLANEOUS

21.1 Description - This section covers the contract items Miscellaneous Iron and Steel; Traffic Signal Conduit Relocation; Trash Rack; 3-Foot Cable Railing; Block Wall; Remove and Reinstall In-Pavement Flashing Crosswalk System; Install Electric Conduit; and Extra Directed Work.

21.2 Miscellaneous Iron and Steel - The contract item Miscellaneous Iron and Steel covers all ferrous metal used in the various hydraulic structures. Materials, parts and fittings shall conform with the following:

- (a) Manhole Frames and Covers - Per ASTM Designation: A-48, Class 35B. Manhole frames and covers shall be minimum weight as shown on the plans, and the weight of each frame and cover shall be indicated thereon in white paint. Style and markings shall be approved by the Engineer. The castings shall be free from cracks, blowholes or other imperfections, straight, true to pattern and have a

uniform finish. The castings for manholes in streets shall be thoroughly cleaned and coated with asphaltum paint of approved composition; all other castings for frames and covers shall be cleaned and galvanized. The cover shall fit firmly into the frame without rocking, with the frame accurately placed so that cover is flush with finish paving.

- (b) All other Miscellaneous Metal - Per ASTM Designation: A-36.
- (c) Galvanizing - Except for manhole frames and covers described above, all exposed ferrous metal shall be galvanized per Section 210-3 of the Standard Specifications.

21.3 Traffic Signal Conduit Relocation - The contract item Traffic Signal Conduit Relocation includes all equipment, material and labor required to relocate the traffic signal conduit. Relocating or replacement shall conform to Section 86 of the State Standard Specifications. No splicing of conductors will be allowed unless a pull box is installed at the splice location.

21.4 Trash Rack - The contract item Trash Rack includes furnishing and installing the trash rack as shown on the plans and as directed by the Engineer. Included in this item is all hardware, parts, galvanizing and welding.

21.5 3-Foot Cable Railing - The contract item 3-Foot Cable Railing includes furnishing and installing the material required for this portion of the work. Included in this item is all hardware, parts, posts and fitting in conformance with Section 83-1-02E of the State Standard Specifications.

21.6 Block Wall - The contract item Block Wall covers all labor, equipment, material and incidentals required for the complete removal and reinstallation of the block wall as shown on the plans or as directed by the Engineer. All new material placing shall be in accordance with Section 202 of the Standard Specifications.

21.7 Remove and Reinstall In-Pavement Flashing Crosswalk System - The contract item Remove and Reinstall In-Pavement Flashing Crosswalk System covers all labor, equipment, material and incidentals required to remove and reinstall the in-pavement flashing crosswalk system at approximate Station 16+80. Any damage to the system shall be replaced in-kind.

21.8 Install Electric Conduit - The contract item Install Electric Conduit covers all labor and material needed for the installation of 4" PVC Pipe (Schedule 40) where an electric conduit will be placed at Station 26+30± and backfilling as shown on the drawings and as directed by Engineer

21.9 Extra Directed Work - The contract item Extra Directed Work shall consist of necessary work that is not included in other contract bid items and not shown on the drawings, as determined by the Engineer. All Extra Directed Work shall be performed only as directed by the Engineer and in accordance with all applicable standards and specifications.

21.10 Measurement - Measurement for payment for the contract item Miscellaneous Iron and Steel will be the number of pounds used in the work as specified. Should manhole frames and covers exceed the minimum weights as shown on the drawings by more than two percent (2%) that weight in excess of the allowable two percent (2%) increase will not be measured for payment. Manhole frames and covers to be salvaged and reused will not be measured for payment.

Measurement for payment for Traffic Signal Conduit Relocation will be the number of lineal feet of conduit installed as specified.

No measurement will be made for payment for the lump sum contract item Trash Rack.

Measurement for the contract item 3-Foot Cable Railing will be the number of lineal feet of new railing installed measured along the top of the railing parallel to the ground.

No measurement will be made for payment for the lump sum contract item Block Wall.

No measurement will be made for payment for the lump sum contract item Remove and Reinstall In-Pavement Flashing Crosswalk System.

No measurement will be made for payment for the lump sum contract item Install Electric Conduit.

21.11 Payment - The contract prices paid for Miscellaneous Iron and Steel; Traffic Signal Conduit Relocation; Trash Rack; 3-Foot Cable Railing; Block Wall; Remove and Reinstall In-Pavement Flashing Crosswalk System; and Install Electric Conduit shall include full compensation for all costs incurred under this section.

Full compensation for the contract item Extra Directed Work shall be made as "Extra Work" and shall be paid pursuant to Section 2.07 of the General Provisions. The total accumulated costs for Extra Directed Work shall not exceed the amount specified in the contract bid item unless otherwise increased by change order.

SECTION 22 THROUGH SECTION 26 - NOT USED

SECTION 27 - DUST ABATEMENT

27.1 Description - This section covers the implementation of dust control measures necessary to prevent harm and nuisance from dust. Supplementing Section 8.06 of the General Provisions, the Contractor shall comply with all the provisions of the South Coast Air Quality Management District (SCAQMD) Rule 403 and Rule 403.1 as described in Appendix "A".

27.2 Dust Abatement - The contract item Dust Abatement includes the action necessary to prevent, reduce or control dust within the work area as required to complete the work. The Contractor shall carry out proper and efficient measures to prevent his operations from producing

dust in amounts damaging to property or causing a nuisance or harm to persons living nearby or occupying buildings in the vicinity of the work.

The Contractor shall implement appropriate fugitive dust control measures including watering, stabilized construction access to reduce tracking of mud or dirt onto public roads, covering trucks hauling loose dirt offsite and street sweeping of track-out. The Contractor can contact SCAQMD for their Rule 403 and Rule 403.1 implementation handbooks which contain a detailed listing of reasonably available dust control measures.

The Contractor shall prepare and implement a dust control plan in accordance with the requirements set forth in the latest version of the SCAQMD Rule 403 and Rule 403.1. The methods to be used for controlling dust in the construction area and along haul roads shall be approved by the Engineer prior to starting any work included in this contract. If the Contractor's operations meet the Rule 403 definition of "Large Operations", the dust control plan shall be submitted to SCAQMD for review and approval prior to start of operations.

Water material excavated or graded sufficiently to prevent excessive amounts of dust. Water at least three times daily with complete coverage, preferable in the late morning and after work is done for the day and ensure that all disturbed areas of potentially lead-contaminated soil maintain at least 12-percent moisture content.

Apply non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).

Construction equipment idling shall not exceed 10 minutes to ensure that the SCAQMD daily thresholds are not exceeded.

27.3 Payment - The contract lump sum price paid for Dust Abatement shall include full compensation for all direct and indirect costs incurred under this section.

This payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 28 - NOT USED

SECTION 29 - STORMWATER AND NON-STORMWATER POLLUTION CONTROL

29.1 Description - This section covers the contract items Stormwater and Non-Stormwater Pollution Control; and Non-Stormwater Discharge or Dewatering. The contract item Stormwater and Non-Stormwater Pollution Control shall include preparing, obtaining approval of, amending and implementing the Permit Registration Documents (PRDs) as required by the State Water Resources Control Board (SWRCB) and the California Regional Water Quality Control Board (CRWQCB) - Colorado River Basin Region. The contract item Non-Stormwater Discharge or Dewatering shall include compliance with Colorado River Basin Regional Water Quality Board Order No. R7-2009-0300.

29.2 General Requirements – All activities performed by the Contractor for this project shall conform to the requirements of the State-wide National Pollutant Discharge Elimination System (NPDES) General Permit (Board Order No. 2009-0009-DWQ and Board Order No. 2012-0006-DWQ) for Stormwater Discharges Associated with Construction and Land Disturbance Activities, hereafter referred to as the "General Permit", issued by the SWRCB. This General Permit regulates both stormwater and non-stormwater discharges associated with Contractor's construction activities. This General Permit can be downloaded at http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

The PRDs mentioned above consist of:

1. Notice of Intent
2. Risk Assessment (Section VIII of the General Permit)
3. Site Map
4. Stormwater Pollution Prevention Plan (SWPPP) (Section XIV of the General Permit)
5. Annual Fee
6. Signed Certification Statement

Notice of Intent - The District will complete and submit the Notice of Intent.

Risk Assessment - Using the methodology in Appendix 1 of the General Permit, the District has calculated the preliminary Risk Level to be 1 based on returning disturbed areas to pre-construction conditions at the end of the day.

Site Map – The Contractor shall revise District provided site map of the project area if Contractor's Qualified SWPPP Developer (QSD) deems necessary. Site Map shall conform to requirements of General Permit Attachment A, Section B.

SWPPP – For the convenience of the Contractor and to expedite the SWPPP preparation and approval, a "90%" SWPPP Template has been prepared by the District. This SWPPP Template has been tailored to the referenced project and can be downloaded from http://rcflood.org/Documents/SWPPP_Template_6000163.pdf. Winning bidder will be provided a digital copy of the "90%" SWPPP Template to amend. The Contractor shall review and amend this SWPPP Template based on the requirements of the General Permit and per the construction schedule and work plan proposed by the Contractor. The Contractor shall then submit a SWPPP certified by the Contractor's QSD which conforms to Section 29.3 for District review and approval.

The Contractor shall amend and finalize the complete "90%" SWPPP Template referenced above. The Contractor shall, at a minimum, provide and/or prepare the following:

1. Name and contact information for the Contractor's Qualified SWPPP Practitioner (QSP) and QSD
2. Contractor name and contact information
3. Contractor site contact person and emergency contact person information

4. Verification of disturbance area due to construction
5. Construction commencement date
6. Anticipated construction completion date
7. Construction Activity Schedule/Best Management Practices (BMPs) Installation Schedule
8. Name and contact information for personnel responsible for pre-storm, post-storm and storm event BMP inspections – this should be the project's QSP
9. Name of the lab responsible for testing any stormwater samples for non-visible pollutants
10. Verification of project risk level and permit type (Linear Underground/Overhead Project (LUP) or Traditional)
11. List of all subcontractors that will be working on the project
12. Review and finalize water pollution control drawings

The SWPPP shall be certified by the Contractor's QSD and implemented by the Contractor's QSP. The SWPPP shall be developed based on the format outlined in the CASQA SWPPP Template located in the California Stormwater Quality Association (CASQA) Construction BMP Handbook Portal and modified as required to meet the LUP specific requirements set forth in the General Permit Attachment A. The portal can be found on the CASQA Website: www.casqa.org. The SWPPP shall identify site specific BMPs to be implemented during and after construction to minimize the potential pollution of stormwater runoff and downstream receiving waters. The identified BMPs shall be practices designed to minimize or eliminate the discharge of pollutants from the construction site and Contractor's construction activities, including, but not limited to:

1. Good housekeeping practices for solid and sanitary/septic waste management, vehicle and equipment cleaning/maintenance, and material handling and storage.
2. Construction procedures such as stabilized construction access points, scheduling/phasing to minimize areas of soil disturbance, soil stabilization and erosion/sediment control.

The SWPPP shall also stipulate an ongoing program for monitoring and maintenance of all BMPs.

The SWPPP shall be designed to address the following objectives:

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion and all other activities associated with construction activity are controlled;
2. Where not otherwise required to be under a Regional Water Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated;
3. Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from

- construction activity to the Best Available Technology/Best Conventional Technology (BAT/BCT) standard;
4. Calculations and design details as well as BMP controls for site run-on are complete and correct; and
 5. Stabilization BMPs, installed to reduce or eliminate pollutants after construction, are completed.

To demonstrate compliance with requirements of the General Permit, the QSD shall include information in the SWPPP that supports the conclusions, selections, use, and maintenance of BMPs.

The Contractor shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Regional Board inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

Annual Fee – The District will pay any necessary fees.

Signed Certification Statement – The Contractor's QSD shall submit a signed certification certifying the SWPPP is a true, accurate and complete representation of the proposed project and mitigation measures.

In the event the District incurs any Administrative Civil Liability or Mandatory Minimum (fine) imposed by the CRWQCB - Santa Ana Region, as a result of Contractor's failure to fully implement the provisions of this section and permit requirements, "Stormwater and Non-Stormwater Pollution Control", the Engineer may, in the exercise of his sole judgment and discretion, withhold from payments otherwise due Contractor a sufficient amount to cover the Civil Liability. Liability for "Negligent Violations" may be in an amount up to \$50,000 per day per deemed occurrence while "Knowing Violations" can result in fines as high as \$250,000 and imprisonment.

Stormwater and Non-Stormwater Pollution Control work shall conform to the requirements in the latest version of the CASQA Handbook, entitled "**California Stormwater BMP Handbook – Construction**" updated November 2009. A copy of the "California Stormwater BMP Handbook – Construction", updated November 2009, hereafter referred to as the "CASQA Handbook", may be obtained from CASQA, Post Office Box 2105, Menlo Park, California 94026-2105. Telephone: 650.366.1042. Copies of the CASQA Handbook can also be downloaded from the CASQA Construction BMP Handbook Portal.

The Contractor shall be responsible for all costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section, "Stormwater and Non-Stormwater Pollution Control", including but not limited to, compliance with the applicable provisions of the CASQA Handbook, General Permit, General De Minimus Permit, Federal, State and local regulations. For the purpose of this paragraph, costs and

liabilities include, but are not limited to, fines, penalties and damages whether assessed against the District or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Act.

The Contractor shall become fully informed of and comply with the applicable provisions of the CASQA Handbook, General Permit, General De Minimus Permit, and Federal, State and local regulations that govern the Contractor's activities and operation pertaining to both stormwater and non-stormwater discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall, at all times, keep copies of the General Permit, General De Minimus Permit, approved SWPPP and all amendments at the project site. The SWPPP shall be made available upon request of a representative of the SWRCB, CRWQCB, United States Environmental Protection Agency (USEPA) or local stormwater management agency. Requests by the public shall be directed to the Engineer.

The Contractor is solely and exclusively responsible for any arrangements made between the Contractor and other property owners or entities that result in disturbance of areas or construction activities being conducted outside limits of the designated rights-of-way and temporary construction easements as shown on the project drawings.

The Contractor shall, during work hours, allow authorized agents of the CRWQCB, SWRCB, USEPA or local stormwater management agency, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the construction site and the Contractor's facilities pertinent to the work;
2. Have access to and copy any records required to be kept as specified in the General Permit;
3. Inspect the construction site, including any offsite staging areas or material storage areas, and related soil stabilization practices and sediment control BMPs; and
4. Sample or monitor for the purpose of ensuring compliance with the General Permit.

The Contractor shall notify the Engineer immediately upon request from regulatory agencies to enter, inspect, sample, monitor or otherwise access the project site or the Contractor's records.

29.3 PRDs Preparation and Approval - The Contractor shall prepare and obtain approval of the PRDs as part of the Stormwater and Non-Stormwater Pollution Control work for this contract. The SWPPP shall include an appropriate Monitoring and Reporting Program (M&RP) as required by Section M, "Monitoring and Reporting Requirements" of Attachment A of the General Permit. A guidance document titled "Field Monitoring and Analysis Guidance" is available from the CASQA internet site in their Construction BMP Handbook Portal. The Contractor shall prepare and implement the SWPPP in accordance with the CASQA Handbook, the General Permit and these Detailed Specifications.

In case of conflict between the CASQA Handbook and these Detailed Specifications, the Detailed Specifications shall govern; in case of conflict between these Detailed Specifications and the General Permit, the latter shall govern.

Within five (5) working days after the award of the contract, the Contractor shall submit two (2) copies of the PRDs to the Engineer for review and approval. The Contractor shall allow ten (10) working days for the Engineer to review the PRDs. If revisions are required as determined by the Engineer, the Contractor shall revise and resubmit the PRDs within three (3) working days of receipt of the Engineer's comments and shall allow ten (10) working days for the Engineer to review the revisions. The Contractor shall submit four (4) hard copies and one (1) pdf copy of the approved SWPPP to the Engineer prior to the pre-construction meeting. **The Contractor must have approved PRDs prior to the pre-construction meeting.**

The SWPPP shall incorporate BMPs in each of the following categories:

1. Soil stabilization practices;
2. Sediment control practices;
3. Sediment tracking control practices;
4. Wind erosion control practices; and
5. Non-stormwater management, and waste management and disposal control practices.

Specific objectives and minimum requirements for each category of BMPs are described in the CASQA Handbook. The Contractor shall consider the objectives and minimum requirements presented in the CASQA Handbook for each of the above categories. When minimum requirements are listed for any category, the Contractor shall incorporate one or more of the listed minimum BMPs required into the SWPPP and implement them on the project to meet the pollution control objectives for the category. In addition, the Contractor shall consider other BMPs presented in the CASQA Handbook to supplement the minimum BMPs required when necessary to meet the objectives of the SWPPP and maintain compliance with the General Permit. The Contractor shall document the selection process in accordance with the procedure specified in the CASQA Handbook.

The Contractor should not assume that the minimum BMPs required for each category presented in the CASQA Handbook are adequate to meet the pollution control objectives. The Contractor may use other effective BMPs, as approved by the Engineer, in addition to the minimum as required in the CASQA Handbook to achieve the pollution control objectives.

The SWPPP shall include the following items as described in the CASQA Handbook and General Permit:

Section 1 - SWPPP Requirements:

- 1.1 Introduction
- 1.2 District's MS4 Permits
- 1.3 Permit Registration Documents

- 1.4 SWPPP Availability and Implementation
- 1.5 SWPPP Amendments
- 1.6 Retention of Records
- 1.7 Required Non-Compliance Reporting
- 1.8 Annual Report
- 1.9 Changes to Permit Coverage
- 1.10 Notice of Termination

Section 2 - Project Information:

- 2.1 Project and Site Description
- 2.2 Permits and Governing Documents
- 2.3 Stormwater Run-on from Offsite Areas
- 2.4 Findings of the Construction Site Sediment and Receiving Water Risk Determination
- 2.5 Construction Schedule
- 2.6 Potential Construction Activity and Pollutant Sources
- 2.7 Identification of Non-Stormwater Discharges
- 2.8 Required Site Map Information

Section 3 - Best Management Practices (BMPs):

- 3.1 Schedule for BMP Implementation
- 3.2 Erosion and Sediment Control
- 3.3 Non-Stormwater Controls and Waste and Materials Management
- 3.4 Post-Construction Stormwater Management Measures

Section 4 - BMP Inspection and Maintenance:

- 4.1 BMP Inspection and Maintenance

Section 5 - Training

Section 6 - Responsible Parties and Operators:

- 6.1 Responsible Parties
- 6.2 Contractor List

Section 7 – Monitoring and Reporting Program (M&RP):

- 7.1 Purpose
- 7.2 Applicability of Permit Requirements
- 7.3 Weather and Rain Event Training
- 7.4 Monitoring Locations
- 7.5 Safety and Monitoring Exemptions
- 7.6 Visual Monitoring

- 7.7 Water Quality Sampling and Analysis
- 7.8 Active Treatment System Monitoring
- 7.9 Bioassessment Monitoring
- 7.10 Watershed Monitoring Option
- 7.11 Quality Assurance and Quality Control
- 7.12 Records Retention

To ensure that the preparation, implementation, and oversight of the SWPPP is sufficient for effective pollution prevention, individuals responsible for creating, revising, overseeing, and implementing the SWPPP should participate in applicable training programs and document such training in the SWPPP. A copy of the SWPPP should be located at the construction site.

The following notes (or notes of substantially similar intent) that address pollution prevention to the Maximum Extent Practicable during the construction phase of a project on a year-round basis need to be placed on the Stormwater and Non-Stormwater Pollution Control Drawings:

- ◆ Erosion control BMPs shall be implemented and maintained to minimize and/or prevent the entrainment of soil in runoff from disturbed soil areas on construction sites.
- ◆ Sediment control BMPs shall be implemented and maintained to prevent and/or minimize the transport of soil from the construction site.
- ◆ Stockpiles of soil shall be properly contained to eliminate or reduce sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking or wind.
- ◆ Appropriate BMPs for construction-related materials, wastes, spills or residues shall be implemented to eliminate or reduce transport from the site to streets, drainage facilities or adjoining properties by wind or runoff.
- ◆ Runoff from equipment and vehicle washing shall be contained at construction sites and must not be discharged to receiving waters or the local storm drain system. Washwaters or rinsate from ready mix, concrete, or cement vehicles must be handled appropriately and may not be discharged to receiving waters or any storm drain system.
- ◆ All construction contractor and subcontractor personnel are to be made aware of the required BMPs and good housekeeping measures for the project site and any associated construction staging areas.
- ◆ At the end of each day of construction activity all construction debris and waste materials shall be collected and properly disposed in trash or recycle bins.
- ◆ Construction sites shall be maintained in such a condition that a storm does not carry wastes or pollutants off the site. Discharges other than stormwater (non-stormwater discharges) are prohibited, except as authorized by an individual NPDES Permit or the State-wide General Permit for Stormwater Discharges Associated with Construction Activity. Potential pollutants include but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, solvents, detergents, glues, lime, pesticides, herbicides, fertilizers, wood

preservatives and asbestos fibers; paint flakes or stucco fragments; fuels, oils, lubricants and hydraulic, radiator or battery fluids; concrete and related cutting or curing residues; floatable wastes; wastes from engine/equipment steam cleaning or chemical degreasing; wastes from street cleaning; and super-chlorinated potable water from line flushing and testing. During construction, disposal of such materials should occur in a specified and controlled temporary area onsite physically separated from potential stormwater runoff, with ultimate disposal in accordance with local, State and Federal requirements.

- ◆ Discharging contaminated groundwater produced by dewatering groundwater that has infiltrated into the construction site is prohibited. Discharging of contaminated soils via surface erosion is also prohibited.
- ◆ The Contractor is required to notify and obtain approval from the District ten (10) days prior to any non-stormwater discharge or dewatering associated with Contractor's construction activities.
- ◆ Construction sites shall be managed to minimize the exposure time of disturbed soil areas through phasing and scheduling of grading to the extent feasible and the use of temporary and permanent soil stabilization.
- ◆ BMPs shall be maintained at all times. In addition, BMPs shall be inspected prior to predicted storm events and following storm events.

29.4 PRD and Rain Event Action Plan (REAP) Amendments - If the scope or schedule of the project changes, the Contractor shall immediately notify the Engineer. The Engineer will determine if the Contractor will be required to recalculate the Risk Assessment. If it is determined by the Engineer that a new Risk Assessment is required, the Engineer will notify the Contractor to resubmit amended PRDs and in the case that the risk level increases, the Contractor shall comply with additional applicable requirements of the General Permit, including preparation and implementation of REAPs, M&RP, Numeric Action Level (NAL) Exceedance Reports, and annual reporting requirements. The Contractor shall also prepare amendments to the PRDs, both graphically and in narrative form, whenever there is a change in Contractor's construction activities or operations which may result in the discharge of pollutants to surface waters, groundwaters, municipal storm drain systems, or as deemed necessary by the Engineer. The Contractor shall also amend the PRDs if they are in violation of any condition of the General Permit, or has not effectively achieved the objective of reducing pollutants in stormwater discharges. Amendments shall show additional BMPs, revised Contractor's construction activities or operations, including those in areas not shown in the initially approved SWPPP, which are required on the project to effectively control water pollution.

Amendments to the PRDs shall be submitted for review and approval by the Engineer in the same manner specified for the initial approval of the PRDs. The Contractor shall date and attach all approved amendments to any of the PRDs. Upon approval of the amendment, the Contractor shall implement the approved changes, revised construction activities or operations.

29.5 Non-Compliance Reporting - If the project is in non-compliance at any time, the Contractor shall make a written report to the Engineer within two (2) calendar days of identification of non-compliance activities.

29.6 SWPPP Implementation - Upon approval of the SWPPP, the Contractor shall be responsible throughout the duration of the project for placing, installing, constructing, inspecting and maintaining the BMPs as well as conducting the M&RP as included in the SWPPP and any amendments thereto, and for removing and disposing of temporary BMPs. All SWPPP implementation shall be performed or supervised by a QSP. Unless otherwise directed by the Engineer or specified in these Detailed Specifications, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in accordance with Section 6.05, "TEMPORARY SUSPENSION OF THE WORK", of the General Provisions. Requirements for installation, construction, inspection, maintenance, removal and disposal of BMPs are specified in the CASQA Construction BMP Handbook Portal and these Detailed Specifications.

The Engineer may order the suspension of construction operations if the Contractor fails to comply with the requirements of this section, "Stormwater and Non-Stormwater Pollution Control", as determined by the Engineer.

The Contractor will not be compensated for sampling and analysis work because of the Contractor's failure to properly implement, inspect, maintain and repair BMPs in the approved SWPPP and any amendments thereto, or for failing to store construction materials or wastes in watertight containers.

- (a) Stormwater Pollution Control - **The Contractor shall implement soil stabilization practices and sediment control BMPs, including minimum requirements as presented in the CASQA Construction BMP Handbook Portal, on all disturbed areas of the project site throughout the duration of the project.**

Implementation of soil stabilization practices and sediment control BMPs for soil-disturbed areas, including but not limited to, rough graded access roads, slopes, channel inverts, operational inlets and outlets of the project shall be completed prior to soil disturbance. The General Permit requires BMPs to be deployed throughout the duration of the project.

The Engineer may require the Contractor, on a case-by-case basis, to reduce the active, soil-disturbed area limit of the project. The Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control BMPs to protect soil-disturbed areas of the project site by maintaining an adequate quantity of soil stabilization and sediment control materials onsite to protect exposed, soil-disturbed areas and a detailed plan for the mobilization of sufficient labor and equipment to fully deploy the required BMPs prior to the onset of precipitation and for the duration of the project.

Throughout the duration of the project, soil-disturbed areas of the project site shall be considered to be inactive whenever soil disturbing activities are expected to be discontinued for a period of fourteen (14) calendar days or more. Areas that will become inactive shall be fully protected with soil stabilization

practices such as covering with mulch, temporary seeding, fiber rolls, blankets, etc., within ten (10) calendar days of the discontinuance of soil disturbing activities or two (2) calendar days prior to the onset of precipitation, whichever is first to occur. Areas that will become inactive shall be fully protected with sediment control BMPs within ten (10) calendar days of the discontinuance of soil disturbing activities or two (2) calendar days prior to the onset of precipitation, whichever is first to occur.

Throughout the duration of the project, the project site shall be fully protected with soil stabilization practices and sediment control BMPs. The Contractor shall monitor the weather forecast on a daily basis. The National Weather Service forecast shall be used.

- (b) **Non-Stormwater Pollution Control** - The Contractor shall implement, year-round and throughout the duration of the project, BMPs included in the SWPPP for sediment tracking, wind erosion, non-stormwater management, and waste management and disposal.
- (c) **Inspections and Reporting** - The Contractor shall ensure that a QSP regularly inspects the construction site for BMPs identified in the SWPPP to ensure the proper implementation and functioning of BMPs. The QSP shall identify corrective actions and time frames to address any damaged BMPs or reinstate any BMPs that have been discontinued. All repairs and design changes shall begin to be implemented within 72 hours of identification.

At a minimum, the Contractor shall inspect the construction site as follows:

1. Prior to a forecast storm;
2. After any precipitation which causes runoff capable of carrying sediment from the construction site;
3. At 24-hour intervals during extended precipitation events; and
4. At a regular interval of once every week.

The construction site inspection checklist provided in the CASQA SWPPP Template shall be used to ensure that the necessary BMPs are being properly implemented and are functioning adequately. The Contractor shall submit one copy of each site inspection record to the Engineer.

- (d) **Maintenance** - The Contractor's QSP shall maintain construction site BMPs identified in the SWPPP to ensure the proper implementation and functioning of BMPs. If the QSP or the Engineer identifies a deficiency in the deployment or functioning of an identified BMP, the QSP shall begin implementing repairs or design changes within 72 hours of identification and complete as soon as possible. The correction of deficiencies shall be at no additional cost to the District.

- (e) Training – The Contractor shall ensure that all persons responsible for implementing requirements of the General Permit shall be appropriately trained in accordance with Section VII "Training Qualifications and Certification Requirements" of the General Permit. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. All training shall be documented and included in the SWPPP as an appendix.

The Contractor shall ensure that SWPPPs are written, amended and certified by a QSD. The Contractor shall also ensure that all inspection, maintenance, repair and sampling activities shall be performed or supervised by a QSP. A QSP is a person responsible for non-stormwater and stormwater visual observations, sampling and analysis.

29.7 REAP – The REAP is applicable to LUP Risk Level 2 construction sites only. The Contractor shall ensure a QSP develop a REAP and submit a copy to the Engineer for review 48 hours prior to any likely precipitation event. The Contractor shall amend and implement the REAP as directed by the Engineer. If no comments are received prior to the precipitation event, the REAP shall be implemented as proposed. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. The discharger shall ensure a QSP obtain a printed copy of the precipitation forecast information from the National Weather Service Forecast Office (e.g., enter the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).

The Contractor's QSP shall ensure that the REAP include, at a minimum, the following site information:

- a. Site Address
- b. Calculated Risk Level
- c. Site Stormwater Manager information including the name, company and 24-hour emergency telephone number
- d. Erosion and Sediment Control Provider information including the name, company and 24-hour emergency telephone number
- e. Stormwater Sampling Agent information including the name, company and 24-hour emergency telephone number

29.8 Water Quality Monitoring, Sampling and Analysis – The Water Quality Monitoring, Sampling and Analysis is applicable to LUP Risk Level 2 construction sites only. The Contractor's QSD shall be responsible for preparing an M&RP and implementing the monitoring, sampling and analysis requirements as described in Attachment A of the General Permit. Records of all visual observations and sampling results required by the General Permit shall be kept using the forms contained in Attachment 3 of the CASQA Construction BMP Handbook

Portal. Copies of the forms shall be maintained in the SWPPP and submitted to the Engineer within 24 hours of the visual observation or sampling event.

29.9 NAL Exceedance Report - The NAL Exceedance Report is applicable to LUP Risk Level 2 construction sites only. The Contractor shall be responsible for submitting a NAL Exceedance Report to the Engineer in the event that any effluent sample exceeds an applicable NAL.

- a. The Contractor shall submit all storm event sampling results for each discharge point to the Engineer no later than 24 hours after the conclusion of the storm event.
- b. The Contractor shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.
- c. The Contractor shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three (3) years after the date the annual report is filed.
- d. The Contractor shall include in the NAL Exceedance Report:
 - i. The analytical method(s), method reporting unit(s) and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit").
 - ii. The date, place, time of sampling, visual observation (inspections) and/or measurements, including precipitation.
 - iii. A description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

29.10 Non-Stormwater Discharge or Dewatering - Dewatering activity should only be considered after other methods have been determined to be inadequate for storm drain construction by the Engineer. If groundwater will be encountered during the project activities, the dewatering activity must be covered by the General Waste Discharge Requirements and General NPDES Permit for Low Threat Discharges to Surface Waters within the Colorado River Basin Region (De Minimus Permit), Colorado River Basin Regional Water Quality Control Board Order No. R7-2009-0300. The Contractor shall comply with this Order, and notify and obtain approval from the Engineer fifteen (15) days prior to any non-stormwater discharging of groundwater dewatering. If an emergency or unforeseen dewatering activity that will discharge to Waters of the United States occurs, the Contractor shall contact the Engineer immediately.

When discharging groundwater from dewatering activities to surface waters, the Contractor shall comply with and implement the Monitoring and Reporting Program required under Order No. R7-2009-0300. This Order can be downloaded from http://www.waterboards.ca.gov/coloradoriver/board_decisions/adopted_orders/general_board_or

ders.shtml. Under the Monitoring and Reporting Program, the Contractor shall prepare the monitoring report in accordance with Attachment E of the Order. The Contractor must submit the Monitoring Reports to the Engineer by the 15th day of each month following the monitoring period. The District will submit the Monitoring Reports to the Colorado River Basin Regional Water Quality Control Board. The Monitoring Reports shall cover the previous month's monitoring activities.

If there is any other form of non-stormwater discharge from the project to surface waters, the Contractor shall immediately contact the Engineer to determine appropriate actions required for coverage under the De Minimus Permit.

Failure of the Contractor to fully comply with this requirement may result in the suspension of construction operations and liability for any associated monitoring, fines, penalties and remediation activities related to the discharge.

29.11 Reports -

- (a) Annual Report - The Contractor shall be responsible for preparing an Annual Report to meet the requirements of Section XVI of the General Permit covering the preceding period of construction from July 1st to June 30th. The Annual Report shall be structured in accordance with the CASQA Construction BMP Handbook Portal Section 1.7. The Contractor shall submit two (2) copies of the Annual Report to the Engineer by July 15th of each year for review and approval. The Contractor shall allow ten (10) working days for the Engineer to review the Annual Report. If revisions are required as determined by the Engineer, the Contractor shall revise and resubmit the Annual Report within three (3) working days of receipt of the Engineer's comments. The Contractor shall submit four (4) copies of the approved Annual Report to the Engineer prior to August 15th of each year. **The Contractor shall be responsible for providing an Annual Report to the Engineer for any construction occurring for part of the year after July 1st prior to receiving final payment on the project.**
- (b) Monthly Report - The Contractor shall prepare and submit to the Engineer a Monthly Report within five (5) working days of the end of the month including:
1. All visual observation reports;
 2. All sampling and analysis reports;
 3. All NAL Exceedance Reports; and
 4. Summary of changes to the SWPPP and or REAP based on inspection results for the preceding month.

29.12 Payment - The contract lump sum price paid for Stormwater and Non-Stormwater Pollution Control work shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising and amending the PRDs, and installing, constructing, maintaining,

removing and disposing of BMPs as shown in the SWPPP, as specified in the CASQA Handbook, General Permit and these Detailed Specifications, and as directed by the Engineer.

The contract lump sum price paid for Non-Stormwater Discharge or Dewatering shall include full compensation for compliance of Section 29.10, "Non-Stormwater Discharge or Dewatering". **Contractor shall not be paid any portion of the contract lump sum if discharge of groundwater from dewatering activities to surface waters is avoided.**

Monthly payment will be made on a basis of the percentage of work completed on the entire project and subject to the submittal of a complete Monthly Report as specified in Section 29.11(b). Failure to complete or report required visual inspections, monitoring, sampling and analysis requirements, NAL Exceedance Reports, and/or other necessary follow-up actions to ensure that the project stays in compliance with the General Permit can be the basis for reducing monthly progress payments for the project. Monthly progress payments will be reduced by the amount of direct costs, overhead costs and engineering costs incurred by the Engineer to address compliance deficiencies, including costs to conduct inspections, monitoring, reporting and supplemental BMP implementation necessary to comply with the General Permit and costs incurred by the Engineer to address complaints, additional State inspections and violations and/or fines issued by the State or USEPA associated with failure to properly comply with the General Permit. Progress payment reductions can exceed the monthly percentage or total contract lump sum price for Stormwater and Non-Stormwater Pollution Control work.

Payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 30 - UTILITIES

30.1 Description - This section covers the contract items 8-Inch Vitrified Clay Pipe (VCP) Sewer Relocation and Laterals; and 24-Inch CML/C Steel Watermain Relocation as shown on the three (3) sets of Desert Water Agency construction drawings included in this contract.

This section also covers the contract item Highway 111 Utility Protection Plan.

30.2 General Material and Installation Requirements - The sanitary sewer line, waterline and appurtenances are under the jurisdiction of the Desert Water Agency (DWA). Construction of these facilities shall be in accordance with the requirements of the latest edition of the DWA's "Sanitary Sewer Construction Specifications" and "Domestic Water System Construction Specifications". The Contractor is required to obtain these specifications from DWA. All materials, installation and testing for work within this section shall conform to these specifications. All materials proposed to be used by the Contractor for the construction of the sewer lines and waterlines shall be submitted for review by DWA.

The Contractor shall notify DWA (Steve Johnson, Telephone 760.323.4971) in writing at least 14 working days before relocation is started.

Sewage flows shall not be interrupted. Should the Contractor disrupt existing sewer facilities, sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. Sewage shall not be permitted to flow in trenches or be covered by backfill.

Concrete anchors and any concrete exposed to sewer gases shall use Type V Portland cement.

30.3 8-Inch Vitrified Clay Pipe (VCP) Sewer Relocation and Laterals - The contract item 8-Inch Vitrified Clay Pipe (VCP) Sewer Relocation and Laterals covers all labor, equipment, materials and incidentals required for the construction and installation of the 8-Inch VCP sewer mains and laterals as shown on two (2) sets of sewer relocation drawings titled "Perez Road Storm Drain Improvement Plans - 8" VCP Sewer Relocation" consisting of four (4) sheets, and "Perez Road Storm Drain Improvement Plans - HOD Lateral Relocation" consisting of four (4) sheets).

The Contractor may obtain DWA Specifications from DWA, 1200 Gene Autry Trail South, Palm Springs, CA 92263-1710.

The Contractor is required to closely coordinate and cooperate with DWA to ensure that the work proceeds in an orderly manner and that the sewer line is out of service for a minimum period of time.

30.4 24-Inch CML/C Steel Watermain Relocation - The contract item 24-Inch CML/C Steel Watermain Relocation covers all labor, equipment, materials and incidentals required for the construction and installation of the 24-Inch CML/C steel watermain and 8" Class 350 CML DI Pipe per water plans, titled "Perez Road Storm Drain Improvement Plans - 24" CML/C Steel Watermain Relocation" consisting of four (4) sheets.

30.5 Highway 111 Utility Protection Plan - The contract item Highway 111 Utility Protection Plan shall include full performance of all requirements described in this section to mitigate the potential for construction impacts to utilities and pavement in the Highway 111 traveled way.

There is a high degree of concern by local stakeholders about prolonged construction related traffic impacts to Highway 111 (East Palm Canyon Drive). Contractor shall prepare a written plan for utility and pavement protection within the Highway 111 traveled way. The plan shall describe any proposed modifications to the traffic control plan included in the contract drawings. The plan shall summarize construction methods to be employed to install the various buried structures. The plan shall identify specific areas of concern and describe what specialized measures the Contractor will implement to minimize potential for impacts on adjacent underground utilities and pavement. Importantly the plan shall include a schedule for the traffic impacting work in the intersection.

30.6 Measurement and Payment - The contract lump sum prices paid for 8-Inch Vitrified Clay Pipe (VCP) Sewer Relocation and Laterals; and 24-Inch CML/C Steel Watermain Relocation shall include full compensation for all costs incurred under this section except that Aggregate

Base, and Asphalt Concrete used for resurfacing the street will be measured and paid for under the contract items Aggregate Base, Class 2 and Hot Mix Asphalt Aggregate Type A.

The methods of protection are the responsibility of the Contractor and paid under contract bid item Trench Safety System and Falsework. The contract lump sum price paid for Highway 111 Protection Plan shall include full compensation for all direct and indirect costs incurred under this section. The full lump sum payment for contract item Highway 111 Protection Plan will be made upon Engineer's approval of said plan.

SECTION 31 – PRECAST REINFORCED CONCRETE BOX

31.1 Description – This section includes the contract items Precast Reinforced Concrete Box (PRCB) of the various sizes.

31.2 General Requirements – This specification covers single-cell Precast Reinforced Concrete Box (PRCB) sections, the span, rise, soil weight and design earth cover are shown on the plans. The Contractor shall follow Sections 4 and 216 of the Standard Specifications except as noted herein.

Prior to the manufacture of the PRCB and prior to the pre-construction meeting, two (2) sets of prints of the PRCB layout diagrams and two (2) sets of shop drawings, including identifying the lifting devices and locations, shall be submitted to the Engineer in accordance with Section 2-5.3 of the Standard Specifications. The layout diagrams will be used by the Engineer for reference only and their use shall in no way relieve the Contractor of its responsibility for accuracy. The Engineer may waive the PRCB layout diagram requirement.

The interior surface of the PRCB shall be smooth and well-finished. Joints shall be of such type and design and so constructed as to be adequate for the purpose intended so that when laid, the PRCB will form a continuous conduit with a smooth uniform interior surface. The manufacturer shall provide a representative test section to be used to determine the acceptable finish by the Engineer.

Tongue and groove ends of the PRCB shall be free from any deleterious substance or condition which might prevent a satisfactory mortar or mastic bond at the joint.

31.3 Material and Methods – All concrete for PRCB shall have a compressive strength of 5,000 psi minimum and conform to Section 216 of the Standard Specifications. When precast concrete members are manufactured at the plant of an established manufacturer of precast concrete members, the mix proportions of the concrete shall be determined by the Contractor and a trial batch and prequalification of the materials, mix proportions, mixing equipment and procedures will not be required.

Reinforcing steel shall conform to Section 216-2.3 of the Standard Specifications.

Tongue and groove joints shall be mortared in conformance with Section 306.1.7.5.1 of the Standard Specifications.

31.4 Fabrication – The Fabrication for the PRCB shall conform to Section 216-3 of the Standard Specifications with the following exceptions:

Reinforcement placement shall conform to the details shown on the plans or standard plans except that the minimum cover of concrete over the reinforcement for the invert is two (2) inches.

Welding of the reinforcing steel is not allowed. All splices or laps must be tied.

If deformed steel reinforcing bars are used, the area of steel shall be increased to account for the differences in the steel yield strength, steel spacing, concrete cover and crack control between the welded wire reinforcement and the deformed steel reinforcing bars. Calculations for the deformed steel reinforcing design shall conform to the latest edition of ACI 318 and be prepared by a California Registered Civil Engineer and submitted to the Engineer for approval prior to the pre-construction meeting and in accordance with Section 2-5.3.1 of the Standard Specifications.

31.5 Shop Drawings – Shop drawings shall be provided to the Engineer to show the necessary details of all reinforcing steel required for manholes, transition and junction structures as shown on the plans. Shop drawings shall be prepared by a California Registered Civil Engineer and submitted to the Engineer for approval prior to the pre-construction meeting and in accordance with Section 2-5.3 of the Standard Specifications. No manufacturing of any specially designed PRCB sections will be allowed prior to the approval of the shop drawings.

31.6 Testing Requirements – Testing requirements for the PRCB shall conform to Section 216-4 of the Standard Specifications.

31.7 Permissible Variations – Permissible Variations shall comply with Section 216-5 of the Standard Specifications.

31.8 Markings – Markings shall comply with Section 216-6 of the Standard Specifications.

31.9 Basis of Acceptance - The basis of acceptance shall be either of the following:

- a) If PRCB Manufacturing Plan is certified on Caltrans Authorized Facility Audit List:

The basis of acceptance shall be provision of a Certificate of Compliance conforming to Section 4-1.5 of the Standard Specifications from the fabrication plant. **BEFORE** any PRCB is ordered or fabricated, the Contractor shall supply documentation to the satisfaction of the Engineer, that the plant is currently certified on the Caltrans Authorized Facility Audit List.

- b) If PRCB Manufacturing Plant certified is NOT on Caltrans Authorized Facility Audit List for structural precast concrete:

The basis of acceptance shall be full compliance with these Specifications and inspection of the manufacturing and inspection of completed PRCB sections. Inspections and verification of compliance shall be performed by a Contractor supplied third party inspector in accordance with Section 31.11 of these Detailed Specifications.

31.10 Contractor Supplied Third Party Inspection of Precast RCB Plant (PRCB) - If the PRCB is fabricated at a plant that is NOT currently certified on the Caltrans Authorized Facility Audit List, the Contractor, at its expense, shall engage a Qualified Inspector or Accredited Testing Laboratory to inspect the materials, equipment and manufacture of the PRCB. The PRCB inspections shall be conducted for every 400 feet or 50 units whichever is less in total length.

The Qualified Inspector or Accredited Testing Laboratory shall be approved by the Engineer and:

1. Either 1) be registered as a civil engineer in the State of California; or 2) have a current Plant Quality Personnel Certification, Level II from the Precast/Prestressed Concrete Institute.
2. Be a subcontractor providing only quality control inspection services.
3. The Qualified Inspector or Accredited Testing Laboratory must not be affiliated with, employed or compensated by any material provider, the PRCB manufacturer, or any other subcontractor providing other services or materials for this project.

The Inspection Reports to be submitted to the Engineer shall include, at a minimum:

1. Plant location;
2. Names of all inspectors and the specific inspections they performed that day;
3. Verification of compliance with Section 216 of the Standard Specifications and these contract documents for every 400 feet or 50 units whichever is less in total length;
4. Any problems or deficiencies discovered;
5. Any testing or repair work performed; and
6. Daily production reports.

The Contractor shall forward all daily reports to the Engineer on a weekly basis. Any problems or deficiencies discovered shall be immediately reported to the PRCB manufacturer and to the Engineer, and deficiencies corrected to the satisfaction of the Engineer, or affected products shall be replaced.

31.11 External Sealing Bands - All joints shall be wrapped with an External Sealing Band meeting the requirements of ASTM C-877 and installed with the manufacturer's recommendation. Provide sealing band with a minimum width of 2 feet and a length sufficient

to ensure a minimum overlap of 24 inches and must extend a minimum of 12 inches beyond each side of the joint.

31.12 Precast Reinforcing Concrete Box (PRCB) – The contract item Precast Reinforced Concrete Box (PRCB) includes the furnishing and installation of the various PRCB sizes as specified, and sealing band, exclusive of earthwork.

31.13 Measurement – Measurement for payment of the contract item Precast Reinforced Concrete Box (PRCB) of the various sizes will be the number of lineal feet of each size installed as specified measured along the centerline of the box in place including curves.

No separate measurement or payment shall be made for External Sealing Band. External Sealing Band shall be included in the contract price Precast Reinforced Concrete Box (PRCB).

31.14 Payment – The contract price paid for the Precast Reinforced Concrete Box (PRCB) shall include full compensation for all costs incurred under this section.

to ensure a minimum overlap of 24 inches and must extend a minimum of 12 inches beyond each side of the joint.

31.12 Precast Reinforcing Concrete Box (PRCB) – The contract item Precast Reinforced Concrete Box (PRCB) includes the furnishing and installation of the various PRCB sizes as specified, and sealing band, exclusive of earthwork.

31.13 Measurement – Measurement for payment of the contract item Precast Reinforced Concrete Box (PRCB) of the various sizes will be the number of lineal feet of each size installed as specified measured along the centerline of the box in place including curves.

No separate measurement or payment shall be made for External Sealing Band. External Sealing Band shall be included in the contract price Precast Reinforced Concrete Box (PRCB).

31.14 Payment – The contract price paid for the Precast Reinforced Concrete Box (PRCB) shall include full compensation for all costs incurred under this section.

SECTION 32 – DAM OUTLET CHANNEL

32.1 Description - This section covers the contract item Dam Outlet Channel as shown on Drawing No. 6-395, Sheets 10A and 10B of the Palm Springs Master Drainage Plan Line 43.

32.2 Dam Outlet Channel - The contract item Dam Outlet Channel shall include all labor, equipment, and material needed to complete the Dam Outlet Channel as shown on the drawings. Included in this item is all the earthwork (riprap removal – including No. 2 backing class and filter fabric, excavation, subgrade preparation, bedding material, backfill, and grading), disposal and hauling of excess material, concrete for outlet channel, concrete fillets, concrete for headwall, reinforcing steel for all concrete, coring for dowels and fence posts, the dowels, 6-foot chain link fence and main gate, weepholes (including filter material, ¼-inch mesh 16 gauge galvanized screen and filter fabric), and steps for channel.

32.3 General Requirements - The dam outlet channel concrete shall be Class "A" concrete, six (6) sack minimum, with a 28-day minimum compressive strength of 5,000 psi with 1" maximum combined aggregate.

The 6-foot chain link fence includes furnishing and installing the material required for this portion of the work as shown on the drawings. Included in the fence installation are all hardware parts, posts and fittings. All materials shall be new and shall conform to Section 206-6 of the Standard Specifications and the drawings, with installation in conformance with Section 304-3.2.

32.4 Measurement - No measurement will be made for payment for the lump sum contract item Dam Outlet Channel.

32.5 Payment - The contract lump sum price paid for Dam Outlet Channel shall include full compensation for all direct and indirect costs incurred under this section.

This payment will be made on a basis of the percentage of work completed on the Dam Outlet Channel.

APPENDIX "A"

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

RULE 403 AND RULE 403.1

(Adopted May 7, 1976) (Amended November 6, 1992)
(Amended July 9, 1993) (Amended February 14, 1997)
(Amended December 11, 1998)(Amended April 2, 2004)
(Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

- (1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.
- (2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.
- (3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.
- (4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.
- (5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

- (6) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (7) CEMENT MANUFACTURING FACILITY is any facility that has a cement kiln at the facility.
- (8) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (9) COMMERCIAL POULTRY RANCH means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.
- (10) CONFINED ANIMAL FACILITY means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (11) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (12) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.
- (13) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

- (14) **DISTURBED SURFACE AREA** means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
- (A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (B) been paved or otherwise covered by a permanent structure; or
 - (C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.
- (15) **DUST SUPPRESSANTS** are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (16) **EARTH-MOVING ACTIVITIES** means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.
- (17) **DUST CONTROL SUPERVISOR** means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.
- (18) **FUGITIVE DUST** means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (19) **HIGH WIND CONDITIONS** means that instantaneous wind speeds exceed 25 miles per hour.
- (20) **INACTIVE DISTURBED SURFACE AREA** means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.
- (21) **LARGE OPERATIONS** means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

meters (5,000 cubic yards) or more three times during the most recent 365-day period.

- (22) OPEN STORAGE PILE is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (23) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (24) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- (25) PM₁₀ means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (26) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (27) RULE 403 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (28) SERVICE ROADS are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.
- (29) SIMULTANEOUS SAMPLING means the operation of two PM₁₀ samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- (30) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

- (31) STABILIZED SURFACE means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.
 - (32) TRACK-OUT means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
 - (33) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.
 - (34) UNPAVED ROADS means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
 - (35) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
 - (36) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.
 - (37) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.
- (d) Requirements
- (1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

- (A) the dust remains visible in the atmosphere beyond the property line of the emission source; or
 - (B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- (2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- (3) No person shall cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM₁₀ monitoring. If sampling is conducted, samplers shall be:
- (A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀.
 - (B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
- (4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.
- (5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.
- (A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
 - (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).
- (6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.
- (e) Additional Requirements for Large Operations
- (1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:
 - (A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;
 - (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
 - (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

- (D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;
 - (E) identify a dust control supervisor that:
 - (i) is employed by or contracted with the property owner or developer;
 - (ii) is on the site or available on-site within 30 minutes during working hours;
 - (iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;
 - (iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and
 - (F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).
- (2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).
- (f) **Compliance Schedule**
The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

- (1) The provisions of this Rule shall not apply to:
- (A) Dairy farms.
 - (B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.
 - (C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.
 - (D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.
 - (E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.

- (F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
 - (G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
 - (H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
 - (I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
 - (J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:
 - (i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and
 - (ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.
 - (K) sandblasting operations.
- (2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:
- (A) When wind gusts exceed 25 miles per hour, provided that:

- (i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;
 - (ii) records are maintained in accordance with subparagraph (e)(1)(C).
 - (B) To unpaved roads, provided such roads:
 - (i) are used solely for the maintenance of wind-generating equipment; or
 - (ii) are unpaved public alleys as defined in Rule 1186; or
 - (iii) are service roads that meet all of the following criteria:
 - (a) are less than 50 feet in width at all points along the road;
 - (b) are within 25 feet of the property line; and
 - (c) have a traffic volume less than 20 vehicle-trips per day.
 - (C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.
- (3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.
- (4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:
- (A) Blasting operations which have been permitted by the California Division of Industrial Safety; and
 - (B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.
- (5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

- (6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.
- (7) The provisions of subdivision (e) shall not apply to:
 - (A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.
 - (B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.
 - (C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.
- (8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM₁₀ pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and	✓ Mix backfill soil with water prior to moving
	01-2 Stabilize backfill material during handling; and	✓ Dedicate water truck or high capacity hose to backfilling equipment
	01-3 Stabilize soil at completion of activity.	✓ Empty loader bucket slowly so that no dust plumes are generated ✓ Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and	✓ Maintain live perennial vegetation where possible
	02-2 Stabilize soil during clearing and grubbing activities; and	✓ Apply water in sufficient quantity to prevent generation of dust plumes
	02-3 Stabilize soil immediately after clearing and grubbing activities.	
Clearing forms	03-1 Use water spray to clear forms; or	✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements
	03-2 Use sweeping and water spray to clear forms; or	
	03-3 Use vacuum system to clear forms.	
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and	✓ Follow permit conditions for crushing equipment
	04-2 Stabilize material after crushing.	✓ Pre-water material prior to loading into crusher ✓ Monitor crusher emissions opacity ✓ Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and	✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration
	05-2 Stabilize soil during and after cut and fill activities.	✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
	06-1 Stabilize wind erodible surfaces to reduce dust; and	✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes
	06-2 Stabilize surface soil where support equipment and vehicles will operate; and	
	06-3 Stabilize loose soil and demolition debris; and	
	06-4 Comply with AQMD Rule 1403.	
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and	✓ Limit vehicular traffic and disturbances on soils where possible
	07-2 Stabilize disturbed soil between structures	✓ If interior block walls are planned, install as early as possible ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and	✓ Grade each project phase separately, timed to coincide with construction phase
	08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and	✓ Upwind fencing can prevent material movement on site
	08-3 Stabilize soils once earth-moving activities are complete.	✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	<ul style="list-style-type: none"> ✓ Use tarps or other suitable enclosures on haul trucks ✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage ✓ Comply with track-out prevention/mitigation requirements ✓ Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	<ul style="list-style-type: none"> ✓ Apply water to materials to stabilize ✓ Maintain materials in a crusted condition ✓ Maintain effective cover over materials ✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes. ✓ Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	<ul style="list-style-type: none"> ✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs ✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	<ul style="list-style-type: none"> ✓ Dedicate water truck or high capacity hose to screening operation ✓ Drop material through the screen slowly and minimize drop height ✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	<ul style="list-style-type: none"> ✓ Limit size of staging area ✓ Limit vehicle speeds to 15 miles per hour ✓ Limit number and size of staging area entrances/exists
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	<ul style="list-style-type: none"> ✓ Add or remove material from the downwind portion of the storage pile ✓ Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas ✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching ✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	✓ Empty loader bucket such that no visible dust plumes are created ✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	✓ Haul waste material immediately off-site

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	<p>(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR</p> <p>(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.</p>
Earth-moving: Construction fill areas:	<p>(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.</p>

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Unpaved Roads	(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR (4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR (4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) Apply chemical stabilizers; OR (5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR (5c) Install temporary coverings; OR (5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	(6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling (Only applicable to Commercial Poultry Ranches)	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

(Adopted January 15, 1993)(Amended June 16, 2000)(Amended April 2, 2004)

RULE 403.1. SUPPLEMENTAL FUGITIVE DUST CONTROL REQUIREMENTS FOR COACHELLA VALLEY SOURCES

(a) Purpose

The purpose of this rule is to reduce or prevent the amount of fine particulate matter (PM₁₀) entrained in the ambient air from anthropogenic (man-made) fugitive dust sources.

(b) Applicability

The provisions of this rule are supplemental to Rule 403 requirements and shall apply only to fugitive dust sources in the Coachella Valley.

(c) Definitions

- (1) ACTIVE OPERATIONS shall mean any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface areas, or agricultural operations.
- (2) AGRICULTURAL OPERATIONS means any operation occurring on a ranch or farm directly related to the growing of crops, or raising of fowls or animals for the primary purpose of making a profit or for a livelihood.
- (3) ANEMOMETERS are devices used to measure wind speed in accordance with the performance standards, maintenance and calibration criteria specified in the Rule 403.1 Implementation Handbook.
- (4) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter and other organic and inorganic particulate matter.
- (5) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

- (6) COACHELLA VALLEY means that portion of Riverside County, as defined in Rule 103, subdivision (h).
- (7) COACHELLA VALLEY BLOWSAND ZONE means the corridor of land extending two miles to either side of the centerline of the I-10 Freeway beginning at the SR-111/I-10 junction and continuing southeast to the I-10/ Jefferson Street interchange in Indio.
- (8) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (9) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
 - (A) been restored to a natural state, such that vegetative ground cover and soil characteristics are similar to adjacent or near-by natural conditions;
 - (B) been paved or otherwise covered by a permanent structure;
 - (C) sustained a vegetative ground cover of at least 70 percent of the average native cover for a particular area for at least 30 days.
- (10) DUST CONTROL SUPERVISOR means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 and Rule 403.1 requirements at an active operation.
- (11) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive emissions.
- (12) EARTH-MOVING ACTIVITIES means the use of any equipment for any activity where soil is being moved or uncovered and shall include, but not be limited to the following: such operations as grading, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, soil mulching and agricultural tilling.

- (13) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (14) FUGITIVE DUST CONTROL PLAN means a plan to control fugitive dust plan as described in subdivision (e).
- (15) ON-SITE means within the property lines of a property, or as otherwise approved by the Executive Officer.
- (16) OPEN STORAGE PILE is any accumulation of bulk material which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (17) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (18) PM₁₀ means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable state and federal reference test methods.
- (19) PROPERTY LINE means the boundaries of an area in which a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (20) RULE 403.1 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (21) STABILIZED SURFACE means any previously disturbed surface area which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403.1 Implementation Handbook.
- (22) UNPAVED ROADS means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by one of the following: concrete, asphaltic concrete, recycled asphalt, asphalt or other materials with equivalent performance as determined by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Public unpaved roads

are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.

- (23) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.
- (24) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) General Requirements

- (1) Any person who is responsible for any active operation, open storage pile, or disturbed surface area, and who seeks an exemption pursuant to Rule 403, paragraph (g)(2) shall be required to determine when wind speed conditions exceed 25 miles per hour. The wind speed determination shall be based on either District forecasts or through use of an on-site anemometer as described in subdivision (g).
- (2) Any person involved in active operations in the Coachella Valley Blowsand Zone shall stabilize new man-made deposits of bulk material within 24 hours of making such bulk material deposits. Stabilization procedures shall include one or more of the following:
 - (A) Application of water to at least 70 percent of the surface area of any bulk material deposits at least 3 times for each day that there is evidence of wind driven fugitive dust; or
 - (B) Application of chemical stabilizers in sufficient concentration so as to maintain a stabilized surface for a period of at least 6 months; or
 - (C) Installation of wind breaks of such design so as to reduce maximum wind gusts to less than 25 miles per hour in the area of the bulk material deposits.
- (3) Any person involved in active operations in the Coachella Valley Blowsand Zone shall stabilize new deposits of bulk material originating from off-site undisturbed natural desert areas within 72 hours. Stabilization procedures shall include one or more of the following:
 - (A) Application of water to at least 70 percent of the surface area of any bulk material deposits at least 3 times for each day that there is evidence of wind driven fugitive dust; or
 - (B) Application of chemical stabilizers in sufficient concentration so as to maintain a stabilized surface for a period of at least six months.

- (4) A person who conducts or authorizes the conducting of an active operation shall implement at least one of the control actions specified in Rule 403, Table 2 for the source category "Inactive Disturbed Surface Areas" to minimize wind driven fugitive dust from disturbed surface areas at such time when active operations have ceased for a period of at least 20 days.
 - (5) Any person involved in agricultural tilling or soil mulching activities shall cease such activities when wind speeds exceed 25 miles per hour. The wind speed determination shall be based on either District forecasts or through use of an on-site anemometer as described in subdivision (g).
- (e) Fugitive Dust Control Plan and Other Requirements for Construction Projects/Earth-Moving Activities
- (1) Any person who conducts or authorizes the conducting of an active operation with a disturbed surface area of more than 5,000 square feet shall not initiate any earth-moving activities unless a fugitive dust control plan is prepared and approved by the Executive Officer in accordance with the requirements of subdivision (f) and the Rule 403.1 Implementation Handbook. These provisions shall not apply to active operations exempted by paragraph (i)(4).
 - (2) Any operator required to submit a fugitive dust control plan under paragraph (e)(1) shall maintain a complete copy of the approved fugitive dust control plan on site in a conspicuous place at all times and the fugitive dust control plan must be provided upon request.
 - (3) Any operator required to submit a fugitive dust control plan under paragraph (e)(1) shall install and maintain signage with project contact information that meets the minimum standards of the Rule 403.1 Implementation Handbook prior to initiating any type of earth-moving activities.
 - (4) Any operator required to submit a fugitive dust control plan under paragraph (e)(1) for a project with a disturbed surface area of 50 or more acres shall have an Dust Control Supervisor that:
 - (A) is employed by or contracted with the property owner or developer; and
 - (B) is on-site or is available to be on-site within 30 minutes of initial contact; and

- (C) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 and 403.1 requirements; and
 - (D) has completed the AQMD Coachella Valley Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class.
- (5) Failure to comply with any of the provisions of an approved fugitive dust control plan shall be a violation of this rule.
- (f) Fugitive Dust Control Plan Preparation, Submittal, and Approval Requirements
- (1) A fugitive dust control plan prepared pursuant to paragraph (e)(1) must include the following information in a 8 ½ by 11 inch format:
 - (A) the name(s), address(es), and phone number(s) of the person(s) responsible for the preparation, submittal, and implementation of the fugitive dust control plan; and
 - (B) a description of the operation(s), including a map depicting the location of the site; and
 - (C) a listing of all sources of fugitive dust emissions within the property lines; and
 - (D) a description of the control measures as identified by the Rule 403.1 Implementation Handbook as applied to each of the sources identified in the fugitive dust control plan. The description of the control measures must be sufficiently detailed to demonstrate that the applicable best available control measures will be utilized and/or installed during all periods of active operations; and
 - (E) a description of the required contingency control measures (e.g., increased watering) for immediate implementation upon notice of visible dust crossing any property line.
 - (2) In the event that there are special technical (e.g., non-economic) circumstances, including safety, which prevent the use of at least one of the control measures as identified by the Rule 403.1 Implementation Handbook for any of the sources identified in the fugitive dust control plan, a justification statement must be provided in lieu of the description. The justification statement must explain the reason(s) why the required control measures cannot be implemented.
 - (3) Within 30 calendar days of the receipt of a fugitive dust control plan submitted pursuant to paragraph (e)(1), the Executive Officer will either

approve or apply any necessary conditions to the fugitive dust control plan in writing. For a fugitive dust control plan to be approved, the requirements of paragraph (f)(1) must be satisfied.

- (4) The Executive Officer will apply conditions if the stated fugitive dust control plan measures do not satisfactorily conform to the best available control measures and guidance contained in the Rule 403.1 Implementation Handbook. The conditions necessary to modify the fugitive dust control plan will be provided in writing to the person(s) identified in subparagraph (f)(1)(A). A letter to the Executive Officer stating that such modifications will be incorporated into the fugitive dust control plan shall be deemed sufficient to result in approval of the fugitive dust control plan.
 - (5) Any fugitive dust control plan approved by the Executive Officer shall be valid for a period of one year from the date of approval. Any approved fugitive dust control plan must be resubmitted annually, at least 30 days prior to the expiration date, or the fugitive dust control plan shall expire as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously approved fugitive dust control plan, the submittal may contain a simple statement of no-change (Form 403NC). Otherwise, a resubmittal must contain all the items specified in subparagraphs (f)(1)(A) through (f)(1)(E).
- (g) Wind Monitoring Implementation Requirements
- (1) The determination of wind speed conditions in excess of 25 miles per hour, as specified in paragraphs (d)(1) and (d)(5), shall be based on the following criteria:
 - (A) For facilities with an on-site anemometer:
 - (i) When the on-site anemometer registers at least two wind gusts in excess of 25 miles per hour within a consecutive 30-minute period. Wind speeds shall be deemed to be below 25 miles per hour if there is no recurring wind gust in excess of 25 miles per hour within a consecutive 30-minute period; or
 - (B) For facilities without an on-site anemometer:

- (i) When wind speeds in excess of 25 miles per hour are forecast to occur in the Coachella Valley for that day. This condition shall apply to the full calendar day for which the forecast is valid. (The Executive Officer shall determine meteorological conditions which will cause wind speeds in excess of 25 miles per hour, and shall issue daily forecasts of expected wind conditions. Such forecasts shall be available to the public); or
 - (ii) When wind speeds in excess of 25 miles per hour are not forecast to occur by the District, and fugitive dust emissions are visible for a distance of at least 100 feet from the origin of such emissions, and there is visible evidence of wind driven fugitive dust.
- (2) Any person who elects to install an on-site anemometer shall:
 - (A) Notify the Executive Officer no more than 10 days after installing such equipment. The notification shall contain, at a minimum, the person's name, address, telephone number, description of the operation(s), and first day of operation, as specified in the District's Rule 403.1 Implementation Handbook.
 - (B) Be subject to the provisions of subparagraph (g)(1)(B) for wind speed determinations if equipment outages, malfunctions, or invalid data exceed one hour during active operations on a calendar day.
- (h) Recordkeeping
 - (1) A person subject to the provisions of this rule shall compile written daily records to document the specific actions taken to comply with this Rule. Such records shall be retained for not less than three years and shall be made available to the Executive Officer upon request.
 - (2) In addition to the provisions of paragraph (h)(1), any person who elects to install an on-site anemometer shall also compile written records. Such records shall contain:
 - (A) Location, vendor, model, and serial number of the anemometer;
 - (B) The time of occurrence of any wind gust in excess of 25 miles per hour during hours of active operations;

- (C) The actions taken to comply with the provisions of paragraphs (d)(5) and (i)(3), as applicable.
- (i) Exemptions
- (1) The provisions of this rule shall not apply to ceased or inactive mining operations subject to the requirements of the Surface Mining and Recovery Act (SMARA) of 1975, provided that the provisions of the SMARA Reclamation Plan are implemented by the owner and are at least as stringent as those contained in this rule;
 - (2) The provisions of paragraphs (d)(2), (d)(3), and (d)(4) shall not apply to:
 - (A) Any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the Endangered Species Act as determined in writing by the State or federal agency responsible for making such determinations;
 - (B) Any disturbed surface areas or bulk material deposits with a surface area less than 2,500 square feet;
 - (C) Non-routine or emergency maintenance of flood control channels and water spreading basins.
 - (3) The provisions of paragraph (d)(5) shall not apply to agricultural tilling activities or soil mulching activities under the following conditions:
 - (A) If the prohibitory requirements of this Rule have occurred during six or more hours of active operations on each of two previous consecutive days, then a one-day exemption will be allowed. (These activities would again be subject to the prohibitory requirements of this Rule following this one day exemption.)
 - (B) If the prohibitory requirements of this Rule have occurred during sixty or more cumulative hours of active operations within a calendar month, then an exemption will be allowed for the remainder of the calendar month. (These activities would again be subject to the prohibitory requirements of this Rule at the start of the following month.)
 - (C) During periods of precipitation.

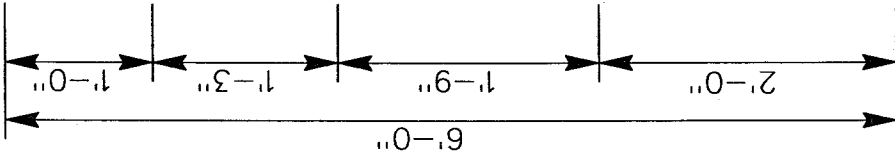
- (4) The provisions of paragraph (e)(1) shall not apply to any active operation which is required to submit a dust control plan to any city or county government that has adopted a District-approved dust control ordinance.

- (j) Fees
 - (1) Any person subject to a fugitive dust control plan submittal pursuant to paragraph (e)(1) shall be assessed applicable filing and evaluation fees pursuant to Rule 306.
 - (2) The submittal of an annual statement of no-change, pursuant to paragraph (f)(5), shall not be considered as an annual review, and therefore shall not be subject to annual review fees, pursuant to Rule 306.

APPENDIX "B"

PROJECT SIGNS

8'-0"



LETTER SCHEDULE

	SIZE	COLOR
①	2"	BLACK
②	4"	ROYAL
③	3"	ROYAL
④	2"	ROYAL
⑤	2"	BLACK

RIVERSIDE COUNTY FLOOD CONTROL ①
AND
WATER CONSERVATION DISTRICT

PALM SPRINGS MDP LINE 43 ②
AND LATERAL 43A STG. 1

TOTAL CONSTRUCTION COST: \$ * ③
FUNDED BY RIVERSIDE COUNTY FLOOD CONTROL AND
WATER CONSERVATION DISTRICT ④

START DATE: * ④ APPROX. COMPLETION DATE: *

ENGINEER: ④ CONTRACTOR: *

WARREN D. WILLIAMS ⑤
GENERAL MANAGER-CHIEF ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
RIVERSIDE, CALIFORNIA
(951) 955-1200

3/4" CDX GRADE
PLYWOOD



NOTES:

1. MINIMUM SPACING BETWEEN LINES 1".
2. * -INFO. FURNISHED BY ENGINEER
3. ALL LETTERS FILLED AND CENTERED
4. THE STRIPES ARE GOLD AND BLACK ON WHITE BACKGROUND.

APPENDIX "B" PROJECT SIGN

APPENDIX "C"

LOG OF SOIL BORINGS

EXPLORATORY BORING NO. 1

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		(SM) Silty Sand, fine to coarse, light gray	Fill	X	X	9 11 12	1.8 2.1	125	Ring
5		(SM) Silty Sand, fine to coarse, gravel to 1/2", light gray	Native	X	X	13 13 16	2.5 2.9	122	Ring
10				X		10 12 24	1.6	124	Ring, Cor
15				X		17 27 50/3"	3.1	121	Ring
20		END OF BORING	Bedrock						
		REFUSAL AT 17.0', BEDROCK AT 17.0' FILL TO 6.0', SLIGHT CAVING NO FREE GROUNDWATER							

BORING LOG - NO EQUIV & BLOW PER 6 IN. 10458-3.GPJ CHJ.GDT 8/10/10

EXPLORATORY BORING NO. 2

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		(SM) Silty Sand, fine to coarse, gravel to 1/4", light gray	Native	X	X		2.3		
5				X	X	12 17 17	3.2	123	Ring
		(SM) Silty Sand, fine to coarse, gravel to 1/4", brown		X	X	9 18 25	2.7 2.0	123	Ring
10				X	X	11 12 16	2.6	120	Ring
15				X	X	14 14 18	2.7	123	Ring
20				X	X	13 17 20	2.3	120	Ring
25		BORING TERMINATED AT 33.5' NO REFUSAL, NO BEDROCK NO FILL, SLIGHT CAVING NO FREE GROUNDWATER		X	X	16 21 25	2.5	122	Ring
30				X	X	17 23 45	2.3	126	Ring
			END OF BORING		X	X			

BORING LOG - NO EQUIV & BLOW PER 6 IN 10459-3.GPJ CHJ.GDT 9/10/10



C.H.J.

PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-2

EXPLORATORY BORING NO. 3

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
5		(SW-SM) Sand, fine to coarse with silt, gravel to 1/2", light gray	Native				1.1		Cor.
				X		10 12 12	2.5	123	Ring
				X		6 7 7	1.3	121	Ring, DS
10		(SW-SM) Sand, fine to coarse with silt, gravel to 3/4", brown					2.5		SE, Wash#200 Ring
				X		13 18 24	2.1	129	
				X		13 24 33	2.8	128	Ring
20				X		27 50/5"	NR	NR	Ring
				X		9 6 9	4.5	118	Ring
30				X		20 34 36	3.6	132	Ring
				END OF BORING NO REFUSAL, NO BEDROCK, NO FILL HEAVY CAVING, NO FREE GROUNDWATER					

BORING LOG - NO EQUIV & BLOW PER 6 IN. 10458-3.GPJ CHJ.GDT 9/10/10



C.H.J.

PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-3

EXPLORATORY BORING NO. 4

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		8-1/2" Asphalt Concrete, 2-3/4" Aggregate Base	AC/Base						
		(SW-SM) Sand, fine to coarse with silt, gravel to 1/2", brown	Fill			11	3.4		SA, SE
						10	2.3	122	Ring
						9	4.1		SE
5		(SM) Silty Sand, fine to coarse, brown	Native			6	3.3	121	Ring, Cor.
						7			
						8	4.8	131	Ring
10						9			
						14	3.1	118	Ring
						17			
15						13	3.0	128	Ring
						16			
20						20	7.5	99	Ring
		(SP-SM) Silty Sand, fine, light brown				9	8.6		Ring
						11			
25						13	2.0	108	Ring
		(SM) Silty Sand, fine to medium, gray				11	2.6		
						13			
30						20			
		END OF BORING				35			
		NO BEDROCK, NO REFUSAL, FILL TO 4.0', NO CAVING, NO FREE GROUNDWATER							
35									

BORING LOG - NO EQUIV & BLOWPER 6 IN. 10459-3.GPJ CHJ.GDT 9/10/10



C.H.J.

PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-4

EXPLORATORY BORING NO. 5

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		8-1/2" Asphalt Concrete, No Aggregate Base	AC						
		(SW-SM) Sand, fine to coarse with silt, gravel to 1/2", brown	Native	X	X	16 17 20	2.5 2.1	122	SA, SE Ring
5				X	X	12 14 17	2.5	119	Ring, Cor.
10				X	X	11 16 20	3.3	128	Ring
15				X	X	10 16 16	3.4	119	Ring
20				X	X	13 18 24	3.1	130	Ring
25				X	X	21 23 20	3.5	120	Ring
30				X	X	15 26 31	3.3	123	Ring
35		END OF BORING NO REFUSAL, NO BEDROCK, NO FILL NO CAVING, NO FREE GROUNDWATER							

BORING LOG - NO EQUIV & BLOWPER 6 IN. 10459-3.GPJ CHJ GDT 9/10/10



PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-5

EXPLORATORY BORING NO. 6

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		3" Asphalt Concrete, 3" Aggregate Base	AC/Base						
		(SM) Silty Sand, fine with medium and coarse and gravel to 3/8", light brown	Native				5.1		SA, SE, RV
5				X		8 8 7	5.9	99	Ring, Cor.
		(SM) Silty Sand, fine to coarse, light brown		X		5 7 10	2.7 1.5	122	Ring
10				X		9 14 50	2.0 1.7	111	Ring
15		(SM) Silty Sand, fine, light brown		X					Ring
		END OF BORING	Refusal			50/1"	NR	NR	Ring
20		REFUSAL AT 17.0', BEDROCK AT 17.0' NO FILL, NO CAVING NO FREE GROUNDWATER							
25									
30									

BORING LOG - NO EQUIV & BLOW PER 6 IN. 10459-3.GPJ CHJ.GDT 8/10/10



C.H.J.

PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-6

EXPLORATORY BORING NO. 7

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		3-1/4" Asphalt Concrete, 6-1/2" Aggregate Base	AC/Base						
		(SM) Silty Sand, fine to coarse with gravel to 3/8", dark brown	Fill	X	X	17 23 37	5.3 3.0	129	SA, SE Ring
		(SW-SM) Sand, fine to medium with silt, light brown	Native				3.9		SE, Cor., Wash#200
5				X		7 12 12	4.2	111	Ring, DS
10				X		6 10 15	6.9	111	Ring, Consol.
15				X		10 17 17	3.1	112	Ring
20				X		10 13 16	2.9	107	Ring
25		(SM) Silty Sand, fine to medium with coarse, light brown		X	X	17 28 38	3.1 3.0	120	Ring
30				X		11 17 23	3.8	107	Ring
		END OF BORING							
		NO REFUSAL, NO BEDROCK, FILL TO 3.0' NO CAVING, NO FREE GROUNDWATER							

BORING LOG - NO EQUIV & BLOW PER 6 IN. 10459-3.GPJ, CHJ.GDT 9/10/10



C.H.J.

PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-7

EXPLORATORY BORING NO. 8

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		4-1/2" Asphalt, 5-1/2" Aggregate Base	AC/Bases						
		(SW-SM) Sand, fine to medium with silt, brown	Native				2.9		SA, SI
5				X		16 18 16	2.3	114	Ring
10				X		8 10 13	2.7	105	Ring, Cor.
15				X		12 16 22	1.5	118	Ring
20				X		23 18 24	1.0	107	Ring
25				X		15 25 35	1.5	113	Ring
30				X		17 22 23	1.6	114	Ring
		NO REFUSAL, NO BEDROCK, NO FILL NO CAVING, NO FREE GROUNDWATER							
		(SM) Silty Sand, fine to coarse, light gray		X		34 40 50/S"	2.0 2.1	120	Ring
		END OF BORING							

BORING LOG - NO EQUIV & BLOW PER 6 IN. 10459-3.GPJ CHJ.GDT 8/10/10



C.H.J.

PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-8

EXPLORATORY BORING NO. 9

Date Drilled: 8/20/10

Client: Albert A. Webb Associates

Equipment: CME 55 Drill Rig

Driving Weight / Drop: 140 lbs./30 in.

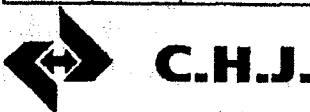
Surface Elevation(ft): N/A

Logged by: JSM

Measured Depth to Water(ft): N/A

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES		BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				DRIVE	BULK				
		4" Asphalt Concrete, 6" Aggregate Base	Asphalt						
		(SM) Silty Sand, fine to medium with coarse, gravel to 1-1/2", light brown	Base Fill	XXXX			09		
		END OF BORING	Bedrock						
5		REFUSAL AT 3.0', BEDROCK AT 3.0' FILL TO 3.0', HEAVY CAVING NO FREE GROUNDWATER							
10									
15									
20									
25									
30									

BORING LOG - NO EQUIV & BLOW PER 6 IN. 10459-3.GPJ CHJ.GDT 8/25/10



PALM SPRINGS MDP LINE 43 & LATERAL 43-A
CATHEDRAL CITY, CA

Job No. Enclosure
10459-3 B-9

ATTACHMENTS FILED
WITH
THE CLERK OF THE BOARD