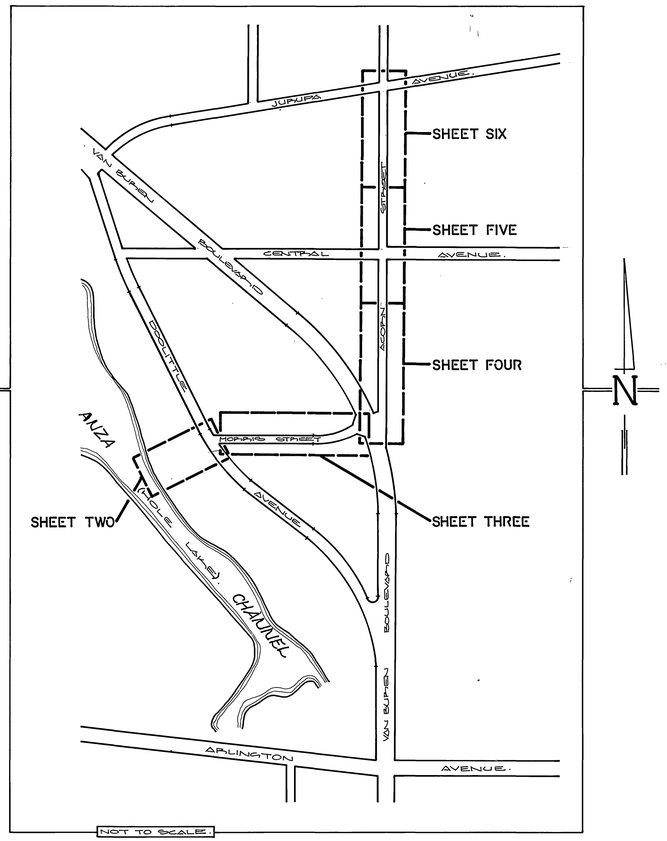
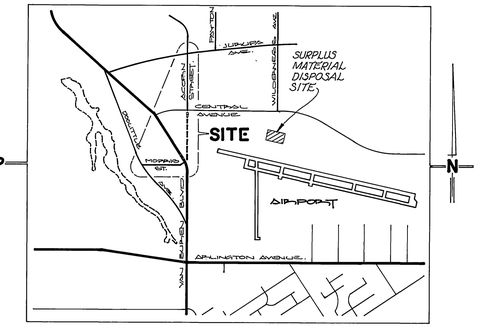
INDEX MAP



LOCATION MAP
(NOT TO SCALE)



GENERAL NOTES

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, STANDARD DRAWINGS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985 EDITION, *AND 1986 SUPPLEMENT.*
3. 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.
4. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE NO. 1-800-422-4133, 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.
5. *SPECIAL NOTICE: PIPE MAY BE CONSTRUCTED OF TWO ALTERNATE MATERIALS:*
   ALT. 1: REINFORCED CONCRETE PIPE (RCP)
   ALT. 2: GALVANIZED STEEL SPIRAL RIB PIPE (WITH POLYMER COATED INVERT-90°)
   PIPE MATERIALS MAY BE INTERCHANGEABLE THROUGH OUT SYSTEM, EXCEPT LIKE MATERIAL PIPE SHALL BE USED FOR FULL LENGTH BETWEEN DRAINAGE STRUCTURES
6. ~~PIPE BEDDING SHALL BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452, BASE 1.~~
7. THE STORM DRAIN CONTRACTOR SHALL ADJUST STORM DRAIN MANHOLES TO FINAL GRADE AFTER REPAVING IS COMPLETED.
8. EXISTING STREET PAVING TO BE REMOVED AND REPLACED AS REQUIRED PER CITY OF RIVERSIDE STANDARD DRAWING NO. 453, *AND PER NOTED PAVEMENT SECTION ON PLANS.*
9. UTILITIES TO BE CROSSED BY THE PROPOSED STORM DRAIN FACILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ISSUANCE OF GRADE SHEETS.
10. ALL ELEVATIONS SHOWN ON THE PLAN SHALL BE STAKED IN THE FIELD.
11. ALL GRADE SHEETS SHALL BE ISSUED THROUGH THE CITY INSPECTION SECTION AND A MINIMUM OF 4 WORKDAYS SHOULD BE ALLOWED BETWEEN CONTRACTOR'S REQUEST FOR STAKING BEING SUBMITTED TO THE INSPECTION SECTION AND ISSUANCE OF GRADE SHEETS.
12. RIGHTS OF ENTRY HAVE BEEN OBTAINED FOR WORK SHOWN ON PRIVATE PROPERTY.
13. GROUNDWATER DISCLAIMER NOTE: GROUNDWATER LEVELS WERE DETERMINED PER INVESTIGATION COMPLETED APRIL 4, 1986. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE PRESENT GROUNDWATER CONDITION PRIOR TO BIDDING AND CONSTRUCTING PROJECT.
14. ALL CONSTRUCTION SHALL BE DONE PER SOILS REPORT BY PIONEER CONSULTANTS DATED APRIL 24, 1986.
15. *PRIOR TO REMOVAL, CONTRACTOR IS CAUTIONED TO REQUEST SURVEY OF EXISTING IMPROVEMENTS REQUIRING REMOVAL AND REPLACEMENT IN ORDER TO PROVIDE SUFFICIENT INFORMATION TO PROPERLY REPLACE SAID IMPROVEMENTS.*

NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES 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 THOSE SHOWN ON THESE PLANS.

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

THE COVER OF A UTILITY IS SHOWN IN THE PROFILE. UTILITIES SHOWN AS N/I IN THE PROFILE INDICATES THAT COVER IS UNKNOWN; HOWEVER, THE UTILITY IS NOT EXPECTED TO CONFLICT WITH THE PROPOSED IMPROVEMENTS.

CALL UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133 AT LEAST 48 HOURS PRIOR TO EXCAVATION.

BENCH MARK

BENCHMARK H-4-A.
FOUND P.K. NAIL AND CITY ENGINEER TAG IN BASE OF STREET LIGHT, ON NORTH SIDE OF JURUPA AVENUE, 40 FEET WESTERLY OF THE ROHR RAILROAD SPUR.
PER CITY OF RIVERSIDE FIELD BOOK 739/48.
ELEVATION 788.314

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE, CALIFORNIA
APPROVED BY [signature] DATE 2-3-86
R.E. No. 27,983
W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.

MARK | REVISIONS | APPR. | DATE
DESIGNED BY [signature] DRAWN BY B.L.H. CHECKED BY [signature]

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	[signature]	9/5/86
SURVEYOR		
TRAFFIC DIVISION	[signature]	9/5/86
CHIEF PUB. WKS. INSP.	[signature]	9/5/86

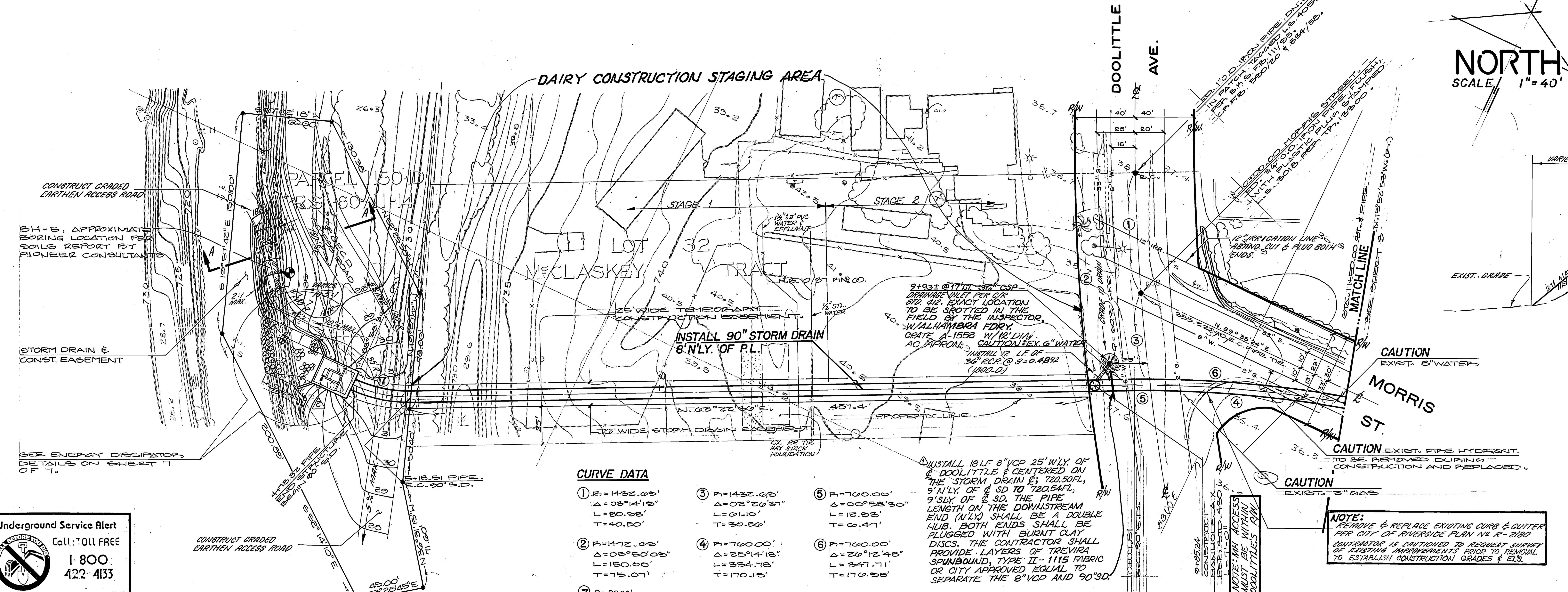
APPROVED BY [signature]
DIRECTOR OF PUBLIC WORKS
DATE 9-5-86

FDA PROJECT NO. 07-01-02848
INDEXED BY C.S.

AIRPORT INDUSTRIAL STORM DRAIN
TITLE SHEET

SCALE: AS SHOWN

ACCOUNT No. 84-222
DRAWING NUMBER
D-492
SHEET 1 OF 7



CURVE DATA

① R=1432.69' Δ=03°14'19" L=80.98' T=40.50'

② R=1472.69' Δ=05°50'09" L=150.00' T=75.07'

③ R=1432.69' Δ=02°26'37" L=61.10' T=30.56'

④ R=760.00' Δ=25°14'18" L=334.78' T=170.15'

⑤ R=760.00' Δ=00°58'30" L=12.93' T=6.47'

⑥ R=760.00' Δ=26°12'48" L=347.71' T=176.95'

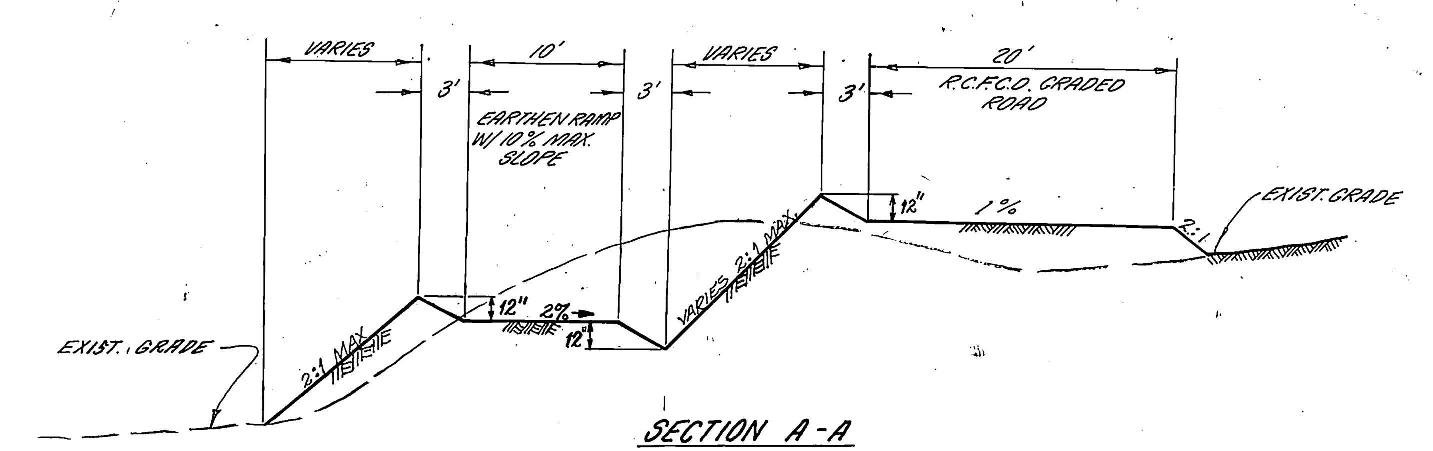
⑦ R=90.00' Δ=25°16'00" L=39.69' T=20.17'

① INSTALL 18 LF 8" VCP 25' W'LY. OF ℄ DOOLITTLE & CENTERED ON THE STORM DRAIN ℄; 720.50 FL, 9' N'LY. OF ℄ SD TO 720.54 FL, 9' S'LY. OF ℄ SD. THE PIPE LENGTH ON THE DOWNSTREAM END (N'LY) SHALL BE A DOUBLE HUB. BOTH ENDS SHALL BE PLUGGED WITH BURNT CLAY DISCS. THE CONTRACTOR SHALL PROVIDE LAYERS OF TREVIRA SPUNBOUND, TYPE II-1115 FABRIC OR CITY APPROVED EQUAL TO SEPARATE THE 8" VCP AND 90" SD.

NOTE:
REMOVE & REPLACE EXISTING CURB & GUTTER PER CITY OF RIVERSIDE PLAN № R-2180
CONTRACTOR IS CAUTIONED TO REQUEST SURVEY OF EXISTING IMPROVEMENTS PRIOR TO REMOVAL TO ESTABLISH CONSTRUCTION GRADES & EL'S.

BENCH MARK

BENCHMARK H-4-A.
FOUND P.K. NAIL AND CITY ENGINEER TAG IN BASE OF STREET LIGHT, ON NORTH SIDE OF JURUPA AVENUE, 40 FEET WESTERLY OF THE ROHR RAILROAD SPUR. PER CITY OF RIVERSIDE FIELD BOOK 739/48.
ELEVATION 788.314



SECTION A-A
NOT TO SCALE

QUANTITY ESTIMATE

CUT - 270.00 CU. YDS. FILL - 427.00 CU. YDS.
THE ABOVE QUANTITIES DO NOT INCLUDE ANY OVER-EXCAVATION, SUBSIDENCE, SHRINKAGE OR ANY OTHER SPECIAL CONDITIONS CALLED FOR BY THE PRELIMINARY SOILS INVESTIGATION REFERRED TO IN GENERAL NOTE 14.

1.) USE 0.29' A.C./1.09' C.A.B. FOR MORRIS ST. & DOOLITTLE AVE. TRENCH RESURFACING.

Underground Service Alert
Call: TOLL FREE
1-800 422-4133
TWO WORKING DAYS BEFORE YOU DIG

EDA PROJECT NO. 07-01-02848

INDEXED BY C.S.

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE, CALIFORNIA
APPROVED BY [signature] DATE 2-3-86
R.E. No. 27,983
W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.

MARK	REVISIONS	APPR.	DATE
2	ADDED POLLUTION TRAP AS REQ'D. BY STATE DEPT. OF FISH & GAME	[initials]	10-15-86
1	ADDED 18 LF OF 8" VCP	[initials]	9/12/86

DESIGNED BY EBBIE DRAWN BY R.H. CHECKED BY RCM

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

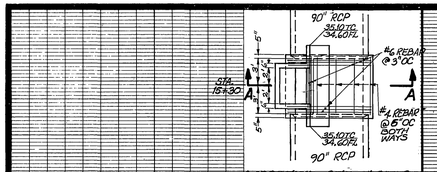
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	[initials]	9/5/86
SURVEYOR		
TRAFFIC DIVISION	[initials]	9/5/86
CHIEF PUB. WKS. INSP.	[initials]	9/5/86

APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS
DATE 9-5-86

AIRPORT INDUSTRIAL STORM DRAIN
PLAN & PROFILE
MORRIS STREET

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

ACCOUNT No. 84-222
DRAWING NUMBER
D-492
SHEET 2 OF 7

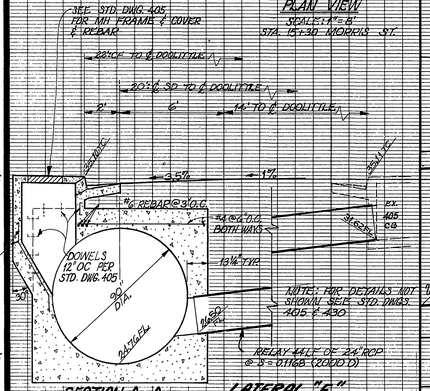


MODIFIED STD. 405 CB

PLAN VIEW

SCALE: 1"= 5'

STA. 15+30 MORRIS ST.

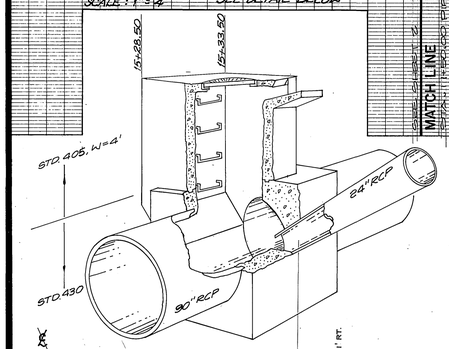


SECTION A-A

SCALE: 1"= 5'

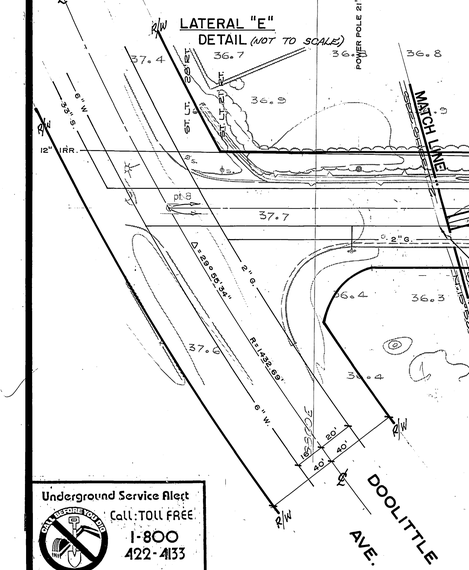
LATERAL "E"

SEE DETAIL BELOW



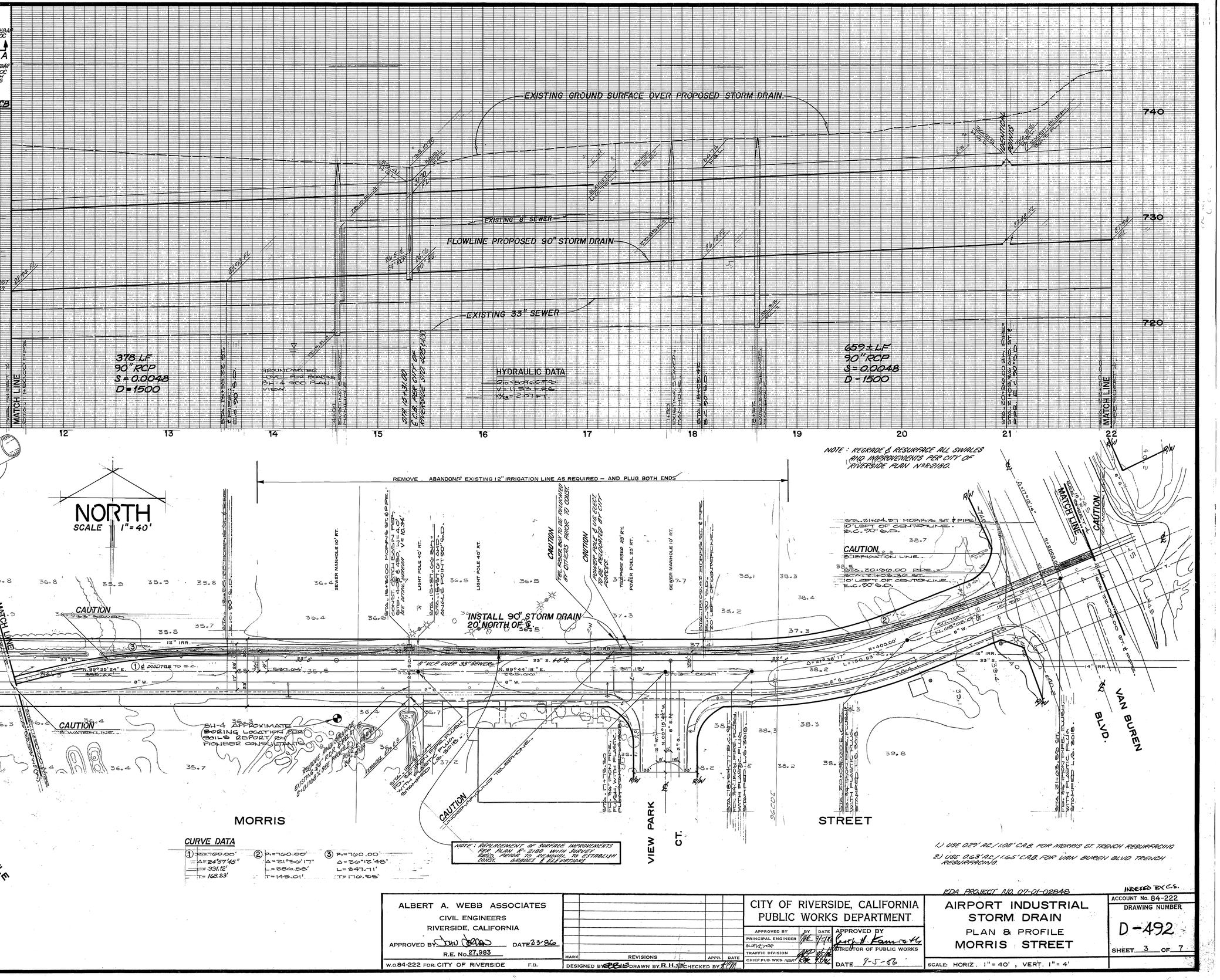
LATERAL "E"

DETAIL (NOT TO SCALE)



NORTH

SCALE 1"= 40'



CURVE DATA

①	②	③
R=760.00'	R=760.00'	R=760.00'
Δ=24°57'45"	Δ=21°36'17"	Δ=26°12'48"
L=331.12'	L=286.58'	L=347.71'
T=168.23'	T=145.01'	T=176.95'

NOTE: REPLACEMENT OF SURFACE IMPROVEMENTS PER PLAN R-2180 WITH SURVEY MONUMENTS PRIOR TO REMOVAL TO ESTABLISH GRADES & ELEVATIONS

NOTE: REGRADE & RESURFACE ALL SWALES AND IMPROVEMENTS PER CITY OF RIVERSIDE PLAN NO. R-2180.

1) USE 0.23' AC / 1.08' C.A.B. FOR MORRIS ST. TRENCH RESURFACING

2) USE 0.63' AC / 1.65' C.A.B. FOR VAN BUREN BLVD. TRENCH RESURFACING.

FDA PROJECT NO. 07-01-02848

INDEXED BY C.S.

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE, CALIFORNIA

APPROVED BY [signature] DATE 2-3-86
R.E. No. 27,983
W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.

MARK	REVISIONS	APPR.	DATE

DESIGNED BY RBH DRAWN BY R.H. CHECKED BY [illegible]

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	[illegible]	9/5/86
SURVEYOR		
TRAFFIC DIVISION	[illegible]	9/5/86
CHIEF PUB. WKS. INSP.	[illegible]	9/5/86

APPROVED BY [signature]
DIRECTOR OF PUBLIC WORKS
DATE 9-5-86

AIRPORT INDUSTRIAL STORM DRAIN
PLAN & PROFILE
MORRIS STREET

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

ACCOUNT No. 84-222
DRAWING NUMBER D-492
SHEET 3 OF 7

EXISTING GROUND SURFACE OVER PROPOSED STORM DRAIN

FLOWLINE PROPOSED 90" STORM DRAIN

EXISTING 27" SEWER

20 LF 90" RCP S = 0.0048 D-1500

543± LF 90" RCP D-1500, S=0.0186

HYDRAULIC DATA
Q = 50.10 C.F.S.
V = 11.62 F.P.S.
V²/2g = 2.01 FT.

390±LF 78" RCP D-1500, S=0.0042

HYDRAULIC DATA
Q = 285.6 C.F.S.
V = 8.01 F.P.S.
V²/2g = 1.16 FT.

MATCH LINE — SEE SHEET 5

MATCH LINE — SEE SHEET 6

STA 22+20.00 ℄ S.D.
CONSTRUCT M.H. J.M. PER CITY OF RIVERSIDE STD. Nº 432
A = 90° B = 36' C = 109.0 D = 90°
D₂ = 90° F' = 89' L = 8.5' ELEV. R = 32.23
ELEV. S = 31.03

INSTALL 345± L.F. OF 36" R.C.P. @ S = 0.110ft

22+62± ℄ S.D. @ 28+LT.
INSTALL 36" CGSP DROP INLET PER CITY OF RIVERSIDE STD. Nº 412 (EXACT LOCATION OF INLET TO BE DETERMINED BY THE INSPECTOR) W/ ALHAMBRA FDRY. GRATE A-1558 W/AC APRON (12'-0"A)

INSTALL 90" STORM DRAIN 10' WEST OF ℄

STA 28+00 ℄ S.D.
CONSTRUCT M.H. J.M. PER CITY OF RIVERSIDE STD. Nº 432
A = 90° B = 90° C = 12.3' D = 78"
D₂ = 90° F' = 12.3' L = 12.1'
ELEV. S = 32.75 ELEV. R = 32.87

STA 22+45.20 BK 20.25 AHD
STA 23+12.02 ℄ MORRIS ST.

STA 23+05.91 MORRIS ST. = STA 23+05.91 ACORN ST.

CAUTION — 14" IRRIGATION LINE

CAUTION — 16" ELECTRIC

9" SLUB @ 9.00'

END 42" RCP CONNECTOR PIPE TO RIVERSIDE STD. Nº 416 32.95'±

ACORN STREET

NORTH
SCALE: 1" = 40'

1. USE 0.02' A.C. OVER 1.05' C.A.B. FOR VAN BUREN BLVD. TRENCH RESURFACING.

SECTION B-B
N.T.S.

DROP INLET PROFILE LOOKING DOWNSTREAM

INSTALL 45 L.F. OF 36" R.C.P. @ S = 0.0000

GRADE TO DRAIN

2½" AC APRON 12" DIA.

CURVE DATA

CURVE	Δ	L	R	T
1	67°44'07"	106.40'	90'	60.40'

Underground Service Alert
Call: TOLL FREE
1-800
422-4133
TWO WORKING DAYS BEFORE YOU DIG

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE, CALIFORNIA
APPROVED BY [signature] DATE 2-3-86
R.E. No. 27,983
W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.

MARK REVISIONS APPR. DATE
DESIGNED BY [illegible] DRAWN BY R.H.S. CHECKED BY [illegible]

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	[illegible]	7/5/86
SURVEYOR		
TRAFFIC DIVISION	[illegible]	9/5/86
CHIEF PUB. WKS. INSP.	[illegible]	9/5/86

APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS
DATE 9-5-86

EDA PROJECT NO. 07-01-02248

INDEXED BY C.S.

AIRPORT INDUSTRIAL STORM DRAIN
PLAN & PROFILE
ACORN STREET

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

ACCOUNT No. 84-222
DRAWING NUMBER D-492
SHEET 4 OF 7

* AS BUILT 4-26-88 RVZ

EDA PROJECT NO. 07-01-02848

INDEXED BY C.S.

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE, CALIFORNIA

APPROVED BY John Jordan DATE 2-3-86
R.E. No. 27,983

W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.

MARK	REVISIONS	APPR.	DATE
2	60" SD. SLOPE & DEPTH CHANGED TO CLEAR EX. 16" WATER LINE	wbj	10.15.86
1	60" SD SLOPE & DEPTH CHGD. TO CLEAR EX. 6" HPG	wbj	10.15.86

DESIGNED BY EBBIE DRAWN BY R.H. CHECKED BY RCM

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

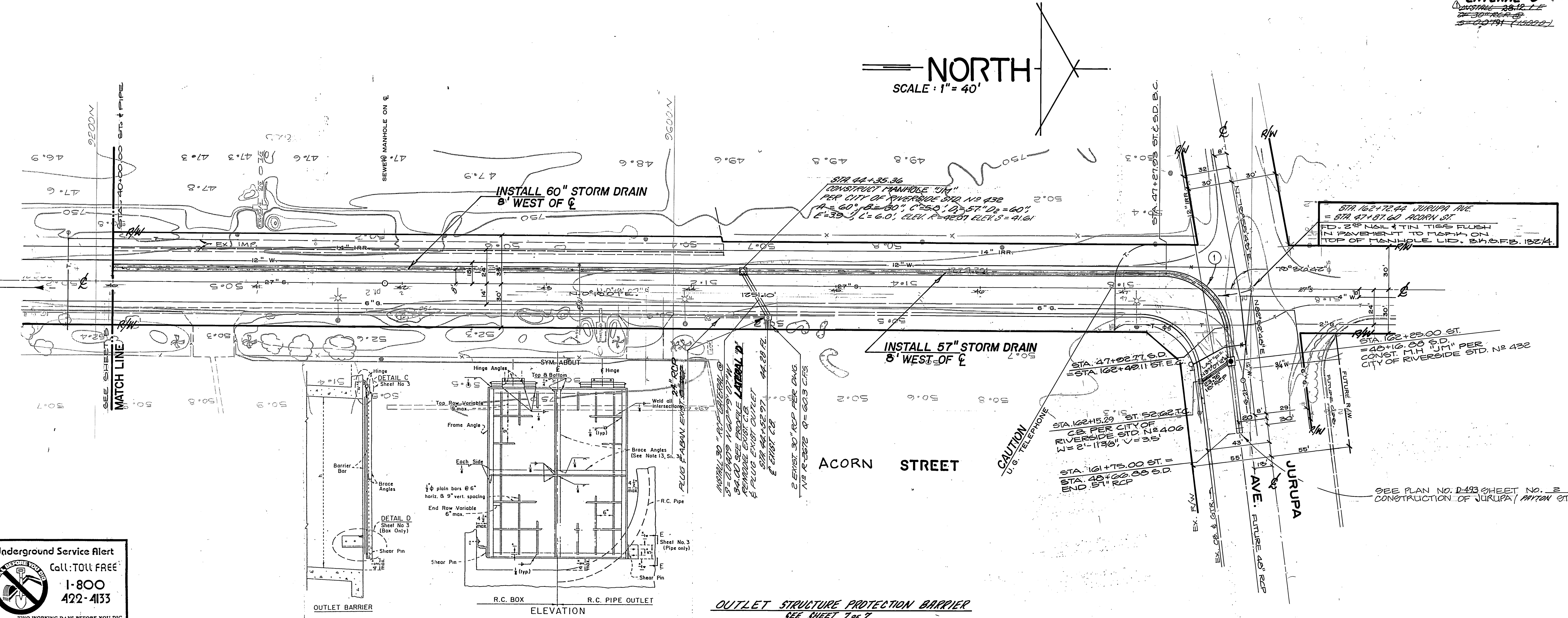
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		9/5/86
SURVEYOR		
TRAFFIC DIVISION		9/5/86
CHIEF PUB. WKS. INSP.		9/5/86

APPROVED BY George A. Kamrath
DIRECTOR OF PUBLIC WORKS
DATE 9-5-86

AIRPORT INDUSTRIAL STORM DRAIN
PLAN & PROFILE
ACORN STREET

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

ACCOUNT No. 84-222
DRAWING NUMBER
D-492
SHEET 5 OF 7



Underground Service Alert
Call: TOLL FREE
1-800 422-4133
TWO WORKING DAYS BEFORE YOU DIG

1. USE 0.58' A.C. OVER 1.58' C.A.B. FOR JURUPA AVENUE TRENCH RESURFACING.
2. USE 0.33' A.C. OVER 1.00' C.A.B. FOR ACORN STREET TRENCH RESURFACING.

MANHOLE "JM" STD. 432
SCHEDULE OF VALUES

	RT. LAT. "F"
A	60
B	18"
C'	5.3
D₁	48
D₂	57
E'	3.1
L'	4.7
R	46.54'
S	45.50'

CURVE DATA

CURVE	Δ	L	R	T
1	82°33'42"	64.84'	45'	39.51'

SEE PLAN NO. D-493 SHEET NO. 2 FOR CONSTRUCTION OF JURUPA/PAYTON STORM DRAIN

EDA PROJECT NO. 07-01-02848

INDEXED BY C.S.

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
RIVERSIDE, CALIFORNIA
APPROVED BY [signature] DATE 2-3-86
R.E. No. 27,983
W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.

MARK	REVISIONS	APPR.	DATE
1	60" SD SLOPE & DEPTH CHGD. TO CLEAR EX. 6" HPG	[initials]	10.15.86

DESIGNED BY [initials] DRAWN BY R.H. CHECKED BY [initials]

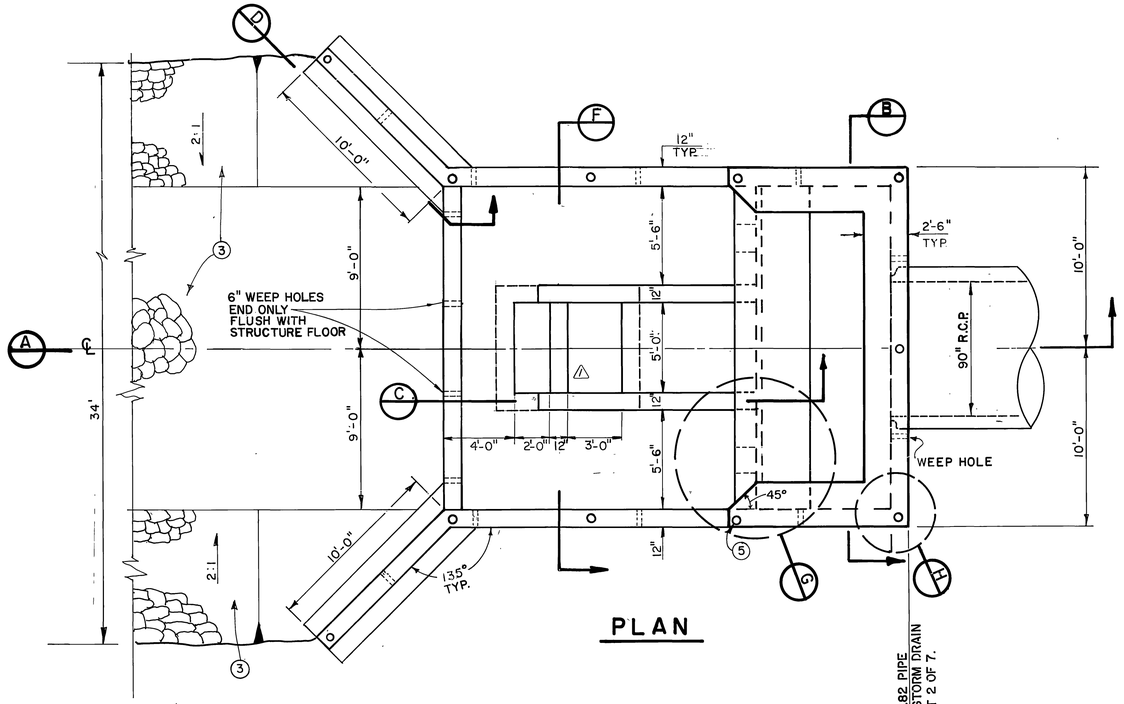
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	[initials]	9/5/86
SURVEYOR		
TRAFFIC DIVISION	[initials]	[date]
CHIEF PUB. WKS. INSP.	[initials]	[date]

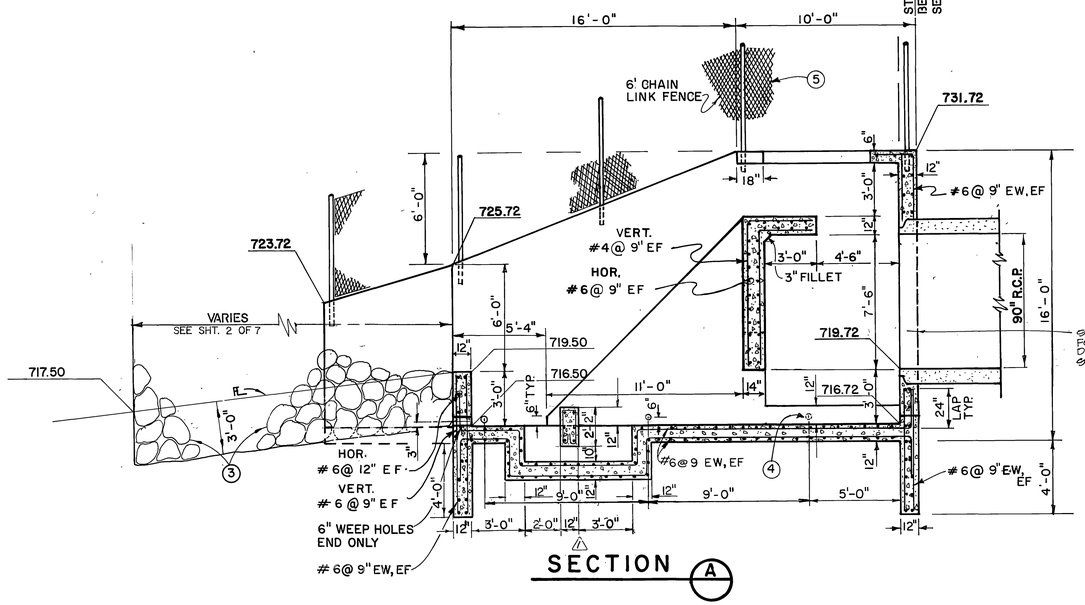
APPROVED BY [signature]
DIRECTOR OF PUBLIC WORKS
DATE 9-5-86

AIRPORT INDUSTRIAL STORM DRAIN
PLAN & PROFILE
ACORN STREET
SCALE: HORIZ. 1" = 40', VERT. 1" = 4'

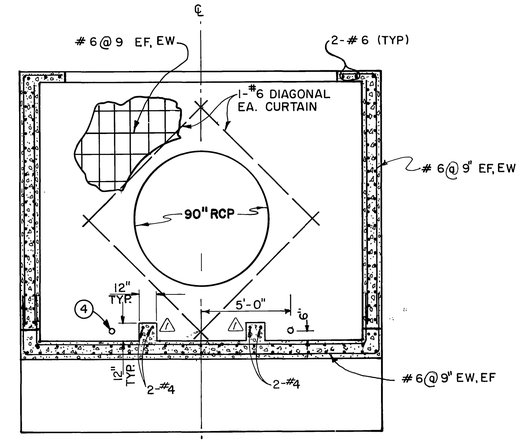
ACCOUNT No. 84-222
DRAWING NUMBER
D-492
SHEET 6 OF 7



PLAN



SECTION A



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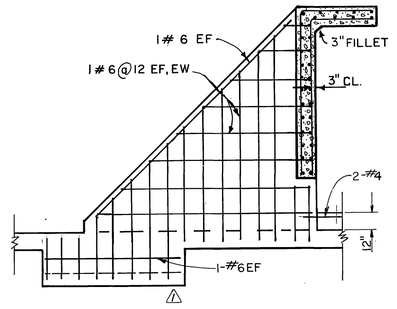

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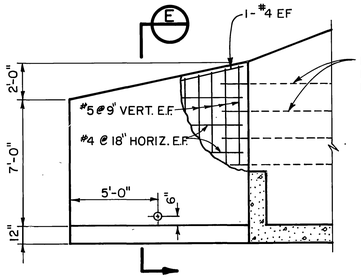

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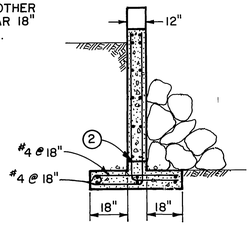

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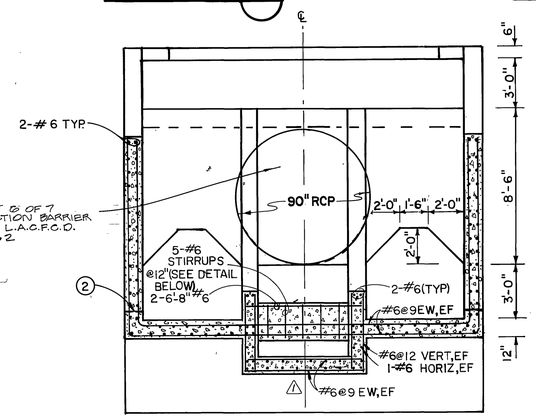
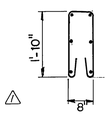


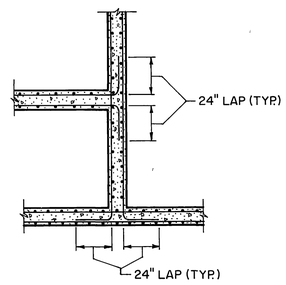
SECTION F



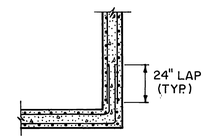
STIRRUP DETAIL
SCALE: 1/2" = 1'-0"

NOTES

1. ALL STEEL SHALL HAVE 2" COVER UNLESS OTHERWISE NOTED.
2. 6" STARTER WALL WITH CONST. JOINT TO BE USED IN ALL CASES.
3. 1/2 TON ROCK SLOPE PROTECTION.
4. CONST. 11/2" DIA. WEEPHOLES WITH RODENT SCREEN & 1 CUBIC FT. OF FILTER MAT'L. AT EACH HOLE. RODENT SCREEN AND FILTER MAT'L. ARE TO BE OMITTED IN DOWNSTREAM ENDWALL WEEPHOLES.
5. FOR CHAIN LINK FENCE DETAILS SEE STD. M-801
6. ALL EXPOSED EDGES ON CONC. STRUCTURES SHALL HAVE A 3/4" CHAMFER.
7. ALL CONCRETE SHALL BE CLASS 560-B-3250



DETAIL G



DETAIL H

INTERSECTING WALL & CORNER DETAILS
TYPICAL ALL CORNERS & INTERSECTIONS

EDA PROJECT NO. 07-01-02848 INDEXED BY C.S.

ALBERT A. WEBB ASSOCIATES CIVIL ENGINEERS RIVERSIDE, CALIFORNIA APPROVED BY [signature] DATE 2-3-86 R.E. No. 27,983 W.O. 84-222 FOR: CITY OF RIVERSIDE F.B.	1 ADDED POLLUTION TRAP AS REQ'D. BY STATE DEPT OF FISH & GAME 10-15-86 MARK REVISIONS APPR. DATE DESIGNED BY EBLE DRAWN BY AM CHECKED BY [illegible]	CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT APPROVED BY / BY / DATE PRINCIPAL ENGINEER [illegible] 9/5/86 SURVEYOR TRAFFIC DIVISION CHIEF PUB. WKS INSP. APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS DATE 9-5-86	AIRPORT INDUSTRIAL STORM DRAIN ENERGY DISSIPATOR DETAIL SHEET SCALE: 1/4" = 1'-0"	ACCOUNT No. 84-222 DRAWING NUMBER D-492 SHEET 7 OF 7