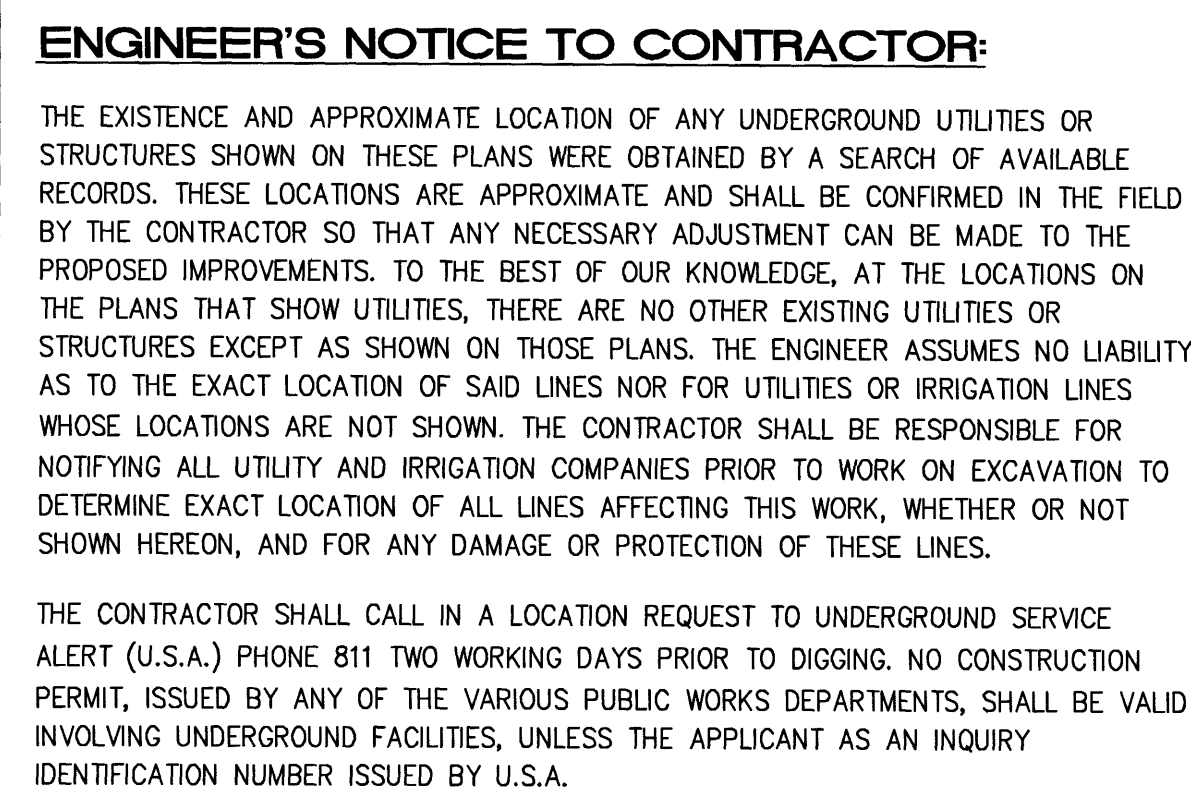
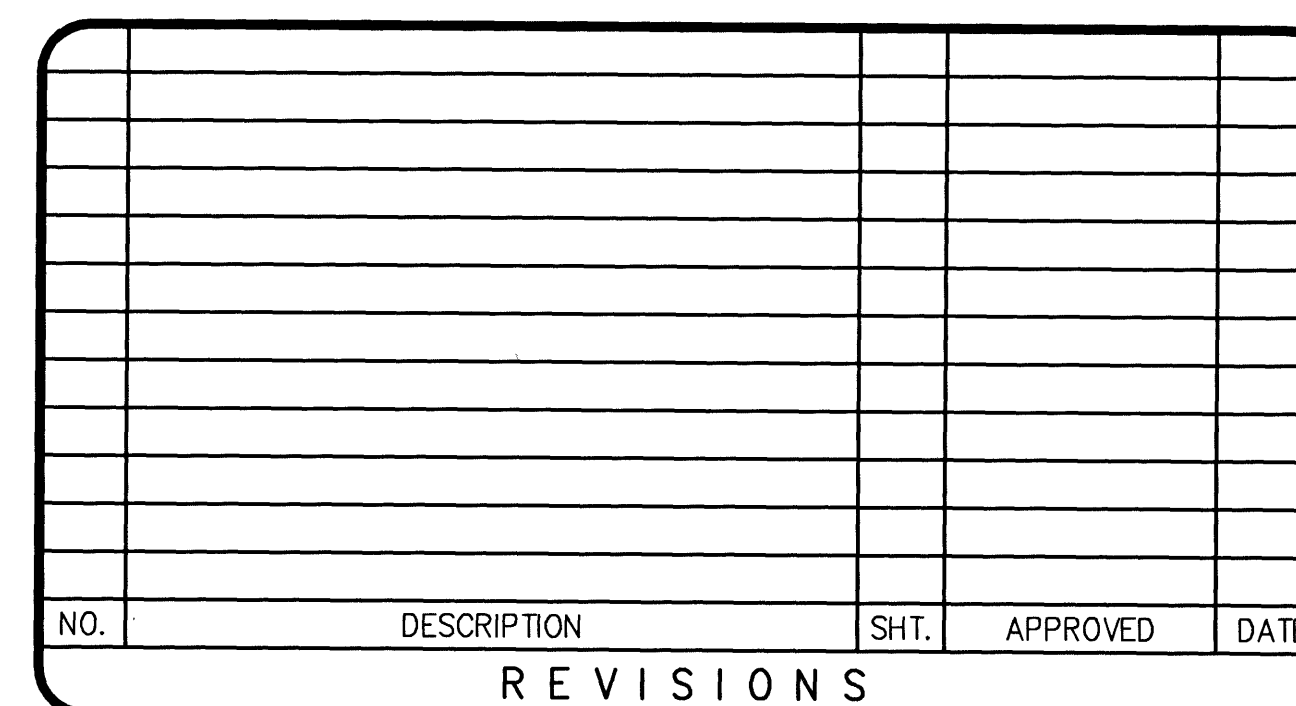




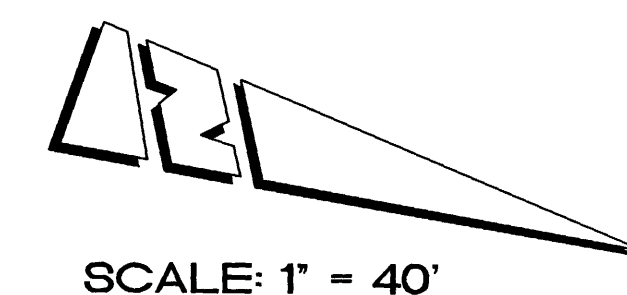
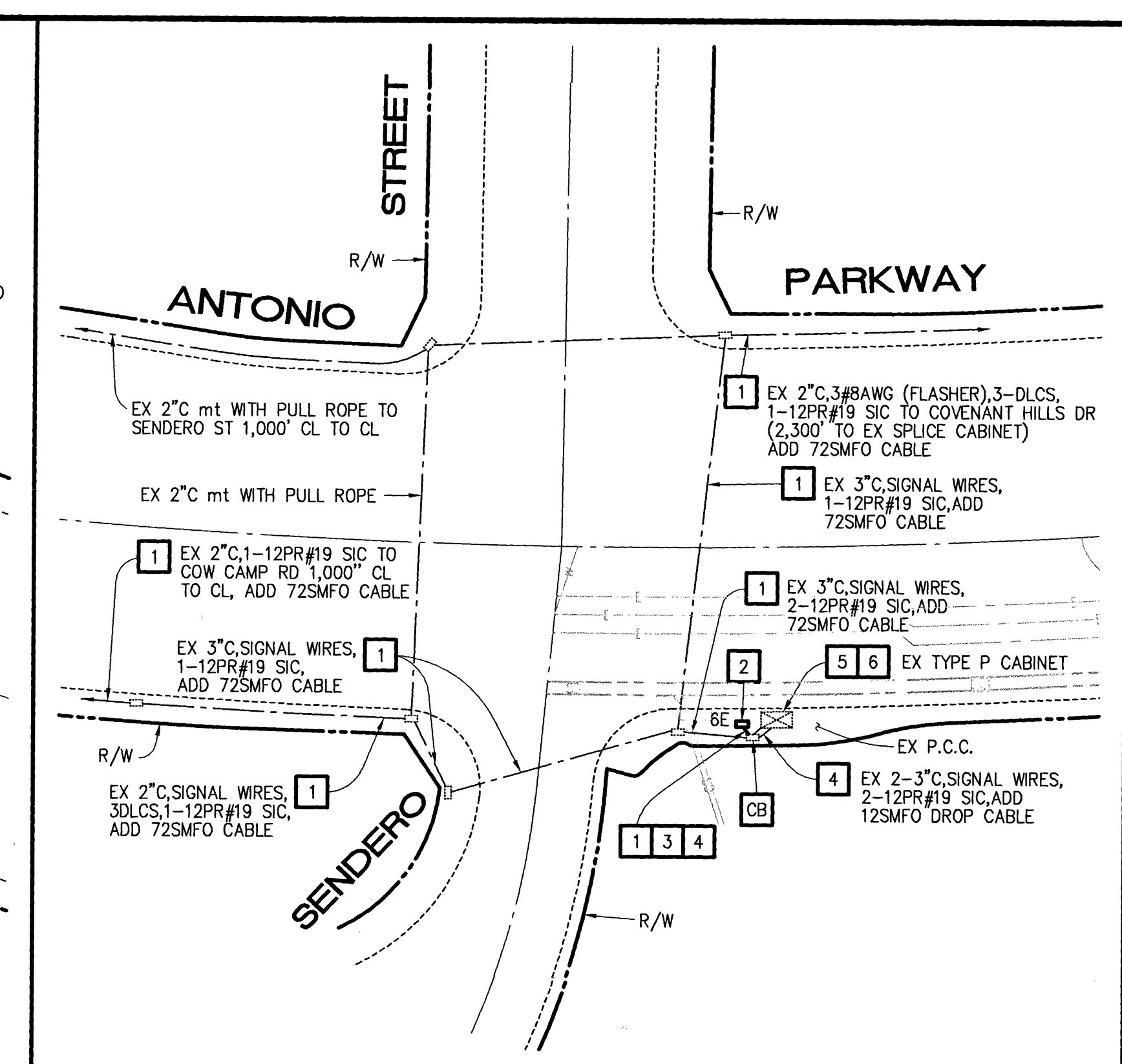
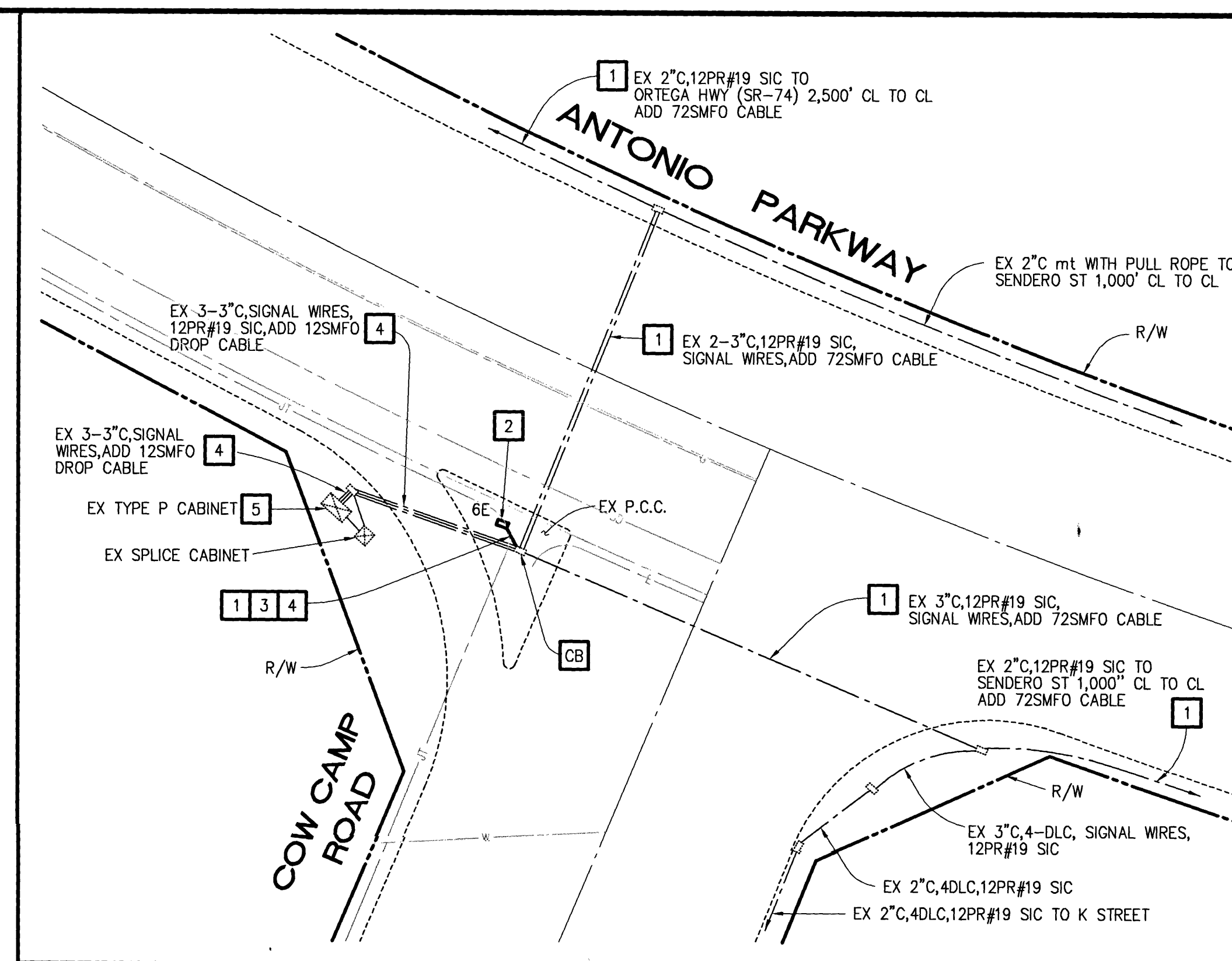
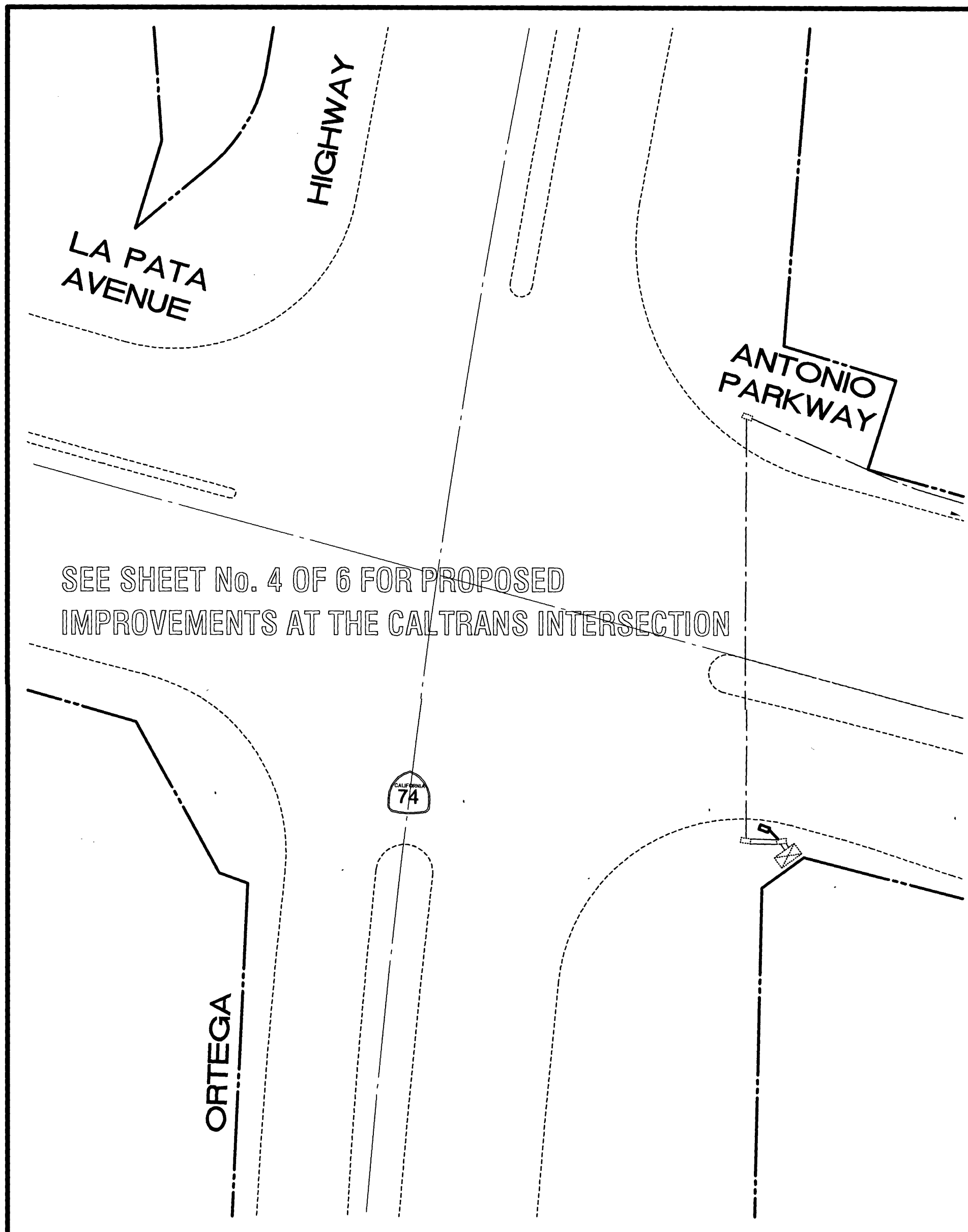
1. ALL WORK SHALL CONFORM TO THE LATEST STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS, CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, COUNTY OF ORANGE SPECIAL PRISONS, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AND AS DIRECTED BY THE COUNTY'S REPRESENTATIVE.
2. LOCATION OF UTILITIES AND SUBSTRUCTURES HAVE BEEN SHOWN FROM A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL PROVIDE UNDERGROUND SERVICE ALERT AT 811, AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL AFFECTED AGENCIES AND UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
4. WHERE DAMAGE IS CAUSED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL AT HIS EXPENSE REPAIR OR REPLACE DAMAGED FACILITIES PROMPTLY IN ACCORDANCE WITH CALTRANS SPECIFICATIONS. IN THE EVENT OF THE SEVERATION OF THE AFFECTED UTILITY, OWNERS AND THE ENGINEER IN THE FIELD, WHERE SIDEWALKS, CURBS, OR OUTTERS ARE TO BE REPAIRED, REPAIRS SHALL BE MADE BY REMOVING AND REPLACING THE ENTIRE SECTION BACK TO THE NEAREST JOINTS AND NOT BY REFINISHING THE DAMAGED PORTION.
5. ALL EXISTING EQUIPMENT AND MATERIALS REMOVED AS PART OF THE UPGRADE SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. EACH FIBER OPTIC CABLE SHALL BE PERMANENTLY IDENTIFIED BY DIRECT LABELING.
7. NEW PULL BOXES SHALL BE NUMBER 6E PER CALTRANS 2012 UPDATE UNLESS OTHERWISE NOTED.
8. NEW CONDUIT SHALL BE PULLED THROUGH OPPOSITE ENDS OF PULL BOXES USING 45° U.L. APPROVED ELBOWS, UNLESS OTHERWISE INDICATED ON THE PLANS.
9. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER THE PRECISE FIELD LOCATIONS OF ALL COMMUNICATION EQUIPMENT PRIOR TO INSTALLATION OF EQUIPMENT OR WIRING.
10. NO LANES MAY BE CLOSED OR OBSTRUCTED AT ANY TIME UNLESS SPECIFICALLY ALLOWED AND AS DIRECTED BY THE ENGINEER.
11. THE CONTRACTOR SHALL ARRANGE TO HAVE A FIBER OPTIC COMMUNICATION TECHNICIAN QUALIFIED TO WORK ON THE COMMUNICATION SYSTEM AND EMPLOYED BY THE MANUFACTURER OR THE MANUFACTURER REPRESENTATIVE, PRESENT AT THE TIME OF THE SYSTEM TURN ON.
12. THE CONTRACTOR SHALL PROVIDE ALL PATCH CORDS AND CABLING WITH APPROPRIATE CONNECTORS TO CONNECT ALL THE EXISTING/PROPOSED EQUIPMENT TO HAVE THE SYSTEM FULLY OPERATIONAL.
13. THE CONTRACTOR SHALL PROVIDE SYSTEM INTEGRATION AT COUNTY'S TRAFFIC MANAGEMENT CENTER (TMC) WITH THE PROPOSED EQUIPMENT. THE CONTRACTOR SHALL INSTALL THE REQUIRED COMMUNICATION SYSTEM AND PROVIDE A COMPLETE OPERATIONAL SYSTEM WITH MINIMUM DISRUPTION TO THE EXISTING COMMUNICATION SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH THE COUNTY OF ORANGE PUBLIC WORKS DEPARTMENT FOR EQUIPMENT AND INSTALLATION REQUIREMENTS.



W. O. NO.
DWG. NO.

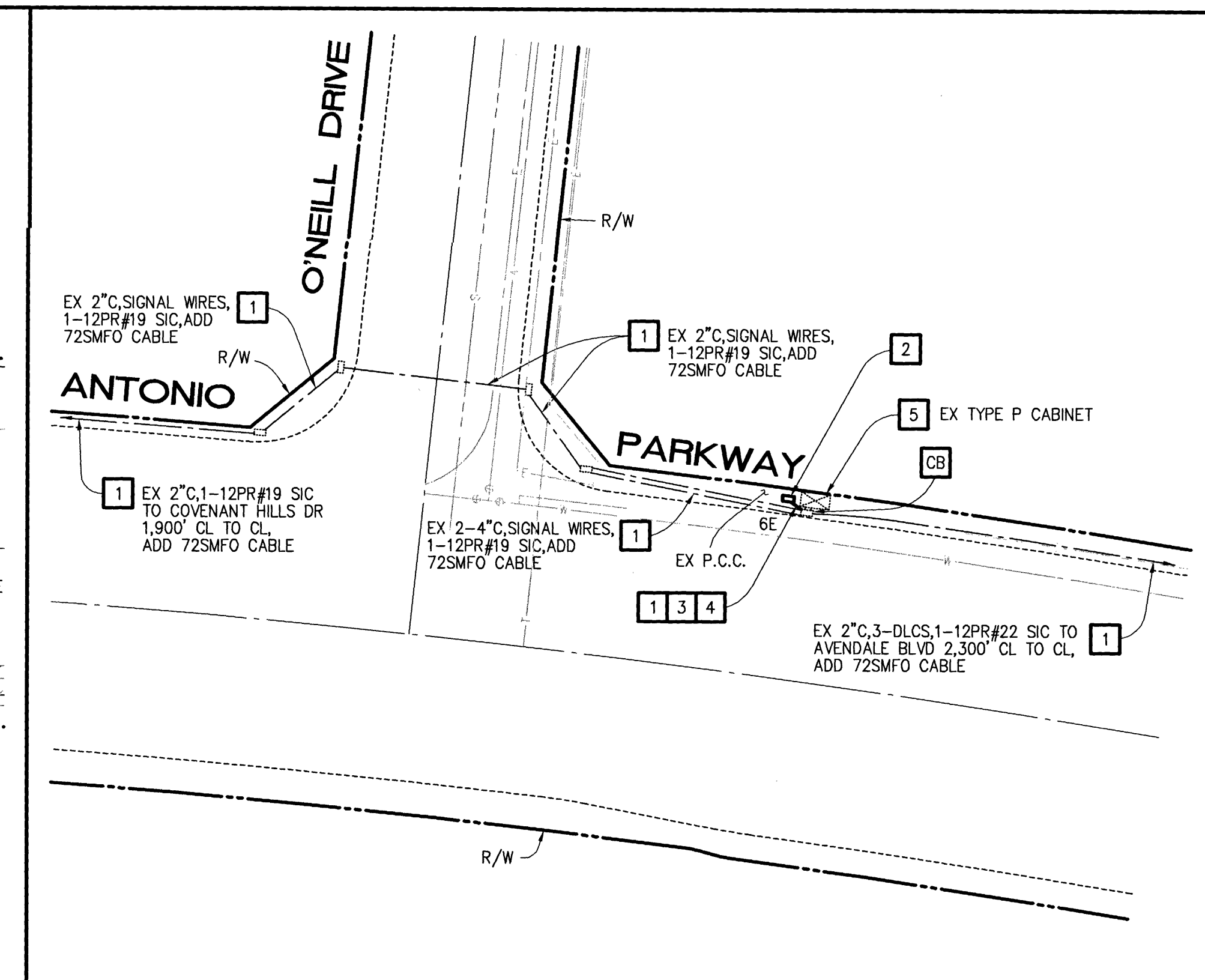
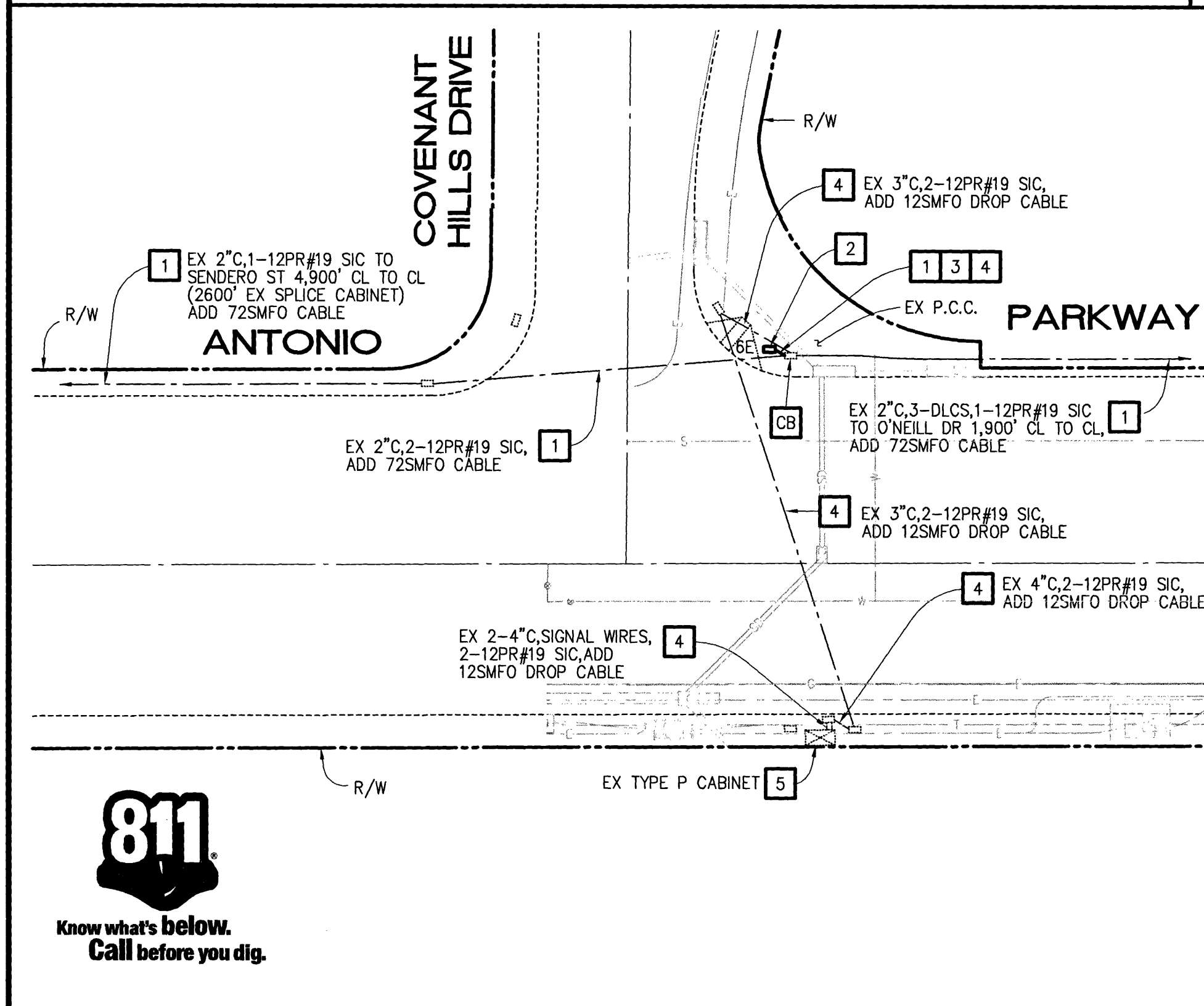
SHEET 1 OF 6

FILE NAME: Antonio_Co_Title.dwg ACA Job No.: 689-019 Print Date: 11/05/2014 Last Revision: 11/05/2014



SCALE: 1" = 40'

NOTE: THESE PLANS ARE ACCURATE FOR SIGNAL COMMUNICATIONS WORK ONLY

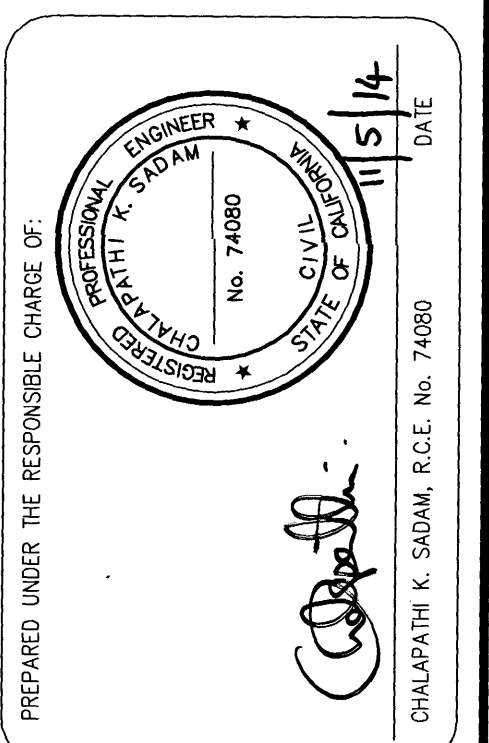


CONSTRUCTION NOTES (THIS SHEET):

- 1 - FURNISH AND INSTALL 72SMFO CABLE TRUNK LINE WITH PULL ROPE THROUGH NEW OR EXISTING CONDUITS. PROTECT IN PLACE EXISTING SIGNAL CABLES AND SIGNAL INTERCONNECT CABLE (SIC).
- 2 - FURNISH AND INSTALL #6E PULL BOX ADJACENT TO EXISTING INTERCONNECT OR SIGNAL PULL BOX. INSTALL FIBER OPTIC SPLICING ENCLOSURE (CORNING SCF-6C22-01) IN NEW #6E PULL BOX. FUSION SPLICING NECESSARY FOR INTENDED OPERATION. SEE FIBER ASSIGNMENTS ON SHEET 6 OF 6.
- 3 - INSTALL 3" CONDUIT BETWEEN NEW #6E PULL BOX AND EXISTING PULL BOX AS SHOWN ON PLAN.
- 4 - FURNISH AND INSTALL 12SMFO DROP CABLE WITH PULL ROPE THROUGH NEW OR EXISTING CONDUITS. PROTECT IN PLACE EXISTING SIGNAL CABLES AND SIGNAL INTERCONNECT CABLE (SIC).
- 5 - FURNISH AND INSTALL ETHERWAN EX71620-A0B FIBER SWITCH COMPLETE IN EXISTING CONTROLLER CABINET. FURNISH AND INSTALL FIBER TERMINATION UNIT (CORNING SPH-01P) COMPLETE WITH ONE 12-FIBER SC CONNECTOR PANEL (CCH-CP12-59) AND SC-SC DUPLEX FIBER JUMPERS. TERMINATE NECESSARY FIBERS FOR INTENDED OPERATION. SEE FIBER ASSIGNMENTS ON SHEET 6 OF 6.
- 6 - FURNISH AND INSTALL AXIS 4-CHANNEL ENCODER FOR THE EXISTING VIDEO DETECTION CAMERAS IN EXISTING CONTROLLER CABINET. FURNISH AND INSTALL NECESSARY CABLES AND CONNECTORS FOR INTENDED OPERATION.
- CB - INSTALL CONDUIT INTO EXISTING PULL BOX.

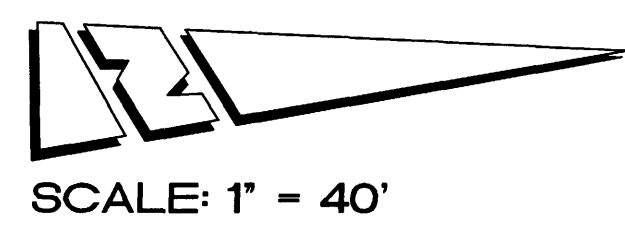
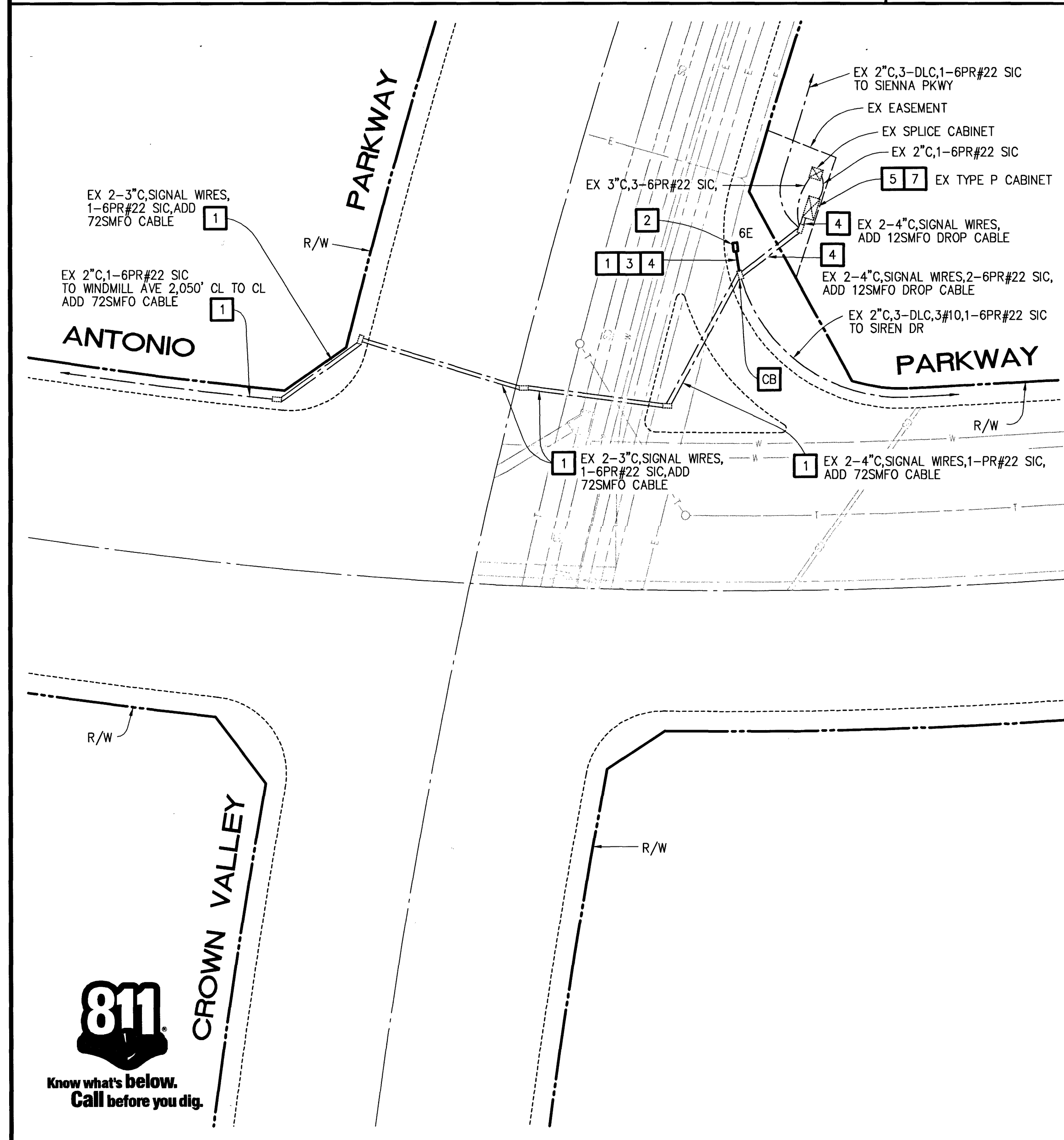
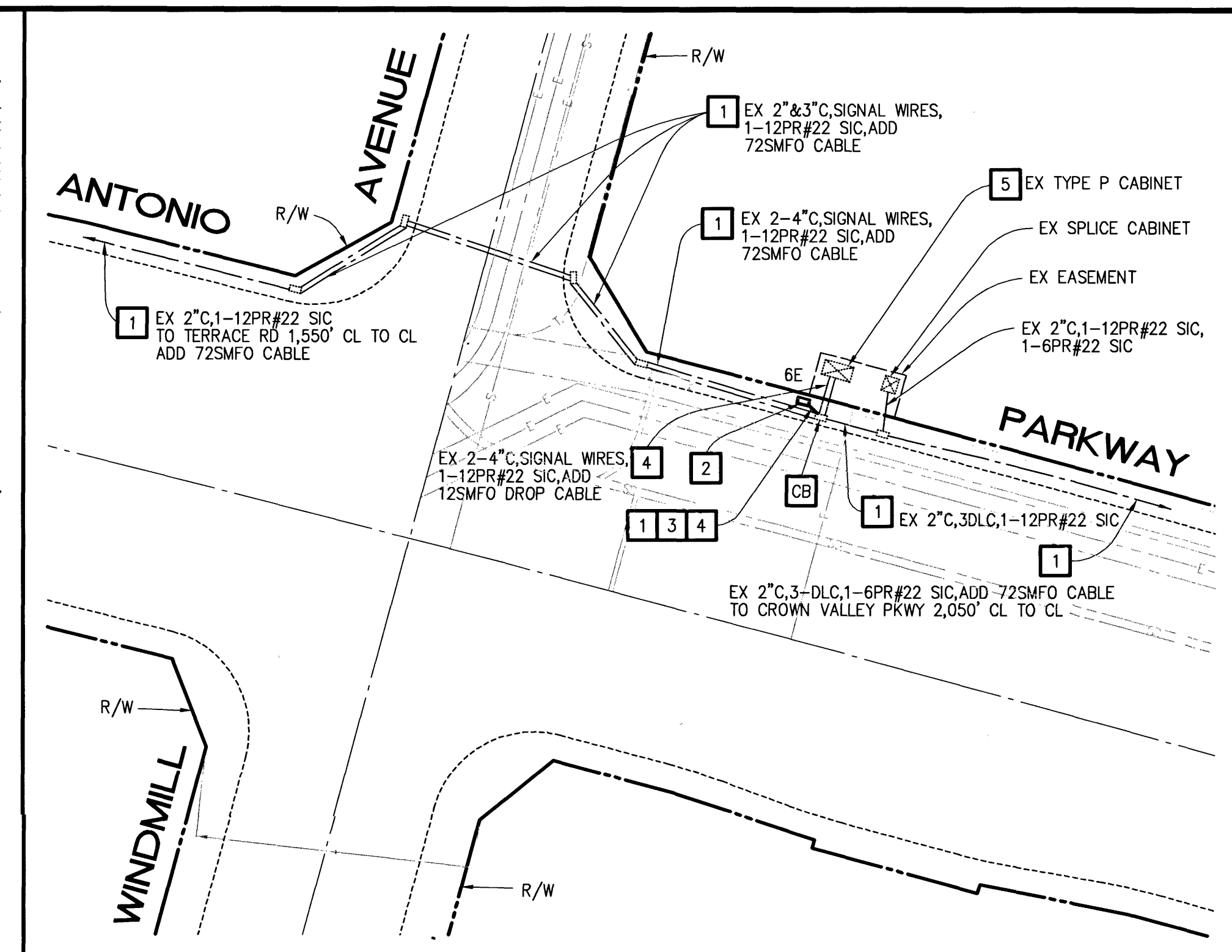
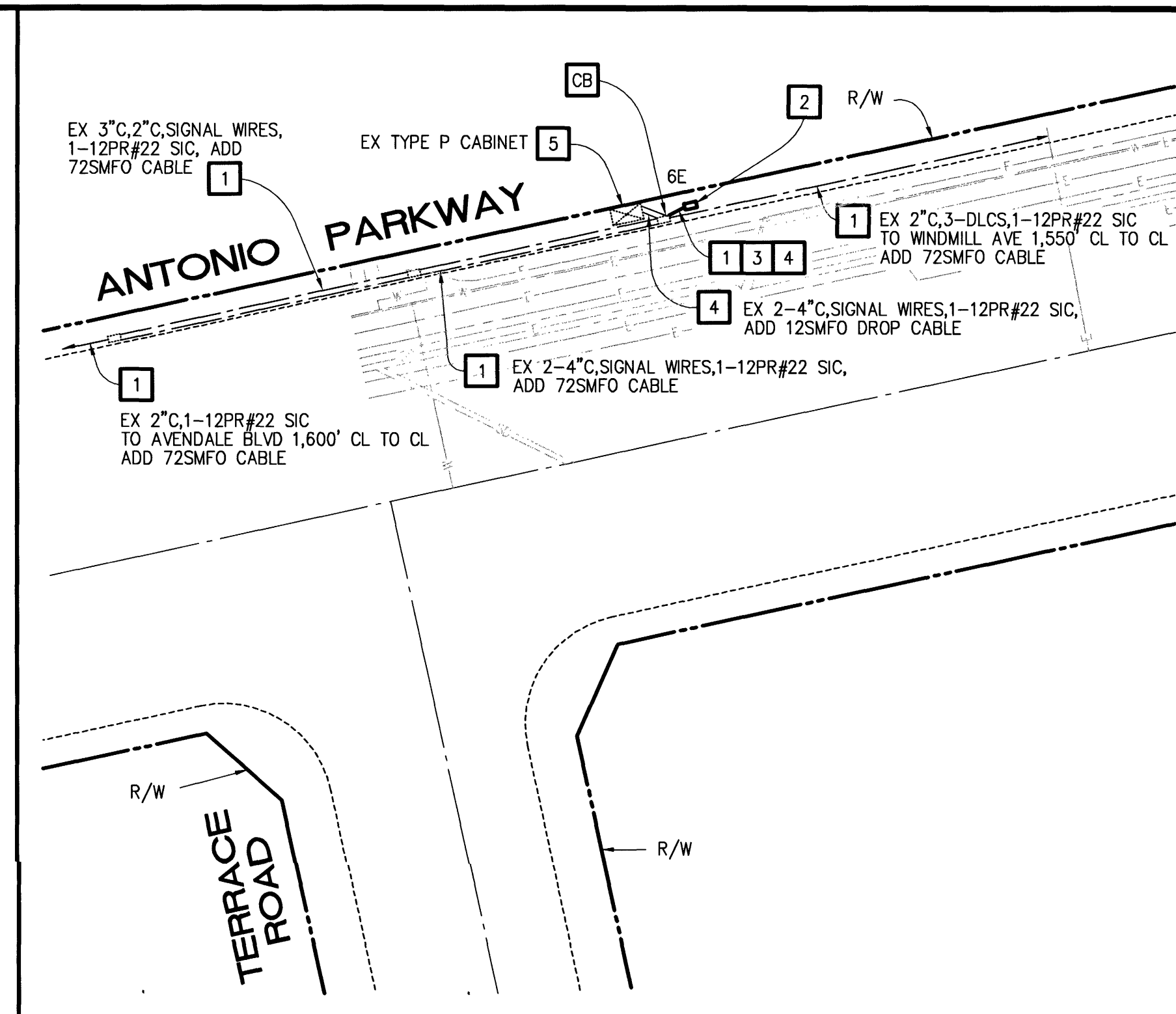
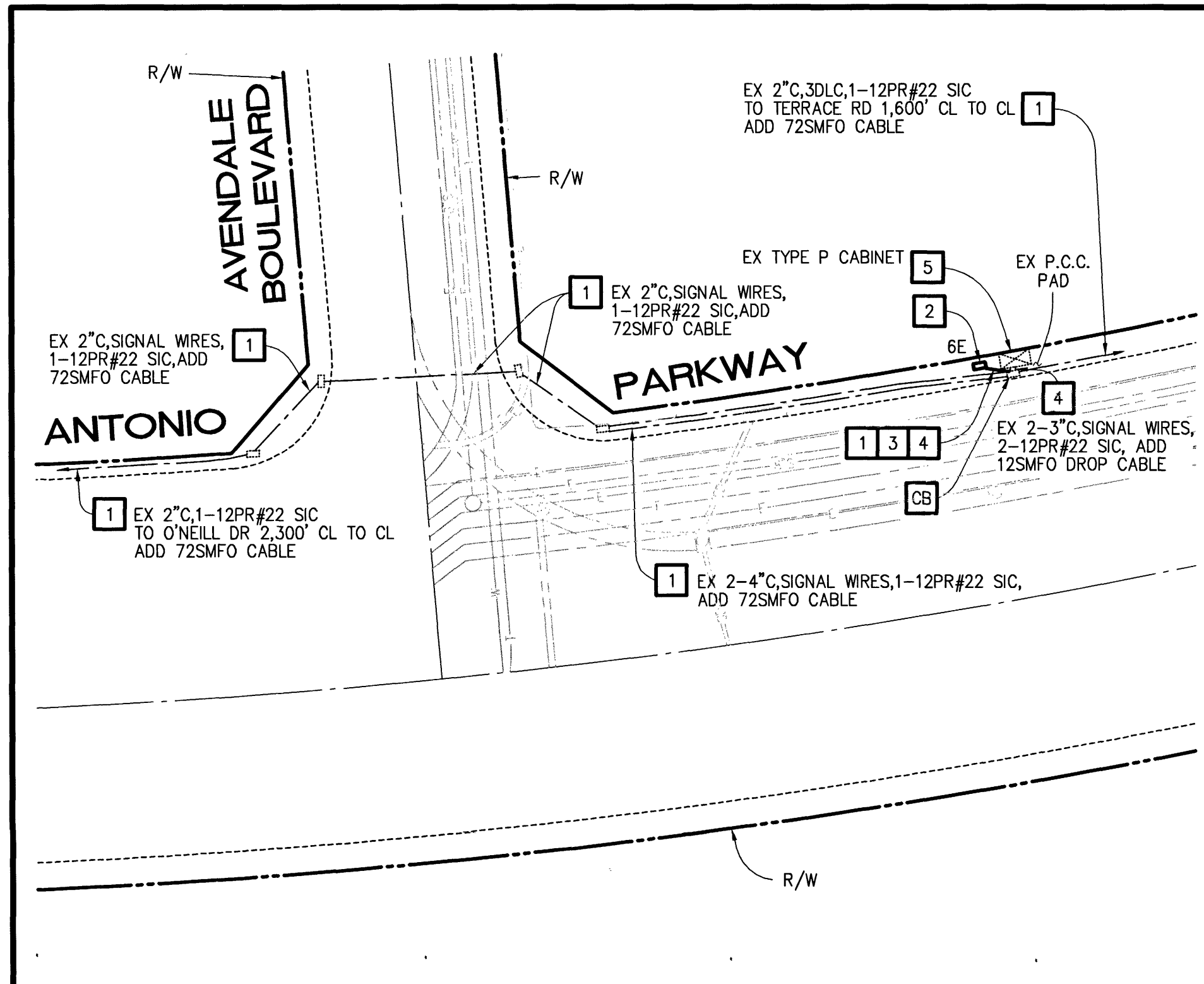


MARK	DESCRIPTION	DATE	APPR.



DESIGNED BY: IGNACIO SANCHEZ	CHECKED BY: IGNACIO SANCHEZ	DATE: 11/15/14
DRAWN BY: IGNACIO SANCHEZ	DRAWING CODE: FILE NAME:	SCALE: AS NOTED
COUNTY OF ORANGE OC PUBLIC WORKS	PLANS PREPARED BY: ALBERT GARCIA TRAFFIC SIGNALS & COMMUNICATIONS ENGINEERS 211 E. Imperial Ave., Suite 205 Fullerton, CA 92635	PLANT DATE: PLOT DATE:

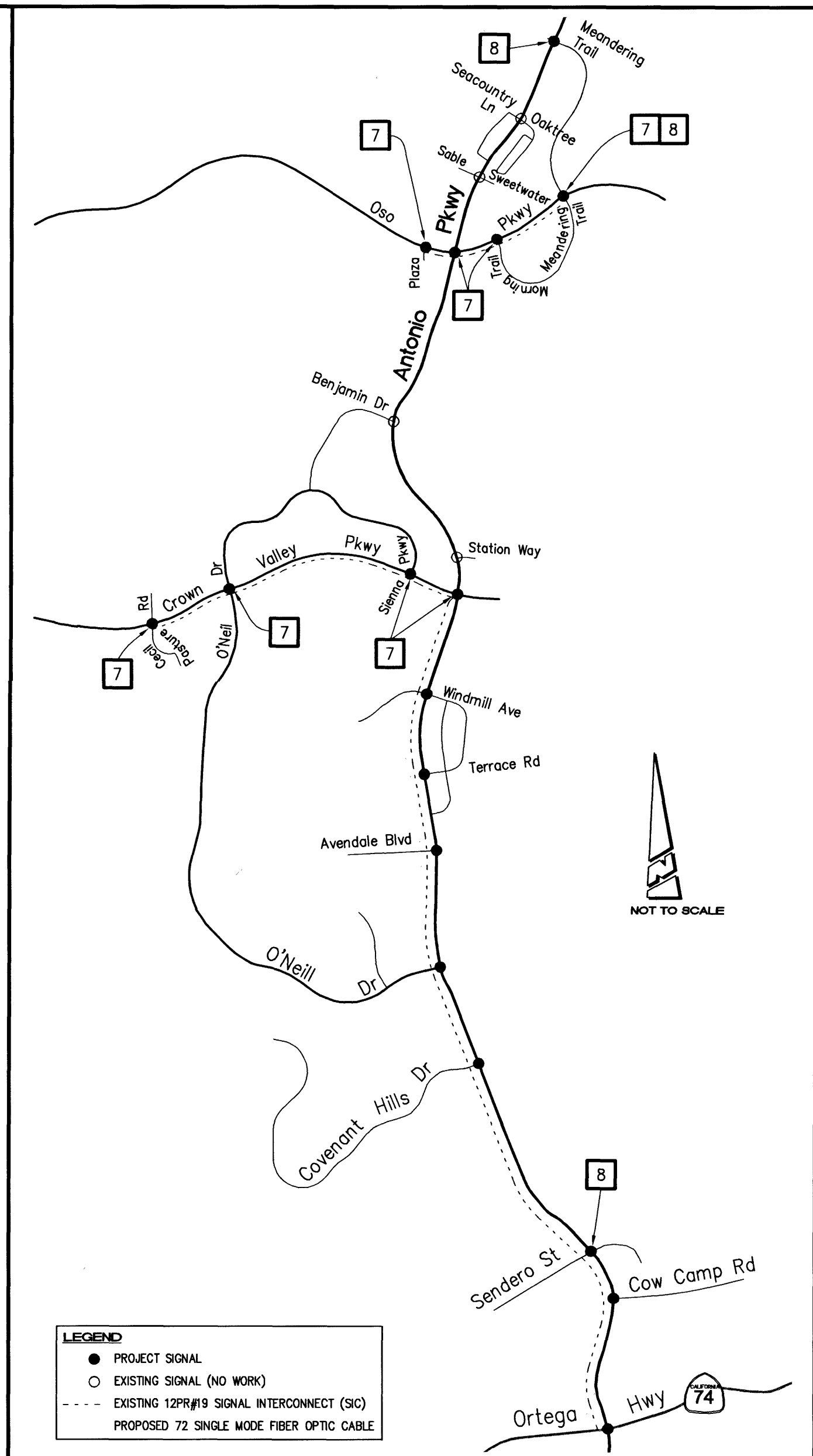
ANTONIO PARKWAY CORRIDOR IMPROVEMENTS PROJECT
TRAFFIC SIGNAL COMMUNICATIONS PLAN



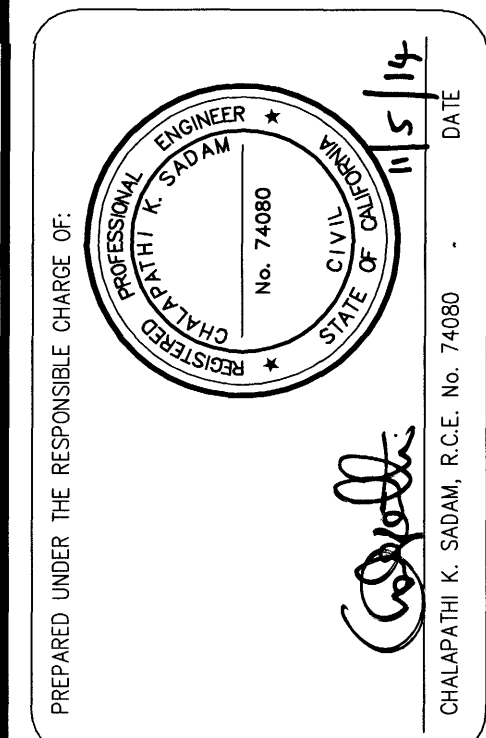
CONSTRUCTION NOTES (THIS SHEET):

- NOTE 6 NOT USED IN THIS SHEET.
- 1 - FURNISH AND INSTALL 72SMFO CABLE TRUNK LINE WITH PULL ROPE THROUGH NEW OR EXISTING CONDUITS. PROTECT IN PLACE EXISTING SIGNAL CABLES AND SIGNAL INTERCONNECT CABLE (SIC).
 - 2 - FURNISH AND INSTALL #6E PULL BOX ADJACENT TO EXISTING INTERCONNECT OR SIGNAL PULL BOX. INSTALL FIBER OPTIC SPLICE ENCLOSURE (CORNING SCF-6C22-01) IN NEW #6E PULL BOX. FUSION SPLICE NECESSARY FIBERS FOR INTENDED OPERATION. SEE FIBER ASSIGNMENTS ON SHEET 6 OF 6.
 - 3 - INSTALL 3\" CONDUIT BETWEEN NEW #6E PULL BOX AND EXISTING PULL BOX AS SHOWN ON PLAN.
 - 4 - FURNISH AND INSTALL 12SMFO DROP CABLE WITH PULL ROPE THROUGH NEW OR EXISTING CONDUITS. PROTECT IN PLACE EXISTING SIGNAL CABLES AND SIGNAL INTERCONNECT CABLE (SIC).
 - 5 - FURNISH AND INSTALL ETHERWAN EX71620-A0B FIBER SWITCH COMPLETE IN EXISTING CONTROLLER CABINET. FURNISH AND INSTALL FIBER TERMINATION UNIT (CORNING SPH-01P) COMPLETE WITH ONE 12-FIBER SC CONNECTOR PANEL (CCH-CP12-59) AND SC-SC DUPLEX FIBER JUMPERS. TERMINATE NECESSARY FIBERS FOR INTENDED OPERATION. SEE FIBER ASSIGNMENTS ON SHEET 6 OF 6.
 - 7 - FURNISH AND INSTALL NEW ETHERWAN ED3175-82B DSL ETHERNET SWITCH IN EXISTING CONTROLLER CABINET.
 - 8 - FURNISH AND INSTALL NEW WIFI SPEED DETECTION/TRAVEL TIME UNIT AND ANTENNA. EXACT LOCATION OF THE ANTENNA WILL BE DETERMINED IN THE FIELD BY THE MANUFACTURER REPRESENTATIVE.
 - CB - INSTALL CONDUIT INTO EXISTING PULL BOX.

NOTE: THESE PLANS ARE ACCURATE FOR SIGNAL COMMUNICATIONS WORK ONLY



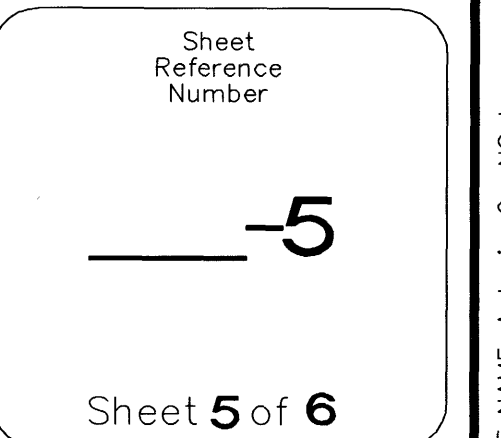
MARK	DESCRIPTION	DATE	APPR.

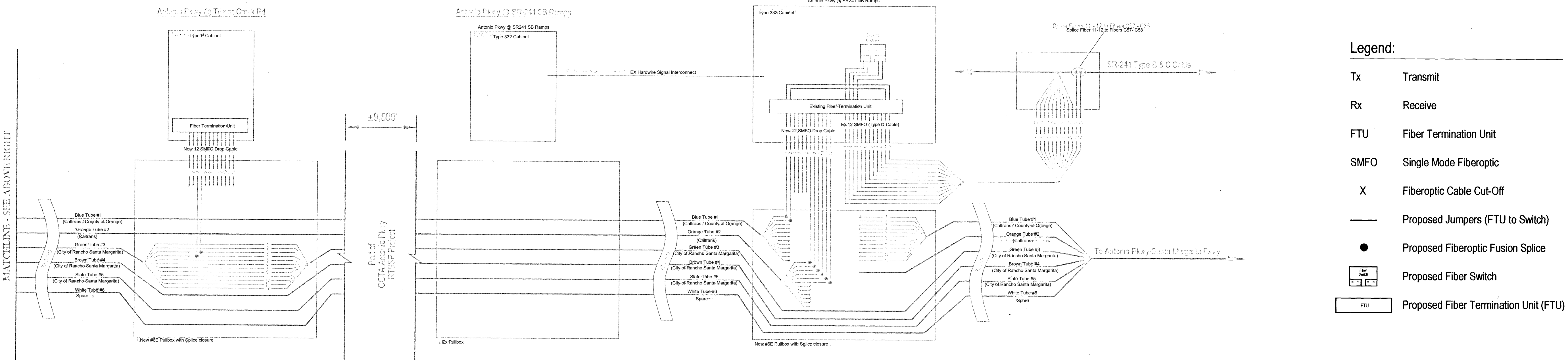
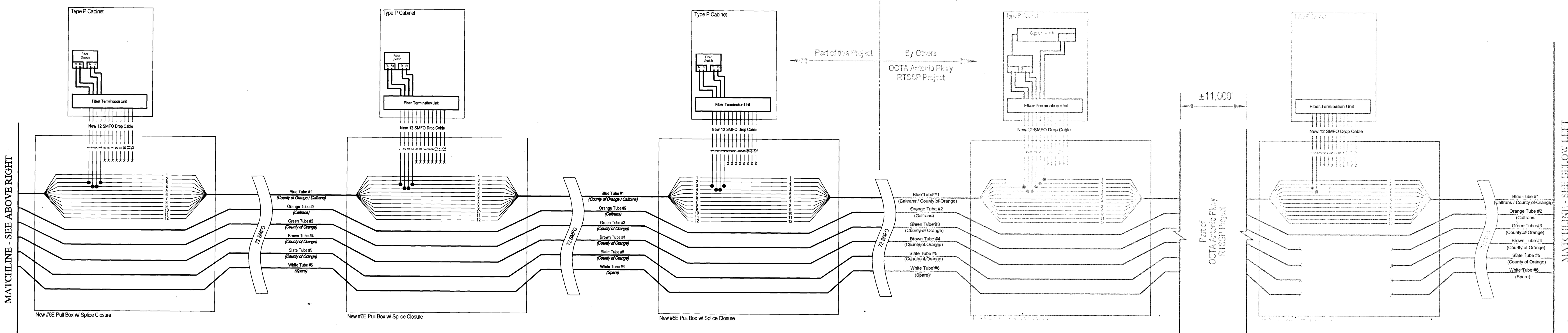
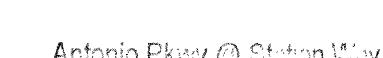
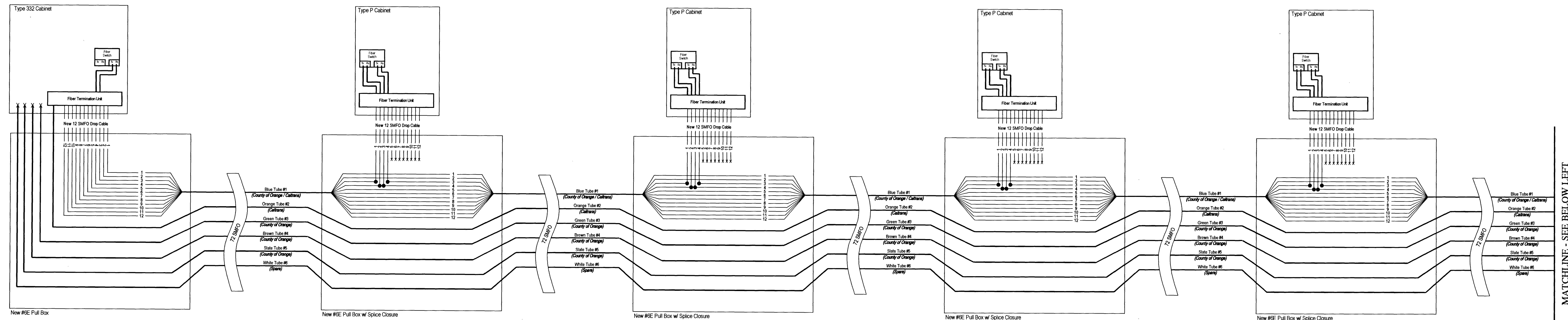
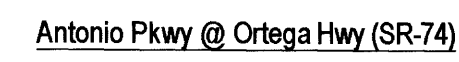


DESIGNED BY: IGNACIO SANCHEZ	CHECKED BY: CHALAP SADAM
DRAWN BY: IGNACIO SANCHEZ	DRAWING CODE:
FILE NAME:	SCALE: AS NOTED
PLOT DATE:	DATE: 11/5/14

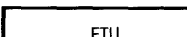
ANTONIO PARKWAY CORRIDOR IMPROVEMENTS PROJECT
TRAFFIC SIGNAL COMMUNICATIONS PLAN

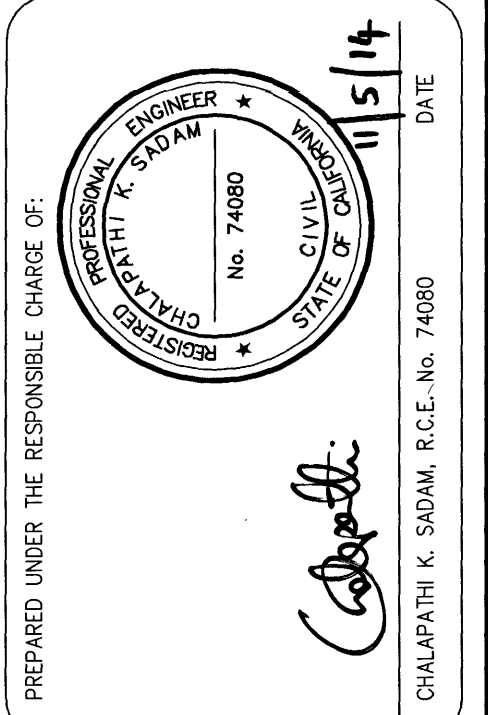
COMMUNICATION NETWORK SCHEMATIC





Legend:

Tx	Transmit
Rx	Receive
FTU	Fiber Termination Unit
SMFO	Single Mode Fiberoptic
X	Fiberoptic Cable Cut-Off
————	Proposed Jumpers (FTU to Switch)
●	Proposed Fiberoptic Fusion Splice
	Proposed Fiber Switch
	Proposed Fiber Termination Unit (FTU)

[illegible]

COUNTY OF ORANGE OC PUBLIC WORKS		PLANS PREPARED BY: ALBERT & ASSOCIATES older@gray.com (714) 942-1500 FAX 949-450-1500	
DESIGNED BY:	RUBEN PERALES	CHECKED BY:	CHALAP SADAM
DRAWN BY:	RUBEN PERALES	DRAWING CODE:	
FILE NAME:			
PLOT DATE:	SCALE:	NO SCALE	

ANTONIO PARKWAY CORRIDOR
IMPROVEMENTS PROJECT

FIBER
ASSIGNMENTS
PLAN

Sheet
Reference
Number

_____ - 6

Sheet 6 of 6