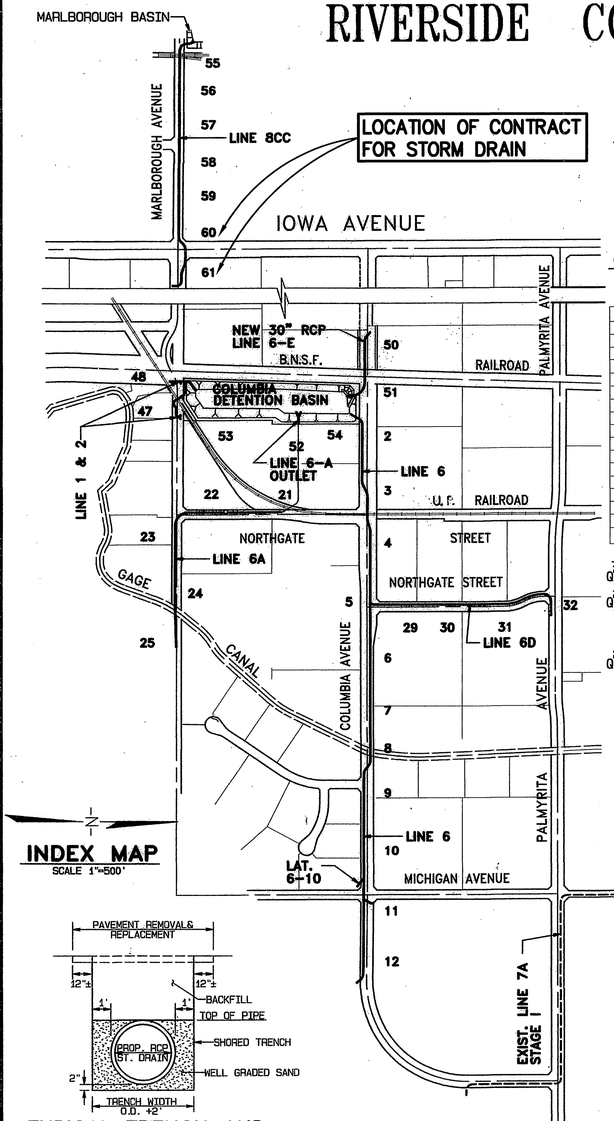
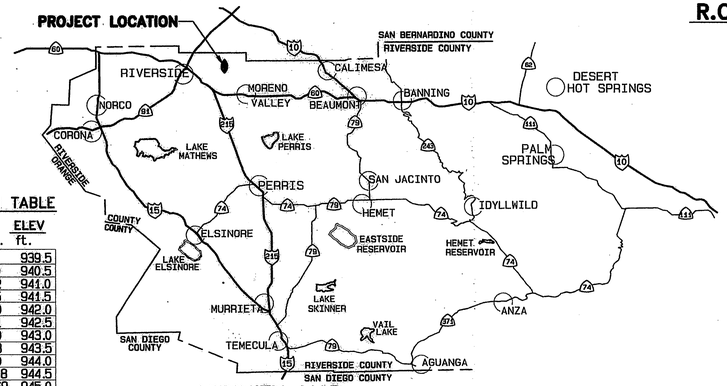
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT



INDEX MAP
SCALE 1"=500'

TYPICAL TRENCH AND BEDDING DETAIL
N.T.S.



VICINITY MAP
N.T.S.

COLUMBIA BASIN TABLE

No	Q/OUT cfs	VOL ac.ft.	ELEV ft.
1	0	0	939.5
2	9.3	0.240	940.5
3	20.0	0.692	941.0
4	35.0	1.475	941.5
5	38.8	2.550	942.0
6	42.5	3.941	942.5
7	51.4	5.640	943.0
8	53.5	7.533	943.5
9	53.5	9.470	944.0
10	53.5	11.448	944.5
11	54.0	13.469	945.0
12	54.9	17.638	946.0
13	55.8	21.980	947.0
14	56.7	26.495	948.0
15	58.4	36.051	950.0
16	60.1	46.318	952.0
17	61.9	57.310	954.0
18	62.3	63.079	955.0

MAX. WS DURING 100-YR 24-HR

$Q_{100}^{24\text{-HR}}$ = 258.5 cfs INFLOW

$Q_{100}^{24\text{-HR}}$ = 62.0 cfs OUTFLOW

30" OUT - 27.9 cfs

60" OUT - 34.1 cfs

$WS_{100}^{24\text{-HR}}$ = 954.1 ft

SHEET INDEX

	SHEET NO.
TITLE SHEET	1
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LINE 6D PLAN AND PROFILES	29 - 32
LINE 6D LATERALS	33
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LINE 7 DETAILS	42 - 44
LINE 7B PLAN & PROFILES	45 & 46
LINE 1 AND 2 PLAN AND PROFILES	47 & 48
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LINE 6-E - NEW 30" BASIN OUTLET	50 & 51
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COLUMBIA DETENTION BASIN	53 & 54
LINE 8CC PLAN AND PROFILES	55 & 61
LINE 8CC DETAILS	62
LINE 8CC LATERALS	63

MAINTENANCE RESPONSIBILITIES

	RCFC & WCD	CITY OF RIVERSIDE
LINE 6	BEG. TO STA 50+22.14	STA 50+22.14 TO END
LINE 6A	BEG. TO STA 17+05.29	STA 17+05.29 TO END
LINE 6D	BEG. TO STA 16+25.82	STA 16+25.82 TO END
LINE 6E	——	ENTIRE LINE
LINE 7	10+94.49 TO END	BEG. TO 10+94.49
LINE 7B	ENTIRE LINE	——
LINE 8CC	BEG. TO STA 31+54.26	STA 31+54.26 TO END
LINE 1	ENTIRE LINE	——
LINE 2	BEG. TO STA 1+93.81	STA 1+93.81 TO END
LAT 6-10	ENTIRE LATERAL	——
COLUMBIA DETENTION BASIN	ENTIRE BASIN	——
		ALL LATERALS AND CATCH BASINS EXCEPT LATERAL 6-10

R.C.F.C. & W.C.D. STD. DRAWINGS

MH 251 MANHOLE NO.1
MH 252 MANHOLE NO. 2
MH 254 MANHOLE NO. 4
JS 227 JUNCTION STRUCTURE NO. 2
JS 229 JUNCTION STRUCTURE NO. 4
JS 230 JUNCTION STRUCTURE NO. 5
TS 301 TRANSITION STRUCTURE NO. 1
TS 303 TRANSITION STRUCTURE NO. 3
CB 104 INLET TYPE X
CB 110 DROP INLET
M 803 CONCRETE COLLAR
M 808 REMODELING DETAILS
M 815 BEDDING AND PAY LINES
M 816 CONCRETE BULKHEAD
CH 333 DRAINAGE APRON FOR ACCESS RD.

CALTRANS STD. DRAWINGS

D 80 REINFORCED CONCRETE BOC
D 90 PIPE CULVERT HEADWALL AND WINGWALL
B 3-1 RETAINING WALL

CITY OF RIVERSIDE STD. DRAWINGS

405 CATCH BASIN
407 CATCH BASIN
453 TRENCH BACKFILL

A.P.W.A. STD. DRAWINGS

361-0 TRASH RACK (INCLINED)
211-1 MANHOLE FRAME & COVER, PRESSURE TYPE

SAN DIEGO STD. DRAWINGS

D-41 CONCRETE DISSIPATOR STRUCTURE

GENERAL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT THE FLOOD CONTROL IMPROVEMENTS SHOWN ON THE DRAWINGS IN CONFORMANCE WITH THE REQUIREMENTS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S MEMORANDUM OF UNDERSTANDING STANDARD SPECIFICATIONS, DATED SEPTEMBER 1984, AND DESIGN MANUAL STANDARD DRAWINGS, RECENT EDITION DATED APRIL 2004.
2. THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITIES SHOWN IN THE PLAN.
3. CONSTRUCTION INSPECTION WILL BE PERFORMED BY RIVERSIDE COUNTY FLOOD CONTROL. CONTACT DALE ANDERSON AT (909) 955-1288. THE DISTRICT MUST BE NOTIFIED TWENTY DAYS PRIOR TO CONSTRUCTION.
4. ALL STATIONING REFERS TO THE CENTERLINE OF CONSTRUCTION UNLESS OTHERWISE NOTED.
5. STATIONING FOR LATERALS AND CONNECTOR PIPE REFER TO THE CENTERLINE-CENTERLINE INTERSECTION STATION.
6. FORTY-EIGHT HOURS BEFORE EXCAVATION, CALL UNDERGROUND SERVICE ALERT (800) 227-2600.
7. ALL ELEVATIONS SHOWN ARE IN FEET AND DECIMALS THEREOF BASED ON U.S.C. & G.S. DATUM.
8. ALL CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM.
9. ELEVATIONS AND LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE UNLESS OTHERWISE NOTED. ALL UTILITIES ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
10. OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES TO BE ABANDONED SHALL BE SEALED WITH 6 INCHES OF CLASS "B" CONCRETE.
11. PIPE CONNECTED TO THE MAINLINE PIPE SHALL CONFORM TO JUNCTION STRUCTURE NO. 4 (JS 229) UNLESS OTHERWISE NOTED.
12. "V" IS THE DEPTH OF INLET AND CATCH BASINS MEASURED FROM THE TOP OF CURB TO INVERT OF CONNECTOR PIPE.
13. ALL CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS AND OTHER EXISTING IMPROVEMENTS TO BE RECONSTRUCTED IN KIND AND AT THE SAME ELEVATION AND LOCATION AS THE EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED.
14. HYDRAULIC GRADE LINES SHOWN IN PROFILES ARE FOR 100 YEAR FREQUENCY FLOWS, UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL COMPLY WITH THE STATE AND LOCAL SAFETY CODES DURING THE PROGRESS OF WORK.

15A. THICK WALL PIPE SHALL HAVE 1 1/2"CONCRETE COVER BETWEEN THE INSIDE PIPE AND THE INTERIOR REINFORCING STEEL. FOR FLOW VELOCITIES BETWEEN 20 AND 30 fps Fc=5000 PSI AND FOR VELOCITIES BIGGER THAN 30 fps Fc=6000 PSI UNLESS OTHERWISE SPECIFIED.

16. THE DEVELOPER SHALL MAINTAIN ADJACENT STREETS IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE CITY OF RIVERSIDE'S OR DISTRICT'S INSPECTOR. THE ADJACENT STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE DEVELOPER SHALL BE RESPONSIBLE FOR ANY CLEAN-UP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS.

GENERAL NOTES CONT.

17. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE 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, R.C.F.C.D., CITY OF RIVERSIDE, AND THE DEVELOPER'S ENGINEER HARLMESS 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 OWNERS, OR THE DEVELOPER'S ENGINEER.
18. ADJUST ALL STORM DRAIN AND SEWER MANHOLES, AND WATER VALVES TO GRADE.
19. ALL PIPE LENGTHS ARE HORIZONTAL PROJECTIONS (NOT TRUE LENGTHS OF PIPE) AND ARE THE BASIS OF THE ESTIMATES OF QUANTITIES. THE CONTRACTOR SHALL DETERMINE THE TRUE QUANTITY OF PIPE REQUIRED FOR THIS PROJECT PRIOR TO PLACING THE ORDER.
20. ELEVATIONS SHOWN ARE TO THE INVERT OF PIPE, EXCEPT WHERE OTHERWISE NOTED.
21. AT THE DISCRETION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO VERIFY BY POTHOLING THE LOCATION OF POTENTIALLY AFFECTED UTILITIES.
22. CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATED MATERIAL AT MANDATORY DISPOSAL SITE. MUST BE NOTIFIED ONE WEEK PRIOR TO CONSTRUCTION.
23. ALL BACKFILL AND BEDDING AROUND STRUCTURES AND PIPES SHALL BE COMPACTED TO NOT LESS THAN 90 PERCENT RELATIVE COMPACTION EXCEPT WHERE SUCH MATERIAL IS PLACED UNDER EXISTING PAVED ROADWAYS, THE TOP 3 FEET, MEASURED FROM THE FINISHED PAVING, SHALL BE COMPACTED TO 95 PERCENT RELATIVE COMPACTION.
24. PIPE BEDDING SHALL CONFORM TO RCFC&WCD STD. DWG. NO. M815 EXCEPT FOR COVER <2 FEET. FOR COVER <2 FEET, CONCRETE SLURRY (2000 PSI - 2 SACK) SHALL BE USED. THE ENTIRE TRENCH SHALL BE SLURRY EXTENDING 4 INCHES MINIMUM AND 12 INCHES MAXIMUM ABOVE THE TOP OF THE PIPE.
25. APPROVAL OF THESE PLANS BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DOES NOT RELIEVE THE DEVELOPER'S ENGINEER OF RESPONSIBILITY FOR THE ENGINEERING DESIGN. IF FIELD CHANGES ARE REQUIRED, IT WILL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO MAKE THE NECESSARY CORRECTIONS.
26. THE CONTRACTOR OR DEVELOPER SHALL SECURE ALL REQUIRED ENCROACHMENT AND/OR STATE AND FEDERAL REGULATORY PERMITS PRIOR TO THE COMMENCEMENT OF ANY WORK.
27. CONTRACTOR SHALL CONTACT THE BURLINGTON NORTHERN SANTA FE (BNSF) ROADMASTER, DAVE GONZALES; PHONE NO. 909-386-4061, AT LEAST 5 WORKING DAYS (MONDAY THROUGH FRIDAY) BEFORE STARTING CONSTRUCTION.
28. CONTRACTOR SHALL CONTACT THE RIVERSIDE COUNTY TRANSPORATION COMMISSION, CLAUDIA CHASE, PHONE NO. 951-787-7937, AT LEAST 5 WORKING DAYS (MONDAY THROUGH FRIDAY) BEFORE STARTING CONSTRUCTION.
29. RAIL TRACK ELEVATIONS OVER THE PIPELINE SHALL BE MONITORED TO DETECT ANY TRACK MOVEMENT. ANY MOVEMENT OVER ONE-QUARTER (1/4) INCH SHALL BE IMMEDIATELY REPORTED TO THE BNSF ROADMASTER AND RCTC. MONITORING SHALL BE PERFORMED BY A LICENSED SURVEYOR. A LETTER REPORT FROM THE SURVEYOR SHALL BE SUBMITTED TO BNSF AND RCTC STATING METHODOLOGY AND MONITORING RESULTS, WITHIN SEVEN (7) DAYS OF THE COMPLETION OF THE PIPE JACKING. THE REPORT SHALL BE SENT TO GREG ROUSSEAU OF BNSF AT 740 EAST CARNEGIE DRIVE, SAN BERNARDINO, CALIFORNIA 92408 AND CLAUDIA CHASE OF RCTC AT POST OFFICE BOX 12008, RIVERSIDE, CALIFORNIA 92502-2208.

ALBERT A WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY:
DATE: 6-1-05
R.C.E. NO. C44762
EXP. DATE: 3-31-06

REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA

THESE PLANS HAVE BEEN ADAPTED AND MODIFIED BY: (CITY OF RIVERSIDE DWG. NO. D-754A ONLY)
KCT CONSULTANTS, INC.
TERESITO N. TABIOLO
RCE 38826 EXP. 03-31-07
6-01-05
DATE

REGISTERED PROFESSIONAL ENGINEER TERESITO N. TABIOLO RCE No. 38826 Exp. 3-31-07 CIVIL STATE OF CALIFORNIA

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
RECOMMENDED FOR APPROVAL BY:
DATE: 6/2/05
APPROVED BY:
DATE: 6/7/05

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
B.M. NO. JB-H3
ELEVATION FOR THIS JOB WAS ORIGINALLY OBTAINED FROM RIVERSIDE CITY BENCHMARK JB-H3, A LEAD AND TACK IN THE CATCHBASIN AT THE SOUTHEAST CORNER OF NORTHGATE AND PALMYRITA. THE TRUE BENCH WAS LOCATED UNDER A METAL COVER AND VERIFIED WITH BENCHMARK "JB-A" AT THE C.L. INTERSECTION OF IOWA AND MARLBOROUGH, A BRASS DISK IN A CAPWELL MONUMENT, AN ADJUSTMENT OF +1.42' WAS PERFORMED AND THE FOLLOWING BENCHMARK DATA IS VERIFIED AND CORRECT.
ELEV. 981.65

REF.	REVISIONS	APPR.	DATE

DESIGNED BY: ETA
DRAWN BY: EMP
DATE DRAWN: 6/1/2005
CHECKED BY: SRH

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: PLANNING ENGINEER
DATE: 6-20-2005
APPROVED BY: CHIEF ENGINEER
DATE: 6-20-05

DUPLICATE OF ORIGINAL - DO NOT REVISE

UNIVERSITY AREA MASTER DRAINAGE PLAN
FOR
HUNTER PARK ASSESSMENT DISTRICT
Lines 1, 2, 6, 6-A, 6-D, 6-E, 7, 7-D, 8-CC
TITLE SHEET

PROJECT NO'S.
1-0-121
1-0-0125
1-0-00127
1-0-00128
1-0-00129
1-0-00130
1-0-00131
1-0-00132
1-0-00133

DRAWING NO. 1-632

SHEET NO. 1 OF 63

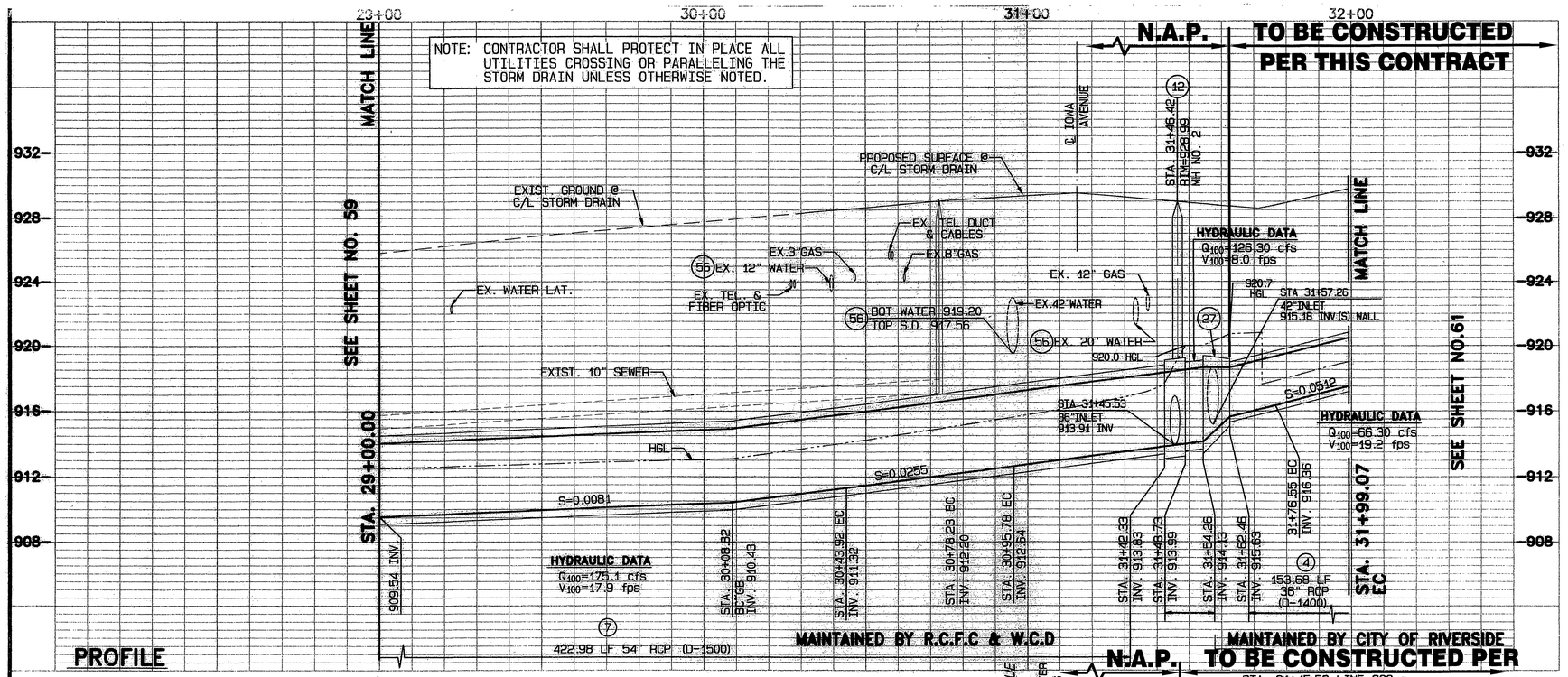
CITY OF RIVERSIDE STORM DRAIN NO. D-754A
CONTAINS SHEETS 1, 60, 61, AND 63 (4 SHEETS TOTAL)

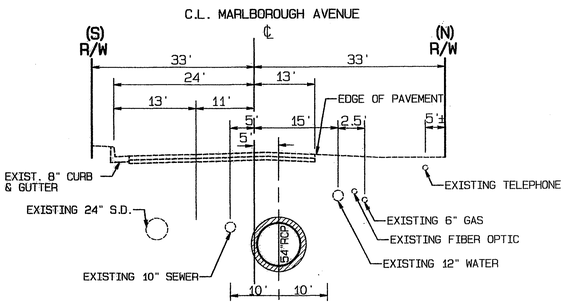
INDEXED 10-11-05 LH

D-754A

G:\2001\01-029A\DWG\PRO\01-29A_RCFCD_S.pro 6/1/2005 4:45PM

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.





SECTION AT STA 30+00.00
TYPICAL SECTION FROM STA. 29+00.00 TO STA. 31+65.62
N.T.S.

INFORMATIONAL NOTE

ALL X-SECTIONS TAKEN LOOKING DOWN STREAM

Ⓐ ℄ CURVE DATA
Δ = 44°41'26"
R = 45.00'
T = 18.50'
L = 35.10'
BC = STA. 30+08.82
EC = STA. 30+43.92
PI = N 7383.499
E 1987.042

Ⓑ ℄ CURVE DATA
Δ = 44°41'26"
R = 22.50'
T = 9.25'
L = 17.55'
BC = STA. 30+78.23
EC = STA. 30+95.78
PI = N 7426.898
E 2031.403

Ⓒ ℄ CURVE DATA
Δ = 14°20'16"
R = 90.00'
T = 11.32'
L = 22.52'
BC = STA. 31+76.55
EC = STA. 31+99.07
PI = N 7426.336
E 2132.735

-N-

PLAN
GRAPHIC SCALE 1"=20'
0 20 40 60

NOTE: CONTRACTOR SHALL POTHOLE AND VERIFY EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

CONSTRUCTION NOTES

(4) INSTALL 36" RCP STORM DRAIN (D-LOAD PER PLAN).
(5) INSTALL 42" RCP STORM DRAIN (D-LOAD PER PLAN).
(7) INSTALL 54" RCP STORM DRAIN (D-LOAD PER PLAN).
(12) CONSTRUCT MH NO. 4 PER RCFC&WCD STD. DWG. NO. MH254.
(17) REMOVE & REPLACE 10' WIDE OF EXISTING A.C. PAVEMENT PER CITY OF RIVERSIDE REQUIREMENTS AND PLANS.
(27) CONSTRUCT TS NO. 3 PER RCFC & WCD STD. DWG. NO. TS303.
(56) CONSTRUCT PIPE SUPPORT PER RCFC&WCD STD.DWG.No.806
(62) CONSTRUCT TRANSITION STRUCTURE TS#1 PER RCFC&WCD STD.DWG.No.TS 301
(64) CONSTRUCT TS NO. 3 PER RCFC & WCD STD. DWG. NO. TS303. MODIFY SIZE AND INVERT FOR DOUBLE 27" PIPE UPSTREAM

REGISTERED PROFESSIONAL ENGINEER — TERESITO N. TABIOLO — RCE No. 38826 — EXP. 3-31-07 — CIVIL — STATE OF CALIFORNIA

STA. 31+45.53 MH # 4 DATA	
A	90°
B	36"
C	4.60'
D1= D2	54"
E	3.20'
L	6.40'
Elev.S	915.30
Elev.R	916.70

STA. 31+57.26 TS # 3 DATA	
A	68°17'43"
B	42"
C	5.00'
D1=	36"
D2	54"
E	5.20'
L	8.20'
Elev.S	915.18
Elev.R	917.58

THESE PLANS HAVE BEEN ADAPTED AND MODIFIED BY: (CITY OF RIVERSIDE DWG. NO. D-754A ONLY)

KCT CONSULTANTS, INC.
Civil Engineers - Surveyors - Planners
P.O. Box 5705 Riverside, CA 92517-5705
4344 Latham St., Suite 200, Riverside, CA 92501
Phone: 951-341-8960 Fax: 951-341-8945
e-mail: kctinc@kctconsultants.com

TERESITO N. TABIOLO
RCE 38826, EXP. 03-31-07
9-01-05
DATE

ALBERT A. WEBB ASSOCIATES — ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH (909) 686-1070
FAX (909) 788-1256
PREPARED BY:
DATE: 6-1-05
R.C.E. NO. C44762
EXP. DATE: 3-31-06

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BENCH MARK:
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ELEV. 981.65

REF.	REVISIONS	APPR.	DATE

DESIGNED BY: ETA
DRAWN BY: EMP
DATE DRAWN: 5/27/2005
CHECKED BY: SRH

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: [redacted]
DATE: 6/16/05
APPROVED BY:
DATE: 6-20-2005

UNIVERSITY AREA MASTER DRAINAGE PLAN
FOR
HUNTER PARK ASSESSMENT DISTRICT
LINE 8CC
STA. 29+00.00 TO STA. 31+65.62

PROJECT NO. 1-0-00133
DRAWING NO. 1-632
SHEET NO. 60 OF 63

INDEXED 10-11-05 LH

D-754A

CITY OF RIVERSIDE STORM DRAIN NO. D-754A
CONTAINS SHEETS 1, 60, 61, AND 63 (4 SHEETS TOTAL)

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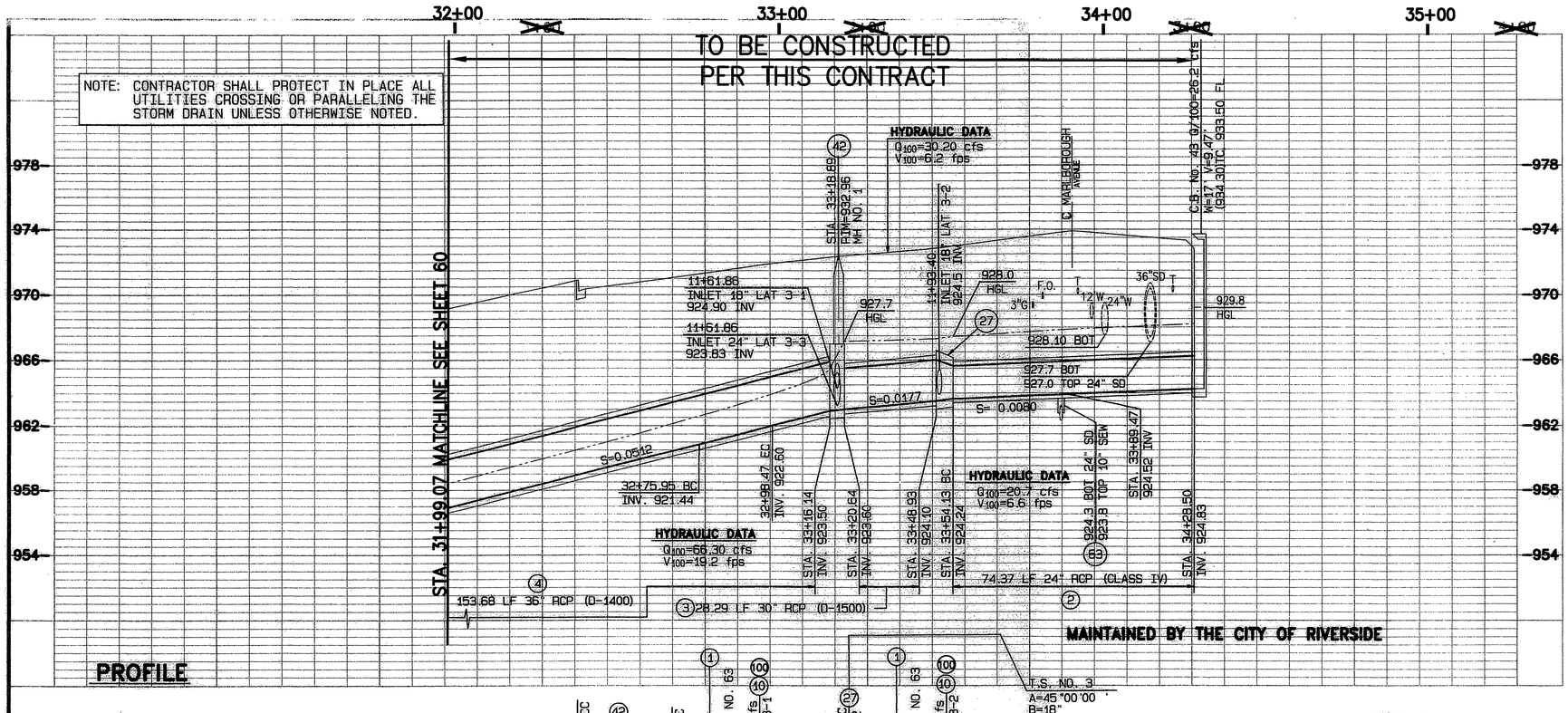
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

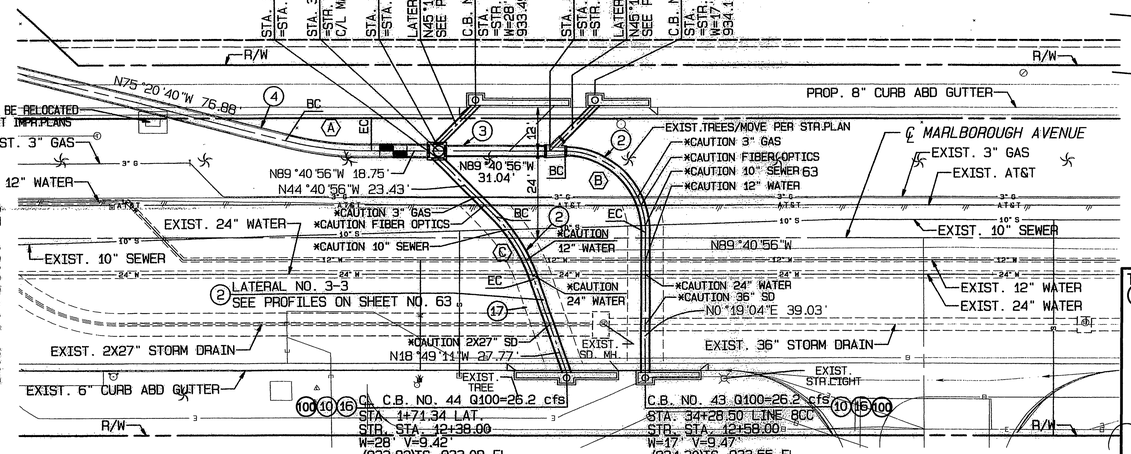
PROFILE



PLAN

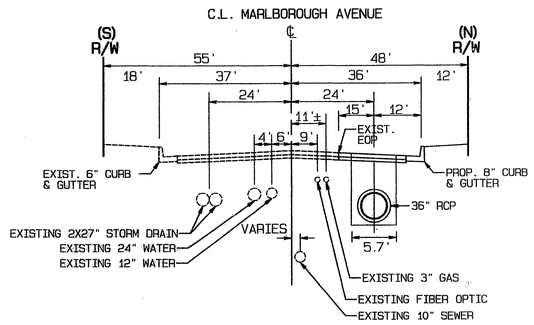
GRAPHIC SCALE 1"=20'

0 20 40 60



SECTION AT STA 11+50.00

N.T.S.



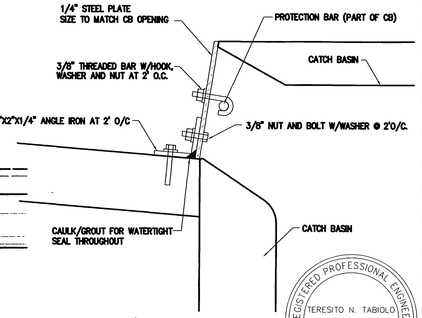
NOTE: CONTRACTOR SHALL POTHOLE AND VERIFY EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

INFORMATIONAL NOTE

ALL X-SECTIONS TAKEN LOOKING DOWN STREAM

CONSTRUCTION NOTES

1. INSTALL 18" RCP STORM DRAIN (CLASS IV).
2. INSTALL 24" RCP STORM DRAIN (CLASS IV).
3. INSTALL 30" RCP STORM DRAIN (D-LOAD PER PLAN).
4. INSTALL 36" RCP STORM DRAIN (D-LOAD PER PLAN).
10. CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STD. DWG. NO. 407.
16. REMOVE CURB & GUTTER & SIDEWALK (CB WIDTH +5') REBUILD SIDEWALK ALONG CATCH BASIN.
17. REMOVE & REPLACE 10' WIDE OF EXISTING A.C. PAVEMENT.
27. CONSTRUCT TS NO. 3 PER R.C.F.C. & W.C.D. STD. DWG. NO. TS303.
42. CONSTRUCT MH NO. 1 PER R.C.F.C. & W.C.D. STD. DWG. NO. MH251.
62. COLLETOR STRUCUTE PER DETAIL ON SHEET 61
63. PROTECT EXISTING 10" SEWER PER RCFC. WCD/STD. M807
100. CONSTRUCT CATCH BASIN OPENING COVER PER DETAIL "A" THIS SHEET



DETAIL "A"

N.T.S.

Ⓐ ℄ CURVE DATA
Δ = 14°20'16"
R = 90.00'
T = 11.32'
L = 22.52'
BC = STA.32+75.95
PRC = STA. 32+98.47
PI = N 7401.157
E 2229.017

Ⓑ ℄ CURVE DATA
Δ = 90°00'00"
R = 22.50'
T = 22.50'
L = 35.34'
BC = STA. 11+97.60
EC = STA. 12+32.94
PI = N 7400.660
E 2318.497

Ⓒ ℄ CURVE DATA
Δ = 25°51'45"
R = 45.00'
T = 10.33'
L = 20.32'
PRC = STA. 1+23.25
EC = STA. 1+43.57
PI = N 7375.353
E 2283.864

THESE PLANS HAVE BEEN ADAPTED AND MODIFIED BY: (CITY OF RIVERSIDE DWG. NO. D-754A ONLY)

KCT CONSULTANTS, INC.
Civil Engineers - Surveyors - Planners
P.O. Box 5705 Riverside, CA 92517-5705
4344 Latham St., Suite 200, Riverside, CA 92501
Phone: 951-341-8940 Fax: 951-341-8945
e-mail: kctinc@kctconsultants.com

TERESITO N. TABIOLO
RCE 38826, EXP. 03-31-07

9-01-05
DATE

REGISTERED PROFESSIONAL ENGINEER
TERESITO N. TABIOLO
RCE No. 38826
Exp. 3-31-07
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
SCOTT R. HILDEBRAND
NO. C44762
EXP. 3-31-06
CIVIL
STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH (909) 686-1070
FAX (909) 788-1256
PREPARED BY:
DATE: 6-1-05
R.C.E. NO. C44762
EXP. DATE: 3-31-06

Don't Dig...Until You Call U.S.A. Toll Free
1-800-227-2600
for the location of buried utility lines.
Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
B.M. NO. JB-H3
ELEVATION FOR THIS JOB WAS ORIGINALLY OBTAINED FROM RIVERSIDE CITY BENCHMARK JB-H3, A LEAD AND TACK IN THE CATCHBASIN AT THE SOUTHEAST CORNER OF NORTHEAST AND PALMYRA, THE TRUE BENCH WAS LOCATED UNDER A METAL COVER AND VERIFIED WITH BENCHMARK "JB-A" AT THE C.L. INTERSECTION OF IOWA AND MARLBOROUGH, A BRASS DISK IN A CORNELL MONUMENT, AN ADJUSTMENT OF +1.42' WAS PERFORMED AND THE FOLLOWING BENCHMARK DATA IS VERIFIED AND CORRECT.
ELEV. 981.65

REF.	REVISIONS	APPR.	DATE

DESIGNED BY: ETA
DRAWN BY: EMP
DATE DRAWN: 5/27/2005
CHECKED BY: SRH

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: DATE:
APPROVED BY: DATE:

UNIVERSITY AREA MASTER DRAINAGE PLAN
FOR HUNTER PARK ASSESSMENT DISTRICT LINE 8CC
STA.1+00.00 TO STA. 3+69.51

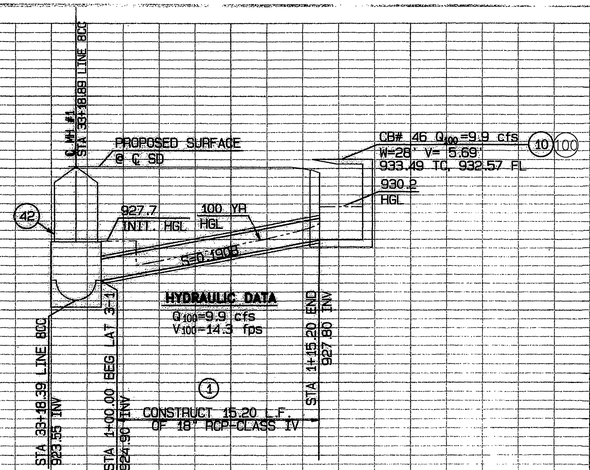
PROJECT NO. 1-0-00133
DRAWING NO. 1-632
SHEET NO. 61 OF 63

INDEXED 10-11-05

D-754A

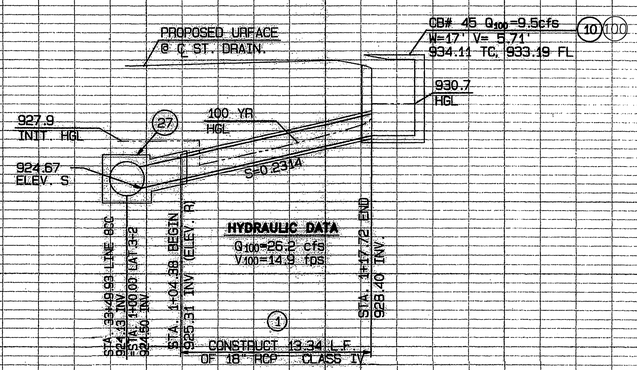
CITY OF RIVERSIDE STORM DRAIN NO. D-754A
CONTAINS SHEETS 1, 60, 61, AND 63 (4 SHEETS TOTAL)

G:\2001\01-0294\DWG\PRO\01-294_RCFCD_8CC.pro 5/27/2005 4:53PM



LATERAL NO. 3-1

SEE PLAN SHEET NO. 61
STA. 33+18.39



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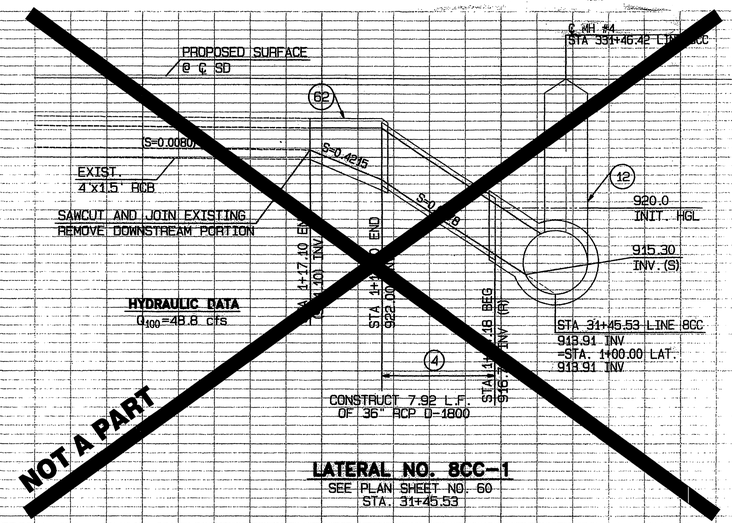
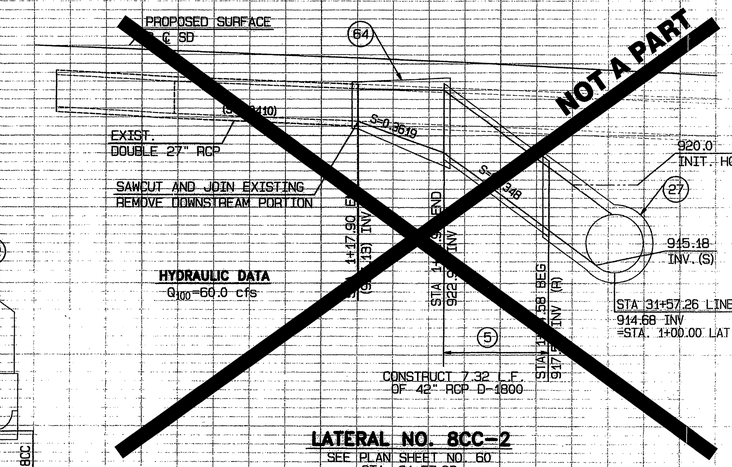
SEE PLAN SHEET NO. 61
STA. 33+49.93



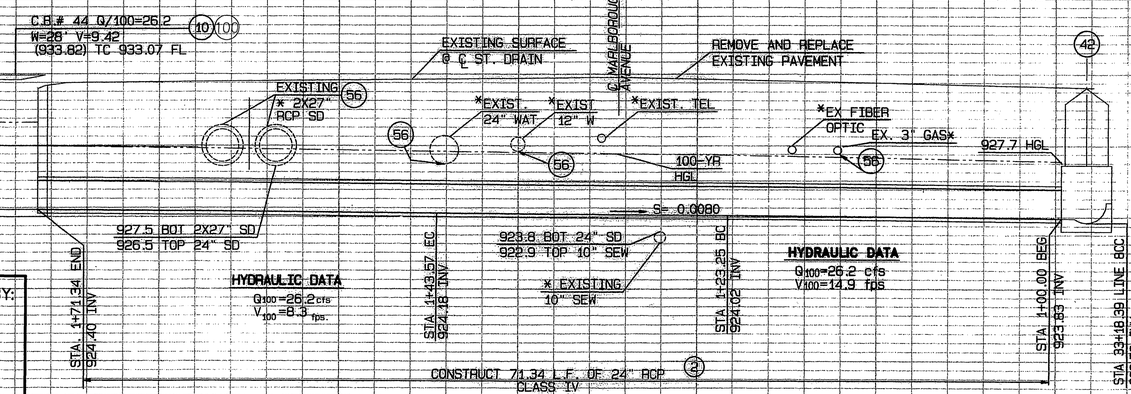
LATERAL NO. 8CC-1

SEE PLAN SHEET NO. 60
STA. 31+45.53



LATERAL NO. 8CC-2

SEE PLAN SHEET NO. 60
STA. 31+57.26



LATERAL NO. 3-3

SEE PLAN SHEET NO. 61
STA. 33+18.39

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

NOTE: CONTRACTOR SHALL POTHOLE AND VERIFY EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

INFORMATIONAL NOTE

ALL X-SECTIONS TAKEN LOOKING DOWN STREAM

THESE PLANS HAVE BEEN ADAPTED AND MODIFIED BY: (CITY OF RIVERSIDE DWG. NO. D-754A ONLY)

KCT CONSULTANTS, INC.
Civil Engineers - Surveyors - Planners
P.O. Box 5705 Riverside, CA 92517-5705
4344 Latham St., Suite 280, Riverside, CA 92501
Phone: 951-341-8942 Fax: 951-341-8945
e-mail: tcbio@kctconsultants.com

TERESITO N. TABIOLO
RCE 38826, EXP. 03-31-07
9-01-05
DATE

PROFILE

SCALE: HOR. 1" = 5'
VERT. 1" = 5'

GRAPHIC SCALE 1"= 5'
0 5 10 15

REGISTERED PROFESSIONAL ENGINEER
TERESITO N. TABIOLO
RCE No. 38826
Exp. 3-31-07
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
SCOTT R. HILDEBRANDT
NO. C44762
EXP. 3-31-06
CIVIL
STATE OF CALIFORNIA

MAINTAINED BY THE CITY OF RIVERSIDE

CONSTRUCTION NOTES

(1) INSTALL 18" RCP STORM DRAIN (CLASS IV).
(4) INSTALL 36" RCP STORM DRAIN (D-LOAD PER PLAN).
(5) INSTALL 42" RCP STORM DRAIN (D-LOAD PER PLAN).
(10) CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STD. DWG. NO. 407.
(12) CONSTRUCT MH NO. 4 PER R.C.F.C & W.C.D. STD. DWG NO. MH254
(27) CONSTRUCT TS NO. 3 PER R.C.F.C & W.C.D. STD. DWG NO. TS303.
(42) CONSTRUCT MH NO. 1 PER R.C.F.C & W.C.D. STD. DWG NO. MH251.
(56) CONSTRUCT PIPE SUPPORT PER R.C.F.C & W.C.D. STD. DWG NO. M806
(62) CONSTRUCT TRANSITION STRUCTURE TS#1 PER RCFC&WCD STD.DWG.No.TS 301
(64) CONSTRUCT TS NO. 3 PER RCFC & WCD STD. DWG. NO. TS303. MODIFY SIZE AND INVERT FOR DOUBLE 27" PIPE UPSTREAM
(100) CONSTRUCT CATCH BASIN OPENING COVER PER DETAIL "A" SHEET 61A

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
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RIVERSIDE, CA. 92506
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PREPARED BY:
R.C.E. NO. C44762
DATE: 6-1-05 EXP. DATE: 3-31-06

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REF.	REVISIONS	APPR.	DATE

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DRAWN BY: EMP
DATE DRAWN: 5/27/2005
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RECOMMENDED FOR APPROVAL BY: DATE:
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UNIVERSITY AREA MASTER DRAINAGE PLAN
FOR
HUNTER PARK ASSESSMENT DISTRICT STORM DRAIN LINE 8CC LATERALS 3-1, 3-2 & 3-3

PROJECT NO. 1-0-00133
DRAWING NO. 1-632
SHEET NO. 63 OF 63

INDEXED 10-11-05 LH

D-754A

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