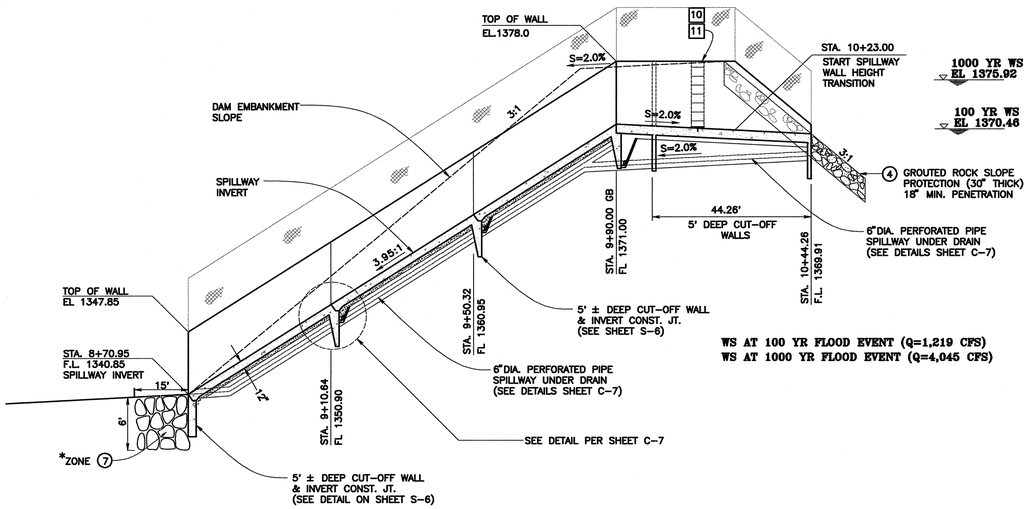


A SPILLWAY UNDERDRAIN PROFILE

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 8'

NOTES:

1. DRAIN MATERIAL SHOULD MEET THE REQUIREMENT FOR CONCRETE AGGREGATES PRESENTED IN CALTRANS SPEC. SECTION 90 .
2. PERFORATED DRAIN PIPE EMBEDDED IN THE DRAIN MATERIAL SHOULD HAVE SLOTS LIMITED TO 3/8"MAX. IN WIDTH OR CIRCULAR PERFORATIONS WITH A DIAMETER ABOUT 1/2" MAX.
3. CLEAN-OUTS SHOULD BE PROVIDED AT THE ENDS OF ALL SUBSURFACES DRAINS DRAIN MATERIALS SHOULD BE MOISTENED THROUGHLY AND COMPACTED TO A RELATIVE DENSITY OF AT LEAST 75 PERCENT (BASED ON ASTM METHODS D 4253 AND D 4254)

CONSTRUCTION CALLOUTS:

- 2 3" AC PVMT ROAD SECTION PER
- 8 CHANNEL FENCE PER SHT FCD-II
- 10 WALK GATE PER SHT FCD-II
- 11 SPILLWAY ACCESS LADDER PER SHT S-7

CONSTRUCTION NOTES:

- 11 CONSTRUCT REINFORCED CONCRETE SPILLWAY PER PLAN ON SHEETS C-2, C-3, C-5 & C-6, PROFILE ON SHEETS C-5, DETAILS ON SHEETS C-6, C-7 & S-5 AND SURVEY CONTROL DATA ON SHEETS G-2, G-3 & G-5
- 29 CONSTRUCT CONCRETE CUT-OFF WALLS PER PLAN ON SHEET C-6 AND DETAILS ON SHEETS S-3, S-6
- 30 CONSTRUCT SPILLWAY UNDERDRAIN SYSTEM PER PLAN ON SHEET C-6, SECTIONS & DETAILS ON SHEETS C-6 & C-7

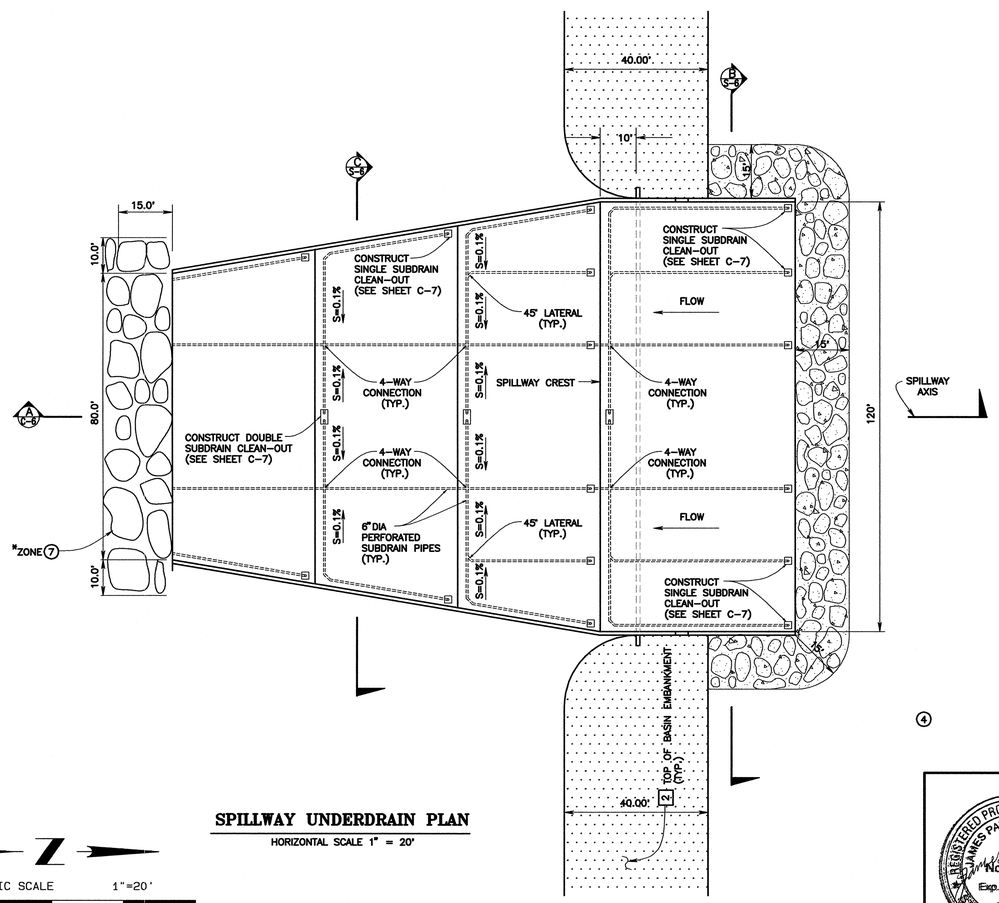
MATERIAL ZONES:

ZONE 1 MIXED, BORROW FROM BASIN EXCAVATION

SIZE	PERCENT PASSING
2.0"	100
1.5"	73 - 100
1.0"	65 - 92
# 4	37 - 64
#10	25 - 52
#20	15 - 37
#40	9 - 25
#200	> 8

ZONE 4 CONCRETED ROCK SLOPE PROTECTION (RSP). 1/4 TON, METHOD 'B' PLACEMENT

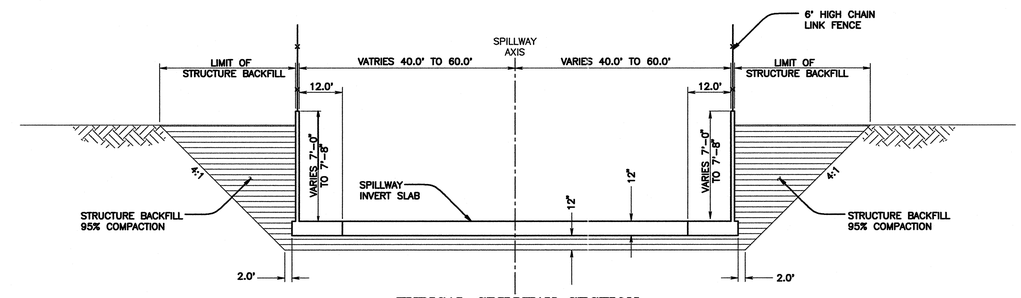
*ZONE 7 MODIFIED 1/2 TON UNGROUTED ROCK RIP-RAP, THICKNESS = 6' MIN., METHOD 'A' PLACEMENT



SPILLWAY UNDERDRAIN PLAN

HORIZONTAL SCALE 1" = 20'

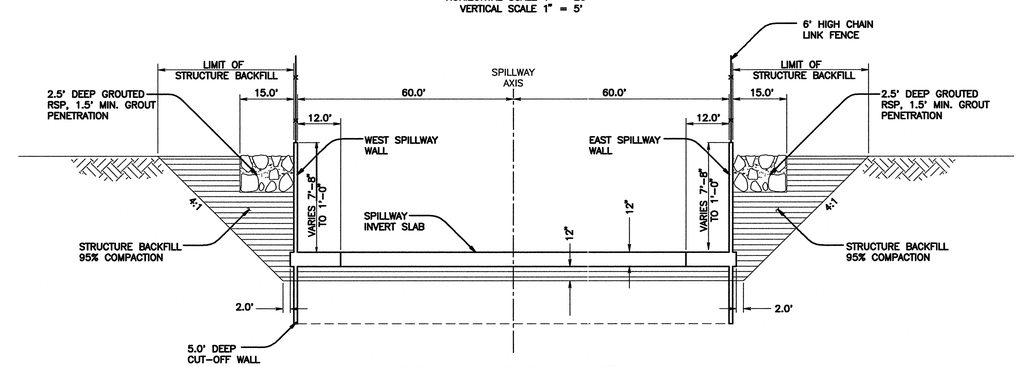
GRAPHIC SCALE 1"=20'
0 20 40 60



C TYPICAL SPILLWAY SECTION

STA. 8+70.95 TO STA. 10+00.00

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 5'



B TYPICAL SPILLWAY SECTION

STA. 10+23.00 TO STA. 10+44.26

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 5'

REGISTERED PROFESSIONAL ENGINEER JAMES PATRICK BORCUK NO. 41807 Exp 3/31/08 CIVIL STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT 1939 CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: CHIEF, ENGINEERING DIVISION DATE

RECOMMENDED BY: ASSIST. FLOOD CONTROL ENGINEER DATE

APPROVED BY: FLOOD CONTROL ENGINEER DATE

PROJ. ENGR.	DES. BY:	REV'D BY:	DRAWN BY:
T.R.	S.F.B./D.J.N.	J.B.	S.F.B./D.J.N.

SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

FONTANA-RIALTO DRAINAGE SYSTEM

CACTUS BASINS NO. 3

BASIN OUTLET SPILLWAY
UNDER DRAIN PLAN,
PROFILE & SECTIONS

DATE DEC. , 2007
SCALE AS SHOWN
FILE NO. 2-104-
SHEET NO. C-6