

BILL OF MATERIALS

DESCRIPTION	MAIN	F.H.	SERVICE	B.A.
4" D.I.P.	261.87 L.F.			
8" A.C.P.	519.14 L.F.			
1" SERVICE FITTINGS			7 EA.	
1" COPPER TUBING			200 LF	
1" WATER METER			7 EA.	
METER BOX-BROOKS NO. 37 (W/LID)			7 EA.	
4" END CAP W/2" B.O. (C.W.D.411)	2 EA.			15 S.F.
8" X 4" REDUCER	2 EA.			15 S.F.
12" X 12" X 8" TAPPING SLEEVE (BY CITY)	1 EA.			12 S.F.
6" FIRE HYDRANT ASSEMBLY (C.W.D.-700)		1 EA.		4 S.F.
1" S & 1" M (BY CITY)			3 EA.	

11

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND IN CONFORMANCE WITH THE LATEST REVISION OF STANDARD SPECIFICATIONS NO. 205 FOR WATER DISTRIBUTION SYSTEMS, WATER ENGINEERING DIVISION, CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT, AND APPLICABLE A.W.W.A. STANDARDS AND SPECIFICATIONS, EXCEPT AS NOTED.
- ALL WATER MAINS ARE CL. 150 A.C. PIPE, A.W.W.A. C-400, AND CL. 50/CL. 51 D.I.P. A.W.W.A. C-151.
- APPROVAL OF THIS PLAN BY THE WATER DIVISION DOES NOT RELIEVE THE ENGINEER OF THE DESIGN RESPONSIBILITY THEREOF.
- THE WATER MAIN SHALL BE LAID TO THE LINE AND GRADE SHOWN ON THE PLAN. THE DEVELOPER'S ENGINEER SHALL PROVIDE A CONSTRUCTION OFF-SET LINE AND STATION ALL FITTINGS. CUT SHEETS WITH GRADES SHALL BE PROVIDED FOR PIPELINES ON ORION ST. & BOEHM CT. MINIMUM HEIGHT OF COVER OVER WATER MAIN = 3.0 FEET, UNLESS OTHERWISE NOTED. ALL 12 INCH DIAMETER WATER MAIN SHALL HAVE 4.0 FEET COVER MINIMUM.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CABLES 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 CONSTRUCTION CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN, OR ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- PROPOSED ELECTRICAL UNDERGROUND AND STREET LIGHT FACILITIES NOT SHOWN ON PLAN. COORDINATE INSTALLATION WITH DEVELOPER AND PUBLIC UTILITIES DEPARTMENT. ELECTRICAL DIVISION, CALL: (714) 782-5452 FOR PROPOSED ELECTRICAL AND STREET LIGHT FACILITIES.
- WATER MAINS AND SEWER MAINS SHALL NOT CROSS WITH LESS THAN 1'-0" VERTICAL CLEARANCE. WATER SERVICE LINES AND SEWER LATERALS SHALL NOT BE IN THE SAME TRENCH. TEN FOOT MINIMUM HORIZONTAL CLEARANCE REQUIRED.
- WATER METER BOXES AND FIRE HYDRANTS WILL BE PLACED AT CURB SITE LOCATIONS. THE CONTRACTOR SHALL ADJUST METER BOXES TO SIDEWALK GRADE WHEN SIDEWALKS ARE POURED.
- THE CONTRACTOR MAY BEGIN CONSTRUCTION ONLY AFTER A PRE-CONSTRUCTION MEETING IS HELD WITH WATER DIVISION ENGINEERING STAFF. CONTACT INSPECTION AT 782-5304 TO ARRANGE THIS MEETING.
- MATERIALS LISTS PER SECTION 3-10 AND CERTIFICATIONS MUST BE SUBMITTED FOR WATER DIVISION APPROVAL PRIOR TO INSTALLATION.
- ALL NECESSARY PERMITS WILL BE TAKEN OUT BY THE CONSTRUCTION CONTRACTOR. NO EXCAVATION SHALL BE DONE WITHOUT A STREET OPENING PERMIT FOR WATER MAIN CONSTRUCTION.
- CONSTRUCTION CONTRACTOR SHALL REQUEST WATER DIVISION INSPECTION 48 HOURS PRIOR TO TRENCHING. PLANS AND SPECIFICATIONS SHALL BE ON THE SITE AT ALL TIMES.
- WATER MAINS SHALL BE SAND BEDDED. NATIVE FREE DRAINING MATERIAL WILL BE ALLOWED ONLY WHEN THE SAND EQUIVALENT IS GREATER THAN 30.
- CONSTRUCTION CONTRACTOR SHALL BULKHEAD MAINS, TEST AND STERILIZE BEFORE TIE-IN MADE TO CITY SYSTEMS. GAS CHLORINATION IS REQUIRED. A MINIMUM OF ONE BACTERIOLOGICAL TEST PER 500 FEET OF MAIN WILL BE REQUIRED FOR TWO CONSECUTIVE DAYS. THE PRESSURE TEST SHALL BE CONDUCTED ONLY AFTER THE BEDDING AND TRENCH BACKFILL HAVE PASSED THE REQUIRED COMPACTION TESTS. HYDRO TEST PRESSURE = 200 P.S.I. FOR TWO HOURS. LEAKAGE LIMIT = 15 GAL./IN. DIA./MILE/24 HOURS FOR D.I.P. AND 30 GAL./IN. DIA./MILE/24 HOURS FOR A.C.P.
- CITY FORCES WILL MAKE FINAL TIE-INS FROM EXISTING MAINS AT ORION ST. & GOLDEN AVE.
- CONTRACTOR SHALL NOT BACKFILL TRENCH UNTIL HE HAS OBTAINED AS-BUILT STATIONING ON ALL STRUCTURES.
- BLUE HYDRANT REFLECTORS REQUIRED FOR EACH FIRE HYDRANT. (BY CITY FORCES)

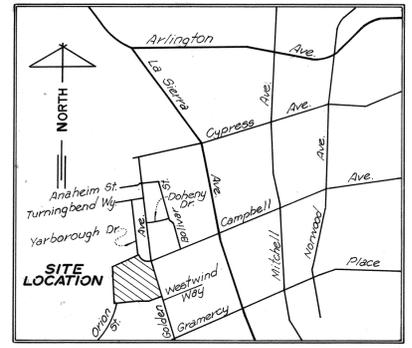
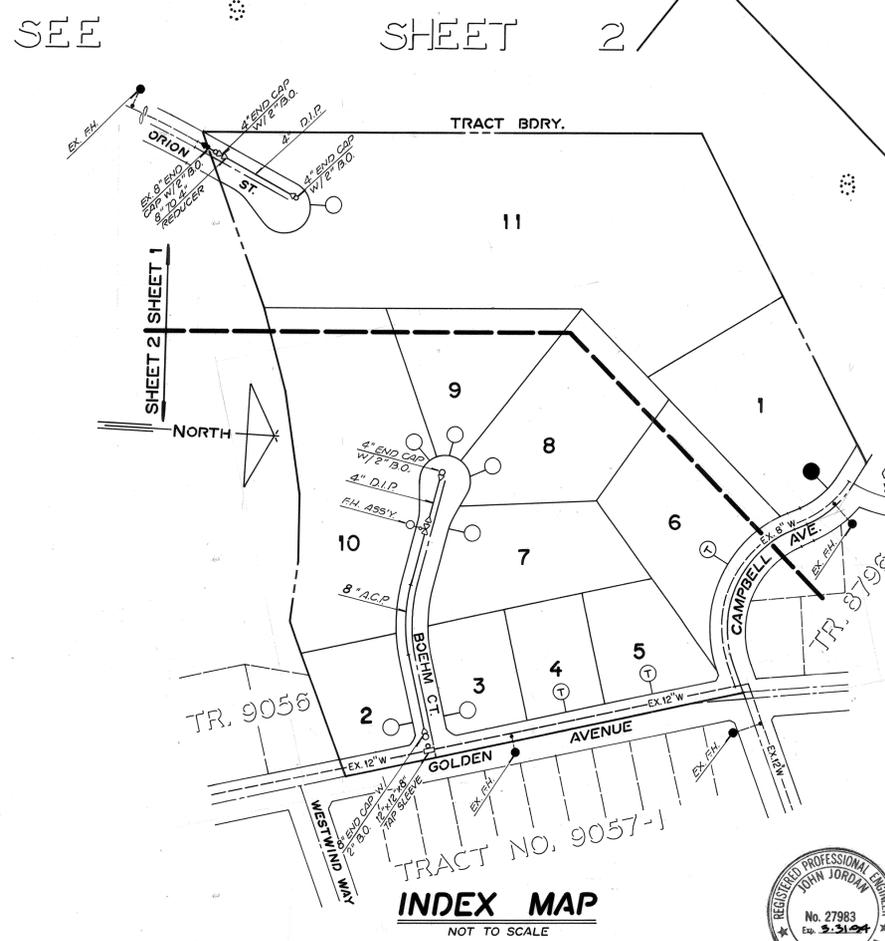
STANDARD DRAWING FOR CONSTRUCTION

- | | |
|---------|-------------------------|
| CWD 020 | STRUCTURE INTERFERENCE |
| CWD 021 | STRUCTURE INTERFERENCE |
| CWD 022 | STRUCTURE INTERFERENCE |
| CWD 023 | STRUCTURE INTERFERENCE |
| CWD 024 | STRUCTURE INTERFERENCE |
| CWD 030 | THRUST BLOCKS |
| CWD 040 | STANDARD BEDDING |
| CWD 042 | BACKFILL AND PAVEMENT |
| CWD 411 | 2" BLOWOFF ASSEMBLY |
| CWD 412 | TEMP. END CAP |
| CWD 500 | GATE BOX |
| CWD 501 | GATE BOX |
| CWD 504 | TAP SLEEVE AND TAR G.V. |
| CWD 600 | 1" WATER SERVICE |
| CWD 700 | TYR FIRE HYDRANT |

LEGEND

- | | | |
|--------------------------|-------------------------------|-----|
| NEW D.I.P. | SEWER LATERAL | L |
| NEW FIRE HYDRANT | EXIST. WATERLINE | --- |
| NEW GATE VALVE | PROPOSED 8" SEWER | S |
| NEW END CAP W/2" B.O. | EXISTING FIRE HYDRANT | ● |
| NEW SERVICE | EXIST. GATE VALVE | ● |
| TRACT BOUNDARY | TAPPING SLEEVE & TAPPING G.V. | □ |
| EXIST. END CAP W/2" B.O. | EXISTING TELEPHONE | T |
| EXIST. GAS LINE | NEW WATER SERVICE | ○ |
| NEW A.C.P. | EXIST. WATER SERVICE | ● |
| NEW REDUCER | NEW SERVICE (BY CITY FORCES) | ○ |

BENCH MARK:
CITY OF RIVERSIDE B.M. NO. G2-8 (RESET)
P.K. NAIL AND CITY ENG. TAG IN SWLY
CURB RETURN OF CAMPBELL AVE. AT LA SIERRA AVE.
E.L. = 770.448



NOTE: THIS SYSTEM SERVED BY 1010 ZONE

PACIFIC BELL TELEPHONE COMPANY
APPROVED BY: *[Signature]* DATE: 10-29-91

SOUTHERN CALIFORNIA GAS COMPANY
APPROVED BY: *[Signature]* DATE: 10-29-91

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

CITY OF RIVERSIDE WATER SYSTEM
APPROVED BY: *[Signature]* DATE: 10-29-91
VOID ONE YEAR FROM THIS DATE

CITY OF RIVERSIDE OVERHEAD AND UNDERGROUND
CHIEF UTILITIES ENGINEER, ELECTRICAL
DATE: 10/29/91

APPROVED FOR FIRE HYDRANT LOCATION
RIVERSIDE FIRE DEPARTMENT DIVISION OF FIRE PREVENTION
DATE: 10/29/91

JUNBEELER and associates LAND SURVEYING AND MAPPING
6104 RIVERSIDE AVENUE SUITE B RIVERSIDE, CA 92506 (714)882-2216
DATE: 7-12-91

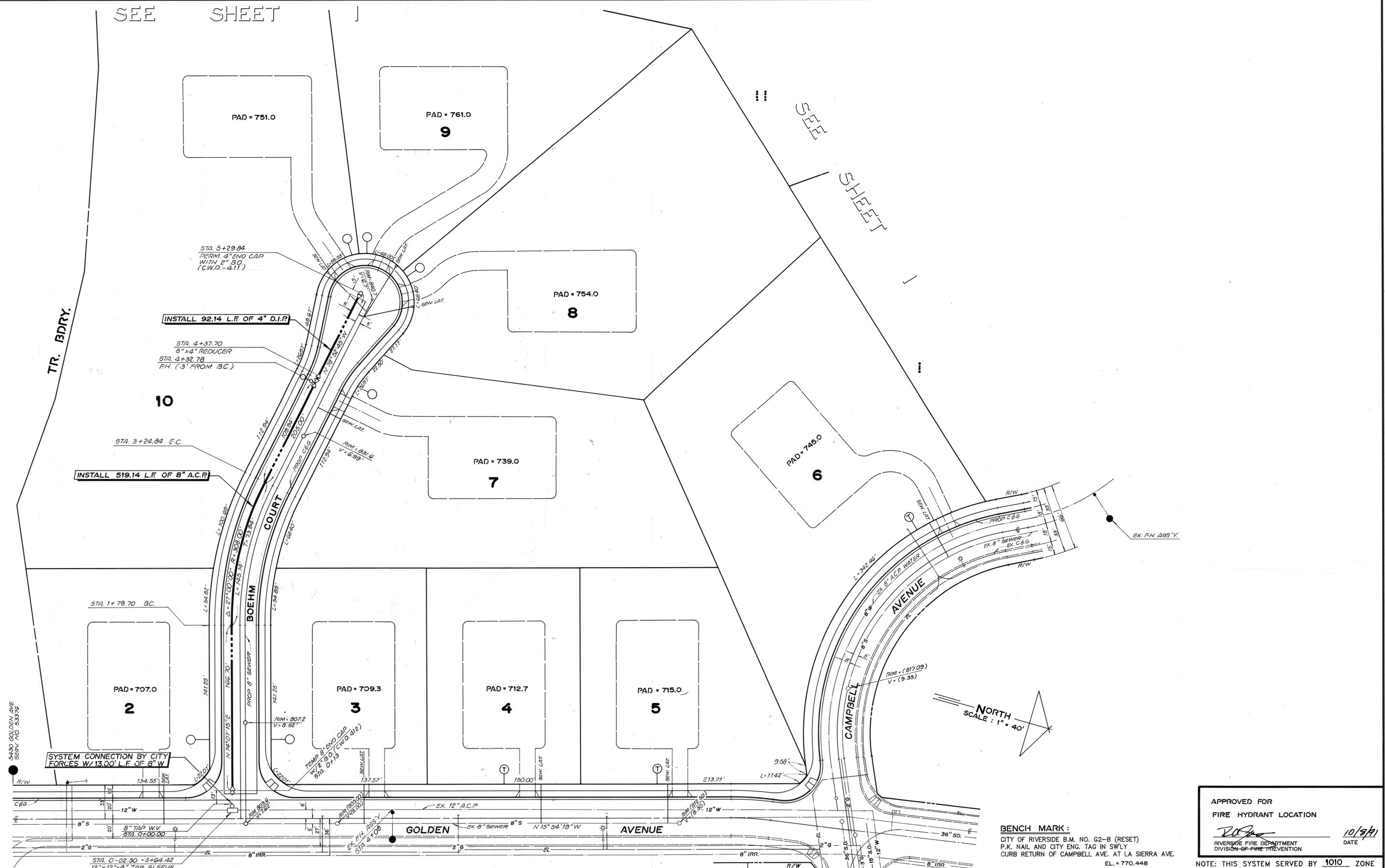
DATE: 9/25/91
CHECKED: EB
APPROVED: EB
AMP. NO. 665

TRACT NO. 25585 NEW WATER SYSTEM SHT. 1 of 2
CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES
DRAWING NO. 91-D5-3252-1

SEE SHEET

SEE SHEET

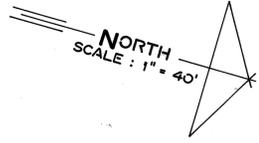
TR. BDRY.



INSTALL 92.14 L.F. OF 4" D.I.P.

INSTALL 519.14 L.F. OF 8" A.C.P.

SYSTEM CONNECTION BY CITY FORCES W/ 13.00' L.F. OF 8" W



BENCH MARK:
 CITY OF RIVERSIDE B.M. NO. G2-B (RESET)
 P.K. NAIL AND CITY ENG. TAG IN SWLY
 CURB RETURN OF CAMPBELL AVE. AT LA SIERRA AVE.
 EL. = 770.448

APPROVED FOR
 FIRE HYDRANT LOCATION

 RIVERSIDE FIRE DEPARTMENT
 DIVISION OF FIRE PREVENTION
 DATE: 10/9/91
 NOTE: THIS SYSTEM SERVED BY 1010_ZONE

PACIFIC BELL TELEPHONE COMPANY
 APPROVED BY:
 DATE: 10-3-91

SOUTHERN CALIFORNIA GAS COMPANY
 APPROVED BY:
 DATE: 10-2-91

Underground Service Alert

 Call: TOLL FREE
 1-800-422-4133
 TWO DAYS BEFORE YOU DIG

CITY OF RIVERSIDE WATER SYSTEM
 APPROVED BY: _____
 DATE: _____
 VOID ONE YEAR FROM THIS DATE

CITY OF RIVERSIDE OVERHEAD AND UNDERGROUND
 CHIEF UTILITIES ENGINEER, ELECTRICAL

 DATE: 11-20-91

UNDELLER LAND SURVEYING AND MAPPING
 6104 RIVERSIDE AVENUE SUITE B
 RIVERSIDE, CA 92506
 (714)982-2216
 PLANS PREPARED UNDER THE SUPERVISION OF:

 R.C.E. 27983 EXP. 3/31/94 DATE: 7-12-91

REVISED	DATE	BY

TRACT NO. 25585
NEW WATER SYSTEM SHT. 2 of 2
 SCALE: 1" = 40'
 DATE: 9/25/91 DRAWN: K.S.M.
 JOB NO. 3252 CHECKED: EB
 APPROVED: EB
 AMP. NO. 665 65-751-703
 CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES
 DRAWING NO. 91-D5-3252-2