RIVERSIDE CALIFORNIA

PUBLIC WORKS DEPARTMENT

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

FEDERAL AID PROJECT NUMBER STPLE-5058(016) AND STPLE-5058(021)

GENERAL CONSTRUCTION NOTES

1. EXISTING UTILITIES SHOWN ON THE PLAN, ARE PLOTTED FROM UTILITY RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN.
2. PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS "A" LICENSE.
3. ALL ELEVATIONS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD.
4. CONFLICTING UTILITIES IN THE CONSTRUCTION AREA SHALL BE RELOCATED OR ABANDONED.
5. NUMBERS APPEARING AFTER RELOCATE OR ADJUST ON TOPO, SUCH AS RELOCATE 1, ADJUST 1, ETC. REPRESENT ACTIONS BY THE FOLLOWINGS:

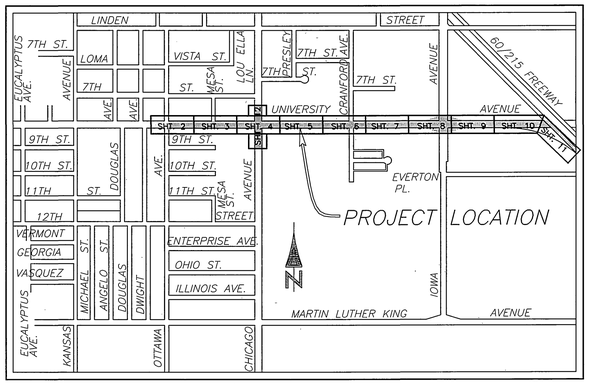
   1 – CITY OF RIVERSIDE, PUBLIC UTILITIES DEPARTMENT, WATER DIVISION
   2 – SOUTHERN CALIFORNIA GAS COMPANY
   3 – CITY OF RIVERSIDE, PUBLIC UTILITIES DEPARTMENT, ELECTRICAL DIVISION
   4 – PACIFIC BELL TELEPHONE COMPANY
   5 – RIVERSIDE TRANSIT AGENCY (RTA)

6. RIGHTS OF ENTRY FOR ALL PROPERTIES ON UNIVERSITY AVENUE BETWEEN OTTAWA AVENUE AND THE 215 FREEWAY HAVE BEEN OBTAINED BY THE CITY OF RIVERSIDE.

PARK AND RECREATION NOTES

1. ALL RELATED WORK SHALL CONFORM TO THE CITY OF RIVERSIDE PARK AND RECREATION DEPT. STANDARDS AND CITY OF RIVERSIDE STREET TREE POLICIES.
2. WHEN CALLING FOR INSPECTIONS CONTACT THE STREET TREE INSPECTOR A MIN. OF 48 HOURS IN ADVANCE AT (909) 351–6126 TO SCHEDULE AN INSPECTION. A FIELD NOTICE WILL BE ISSUED AS WRITTEN APPROVAL FOR EACH STAGE OF INSPECTION. A VERBAL APPROVAL WILL NOT BE ACCEPTABLE. INSPECTIONS ARE REQUIRED:
   a. AFTER COMPLETION OF FINAL GRADING AND WHEN ALL UTILITY SERVICES AND SEWER LATERALS HAVE BEEN MARKED, BUT PRIOR TO DIGGING PLANT PITS, ALL FINAL STREET TREE LOCATIONS ARE TO BE SPOTTED IN THE FIELD BY THE STREET TREE INSPECTOR.
   b. WHILE DIGGING PLANT PITS AND PLANTING/RELOCATING TREES.
   c. AFTER PLANTING AND ALL OTHER INDICATED OR SPECIFIED WORK HAS BEEN COMPLETED, FOR START OF MAINTENANCE.
   d. AT END OF MAINTENANCE PERIOD, THE CONTRACTOR/DEVELOPER SHALL CALL THE STREET TREE INSPECTOR AT (909) 351–6126 FOR A FINAL ACCEPTANCE INSPECTION IN ORDER TO BE RELEASED FROM MAINTENANCE. DEVELOPERS BONDS WILL NOT BE RELEASED UNTIL AFTER RECEIPT OF WRITTEN NOTIFICATION FROM THE CITY THAT THE TREES PASS FINAL INSPESTION AND THE PARK AND RECREATION DEPT. IS ASSUMING MAINTENANCE RESPONSIBILITY.
3. ~~ALL STREET TREES ARE TO BE PLANTED PRIOR TO OCCUPANCY.~~
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO ACCEPTABLY MAINTAIN ALL PLANTINGS FOR A MINIMUM PERIOD OF ONE (1) YEAR.
5. BOTH A STREET TREE RELOCATION/REMOVAL PERMIT AS ISSUED BY THE PARK AND RECREATION DEPARTMENT AND A STREET OPENING PERMIT AS ISSUED BY THE PUBLIC WORKS DEPARTMENT ARE REQUIRED PRIOR TO COMMENCEMENT OF TREE RELOCATION AND/OR REMOVAL WORK. FOR ALL EXISTING TREES WITHIN WHAT WILL ULTIMATELY BE THE PUBLIC RIGHT–OF–WAY PAVEMENT AREA, BACKFILL OF ALL HOLES MUST BE INSPECTED BY THE PUBLIC WORKS INSPECTOR FOR PROPER COMPACTION.
6. ALL STREET TREES MUST BE AUTOMATICALLY IRRIGATED.

NOTE: IN THE INTEREST OF PUBLIC SAFETY AND MAINTENANCE, THE STREET TREE INSPECTOR SHALL HAVE THE AUTHORITY TO REVISE THE STREET TREE QUANTITIES AND LOCATIONS SHOWN ON APPROVED PLANS BASED UPON FIELD CONDITIONS FOUND AT THE TIME OF INSTALLATION OF THE TREES.



PROJECT LOCATION PLAN

SCALE: 1" = 1,000'

SHEET INDEX

SHEETS 1–12: STREET IMPROVEMENT PLANS.
SHEETS LP–1 TO LP–11 (PLUS LP–8.1, LP–8.2 AND LP–8.3): PARKWAY AND MEDIAN PLANTING PLANS.
SHEETS LH–1 TO LH–16 (PLUS LH–8.1, AND LH–8.2) : PARKWAY AND MEDIAN HARDSCAPE PLANS.
SHEETS LI–1 TO LI–13 (PLUS LI–8.1, LI–8.2 AND LI–8.3): PARKWAY AND MEDIAN IRRIGATION PLANS.
SHEETS LL–1 TO LL–3: PEDESTRIAN LIGHTS AND MEDIAN UPLIGHTING PLANS.

APPROVED FOR CITY OF RIVERSIDE

BARRY BECK, PUBLIC WORKS DIRECTOR — DATE 7/3/95

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

CALTRANS GENERAL NOTES

1) AN ENCROACHMENT PERMIT IS REQUIRED BEFORE ANY WORK MAY BEGIN IN OR NEAR THE STATE RIGHT–OF–WAY.
2) ALL WORK WITHIN THE STATE RIGHT–OF–WAY SHALL BE COMPLETED IN ACCORDANCE WITH THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS DATED JULY, 1992. SHOULD A CONFLICT ARISE BETWEEN THE CONTRACT PLANS, SPECIFICATIONS AND/OR DETAILS PREPARED BY THE PERMITTEE, THE STATE'S STANDARD SPECIFICATIONS SHALL GOVERN AS DETERMINED BY THE STATE'S REPRESENTATIVE (STANDARDS OTHER THAN STATE MUST BE PRE–APPROVED AND JUSTIFIED).
3) NO EQUIPMENT OR MATERIALS MAY BE STORED ON THE STATE RIGHT–OF–WAY.
4) ALL DISTURBED AREAS IN THE STATE RIGHT–OF–WAY MUST BE TREATED FOR EROSION CONTROL (HYDROSEEDING OR EQUIVALENT, OR AS DIRECTED BY THE STATE'S REPRESENTATIVE). THE RESPONSIBILITY FOR MAINTAINING EROSION CONTROL WILL NOT BE RELEASED UNTIL THE SEEDING IS WELL ESTABLISHED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF CALTRANS CLEANING ANY DRAINAGE STRUCTURES/CHANNELS WHICH HAVE BECOME CLUTTERED WITH DEBRIS AND/OR SILT AS A RESULT OF, OR CAUSED BY, THE CONSTRUCTION PROJECT.
5) ACCESS CONTROL ON THE FREEWAY WILL BE MAINTAINED AT ALL TIMES, I.E., THE WORK INSIDE THE STATE RIGHT–OF–WAY MUST BE FENCED OFF WITH NO ACCESS TO THE WORK AREA FROM THE FREEWAY.
6) NO FREEWAY RAMPS OR FREEWAY LANES MAY BE CLOSED OR OBSTRUCTED AT ANYTIME UNLESS SPECIFICALLY ALLOWED PER THE ENCROACHMENT PERMIT AND/OR AS DIRECTED BY THE STATE'S REPRESENTATIVE.
7) ALL FENCE RELOCATED TO FACILITATE THE CONSTRUCTION OF THIS PROJECT INSIDE THE STATE RIGHT–OF–WAY SHALL BE REPLACED WITH CL–6 FENCE AS SHOWN IN THE STATE'S STANDARD PLANS OR WITH A BLOCK WALL IN ACCORDANCE WITH ACCEPTABLE LOCAL AGENCY STANDARDS.
8) WHERE TYPE CL–6 FENCE DOES NOT EXIST, THE STATE RIGHT–OF–WAY FENCE MUST BE UPGRADED TO TYPE CL–6 FENCE, AS SHOWN IN THE STANDARD PLANS.
9) WHERE SURVEY MONUMENTS EXIST, SUCH MONUMENTS SHALL BE PROTECTED OR SHALL BE REFERENCED AND RESET PURSUANT TO BUSINESS AND PROFESSIONS CODE, SECTIONS 8700 TO 8805 (LAND SURVEYOR'S ACT).
10) ALL SIGNING, STRIPING AND PAVEMENT MARKINGS WITHIN STATE RIGHT–OF–WAY SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE TRAFFIC MANUAL, PUBLISHED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, AND THE SPECIAL PROVISIONS. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED ON THE PLANS.
11) THE EXACT LOCATION OF ALL SIGNS SHALL BE DETERMINED IN THE FIELD BY THE STATE'S REPRESENTATIVE.
12) ALL CONFLICTING STRIPING AND PAVEMENT MARKINGS NOT SHOWN ON THE PLANS SHALL BE REMOVED FROM THE PAVEMENT BY SANDBLASTING BY THE CONTRACTOR.
13) ALL CONFLICTING SIGNS SHALL BE EITHER REMOVED OR RELOCATED BY THE CONTRACTOR. RELOCATABLE SIGNS SHALL BE INSTALLED AS SPECIFIED ON THE PLANS OR AS DETERMINED IN THE FIELD BY THE STATE'S REPRESENTATIVE.
14) ALL SIGNS, ROADSIDE MARKERS, ELECTROLIERS, ETC., SHALL BE PROTECTED AND/OR REPLACED IN–KIND ACCORDING TO THE CURRENT STATE STANDARD PLANS AND THE CURRENT TRAFFIC MANUAL, AT NO COST TO THE STATE.

SPECIFIC CONSTRUCTION NOTES

⬢ NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY, UNLESS MODIFICATIONS ARE NOTED ON THE PLAN. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.

⬢ 325 M — CONSTRUCT SIDEWALK PER MODIFIED STANDARD DRAWING 325. MODIFICATION SHALL INCLUDE WIDTH, THICKNESS, ~~REINFORCEMENT~~ AND FINISH PER DETAIL 1 ON SHEET LH–16.

(–) DETAIL NUMBER / SHEET NUMBER

INDEXED 9/98 CD

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/1/95

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY :	BY	DATE
DEPUTY P.W. DIRECTOR		4/5/95
PRINCIPAL ENGINEER		4/5/95
CHIEF P.W. INSPECTOR		6-1-95
TRAFFIC DIVISION		5/11/95
SURVEYOR		5-15-95
STREET DIVISION		5/11/95
PARKS DEPARTMENT		5/11/95

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE

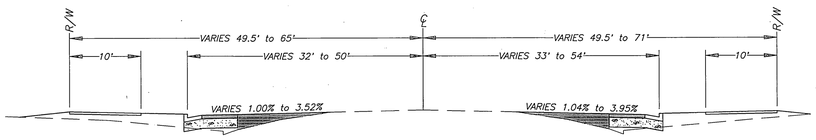
UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO 215 FREEWAY

ACCOUNT NUMBER
432–541500–440302–30316

R–3271

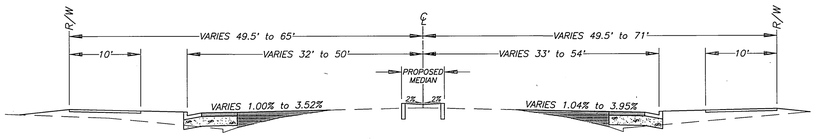
SHEET 1 OF 12

FILE NO. : PC 3602 P/S



TYPICAL CROSS SECTION
UNIVERSITY AVENUE
WITHOUT MEDIANS

STRUCTURAL SECTION: 0.5' A.C. / 1.33' C.A.B.
SCALE: 1" = 10'



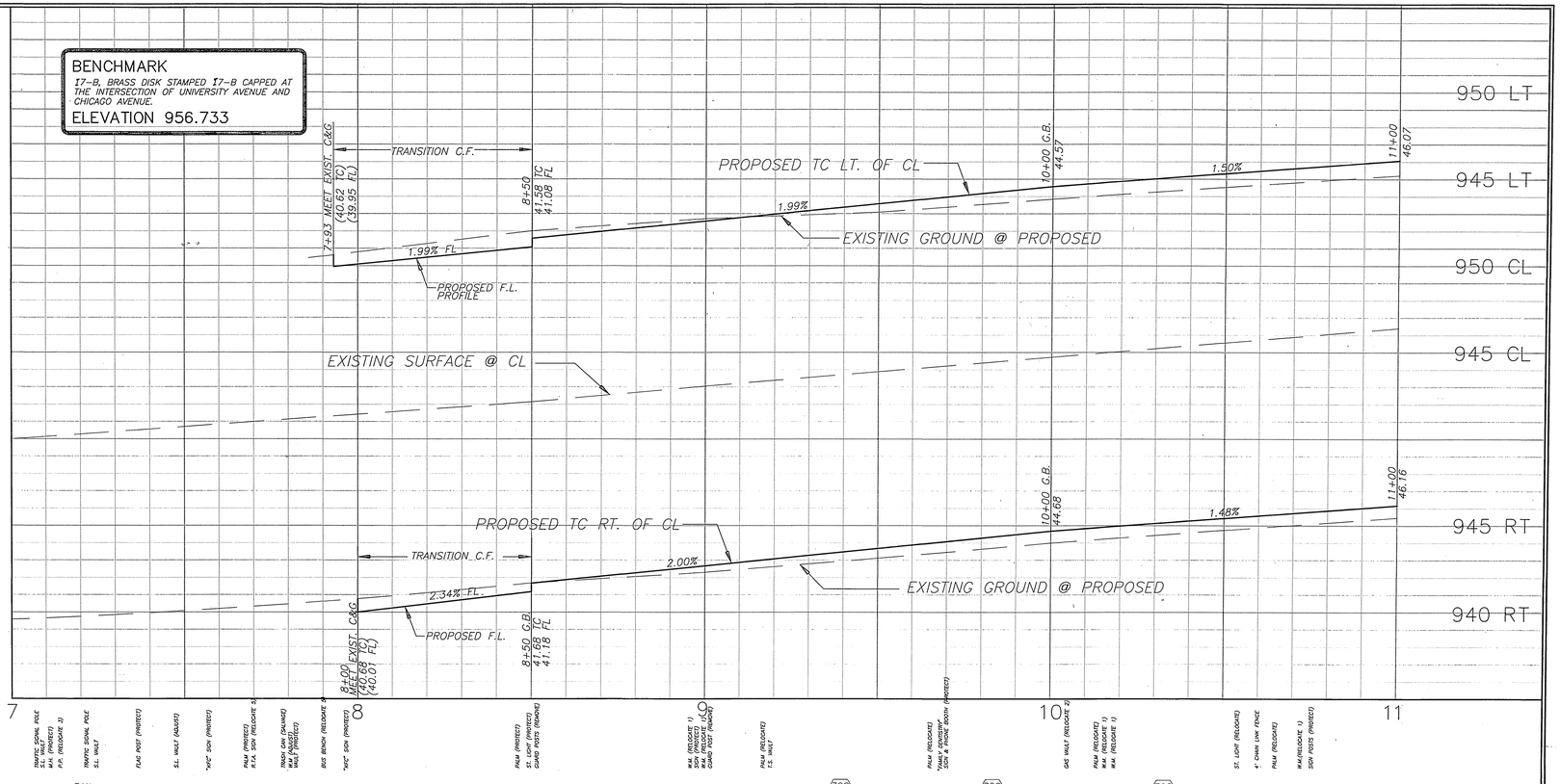
TYPICAL CROSS SECTION
UNIVERSITY AVENUE
WITH MEDIANS

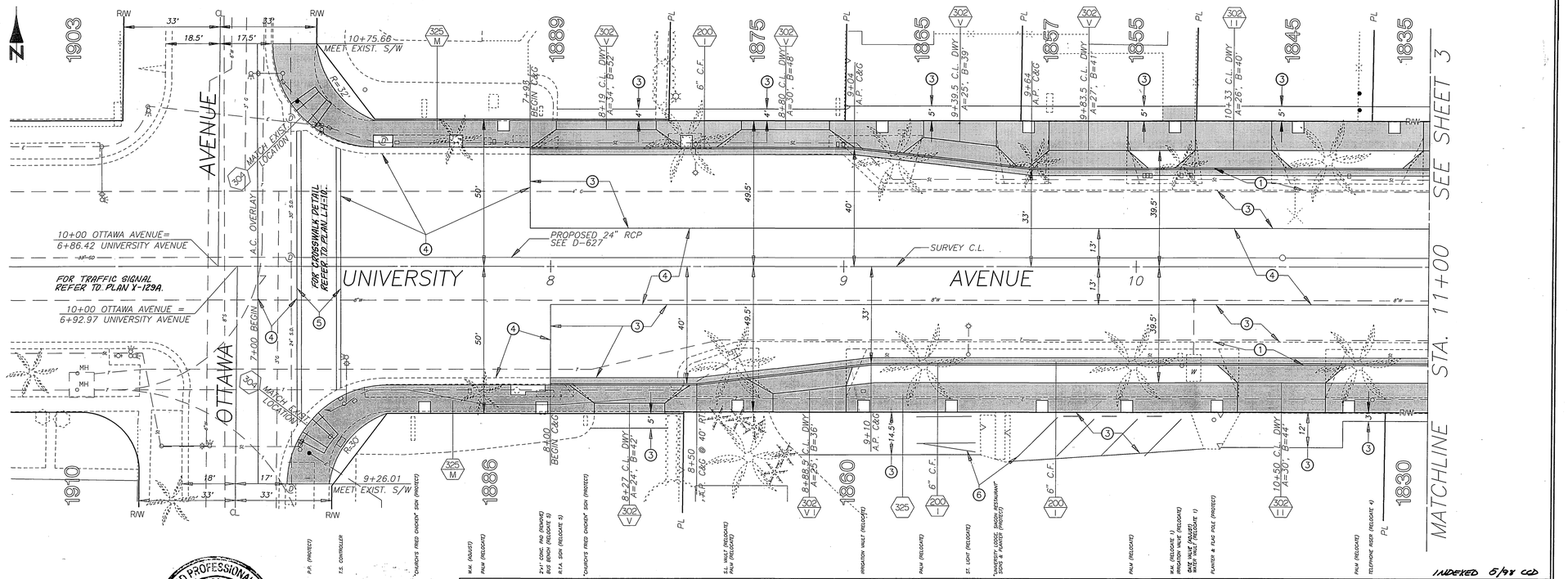
STRUCTURAL SECTION: 0.5' A.C. / 1.33' C.A.B.
SCALE: 1" = 10'

CONSTRUCTION NOTES

1. CONSTRUCT 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
2. CONSTRUCT 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.
3. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
5. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
6. REMOVE AND REPLACE (3) P.C.C. BUMPERS & (7) 4" WHITE STRIPES.

BENCHMARK
17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.
ELEVATION 956.733





REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RWC	5/16/95
PRINCIPAL ENGINEER	JE	6/7/95
CHIEF P.W. INSPECTOR	RSK	6-7-95
TRAFFIC DIVISION	JT	5/31/95
SURVEYOR	CWDE	6/16/95
STREET DIVISION	RE	5/30/95
PARKS DEPARTMENT	MF	5/31/95

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

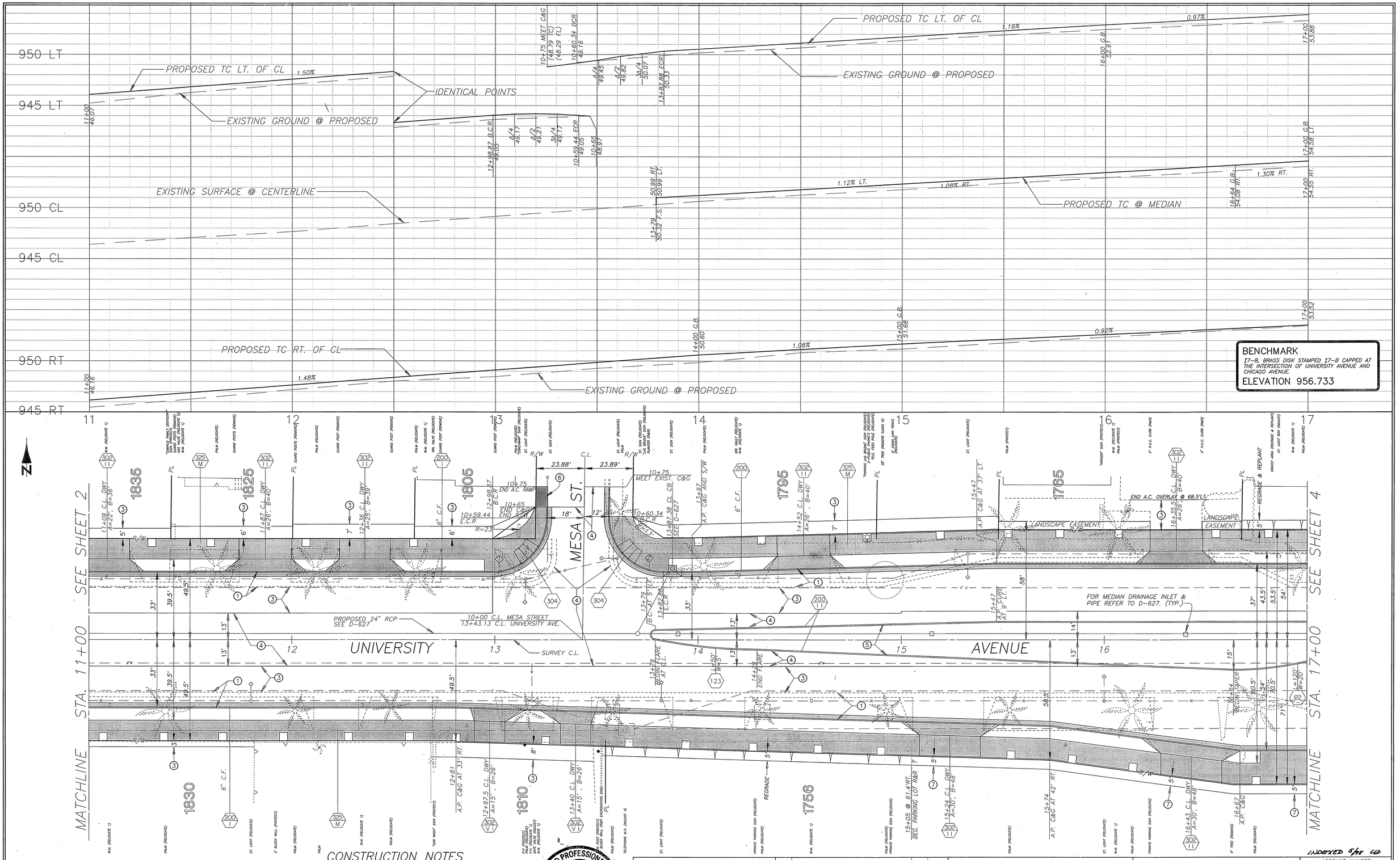
INDEXED 5/98 CCD

ACCOUNT NUMBER
432-541500-440302-30316

R-3271

SHEET 2 OF 12

FILE NO. : PC 3602 P/S



CONSTRUCTION NOTES

1. CONSTRUCT 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
3. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
5. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
6. CONSTRUCT 10'x 6' A.C. RAMP.
7. R&R WITH 4" ASPHALT CONCRETE OVER COMPACTED NATIVE.

CURVE DATA				
◇	△	R	L	T
1	89° 17' 08"	27'	42.07'	26.67'
2	90° 42' 53"	27'	42.75'	27.34'

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RMG	6/12/95
PRINCIPAL ENGINEER		6/4/95
CHIEF P.W. INSPECTOR	REE	6-1-95
TRAFFIC DIVISION		5/31/95
SURVEYOR		5/18/95
STREET DIVISION		5/31/95
PARKS DEPARTMENT		5/31/95

DATE

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

INDEXED 5/98 GD

ACCOUNT NUMBER 432-541500-440302-30316

R-3271

SHEET 3 OF 12

FILE NO.: PC 3602 P/S

960 LT
955 LT
960 CL
955 CL
960 RT
955 RT

PROPOSED TC LT. OF CL
EXISTING GROUND @ PROPOSED
PROPOSED TC @ MEDIAN
PROPOSED F.S. @ CROWN LINE
PROPOSED TC RT. OF CL

L=54.49'
L=55.47'
40' V.C.
P.I.=59.01 TC
63.34' V.C.
PI=59.75

0.97%
1.21%
1.85%
1.52%
1.68%
1.00% LT.
1.02% RT.
1.30% RT.
1.68% LT.
1.40% RT.
1.58% RT.
-0.36%
1.50%
0.92%
1.34%
0.85%

17+00 53.88
17+00 GB 54.98 LT.
17+00 54.55 RT.
17+00 53.52
17+50 G.B. 53.98
17+84 G.B. 56.64 RT.
18+50 G.B. 55.34
18+50 G.B. 56.08 LT.
18+50 G.B. 56.31 RT.
18+50 G.B. 55.32
19+00 60.14 TC
19+22.38 BCR 60.06 TC
19+29.47 BCR 56.30 TC
19+34 G.B. RT. 56.82 F.S.
19+34 G.B. 57.49 RT.
19+34 G.B. 57.49 LT.
19+20.99 BCR 56.51 TC
19+10.62 ECR 58.09 TC
20+78.43 ECR 55.71 TC
20+83.40 BCR 56.16 TC
20+99 (55.33) TC (54.80) FL MEET EXIST. C&G
20+99 MEET EXIST. C&G MEET EXIST. S/W
21+00 MEET EXIST. C&G 20+83.40 B.C.R.
20+79.23 E.C.R. 20+83.23 C.L. DWY SEE D-627
20+66.66 E.C.R.
20+99 CL. CB SEE D-627
19+23.50 B.C.
19+10.62 E.C.R.
19+51.60
20+67.40 B.C.
20+57
20+40 SC 40
19+46
21+18.33 MOC 59.90 TC
21+25 59.94 TC
21+50 EVC 60.23 TC
19+99.42 B.C.R.
20+20.99 E.C.R.
17+90 C.L. DWY A=30', B=44'
17+60 A.P. C&G
18+14 @ 53.5' LT. BACK S/W
18+40 A.P. C&G, BACK S/W
19+02 C.L. DWY A=36', B=54'
21+00 C.L. DWY A=30', B=44'
18+12 C.L. DWY A=30', B=44'
21+89.5 C.L. DWY A=30', B=48'
22+00 C.L. DWY A=25', B=43'
22+72 C.L. DWY A=31', B=45'
22+63.8 C.L. DWY A=19', B=30'
22+97 BEGIN TAPER
23+00 G.B. 62.49
23+00 G.B. 62.35
23+00 G.B. 63.64 LT.
23+00 G.B. 63.40 RT.

MATCHLINE STA. 17+00 SEE SHEET 3
MATCHLINE STA. 21+00 SHEET 12
MATCHLINE STA. 19+00 SHEET 12
MATCHLINE STA. 23+00 SEE SHEET 5

UNIVERSITY AVENUE
CHICAGO AVENUE

17 18 19 20 21 22 23

1725 1715 1705 1691 1680 1651 1666 1756

FOR TRAFFIC SIGNAL REFER TO PLAN X-132
FOR CROSSWALK DETAIL REFER TO PLAN LH-11.
FOR PROPOSED 24" RCP AND MEDIAN DRAINAGE PIPE CONNECTION, REFER TO PLAN D-627
20+00 C.L. CHICAGO AVE. = 20+00 C.L. UNIVERSITY AVE.
SURVEY C.L.
CROWN LINE
LANDSCAPE EASEMENT
2'GUTTER
R/W
R=42'
R=50'
R=25'
R=32'

BENCHMARK
I7-B, BRASS DISK STAMPED I7-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.
ELEVATION 956.733

CONSTRUCTION NOTES

1. CONSTRUCT 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
3. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
5. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
6. CONSTRUCT 2 DROP INLETS (ALHAMBRA A-344, 12"x12"). CONNECT TO BACK OF CATCH BASIN AT STATION 20+99 UNIVERSITY AVENUE USING 4" P.V.C. PIPE. HORIZONTAL & VERTICAL LOCATION TO BE DETERMINED AT THE TIME OF CONSTRUCTION BY THE ENGINEER.
7. R&R WITH 4" ASPHALT CONCRETE OVER COMPACTED NATIVE.
13. CONSTRUCT 12" PVC DRAIN PIPE.
17. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) Δ4

CURVE DATA				
◇	△	R	L	T
1	89° 11' 56"	35'	54.49'	34.51'
2	90° 48' 04"	35'	55.47'	35.49'
3	90° 37' 34"	35'	55.36'	35.38'
4	89° 22' 26"	35'	54.60'	34.62'

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
1	Modified Dwy. & Curb & Gutter.	DKG	5/16/95
2	Added Curb & Sidewalk around Access Hatch.	DKG	7/10/96
3	Added Grind Area & Revised Profile.	DKG	5/14/97
4	Added 6' C.F. along landscape Easement.	DKG	7/5/96

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	MKS	6/10/96
PRINCIPAL ENGINEER	DKG	6/10/96
CHIEF P.W. INSPECTOR	RDK	6-7-96
TRAFFIC DIVISION	SR	7/11/96
SURVEYOR	LMS	5/16/96
STREET DIVISION	RS	5/16/96
PARKS DEPARTMENT	LM	5/21/96

DATE

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

INDEXED 9/98 CD

ACCOUNT NUMBER 432-541500-440302-30316

R-3271

SHEET 4 OF 12

FILE NO. : PC 3602 P/S

970 LT
965 LT
970 CL
965 CL
970 RT
965 RT

PROPOSED TC LT. OF CL
EXISTING GROUND @ PROPOSED
PROPOSED TC @ MEDIAN
EXISTING SURFACE @ CENTERLINE
PROPOSED TC RT. OF CL
EXISTING GROUND @ PROPOSED

1.52%
1.60%
1.12% LT.
1.60% LT.
1.66% RT.
1.80%
1.49%
(1.40%)

23+00 G.B. 22.38
23+00 G.B. 23+00 G.B. 63.64 LT.
23+00 G.B. 63.40 RT.
24+17 G.B. 64.16
24+17 G.B. 64.95 LT.
25+00 G.B. 66.08
23+00 G.B. 62.48
25+40 64.46
26+45.60 (68.25) TC (67.55) FL
26+67 68.80 T.S.
26+67 68.49 PT 68.39 LT.
27+34.50 MEET EXIST C&G (68.25 TC) (68.78 FL)
27+47 20.23 RT 20.23 LT

18"X18" DRAIN INLET WITH PARKWAY GRATE
12" P.V.C. PIPE
DETAIL 'A'
MEDIAN DRAIN DETAIL

Varies 3'-10"
2'
Slope Varies 1.2% - 3.0%
Exist. Curb
Exist. A.C.
Grade Break
A ——— A

BENCHMARK
17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.
ELEVATION 956.733

23 24 25 26 27 28 29

ST. LIGHT (RELOCATE)
GRASSY AREA (RESHAPE & REPLANT)
ST. LIGHT VAULT (REMOVE)
REPLANT
"REDLANDS FEDERAL BANK" SIGN (PROTECT)
PALM (RELOCATE)
W.M. (ADJUST)
W.M. (RELOCATE)
PALM (RELOCATE)
ST. ELOCATE (PROTECT)
ST. LIGHT (PROTECT)
PLANTER (PROTECT)
PALM (PROTECT)
"HARRY'S" SIGN (PROTECT)
PALM (PROTECT)
PLANTER (PROTECT)
LIGHT (PROTECT)
W.M. (ADJUST)
"SQUARE" SIGN (PROTECT)
W.M. (ADJUST)
ST. LIGHT (PROTECT)
"HARVEST" SIGN (PROTECT)
PALM (PROTECT)
SIGN (EXISTING) (PROTECT)
W.M. (ADJUST)
PALM (PROTECT)
ST. LIGHT (PROTECT)
PALM (PROTECT)
W.M. (ADJUST)

122 — 302 V — 200 I — 302 I — 302 I — 302 I — 325 M — 302 I

1651 1635 1605 1575 1616 1580 1550

R&R S/W TO 66'LT.
2' REGRADE & REPLANT
6" C.F.
29+17 @ 37° E.F. END TAPER
24+28.5 C.L. DWY A=25', B=39'
24+85.5 C.L. DWY A=22', B=36'
25+45 A.P. C&G
25+66 C.L. DWY A=22', B=36'
26+16 C.L. DWY A=30', B=44'
27+12.5 C.L. DWY A=30', B=44'
R&R DWY TO 68'LT.
PORTION OF 120' REVERSE TAPER W=10'
SURVEY C.L.
UNIVERSITY AVENUE
REMOVE CURB
R=1'
R=40'
22+30.25 BEGIN TRANSITION
25+40 EC
25+40 BC
25+40 A.P. CURB
REMOVE CURB & 8" STRIPE
26+27 END STRIPE
BEGIN TAPER 26+34.19 @ 4.0' 26+44.27 @ 8.38' RT.
24+87 BC @1.6' LT.
27+42 EC @ 4.0' LT.
27+47 BC @ 4.0' RT.
27+34.50 MEET EXIST. C&G
26+67 MEET EXIST. CURB
DEPRESS GUTTER LIP TO MEET EXIST.
21+47 BC @ 4.0' RT.
1=120' W=20'
23+19.5 C.L. DWY A=15', B=26'
24+07 C.L. DWY A=24', B=42'
25+25 C.L. DWY A=25', B=39'
REMOVE & REPLACE 18"CP WITH 18"x18" R.C.B.
REMOVE & REPLACE 24" CP WITH TYPE II C/G AS WEREAS C.Y.A.
LANDSCAPE EASEMENT
R/W
MATCHLINE STA. 23+00 SEE SHEET 4
MATCHLINE STA. 29+00 SEE SHEET 6

CONSTRUCTION NOTES

1. CONSTRUCT 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
2. R&R WITH 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
3. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
5. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
7. R&R WITH 4" ASPHALT CONCRETE OVER COMPACTED NATIVE.
12. CONSTRUCT MEDIAN DRAIN PER DETAIL "A" ON THIS SHEET.
13. CONSTRUCT 12" P.V.C. DRAIN PIPE.
17. **GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.).**

REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6/20/97 CIVIL STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
3	Modify Median for Left Turn Pocket	PHL	4/27/01
2	Added C&G removal & replace notes.	PHL	3/12/96
1	Added Grind Area.	PHL	5/11/95

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY EMM

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RMK	5/9/95
PRINCIPAL ENGINEER	JR	5/9/95
CHIEF P.W. INSPECTOR	RBC	5-11-95
TRAFFIC DIVISION	[illegible]	5/11/95
SURVEYOR	MARK	5/15/95
STREET DIVISION	JC	5/15/95
PARKS DEPARTMENT	[illegible]	5/15/95

DATE

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

ACCOUNT NUMBER 432-541500-440302-30316

R-3271

SHEET 5 OF 12

FILE NO. : PC 3602 P/S

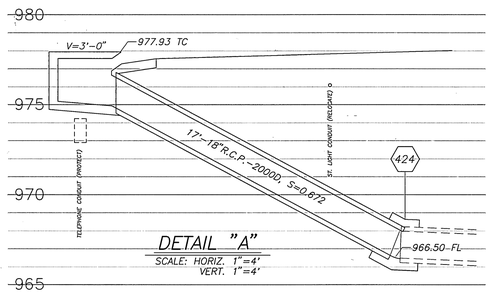
REGISTERED PROFESSIONAL ENGINEER EDWARD L. MASON No. 27154 Exp. 6-30-03 CIVIL STATE OF CALIFORNIA

CITY BUSINESS TAX CERTIF. NO. 103373 EXP 06-30-02
DAVID CROSSWHITE & ASSOC.
P.O. BOX 8517 REDLANDS, CA 92375
(909)264-7626 FAX (909)389-0033

INDEXED 5/96 CD

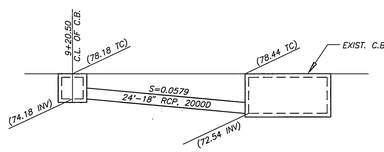
ENGR. DATE 04-18-2001

PREPARED UNDER THE SUPERVISION OF



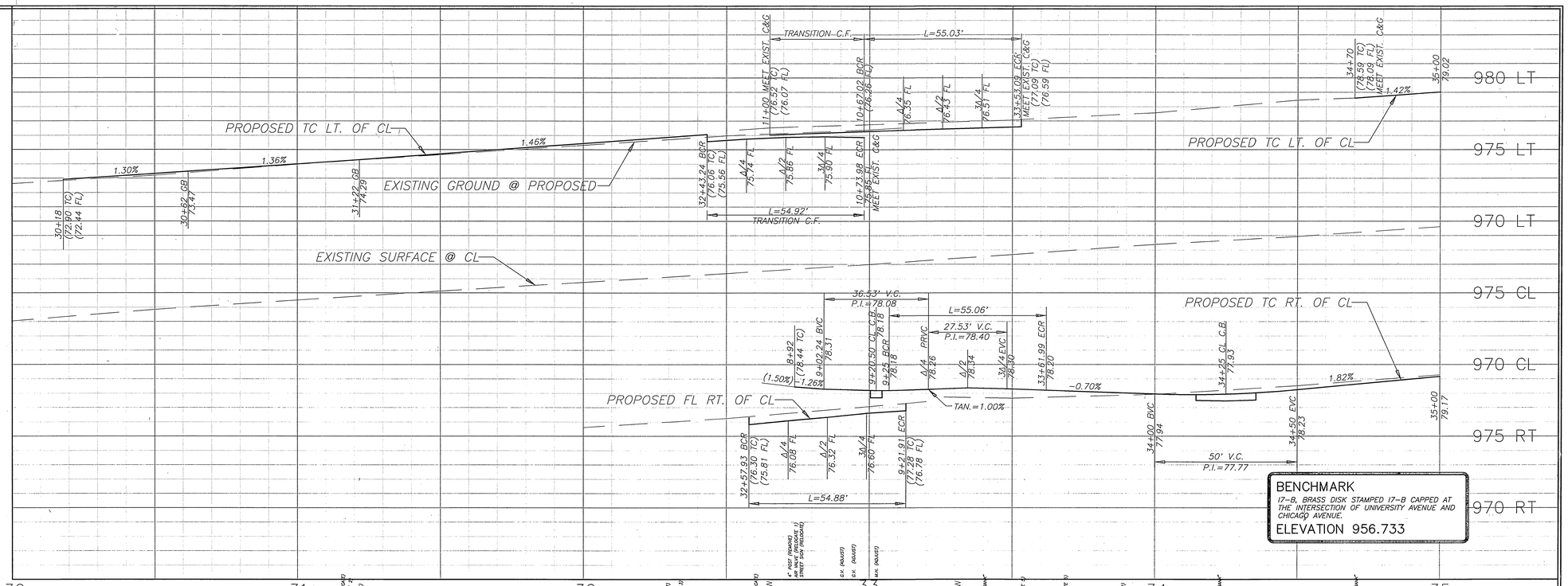
DETAIL "A"

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



DETAIL "B"

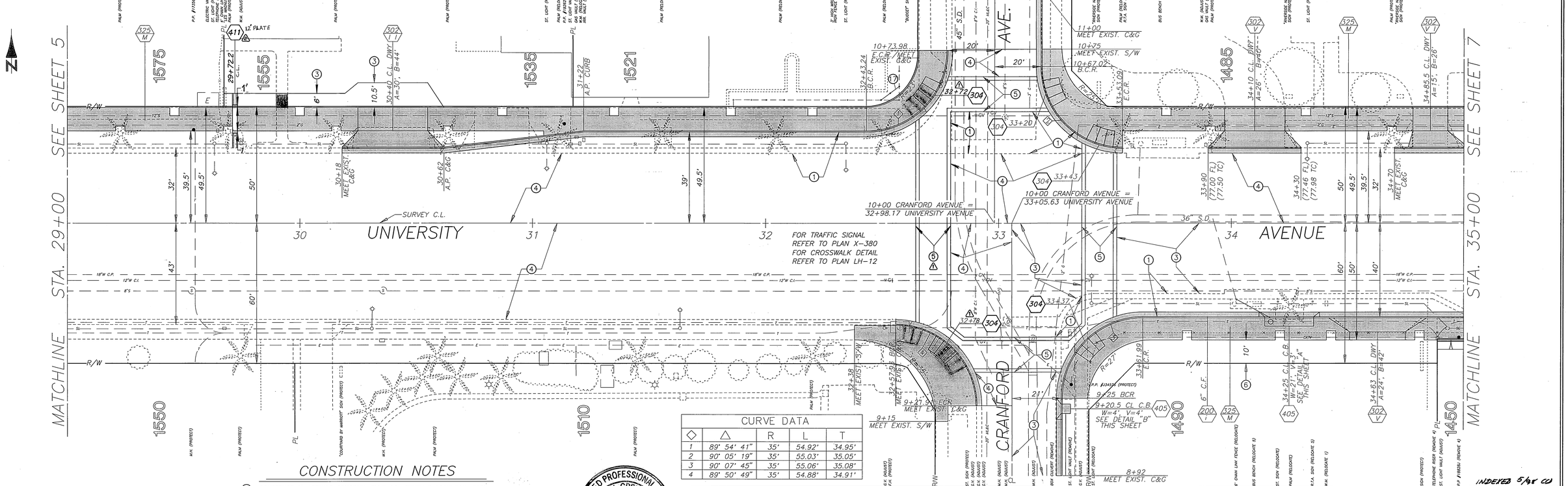
SCALE: HORIZ. 1"=10'
VERT. 1"=10'



BENCHMARK

17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.

ELEVATION 956.733



CONSTRUCTION NOTES

1. CONSTRUCT 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
3. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
5. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
6. RELOCATE 6' CHAIN LINK FENCE TO R/W.
17. RELOCATE INTERFERING PORTION OF 3' HIGH WROUGHT IRON FENCE.

CURVE DATA				
◇	△	R	L	T
1	89° 54' 41"	35'	54.92'	34.95'
2	90° 05' 19"	35'	55.03'	35.05'
3	90° 07' 45"	35'	55.06'	35.08'
4	89° 50' 49"	35'	54.88'	34.91'

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE

DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97

DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
2	Added Under Sidewalk Drain	DKG	8/12/96
1	Relocated Wheel Chair Ramps & Crosswalk.	DKG	12/12/96

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	[illegible]	4/15/97
PRINCIPAL ENGINEER	[illegible]	4/15/97
CHIEF P.W. INSPECTOR	[illegible]	4/15/97
TRAFFIC DIVISION	[illegible]	4/17/97
SURVEYOR	[illegible]	6-15-95
STREET DIVISION	[illegible]	6-15-95
PARKS DEPARTMENT	[illegible]	6-15-95

DATE

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

INDEXED 5/97 CD

ACCOUNT NUMBER
432-541500-440302-30316

R-3271

SHEET 6 OF 12

FILE NO. : PC 3602 P/S

985 LT
980 LT
985 CL
980 CL
985 RT
980 RT

EXISTING GROUND @ PROPOSED
PROPOSED TC LT. OF C.L.
EXISTING SURFACE @ CENTERLINE
PROPOSED TC RT. OF C.L.
EXISTING SURFACE @ PROPOSED

1.42%
1.27%
1.88% LT
1.78% RT
1.87%
1.71%
1.28%
1.59%
1.82%

35+00 79.02
35+45 (79.66 TC) (79.16 FL)
36+22 (80.50 TC) (80.05 FL)
37+06 (81.57 TC) (81.13 FL)
40+10 BC 87.59 LT
40+10 BC 87.56 RT
41+00 89.28 LT
41+00 89.16 RT
35+03 79.19 TC) (78.71 FL)
35+00 79.11
36+68 (81.18 TC) (81.08 FL)
37+17 GB 82.04
38+00 GB 83.10
40+10 GB 86.69
41+00 88.37

BENCHMARK
17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.
ELEVATION 956.733

35 36 37 38 39 40 41

SEE SHEET 6 — STA. 35+00 — MATCHLINE
SEE SHEET 8 — STA. 41+00 — MATCHLINE

36 UNIVERSITY 37 38 39 AVENUE 40

1485 1445 1443 1435 1405 1393 1377
1450 1420 1414 1360

PROPOSED 36" RCP SEE D-627
PROPOSED 30" RCP
36"-S.D.
FOR MEDIAN DRAINAGE INLET & PIPE REFER TO D-627. (TYP.)
REGRADE & REPLANT
R/W

CONSTRUCTION NOTES

(2) CONSTRUCT 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.
(3) CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
(4) GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
(5) REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
(6) R&R WITH 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.
(7) R&R WITH 4" ASPHALT CONCRETE OVER COMPACTED NATIVE.
(8) REMOVE & RECONSTRUCT CONCRETE GUTTER (8" THICK).
(9) REMOVE & RECONSTRUCT CONCRETE SIDEWALK (3.5" THICK).

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

INDEXED 5/98 CD

ACCOUNT NUMBER 432-541500-440302-30316

R-3271

SHEET 7 OF 12

FILE NO. : PC 3602 P/S

◇	Δ	R	L	T
CURVE DATA				
1	89° 48' 58"	35'	54.87'	34.89'
2	90° 11' 02"	35'	55.09'	35.11'
3	89° 53' 37"	35'	54.91'	34.94'
4	90° 06' 23"	35'	55.04'	35.07'
5	55° 11' 28"	42'	40.46'	21.95'
6	29° 12' 06"	30'	15.29'	7.81'

CONSTRUCTION NOTES

(2) CONSTRUCT 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.
(3) CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
(4) GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
(5) REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
(6) R&R WITH 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.
(7) R&R WITH 4" ASPHALT CONCRETE OVER COMPACTED NATIVE.
(13) CONSTRUCT 12" PVC DRAIN PIPE.

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
1	ADD 411 DRAINS @ IHOP + MOTELODGE	DKG	8/30/96

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RWG	6/2/95
PRINCIPAL ENGINEER		6/3/95
CHIEF P.W. INSPECTOR	REK	6-1-95
TRAFFIC DIVISION		5/31/95
SURVEYOR		5.18.95
STREET DIVISION		5/8/95
PARKS DEPARTMENT		5/31/95

[redacted]

DATE

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

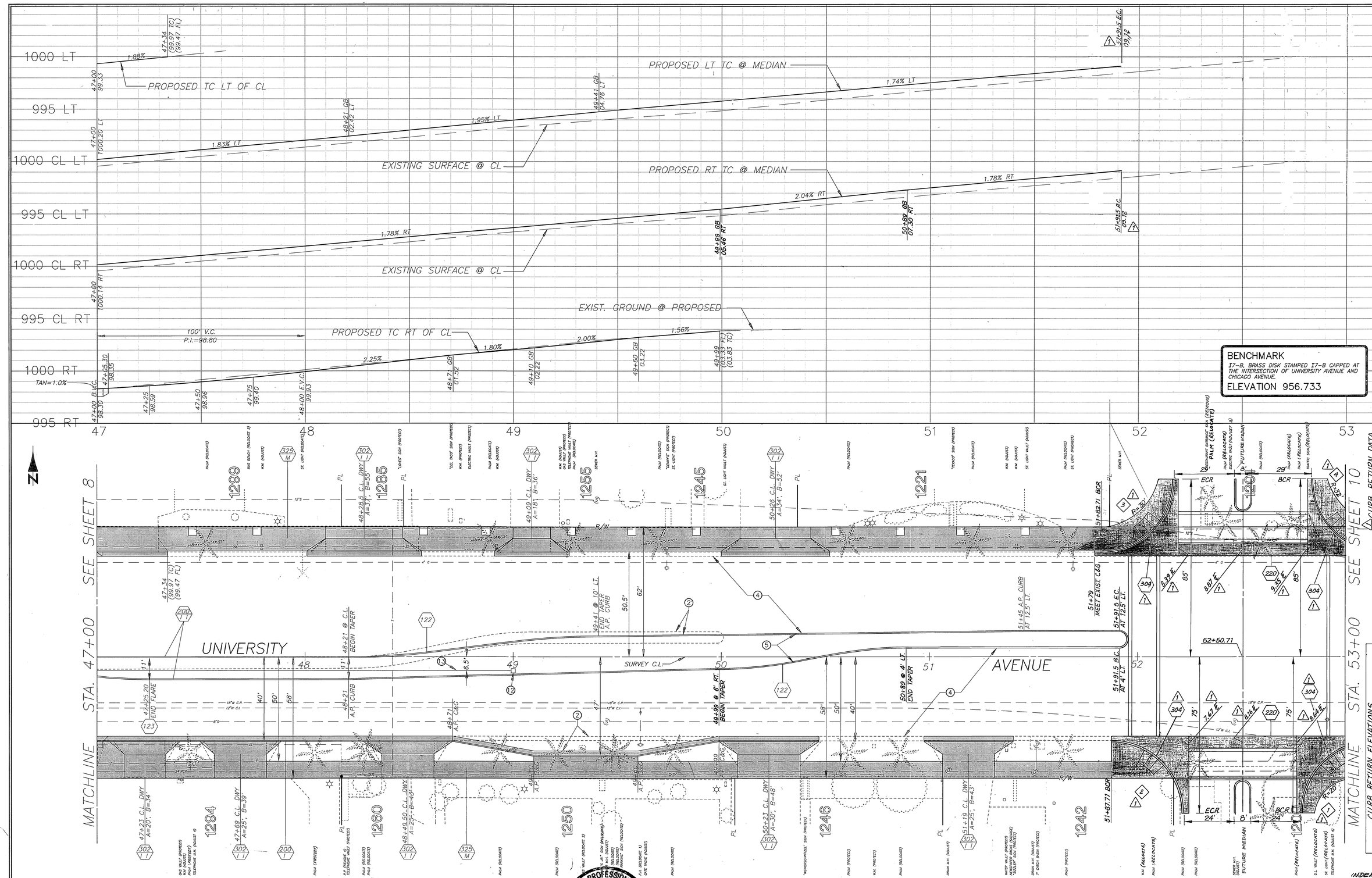
INDEXED 5/98 CCD

ACCOUNT NUMBER
432-541500-440302-30316

R-3271

SHEET 8 OF 12

FILE NO. : PC 3602 P/S



CONSTRUCTION NOTES

(2) CONSTRUCT 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.
(4) GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
(5) REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
(12) CONSTRUCT MEDIAN DRAIN PER DETAIL "A" ON SHEET 5 OF 12.
(13) CONSTRUCT 12" PVC DRAIN PIPE .

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
1	REVISED MEDIANS AND ADDED CURB RETURNS		9/2/95

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		
TRAFFIC DIVISION		
SURVEYOR		
STREET DIVISION		
PARKS DEPARTMENT		

DATE

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

INDEXED 5/98 CCD

ACCOUNT NUMBER 432-541500-440302-30316

R-3271

SHEET 9 OF 12

FILE NO. : PC 3602 P/S

MARK	REVISIONS	APPR.	DATE
A	Revised Median, Added Apron to Drop inlet.	CWD	3/11/97
A	Relocated Signs within Caltrans R/W.	JC	4/24/97

PROPOSED TC LT OF CL
EXISTING GROUND @ PROPOSED
1.71%
54+17.44 (112.32') (104.85')
56+56.50 (116.02 TC) (115.55 FL)
PROPOSED LT & RT TC @ MEDIAN
1.91% LT
1.91% RT
EXISTING SURFACE @ CL
57+82 BC 20.30 LT
57+82 BC 20.30 RT
53+00 11.70 LT
53+00 11.70 RT
PROPOSED TC RT OF CL
2.00 %
1.53%
57+30 GB 18.37 TC
58+05.10 BCR 19.52 TC
4/4 19.72 TC
1/2 19.90 TC
3/4 19.99 TC
38+66.46 ECR 20.10 TC, 19.60 FL
L=34.23'
54+29 (112.35 TC) (110.88 FL) MEET EXIST. C&G
EXISTING GROUND @ PROPOSED
1015 LT
1010 LT
1020 CL
1015 CL
1010 CL
1015 RT
1010 RT
53
54
55
56
57
58
59

FREEWAY SIGN RELOCATIONS

(A) REMOVE AND SALVAGE G8 SIGN.

(B) RELOCATE SIGNS G49, G28 AND G44 TO STREET LIGHT STANDARD AT STATION 56+77 RT. WITH A MINIMUM CLEARANCE OF 7'. SALVAGE G50, G28, G36, G47, G27 AND G36 SIGNS.

(C) REMOVE AND SALVAGE G9 SIGN. RELOCATE R17B SIGN TO NOSE OF MEDIAN AT STATION 57+80.

(D) REMOVE AND SALVAGE G92 AND G9 SIGNS.

BENCHMARK

17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.

ELEVATION 956.733

CURVE DATA				
◇	△	R	L	T
1	56° 02' 00"	35'	34.23'	18.62'

N

MATCHLINE STA. 53+00 SEE SHEET 9

SEE SHT. 10A FOR THIS AREA

SEE SHT. 10A FOR THIS AREA

SEE SHT. 10A FOR THIS AREA

SEE SHEET 11

53+18.71 ECR

54+23.5 BEGIN TAPER @ 2.5' LT

54+17.66 MEET EXIST. C&G

55+33.5 END TAPER @ 12' LT.

56+56.50 MEET EXIST. C&G

53+10.5 @ 2.5' LT.

53+10.5 @ 6' RT.

53+55 10.03 TC

54+42 A.P. CURB @ 6' RT. 1009.10 F.L. 1809.00 F.L.

54+29 BEGIN C&G

54+52.56 WIDE 18"x18" GRATE

54+38.46 C.L. DWY. A=23°, B=41'

54+52.56 1008.00 F.L.

55+25 C.L. DWY. A=26°, B=44'

55+09.5 A.P. S/W

55+23 A.P. S/W

55+19 A.P. S/W

55+26.65 A.P. S/W

56+34.50 C.L. DWY. A=26°, B=44'

56+50 61.75' RT. TOP OF GRATE 1014.78 F.L.

57+13.3 @ 89.4' RT. C.L. 8' SIDEWALK

57+29 @ 52.5' RT. C.L. 8' SIDEWALK

56+90 A.P. CURB AT 3' LT.

57+12.8 @ 7.5' RT. 1016.01 F.L.

57+36.3 @ 76.4' RT. 1015.10 F.L.

58+05.10 B.C.R.

58+66.46 E.C.R.

57+90 B.C.

58+33.55 UNIVERSITY AVE.= 38+24.53 POT OFF RAMP= 38+16.34 POT TURN LANE

RELOCATED R17B SIGN

R=45'

STATE HIGHWAY C.L.

AVENUE

FOR TRAFFIC SIGNAL REFER TO PLAN X-291.

S 89° 16' 47" E

S 32° 15' 37" E

SURVEY C.L.

STATE R/W

R/W

1201 1199 1200 1160 1150 1147

* Chainlink Not Relocated.

* Deleted w/o Ramp

CONSTRUCTION NOTES

(2) CONSTRUCT 4" ASPHALT CONCRETE OVER 8" CRUSHED AGGREGATE BASE.

(3) CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.

(4) GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.).

(5) REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.

(9) DEPRESS CURB AND REMOVE A.C. PAVEMENT WITHIN LIMITS SHOWN. CONSTRUCT 4" ASPHALT CONCRETE OVER COMPACTED NATIVE.

(11) REMOVE FENCE FROM STATION 55+50 to 56+50 AND RECONSTRUCT PER CALTRANS STANDARD DRAWING A85 AFTER REGRADING AREA.

(12) CONSTRUCT MEDIAN DRAIN PER DETAIL "A" SHEET 5 OF 12.

(13) CONSTRUCT 12" P.V.C. PIPE.

(14) CONTRACTOR TO POTHOLE AND VERIFY UTILITY DEPTHS PRIOR TO CONSTRUCTION OF STORM DRAIN PIPE.

(15) CONSTRUCT 12" R.C.P., 2000D STORM DRAIN PIPE.

(16) CONSTRUCT 18" R.C.P., 2000D STORM DRAIN PIPE.

(17) CONSTRUCT 24 L.F. OF 24" R.C.P., 2000D WITH CONCRETE HEADWALL AT EACH END PER CALTRANS STANDARD DRAWING D89.

(A) (18) CONSTRUCT 2' WIDE x 3" THICK P.C.C. APRON AROUND DRAIN INLET.

REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6/30/97 CIVIL STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
A	Added Sidewalk & Pipe Culvert, Revised Island.	KJH	12/12/95
A	Delete median taper Sta 55+13 to 57+82. Reduced median width to 6' + offset L.	KJH	12/22/95
A	Revised Dwy. at Sta. 54+38.46.	CWD	10/13/96
A	REVISED MEDIAN AND ADDED CURB RETURN	KJH	9/2/97
A	REDUCED MEDIAN WIDTH TO 10 FEET	CWD	6/25/97

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY KJH

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	KJH	6/25/97
PRINCIPAL ENGINEER	JC	6-25-97
CHIEF P.W. INSPECTOR	RDC	6-25-97
TRAFFIC DIVISION	JC	7/1/97
SURVEYOR	TMW	12/18/95
STREET DIVISION	JC	7/1/97
PARKS DEPARTMENT	KJH	7/24/97

UNIVERSITY AVENUE WIDENING

FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

REVISED PLAN
CalTrans Permit No.
08-95-N-MC-0240
INDEXED 5/94 CD

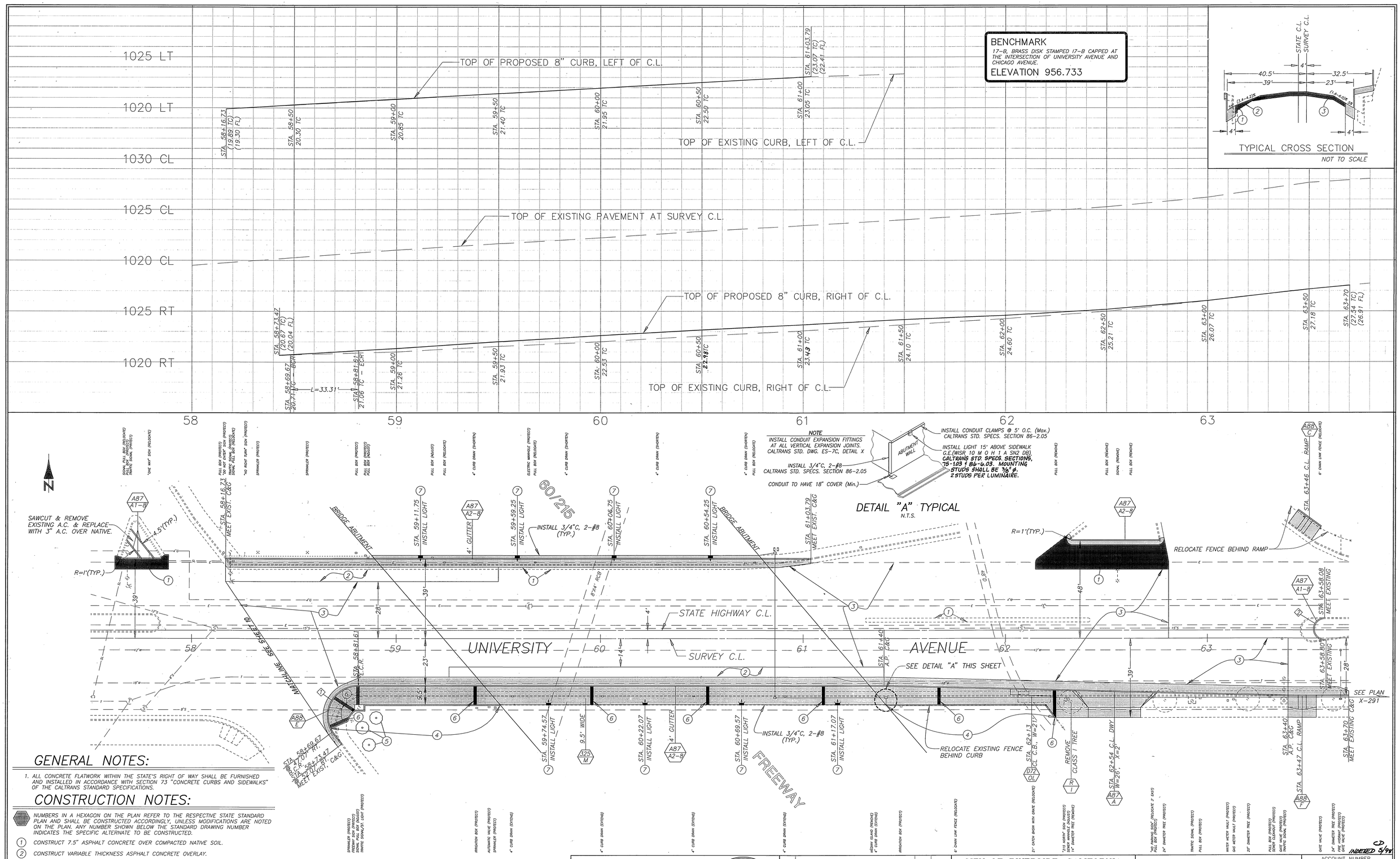
*As-Built 4/7/97

ACCOUNT NUMBER
432-541500-440302-30316

R-3271

SHEET 10 OF 12

FILE NO. : PC 3602 P/S



BENCHMARK

17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.

ELEVATION 956.733

TYPICAL CROSS SECTION

NOT TO SCALE

NOTE

INSTALL CONDUIT EXPANSION FITTINGS AT ALL VERTICAL EXPANSION JOINTS. CALTRANS STD. DWG. ES-7C, DETAIL X

DETAIL "A" TYPICAL

N.T.S.

GENERAL NOTES:

1. ALL CONCRETE FLATWORK WITHIN THE STATE'S RIGHT OF WAY SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH SECTION 73 "CONCRETE CURBS AND SIDEWALKS" OF THE CALTRANS STANDARD SPECIFICATIONS.

CONSTRUCTION NOTES:

NUMBERS IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STATE STANDARD PLAN AND SHALL BE CONSTRUCTED ACCORDINGLY, UNLESS MODIFICATIONS ARE NOTED ON THE PLAN. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.

1. CONSTRUCT 7.5" ASPHALT CONCRETE OVER COMPACTED NATIVE SOIL.
2. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
3. GRIND EXISTING ASPHALT CONCRETE (0.15' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. CONSTRUCT 6" THICK BY 12" HIGH PCC CURB MONOLITHIC WITH THE SIDEWALK AS SHOWN ON THE TYPICAL SECTION.
5. PLANT 36" BOX MULTI TRUNK CRAPE MYRTLE PER PLANTING SPECIFICATIONS ON SHEET LP-8.3 (TOTAL 3 TREES).
6. CONSTRUCT 16" STAMPED CONCRETE BANDING (RED COLOR AND STAMPING PATTERN SHALL MATCH UNIVERSITY AVENUE SIDEWALK BANDS AT IOWA AVENUE).
7. INSTALL 8 G.E. LIGHTS (WISR 10 M O H 1 A SN2 DB) 15' ABOVE BACK OF SIDEWALK ON FACE OF ABUTMENT WALL. ALL ENCLOSURES & CONDUITS TO BE STEEL.

CURVE DATA				
◇	△	R	L	T
1	127°13'22"	15'	33.31'	30.23'
2	187°28'38"	5.58'	18.25'	85.39'

ENGINEER IN RESPONSIBLE CHARGE

DUANE K. GREENWOOD

R.C.E. No. 43965 expires 6/30/97

DATE 3/15/96

REGISTERED PROFESSIONAL ENGINEER — DUANE K. GREENWOOD — No. 43965 Exp. 6-30-1997 — CIVIL — STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		
PRINCIPAL ENGINEER		
CHIEF P.W. INSPECTOR		3/15/96
TRAFFIC DIVISION		3/15/96
SURVEYOR		3/15/96
STREET DIVISION		
PARKS DEPARTMENT		

DATE

UNIVERSITY AVENUE WIDENING

AT THE 60/215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

ACCOUNT NUMBER R-3271

SHEET 10A OF 12

CalTrans Permit No. 08-95-N-MC-0240

CD INDEXED 5/98

RAMP LAYOUT LINE ONLY

EXISTING GRADE @ LAYOUT LINE SOUTH ROADBED ONRAMP

GRADE @ PROPOSED EDGE OF TRAVEL LANE ⚠

GRADE @ PROPOSED EP ⚠

GRADE @ EXISTING EP

38+66.46 E.C.R. 20.10' TC @ 32' RT
38+99.2 20.52' TC @ 32' RT
20.02' FL @ 32' RT
39+50 20.70' @ 32' RT
39+89 21.79' @ 24' RT
21.39' @ 32' RT
40+58 23.63' @ 24' RT
23.23' @ 32' RT
41+00 25.02' @ 24' RT
24.62' @ 32' RT
41+50 26.81' @ 24' RT
26.41' @ 32' RT
42+00 28.85' @ 24' RT
28.45' @ 32' RT
42+50 31.15' @ 24' RT
30.75' @ 32' RT
43+00 33.64' @ 23.59' RT
33.24' @ 31.59' RT
43+50 36.27' @ 22.59' RT
35.87' @ 30.59' RT
44+00 38.89' @ 21.59' RT
38.49' @ 29.59' RT
44+50 41.12' @ 20.59' RT
40.72' @ 28.59' RT
45+00 42.82' @ 19.59' RT
42.40' @ 28.03' RT
45+50 44.14' @ 18.59' RT
43.69' @ 27.48' RT
46+00 44.86' @ 17.59' RT
44.40' @ 26.92' RT
46+50 45.26' @ 16.59' RT
45.09' @ 26.37' RT
47+00 45.11' @ 15.59' RT
44.94' @ 25.59' RT
47+50 44.31' @ 24.59' RT
48+00 43.31' @ 23.59' RT
48+50 42.47' @ 22.59' RT
49+00 MEET EXISTING 41.72' @ 20.3' RT

1045 1040 1035 1030 1025 1020

38 39 40 41 42 43 44 45 46 47 48 49

215 FREEWAY

40+57.19 B.C. L.L. S. ROBD. = 40+57.19 @ 23' RT ℄ IMP.

CENTERLINE IMPROVEMENTS S39°51'00"E

S40°14'01"E LAYOUT LINE SOUTH ROADBED

45+92.81 E.C. L.L. S. ROBD.

46+30.68 E.C. ONRAMP LAYOUT LINE

48+79.90 ONRAMP LAYOUT LINE = 48+80.04 @ 30' RT SOUTHBOUND L.L. 6° GORE PT.

S43°05'49"E

SEE UNIVERSITY AVENUE WIDENING STREET IMPROVEMENT PLANS R-3271, SHEET 10 FOR STREET IMPROVEMENTS IN THIS AREA.

STATE HIGHWAY C.L.

AVENUE 52

38+52.21 RAMP LAYOUT LINE

39+51.88 BEGIN SAWCUT & A.C. PAVEMENT REMOVAL

40+58 E.C. ONRAMP LAYOUT LINE

42+79.29 ONRAMP LAYOUT LINE BEGIN EP TRANSITION

43+58.20 B.C. ONRAMP LAYOUT LINE

LAYOUT LINE SOUTH ROADBED ONRAMP

SHOULDER

R=800' L=205.81' S47°00'00"

R=4000' L=272.48'

FREEWAY ON RAMP

SHOULDER TRANSITION FROM 8' TO 10' WIDTH

LIMIT OF GRINDING

SHOULDER LINE

SAWCUT LINE

EDGE OF TRAVEL LANE

A.C. DIKE

44+50 END 8' SHOULDER

Added 17' of Rock & Mortar Swale. PROTECT PIPE & HEADWALL IN PLACE (REGRADE TO DRAIN)

FUTURE WIDENING FOR CHP ENFORCEMENT AREA BY CALTRANS

46+50 END A.C. DIKE

46+75 BEG. 10' SHOULDER

47+00 END SAWCUT & PAVEMENT REMOVAL

SHOULDER LINE

LIMIT OF GRINDING

49+00 END A.C. GRINDING AND OVERLAY; MEET EXISTING

BREAK RCP AFTER CONSTRUCTION OF C.B.

PROTECT IN PLACE ⚠

REMOVE DROP INLET & 12"RCP., SEE LP-8.1 FOR RIVER ROCK DRAINAGE SWALE. ⚠

39+97.2 CONST. C.B. F.L.= 16.50 TW=3.64' 38+93.2 TYPE A2-6 CURB

END A87, TYPE A2-6 CURB BEGIN A87, TYPE A.C. DIKE

A87 A2-6

D7.3 G.3

UNIVERSITY ST.

STATE R/W

SEE UNIVERSITY AVENUE WIDENING LANDSCAPING PLANS LP-8.2, LH-8.2 AND LI-8.2 FOR LANDSCAPING IMPROVEMENTS IN THIS AREA.

LAYOUT LINE SOUTH ROADBED ONRAMP

VARIES 8' to 16' | GRIND 4' | R&R 8' | E.P. TRAVEL LANE EDGE | VARIES 8' to 10' | SHOULDER EDGE | VARIES 0' to 26'

1.5% min. 5% 3'

0.05' O.G.A.C. OVER 0.10' D.G.A.C.

0.05' O.G.A.C. OVER 1.05' D.G.A.C. OVER COMPACTED NATIVE

0.05' O.G.A.C. OVER 0.65' D.G.A.C. OVER COMPACTED NATIVE

1.5:1 SLOPE

⚠ TYPICAL SECTION 215 FREEWAY SOUTH ROADBED ONRAMP AT UNIVERSITY AVENUE

NOT TO SCALE

GENERAL AND CONSTRUCTION NOTES:

1. ALL WORK WITHIN STATE RIGHT-OF-WAY SHALL COMPLY WITH THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS AND SPECIFICATIONS DATED JULY 1992.
2. HOV LANE MARKINGS AND SIGNALIZATION TO BE INSTALLED BY CALTRANS AT A LATER DATE.

REM — REMOVE EXISTING AC ONRAMP AND ASPHALT ISLAND.

S — CONSTRUCT STRUCTURAL SECTION OF 0.05' O.G.A.C. OVER 0.65' D.G.A.C. OVER COMPACTED NATIVE. (FOR SHOULDER)

R — SAWCUT 8' FROM EXISTING E.P., REMOVE & REPLACE WITH NEW STRUCTURAL SECTION OF 0.05' O.G.A.C. OVER 1.05' D.G.A.C. OVER COMPACTED NATIVE. (FOR TRAVEL LANE)

⚠ G — GRIND 4' WIDE SECTION, OVERLAY WITH 0.05' O.G.A.C. OVER 0.10' D.G.A.C.

INDEXED 5/98 CD

REVISED PLAN
CalTrans Permit No.
08-95-N-MC-0240

* As-built 4/7/97

THIS PLAN SUPERSEDES STAMPED AND SIGNED PLAN DATED 5/16/95

REGISTERED PROFESSIONAL ENGINEER — DUANE K. GREENWOOD — No. 43965 Exp. 6/30/97 — CIVIL — STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 3/7/96

MARK	REVISIONS	APPR.	DATE
⚠	Revised Profile grades, Grinding & Removal areas & typ. sec.	DKD	3/7/96
⚠	Revised toe of slope., Added notes.	DKD	10/26/95

DESIGNED BY P.H. DRAWN BY D.P.Y. CHECKED BY DKD

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	[illegible]	3/7/96
PRINCIPAL ENGINEER	[illegible]	3/7/96
CHIEF P.W. INSPECTOR	[illegible]	3/7/96
TRAFFIC DIVISION	[illegible]	3/7/96
SURVEYOR	[illegible]	3/7/96
STREET DIVISION	[illegible]	3/7/96
PARKS DEPARTMENT		

DATE

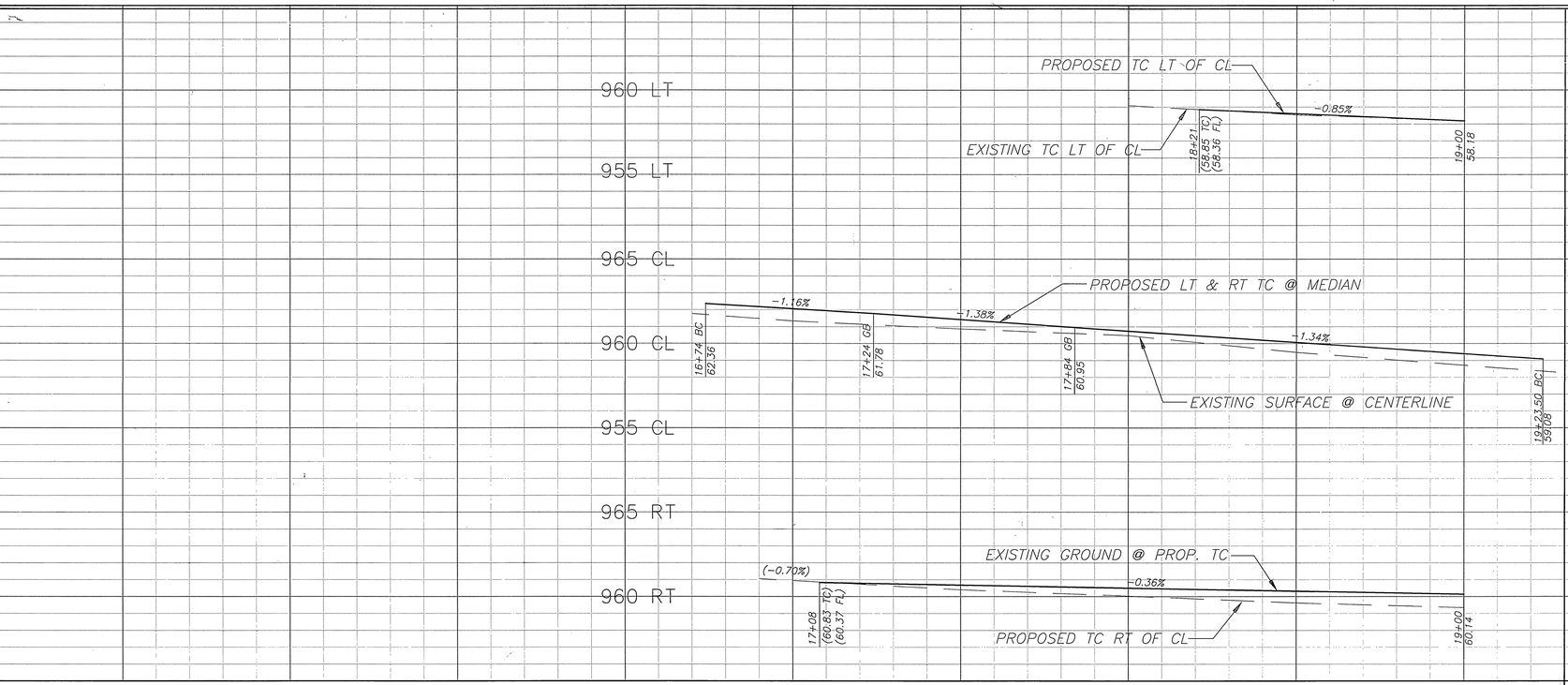
UNIVERSITY AVENUE ON-RAMP
TO SOUTH BOUND 215 FREEWAY

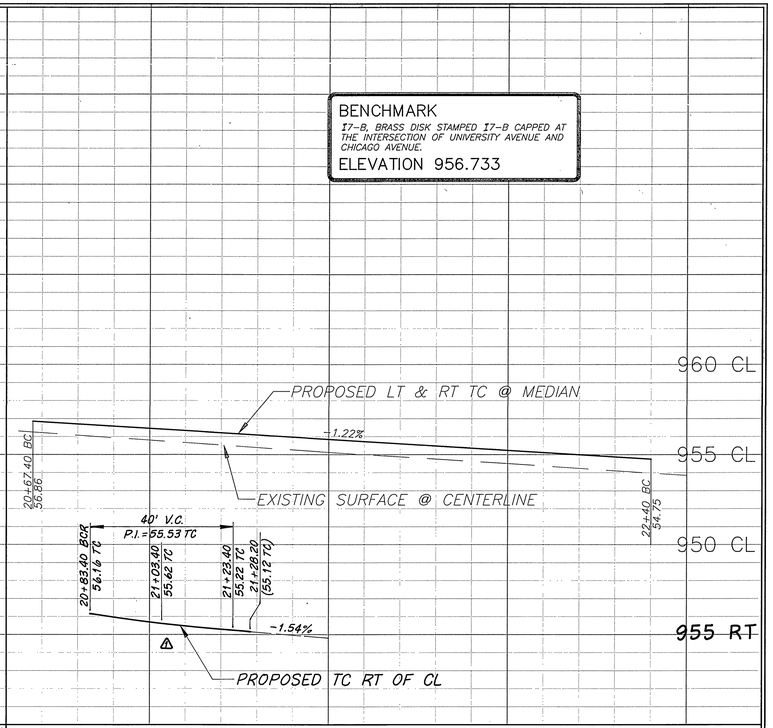
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

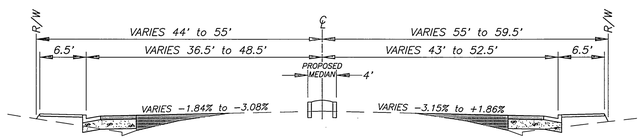
ACCT. NO. 432-541500-440302-30316

R-3271
SHEET 11 OF 12

FILE NO. : PC 3602 P/S

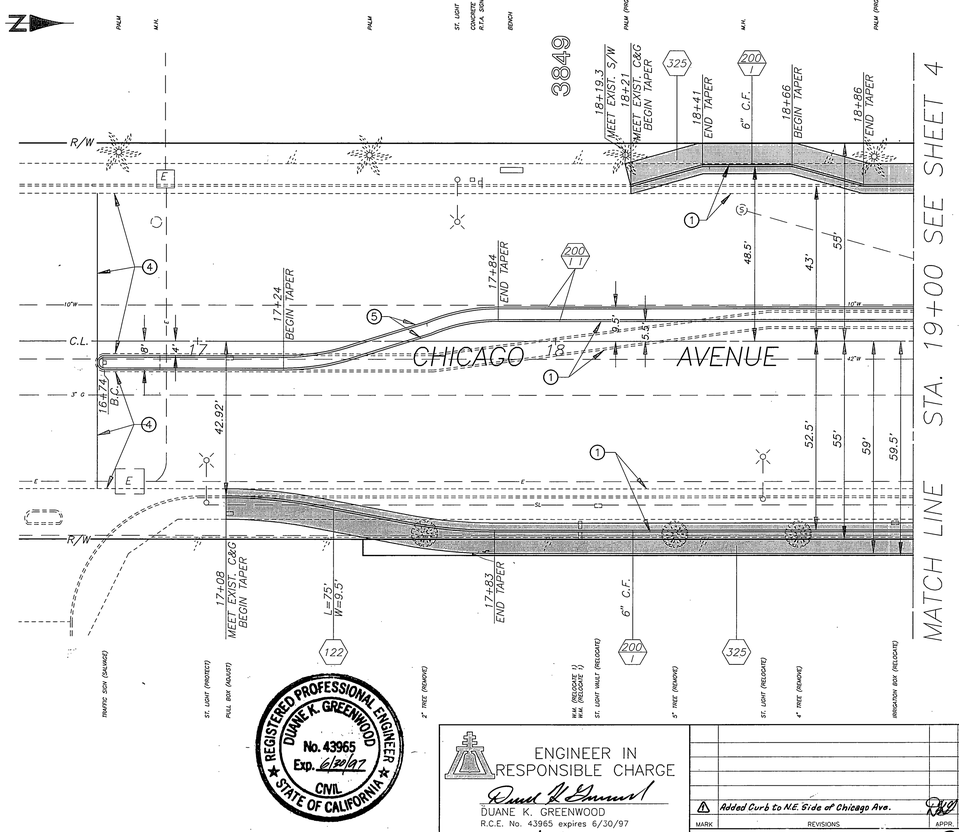


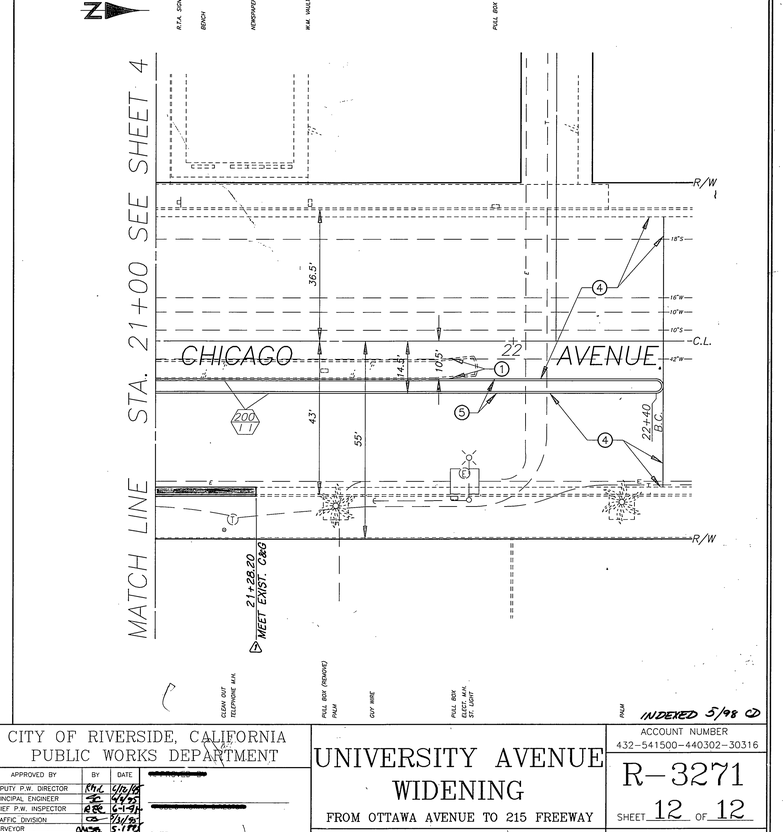




TYPICAL CROSS SECTION
CHICAGO AVENUE
WITH MEDIANS

STRUCTURAL SECTION: 0.5' A.C. / 1.33' C.A.B.
SCALE: 1" = 10'





CONSTRUCTION NOTES

1. CONSTRUCT 6" ASPHALT CONCRETE OVER 16" CRUSHED AGGREGATE BASE.
3. CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY.
4. GRIND EXISTING ASPHALT CONCRETE (0.10' MIN.) AND CONSTRUCT VARIABLE THICKNESS ASPHALT CONCRETE OVERLAY (0.10' MIN.)
5. SAWCUT AND REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6/30/97
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE K. GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 5/16/95

MARK	REVISIONS	APPR.	DATE
1	Added Curb to N.E. Side of Chicago Ave.	DKG	5/16/96

DESIGNED BY P.H. DRAWN BY P.H. CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	[illegible]	6/12/96
PRINCIPAL ENGINEER	[illegible]	6/6/96
CHIEF P.W. INSPECTOR	[illegible]	6-19-96
TRAFFIC DIVISION	[illegible]	7/24/96
SURVEYOR	[illegible]	5-17-96
STREET DIVISION	[illegible]	7/16/96
PARKS DEPARTMENT	[illegible]	7/24/96

DATE

UNIVERSITY AVENUE WIDENING
FROM OTTAWA AVENUE TO 215 FREEWAY

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

ACCOUNT NUMBER
432-541500-440302-30316

R-3271

SHEET 12 OF 12

FILE NO. : PC 3602 P/S

INDEXED 5/98 CD