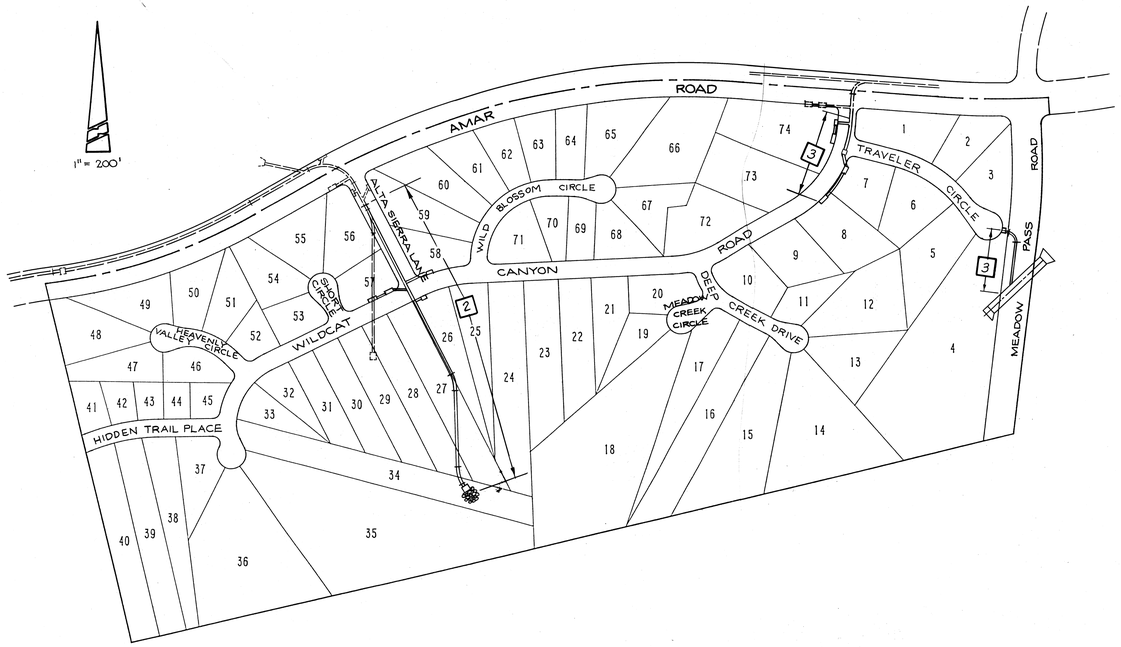
STORM DRAIN PLANS IN TRACT NO. 41994 MTD 1283

B.M. CG 2710 **ELEV.** 732.057

CSBM IN 2ND LIGHT STD OF MT SAC PARKING LOT 75 FT E. AND 90 FT N. OF C/L INT GRAND AVE AND TEMPLE AVENUE MKD (BM 17-31 1963)

COVINA **QUAD. 19** 75



INDEX MAP

SCALE : 1" = 200'

☐ — INDICATES SHEET NO.

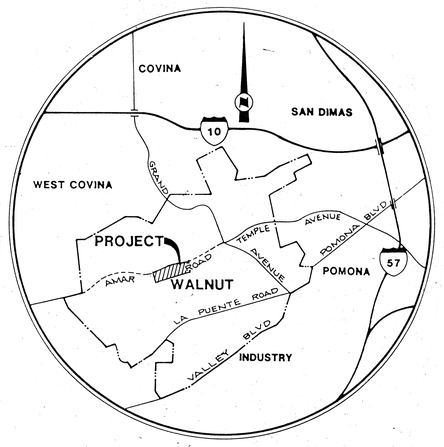
CONSTRUCTION NOTES AND ESTIMATED QUANTITIES

1	CONST. 18" RCP (D LOAD PER PROFILE)	* 239 LF
2	CONST. 30" RCP (D LOAD PER PROFILE)	20 LF
3	CONST. 60" RCP (D LOAD PER PROFILE)	* 991 LF
4	CONST. CATCH BASIN PER A.P.W.A. STD. 300-O (W = 3.5')	3 EA
5	CONST. CATCH BASIN PER A.P.W.A. STD. 300-O (W = 7')	2 EA
6	CONST. CATCH BASIN PER A.P.W.A. STD. 300-O (5@W=21', 1@W=28')	6 EA
7	CONST. MANHOLE NO. 2 PER LACFCD STD 2-D184	2 EA
8	CONST. TRANSITION STRUCTURE NO. 3 PER LACFCD STD. 2-D188	1 EA
9	CONST. JUNCTION STRUCTURE NO 4 PER LACFCD STD 2-D193	4 EA
10	CONST. CONCRETE COLLAR PER LACFCD STD 2-D393	4 EA
11	REMOVE PLUG & JOIN	2 EA
12	CONST. ENERGY DISSIPATOR PER DETAIL SHEET NO. 4	1 EA
13	PROVIDE CONCRETE BACKFILL PER LACFCD STD 2-D213	15 LF
14	CONST. 4" PCC SIDEWALK PER WS-505	775 SF
15	CONST. MANHOLE NO.1 PER LACFCD STA. 2 - D102	1 EA
16	CONST. 21" RCP (D LOAD PER PROFILE)	47 LF
17	CONST. 24" RCP (D LOAD PER PROFILE)	*304 LF

* SEE PROFILES FOR THOSE REACHS REQUIRING ADDITIONAL CONCRETE COVER OVER INVERT OF PIPE (SEE NOTE 25)

LIST OF STANDARD PLANS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT	
Manhole No. 1	2-D102
Manhole No. 2	2-D184
Transition Structure No. 3	2-D188
Manhole Shaft	2-D107
Junction Structure No. 4	2-D193
Standard A-615 Reinforcing Bars'	2-D171
Pipe Bedding	2-D177
Concrete Collar	2-D393
Manhole Shaft Safety Ledge	2-D430
Protection Barrier	2-D261-1
LOS ANGELES COUNTY ENGINEER	
Minimum Public Safety Requirements	S-2
Pipe Bedding	D-54
LOS ANGELES COUNTY ROAD DEPARTMENT	
Guide Marker	84-01
AMERICAN PUBLIC WORKS ASSOCIATION	
Curb Opening Catch Basin	300-0
Monolithic Catch Basin Connection	308-0
Catch Basin Reinforcement	309-0
Catch Basin Face Plate Assembly and Protection Bar	310-0
Catch Basin Manhole Frame and Cover	312-0
Local Depressions at Catch Basins	313-0
Chain Link Fence and Gates	600-0
24-inch Manhole Frame and Cover	630-0
Steel Step	635-0



VICINITY MAP

NOT TO SCALE

GENERAL NOTES (Cont'd)

21. All backfill and fill around closed conduit in street rights-of-way shall be brought up to subgrade of the road or to 2 feet above the top of the conduit, whichever is less. The City shall inspect all backfill and fill above aforementioned limits. Applications for an engineer or inspector in connection with the work shall be made by the contractor at least 24 hours before his service is required.

22. a. All reinforced concrete pipe shall be bedded in accordance with Los Angeles County Engineer Case Ad Bedding per Standard Drawing D-54 unless otherwise noted. The bedding material placed from the bottom of the pipe to 1 foot over the top of the pipe shall be sand, crushed aggregate, or native free-draining granular material and shall have a sand equivalent of 20 or greater.

OR

b. ~~All pipe in open trench shall be bedded according to Standard Drawing No. 2-D177, Case III, except bell and spigot pipe which shall be Case II bedding, unless otherwise shown. "W" values shall be as specified on Standard Drawing No. 2-D177 for Case III Bedding, Notes 3(a), 3(b), and 3(c). If the "W" value at the top of the pipe is exceeded, the bedding shall be modified, and/or pipe of additional strength shall be provided. The proposed modification shall be approved by the District.~~

23. All pipes shall be placed in trench in natural ground and/or compacted fill. The ground level before the trenching shall be at least 3 feet above the top of the pipe elevation, or at finish surface elevation, whichever is less. All back fills in easements shall be compacted to the density required by the grading plan.

24. Pipe shall be embedded 5 inches into all structures including inlet and headwalls, unless otherwise specified.

25. The pipe is to be manufactured with an additional concrete thickness over the invert reinforcement as specified in profile on these plans.

26. Elevations are in feet above U.S.C. & G.S. Mean Sea Level Datum of 1929, unless otherwise indicated.

27. All catch basins within the dedicated street right-of-way shall be constructed per the street plans.

28. The contractor shall provide for contributory drainage at all times until this storm drain system is operable.

29. All references on this plan to the County Engineer, Road Department, or Flood Control District shall apply to the appropriate sections of the Department of Public Works.

30. Existing utilities shall be maintained in place by the contractor, unless otherwise noted.

31. Where the utilities are indicated on the Drawings to be supported, said supports shall be in accordance with Standard Plan No. 224-0, unless otherwise indicated.

32. All openings resulting from the cutting or partial removal of existing culverts, pipes or similar structures shall be sealed with 8 inches of Brick and Mortar or 6 inches of concrete, unless otherwise shown.

33. Manholes No. 1,2,3, and 4, shall use the Standard Plans 630-0 for the "Frame and Cover" and 635-0 for the "Standard Drop Step".

GENERAL NOTES:

1. A permit shall be obtained from the Los Angeles County Department of Public Works prior to commencing any construction work under this contract. Contact the Department by telephone at (818) 458-3129, to obtain an inspection and connection permit and to make deposit for construction inspection.

2. This storm drain will not be accepted for maintenance until the streets have been paved, manholes brought to grade and the system cleaned to the satisfaction of the City Engineer.

3. Approval of this plan by the CITY ENGINEER does not constitute a representation to the accuracy of the location, or the existance or non-existance of any underground utility, pipe or structure within the limits of this project. This note applies to all sheets.

4. All work shall be in accordance with the "Standard Specifications for Public Works Contsruction 1988 Edition," including supplements and shall be prosecuted only in the presence of the City Engineer.

5. The contractor's attention is directed to Section 7-10.41 of the Standard Specifications for Public Works construction in regard to safety orders.

6. The contractor shall conform to the "Minimum Public Safety Requirements" as shown on Los Angeles County Engineer Standard S-2.

7. Transverse reinforcement and transverse joints shall be placed at right angles (or radial) to the conduit centerline except as otherwise shown on the drawings.

8. All steel adjacent to face of concrete shall have 2" clearance unless otherwise specified.

9. Reinforcement shall be deformed bars of intermediate grade steel, per A.S.T.M. A-615-Grade 60.

10. All bar bends and hooks shall conform to the American Concrete Institute "Manual of Standard Practice".

11. Dimensions from face of concrete to steel are to centerline of steel unless otherwise noted.

12. All steel that is to be continuous shall have a minimum lap of 30 bar diameters or 18" whichever is greater.

13. No concrete shall be placed until the forms and reinforcing steel have been placed, inspected and approved.

14. All concrete shall be portland cement concrete with an ultimate 28 day compressive strength of 3250 p.s.i. unless otherwise noted.

15. All construction joints in the footing of slabs and walls shall be in the same plane. No staggering of joints will be permitted.

16. All exposed edges shall be finished with a 3/4" chamfer.

17. Unless otherwise shown, concrete dimensions shall be measured vertically or horizontally and parallel or at right angles (or radial) to the centerline of construction.

18. The inspector may have the option to require concrete backfill during construction when the pipe has less than one foot of cover and is subjected to heavy equipment traffic. The concrete backfill shall consist of 1:3:5 mix, portland cement concrete poured from wall to wall of trench and from bottom of trench to a minimum if 4 inches over the top of the pipe.

19. All backfills and fills to be used as subgrade shall be compacted to a relative density of 90% unless otherwise specified.

20. A soils engineer shall certify that all fills and backfills over underground storm drains outside of street right-of-way have been compacted or consolidated to a 90% density. This certification shall be submitted to the City Engineer prior to the acceptance of the work by the County.

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.

PRIVATE ENGINEERS NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS MAP.

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS DRAWING.

Stanley C Morse — 3/22/89
REGISTERED CIVIL ENGINEER No. 20596 — DATE

REGISTERED PROFESSIONAL ENGINEER STANLEY C. MORSE No. 20596 Exp. 9-30-89 CIVIL STATE OF CALIFORNIA

IF CONSTRUCTION OF IMPROVEMENTS AS SHOWN HEREON IS NOT INITIATED WITHIN 18 MONTHS OF APPROVAL DATE, THESE PLANS ARE SUBJECT TO REVIEW BY THE CITY.

CITY OF WALNUT

RONALD L. KRANZER — CITY ENGINEER

APPROVED BY: Ronald L. Kranzer DATE: 4-12-89
RONALD L. KRANZER R.C.E 18303

NO.	REVISION	REVISED BY	APPROVED BY	DATE
1	ADDED TERRACE DRAIN INLET DETAIL ~ SHT 3	SM 10/2/89		10/3/89

BASIS OF BEARINGS:
THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N 46° 31' 47" E FOR THE CENTERLINE OF AMAR ROAD AS SHOWN ON MAP OF TRACT NO. 35644 M.B. 988-32-41.

PLANS PREPARED BY
MORSE CONSULTING GROUP
PLANNING • ENGINEERING • LANDSCAPE ARCHITECTURE
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IRVINE, CALIFORNIA 92720-1999
(714)730-7117

Stanley C Morse — 3/22/89
STANLEY C. MORSE, R.C.E. 20596 — DATE

REGISTERED PROFESSIONAL ENGINEER STANLEY C. MORSE No. 20596 Exp. 9-30-89 CIVIL STATE OF CALIFORNIA

SHT 1 OF 4 SHTS

1" = 167 ft

STORM DRAIN PLANS IN
TRACT NO. 41994 MTD 1283

HYDRAULIC DATA

LINE	STA.	TO	STA.	Q25	So	Sf	n	DIA	dn	Vn	dc	Vc	V	REMARKS
A	1+92.00	TO	3+10.00	253.9	0.0820		0.013	60"	2.2	31.0	4.5	13.8		OPEN CHANNEL
A	3+10.00	TO	6+00.00	253.9	0.1982		0.013	60"	1.6	47.3	4.5	13.8		OPEN CHANNEL
A	6+00.00	TO	7+17.67	253.9	0.0100		0.013	60"	4.0	15.1	4.5	13.8		OPEN CHANNEL
A	7+22.34	TO	8+79.45	253.9	0.0100		0.013	60"	4.0	15.1	4.5	13.8		OPEN CHANNEL
A	8+80.95	TO	9+11.80	243.8	0.0100	0.0088	0.013	60"					12.4	PRESSURE FLOW
A	9+13.30	TO	9+24.81	226.7	0.0100	0.0076	0.013	60"					11.5	PRESSURE FLOW
A	9+26.31	TO	10+47.67	215.6	0.0100	0.0069	0.013	60"					11.0	PRESSURE FLOW
A	10+52.34	TO	11+92.00	215.6	0.0070	0.0069	0.013	60"					11.0	PRESSURE FLOW
A	11+92.00	TO	12+13.83	215.6	0.0070	0.0069	0.013	60"					11.0	PRESSURE FLOW
A	12+15.33	TO	12+30.00	214.9	0.0070	0.0068	0.013	60"					10.9	PRESSURE FLOW
A-5	0+02.50	TO	0+18.00	18.8	0.5344		0.013	18"	0.5	35.9	1.5	10.7		OPEN CHANNEL
A-4	0+02.59	TO	0+40.11	31.2	0.3256		0.013	24"	0.7	34.1	1.9	10.2		OPEN CHANNEL
A-4	0+61.11	TO	0+78.11	14.2	0.0365		0.013	18"	0.9	12.3	1.4	8.3		OPEN CHANNEL
A-3	0+02.50	TO	0+59.87	17.7	0.2078		0.013	18"	0.6	25.1	1.5	10.1		OPEN CHANNEL
A-2	0+02.89	TO	0+28.39	1.3	0.2639		0.013	18"	0.2	12.8	0.4	3.1		OPEN CHANNEL
A-1	0+02.50	TO	0+17.94	12.3	0.4171		0.013	18"	0.4	29.2	1.3	7.4		OPEN CHANNEL

CONSTRUCTION NOTES

1. CONST. 18" RCP (D LOAD PER PROFILE)
3. CONST. 60" RCP (D LOAD PER PROFILE)
4. CONST. CATCH BASIN PER A.P.W.A. STD. 300-O (W=3.5')
5. CONST. CATCH BASIN PER A.P.W.A. STD. 300-O (W=7')
6. CONST. CATCH BASIN PER A.P.W.A. STD. 300-O (W=21')
7. CONST. MANHOLE NO.2 PER LACFCD STD. 2-D184
9. CONST. JUNCTION STRUCTURE NO.4 PER LACFCD STD. 2-D193
10. CONST. CONC. COLLAR PER LACFCD STD. 2-D393
11. REMOVE PLUG & JOIN
12. CONST. ENERGY DISSIPATOR (TYPE 1) PER DETAIL ON SHT. 4
17. CONST. 24" RCP (D-LOAD PER PROFILE)
14. CONST. 4" PCC SIDEWALK PER WS-505

NO.	REVISION	REVISED BY	APPROVED BY	DATE

CURVE DATA					
NO.	Δ	R	L	T	REMARK
A	32°58'53"	90.00'	51.80'	26.64'	LINE A
B	24°18'53"	90.00'	38.19'	19.39'	LINE A
C	2°07'35"	565.00'	20.97'	10.49'	LINE A

PLANS PREPARED BY
MORSE CONSULTING GROUP
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REGISTERED PROFESSIONAL ENGINEER — STANLEY C. MORSE — No. 20596 — Exp. 9-30-91 — CIVIL — STATE OF CALIFORNIA

Stanley C. Morse 3/25/89
STANLEY C. MORSE, R.C.E. 20596 DATE

CITY OF WALNUT
RONALD L. KRANZER — CITY ENGINEER

APPROVED BY: Ronald L. Kranzer DATE: 4-12-89
RONALD L. KRANZER R.C.E. 18503

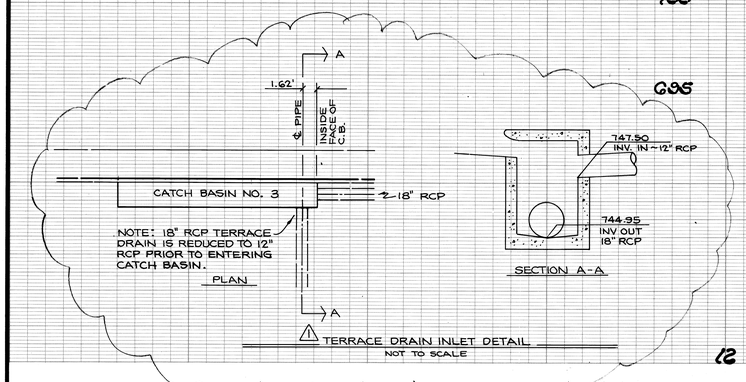
SHT 2 OF 4 SHTS

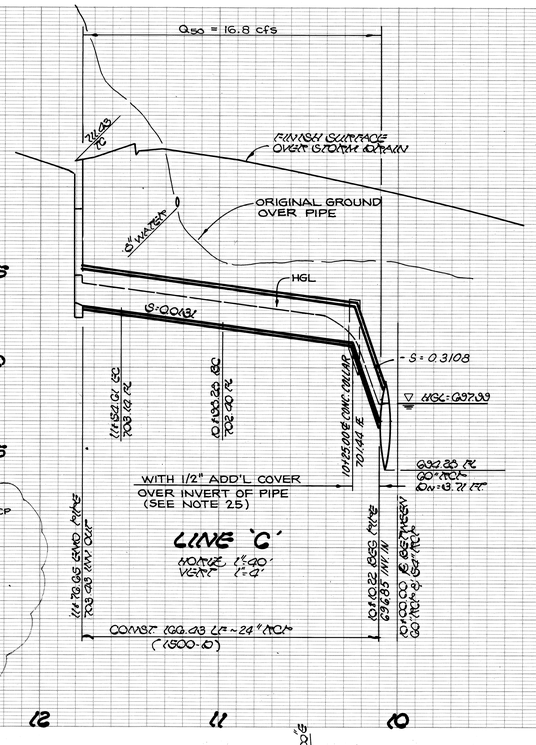
167B

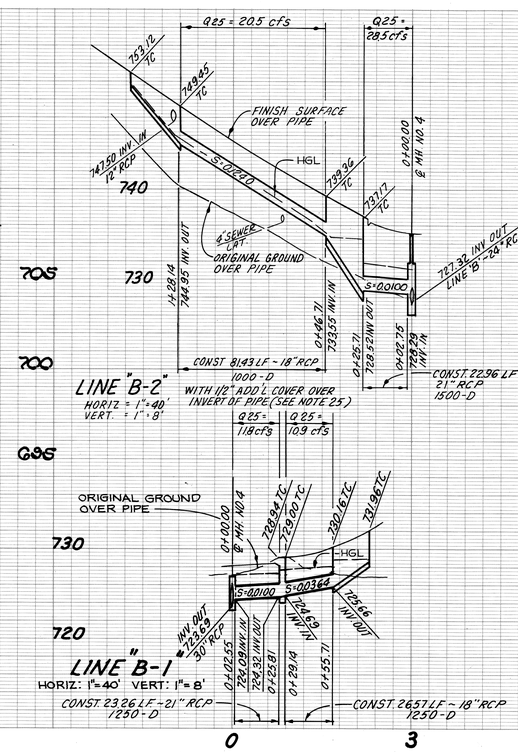
STORM DRAIN PLANS IN
TRACT NO. 41994 MTD 1283

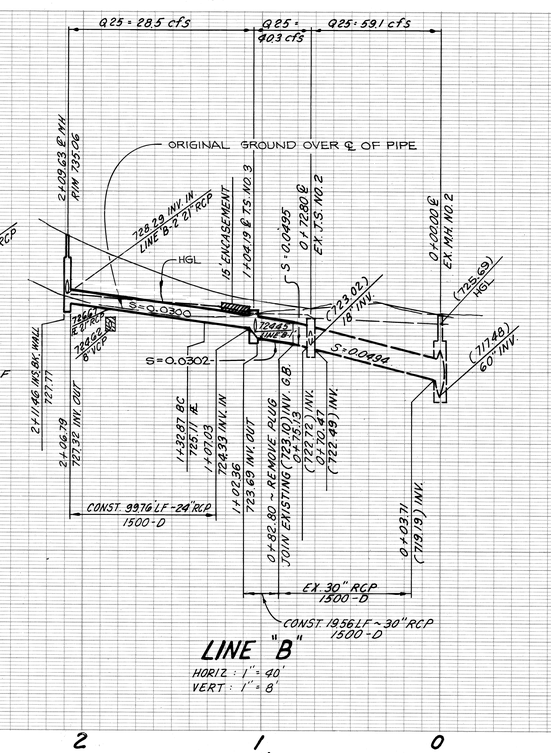
HYDRAULIC DATA

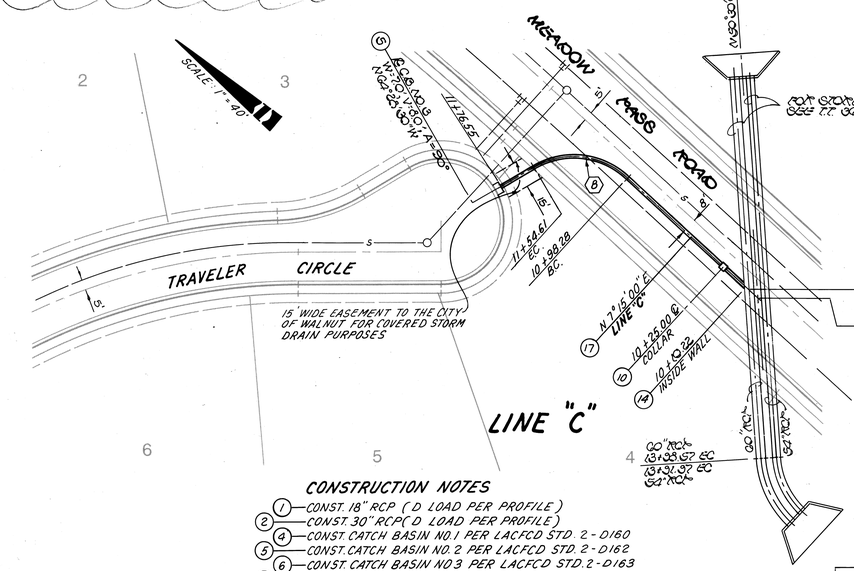
LINE	STA	TO	STA	Q25	So	Sf	n	DIA	dn	Vn	dc	Vc	V	
B	0+75.13	TO	0+82.80	40.3	0.0494	0.0097	0.013	30"					8.2	PRESSURE FLOW
B	0+82.80	TO	1+02.36	40.3	0.0302	0.0097	0.013	30"					8.2	PRESSURE FLOW
B	1+07.03	TO	2+06.79	28.5	0.0300	0.0159	0.013	24"					9.1	PRESSURE FLOW
B-1	0+02.55	TO	0+25.81	11.8	0.0100	0.0055	0.013	21"					4.9	PRESSURE FLOW
B-1	0+29.14	TO	0+55.71	10.9	0.0364	0.0108	0.013	18"					6.2	PRESSURE FLOW
				Q50										
C	10+10.22	TO	10+25.00	16.8	0.3108		0.013	24"	0.5	27.9	1.5	6.8		OPEN CHANNEL
C	10+25.00	TO	11+76.65	16.8	0.0131		0.013	24"	1.2	8.8	1.5	6.8		OPEN CHANNEL
				Q25										
B-2	0+02.75	TO	0+25.71	28.5	0.0100	0.0324	0.013	21"					11.9	PRESSURE FLOW
B-2	0+46.71	TO	1+28.14	20.5	0.1240		0.013	18"	0.8	21.5	1.5	11.7		OPEN CHANNEL

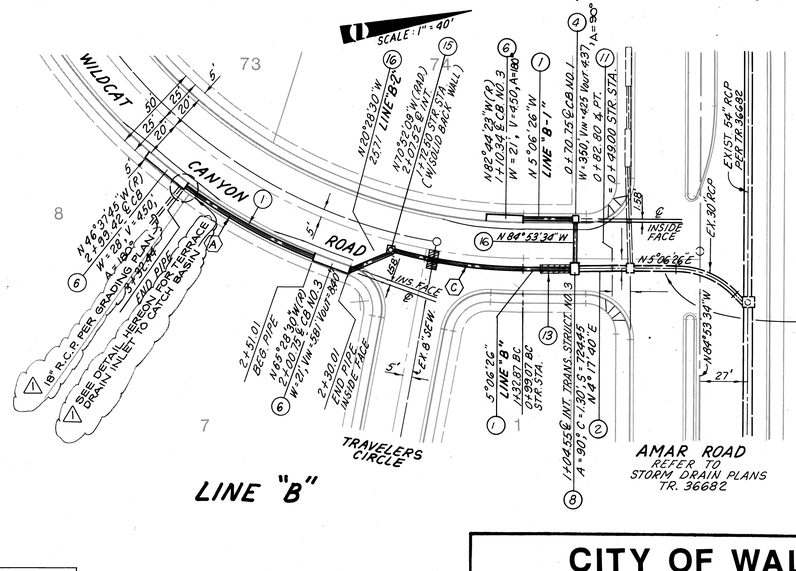












CONSTRUCTION NOTES

1. CONST. 18" RCP (D LOAD PER PROFILE)
2. CONST. 30" RCP(D LOAD PER PROFILE)
4. CONST. CATCH BASIN NO.1 PER LACFCD STD. 2-D160
5. CONST. CATCH BASIN NO. 2 PER LACFCD STD. 2-D162
6. CONST. CATCH BASIN NO.3 PER LACFCD STD.2-D163
8. CONST. MANHOLE NO. 4 PER LACFCD STD. 2-D113
10. CONST. CONC. COLLAR PER LACFCD STD. 2-D393
11. REMOVE PLUG & JOIN
13. PROVIDE CONC. BACKFILL PER LACFCD STD.2-D213
14. CONST. JUNCTION STRUCTURE NO.4 PER LACFCD STD. 2-D193
15. CONST. MANHOLE NO. 1 PER LACFCD STA. 2-D102
16. CONST. 21" RCP (D-LOAD PER PROFILE)
17. CONST. 24" RCP (D-LOAD PER PROFILE)

STORM DRAIN DATA					
NO.	Δ	R	L	T	REMARK
A	14°29'06"	322.08'	81.43'	40.93'	LINE B-2
B	71°43'30"	45.00'	56.33'	32.53'	LINE C
C	14°01'25"	305.00	74.65	37.51	LINE B

NO.	REVISION	REVISED BY	APPROVED BY	DATE
1	ADDED TERRACE DRAIN INLET DETAIL	SMW 4/26/89	[illegible]	4/3/89

PLANS PREPARED BY
MORSE CONSULTING GROUP
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IRVINE, CALIFORNIA 92718-1998
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REGISTERED PROFESSIONAL ENGINEER STANLEY C. MORSE No. 20596 Exp. 9-30-89 CIVIL STATE OF CALIFORNIA

Stanley C. Morse 3/23/89
STANLEY C. MORSE, R.C.E. 20596 DATE

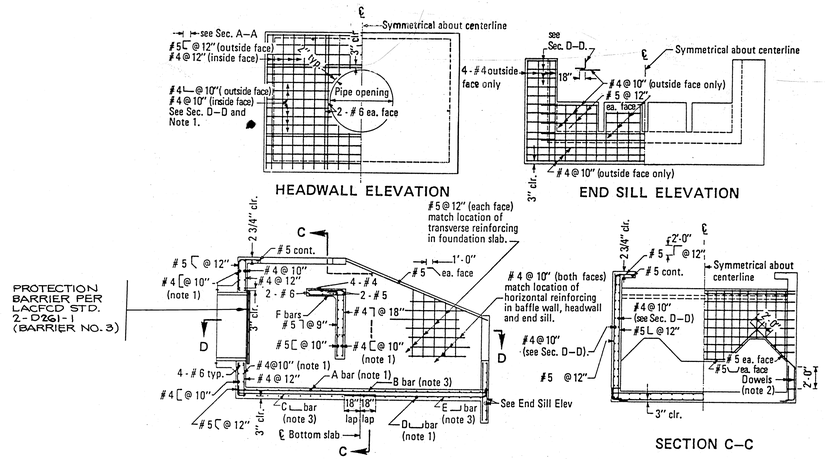
CITY OF WALNUT
RONALD L. KRANZER — CITY ENGINEER

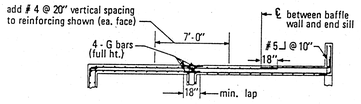
APPROVED BY: Ronald L. Kranzer DATE: 4-12-89
RONALD L. KRANZER R.C.E 18503

SHT 3 OF 4 SHTS

STORM DRAIN PLANS IN

TRACT NO. 41994 MTD 1283





SECTION D–D

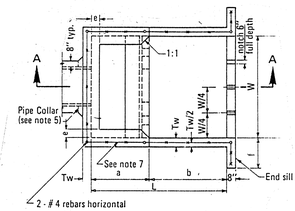
NOTES

1. Match location of sidewall reinforcing.
2. Dowels having same size and spacing as wall reinforcing may be used in lieu of continuous bars at contractors option.
3. Match location of headwall or end sill reinforcing.

Pipe dia. (in.)	36	42	48	54	60	72
A bar	# 5 @ 12"	# 6 @ 12"	# 7 @ 12"			
B bar	# 5 @ 12"	# 6 @ 12"				
C bar	# 4 @ 12"	# 5 @ 12"				
D bar	# 4 @ 12"	# 5 @ 12"	# 6 @ 12"			
E bar	# 4 @ 12"	# 5 @ 12"				
F bar	# 4 @ 9"	# 5 @ 9"	#6@9"			
G bar	# 7	# 11				

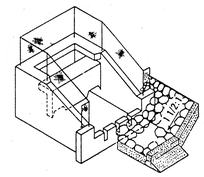
CONCRETE ENERGY DISSIPATOR (REINFORCEMENT)

(NO SCALE)

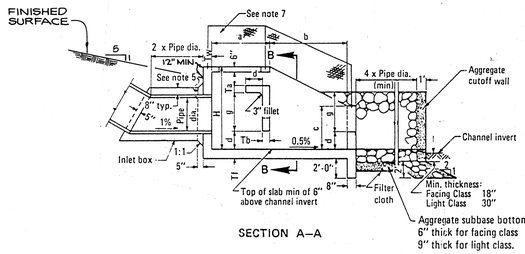


PLAN

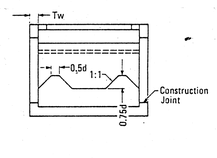
Note: Riprap not shown.



PICTORIAL VIEW



SECTION A–A



SECTION B–B

NOTES

1. Design:
   Equivalent Fluid Pressure = 60 p.c.f.
   Maximum Outlet Velocity = 35 f.p.s.
2. Concrete shall be 564 - C - 3000.
3. Reinforcing shall conform to ASTM designation A615 and may be grade 40 or 60. Reinforcing shall be placed with 2" clear concrete cover unless noted otherwise. Splices shall not be permitted except as indicated on the plans.
4. For pipe grades not exceeding 20%, inlet box may be omitted.
5. If inlet box is omitted, consteuct pipe collar as shown.
6. Unless noted otherwise, all reinforcing bar bends shall be fabricated with standard hooks.
7. Five foot high chain link fencing PER A.P.W.A. 600-O
8. In Sandy and Silty soil:
   a) Riprap and aggregate base cutoff wall required at the end of rock apron.
   b) Filter cloth (Polyfilter X or equivalent) shall be installed on native soil and base, minimum of 1 ft. overlaps at joints.
9. Rip rap and subbase classification shall be as shown on plans.

TYPE I

Pipe Dia (in)	18	24	30	36	42	48	54	60	72
Area (sq.ft.)	1.77	3.14	4.91	7.07	9.62	12.57	15.90	19.63	28.27
Max. Q (cfs)	21	38	59	85	115	151	191	236	339
W	5' - 6"	6' - 9"	8' - 0"	9' - 3"	10' - 6"	11' - 9"	13' - 0"	14' - 3"	16' - 6"
H	4' - 3"	5' - 3"	6' - 3"	7' - 3"	8' - 0"	9' - 0"	9' - 9"	10' - 9"	12' - 3"
L	7' - 4"	9' - 0"	10' - 8"	12' - 4"	14' - 0"	15' - 8"	17' - 4"	19' - 0"	22' - 0"
a	3' - 3"	3' - 11"	4' - 7"	5' - 3"	6' - 0"	6' - 9"	7' - 4"	8' - 0"	9' - 3"
b	4' - 1"	5' - 1"	6' - 1"	7' - 1"	8' - 0"	8' - 11"	10' - 0"	11' - 0"	12' - 3"
c	2' - 4"	2' - 10"	3' - 4"	3' - 10"	4' - 5"	4' - 11"	5' - 5"	5' - 11"	6' - 11"
d	0' - 11"	1' - 2"	1' - 4"	1' - 7"	1' - 9"	2' - 0"	2' - 2"	2' - 5"	2' - 9"
e	0' - 6"	0' - 6"	0' - 8"	0' - 8"	0' - 10"	0' - 10"	1' - 0"	1' - 0"	1' - 3"
f	1' - 6"	2' - 0"	2' - 6"	3' - 0"	3' - 0"	3' - 0"	3' - 0"	3' - 0"	3' - 0"
g	2' - 1"	2' - 6"	3' - 0"	3' - 6"	3' - 11"	4' - 5"	4' - 11"	5" - 4"	6' - 2"
Tf	8"			10"		12"			
Tb	7"			9 1/2"		10 1/2"			
Tw	7"			9 1/2"		10 1/2"			
Ta	7"			8"					

CONCRETE ENERGY DISSIPATOR

(NO SCALE)

NO.	REVISION	REVISED BY	APPROVED BY	DATE

PLANS PREPARED BY

MORSE CONSULTING GROUP
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Stanley C. Morse 3/15/89
STANLEY C. MORSE, R.C.E. 20596 DATE

REGISTERED PROFESSIONAL ENGINEER STANLEY C. MORSE No. 20596 Exp. 9-30-91 CIVIL STATE OF CALIFORNIA

CITY OF WALNUT

RONALD L. KRANZER — CITY ENGINEER

APPROVED BY: Ronald L. Kranzer DATE: 4-12-89

RONALD L. KRANZER R.C.E. 18503

SHT 4 OF 4 SHTS