SCONE AIRPORT AVIATION VISITOR ATTRACTION AND TERMINAL
SCONE, NSW 2337
CIVIL WORKS

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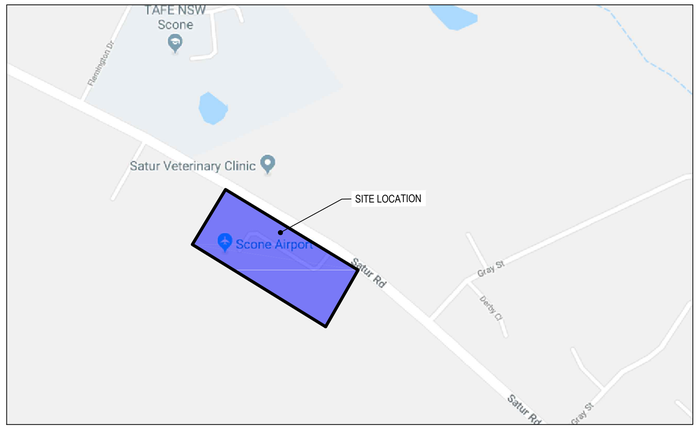

LOCALITY PLAN
NTS

DIAL BEFORE YOU DIG

DIAL BEFORE YOU DIG www.1100.com.au

IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

ISSUE FOR COORDINATION

REV	DATE	REVISION DESCRIPTION
A	06.06.18	ISSUE FOR COORDINATION
B	19.06.18	PRELIMINARY ISSUE
C	23.09.18	ISSUE FOR TENDER

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SCONE AIRPORT AVIATION VISITOR ATTRACTION AND TERMINAL

CLIENT
UPPER HUNTER SHIRE COUNCIL

TITLE PAGE & LOCALITY PLAN

JOB NUMBER:	SCALE	SHEET No	REV
18016	1:500@A1	C101	C

CIVIL GENERAL NOTES

1. THESE PLANS SHALL BE READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS AND UPPER HUNTER SHIRE COUNCIL SPECIFICATIONS. WHERE DISCREPANCIES ARE FOUND CHRISP CONSULTING CONSULTANTS MUST BE CONTACTED IMMEDIATELY FOR VERIFICATION.
2. WHERE OMISSIONS ARE FOUND, CHRISP CONSULTING GENERAL NOTES ARE TO BE USED AND THE CONTRACTOR IS TO CONTACT CHRISP CONSULTING CONSULTANTS FOR CERTIFICATION.

SITEWORKS NOTES

1. ORIGIN OF LEVELS :- AUSTRALIAN HEIGHT DATUM (A.H.D.)
2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS, SERVICES AND STRUCTURES ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE PRINCIPAL'S REPRESENTATIVE.
4. EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPAL'S REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
5. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
7. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
8. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED NON-NATURAL GRANULAR MATERIAL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS.1289.5.1.1.
9. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
10. PROVIDE 10mm WIDE EXPANDING JOINT FILLER BETWEEN BUILDINGS AND ALL CONCRETE PAVEMENTS.
11. CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS.
12. ALL BATTERS TO BE GRASSED LINED WITH MINIMUM 100 TOPSOIL AND APPROVED KIKUYU LAID AS TURF.
13. MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD.
14. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS.
15. THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
16. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
17. ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.
18. WORK AS EXECUTED PLANS TO BE PROVIDED TO THE CLIENT REPRESENTATIVE UPON COMPLETION OF ALL MILESTONE WORKS INCLUDING STORMWATER INSTALLATION, SUBGRADE PREPARATION AND FINISHED PAVEMENT LEVELS

STORMWATER NOTES

1. ALL 225 DIA. DRAINAGE PIPES AND LARGER SHALL BE CLASS "2" APPROVED SPIGOT AND SOCKET FRC OR RCP PIPES WITH RUBBER RING JOINTS. (U.N.O.) ALL DOWNPIPE DRAINAGE LINES SHALL BE SEWER GRADE uPVC WITH SOLVENT WELD JOINTS. (U.N.O.)
2. EQUIVALENT STRENGTH REINFORCED CONCRETE PIPES MAY BE USED.
3. ALL PIPE JUNCTIONS UP TO AND INCLUDING 450 DIA. AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.
4. MINIMUM GRADE TO STORMWATER LINES TO BE 1%. (U.N.O.)
5. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
6. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
7. PRECAST PITS SHALL NOT BE USED UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE SUPERINTENDENT.
8. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN. 50MM CONCRETE BED (OR 75MM THICK BED OF 12MM BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. IN OTHER THAN ROCK, PIPES SHALL BE LAID ON A 75MM THICK SAND BED. IN ALL CASES BACKFILL THE TRENCH WITH SAND TO 200MM ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH WITH SAND OR APPROVED GRANULAR BACKFILL COMPACTED IN 150MM LAYERS TO 98% STANDARD MAX. DRY DENSITY.
9. BEDDING SHALL BE (U.N.O.) TYPE H1, IN ACCORDANCE WITH CURRENT RELEVANT AUSTRALIAN STANDARDS.
10. WHERE STORMWATER LINES PASS UNDER FLOOR SLABS SEWER GRADE RUBBER RING JOINTS ARE TO BE USED.
11. WHERE SUBSOIL DRAINAGE LINES PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS UNSLOTTED UPVC SEWER GRADE PIPE SHALL BE USED.
12. PROVIDE 3.0M LENGTH OF 100 DIA. SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK, AT UPSTREAM END OF EACH PIT.

EXISTING SERVICES AND FEATURES

1. THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION, REMOVAL AND DISPOSAL IF REQUIRED OF ALL EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA, AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
2. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
3. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN WRITTEN APPROVAL OF HIS PROGRAMME FOR THE RELOCATION/CONSTRUCTION OF TEMPORARY SERVICES.
4. EXISTING BUILDINGS, EXTERNAL STRUCTURES, AND TREES SHOWN ON THESE DRAWINGS ARE FEATURES EXISTING PRIOR TO ANY DEMOLITION WORKS.
5. CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
6. INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL. CONTRACTOR TO GAIN APPROVAL OF SUPERINTENDENT FOR TIME OF INTERRUPTION.

ENGINEERED FILL

1. ENGINEERED FILL TO BE A NON-REACTIVE MATERIAL, CRUSHED SANDSTONE OR DGB20 (OR SIMILAR APPROVED). RECYCLED CONCRETE WILL NOT BE ACCEPTED. UNLESS APPROVED BY GEOTECHNICAL ENGINEER.
2. PLACE IN 150mm MAX LOOSE LAYERS IF USING HEAVY COMPACTION EQUIPMENT OR 100MM MAX LOOSE LAYERS IF HAND OPERATED COMPACTION EQUIPMENT USED.
3. MUST BE FREE OF DELETERIOUS MATERIAL SUCH AS VEGETATION, ROOTS AND PARTICLES LARGER THAN 70mm IN SIZE, AS WELL AS BE FREE OF CONTAMINANTS SUCH AS ASBESTOS, HYDROCARBONS ANY OTHER POTENTIALLY CARCENOGENIC MATERIAL OR MATERIAL THAT MAY BE HARMFUL TO THE ENVIRONMENT. THE CONTRACTOR IS TO PROVIDE WRITTEN CERTIFICATION THAT ALL FILL IS FREE OF CONTAMINANTS. FOR ENGINEERED FILL THE CONTRACTOR SHALL USE CRUSHED QUARRY GRAVEL (BASALT OR DOLERITE) AND SHALL COMPLY WITH AS2758 - AGGREGATES AND ROCK FOR ENGINEERING PURPOSES.
4. TO BE COMPACTED TO A DENSITY OF AT LEAST 98% STANDARD MAXIMUM DRY DENSITY (SMDD) AND A MOISTURE CONTENT WITHIN 2% OF STANDARD OPTIMUM MOISTURE CONTENT. THE SUBGRADE SHALL ACHIEVE A MINIMUM CBR OF 10. (UNO)
5. EARTHWORKS IN ACCORDANCE WITH AS3798 -2007.
6. FREQUENCY OF DENSITY TESTING IS ONE TEST PER LAYER PER 500m2 OR THREE TESTS PER VISIT, WHICHEVER REQUIRES THE MOST TESTS.
7. ALL SUBGRADE SHALL BE PROOF ROLLED USING A STATIC SMOOTH DRUM ROLLER WITH A MINIMUM GROSS MASS OF 12 TONNES AND IN ACCORDANCE WITH RMS TEST METHOD T198 AND UNDER THE SUPERVISION OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.
8. FILL SHALL BE PLACED UNDER THE SUPERVISION OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER AND PLACED UNDER LEVEL 1 CONTROL AS DEFINED BY AS3798. PREFERABLY THE GEOTECHNICAL TESTING AUTHORITY SHOULD BE ENGAGED DIRECTLY ON BEHALF OF THE CLIENT AND NOT THE EARTHWORKS SUBCONTRACTOR.
9. ALL SPOIL AND CONTAMINATED MATERIAL IS TO BE REMOVED FROM SITE AT THE CONTRACTORS EXPENSE.
10. THE CONTRACTOR SHALL PROVIDE TO THE CLIENT WRITTEN CONFIRMATION OF PROOF ROLLING AND COMPACTION TEST RESULTS FROM A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER AND A WORK-AS-EXECUTED SURVEY (TO CONFIRM LEVELS ACHIEVED) CARRIED OUT BY A REGISTERED SURVEYOR. THESE TESTS AND THE SUPPLY OF THIS WRITTEN CONFIRMATION SHALL CONSTITUTE HOLD POINTS UNDER THE CONTRACTORS INSPECTION AND TEST PLAN.
11. TOLERANCES ARE :• LEVEL +-10mm
12. THE CONTRACTOR SHALL USE DGB20 IN ACCORDANCE WITH RMS QA SPECIFICATION R71.

LINEMARKING NOTES

1. THE WORK SHALL INCLUDE ALL LINE MARKING TO ROADS, HARDSTANDS, PATHS, CARPARKS AND THE TRAFFICABLE AREAS.
2. THE PAVEMENT MARKING AND PAINT SHALL BE IN ACCORDANCE WITH AS 1742.2 AND THE RELEVANT LOCAL AND STATE AUTHORITY GUIDELINES.
3. PAINT SHALL BE TYPE 3, CLASS A AND THE COLOUR SHALL BE WHITE AND NOT SUBJECT TO DISCOLOURATION BY BITUMEN FROM THE ROAD SURFACE. EACH LINE SHALL BE 80mm WIDE, UNO IN LEGEND. ALL PAINT SHALL BE APPLIED BY MECHANICAL SPRAYER.
4. LINE MARKING SHALL BE SPOTTED OUT AND APPROVED PRIOR TO SPRAYING.
5. PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm TO 0.40mm.
6. ALL EXISTING PAVEMENT MARKING (WHICH IS LOCATED ON EXISTING PAVEMENT TO BE RETAINED) SHALL BE REMOVED BY GRINDING WHERE THE EXISTING MARKINGS ARE MADE REDUNDANT BY THE PROPOSED WORKS.
7. ALL LONGITUDINAL LINEMARKING (ie: ROADWAY CENTRELINES) SHALL BE COMPLETED IN WATERBOURNE PAINT (WITH BEADS).
8. ALL TRANSVERSE LINEMARKING (ie: GIVEWAY, STOP LINES, PEDESTRIAN CROSSINGS, etc) AND DIRECTIONAL ARROWS SHALL BE COMPLETED IN THERMOPLASTIC PAINT TO AVOID PREMATURE WEAR
9. ALL CAR PARK AREAS CAN BE PAINTED USING WATERBOURNE PAINT

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND ANY OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO DEVELOPMENT AT THE SUBJECT SITE.
2. THE SITE SUPERINTENDENT WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THIS SPECIFICATION.
3. ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

CONSTRUCTION SEQUENCE

4. THE SOIL EROSION POTENTIAL ON THIS SITE SHALL BE MINIMISED. HENCE WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE :
   a. INSTALL SEDIMENT FENCES, TEMPORARY CONSTRUCTION EXIT AND SANDBAG KERB INLET SEDIMENT TRAP.
   b. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

5. DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
6. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

FENCING

7. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
9. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

11. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
12. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.

SITE INSPECTION & MAINTENANCE

13. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIR AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED.

SUBGRADE PREPARATION

1. REMOVE ALL TOPSOIL, VEGETABLE MATTER AND RUBBLE.
2. PROOF ROLL NATURAL SURFACE.
3. REMOVE ANY SOFT AREAS.
4. PLACE APPROVED NON ORGANIC FILL WITH A MAXIMUM PARTICLE SIZE OF 75mm AND COMPACT IN 200mm MAX. THICK LAYERS. U.N.O.
5. COMPACTION IS TO BE CARRIED OUT BY ROLLING AT OPTIMUM MOISTURE CONTENT TO OBTAIN A DENSITY EQUIVALENT TO 98% OF MAXIMUM DRY DENSITY WHEN TESTED BY THE STANDARD COMPACTION TEST. No. E1.1 FROM A.S. 1289.
6. COMPACTION SHALL BE CARRIED OUT WITH A VIBRATING ROLLER WITH AT LEAST 10 TONNE STATIC WEIGHT.
7. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY.

COMPACTION NOTES

1. STRIP TOPSOIL TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE FOR SELECTIVE RE-USE OR DISPOSE OFF-SITE AS DIRECTED BY THE SUPERINTENDENT.
2. WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE SUPERINTENDENT.
3. ALL SOFT, WET OR UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
4. ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE SUPERINTENDENT AND SHALL COMPLY WITH THE FOLLOWING :
   a. FREE FROM ORGANIC, PERISHABLE AND CONTAMINATED MATTER
   b. MAXIMUM PARTICLE SIZE 75MM
   c. PLASTICITY INDEX BETWEEN 2% AND 15%
5. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200MM THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 1289 E3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E1.1 :

LOCATION	STANDARD DRY DENSITY
UNDER BUILDING SLABS	98%
AREAS OF SERVICE TRENCHES	98%
EXTERNAL PAVED AREAS, ROADS AND CARPARKS	98%
LANDSCAPED AREAS	90%

6. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLER MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED BY THE CONTRACTOR AT THEIR COST.
7. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.

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GENERAL NOTES & SPECIFICATIONS – SHEET 1 OF 2

JOB NUMBER:	SCALE	SHEET No	REV
18016	NTS	C102	C

ROADWORKS NOTES

1. ALL BASECOURSE AND SUB-BASECOURSE MATERIALS SHALL CONFORM WITH AUSTRALIAN STANDARDS.
2. ALL BASECOURSE AND SUB-BASE MATERIALS SHALL BE COMPACTED TO ACHIEVE A MINIMUM OF 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT OF +OR- 2% IN ACCORDANCE WITH AS1289 E1.1.
3. ALL WEARING SURFACES SHALL BE ASPHALTIC CONCRETE LAID TO THE THICKNESS SPECIFIED AND IN ACCORDANCE WITH THE SPECIFICATION.

ASPHALTIC CONCRETE NOTES

GENERAL

1. a) MINERAL AGGREGATES TO COMPLY WITH AUSTRALIAN STANDARDS
   b) MINERAL FILLER TO COMPLY WITH AS.2357 MINERAL FILLERS OR ASPHALT.
   c) BITUMEN BINDER SHALL COMPLY WITH AS 2008

MIX PROPORTIONS

2. a) JOB MIX - 10mm NOMINAL SIZE AGGREGATE. MINIMUM BITUMEN CONTENT BY MASS OF TOTAL MASS - 5.1%
   b) MIX STABILITY - BETWEEN 16kN AND 36kN AS DETERMINED BY AS 2891
   c) AIR VOIDS IN COMPACTED MIX - BETWEEN 4% AND 7% OF THE VOLUME OF THE MIX.
   d) VOIDS FILLED IN BINDER - 65-80% OF AIR VOIDS IN THE TOTAL MINERAL AGGREGATE FILLED BY BINDER IN ACCORDANCE WITH AUSTRALIAN STANDARDS

PAVEMENT PREPARATION

3. a) THE EXISTING SURFACE TO BE SEALED SHALL BE DRY AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL FOREIGN MATTER.
   b) ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE LAYING OF MAIN COURSE.

TACK COAT

4. a) THE WHOLE OF THE AREA TO BE SHEETED WITH ASPHALTIC CONCRETE SHALL BE LIGHTLY AND EVENLY COATED WITH RAPID SETTING BITUMEN COMPLYING WITH AUSTRALIAN STANDARDS. APPLICATION RATE FOR RESIDUAL BITUMEN SHALL BE 0.15 TO 0.30 LITRES/SQUARE METRE. APPLICATION SHALL BE BY MEANS OF A MECHANICAL SPRAYER WITH SPRAY BAR.

SPREADING

5. a) ALL ASPHALTIC CONCRETE SHALL BE SPREAD WITH A SELF PROPELLED PAVING MACHINE.
   b) THE ASPHALTIC CONCRETE SHALL BE LAID AT A MIX TEMPERATURE AS SHOWN BELOW;

ROAD SURFACE TEMPERATURE IN SHADE (°C)	MIX TEMPERATURES (°C)
5 - 10	NOT PERMITTED
10 - 15	150
15 - 25	145
OVER 25	140

   c) ASPHALTIC CONCRETE SHALL NOT BE LAID WHEN THE ROAD SURFACE IS WET OR WHEN COLD WINDS CHILL THE MIX ADVERSELY AFFECT SPREADING AND COMPACTION.
   d) THE MINIMUM COMPACTED THICKNESS IS 30mm OVER EXISTING SEALED PAVEMENTS AND 50mm OVER NEW PAVEMENTS

JOINTS

6. a) THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM.
   b) THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
   c) WHERE PAVEMENT JOINTS ARE NOT COMPACTED AND COMPLETED TO THE SATISFACTION OF THE ENGINEER AND/OR SITE REPRESENTATIVE, BITUMIN BANDING WILL BE APPLIED AT THE COST OF THE CONTRACTOR

7. COMPACTION
   a) ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS.
   b) INITIAL ROLLING SHALL BE COMPLETE BEFORE THE MIX TEMPERATURE FALLS BELOW 105°C
   c) SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 60°C
   d) MINIMUM CHARACTERISTICS VALUE OF RELATIVE COMPACTION OF A LOT WHEN TESTED IN ACCORDANCE WITH AS2150

8. FINISHED PAVEMENT PROPERTIES
   a) FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE TO SHAPE AND SHALL NOT VARY MORE THAN 10mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT AND SHALL NOT DEVIATE FROM THE BOTTOM OF A 3m STRAIGHT EDGE LAID IN ANY DIRECTION BY MORE THAN 5mm.

BITUMEN SEALANT NOTES

PAVEMENT PREPARATION

1. THE SURFACE TO BE SEALED SHALL BE DRY AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL, FOREIGN AND LOOSE MATTER.
2. IF APPROVED BY THE SUPERINTENDENT, ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE SEALING COMMENCES.

MATERIALS

3. BINDER SHALL BE CLASS 170 TO AS 2008 OR APPROVED PROPRIETARY MATERIAL FOR PRIMING AND PRIME-SEALING.
4. AGGREGATE SHAPE, DURABILITY AND WET TO DRY STRENGTH SHALL COMPLY TO AS 2758 FOR CLASS "N" AGGREGATES. A 20kg SAMPLE TO BE APPROVED BY THE SUPERINTENDENT PRIOR TO USE.
5. AGGREGATES SHALL BE DELIVERED UNIFORMLY PRECOATED, EXCESSIVE PRECOATING WILL RESULT IN AGGREGATES BEING REJECTED.
6. FOR TWO COAT FLUSH SEALS, THE SIZE OF THE AGGREGATE FOR THE SECOND COAT, WHILE NORMALLY HALF THAT OF THE FIRST COAT, SHALL BE DIMENSIONALLY COMPATIBLE WITH THAT OF THE FIRST COAT.

DESIGN

7. DESIGN OF SPRAYED BITUMINOUS SEALS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE AUSTROADS (NAASRA) PUBLICATION, "PRINICPLES AND PRACTICE OF BITUMINOUS SURFACING, VOLUME 1 - SPRAYED WORK"
8. WHERE NOT INDICATED ON THE DRAWINGS, PRIMES AND PRIMER-SEALS SHALL BE DESIGNED TO REMAIN INTACT UNTIL FINAL SEALING TAKES PLACE, HAVING REGARD FOR THE TRAFFIC AND CLIMATIC CONDITIONS PERTAINING.
9. UNLESS OTHERWISE SPECIFIED, BINDER APPLICATION RATES SHALL BE SELECTED TO FILL 85% OF THE THEORETICAL VOIDS OF THE MAT.

PRIMER-SEALING

10. A SINGLE COAT PRIMER-SEAL USING A SUITABLE CUT-BACK OR PROPRIETARY BINDER SHALL BE APPLIED TO BASECOURSE MATERIAL FOR PROTECTION OF PAVEMENT DURING CONSTRUCTION.

BITUMEN FLUSH SEALING

13. BITUMEN FLUSH SEALS SHALL BE EITHER SINGLE OR DOUBLE COAT AS SHOWN ON THE DRAWINGS. E.G.(6/3) INDICATES A DOUBLE COAT FLUSH SEAL USING TWO APPLICATIONS OF BITUMEN AND AGGREGATE, THE FIRST AGGREGATE LAYER BEING OF 20mm NOMINAL SIZE, THE SECOND 10mm.
14. BINDER SHALL BE CLASS 170 TO AS 2008.
15. COVER AGGREGATE SHALL BE SPREAD IMMEDIATELY AFTER SPRAYING OF BINDER. IN NO CASE SHALL SPREADING BE DELAYED MORE THAN 8 MINUTES.
16. AGGREGATES SHALL BE DELIVERED UNIFORMLY PRECOATED, EXCESSIVE PRECOATING WILL RENDER AGGREGATES UNSUITABLE AND WILL BE REJECTED. APPLICATION RATES SHALL BE IN THE RANGE OF 3-10 L/M² OF AGGREGATE AND THE PRECOATING AGENT SHALL BE COMPATIBLE WITH THE SEALING AGGREGATE TO BE USED.
17. SEALING TO BE CARRIED OUT IN THE PRESENCE OF THE CONSULTANT ENGINEER.
18.

APPLICATION RATES:	BINDER L/m²	COVER SIZE mm	AGGREGATE RATE m²/m³
FIRST SEAL	1	14	80
SECOND SEAL	0.500	7	160
SINGLE SEAL OR RESEAL	0.750	10	120

19. RECORDS; ALL SPRAY RECORDS AND AGGREGATE SUPPLY TONNAGE RECEIPTS SHALL BE RETAINED AND PASSED ON TO THE CONSULTING ENGINEER AS PART OF THE QUALITY ASSURANCE PROCEDURES.
20. GENERALLY FLUSH SEALING SHALL BE CARRIED OUT COMPLETE AND IN ACCORDANCE WITH THE RELEVANT R.T.A. STANDARD.

CONCRETE NOTES

GENERAL

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH AS 3600 CURRENT EDITIONS WITH AMENDMENTS, AND THE ACSE CONCRETE SPECIFICATION EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. VERIFY ALL SET OUT DIMENSIONS WITH THE ARCHITECT AND/OR THE SURVEYOR.
3. DO NOT OBTAIN DIMENSIONS BY SCALING THE DRAWINGS.

DESIGN LOADS

1. N/A

CONCRETE

1. PLACE CONCRETE OF THE FOLLOWING CHARACTERISTIC COMPRESSIVE STRENGTH F"C AS DEFINED IN AS.3600 OR M.R. FORM 609. ADD WATER REDUCING ADMIXTURE EQUAL TO WRDA.

LOCATION	AS.3600 F'c MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
ALL KERB PITS ETC.	25	80	20
VEHICULAR PAVEMENTS	32	80	20

2. USE "A.C.S.E. SPECIFICATION TYPE A" CEMENT.
3. ALL CONCRETE SHALL BE SUBJECT TO PROJECT CONTROL SAMPLE AND TESTING TO AS.3600.
4. CONSOLIDATE BY VIBRATION.

REINFORCEMENT

1. FIX REINFORCEMENT AS SHOWN ON DRAWINGS. THE TYPE AND GRADE IS INDICATED BY A SYMBOL AS SHOWN BELOW. ON THE DRAWING N IS FOLLOWED BY A NUMERAL WHICH INDICATES THE SIZE IN MILLIMETRES. A MARK NUMERAL (IF USED) FOLLOWS THIS NUMERAL.
   N. HOT ROLLED DEFORMED BAR, GRADE 410Y
   S. HOT ROLLED DEFORMED BAR, GRADE 230S
   R. PLAIN ROUND BAR, GRADE 230R
   SL. HARD DRAWN WIRE FABRIC.
2. PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING CONCRETE COVER TO ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

   FOOTINGS
   - 75 BOTTOM, 65 TOP AND SIDES SLABS
   - 20 TOP AND BOTTOM, 30 WHEN EXPOSED TO WEATHER.

   BEAMS
   - 50 BOTTOM AND SIDES (TO STIRRIPS) TOP COVER AS DETAILED COLUMNS
   - 40 TO TIES AND SPIRALS 50 WHEN EXPOSED TO WEATHER

   WALLS
   - 25 GENERALLY 30 WHEN CAST IN FORMS BUT LATER EXPOSED TO WEATHER OR GROUND.
   - 65 WHEN CAST DIRECTLY IN CONTACT WITH GROUND.

CURING

1. CURE ALL CONCRETE IN ACCORDANCE TO THE METHOD PROVIDED IN THE MANUFACTURERS SPECIFICATION.

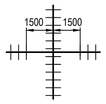
CONCRETE PAVEMENT JOINT NOTES

1. CONCRETE MIX PARAMETERS ;
   - MAXIMUM AGGREGATE SIZE 20mm
   - FLEXURAL STRENGTH AT 28 DAYS = 3.5MPa
   - FLEXURAL STRENGTH AT 90 DAYS = 3.85 MPa
   - MAXIMUM WATER / CEMENT RATIO = 0.55
   - MAXIMUM SHRINKAGE LIMIT = 650 MICRON STRAINS (AS 1012 Pt 13)
   - MINIMUM CEMENT CONTENT = 300kg/m3
   - CEMENT TO BE TYPE "A" (NORMAL CEMENT) TO AS.1315
   - SLUMP = 50mm
2. JOINT TO BE SAWN AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY THAT IT WILL NOT BE DAMAGED BY SAWING. IF AN UNPLANNED CRACK OCCURS THE CONTRACTOR SHALL REPLACE WHOLE SLABS EITHER SIDE OF THE UNPLANNED CRACK, UNLESS DIRECTED OTHERWISE.
3.
   a. CONSTRUCT JOINTS AS DETAILED
   b. CONSTRUCTION JOINTS WHERE REQUIRED BUT NOT SHOWN, SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER AND CONSTRUCTED AT THE CONTRACTORS EXPENSE.
   c. ALL LONGITUDINAL CONSTRUCTION JOINTS SHALL BE FORMED AND INCLUDE DOWEL BARS AS SPECIFIED. ALL TRANSVERSE CONSTRUCTION JOINTS SHALL BE FORMED AND INCLUDE DOWEL BARS AS SPECIFIED.
   d. BOND BREAKER TO BE TWO (2) UNIFORM COATS OF BITUMEN EMULSION ALL OVER THE EXPOSED SURFACE AND ON END.
4. DOWELS AND TIE BARS TO MEET STRENGTH REQUIREMENTS OF STRUCTURAL GRADE STEEL IN ACCORDANCE AS. 1302. DOWELS AND TIE BARS SHALL BE ;-
   - STRAIGHT
   - TO LENGTH SPECIFIED
   - CLEAN AND FREE FROM MILL SCALE, RUST AND OIL.
   - SAWN TO LENGTH NOT CROPPED.
5. DIMENSIONS OF SEALANT RESERVOIR DEPENDANT ON THE SEALANT TYPE ADOPTED. ENGINEERS APPROVAL TO BE OBTAINED FOR SEALANT AND RESERVOIR DIMENSIONS AND DETAIL PROPOSED BY THE CONTRACTOR. REFER DETAIL "B" FOR TYPICAL ARRANGEMENT AND SEALANT.
6. PRIOR TO THE PLACEMENT OF CONCRETE IN THE ADJACENT SLAB, SELF EXPANDING CORK FILLER SHALL BE ADHERED TO THE ALREADY CAST AND CLEANED CONCRETE FACE USING AN APPROVED WATERPROOF ADHESIVE. ADHESIVE SHALL BE LIBERALLY APPLIED TO THE FULL FACE OF THE CONCRETE SLAB TO BE COVERED BY THE FILLER, AND ON THE FULL FACE OF THE FILLER TO BE ADHERED.
7. REFER TO COMPACTION NOTES FOR PREPARATION OF SUB-BASE AND SUB-GRADE.
8. ALL WORK TO BE BROOM FINISH.

JOINTING NOTES

VEHICULAR PAVEMENT JOINTING

1. ALL VEHICULAR PAVEMENT TO BE JOINTED AS SHOWN ON DRAWINGS.
2. KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTRES.
3. SAWN JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTRES OR 1.5 x THE SPACING OF KEYED JOINTS, WHERE KEY JOINT SPACING IS LESS THAN 4m, WITH DOWELLED EXPANSION JOINTS AT MAXIMUM OF 30m CENTRES.
4. PROVIDE 10mm WIDE FULL DEPTH ISOLATION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS.
5. WHERE DOWELLED JOINTS INTERSECT REMOVE DOWELS FROM LAST 1500mm FROM JOINT IN DIRECTION OF POUR.



PEDESTRIAN FOOTPATH JOINTING

1. DOWELED JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 6.0m CENTRES.
2. TOOLED JOINTS ARE TO BE LOCATED AT A MAX 1.5 x WIDTH OF THE PAVEMENT.
3. WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND/OR ADJACENT PAVEMENT JOINTS.
4. ALL RAMPED CROSSINGS SHALL BE DOWELED INTO ADJOINING PATH PAVEMENT

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TITLE	NAME
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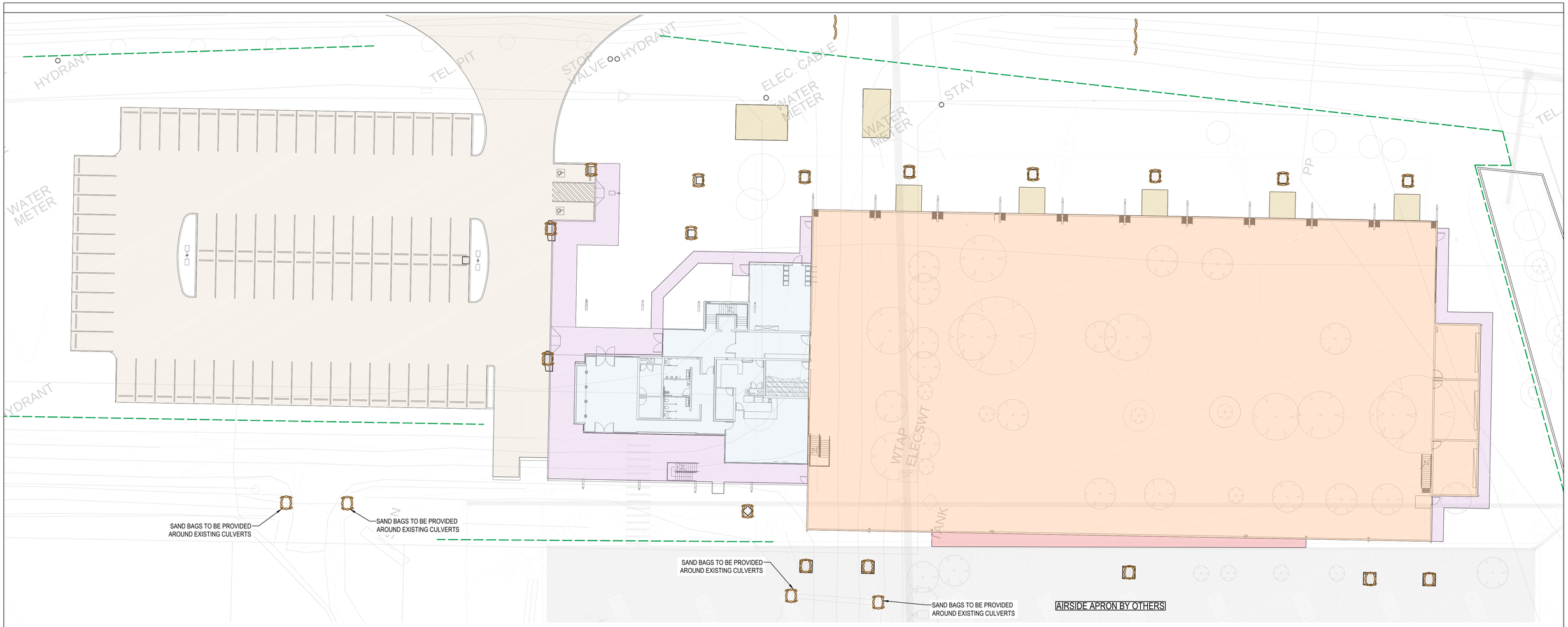
SCONE AIRPORT AVIATION VISITOR ATTRACTION AND TERMINAL

CLIENT
UPPER HUNTER SHIRE COUNCIL

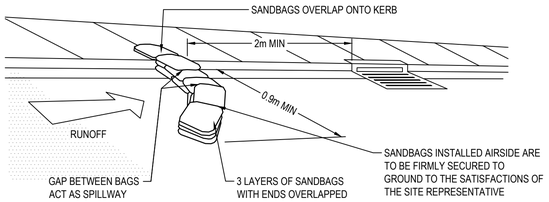
GENERAL NOTES & SPECIFICATIONS – SHEET 2 OF 2

JOB NUMBER:	SCALE	SHEET No	REV
18016	NTS	C103	C



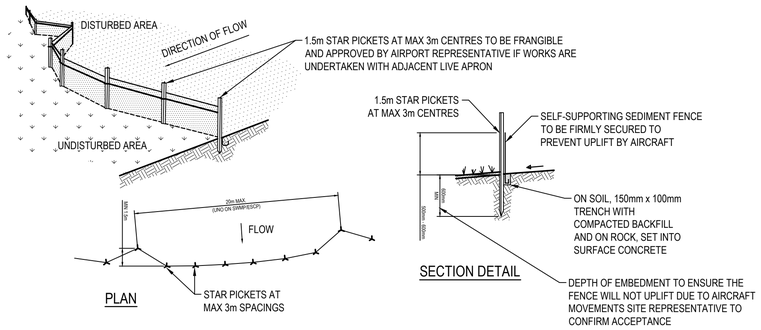
SEDIMENT & EROSION CONTROL LEGEND

— — — —	SEDIMENT FENCE
	SAND BAG SEDIMENT TRAP



SANDBAG SEDIMENT TRAP

N.T.S.



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 3 METRES APART. THE SITE REPRESENTATIVE IS TO CONFIRM IF ADDITIONAL STAR PICKETS ARE REQUIRED
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC.
5. FIX SELF-SUPPORTING SEDIMENT FENCE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY SEDIEMNT FENCE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.

SEDIMENT CONTROL FENCE

N.T.S.

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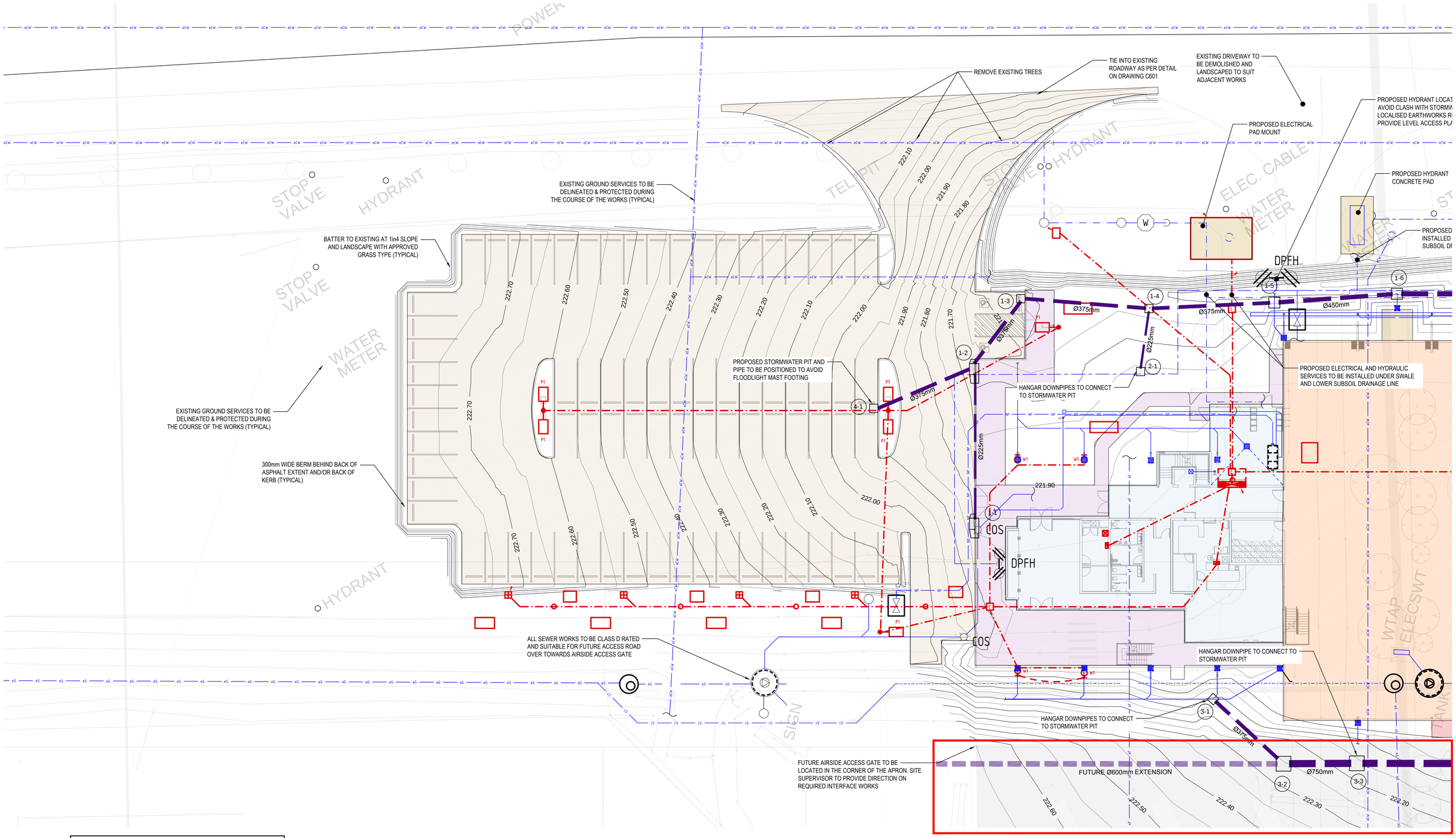
SEDIMENT & EROSION CONTROL PLAN & DETAILS

JOB NUMBER:	SCALE	SHEET No	REV
18016	1:250@A1	C201	C



AIRSIDE PAVEMENT GRADING TO BE CONFIRMED PRIOR TOO CONSTRUCTION

ISSUE FOR COORDINATION

CIVIL LEGEND

- KERB AND GUTTER
- STORMWATER
- EXISITNG POWER
- EXISTING TELSTRA
- EXISTING SEWER
- EXISTING GAS
- EXISTING WATER
- PRAM RAMP

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CIVIL WORKS PLAN - SHEET 1 OF 2

JOB NUMBER:	SCALE	SHEET No	REV
18016	1:200@A1	C301	C

EXISTING DRIVEWAY TO BE DEMOLISHED AND LANDSCAPED TO SUIT ADJACENT WORKS

PROPOSED HYDRANT LOCATION TO AVOID CLASH WITH STORMWATER PIPE. LOCALISED EARTHWORKS REQUIRED TO PROVIDE LEVEL ACCESS PLATFORM

PROPOSED ELECTRICAL PAD MOUNT

PROPOSED HYDRANT CONCRETE PAD

BATTER TO EXISTING AT 1in4 SLOPE AND LANDSCAPE WITH APPROVED GRASS TYPE (TYPICAL)

EXISTING POWER POLE TO BE REMOVED AS PART OF BUILDING WORKS. REFER TO ELECTRICAL WORKS PACKAGE FOR FURTHER DETAIL

PROPOSED HYDRANT LOCATION TO AVOID CLASH WITH STORMWATER PIPE. LOCALISED EARTHWORKS REQUIRED TO PROVIDE LEVEL ACCESS PLATFORM

PROPOSED HYDRAULIC SERVICES TO BE INSTALLED UNDER SWALE AND LOWER SUBSOIL DRAINAGE LINE

STORMWATER TO OUTLET INTO PROPOSED BASIN. AND MAKE GOOD FINISH TO PREVENT EROSION AT PIPE ENTRY. REFER TO AIRSIDE DRAINAGE DESIGN FOR DETAILS

PROPOSED ELECTRICAL AND HYDRAULIC SERVICES TO BE INSTALLED UNDER SWALE AND LOWER SUBSOIL DRAINAGE LINE

PROPOSED RAINWATER TANK PAD FOOTINGS (TYPICAL)

DETENTION BASIN TO BE CONSTRUCTED PRIOR TO FINALISATION OF PROJECT STORMWATER WORKS

REFER TO HYDRAULIC PLANS FOR STORMWATER DRAINAGE IN THIS LOCATION

HANGAR FLOOR TO MEET PROPOSED APRON EDGE AT RL 222.00. CONFIRMATION WITH AIRSIDE DESIGNER AND COUNCIL REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION

GRATED DRAIN AT HANGAR ENTRANCE TO CONNECT TO STORMWATER PIT

HANGAR DOWNPIPE TO CONNECT TO STORMWATER PIT

HANGAR DOWNPIPE TO CONNECT TO STORMWATER PIT

HANGAR WORKS IS REQUIRED TO UPGRADE Ø600mm RCP TO Ø750 RCP. STORMWATER LINE TO BE LOCATED WITHIN AIRSIDE APRON TO ALLOW FOR FUTURE MAINTENANCE

STORMWATER TO OUTLET INTO PROPOSED BASIN. AND MAKE GOOD FINISH TO PREVENT EROSION AT PIPE ENTRY. REFER TO AIRSIDE DRAINAGE DESIGN FOR DETAILS

AIRSIDE PAVEMENT GRADING TO BE CONFIRMED PRIOR TOO CONSTRUCTION

CIVIL LEGEND

- KERB AND GUTTER
- STORMWATER
- EXISITNG POWER
- EXISTING TELSTRA
- EXISTING SEWER
- EXISTING GAS
- EXISTING WATER
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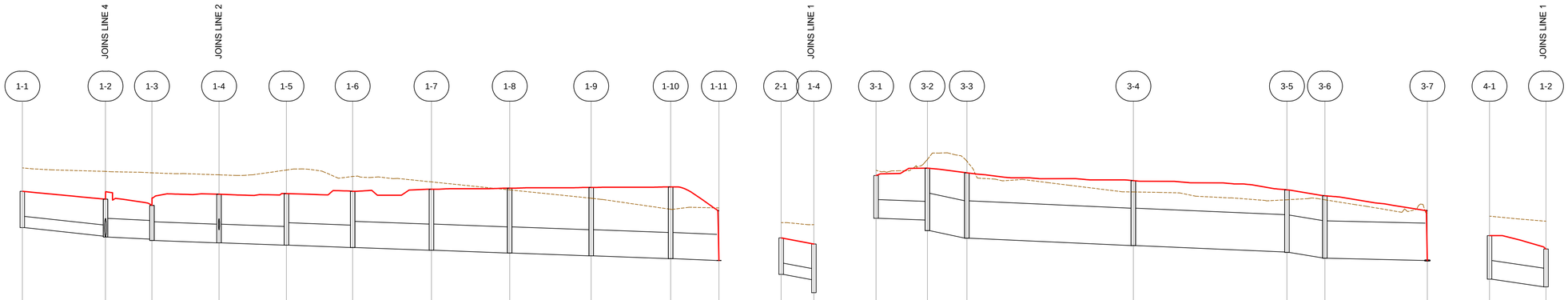
CIVIL WORKS PLAN - SHEET 2 OF 2

JOB NUMBER:	SCALE	SHEET No	REV
18016	1:200@A1	C302	C



LINE 1

DIAMETER		Ø225mm	Ø375mm	Ø375mm	Ø375mm	Ø450mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm
GRADE		1.02%	0.43%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.38%
DATUM R.L.	214.000										
DEPTH TO INVERT		0.729	0.741	0.761	0.677	0.705	0.976	0.976	1.037	1.037	1.129
INVERT LEVEL		221.060	220.890	220.870	220.830	220.802	220.755	220.755	220.708	220.708	220.661
FINISHED SURFACE LEVEL	221.789		221.631	221.507		221.731		221.744		221.790	
NATURAL SURFACE LEVEL	222.260		222.189	222.160		222.120		222.217		222.087	
CHAINAGE	0.000		16.725	26.060		39.542		53.100		66.408	

DIAMETER		Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm	Ø525mm
GRADE		0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.38%	
DATUM R.L.	215.000										
DEPTH TO INVERT		1.129	1.225	1.225	1.301	1.301	1.374	1.374	1.440	1.440	-0.000	-0.000
INVERT LEVEL		220.661	220.606	220.606	220.551	220.551	220.493	220.493	220.437	220.437	220.400	220.400
FINISHED SURFACE LEVEL		221.830		221.852		221.867		221.877		220.400		
NATURAL SURFACE LEVEL		221.978		221.818		221.650		221.429		221.456		
CHAINAGE		82.258		97.980		114.368		130.341		140.054		

LINE 2

DIAMETER		Ø225mm			
GRADE		1.61%			
DATUM R.L.	214.000				
DEPTH TO INVERT		0.733	0.717	0.976	
INVERT LEVEL		221.121	221.015	220.755	
FINISHED SURFACE LEVEL	221.854		221.731		
NATURAL SURFACE LEVEL	222.161		222.120		
CHAINAGE	0.000		6.580		

LINE 3

DIAMETER		Ø375mm	Ø750mm	Ø750mm	Ø750mm	Ø750mm	Ø750mm	Ø750mm	Ø750mm	Ø750mm	Ø750mm
GRADE		0.35%	1.89%	0.44%	0.42%	1.45%	0.22%				
DATUM R.L.	215.000										
DEPTH TO INVERT		0.859	1.042	1.254	1.311	1.312	1.303	1.303	1.249	1.256	1.247	1.254	0.000	0.000
INVERT LEVEL		221.249	221.212	221.000	220.850	220.848	220.701	220.701	220.570	220.563	220.452	220.446	220.400	220.400
FINISHED SURFACE LEVEL	222.107		222.254	222.161		222.004			221.819		221.700		220.400	
NATURAL SURFACE LEVEL	222.212		222.427	222.394		221.776			221.620		221.620		221.354	
CHAINAGE	0.000		10.323	18.259		51.726			82.606		90.240		110.831	

LINE 4

DIAMETER		Ø375mm		
GRADE		1.37%		
DATUM R.L.	215.000			
DEPTH TO INVERT		0.875	0.761	0.761
INVERT LEVEL		221.025	220.870	220.870
FINISHED SURFACE LEVEL	221.900		221.631	
NATURAL SURFACE LEVEL	222.291		222.189	
CHAINAGE	0.000		11.352	

ALL STORMWATER PIPES INSTALLED WITH LESS THAN 500mm COVER TO FINISHED SURFACE LEVEL ARE TO BE CONCRETE ENCASED AS PER DETAIL ON DRAWING C601

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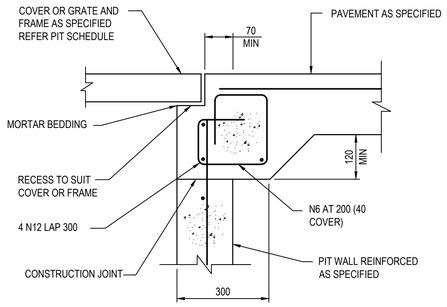
CLIENT
UPPER HUNTER SHIRE COUNCIL

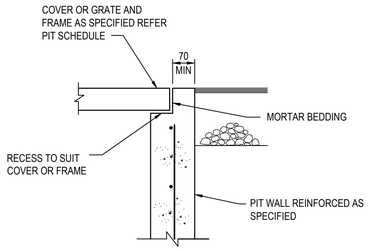
STORMWATER LONGSECTION

JOB NUMBER:	SCALE	SHEET No	REV
18016	AS SHOWN	C310	A



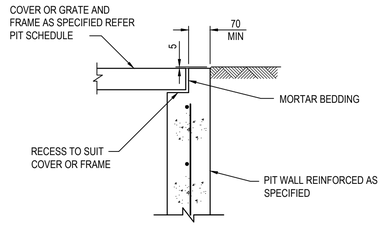
PIT EDGE DETAIL "A"

SCALE 1:10



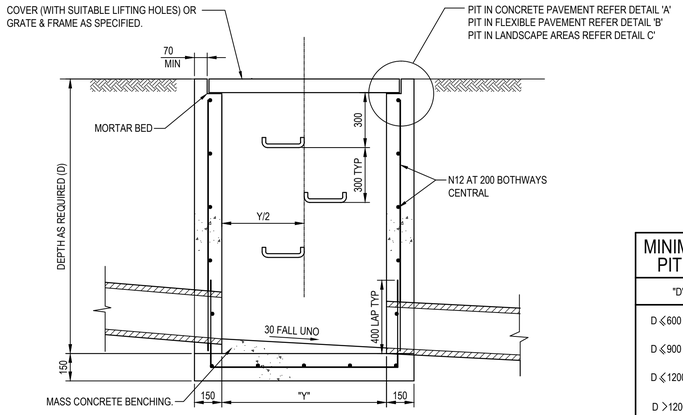
PIT EDGE DETAIL "B"

SCALE 1:10



PIT EDGE DETAIL "C"

SCALE 1:10

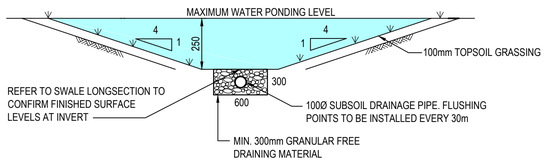


SECTION 2 -

SCALE 1:20

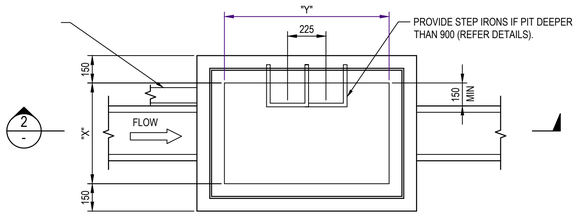
MINIMUM INTERNAL PIT DIMENSIONS		
"D"	"X"	"Y"
D ≤ 600	450	450*
D ≤ 900	600	600*
D ≤ 1200	600	900
D > 1200	900	900

NOTE: PITS DENOTED * SHALL BE USED ONLY WHERE SPECIFIED IN DRAINAGE SCHEDULE OR ON PLAN.



TYPICAL SECTION THROUGH GRASS LINED SWALE

N.T.S.



PLAN

SURFACE INLET/JUNCTION PIT

SCALE 1:20

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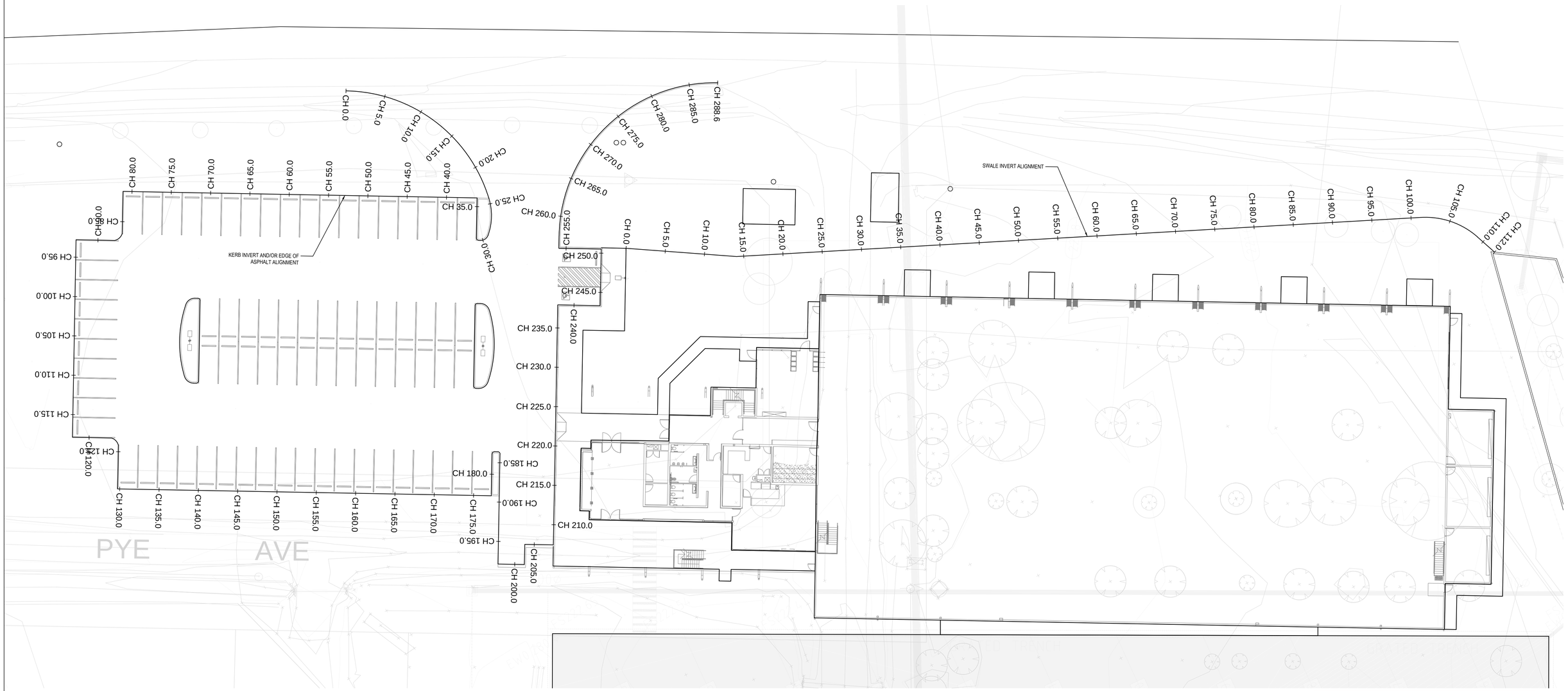
STORMWATER DETAILS

JOB NUMBER:	SCALE	SHEET No	REV
18016	AS SHOWN	C315	C



ISSUE FOR COORDINATION

REV	DATE	REVISION DESCRIPTION
A	06.06.18	ISSUE FOR COORDINATION
B	19.06.18	PRELIMINARY ISSUE
C	23.09.18	ISSUE FOR TENDER

TITLE	NAME
DRAWN	KR
DESIGNED	KL
DRG CHECK	CP
DESIGN CHECK	CP
APPROVED	CP

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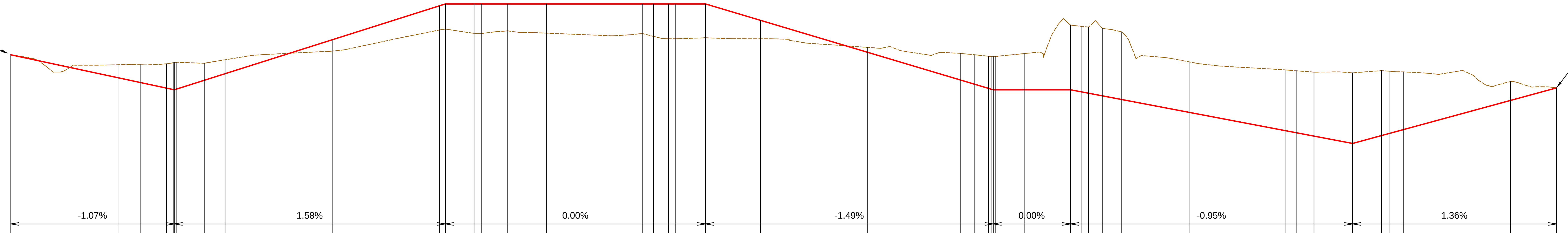
SCONE AIRPORT AVIATION VISITOR ATTRACTION AND TERMINAL

CLIENT
UPPER HUNTER SHIRE COUNCIL

ALIGNMENT PLAN & SETOUT PLAN

JOB NUMBER:	SCALE	SHEET No	REV
18016	1:250@A1	C320	C

TIE DRIVEWAY INTO
EXISTING ROADWAY
AND MAKE GOOD



TIE DRIVEWAY INTO
EXISTING ROADWAY
AND MAKE GOOD

VERTICAL GEOMETRY

DATUM 220.5

DESIGN ALIGNMENT	222.326	222.112	222.067	222.016	222.002	222.000	222.008	222.088	222.150	222.466	222.782	222.800
NATURAL SURFACE LEVEL	222.326	222.233	222.233	222.242	222.252	222.254	222.256	222.246	222.279	222.360	222.557	222.565
CHAINAGE	0.000	20.000	24.263	29.061	30.304	30.520	31.002	36.102	40.000	60.000	80.000	81.152

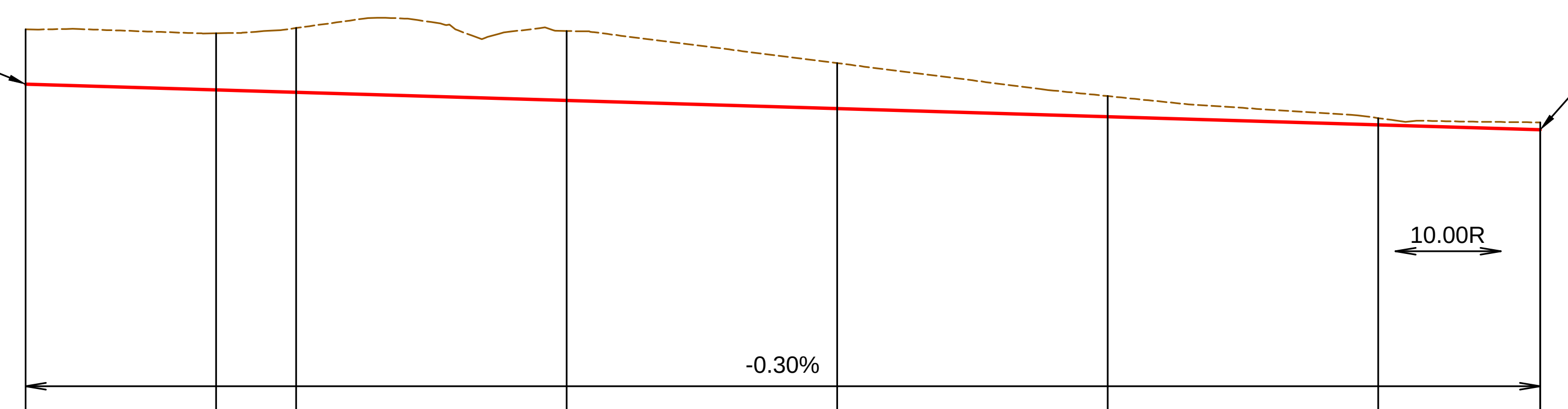
DESIGN ALIGNMENT	222.800	222.800	222.800	222.800	222.800	222.800	222.800	222.800	222.800	222.647	222.349	222.092
NATURAL SURFACE LEVEL	222.525	222.524	222.549	222.527	222.524	222.497	222.475	222.475	222.486	222.475	222.395	222.339
CHAINAGE	86.509	87.831	92.784	100.000	117.884	120.000	122.838	124.160	129.716	140.000	160.000	177.266

DESIGN ALIGNMENT	222.051	222.013	222.006	222.000	222.000	222.000	222.000	222.000	221.980	221.968	221.944
NATURAL SURFACE LEVEL	222.326	222.312	222.310	222.309	222.309	222.310	222.337	222.603	222.590	222.584	222.573
CHAINAGE	180.000	182.566	183.038	183.425	183.438	183.909	189.209	197.870	200.000	201.230	203.790

DESIGN ALIGNMENT	221.909	221.790	221.620	221.600	221.568	221.500	221.573	221.595	221.629	221.900	222.017
NATURAL SURFACE LEVEL	222.540	222.260	222.186	222.177	222.164	222.158	222.179	222.173	222.166	222.075	222.017
CHAINAGE	207.430	220.000	237.930	240.000	243.330	250.530	255.930	257.525	260.000	280.000	288.623

KERB INVERT
SCALE HORIZONTAL 1:500
VERTICAL 1:25

SWALE INVERT TO
MATCH FOOTPATH
PAVEMENT LEVEL



SWALE INVERT TO
DISCHARGE AT TOP
OF DETENTION BASIN

HORIZONTAL GEOMETRY

VERTICAL GEOMETRY

DATUM 219.0

DESIGN ALIGNMENT	221.737	221.695	221.677	221.617	221.556	221.496	221.436	221.400	221.400
NATURAL SURFACE LEVEL	222.145	222.113	222.153	222.130	221.892	221.648	221.485	221.454	
CHAINAGE	0.000	14.085	20.000	40.000	60.000	80.000	100.000	111.973	111.983

SWALE INVERT
SCALE HORIZONTAL 1:500
VERTICAL 1:50

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SCONE AIRPORT AVIATION VISITOR
ATTRACTION AND TERMINAL

CLIENT
UPPER HUNTER SHIRE COUNCIL

LONGSECTION PLAN

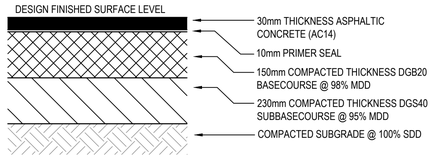
JOB NUMBER:	SCALE	SHEET No	REV
18016	AS SHOWN	C321	C

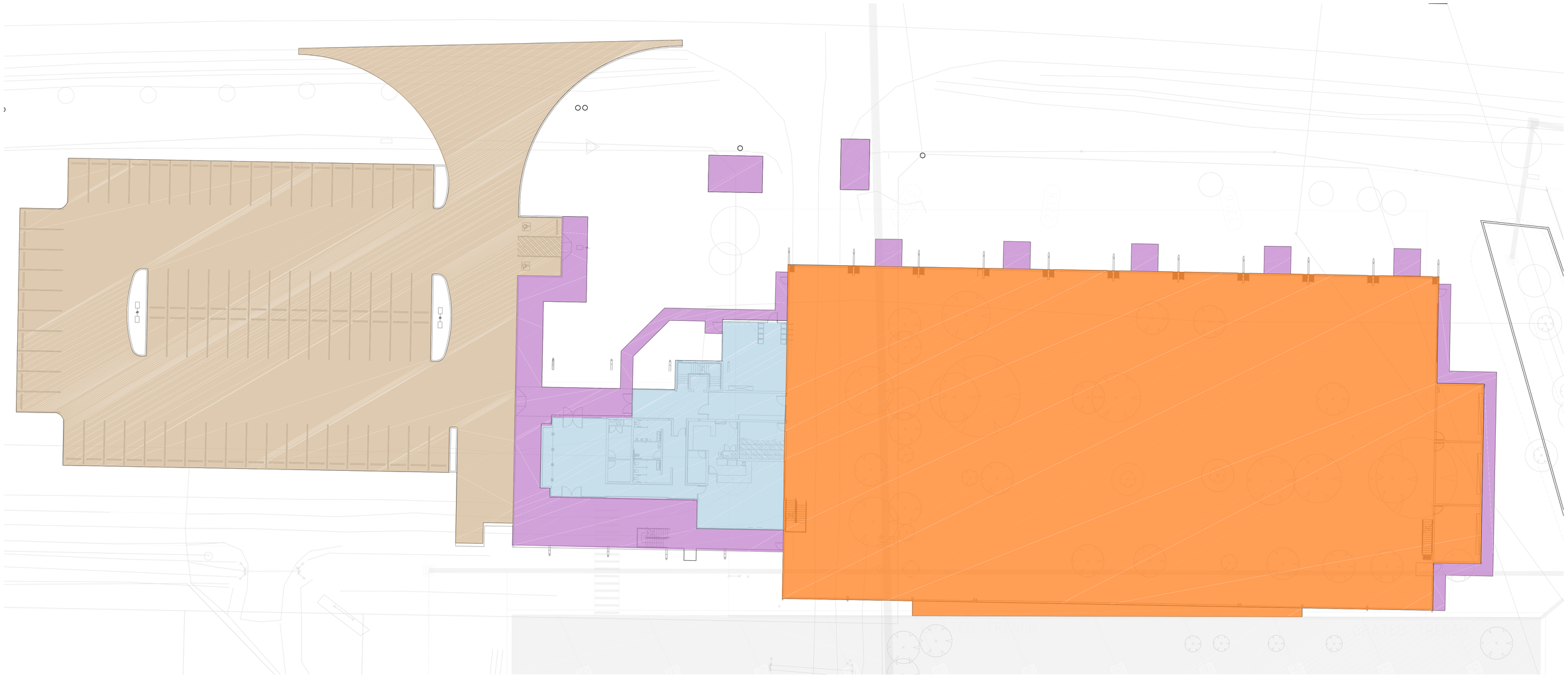
CONCRETE PATHWAY
AS PER STRUCTURAL ENGINEERS DRAWINGS

HANGAR PAVEMENT
AS PER STRUCTURAL ENGINEERS DRAWINGS

AMENITIES PAVEMENT
AS PER STRUCTURAL ENGINEERS DRAWINGS

ASPHALT PAVEMENT
CARPARK





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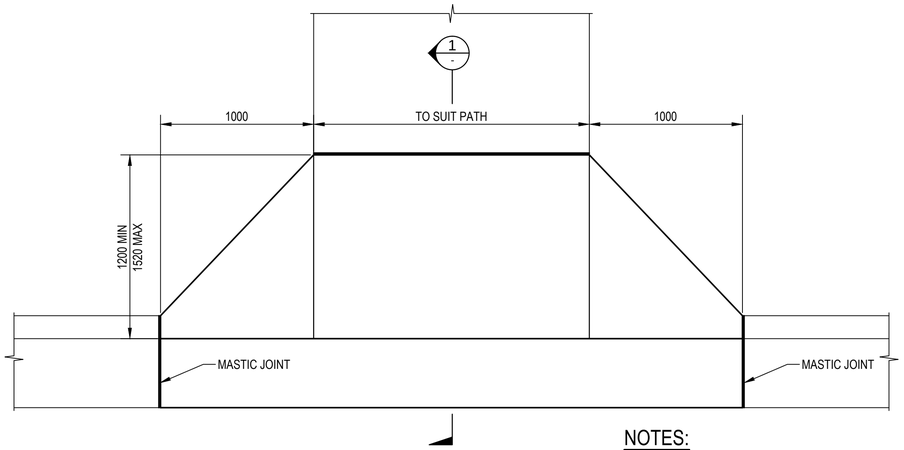
PAVEMENT PLAN

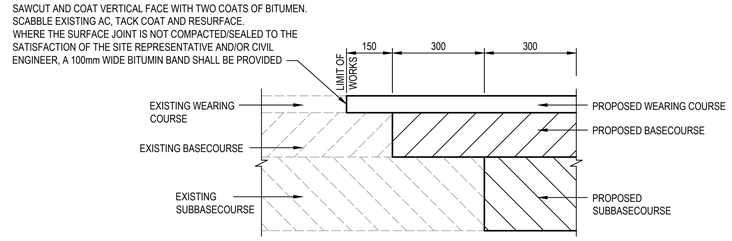
JOB NUMBER:	SCALE	SHEET No	REV
18016	1:250@A1	C401	C



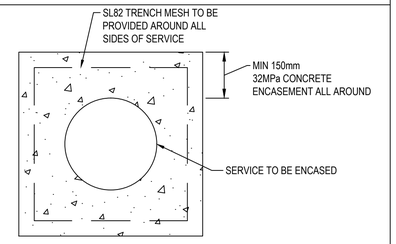
PRAM RAMP
SCALE 1:20

NOTES:
PRAM RAMP SHALL BE 130mm MIN THICK CONCRETE PLACED ON A 75mm MIN THICK COMPACTED LAYER OF 20mm DGB 20 OR THE BASE OF THE EXISTING PAVEMENT WHICH EVER IS THE GREATER

THERE MUST BE A SHARP TRANSITION AND NO LIP BETWEEN THE EDGE OF RAMP AND THE GUTTER

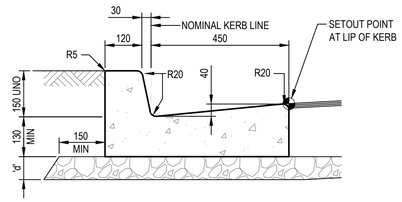


FULL DEPTH PAVEMENT CONNECTION TO EXISTING PAVEMENT
NTS

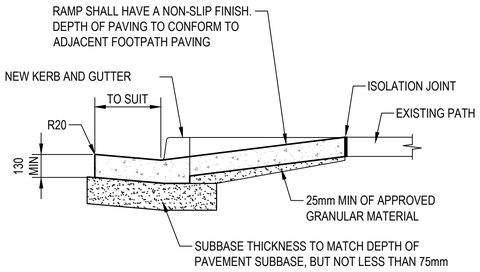


CONCRETE ENCASEMENT (TYPICAL)
NTS

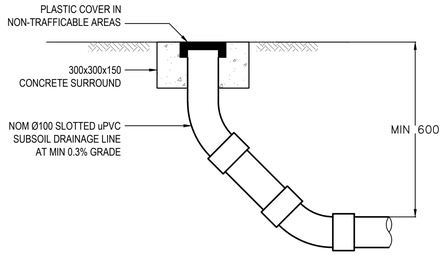
ALL SERVICES CONDUITS AND STORMWATER PIPES INSTALLED WITH LESS THAN 500mm COVER TO FINISHED SURFACE LEVEL ARE TO BE CONCRETE ENCASED AS PER DETAIL



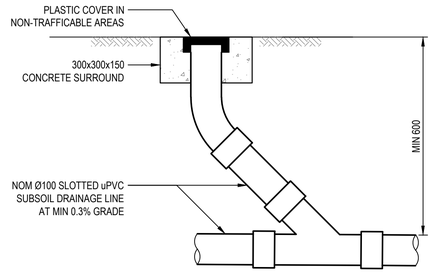
KERB AND GUTTER (K&G)
SCALE 1:10
NOTE:
'd' = SUBBASE THICKNESS TO MATCH DEPTH OF PAVEMENT SUBBASE, BUT NOT LESS THAN 75



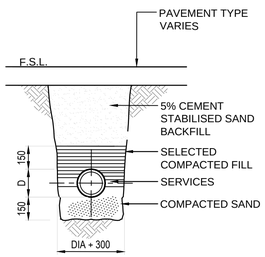
SECTION 1
SCALE 1:20



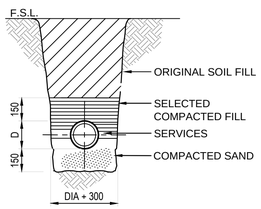
SUBSOIL DRAINAGE HIGH END RISER
N.T.S.



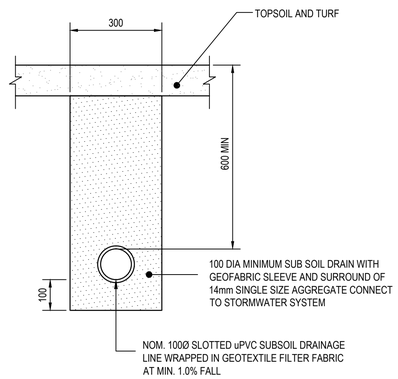
INTERMEDIATE RISER - IN LANDSCAPE AREAS
SCALE 1:10



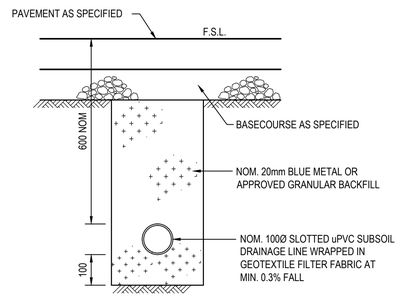
TRENCH CONDITIONS PAVEMENT AREAS
SCALE 1:20



TRENCH CONDITIONS LANDSCAPE AREAS
SCALE 1:20



SUBSOIL DRAINAGE - TYPICAL
SCALE 1:10



SUBSOIL UNDER PAVEMENTS
SCALE 1:10

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GENERAL DETAILS

JOB NUMBER:	SCALE	SHEET No	REV
18016	AS SHOWN	C601	C