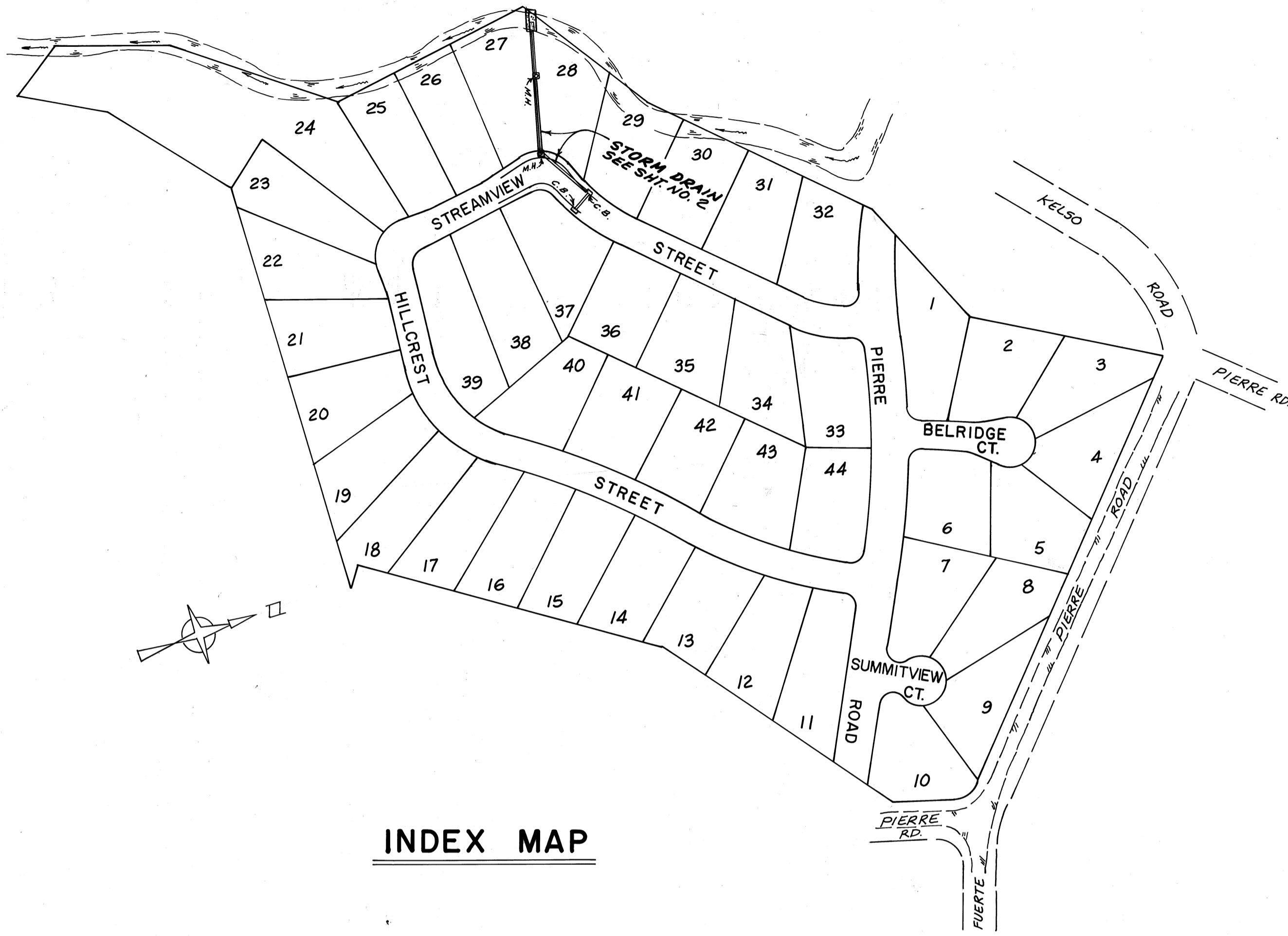
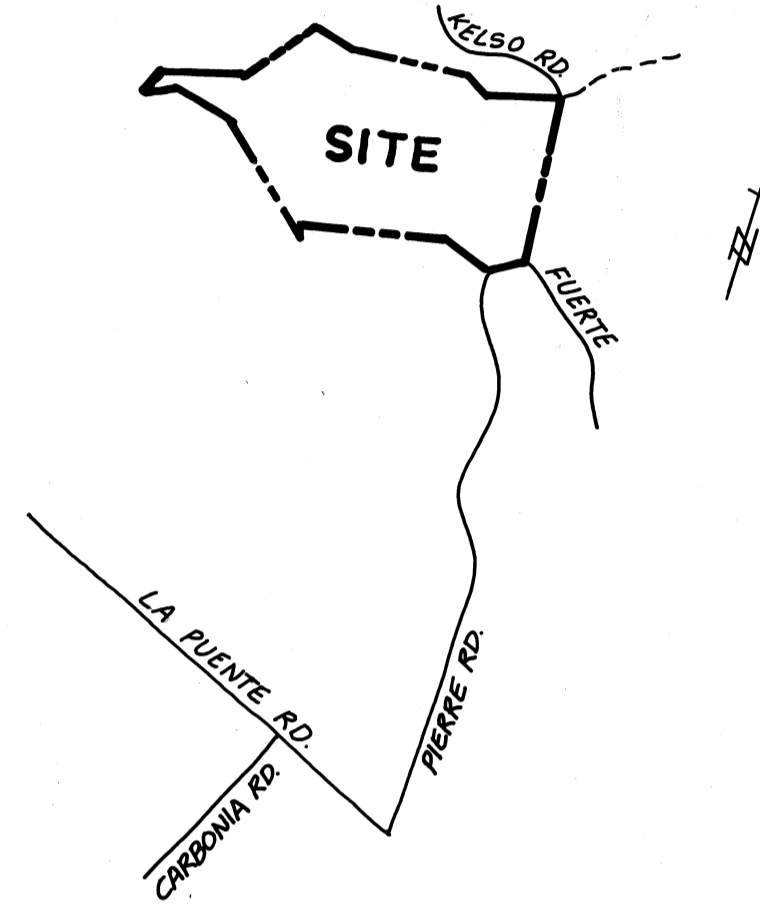


STORM DRAIN IMPROVEMENT PLANS

TRACT NO. 39765 CITY OF WALNUT



INDEX MAP



VICINITY MAP

CONST. NOTES & QUANTITY ESTIMATE

	DESCRIPTION	QUANTITY	UNIT
①	CONST. 18" φ RCP 1350-D	45	L.F.
②	CONST. 24" φ RCP 1500-D	250	L.F.
③	CONST. MANHOLE PER L.A.C.F.C.D. STD. DRWG. NO. 2-D102, M.H.N01	2	EA.
④	CONST. PIPE ENTRANCE PER DETAIL SHT. 2. (APPROX. 7 C.Y. CONC.)	1	EA.
⑤	CONST. RIP-RAP PER DETAIL SHT. 2	145	TON
⑥	CONST. CONC. CUT-OFF WALL PER DETAIL SHT. 2	1	EA.

STORM DRAIN NOTES

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEA LEVEL DATUM OF 1929. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1902 EDITION" W/1983 SUP. AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE CITY ENGINEER.
2. ALL REINFORCED CONCRETE PIPE SHALL BE BEDDED IN ACCORDANCE WITH STANDARD DRAWING 2D-77 UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER BY TELEPHONE (714) 594-9702 AT LEAST 48 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
4. REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE STEEL AS PER A.S.T.M. A-615 GRADE 60.
5. ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AN ULTIMATE 28 DAYS COMPRESSIVE STRENGTH OF 3000 PSI.
6. THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTANANCE UNTIL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT TO GRADE, AND THE SYSTEM IS CLEANED TO THE SATISFACTION OF THE CITY ENGINEER.
7. CONTRACTOR TO VERIFY ELEVATIONS OF ANY EXISTING WATER PIPELINES AND GAS LINES PRIOR TO ANY STORM DRAIN CONSTRUCTION.
8. ALL PIPES SHALL BE EMBEDDED A MIN. OF 5" INTO HEADWALLS OR OTHER STRUCTURES.
9. FINISH ALL EXPOSED CONCRETE EDGES WITH 3/4" CHAMFERS.
10. ALL STEEL THAT IS TO BE CONTINUOUS SHALL HAVE A MIN. LAP AT SPLICES OF 30 BAR DIAMETER.

RIPRAP NOTES

1. ROCKS FOR GROUTED RIPRAP SHALL BE GOOD QUALITY BROKEN CONCRETE AND/OR RIVER RUN ROCK. THE SMALLEST DIMENSION SHALL EXCEED 3 INCHES AND THE LARGEST DIMENSION SHALL NOT EXCEED 18 INCHES. THE LARGEST DIMENSION SHALL NOT EXCEED 4 TIMES THE SMALLEST DIMENSION.
 2. THERE SHALL BE A GROUT BED OF AT LEAST 2 INCHES BENEATH THE FIRST LAYER OF ROCK. ALL THE VOIDS BETWEEN THE ROCKS SHALL BE FILLED WITH GROUT. MAXIMUM SPACING BETWEEN ROCKS SHALL BE 2 INCHES.
 3. SURFACE ROCKS SHALL BE IMBEDDED FROM 1/2 TO 2/3 OF THEIR MAXIMUM DIMENSION.
- NOTE: CONCRETE MAY BE SUBSTITUTED FOR THE GROUT.

BASIS OF BEARINGS

THE NORTHWESTERLY BOUNDARY OF TR. NO. 32840 ON FILE IN BOOK 987, PAGES 82 THRU. 86 INCLUSIVE, OF MAPS, RECORDS OF L.A. COUNTY, SHOWN THEREON AS N 53° 52' 08" E

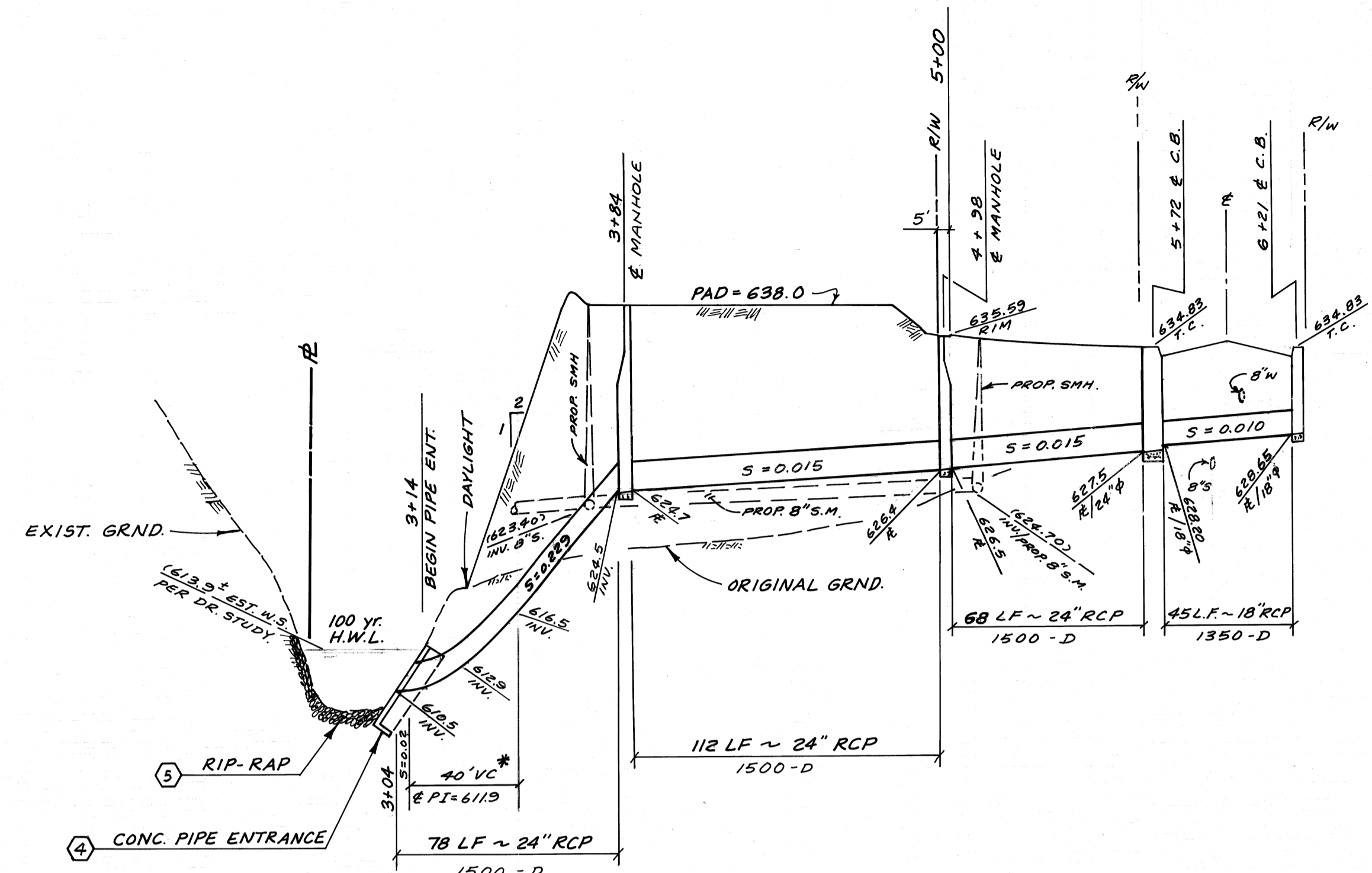
BENCH MARK

L.A.C.R.D.B.M. (NO. 86 1774 COVINA 1970) L&T IN CONC. HDWL AT N.W. COR. LA PUENTE RD. & PIERRE RD. 25' N. 30' W & INTR. MKD. (BM).

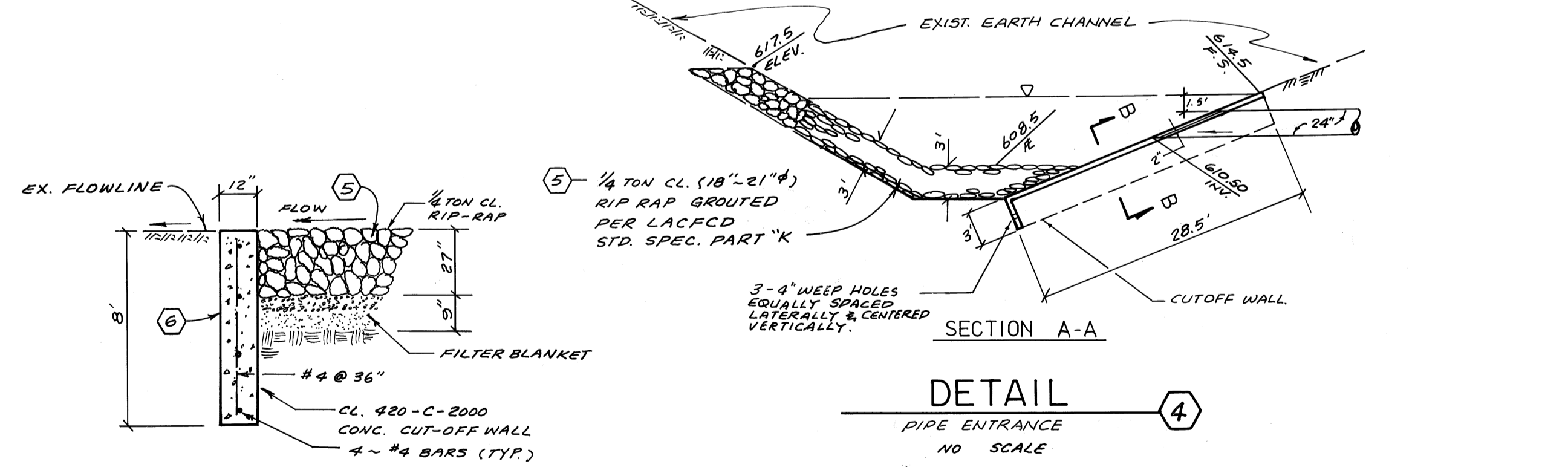
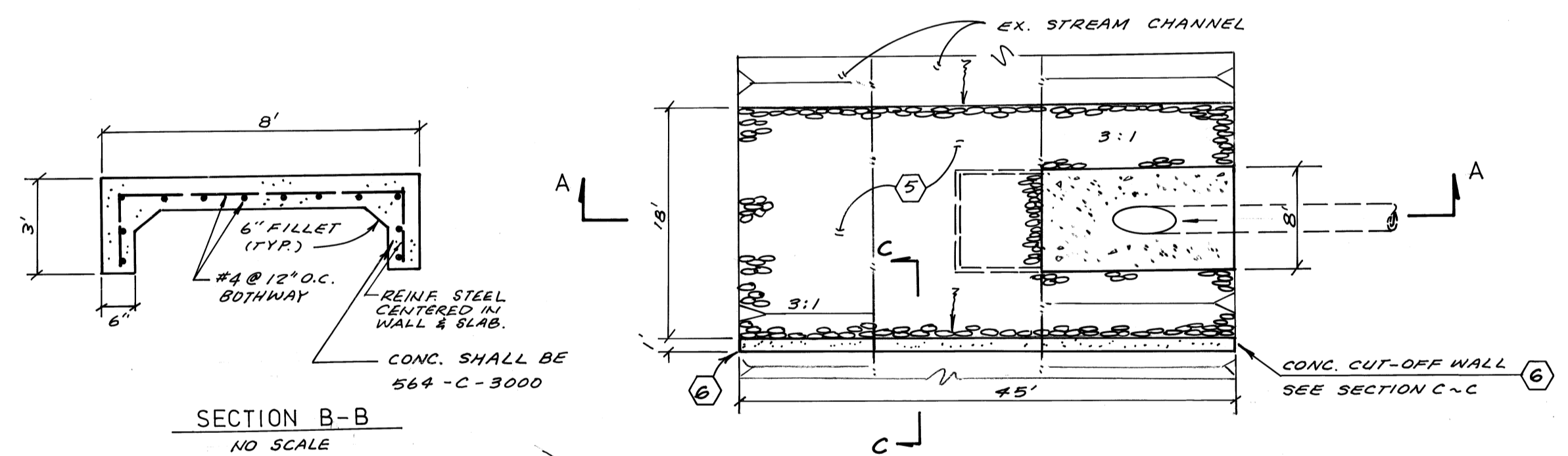
PREPARED BY: TOAL ENGINEERING, INC. 139 AVENIDA NAVARRO P.O. BOX 3878 SAN CLEMENTE, CALIF. 92672 Phone (714) 492-8586 Raymond O. Toal 7/3/84 RCE I6889	REVISIONS _____ _____ _____ DATE
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NOTE:
IF CONSTRUCTION OF IMPROVEMENTS AS SHOWN HEREON ARE NOT INITIATED WITH 18 MONTHS OF APPROVAL DATE, THESE PLANS ARE SUBJECT TO RENEW BY THE CITY.

CITY OF WALNUT			
INDEX MAP, VICINITY MAP, STORM DRAIN NOTES, QUANTITIES, AND DETAILS			
APPROVED BY: <i>[Signature]</i> CITY ENGINEER	DATE: 3/20/85 RCE 16889	TR. NO. 39765	DWG. NO. _____ SHT 1 OF 2 SHTS JOB NO. 4680



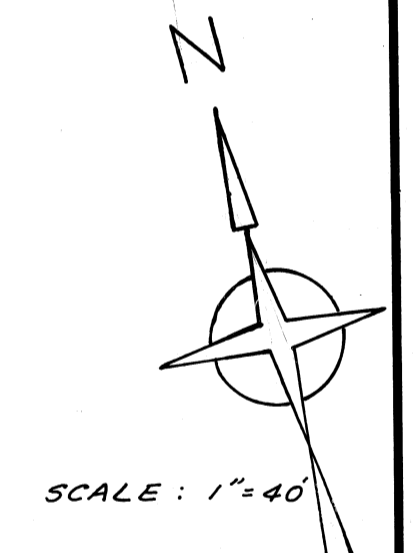
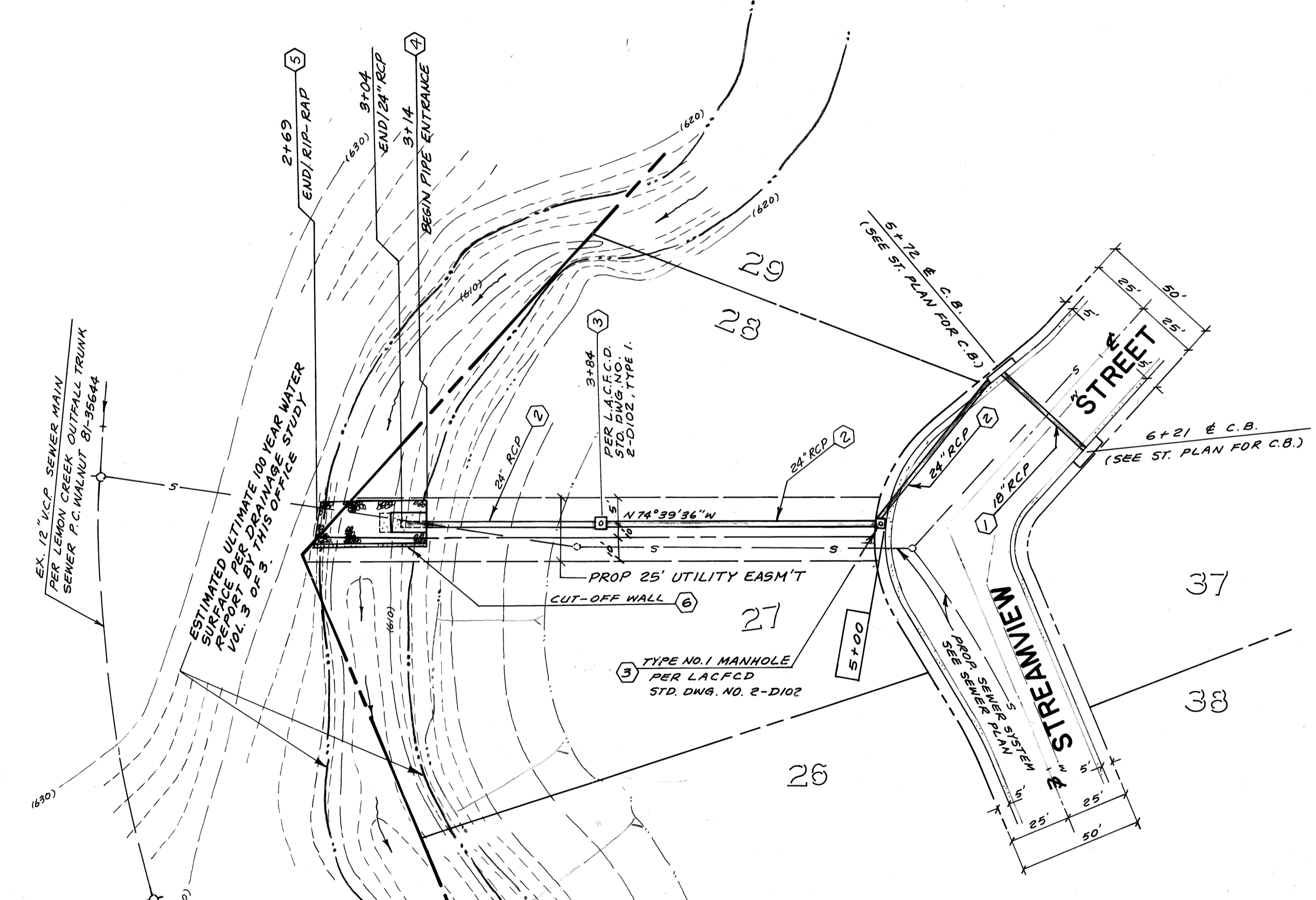
NOTE: * USE 4' LENGTH PIPES TO FORM VERT. CURVE.
 SCALE: 1" = 40' HORIZ.
 1" = 8' VERT.



SECTION C-C
 (E) CONC. CUT-OFF WALL
 NO SCALE

HYDRAULIC CHART 50 YEAR FREQUENCY

REACH	Q	PIPE	FRICTION SLOPE	VELOCITY F.P.S.
3+04 ~ 3+85	26.6 CFS	24"	4.4% 15'	8.31 FPS
3+85 ~ 5+00	26.6 CFS	24"	1.50 %	10.8 FPS
5+00 ~ 5+73	26.6 CFS	24"	1.18 %	8.5 FPS
5+73 ~ 6+22	12.7 CFS	18"	1.24 %	7.2 FPS



PREPARED BY:
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 SAN CLEMENTE, CALIF. 92672
 Phone (714) 492-8586
 Raymond D. Toal 7/9/84 RCE 16889

CITY OF WALNUT	
PLAN AND PROFILE STORM DRAIN 24" ST. DR. AT LOT 28	
APPROVED BY CITY ENGINEER <i>Paul [Signature]</i>	DATE 3/20/85 RCE 16889
TR. NO. 39765	DWG. NO. SHT 2 OF 2 SHTS

No.	Description	Approved By	Date