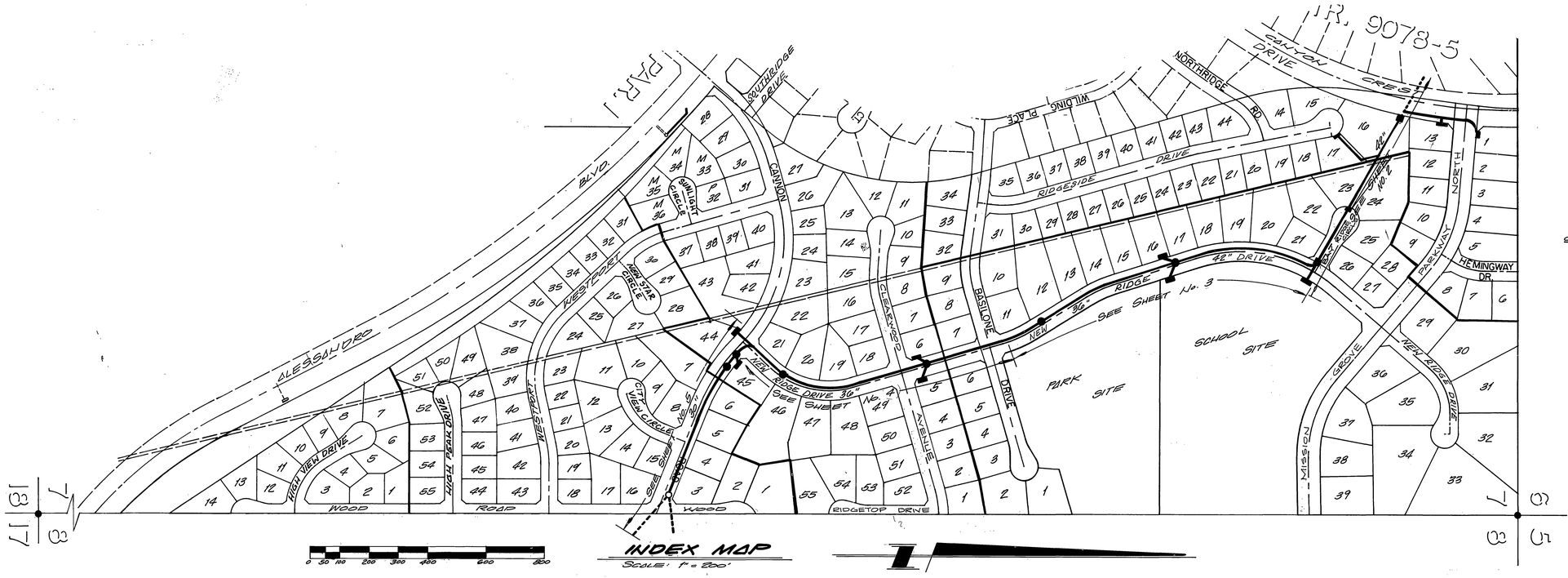
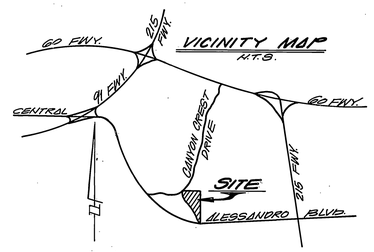
TRACT 21685 - STORM DRAIN PLAN



0 50 100 200 300 400 600 800

INDEX MAP
SCALE: 1" = 200'



WALL THICKNESS FOR CIPP	
PIPE SIZE	WALL THICKNESS
30 INCHES	3 INCHES
36 INCHES	3½ INCHES
42 INCHES	4 INCHES

CONSTRUCTION NOTES

1. CONST. CATCH BASIN PER CITY OF RIVERSIDE STD. NO. 405
2. CONST. CATCH BASIN PER CITY OF RIVERSIDE STD. NO. 407
3. CONST. CATCH BASIN PER CITY OF RIVERSIDE STD. NO. 408
4. CONST. C.S.P. INLET PER CITY OF RIVERSIDE STD. 412
5. CONST. MANHOLE EZ PER CITY OF RIVERSIDE STD. NO. 431
6. CONST. JUNCTION STRUCTURE B PER CITY OF RIVERSIDE STD. NO. 421
7. CONST. JUNCTION STRUCTURE C PER CITY OF RIVERSIDE STD. NO. 422
8. CONST. CONCRETE COLLAR PER CITY OF RIVERSIDE STD. NO. 424
9. INSTALL 18" RCP (D-1000)
10. INSTALL 18" RCP (D-2000)
11. INSTALL 30" RCP (D-1000) OR CIPP
12. INSTALL 30" RCP (D-1750) OR CIPP
13. INSTALL 30" RCP (D-2000) OR CIPP
14. INSTALL 36" RCP (D-1000) OR CIPP
15. INSTALL 36" RCP (D-1750) OR CIPP ⚠
16. INSTALL 42" RCP (D-1000) OR CIPP
17. INSTALL 42" RCP (D-1200) OR CIPP
18. INSTALL 42" RCP (D-1500) OR CIPP
19. INSTALL 42" RCP (D-1800) OR CIPP
20. NOT USED
21. CONST. CATCH BASIN PER CITY OF RIVERSIDE STD. NO. 409
22. CONST. CURB OUTLET PER CITY OF RIVERSIDE STD. NO. 410
23. INSTALL 18" CMP GAUGE 12
24. INSTALL 24" R.C.P. D-2000
25. INSTALL 24" RCP D-1000

BENCHMARK:

SET P.K. NAIL & TAG IN NORTHERLY END OF 6'X15"X3' HIGH GRANITE ROCK NORTHERLY OF INTERSECTION OF ALESSANDRO BLVD. & TRAUTWEIN RD.
P.B. 135.72 ELEV.: 1627.344

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 STD. DWGS, STANDARD DWG. NO. 10 AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTR. CURRENT EDITION.
3. ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
4. 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.
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. NOTICE TO CONTRACTOR. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
7. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
8. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO THE UNDERGROUND SERVICE ALERT (USA), PHONE NO. 1-800-422-4133, 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 U.S.A.
9. BEFORE THE RIP RAP IS ACCEPTED, AS PLACED, AT THE OUTLET OF ANY DRAINAGE STRUCTURE, IT SHALL BE TESTED UNDER FLOWS AS CLOSE AS POSSIBLE TO DESIGN CONDITIONS WITH WATER OBTAINED FROM FIRE HYDRANTS IN THE IMMEDIATE AREA.

REGISTERED PROFESSIONAL ENGINEER — ALLEN R. MARTIN — No. C 22853 — EXP. 3-31-89 — CIVIL — STATE OF CALIFORNIA

INDEXED 8-18-88 LH

APPROVAL BY:
SOUTHERN CALIFORNIA GAS COMPANY
9-29-87 DATE

PREPARED BY:
SOUTHLAND ENGINEERING
2501 RUBIDOUX BLVD. STE. B
RIVERSIDE, CA 92509
(714) 788-5488
ALLEN R. MARTIN R.C.E. 22853 EXP. 3-31-89
10-01-87 DATE

NO.	REVISION	BY	DATE
⚠	ADD CIPP ALT.	WLK	3/16/88

DESIGN FM DRAWN BB CHECKED KZ

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

	APPROVED BY	DATE	BY
	PRIN. ENGINEER	11-17-87	
	PARK. DEPT.		
	TRAFFIC DIV.		
	CH. P.W. ENGINEER	11.25 11/17/87	WLK

APPROVED BY: Barry Beck
PUBLIC WORKS DIRECTOR
DATE 11/30/87

TRACT 21685
STORM DRAIN PLANS
TITLE SHEET

ACCT. NO. 87111
D-530
SHT. 1 OF 6
SCALE: AS NOTED

LINE "A"

LINE "C"

LINE "B"

LINE "E"

LINE "D"

LINE "B" & LINE "E" & LINE "C"

SECTION B-B

SECTION A-A
FREELAND OVERFLOW DITCH
N.T.S.

SECTION B-B
N.T.S.

TERRACE DRAIN DETAIL
N.T.S.

SECTION C-C
FREELAND OVERFLOW DITCH
N.T.S.

PROFILE SCALE
HORIZ. 1"=40'
VERT. 1"=8'

· CAUTION ·
12" H.P. GAS LINE

CONSTRUCTION NOTES

(2)	CONST. CATCH BASIN	PER CITY RIV. STD.	407
(3)	CONST. CATCH BASIN	PER CITY RIV. STD.	408
(4)	CONST. CSP INLET	PER CITY RIV. STD.	412
(15)	CONST. MANHOLE EZ	PER CITY RIV. STD.	431
(16)	CONST. JUNCTION STRUCTURE 'B'	PER RIV. STD.	421
(17)	CONST. CONC. COLLAR	PER CITY RIV. STD.	424
(18)	INSTALL 18" RCP (D-2000)		
(19)	INSTALL 42" RCP (D-1500)	OR CIPP	
(19)	INSTALL 42" RCP (D-1800)	OR CIPP	
(24)	INSTALL 24" RCP (D-2000)	OR CIPP	

NOTE:
NORMAL Q100= 3.0 CFS.
IN CASE OF CLOGGING OF CATCH BASIN 13+20.62 BAY RIDGE CIR. & 12+14.34 RIDGESIDE DR. DESIGNED AT Q100= 39.0 CFS.

STORM DRAIN CURVE DATA				
NO.	DELTA	RADIUS	LENGTH	TANGENT
①	58° 45' 47"	50.00'	51.28'	28.15'
②	44°53' 17"	150.00'	117.52'	61.96'
③	01°21' 16"	1630.00'	38.52'	19.27'
④	01° 58' 05"	1630.00'	55.99'	28.00'
⑤	84° 18' 46"	50.00'	73.58'	45.27'

REGISTERED PROFESSIONAL ENGINEER
ALLEN W. MARTIN
No. C 38463 EXP 3-31-89
CIVIL
STATE OF CALIFORNIA

PREPARED BY
SOUTHLAND ENGINEERING
2501 RUBIDOUX BLVD. STE. B
RIVERSIDE, CA 92509
(714) 788-8388
ALLEN W. MARTIN
R.C.E. 38463 EXP 3-31-89
10-01-87
DATE

MARK	REVISIONS	APPR.	DATE
2	Rev 42" Pipe Slope KZ 6-14-88	WW	6/14/88
1	ADD M.H. & C.B. DETAIL, KZ 6-14-88	WW	6/14/88
1	ADD CIPP ALT.	WW	8/16/88

DESIGNED BY FM DRAWN BY BH CHECKED BY KZ

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	11-17-87	JMG
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGINEER	11-25 / 11/17/87	[illegible]

APPROVED BY [signature]
PUBLIC WORKS DIRECTOR
DATE 11/30/87

STORM DRAIN PLAN AND PROFILE

TRACT 21685
RIDGESIDE DRIVE
CANYON CREST DRIVE
MISSION GROVE PARKWAY NORTH
BAY RIDGE CIRCLE

HORIZ. SCALE: 1"=40' VERT. SCALE: 1"=8'

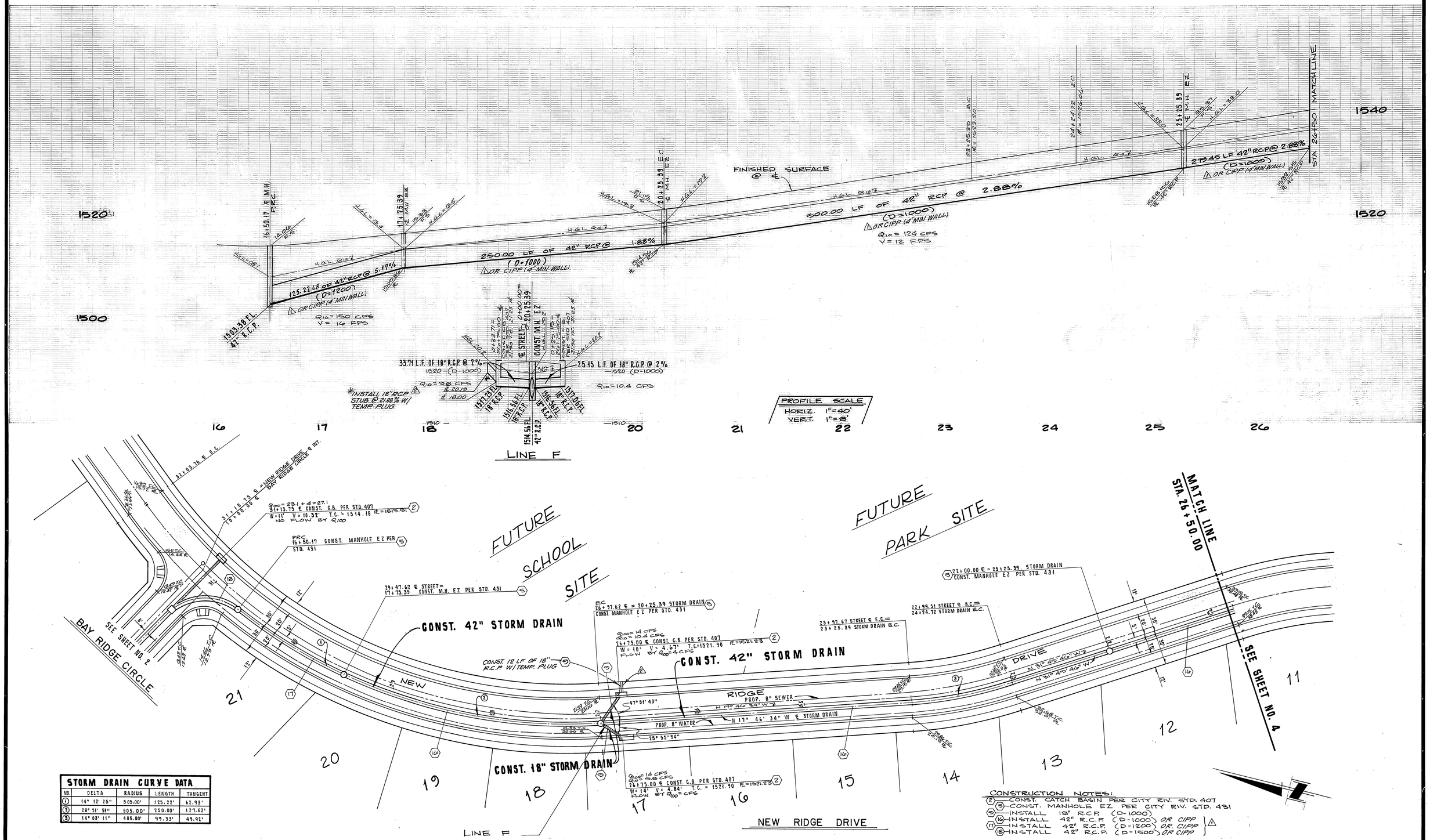
APPROVAL:
SOUTHERN CALIFORNIA GAS COMPANY
[signature]
9-29-87
DATE

INDEXED 8-17-88 GH

ACCOUNT NO. 87111

D-530

SHEET 2 OF 6



STORM DRAIN CURVE DATA				
NO.	DELTA	RADIUS	LENGTH	TANGENT
①	14° 12' 25"	505.00'	125.22'	62.93'
②	28° 24' 51"	505.00'	250.00'	127.62'
③	14° 03' 11"	405.00'	99.33'	49.92'

CONSTRUCTION NOTES:
② CONST. CATCH BASIN PER CITY RIV. STD. 407
⑤ CONST. MANHOLE EZ PER CITY RIV. STD. 431
⑯ INSTALL 18" R.C.P. (D-1000)
⑯ INSTALL 42" R.C.P. (D-1000) OR CIPP
⑰ INSTALL 42" R.C.P. (D-1200) OR CIPP
⑱ INSTALL 42" R.C.P. (D-1500) OR CIPP

2.67% Sta to Edge 12'

INDEXED 8-18-88 GH

REGISTERED PROFESSIONAL ENGINEER ALLEN W. MARTIN No. C 38463 EXP 3-31-89 CIVIL STATE OF CALIFORNIA

PREPARED BY:
SOUTHLAND ENGINEERING
2501 RUBIDOUX BLVD., STE. B
RIVERSIDE, CA 92509
(714) 788-8488
ALLEN W. MARTIN 10-01-87
R.C.E. 38463 EXP. 3-31-89 DATE

MARK	REVISIONS	APPR.	DATE
⚠	ADD 18" RCP STUB	WJK	9/27/88
⚠	ADD CIPP ALT.	WJK	9/14/88

DESIGNED BY PW DRAWN BY EH CHECKED BY KZ

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	11-17-87	WJK
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P.W. ENGINEER	11-25	WJK
	11/30/87	WJK

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 11/30/87

STORM DRAIN PLAN AND PROFILE
TRACT 21685
NEW RIDGE DRIVE

HORIZ. SCALE: 1"= 40' VERT. SCALE: 1"= 8'

ACCOUNT NO. 87111
D-530
SHEET 3 OF 6

STORM DRAIN CURVE DATA

NO.	DELTA	RADIUS	LENGTH	TANGENT
1	15° 19' 46"	395.00'	105.68	53.16'
2	59° 45' 00"	295.00'	307.64'	169.46'
3	92° 19' 57"	50.00	80.58'	52.08'

CONSTRUCTION NOTES:

- (2) CONST. CATCH BASIN PER CITY RIV. STD 407
- (5) CONST. MANHOLE EZ PER CITY RIV. STD 431
- (7) CONST JUNCTION STRUCTURE B PER CITY RIV. STD. 422
- (9) INSTALL 18" R.C.P. (D-1000)
- (12) INSTALL 30" R.C.P. (D-1750) OR CIPP
- (13) INSTALL 30" R.C.P. (D-2000) OR CIPP
- (14) INSTALL 36" R.C.P. (D-1000) OR CIPP
- (16) INSTALL 42" R.C.P. (D-1000) OR CIPP
- (25) INSTALL 24" R.C.P. (D-1000

REGISTERED PROFESSIONAL ENGINEER ALLEN W. MARTIN No. C 38463 EXP. 3-31-89 CIVIL STATE OF CALIFORNIA

PREPARED BY:
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(714) 788-8488

ALLEN W. MARTIN
R.C.E. 38463 EXP. 3-31-89
10-01-87
DATE

MARK	REVISIONS	APPR.	DATE
1	ADD CIPP ALT.	WWM	3/16/88

DESIGNED BY PM DRAWN BY BH CHECKED BY KZ

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	11-17-87	
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGINEER	11.25 / 11/17/87	

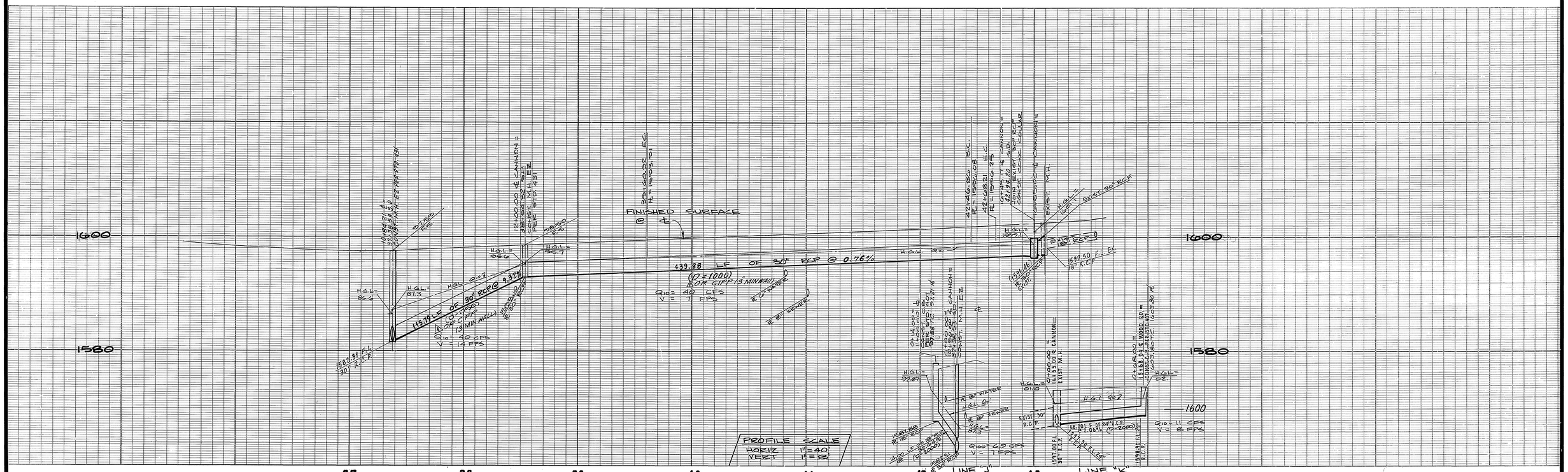
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 11/30/87

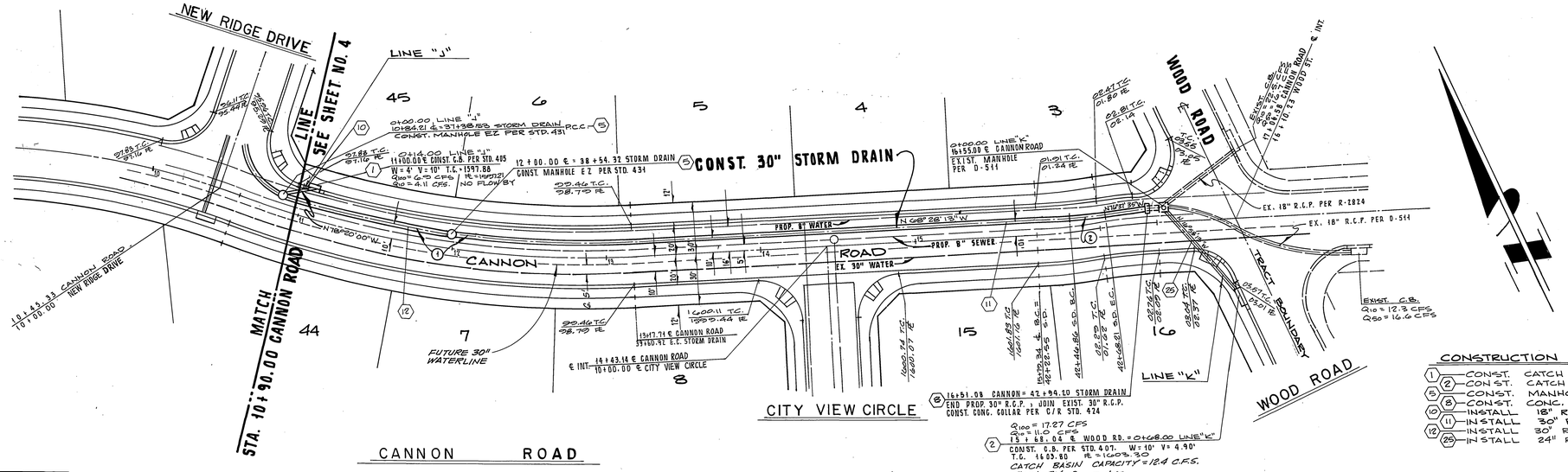
STORM DRAIN PLAN AND PROFILE
TRACT 21685
NEW RIDGE DRIVE

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 8'

ACCOUNT NO. 87111
D-530
SHEET 4 OF 6

INDEXED 8-18-88





CONSTRUCTION NOTES:

1	CONST.	CATCH BASIN PER CITY RIV. STD. 405
2	CONST.	CATCH BASIN PER CITY RIV. STD. 407
5	CONST.	MANHOLE E℄ PER CITY RIV. STD. 431
8	CONST.	CONC. COLLAR PER CITY RIV. STD. 424
10	INSTALL	18" R.C.P. (D-2000) OR CIPP
11	INSTALL	30" R.C.P. (D-1000) OR CIPP ⚠
12	INSTALL	30" R.C.P. (D-1750) OR CIPP
26	INSTALL	24" R.C.P. (D-1000)

STORM DRAIN CURVE DATA

NO.	DELTA	RADIUS	LENGTH	TANGENT
1	20° 24' 42"	6 25.78'	222.35'	112.38'
2	08° 09' 22"	150.00'	21.35'	10.69'

INDEXED 8-18-88 LH

REGISTERED PROFESSIONAL ENGINEER ALLEN W. MARTIN No. C 38463 EXP 3-31-89 CIVIL STATE OF CALIFORNIA

PREPARED BY:
SOUTHLAND ENGINEERING
2901 RUBIDOUX BLVD, STE. B
RIVERSIDE, CA 92509
(714) 788-3488
ALLEN W. MARTIN
R.C.E. 38463 EXP. 3-31-89
10-01-87
DATE

MARK	REVISIONS	APPR.	DATE
⚠	ADD CIPP ALT.	WLL	8/16/88

DESIGNED BY FM DRAWN BY BH CHECKED BY KZ

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

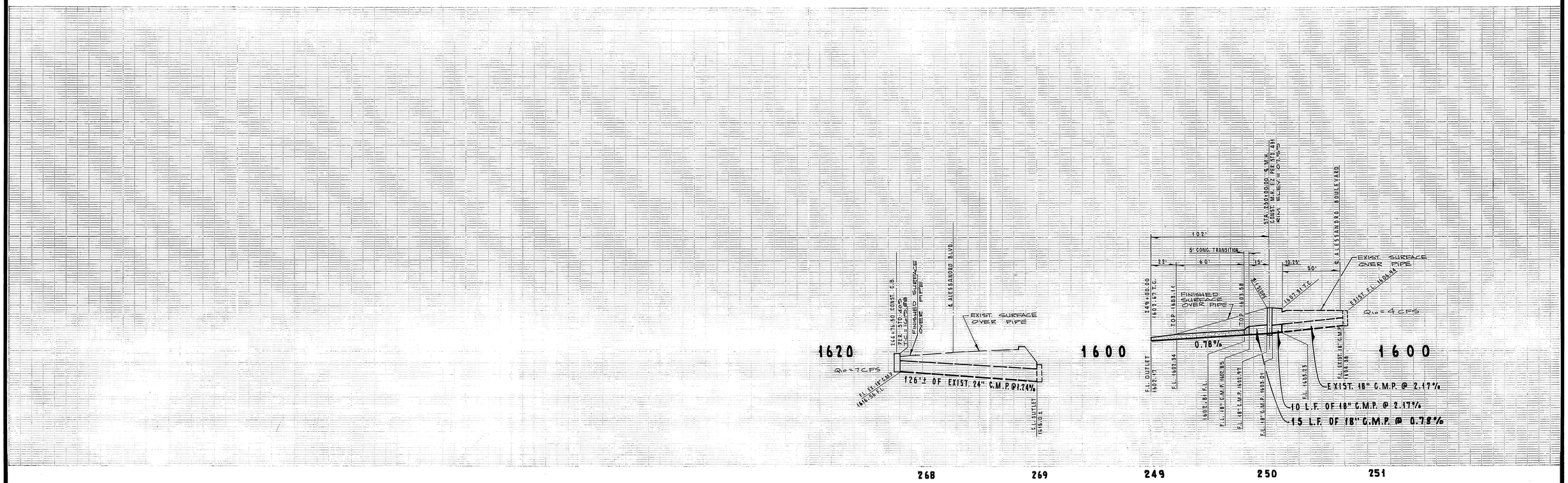
APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	11-17-87	WLL
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGINEER	11.25	WLL
	11/17/87	WLL

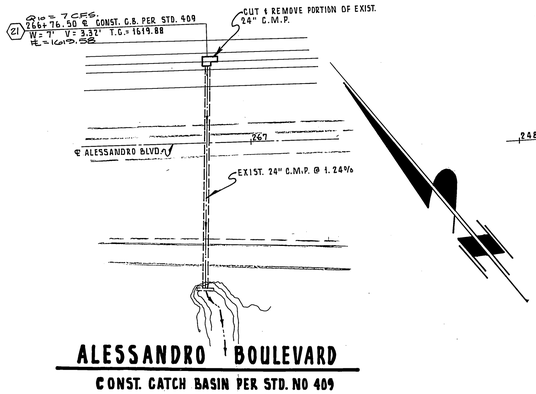
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 11/30/87

STORM DRAIN PLAN AND PROFILE
TRACT 21685
CANNON ROAD

HORIZ. SCALE: 1"=40' VERT. SCALE: 1"=8'

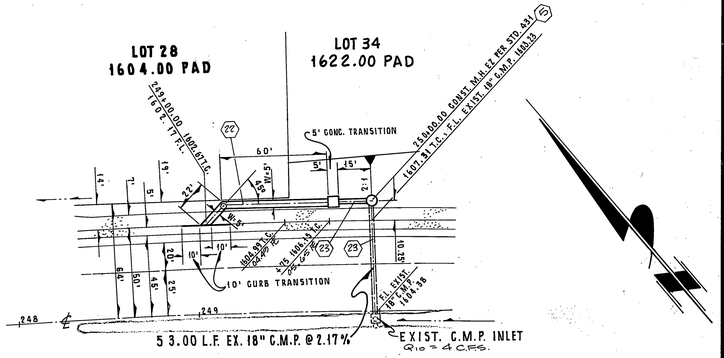
ACCOUNT NO. 87111
D-530
SHEET 5 OF 6





ALESSANDRO BOULEVARD

CONST. CATCH BASIN PER STD. NO 409



ALESSANDRO BLVD.

CONST. CURB OUTLET PER STD. NO. 410

CONSTRUCTION NOTES:

(5) CONST. MANHOLE EZ PER CITY RIV. STD. 431
(21) CONST. CATCH BASIN PER CITY RIV. STD. 409
(22) CONST. CURB OUTLET PER CITY RIV. STD. 410
(23) INSTALL 18" C.M.P. GAUGE 12

INDEXED 8-18-88 LH

REGISTERED PROFESSIONAL ENGINEER ALLEN W. MARTIN No. C 38463 EXP 3-31-89 CIVIL STATE OF CALIFORNIA

PREPARED BY: ALLEN W. MARTIN
SOUTHLAND ENGINEERING
2501 RUBIDOUX BLVD., STE. B
RIVERSIDE, CA. 92509
(714) 788-8488

ALLEN W. MARTIN R.C.E. 38463 EXP. 3-31-89 — 10-01-87 DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.M. DRAWN BY SS CHECKED BY BZ

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	11-17-87	
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGINEER	11-25	
	11/17/87	

APPROVED BY Barry Beck
PUBLIC WORKS DIRECTOR
DATE 11/30/87

STORM DRAIN PLAN AND PROFILE
TRACT NO. 21685
ALESSANDRO BLVD.

HORIZ. SCALE: 1" = 4' VERT. SCALE: 1" = 8'

ACCOUNT NO. D-530
SHEET 6 OF 6