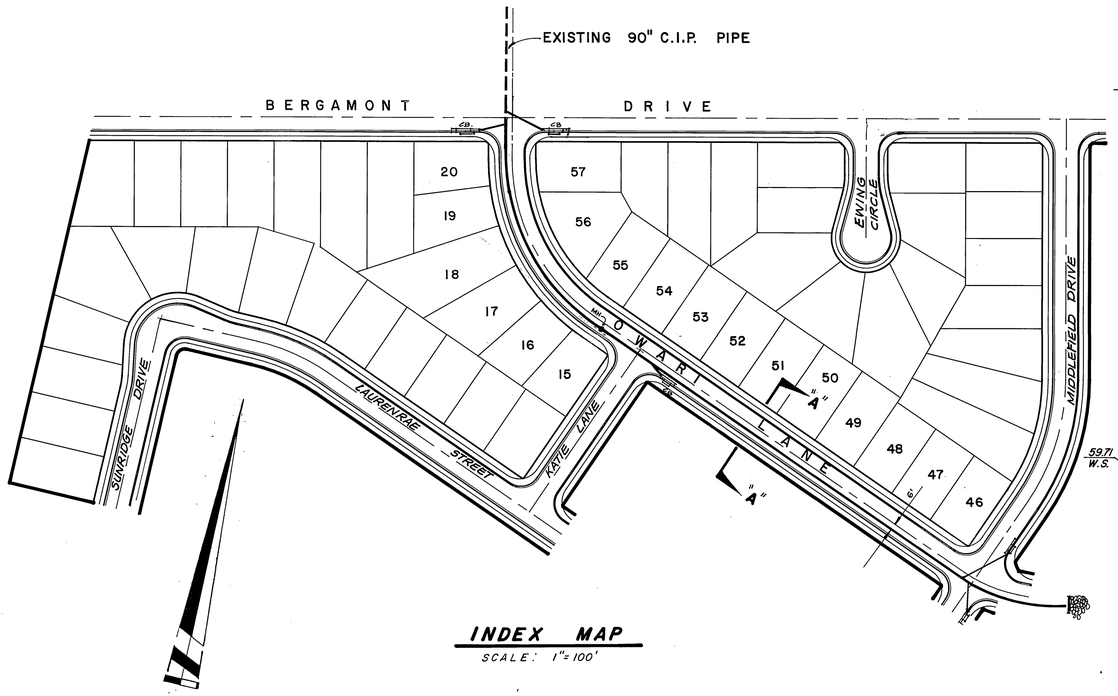
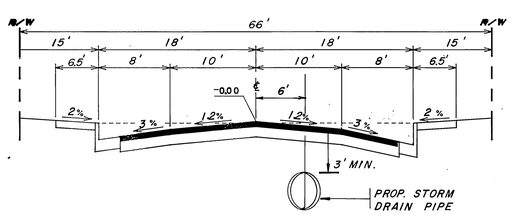
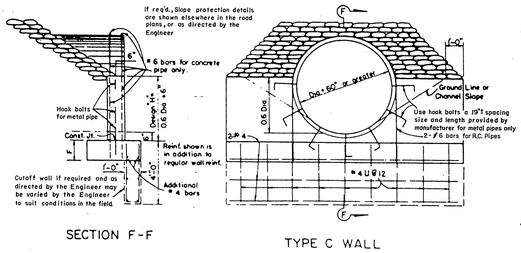


INDEX MAP
SCALE: 1"=100'



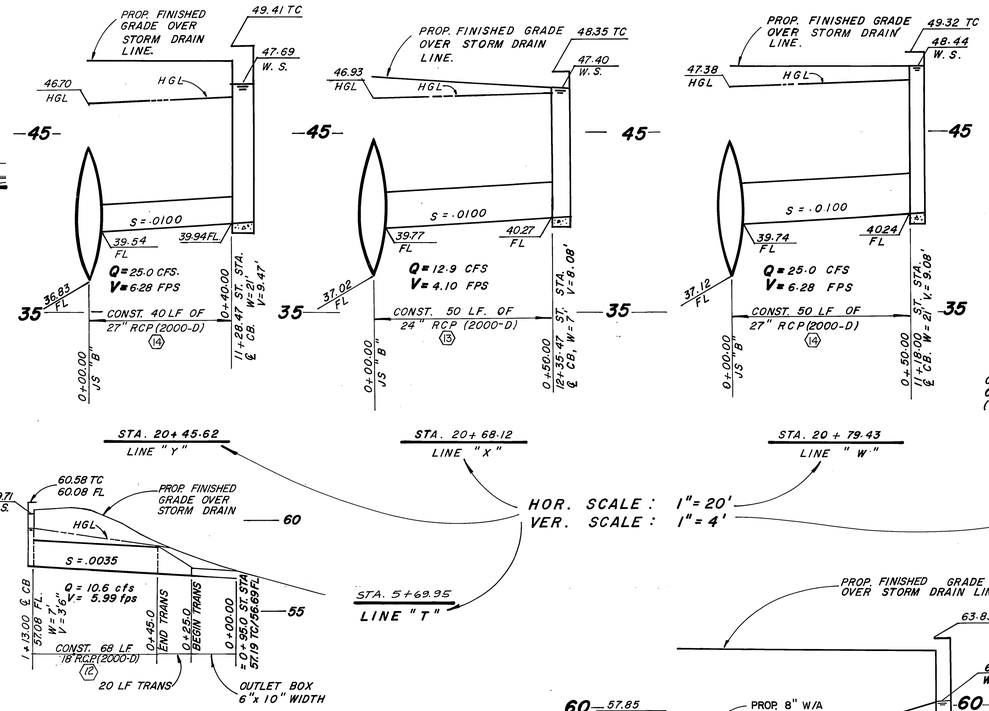
SECTION "A"-"A"
OWARI LANE
N.T.S.



HEADWALL DETAIL
N.T.S.

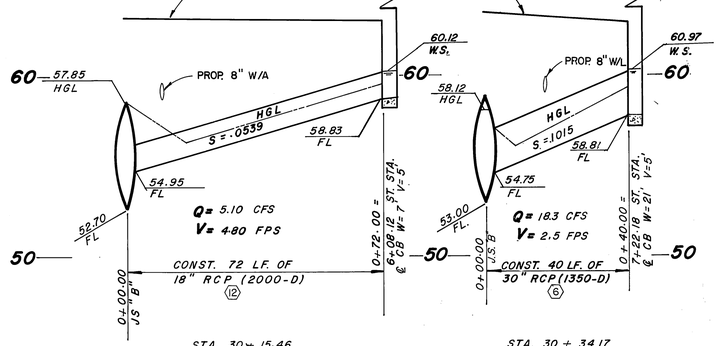
STORM DRAIN GENERAL NOTES

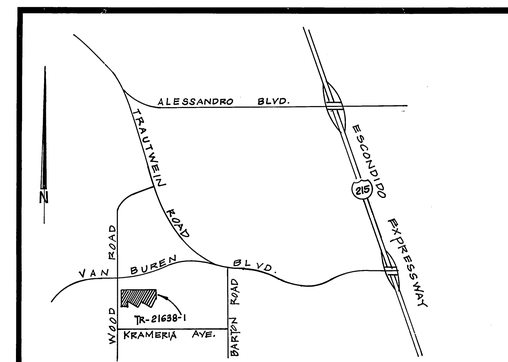
1. QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPT. OF PUBLIC WORKS STD. DWGS., STD. DWG. No. 10, AND SPECIFICATIONS FOR PUBLIC WORKS, CONSTRUCTION, CURRENT EDITION.
3. IT 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 AT NO COST TO THE CITY.
4. NOTICE TO CONTRACTOR: THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE 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.
5. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTURCTION THE PRIVATE ENGINEER SIGNING THESE PLANS SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
6. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PLONE 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 USA.
7. 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.
8. ALL EMBANKMENT FILL SHALL BE COMPACTED TO MINIMUM OF 90% MAXIMUM DRY DENSITY AND SHALL BE OF AN APPROVED QUALITY.
9. DEVELOPER TO GIVE CITY WATER DIVISION FIVE (5) WORKING DAYS WRITTEN NOTICE PRIOR TO START OF CONSTRUCTION AND TO ALLOW CITY TEN (10) WORKING DAYS FOR COMPLETION OF WORK (787-7611).
10. ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN FIVE (5) DAYS AFTER NOTIFICATION FROM THE CITY INSPECTOR.
11. 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.



STORM DRAIN CONSTRUCTION NOTES

		QUANTITIES
1	CONSTRUCT 90" C.I.P.P. OR R.C.P. AS SHOWN ON THIS PLAN.	412 L.F.
2	CONSTRUCT CONCRETE HEADWALL PER CALTRANS STD. D-90. AND DETAIL SHOWN	1 EA.
3	CONSTRUCT JUNCTION STRUCTURE B. PER CITY STD. NO. -421.	4 EA.
4	CONSTRUCT MANHOLE J M PER CITY STD. NO. -432.	1 EA.
5	CONSTRUCT CURB INLET CATCH BASIN PER CITY STD. NO. 405.	6 EA.
6	CONSTRUCT 30" DIA. R.C.P. STORM DRAIN ASTM CL. III (1350-D).	58 L.F.
7	CONSTRUCT 72" C.I.P.P. AS SHOWN THIS PLAN.	723 L.F.
8	CONSTRUCT CONCRETE COLLAR PER CITY STD. NO. 424.	1 EA.
9	CONSTRUCT 36" RCP STORM DRAIN ASTM CL III (1350-D)	18 L.F.
10	CONSTRUCT GROUTED RIP-RAP 1/4 TON MINIMUM.	1 EA.
11	CONSTRUCT MANHOLE AX PER CITY STD. NO. 430	1 EA.
12	CONSTRUCT 18" R.C.P. STORM DRAIN ASTM CL III. (2000-D)	116 L.F.
13	CONSTRUCT 24" R.C.P. STORM DRAIN ASTM CL III. (2000-D)	50 L.F.
14	CONSTRUCT 27" R.C.P. STORM DRAIN ASTM CL III. (2000-D)	90 L.F.
15	CONSTRUCT CURB OUTLET STRUCTURE PER CITY STD. 410 A-B = 5', C-D = 3', E-F = 10', W = 3'	1 EA.





VICINITY MAP INDEXED 7-21-87 LH
N.T.S.

Underground Service Alert
DIG ALERT BEFORE YOU DIG
Call: TOLL FREE
1-800 422-4133
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W. CANTY No. 17550 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF: John W Canty
REGISTERED CIVIL ENGINEER NO. 17550
EXPIRATION DATE 6-30-89 DATE: 11/27/87
APPROVED BY:

J.F. DAVIDSON ASSOCIATES, INC.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
P.O. BOX 493 ■ RIVERSIDE, CA 92502 (714) 686-0844
11200 SO. MT. VERNON AVE. #D ☐ COLTON, CA 92324 (714) 825-1082
73-080 EL PASEO, #103 ☐ PALM DESERT, CA 92260 (619) 346-5691
JFD ASSOCIATES

SCALE AS SHOWN
DATE NOV. 1986

BENCH MARK: V.B. 10-64 ELEV. 1700.670 BRASS DISK FLUSH & MARKED VB 10-64, 06 MI. E ON VAN BUREN BLVD. FROM & INT. OF VAN BUREN & WOOD RD. 205 N OF VAN BUREN & THE N.E. SIDE OF GRANITE BOULDERS ON TOP OF 3'x 15'x 18' BOULDER.

MARK	REVISIONS	APPR.	DATE

DESIGNED BY N.M.M. DRAWN BY T.F.E. CHECKED BY R.H.

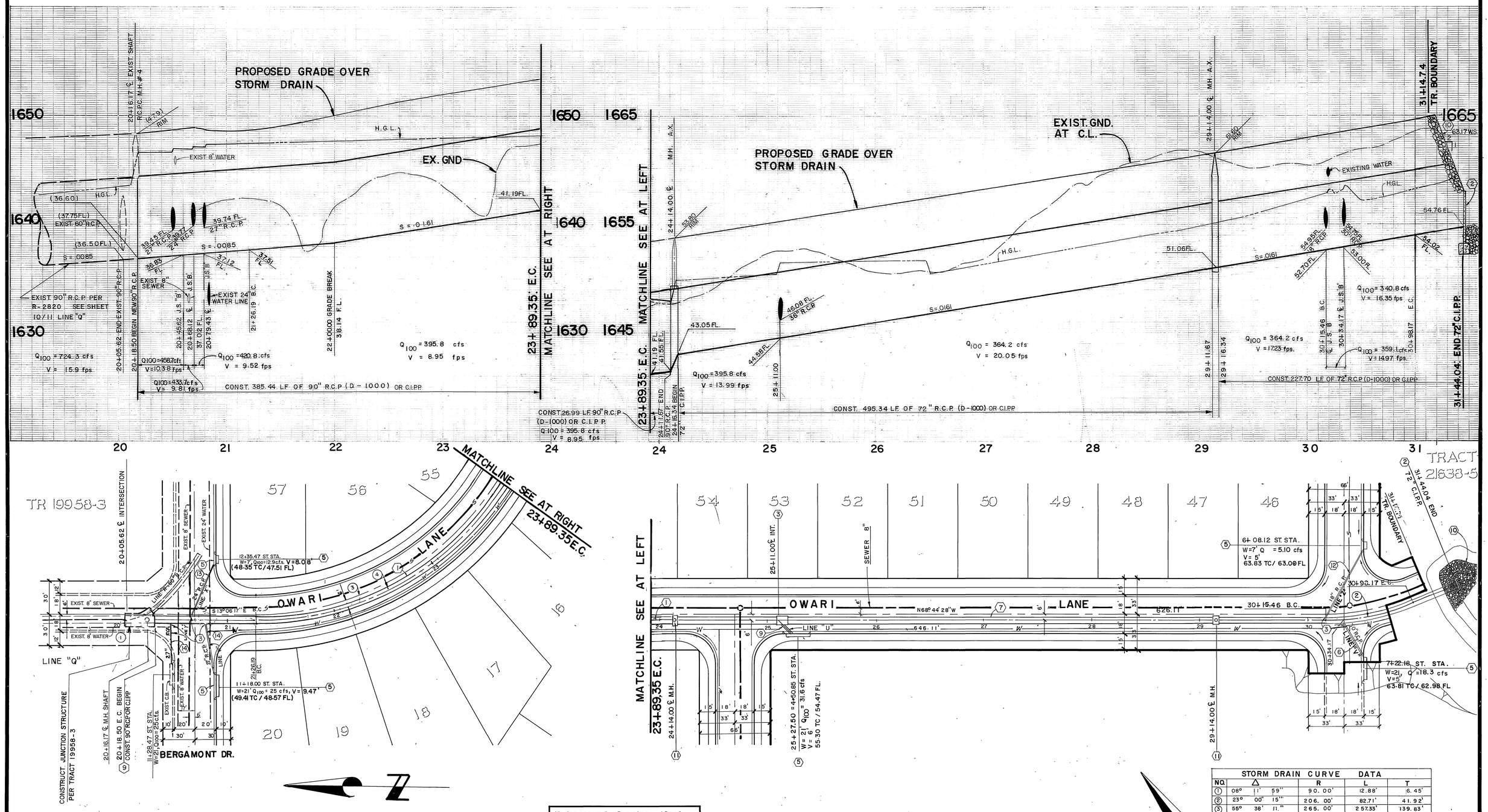
CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

	BY	DATE
APPROVED BY		
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P.W. ENGR.		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 7/14/87

TITLE SHEET
STORM DRAIN PLAN
TR No. 21638-1
FOR: S.I.C.

PROJECT NO. D-509
SHEET 1 OF 2
FILE NO. 86-9378


PROPOSED GRADE OVER STORM DRAIN
EX. GND
EXIST. GND. AT C.L.
PROPOSED GRADE OVER STORM DRAIN
H.G.L.
EXIST 8" WATER
EXISTING WATER
EXIST 8" SEWER
EXIST 24" WATER LINE
EXIST 90" R.C.P. PER R-2820 SEE SHEET 10/11 LINE "Q"
EXIST 60" R.C.P.
20+16.17 ℄ EXIST. SHAFT R.C.P.C. M.H. # 4
20+18.50 BEGIN NEW 90" R.C.P.
20+05.62 END EXIST. 90" R.C.P.
22+10.00 GRADE BREAK 38.14 F.L.
23+89.35 E.C. MATCHLINE SEE AT RIGHT
MATCHLINE SEE AT LEFT 23+89.35 E.C.
24+14.00 ℄ M.H. A.X.
29+14.00 ℄ M.H. A.X.
63.20 RIM
64.60 RIM
Q100 = 724.3 cfs V = 15.9 fps
Q100 = 395.8 cfs V = 8.95 fps
Q100 = 420.8 cfs V = 9.52 fps
Q100 = 468.7 cfs V = 10.38 fps
Q100 = 433.7 cfs V = 9.81 fps
Q100 = 364.2 cfs V = 20.05 fps
Q100 = 395.8 cfs V = 13.99 fps
Q100 = 340.8 cfs V = 16.35 fps
Q100 = 364.2 cfs V = 17.23 fps.
Q100 = 359.1 cfs V = 14.97 fps.
CONST. 385.44 LF OF 90" R.C.P (D = 1000) OR C.I.P.P.
CONST 26.99 LF 90" R.C.P (D-1000) OR C.I.P.P. Q-100 = 395.8 cfs V = 8.95 fps
CONST. 495.34 LF OF 72" R.C.P (D-1000) OR C.I.P.P.
CONST. 227.70 LF OF 72" R.C.P (D-1000) OR C.I.P.P.
31+14.74 TR. BOUNDARY
31+44.04 END 72" C.I.P.P.
TR 19958-3
LINE "Q"
LINE "U"
LINE "V"
OWARI LANE
BERGAMONT DR.
MATCHLINE SEE AT RIGHT 23+89.35 E.C.
MATCHLINE SEE AT LEFT 23+89.35 E.C.
CONSTRUCT JUNCTION STRUCTURE PER TRACT 19958-3
20+16.17 ℄ M.H. SHAFT
20+18.50 E.C. BEGIN
CONST. 90" RCP OR C.I.P.P.
12+35.47 ST. STA. W=7' Q100=12.9 cfs. V=8.08' (48.35 TC/47.51 FL)
11+18.00 ST. STA. W=21' Q100 = 25 cfs, V= 9.47' (49.41 TC / 48.57 FL)
11+28.47 ST. STA. W=21' Q100=25 cfs.
6+08.12 ST. STA. W=7' Q =5.10 cfs V= 5' 63.83 TC/ 63.00 FL
7+22.18 ST. STA. W=21, Q =18.3 cfs V=5 63.81 TC / 62.98 FL
25+27.50 = 4+50.85 ST. STA. W= 21' Q100 = 31.6 cfs V= 6' 55.30 TC / 54.47 FL.
TRACT 21638-5
TRACT 21638-3
TRACT 21638-1
SEWER 8"
LINE "R" R.C.P.
LINE "S" R.C.P.
LINE "T" R.C.P.
LINE "V" R.C.P.
EXIST. C.B.
EXIST. 6" SEWER
EXIST. 24" WATER
EXIST. 8" WATER
EXIST. 8" SEWER
EXIST. 8" SEWER
EXIST 24" WATER LINE
EXIST. 8" WATER
EXIST. 8" SEWER
EXIST. 8" WATER
EXIST. C.B.
EXIST. 6" SEWER
EXIST. 24" WATER
EXIST. 8" WATER
EXIST. 8" SEWER
EXIST. 8" WATER
EXIST. 8" SEWER
EXIST. 8" WATER
EXIST. 8" SEW