Storm Drain Improvement Plans
FOR
Tract 31755
City Of Riverside

General Notes - Public Works

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT-OF-WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STD. DWG., THERE SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
3. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY, THE CITY.
4. QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE ARE NOT RESPONSIBLE FOR THEIR ACCURACY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
6. ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
7. NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OF INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHTS-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.
8. ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN FIVE DAYS AFTER NOTIFICATION FROM THE CITY INSPECTORS.
9. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE NO. 1-800-227-2600, TWO WORKING DAYS BEFORE DIGGING. NO CONSTRUCTION PERMIT WILL BE ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS BEEN PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY USA.
10. BEFORE THE RIP-RAP AT THE OUTLET OF ANY DRAINAGE STRUCTURE IS ACCEPTED BY THE CITY, IT SHALL BE TESTED UNDER FLOWS AS CLOSE AS POSSIBLE TO DESIGN CONDITIONS WITH WATER OBTAINED FROM FIRE HYDRANTS IN THE IMMEDIATE AREA.

Private Engineer's Notes To Contractor:

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THIS DRAWING.
2. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR 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 CITY, THE OWNER, AND THE 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 OWNER OR THE ENGINEER.

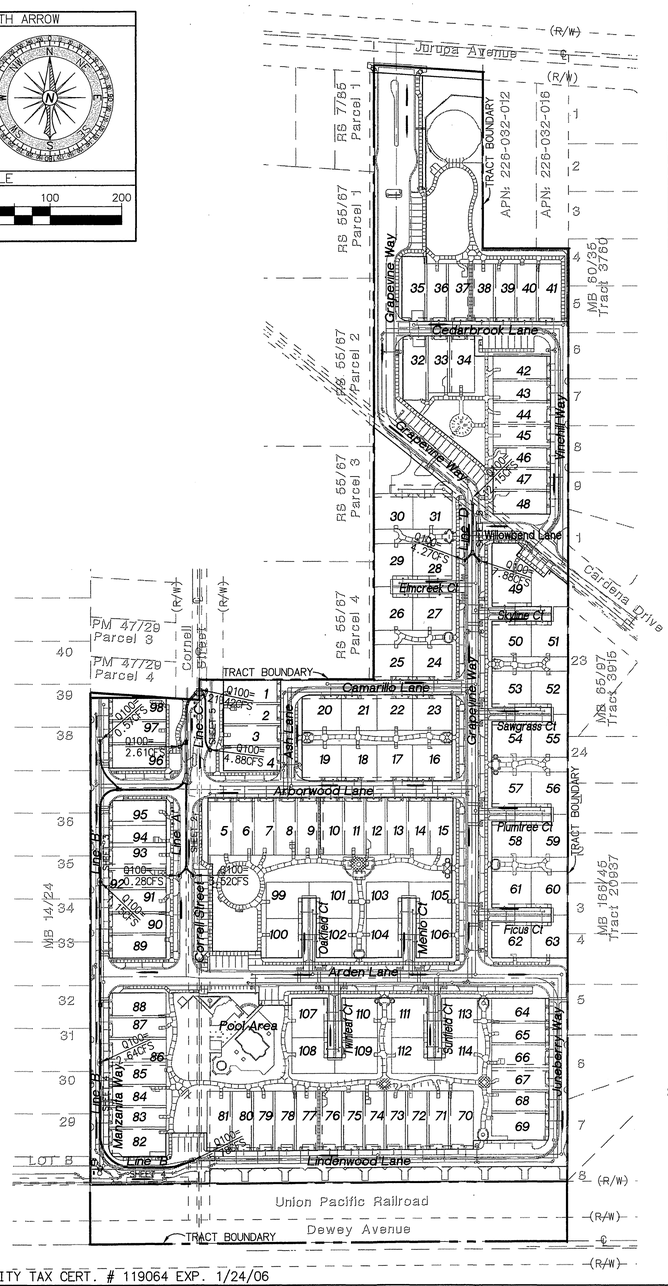
UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE

Notice

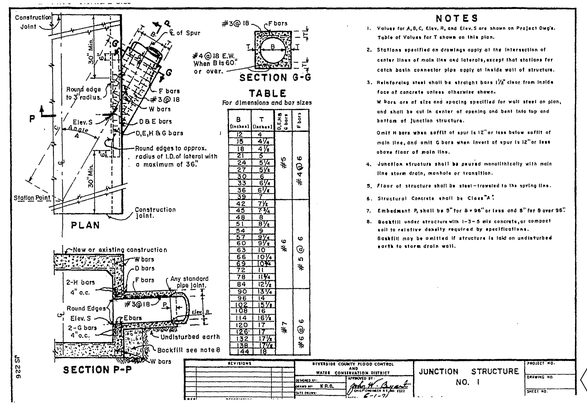
BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

NORTH ARROW

SCALE 0 100 200



CITY TAX CERT. # 119064 EXP. 1/24/06



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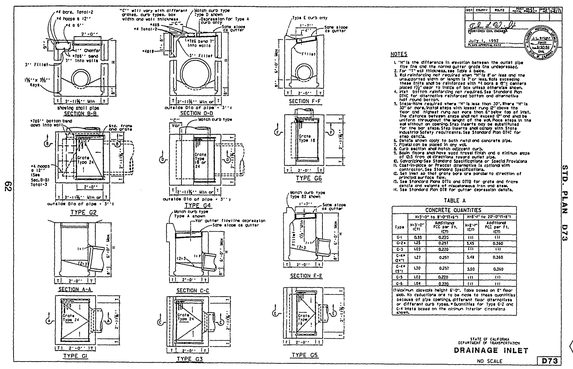

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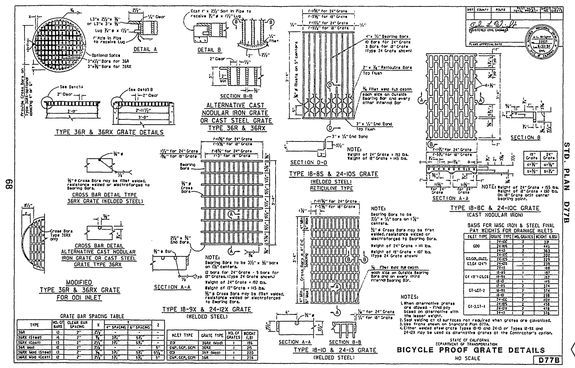

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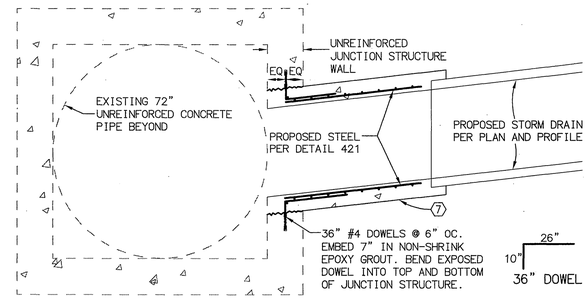


SD CONNECTION TO EXISTING JUNCTION STRUCTURE

NOT TO SCALE
USED IN CONJUNCTION WITH (10)

Owner / Applicant

ATHERTON SQUARE LLC
CORMAN LEIGH COMMUNITIES(MANAGING MEMBER)
32823 HWY 79 SOUTH
TEMECULA, CA 92590 (951)296-5070

Engineer

RENCIVIL
41593 WINCHESTER RD, SUITE 120
TEMECULA, CA 92590
(951)296-1292

Utilities

SEWER AND WATER
CITY OF RIVERSIDE
3460 ORANGE STREET
RIVERSIDE, CA 92501
909.427.2200

ELECTRIC:
CITY OF RIVERSIDE
3460 ORANGE STREET
RIVERSIDE, CA 92501
909.427.2200

GAS:
SOUTHERN CALIF. GAS CO.
1981 W. LUGONIA
REDLANDS, CA 92374
909.995.7847

TELEPHONE:
PACIFIC BELL
3939 E. COLORADO ST.
ANAHEIM CA 92807
800.310.2355

Topography

AERIAL & FIELD TOPOGRAPHY BY THOMSON INC.

DATED: 08/11/03

Legal Description

BEING A SUBDIVISION OF A PORTION OF SECTIONS 28 AND 33 OF T.2.S., R.5W., S.B.B.M.

Storm Drain Notes + Quantities

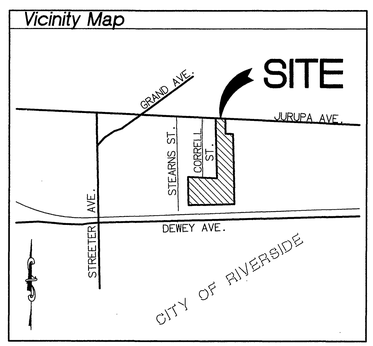
⟨⟩	DESCRIPTION	QUANTITY
1	INSTALL 18" RCP OR CIPP ALT	180 LF
2	INSTALL 24" RCP OR CIPP ALT	870 LF
3	INSTALL 30" RCP OR CIPP ALT	180 LF
4	CONST. JUNCTION STRUCTURE 1 PER RCFC & WCD STD JS226	1 EA
5	CONSTRUCT MANHOLE E2 PER CITY STD 431	1 EA
6	CONSTRUCT MANHOLE JM PER CITY STD 432	1 EA
7	CONSTRUCT JUNCTION STRUCTURE B PER CITY STD 421	1 EA
8	CONSTRUCT JUNCTION STRUCTURE C PER CITY STD 422	4 LF
9	CONSTRUCT JUNCTION STRUCTURE 4 PER CITY STD 423 CASE I	1 EA
10	CONSTRUCT JUNCTION STRUCTURE B PER CITY STD 421 AS MODIFIED ON SHEET 1	1 EA
11	CONSTRUCT CATCH BASIN PER CITY STD 405	8 LF
12	CONSTRUCT CATCH BASIN PER CALTRANS STD D73 TYPE G1	32 LF
13	USE (12) IN CONJUNCTION WITH GRATE D77B TYPE 24-12X SEE SHEET 1 FOR DETAILS (12) AND (13)	32 LF
14	CONSTRUCT CONC CAP PER CITY STD 452	1,236 LF

Legend + Abbreviations

LEGEND	
A-A / 9	A-A = SECTION LETTER; 7 = SHEET DETAIL IS ON
A-A / –	A-A = SECTION LETTER; – = DETAIL ON THIS SHEET
	BOUNDARY LINE
	CENTERLINE
	CURB AND GUTTER
----GB----	GRADE BREAK
	SAWCUT LINE
	EDGE OF PAVEMENT
	RETAINING WALL
	EXISTING WALL
	DIRECTION OF FLOW
100	EXISTING GROUND CONTOUR
	DRAINAGE SWALE
S	EXISTING SEWER
W	EXISTING WATER
2:1	TOP OF SLOPE; SLOPE RATIO; TOE OF SLOPE
00.00TC	PROPOSED ELEVATION
(00.00)TC	EXISTING ELEVATION
[00.00]TC	FUTURE ELEVATION
0.9%	PROPOSED GRADE
(0.9%)	EXISTING GRADE
18"SD	PROPOSED STORM DRAIN
	EXISTING STORM DRAIN
	PROPOSED MANHOLE
	EXISTING MANHOLE
	PROPOSED CATCH BASIN
	EXISTING CATCH BASIN
	PROPOSED FIRE HYDRANT
	EXISTING FIRE HYDRANT
	ITEM TO BE DEMOLISHED
	CUT/FILL DAYLIGHT
	BLOCK WALL
	RETAINING WALL
	6' HIGH WROUGHT IRON FENCE
	6' HIGH WOOD FENCE

ABBREVIATIONS	
BVC	BEGIN VERTICAL CURVE
BW	BACK OF WALK
EG	EXISTING GROUND
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
FS	FINISH SURFACE
GB	GRADE BREAK
GF	GARAGE FINISH FLOOR
H=	HEIGHT OF RETAINING
HP	HIGH POINT
INV	INVERT
ITC	IMAGINARY TOP OF CURB
LP	LOW POINT
MVC	MIDDLE VERTICAL CURVE
NG	NATURAL GROUND
PAD	PAD ELEVATION
TB	TOP OF AC BERM
TC	TOP OF CURB
TD	TOP OF DRAIN
TF	TOP OF FOOTING
TW	TOP OF WALL
TWR	TOP OF WALL RETAINING
MH	MAN HOLE
JS	JUNCTION STRUCTURE
PCC	PORTLAND CONCRETE CEMENT OR POINT OF COMPOUND CURVATURE
AC	ASPHALTIC CONCRETE
STA	STATION
( )	EXISTING ITEM
[ ]	FUTURE ITEM
(PP)	EXISTING POWERPOLE

Vicinity Map



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

PUBLIC UTILITIES WATER DIVISION
APPROVED BY ____ DATE ____

BENCHMARK
P.K. NAIL AND CITY ENGINEER TAG IN THE SOUTHEASTERLY CORNER OF A CATCH BASIN IN THE NORTHERLY CURB OF JURUPA AVENUE, 37 FEET WESTERLY OF STEARNS STREET. DESIGNATED H5-H3
ELEVATION=784.689

REGISTERED PROFESSIONAL ENGINEER RUDY E. NUNEZ NO. C55955 Exp. 12/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
R.C.E. C55955 EXP 12/31/06
DATE 11/15/05

RENCivil™
ENGINEERING · SURVEYING · LAND PLANNING
41593 WINCHESTER RD SUITE 120 TEMECULA CA 92590
951.296.1292 951.296.1164 FAX

MARK	REVISIONS	APPR.	DATE

DESIGNED BY REN DRAWN BY RLV CHECKED BY REN

City of Riverside, California
PUBLIC WORKS DEPARTMENT

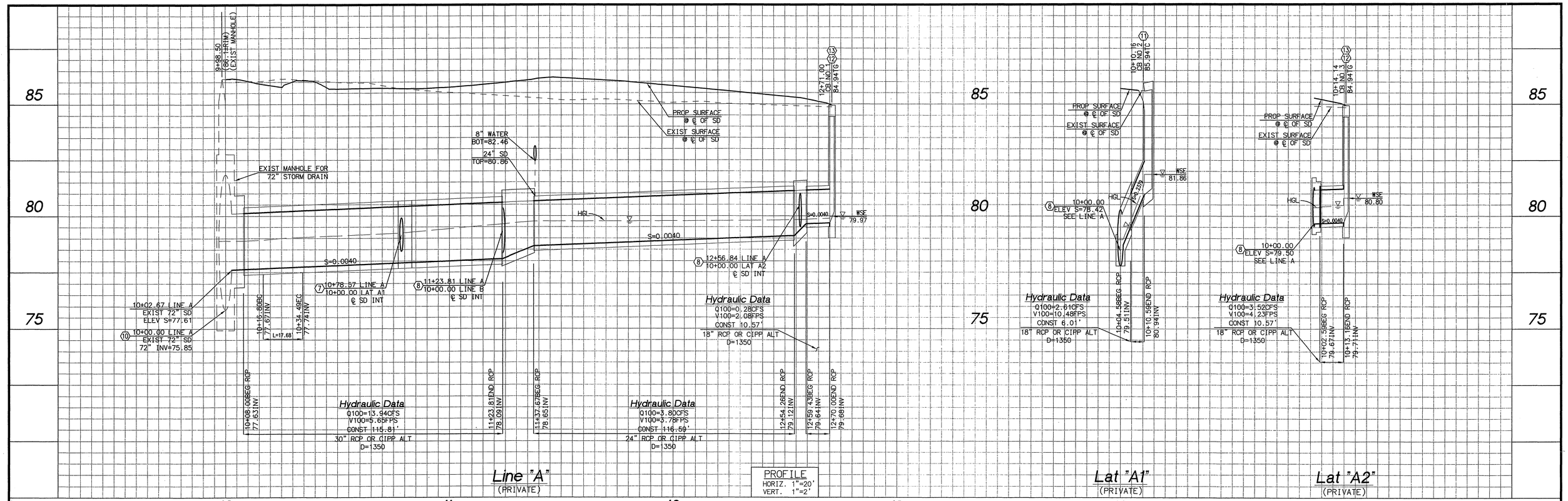
APPROVED BY	BY	DATE	APPROVED BY:
PRINCIPAL ENGINEER		11/23/05	CITY ENGINEER
			DATE 11/28/05

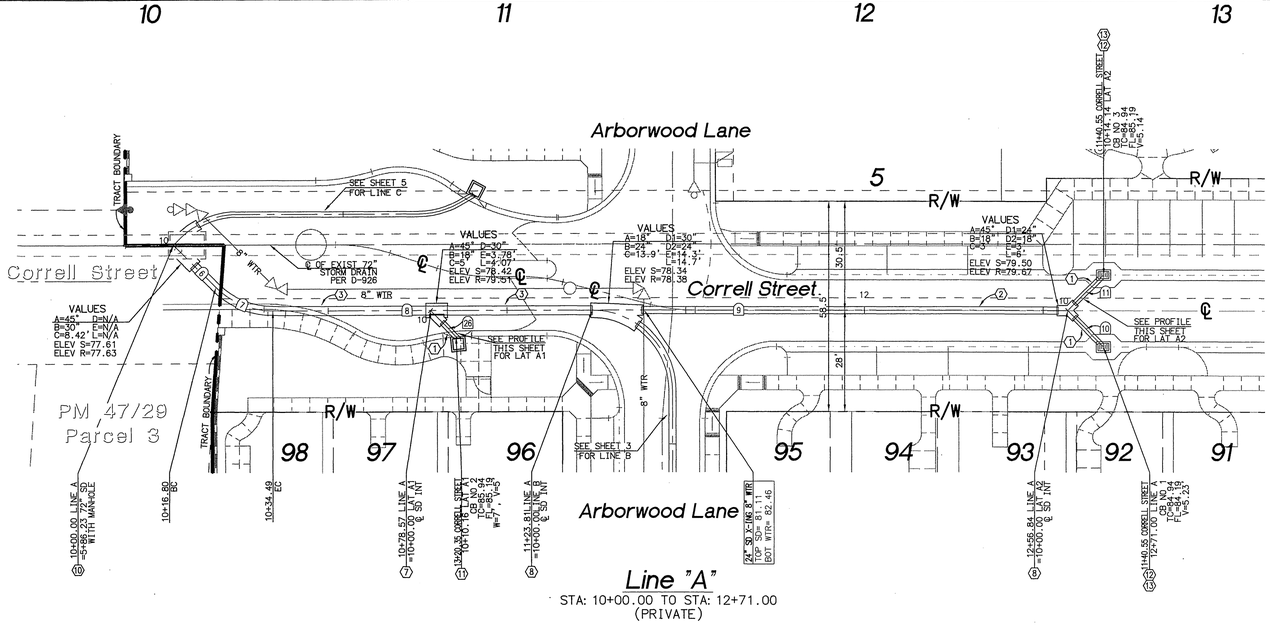
Storm Drain Improvement Plan
Tract 31755
Title Sheet

ACCOUNT NO. PW04-0787
D-785
SHEET 1 OF 5 SHEETS
HORIZ. SCALE: AS NOTED VERT. SCALE: AS NOTED FILE NO.

STORM DRAIN IMPROVEMENT PLANS

INDEXED 12-10-05 LH





NORTH ARROW

SCALE 0 20 40

STORM DRAIN DATA				
⌂	DELTA/BRG	RADIUS	LENGTH	TANGENT
6	N44°58'08"W	--	16.80'	N/A
7	Δ= 45°01'52"	22.50'	17.68'	9.33'
8	N90°00'00"W	--	89.32'	N/A
9	N90°00'00"W	--	133.04'	N/A
10	N45°00'00"W	--	14.16'	N/A
11	N45°03'41"E	--	14.14'	N/A
26	N44°58'08"W	--	10.81'	N/A

Storm Drain Notes

⌂	DESCRIPTION
1	INSTALL 18" RCP OR CIPP ALT
2	INSTALL 24" RCP OR CIPP ALT
3	INSTALL 30" RCP OR CIPP ALT
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13	USE ⑫ IN CONJUNCTION WITH GRATE D77B TYPE 24-12X
	SEE SHEET 1 FOR DETAILS ⑫ AND ⑬
14	CONSTRUCT CONC CAP PER CITY STD 452

CITY TAX CERT. # 119064 EXP. 1/24/06

UNDERGROUND SERVICE ALERT
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PUBLIC UTILITIES WATER DIVISION
APPROVED BY DATE

BENCHMARK
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ELEVATION=784.689

REGISTERED PROFESSIONAL ENGINEER HUGH E. NUNEZ NO. C55955 Exp. 12/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
R.C.E. C55955 EXP 12/31/06
DATE 11/18/05

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41593 WINCHESTER RD SUITE 120 TEMECULA CA 92590
951.296.1292 951.296.1164 FAX

MARK	REVISIONS	APPR.	DATE

DESIGNED BY REN DRAWN BY RLV CHECKED BY REN

City of Riverside, California
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	DH	11/22/05

APPROVED BY:
CITY ENGINEER
DATE 11/18/05

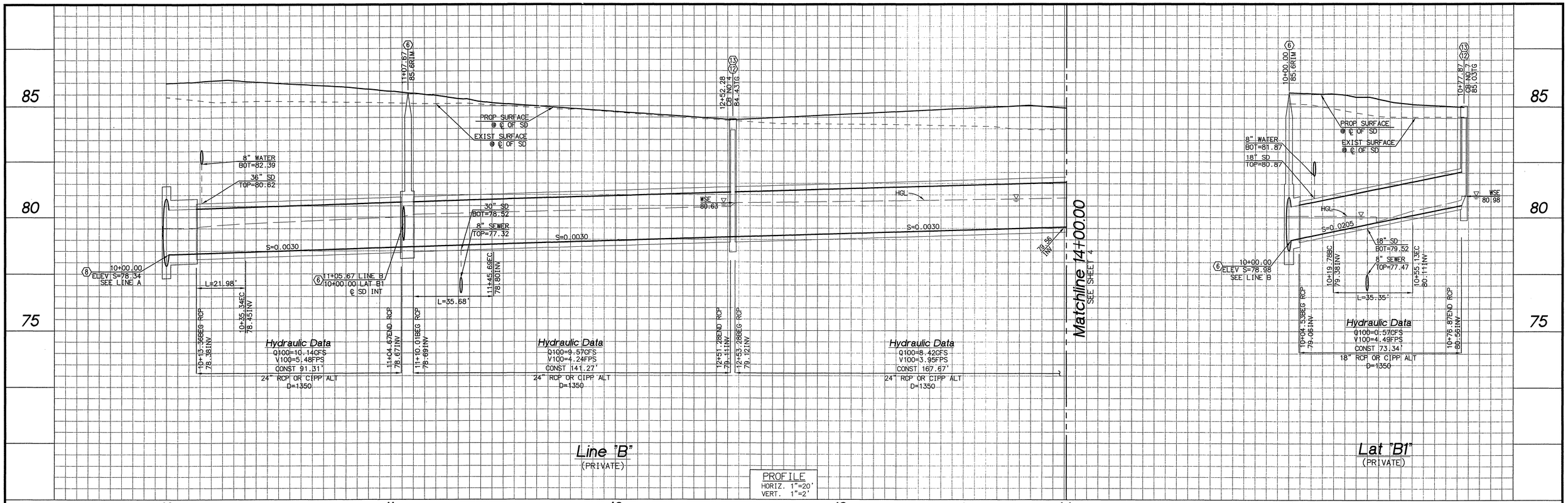
Storm Drain Improvement Plan
Tract 31755
Line "A"
STA: 10+00.00 TO STA: 12+71.00
HORIZ. SCALE: AS NOTED VERT. SCALE: AS NOTED

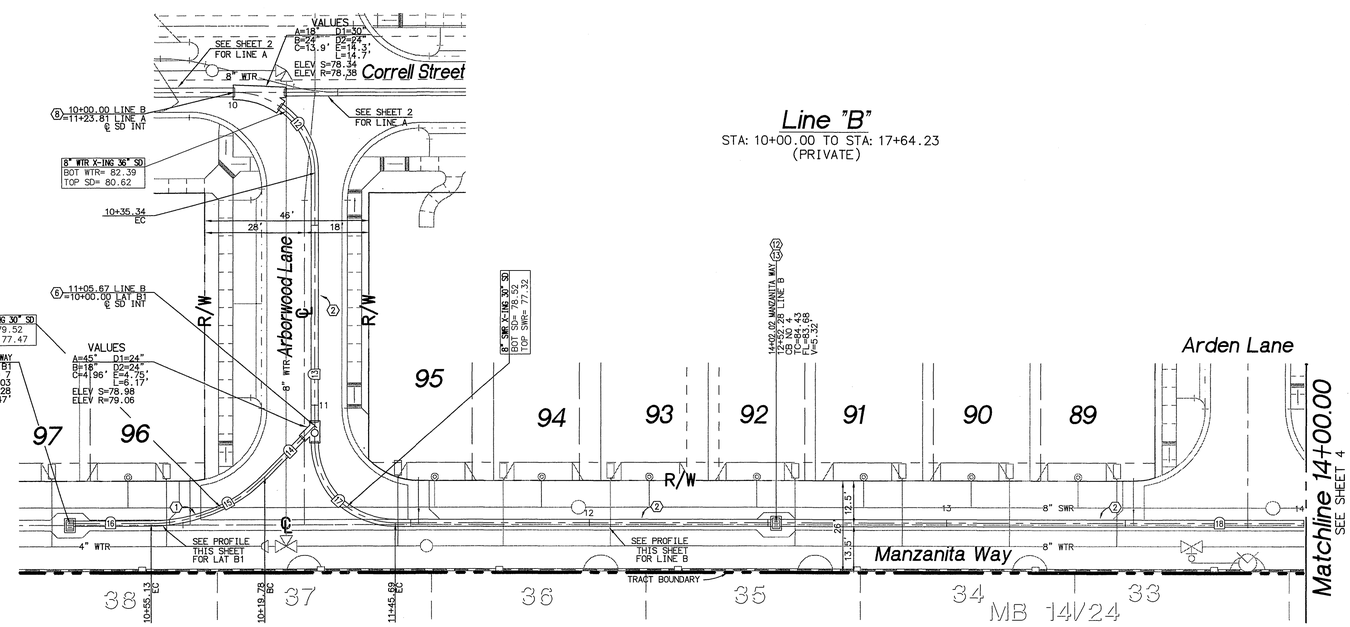
ACCOUNT NO. PW04-0787
D-785
SHEET 2 OF 5 SHEETS
FILE NO.

STORM DRAIN IMPROVEMENT PLANS

842

INDEXED 12-10-05 FH





NORTH ARROW

SCALE
0 20 40

CITY TAX CERT. # 119064 EXP. 1/24/06

STORM DRAIN DATA				
⬡	DELTA/BRG	RADIUS	LENGTH	TANGENT
12	Δ= 90°00'00"	22.50'	21.98'	22.50'
13	N89°57'42"W	--	75.00'	N/A
14	N44°57'42"W	--	19.78'	N/A
15	Δ= 45°00'00"	45.00'	35.34'	18.64'
16	N00°02'18"E	--	22.74'	N/A
17	Δ= 90°00'00"	22.50'	35.68'	22.50'
19	Δ= 90°24'34"	45.00'	71.01'	45.32'
18	N90°00'00"E	--	461.29'	N/A
20	N90°00'00"E	--	50.66'	N/A
21	Δ= 19°51'11"	45.00'	15.59'	7.88'
22	N70°08'49"E	--	20.00'	N/A

Storm Drain Notes

⬡	DESCRIPTION
1	INSTALL 18" RCP OR CIPP ALT
2	INSTALL 24" RCP OR CIPP ALT
3	INSTALL 30" RCP OR CIPP ALT
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UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

PUBLIC UTILITIES WATER DIVISION
APPROVED BY DATE

BENCHMARK
P.K. NAIL AND CITY ENGINEER TAG IN THE SOUTHEASTERLY CORNER OF A CATCH BASIN IN THE NORTHERLY CURB OF JURUPA AVENUE, 37 FEET WESTERLY OF STEARNS STREET. DESIGNATED H5-H3
ELEVATION=784.689

REGISTERED PROFESSIONAL ENGINEER RUDY E. NUNEZ NO. C55955 Exp. 12/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
R.C.E. C55955 EXP 12/31/06
DATE 11/18/05

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951.296.1292 951.296.1164 FAX

MARK	REVISIONS	APPR.	DATE

DESIGNED BY REN DRAWN BY RLV CHECKED BY REN

City of Riverside, California
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		11/18/05

APPROVED BY:
CITY ENGINEER
DATE 11/18/05

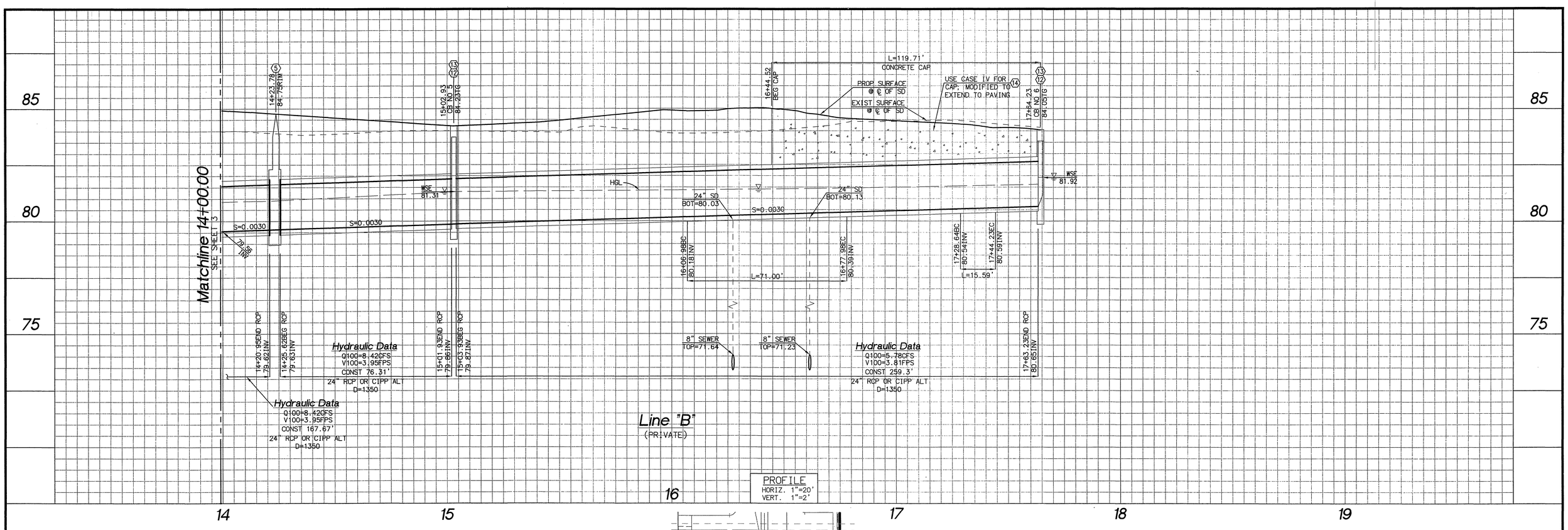
Storm Drain Improvement Plan
Tract 31755
Line "B"
STA: 10+00.00 TO STA: 17+64.23
HORIZ. SCALE: AS NOTED VERT. SCALE: AS NOTED

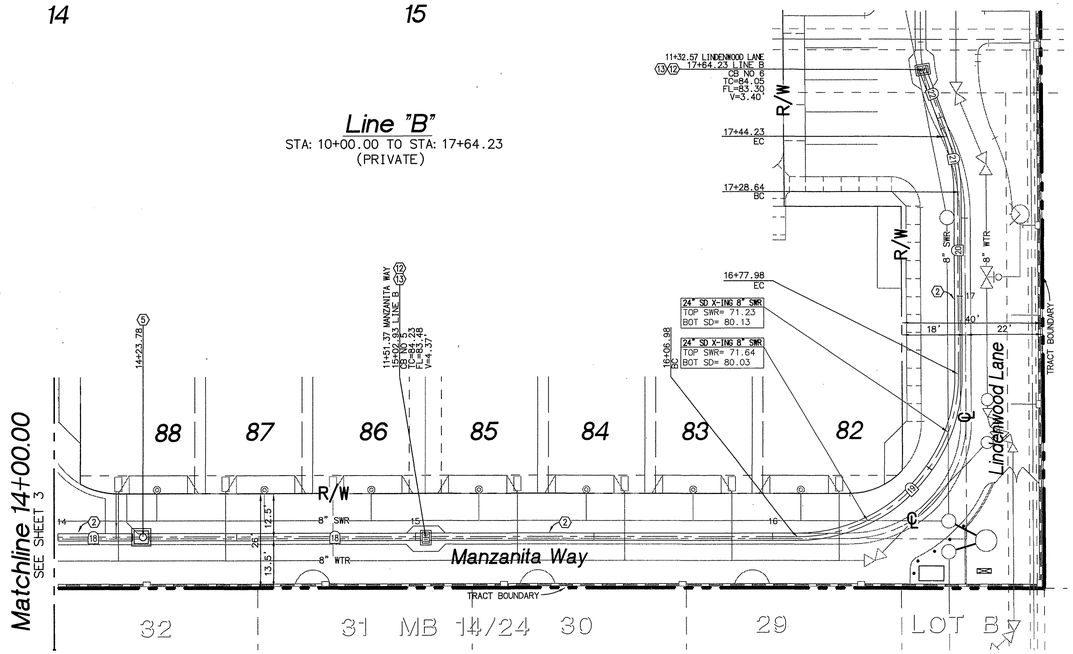
ACCOUNT NO. PW04-0787
D-785
SHEET 3 OF 5 SHEETS
FILE NO.

STORM DRAIN IMPROVEMENT PLANS

BZ

INDEXED 12-10-05 LH





NORTH ARROW

SCALE
0 20 40

CITY TAX CERT. # 119064 EXP. 1/24/06

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ELEVATION=784.689

REGISTERED PROFESSIONAL ENGINEER AUDY E. NUNEZ NO. C55955 Exp. 12/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
R.C.E. C55955 EXP 12/31/06
DATE 11/15/05

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951.296.1292 951.296.1164 FAX

MARK	REVISIONS	APPR.	DATE

DESIGNED BY REN DRAWN BY RLV CHECKED BY REN

City of Riverside, California
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		11/16/05

APPROVED BY:
CITY ENGINEER
DATE 11/18/05

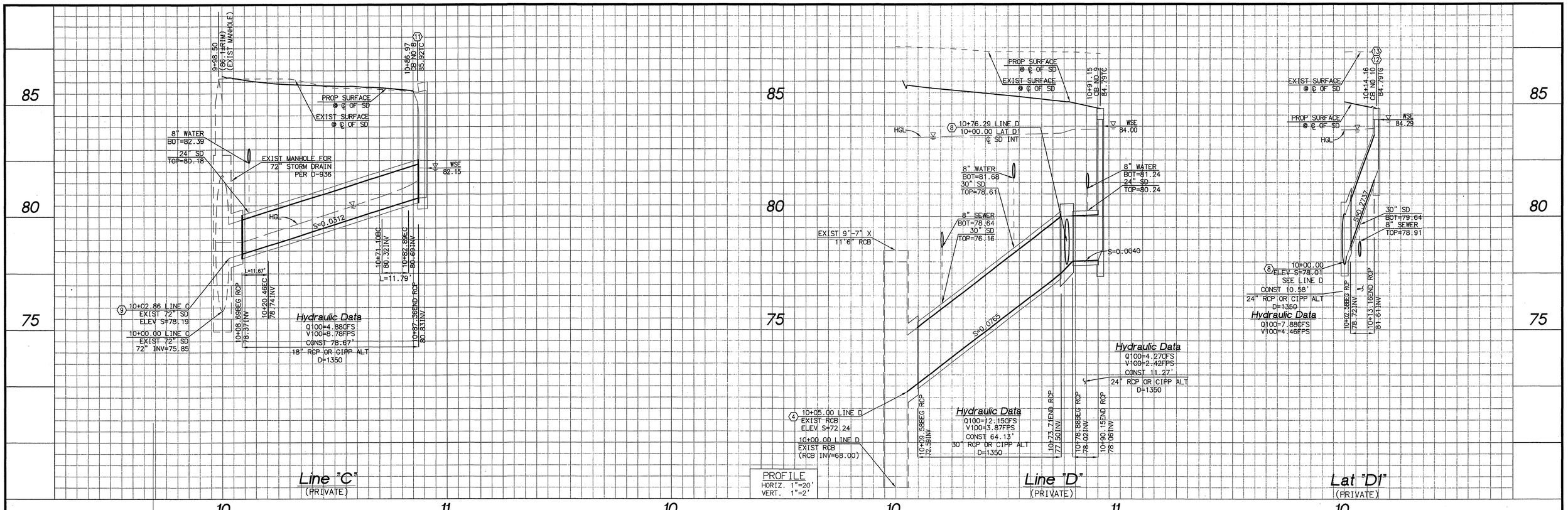
Storm Drain Improvement Plan
Tract 31755
Line "B"
STA: 10+00.00 TO STA: 17+64.23
HORIZ. SCALE: AS NOTED VERT. SCALE: AS NOTED

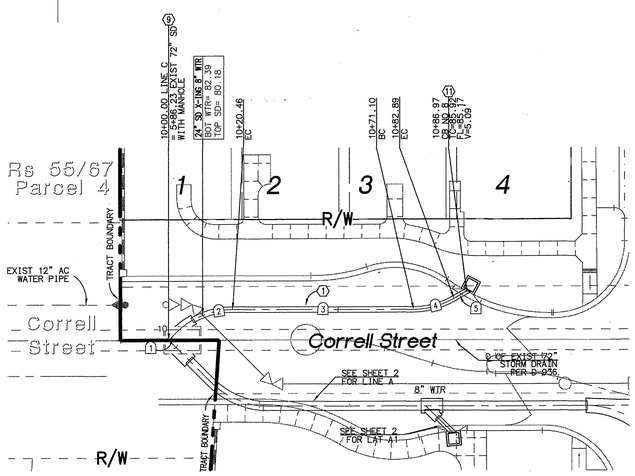
ACCOUNT NO. PW04-0787
D-785
SHEET 4 OF 5 SHEETS
FILE NO.

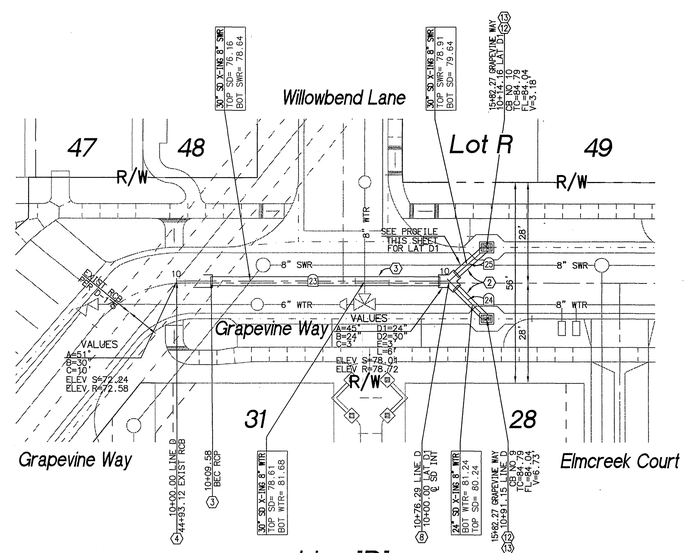
STORM DRAIN IMPROVEMENT PLANS

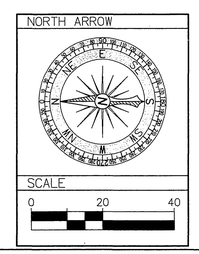
812

INDEXED 12-10-05 LH









STORM DRAIN DATA				
⬡	DELTA/BRG	RADIUS	LENGTH	TANGENT
1	N45°01'52"E	---	2.79'	N/A
2	Δ= 45°00'00"	22.50'	17.67'	9.32'
3	N89°58'14"W	---	50.64'	N/A
4	Δ= 30°01'52"	22.50'	11.79'	6.04'
5	N60°00'00"E	---	4.66'	N/A
23	N90°00'00"E	---	76.29'	N/A
24	N45°00'00"W	---	14.86'	N/A
25	N47°53'59"E	---	14.16'	N/A

Storm Drain Notes

⬡	DESCRIPTION
1	INSTALL 18" RCP OR CIPP ALT
2	INSTALL 24" RCP OR CIPP ALT
3	INSTALL 30" RCP OR CIPP ALT
4	CONST. JUNCTION STRUCTURE 1 PER RCFC & WCD STD JS226
5	CONSTRUCT MANHOLE EZ PER CITY STD 431
6	CONSTRUCT MANHOLE JM PER CITY STD 432
7	CONSTRUCT JUNCTION STRUCTURE B PER CITY STD 421
8	CONSTRUCT JUNCTION STRUCTURE C PER CITY STD 422
9	CONSTRUCT JUNCTION STRUCTURE 4 PER CITY STD 423 CASE I
10	CONSTRUCT JUNCTION STRUCTURE B PER CITY STD 421
	AS MODIFIED ON SHEET 1
11	CONSTRUCT CATCH BASIN PER CITY STD 405
12	CONSTRUCT CATCH BASIN PER CALTRANS STD D73 TYPE G1
13	USE ⑫ IN CONJUNCTION WITH GRATE D77B TYPE 24-12X
	SEE SHEET 1 FOR DETAILS ⑫ AND ⑬
14	CONSTRUCT CONC CAP PER CITY STD 452

CITY TAX CERT. # 119064 EXP. 1/24/06

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

PUBLIC UTILITIES WATER DIVISION
APPROVED BY ____ DATE ____

BENCHMARK
P.K. NAIL AND CITY ENGINEER TAG IN THE SOUTHEASTERLY CORNER OF A CATCH BASIN IN THE NORTHERLY CURB OF JURUPA AVENUE, 37 FEET WESTERLY OF STEARNS STREET. DESIGNATED H5-H3
ELEVATION=784.689

REGISTERED PROFESSIONAL ENGINEER RUDY E. NUNEZ NO. C55955 Exp. 12/31/06 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
R.C.E. C55955 EXP 12/31/06
DATE 11/15/05

RENCivil™
ENGINEERING · SURVEYING · LAND PLANNING
41593 WINCHESTER RD SUITE 120 TEMECULA CA 92590
951.296.1292 951.296.1164 FAX

MARK	REVISIONS	APPR.	DATE

DESIGNED BY REN DRAWN BY RLV CHECKED BY REN

City of Riverside, California
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		

APPROVED BY:
CITY ENGINEER
DATE 11/15/05

Storm Drain Improvement Plan
Tract 31755
Line "C"
STA: 10+00.00 TO STA: 10+87.36
Line "D"
STA: 10+00.00 TO STA: 10+91.15

ACCOUNT NO. PW04-0787
D-785
SHEET 5 OF 5 SHEETS
HORIZ. SCALE: AS NOTED VERT. SCALE: AS NOTED
FILE NO.

2/2

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STORM DRAIN IMPROVEMENT PLANS