GENERAL NOTES:

THE CONTRACTOR SHALL PROVIDE ALL MATERIALS FOR AND CONSTRUCT THE PIPELINE, COMPLETE, IN PLACE INCLUDING ALL APPURTENANCES AS SHOWN ON THESE PLANS, AND PER THE SPECIFICATIONS.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND SPECIAL PROVISIONS AND THE APPLICABLE AWWA STANDARDS AND SPECIFICATIONS, AND STANDARD SPECIFICATIONS OF THE PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND REVISIONS.

ALL FITTINGS AND VALVES SHALL BE MECHANICAL JOINT AND ALL PIPE SHALL BE PUSH-ON JOINTS UNLESS OTHERWISE NOTED.

4. ALL STATIONING IS ALONG THE CENTERLINE OF THE PIPE, AS TAKEN FROM R/W CENTERLINE SURVEY. ALL CENTERLINE STATIONING REFERS TO THIS R/W CENTERLINE SURVEY.
5. THE CONTRACTOR SHALL HAVE AN "A" OR "C-34" LICENSE.
6. UNDERGROUND UTILITIES OTHER THAN CITY OF RIVERSIDE OWNED FACILITIES SHOWN ON THESE PLANS ARE BASED ON DATA PROVIDED BY THE UTILITY OWNER: THEREFORE, THE CITY OF RIVERSIDE AND THE ENGINEER ARE NOT RESPONSIBLE FOR THE ACCURACY OF THE UTILITY INFORMATION PROVIDED ON THESE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AFFECTED BY THIS WORK, VERIFY ALL UTILITY INFORMATION AND COORDINATE ALL WORK WITH RESPECT TO THE UTILITY COMPANIES POSSIBLE OBSTRUCTIONS.
7. VERIFY UTILITY DEPTHS IN FIELD PRIOR TO LAYING THE PIPE PER THESE PLANS AND AS NOTED IN THE SPECIFICATIONS (CONTRACTOR'S RESPONSIBILITY TO EXPOSE EXISTING UTILITIES PRIOR TO CONSTRUCTION).
8. TEST PRESSURE = 200 P.S.I. FOR 2 HOURS. LEAKAGE LIMIT PER SPECIAL PROVISIONS. THE CONTRACTOR SHALL PRESSURE TEST AND STERILIZE THE MAIN WITH GAS CHLORINATION BEFORE CITY FORCES MAKE THE SYSTEM CONNECTIONS TO THE EXISTING MAINS. A MINIMUM OF ONE BACTERIOLOGICAL TEST PER 500 FEET IS REQUIRED FOR TWO CONSECUTIVE DAYS. THE PRESSURE TEST SHALL BE CONDUCTED ONLY AFTER THE BEDDING AND TRENCH BACKFILL HAVE PASSED THE COMPACTION TESTS. SEE C.W.D. 040-1 & C.W.D. 040-2.
9. THE CONTRACTOR SHALL PROVIDE THE CONSTRUCTION ADMINISTRATIVE ENGINEER A MINIMUM OF FOUR (4) WORKING DAYS WRITTEN NOTICE OF SURVEY REQUIREMENTS TO ALLOW FOR SCHEDULING AND COMPLETION OF SURVEY STAKING.
10. PROPOSED WATER MAIN CROSSING SEWER MAIN SHALL BE CONSTRUCTED AS PER C.W.D. 15-2.
11. TRENCH SHORING SHIELD:
    A. THE TRENCH SHORING SHIELD DESIGN SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND SHALL COMPLY WITH THE STATE OF CALIFORNIA ADMINISTRATIVE CODE, TITLE 8, CHAPTER 4, SECTION 151.1 (C) (2) AND FEDERAL OSHA SAFETY AND HEALTH STANDARD 29, CFR PART 1926, SUBPART P.
    B. THIS SHIELD SHALL BE USED IN ACCORDANCE WITH THE STATE OF CALIFORNIA ADMINISTRATIVE CODE, TITLE 8, CHAPTER 4, SECTION 154.1 (g) AT ALL TIMES.
    C. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR ALL WORK DESCRIBED.
12. NO BACKFILL MATERIAL SHALL BE PLACED WITHOUT PRIOR APPROVAL BY THE CITY OF RIVERSIDE INSPECTOR. BACKFILL MATERIAL SHALL CONFORM TO SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
13. ALL PIPE AND APPURTENANCES SHALL BE WRAPPED WITH POLYETHYLENE ENCASEMENT, 8 MIL MINIMUM THICKNESS IN ACCORDANCE WITH SECTION 4.1 OF AWWA C105/ANSI A21.5.
14. THE CITY OF RIVERSIDE INSPECTOR SHALL FIELD VERIFY APPURTENANCE LOCATIONS PRIOR TO INSTALLATION.
15. THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES IN PLACE UNLESS OTHERWISE NOTED.
16. THE CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY GRASS, TREES, SHRUBS, FENCE LANDSCAPE, IRRIGATION PIPE AND APPURTENANCES DAMAGED DURING CONSTRUCTION PER PLANS AND SPECIFICATIONS AND AT THE DIRECTION OF THE ENGINEER.
17. PROTECT ALL CURB, GUTTER, CROSS GUTTER, DRIVEWAY AND SIDEWALK. IF DAMAGED, THE CONTRACTOR SHALL RESTORE THEM AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL REPLACE THE PORTION OF CONCRETE CROSS GUTTER REMOVED DURING CONSTRUCTION IN ACCORDANCE WITH THE CITY OF RIVERSIDE, PUBLIC WORKS DEPARTMENT, STANDARD DRAWING 220.
18. MAINTAIN 4' MINIMUM COVER FROM PROPOSED FINISHED SURFACE OVER NEW 12" D.I. PIPE, CL-350, EXCEPT AS NOTED.
    MAINTAIN 3' MINIMUM COVER FROM PROPOSED FINISHED SURFACE OVER NEW 8" D.I. PIPE, CL-350, EXCEPT AS NOTED.
19. SYSTEM CONNECTIONS WILL BE MADE BY CITY FORCES AFTER PIPE HAS PASSED BACTERIOLOGICAL AND PRESSURE TESTS. FINAL CONNECTIONS SHALL BE MADE FROM EXISTING MAINS AT PARK AVENUE, VICTORIA AVENUE, SEDGEWICK AVENUE, COMER AVENUE, EUCALYPTUS AVENUE AND UNIVERSITY AVENUE.
20. CONTRACTOR SHALL REQUEST WATER DIVISION INSPECTION 48 HOURS PRIOR TO ANY CONSTRUCTION WORK. PLANS AND SPECIFICATIONS SHALL BE ON THE SITE AT ALL TIMES.

CONSTRUCTION NOTES:

(1) FURNISH AND INSTALL 1" COPPER WATER SERVICE PER CWD 600. CONTRACTOR SHALL INSTALL SERVICE LINE TO THE METER AND CITY FORCES SHALL CONNECT TO THE METER. PROPOSED CORP. STOPS SHALL BE INSTALLED IN ALIGNMENT WITH EXIST. WATER SERVICE LINES. CONTRACTOR SHALL FURNISH NEW METER BOX AND PLACE NEXT TO EXISTING METER BOX.

(2) FURNISH AND INSTALL 2" COPPER WATER SERVICE PER CWD 601. CONTRACTOR SHALL INSTALL SERVICE LINE TO THE METER AND CITY FORCES SHALL CONNECT TO THE METER. PROPOSED CORP. STOPS SHALL BE INSTALLED IN ALIGNMENT WITH EXIST. WATER SERVICE LINES. CONTRACTOR SHALL FURNISH NEW METER BOX AND PLACE NEXT TO EXISTING METER BOX.

(3) CUT, PLUG AND ABANDON EXISTING 4", 6" & 8" C.I., AND 6" A.C. MAINS BY CITY FORCES.

(4) FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY IN ACCORDANCE WITH CWD 700. ALL FIRE HYDRANTS SHALL BE STANDARD 1-4" OUTLET AND 1-2½" OUTLET UNLESS OTHERWISE NOTED.

(5) ALL RESTRAINTS SHALL BE GRIP RINGS (1 EACH SIDE OF FITTING) AND FIELD "LOC"® RUBBER RINGS, AS NOTED ON PLAN VIEW DRAWINGS. THRUST BLOCKS PER CWD 030, WITH BEARING AREAS AS SHOWN ON PLANS SHALL BE USED. THRUST BLOCKS OR "FIELD LOK" RUBBER RINGS AND GRIP RINGS SHALL BE USED.

(6) FURNISH AND INSTALL VALVE BOX IN ACCORDANCE WITH CWD 500 OR CWD 501.

(7) ABANDONMENT OF VALVES AND FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS.

(8) FURNISH AND INSTALL WATER MAIN PER CWD 040-1 & 2.

LEGEND:

- NEW FIRE HYDRANT
- EXIST. FIRE HYDRANT
- EXIST. WATER SERVICE CALL OUT
- ELBOW
- TEE
- CROSS
- REDUCER
- EXIST. WATER METER
- BLOW-OFF
- MAIL BOX
- NEW GATE VALVE
- EXIST. GATE VALVE
- TO BE ABANDONED BY CITY FORCES
- TRANSITION (FLEX) COUPLING

* WHEN THE DETAIL OR SECTION IS SHOWN ON THE SAME PAGE AS THE CALL OUT, THE DRAWING PAGE NUMBER IS REPLACED WITH A HORIZONTAL LINE.

DETAIL OR SECTION IDENTIFICATION — D 20 — DETAIL OR SECTION LETTER * / * DRAWING PAGE ON WHICH DETAIL OR SECTION IS LOCATED.

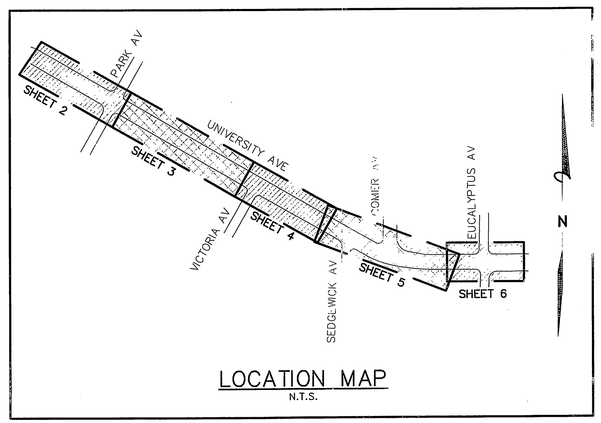
THRUST BLOCK BEARING AREAS	
12" X 8" TEE	13.2 SQ. FT.
12" X 8" CROSS	13.2 SQ. FT.
12" X 6" TEE	13.2 SQ. FT.
4" X 22.5° ELL.	2.25 SQ. FT.
8" X 30° ELL.	4 SQ. FT.
4" X 45° ELL.	4 SQ. FT.
6" X 45° ELL.	4 SQ. FT.
8" X 45° ELL.	6 SQ. FT.
6" X 90° ELL.	5 SQ. FT.
8" X 90° ELL.	8 SQ. FT.
12" G.V.	13.2 SQ. FT.

ABBREVIATIONS & SYMBOLS:

#	NUMBER	LAT.	LATERAL
1'	1 FOOT OR 1 MINUTE	LT.	LEFT
1"	1 INCH OR SECOND	MH	MANHOLE
1°	1 DEGREE	MJ	MECHANICAL JOINT
℄	CENTERLINE	ML&C	MORTER LINED AND COATED
&	AND	NO.	NUMBER
=	EQUALS	N.T.S.	NOT TO SCALE
±	PLUS OR MINUS	PE	PLAIN END
@	AT	PL.	PLACE
△	ANGLE	R	RADIUS
A.C.	ASBESTOS CEMENT PIPE	R.C.E.	REGISTERED CIVIL ENGINEER
AVE.	AVENUE	R/W	RIGHT OF WAY
BA	BEARING AREA	RD.	ROAD
BC	BEGIN CURVE	RT.	RIGHT
C.A.T.V.	CABLE TELEVISION	S.D.	STORM DRAIN
C.I.	CAST IRON PIPE	S.	SANITARY SEWER
CWD	CITY WATER DIVISION	SHT.	SHEET
CL	CLASS	S. LAT.	SANITARY SEWER LATERAL
D.I. OR D.I.P.	DUCTILE IRON PIPE	SQ.	SQUARE
DR.	DRIVE	ST.	STREET
EC	END CURVE	STA.	STATION
E.	ELECTRIC	STD.	STANDARD
ELL	ELBOW	STL.	STEEL
EXIST.	EXISTING	ST. LT.	STREET LIGHT
EXP.	EXPIRE	SYM.	SYMBOL
FLG.	FLANGE	T	TANGENT
FT.	FEET	TEL.	TELEPHONE
G.	GAS	TYP.	TYPICAL
GV	RESILIENT WEDGE GATE VALVE	V	VERTICAL DISTANCE OR DEPTH TO SEWER FLOW LINE
HPI	HORIZONTAL POINT OF INTERSECTION	W.	WATER
L	LENGTH	W/	WITH

STANDARD DRAWINGS:

CWD 015-1, 2 & 3	WATER MAINS AND SANITARY SEWER SEPARTATION. CASE 2 NEW WATER MAIN	CWD 413	TYPICAL VALVE BOX FOR GATE VALVES END CAPS FOR FLUSHING, TESTING AND CHLORINATION
CWD 030	THRUST BLOCK DETAILS	CWD 500	TYPICAL VALVE BOX FOR GATE VALVES
CWD 040-1 CWD 040-2	TYPICAL PIPE TRENCH	CWD 515	TYPICAL SPLIT - SLEEVE RISER FOR 8" & 10" VALVE BOX
CWD 411-A & B	TYPICAL 2" BLOW-OFF ASSEMBLY FOR MAINS WITH MORE THAN 42" OF COVER	CWD 600	1" WATER SERVICE
		CWD 601	2" WATER SERVICE
CWD 412	6"-10" TEMPORARY CONSTRUCTION END CAPS FOR FLUSHING, TESTING AND CHLORINATION	CWD 700	REGULAR & SUPER FIRE HYDRANT DETAI



LOCATION MAP
N.T.S.

ZONE: CHICAGO 1100

DIG ALERT
CALL: TOLL FREE
1-800-227-2600
48 HOURS BEFORE YOU DIG

REGISTERED PROFESSIONAL ENGINEER RICHARD S. DRUDGE No. C031621 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
WATER ENGINEERING DIVISION

R.C.E. No. C031621 — DATE 3/22/04

MARK	REVISIONS	APPROVED	DATE

UNIVERSITY AV WATER MAIN REPLACEMENT
BETWEEN MULBERRY ST. & EUCALYPTUS AV

SCALE:	1" = 20'	DRAWN:	
DATE:	2/04	CHECKED:	
JOB NO.:	704188	APPROVED:	
MAP PAGE:	40-1 & 40-2	XXXX0-470707XX\704188	

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES

W — D5-704188-6 SHT. 1 OF 6

FILE W/ R-3747
INDEXED 3-29-04 GH

CURVE DATA				
◇	R	△	L	T
1	1'	180°00'00"	3.14'	–
2	35'	90°07'34"	55.05'	35.08'
3	35'	87°45'00"	53.60	33.65'
4	35'	90°13'24"	55.11'	35.14'
5	35'	90°00'19"	54.98"	35.00'

TO BE INSTALLED BY CITY FORCES — TO BE INSTALLED BY CONTRACTOR

BENCH MAR 7

FD PK NAIL AND CITY ENGINEER IN THE TOP OF CURB, 15 SOUTHERLY OF THE EASTERLY CURB RETURN UNIVERSITY AVE AND PARK AVE

ELEVATION = 590.553

±STA. 55+12.00
AFTER CHLORINATION INSTALL 8" X 8", 90° ELL. AND COMPLETE CONNECTION. (BY CITY FORCES)

CUT & PLUG 2" SERVICE LATERAL AND RECONNECT INTO PROPOSED 12" D.I. PIPE. (BY CITY FORCES) (2)(3)

CAUTION!!! 6" S.S.

BEGIN CONSTRUCTION

EXISTING 8" WATER MAIN TO BE ABANDONED (1)

STA. 58+09.84
INSTALL 8" GATE VALVE

(4) STA. 57+81.96
INSTALL FIRE HYDRANT WITH 12" X 6" TEE, M/J X FLG.

STA. 30+91.08 (PIPE STA.)=
STA. 10+70.08 (PARK AV STA.) @ 12' LT.
TEMPORARY CONSTRUCTION B.O. PER C.W.D. 412. AFTER CHLORINATION, REPLACE B.O. WITH AN 8"X 6" REDUCER AND A 6", 45° ELL. AND COMPLETE CONNECTION. (BY CITY FORCES)

STA. 30+70.50 (PIPE STA.)=
STA. 10+49.50 (C/L PARK AV) @ 12' LT.
INSTALL 8" G.V.

STA. 58+27.84 (UNIVERSITY AV PIPE)=
STA. 28+27.84 (C/L UNIVERSITY) @ 21' RT.=
STA. 30+00.00 (PARK AV PIPE STA.) =
STA. 9+79.00 (C/L PARK AV STA.) @ 12' LT.
INSTALL 12" X 8" CROSS

INSTALL 12" D.I. PIPE WITH THRUST RESTRAINTS

INSTALL 43' MIN. OF THRUST RESTRAINTS

INSTALL 71' MIN. OF THRUST RESTRAINTS

℄ 28+39.84 UNIVERSITY
℄ 10+00 PARK AVE

INSTALL 140'± CL350, 8" D.I. PIPE
12' W'LY. C/L PARK AVENUE.

STA. 58+69.84
INSTALL 8" GATE VALVE

CAUTION!!! 60" S.D.

CAUTION!!! 6" S.S.

CAUTION!!! 6" W.

CAUTION!!! 30" W.

±STA. 55+25.00
TEMPORARY CONSTRUCTION B.O. PER C.W.D. 413. AFTER CHLORINATION, REPLACE B.O. WITH AN 8" X 12" INCREASER AND COMPLETE CONNECTION. (BY CITY FORCES)

STA. 55+35.00
12" G.V.

INSTALL 388'± CL350, 12" D.I. PIPE
21' S'LY. C/L UNIVERSITY AVENUE.

STA. 29+50.87 (PIPE STA.)=
STA. 9+29.87 (PARK AV STA.) @ 12' LT.
TEMPORARY CONSTRUCTION B.O. PER C.W.D. 412. AFTER CHLORINATION, REPLACE B.O. WITH AN 8"X 6" REDUCER AND 6", 45° ELL. AND AND COMPLETE CONNECTION. (BY CITY FORCES)

EXISTING 6" WATER MAIN TO BE ABANDONED

490'± TO NEAREST EXIST. G.V.

INSTALL MIN. 81' D.I. PIPE WITH THRUST RESTRAINTS

340'± TO NEAREST G.V. FROM G.V. #99 — TO BE INSTALLED BY CITY FORCES — RESTRAINTS BY CONTRACTOR

388'± TO NEAREST G.V. FROM C/L UNIVERSITY AV — D.I. PIPE TO BE INSTALLED WITH THRUST — TO BE INSTALLED BY CITY FORCES

20' 10' 0' 20' 40'
GRAPHIC SCALE

Note: For reduced sized prints, original scale is in inches

REGISTERED PROFESSIONAL ENGINEER RICHARD S. DRODSKE No. C031621 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

Richard S. Drodske 3/22/04
R.C.E. No. C031621 DATE

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
WATER ENGINEERING DIVISION

MARK	REVISIONS	APPROVED	DATE

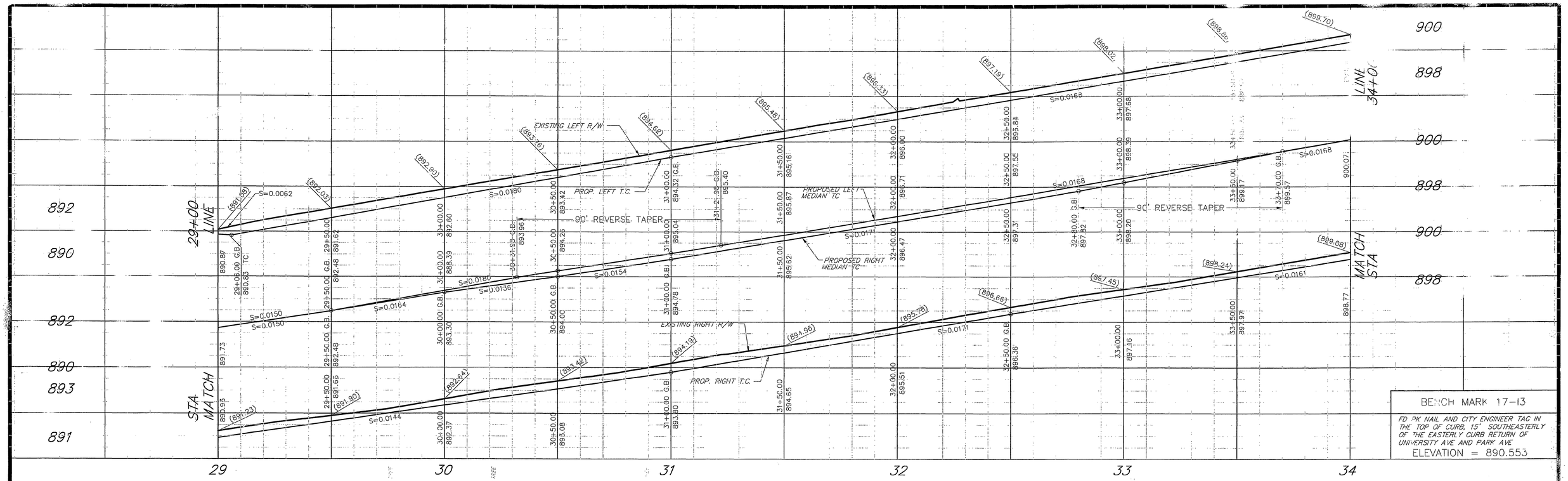
UNIVERSITY AV WATER MAIN REPLACEMENT
BETWEEN MULBERRY ST. & EUCALYPTUS AV

SCALE:	1" = 20'	DRAWN:	M.N.
DATE:	2/04	CHECKED:	
JOB NO.:	704188	APPROVED:	
MAP PAGE:	40-1 & 40-2	623000X00D-470707XX#704188	

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES

W D5-704188-2
SHT. 2 OF 6

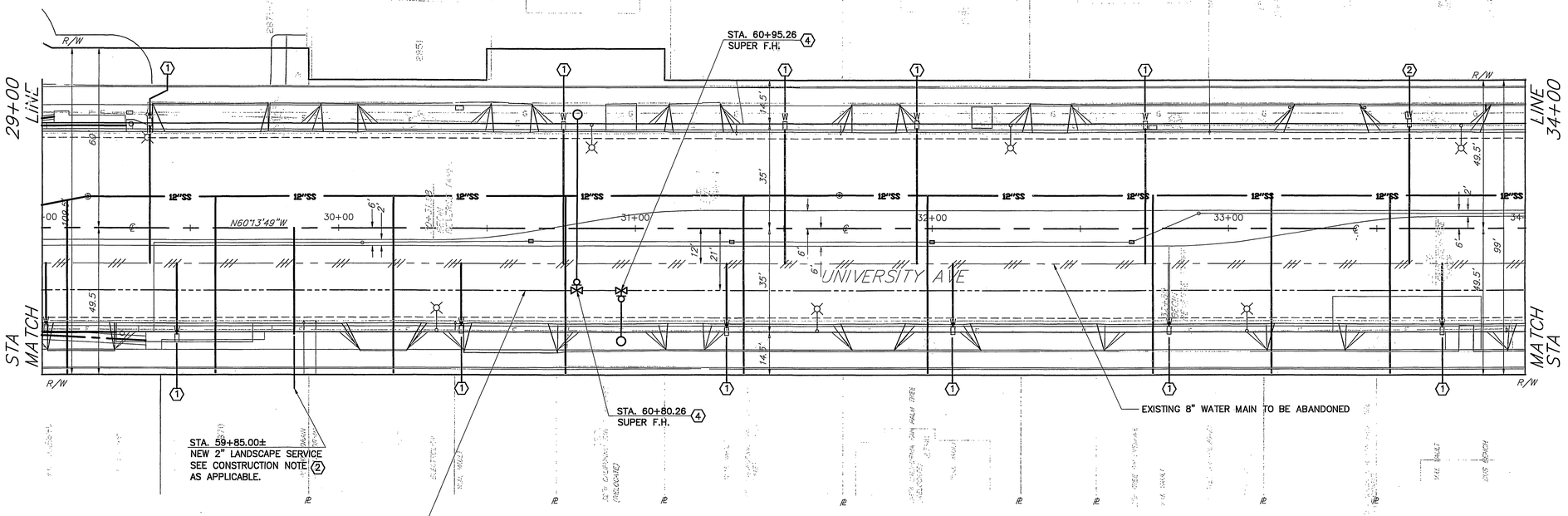
FILE W/ R-3747
INDEXED 3-29-04 GH



BENCH MARK 17-13

FD PK NAIL AND CITY ENGINEER TAG IN THE TOP OF CURB, 15' SOUTHEASTERLY OF THE EASTERLY CURB RETURN OF UNIVERSITY AVE AND PARK AVE

ELEVATION = 890.553



INSTALL 500'± CL350, 12" D.I. PIPE

21' S'LY. C/L UNIVERSITY AVENUE.

20' 10' 0' 20' 40'

GRAPHIC SCALE

Note: For reduced sized prints, original scale is in inches

REGISTERED PROFESSIONAL ENGINEER RICHARD S. DIEKER No. C031821 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
WATER ENGINEERING DIVISION

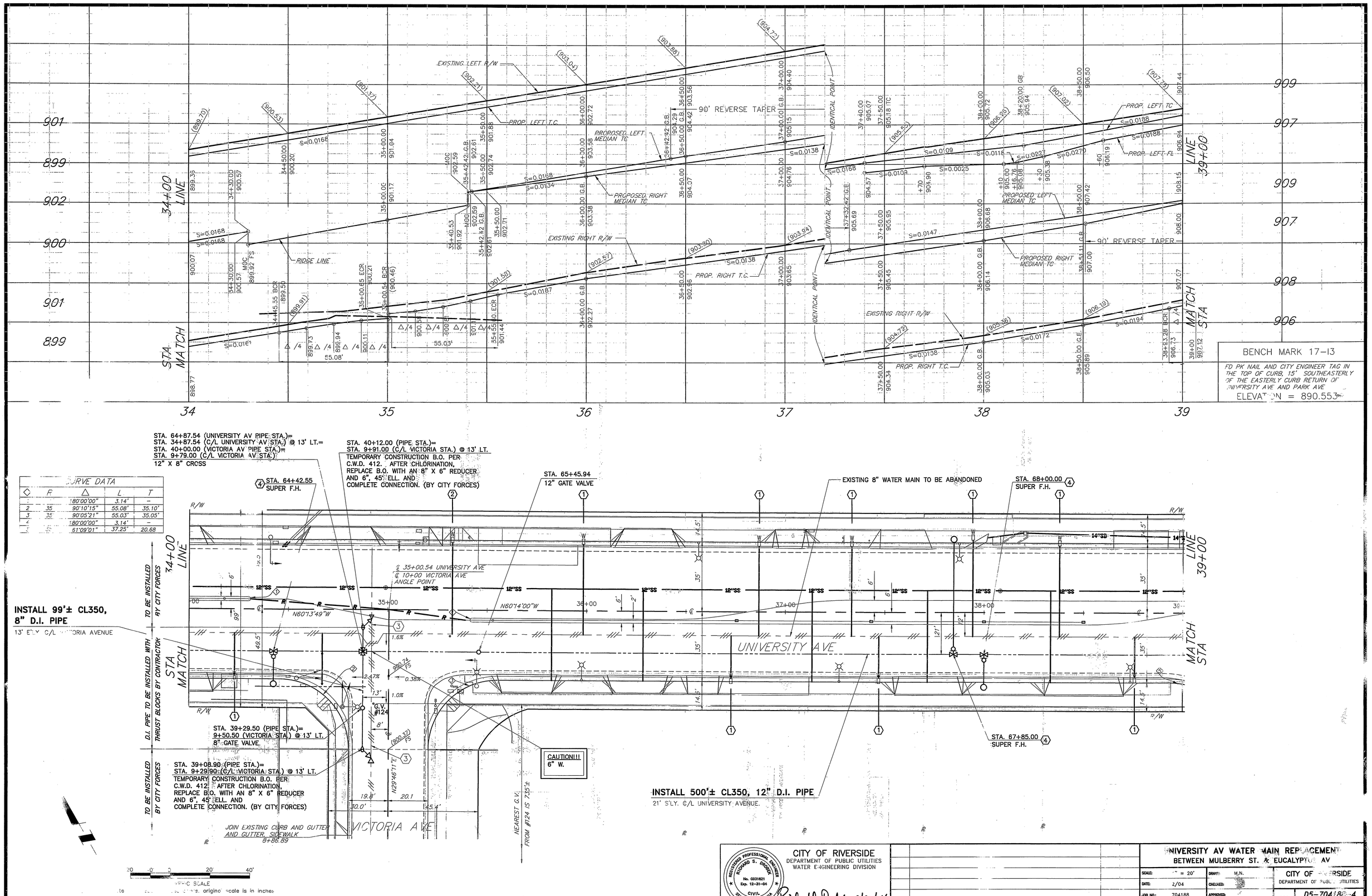
Richard S. Dieker 3/22/04
R.C.E. No. C031821 DATE

MARK	REVISIONS	APPROVED	DATE

UNIVERSITY AV WATER MAIN REPLACEMENT
BETWEEN MULBERRY ST. & EUCALYPTUS AV

SCALE:	1" = 20'	DRAWN: M.N.	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES
DATE:	2/04	CHECKED:	
JOB NO.:	704188	APPROVED:	W 05-704188-3
MAP PAGE:	40-1 & 40-2	623030XXX0-470707XX/704188	SHT. 3 OF 6

FILE W/R-3747
INDEXED 3-29-04 FH



CURVE DATA

◇	R	△	L	T
1		180°00'00"	3.14'	–
2	35	90°10'15"	55.08'	35.10'
3	35	90°05'21"	55.03'	35.05'
4		180°00'00"	3.14'	–
5	35	61°09'01"	37.25'	20.68

20 0 20 40'
SCALE
original scale is in inches

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
WATER ENGINEERING DIVISION

REGISTERED PROFESSIONAL ENGINEER RICHARD S. DROBEK No. C031621 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

R.C.E. No. C031621 3/22/04 DATE

MARK | REVISIONS | APPROVED | DATE

UNIVERSITY AV WATER MAIN REPLACEMENT
BETWEEN MULBERRY ST. & EUCALYPTUS AV

SCALE:	1" = 20'	DRAWN:	M.N.
DATE:	2/04	CHECKED:	
JOB NO.:	704188	APPROVED:	
MAP PAGE:	40-1 & 40-2		

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES

W | D5-704188-4
SHT 4 OF 8

FILE W/R-3747
INDEXED 3-29-04 4H

CURVE DATA				
◇	R	Δ	L	T
1	35'	61°09'01"	37.35	20.68
2	14.5'	119°03'17"	30.13'	24.64
3	20'	115°43'04"	40.39'	31.83
4	35'	78°51'35"	48.17'	28.78
5	1'	180°00'00"	3.14'	–
6	1'	158°00'35"	2.76'	5.19'
7	535'	29°51'15"	278.76'	142.62'
8	506'	2°44'42"	24.24'	12.12'
9	465'	11°26'10"	92.81'	46.56'
10	465'	03°39'10"	29.64'	14.83'
11	500'	29°51'15"	260.53'	133.29'
12	50'	29°51'15"	26.05'	13.33'

INSTALL 109'± CL350, 8" D.I. PIPE
8' W'LY. C/L COMER AVENUE.

STA. 69+17.20 (UNIVERSITY PIPE STA.)=
STA. 39+17.20 (UNIVERSITY AV STA.) @ 21' RT.=
STA. 50+00.00 (SEDGEWICK PIPE STA.)=
STA. 9+80.77 (C/L SEDGEWICK AV) @ 8.69' LT.
12" X 8" TEE

CAUTION!!! 6" SEWER

STA. 60+74.19 (PIPE)=
STA. 10+83.33 (C/L COMER) @ 13.32' LT.
TEMPORARY CONSTRUCTION B.O. PER C.W.D. 412. AFTER CHLORINATION, REPLACE B.O. WITH AN 8" X 4" REDUCER AND COMPLETE CONNECTION. (BY CITY FORCES)

STA. 60+49.07 (PIPE)=
STA. 10+59.97 (C/L COMER) @ 22.69' LT.
8" GATE VALVE

STA. 60+87.17 (PIPE)=
STA. 10+95.30 (C/L COMER) @ 8.54' LT.
4", 22.5° ELL.

D.I.P. TO BE INSTALLED W/ THRUST RESTRAINTS BY CONTRACTOR

NEAREST G.V. FROM #138 IS 500'±

TO BE INSTALLED BY CITY FORCES

STA. 71+71.98
SUPER F.H.

INSTALL 44'± CL350, 8" D.I. PIPE
12' W'LY. C/L SEDGEWICK AV

D.I. PIPE TO BE INSTALLED WITH THRUST RESTRAINTS BY CONTRACTOR

STA. 49+93.37 (PIPE STA.)=
STA. 9+75.03 (SEDGEWICK STA.) @ 12' LT.
8", 30° ELL.

STA. 49+68.13 (PIPE STA.)=
STA. 9+49.79 (SEDGEWICK STA.) @ 12' LT.
8" GATE VALVE

STA. 49+64.94 (PIPE STA.)=
STA. 9+46.60 (SEDGEWICK STA.) @ 12' LT.
TEMPORARY CONSTRUCTION B.O. PER C.W.D. 412 AFTER CHLORINATION, REPLACE B.O. WITH AN 8" X 6" REDUCER AND 6", 45° ELL. AND COMPLETE CONNECTION. (BY CITY FORCES)

NEAREST G.V. FROM #130 IS 390'±

TO BE INSTALLED BY CITY FORCES

EXISTING 8" WATER MAIN TO BE ABANDONED

STA. 70+01.59 (B.C. PIPE)=
STA. 40+01.59
(B.C. C/L UNIVERSITY AV) @ 21' RT.

STA. 70+70.24 (PIPE ON UNIVERSITY AV)=
STA. 40+41.38 (C/L UNIVERSITY) @ 21' RT.=
STA. 60+00.00 (PIPE ON COMER AV)
12" X 8" TEE

STA. 70+87.68
12" X 8" TEE

INSTALL 510'± CL350, 12" D.I. PIPE
21' S'LY. C/L UNIVERSITY AVENUE.

STA. 72+73.06 (E.C. PIPE)=
STA. 42+62.71 (E.C. C/L VICTORIA AV) @ 21' RT.

EXISTING 8" WATER MAIN TO BE ABANDONED

STA. 71+66.00±
NEW 2" LANDSCAPE SERVICE.
SEE CONSTRUCTION NOTE (2) AS APPLICABLE.

20' 10' 0' 20' 40'
GRAPHIC SCALE
Note: For reduced sized prints, original scale is in inches

BENCH MARK 17-13

FD PK NAIL AND CITY ENGINEER TAG IN THE TOP OF CURB, 15' SOUTHEASTERLY OF THE EASTERLY CURB RETURN OF UNIVERSITY AVE AND PARK AVE
ELEVATION = 890.553'

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
WATER ENGINEERING DIVISION

REGISTERED PROFESSIONAL ENGINEER RICHARD S. DRUCE No. C031621 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

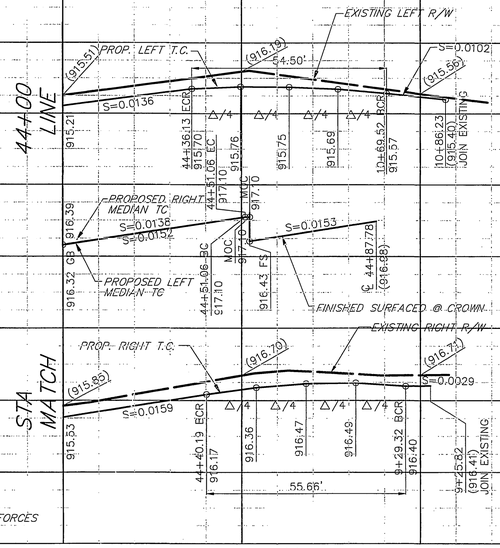
Richard S. Druce 3/22/04
R.C.E. No. C031621 DATE

MARK	REVISIONS	APPROVED	DATE

UNIVERSITY AV WATER MAIN REPLACEMENT
BETWEEN MULBERRY ST. & EUCALYPTUS AV

SCALE: 1" = 20'	DRAWN: M.N.	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: 2/04	CHECKED:		
JOB NO.: 704188	APPROVED:	W	D5-704188-5 SHT. 5 OF 6
MAP PAGE: 40-1 & 40-2	623000XXXD-47070700X704188		

FILE WR-3747
INDEXED 3-29-04 GH



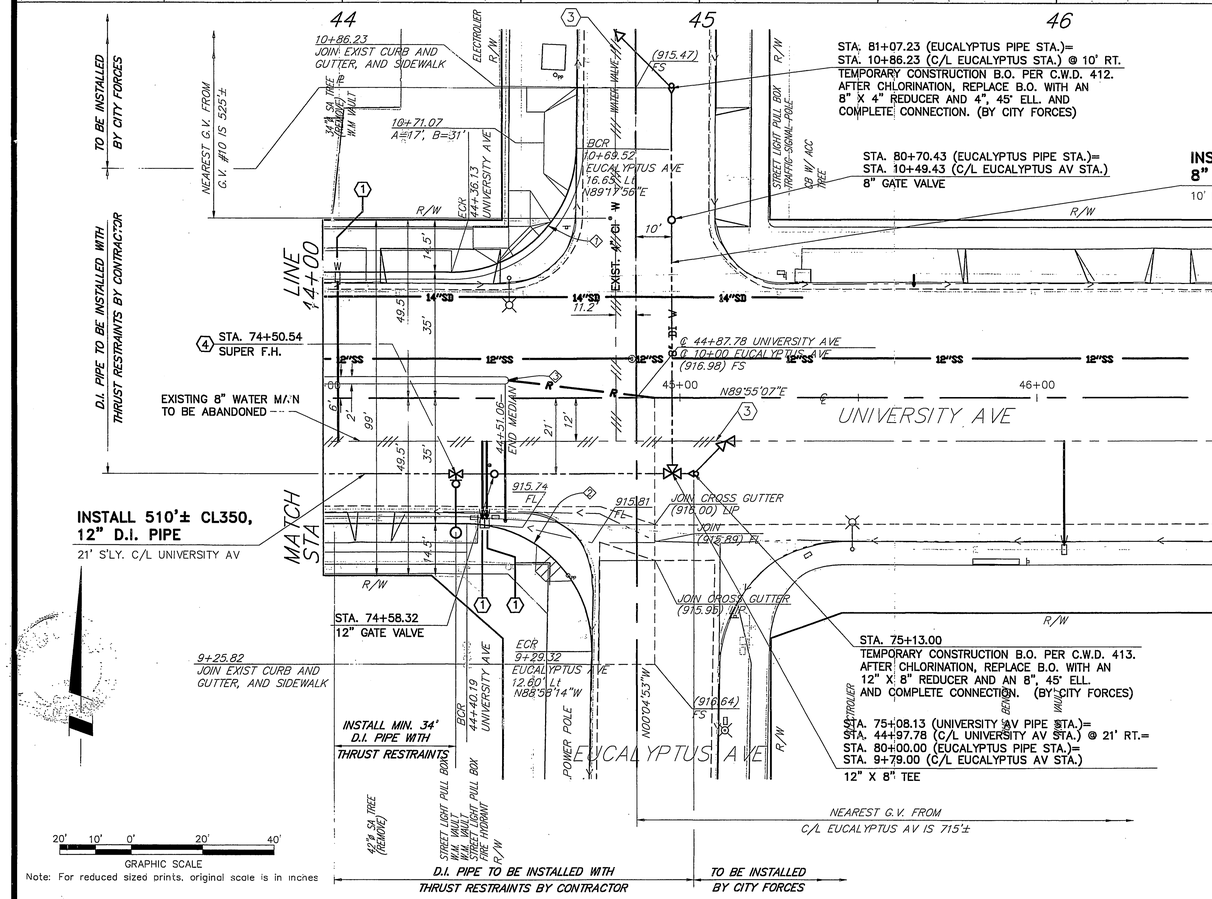
TO BE INSTALLED BY CITY FORCES

BENCH MARK 17-13

FD PK NAIL AND CITY ENGINEER TAG IN THE TOP OF CURB, 15' SOUTHEASTERLY OF THE EASTERLY CURB RETURN OF UNIVERSITY AVE AND PARK AVE

ELEVATION = 890.553'

CURVE DATA				
◇	R	△	L	T
1	35'	89°13'03"	54.50'	34.53'
2	35'	91°06'39"	55.66'	35.69'
3	1'	180°00'00"	3.15'	3.14'



20' 10' 0' 20' 40'

GRAPHIC SCALE

Note: For reduced sized prints, original scale is in inches

REGISTERED PROFESSIONAL ENGINEER RICHARD S. DRDEK No. C031621 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
WATER ENGINEERING DIVISION

R.C.E. No. C031621 — DATE 3/22/04

MARK	REVISIONS	APPROVED	DATE

UNIVERSITY AV WATER MAIN REPLACEMENT
BETWEEN MULBERRY ST. & EUCALYPTUS AV

SCALE:	1" = 20'	DRAWN: M.N.	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES
DATE:	2/04	CHECKED:	
JOB NO:	704188	APPROVED:	W D5-704188-6 SHT. 6 OF 6
	40-1 & 40-2	6230000XXX0-4707077XX8704188	

FILE W/ R-3747
INDEXED 3-29-04 GH