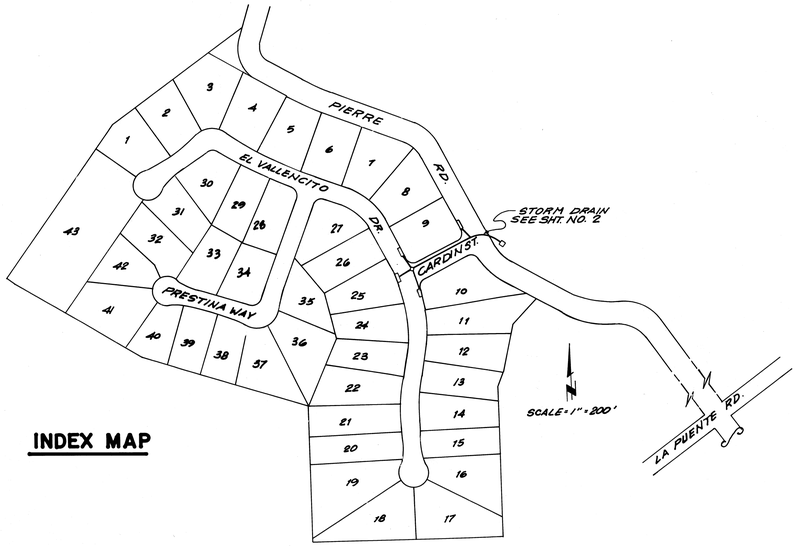
BENCH MARK

L.A.C.R.D.B.M. (NO. BG 1774 COVINA 1970) 1"ϕ IN. CONC. HDWL @ N.W. COR LA PUENTE RD & PIERRE RD. 25'N. 30'W & INTR. MHD. (BM)

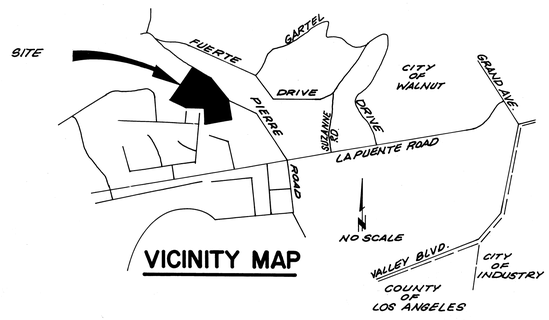
ELEV. 577.795

STORM DRAIN NOTES

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEA LEVEL DATUM OF 1929. ALL WORK SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1979 EDITION" W/1980 SUP. AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE CITY ENGINEER.
2. ALL REINFORCED CONCRETE PIPE SHALL BE BEDDED IN ACCORDANCE WITH LOS ANGELES COUNTY ENGINEER CASE #2 BEDDING PER STANDARD DRAWING D-54, UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER BY TELEPHONE (714) 595-7543 AT LEAST 24 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 40.
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 MAINTENANCE 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 & 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 MINIMUM LAP AT SPLICES OF 30 BAR DIAMETER.



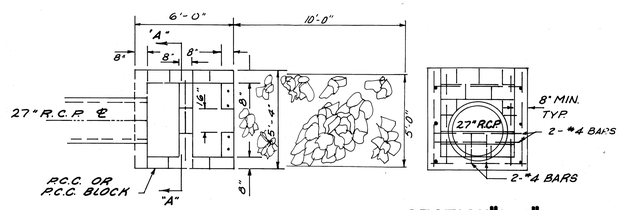
INDEX MAP



VICINITY MAP

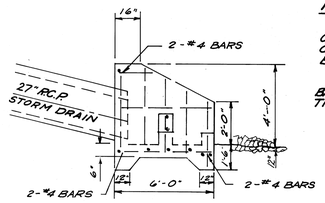
STORM DRAIN QUANTITIES

18" ϕ R.C.P.	2000 - D	150.58	L.F.
24" ϕ R.C.P.	1350 - D	6.98	L.F.
27" ϕ R.C.P.	2250 - D	259.00	L.F.
J.S. NO. 2		1	EA.
OUTLET STRUCT.		1	EA.
M.H. NO. 1		1	EA.
C.B. NO. 3		3	EA
C.B. NO. 2		1	EA
LOCAL DEP.		6	EA.
RIP RAP		50	SF.
CONC. COLLAR		1	EA.
8" A.C.P. WATER MAIN RELOCATION		117	L.F. (BY OTHERS)
REINFORCED CONC. BEAM		3	EA.



PLAN

SECTION "A-A"



ELEVATION

STORM DRAIN OUTLET STRUCTURE

NOTE:

VELOCITY REDUCER TO BE CONST. OF PORTLAND CEMENT CONC. OR 8"X 18"X 16" CONC. BLOCK WITH GROUTED CELLS.

ALL REINFORCING STEEL #4 BARS. ALL VERTICAL AND HORIZONTAL TIE BARS 18" MAX. SPACING.

REVISIONS	DATE

PLANS PREPARED BY:
LDKING
L.D. KING ENGINEERING CO., INC.
701 NORTH PARKCENTER DRIVE
SANTA ANA, CALIFORNIA 92705
TEL. (714) 972-9000

Ronald C. Mueller 22510 8-8-80
R.C.E. DATE

CITY OF WALNUT

INDEX MAP, VICINITY MAP, STORM DRAIN NOTES, QUANTITIES, AND DETAILS. 130A

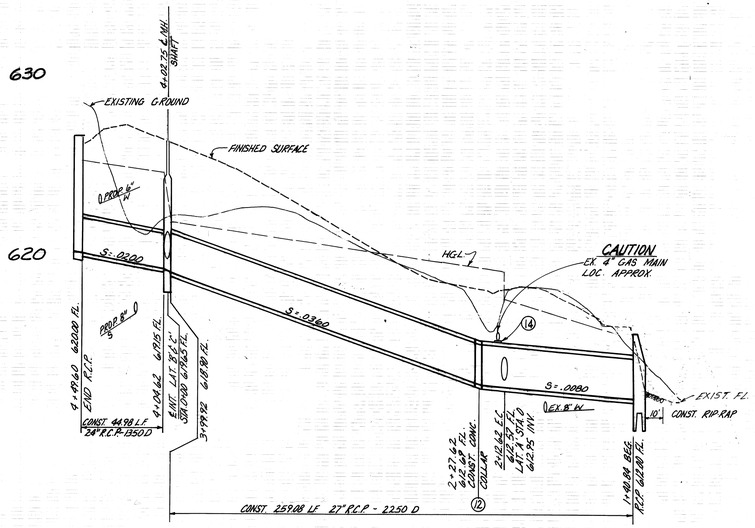
APPROVED BY _____ 5/8/81
CITY ENGINEER R.C.E. 12225

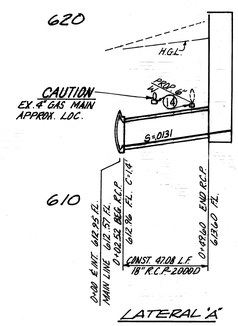
FILED WITH CITY CLERK

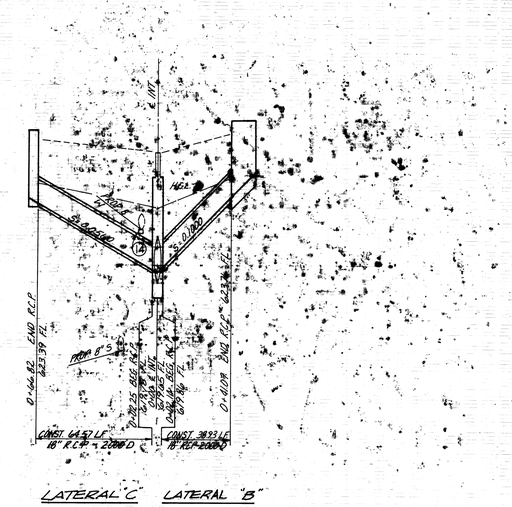
TR. NO. 32840 | DWG. NO. | SHT. 1 OF 2 SHTS.

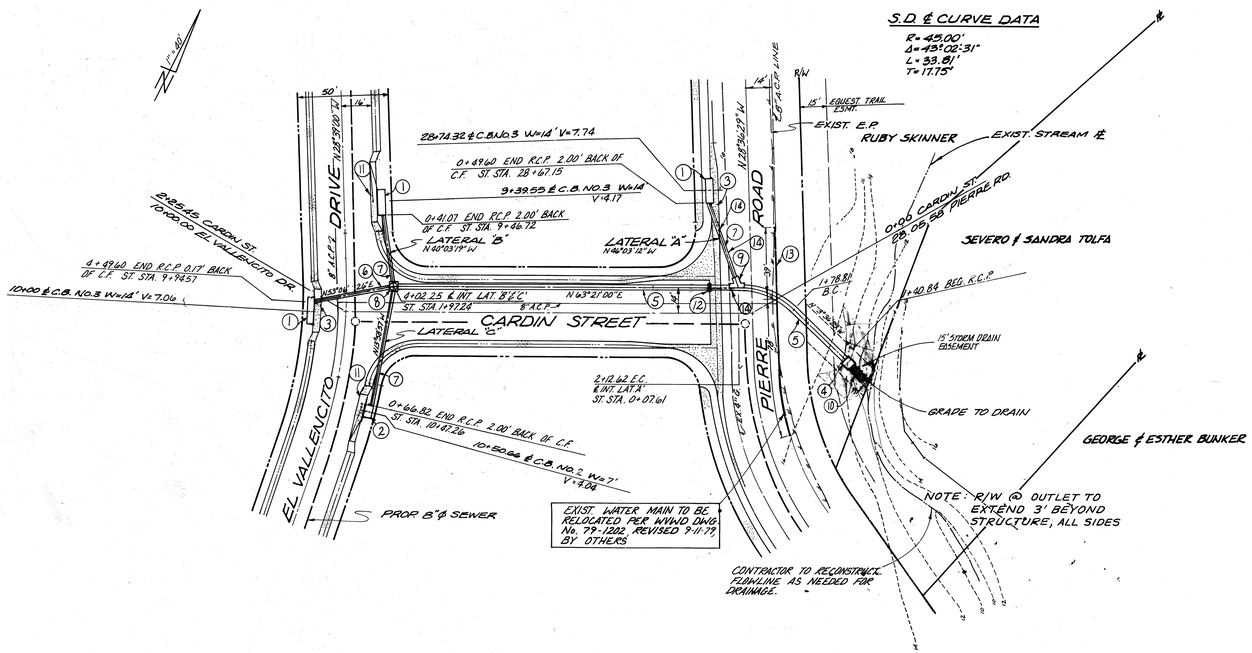
WPC 192 JN 659-004

B-5









SCALE
HOR. 1"=40'
VERT. 1"=4'

HYDRAULIC CHART 10 YEAR FREQUENCY

REACH		Q	PIPE ø	FRICTION SLOPE	VELOCITY F.P.S.	
1+40.84 - 2+12.62		47.0	27"	0.023.03	11.8	
2+12.62 - 2+67.62		36.7	27"	0.01404	9.2	
2+27.62 - 3+99.82		36.7	27"	0.01404	9.2	
4+04.62 - 4+49.60		22.7	24"	0.01007	7.2	
0+02.52 - 0+49.60	A	11.2	18"	0.01137	6.3	
0+02.14 - 0+48.87	B	7.9	18"	0.005646	4.5	
0+02.25 - 0+66.82	C	7.3	18"	0.00483	4.1	

CONSTRUCTION NOTES

1. CONST. C.B. No. 3 PER LACFCD DWG. No. 2-D143.
2. CONST. C.B. No. 2 PER LACFCD DWG. No. 2-D162.
3. CONST. L.D. No. 2 PER LACFCD STD. No. 68-02 (N-S')
4. CONST. OUTLET STRUCTURE PER DETAIL SH. 1.
5. CONST. 27" R.C.P. - 2250 D.
6. CONST. 24" R.C.P. - 1350 D.
7. CONST. 18" R.C.P. - 2000 D.
8. CONST. M.H. No. 1 PER LACFCD DWG. No. 2-D102.
9. CONST. V.S. No. 2 PER LACFCD DWG. No. 2-D112.
10. CONST. RIP-RAP.
11. CONST. L.D. No. 1 PER LACFCD STD. No. 68-01 (N-S')
12. CONST. CONC. CRADLE PER LACFCD DWG. No. 2-D393.
13. RECONST. EX. 8" A.C.P. WATER MAIN (SEE NOTE).
14. CONST. REINFORCED CONC. BEAM PER LACFCD #2-D173.1, CASE I.

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 1/3 TO 2/3 OF THEIR MAXIMUM DIMENSION.

NOTE: CONCRETE MAY BE SUBSTITUTED FOR THE GROUT.

REVISIONS	DATE

PREPARED BY
LDKING
L. D. KING ENGINEERING CO., INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CALIF. 92705
PHONE (714) 972-9000
Ronald C. Mueller R.C.E. 23510
8-5-80

CITY OF WALNUT

PLAN AND PROFILE OF
STORM DRAIN
CARDIN STREET 130B

APPROVED BY [signature] 5/8/81
CITY ENGINEER R.C.E. 12225
FILED WITH CITY CLERK

TR. 32840 | DWG. NO. | SHT. 2 OF 2 SHTS.

WPC 192
JN 659.004
B5