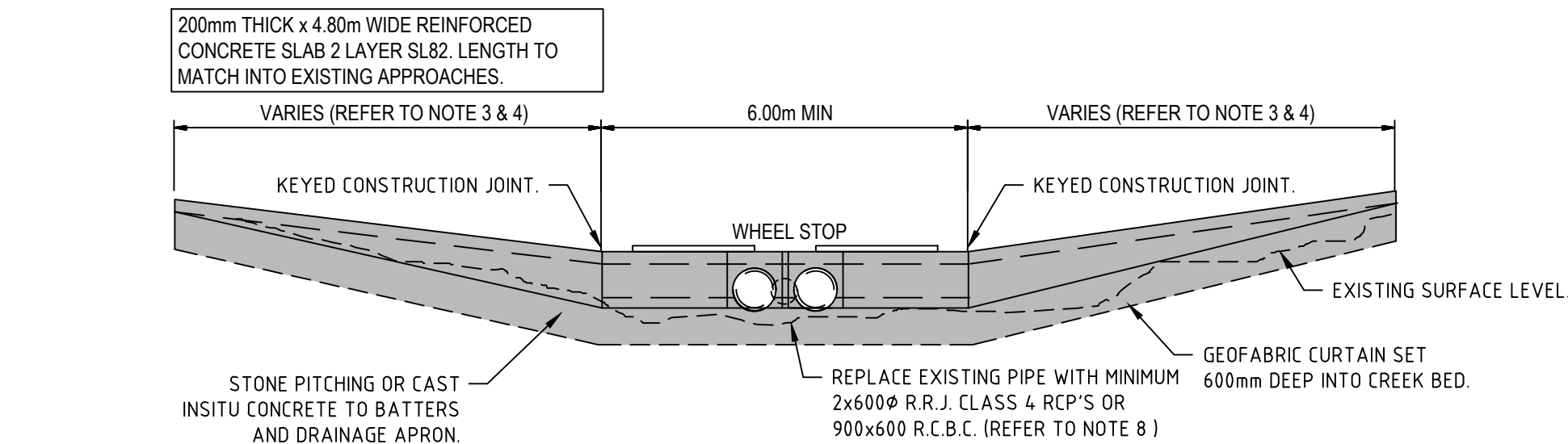
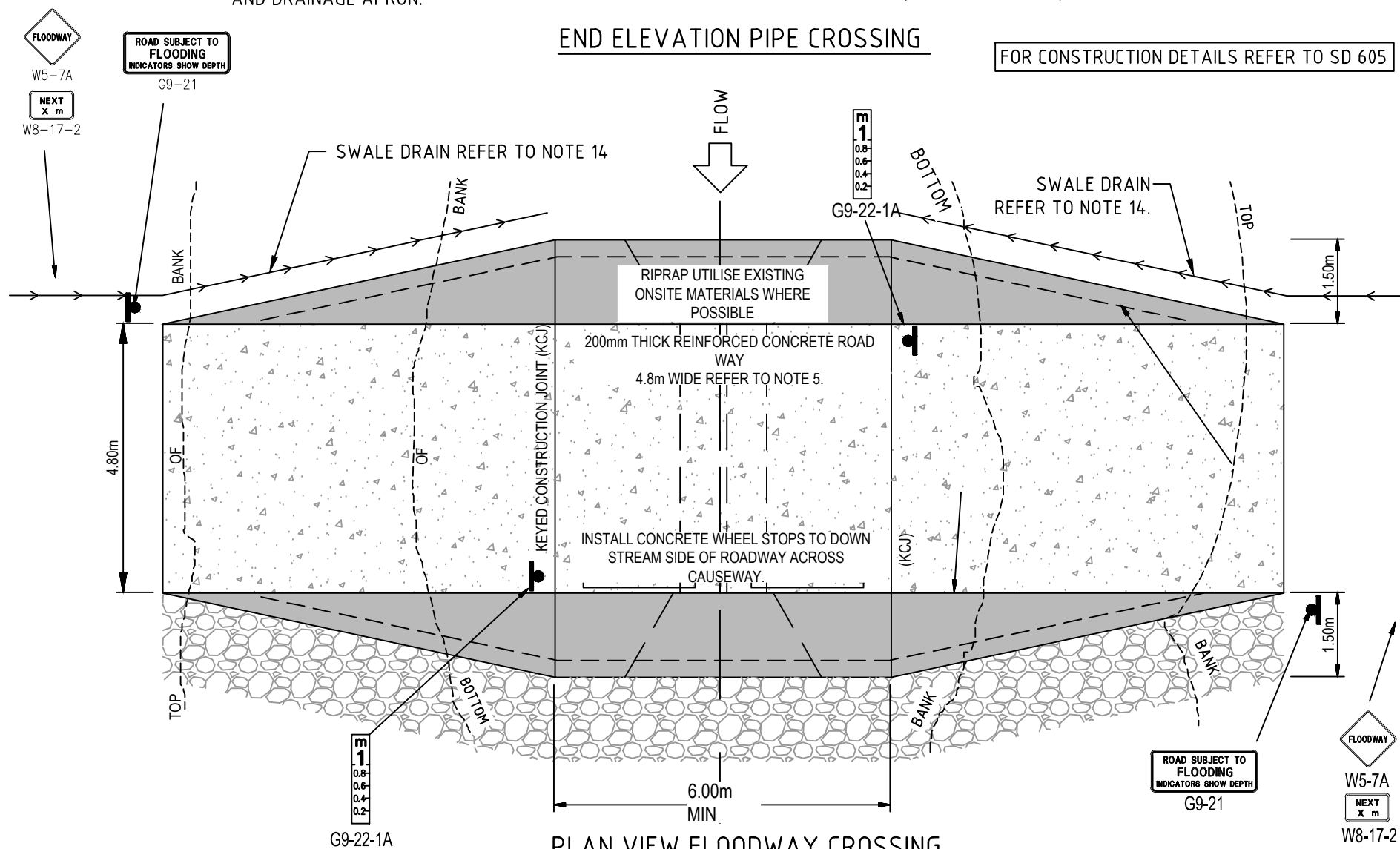




END ELEVATION PIPE CROSSING

FOR CONSTRUCTION DETAILS REFER TO SD 605



PLAN VIEW FLOODWAY CROSSING

NOTES

- DETAILS ARE FOR THE UPGRADING/RECONSTRUCTION OF AN EXISTING FLOODWAY ON A ONE LANE RURAL ROAD ONLY. DETAILS ARE NOT TO BE USED FOR NEW CONSTRUCTION UNLESS APPROVED BY COUNCILS ENGINEER.
- THESE FLOODWAY DETAILS PERTAIN TO A 90° ROAD CROSSING. WHERE AT SKEWED CROSSING IS REQUIRED THE GENERAL ARRANGEMENTS MAY BE MODIFIED TO SUIT.
- FLOODWAY IS DESIGNED TO CATER FOR Q10 FLOWS $< 5\text{m}^3/\text{s}$. WITH AN ASSUMED DOWN STREAM STANDING WATER LEVEL OF 150mm ABOVE INVERT LEVEL AND MAY NOT SUIT ALL SITES. SITE APPROVAL IS TO BE OBTAINED FROM THE MANAGER PROJECT MANAGEMENT AND CONSTRUCTION PRIOR TO COMMENCING CONSTRUCTION.
- ROADWAY APPROACHES FLOODWAY:-
 - DESIGN AND CONSTRUCT IN ACCORDANCE WITH AUSTRROADS 'GUIDE TO ROAD DESIGN' PART 3 - GEOMETRIC DESIGN AND TO THE SATISFACTION OF THE SITE SUPERVISOR/CONTRACT MANAGER.
 - CAUSEWAY AND APPROACHES ARE TO BE 200mm THICK REINFORCED CONCRETE WITH SL82 MESH TOP & BOTTOM (75mm BOTTOM COVER) WITH CONSTRUCTION JOINTS AT 5m CENTRES (MAX) OR OTHERWISE SHOWN. CONCRETE TO BE N32 CURED FOR 7 DAYS WHERE A SIDE ROAD IS CONSTRUCTED OR N50 CURED FOR 12 HOURS WHERE A SIDE TRACK IS NOT CONSTRUCTED.
 - APPROACH GRADES ARE TO BE 1:20 MAX. MATCHING INTO EXISTING ROAD LEVELS. LENGTH OF CAUSE WAY APPROACHES ARE TO BE DETERMINED ON SITE BY THE SITE SUPERINTENDENT AND TO MATCH INTO EXISTING ROAD LEVELS AT THE TOP OF THE BANKS.
- SIGN POSTING:-
 - FLOODWAY
 - NEXT... km (W8-17-2)
 - ROAD SUBJECT TO FLOODING - INDICATORS SHOWN DEPTH (G9-21)
 - DEPTH INDICATOR - (G9-22)
 - GUIDE POSTS, WARNING SIGNS AND DEPTH INDICATORS ARE TO BE INSTALLED AS PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- TEMPORARY CONSTRUCTION OF SIDE ROADS ARE TO BE DETERMINED ON SITE BY THE SITE SUPERINTENDENT.
- CULVERT CROSSING IS TO BE RECONSTRUCTED TO MATCH INTO EXISTING LEVELS. CLEAR AND RESHAPE CREEK BED WHERE REQUIRED.
- BOX CULVERT PREFERRED FOR PERMANENT STREAM WHERE FISH PASSAGE IS REQUIRED
- RIPRAP AND ROCK PITCH TO UTILISE EXISTING MATERIAL ON SITE WHERE POSSIBLE. RIPRAP TO BE SELECTED ANGULAR ROCKS WELL GRADE D50 300mm ROCKS PLACED 450mm DEEP. AREA, SIZE AND LOCATION TO BE DETERMINED ON SITE BY THE SITE SUPERINTENDENT.
- BATTER TREATMENT, CULVERT HEADWALL AND APRON TO BE KEYED 600mm INTO CREEK BED. BATTERS TO BE SHAPED TO MATCH INTO EXISTING CREEK CHANNEL
- ROCK PITCHING TO BATTERS AND PIPE SURROUND SHAPE PITCHING TO MATCH INTO CREEK FLOOR CHANNEL CAPACITY. PRECAST HEADWALLS OR CONCRETE CAST INSITU 150mm THICK (NOM.) MAY ALSO BE USED.
- ROCK PITCHING ORDER OF WORKS:-
 - PLACE GEOFABRIC AND INSERT APRON ENDS 600mm MIN. INTO NATURAL MATERIAL.
 - PLACE ROCK/STONE ON GEOFABRIC.
 - APPLY CONCRETE TO ROCK SURFACES AND CREVICES
 - WASH LATENT FROM ROCK SURFACES.
- GEOFABRIC TO BE NON WOVEN BIDIM A24 OR EQUIVALENT MEETING STRENGTH AND PERMEABILITY REQUIREMENTS REQUIREMENTS.
- ADJOINING ROAD SWALE DRAINS ARE TO BE CLEANED AND RESHAPED TO SUIT.

SWALE DRAIN TREATMENT

SWALE DRAIN	TREATMENT
0.4%-2%	CONCRETE LINED
2%-5%	GRASS LINED
5%-10%	ROCK LINED
10% OR GREAT	CONCRETE LINED

- SELECT FILL TO BE PM2/20 OG/QR COMPACTED TO 96% MODIFIED (ONE (1) TEST EACH SIDE OF CULVERT).
- INSTALL 150mm HIGH WHEEL STOPS TO DOWN STREAM SIDE OF ROADWAY ONLY ACROSS CAUSEWAY AT 1.0m SPACING.

ALL MEASUREMENTS IN MILLIMETRES

E	MINOR AMENDMENTS	6.11.2018	AF	AF	MDH
D	MINOR AMENDMENTS	18.07.2017	JZ	JC	DSL
C	ISSUED FOR REVIEW	10.06.2016	JZ	DL	DSL
B	ISSUED FOR REVIEW	10.05.2016	JZ	DL	DSL
A	ISSUED FOR REVIEW	15.03.2016	JZ	DL	DSL
REV	DESCRIPTION	DATE	DES	DRW	APP
THIS PROJECT HAS BEEN ASSISTED BY THE LOCAL GOVERNMENT RESEARCH AND DEVELOPMENT SCHEME AND INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA					

INFRASTRUCTURE GUIDELINES (SA)

SHEET TITLE

FLOODWAY - GENERAL ARRANGEMENT LOW VOLUME RURAL ROADS

SCALE
NTS @ A3

DRAWING No.

SD 600

REV

E