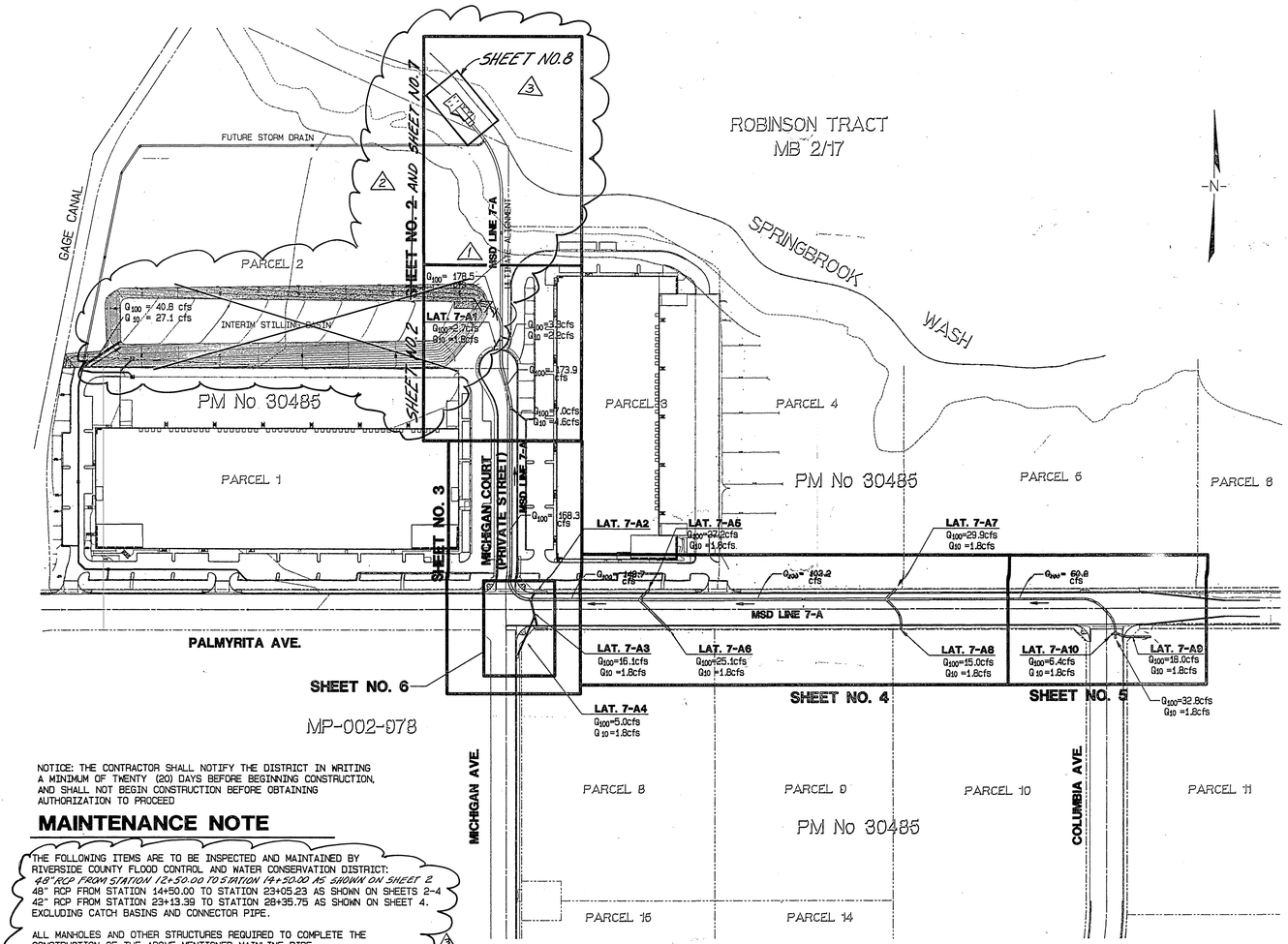
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION D...

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 MAY 1971.
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) 275-1288. 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 1-800-227-2600.
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.
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.
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., COUNTY ROAD DEPARTMENT, AND THE DEVELOPER'S ENGINEER HARMLESS 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 DEVELOPERS 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. ALL 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.



NOTICE: THE CONTRACTOR SHALL NOTIFY THE DISTRICT IN WRITING A MINIMUM OF TWENTY (20) DAYS BEFORE BEGINNING CONSTRUCTION, AND SHALL NOT BEGIN CONSTRUCTION BEFORE OBTAINING AUTHORIZATION TO PROCEED

MAINTENANCE NOTE

THE FOLLOWING ITEMS ARE TO BE INSPECTED AND MAINTAINED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT:
48"RCP FROM STATION 12+50.00 TO STATION 14+50.00 AS SHOWN ON SHEET 2
48" RCP FROM STATION 14+50.00 TO STATION 23+05.23 AS SHOWN ON SHEETS 2-4
42" RCP FROM STATION 23+13.39 TO STATION 28+35.75 AS SHOWN ON SHEET 4.
EXCLUDING CATCH BASINS AND CONNECTOR PIPE.

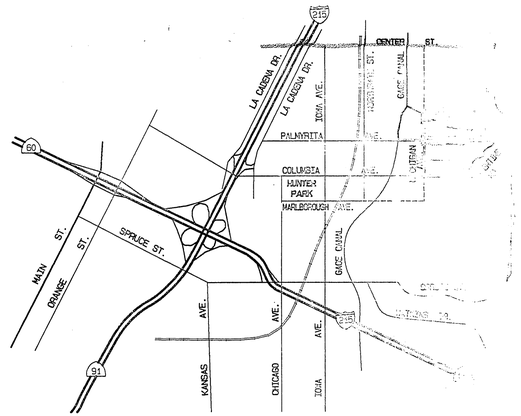
ALL MANHOLES AND OTHER STRUCTURES REQUIRED TO COMPLETE THE CONSTRUCTION OF THE ABOVE MENTIONED MAINLINE PIPE.

THE FOLLOWING ITEMS ARE TO BE INSPECTED AND MAINTAINED BY THE CITY OF RIVERSIDE:

48" RCP FROM STA. 10+00.00 TO STA 12+50.00 INCLUDING THE OUTLET STRUCTURES AT STA. 10+00.00

INDEX

TITLE SHEET
STORM DRAIN PLAN AND PROFILES
LINE 7-A FROM THE BEGINNING TO STA 17+00.00
LINE 7-A FROM STA 17+00.00 TO STA 21+80.00
LINE 7-A FROM STA 21+80.00 TO STA 31+00.00
LINE 7-A FROM STA 31+00.00 TO STA 33+84.35 (END)
LATERALS 7-A2, 7-A3 AND 7-A4
ENERGY DISSIPATOR DETAIL
R.C.F.C.W.C.D. STD. DRAWI...
JS 227 JUNCTION STRUCTURE No. 2
JS 229 JUNCTION STRUCTURE No. 4
TS 303 TRANSITION STRUCTURE No. 3
MH 251 MANHOLE No. 1
MH 252 MANHOLE No. 2
MH 254 MANHOLE No. 4
CB 108 INLET TYPE X
M 815 BEDDING AND PAY LINES
M 816 CONCRETE BULKHEAD



VICINITY MAP
N.
T2S, R4W, ...

INDEX MAP

SCALE 1"=150'

D-800

DUPLICATE OF ORIGINAL – DO NOT REVISE

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
"JB-D3"
LEAD AND TACK IN THE TOP OF CURB, 3.5 FEET NORTH OF THE B.C.R. OF THE NORTHWEST CURB RETURN AT PALMYRITA AVENUE AND IOWA AVENUE.
ELEV=918.908

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

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
APPROVED BY: [signature] DATE: 1-07-04
R.C.E. NO. C44762 EXP. DATE 3-31-06

CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE, CA. 92506
SCOTT HILDEBRANDT
PH: (909) 686-1070
FAX: (909) 788-1256

REF.	DESCRIPTION	APPR.	DATE
1	REMOVE PIPE STA. 13+63.31 TO STA. 14+50.00 AND INTERIM BASIN	JC	1-07-04 / 11/06
2	ADDED SHEET 7-LINE 7-A FROM STA. 10+00.00 TO STA 14+50.00	JC	1-07-04 / 11/06
3	ADDED SHEET 8-ENERGY DISSIPATOR DETAILS	JC	1-07-04 / 11/06

DESIGNED BY: JCC
DRAWN BY: JCC
DATE DRAWN: 1-26-04
CHECKED BY: SCH

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: PLANNING ENGINEER [signature] DATE 2-17-2004
APPROVED BY: CHIEF ENGINEER [signature] DATE 2/17/04

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: [signature] DATE: 2/5/04
RCE NO. 36170 EXP. DATE 6/30/04

COUNTY OF RI...
UNIVERSITY ...
LINE 7-...
TITLE S...

INDEXED 6-06-06 GH

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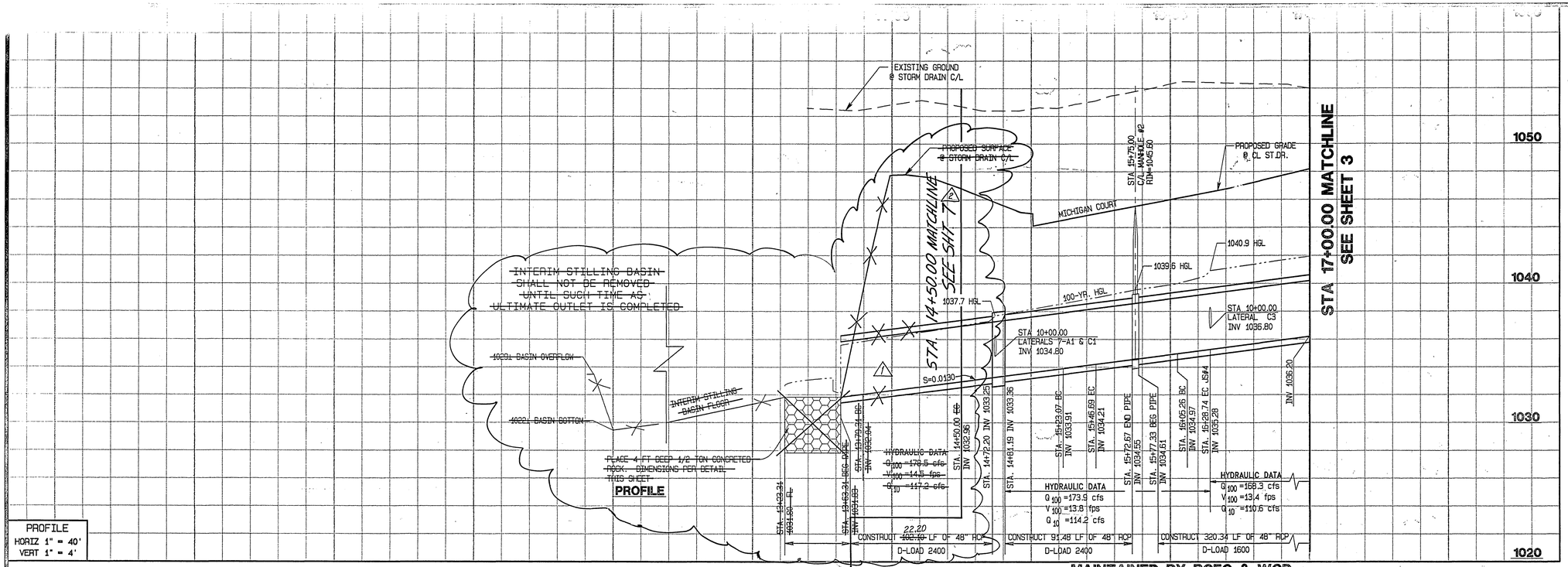


PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

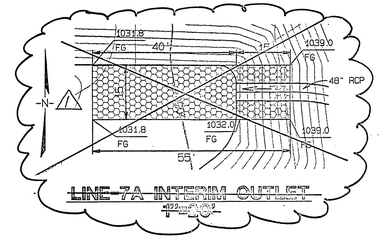
~~STILLING BASIN AND STORM DRAIN FROM OUTLET TO STA 14+50.00 MAINTAINED BY OPERATING ENGINEERS TRUST FUND~~

MAINTAINED BY RCFC & WCD

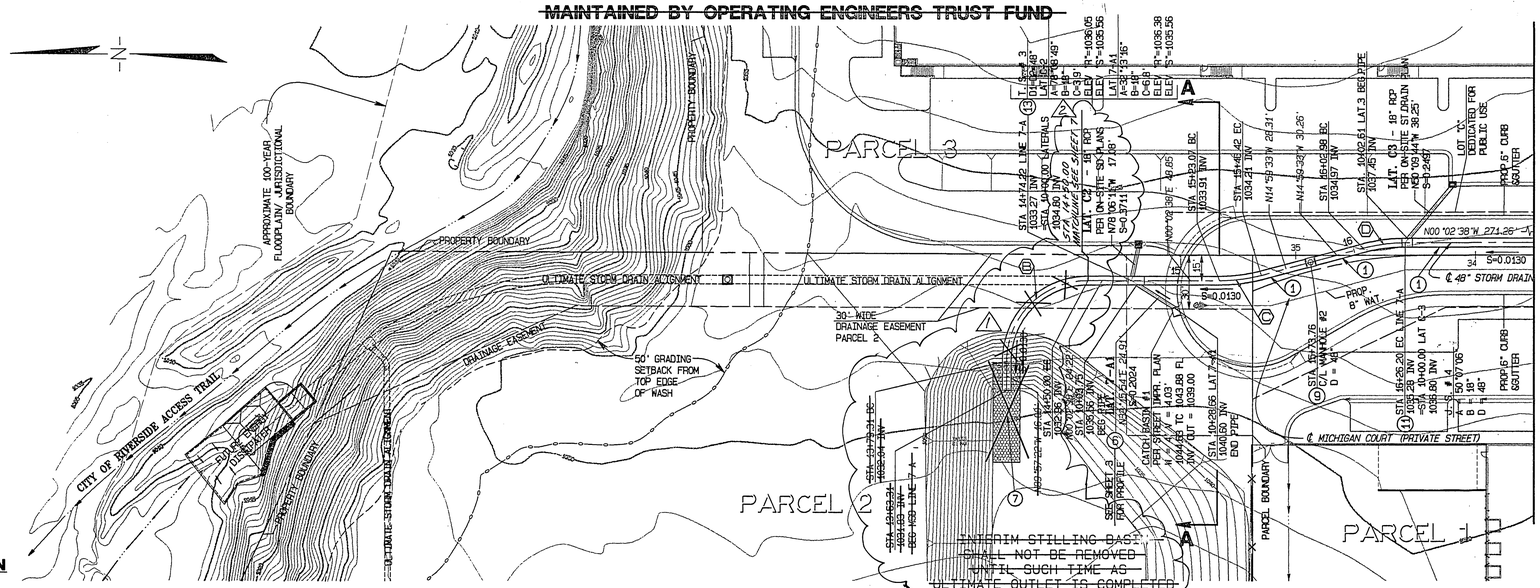
STA 17+00.00 MATCHLINE SEE SHEET 3

CONSTRUCTION NOTES:

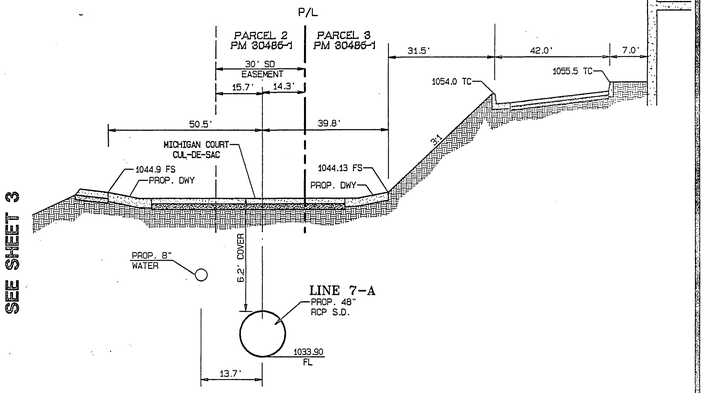
1. INSTALL 48" RCP (D-LOAD PER PLAN)
6. INSTALL 18" RCP (CLASS IV)
7. ~~PLACE 55 L.F. 15 FT WIDE X 4 FT DEEP 1/2 TON CONCRETED ROCK~~ /1 SEE DETAIL BELOW
9. CONSTRUCT MANHOLE #2 PER RCFC&WCD STD. DWG. No. MH 252
11. CONSTRUCT JUNCTION STRUCTURE #4 PER RCFC&WCD STD. DWG. No. JS 229
13. CONSTRUCT TRANSITION STRUCTURE #3 PER RCFC&WCD STD. DWG. No. TS 303



△	DELTA	RADIUS	LENGTH	TANGENT
①	90°00'00"	45.00'	70.69'	45.00'
②	15°02'11"	90.00'	23.62'	11.88'
③	14°56'55"	90.00'	23.48'	11.81'



PLAN



SECTION "A-A" AT STA. 15+23.00

N.T.S.

D-800

GRAPHIC SCALE 1"=40'

0 40 80 120

UNDERGROUND SERVICE ALERT CALL: TOLL FREE 1·800 227·2600 TWO WORKING DAYS BEFORE YOU DIG	BENCHMARK "J8-03" LEAD AND TACK IN THE TOP OF CURB, 3.5 FEET NORTH OF THE B.C.R. OF THE NORTHWEST CURB RETURN AT PALMYRITA AVENUE AND IOWA AVENUE. ELEV=918.908	SEAL REGISTERED PROFESSIONAL ENGINEER SCOTT R. WILDERMUTH 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 FX: (909) 788-1256 APPROVED BY [signature] DATE: 1-27-04 R.C.E. NO. C44762 EXP. DATE 3-31-06

REF.	REVISIONS	APPR.	DATE
/1	REMOVE PIPE FROM STA 13+63.31 TO STA 14+50.00 AND INTERIM BASIN	JCC	2/1/06
/2	ADDED SHEET 7-LINE 7-A FROM STA. 10+00.00 TO STA 14+50.00	JCC	2/1/06

DESIGNED BY: JCC
DRAWN BY: JCC
DATE DRAWN: 1-26-04
CHECKED BY: SRH

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL [signature] DATE: 2/17/04
APPROVED BY: [signature] DATE: 2-17-2004

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT
APPROVED BY: [signature] DATE: 2/3/04
RCE NO. 36170 EXP. DATE 6/30/04

COUNTY OF RIVERSIDE
UNIVERSITY AREA
MASTER DRAINAGE PLAN
HUNTER BUSINESS PARK
LINE 7-A
BEGINNING TO STA 17+00.00

PROJECT NO. 1-0-0126
DRAWING NO. 1-616
SHEET NO. /2 OF /2

INDEXED 6-06-06 SH

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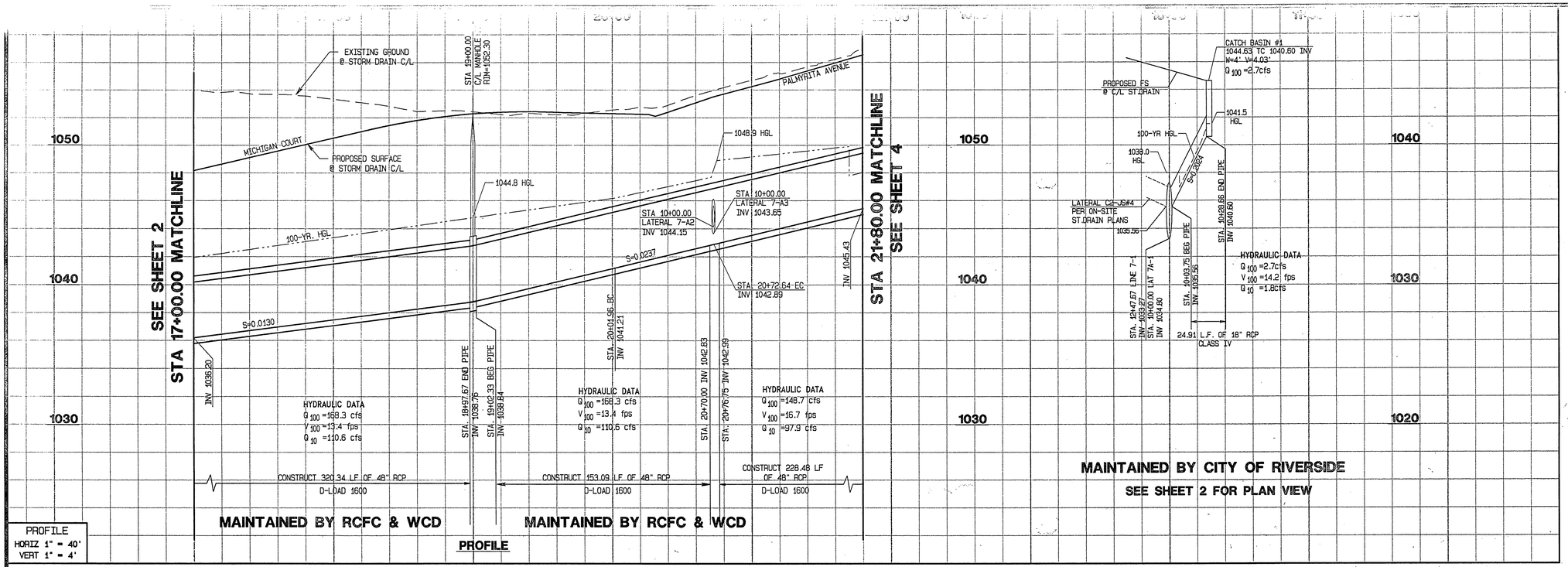
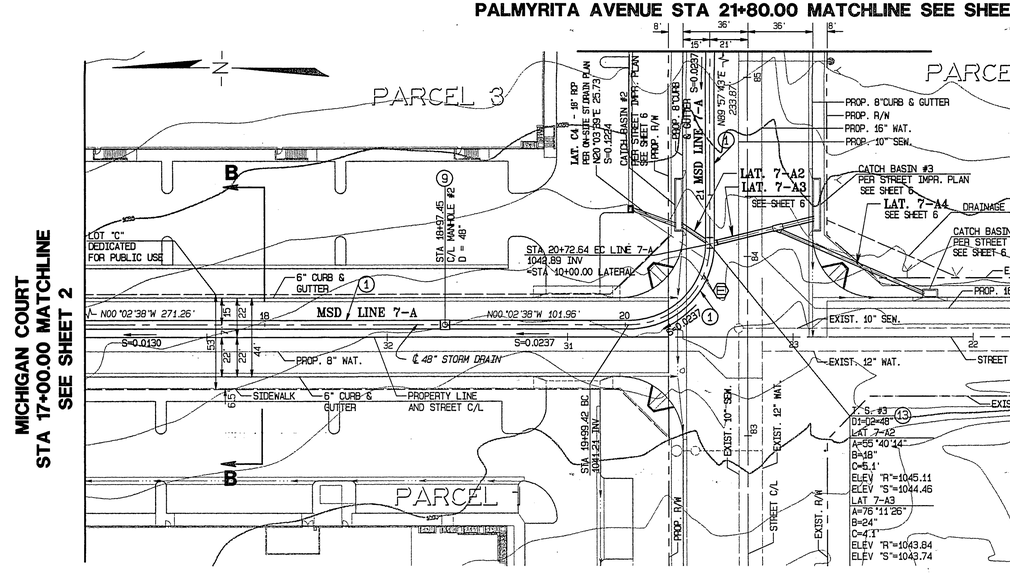


PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

PROFILE

CONSTRUCTION NOTES:

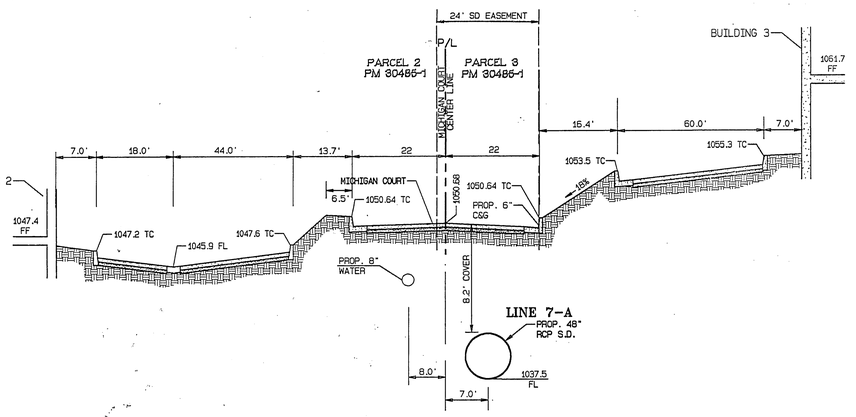
1. INSTALL 48" RCP (D-LOAD PER PLAN)
9. CONSTRUCT MANHOLE #2 PER RCFC&WCD STD. DWG. No. MH 252
13. CONSTRUCT TRANSITION STRUCTURE #3 PER RCFC&WCD STD. DWG. No. TS 303



PLAN

Δ	DELTA	RADIUS	LENGTH	TANGENT
℄	89°59'39"	45.00'	70.68'	45.00'

GRAPHIC SCALE 1"=40'
0 40 80 120



SECTION "B-B" AT STA. 18+00.00

N.T.S.

D-800

INDEXED 6-06-06 GH

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1·800 227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
"J8-03"
LEAD AND TACK IN THE TOP OF CURB, 3.5 FEET NORTH OF THE B.C.R. OF THE NORTHWEST CURB RETURN AT PALMYRITA AVENUE AND IOWA AVENUE.
ELEV=918.908

SEAL
REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT 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
APPROVED BY _____ DATE: 1-27-04
R.C.E. NO. C44762 EXP. DATE 3-31-06

REF.	REVISIONS	APPR.	DATE
1	ADDED SHEET 7		2/1/06
2	ADDED SHEET 8		2/1/06

DESIGNED BY: JCC
DRAWN BY: JCC
DATE DRAWN: 1-26-04
CHECKED BY: SRH

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: _____ DATE: 2/17/2004
APPROVED BY: _____ DATE: 2-17-2004

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT
APPROVED BY: _____ DATE: 4/20/04
RCE NO. 36770 EXP. DATE 6/30/04

COUNTY OF RIVERSIDE
UNIVERSITY AREA
MASTER DRAINAGE PLAN
HUNTER BUSINESS PARK
LINE 7-A
STA 17+00.00 TO STA 21+80.00

PROJECT NO. 1-0-0126
DRAWING NO. 1-613
SHEET NO. 3 OF 8

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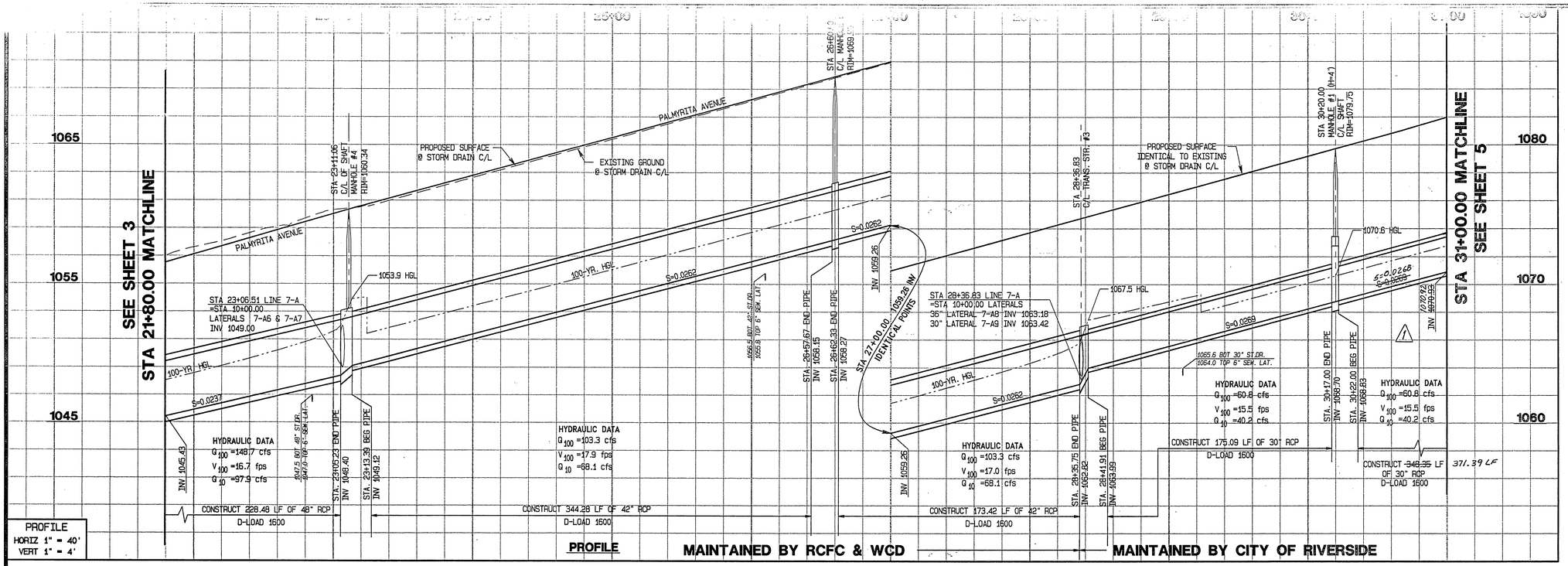
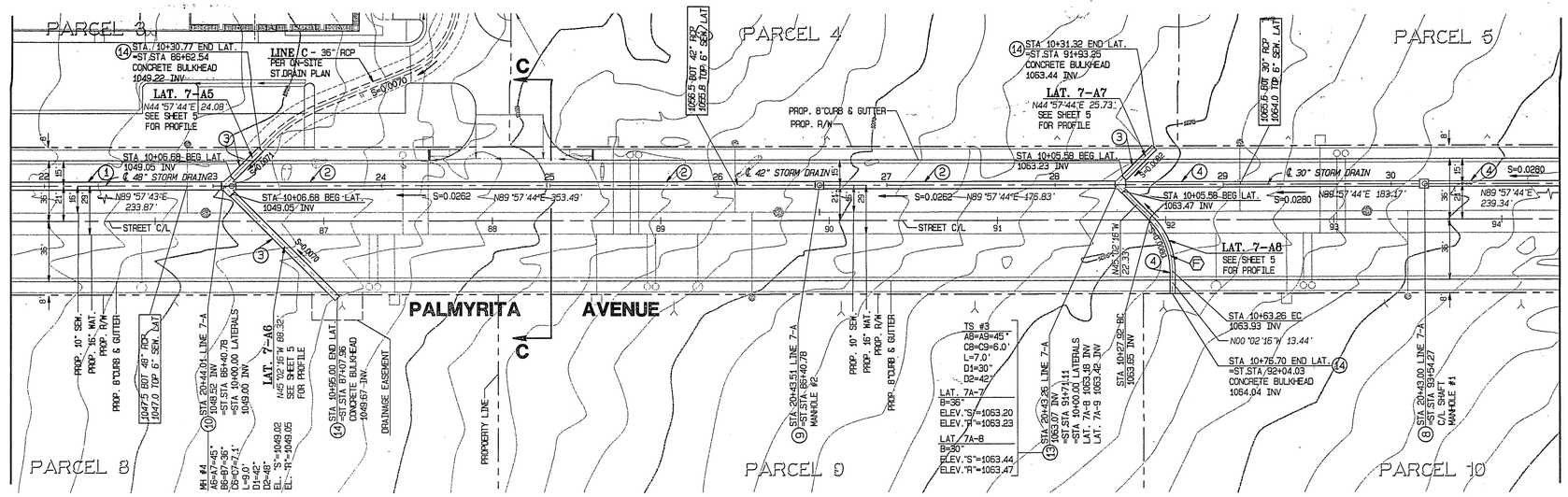


CONSTRUCTION NOTES:

1. INSTALL 48" RCP (D-LOAD PER PLAN)
2. INSTALL 42" RCP (D-LOAD PER PLAN)
3. INSTALL 36" RCP (D-LOAD PER PLAN)
4. INSTALL 30" RCP (D-LOAD PER PLAN)
8. CONSTRUCT MANHOLE #1 PER RCFC&WCD STD. DWG. No. MH 251
10. CONSTRUCT MANHOLE #4 PER RCFC&WCD STD. DWG. No. MH 254
13. CONSTRUCT TRANSITION STRUCTURE #3 PER RCFC&WCD STD. DWG. No. TS 303
14. CONSTRUCT CONCRETE BULKHEAD PER RCFC&WCD STD. DWG. No. MB16



DELTA	RADIUS	LENGTH	TANGENT
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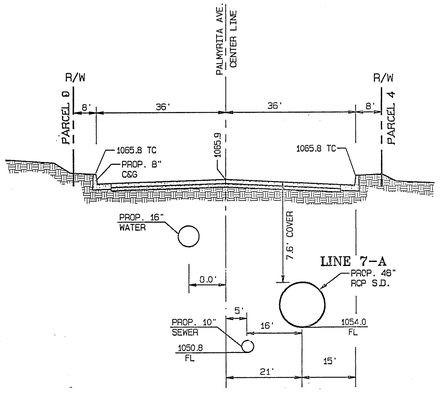

SECTION "C-C" AT STA. 25+00.00

N.T.S.

MSD LINE 7-A

D-800

UNDERGROUND SERVICE ALERT	BENCHMARK	SEAL	ENGINEER	REVISIONS			
CALL: TOLL FREE 1·800 227·2600 TWO WORKING DAYS BEFORE YOU DIG	"J8-03" LEAD AND TACK IN THE TOP OF CURB, 3.5 FEET NORTH OF THE B.C.R.-OF THE NORTHWEST CURB RETURN AT PALMYRITA AVENUE AND IOWA AVENUE. ELEV=918.908	REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA	ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS APPROVED BY DATE: 1-27-04 R.C.E. NO. C44762 EXP. DATE 3-31-06	CIVIL ENGINEERS 3788 McCRAY ST. RIVERSIDE, CA. 92506 PH: (909) 686-1070 FAX: (909) 788-1256	1 ADDED SHEET 7	SRH	2/1/06
					2 ADDED SHEET 8	SRH	2/1/06
					REF.	DESCRIPTION	APPR. DATE

	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT	COUNTY OF RIVERSIDE UNIVERSITY AREA MASTER DRAINAGE PLAN HUNTER BUSINESS PARK LINE 7-A STA 21+80.00 TO STA 31+00.00	PROJECT NO. 1-0-0126
DESIGNED BY: JCC	RECOMMENDED FOR APPROVAL	APPROVED BY:		DRAWING NO. 1-616
DRAWN BY: JCC	APPROVED BY:	APPROVED BY: DATE: 2/8/04		SHEET NO. 4 OF 8
DATE DRAWN: 1-26-04	DATE: 2/11/04	RCE NO. 36170 EXP. DATE 6/30/06		
CHECKED BY: SRH	DATE: 2-17-2004			

Indexed 6-06-06 KH

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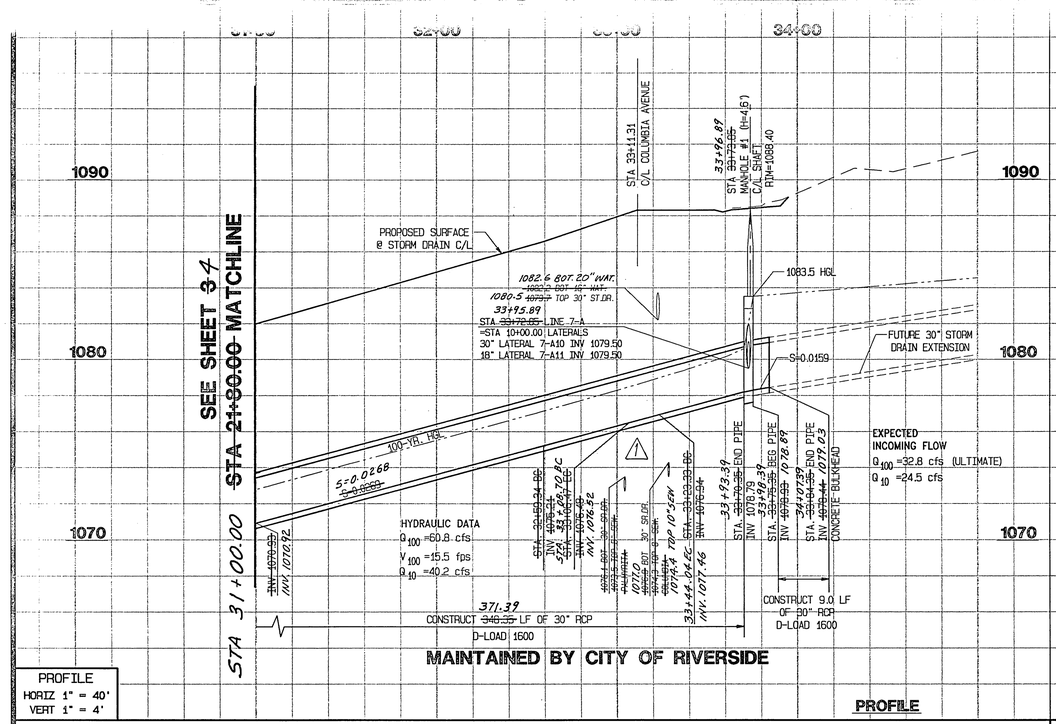
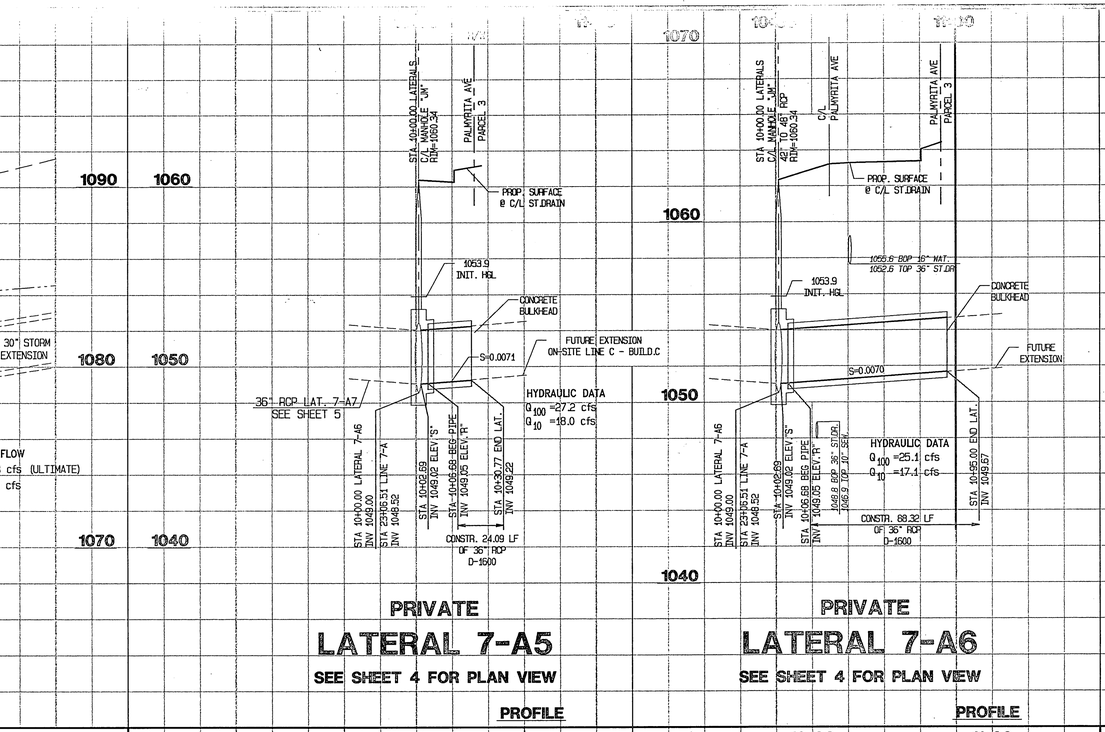
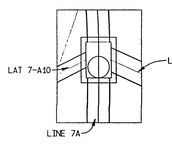
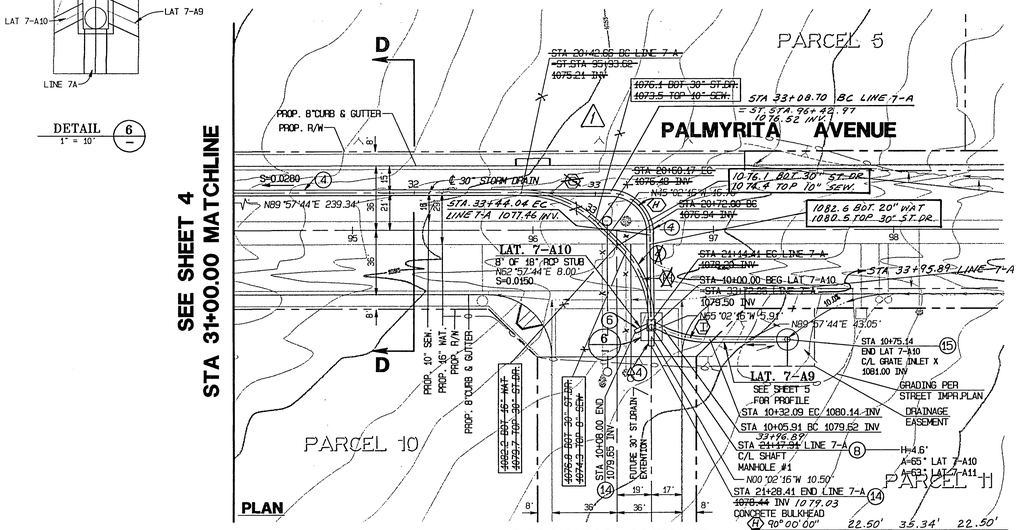






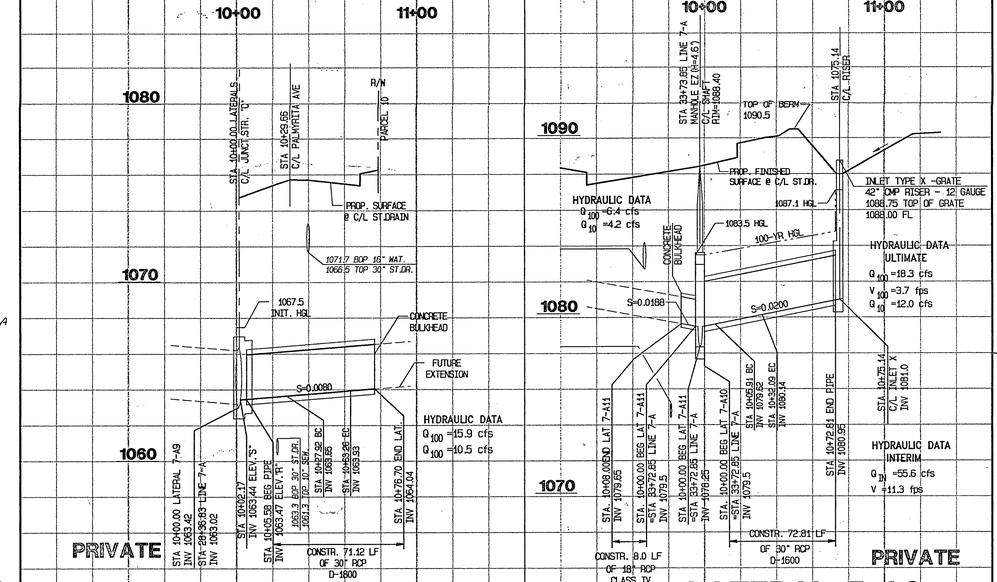
DETAIL 6 1" = 10'



	DELTA	RADIUS	LENGTH	TANGENT
G	45°00'00"	60.00'	47.12'	24.85'
H	45°00'00"	60.00'	47.12'	24.85'
I	25°00'00"	60.00'	26.18'	13.30'

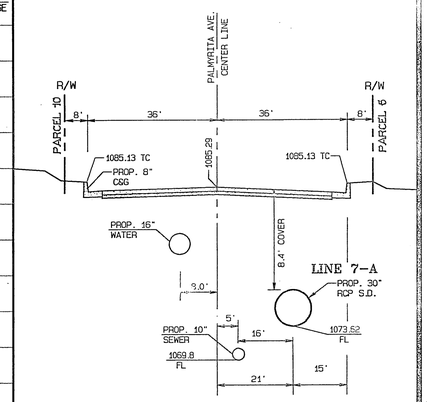
GRAPHIC SCALE 1"=40'
0 40 80 120

MSD LINE 7-A



CONSTRUCTION NOTES:

4. INSTALL 30" RCP (D-LOAD PER PLAN)
6. INSTALL 18" RCP (CLASS IV)
8. CONSTRUCT MANHOLE #1 PER RCFCSWCD STD. DWG. No. MH 251
14. CONSTRUCT CONCRETE BULKHEAD PER RCFCSWCD STD. DWG. No. M816
15. CONSTRUCT TEMPORARY CMP INLET TYPE X PER RCFCSWCD STD. DWG. No. CB 103



SECTION "D-D" AT STA. 32+00.00

N.T.S. D-800

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

SEAL — REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT 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
APPROVED BY [signature] DATE: 1-27-04
R.C.E. NO. C44762 EXP. DATE 3-31-06

REF.	REVISIONS DESCRIPTION	APPR.	DATE
A	ADDED SHEET 7	MA	11/06
B	ADDED SHEET 8	MA	11/06
C	REVISED STORM DRAIN ALIGNMENT	SRH	5/04

DESIGNED BY: JCC
DRAWN BY: JCC
DATE DRAWN: 1-26-04
CHECKED BY: SRH

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

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT
APPROVED BY: [signature] DATE: 2/3/04
RCE NO. 26170 EXP. DATE 12/31/07

COUNTY OF RIVERSIDE
UNIVERSITY AREA
MASTER DRAINAGE PLAN
HUNTER BUSINESS PARK
LINE 7-A
STA 31+00.00 TO STA 33+94.35

PROJECT NO. 1-0-0126
DRAWING NO. 1-616
SHEET NO. 5 OF 8

INDEXED 6-06-06 LH

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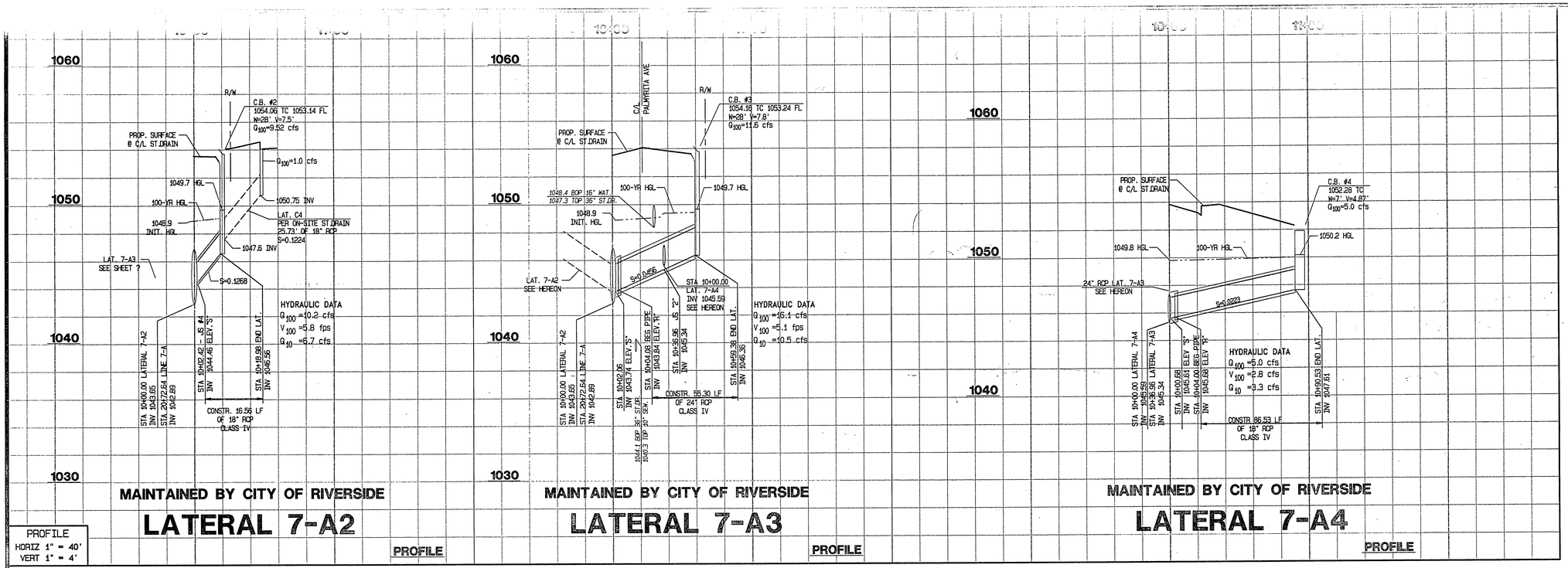
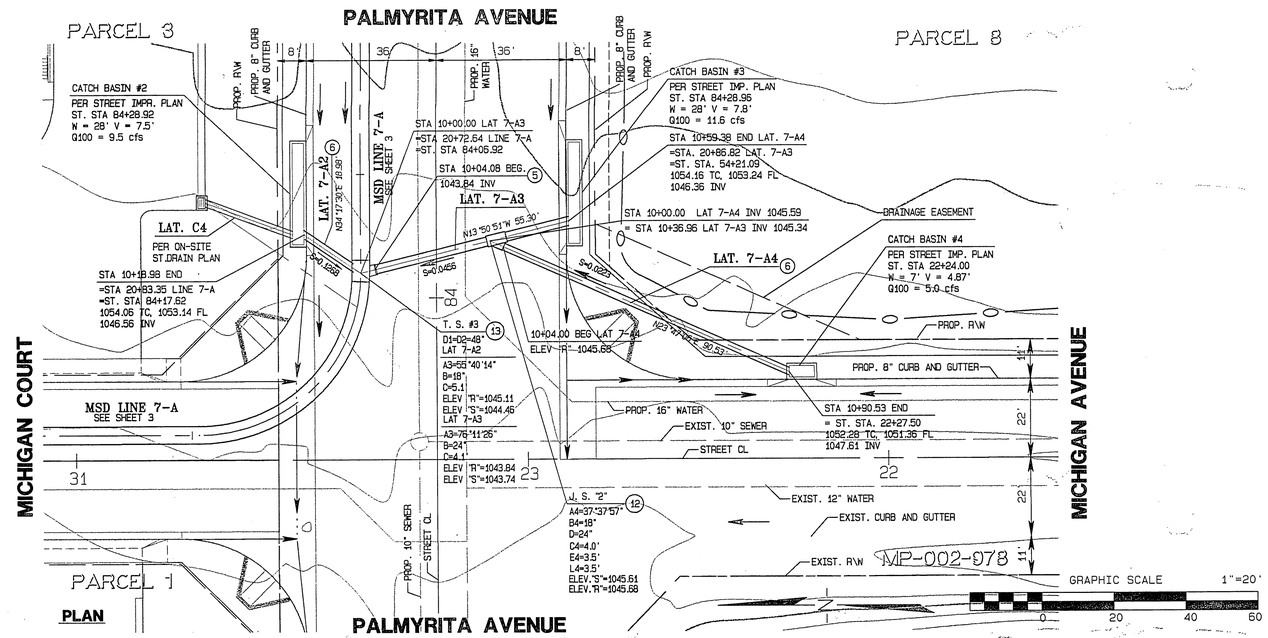


PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

CONSTRUCTION NOTES:

(5) INSTALL 24" RCP (CLASS IV)
(6) INSTALL 18" RCP (CLASS IV)
(12) CONSTRUCT JUNCTION STRUCTURE #2 PER RCFC&WCD STD. DWG. No. JS 227
(13) CONSTRUCT TRANSITION STRUCTURE #3 PER RCFC&WCD STD. DWG. No. TS 303



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D-800 .tif

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UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
"JB-D3"
LEAD AND TACK IN THE TOP OF CURB, 3.5 FEET NORTH OF THE B.C.R. OF THE NORTHWEST CURB RETURN AT PALMYRITA AVENUE AND IOWA AVENUE.
ELEV=918.908

SEAL
REGISTERED PROFESSIONAL ENGINEER SCOTT R. WILDERMUTH 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

APPROVED BY [signature] DATE: 1-27-04
R.C.E. NO. C44762 EXP. DATE 3-31-06

REF.	REVISIONS	APPR.	DATE
2	ADDED SHEET 7		
3	ADDED SHEET 8		

DESIGNED BY: JCC
DRAWN BY: JCC
DATE DRAWN: 1-26-04
CHECKED BY: SRH

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

APPROVED BY:
DATE:

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: [signature] DATE: 2/3/04
RCE. NO. 36170 EXP. DATE 6/30/04

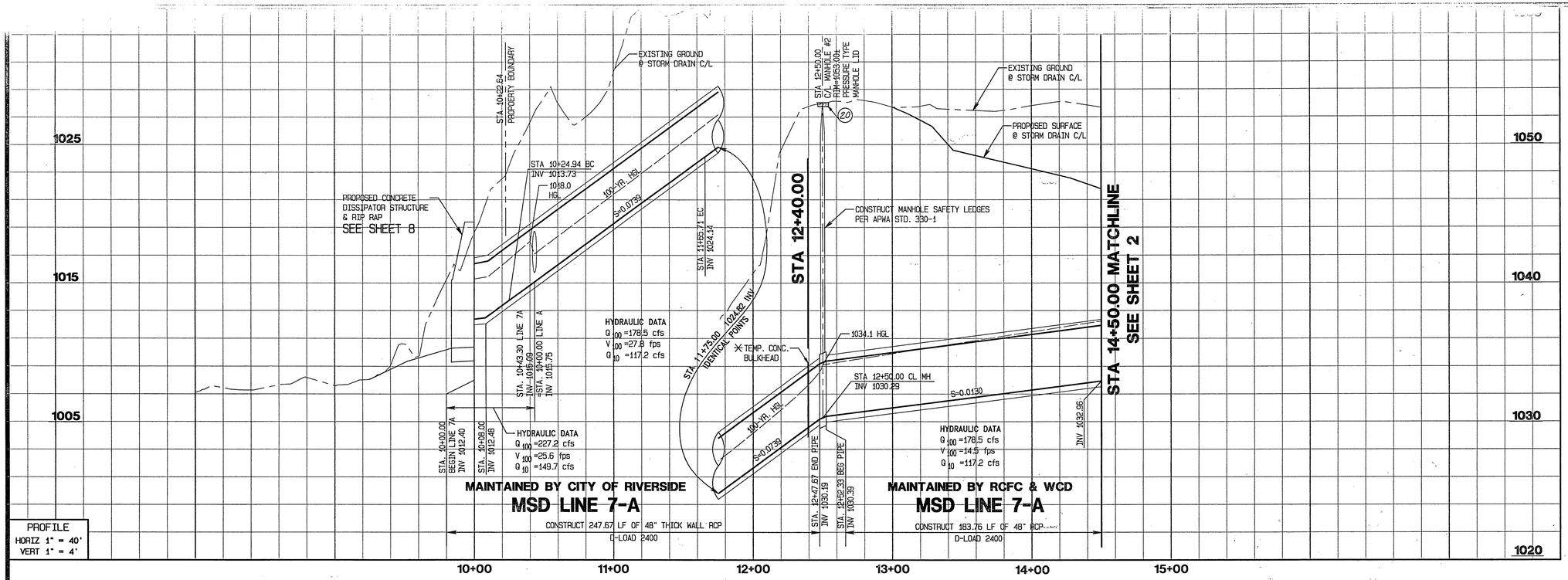
COUNTY OF RIVERSIDE
UNIVERSITY AREA
MASTER DRAINAGE PLAN
HUNTER BUSINESS PARK
LINE 7-A
STA 31+00.00 TO STA 33+84.35

PROJECT NO. 1-0-0126
DRAWING NO. 1-616
SHEET NO. 6 OF 8

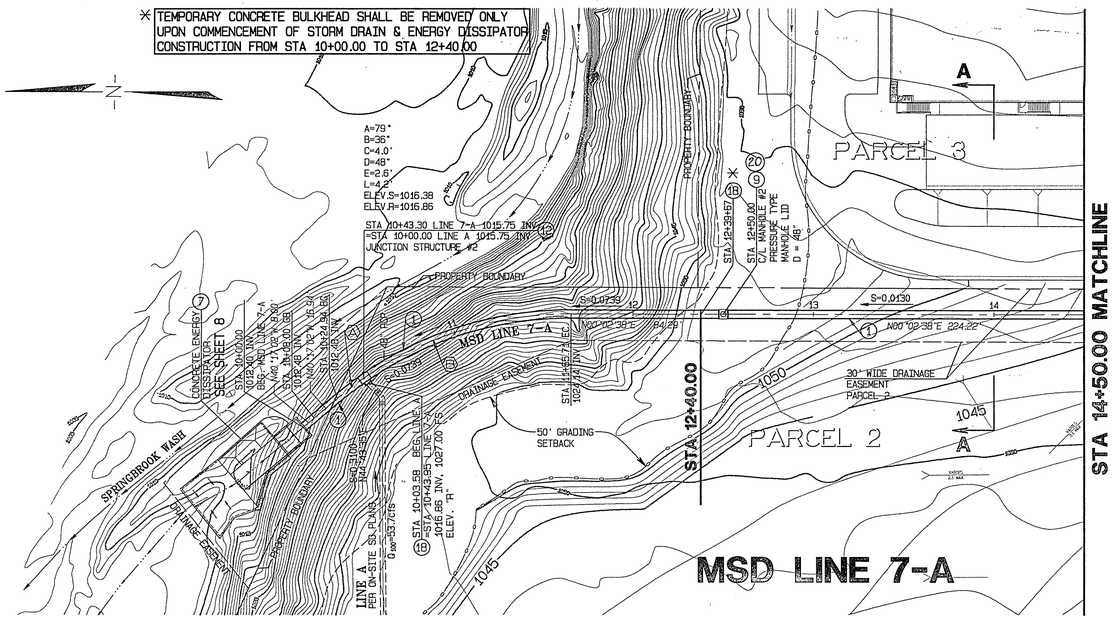
INDEXED 6-06-06 [illegible]

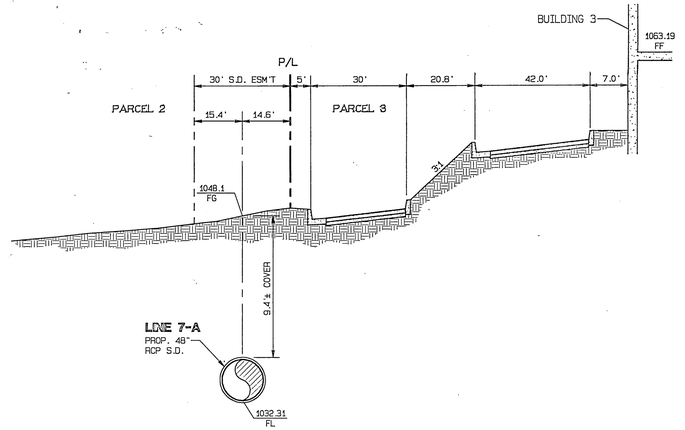
CONSTRUCTION NOTES:

1. INSTALL 48" RCP (D-LOAD PER PLAN)
7. CONSTRUCT CONCRETE ENERGY DISSIPATOR PER SAN DIEGO REGIONAL STD DWG No. D-41 - SEE DETAILS ON SHEET 8
9. CONSTRUCT MANHOLE #2 PER RCFC & WCD STD. DWG. No. MH 252
12. CONSTRUCT JUNCTION STRUCTURE #2 PER RCFC & WCD STD. DWG. No. JS 227
18. CONSTRUCT TEMPORARY CONCRETE BULKHEAD PER RCFC & WCD STD. DWG. No. M816
20. CONSTRUCT 6'x6'x6" CONCRETE PAD W/#4@18" O.C. EACH WAY



◯	DELTA	RADIUS	LENGTH	TANGENT
Ⓐ	5°15'39"	200.00'	18.36'	9.19'
Ⓑ	35°04'02"	200.00'	122.41'	63.19'





SECTION "A-A" AT STA. 14+00.00

N.T.S.

GRAPHIC SCALE 1"=40'
0 40 80 120

D-800

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
SEE TITLE SHEET

SEAL
REGISTERED PROFESSIONAL ENGINEER SCOTT R. WILLIAMSON 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
APPROVED BY [signature] DATE: 1-20-06
R.C.E. NO. C44762 EXP. DATE 3-31-06

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
DESIGNED BY:
DRAWN BY:
DATE DRAWN:
CHECKED BY:
RECOMMENDED FOR APPROVAL [signature] DATE: 2/1/06
APPROVED BY: [signature] DATE: 2-1-2006

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: [signature] DATE: 1/23/06
RCE NO. 36686 EXP. DATE 6/30/06

COUNTY OF RIVERSIDE
UNIVERSITY AREA
MASTER DRAINAGE PLAN
HUNTER BUSINESS PARK
LINE 7-A
STA 10+00.00 TO STA 14+50.00

PROJECT NO. 1-0-0123
DRAWING NO. 1-816
SHEET NO. 7 OF 8

INDEXED 6-06-06 GH

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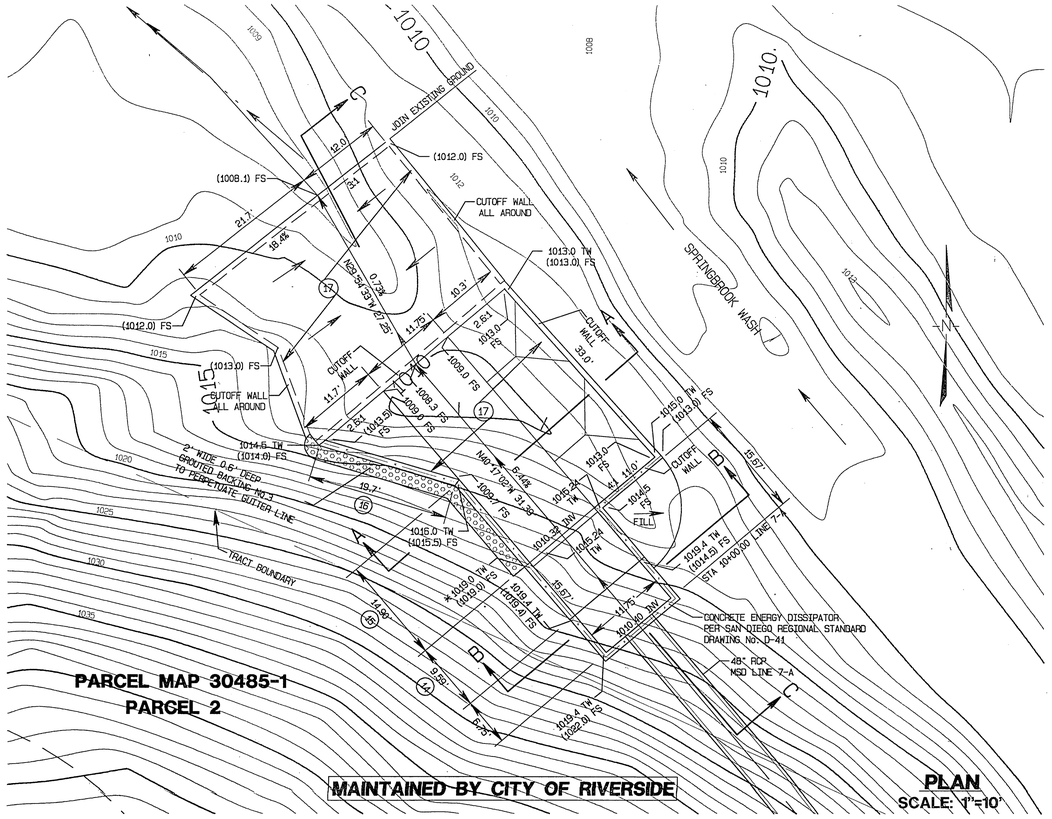
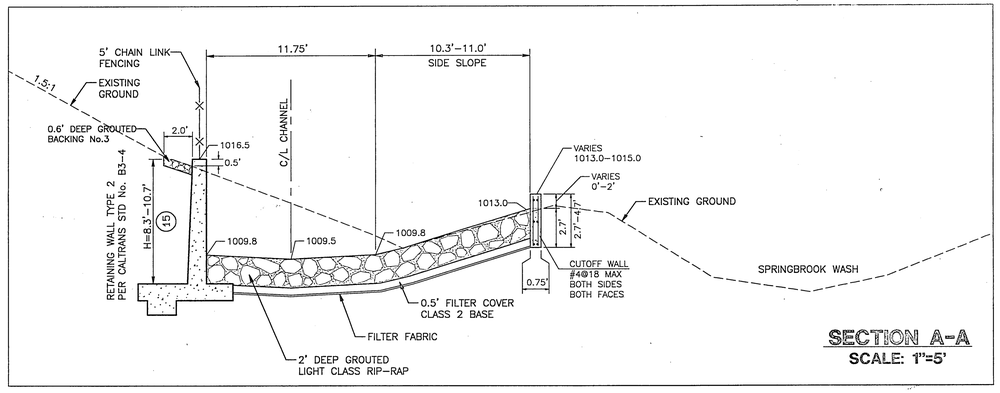
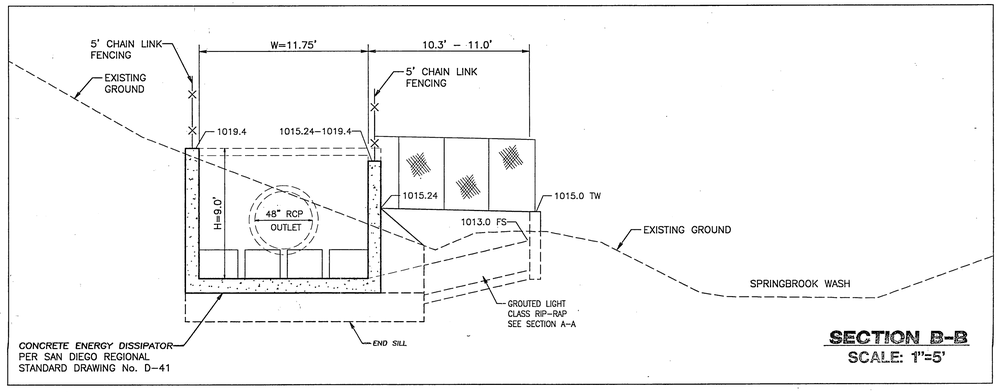




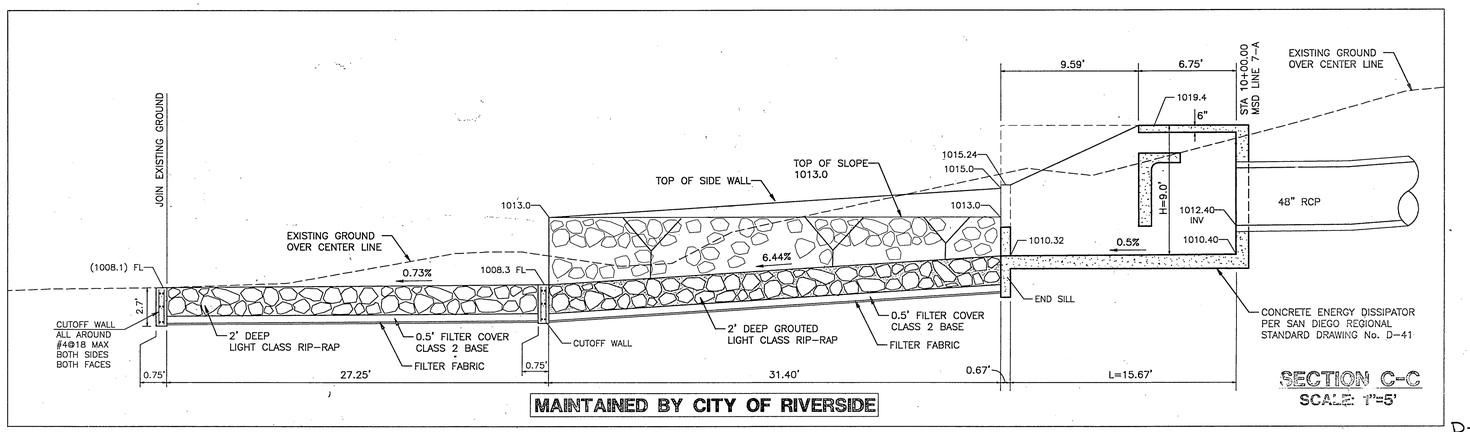
SECTION A-A
SCALE: 1"=5'



SECTION B-B
SCALE: 1"=5'

CONSTRUCTION NOTES:

- ✕(14) MODIFY 9.59 L.F. OF THE DISSIPATOR SIDE WALL TO VERTICAL RETAINING WALL TYPE 2 PER CALTRANS STD No. B3–4 (H=8.7' TO 9.1').
- (15) CONSTRUCT 19.00 L.F. OF VERTICAL RETAINING WALL TYPE 2 PER CALTRANS STD No. B3–4 (H=8.3' TO 10.7').
- (16) CONSTRUCT 19.70 L.F. OF VERTICAL RETAINING WALL TYPE 2 PER CALTRANS STD No. B3–4 (H=3.0' TO 8.3'). (FOR H<6' USE SIZES AND REINFORCEMENT FOR H=6'. MODIFY BAR LENGHTS.)
- (17) CONSTRUCT LIGHT CLASS GROUTED RIP-RAP



SECTION C-C
SCALE: 1"=5'

MAINTAINED BY CITY OF RIVERSIDE

D-800

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
SEE TITLE SHEET

SEAL
REGISTERED PROFESSIONAL ENGINEER
SCOTT R. WILDERMUTH
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

APPROVED BY [signature] DATE: 1-30-06
R.C.E. NO. C44762 EXP. DATE 3-31-06

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY:	RECOMMENDED FOR APPROVAL	APPROVED BY:
DRAWN BY:		
DATE DRAWN:		
CHECKED BY:	DATE:	DATE:

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: [signature] DATE: 1/23/06
RCE NO. 36686 EXP. DATE 6-30-06

COUNTY OF RIVERSIDE
UNIVERSITY AREA
MASTER DRAINAGE PLAN
HUNTER BUSINESS PARK
LINE 7-A
ENERGY DISSIPATOR DETAIL

PROJECT NO. 1-0-0126
DRAWING NO. 1-613
SHEET NO. 8 OF 9

INDEXED 6-06-06 LH

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