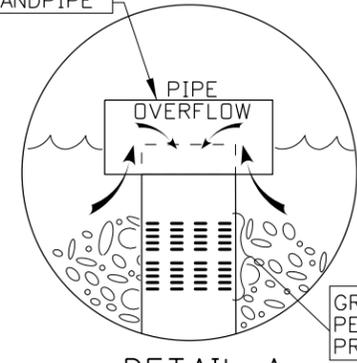


PLAN - RETENTION BASIN
(SPILLWAY OPTION 1 SHOWN)

CHANNEL SLOPE %	LENGTH	DEPTH
1	10'	1.0'
2	15'	1.0'
3	20'	1.5'
4	25'	2.0'
5	30'	3.0'

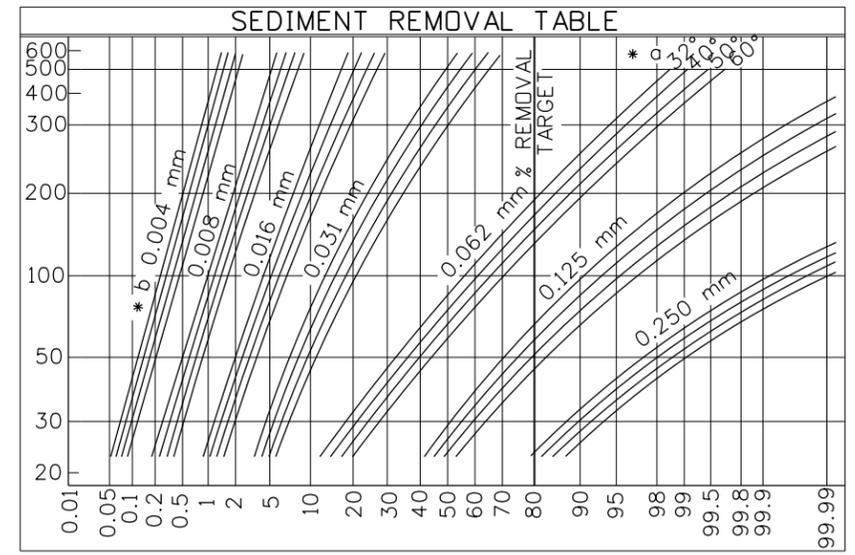
EMERGENCY SPILLWAYS
OPTION 1 - A
CONCRETE METAL
REINFORCED LINED
FLUME OPTION 2 - A
RIPRAPED TROUGH WITH
GEOTEXTILE LINER (NOT
SHOWN)

FABRICATE TRASH
RACK GRATE FROM #4
REBAR ON TOP TO
KEEP LARGE DEBRIS
OUT OF STANDPIPE



DETAIL A

GRAVEL TO COVER
PERFORATIONS TO
PREVENT CLOGGING



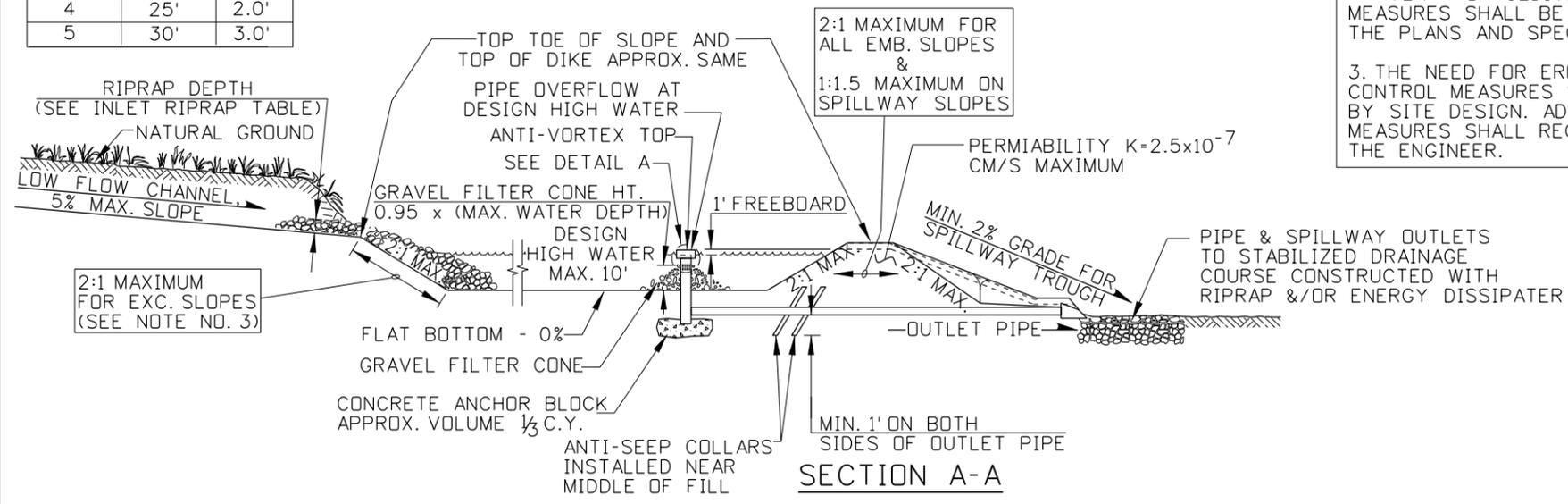
$\% \text{ REMOVED} \left(1 - \frac{W_1}{W_0} \right) 100$ *a TEMPERATURE °F
*b PARTICLE SIZE

NOTES

- SEE THE GENERAL NOTES FOR SEDIMENT CONTROL.
- THE CRITERIA FOR OPTIMAL LOCATION OF RETENTION BASINS ARE:
 - LOCATE BASIN ON OR ADJACENT TO THE HIGHWAY RIGHT-OF-WAY.
 - PLACE BASIN IN A NATURAL SWALE, USING NATURAL SLOPES SO THAT ONLY THE FRONTAL DIKE NEED BE CONSTRUCTED.
 - LOCATE AND CONSTRUCT SO THAT EXCAVATION AND EMBANKMENT QUANTITIES WILL BE REASONABLY BALANCED.
- WHEN AMPLE SPACE IS AVAILABLE USE THE NATURAL SLOPES TO CONSTRUCT RETENTION BASINS. EXCAVATED SLOPES FOR RETENTION BASINS SHALL BE CONSTRUCTED WITH GENTLE SLOPES AS TO PREVENT FURTHER EROSION OR SLOUGHING INSIDE THE BASIN. THE TOP TOE OF THE EXCAVATED SLOPE SHALL BE NO HIGHER THAN THE TOP OF THE BASIN DIKE PORTION.
- RETENTION BASINS SHALL BE CONSTRUCTED AT LOCATIONS AS SHOWN ON THE PLANS. THE BASIN DIMENSIONS, CAPACITY, AND FLOW GRADES SHALL BE DETERMINED BY DESIGN. THE FINAL DESIGN OF ALL RETENTION BASINS SHALL BE APPROVED BY THE ITD HYDRAULICS ENGINEER AND ITD MATERIALS/GEOTECHNICAL ENGINEER.
- IT IS RECOMMENDED THAT THE LENGTH (L) OF A RETENTION BASIN BE (10) TEN TIMES THE WIDTH (W).
- THE CAPACITY OF A RETENTION BASIN SHALL NOT EXCEED 50 ACRE FEET OR A DRAINAGE AREA IN EXCESS OF 150 ACRES.
- DIKE MUST BE COMPACTED TO A MINIMUM OF 95% OF STANDARD DENSITY. DIKE MUST BE CONSTRUCTED OF IMPERMIABLE MATERIAL.
- ACCESS FOR SEDIMENT REMOVAL MUST BE PROVIDED.
- NOT TO SCALE.

GENERAL NOTES FOR SEDIMENT CONTROL

- ALL SEDIMENT CONTROL MEASURES SHOWN ON P-4 SERIES STANDARD DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ITD EROSION AND SEDIMENT CONTROL - BEST MANAGEMENT PRACTICES MANUAL (BMP).
- SITE DIMENSIONS, PLACEMENT, AND PAYMENT FOR SEDIMENT CONTROL MEASURES SHALL BE AS SET FORTH IN THE PLANS AND SPECIAL PROVISIONS.
- THE NEED FOR EROSION & SEDIMENT CONTROL MEASURES SHALL BE DETERMINED BY SITE DESIGN. ADJUSTMENTS TO THOSE MEASURES SHALL REQUIRE APPROVAL BY THE ENGINEER.



SECTION A-A

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-98	MSM						
2	10-10	KEH						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: p4a_1010.dgn
DRAWING DATE: FEBRUARY, 1996

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING
EROSION & SEDIMENT CONTROL RETENTION BASIN

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO.
P-4-A

SHEET 1 OF 1

ORIGINAL SIGNED BY:
KARISSA HARDY
DATE ORIGINAL SIGNED:
OCTOBER 27, 2010