

TYPE 2 SUPPORT

PIPE EMBEDMENT MATERIALS:-

COARSE AGGREGATE (GRADED OR SINGLE SIZE)  
NOMINAL SIZE OF AGGREGATE SHALL BE 10, 14 OR 20mm. AGGREGATE AND THEIR GRADING SHALL COMPLY WITH AS 2758.1 TABLE 1.

SELECT FILL (FOR RC PIPES)  
SELECT FILL IS MATERIAL EITHER OBTAINED FROM EITHER EXCAVATION OF THE TRENCH OR IMPORTED.

SELECT FILL SHALL CONTAIN NO ROCK OF PARTICLE SIZE GREATER THAN 20mm AND CONTAIN NO OTHER MATERIALS OF SIZE GREATER THAN 75mm, AND WHICH CONFORMS WITH THE FOLLOWING SOIL CLASSES AS DEFINED IN APPENDIX D OF AS 1726.

SOIL GROUP CLASSIFICATION

- SC CLAYEY SANDS WITH FINES OF PLASTICITY
- SP POORLY GRADED SANDS
- SW WELL GRADED SANDS
- GC CLAYEY GRAVELS WITH FINES OF LOW PLASTICITY
- GW WELL GRADED SAND AND GRAVEL MIXTURES WITH LITTLE OR NO PLASTIC FINES
- GP POORLY GRADED SAND AND GRAVEL MIXTURES WITH LITTLE OR NO PLASTIC FINES

SELECT FILL SHALL BE FREE FROM ORGANIC MATERIALS SUCH AS DOMESTIC & INDUSTRIAL WASTE, TIMBER AND TREE LOOPINGS.

TRENCH FILLING MATERIALS:-

TRENCH SUBJECT TO TRAFFIC LOADING

USE ONE OF THE FOLLOWING FILL TYPES.

HIGH GRADE COMPACTION SAND  
REFER TO PIPE EMBEDMENT DETAILS.

FINE CRUSHED ROCK (ROADBASE)  
FINE CRUSHED ROCK OR "ROADBASE" SHALL COMPLY WITH ROADS AND TRAFFIC AUTHORITY SPECIFICATION 3050, CLASS DGB 20.

75mm CRUSHED SANDSTONE  
75mm CRUSHED SANDSTONE SHALL COMPLY WITH ROADS AND TRAFFIC AUTHORITY SPECIFICATION 3051, CLASS MS 75. APPROVAL IN WRITING MUST BE OBTAINED FROM THE ROAD AUTHORITY.

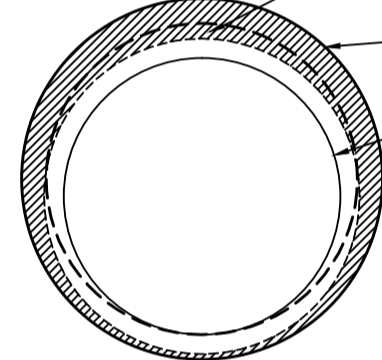
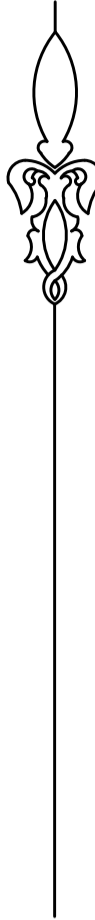
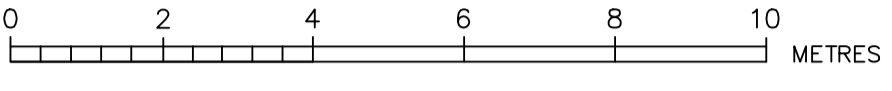
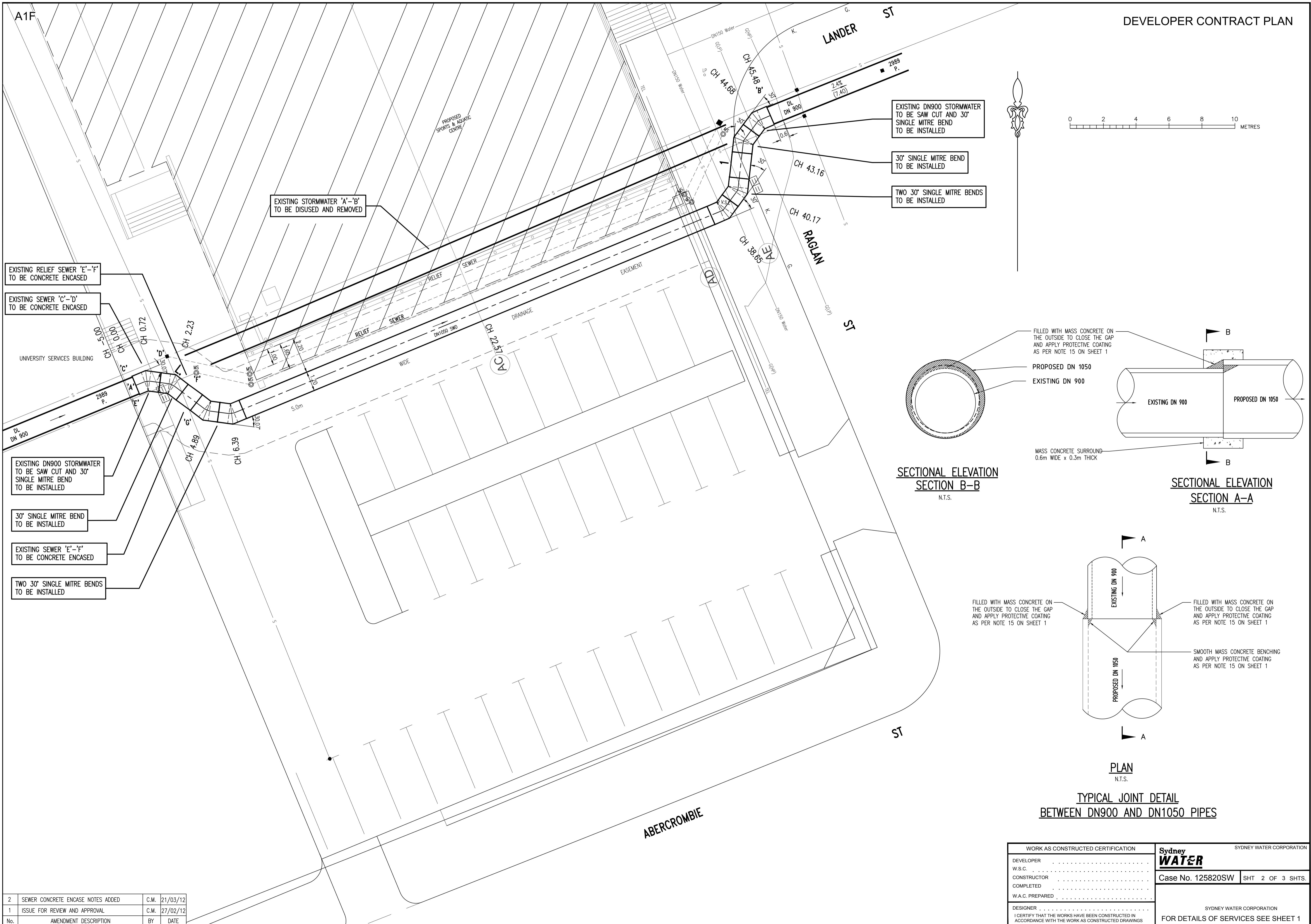
PLACE TRENCH FILL IN LAYERS NOT EXCEEDING 300mm, EACH LAYER BEING COMPACTED BEFORE FURTHER FILL IS ADDED. ENSURE COMPACTING EQUIPMENT DOES NOT OVERLOAD PIPES DURING THE COMPACTION PROCESS.

SCALES

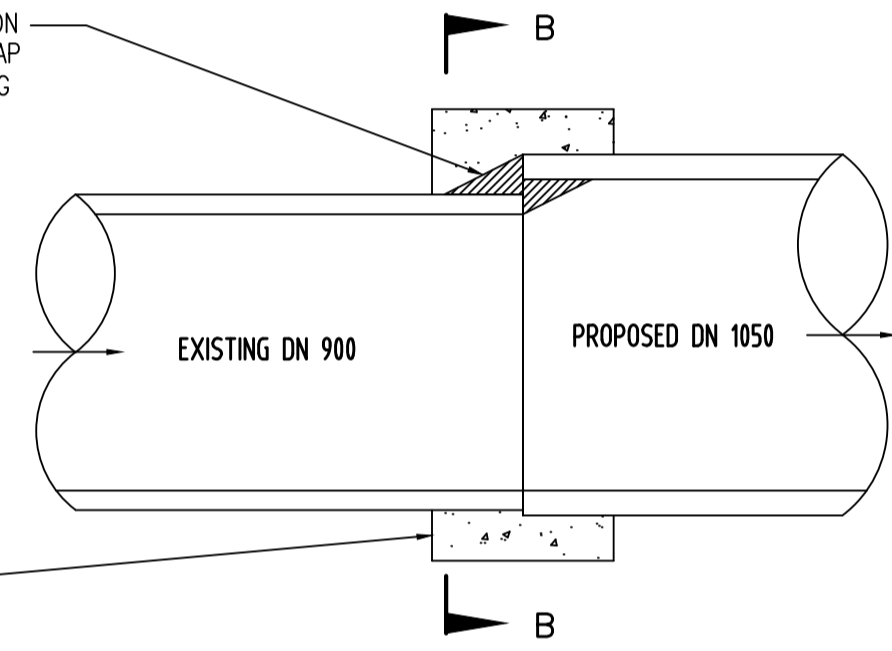
HOR. 1 : 100  
VERT. 1 : 50

WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	W.S.C.	Case No. 125820SW SHT 3 OF 3 SHTS.	
CONSTRUCTOR	COMPLETED		
W.A.C. PREPARED			
DESIGNER			
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1	

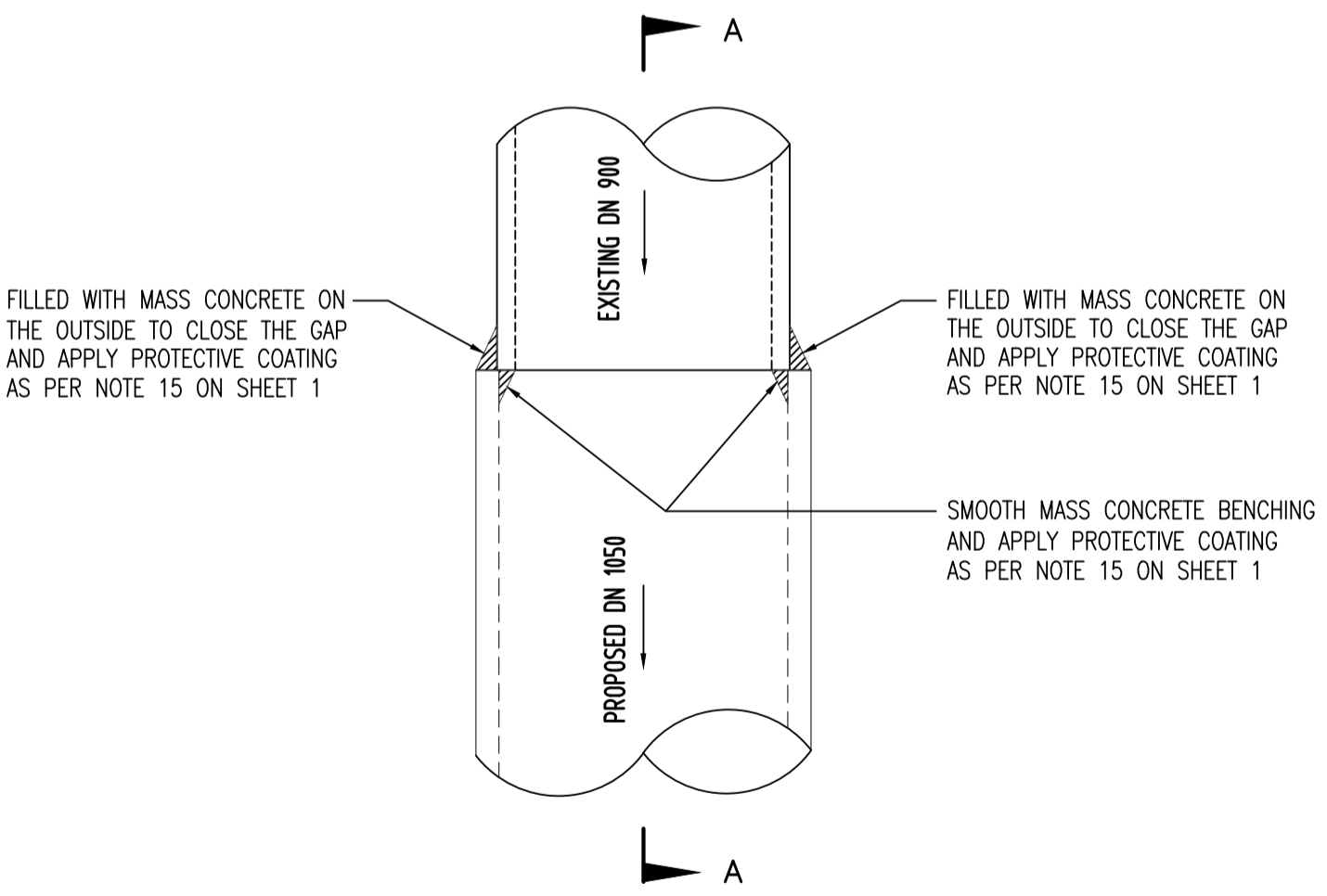
No.	AMENDMENT DESCRIPTION	BY	DATE
2	GRADE SIGNAGE AMENDED	C.M.	21/03/12
1	ISSUED FOR REVIEW AND APPROVAL	C.M.	27/02/12



SECTIONAL ELEVATION SECTION B-B  
N.T.S.



SECTIONAL ELEVATION SECTION A-A  
N.T.S.



PLAN  
N.T.S.

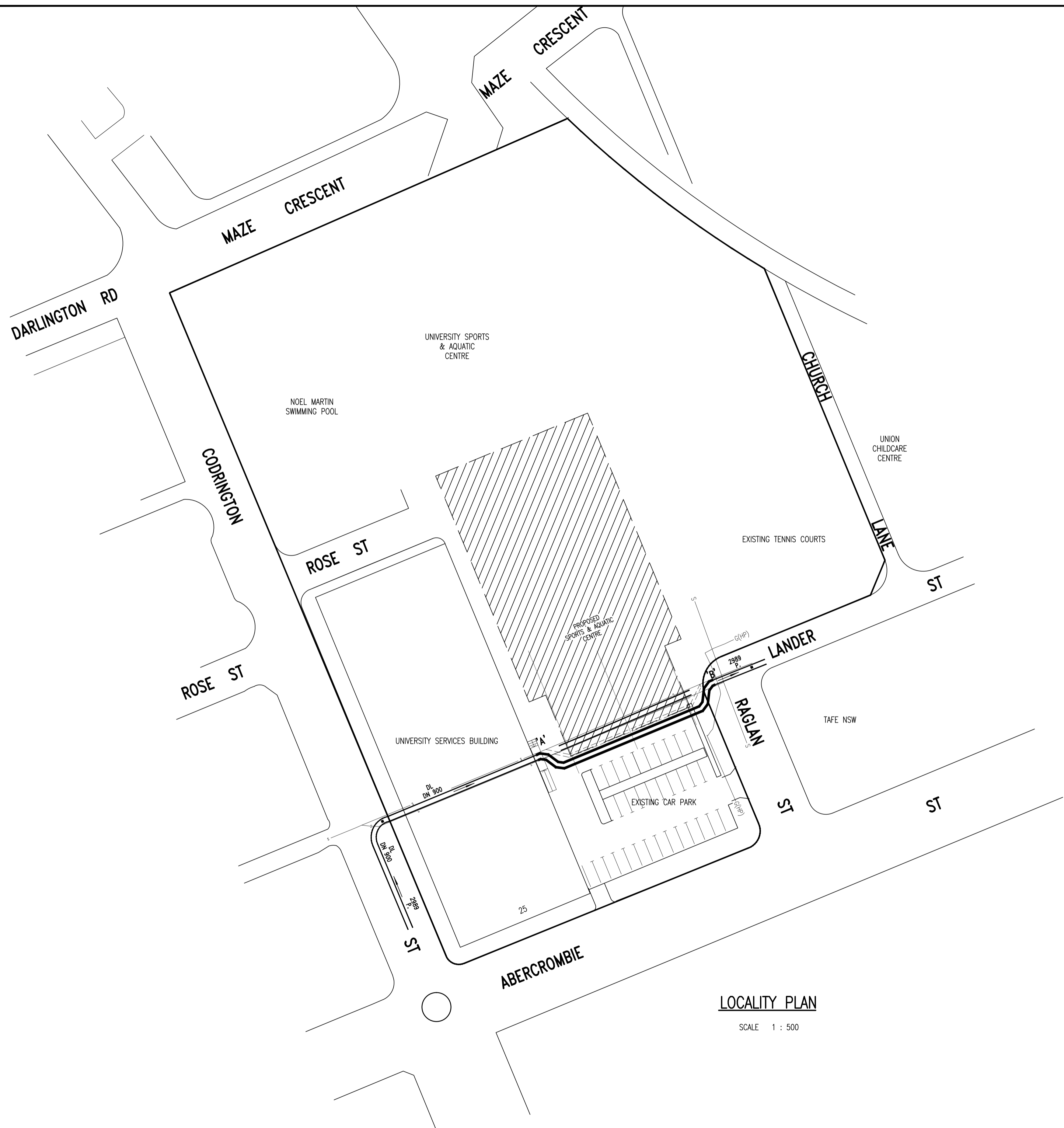
TYPICAL JOINT DETAIL BETWEEN DN900 AND DN1050 PIPES

- EXISTING RELIEF SEWER 'E'-'F' TO BE CONCRETE ENCASED
- EXISTING SEWER 'C'-'D' TO BE CONCRETE ENCASED
- EXISTING DN900 STORMWATER TO BE SAW CUT AND 30° SINGLE MITRE BEND TO BE INSTALLED
- 30° SINGLE MITRE BEND TO BE INSTALLED
- EXISTING SEWER 'E'-'F' TO BE CONCRETE ENCASED
- TWO 30° SINGLE MITRE BENDS TO BE INSTALLED

No.	AMENDMENT DESCRIPTION	BY	DATE
2	SEWER CONCRETE ENCASE NOTES ADDED	C.M.	21/03/12
1	ISSUE FOR REVIEW AND APPROVAL	C.M.	27/02/12

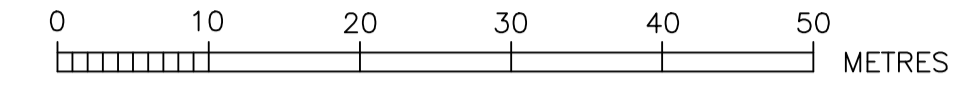
WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	.....	Case No. 125820SW	SHT 2 OF 3 SHTS.
W.S.C.	.....		
CONSTRUCTOR	.....		
COMPLETED	.....		
W.A.C. PREPARED	.....		
DESIGNER	.....	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	

PLAN DRAWN DATE: 21/03/12 VERSION: 2 SHEET 2 OF 3 SHEETS



LOCALITY PLAN

SCALE 1 : 500



- NOTES :-
- DESIGN AND FINAL PLAN PREPARED BY :  
WATER SERVICING COORDINATOR  
WARREN SMITH AND PARTNERS PTY.LTD.  
CONSULTING CIVIL ENGINEERS.  
LEVEL 1, 123 CLARENCE STREET  
SYDNEY, 2000.  
Ph: (02) 9299 1312  
Fax: (02) 9290 1295  
REF: 4077001
  - FOR : THE UNIVERSITY OF SYDNEY  
22 CODRINGTON ST  
DARLINGTON, NSW 2008  
Ph: 02 9351 1552
  - THE PROPOSED WORKS AND MATERIALS DETAILED HERE ON SHALL BE IN ACCORDANCE WITH THE SEWERAGE CODE OF AUSTRALIA WSA 02-2002-2.2, SYDNEY WATER EDITION 1-VERSION 3 THE CONTRACTOR MUST HAVE A COPY OF THESE DOCUMENTS ON SITE AT ALL TIMES.
  - MEASURES REQUIRED TO PROTECT THE ENVIRONMENT ARE DETAILED IN REVIEW OF ENVIRONMENTAL FACTORS. REF: 125820SWref.DOC
  - WATER SERVICING COORDINATOR SHALL BE GIVEN REASONABLE NOTICE (24 HRS) TO INSPECT BEDDING, PIPELINE, PROGRESSIVE BACKFILLING AND ANY CONCRETE POURS.
  - SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE NECESSARY BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORK AND APPROPRIATE PROCEDURES, PRECAUTIONS AND CARE NEED TO BE TAKEN WHEN WORKING WITHIN CLOSE PROXIMITY OF THESE SERVICES TO EXISTING SERVICES. ANY DAMAGE TO BE RECTIFIED AT THE CONTRACTOR'S EXPENSE.
  - THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA:  
NOT IN ROADWAY: PIPE EMBEDMENT ZONE: 1 TEST  
TRENCH FILL ZONE: 20 TEST (1 PER 300mm LAYER)
  - ALL PROPOSED F.S.L. ARE APPROXIMATE AND GIVEN AS GUIDE ONLY. DETAILS MUST BE CONFIRMED WITH THE DEVELOPER & PROJECT MANAGER PRIOR TO COMPLETION OF MH.
  - ALL LEVELS ELECTRONICALLY GENERATED. NO LEVEL BOOK AVAILABLE.
  - BUILDING OVER OR ADJACENT TO STORMWATER CONDITIONS APPLY CONTACT SYDNEY WATER OR THE WATER SERVICE COORDINATOR PRIOR TO COMMENCEMENT.
  - HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORMWATER SHALL BE CONFIRMED ON SITE PRIOR TO PIPE INSTALLATION TO ENSURE CORRECT ALIGNMENT, ORDERING AND DELIVERY OF MATERIALS.
  - ALL STRUCTURES TO BE BUILT TO PFSL.
  - PIPES TO BE CONCRETE ENCASED SHOWN ACCORDINGLY ON SECTIONS:
  - EXISTING STORMWATER "A"- "B" TO BE BROKEN OUT DURING CONSTRUCTION.
  - PREPARED SURFACE MIN. 0.5m EITHER SIDE AND THE CIRCUMFERENCE OF JOINT. APPLIED TOTAL PRE-TREATMENT AND PROTECTIVE COATING IN ACCORDANCE WITH SYDNEY WATER'S PRODUCT SPECIFICATION PCS 104 TABLE A-14-SYSTEM EPX-11 GENERALLY AS FOLLOWS:  
FILL SMOOTH TRANSITION BETWEEN SURFACES WITH EPOXY MORTAR OR EPOXY FILLER.  
APPLY NON-INHIBITIVE 2-PACK EPOXY PRIMER DFT 50-75 MICRONS  
APPLY 2-PACK EPOXY MASTIC DFT 175-225 MICRONS  
APPLY 2-PACK EPOXY MASTIC DFT 175-225 MICRONS TOTAL DFT 400-525 MICRONS

2	TITLE BLOCK AMENDED	C.M.	21/03/12
1	ISSUE FOR REVIEW AND APPROVAL	C.M.	27/02/12

No.	AMENDMENT DESCRIPTION	BY	DATE
PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT:- DIAL BEFORE YOU DIG ..... Ph. 1100 ELECTRICITY ..... AUSGRID ..... Ph. 49510899 GAS ..... MEMENA SOUTH ..... Ph. 1300880906 TELECOMMUNICATIONS ..... TELSTRA ..... Ph. 1800653935 SYDNEY WATER ..... Ph. 132092 GIVING AT LEAST 48 HOURS NOTICE.			

UTILITIES			
TYPE	DATE	REF.	
WATER: DN100 Water	01/12/11		
GAS: G(HP)	01/12/11		
TELSTRA: TEL	01/12/11		
ENERGY AUST: E	01/12/11		
PROP SEWER: S	28/02/12		

WORK AS CONSTRUCTED CERTIFICATION	
DEVELOPER	.....
WATER SERVICE CO-ORDINATOR	.....
CONSTRUCTOR	.....
COMPLETED	..... W.A.C. PREPARED
DESIGNER	.....
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.	

PIPE SCHEDULE				
SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES
1050	R.C.	CL 4	45.50	RRJ

AUSTRALIAN HEIGHT DATUM
SCALES
PLAN : 1:100 SECTION { HOR : 1:100 VERT : 1:50
CROSS SECTIONS : NATURAL
LENGTHS, DEPTHS & LEVELS ARE IN METRES.

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.
U.B. DIRECTORY ..... 215, L5 43rd Edition
SHEET . 1 . OF . 3 . File No. N/A

**Sydney WATER** SYDNEY WATER CORPORATION

Case No. 125820SW

**CITY OF SYDNEY DRAINAGE**  
MOUNTAIN ST - SHEPHERD ST BRANCH SWS 17K  
DRAINS TO BLACKWATTLE BAY SWC 17  
DEVIATION

