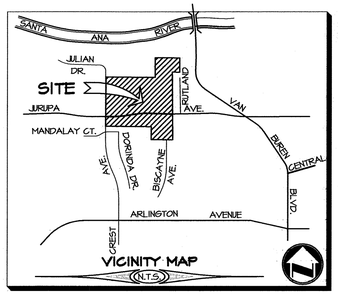
STORM DRAIN PLAN:

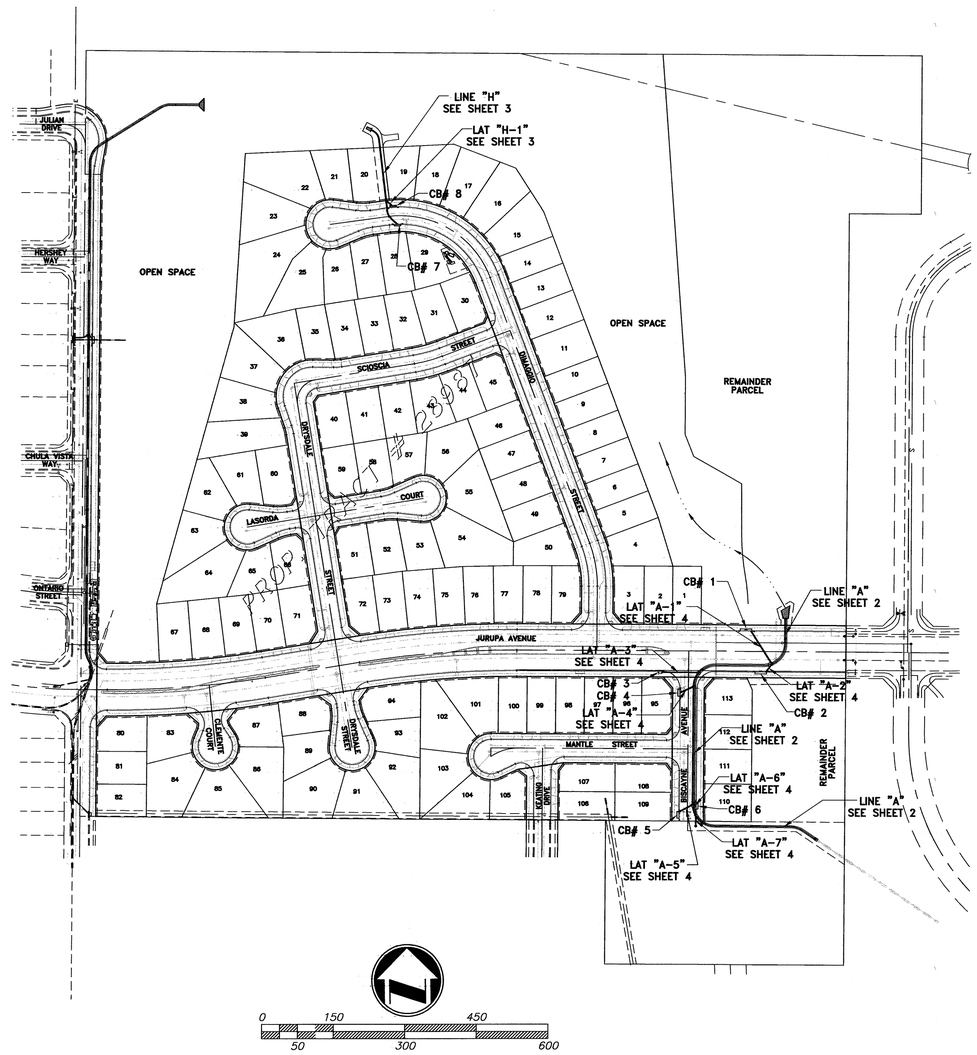
TRACT No. 28987

RIVERSIDE, CA.



STORM DRAIN GENERAL NOTES

1. NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHT-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.
2. 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.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
4. 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.
5. QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.
6. THE DEVELOPER SHALL BE RESPONSIBLE FOR PRESERVING OR REESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
7. ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
8. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE # 1-800-227-2500, 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 U.S.A.
9. 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 CONDITIONED WITH WATER OBTAINED FROM FIRE HYDRANTS IN THE IMMEDIATE AREA.
10. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR PERFORMING A VIDEO INSPECTION OF ALL NEW SEWER ANS STORM DRAIN FACILITIES TO BE PUBLICLY OWNED AND MAINTAINED PRIOR TO FINAL ACCEPTANCE OF THE WORK. THE VIDEO INSPECTION MUST BE PERFORMED IN THE PRESENCE OF THE PUBLIC WORKS INSPECTOR. A RECORDING OF THE VIDEO INSPECTION MUST BE SUBMITTED TO THE CITY FOR REVIEW AND ACCEPTANCE.



0 150 450
50 300 600
SCALE: 1" = 150'

LEGEND

CB	CATCH BASIN
C&G	CURB AND GUTTER
C.L.	CENTERLINE
D/W	DRIVEWAY
FL	FLOW LINE
INV.	INVERT OF PIPE
MH	MAN HOLE
SD	STORM DRAIN
TC	TOP OF CURB
TW	TOP OF WALL

SHEET INDEX

SHEET 1: TITLE SHEET
SHEET 2: LINE "A" PLAN AND PROFILE
SHEET 3: LINE "H" & LAT "H-1" PLAN AND PROFILE
SHEET 4: LATERAL "A-1" THROUGH "A-7" PLAN AND PROFILE
SHEET 5: SECTIONS AND DETAILS

CONSTRUCTION NOTES AND QUANTITY ESTIMATE

THE QUANTITIES SHOWN BELOW ARE FOR BONDING INFORMATION ONLY. THE CONTRACTOR IS TO CONSTRUCT PROJECT PER THESE PLANS AND SUBMIT CONSTRUCTION BID BASED ON THEIR OWN QUANTITY "TAKE-OFF".

1	INSTALL 18" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.	120	LF
2	INSTALL 24" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.	369	LF
3	INSTALL 42" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.	260	LF
4	NOT USED		N/A
5	INSTALL 60" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.	923	LF
6	CONSTRUCT MANHOLE JM PER CITY STD. DWG. NO. 432.	1	EA
7	CONSTRUCT MANHOLE AX PER CITY STD. DWG. NO. 430.	4	EA
8	CONSTRUCT CONCRETE COLLAR PER CITY STD. DWG. NO. 424.	2	EA
9	CONSTRUCT JUNCTION STRUCTURE B PER CITY STD. DWG. NO. 422.	1	EA
10	CONSTRUCT 7' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.	1	EA
11	CONSTRUCT 14' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.	1	EA
12	CONSTRUCT 24' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.	3	EA
13	CONSTRUCT GRATING CATCH BASIN PER A.P.W.A. STD. DWG. NO. 304-2 (2'X4').	2	EA
14	CONSTRUCT HEADWALL AND TRASH RACK PER DETAIL ON SHEET 5.	6	EA
15	CONSTRUCT C.S.P. INLET PER CITY STD. DWG. NO. 412.	1	EA
16	CONSTRUCT RIP-RAP PER DETAIL ON SHEET 5.	350	SF

CITY OF RIVERSIDE BUSINESS TAX ACCT.#058833 EXP. 1/1/15

RIVERSIDE PUBLIC UTILITIES— WATER
MW MWell 12/30/14
REVIEWED FOR CONFLICTS BY: DATE:

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER MITCHELL JAY ADKISON NO. 75731 EXP. 6-30-16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-9270 Fax:(951) 688-0599
Under the Supervision of: Mitchell Adkison, R.C.E. 75731 Exp. 06.30.16 Date: 12-30-14

BENCHMARK: H3-D3
CITY OF RIVERSIDE
BENCH MARK TRANSFER:
SET CHISLED "X" IN THE TOP OF EASTERLY BASE BOLT OF AN 18" DIAMETER TRAFFIC SIGNAL POLE AT THE NORTHEASTERLY CURB RETURN OF JURUPA AVENUE AND VAN BUREN BOULEVARD.
H3-D3-TRANSFER.
DATUM: 1929
ELEVATION: 726.212

MARK	REVISIONS	APPR.	DATE
2	REV. LINE H PER SWR FORCED MAIN REALIGN		2/28/17
1	REVISED STORM DRAIN LAT A-1 & A2 SHT 4		06/01/15

DESIGNED BY: Rick DRAWN BY: Rick CHECKED BY: Mitch

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

	DATE	BY
ENGINEERING MANAGER	1/8/15	FM
CAPITAL PROJECTS		

APPROVED BY
CITY ENGINEER / P.W. DIRECTOR
DATE 1/14/2015

STORM DRAIN PLAN
TRACT 28987
COVER SHEET

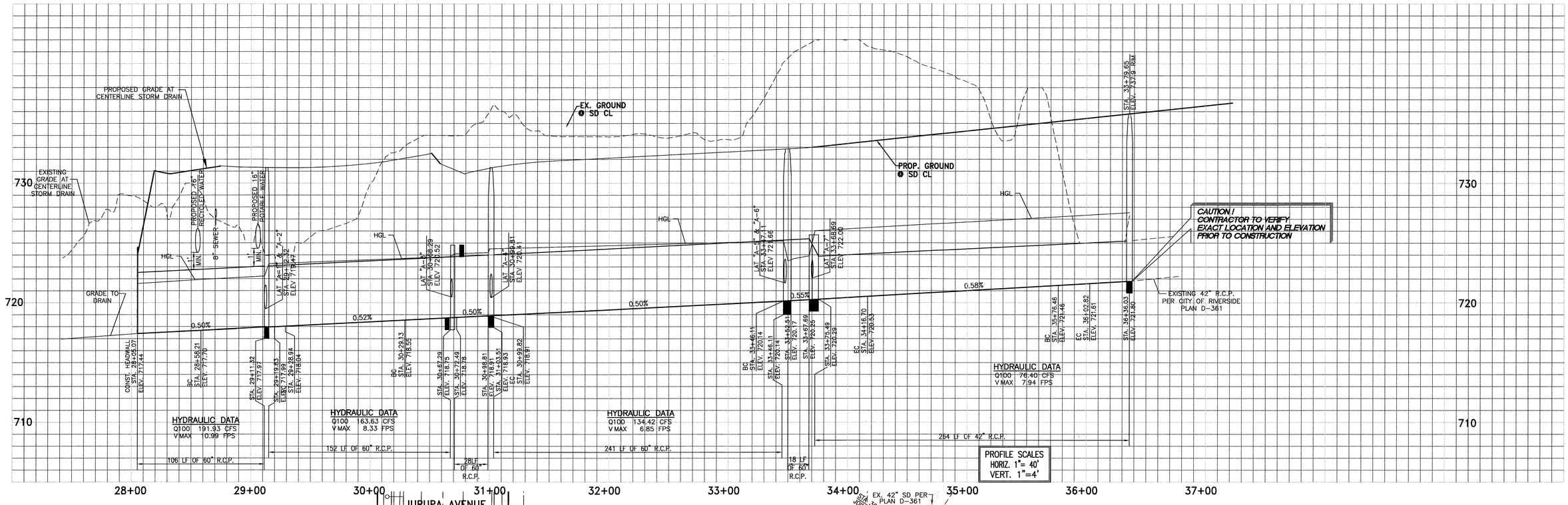
PW13-0599
ACCOUNT NO.
D-813
SHEET 1 OF 5

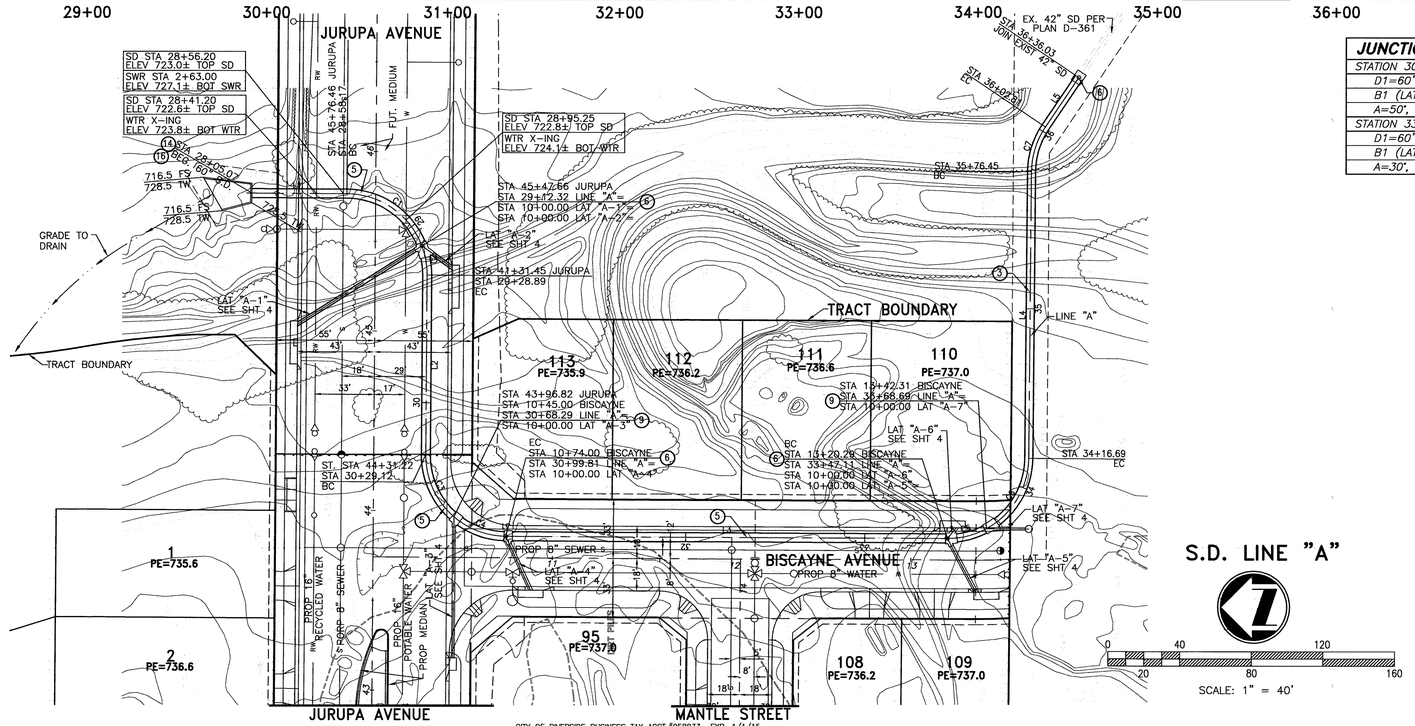
HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN
J.N. 8489

FILE NAME: U:\Projects\Cox-FRA\Storm Drain\8489 SD 01.dwg

INDEXED 9-15-16

PLOT DATE 12/30/14





JUNCTION STRUCTURE VALUES

STATION 30+68.69, LINE "A"
D1=60", D2=60"
B1 (LAT. "A-3") =18"
A=50', C=5.6',E=4.2', L=5.2'
STATION 33+68.69, LINE "A"
D1=60", D2=42"
B1 (LAT. "A-7") =18"
A=30', C=7.6',E=6.3', L=7.8'

STORM DRAIN CONSTRUCTION NOTES

1. INSTALL 18" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
2. INSTALL 24" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
3. INSTALL 42" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
4. NOT USED
5. INSTALL 60" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
6. CONSTRUCT MANHOLE JM PER CITY STD. DWG. NO. 432.
7. CONSTRUCT MANHOLE AX PER CITY STD. DWG. NO. 430.
8. CONSTRUCT CONCRETE COLLAR PER CITY STD. DWG. NO. 424.
9. CONSTRUCT JUNCTION STRUCTURE B PER CITY STD. DWG. NO. 422.
10. CONSTRUCT 7' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.
11. CONSTRUCT 14' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.
12. CONSTRUCT 24' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.
13. CONSTRUCT GRATING CATCH BASIN PER A.P.W.A. STD. DWG. NO. 304-2 (2'x4').
14. CONSTRUCT HEADWALL AND TRASH RACK PER DETAIL ON SHEET 5.
15. CONSTRUCT C.S.P. INLET PER CITY STD. DWG. NO. 412.
16. CONSTRUCT RIP-RAP PER DETAIL ON SHEET 5.

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	56.02'	N00°17'59"E
L2	100.23'	N89°39'26"W
L3	246.29'	N00°20'34"E
L4	159.76'	N89°32'03"W
L5	33.23'	N55°58'29"W

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TAN
C1	54.15'	45.00'	68°55'55"	30.89'
C2	16.57'	45.00'	21°08'53"	8.38'
C3	39.17'	45.00'	49°52'37"	20.92'
C4	31.51'	45.00'	40°07'24"	16.43'
C5	22.60'	45.00'	28°46'17"	11.54'
C6	47.99'	45.00'	61°06'19"	26.56'
C7	26.36'	45.00'	33°33'34"	13.57'

RIVERSIDE PUBLIC UTILITIES— WATER

MW McLeod 12/30/14

REVIEWED FOR CONFLICTS BY: DATE:

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER MITCHELL JAY ADKISON NO. 75731 EXP. 6-30-16 CIVIL STATE OF CALIFORNIA

CITY OF RIVERSIDE BUSINESS TAX ACCT.#058833 EXP. 1/1/15

PLANS PREPARED BY: adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 Fax:(951) 688-0599

Under the Supervision of: Mitchell Adkison, R.C.E. 75731 Exp. 06.30.16 Date: 12-30-14

BENCHMARK: H3-D3
CITY OF RIVERSIDE
BENCH MARK TRANSFER:
SET CHISLED "X" IN THE TOP OF EASTERLY BASE BOLT OF AN 18" DIAMETER TRAFFIC SIGNAL POLE AT THE NORTHEASTERLY CURB RETURN OF JURUPA AVENUE AND VAN BUREN BOULEVARD.
H3-D3-TRANSFER.
DATUM: 1929
ELEVATION: 726.212

MARK	REVISIONS	APPR.	DATE

DESIGNED BY: Rick DRAWN BY: Rick CHECKED BY: Mitch

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
ENGINEERING MANAGER	1/8/15	FM
CAPITAL PROJECTS		

APPROVED BY: CITY ENGINEER / P.W. DIRECTOR
DATE 1/14/2015

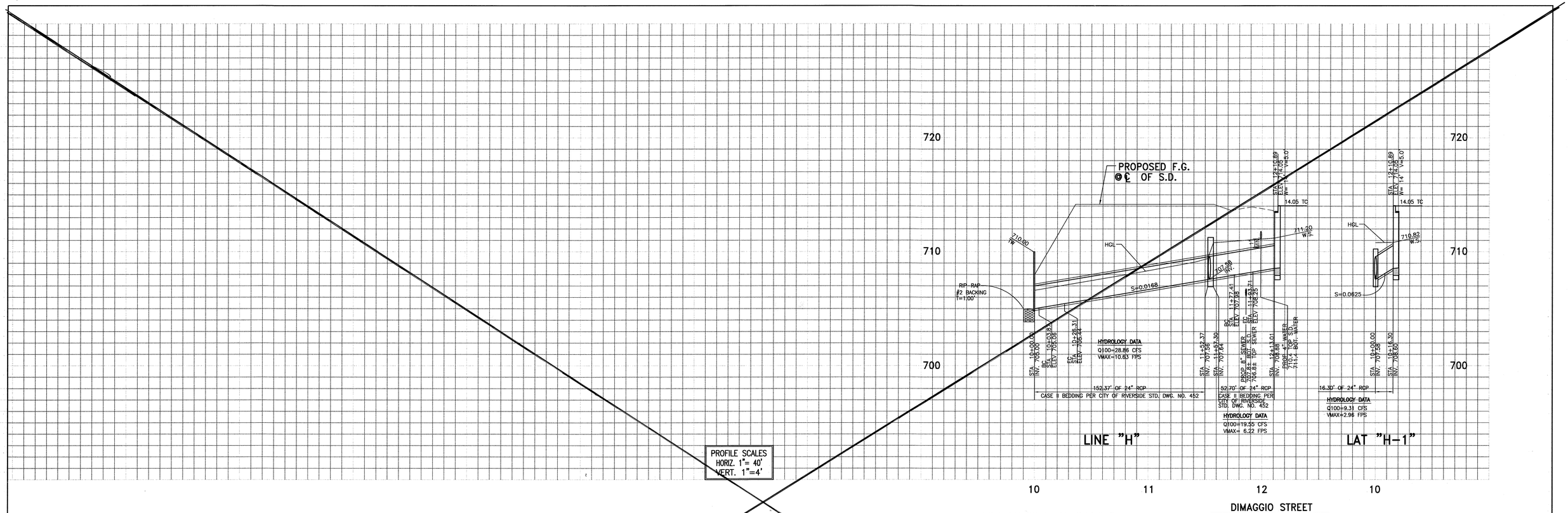
STORM DRAIN PLAN
TRACT 28987
STORM DRAIN LINE "A"

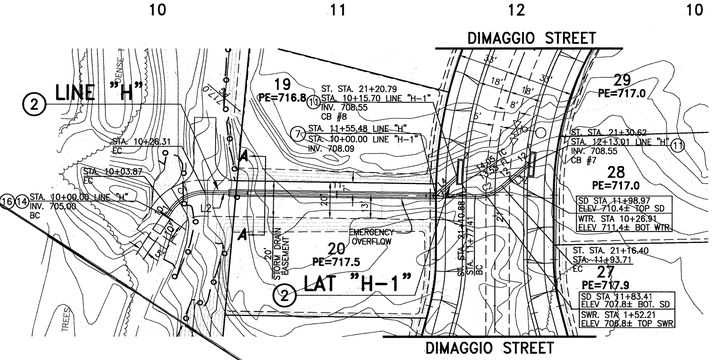
HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

PW13-0599
ACCOUNT NO.
D-813
SHEET 2 OF 5
J.N. 8489

PLOT DATE: 12/30/2014

FILE NAME: U:\Projects\Cox-FRA\Storm Drain\8489 SD 02.dwg





SEE SHEET 3A

STORM DRAIN CONSTRUCTION NOTES

1. INSTALL 18" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
2. INSTALL 24" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
3. INSTALL 42" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
4. NOT USED
5. INSTALL 60" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
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13. CONSTRUCT GRATING CATCH BASIN PER A.P.W.A. STD. DWG. NO. 304-2 (2'X4').
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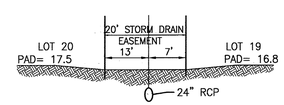
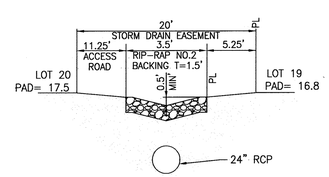
15. CONSTRUCT C.S.P. INLET PER CITY STD. DWG. NO. 412.
16. CONSTRUCT RIP-RAP PER DETAIL ON SHEET 5.



SECTION A-A

STORM DRAIN EASEMENT
N.T.S.

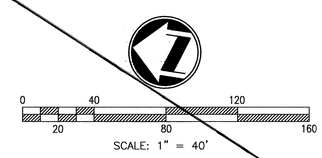


EMERGENCY OVERFLOW

N.T.S.

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	3.87'	N63°56'56"W
L2	151.10'	N06°48'51"W
L3	19.30'	N48°19'30"W
L4	15.70'	S49°59'05"E

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TAN
C1	22.44'	22.50'	057°08'06"	12.25'
C2	16.30'	22.50'	041°30'40"	8.53'



JUNCTION STRUCTURE VALUES
STATION 11+55.48, LINE H
D1=24", D2=24"
B1 (LAT. "H-1") =24"
A=4.3', C=4.0',E=4.0', L=5.5'

CITY OF RIVERSIDE BUSINESS TAX ACCT.#058833 EXP. 1/1/15

RIVERSIDE PUBLIC UTILITIES– WATER

MW McLeod 12/30/14

REVIEWED FOR CONFLICTS BY: DATE:

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER MITCHELL JAY ADKISON NO. 75731 EXP. 6-30-16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 Fax:(951) 688-0599
Under the Supervision of: Mitchell Adkison, R.C.E. 75731 Exp. 06.30.16 Date: 12-30-14

BENCHMARK: H3-03
CITY OF RIVERSIDE
BENCH MARK TRANSFER:
SET CHISLED "X" IN THE TOP OF EASTERLY BASE BOLT OF AN 18" DIAMETER TRAFFIC SIGNAL POLE AT THE NORTHEASTERLY CURB RETURN OF JURUPA AVENUE AND VAN BUREN BOULEVARD.
H3-03-TRANSFER. DATUM: 1929
ELEVATION: 726.212

MARK	REVISIONS	APPR.	DATE
2	REV LINE H FOR SWR FORCED MAIN RELOC.		

DESIGNED BY: Rick DRAWN BY: Rick CHECKED BY: Mitch

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
ENGINEERING MANAGER	4/8/15	RMA
CAPITAL PROJECTS		

APPROVED BY: CITY ENGINEER / P.W. DIRECTOR
DATE 1/4/2015

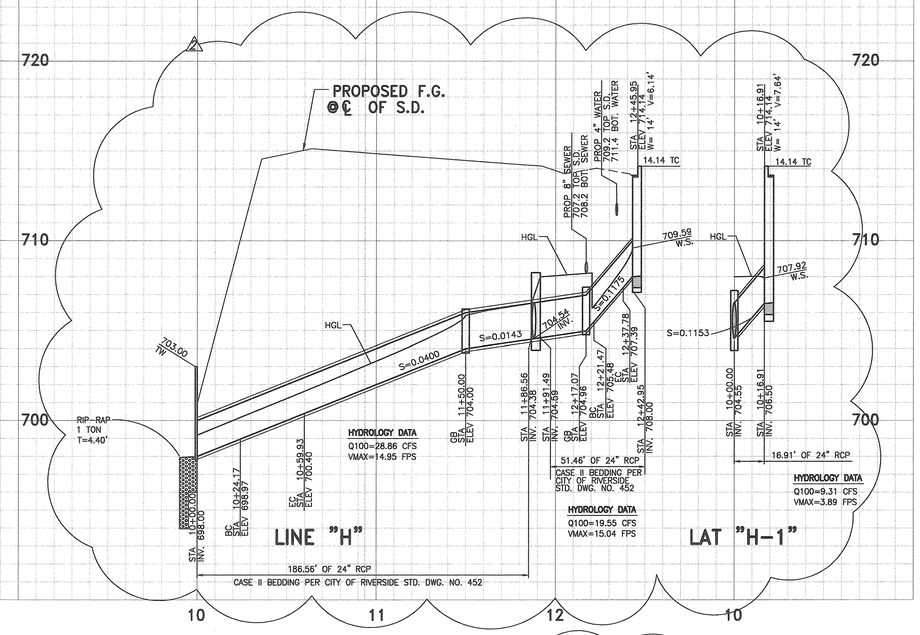
STORM DRAIN PLAN
TRACT 28987
JURUPA AVENUE
STA 42+00 TO STA 44+31.22
STORM DRAIN LINE "H", LATERAL "H-1"

HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

PW13-0599
ACCOUNT NO.
D-813
SHEET 3 OF 5
J.N. 8489

FILE NAME: U:\Projects\Cox-FRA\Storm Drain\8489 SD 03.dwg

PLOT DATE: 12/30/2014



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

STORM DRAIN CONSTRUCTION NOTES

1. INSTALL 18" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
2. INSTALL 24" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
3. INSTALL 42" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
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5. INSTALL 60" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
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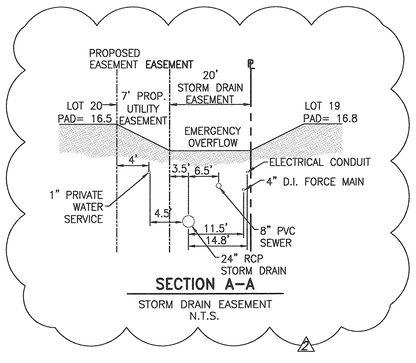
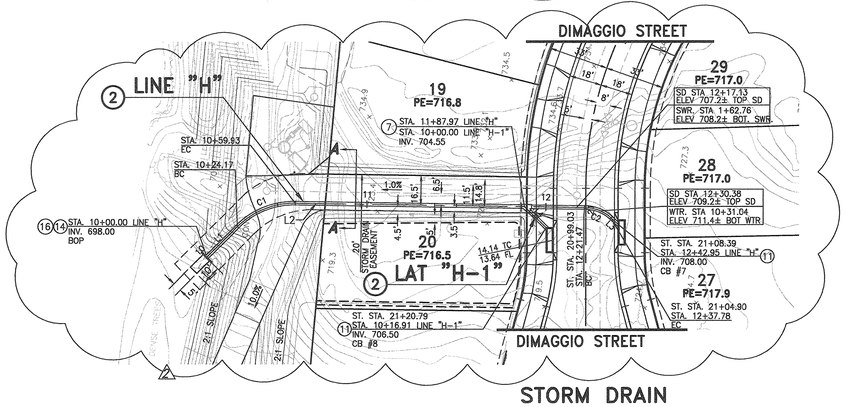
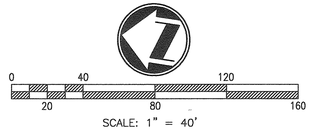




STORM DRAIN
LINE "H" & LAT. "H-1"



SCALE: 1" = 40'

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	24.17'	N52°21'12"W
L2	161.47'	N06°48'52"W
L3	5.18'	N34°41'49"E
L4	16.91'	N36°21'24"E

CURVE TABLE				
CURVE	LENGHT	RADIUS	DELTA	TAN
C1	35.76'	45.00'	045°37'27"	18.93'
C2	16.30'	22.50'	041°30'40"	8.53'

JUNCTION STRUCTURE VALUES
STATION 11+55.48, LINE H
D1=24", D2=24"
B1 (LAT. "H-1") =24"
A=4.3', C=4.0',E=4.0', L=5.5'

CITY OF RIVERSIDE BUSINESS TAX ACCT.#058833 EXP. 1/31/17

RIVERSIDE PUBLIC UTILITIES- WATER

REVIEWED FOR CONFLICTS BY: DATE: 2/10/2017

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER MITCHELL JAY ADKISON NO. 75731 EXP. 6-30-18 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, Ca. 92504
Tel:(951) 688-0241 Fax:(951) 688-0599
Under the Supervision of: Mitchell Adkison, R.C.E. 75731 Exp. 06.30.18 Date: 1-10-17

BENCHMARK: H3-03
CITY OF RIVERSIDE
BENCH MARK TRANSFER:
SET CHISLED "X" IN THE TOP OF EASTERLY BASE BOLT OF AN 18" DIAMETER TRAFFIC SIGNAL POLE AT THE NORTHEASTERLY CURB RETURN OF JURUPA AVENUE AND VAN BUREN BOULEVARD.
H3-03-TRANSFER.
DATUM: 1929
ELEVATION: 726.212

MARK	REVISIONS	APPR.	DATE
7	REVISED LINE H PER FORCE MAIN SWR REVISIONS	D.A.	9/13/17

DESIGNED BY: Rick DRAWN BY: Rick CHECKED BY: Mitch

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
ENGINEERING MANAGER		
CAPITAL PROJECTS		

APPROVED BY
CITY ENGINEER / P.W. DIRECTOR
DATE Oct. 3/2017

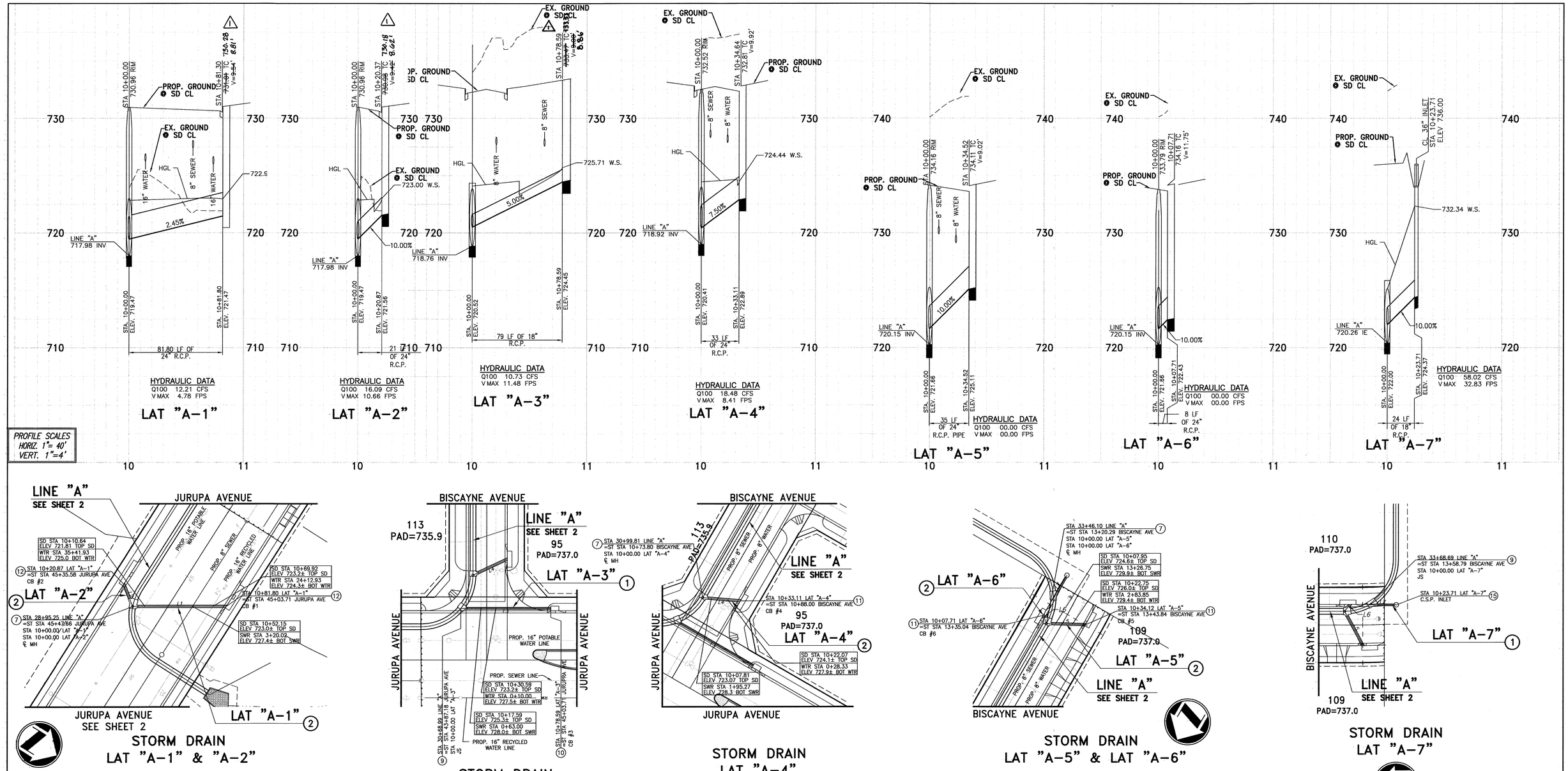
STORM DRAIN PLAN
TRACT 28987
JURUPA AVENUE
STA 42+00 TO STA 44+31.22
STORM DRAIN LINE "H", LATERAL "H-1"

HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

PW13-0599
ACCOUNT NO.
D-813
SHEET 3A OF 5
J.N. 8489

PLOT DATE: 1/11/2017

FILE NAME: U:\Projects\Cox-FRA\Storm Drain\8489 SD 03.dwg



STORM DRAIN CONSTRUCTION NOTES

1. INSTALL 18" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
2. INSTALL 24" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
3. INSTALL 42" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
4. NOT USED
5. INSTALL 60" R.C.P., CLASS IV, D-2000, CASE II BEDDING PER CITY STD. DWG. NO. 452.
6. CONSTRUCT MANHOLE JM PER CITY STD. DWG. NO. 432.
7. CONSTRUCT MANHOLE AX PER CITY STD. DWG. NO. 430.
8. CONSTRUCT CONCRETE COLLAR PER CITY STD. DWG. NO. 424.
9. CONSTRUCT JUNCTION STRUCTURE B PER CITY STD. DWG. NO. 422.
10. CONSTRUCT 7' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.
11. CONSTRUCT 14' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.
12. CONSTRUCT 24' WIDE CATCH BASIN PER CITY STD. DWG. NO. 405.
13. CONSTRUCT GRATING CATCH BASIN PER A.P.W.A. STD. DWG. NO. 304-2 (2'X4').
14. CONSTRUCT HEADWALL AND TRASH RACK PER DETAIL ON SHEET 5.
15. CONSTRUCT C.S.P. INLET PER CITY STD. DWG. NO. 412.
16. CONSTRUCT RIP-RAP PER DETAIL ON SHEET 5.

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	81.80'	N32°09'26"W
L2	20.87'	N35°43'04"E
L3	78.59'	N89°39'26"W
L4	33.11'	N65°19'31"E
L5	34.12'	N61°52'46"E
L6	7.71'	N50°43'54"W
L7	23.71'	N00°27'57"E

JUNCTION STRUCTURE VALUES
STATION 30+68.69, LINE "A"
D1=60", D2=60"
B1 (LAT. "A-3") =18"
A=50', C=5.6',E=4.2', L=5.2'
STATION 33+68.69, LINE "A"
D1=60", D2=42"
B1 (LAT. "A-7") =18"
A=30', C=7.6',E=6.3', L=7.8'

CITY OF RIVERSIDE BUSINESS TAX ACCT.#058833 EXP. 1/1/15

RIVERSIDE PUBLIC UTILITIES- WATER

MW MCL 12/30/14

REVIEWED FOR CONFLICTS BY: DATE:

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER MITCHELL JAY ADKISON NO. 75731 EXP. 6-30-16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-9244 Fax:(951) 688-0599
Under the Supervision of: Mitchell Adkison, R.C.E. 75731 Exp. 06.30.16 Date: 12-30-14

BENCHMARK: H3-03
CITY OF RIVERSIDE
BENCH MARK TRANSFER:
SET CHISLED "X" IN THE TOP OF EASTERLY BASE BOLT OF AN 18" DIAMETER TRAFFIC SIGNAL POLE AT THE NORTHEASTERLY CURB RETURN OF JURUPA AVENUE AND VAN BUREN BOULEVARD.
H3-03-TRANSFER.
DATUM: 1929
ELEVATION: 726.212

MARK	REVISIONS	APPR.	DATE
1	REVISED CATCH BASIN ELEVATIONS DUE TO STREET REVISIONS	MW	12/30/15

DESIGNED BY: Rick DRAWN BY: Rick CHECKED BY: Mitch

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
ENGINEERING MANAGER	1/12/15	PM
CAPITAL PROJECTS		

APPROVED BY
CITY ENGINEER / P.W. DIRECTOR
DATE 1/14/2015

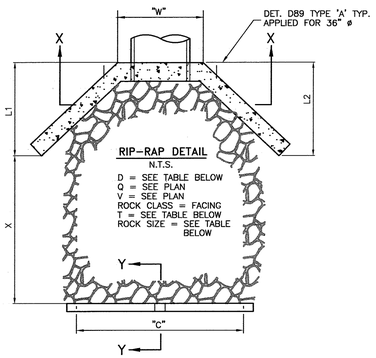
STORM DRAIN PLAN
TRACT 28987
STORM DRAIN LAT "A-1", "A-2", "A-3", "A-4", "A-5", "A-6" & "A-7".

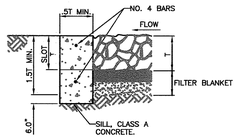
HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

PW13-0599
ACCOUNT NO.
D-813
SHEET 4 OF 5
J.N. 8489

PLOT DATE: 12/30/2014

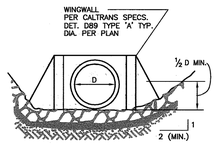
FILE NAME: U:\Projects\Cox-FRA\Storm Drain\8489 SD 04.dwg





SECTION Y-Y

PIPE WINGWALL

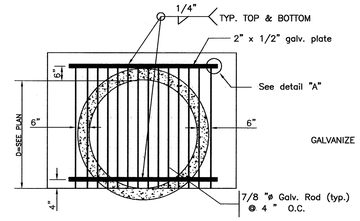


SECTION X-X

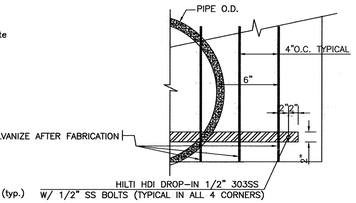
RIP-RAP TABLE					
LINE	X	Y	DIA	"T"	ROCK CLASS
A	20'	15'	60" PIPE	5.95'	1 TON
H	10'	5'	24" PIPE	1.0'	#2 BACKING

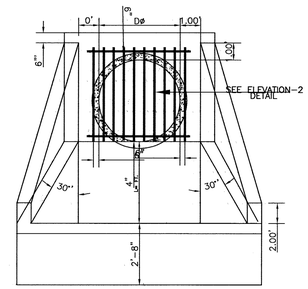
RIP-RAP DETAIL (16)

N.T.S.

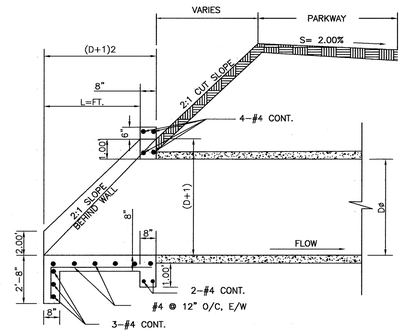


ELEVATION-2

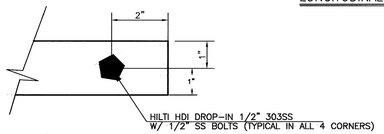




ELEVATION-1



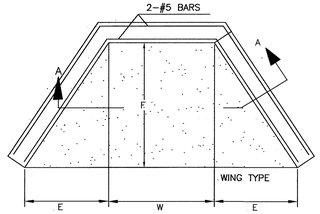
LONGITUDINAL SECTION



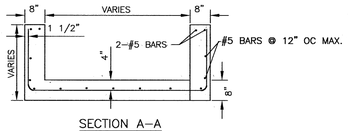
DETAIL - "A"

TRASH RACK DETAIL

N.T.S.



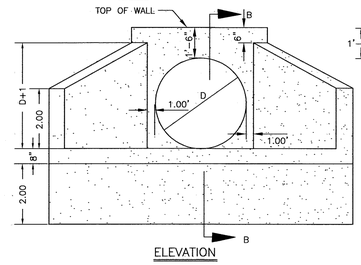
PLAN



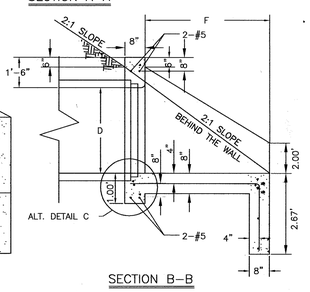
SECTION A-A

NOTES:

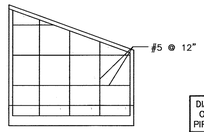
1. CONCRETE SHALL BE 560-C-3250
2. EXPOSED CORNERS TO BE CHAMFERED 3/4".
3. MULTIPLE PIPES TO BE SET A DISTANCE OF D/2, WITH A 1' MINIMUM BETWEEN OUTSIDE DIAMETERS OF PIPES.
4. TOP OF HEADWALL SHALL BE PLACED APPROXIMATELY PARALLEL TO PROFILE GRADE WHEN THE GRADE IS 3% OR MORE.
5. SKEWED PIPES: DIMENSION W TO BE INCREASED IN WIDTH OR LENGTH DUE TO SKEW OR MULTIPLE PIPES.
6. FOR PIPE WALL THICKNESS GREATER 3" USE ALTERNATE DETAIL-C.



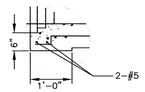
ELEVATION



SECTION B-B



WING WALL REINFORCING



ALT. DETAIL C

ELEVATION-1

DIA. OF PIPE	DIMENSIONS 30° OR 45° DEGREES WINGED WALL			
	E=FT.	F=FT.	W=FT.	E=FT.
INCH	30°	(D+1)2	D+24"	45°
18	3'0"	5'-0"	3'6"	5'-0"
24	3'6"	6'-0"	4'0"	6'-0"
30	4'0"	7'-0"	4'6"	7'-0"
36	4'8"	8'-0"	5'0"	8'-0"
42	5'2"	9'-0"	5'6"	9'-0"
48	5'9"	10'-0"	6'0"	10'-0"
54	6'4"	11'-0"	6'6"	11'-0"
60	6'11"	12'-0"	7'0"	12'-0"
66	7'6"	13'-0"	7'6"	13'-0"
72	8'1"	14'-0"	8'0"	14'-0"
78	8'8"	15'-0"	8'6"	15'-0"
84	9'3"	16'-0"	9'0"	16'-0"

WING TYPE HEADWALLS

N.T.S.

CITY OF RIVERSIDE BUSINESS TAX ACCT.#058833 EXP. 1/1/15

RIVERSIDE PUBLIC UTILITIES- WATER

MW McLeod 12/30/14

REVIEWED FOR CONFLICTS BY: DATE:

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REGISTERED PROFESSIONAL ENGINEER MITCHELL JAY ADKISON NO. 75731 EXP. 6-30-16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 Fax:(951) 688-0599
Under the Supervision of: Mitchell Adkison, R.C.E. 75731 Exp. 06.30.16 Date: 12-30-14

BENCHMARK: H3-03
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BENCH MARK TRANSFER:
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MARK	REVISIONS	APPR.	DATE

DESIGNED BY: Rick DRAWN BY: Rick CHECKED BY: Mitch

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
ENGINEERING MANAGER	1/14/15	FM
CAPITAL PROJECTS		

APPROVED BY
CITY ENGINEER / P.W. DIRECTOR
DATE 1/14/2015

STORM DRAIN PLAN

TRACT 28987

STORM DRAIN DETAILS

HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

PW13-0599
ACCOUNT NO.
D-813
SHEET 5 OF 5
J.N. 8489

PLOT DATE: 9/26/2013

FILE NAME: U:\Projects\Cox-FRA\Storm Drain\8489 SD 05.dwg