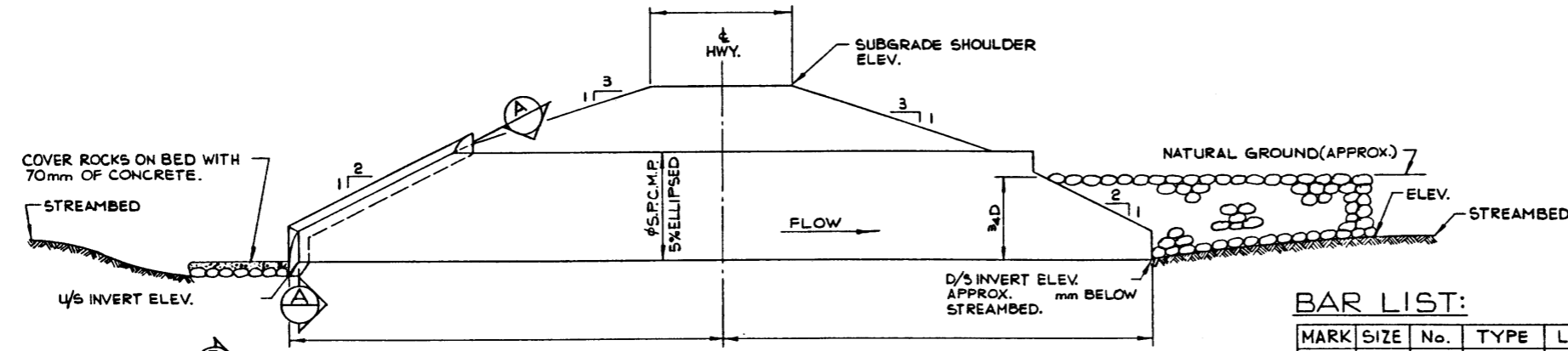
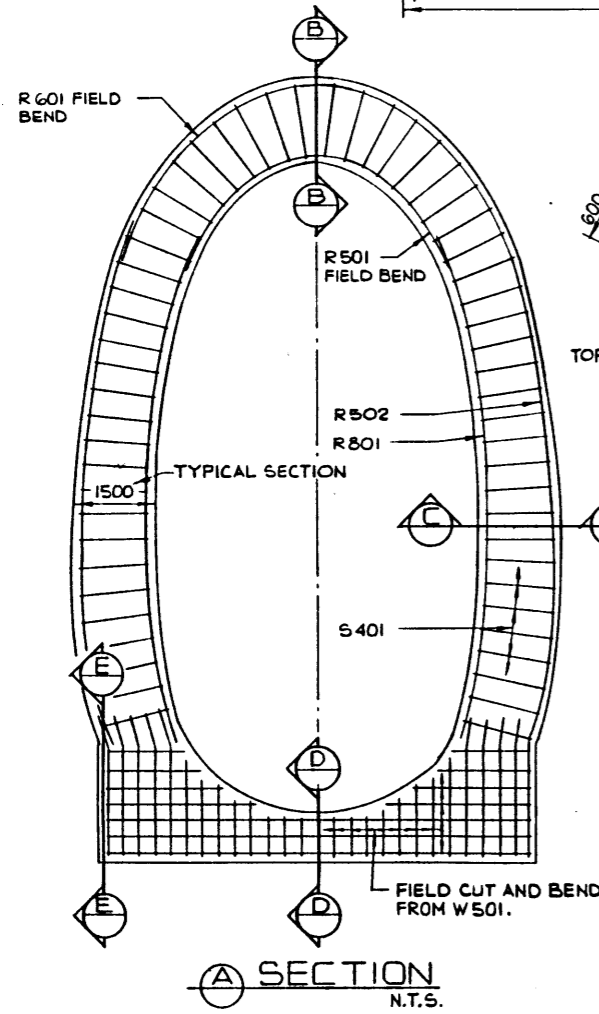


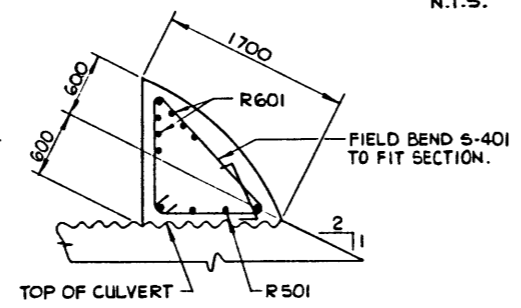
PLAN
N.T.S.



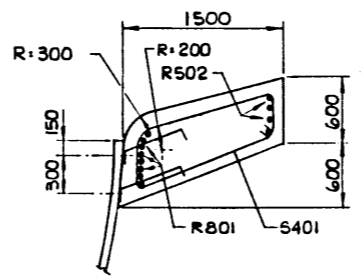
ELEVATION
N.T.S.



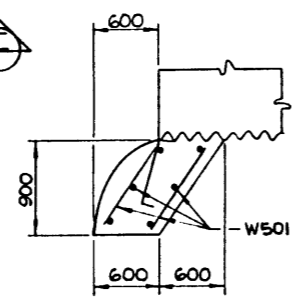
A SECTION
N.T.S.



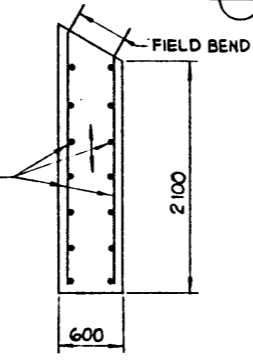
B SECTION
N.T.S.



C SECTION
N.T.S.



D SECTION
N.T.S.



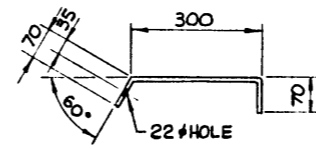
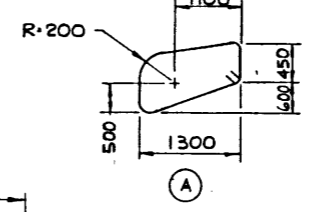
E SECTION
N.T.S.

BAR LIST:

MARK	SIZE	No.	TYPE	LENGTH	WEIGHT
R 501	15		STR.		
R 502	15		STR.		
R 601	20		STR.		
R 801	20		STR.		
S 401	15		A		
W 501	15		STR.		

BAR TYPES:

(ALL DIMENSIONS ARE OUT TO OUT)



ANCHOR
N.T.S.

ANCHORS TO BE 6mm x 50mm STREP IRON x 450mm LG.
ANCHOR LOCATION TO ALTERNATE AT 300mm INTERVALS.
FIELD BEND TO SUIT. BOLTS TO BE 20mm# x 30mm STD.
GALV. CULVERT ASSEMBLY BOLTS.

RIP-RAP GRADING

- CLASS I: (AVERAGE 300mm THICK)**
 90% GREATER THAN 22 kg
 50% GREATER THAN 35 kg
 MAXIMUM SIZE 90 kg
- CLASS II: (AVERAGE 750mm THICK)**
 90% GREATER THAN 70 kg
 50% GREATER THAN 225 kg
 MAXIMUM SIZE 700 kg

CULVERT DIMENSIONS
(AFTER TIGHTENING; BEFORE BACKFILLING)

NOMINAL	VERTICAL	HORIZONTAL
3050	3200	2900
3350	3500	3100
3650	3800	3500
3950	4150	3750
4250	4460	4000
4900	5150	4650
5500	5775	5225
6100	6400	5800

QUANTITY ESTIMATE:

ITEM	UNIT	EST.	AS CONST.
INSTALLATION OF SPCMP	m		
CLASS I ROCK	m ³		
CLASS II ROCK	m ³		
CLASS A CONCRETE	m ³		
REINFORCING STEEL	kg		

GENERAL NOTES:

- ALL REINFORCING BARS TO HAVE 70mm CLEAR COVER.
- ALL SURFACES OF ROCK RIP-RAP THAT WILL COME INTO CONTACT WITH CONCRETE MUST BE CLEANED TO ENSURE BOND.
- THE CONCRETE USED TO FILL VOIDS IN BETWEEN RIP-RAP SHALL CONFORM TO THE REQUIREMENTS OF CLASS A CONCRETE. FIELD DRILL 22mm# HOLES IN THE S.P.C.M.P. TO RECEIVE ANCHOR BOLTS (DO NOT BURN). DUE TO POSSIBLE CHANGES IN BENCH MARKS, ERRORS, ETC., THE PROPOSED ELEVATIONS MUST BE FIELD CHECKED TO ENSURE THAT THE CULVERT IS APPROX. D/4 BELOW STREAMBED.
- THE CONCRETE USED FOR THE SHOULDER AND SLOPED SLABS SHALL CONFORM TO THE REQUIREMENTS OF CLASS A CONCRETE.
- PLEASE RETURN THIS DRAWING WITH THE AUTHORIZATION WHEN THE STRUCTURE IS COMPLETED, SHOWING THE ACTUAL "AS INSTALLED" INVERT ELEVATIONS AND THE "AS CONSTRUCTED" DIMENSIONS.
- WORK THIS DRAWING WITH DRAWING No. AND SPECIFICATION B-269/67 "INSTALLATION OF LARGE METAL PIPE".
- ROCK TREATMENT AND BANK DETAILS ON OUTLET TO BE REVISED AS NECESSARY FOR EACH SITE.
- ALL MEASUREMENTS ARE GIVEN IN mm.

<p>GENERAL LAYOUT AND END TREATMENT</p>			
NO.	DATE	DESCRIPTION	
REVISIONS			
DESIGNED	DRAWN BY	DATE	CHK'D.
E. MOISEY	A. PHILLIPS	78-12-19	
STREAM	LOCATION	HWY. NO.	SCALE
FILE NO.	SHEET	OF	DWG. NO.
			S-1435