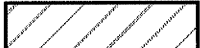
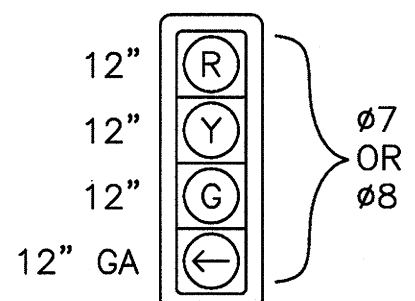
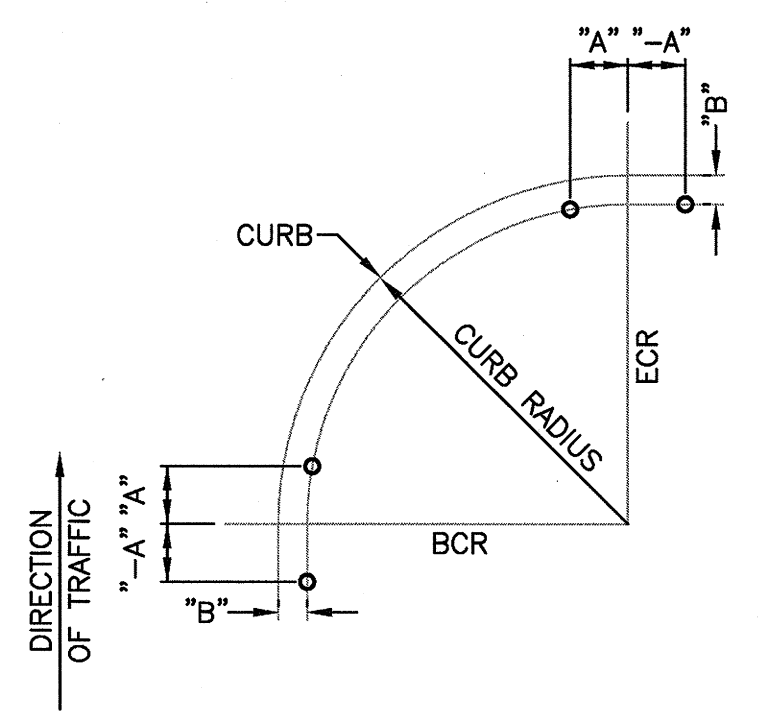


TRAFFIC SIGNAL GENERAL NOTES (THIS SHEET ONLY):

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2. UTILITIES SHOWN ON THESE PLANS ARE CORRECT AND ACCURATE TO THE EXTENT OF AVAILABLE KNOWLEDGE. THE CONTRACTOR, HOWEVER, IS REQUIRED TO TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF UNDERGROUND FACILITIES PRIOR TO DOING WORK THAT MAY INTERFERE WITH SUCH FACILITIES. CONTACT USA DIG AT 1-800-227-2600 48 HOURS IN ADVANCE.
3. EACH CONDUCTOR IN EACH PULL BOX SHALL BE IDENTIFIED WITH A PERMANENT IDENTIFICATION BAND IN PULL BOXES AND NEAR END OF EACH CONDUCTOR WHERE CONDUCTORS ARE TERMINATED. PERMANENT IDENTIFICATION BANDS SHALL BE EMBOSSED ALUMINUM FOIL TYPE WITH PRESSURE SENSITIVE OIL RESISTANT BACKING.
4. ALL NEW CONDUITS SHALL BE SCHEDULE 80 PVC AND SHALL BE 3" IN SIZE UNLESS OTHERWISE NOTED ON PLANS. ALL PVC CONDUITS SHALL HAVE A BARE #8 WIRE.
5. CORE, SAW-CUT, AND POLE FOUNDATION LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER PRIOR TO EXCAVATING. DIRT AND DEBRIS ON THE STREET SURFACE DUE TO SAWCUTTING AND CORING ACTIVITIES SHALL BE VACUUMED IMMEDIATELY AFTER SAWCUTTING. POLE PLACEMENT MAY BE ADJUSTED BY THE ENGINEER; NO ADDITIONAL COMPENSATION FOR THE NEW LOCATION SHALL BE GRANTED TO THE CONTRACTOR.
6. ALL PULL BOXES SHALL BE No. 5 WITH FIBRELYTE NON-CONCRETE LID LABELED "TRAFFIC SIGNAL" UNLESS NOTED OTHERWISE ON PLAN.
7. ALL CONDUITS SHALL BE INSTALLED AT MINIMUM DEPTH OF 30".
8. TRENCHING IN STREET PAVEMENT SHALL NOT BE ALLOWED FOR THIS PROJECT. HOWEVER, IN SIDEWALK AREAS, CONTRACTOR MAY TRENCH OR BORE SUCH THAT SIDEWALK IS REPLACED IN KIND, SCORE MARK TO SCORE MARK.
9. PROTECT-IN-PLACE EXISTING SIGNS UNLESS NOTED OTHERWISE.
10. CONTRACTOR SHALL FURNISH ALL MATERIAL AND EQUIPMENT REQUIRED.
11. CONTRACTOR SHALL POT-HOLE TO IDENTIFY EXACT UTILITY LOCATION AND DEPTH PRIOR TO BORING/JACKING CONDUIT.
12. ADDITIONAL REMOVAL AND REPLACEMENT OF ASPHALT CONCRETE MAY BE NEEDED. REMOVAL AND REPLACEMENT LIMITS WILL BE TO THE DISCRETION OF THE ENGINEER.
13. VIDEO DETECTION SYSTEM SHALL BE ECONOLITE AUTOSCOPE TERRA OR ENGINEER APPROVED EQUIVALENT.
14. UNINTERRUPTED POWER SYSTEM (UPS) SHALL BE CLARY CORPORATION SP1250PD "PLUS" TRAFFIC UPS OR APPROVED EQUAL HOUSED IN A CLARY CBS 126 NEMA 3R CABINET ENCLOSURE OR APPROVED EQUAL MOUNTED TO SIDE OF CONTROLLER CABINET.
15.  INDICATES VIDEO DETECTION ZONE.



DETAIL 'B'  
NOT TO SCALE

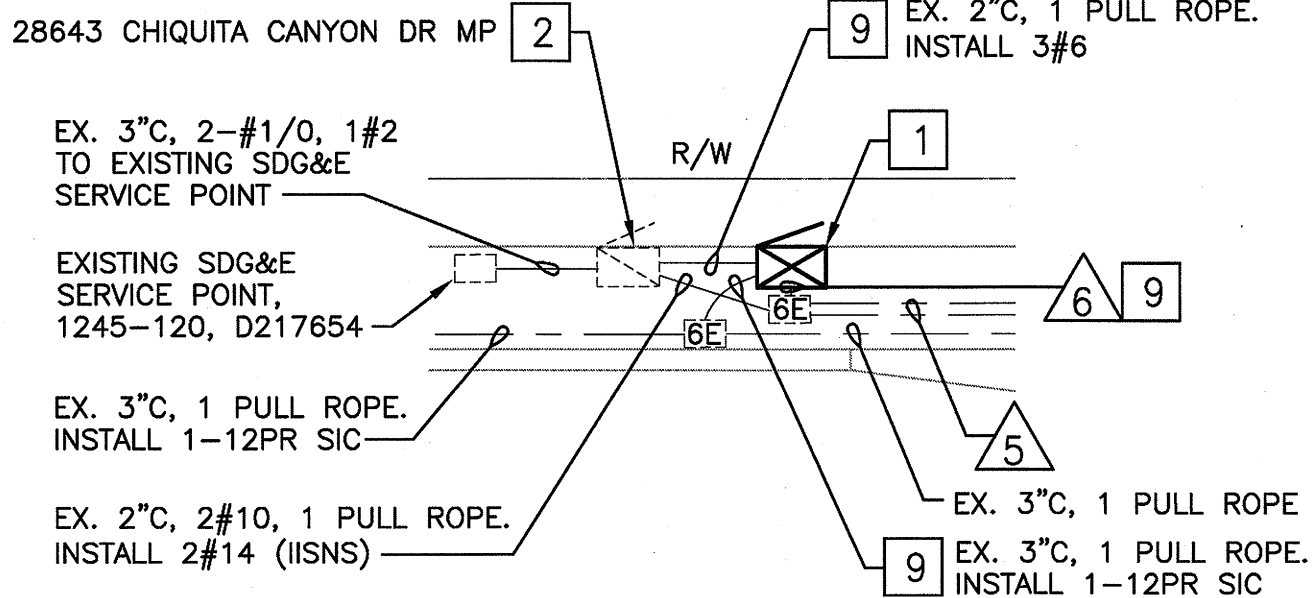


DETAIL 'C'  
NOT TO SCALE

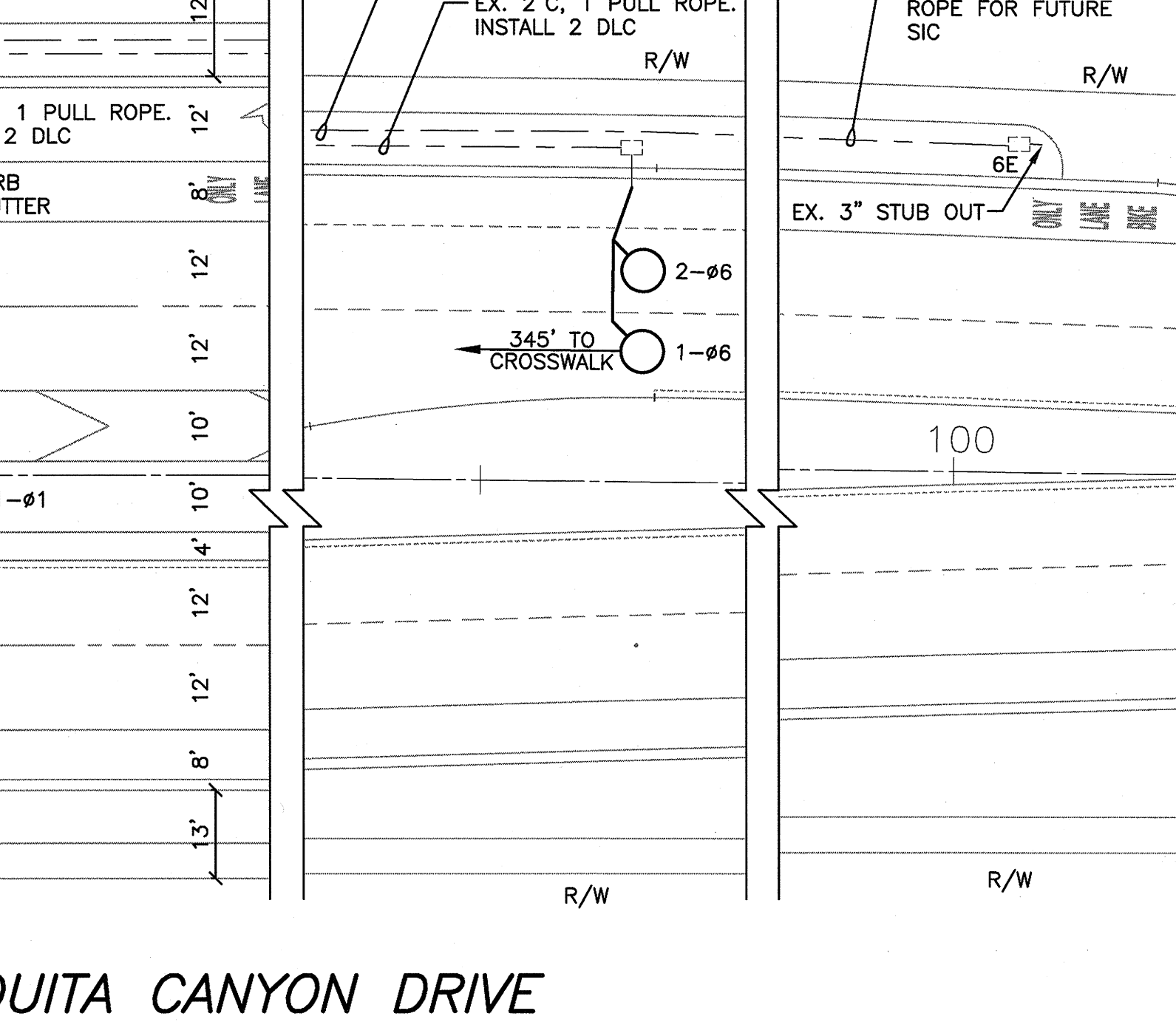
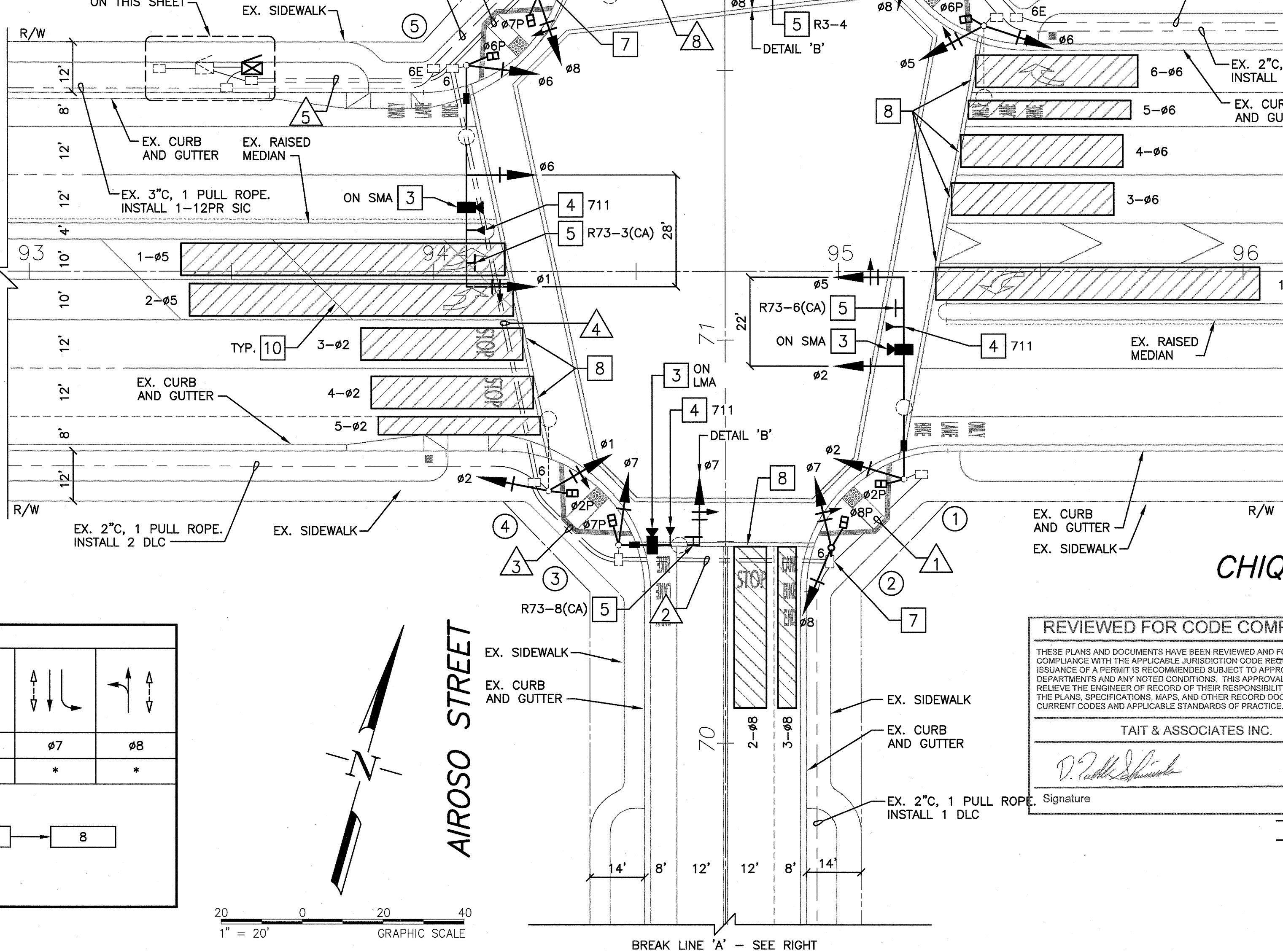
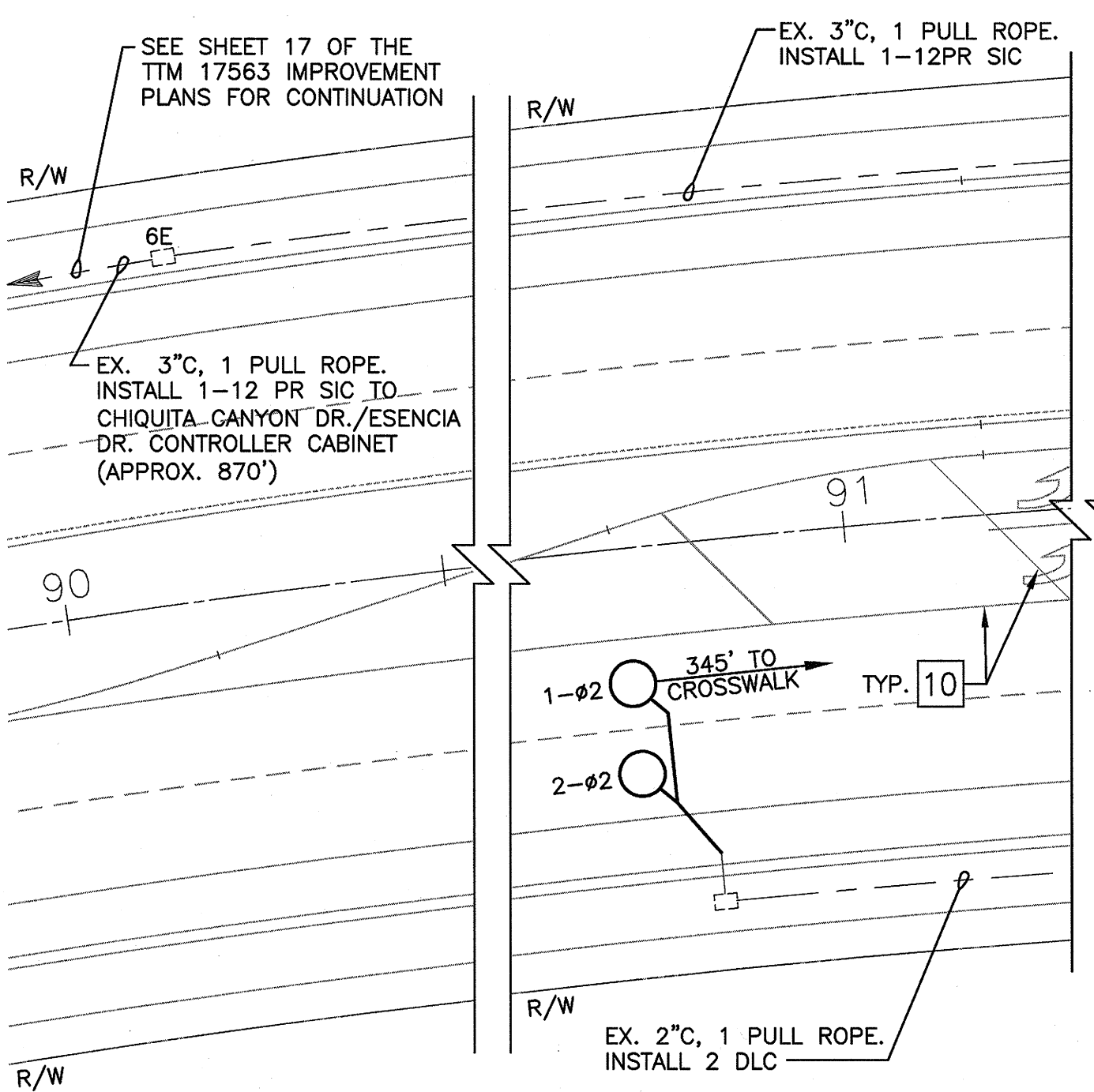
CONSTRUCTION NOTES (THIS SHEET ONLY):

1. CONSTRUCT CONTROLLER FOUNDATION. FURNISH AND INSTALL NEW NEMA TS2 TYPE 2 ECONOLITE ASC/3-2100 CONTROLLER WITH ETHERNET PORT, DATA KEY, 9-PIN FSK MODULE VIDEO DETECTION SYSTEM (ECONOLITE AUTOSCOPE TERRA OR APPROVED EQUAL), EMERGENCY VEHICLE PREEMPTION (EVP) SYSTEM AND ALL NECESSARY EQUIPMENT FOR INTENDED OPERATION IN A NEW NEMA TS2 TYPE 2 PLUG-AND-GO TYPE P-44 CABINET AND UNINTERRUPTED POWER SYSTEM (UPS) PER SPECIFICATIONS.
2. EXISTING TYPE III-BF SERVICE CABINET.
3. FURNISH AND INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE OR SIGNAL MAST ARM PER ENGINEER APPROVAL. INSTALL NECESSARY VIDEO AND POWER CABLES INTO CONTROLLER CABINET.
4. FURNISH AND INSTALL MODEL 711 EVP OPTICAL DETECTOR UNITS ON MAST ARM AS SHOWN.
5. INSTALL SIGN ON SIGNAL MAST ARM PER CALTRANS STD. PLAN ES-7N.
6. INSTALL PULL BOX IN EXISTING CONDUIT RUN.
7. INSTALL CONDUIT INTO EXISTING PULL BOX.

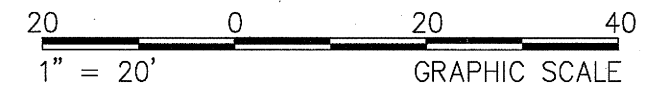
8. ALL STOP SIGNS AND PAVEMENT MARKINGS SHALL BE REMOVED AT THE TIME OF SIGNAL ACTIVATION.
9. INTERCEPT EXISTING CONDUIT AND EXTEND INTO NEW CONTROLLER FOUNDATION.
10. REMOVE INTERIM STRIPING TO OPEN LEFT-TURN LANES. ANY PAVEMENT ARROWS DAMAGED DURING THE INTERIM STRIPING REMOVAL SHALL BE REINSTALLED.



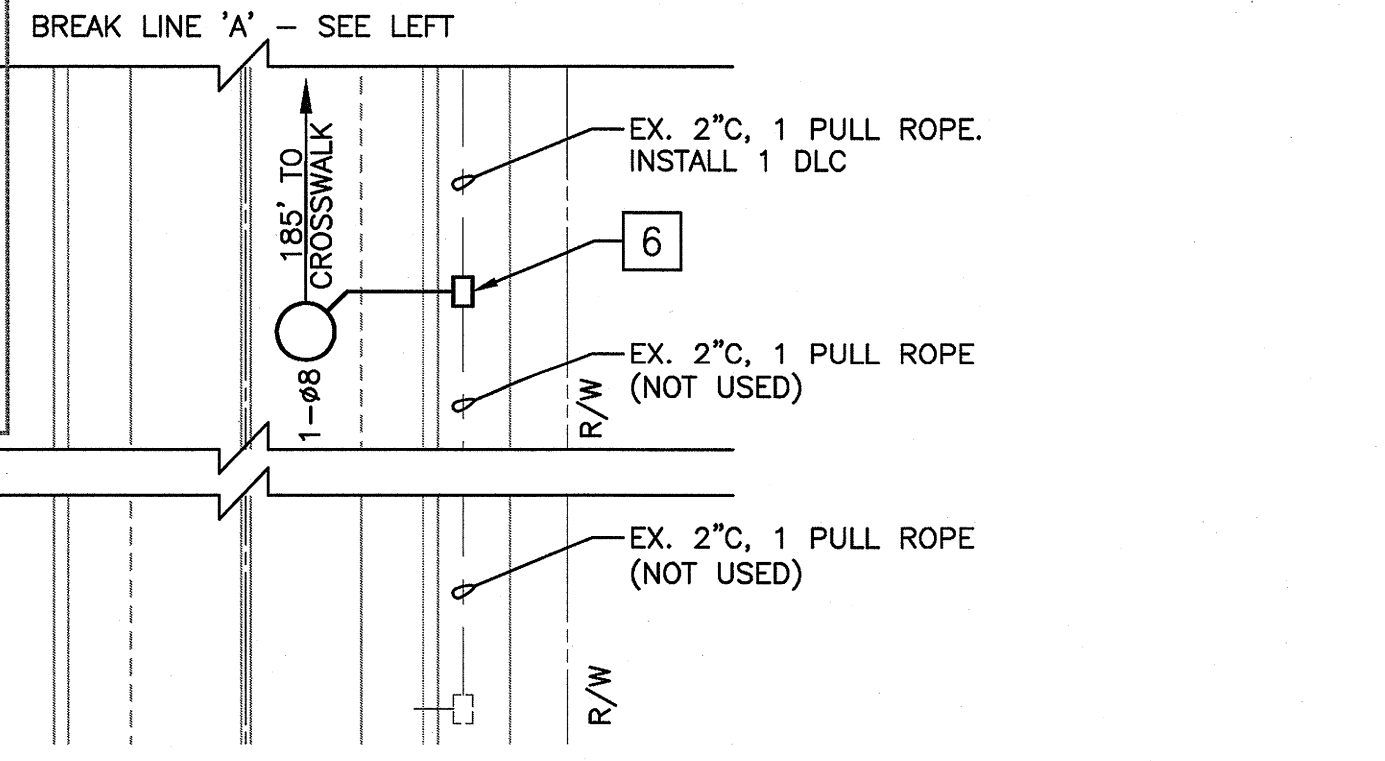
DETAIL 'A'  
NOT TO SCALE



PHASE - FUNCTION - SEQUENCE DIAGRAM							
VEHICLE & PEDESTRIAN MOVEMENTS PER FUNCTION							
NEMA PHASE DESIGNATION	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7
COORDINATED FUNCTION	*	*	*	*	*	*	*
* DETERMINED BY MASTER COMPUTER DURING COORDINATION OPERATION							
SEQUENCE WITH CALLS ON ALL PHASES							



REVIEWED FOR CODE COMPLIANCE	
THESE PLANS AND DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN COMPLIANCE WITH THE APPLICABLE JURISDICTION CODE REQUIREMENTS. ISSUANCE OF A PERMIT IS RECOMMENDED SUBJECT TO APPROVAL BY OTHER DEPARTMENTS AND ANY NOTED CONDITIONS. THIS APPROVAL DOES NOT RELIEVE THE ENGINEER OF RECORD OF THEIR RESPONSIBILITY TO PREPARE THE PLANS, SPECIFICATIONS, MAPS, AND OTHER RECORD DOCUMENTS PER CURRENT CODES AND APPLICABLE STANDARDS OF PRACTICE.	
TAIT & ASSOCIATES INC.	
	12/27/2016
Signature	Date



**Underground Service Alert**

Call: TOLL FREE 811/800 227-2600

TWO WORKING DAYS BEFORE YOU DIG

**Engineer's Note to Contractor:**  
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NO.	DATE	REVISIONS

**PREPARED FOR:**

**RMV COMMUNITY DEVELOPMENT, LLC**  
28811 ORTEGA HIGHWAY  
SAN JUAN CAPISTRANO, CA 92675  
(949) 240-3363

**PREPARED BY:**

**FEHR & PEERS**  
841 E. Kaiser Boulevard  
Anaheim, CA 92808  
(714) 941-8800

DATE 12/27/16  
EXP. 9-30-17

DESIGNED BY MJ	<b>P.A. 2.4 - TTM NO. 17564 STREET IMPROVEMENTS CHIQUITA CANYON DRIVE/ AIROSO STREET</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN</b>	SHEET <b>10</b> OF <b>12</b> SHEETS
DRAWN BY RC			
CHECKED BY JB			

W.O. 2402-24 ROOM: 2414P  
BNC: 2402-24 ROOM: 2414P  
THE RANCH - STREET PLANS - TTM 17564 - PA 2 (24)



CABLE AND CONDUCTOR SCHEDULE												
AWG SIZE, WIRE OR CABLE TYPE	S T D	PHASES	CONDUIT SIZE & RUN NUMBER									
			△	△	△	△	△	△	△	△	△	△
12 CSC	①	Ø5,Ø2,Ø2P/Ø8PPB	1/1	1/1	1/1	1/1	1/1	1/1	—	—	—	
	②	Ø7,Ø8,Ø8P/Ø2PPB	—	1/1	1/1	1/1	1/1	1/1	—	—	—	
	③	Ø7,Ø7P/Ø2PPB	—	—	1/1	1/1	1/1	1/1	—	—	—	
	④	Ø1,Ø2,Ø2P/Ø7PPB	—	—	—	1/1	1/1	1/1	—	—	—	
	⑤	Ø1,Ø6,Ø6P/Ø7PPB	—	—	—	—	1/1	1/1	—	—	—	
	⑥	Ø7,Ø7P,Ø8/Ø6PPB	—	—	—	—	—	1/1	1/1	—	—	
	⑦	Ø8,Ø8P/Ø6PPB	—	—	—	—	—	1/1	1/1	1/1	—	
	⑧	Ø5,Ø6,Ø6P/Ø8PPB	—	—	—	—	—	1/1	1/1	1/1	1/1	
3 CSC	TOTAL		1/1	2/2	3/3	4/4	5/5	8/8	3/3	2/2	1/1	
	#14	I.I.S.N.S.	2	2	2	2	2	—	2	2	—	
	#10	LUMINAIRES	2(E)	2(E)	2(E)	2(E)	2(E)	—	2(E)	2(E)	2(E)	
	#8	SIGNAL & SIGN COM.	1	1	1	1	2	2	1	1	1	
	DLC	Ø2	—	—	—	2	2	2	—	—	—	
		Ø6	—	—	—	—	2	2	2	2	2	
		Ø7	—	—	—	—	2	2	2	—	—	
		Ø8	—	1	1	1	1	1	—	—	—	
	TOTAL		—	1	1	3	7	7	4	2	2	
VIDEO DETECTION POWER/VIDEO		1	1	2	2	4	4	1	1	—		
EVP CABLE (M-138)		1	1	2	2	4	4	1	1	—		
CONDUIT SIZE (EXISTING)		3"(E)	2-3"(E)	2-3"(E)	2-3"(E)	2-3"(E)	3-3"(E)	2-3"(E)	2-3"(E)	3"(E)		
PERCENT FILL (%)		14	11	17	21	30	27	16	11	10		

ALL CONDUIT AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED.  
(E) = EXISTING CONDUIT OR CONDUCTORS


DETECTION SCHEDULE				
1	1-Ø1		9	1-Ø7 2-Ø7
2	1-Ø2 2-Ø2	10	3-Ø7 4-Ø7	
3	3-Ø2 4-Ø2	11	5-Ø7 6-Ø7	
4	5-Ø2	12	1-Ø8 2-Ø8	
5	1-Ø5 2-Ø5	13	3-Ø8	
6	1-Ø6 2-Ø6	14		
7	3-Ø6 4-Ø6	15		
8	5-Ø6 6-Ø6	16		


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NO.	DATE	REVISIONS			

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	28811 ORTEGA HIGHWAY
	SAN JUAN CAPISTRANO, CA
	92675
	(949) 240-3363

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TAIT & ASSOCIATES INC.	
	12/27/2016
Signature	Date

PREPARED BY	
	FEHR & PEERS
	8141 E. Kaiser Boulevard
	Suite 100
	Anaheim, CA 92808
	(714) 941-8800
	DATE 12/27/16
JOSHUA J. PETERMAN	RCE 62301 EXP. 9-30-17

DESIGNED BY	MJ
DRAWN BY	RC
CHECKED BY	JB

P.A. 2.4 - TTM NO. 17564	
STREET IMPROVEMENTS	
CHIQUITA CANYON DRIVE/	
AIROSO STREET	
CONDUCTOR AND POLE SCHEDULES	

SHEET	11
OF	12
SHEETS	
JOB NO.	2402-24

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CONSTRUCTION NOTES (THIS SHEET ONLY):

- 1 FUTURE LOCATION OF TRAFFIC SIGNAL CONTROLLER CABINET. TERMINATE CONDUITS IN PULLBOX.
- 2 FUTURE LOCATION OF TYPE III-BF SERVICE CABINET. TERMINATE CONDUITS IN PULL BOX.
- 3 STUB OUT CONDUIT FOR FUTURE CONNECTION TO SIGNAL POLE(S) OR LOOPS.

REVIEWED FOR CODE COMPLIANCE

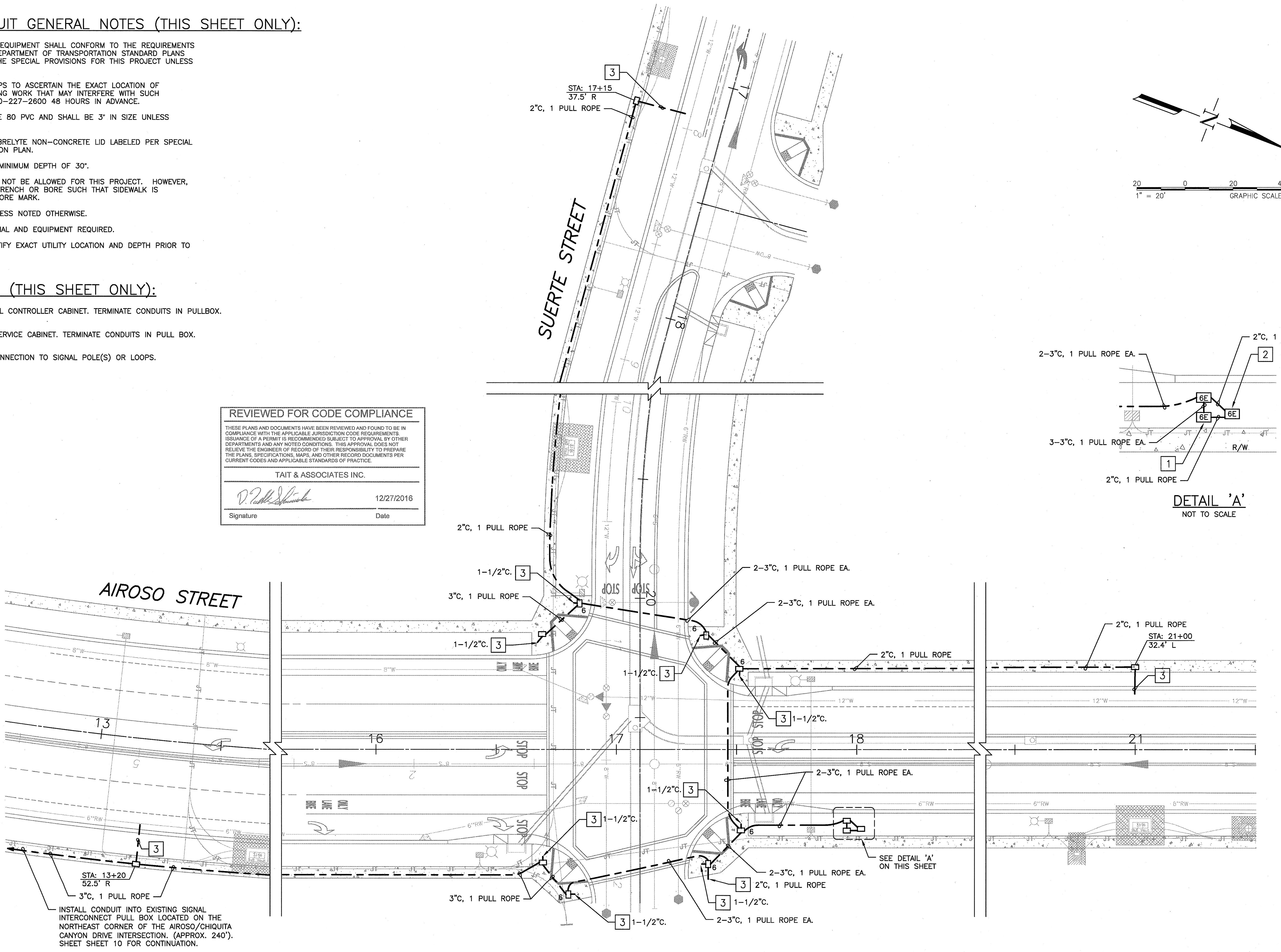
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TAIT & ASSOCIATES INC.




12/27/2016

SignatureDate



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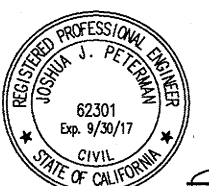
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DATE 12/27/16  
JOSHUA J. PETERMAN RCE 62301 EXP. 9-30-17

DESIGNED BY

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DRAWN BY

RC

CHECKED BY

JB

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STREET IMPROVEMENTS  
AIROSO STREET/  
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TRAFFIC SIGNAL CONDUIT PLAN

SHEET

12

OF

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