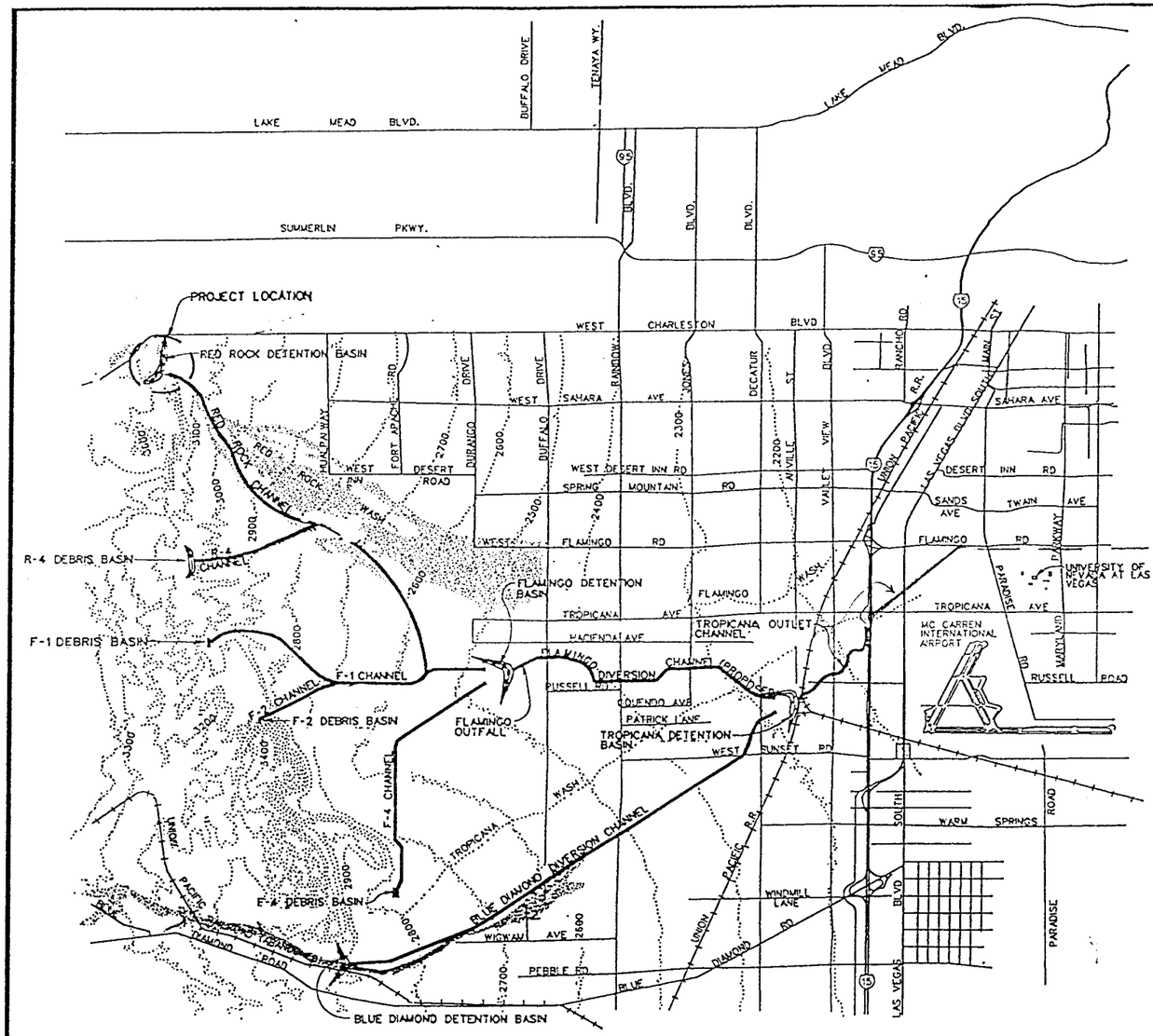
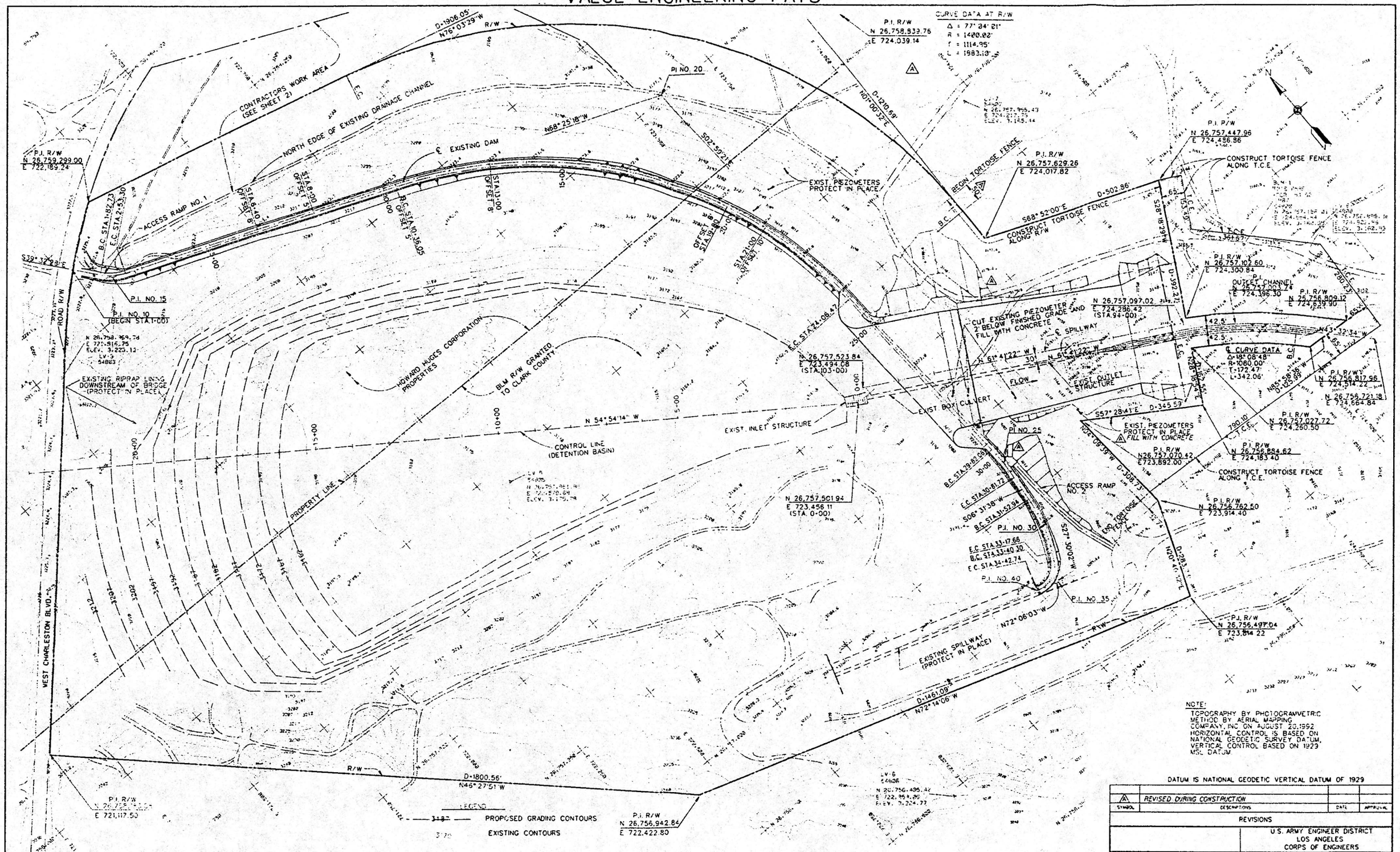


RED ROCK DETENTION BASIN
IAS VEGAS NEVADA

PROJECT LOCATION
AND VICINITY MAPS

U.S. ARMY CORPS OF ENGINEEERS
LOS ANGELES DISTRICT

PLATE 1



CURVE DATA ℄ EXISTING DAM							
PI No.	10	15	20	25	30	35	40
NORTHING	26,759,184.44	26,759,092.84	26,758,508.20	26,757,113.70	26,756,910.58	26,756,761.90	26,756,731.02
EASTING	722,031.34	722,106.96	723,585.22	723,658.04	723,634.80	723,557.40	723,498.20
Δ	——	28°52'50"	65°25'57"	9°30'59"	20°58'24"	80°23'55"	
R	——	140.00'	1200.00'	600.00'	450.00'	73.00'	
T	——	36.05	770.87'	49.94'	83.29'	61.69'	
L	——	70.57'	1370.42'	99.66'	164.72'	102.44'	
B.C. STA.	——	1+82.73	10+36.05	29+82.06	31+52.94	33+40.30	
E.C. STA.	——	2+53.30	24+06.47	30+81.72	33+17.66	34+42.74	
STA.	1+00						34+43.26

PLAN

SCALE 100 50 0 100 200 FEET

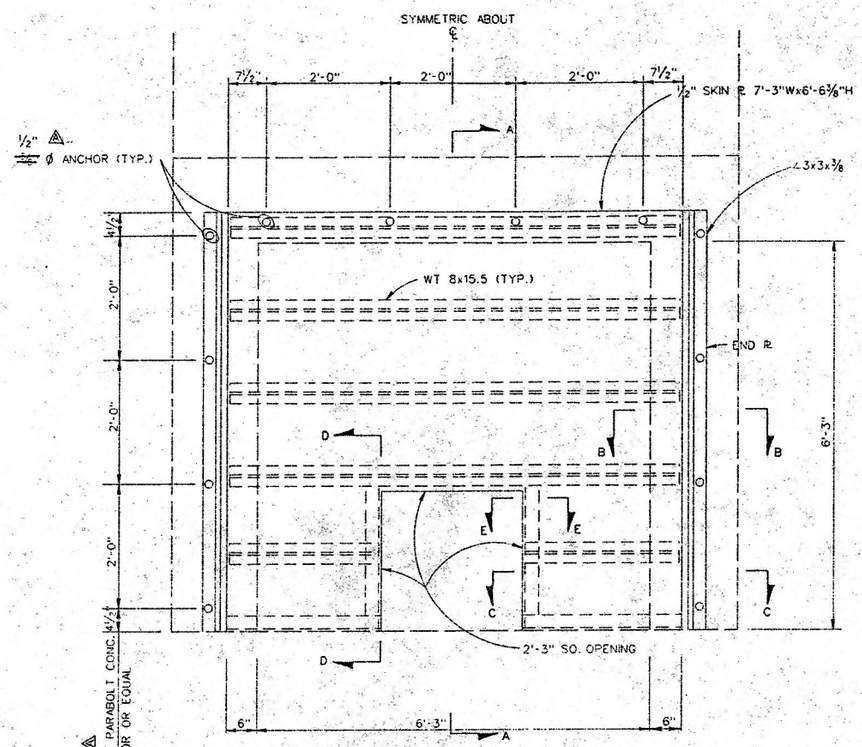
NOTES:

1. FOR SPILLWAY PLAN AND PROFILE DETAILS, SEE SHEET 9
2. FOR ACCESS RAMP DETAILS, SEE SHEET 18
3. FOR DETENTION BASIN CROSS SECTIONS, SEE SHEET 10
4. FOR DAM EMBANKMENT CROSS SECTIONS, SEE SHEET 11
5. FOR TORTOISE FENCE DETAILS, SEE SHEET 22

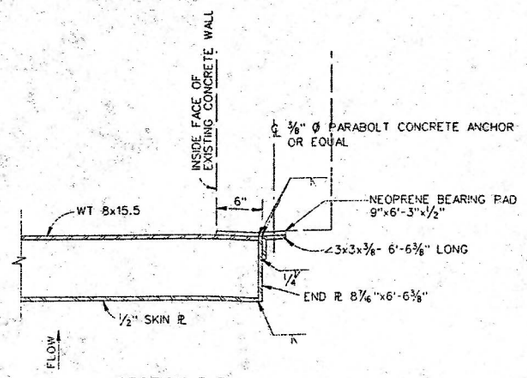
ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING

9/15/94

ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING

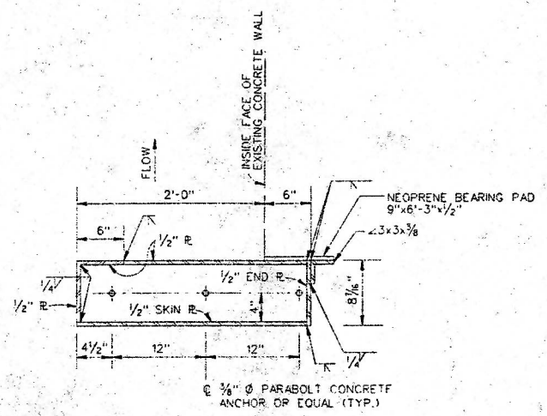


FRONT ELEVATION OF FLOW RESTRICTOR



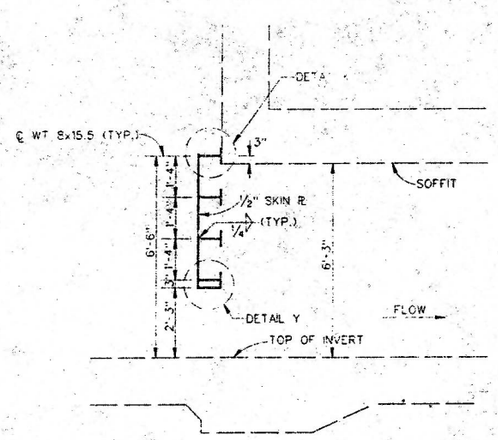
SECTION B-B

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

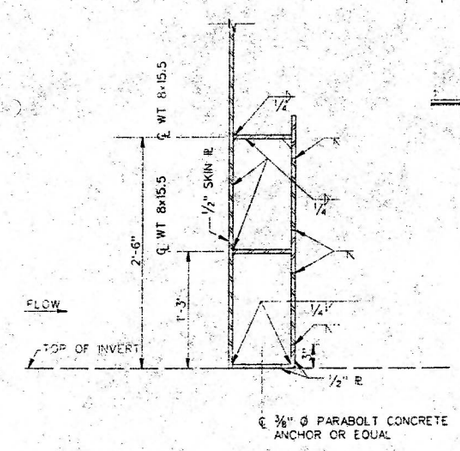


SECTION C-C

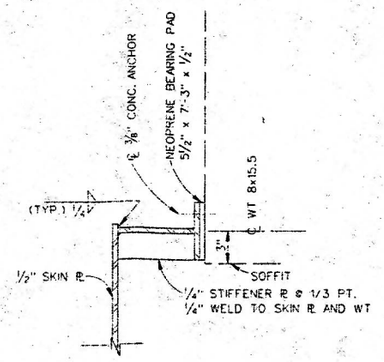
SCALE: 1 1/2" = 1'-0"



SECTION A-A

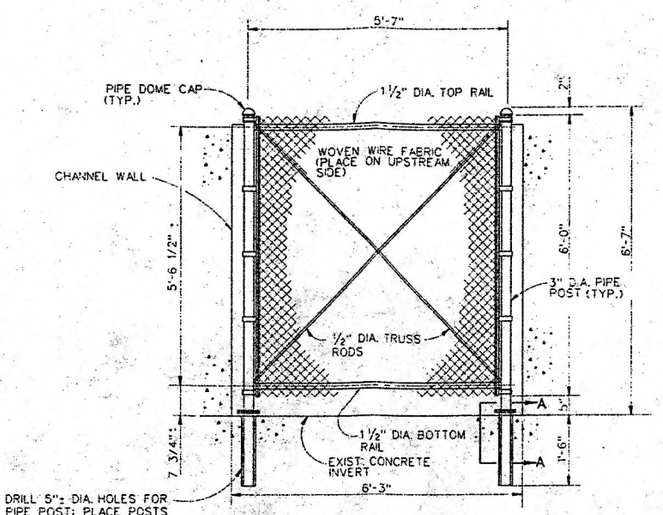


SECTION D-D



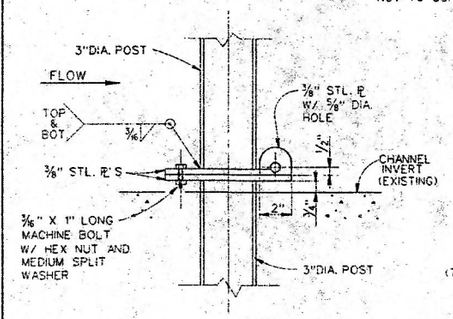
DETAIL X

NOT TO SCALE



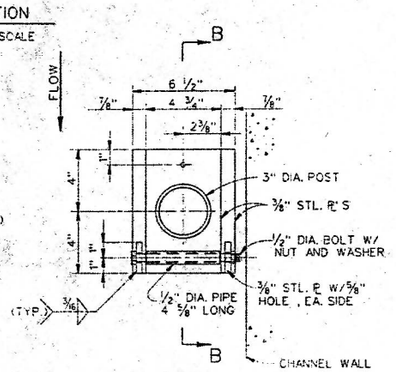
ELEVATION

NOT TO SCALE



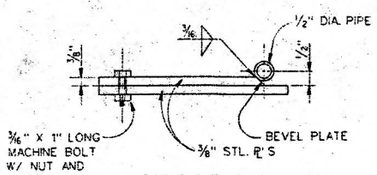
SECTION A-A

NOT TO SCALE



PLAN

NOT TO SCALE



SECTION B-B

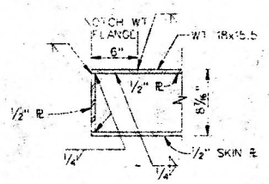
NOT TO SCALE

NOTES:

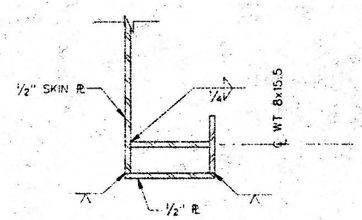
1. ALL METAL PARTS OF FENCE PANEL TO BE GALVANIZED.
2. WOVEN WIRE FABRIC TO BE TIED TO THE TRUSS RODS, PIPE POSTS, AND RAILS.
3. JAM THREADS OF BOLTS AFTER PLACING NUTS AND WASHERS.

COLLAPSIBLE FENCE PANEL

STA. 97+40.5



SECTION E-E



DETAIL Y

NOT TO SCALE

GENERAL STRUCTURAL NOTES

1. STRUCTURAL STEEL SHALL BE ASTM A-36
2. STEEL MEMBERS SHALL BE GALVANIZED AFTER FABRICATION.
3. WELDING SHALL CONFORM TO THE AWS E70 ELECTRODE.
4. CONCRETE SURFACE CONTACT WITH STRUCTURAL STEEL SHALL BE GROUND FLAT.

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

SCALE: 1"=1'-0"

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

AS BUILT

Computer Aided Design & Drafting

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
⚠	REVISED DURING CONSTRUCTION		

REVISIONS

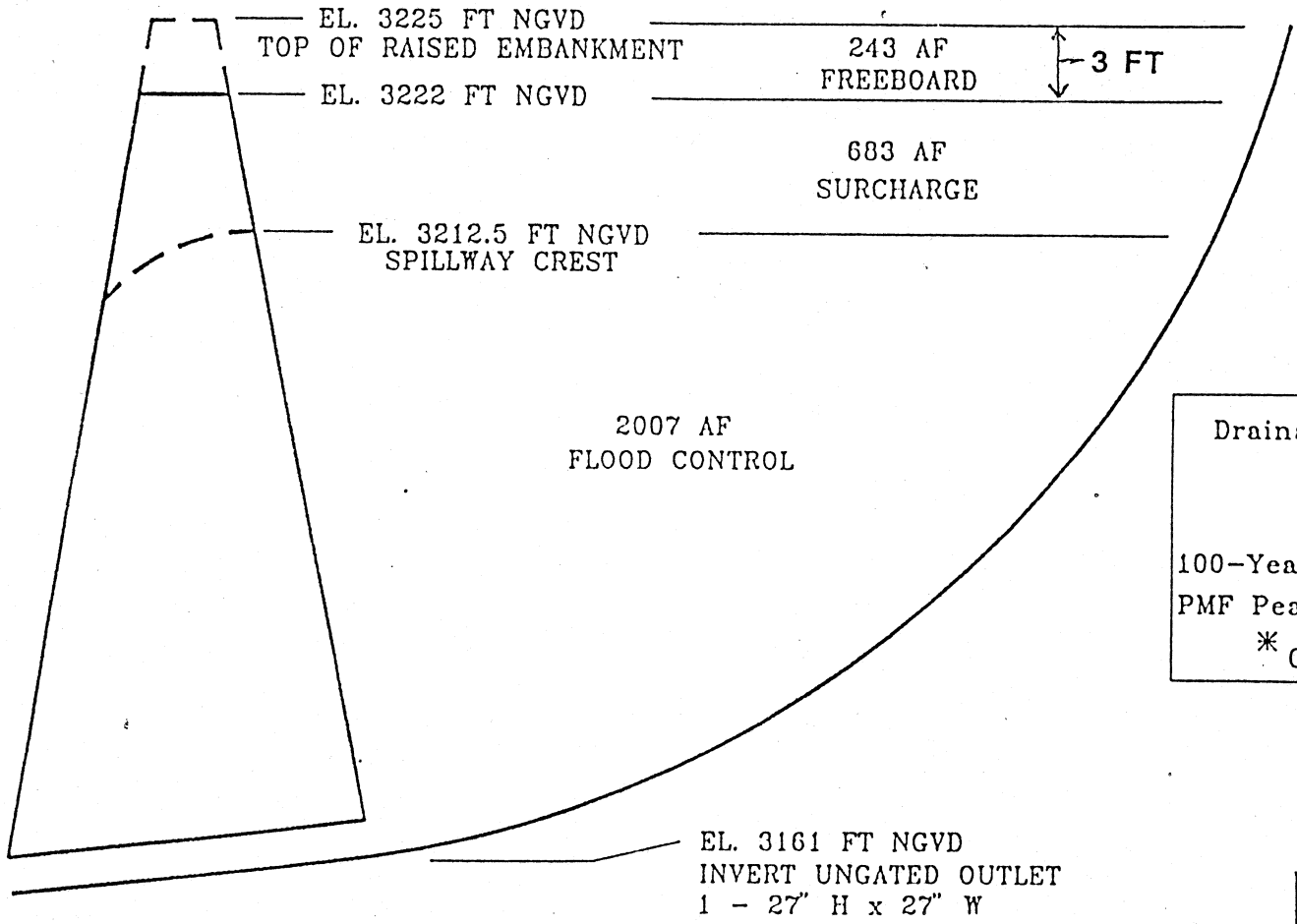
U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

COLORADO RIVER BASIN
LAS VEGAS WASH AND TRIBUTARIES
(TROPICANA AND FLAMINGO WASHES),
CLARK COUNTY, NEVADA

RED ROCK DETENTION BASIN

COLLAPSIBLE FENCE PANEL,
FLOW RESTRICTOR AND DETAILS

DESIGNED BY: A.H.
DRAWN BY: V.C.
CHECKED BY: C.W.F.
SUBMITTED BY: ROBERT L. HALL, P.E.
SPEC. NO. DACW09-95-0004
DISTRICT FILE NO. 196/147
SHEET 20 OF 25 SHEETS



Drainage Area = 55.2 mi^2

INFLOW

100-Year Peak = 12,800 ft^3/s *

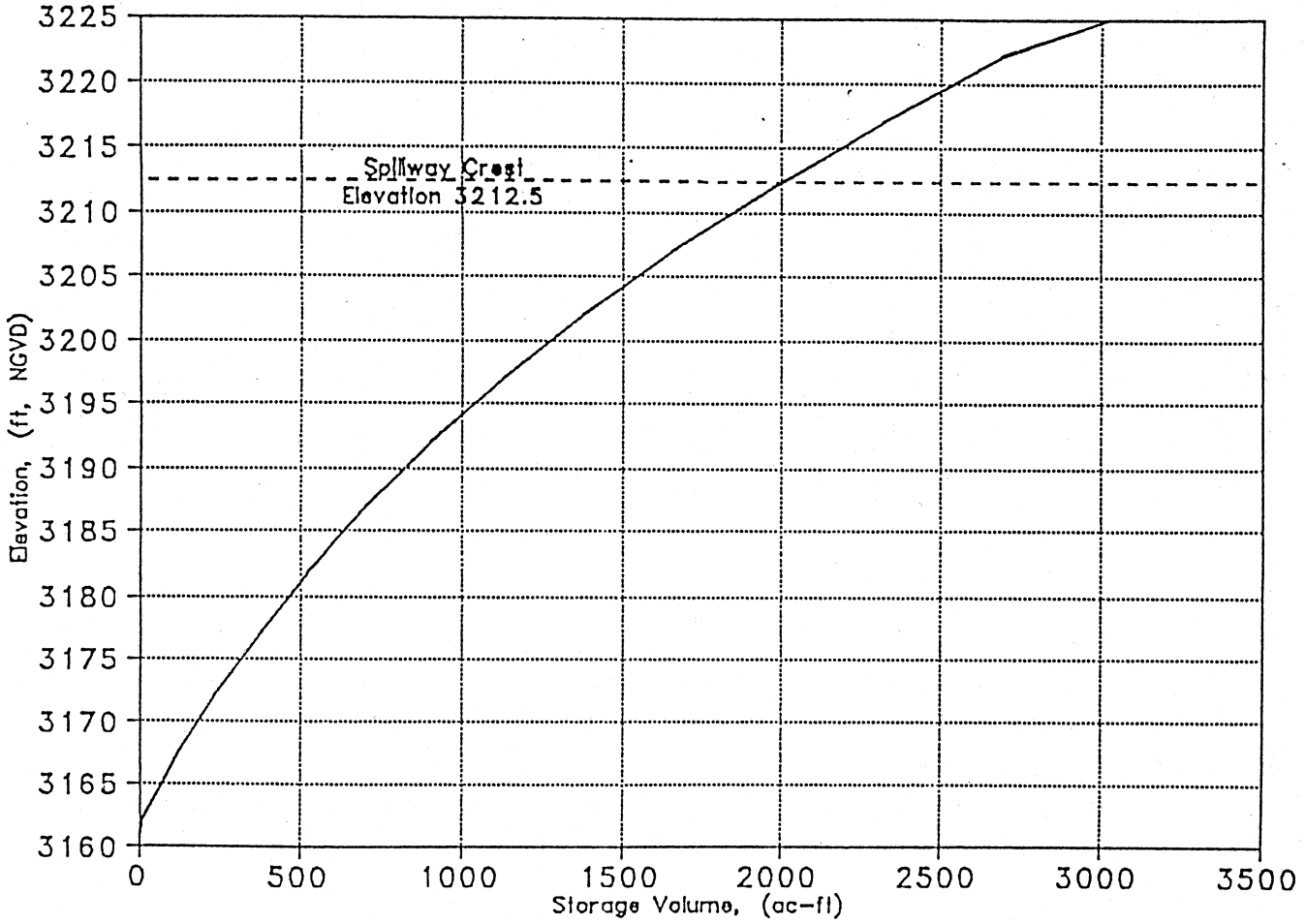
PMF Peak = 110,000 ft^3/s

* Computed Probability

RED ROCK DETENTION BASIN
LAS VEGAS, NEVADA

RESERVOIR STORAGE
ALLOCATION DIAGRAM

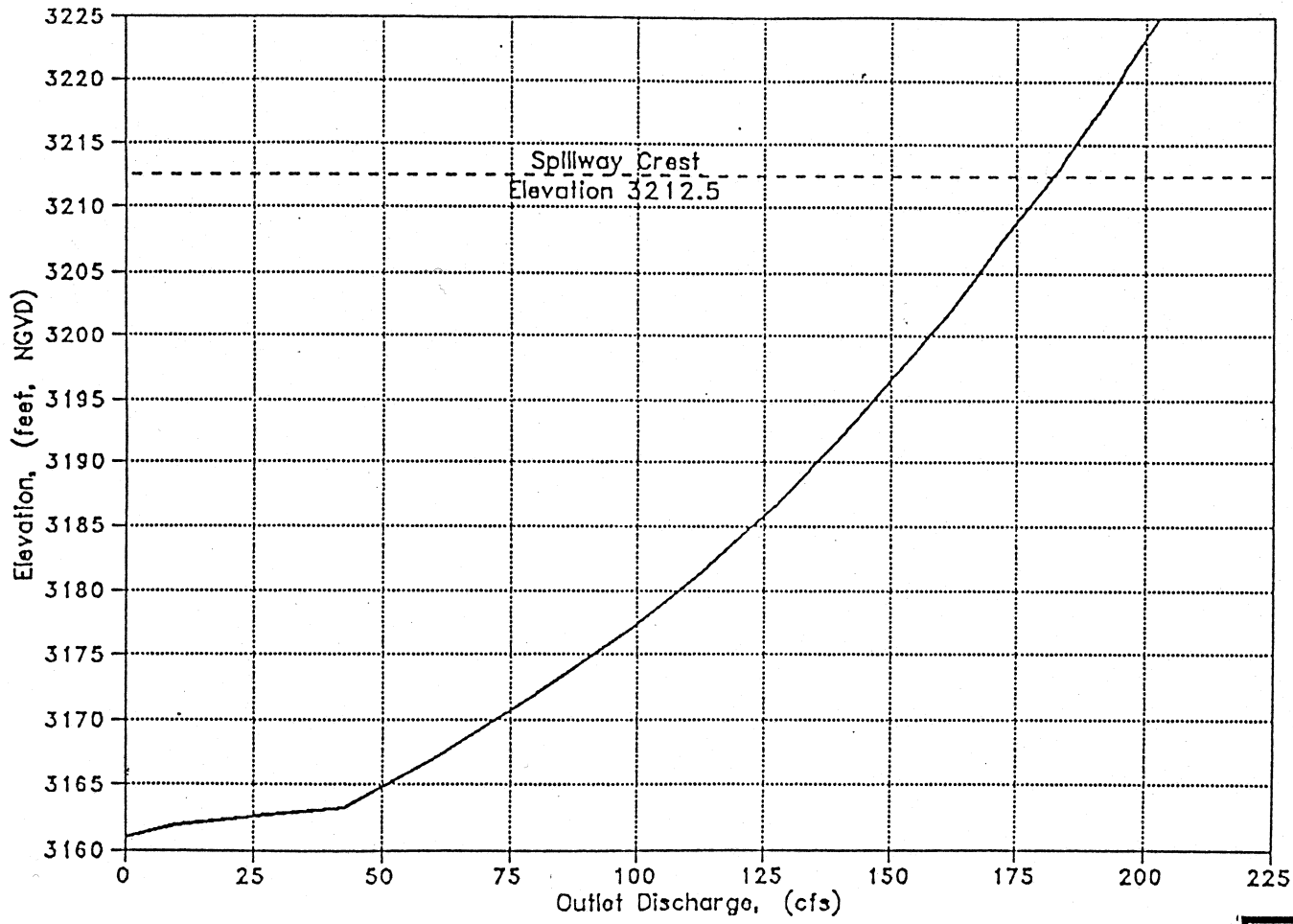
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



RED ROCK DETENTION BASIN
LAS VEGAS, NEVADA

RED ROCK DETENTION BASIN
STORAGE ELEVATION CURVE

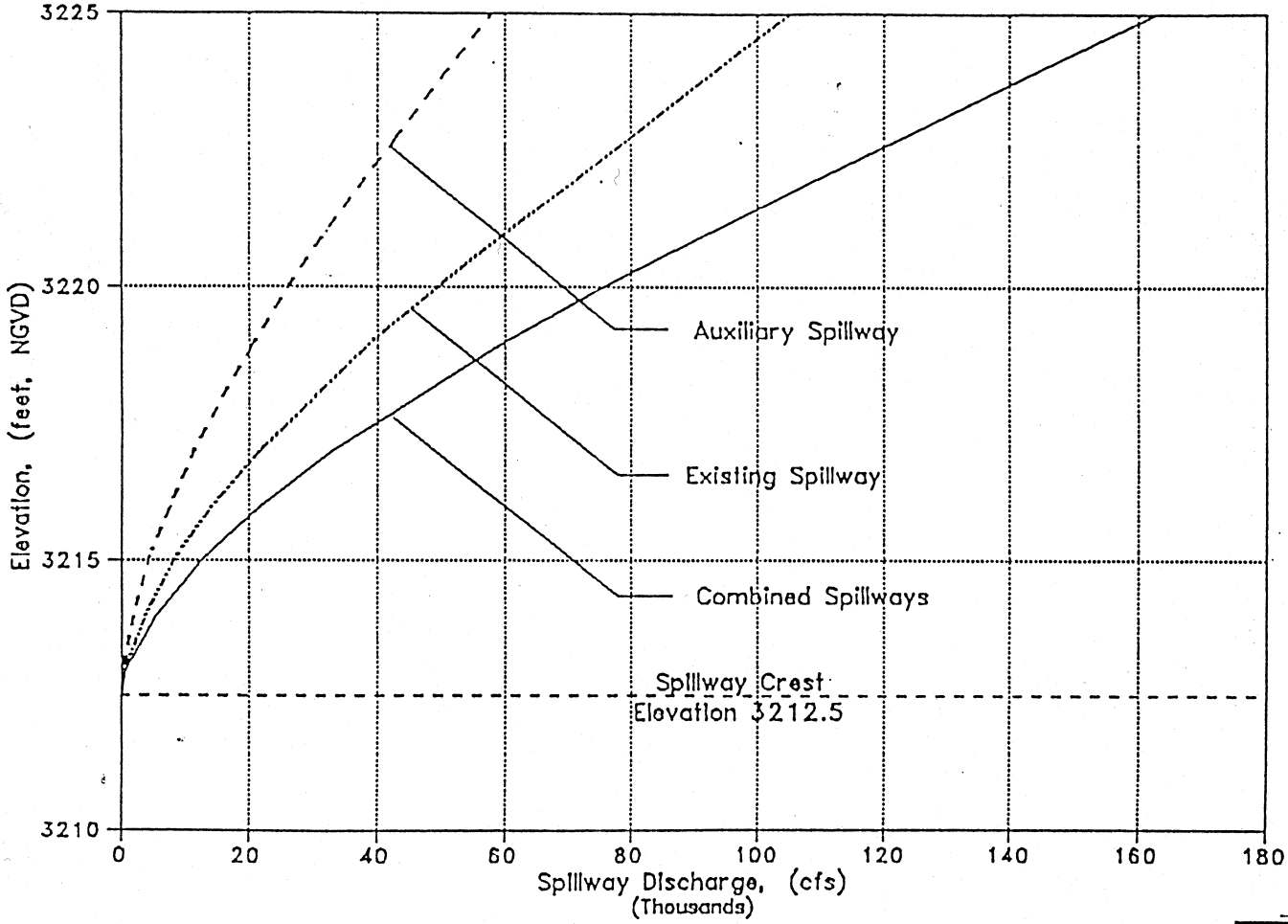
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



RED ROCK DETENTION BASIN
LAS VEGAS, NEVADA

RED ROCK DETENTION BASIN
OUTLET DISCHARGE CURVE

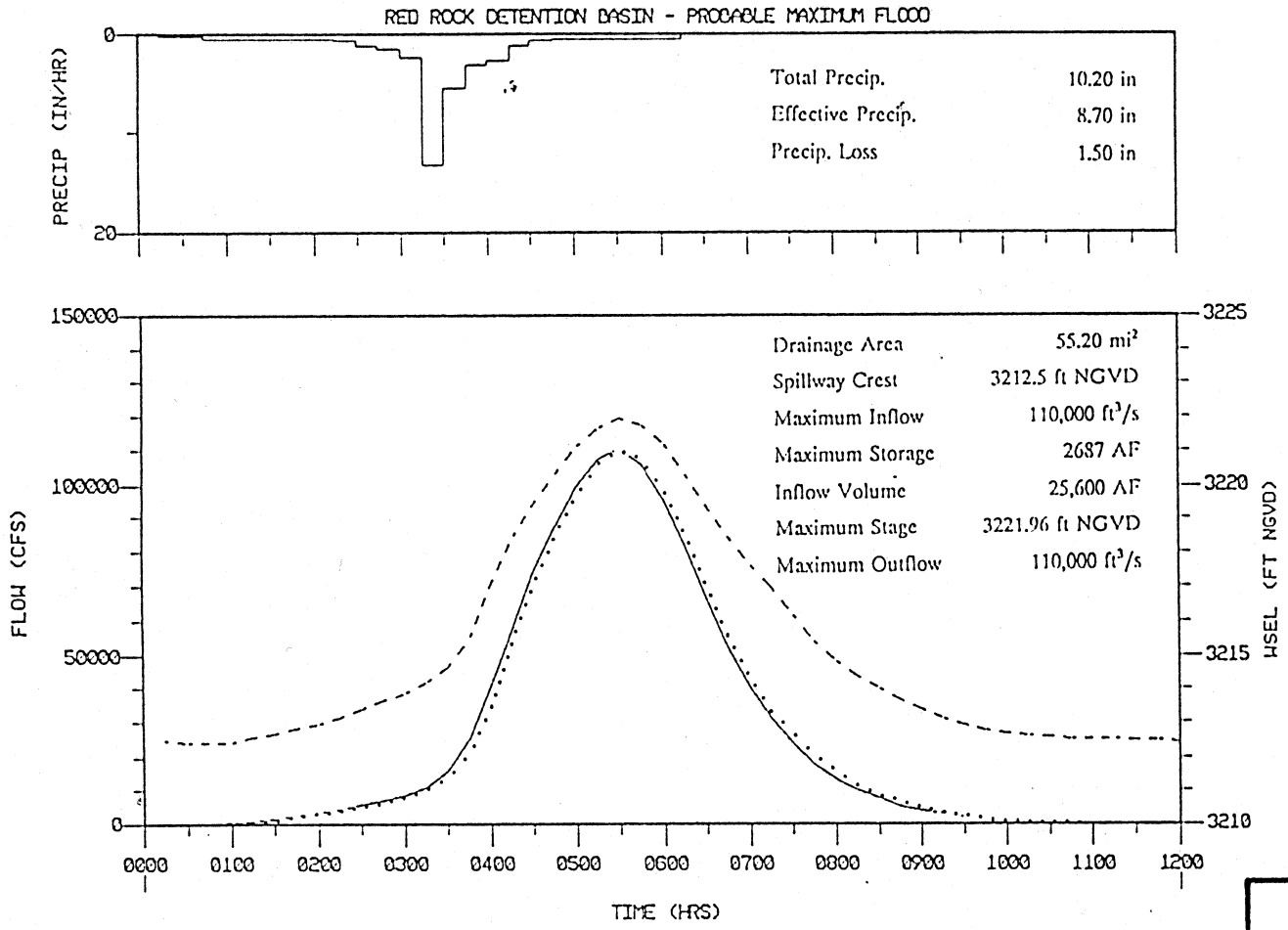
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



RED ROCK DETENTION BASIN
LAS VEGAS, NEVADA

RED ROCK DETENTION BASIN
SPILLWAY RATING CURVES

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



INFLOW
OUTFLOW
WATER SURFACE ELEVATION

LAS VEGAS WASH AND TRIBUTARIES
(TROPICANA & FLAMINGO WASHES)
DESIGN MEMORANDUM

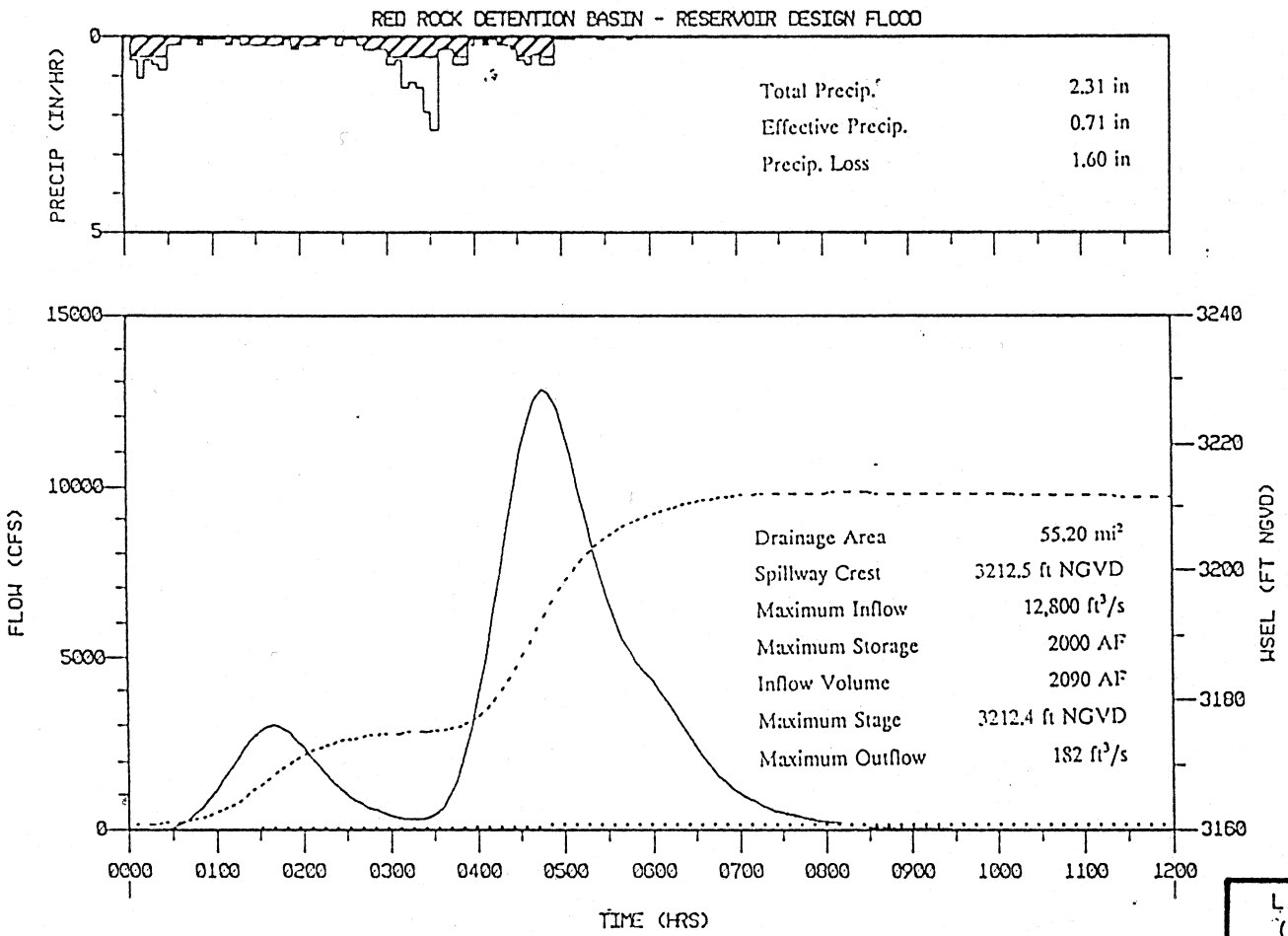
RED ROCK DETENTION BASIN

PROBABLE MAXIMUM FLOOD

INFLOW
HYDROGRAPH

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

PLATE 8



INFLOW
OUTFLOW
WATER SURFACE ELEVATION

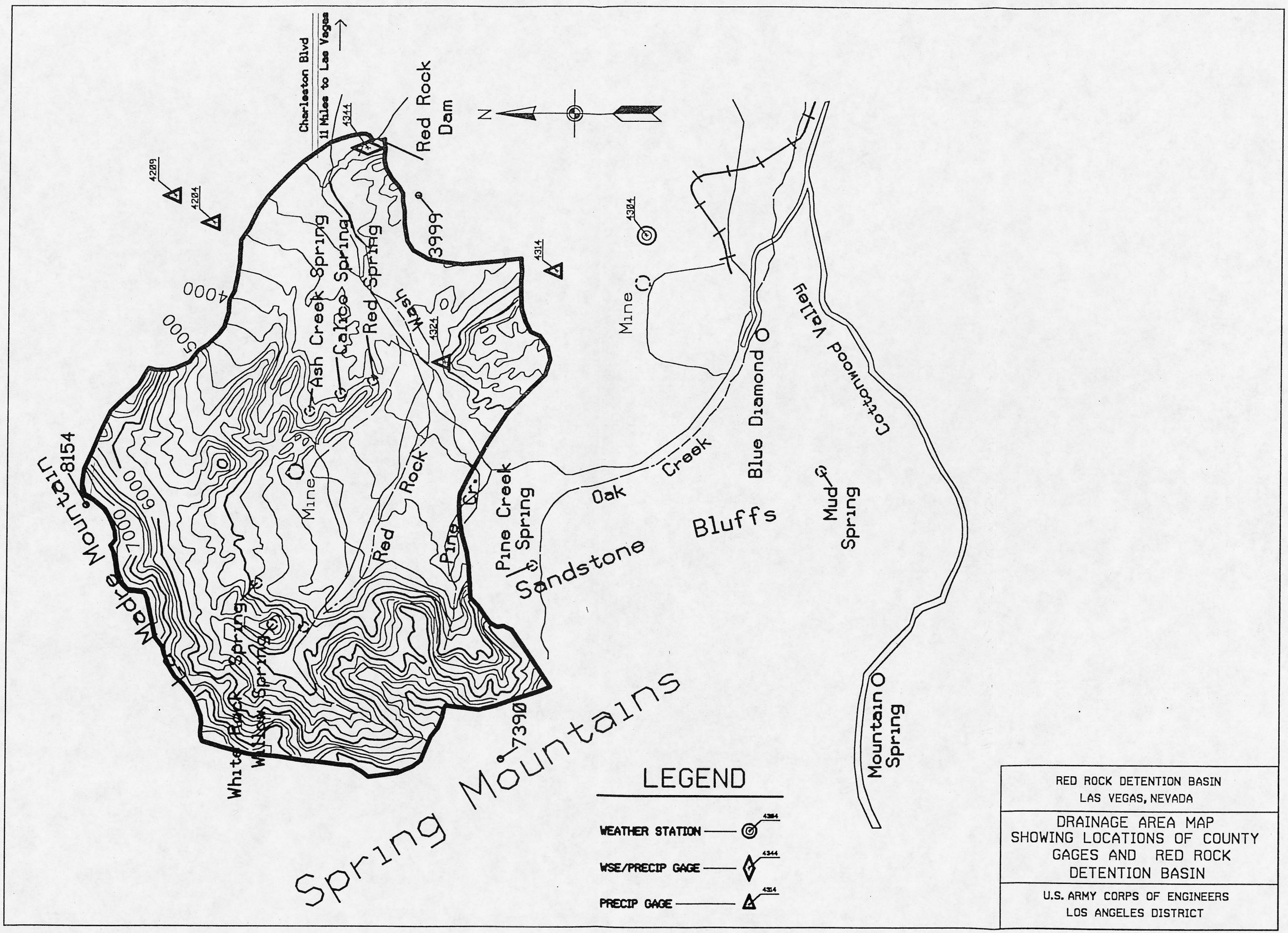
LAS VEGAS WASH AND TRIBUTARIES
(TROPICANA & FLAMINGO WASHES)
DESIGN MEMORANDUM

RED ROCK DETENTION BASIN

RESERVOIR DESIGN FLOOD

INFLOW, OUTFLOW & STAGE HYDROGRAPHS

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



RED ROCK DETENTION BASIN
LAS VEGAS, NEVADA

DRAINAGE AREA MAP
SHOWING LOCATIONS OF COUNTY
GAGES AND RED ROCK
DETENTION BASIN

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT