PROPOSED DEVELOPMENT

310-314 Taren Point Road, Caringbah, NSW greenview Job No: 181209

GENERAL NOTES

- 1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION.
- 2. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- 3. CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- 4. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE
- DIRECTED OR REMOVED FROM SITE. 5. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH
- EXISTING. 6. ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE
- CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S 7. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL
- PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS, FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS AS REQUIRED.
- 8. THESE PLANS SHALL BE A READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS, SPECIFICATIONS, CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE
- 9. THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE, FOOTPATH, AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES
- 10. THE BUILDER IS TO VERIFY ALL LEVELS ON SITE PRIOR TO COMMENCING CONSTRUCTION. 11. ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE
- UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE 12. ALL TERRACE FLOOR AND PLANTER GRATES TO HAVE FIRE
- 13. ALL PITS HAVING AN INTERNAL DEPTH THAT EXCEEDS 1.0m SHALL BE PROVIDED WITH GALVANIZED STEP IRON'S AT 300 mm CENTRES
- PLACED IN A STAGGERED PATTERN AND SHALL BE IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS AS4198-1994 14. ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON SITE DETENTION STORAGE SHALL BE OF A NON-FLOATABLE
- MATERIAL SUCH AS DECORATIVE RIVER GRAVEL, BARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA. 15 PRIOR TO COMMENCING ANY WORKS ON THE SITE THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTION INTO COUNCIL'S KERB/DRAINAGE SYSTEM MATCH THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER
- 16. GREENVIEW IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY SURVEY INFORMATION PROVIDED ON THIS DRAWING. 17. ALL LEVELS SHOWN ARE EXPECTED TO BE TO A.H.D.
- 18. ALL CHAINAGES AND LEVELS ARE IN METERS. AND DIMENSIONS IN MILLIMETRES. UNLESS NOTED OTHERWISE
- 19. THE SURVEY INFORMATION ON THIS DRAWING HAS BEEN PROVIDED BY THE ARCHITECT 20. CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT
- BY A REGISTERED SURVEYOR. 21. W.A.E DRAWINGS BY A REGISTERED SURVEYOR ARE REQUIRED
- PRIOR TO CERTIFICATION OF DRAINAGE. 22. WHERE THESE PLANS ARE NOTED FOR DEVELOPMENT
- APPLICATION PURPOSES ONLY, THEY SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE NOR USED FOR CONSTRUCTION PURPOSES WITHOUT WRITTEN APPROVAL.

RAINWATER REUSE SYSTEM NOTES

- 1. RAINWATER SUPPLY PLUMBING TO BE CONNECTED TO OUTLETS WHERE REQUIRED BY BASIX CERTIFICATE (BY OTHERS)
- 2. NO DIRECT CONNECTION BETWEEN TOWN WATER SUPPLY AND THE RAINWATER SUPPLY
- 3. PROVIDE AN APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE AT THE RAINWATER TANK
- 4. PROVIDE AT LEAST ONE EXTERNAL HOSE COCK ON THE TOWN WATER SUPPLY FOR FIRE FIGHTING

5. PROVIDE APPROPRIATE FLOAT VALVE AND/OR SOLENOID VALVES

- TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE THE TOP-UP INDICATED ON THE TYPICAL DETAIL 6. ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED
- PLUMBERS IN ACCORDANCE WITH AS/NZ3500.1 NATIONAL
- PLUMBING AND DRAINAGE CODE. 7. PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT
- BY A LICENSED ELECTRICIAN. 8. ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER TANK SURFACE WATER INLETS ARE NOT TO BE CONNECTED.

9. PIPE MATERIALS FOR RAINWATER SUPPLY PLUMPING ARE TO BE

- APPROVED MATERIALS TO AS/NZ3500 PART 1 SECTION 2 AND TO BE CLEARLY AND PERMANENTLY IDENTIFIED AS 'RAINWATER'. THIS MAY BE ACHIEVED FOR BELOW GROUND PIPES USING IDENTIFICATION TAPE (MADE IN ACCORDANCE WITH AS2648) OR FOR ABOVE GROUND PIPES BY USING ADHESIVE PIPE MARKERS (MADE IN ACCORDANCE WITH AS1345)
- 10. EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELLED 'RAINWATER' ON A METALLIC SIGN IN
- 11. ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT MOSQUITO AND
- 12. ALL DOWNPIPES CHARGED TO THE RAINWATER TANK ARE TO BE SEALED UP TO GUTTER LEVEL AND BE PRESSURE TESTED AND
- SATISFACTION OF THE REGULATORY AUTHORITY. THIS MAY REQUIRE PROVISION OF 13.1. PERMANENT AIR GAP

13.2. BACKFLOW PREVENTION DEVICE

13. TOWN WATER CONNECTION TO RAINWATER TANK TO BE TO THE

EARTHWORK NOTES

- 1. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY
- 2. THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT OF THE PROPOSED
- 3. PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION. 4. OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH,
- SLABS ETC. AND STRIP TOP SOIL. AVERAGE 200mm THICK. REMOVE FROM SITE, EXCEPT TOP SOIL FOR RE-USE
- 5. CUT AND FILL OVER THE SITE TO LEVELS REQUIRED. 6. PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND.
- PROOF ROLL THE EXPOSED SURFACE WITH A ROLLER OF MINIMUM WEIGHT OF 5 TONNES WITH A MINIMUM OF 10 PASSES. 7. EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE
- MOISTURE CONTENT ± 2%. 8. FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO

COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM

- COMMENCING FILL OPERATIONS. 9. WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH
- **EXCAVATION IS TAKEN** 10. FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 5 1 1) MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR
- FILL TO APPROVAL 11. COMPACTION TESTING SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRES PER LAYER BY A REGISTERED NATA LABORATORY. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
- 12. BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT: 4 HORIZ. 13. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL 14. ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP

SOILED WITH 150mm APPROVED LOAM AND SEEDED UNLESS

SAFETY IN DESIGN NOTES

OTHERWISE SPECIFIED.

THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING. WE NOTE THIS DESIGN IS TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS, GREENVIEW ASSESSMENT DID NOT IDENTIFY ANY UNIQUE RISKS ASSOCIATED

DRAINAGE INSTALLATION

RCP CONVENTIONAL INSTALLATIONS & ROAD CROSSINGS

- ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN
- 2. BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO IT'S SELF COMPACTING ABILITY.
- 3. A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA.
- 4. BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:

COMPACTED CRANIII AR MATERIAL IS TO COMPLY WITH THE

FOLLOWING GF			ERIAL IS	TO COME	LY WITH	IHE
М	19	2.3600	0.6000	0.3000	0.1500	0.0750
% MASS PASSING	100	50-100	20-90	10-60	0-25	0-10

-AND THE MATERIAL PASSING THE 0.075 SIEVE HAVING LOW PLASTICITY AS DESCRIBED IN APPENDIX D OF AS1726.

b.BEDDING DEPTH UNDER THE PIPE TO BE 100mm.

c BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER. THIS REPRESENTS THE 'HAUNCH ZONE.

d.THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE FOR COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS

e.COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & **GUTTER OR PAVEMENT**

STORMWATER DRAINAGE NOTES

- 1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS INCLUDING AS3500.3, NCC AND
- COUNCIL'S SPECIFICATION. PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC
- PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO. 4. ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE
- CLASS 3 U.N.O. BY COUNCILS SPECIFICATION. 5. PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS.
- 6. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO
- 7. ALL PIPES LOCATED IN LANDSCAPE AREAS TO HAVE 300mm COVER, WHERE NOT POSSIBLE AND COVER IS BETWEEN 150mm AND 300mm USE SEWER
- **GRADE PIPE** PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O.
- PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY. 11. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL
- 12. THE MINIMUM SIZES OF THE STORMWATER DRAINAGE PIPES SHALL NOT BE LESS THAN 90mm DIA FOR CLASS 1 BUILDINGS AND 100mm DIA FOR OTHER
- CLASSES OF BUILDING OR AS REQUIRED BY THE REGULATORY AUTHORITY. 13. DOWNPIPES SHOWN ARE INDICATIVE ONLY, REFER ARCHITECTURALS FOR FINAL LOCATIONS. ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT
- AUSTRALIAN STANDARDS. 14. ALL DOWNPIPES TO BE CONSTRUCTED OF ONE MATERIAL FOR AESTHETICS REASONS AND PAINTED TO PROTECT THEM AGAINST ULTRA-VIOLET LIGHT
- DAMAGE. UNLESS APPROVED OTHERWISE BY HE PROJECT ARCHITECT. 15. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS
- 16. ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE UNLESS NOTED 17. ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE UNLESS NOTED OTHERWISE.
- 18. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE. 19. ALL STORMWATER DRAINAGE WORK TO AVOID TREE ROOTS. WHERE NOT
- POSSIBLE, ALL EXCAVATIONS IN VICINITY OF TREE ROOTS ARE TO BE HAND 20. GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION
- WHERE APPLICABLE 21. ALL BASES OF PITS TO BE BENCHED (TO HALF PIPE DEPTH) TO THE INVERT OF
- THE OUTLET PIPE AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO 22. ANY VARIATION TO THAT WORKS AS SHOWN ON THE APPROVED DRAWINGS
- ARE TO BE CONFIRMED BY THE ENGINEER PRIOR TO THE COMMENCEMENT 23. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS. 24. ALL GRATES TO HAVE CHILDPROOF LOCKS
- 25. ALL DOWNPIPES TO HAVE LEAF GUARDS 26. ALL WORK WITHIN COUNCIL RESERVE AREAS TO BE INSPECTED BY COUNCIL PRIOR TO BACKFILLING.
- 27. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
- 28. WATER PROOF ALL CONCRETE BALCONIES & ROOFS TO ARCHITECTS DETAILS 29. ALL BALCONIES TO HAVE FLOOR WASTE AND 1% FALL WITH SAFETY 30. ALL SUBSOIL DRAINAGE SHALL BE A MINIMUM OF Ø65mm AND SHALL BE
- PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE CONSULTANT 31. SUBSOIL DRAINAGE PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS. LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO
- WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL. PROVIDE FLUSHING EYE'S AT HIGH POINTS OR TO COUNCILS REQUIREMENTS. 32. GRATES TO BE IN ACCORDANCE WITH TABLE BELOW:

PIT GRATE INLINE TYPE

GRATE TYPE	TRAFFIC CONDITIONS				
A - EXTRA LIGHT DUTY	FOOTWAYS AND AREAS ACCESSIBLE ONLY TO PEDESTRUANS AND PEDAL CYCLISTS.				
B - LIGHT DUTY	FOOTWAYS THAT CAN BE MOUNTED BY VEHICLES.				
C - MEDIUM DUTY	MALLS AND PEDESTRIAN AREAS OPEN TO SLOW MOVING COMMERCIAL VEHICLES.				
D - HEAVY DUTY	CARRIGEWAYS OF ROADS AND AREAS OPEN TO COMMERCIAL VEHICHLES.				
TABLE AS PER AS3996 - 2006. E ABOVE ARE EXCEEDED.	NGINEER TO BE NOTIFIED IF LOAD CONDITIONS LISTED				

33. COVER TO PIPE TO BE AS PER TABLE BELOW:

COVERTABLE

COVERTABLE						
LOCATION	PIPE TYPE	COVER				
LANDSCAPE	PVC	300				
LANDSCAPE (SINGLE DWELLING)	PVC	100				
UNDER TRAFFICABLE AREA	PVC	100 BELOW UNDERSIDE OF PAVEMENT				
CONCRETE	STEEL	NIL BELOW UNDERSIDE OF PAVEMENT				
ROADS	RCP	500 BELOW UNDERSIDE OF PAVEMENT				

DESIGN:

SCALE:

SIZE:

RECOMMENDED SAFETY SIGNS



BASEMENT PUMP OUT FAILURE WARNING SIGN

1. SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION



WHERE VEHICLES ENTER THE BASEMENT

CONFINED SPACE DANGER SIGN

- . A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS. SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANKS
- MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
- 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE
- SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE

EXISTING SERVICES



ABBREVIATIONS PROPOSED FINISHED FLOOR LEVEL PROPOSED PIT SURFACE LEVEL PROPOSED PIT INVERT LEVEL INSPECTION OPENING **KERB & GUTTER** FINISHED PAVEMENT LEVEL REINFORCED CONCRETE PIPE **ROLL KERB & GUTTER** FINISHED SURFACE LEVEL RAINWATER DRAINAGE OUTLET PROPOSED RAINWATER TANK TOP OF NEW KERB LEVEL TOP OF NEW RETAINING WALL LEVEL

COLOUR LEGEND

RIGID PVC PIPE

TOP OF WATER LEVEL

VERTICAL DROPPER

NEW (REFER TO SCHEDULES FOR COLOUR DEFINITION) EXISTING

REMOVED OR RELOCATED

	GREENVIEW CIVIL SHEET LIST	
No.	SHEET NAME	REV.
C01	NOTES & LEGENDS	3
C02	BASEMENT 2 DRAINAGE PLAN	3
C03	BASEMENT 1 DRAINAGE PLAN	3
C04	GROUND FLOOR DRAINAGE PLAN	3
C05	SITE STORMWATER DETAILS SHEET 1	3

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								1
3	02.08.19	LTR	ISSUED FOR DA					1
2	25.06.19	JPS	ISSUED FOR DA					
1	24.06.19	JPS	ISSUED FOR APPROVAL					1
REV.	DATE	BY	DESCRIPTION	REV.	DATE	BY	DESCRIPTION	





CIVIL DESIGN OTES & LEGENDS	181209 DA C01 3	