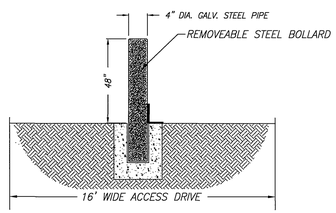
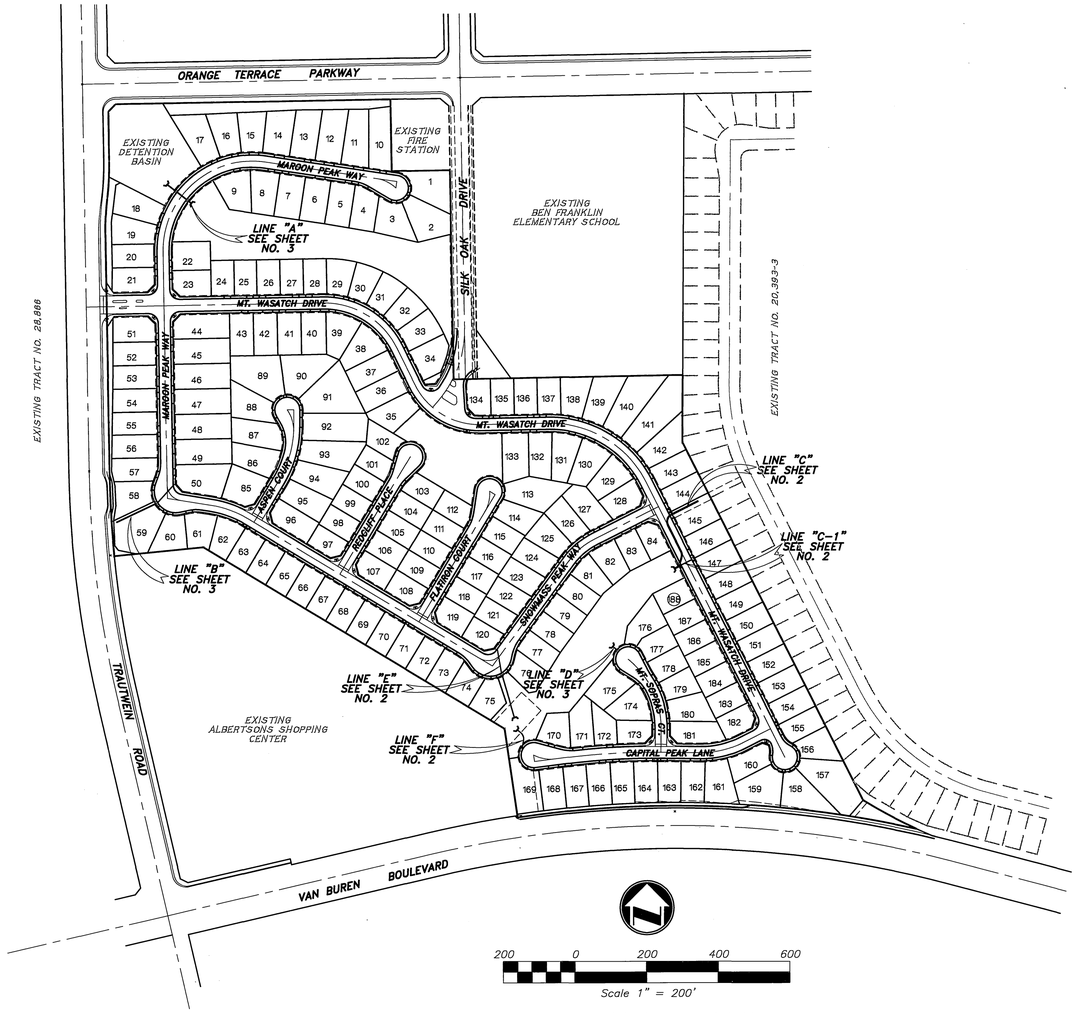
STORM DRAIN PLANS
TRACT NO. 28930

STREET CONSTRUCTION GENERAL NOTES

1. It shall be the responsibility of the contractor to clear the right of way in accordance with the provisions of law as it affects each utility including irrigation lines and appurtenances and at no cost to the City.
2. Construction shall be in accordance with the City of Riverside, Department of Public Works, Standard Drawings, It's supplemental notes and the Standard Specifications for Public Works Construction, current edition.
3. The private engineer signing these plans is responsible for assuring the accuracy and acceptability of the work hereon. In the event of discrepancies arising during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for approval by the City.
4. Quantities shown are for information only and the City of Riverside is not responsible for their accuracy.
5. The developer shall be responsible for preserving or re-establishing and referencing survey monuments destroyed, disturbed or buried as a result of construction shown hereon.
6. All flagged elevations shall be staked in the field by the private engineer.
7. Trim edge of existing pavement where new pavement joins to a smooth, straight line. Construct match-up paving as shown on plan and overlay paving as directed in the field to produce a smooth section.
8. All traffic signs shall be installed prior to opening the streets to traffic.
9. The contractor shall call in a location request to Underground Service Alert (USA), phone number 1-800-227-2600, two working days before digging. No construction permit will be issued by the Public Works Department involving excavation for underground facilities unless the applicant has been provided an inquiry identification number by USA.
10. In pavement overlay areas, distressed existing pavement shall be removed and replaced as directed by the Inspector prior to overlaying with A.C. paving.
11. Refer to plan X-158A for modification work related to existing traffic signal.
12. Contact the Public Utilities Electric Department Sixty (60) Days prior to construction to allow the Department to prepare Electric Utility Design and Street Light relocation for bidding and construction purposes. Contact Bill Armenta at (909) 826-5629.
13. Construction work that will cause damage to the detector loop(s) shall not be performed until traffic signal maintenance personnel have been notified at (909) 351-6096 and the necessary timing adjustments made to maintain signal operation.
14. Any traffic control striping obliterated and/or badly worn during construction shall be restored by the contractor within five days after notification from the City Inspectors.
15. Final striping for traffic control and/or pavement marking to be the responsibility of the developer.
16. Developer to give Western Municipal Dist. five (5) working days written notice prior to start of construction and to allow W.M.W.D. ten (10) working days for completion of work (909-780-9764).
17. No person shall perform any construction activity or install any objects within the public rights-of-way or easements of the City of Riverside without a valid Construction Permit of, a Street Opening Permit Encroachment Permit issued by the City's Public Works Department.



TYPICAL BOLLARD DETAIL
NOT TO SCALE

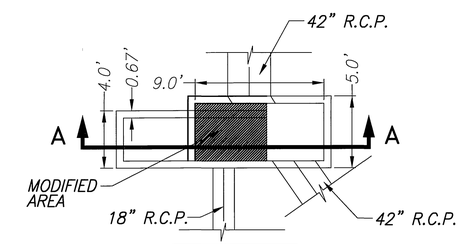


200 0 200 400 600
Scale 1" = 200'

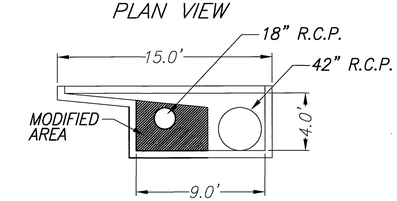
INDEX MAP

CONSTRUCTION NOTES

(31)	INSTALL 18" RCP DLOAD (SEE PROFILE)	393.15	LF
(32)	INSTALL 24" RCP DLOAD (SEE PROFILE)	202.00	LF
(33)	INSTALL 30" RCP DLOAD (SEE PROFILE)	195.00	LF
(35)	INSTALL 42" RCP DLOAD (SEE PROFILE)	247.83	LF
(40)	CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 405 V= (SEE PLAN VIEW), W=7'	6	EA
(41)	CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 407 V= (SEE PLAN VIEW), W=14'	1	EA
(50)	INSTALL CONCRETE COLLAR PER CITY OF RIVERSIDE STANDARD 424	1	EA
(51)	INSTALL INLET/OUTLET HEADWALL PER DETAIL SHEET 3 OF 3	5	EA
(61)	INSTALL 1/4 TON RIP RAP GROUTED IN PLACE (32" DEEP TYP.) W/FILTER FABRIC MATERIAL	5	EA
(62)	CONSTRUCT 3' CONCRETE V-DITCH.	400	SF
(63)	CONSTRUCT WALL PER DETAIL HEREON.	1	EA
(64)	CONSTRUCT MODIFIED CATCH BASIN STANDARD 407 PER DETAIL HEREON V= (SEE PLAN VIEW), W=15'	1	EA
(65)	PLACE TRASH RACK PER A.P.W.A. STD. PLAN 361-0 SEE DETAIL ON SHEET 4 OF 4	8	EA

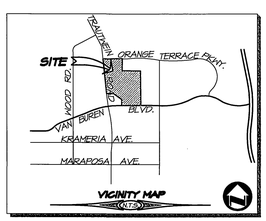


PLAN VIEW



SECTION "A"-"A"

MODIFIED CATCH BASIN STD. 407



REGISTERED PROFESSIONAL ENGINEER CHANDRA J.A. LADD NO. 53390 EXP. 6-30-03 CIVIL STATE OF CALIFORNIA

* AS-BUILT PER PLANS 2-05-04 LH

CITY OF RIVERSIDE BUSINESS TAX CERTIFICATE NO. 058833, EXPERATION DATE 01-01-01

REVIEWED BY:
WESTERN MUNICIPAL WATER DIST.
FOR NON-INTERFERENCE COMPLIANCE
SHEET 1 THROUGH 3
CIVIL ENGINEER REC 46212
DATE: May 26/2000

CITY OF RIVERSIDE PLANNING DEPT.
APPROVED BY DATE 5/26/00

CITY OF RIVERSIDE ELECTRICAL DEPT.
UNDERGROUND & OVERHEAD
APPROVED BY DATE 5-26-00

SO. CA. GAS CO. APPROVED BY DATE 5/25/00
PACIFIC BELL APPROVED BY DATE 5/25/00
CHARTER COMMUNICATIONS APPROVED BY DATE 5-25-00

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PLANS PREPARED BY:
adkan ENGINEERS
CIVIL ENGINEERING SURVEYING PLANNING
6820 AIRPORT DRIVE, RIVERSIDE, CA 92504
TEL: (909) 688-0241 FAX: (909) 688-0599
DATE: 5-25-00
UNDER THE SUPERVISION OF: RCE 53390 6/30/03

BENCHMARK: EB-C3
P.K. NAIL AND TAG IN THE NORTHERLY WALL OF A CATCH BASIN 2 FEET EASTERLY OF THE EASTERLY CURB OF TRAUTWEIN ROAD, 100 FEET NORTHERLY OF VAN BUREN BLVD. TRANSFER FROM VB-10-2.
ELEVATION: 1674.947

MARK | REVISIONS | APPR. | DATE
DESIGNED BY: R.H. DRAWN BY: R.H. CHECKED BY: C-

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	6/6/2000	
PARK DEPARTMENT		
TRAFFIC DIVISION		
P.W. ENGINEER MANAGER	6/7/00	DTB
STREET SERVICES	5/30/00	

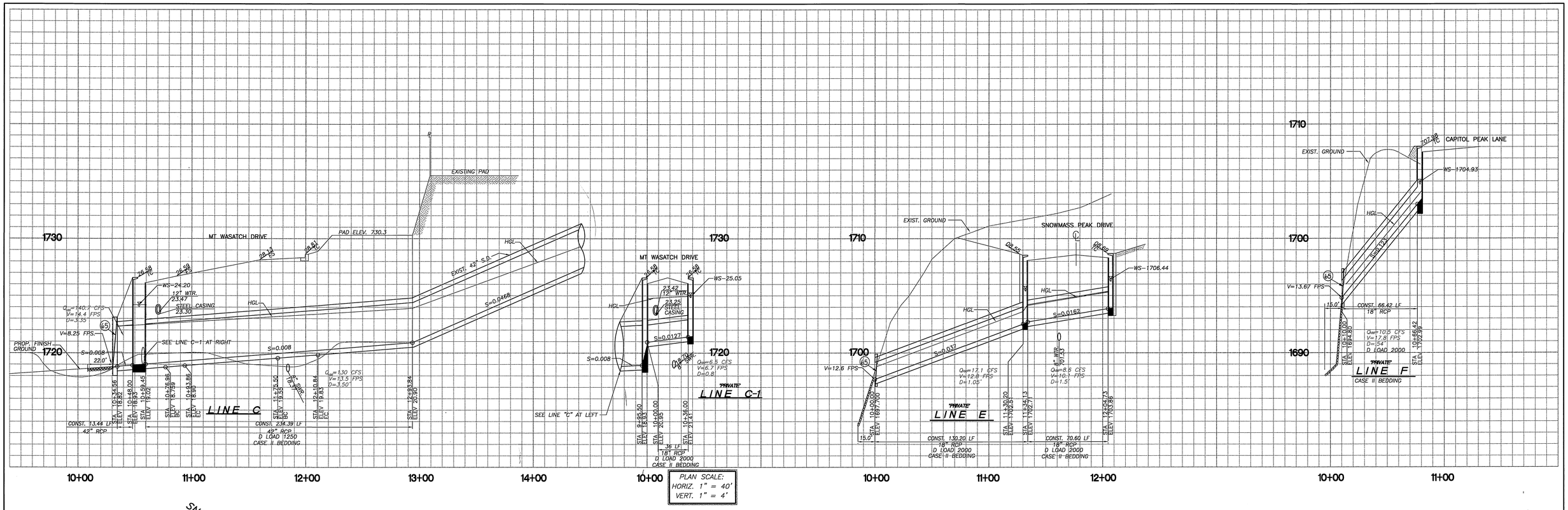
APPROVED BY R. McGrath
PUBLIC WORKS DIRECTOR
DATE 6-9-2000

STORM DRAIN PLAN
TRACT NO. 28930
INDEX MAP

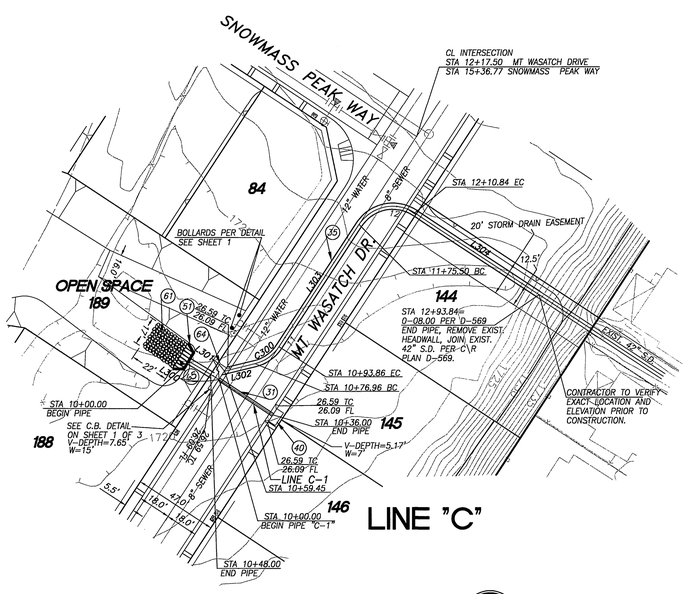
ACCOUNT NO.
D-677
SHEET 1 OF 4
J.N. 5643

INDEXED 8-10-2000 LH

File name: U:\DRAWING\PORTOLA\SD01
Plot Date: 5/25/00
PC XXXX-P/S



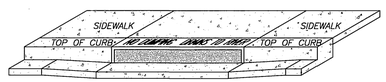
PLAN SCALE:
HORIZ. 1" = 40'
VERT. 1" = 4'



40 0 40 80 120
Scale 1" = 40'

CONSTRUCTION NOTES

- (31) — INSTALL 18" RCP DLOAD (SEE PROFILE) 307.15LF
- (33) — INSTALL 42" RCP DLOAD (SEE PROFILE) . . . . . 247.83 LF
- (40) — CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 405 . . . . . 3EA
  V= (SEE PLAN VIEW), W=7'
- (41) — CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 407 . . . . . 2EA
  V= (SEE PLAN VIEW), W=14'
- (51) — INSTALL INLET/OUTLET HEADWALL PER DETAIL SHEET 3 OF 3 . . . . . 3EA
- (61) — INSTALL 1/4 TON RIP RAP GROUTED IN PLACE (32" DEEP TYP.) 3EA
  W/FILTER FABRIC MATERIAL
- (64) — CONSTRUCT MODIFIED CATCH BASIN STANDARD 407 PER DETAIL HEREON 1EA
  V= (SEE PLAN VIEW), W=15'
- (65) — PLACE TRASH RACK PER APWA STD PLAN 361-0 . . . . . 5 EA
  SEE DETAIL ON SHT. 4 OF 4



NOTES:

A. STENCILS TO HAVE 2" LETTERS AS FOLLOWS:
NO DUMPING
DRAINS TO RIVER

B. PLACE BOTH STENCILS CENTERED WITHIN THE CATCHBASIN OPENING AND WITHIN THE TOP OF CURB.

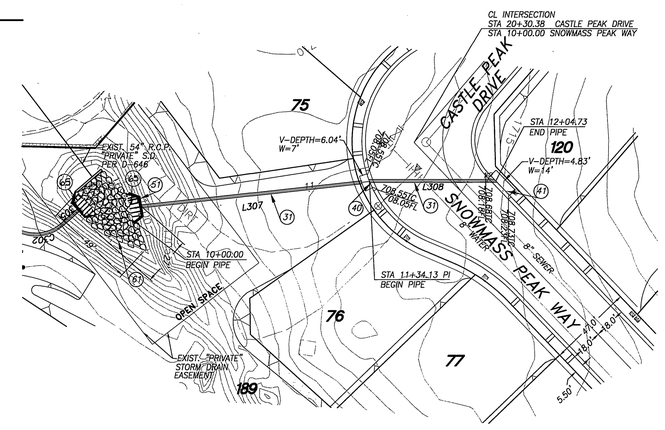
C. SPRAY BOTH STENCILS WITH WHITE PAINT.

D. REMOVE STENCIL WHEN PAINT IS DRY.

CATCH BASIN STENCILING DETAIL
N.T.S.

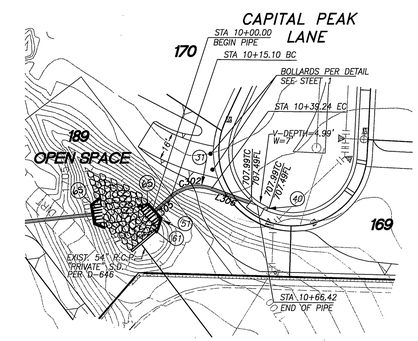
LINE TABLE

NUMBER	DIRECTION	DISTANCE
L300	N61°03'23"E	19.34'
L301	N26°48'14"W	5.54'
L302	N16°12'44"E	17.52'
L303	N26°48'14"W	81.64'
L304	N63°11'46"E	83.00'
L305	N51°36'42"W	15.10'
L306	N09°51'55"E	27.18'
L307	N19°17'02"W	134.13'
L308	N09°54'05"W	70.60'



"PRIVATE"
LINE "E"

40 0 40 80 120
Scale 1" = 40'



"PRIVATE"
LINE "F"

40 0 40 80 120
Scale 1" = 40'

CURVE TABLE

NUMBER	Δ=	L='	R='	T='
C300	43°00'58"	16.89	22.50	8.87
C302	61°28'37"	24.14	22.50	13.38

* AS-BUILT PER PLANS 2-05-04 LH

REGISTERED PROFESSIONAL ENGINEER
CHARISSA J.A. LACH
NO. 53390
EXP. 6-30-03
CIVIL
STATE OF CALIFORNIA

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adkan ENGINEERS
CIVIL ENGINEERING SURVEYING PLANNING
6820 AIRPORT DRIVE, RIVERSIDE, CA 92504
TEL: (951) 688-0241 FAX: (951) 688-0599
DATE 4-22-03
UNDER THE SUPERVISION OF: R.C.E. 53390 6/30/03

BENCHMARK: EB-C3
P.K. NAIL AND TAG IN THE NORTHERLY WALL OF A CATCH BASIN 2 FEET EASTERLY OF THE EASTERLY CURB OF TRAUTWEIN ROAD, 100 FEET NORTHERLY OF VAN BUREN BLVD. TRANSFER FROM VB-10-2.

ELEVATION: 1674.947

MARK	REVISIONS	APPR.	DATE

DESIGNED BY: L.A. DRAWN BY: F.K. CHECKED BY: C-

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	6/14/00	
PARK DEPARTMENT		
TRAFFIC DIVISION		
P.W. ENGINEER MANAGER	6/7/00	
STREET SERVICES	7/6/00	

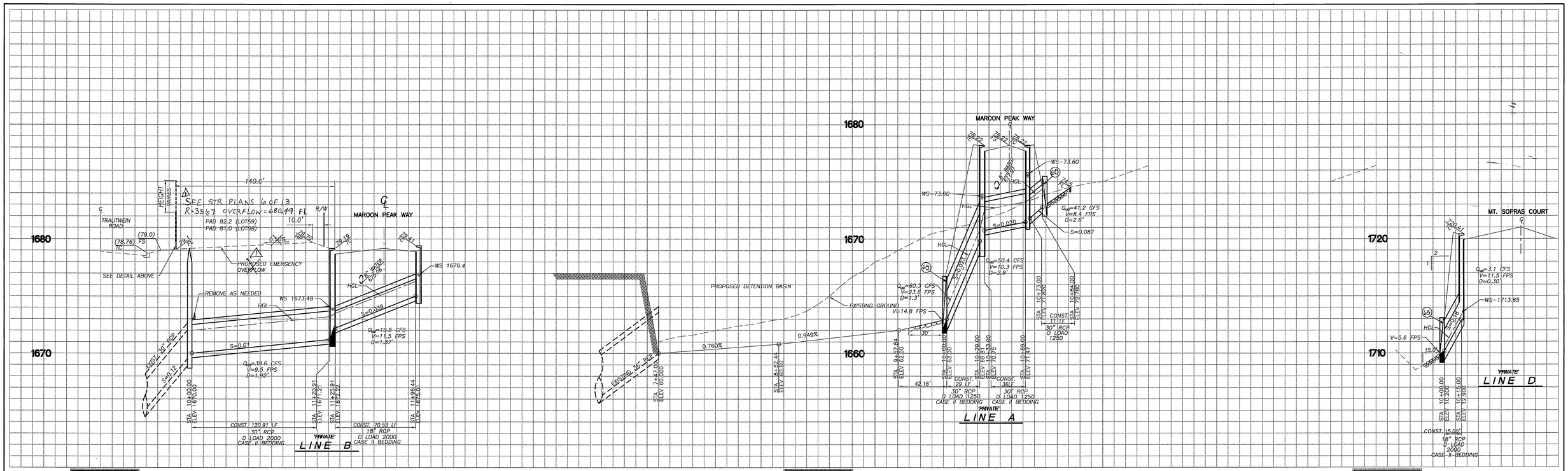
APPROVED BY R. M. Scott
PUBLIC WORKS DIRECTOR
DATE 6-9-2000

STORM DRAIN PLAN
TRACT NO. 28930
LINE "C"
LINE"C-1","E","F"-"PRIVATE"
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

ACCOUNT NO.
D-677
SHEET 2 OF 4
J.N. 5643

File name: U:\DRAWING\FORTOLA\5002
Plot Date: 5/29/00

INDEXED 8-10-2000 LH



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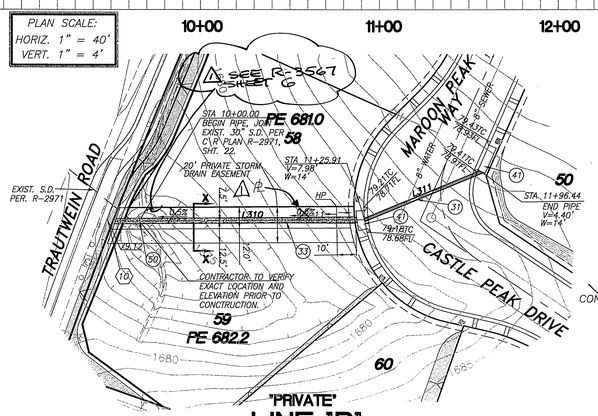

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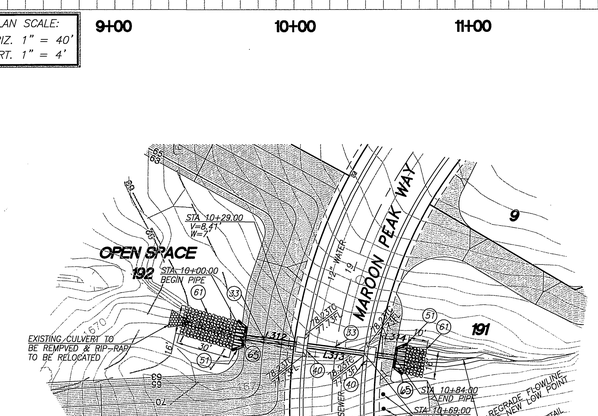

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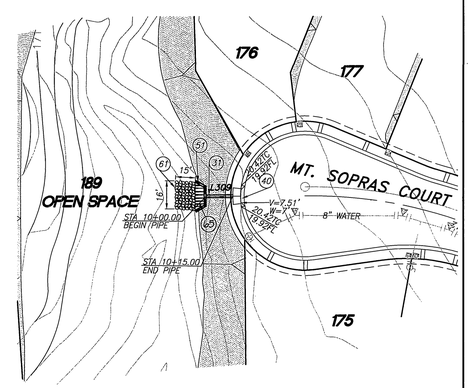
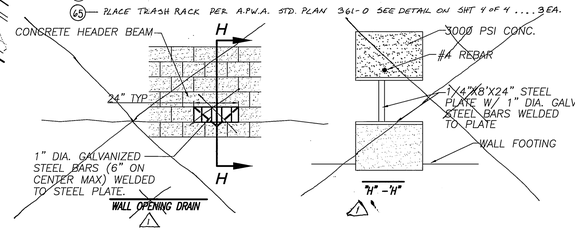
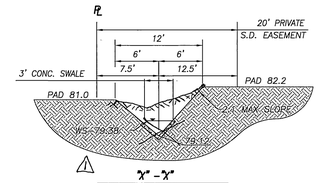


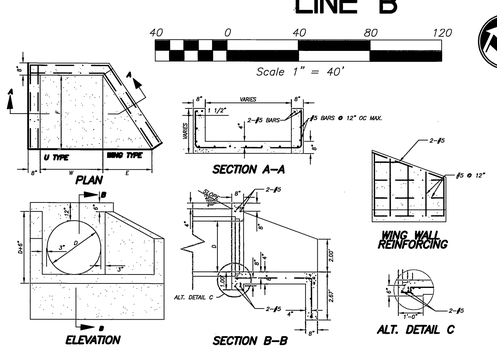
CONSTRUCTION NOTES

(31)	INSTALL 18" RCP DLOAD (SEE PROFILE)	86 LF
(33)	INSTALL 30" RCP DLOAD (SEE PROFILE)	202 LF
(40)	CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 405	3 EA
(41)	CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 407 V= (SEE PLAN VIEW), W=7'	2 EA
(42)	CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 407 V= (SEE PLAN VIEW), W=14'	
	CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD 407 V= (SEE PLAN VIEW), W=21'	
(50)	INSTALL CONCRETE COLLAR PER CITY OF RIVERSIDE STANDARD 424	1 EA
(51)	INSTALL INLET/OUTLET PER DETAIL SHEET 3 OF 3	3 EA
(61)	INSTALL 1/4 TON RIP RAP GROUTED IN PLACE (32" DEEP TYP.) W/FILTER FABRIC MATERIAL	3 EA
(62)	CONSTRUCT 3' CONCRETE V-DITCH	400 SF
(63)	CONSTRUCT WALL PER DETAIL HEREON	1EA
(65)	PLACE TRASH RACK PER A.P.W.A. STD. PLAN 361-0 SEE DETAIL ON SHT 4 OF 4	3 EA.





OVERFLOW RELOCATED TO MAROON PEAK WAY STA. 14+44.67 (WLY SIDE FL=680.49 SEE 6 OF 13 R-3567)



DIA. OF PIPE	DIMENSIONS C	F	W
INCH			
18	1'-3"	2'-6"	2'-0"
24	1'-9"	3'-0"	2'-6"
30	2'-3"	3'-6"	3'-0"
36	2'-9"	4'-0"	3'-6"
42	3'-3"	4'-6"	4'-0"
48	3'-9"	5'-0"	4'-6"
54	4'-3"	5'-6"	5'-0"
60	4'-9"	6'-0"	5'-6"
66	5'-3"	6'-6"	6'-0"
72	5'-9"	7'-0"	6'-6"
84	6'-9"	8'-0"	7'-6"

NOTES:

1. CONCRETE SHALL BE 560-C-3250
2. EXPOSED CORNERS TO BE CHAMFERED 3/4".
3. MULTIPLE PIPES TO BE SET A DISTANCE OF D/2, WITH A 1' MINIMUM BETWEEN OUTSIDE DIAMETERS OF PIPES.
4. TOP OF HEADWALL SHALL BE PLACED APPROXIMATELY PARALLEL TO PROFILE GRADE WHEN THE GRADE IS 3% OR MORE.
5. SKEWED PIPES: DIMENSION W TO BE INCREASED IN WIDTH OR LENGTH DUE TO SKEW OR MULTIPLE PIPES.
6. FOR PIPE WALL THICKNESS GREATER 3" USE ALTERNATE DETAIL-C.

WING AND U TYPE HEADWALLS
N.T.S.

LINE TABLE

NUMBER	DIRECTION	DISTANCE
L309	N50°10'53"W	19.34'
L310	N64°37'45"E	125.91'
L311	N42°40'32"E	70.53'
L312	N52°14'47"W	33.00'
L313	N52°14'47"W	36.00'
L314	N52°14'47"W	15.00'

REGISTERED PROFESSIONAL ENGINEER CHARISSA J.A. LEACH NO. 53390 EXP. 6-30-05 CIVIL STATE OF CALIFORNIA

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adkan ENGINEERS
CIVIL ENGINEERING SURVEYING PLANNING
6820 AIRPORT DRIVE, RIVERSIDE CA 92504
TEL. (909) 688-0241 FAX (909) 688-0599
DATE 5-25-03
UNDER THE SUPERVISION OF: R.C.E. 53390 6/30/03

BENCHMARK: EB-C3
P.K. NAIL AND TAG IN THE NORTHERLY WALL OF A CATCH BASIN 2 FEET EASTERLY OF THE EASTERLY CURB OF TRAUTWEIN ROAD, 100 FEET NORTHERLY OF VAN BUREN BLVD. TRANSFER FROM VB-10-2.

ELEVATION: 1674.947

MARK	REVISIONS	APPR.	DATE
1	ADDED STR OVERFLOW INFO.	RJZ	11-9-04

DESIGNED BY: L.A. DRAWN BY: F.K. CHECKED BY: C-

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

	APPROVED BY	DATE	BY
PRINCIPAL ENGINEER			
PARK DEPARTMENT			
TRAFFIC DIVISION			
P.W. ENGINEER MANAGER			
STREET SERVICES			

APPROVED BY R. McGrath
PUBLIC WORKS DIRECTOR
DATE 6-9-2000

STORM DRAIN PLAN
TRACT NO. 28930
LINE "A", "B", "D"
PRIVATE STORM DRAINS

ACCOUNT NO.
D-677
SHEET 3 OF 4

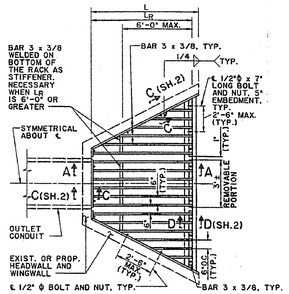
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'
J.N. 5643

File name: U:\DRAWING\PORTOLA\5003

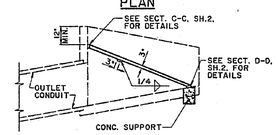
Plot Date: 5/29/00

*AS-BUILT PER PLANS 2-05-04 LH

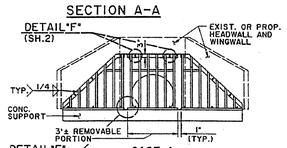
INDEXED 8-10-2000 LH



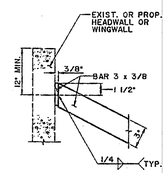
CASE A
PLAN



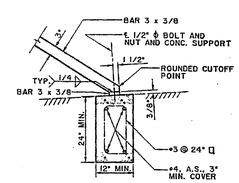
SECTION A-A



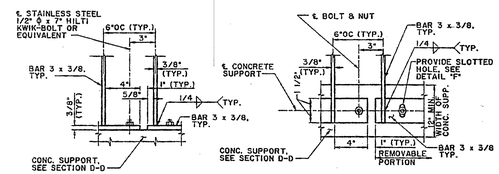
CASE A
ELEVATION



SECTION C-C (SH. 1)

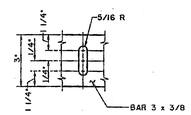


SECTION D-D (SH. 1)



ELEVATION PLAN

DETAIL "E" (SH. 1)



DETAIL "F" (SH. 1)
APPLIES TO THE TOP AND BOTTOM BARS OF THE REMOVABLE PORTION ONLY

NOTES

1. MAXIMUM SIZE OF OUTLET TO BE USED WITH THIS RACK IS 48" PIPE OR 48" WIDE RCB. MAXIMUM LENGTH OF RACK L_R IS 10'-0".
2. L_R CAN BE ADJUSTED SO THAT THE SLOPE OF THE RACK IS APPROXIMATELY 2 HORIZONTAL TO 1 VERTICAL.
3. THE CONCRETE SUPPORT IS NOT NECESSARY IF EXISTING OR PROPOSED INLET STRUCTURE HAS ADEQUATE SUPPORT CUTOFF WALL. IT DOES NOT ELIMINATE THE NEED FOR A CUTOFF WALL BUT CAN BE INTEGRATED WITH ONE WHEN REQUIRED AT A PARTICULAR INSTALLATION.
4. GALVANIZE ALL EXPOSED FERROUS PARTS AFTER FABRICATION.
5. IF FIELD WELDS ARE NECESSARY, USE GALVICON, GALVALLOY OR AGENCY APPROVED EQUAL FOR COATING.
6. ALL BOLTS SHALL BE 1/2" IN DIAMETER AND 7" IN LENGTH. ON REMOVABLE PORTION OF THE RACK, USE 300 SERIES STAINLESS STEEL BOLTS AND NUTS. FOR WINGWALL BOLTS FOR CASE A, AND WHERE HEADWALL AND WINGWALL ARE EXISTING, HILTI KWIK-BOLT OR EQUIVALENT CAN BE USED.

AMERICAN PUBLIC WORKS ASSOCIATION / SOUTHERN CALIFORNIA CHAPTER		
PROMULGATED BY THE PUBLIC WORKS STANDARDS INC., GREENBOOK COMMITTEE 1993	TRASH RACK (INCLINED)	STANDARD PLAN 361 - 0
	USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION	SHEET 1 OF 3

AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER	
TRASH RACK (INCLINED)	STANDARD PLAN 361 - 0 SHEET 2 OF 3

AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER	
TRASH RACK (INCLINED)	STANDARD PLAN 361 - 0 SHEET 3 OF 3

*AS-BUILT PER PLANS 2-05-04 JH

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PLANS PREPARED BY:
adkan ENGINEERS
CIVIL ENGINEERING SURVEYING PLANNING
6820 AIRPORT DRIVE, RIVERSIDE, CA 92504
TEL: (909) 688-0241 FAX: (909) 688-0599
DATE: 6/5/00
UNDER THE SUPERVISION OF: R.C.E. 53390 6/30/03

BENCHMARK: E8-C3
P.K. NAIL AND TAG IN THE NORTHERLY WALL OF A CATCH BASIN 2 FEET EASTERLY OF THE EASTERLY CURB OF TRAUTWEIN ROAD, 100 FEET NORTHERLY OF VAN BUREN BLVD. TRANSFER FROM VB-10-2.
ELEVATION: 1674.947

MARK	REVISIONS	APPR.	DATE

DESIGNED BY: L.A. DRAWN BY: F.K. CHECKED BY: C-

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	6/6/2000	
PARK DEPARTMENT		
TRAFFIC DIVISION		
P.W. ENGINEER MANAGER	6/7/00	TRB
STREET SERVICES	6/9/00	

APPROVED BY R. McGrath
PUBLIC WORKS DIRECTOR
DATE 6-9-2000

STORM DRAIN PLAN
TRACT NO. 28930
DETAILS
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

ACCOUNT NO.
D-677
SHEET 4 OF 4
J.N. 5643

INDEXED 8-10-2000 JH