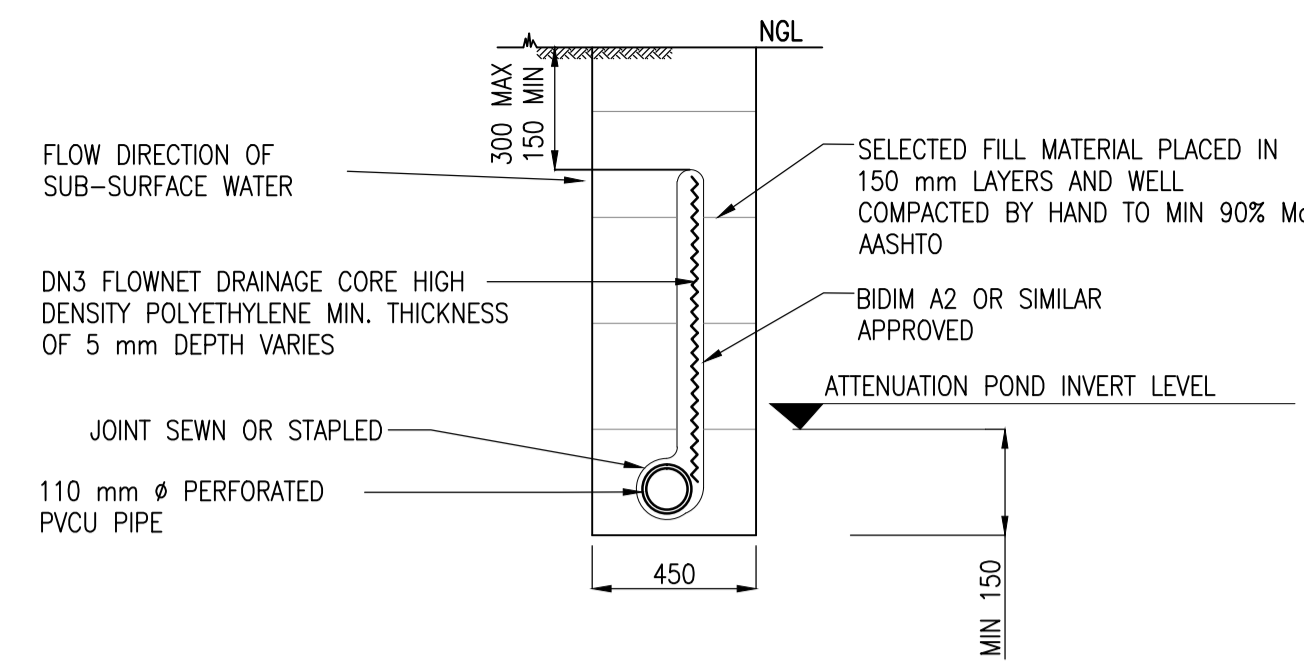
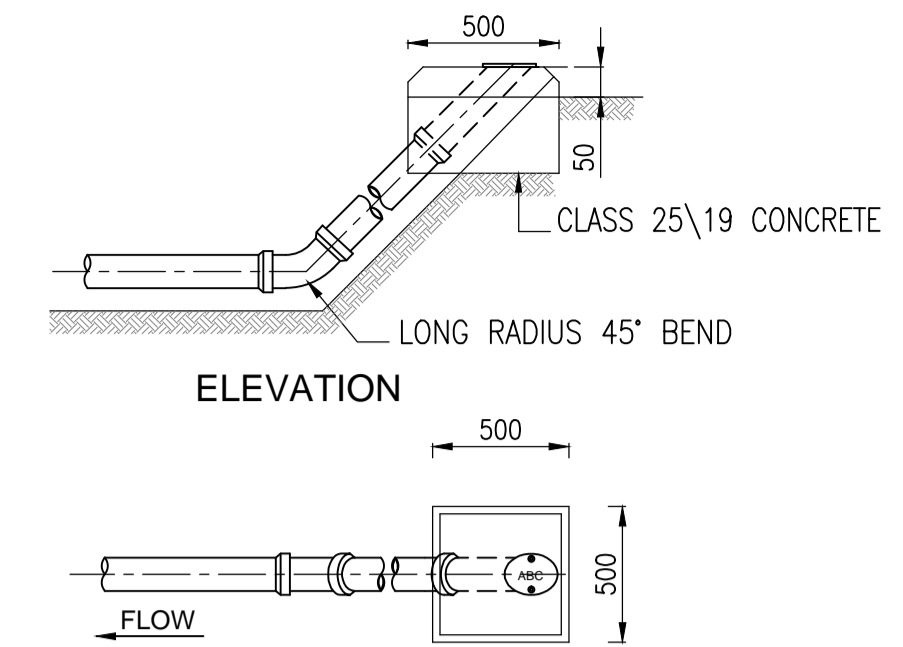


DETAIL A  
TYPICAL DETAIL OF EMERGENCY OVERFLOW WEIR  
NTS

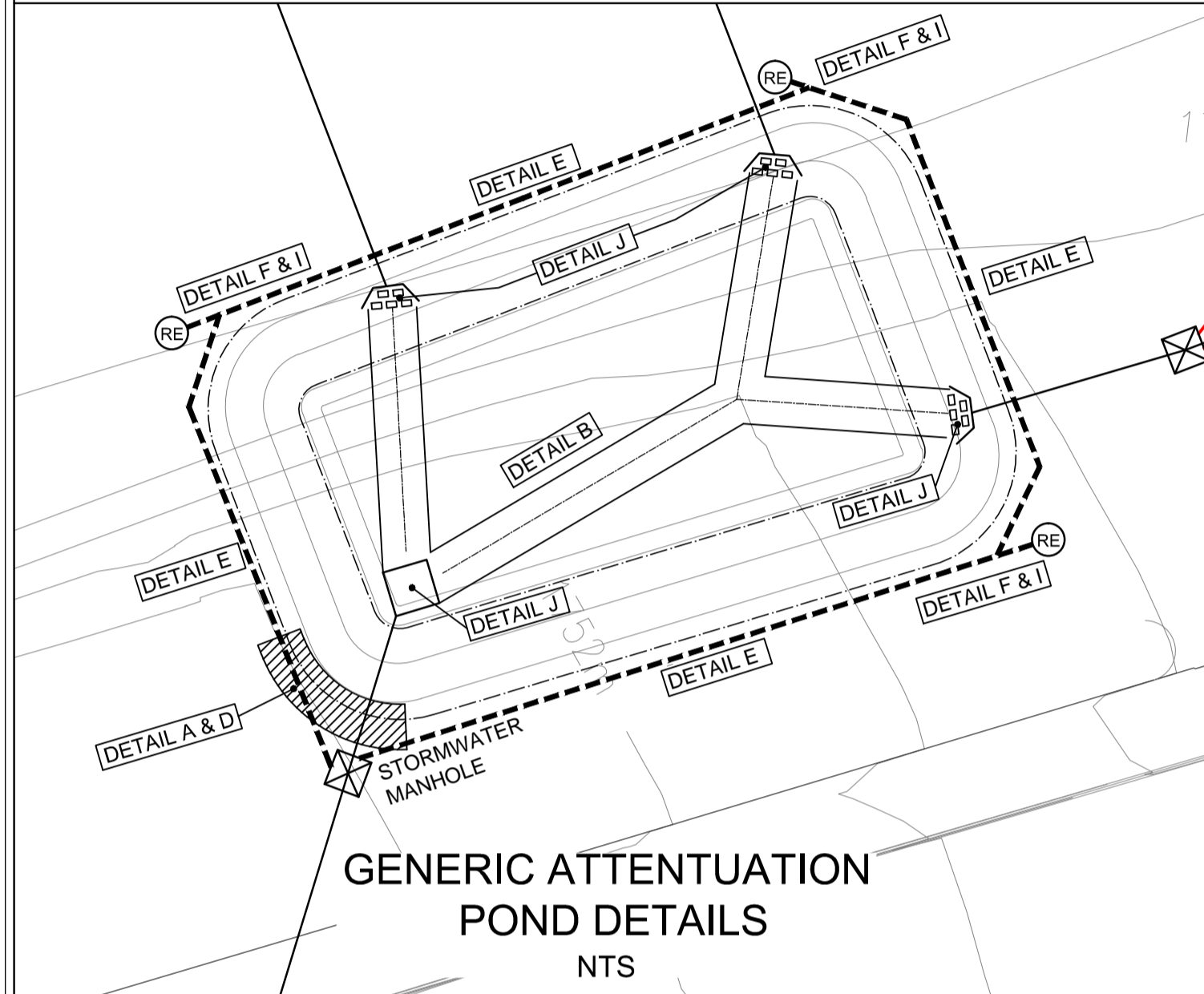


DETAIL E  
CUT OFF DRAIN  
1 m FROM CREST OF POND (EXTERNAL)  
NTS

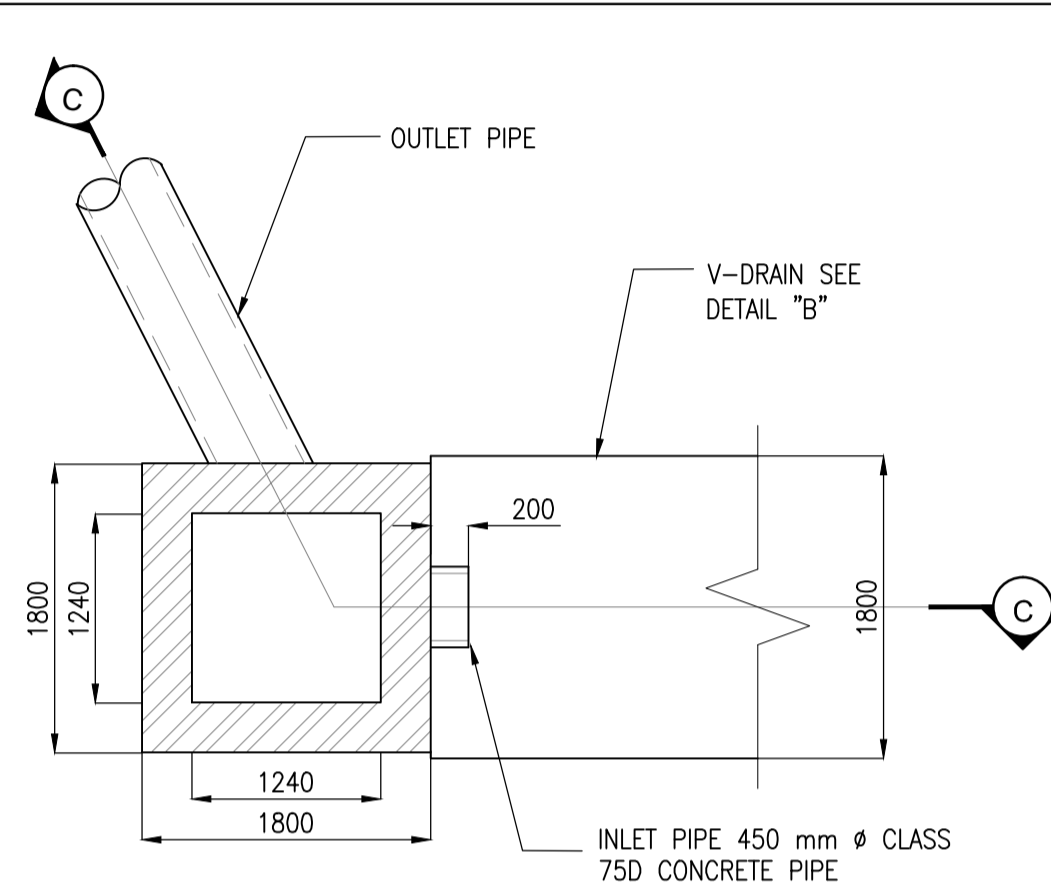


DETAIL I  
TYPICAL SUB-SOIL RODDING EYE  
NTS

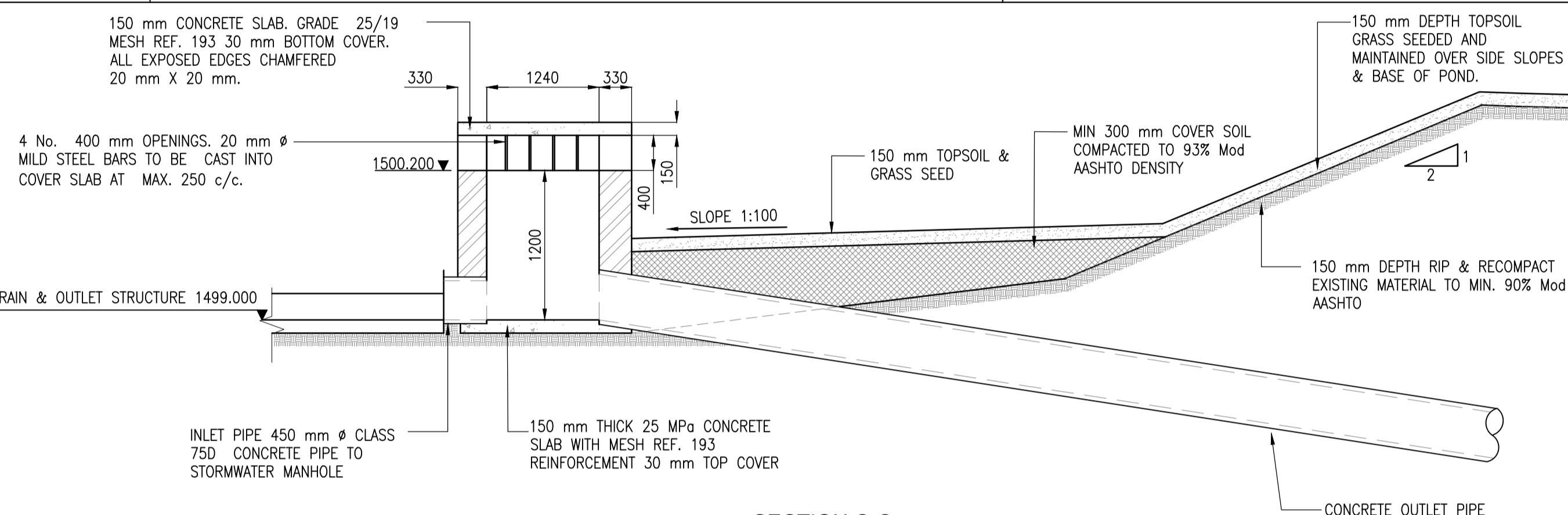
- DISCLAIMER: "SHOULD THESE DRAWINGS AND PROJECT SPECIFICATIONS BE USED OR RELIED UPON FOR ANY OTHER PURPOSE OTHER THAN WHAT THEY WERE INTENDED FOR ON THIS SPECIFIC SITE, WITHOUT PD NAIDOO & ASSOCIATES' PRIOR KNOWLEDGE AND WRITTEN CONSENT, THEN THE USER SHALL INDEMNIFY THE COPYRIGHT HOLDER AGAINST ALL LIABILITIES, CLAIMS, DAMAGES, LOSSES, FINES AND/OR PENALTIES (EITHER IN CONTRACT OR DELICT) INSTITUTED BY THE USER OR ANY OTHER PARTY AS RESULT OF THEIR RE-USE OF OR RELIANCE ON THESE DRAWINGS AND PROJECT SPECIFICATIONS".
- CONSTRUCTION NOTES :
- ALL CONSTRUCTION, TESTING, TOLERANCES AND MATERIALS AS PER SANS 1200 SERIES OF SPECIFICATIONS
  - STRIP 300mm TOPSOIL AND STOCKPILE ON SITE. THE QUANTITY SPECIFIED BY THE CIVIL ENGINEER. SPOIL THE BALANCE OFF SITE. LOCATION OF STOCKPILE TO BE INDICATED BY PROJECT MANAGER.
  - THE ENGINEER MUST BE NOTIFIED IF THE EMBANKMENT OR SUBGRADE IS IN ROCK
  - AN "AS-BUILT" SURVEY OF THE PLATFORM MUST BE PROVIDED BY THE CONTRACTOR AFTER COMPLETION OF THE WORKS
  - TRENCHES MUST BE EXCAVATED IN ORDER TO DRAIN STORMWATER FROM PLATFORMS
  - THE CONTRACTOR SHALL SUBMIT DENSITY TEST RESULTS AS PER SANS 1200 DM CLAUSE 7 - INCLUDING ONE DCP TEST PER 100 SQUARE METRES OF FILL
  - STOCKPILE SELECTED FILL MATERIAL FOR BACKFILL BEHIND RETAINING WALLS. QUANTITY AS PER CIVIL ENGINEER. LOCATION OF STOCKPILE TO BE INDICATED BY PROJECT MANAGER.
  - REFER TO TYPICAL SECTIONS ON THIS DRAWING FOR DEPTH CATEGORIES OF EXCAVATION WRT TEMPORARY EMBANKMENTS. ALL PERMANENT EMBANKMENT SLOPES ARE TO BE 1 : 2.5 IN FILL AND 1 : 2.5 IN CUT.
  - THE EXISTING GROUND LEVELS AS PER THE LAND SURVEYOR'S DWG. MUST BE CONFIRMED BY THE B.E. CONTRACTOR BEFORE CONSTRUCTION COMMENCES. ANY CONFLICT IN LEVELS MUST BE REPORTED IMMEDIATELY. NO CLAIM WILL BE ENTERTAINED IF THE CONTRACTOR HAS NOT NOTIFIED THE ENGINEER OF A CONFLICT IN LEVELS PRIOR TO CONSTRUCTION
  - CONTRACTOR TO CONFIRM POSITIONS OF BOUNDARY PEGS WITH LAND SURVEYOR BEFORE CONSTRUCTION COMMENCES
  - EXTENT OF EARTHWORKS IS RESTRICTED TO THE INSIDE OF THE ERF.
  - BULK EARTHWORKS LEVELS INDICATED ARE AS PER DETAIL
  - PERMISSIBLE DEVIATION (PD) FOR TERRACES AND EMBANKMENTS AS PER SANS 1200 D & DM SECTION 6 :  
a. POSITION OF TOP EDGE OF TERRACE ±150mm  
b. ALIGNMENT OF TOP EDGE OF TERRACE ±50mm  
c. FINISHED LEVELS +25mm & -25mm



GENERIC ATTENUATION POND DETAILS  
NTS

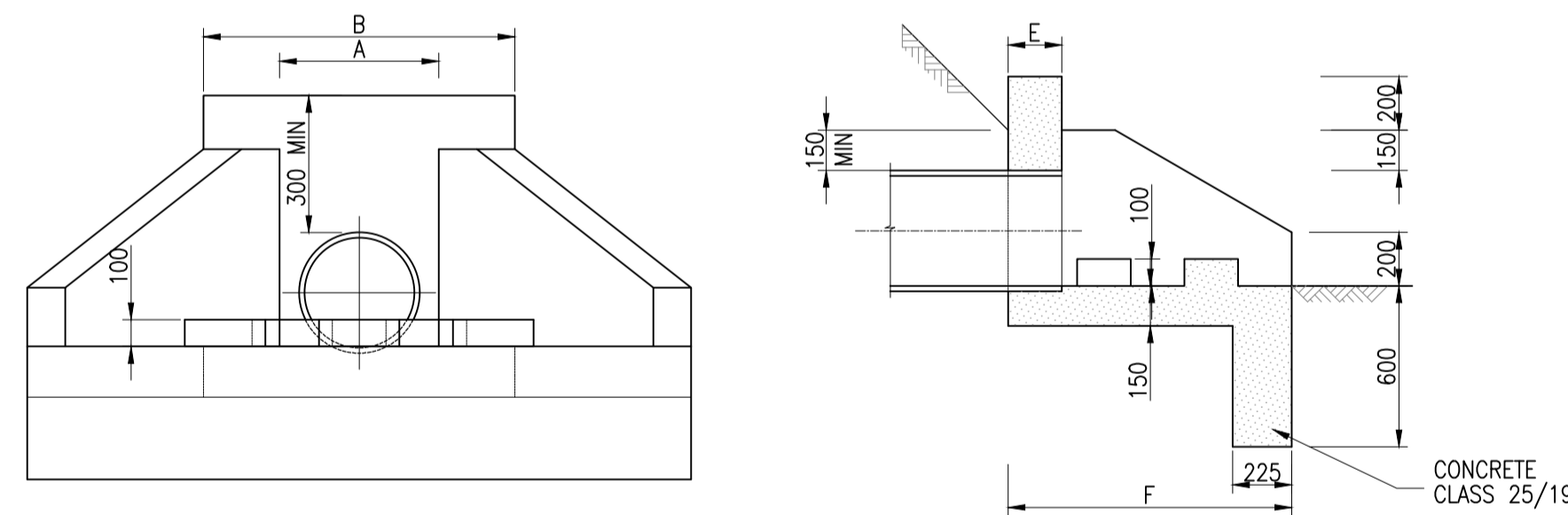


PLAN ON OUTLET STRUCTURE  
SCALE 1:50



SECTION C-C  
TYPICAL SECTION THROUGH OUTLET STRUCTURE  
SCALE 1:50

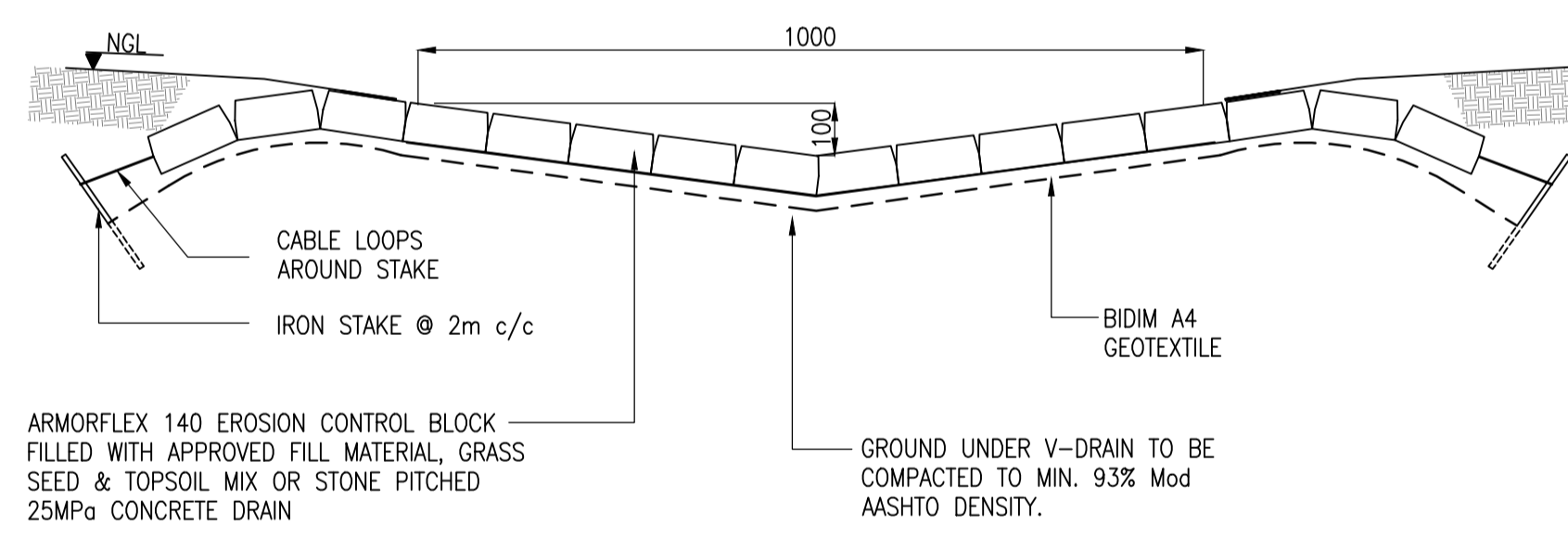
DETAIL C  
SCALE 1:50



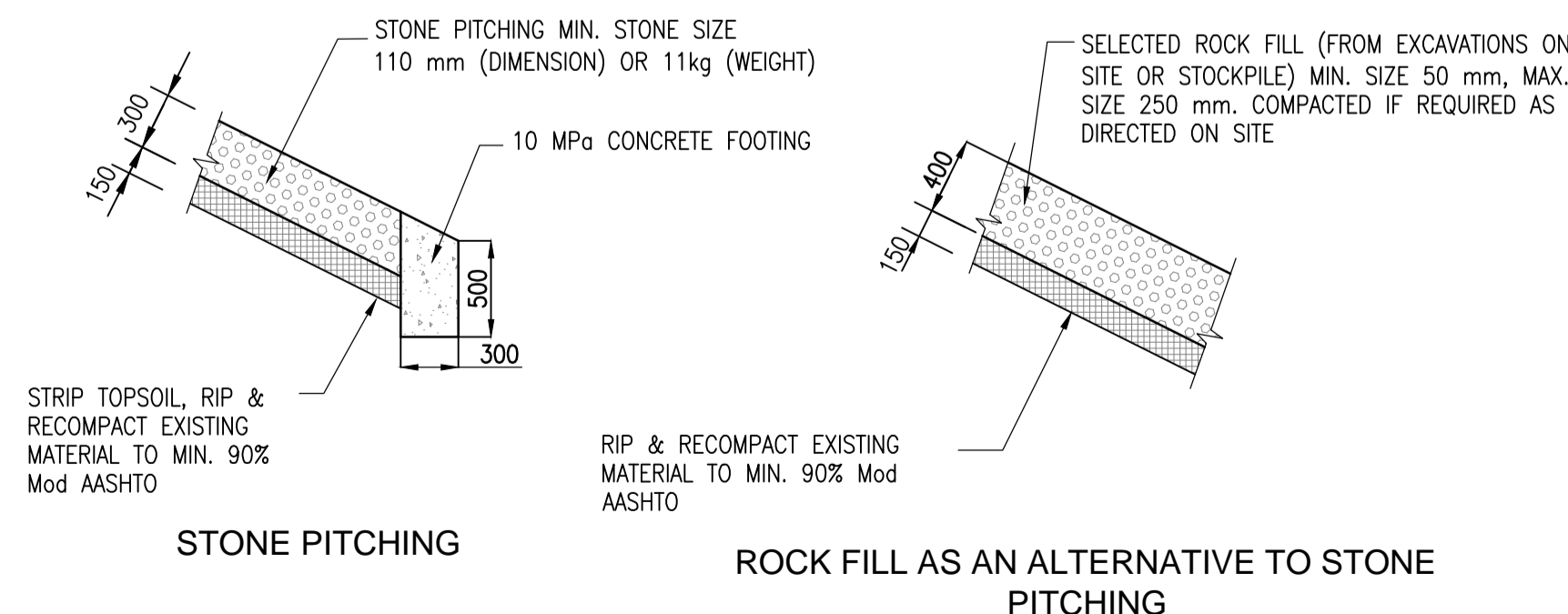
NOTE:  
HEADWALL DIMENSIONS FOR PRECAST BOX CULVERT TO BE FURNISHED BY THE ENGINEER 25 x 25mm CHAMFERS TO BE PROVIDED AT CORNERS OF ALL EXPOSED SURFACES

Ø	HEADWALL DIMENSIONS					
	A	B	C	D	E	F
375	600	1160	2200	930	200	1000
450	600	1160	2200	930	200	1000
525	600	1160	2200	930	200	1000
600	750	1390	2700	1150	225	1200
675	750	1390	2700	1150	225	1200
750	900	1610	3400	1520	250	1500
825	900	1610	3400	1520	250	1500
900	1050	1825	4100	1880	275	1800
1050	1200	2050	4800	2245	300	2100
1200	1350	2270	5500	2605	325	2400
1350	1500	2500	6200	2970	350	2700
1650	1800	2800	6500	3270	375	3000

DETAIL J  
HEADWALL DETAILS  
NTS



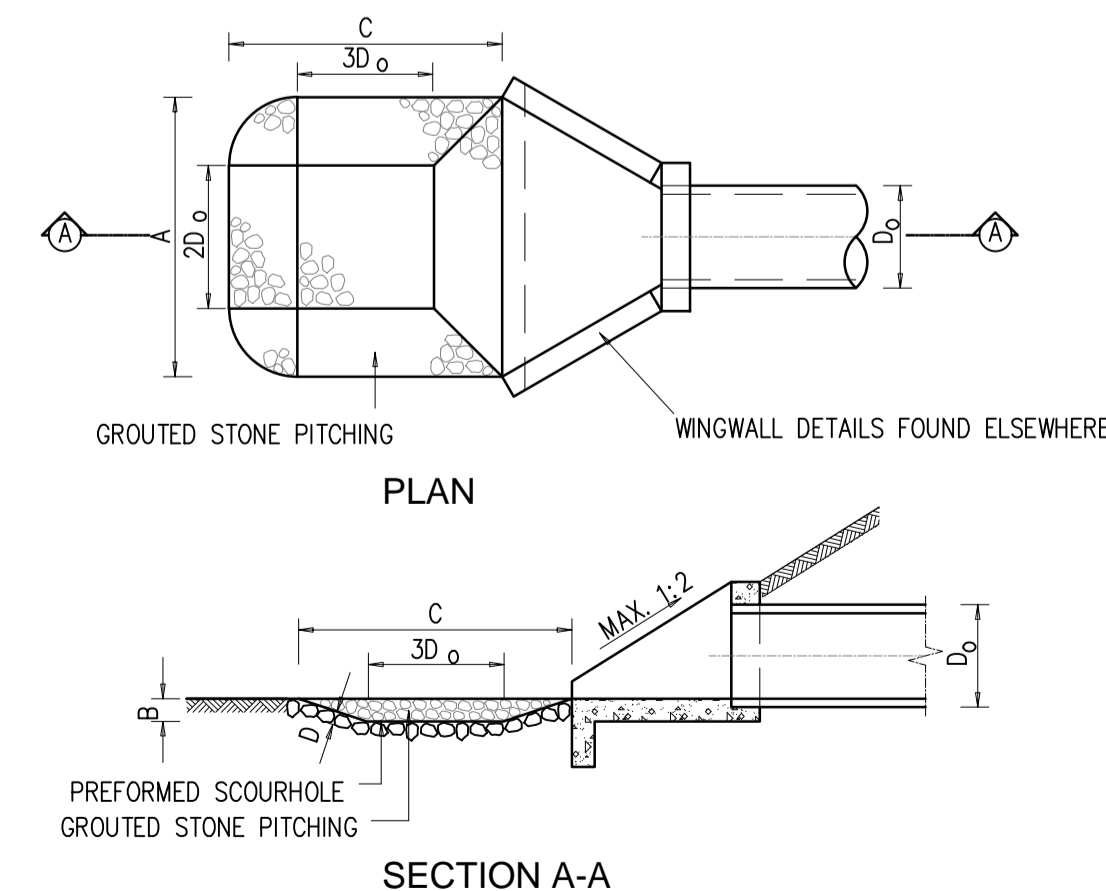
DETAIL B  
V-DRAIN WITHIN ATTENUATION POND  
NTS



DETAIL D  
ROCK FILL OR STONE PITCHING  
NTS

DIMENSIONS		
FOR SHALLOW STILLING BASIN (SEE NOTE)	DIMENSIONS	FOR DEEP STILLING BASIN (SEE NOTE)
0,0552 (Q 1,333) (m) D <sub>0</sub> 2,333	D <sub>50</sub>	0,0362 (Q 1,333) (m) D <sub>0</sub> 2,333
50 <sub>0</sub> (m)	A	80 <sub>0</sub> (m)
0,5 D <sub>0</sub> (m)	B	D <sub>0</sub> (m)
60 <sub>0</sub> (m)	C	90 <sub>0</sub> (m)
2D <sub>50</sub> (m)	D	2D <sub>50</sub> (m)

NOTE: REFER TO THE "NATIONAL TRANSPORT COMMISSION HANDBOOK FOR ROAD DRAINAGE" FOR THE APPLICABILITY OF THE VARIOUS TYPES OF EROSION PROTECTION  
D = HEIGHT OF OUTLET PIPE/ CULVERT/ BOX CULVERT.



TYPICAL STILLING BASIN DETAIL  
NTS

REV	DATE	DRAWN	CHECKED	DESCRIPTION
A	05/02/15	PY	PKS	ISSUED FOR APPROVAL

CONSULTANT  
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PROJECT  
KATHU SUPPLIER PARK

DRAWING  
ATTENUATION POND DETAILS

FOR APPROVAL				
SIGNATURE		DATE		
DESIGNED	PKS			05/02/15
DRAWN	PY			05/02/15
CHECKED	RB			05/02/15
APPROVED	PKS			05/02/15
SCALE	AS SHOWN			
PROJECT No.	DISCIPL.	DRG. NUMBER	STAGE SHEET SIZE	REVISION
349951	C	005	A A1	A
CLIENT DRAWING No.	FILE NAME AND LOCATION No. (AUTOCAD 2007)			
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