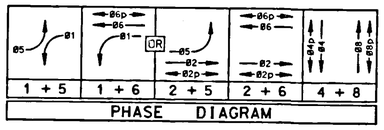
CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11
#14	Ø1	–	–	–	3	3	3	–	–	–	–	–
	Ø2	3	3	3	3	3	–	–	–	–	–	–
	Ø4	–	3	3	3	3	–	–	–	–	–	–
	Ø5	3	3	3	3	3	3	3	3	3	–	–
	Ø6	–	–	–	–	–	3	–	–	–	–	–
	Ø8	–	–	–	–	–	3	3	3	–	–	–
	Ø2 PED	2	2	2	2	2	–	–	–	–	–	–
	Ø4 PED	–	–	2	2	2	2	2	–	–	–	–
	Ø6 PED	–	–	–	–	–	2	2	2	2	–	–
	Ø8 PED	–	2	2	2	2	2	2	2	–	–	–
	Ø2 PPB	–	1	1	1	1	–	–	–	–	–	–
	Ø4 PPB	–	–	–	1	1	1	–	–	–	–	–
	Ø6 PPB	–	–	–	–	–	1	1	1	–	–	–
	Ø8 PPB	1	1	1	1	1	1	1	1	–	–	–
	PPB COMMON	1	1	1	1	1	1	1	1	1	–	–
	SPARES	3	3	3	3	3	3	3	3	3	–	–
	TOTAL	13	19	21	25	25	25	18	16	10	–	–
TYPE B CABLE (2#16)	Ø2 DET.	–	–	–	1	1	–	–	–	–	–	–
	Ø6 DET.	–	–	–	–	–	1	1	1	1	–	–
	TOTAL	–	–	–	1	1	1	1	1	1	–	–
#12	I.S.N.S.	2	2	2	2	2	2	2	2	–	–	4
	BUS SHELTER	2	2	2	2	–	–	–	–	–	–	4
	TOTAL	4	4	4	4	2	2	2	2	–	–	8
*	CAMERA CABLE	1	1	2	2	2	2	1	1	–	–	–
**	CAMERA POWER	1	1	2	2	2	2	1	1	–	–	2#12
***	INTERCONNECT	–	–	–	–	1	–	–	–	–	–	–
#10	LUMINAIRE	2	2	2	2	–	–	2	2	2	–	4
	SIGNAL COMMON	1	1	1	1	1	1	1	1	1	–	–
	TOTAL	3	3	3	3	1	1	3	3	3	–	4
#6	SERVICE	–	–	–	–	–	–	–	–	–	–	3
CONDUIT SIZE (INCH)		2(E)	2.5	2.5	3	3	3	2.5	2(E)	2(E)	2(E)	2(E)

ALL CONDUITS, CABLE AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED.
(E) = EXISTING CONDUIT TO BE REUSED.
* BELDEN NO. 8281 COAXIAL CABLE. SEE SPECIAL PROVISIONS.
** 16-3 SJO POWER CABLE.
*** 1-12 PAIR #19 INTERCONNECT CABLE

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

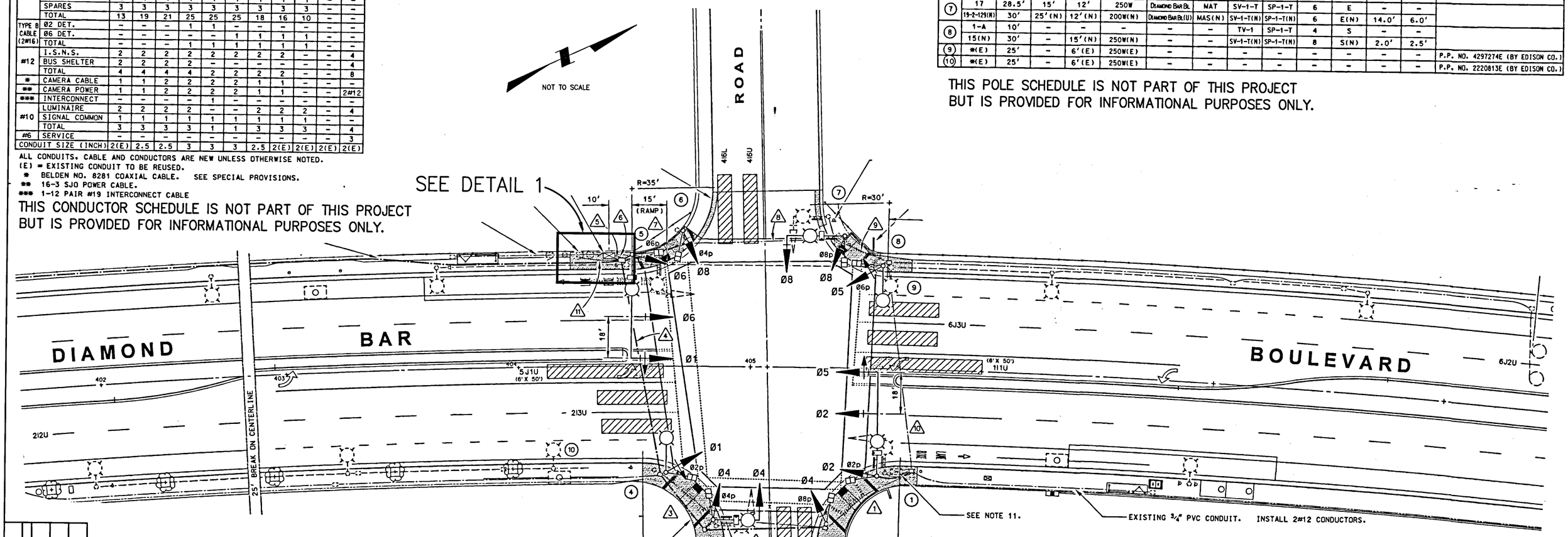


PHASE DIAGRAM

POLE SCHEDULE

NO.	TYPE	HEIGHT	SIG.M.A	LUM.M.A	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED.PUSH BUT. PHASE	QUAD.	PLACEMENT ** "A"	"B"	REMARKS
1	17	28.5'	15'	12'	250W	HIGHLAND VALLEY	MAT	SV-1-T	SP-1-T	4	S	–	–	
	26-4-129(N)	30'	40'(N)	15'(N)	250W(N)	HIGHLAND VALLEY(U)	2-MAS(N)	SV-1-T(N)	SP-1-T(N)	8	S(N)	10.0'	3.0'	
2	1-A(N)	10'	–	–	–	–	–	TV-1-T(N)	SP-1-T(N)	2	W(N)	EXISTING	EXISTING	SEE NOTE 14.
3	17	28.5'	15'	12'	200W	DIAMOND BAR BL	MAS	SV-1-T	SP-1-T	2	W	–	–	
	17-2-129(N)	30'	20'(N)	12'(N)	200W(N)	DIAMOND BAR BL(U)	MAS(N)	SV-1-T(N)	SP-1-T(N)	2	W(N)	10.0'	3.0'	
4	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	4	N	–	–	
	15(N)	30'	–	15'(N)	250W(N)	–	–	SV-1-T(N)	SP-1-T(N)	4	N(N)	10.0'	2.5'	
5	17	28.5'	15'	12'	250W	HIGHLAND VALLEY	MAT	SV-1-T	SP-1-T	4	N	–	–	
	26-4-129(N)	30'	45'(N)	15'(N)	250W(N)	HIGHLAND VALLEY(U)	2-MAS(N)	SV-1-T(N)	SP-1-T(N)	4	N(N)	ECR	6.5'	
6	1-A(N)	10'	–	–	–	–	–	TV-1-T(N)	SP-1-T(N)	6	E(N)	18.5'	6.5'	
7	17	28.5'	15'	12'	250W	DIAMOND BAR BL	MAT	SV-1-T	SP-1-T	6	E	–	–	
	19-2-129(N)	30'	25'(N)	12'(N)	200W(N)	DIAMOND BAR BL(U)	MAS(N)	SV-1-T(N)	SP-1-T(N)	6	E(N)	14.0'	6.0'	
8	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	4	S	–	–	
	15(N)	30'	–	15'(N)	250W(N)	–	–	SV-1-T(N)	SP-1-T(N)	8	S(N)	2.0'	2.5'	
9	*(E)	25'	–	6'(E)	250W(E)	–	–	–	–	–	–	–	–	P.P. NO. 4297274E (BY EDISON CO.)
10	*(E)	25'	–	6'(E)	250W(E)	–	–	–	–	–	–	–	–	P.P. NO. 2220813E (BY EDISON CO.)

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

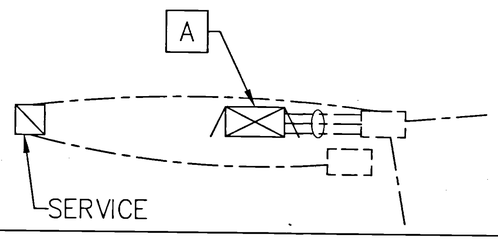
NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS INDICATED IN DETAIL 1.

REVISIONS

DATE	BY	CHANGE

DRAWN BY
SPOTTED BY
AS-BUILT
SUPERVISED BY
REVISED BY



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

PLANS DESIGNED BY:
11/09/16
DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K. LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE
BY
RECOMMENDED
DATE
BY
APPROVED
DATE 11-10-16
BY

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT HIGHLAND VALLEY ROAD

C.C. | SH 1 OF 1 | SCALE:

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10
#14	Ø1	–	–	3	3	3	3	–	–	–	3
	Ø2	3	3	3	3	–	–	–	–	–	3
	Ø5	3	3	3	3	3	3	3	–	–	3
	Ø6	–	–	–	–	3	3	3	–	–	3
	Ø7	–	–	–	–	3	3	–	–	–	3
	Ø8	–	–	–	–	3	3	3	–	–	3
	Ø2 PED	2	2	2	2	–	–	–	–	–	2
	Ø6 PED	–	–	–	–	2 *	2 *	2 *	–	–	2
	SPARES	3	3	3	3	1	1	1	–	–	3
	TOTAL	11	11	14	14	18	18	12	–	–	25
#12	I.S.N.S.	2	2	2	2	2	2	–	4	–	4
	CAMERA CABLE	1	1	1	1	1	1	–	–	–	1
	CAMERA POWER	2	2	2	2	2	2	–	4	–	4
	INTERCONNECT	–	–	1	1	–	–	–	–	–	–
#10	LUMINAIRE	2	2	2	2	2	2	–	4	–	4
	SIGNAL COMMON	1	1	1	1	1	1	1	–	–	1
	TOTAL	3	3	3	3	3	3	1	4	–	5
#8	SERVICE	–	–	–	–	–	–	–	–	2	2
CONDUIT SIZE (INCH)		2	2	2.5	2.5	2.5	2.5	2	2	2	2–3

* USE EXISTING 2–#14 SPARE CONDUCTORS FOR Ø6 PED.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

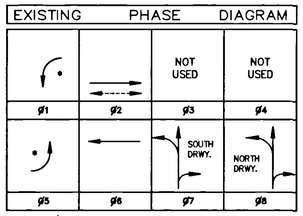
SIGN SCHEDULE

POLE NO.	MOUNT ON POLE	MOUNT ON MAST ARM	FACING
①	–	R73–2(CA)(N)*	SW
	2–R96	–	NW
	2–R96A	–	NW
②	2–R96	–	NW
	2–R96A	–	NW
③	2–R96	–	NW
	2–R96A	–	SE
④	2–R96	–	SE
	2–R96A	–	SE
⑤	–	R73–2(CA)(N)*	NE
	2–R96	–	SE
	2–R96A	–	SE
	R13A	–	SE
⑥	2–R96	–	SE
	2–R96A	–	SE

ALL SIGNS SHALL BE EXISTING, UNLESS OTHERWISE NOTED: (N) – NEW

* SEE STANDARD PLAN ES–7N, DETAIL U.

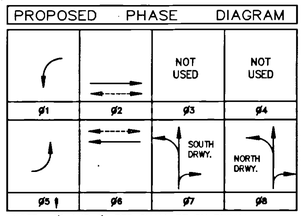
EXISTING PHASE DIAGRAM



NOTE: Ø2 PED SHALL BE ON RECALL.

* PROTECTED–PERMISSIVE LEFT–TURN

PROPOSED PHASE DIAGRAM



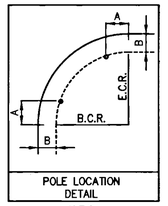
NOTE: Ø2 AND Ø6 PED SHALL BE ON RECALL.

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT. TYPE	PHASE	PLACEMENT "A"	"B"	REMARKS
①	26–4–113	30'	45'(N)	15'	250W	← NB Route 57 (R)	MAS(N)/MAS(R)	SV–1–T	SP–1–T	–	–	(EXISTING)		2 4
②	1–A	7'	–	–	–	–	–	–	TP–2–T	–	–	(EXISTING)		
③	1–A	10'	–	–	–	–	–	TV–2–T (M)	SP–1–T	–	–	(EXISTING)		3
④	1–A	10'	–	–	–	–	–	TV–1–T	–	–	–	(EXISTING)		
⑤	26–4–70	30'	45'(N)	15'	250W	NB Route 57 → (R)	MAS(N)/MAS(R)	SV–3–TB	SP–1–T(N)	–	–	(EXISTING)		2 4 5
⑥	1–A	10'	–	–	–	–	–	TV–3–TB (M)	SP–1–T(N)	–	–	(EXISTING)		3 5

ALL EQUIPMENT ARE EXISTING UNLESS OTHERWISE NOTED. (R) = RELOCATED, (N) = NEW, (M) = MODIFIED

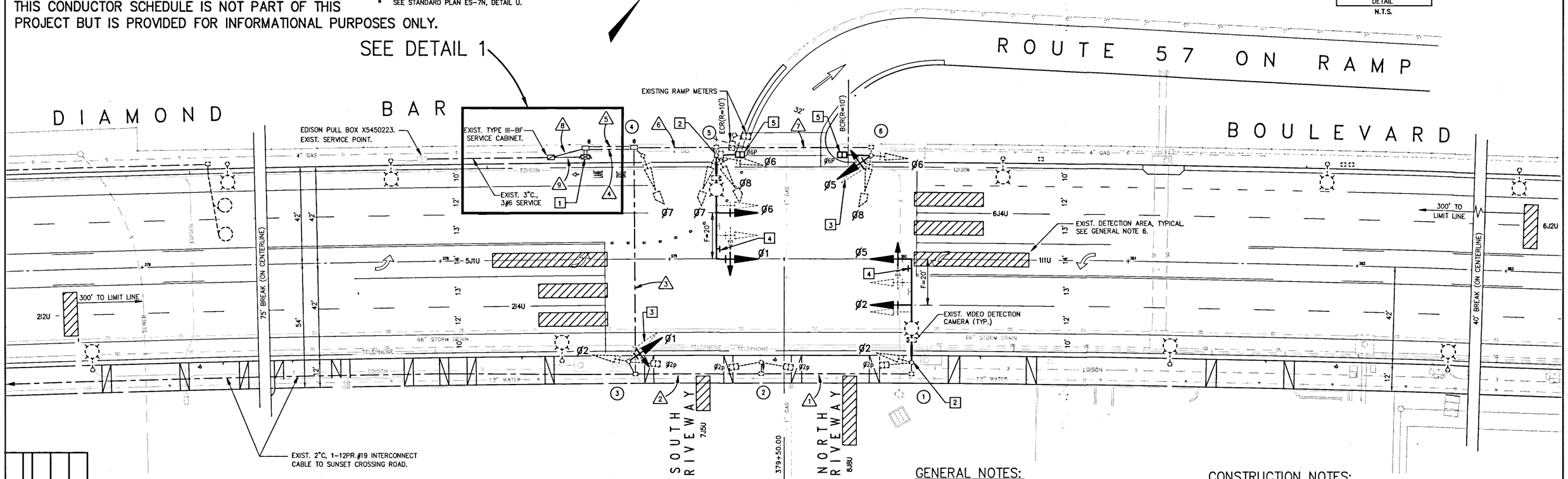
THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



POLE LOCATION DETAIL

N.T.S.

SEE DETAIL 1



GENERAL NOTES:

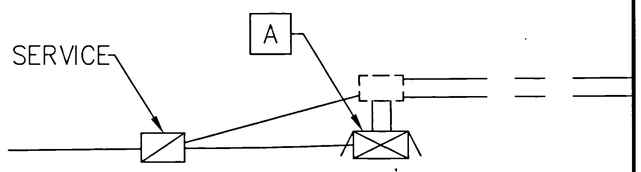
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

A EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX–R BATTERY BACK–UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING–OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK–UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS INDICATED DETAIL 1.



DIAMOND BAR BOULEVARD

BATTERY BACK–UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS–BUILT	
SUPERVISED BY	
REVISED BY	

SERVICE ADDRESS
553 N DIAMOND BAR

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860–6222
Fax: (909) 860–6722
www.advantec–usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT SR–57 NORTHBOUND ON–RAMP

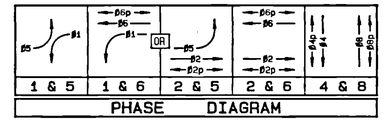
C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13
#14	Ø1	–	–	–	–	3	3	3	–	–	–	–	–	–
	Ø2	–	3	3	3	3	3	3	–	–	–	–	–	–
	Ø4	–	–	3	3	3	3	3	3	3	–	–	–	–
	Ø5	–	3	3	3	3	3	3	3	–	3	–	–	–
	Ø6	–	–	–	–	–	–	–	3	–	–	–	–	–
	Ø8	–	–	3	3	3	3	3	3	6	3	3	–	–
	Ø2 PED	–	2	2	2	2	2	2	–	–	–	–	–	–
	Ø4 PED	–	–	–	2	2	2	2	2	2	–	–	–	–
	Ø6 PED	–	–	–	–	–	–	–	2	4	2	–	–	–
	Ø8 PED	–	–	2	2	2	2	2	2	–	2	2	–	–
	Ø2 PPB	–	–	–	–	1	1	1	–	–	–	–	–	–
	Ø4 PPB	–	–	–	–	1	1	1	1	–	–	–	–	–
	Ø6 PPB	–	–	–	–	–	–	–	1	2	1	–	–	–
	Ø8 PPB	–	1	1	1	1	1	1	1	–	1	1	–	–
	PPB COMMON	–	1	1	1	1	1	1	1	2	1	1	–	–
	SPARES	–	3	3	3	3	3	3	3	6	3	3	–	–
	TOTAL	–	13	21	23	28	28	28	25	25	16	10	–	–
#12	I.S.N.S.	2	2	2	2	2	2	–	–	2	2	–	–	4
DLC	Ø1 DET.	1	1	1	1	1	1	1	–	–	–	–	–	–
	Ø2 DET.	–	–	–	–	3	3	3	–	–	–	–	–	–
	Ø4 DET.	–	–	–	–	–	–	–	2	2	–	–	–	–
	Ø5 DET.	–	–	–	–	–	1	1	–	–	–	–	–	–
	Ø6 DET.	–	–	–	–	–	–	–	3	–	3	–	–	–
	Ø8 DET.	–	–	2	2	2	2	2	–	–	–	–	–	–
	TOTAL	1	1	3	3	6	7	7	5	2	3	–	–	–
*	INTERCONNECT	–	–	–	–	–	–	–	1	–	1	–	–	–
#10	LUMINAIRE	2	2	2	2	2	2	2	2	–	2	2	–	4
	SIGNAL COMMON	1	1	1	1	1	1	1	1	2	1	1	–	–
	TOTAL	3	3	3	3	3	3	3	3	2	3	3	–	4
#8	SERVICE	–	–	–	–	–	–	–	–	–	–	–	2	–
CONDUIT SIZE (INCH)		1.5	2	2.5	2.5	3	3	3	3	2	2.5	2	2	2

* 1-12 PAIR #22 INTERCONNECT CABLE.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



PHASE DIAGRAM

SIGN SCHEDULE

POLE NO.	MOUNT ON POLE	MAST ARM	FACING
(A)	R10A-1 *	–	SW
	TYPE K-1 *	–	SE
(B)	R10A-1 *	–	NE
(C)	R10A-1 *	–	SW
(D)	R34-2 *	–	SE
	R7 *	–	NW

* INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY. LOCATE AS SHOWN AND AS APPROVED BY THE ENGINEER.

POLE SCHEDULE

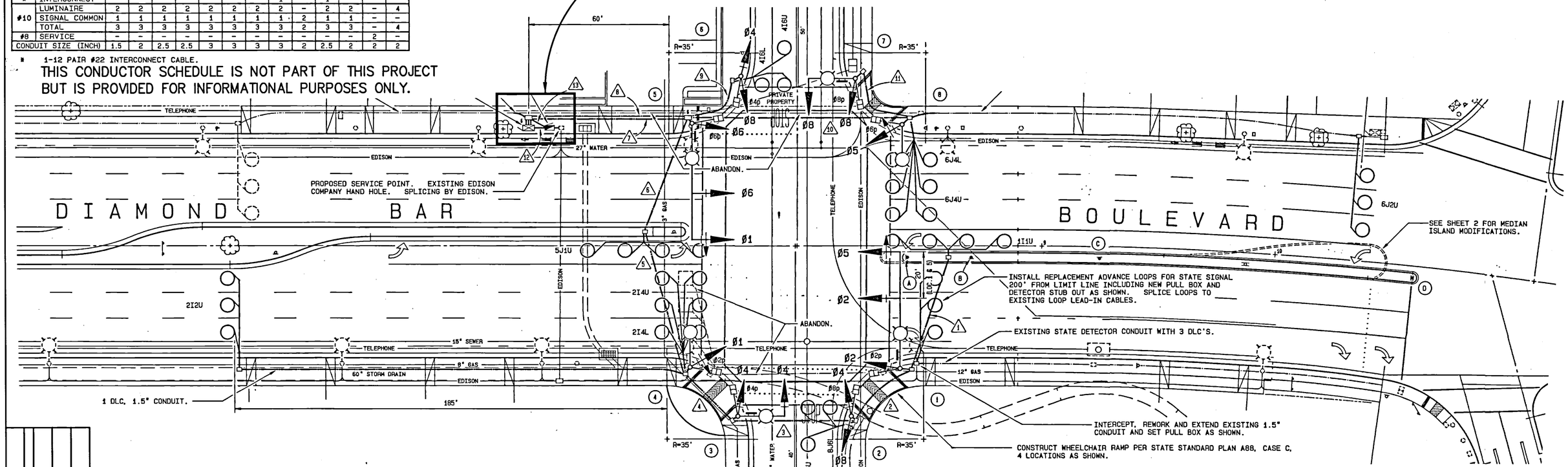
NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE	PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	"B"	REMARKS
(1)	15 (E)	30'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	P.P. NO. 4296611E. I.S.N.S. ARROWS TO EAST. SEE NOTE 13.
	29-4-70	30'	50'	15'	250W	Palomino →	2-MAS	SV-1-T	SP-1-T	B	8	10'	3.0'	
(2)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	B	2	10'	2.5'	
(3)	17-3-70	30'	20'	12'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	B	2	10'	3.0'	
(4)	15 (E)	30'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. NO. 4296609E.
	15	30'	–	15'	150W	–	–	SV-1-T	SP-1-T	B	4	10'	2.5'	SEE NOTE 12.
(5)	15 (E)	30'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. NO. 4296608E.
	29-4-70	30'	50'	15'	250W	Gentle Springs →	2-MAS	SV-1-T	SP-1-T	2-B	4 & 6	10'	3.0'	I.S.N.S. ARROWS TO WEST. SEE NOTE 13.
(6)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	B	6	10'	2.5'	
(7)	17-3-70	30'	20'	12'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	B	6	11'	3.0'	
(8)	15 (E)	30'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. NO. 4296610E.
	15	30'	–	15'	150W	–	–	SV-1-T	SP-1-T	B	8	10'	2.5'	SEE NOTE 12.

(E) = ORNAMENTAL CONCRETE POLE TO BE REMOVED BY EDISON COMPANY.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT-TO-SCALE

SEE DETAIL 1



GENERAL NOTES:

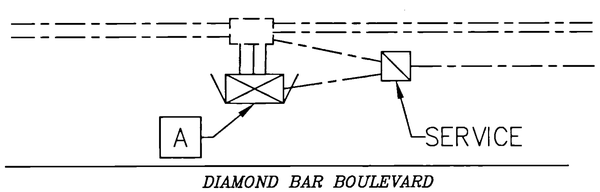
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

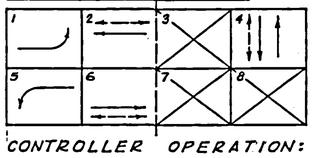
APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

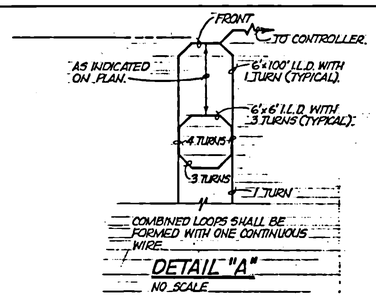
TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT PALOMINO DRIVE

C.C. _____ | SH 1 OF 1 | SCALE: _____

SIGNAL PHASE DIAGRAM



CONTROLLER OPERATION:
Ø2 & Ø6 ON VEHICLE RECALL
Ø1, 3, 4 & 5 ON "NON-LOCK"
TIME DELAY Ø4 FOR RIGHT TURNS



DETAIL "A"
NO SCALE

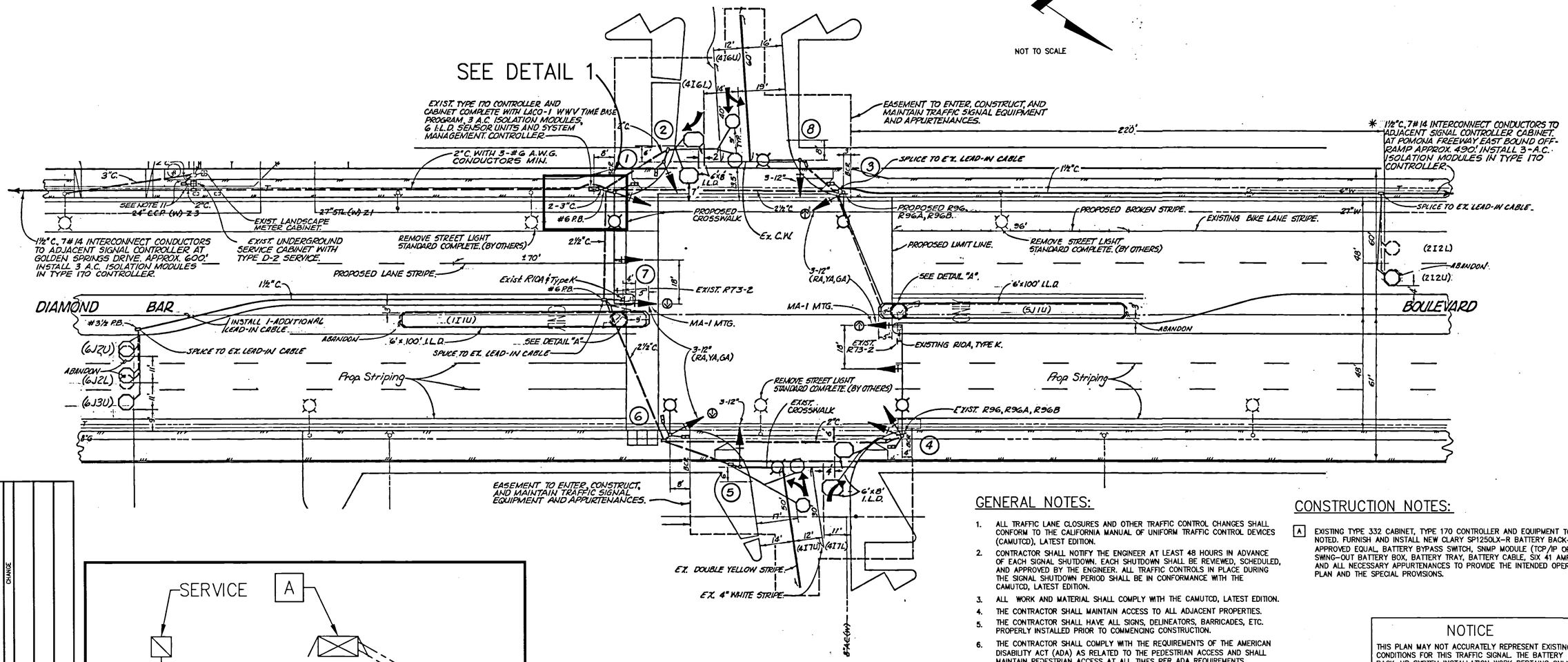
POLE SCHEDULE

POLE NO.	POLE TYPE	SIGNAL M.A. LENGTH	LUMINAIRE M.A. LENGTH	LUMINAIRE H.P.S.V. WATTS	PED PUSH BUTTON NO.	PED PUSH BUTTON PHASE	STREET NAME SIGN TYPE	STREET NAME SIGN LEGEND
(1) *	26-4-70	45'	8'	200	1	4	-	-
(2)	1	-	-	-	1	2	-	-
(3)	15	-	8'	200	-	-	-	-
(4) *	26-4-70	45'	8'	200	1	6	-	-
(5)	15	-	12'	150	1	6	-	-
(6)	15	-	8'	200	1	4	-	-
(7)	9' RP&B POST	-	-	-	1	4	-	-
(8)	15	-	12'	150	1	2	-	-

* = SEE SPECIAL PROVISIONS FOR TRAFFIC SIGNALS.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT TO SCALE



GENERAL NOTES:

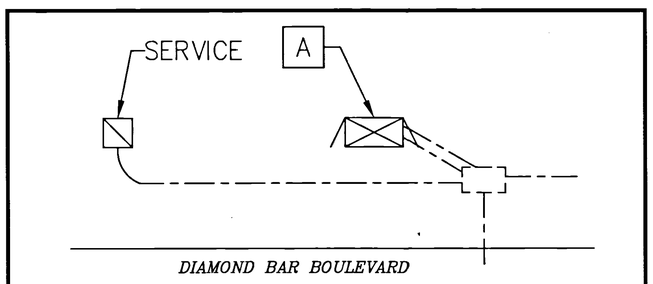
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL. BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:
11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11-10-16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT K-MART WAY

C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13
#14	ø1	–	3	3	3	3	3	3	3	3	3	3	–	–
	ø2	–	–	–	–	–	–	3	3	–	–	–	–	–
	ø4	–	–	3	3	3	3	3	3	3	3	–	–	–
	ø5	–	–	–	–	3	3	3	3	–	–	–	–	–
	ø6	–	3	3	3	3	3	3	–	–	–	–	–	–
	ø8	–	–	3	3	3	3	3	3	3	–	–	–	–
	ø2 PED	–	–	–	–	–	–	–	2	2	2	2	–	–
	ø4 PED	–	–	2	2	2	2	2	2	2	2	–	–	–
	ø6 PED	–	2	2	2	2	2	2	–	–	–	–	–	–
	ø8 PED	–	–	–	2	2	2	2	2	2	–	–	–	–
	ø2 PPB	–	–	–	–	–	–	–	1	1	1	–	–	–
	ø4 PPB	–	1	1	1	1	1	1	1	1	1	1	–	–
	ø6 PPB	–	–	1	1	1	1	1	–	–	–	–	–	–
	ø8 PPB	–	–	–	–	1	1	1	1	–	–	–	–	–
	PPB COMMON	–	1	1	1	1	1	1	1	1	1	1	–	–
	SPARES	–	3	3	3	3	3	3	3	3	3	3	–	–
	TOTAL	–	13	22	24	28	28	31	28	21	16	10	–	–
#12	I.S.N.S.	–	2	2	2	2	2	2	2	2	2	–	–	4
DLC	ø1 DET.	–	–	–	–	–	1	1	–	–	–	–	–	–
	ø2 DET.	–	–	–	–	–	–	–	2	2	2	2	–	–
	ø4 DET.	–	–	2	2	2	2	2	–	–	–	–	–	–
	ø5 DET.	1	1	1	1	1	1	1	–	–	–	–	–	–
	ø6 DET.	–	–	–	–	2	2	2	–	–	–	–	–	–
	ø8 DET.	–	–	–	–	–	–	–	2	2	–	–	–	–
	TOTAL	1	1	3	3	5	6	6	4	4	2	2	–	–
#10	LUMINAIRE	–	2	2	2	2	2	2	2	2	2	2	–	4
	SIGNAL COMMON	–	1	1	1	1	1	1	1	1	1	1	–	–
	TOTAL	–	3	3	3	3	3	3	3	3	3	3	–	4
#8	SERVICE	–	–	–	–	–	–	–	–	–	–	–	2	–
CONDUIT SIZE (INCH)		1.5	2	2.5	2.5	3	3	3	3	3	2.5	2	2	2

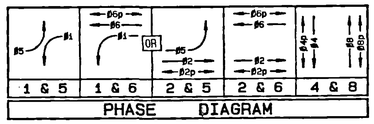
THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

SIGN SCHEDULE

POLE NO.	MOUNT ON POLE	MOUNT ON MAST ARM	FACING
(A)	R18-1 *	–	NW
(B)	W41-1 **	–	NW
(C)	W41-1 *	–	SW

* INSTALL ON EXISTING STREET LIGHT POLE.

** INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 500' FROM LIMIT LINE.



PHASE DIAGRAM

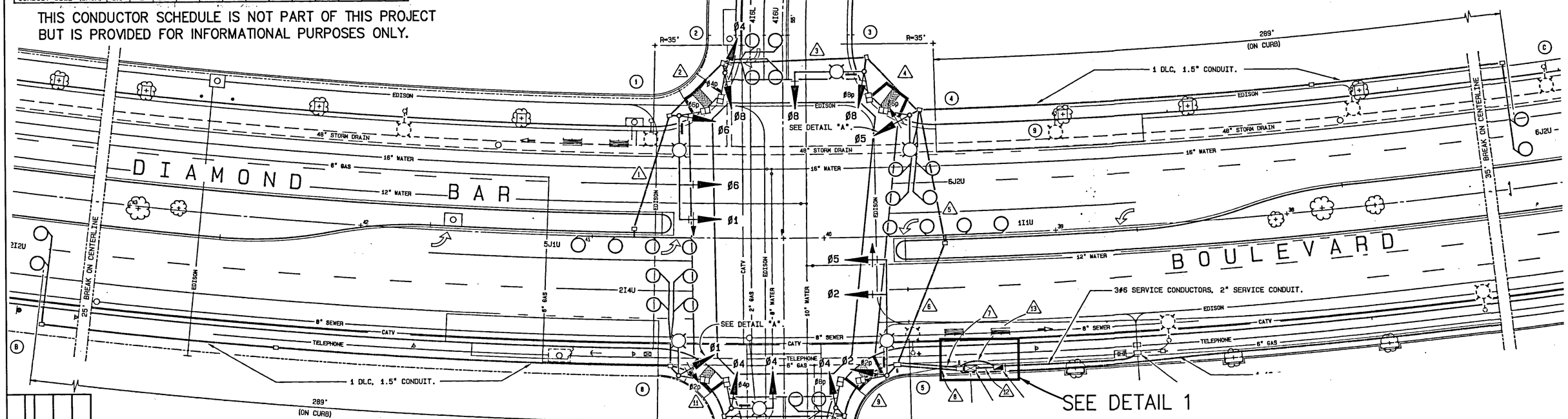
NOT-TO-SCALE

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE	PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	"B"	REMARKS
(1)	29-4-70	30'	45'	15'	250W	Goldrush	2-MAS	SV-1-T	SP-1-T	B	4	11'	3.0'	P.P. 2126092E
(2)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	B	6	12'	2.5'	
(3)	19-3-70	30'	30' *	12'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	B	6	12'	3.0'	
(4)	15	30'	–	15'	200W	–	–	SV-1-T	SP-1-T	B	8	11'	2.5'	
(5)	15 (E)	30'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. 4296626E
	29-4-70	30'	50'	15'	250W	Goldrush	2-MAS	SV-1-T	SP-1-T	B	8	10'	10'	
(6)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	B	2	11'	2.5'	
(7)	17-3-70	30'	18'	12'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	B	2	11'	3.0'	
(8)	15	30'	–	15'	200W	–	–	SV-1-T	SP-1-T	B	4	10'	10'	
(9)	15 (E)	30'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. 4296627E

* MAST ARM SHALL BE FURNISHED WITH ONE TENON ONLY. (E) = ORANAMENTAL CONCRETE POLE TO BE REMOVED BY EDISON COMPANY.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

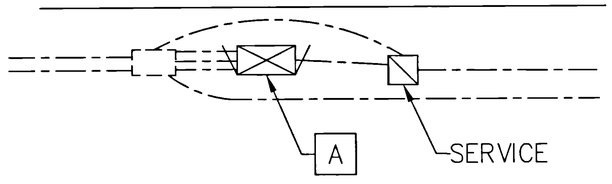
THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

REVISIONS

CHANGE	DATE	BY

DRAWN BY
SPOTTED BY
AS-BUILT
SUPERVISED BY
REVISED BY

DIAMOND BAR BOULEVARD



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

PLANS DESIGNED BY:
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
11/09/16 DATE
21700 Copley Drive, Suite 350, Diamond Bar, CA 91765
Tel: (909) 860-6222 Fax: (909) 860-6722 www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER — LEO K LEE — No. 42445 — CIVIL — STATE OF CALIFORNIA

SUBMITTED DATE _____ BY _____
RECOMMENDED DATE _____ BY _____
APPROVED DATE 11-10-16 BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT GOLDRUSH DRIVE

C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13	14
#14	Ø1	–	–	–	–	3	3	3	3	–	–	–	–	–	–
	Ø2	–	3	3	3	3	3	3	–	–	–	–	–	–	–
	Ø4	–	–	3	3	3	3	3	3	3	–	–	–	–	–
	Ø5	–	3	3	3	3	3	3	3	3	3	3	–	–	–
	Ø6	–	–	–	–	–	–	–	3	–	–	–	–	–	–
	Ø8	–	–	3	3	3	3	3	3	3	3	3	–	–	–
	Ø2 PED	–	2	2	2	2	2	2	–	–	–	–	–	–	–
	Ø4 PED	–	–	–	2	2	2	2	2	2	–	–	–	–	–
	Ø6 PED	–	–	–	–	–	–	–	4	2	2	2	–	–	–
	Ø8 PED	–	–	2	2	2	2	2	2	2	2	–	–	–	–
	Ø2 PPB	–	–	1	1	1	1	1	–	–	–	–	–	–	–
	Ø4 PPB	–	–	–	1	1	1	1	1	–	–	–	–	–	–
	Ø6 PPB	–	–	–	–	–	–	–	2	1	1	–	–	–	–
	Ø8 PPB	–	1	1	1	1	1	1	1	1	1	1	–	–	–
	PPB COMMON	–	1	1	1	1	1	1	1	1	1	1	–	–	–
	SPARES	–	3	3	3	3	3	3	6	3	3	3	–	–	–
	TOTAL	–	13	22	25	28	28	28	34	21	16	13	–	–	–
#12	I.S.N.S.	–	2	2	2	2	2	2	2	2	2	–	–	4	–
DLC	Ø1 DET.	1	1	1	1	1	1	1	–	–	–	–	–	–	–
	Ø2 DET.	–	–	–	–	3	3	3	–	–	–	–	–	–	–
	Ø4 DET.	–	–	–	–	–	–	–	2	2	–	–	–	–	–
	Ø5 DET.	–	–	–	–	–	1	1	–	–	–	–	–	–	–
	Ø6 DET.	–	–	–	–	–	–	–	2	2	2	2	–	–	–
	Ø8 DET.	–	–	1	1	1	1	1	–	–	–	–	–	–	–
	TOTAL	1	1	2	2	5	6	6	4	4	2	2	–	–	–
*	INTERCONNECT	–	1	1	1	1**	1**	1**	–	–	–	–	–	–	–
#10	LUMINAIRE	–	2	2	2	2	2	2	2	2	2	2	–	4	–
	SIGNAL COMMON	–	1	1	1	1	1	1	1	1	1	1	–	–	–
	TOTAL	–	3	3	3	3	3	3	3	3	3	3	–	4	–
#8	SERVICE	–	–	–	–	–	–	–	–	–	–	–	2	–	***
CONDUIT SIZE (INCH)		1.5	2.5	2.5	2.5	3	3	3	3	3	2.5	2	2	2	2.5

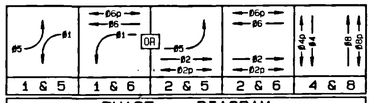
* 1-12 PAIR #19 INTERCONNECT CABLE. SEE CONTRACT SPECIAL PROVISIONS.
** NYLON PULL ROPE FOR FUTURE INTERCONNECT CABLE BY OTHERS.
*** 3#4 SERVICE CONDUCTORS.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

SIGN SCHEDULE

POLE NO.	MOUNT ON POLE	MOUNT ON MAST ARM	FACING
(A)	W41 *	–	S
(B)	W41 *	–	N

* INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 450' FROM LIMIT LINE.



PHASE DIAGRAM

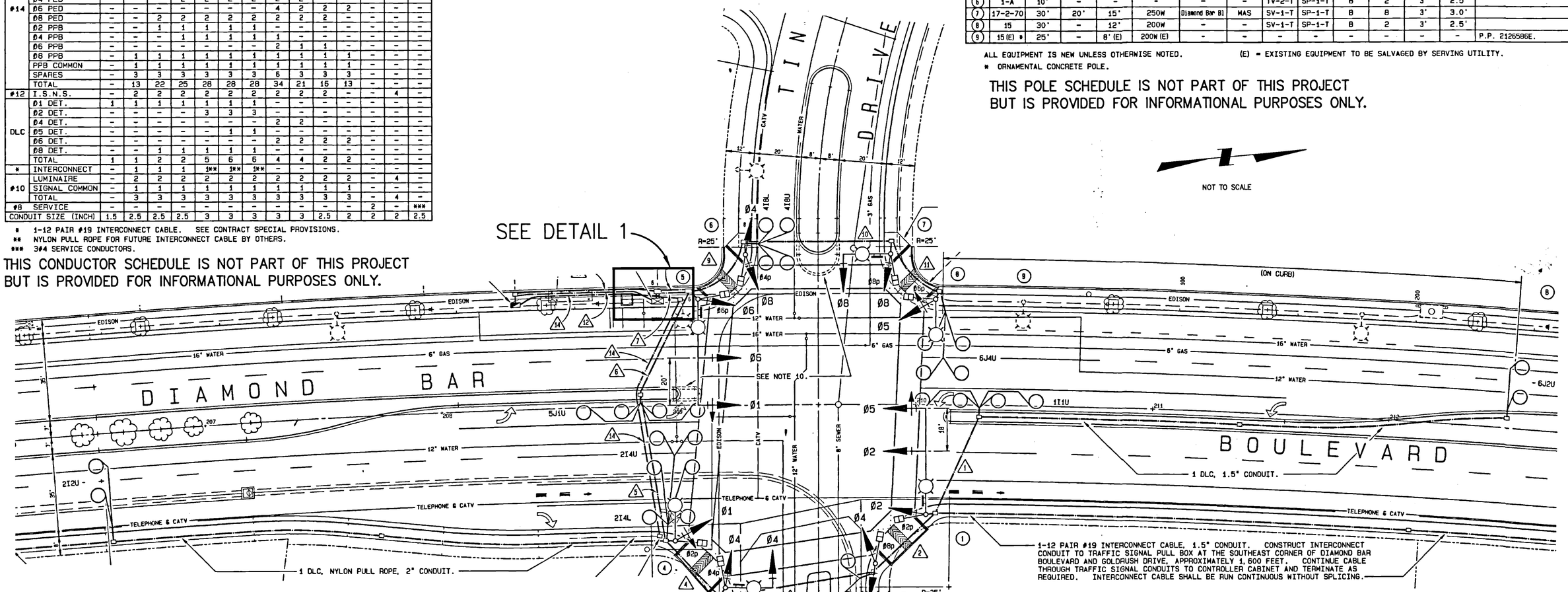
POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	"B"	REMARKS
(1)	26-4-70	30'	45'	15'	250W	Crestview →	2-MAS	SV-1-T	SP-1-T	B	8	10'	3.0'	I.S.N.S. ARROWS EAST.
(2)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	B	2	10'	2.5'	
(3)	17-2-70	30'	20'	15'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	B	8	20'	3.0'	
(4)	15	30'	–	12'	200W	–	–	SV-1-T	SP-1-T	B	2	10'	2.5'	
(5)	15 (E) *	25'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. 4090692E.
	26-4-70	30'	45'	15'	250W	Tin →	2-MAS	SV-1-T	SP-1-T	B	8	2'	3.0'	I.S.N.S. ARROWS WEST.
(6)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	B	2	3'	2.5'	
(7)	17-2-70	30'	20'	15'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	B	8	3'	3.0'	
(8)	15	30'	–	12'	200W	–	–	SV-1-T	SP-1-T	B	2	3'	2.5'	
(9)	15 (E) *	25'	–	8' (E)	200W (E)	–	–	–	–	–	–	–	–	P.P. 2126586E.

ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED. (E) = EXISTING EQUIPMENT TO BE SALVAGED BY SERVING UTILITY.
* ORNAMENTAL CONCRETE POLE.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT TO SCALE



GENERAL NOTES:

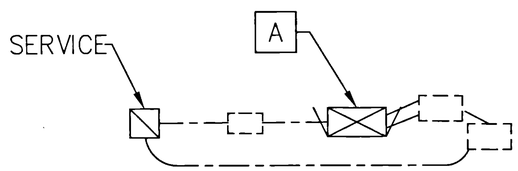
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY
SPOTTED BY
AS-BUILT
SUPERVISED BY
REVISED BY

PLANS DESIGNED BY:
11/09/16
DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE
BY
RECOMMENDED
DATE
BY
APPROVED
DATE 11.10.16
BY

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT CRESTVIEW DRIVE/TIN DRIVE

C.C. | SH 1 OF 1 | SCALE:

CONDUCTOR SCHEDULE

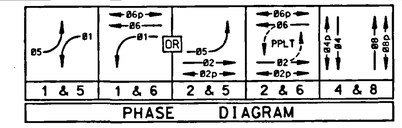
A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13
#14	Ø1 (RED IS SPARE)	3	3	3	3	3	3	3	3	–	–	–	–	3
	Ø2	–	–	–	3	3	3	3	3	–	–	–	–	3
	Ø4	–	–	–	–	–	3	3	–	–	–	–	–	3
	Ø5 (RED IS SPARE)	–	–	–	3	3	–	–	–	–	–	–	–	3
	Ø6	3	3	3	3	3	3	3	3	–	–	–	–	3
	Ø8	–	3	3	3	3	–	–	–	–	–	–	–	3
	Ø2 PED	–	–	–	–	–	2	2	2	–	–	–	–	2
	Ø4 PED	–	2	2	2	2	2	2	–	–	–	–	–	2
	Ø6 PED	2	2	2	2	2	–	–	–	–	–	–	–	2
	Ø8 PED	–	–	2	2	2	2	–	–	–	–	–	–	2
	Ø2 PPB	–	–	–	–	–	1	1	–	–	–	–	–	1
	Ø4 PPB	1	1	1	1	1	1	1	1	–	–	–	–	1
	Ø6 PPB	–	1	1	1	1	–	–	–	–	–	–	–	1
	Ø8 PPB	–	–	–	1	1	–	–	–	–	–	–	–	1
	PPB COMMON	1	1	1	1	1	1	1	1	–	–	–	–	1
	SPARES	3	3	3	3	3	3	3	3	–	–	–	–	3
	TOTAL	13	19	21	28	28	24	22	16	–	–	–	–	34
TYPE B CABLE (2#16)	Ø1 DET.	–	–	–	–	1	–	–	–	–	–	–	–	1
	Ø2 DET.	1	1	1	1	2	1	1	1	–	–	–	–	2
	Ø4 DET.	–	–	2	2	2	2	–	–	–	–	–	–	2
	Ø5 DET.	–	–	–	–	–	1	1	1	1	–	–	–	1
	Ø6 DET.	–	–	–	1	1	–	–	–	–	–	–	–	1
	Ø8 DET.	–	–	–	–	–	2	–	–	–	–	–	–	2
	TOTAL	1	3	3	4	6	4	2	2	1	–	–	–	9
*	INTERCONNECT	1	1	1	1	1	–	–	–	–	–	–	–	1
#12	I.S.N.S.	2	2	2	2	2	2	2	–	–	4	–	–	4
#10	LUMINAIRE	2	2	2	2	2	2	2	–	–	4	–	–	4
	SIGNAL COMMON	1	1	1	1	1	1	1	1	–	–	–	–	1
	TOTAL	3	3	3	3	3	3	3	1	–	4	–	–	8
#8	SERVICE	–	–	–	–	–	–	–	–	–	–	2	–	2
CONDUIT SIZE (INCH)		2.5	3	3	3	3	3	3	2.5	2	2	2	2	2–3"

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

SIGN SCHEDULE

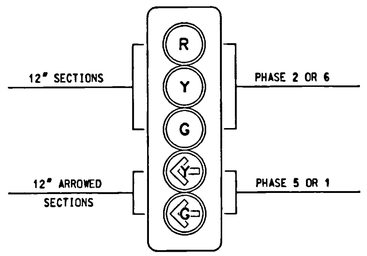
POLE NO.	MOUNT ON POLE	MOUNT ON MAST ARM	FACING
(1)	–	R73-7*	N
(5)	–	R73-7*	S

* SEE STANDARD PLAN ES-6T. DETAIL "U".



PHASE DIAGRAM

NOTE: CONTROLLER SHALL OPERATE IN THE PROTECTED-PERMISSIVE MODE ON PHASES Ø1 AND Ø5. A CALL ON Ø1 AND/OR Ø5 SHALL PLACE A CALL ON Ø4 OR Ø8.



COMBINATION SIGNAL HEAD DETAILS

SCALE: NONE

NOT-TO-SCALE

POLE SCHEDULE

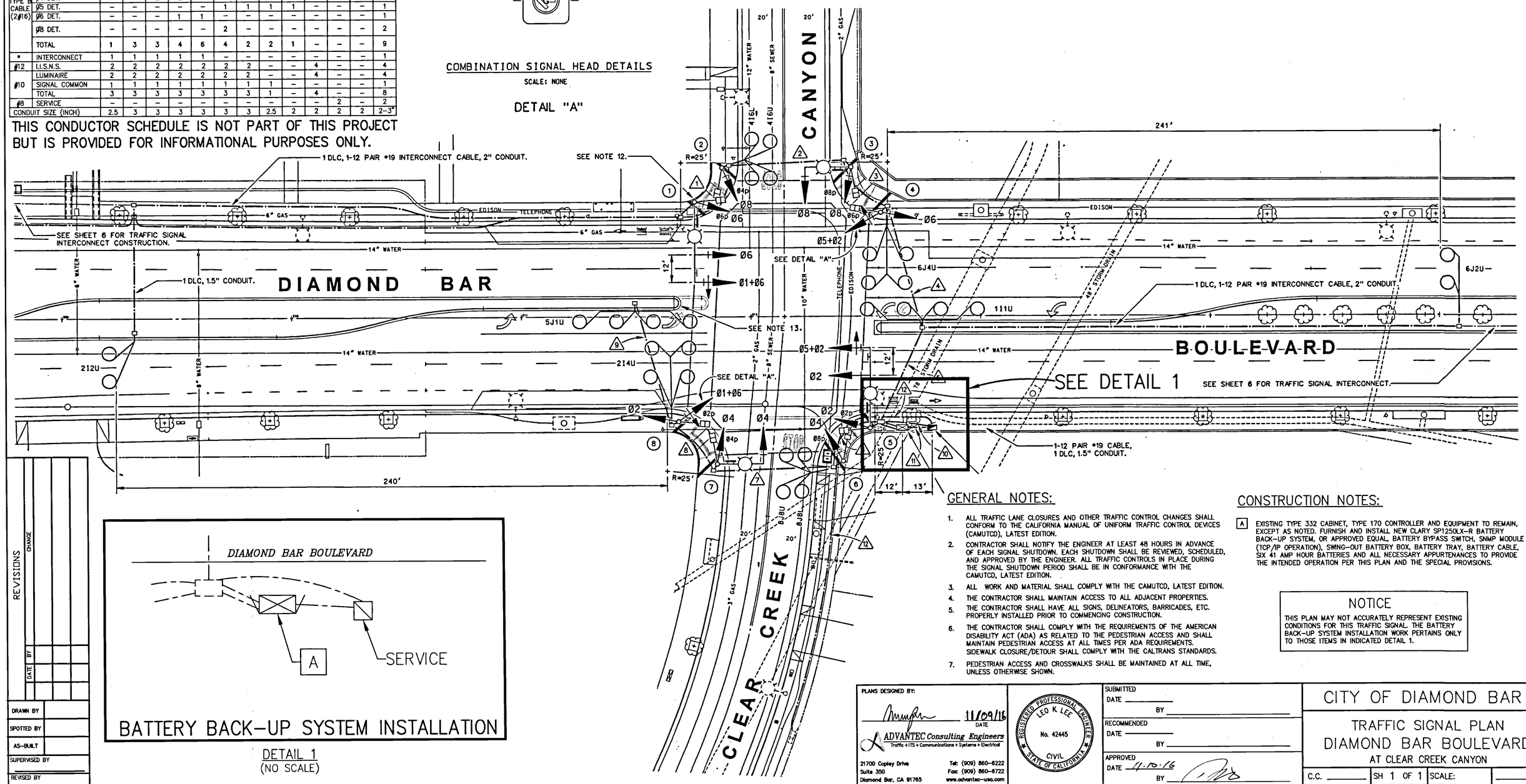
NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED.PUSH BUT. PHASE	QUAD.	PLACEMENT "A"	"B"*	REMARKS
(1)	15(E)	30'	–	8'(E)	250W(E)	–	–	–	–	–	–	–	–	P.P. NO. 2129562E (BY EDISON CO.)
	26-4-70	30'	35'**	15'	250W	Clear Creek Cyn	MAS-5A/MAS	SV-1-T	SP-1-T	4	N	6.0'	7.0'	
(2)	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	6	E	2.0'	7.0'	
(3)	17-2-70	30'	20'	12'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	6	E	2.0'	9.0'	
(4)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	8	S	3.0'	3.0'	
(5)	15(E)	30'	–	8'(E)	250W(E)	–	–	–	–	–	–	–	–	P.P. NO. 2080586E (BY EDISON CO.)
	26-4-70	30'	35'**	15'	250W	Clear Creek Cyn	MAS-5A/MAS	SV-1-T	SP-1-T	8	S	1.5'	6.5'	
(6)	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	2	W	3.0'	10.5'	
(7)	17-2-70	30'	20'	12'	250W	Diamond Bar Bl	MAS	SV-1-T	SP-1-T	2	W	5.0'	3.0'	
(8)	1-A	10'	–	–	–	–	–	TV-2-T	SP-1-T	4	N	5.0'	3.0'	

(E) = EXISTING EQUIPMENT TO BE REMOVED.

* SEE PLACEMENT DETAIL ON SHEET 7.

** INTERIM SIGNAL MAST ARM.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY

SPOTTED BY

AS-BUILT

SUPERVISED BY

REVISED BY

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 4-10-16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT CLEAR CREEK CANYON

C.C. _____ | SH 1 OF 1 | SCALE: _____

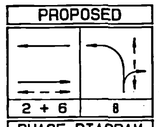
CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12
#14	ø1 (RED IS SPARE)	–	–	–	–	3	3	3	–	–	–	–	3
	ø2	–	3	3	3	3	3	–	–	–	–	–	3
	ø6	–	–	–	–	3	3	3	3	–	–	–	3
	ø8	–	–	–	–	–	–	3	3	–	–	–	3
	ø2 PED	–	2	2	2	2	2	–	–	–	–	–	2
	ø8 PED	–	–	2	2	2	2	2	2	–	–	–	2
	ø2 PPB	–	–	1	1	1	1	–	–	–	–	–	1
	ø8 PPB	–	1	1	1	1	1	1	1	–	–	–	1
	PPB COMMON	–	1	1	1	1	1	1	1	–	–	–	1
	SPARES	–	3	3	3	3	3	3	3	–	–	–	3
	TOTAL	–	10	13	13	19	19	16	13	–	–	–	22
TYPE B CABLE (2#16)	ø1 DET.	–	–	–	–	2	2	–	–	–	–	–	2
	ø2 DET.	–	1	1	1	1	1	1	–	–	–	–	1
	ø6 DET.	–	2	2	2	2	2	–	–	–	–	–	2
	ø8 DET.	–	–	–	–		–	2	2	2	–	–	2
	TOTAL	1	1	1	1	3	3	2	2	2	–	–	7
*	WWV ANTENNA	–	–	–	–	–	–	1	–	–	–	–	1
**	INTERCONNECT	–	–	–	–	1	–	–	–	–	–	–	1
#12	I.S.N.S.	–	2	2	2	2	–	3	2	–	–	3	3
#10	LUMINAIRE	–	2	2	2	2	2	2	2	–	–	2	2
	SIGNAL COMMON	–	1	1	1	1	1	1	1	–	–	–	1
	TOTAL	–	3	3	3	3	3	3	3	–	–	2	6
#8	SERVICE	–	–	–	–	–	–	–	–	–	2	–	–
CONDUIT SIZE (INCH)		2	2	2.5	2.5	3	3	3	2.5	2	2	2	2-3

** 1-12 PAIR #19 INTERCONNECT CABLE. SEE SPECIAL PROVISIONS.

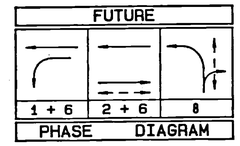
THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPOSED



PHASE DIAGRAM

FUTURE



PHASE DIAGRAM

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT TYPE	PHASE	REMARKS
(1)	15 (E)	30'	–	8' (E)	250W (E)	–	–	–	–	–	–	L.P.1683346E.
	19-3-70	30'	25'	12'	250W	Shadow Canyon	MAS	SV-1-T	SP-1-T	B	8	
(2)	1-A	7'	–	–	–	–	–	–	TP-1	B	2	
(3)	PPB	4'-6"	–	–	–	–	–	–	–	B	2	
(4)	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	–	–	
(5)	26-4-70	30'	35' §	12'	250W	Shadow Canyon	MAS	SV-2-TB	–	–	–	
(6)	17-2-70	30'	20'	12'	250W ##	Diamond Bar B1	MAS	SV-3-TB	SP-1-T	B	8	ONE-SIDED I.S.N.S.

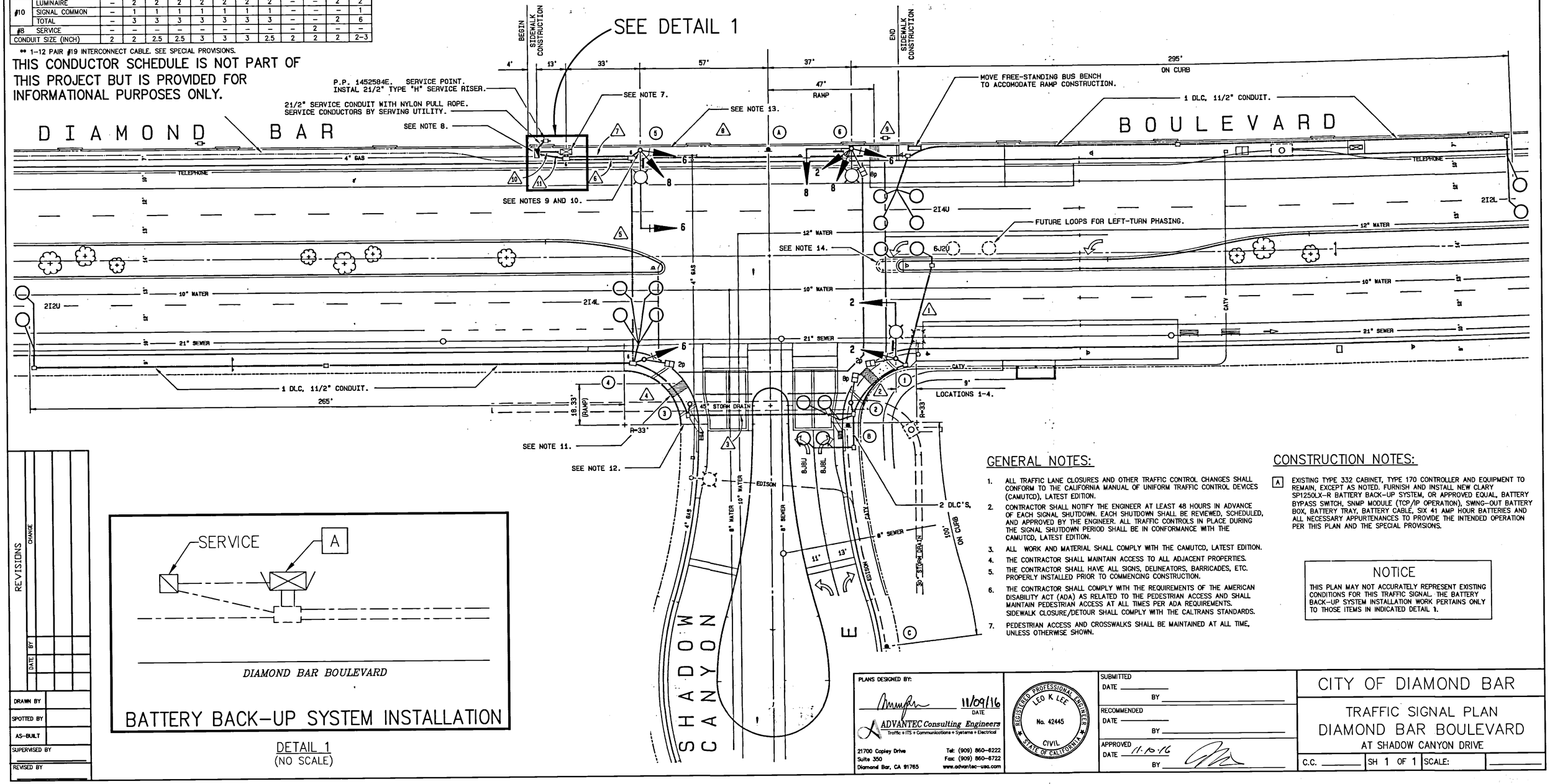
ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED. (E) = EXISTING ELECTROLIER TO BE SALVAGED BY SERVING UTILITY.

§ INTERIM SIGNAL MAST ARM WITH ONE TENON ONLY.

LUMINAIRE MAST ARM ROTATED 90 DEGREES COUNTERCLOCKWISE.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT-TO-SCALE



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

DIAMOND BAR BOULEVARD

BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	BY	DATE

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical

21700 Copley Drive
Suite 350
Diamond Bar, CA 91765

Tel: (909) 860-8222
Fax: (909) 860-8722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K. LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11-10-16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT SHADOW CANYON DRIVE

C.C. _____ | SH 1 OF 1 | SCALE: _____

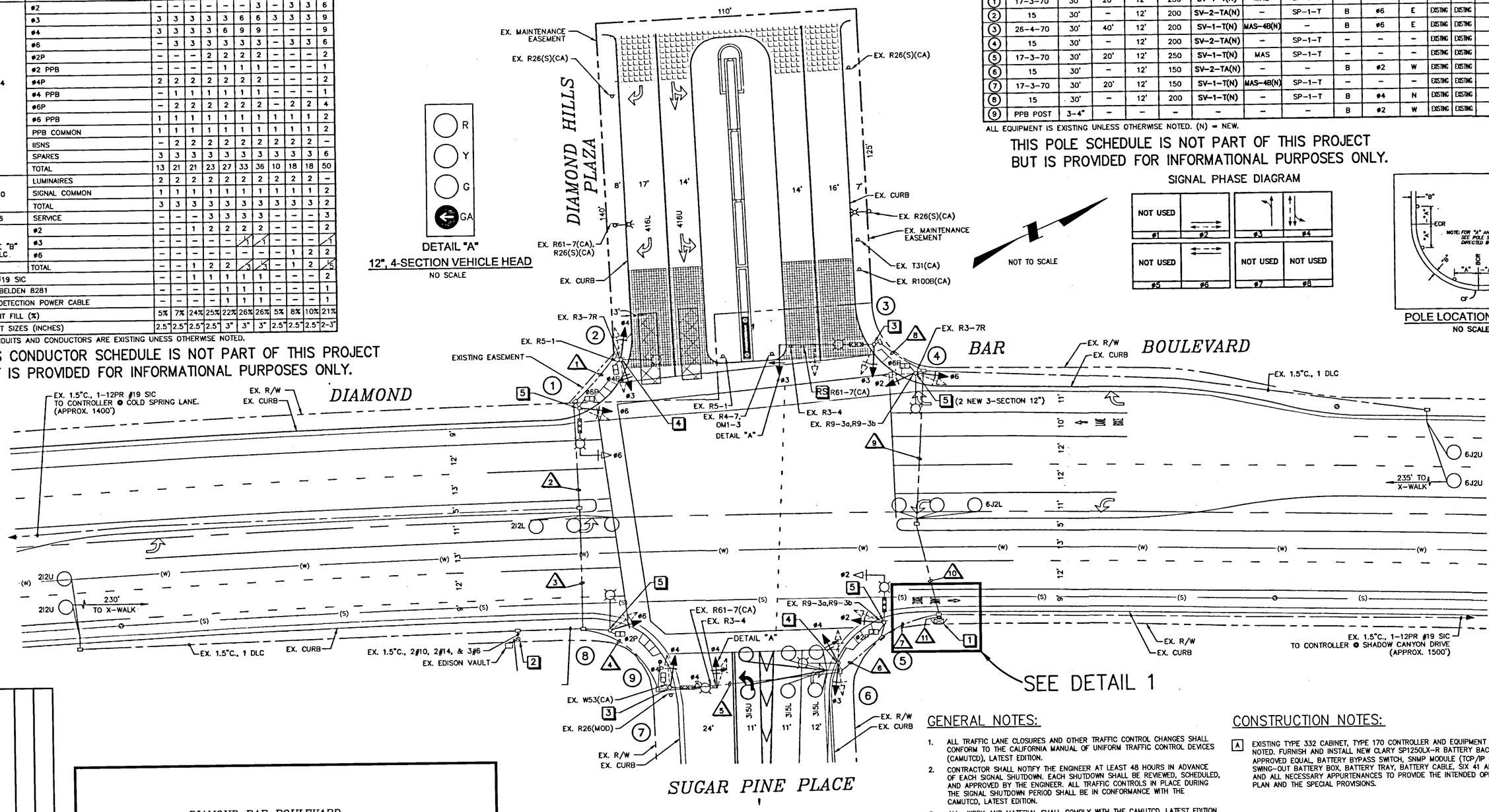
CONDUCTOR SCHEDULE

AWG SIZE	CIRCUIT	CONDUIT SIZE AND RUN 1	2	3	4	5	6	7	8	9	10	11
#14	#2	–	–	–	–	–	–	3	–	3	3	6
	#3	3	3	3	3	3	6	6	3	3	3	9
	#4	3	3	3	3	6	9	9	–	–	–	9
	#6	–	3	3	3	3	3	3	–	3	3	6
	#2P	–	–	–	2	2	2	2	–	–	–	2
	#2 PPB	–	–	–	–	1	1	1	–	–	–	1
	#4P	2	2	2	2	2	2	2	–	–	–	2
	#4 PPB	–	1	1	1	1	1	1	–	–	–	1
	#6P	–	2	2	2	2	2	2	–	2	2	4
	#6 PPB	1	1	1	1	1	1	1	1	1	1	2
	PPB COMMON	1	1	1	1	1	1	1	1	1	1	2
	IISNS	–	2	2	2	2	2	2	2	2	2	–
	SPARES	3	3	3	3	3	3	3	3	3	3	6
	TOTAL	13	21	21	23	27	33	36	10	18	18	50
#10	LUMINAIRES	2	2	2	2	2	2	2	2	2	2	–
	SIGNAL COMMON	1	1	1	1	1	1	1	1	1	1	2
	TOTAL	3	3	3	3	3	3	3	3	3	3	2
#6	SERVICE	–	–	–	3	3	3	3	–	–	–	3
TYPE "B" DLC	#2	–	–	1	2	2	2	2	–	–	–	2
	#3	–	–	–	–	–	1	1	–	–	–	1
	#6	–	–	–	–	–	–	–	–	1	2	2
	TOTAL	–	–	1	2	2	3	3	–	1	2	5
12PR #19 SIC		–	–	1	1	1	1	1	–	–	–	2
ITERIS BELDEN 8281		–	–	–	–	1	1	1	–	–	–	1
VIDEO DETECTION POWER CABLE		–	–	–	–	1	1	1	–	–	–	1
PERCENT FILL (%)		5%	7%	24%	25%	22%	26%	26%	5%	8%	10%	21%
CONDUIT SIZES (INCHES)		2.5"	2.5"	2.5"	2.5"	3"	3"	3"	2.5"	2.5"	2.5"	2-3"

ALL CONDUITS AND CONDUCTORS ARE EXISTING UNESS OTHERWISE NOTED.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

DETAIL "A"
12", 4-SECTION VEHICLE HEAD
NO SCALE



EQUIPMENT SCHEDULE

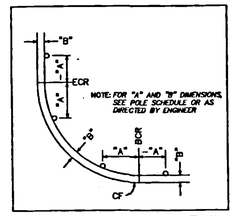
NO.	POLE DATA TYPE	HEIGHT	SIGNAL M.A.	H.P.S. M.A.	WATTS	SIGNAL HEADS AND MOUNTINGS VEHICULAR	M.A.	PEDESTRIAN	PED. PUSH BUTTON TYPE	PHASE	QUAD.	POLE LOC. "A"	"B"	I.I.S.N.S STREET NAME SIGN (dbl. face)
1	17-3-70	30'	20'	12'	250	SV-1-T(N)	MAS	SP-1-T	B	#4	N	EXISTING	EXISTING	SUGAR PINE
2	15	30'	–	12'	200	SV-2-TA(N)	–	SP-1-T	B	#6	E	EXISTING	EXISTING	–
3	26-4-70	30'	40'	12'	200	SV-1-T(N)	MAS-4B(N)	–	B	#6	E	EXISTING	EXISTING	DIAMOND BAR BL
4	15	30'	–	12'	200	SV-2-TA(N)	–	SP-1-T	–	–	–	EXISTING	EXISTING	–
5	17-3-70	30'	20'	12'	250	SV-1-T(N)	MAS	SP-1-T	–	–	–	EXISTING	EXISTING	SUGAR PINE
6	15	30'	–	12'	150	SV-2-TA(N)	–	–	B	#2	W	EXISTING	EXISTING	–
7	17-3-70	30'	20'	12'	150	SV-1-T(N)	MAS-4B(N)	SP-1-T	–	–	–	EXISTING	EXISTING	DIAMOND BAR BL
8	15	30'	–	12'	200	SV-1-T(N)	–	SP-1-T	B	#4	N	EXISTING	EXISTING	–
9	PPB POST	3-4"	–	–	–	–	–	–	B	#2	W	EXISTING	EXISTING	–

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED. (N) = NEW.

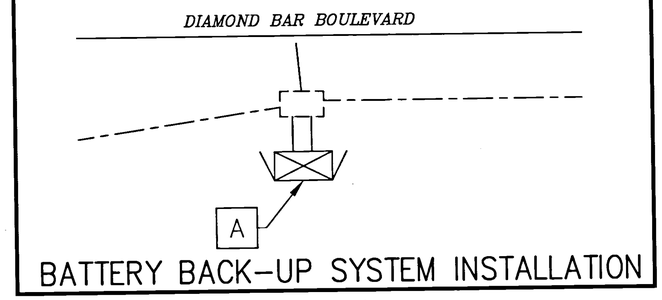
THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT TO SCALE

SIGNAL PHASE DIAGRAM



POLE LOCATION DETAIL
NO SCALE



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11-10-16
BY _____

CITY OF DIAMOND BAR

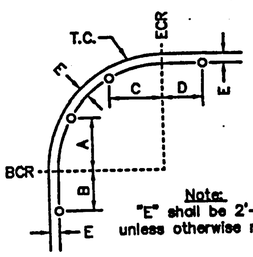
TRAFFIC SIGNAL PLAN
DIAMOND BAR BOULEVARD
AT SUGARPINE PLACE

C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

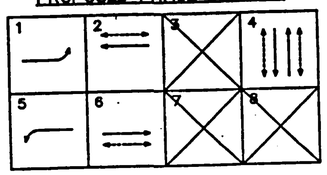
AWG	CIRCUIT	RUNS								
		①	②	③	④	⑤	⑥	⑦	⑧	⑨
#14	#1				3				3	6
	#2	3	3	3	6	3	3	3	3	6
	#4		3	3	3		3	3	3	6
	#5	3	3	3	3	3	3	3	3	6
	#6	3	3	3	3	3	3	3	6	6
	#2P	2	2	2	4					4
	#4P		2	4	4		2	4	4	6
	#5P					2	2	2	4	4
	#2 PPB		1	2	2					2
	#4 PPB	1	1	1	2	1	1	1	1	4
	#6 PPB						1	2	2	2
	PPB COMMON	1	1	1	1	1	1	1	1	1
	SPARES	3	3	3	3	3	3	3	6	6
	TOTAL #14	16	22	23	33	16	22	26	37	61
#10	ISSNS	2	2	2	2		2	2	2	4
	LUMINAIRE	2	2	2	2		2	2	2	4
	SIGNAL COMMON	1	1	1	1	1	1	1	1	1
	TOTAL #10	5	5	5	5	1	5	5	5	9
DLC	#1 DLC					1	1	1	1	1
	#2 DLC				1					3
	#4 DLC		1	1	1			1	1	2
	#5 DLC				1					1
	#6 DLC					3	3	3	3	3
	TOTAL DLC		1	1	3	4	4	5	5	10
	RG58AU CABLE			1	1					1
	CONDUIT SIZE (in.)	2½	3	2½	3	2½	3	2½	3	2-3

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



Note:
"E" shall be 2'-6"
unless otherwise noted.

PROPOSED PHASE DIAGRAM



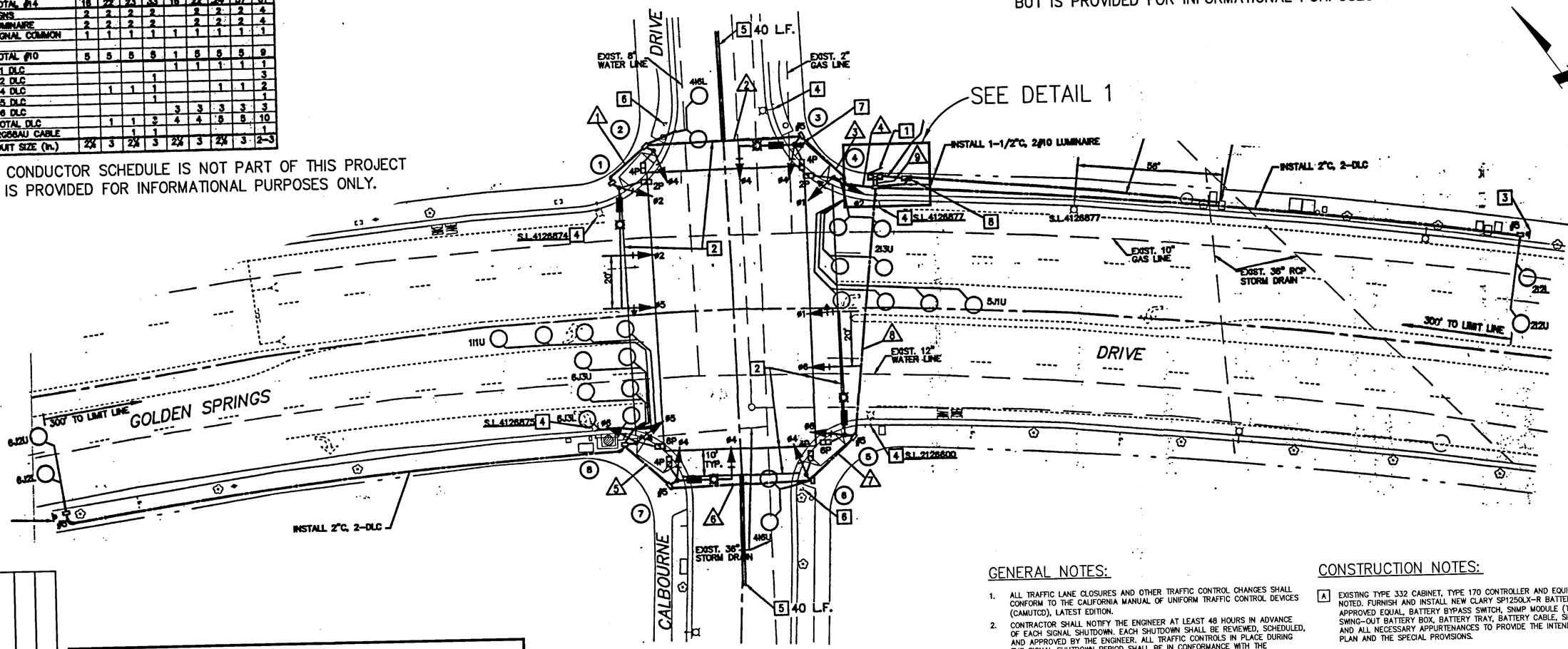
OPERATION:
ø1 & ø5 ON "LOCKING"
ø2 & ø6 ON "VEHICLE RECALL"
ø4 ON "NON-LOCK" WITH TIME DELAY

POLE SCHEDULE

POLE NO.	POLE TYPE *	HEIGHT	SIGNAL M.A. LENGTH	LUMINAIRE M.A. LENGTH	LUMINAIRE H.P.S.V. WATTS	SIGNAL MOUNTING VEHICLE		PED.	PED PUSH BUTTON PHASE	PED PUSH BUTTON QUAD.	STREET NAME SIGN TYPE	STREET NAME SIGN	POLE LOCATION A	B	C	D	E
①	26-3-70	30'	45'	12'	250W	2-MAS	SV-1-T	SP-1-T	4	EAST	LI.	Colbourne Dr	–	–	15'	–	–
②	1-A	10'	–	–	–	–	TV-1-T	SP-1-T	2	SOUTH	–	–	18'	–	–	–	–
③	17-3-70	30'	20'	12'	250W	MAS	SV-1-T	SP-1-T	2	SOUTH	LI.	Golden Springs Dr	–	–	18'	–	–
④	1-A	10'	–	–	–	–	TV-2-T	SP-1-T	4	WEST	–	–	22'	–	–	–	–
⑤	26-3-70	30'	45'	12'	250W	2-MAS	SV-1-T	SP-1-T	4	WEST	LI.	Colbourne Dr	–	–	8'	–	–
⑥	1-A	10'	–	–	–	–	TV-1-T	SP-1-T	6	NORTH	–	–	7'	–	–	–	–
⑦	17-3-70	30'	20'	12'	250W	MAS	SV-1-T	SP-1-T	6	NORTH	LI.	Golden Springs Dr	–	–	7'	–	–
⑧	1-A	10'	–	–	–	–	TV-2-T	SP-1-T	4	EAST	–	–	8'	–	–	–	–

* – PER CALTRANS STANDARD
ALL EQUIPMENT SHOWN IS NEW.
H.P.S.V. – INDICATES HIGH PRESSURE SODIUM VAPOR

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

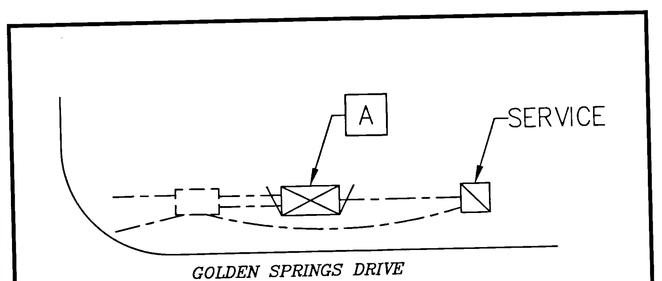
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:
11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT CALBOURNE DRIVE

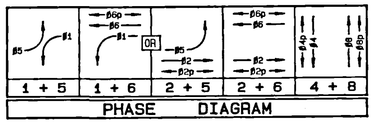
C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13
#14	ø1	–	–	–	3	3	3	–	–	–	–	–	–	–
	ø2	3	3	3	3	3	3	–	–	–	–	–	–	–
	ø4	–	3	3	3	3	3	–	–	–	–	–	–	–
	ø5	3	3	3	3	3	3	3	3	3	3	–	–	–
	ø6	–	–	–	–	–	–	3	–	–	–	–	–	–
	ø8	–	–	–	–	–	–	3	3	3	–	–	–	–
	ø2 PED	2	2	2	2	2	2	–	–	–	–	–	–	–
	ø4 PED	–	–	2	2	2	2	2	2	–	–	–	–	–
	ø6 PED	–	–	–	–	–	–	4	2	2	2	–	–	–
	ø8 PED	–	2	2	2	2	2	2	2	2	–	–	–	–
	ø2 PPB	–	1	1	1	1	1	–	–	–	–	–	–	–
	ø4 PPB	–	–	–	1	1	1	1	–	–	–	–	–	–
	ø6 PPB	–	–	–	–	–	–	1	1	1	–	–	–	–
	ø8 PPB	1	1	1	1	1	1	1	1	1	1	–	–	–
	PPB COMMON	1	1	1	1	1	2	1	1	1	–	–	–	–
	SPARES	3	3	3	3	3	3	6	3	3	3	–	–	–
	TOTAL	13	19	21	25	25	25	31	18	16	10	–	–	–
#12	I.S.N.S.	2	2	2	2	2	2	2	2	2	–	4	–	–
	CAMERA POWER	2	2	2	2	2	2	2	2	2	–	4	–	–
	TOTAL	4	4	4	4	4	4	4	4	4	–	8	–	–
*	CAMERA CABLE	1	1	2	2	2	2	2	1	1	–	–	–	–
**	INTERCONNECT	–	–	–	–	1	1	1	1	1	1	–	–	–
#10	LUMINAIRE	2	2	2	2	2	2	2	2	2	2	4	–	–
	SIGNAL COMMON	1	1	1	1	1	1	1	1	1	1	–	–	–
	TOTAL	3	3	3	3	3	3	3	3	3	3	4	–	–
#6	SERVICE	–	–	–	–	–	–	–	–	–	–	–	***	3
CONDUIT SIZE (INCH)		2	2	2.5	2.5	2.5(E)	3(E)	3(E)	2.5(E)	2.5(E)	2.5(E)	2(E)	2(E)	3(E)

ALL CONDUITS, CABLES AND CONDUCTORS ARE NEW, UNLESS OTHERWISE NOTED.
(E) = EXISTING CONDUIT.
* RU58 COAXIAL CABLE. SEE SPECIAL PROVISIONS.
** NYLON PULL ROPE FOR FUTURE INTERCONNECT BY OTHERS.
*** 2#8 A.W.G. SERVICE CONDUCTORS.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



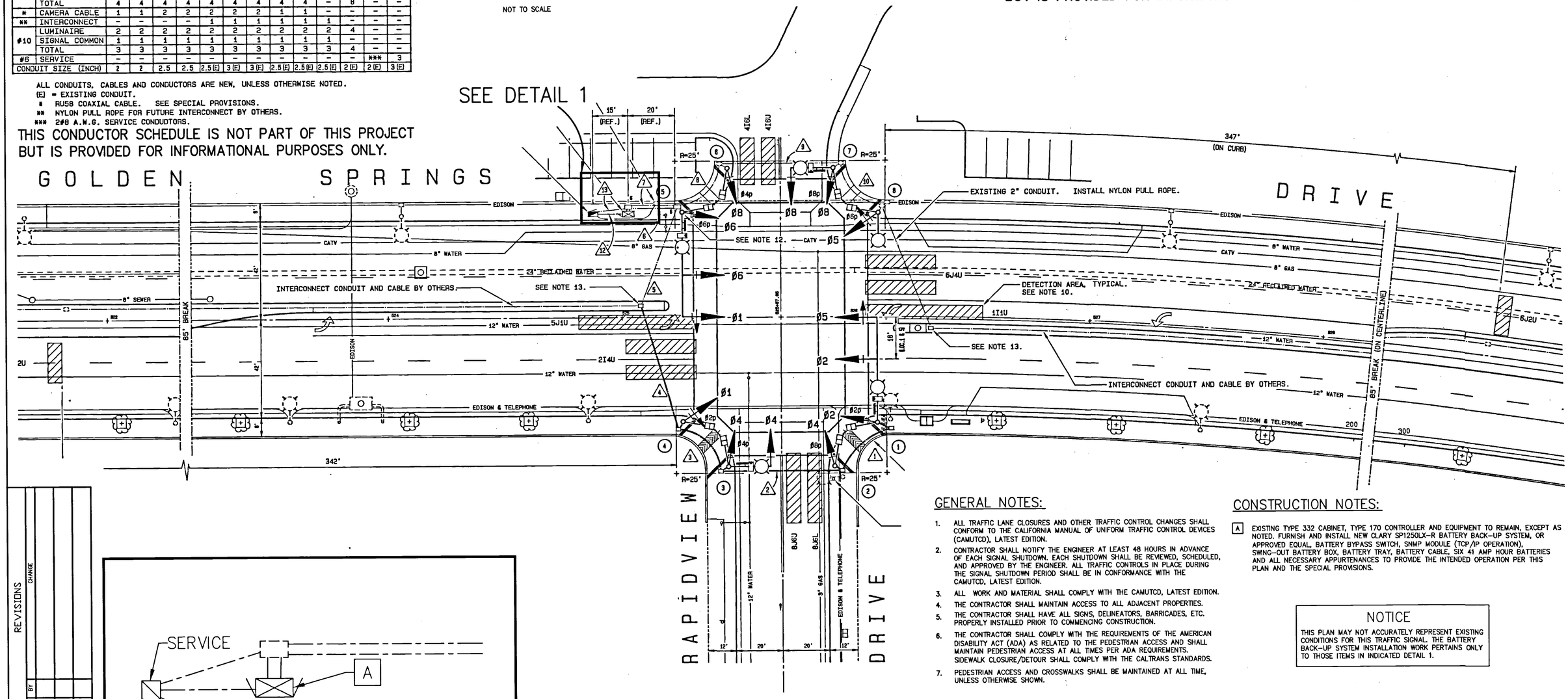
POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	PLACEMENT "B"	REMARKS
1	15(E) *	25'	–	8'(E)	200W(E)	–	–	–	–	–	–	–	–	P.P. 4133729E.
	26-4-70	30'	45'	15'	250W	Rapid View	MAS	SV-1-T	SP-1-T	B	8	4'	3.0'	POLE FOUNDATION IS EXISTING.
2	15(E) *	25'	–	8'(E)	200W(E)	–	–	–	–	–	–	–	–	P.P. 2357104E.
	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	B	2	3'	2.5'	POLE FOUNDATION IS EXISTING.
3	17-2-70	30'	18'	12'	200W	Golden Springs	MAS	SV-1-T	SP-1-T	B	2	3'	3.0'	POLE FOUNDATION IS EXISTING.
4	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	B	4	3'	2.5'	POLE FOUNDATION IS EXISTING.
5	26-4-70	30'	45'	15'	250W	Rapid View	MAS	SV-1-T	SP-1-T	B	4	3'	3.0'	
6	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	B	6	3'	2.5'	
7	17-2-70	30'	18'	12'	200W	Golden Springs	MAS	SV-1-T	SP-1-T	B	6	3'	3.0'	ONE SIDED I.S.N.S.
8	15	30'	–	12'	250W	–	–	SV-1-T	SP-1-T	B	8	3'	2.5'	

ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED. (E) = EXISTING EQUIPMENT TO BE SALVAGED BY SERVING UTILITY.
* ORNAMENTAL CONCRETE POLE.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT TO SCALE



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

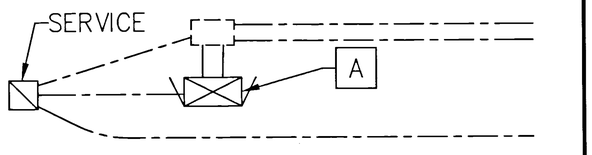
NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	



GOLDEN SPRINGS DRIVE

BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

PLANS DESIGNED BY:
11/09/16
DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K. LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____
RECOMMENDED
DATE _____
BY _____
APPROVED
DATE 11/15/16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT RAPIDVIEW DRIVE

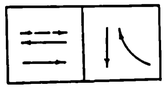
C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

AWG	CIRCUIT	CONDUIT RUN											
		1	2	3	4	5	6	7	8	9	10	11	12
14	8.1					3		3	3	6			
	8.2												
	8.3												
	8.4												
	8.5	3	3	3	3	3	3	3	3	6			
	8.6	3	3	3	3					3			
	8.7			3	3	3	3	3	3	6			
	8.8	3	3	3	3					3			
	Spec. Grn. & Yel. Arrow	2	2	2	2					2			
	8.8 PR					2	2	2	2	2			
	8.4 PR												
	8.6 PR	2	2	2	2					2			
	8.6 PR												
	8.8 PPB					1	1	1	1	1			
	8.4 PPB												
	8.6 PPB		1	1	1					1			
	8.8 PPB					1	1	1	1	1			
	PPB Common												
	Spares	3	3	3	3	3	3	3	3	6			
	TOTAL	16	21	21	24	16	16	19	19	42			
18	Sign Lighting										2		
10	Signal Common	1	1	1	1	1	1	1	1				
8-12 CABLE	8.1 Detector												
	8.2 Detector							2	2	2			
	8.3 Detector												
	8.4 Detector												
	8.5 Detector										1		
	8.6 Detector	3	3	3	3					3			
	8.7 Detector				2	2				2			
	8.8 Detector						1	1	1	1			
	TOTAL	3	3	5	5	2	2	4		10			
#8	Signal Bonding	2	2	2	2					2			
#10	Luminaire	2	2	2	2	2	2	2					
#14	Interconnect To / Strap					7	7	7		7			
Min. Conduit Size		2½"	2½"	2½"	2½"	2"	2"	2"	2½"	2½-3"			

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

EXIST. SIGNAL PHASE DIAGRAM



PROP. SIGNAL PHASE DIAGRAM

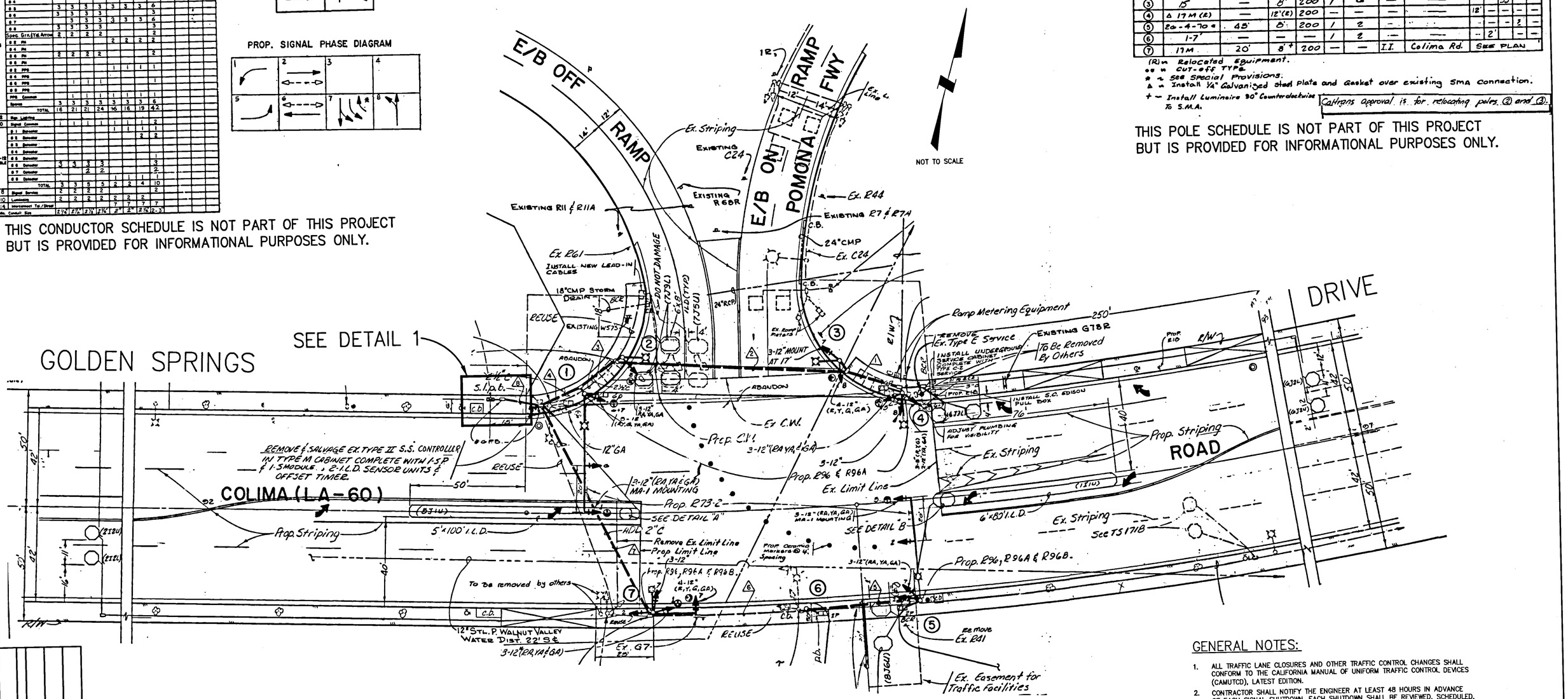
POLE SCHEDULE

POLE NO.	POLE TYPE	SIGNAL M.A. LENGTH	LUMINAIRE M.A. LENGTH	LUMINAIRE TYPE & WATTS	PED. PUSH BUTTON NO.	PED. PUSH BUTTON PHASE	STREET NAME SIGN TYPE	STREET NAME SIGN LEGEND	POLE LOCATION A	B	C	D	E
①	29-5-70-80*	50'	8'	200		—	—	- - -	—	—	25	—	—
②	△ 17 (R)	—	12'(R)	200	1	6	—	——	27'	—	—	—	—
③	15	—	8'	200	1	6	—	——	—	—	35	-	—
④	△ 17 M (E)	—	12'(E)	200	—	—	—	——	12'	—	—	—	—
⑤	20-4-70 *	45'	8'	200	1	2	—	- - -	-	—	—	2	—
⑥	1-7'	—	—	—	1	2	—	——	-	2'		—	—
⑦	17M	20'	8'+	200	—	—	I.I.	Colima Rd.	SEE PLAN				

(R) = Relocated Equipment.
** = CUT-OFF TYPE.
* = See Special Provisions.
△ = Install ¼" Galvanized steel plate and Gasket over existing SMA connection.
+ = Install Luminaire 90° Counterclockwise To S.M.A.

Caltrans approval is for relocating poles ② and ③.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

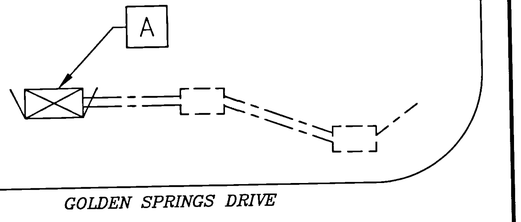
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT SR-60 EB RAMPS

C.C. _____ | SH 1 OF 1 | SCALE: _____

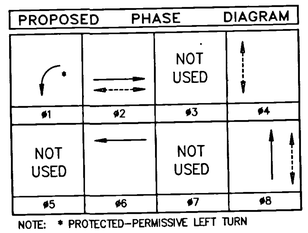
POLE SCHEDULE

NO.	STANDARD TYPE	STANDARD HEIGHT	STANDARD SIG.M.A.	STANDARD LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE	SIGNAL MOUNTING PED.	PED PUSH BUT ARROW	PED PUSH BUT PHASE	PED PUSH BUT LOC.	PLACEMENT "A"	PLACEMENT "B"	REMARKS
(1)	19-3-100	30'	25'	15'	250W	RACQUET CLUB DR	MAS	SV-1-T	SP-1-T	8	7	3'	7'	6 5
(2)	1-A	7'	–	–	–	–	–	TP-1-T	2	1	7'	6'		
(3)	15TS	30'	–	15'	250W	–	–	SP-1-T	2	1	7'	6'		
(4)	15TS	30'	–	15'	250W	–	–	SV-1-T	SP-1-T	4	3	3'	7'	9 14
(5)	26-4-100	30'	25' **	15'	250W	RACQUET CLUB DR	MAS-5A	SV-2-TB	SP-1-T	4	3	SEE PLAN	7'	5 6
(6)	17-3-100	30'	15'	15'*	250W	GOLDEN SPRINGS DR	MAS	SV-2-TB	SP-1-T	8	3	SEE PLAN	7'	6

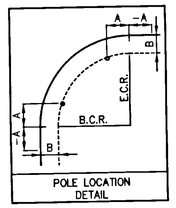
ALL EQUIPMENTS SHALL BE NEW.
* LUMINAIRE ARM SHALL BE MOUNTED PERPENDICULAR TO THE SIGNAL MAST ARM.
** FUTURE 40' M.A.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

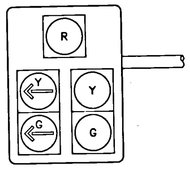
PROPOSED PHASE DIAGRAM



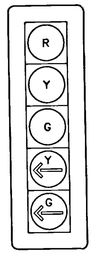
NOTE: * PROTECTED-PERMISSIVE LEFT TURN



PUSH BUTTON LOCATION
NO SCALE



DETAIL "A"
(NO SCALE)



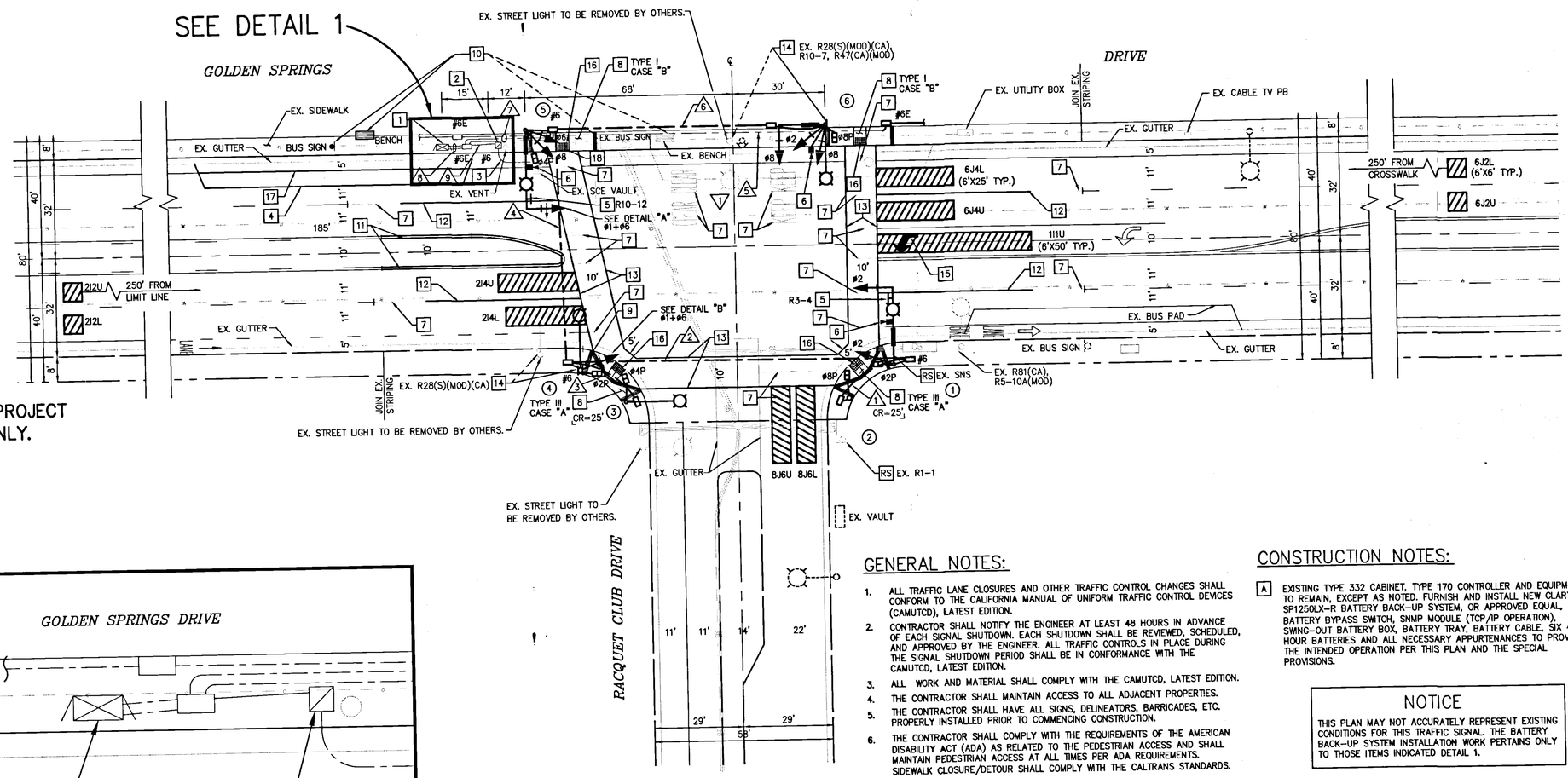
DETAIL "B"
(NO SCALE)

CONDUCTOR SCHEDULE

AWG	POLE NO.	RUNS 1	2	3	4	5	6	7	8	9
12 COND. CABLE	(1)		1		1			1	1	
	(2)									
	(3)									
	(4)				1			1	1	
	(5)							1	1	
	(6)						1	1	1	
	TOTAL		1		2		1	4	4	
5 COND. CABLE	(2)	1	1		1			1	1	
	(3)			1	1			1	1	
	(5)							1	1	
	TOTAL	1	1	1	2			3	3	
3 COND. CABLE	(1)		1		1			1	1	
	(2)	1	1		1			1	1	
	(3)			1	1			1	1	
	(4)				1			1	1	
	(5)							1	1	
	(6)						1	1	1	
	TOTAL	1	2	1	4		1	6	6	
#12	I.I.S.N.S.	–	2	–	2		2	2	–	2
#10	LUMINAIRES	–	2	–	2		2	2	–	2
#8	SIGNAL SERVICE	–	–	–	–		–	–	2	2
ITERIS BELDEN 8281		–	1	–	1		1	3	3	–
VIDEO DETECTION POWER CABLE		–	1	–	1		1	3	3	–
PULLROPE		–	–	–	–	1	–	–	–	–
% FILL		7	16	8	28	–	11	25/25	25/25	4
CONDUIT SIZE		2.5"	3"	2.5"	3"	2"*	3"	2-3"	2-3"	2"

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT-TO-SCALE



GENERAL NOTES:

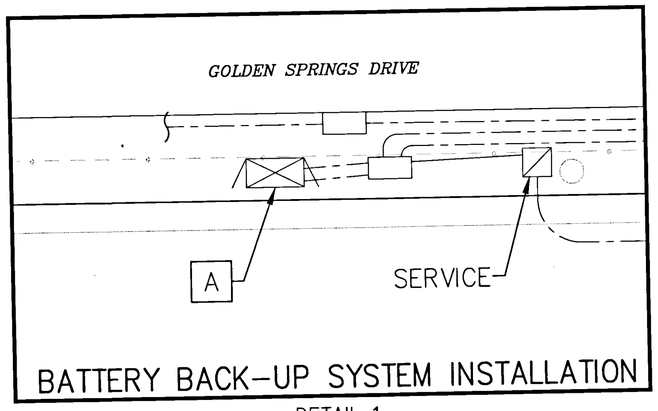
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

SERVICE ADDRESS
22805 GOLDEN SPRINGS DR

REVISIONS

CHANGE	DATE	BY

DRAWN BY
SPOTTED BY
AS-BUILT
SUPERVISED BY
REVISED BY

PLANS DESIGNED BY:
11/09/16 DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive, Suite 350, Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED DATE ____ BY ____
RECOMMENDED DATE ____ BY ____
APPROVED DATE 11.10.16 BY ____

CITY OF DIAMOND BAR
TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT RACQUET CLUB DRIVE

C.C. ____ | SH 1 OF 1 | SCALE: ____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11
#14	1 (FUT.)	–	–	–	3	3	3	–	–	–	–	–
	2	3	3	3	3	3	3	3	3	3	–	–
	4	–	3	3	3	3	–	–	–	–	–	–
	5 (FUT.)	3	3	3	3	3	3	3	3	3	–	–
	6	–	–	–	3	3	3	–	–	–	–	–
	8	–	–	–	–	–	3	3	3	–	–	–
	2 PED	2	2	2	2	2	–	–	–	–	–	–
	4 PED	–	–	2	2	2	–	–	–	–	–	–
	6 PED	–	–	–	–	–	4	2	2	2	–	–
	8 PED	–	2	2	2	2	2	2	2	–	–	–
	2 PPB	–	1	1	1	1	–	–	–	–	–	–
	4 PPB	–	–	–	1	1	1	–	–	–	–	–
	6 PPB	–	–	–	–	–	1	1	1	–	–	–
	8 PPB	1	1	1	1	1	1	1	1	1	–	–
	PPB COMMON	1	1	1	1	1	2	1	1	1	–	–
	SPARES	3	3	3	3	3	6	3	3	3	–	–
	TOTAL	13	19	21	28	28	32	19	19	13	–	–
#12	I.S.N.S.	2	2	2	2	–	–	2	2	–	2	–
TYPE B CABLE (2#16)	6 DET.(FUT.1)	–	–	–	–	–	1	1	1	1	–	–
	2 DET.	–	–	–	2	2	2	2	2	2	–	–
	4 DET.	–	–	–	–	–	2	2	–	–	–	–
	6 DET.(FUT.5)	–	–	–	1	1	–	–	–	–	–	–
	6 DET.	–	–	–	–	–	–	–	–	–	–	–
	8 DET.	–	2	2	2	2	–	–	–	–	–	–
	TOTAL	–	2	2	5	5	5	5	3	3	–	–
*	WWV ANTENNA	–	–	–	–	–	1	–	–	–	–	–
**	INTERCONNECT	–	–	–	–	–	1	1	1	1	–	–
#10	LUMINAIRE	2	2	2	2	–	–	4	2	–	4	–
	SIGNAL COMMON	1	1	1	1	1	1	1	1	1	–	–
	TOTAL	3	3	3	3	1	1	5	3	1	4	–
#6	SERVICE	–	–	–	–	–	***	***	–	–	***	3
CONDUIT SIZE (INCH)		2	2 1/2	2 1/2	3	3	3	3	2 1/2	2 1/2	2	2

* WWV COAXIAL ANTENNA CABLE. SEE CONTRACT SPECIAL PROVISIONS.
** 1-12 PAIR #19 INTERCONNECT CABLE.
*** 2#8 A.W.G. SERVICE CONDUCTORS.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

SIGN SCHEDULE

POLE NO.	MOUNT ON POLE	MOUNT ON MAST ARM	FACING
(A)	R61-5.1 *	–	NW
(B)	R61-5.1**	–	NW
(C)	W41-1 ***	–	SW
(D)	W41-1 ***	–	NE

* INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 10' FROM BCR.

** INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 80' FROM BCR.

*** INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 500' FROM LIMIT LINE.

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	"B"	REMARKS
(1)	15(E) *	30'	–	8'(E)	150W(E)	–	–	–	–	–	–	–	–	P.P. 2222647E
	24-2-70	30'	25'**	12'	250W	Golden Prados	MAS	SV-1-T	SP-1-T	B	8	3'	3.0'	
(2)	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	B	2	3'	5.0'	
(3)	17-2-70	30'	20'	12'	250W	Golden Springs	MAS	SV-1-T	SP-1-T	B	2	3'	5.0'	
(4)	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	B	4	3'	2.5'	
(5)	15(E) *	30'	–	8'(E)	150W(E)	–	–	–	–	–	–	–	–	P.P. 2077274E
	24-2-70	30'	25'**	12'	200W	Golden Prados	MAS	SV-1-T	SP-1-T	B	4	4'	3.0'	
(6)	15(E) *	30'	–	8'(E)	100W(E)	–	–	–	–	–	–	–	–	P.P. 2077273E
	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	B	6	2'	5.0'	
(7)	17-2-70	30'	20'	12'	250W	Golden Springs	MAS	SV-1-T	SP-1-T	B	6	4'	5.0'	
(8)	1-A	10'	–	–	–	–	–	TV-1	SP-1-T	B	8	5'	2.5'	

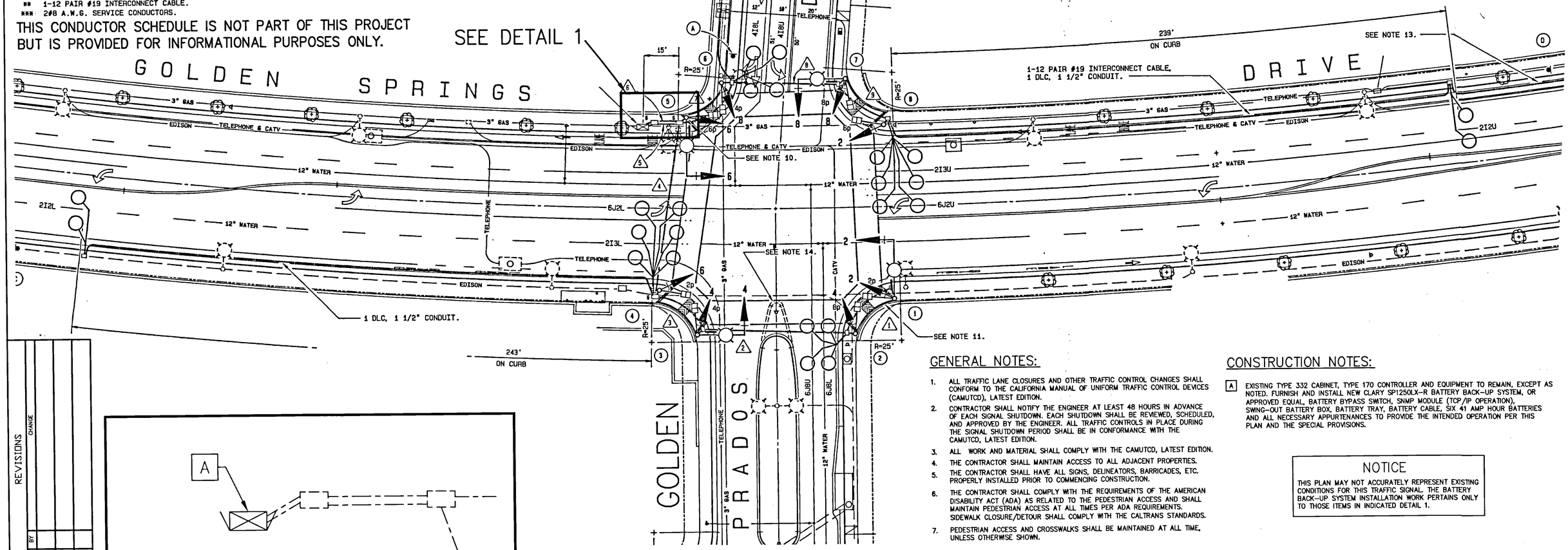
ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED. (E) = EXISTING EQUIPMENT TO BE SALVAGED BY SERVING UTILITY.
* ORNAMENTAL CONCRETE POLE. ** INTERIM MAST ARM WITH ONE TENON ONLY.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOT TO SCALE

PROPOSED		FUTURE				
			OR			
2 + 6	4 + 8	1 + 5	1 + 6	2 + 5	2 + 6	4 + 8
PHASE DIAGRAM		PHASE DIAGRAM				

SEE DETAIL 1



GENERAL NOTES:

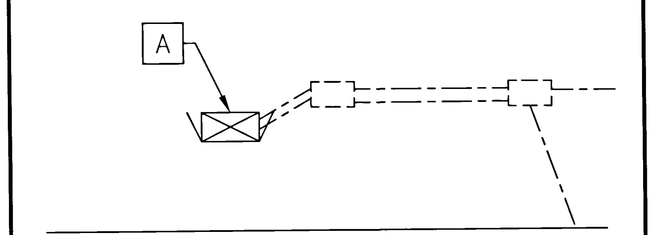
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY
SPOTTED BY
AS-BUILT
SUPERVISED BY
REVISED BY

PLANS DESIGNED BY:
11/09/16 DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K. LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____
RECOMMENDED
DATE _____
BY _____
APPROVED
DATE 11-10-16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT GOLDEN PRADOS DRIVE

C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11
#14	2	3	3	3	3	3	3	3	3	–	–	–
	4	3	3	3	3	–	–	–	–	–	–	–
	5 (FUT.)	3	3	3	3	3	3	3	3	–	–	–
	6	–	3	3	6	–	–	–	–	–	–	–
	4 PED	2	2	2	2	2	2	2	–	–	–	–
	6 PED	–	–	–	–	4	2	2	2	–	–	–
	4 PPB	1	1	1	1	1	1	1	1	–	–	–
	6 PPB	–	–	–	–	1	1	1	–	–	–	–
	PPB COMMON	1	1	1	1	2	1	1	1	–	–	–
	SPARES	3	3	3	3	6	3	3	3	–	–	–
	TOTAL	16	19	19	19	22	16	16	13	–	–	–
#12	I.S.N.S.	2	2	2	–	3	–	–	–	–	2	–
TYPE B CABLE (2#16)	2 DET.	–	–	2	2	2	2	2	2	–	–	–
	4 DET.	–	–	–	–	2	2	–	–	–	–	–
	6 DET. (FUT.5)	–	–	1	1	–	–	–	–	–	–	–
	6 DET.	–	–	–	–	–	–	–	–	–	–	–
	TOTAL	–	–	3	3	4	4	2	2	–	–	–
*	WWV ANTENNA	–	–	–	–	1	–	–	–	–	–	–
**	INTERCONNECT	–	–	–	–	1	1	1	1	–	–	–
#10	LUMINAIRE	2	2	2	–	–	2	2	–	–	4	–
	SIGNAL COMMON	1	1	1	1	1	1	1	1	–	–	–
	TOTAL	3	3	3	1	1	3	3	1	–	4	–
#6	SERVICE	–	–	–	–	–	–	–	–	***	–	3
CONDUIT SIZE (INCH)		2	2	2 1/2	3	3	3	2 1/2	2	2	2	2

* WWV COAXIAL ANTENNA CABLE. SEE CONTRACT SPECIAL PROVISIONS.
** 1-12 PAIR #19 INTERCONNECT CABLE.
*** 2#8 A.W.G. SERVICE CONDUCTORS.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPOSED	
2 + 6	4
PHASE DIAGRAM	

FUTURE		
2 + 5	2 + 6	4
PHASE	DIAGRAM	

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	PLACEMENT "B"	REMARKS
1	24-2-70	30'	25'**	12'	250W	Prospectors	MAS	SV-2-TB	SP-1-T	B	4	AS SHOWN	3.0'	
2	17-2-70	30'	18'	12'***	250W	Golden Springs	MAS	SV-2-TA	SP-1-T	B	4	AS SHOWN	3.0'	ONE SIDED I.S.N.S.
3	15 (E) *	25'	–	8' (E)	150W (E)	–	–	–	–	–	–	–	–	P.P. (NO NUMBER)
	19-2-70	30'	25'	12'	200W	Prospectors	MAS	SV-1-T	SP-1-T	B	4	3'	3.0'	
4	15 (E) *	25'	–	8' (E)	150W (E)	–	–	–	–	–	–	–	–	P.P. (NO NUMBER)
	1-A	7'	–	–	–	–	–	TP-1	B	6	3'	7.0'		
5	15	30'	–	12'	200W	–	–	SP-1-T	B	6	3'	7.5'		
6	1-A	7'	–	–	–	–	–	TV-1	SP-1-T	B	4	3'	2.5'	

ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED.
* ORNAMENTAL CONCRETE POLE.
*** ROTATED 90 DEGREES COUNTER CLOCKWISE.
(E) = EXISTING EQUIPMENT TO BE SALVAGED BY SERVING UTILITY.
** INTERIM MAST ARM WITH ONE TENON ONLY.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

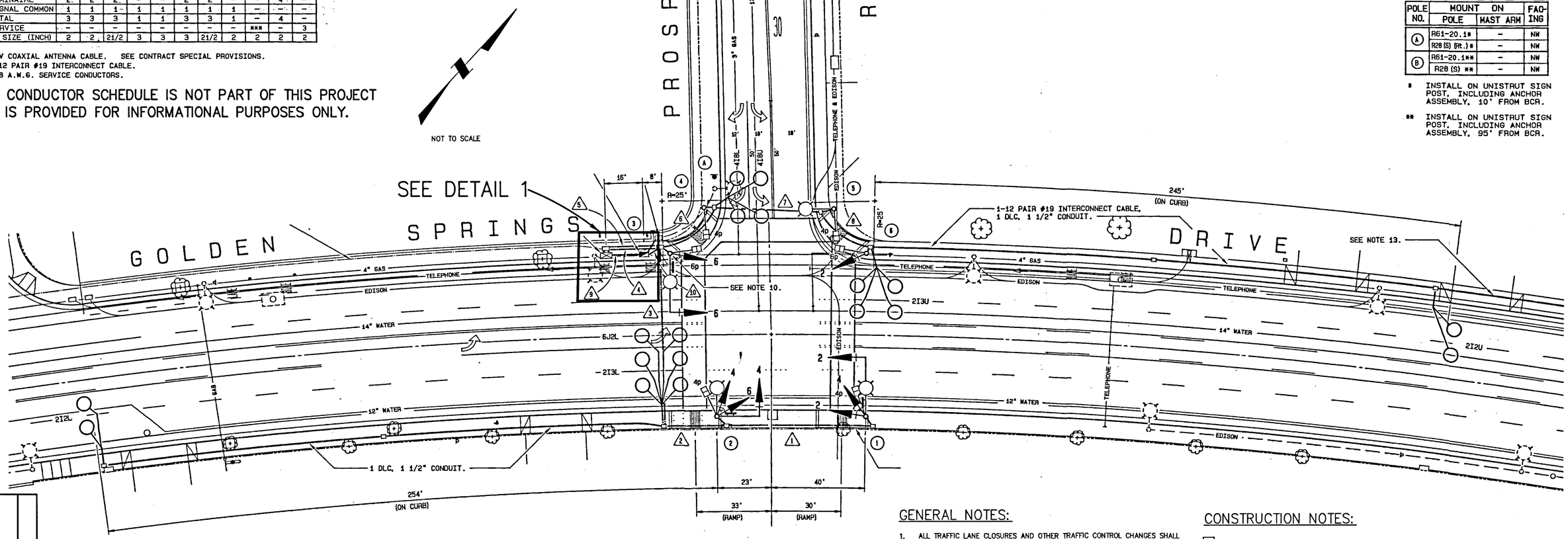
SIGN SCHEDULE

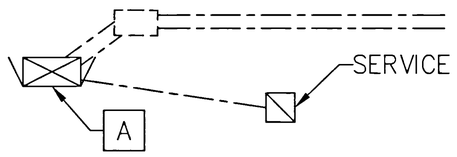
POLE NO.	MOUNT ON POLE	MOUNT ON MAST ARM	FACING
A	R61-20.1*	–	NW
	R28 (S) (Ft.)*	–	NW
B	R61-20.1**	–	NW
	R28 (S) **	–	NW

* INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 10' FROM BCR.

** INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 95' FROM BCR.

NOT TO SCALE





GOLDEN SPRINGS DRIVE

BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:
11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT PROSPECTORS ROAD

C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

A.W.G.	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10
#14	1 (FUT.)	3	3	3	3	3	3	3	3	–	–
	2	–	3	3	3	3	–	–	–	–	–
	6	3	3	3	6	3	3	3	3	–	–
	8	3	3	3	3	–	–	–	–	–	–
	2 PED	–	–	–	–	4	2	2	2	–	–
	8 PED	2	2	2	2	2	2	2	–	–	–
	2 PPB	–	–	–	–	1	1	1	–	–	–
	8 PPB	1	1	1	1	2	1	1	1	–	–
	PPB COMMON	1	1	1	1	2	1	1	1	–	–
	SPARES	3	3	3	3	6	3	3	3	–	–
	TOTAL	16	19	19	22	26	16	16	13	–	–
#12	I.S.N.S.	2	2	2	–	2	–	–	–	–	2
TYPE B CABLE (2#16)	6 DET. (FUT.1)	–	–	1	1	–	–	–	–	–	–
	2 DET.	–	–	2	2	2	2	2	2	–	–
	6 DET.	–	–	–	–	–	–	–	–	–	–
	8 DET.	–	–	–	–	2	2	–	–	–	–
	TOTAL	–	–	3	3	4	4	2	2	–	–
*	WWV ANTENNA	–	–	–	–	1	–	–	–	–	–
**	INTERCONNECT	–	–	–	–	1	1	1	1	–	–
#10	LUMINAIRE	2	2	2	2	2	2	2	–	–	4
	SIGNAL COMMON	1	1	1	1	1	1	1	1	–	–
	TOTAL	3	3	3	3	3	3	3	1	–	4
#6	SERVICE	–	–	–	–	–	–	–	–	***	–
CONDUIT SIZE (INCH)		2	2	21/2	3	3	21/2	21/2	2	2	2

* WWV COAXIAL ANTENNA CABLE. SEE CONTRACT SPECIAL PROVISIONS.
** 1-12 PAIR #19 INTERCONNECT CABLE.
*** 2#8 A.W.G. SERVICE CONDUCTORS.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPOSED	
2 + 6	8
PHASE DIAGRAM	

FUTURE		
1 + 6	2 + 6	8
PHASE DIAGRAM		

SIGN SCHEDULE

POLE NO.	MOUNT ON POLE	MAST ARM	FACING
(A)	W41-1 *	–	NNE
(B)	W41-1 **	–	SW

* INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 485' FROM BCR.

** INSTALL ON UNISTRUT SIGN POST, INCLUDING ANCHOR ASSEMBLY, 500' FROM LIMIT LINE.

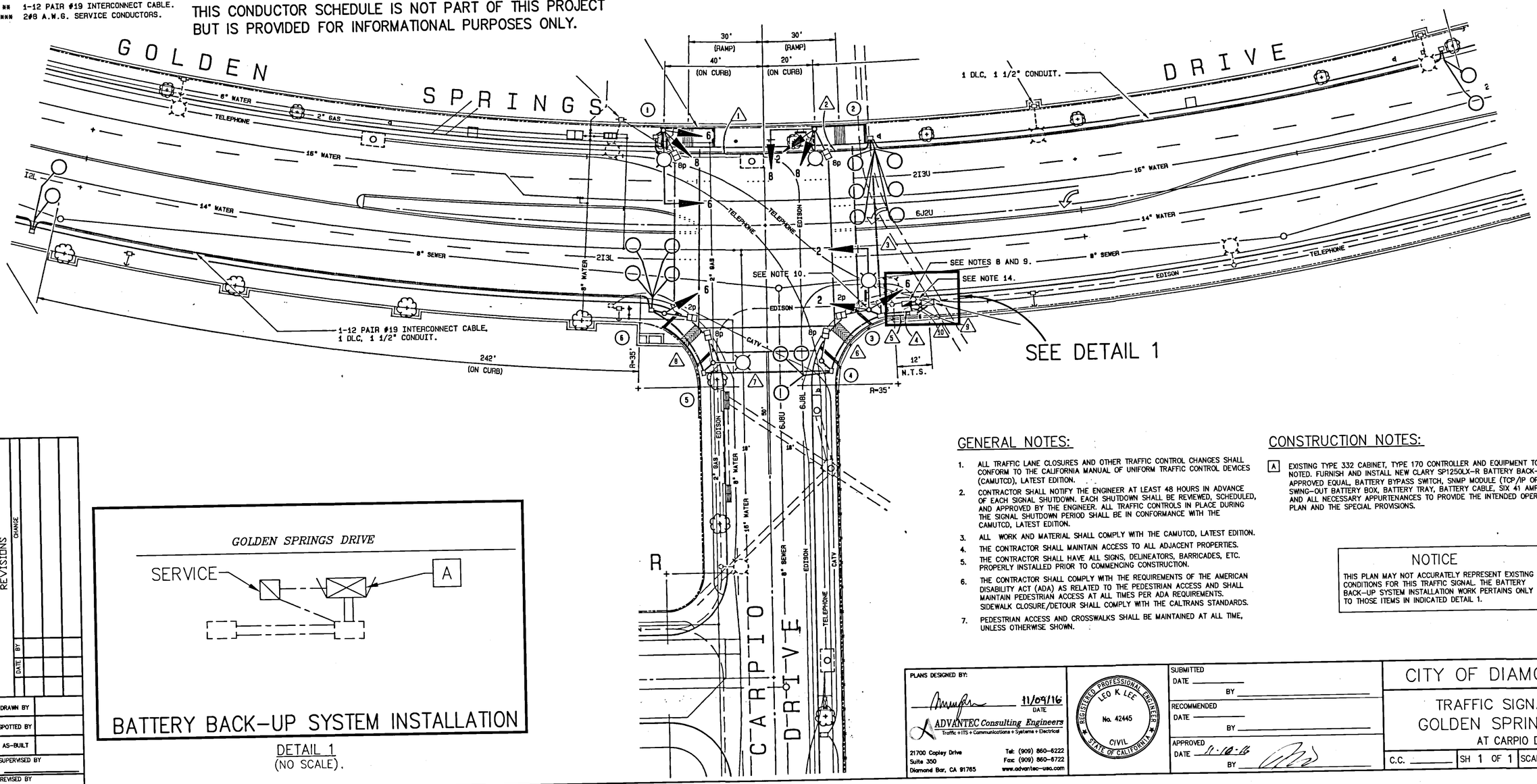
NOT TO SCALE

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED.	PED. PUSH BUT TYPE	PHASE	PLACEMENT "A"	"B"	REMARKS
(1)	24-2-70	30'	25'**	12'	250W	Carpio	MAS	SV-2-TB	SP-1-T	B	8	AS SHOWN	6.5'	
(2)	17-2-70	30'	18'	12'***	250W	Golden Springs	MAS	SV-2-TA	SP-1-T	B	8	AS SHOWN	6.5'	ONE SIDED I.S.N.S.
(3)	15 (E) *	25'	–	8' (E)	150W (E)	–	–	–	–	–	–	–	–	P.P. 4027396E.
	19-2-70	30'	25'	12'	200W	Carpio	MAS	2/SV-1-T	SP-1-T	B	8	10'	3.0'	MOUNT PHASE 6 DISPLAY AT 17'.
(4)	1-A	7'	–	–	–	–	–	–	TP-1	B	2	10'	2.5'	
(5)	15	30'	–	12'	200W	–	–	–	SP-1-T	B	2	10'	2.5'	
(6)	1-A	7'	–	–	–	–	–	TV-1	SP-1-T	B	8	10'	2.5'	

ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED. (E) = EXISTING EQUIPMENT TO BE SALVAGED BY SERVING UTILITY.
* ORNAMENTAL CONCRETE POLE. ** INTERIM MAST ARM WITH ONE TENON ONLY.
*** ROTATED 90 DEGREES COUNTER CLOCKWISE.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

GOLDEN SPRINGS DRIVE

BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE).

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:
11/09/16 DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive, Suite 350, Diamond Bar, CA 91765
Tel: (909) 860-6222 Fax: (909) 860-6722 www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER LEO K LEE No. 42445 CIVIL STATE OF CALIFORNIA

SUBMITTED DATE ____ BY ____
RECOMMENDED DATE ____ BY ____
APPROVED DATE 11-10-16 BY ____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT CARPIO DRIVE

C.C. ____ | SH 1 OF 1 | SCALE: ____

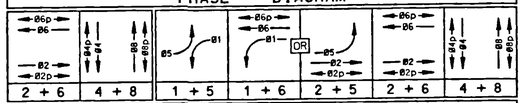
CONDUCTOR SCHEDULE

CABLE /A.W.G.	POLE AND/OR CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12
12 CSC	(1) Ø5, Ø2, Ø2P	1	1	1	1	1	–	–	–	–	–	–	–
	(2) Ø4, Ø8P	–	1	1	1	1	–	–	–	–	–	–	–
	(3) Ø4, Ø4P	–	–	1	1	1	–	–	–	–	–	–	–
	(4) Ø1, Ø6, Ø2P	–	–	–	1	1	–	–	–	–	–	–	–
	(5) Ø1, Ø6, Ø6P	–	–	–	–	–	1	–	–	–	–	–	–
	(6) Ø8, Ø4P	–	–	–	–	–	1	1	–	–	–	–	–
	(7) Ø8, Ø8P	–	–	–	–	–	1	1	1	–	–	–	–
	(8) Ø5, Ø2, Ø6P	–	–	–	–	–	1	1	1	–	–	–	–
	TOTAL	1	2	3	4	4	4	3	2	1	–	–	–
3 CSC	(1) Ø8 PPB	1	1	1	1	1	–	–	–	–	–	–	–
	(2) Ø2 PPB	–	1	1	1	1	–	–	–	–	–	–	–
	(3) Ø2 PPB	–	–	1	1	1	–	–	–	–	–	–	–
	(4) Ø4 PPB	–	–	–	1	1	–	–	–	–	–	–	–
	(5) Ø4 PPB	–	–	–	–	–	1	–	–	–	–	–	–
	(6) Ø6 PPB	–	–	–	–	–	1	1	–	–	–	–	–
	(7) Ø6 PPB	–	–	–	–	–	1	1	1	–	–	–	–
	(8) Ø8 PPB	–	–	–	–	–	1	1	1	1	–	–	–
	TOTAL	1	2	3	4	4	4	3	2	1	–	–	–
#12	I.S.N.S.	2	2	2	2	2	2	2	2	–	4	–	–
*	CAMERA CABLE	1	1	2	2	2	2	1	1	–	–	–	–
**	CAMERA POWER	1	1	2	2	2	2	1	1	–	4	–	–
#10	LUMINAIRE	2	2	2	2	2	2	2	2	2	4	–	–
#6	SERVICE	–	–	–	–	–	–	–	–	–	–	2#8	3
CONDUIT SIZE (INCH)		2.5	3	3	3.5	3.5	3.5	3	2.5	2.5	2	2	2

* BELDEN NO. 8281 COAXIAL CABLE. SEE SPECIAL PROVISIONS.
** 16-3 SJO POWER CABLE.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PHASE DIAGRAM



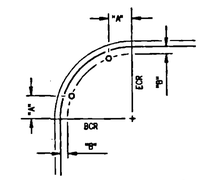
POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A	LUM.M.A	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE	PED.	PED.PUSH BUT. PHASE	QUAD.	PLACEMENT "A"	"B"*	REMARKS
(1)	24-4-80	30'	25'**	15'	200W	High Knob	MAS	SV-1-T	SP-1-T	8	S	3.0'	3.0'	
(2)	15(E)	30'	–	8'(E)	100W(E)	–	–	–	–	–	–	–	–	P.P. NO. 2219513E (BY EDISON CO.)
	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	2	W	3.0'	3.0'	
(3)	17-2-80	30'	20'	12'	200W	Golden Springs	MAS	SV-1-T	SP-1-T	2	W	3.0'	3.0'	
(4)	15(E)	30'	–	8'(E)	100W(E)	–	–	–	–	–	–	–	–	P.P. NO. XXXXXXE (BY EDISON CO.)
	15	30'	–	15'	150W	–	–	SV-1-T	SP-1-T	4	N	3.0'	3.0'	
(5)	24-4-80	30'	25'**	15'	200W	High Knob	MAS	SV-1-T	SP-1-T	4	N	3.0'	3.0'	
(6)	1-A	10'	–	–	–	–	–	TV-1-T	SP-1-T	6	E	3.0'	3.0'	
(7)	17-2-80	30'	20'	12'	200W	Golden Springs	MAS	SV-1-T	SP-1-T	6	E	3.0'	3.0'	
(8)	15	30'	–	15'	150W	–	–	SV-1-T	SP-1-T	8	S	3.0'	3.0'	
(9)	15(E)	30'	–	8'(E)	150W(E)	–	–	–	–	–	–	–	–	P.P. NO. 2222777E (BY EDISON CO.)

(E) = EXISTING EQUIPMENT TO BE REMOVED.

* SEE PLACEMENT DETAIL HEREON.
** INTERIM MAST ARM WITH ONE TENON ONLY.

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

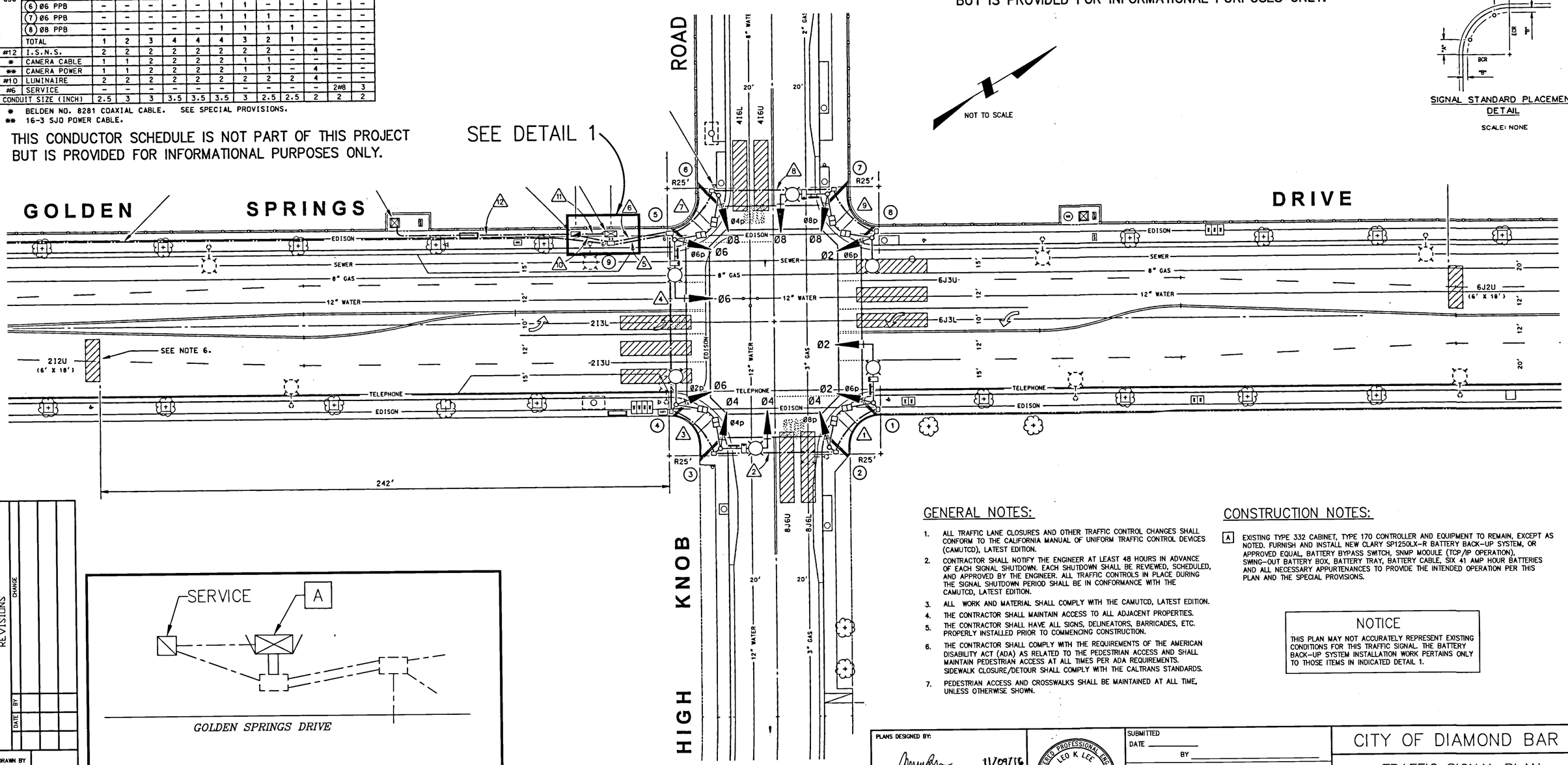


SIGNAL STANDARD PLACEMENT DETAIL

SCALE: NONE

NOT TO SCALE

SEE DETAIL 1



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
GOLDEN SPRINGS DRIVE
AT HIGH KNOB ROAD

C.C. _____ | SH 1 OF 1 | SCALE: _____

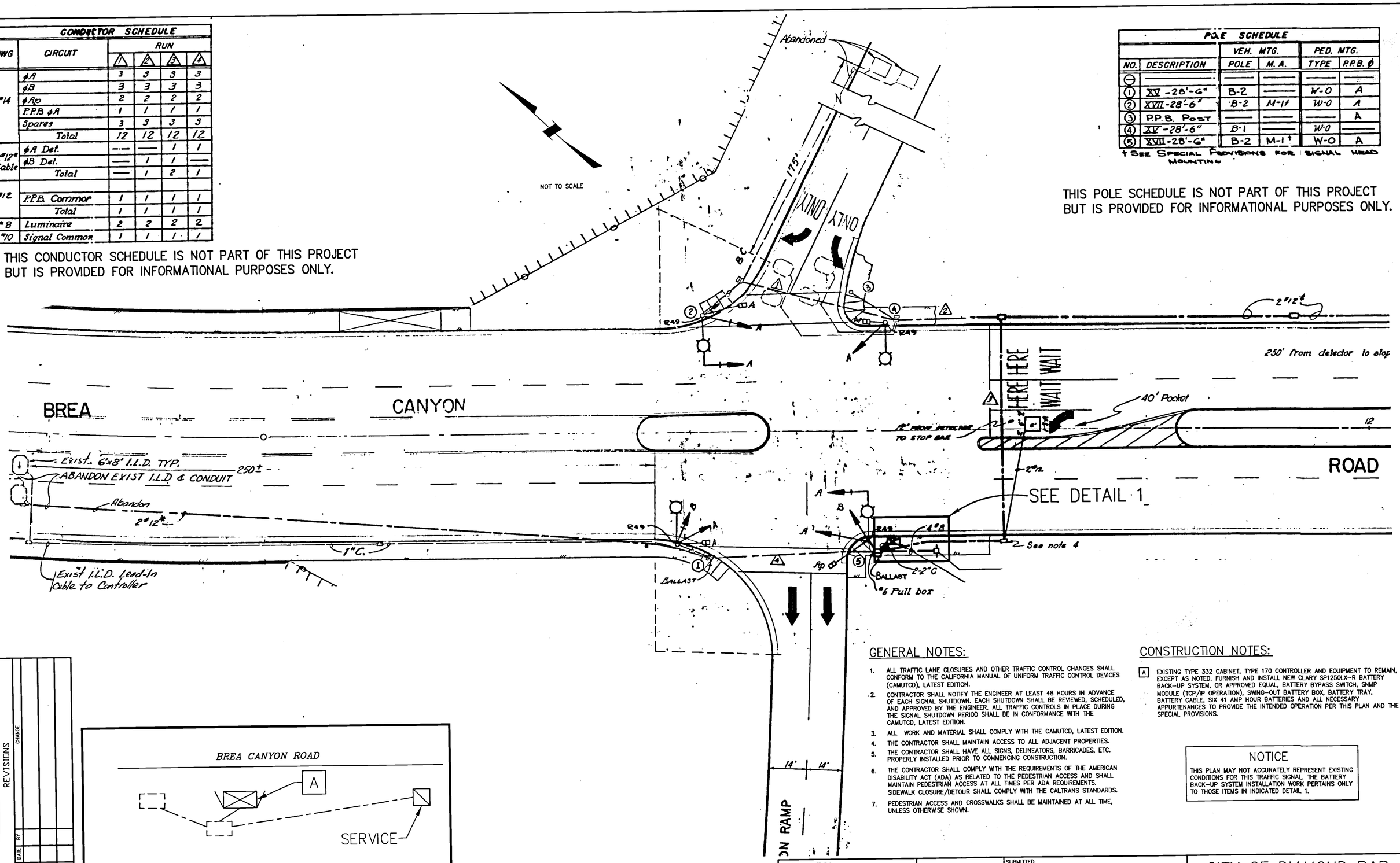
CONDUCTOR SCHEDULE						
AWG	CIRCUIT	RUN				
		1	2	3	4	
#14	ϕA	3	3	3	3	
	ϕB	3	3	3	3	
	ϕAp	2	2	2	2	
	P.P.B ϕA	1	1	1	1	
	Spares	3	3	3	3	
	Total	12	12	12	12	
2#12* Cable	ϕA Det.	—	—	1	1	
	ϕB Det.	—	1	1	—	
	Total	—	1	2	1	
#12	P.P.B. Commor	1	1	1	1	
	Total	1	1	1	1	
#8	Luminaire	2	2	2	2	
#10	Signal Common	1	1	1	1	

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

POLE SCHEDULE					
NO.	DESCRIPTION	VEH. MTG. POLE	VEH. MTG. M.A.	PED. MTG. TYPE	PED. MTG. P.P.B. ϕ
⊖	———	———	———	———	———
1	XV -28'-6"	B-2	———	W-0	A
2	XVIII-28'-6"	B-2	M-11	W-0	A
3	P.P.B. Post	———	———	———	A
4	XV -28'-6"	B-1	———	W-0	———
5	XVIII-28'-6"	B-2	M-1†	W-0	A

† See Special Provisions for signal head mounting

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.

BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	DATE	BY

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11-10-16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
BREA CANYON ROAD
AT SR-60 WB RAMPS

C.C. _____ | SH 1 OF 1 | SCALE: _____

CONDUCTOR SCHEDULE

CABLE /A.W.G.	POLE AND/OR CIRCUIT	RUNS 1	2	3	4	5	6	7A	7B	8	9	10	11	12	13	14	15	16	17
12 CSC	(1) ø5, ø2, ø2P	1	1	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(2) ø3, ø4, ø3P	–	1	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(3) ø4, ø4P	–	–	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(4) ø1, ø2, ø2P	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(5) ø1, ø6, ø6P	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(6) ø3, ø4P	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–
	(7) ø3, ø3P	–	–	–	–	–	1	1	–	1	–	–	–	–	–	–	–	–	–
	(8) ø5, ø6P	–	–	–	–	–	1	1	–	1	1	–	–	–	–	–	–	–	–
	(9) ø2, ø2P	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	1	1	–	–	–	–	–
	(10) ø1, ø2P	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	1	–	–	–	–	–	–
	(11) ø1, ø6, ø7	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	–	–	–	–	–	–	–
	(12) ø7	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	–	–	1	1	–	–	–
	TOTAL (REVISED)	1	2	3	4	5	3	3	–	2	1	–	2	1	1	1	–	–	–
3 CSC	(1) ø3 PPB	1	1	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(2) ø2 PPB	–	1	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(3) ø2 PPB	–	–	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(4) ø4 PPB	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(5) ø4 PPB	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	(6) ø6 PPB	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–
	(7) ø6 PPB	–	–	–	–	–	1	1	–	1	–	–	–	–	–	–	–	–	–
	(8) ø3 PPB	–	–	–	–	–	1	1	–	1	1	–	–	–	–	–	–	–	–
	(9) ø2 PPB	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	1	1	–	–	–	–	–
	(10) ø2 PPB	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	1	–	–	–	–	–	–
	TOTAL (REVISED)	1	2	3	4	5	3	3	–	2	1	–	2	1	–	–	–	–	–
#14	INTERCONNECT(STATE)	–	–	–	–	–	7	–	–	–	–	–	–	–	–	–	–	–	–
#12	I.S.N.S.	2	2	2	2	4	2	2	2	4	4	2	2	2	–	–	6	–	–
DLC	ø1 DET.	–	–	–	–	–	1	–	1	1	1	–	–	–	–	–	–	–	–
	ø1 DET. (BRAHMA)	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	–	–	1	1	–	–	–
	ø2 DET.	–	–	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–
	ø2 DET. (BRAHMA)	1(N)	1(N)	1(N)	1(N)	–	–	–	1(N)	1(N)	1(N)	1(N)	2	–	–	–	–	–	–
	ø3 DET.	–	4	4	4	4	–	–	–	–	–	–	–	–	–	–	–	–	–
	ø4 DET.	–	–	–	–	–	2	2	–	–	–	–	–	–	–	–	–	–	–
	ø5 DET.	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
	ø6 DET.	–	–	–	–	–	2	–	2	2	2	1	–	–	1	–	–	–	–
	ø6 DET. (BRAHMA)	–	–	–	–	–	2(R)	–	2(R)	2(R)	2(R)	2(R)	–	–	2	2	–	–	–
	TOTAL (REVISED)	1	5	5	8	7	5	2	3	3	3	1	2	–	4	3	–	–	–
*	CAMERA CABLE	–	–	–	–	–	1(R)	–	1(R)	1(R)	1(R)	1(R)	–	–	–	–	–	–	–
**	CAMERA POWER	–	–	–	–	–	1	–	1	1	1	1	–	–	–	–	1	–	–
***	INTERCONNECT	–	–	–	–	–	1	–	1	1	1	1	–	–	1	1	–	–	–
****	INTERCONNECT	–	–	–	–	–	1(N)	–	1(N)	1(N)	1(N)	1(N)	–	–	–	–	–	–	–
#10	LUMINAIRE	2	2	2	2	2	4	2	2	4	4	2	2	2	–	–	6	–	–
#8	SERVICE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	3#6
#8	SERVICE (BRAHMA)	–	–	–	–	–	2(N)	–	2(N)	2(N)	2(N)	2(N)	–	–	–	–	2(N)	–	–
CONDUIT SIZE (INCH)		2	3	3	3	4	4	3	3	3	3	3	3	2	2.5	2.5	2	2	3

NOTE: ALL CONDUITS, CABLES AND CONDUCTORS ARE EXISTING AND SHALL BE REUSED, UNLESS OTHERWISE NOTED.
(R) = REMOVE EXISTING CABLES AND/OR CONDUCTORS. CABLES AND CONDUCTORS TO BE REUSED SHALL BE PULLED BACK TO PULL BOX ADJACENT TO NEW CONTROLLER AND TERMINATED IN NEW CONTROLLER.
(N) = NEW CABLES AND CONDUCTORS AS REQUIRED. REMOVE CORRESPONDING CABLES AND CONDUCTORS THAT ARE NOT REUSED.
* BELDEN NO. 8281 COAXIAL CABLE.
** 16–3 SJO POWER CABLE.
*** 1–12 PAIR #19 CABLE.
**** 1–6 PAIR #19 CABLE.

THIS CONDUCTOR SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPOSED PHASING LOCATION

		NOT USED	NOT USED
ø1	ø2	ø3	ø4
NOT USED	OLC	NOT USED	NOT USED
ø5	ø6	ø7	ø8

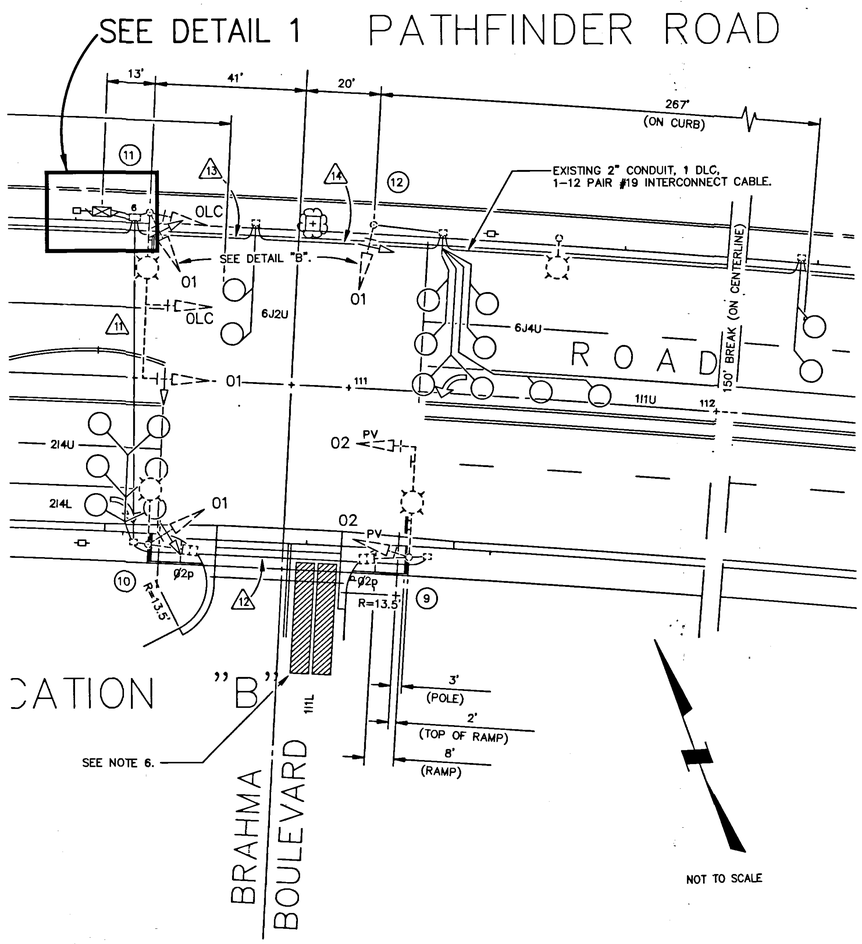
PHASE DIAGRAM

ø2 ON VEHICLE RECALL.
ø1 ON NON–LOCK.
OVERLAP "C" = 01 + 02.

POLE SCHEDULE

NO.	STANDARD TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	LUMINAIRE (H.P.S.V.)	I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE	PED.	PED. PUSH BUT. PHASE	QUAD.	PLACEMENT "A"	"B" *	REMARKS
(1)	26–4–70	30'	45'	15'	250W	Brea Cyn Rd →	2–MAS	SV–1–T	SP–1–T	3	W	3.0'	3.0'	I.S.N.S. ARROWS TO SOUTH.
(2)	15	30'	–	15'	250W	–	–	SV–2–T	SP–1–T	2	N	3.0'	3.0'	
(3)	19–4–80	30'	30'	15'	250W	Pathfinder	MAS	SV–1–T	SP–1–T	2	N	3.0'	3.0'	
(4)	15	30'	–	15'	250W	–	–	SV–2–T	SP–1–T	4	E	3.0'	3.0'	
(5)	26–4–70	30'	40'	12'**	250W	Fern Hollow →	2–MAS	SV–1–T	SP–1–T	4	E	3.0'	3.0'	I.S.N.S. ARROWS TO NORTH.
(6)	1–A	10'	–	–	–	–	–	TV–1–T	SP–1–T	6	S	3.0'	3.0'	
(7)	17–3–80	30'	20'	15'	250W	Pathfinder	MAS	SV–1–T	SP–1–T	6	S	3.0'	3.0'	
(8)	15	30'	–	15'	250W	–	–	SV–1–T	SP–1–T	3	W	3.0'	3.0'	
(9)	19–3–80	30'	30'	12'**	250W	Brahma Blvd	MAS	SV–1–T	SP–1–T	2	S	3.0'	3.0'	
(10)	15	27'	–	12'**	250W	–	–	SV–1–T	SP–1–T	2	S	3.0'	3.0'	POLE SHORTENED DUE TO OVERHEAD.
(11)	26–4–80	30'	45'	15'	250W	Brahma Blvd	2–MAS	SV–2–TB	–	–	–	3.0'	3.0'	
(12)	1–A	10'	–	–	–	–	–	TV–1–T	–	–	–	3.0'	3.0'	

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT
BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



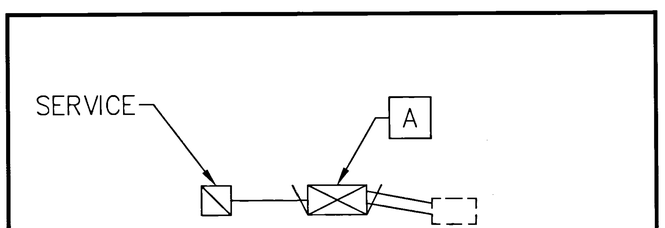
GENERAL NOTES:

1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX–R BATTERY BACK–UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING–OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE
THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK–UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



PATHFINDER ROAD

BATTERY BACK–UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS
CHANGE
BY
DATE

DRAWN BY
SPOTTED BY
AS–BUILT
SUPERVISED BY
REVISED BY

PLANS DESIGNED BY:
11/09/16
DATE
ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860–6222
Fax: (909) 860–6722
www.advantec–ueg.com

REGISTERED PROFESSIONAL ENGINEER
LEO K LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE
BY
RECOMMENDED
DATE
BY
APPROVED
DATE 11-23-16
BY

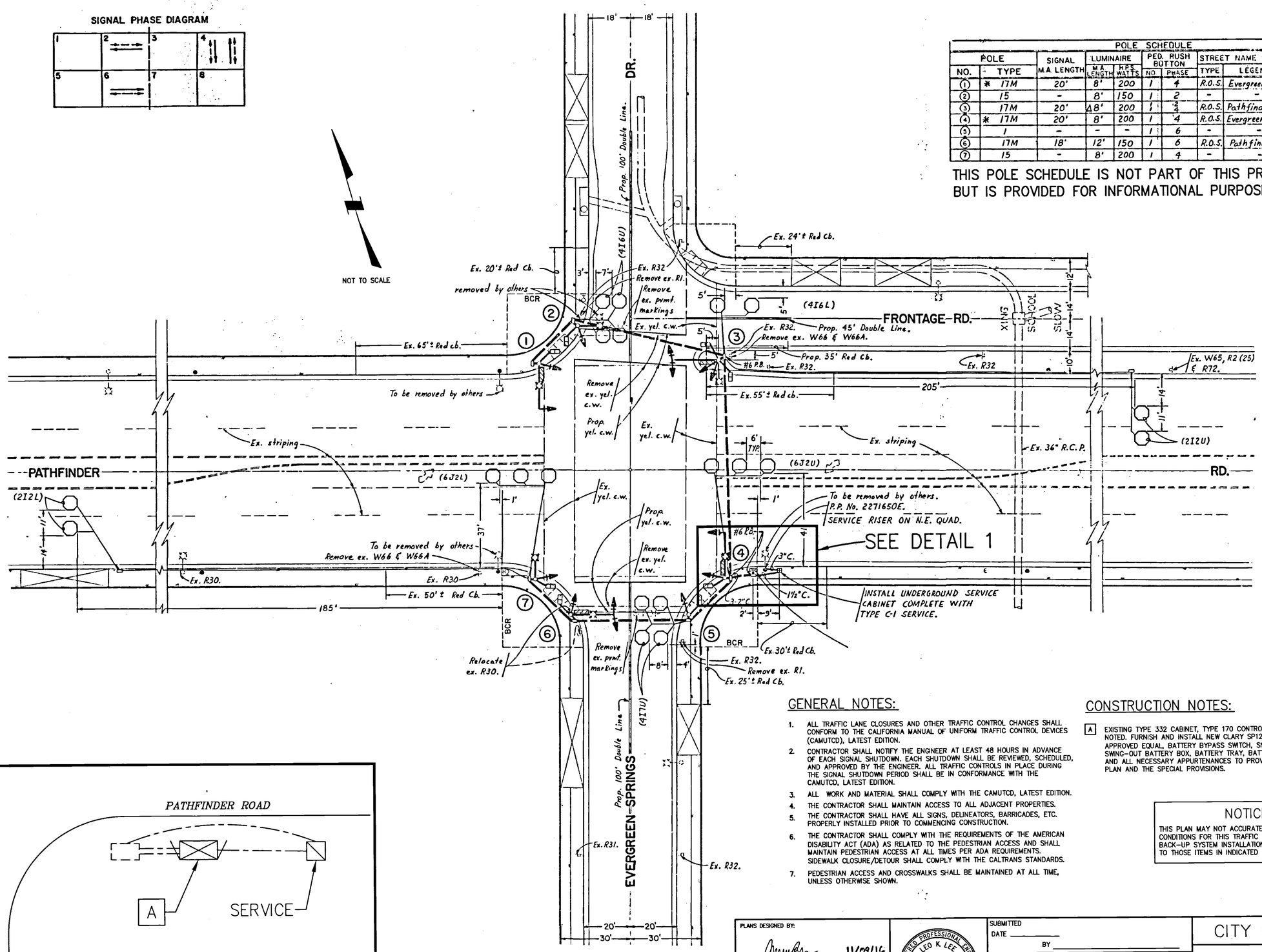
CITY OF DIAMOND BAR
TRAFFIC SIGNAL PLAN
PATHFINDER ROAD
AT BRAHMA BLVD
C.C.
SH 1 OF 1
SCALE:

SIGNAL PHASE DIAGRAM

NOT TO SCALE

POLE SCHEDULE															
POLE NO.	POLE TYPE	SIGNAL M.A. LENGTH	LUMINAIRE M.A. LENGTH	LUMINAIRE HPS WATTS	PED. PUSH BUTTON NO	PED. PUSH BUTTON PHASE	STREET NAME SIGN TYPE	STREET NAME SIGN LEGEND	POLE LOCATION A	B	C	D	E
(1)	* 17M	20'	8'	200	1	4	R.O.S.	Evergreen Sprgs	-	-	14'	-	-
(2)	15	-	8'	150	1	2	-	-	14'	-	-	-	-
(3)	17M	20'	Δ8'	200	1	2 & 4	R.O.S.	Pathfinder Rd	-	SEE	PLAN	-	-
(4)	* 17M	20'	8'	200	1	4	R.O.S.	Evergreen Sprgs	-	-	14'	-	-
(5)	1	-	-	-	1	6	-	-	14'	-	-	-	-
(6)	17M	18'	12'	150	1	6	R.O.S.	Pathfinder Rd	-	-	14'	-	-
(7)	15	-	8'	200	1	4	-	-	14'	-	-	-	-

THIS POLE SCHEDULE IS NOT PART OF THIS PROJECT BUT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



GENERAL NOTES:

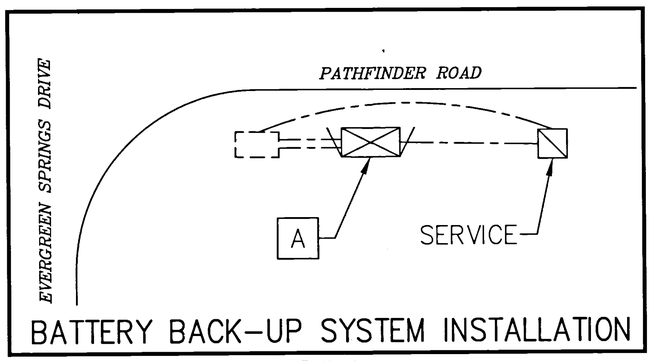
1. ALL TRAFFIC LANE CLOSURES AND OTHER TRAFFIC CONTROL CHANGES SHALL CONFORM TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD), LATEST EDITION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF EACH SIGNAL SHUTDOWN. EACH SHUTDOWN SHALL BE REVIEWED, SCHEDULED, AND APPROVED BY THE ENGINEER. ALL TRAFFIC CONTROLS IN PLACE DURING THE SIGNAL SHUTDOWN PERIOD SHALL BE IN CONFORMANCE WITH THE CAMUTCD, LATEST EDITION.
3. ALL WORK AND MATERIAL SHALL COMPLY WITH THE CAMUTCD, LATEST EDITION.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
5. THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC. PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) AS RELATED TO THE PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CALTRANS STANDARDS.
7. PEDESTRIAN ACCESS AND CROSSWALKS SHALL BE MAINTAINED AT ALL TIME, UNLESS OTHERWISE SHOWN.

CONSTRUCTION NOTES:

[A] EXISTING TYPE 332 CABINET, TYPE 170 CONTROLLER AND EQUIPMENT TO REMAIN, EXCEPT AS NOTED. FURNISH AND INSTALL NEW CLARY SP1250LX-R BATTERY BACK-UP SYSTEM, OR APPROVED EQUAL, BATTERY BYPASS SWITCH, SNMP MODULE (TCP/IP OPERATION), SWING-OUT BATTERY BOX, BATTERY TRAY, BATTERY CABLE, SIX 41 AMP HOUR BATTERIES AND ALL NECESSARY APPURTENANCES TO PROVIDE THE INTENDED OPERATION PER THIS PLAN AND THE SPECIAL PROVISIONS.

NOTICE

THIS PLAN MAY NOT ACCURATELY REPRESENT EXISTING CONDITIONS FOR THIS TRAFFIC SIGNAL. THE BATTERY BACK-UP SYSTEM INSTALLATION WORK PERTAINS ONLY TO THOSE ITEMS IN INDICATED DETAIL 1.



BATTERY BACK-UP SYSTEM INSTALLATION

DETAIL 1
(NO SCALE)

REVISIONS

CHANGE	BY	DATE

DRAWN BY	
SPOTTED BY	
AS-BUILT	
SUPERVISED BY	
REVISED BY	

PLANS DESIGNED BY:

11/09/16
DATE

ADVANTEC Consulting Engineers
Traffic + ITS + Communications + Systems + Electrical
21700 Copley Drive
Suite 350
Diamond Bar, CA 91765
Tel: (909) 860-6222
Fax: (909) 860-6722
www.advantec-usa.com

REGISTERED PROFESSIONAL ENGINEER
LEO K. LEE
No. 42445
CIVIL
STATE OF CALIFORNIA

SUBMITTED
DATE _____
BY _____

RECOMMENDED
DATE _____
BY _____

APPROVED
DATE 11.10.16
BY _____

CITY OF DIAMOND BAR

TRAFFIC SIGNAL PLAN
PATHFINDER ROAD
AT EVERGREEN SPRINGS DRIVE

C.C. _____ | SH 1 OF 1 | SCALE: _____