VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540
CIVIL DRAWINGS

LOCALITY PLAN
N.T.S

DRAWING REGISTER

No.	DRAWING TITLE
VHS-MHT-00-00-DR-C0010	COVER SHEET, DRAWING INDEX AND LOCALITY PLAN
VHS-MHT-00-00-DR-C0020	STANDARD NOTES
VHS-MHT-00-00-DR-C0060	EROSION AND SEDIMENT CONTROL PLAN
VHS-MHT-00-00-DR-C0065	EROSION AND SEDIMENT CONTROL DETAILS
VHS-MHT-00-00-DR-C0070	BULK EARTHWORKS PLAN
VHS-MHT-00-00-DR-C0080	BULK EARTHWORKS SITE SECTIONS - SHEET 1
VHS-MHT-00-00-DR-C0081	BULK EARTHWORKS SITE SECTIONS - SHEET 2
VHS-MHT-00-00-DR-C0082	BULK EARTHWORKS SITE SECTIONS - SHEET 3
VHS-MHT-00-00-DR-C0101	CIVIL SITEWORKS PLAN
VHS-MHT-00-00-DR-C0110	PAVEMENT PLAN
VHS-MHT-00-00-DR-C0120	LINE MARKING AND SIGNAGE PLAN
VHS-MHT-00-00-DR-C0200	CIVIL DETAILS - SHEET 1
VHS-MHT-00-00-DR-C0201	CIVIL DETAILS - SHEET 2

ENVIRONMENTAL MANAGEMENT PLAN

PRIOR TO THE COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL PREPARE A SITE MANAGEMENT PLAN FOR APPROVAL BY THE SUPERINTENDENT. ITEMS TO BE ADDRESSED INCLUDE:

- EROSION AND SEDIMENT CONTROL
- FLORA AND FAUNA CONSERVATION
- WATER QUALITY MANAGEMENT
- DUST CONTROL
- NOISE CONTROL
- ACCESS MANAGEMENT
- WASTE MANAGEMENT
- POLLUTION CONTROL
- MONITORING AND REPORTING
- CORRECTIVE ACTION

IMPORTANT NOTES

1. PRIOR TO THE COMMENCEMENT OF BUILDING WORKS ON SITE, THE CONTRACTOR MUST VERIFY THE FEASIBILITY OF THE OUTFALL STORMWATER DRAINAGE SYSTEM/S TO THE LEGAL POINT OF DISCHARGE AS DOCUMENTED BY:
   - VERIFICATION OF THE INVERT LEVEL OF THE DRAIN FORMING THE LEGAL POINT OF DISCHARGE
   - VERIFICATION THAT THE ROUTE FROM THE SITE TO THE LEGAL POINT/S OF DISCHARGE IS CLEAR OF ALL OTHER AUTHORITY SERVICES.

   IF EITHER OF THE ABOVE CANNOT BE VERIFIED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE SUPERINTENDENT.

2. PRIOR TO THE COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES, NOTIFY THE AUTHORITIES RESPONSIBLE FOR THOSE SERVICES AND COMPLY WITH ALL OF THE REQUIREMENTS OF THOSE AUTHORITIES.

ATTENTION TO CONTRACTOR

OH & S REQUIREMENTS

1. IN ACCORDANCE WITH CLAUSE 15 OF AS2124-1992, THE CONTRACTOR MUST ENSURE THE SAFETY OF THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PEOPLE WHO ARE ON OR ADJACENT TO THE SITE. THE CONTRACTOR MUST COMPLY WITH THE NSW WHS ACT OF 2011.
2. THE CONTRACTOR MUST ENSURE THAT ALL PEOPLE EMPLOYED ON THE SITE WEAR APPROVED SAFETY APPAREL. THIS INCLUDES SAFETY HELMETS, SAFETY BOOTS, EAR AND EYE PROTECTION, WHERE APPROPRIATE.
3. THE CONTRACTOR IS NOT PERMITTED TO BREAK-IN TO AN EXISTING LIVE PIPELINE, ENTER A LIVE ACCESS CHAMBER OR REMOVE THE COVER TO A LIVE ACCESS CHAMBER.
4. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES IN WORKS AFFECTED AREAS PRIOR TO COMMENCING ANY WORKS.

NO ACCIDENT

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR AND AT ALL TIMES PROVIDE A SAFE WORKING ENVIRONMENT IN THE VICINITY OF THE SITE OF WORKS IN FULL COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS.

HEALTH AND SAFETY

1. THE OBLIGATION OF MEINHARDT [OR OTHER RELEVANT MEINHARDT ENTITY] (MEINHARDT) AS THE DESIGN ENGINEER IS LIMITED TO ENSURING THAT THOSE PARTS OF THE BUILDING OR STRUCTURE THAT ARE TO BE USED AS A WORKPLACE ARE, AS FAR AS REASONABLY PRACTICABLE, DESIGNED TO BE SAFE AND WITHOUT RISKS TO THE HEALTH OF THOSE PERSONS USING THE BUILDING OR STRUCTURE AS A WORKPLACE FOR THE PURPOSE FOR WHICH IT WAS DESIGNED IN ACCORDANCE WITH SECTION 22 OF THE NSW WHS ACT 2011.
2. MEINHARDT IS NOT RESPONSIBLE FOR THE OCCUPATIONAL HEALTH AND SAFETY OF PERSONS AT THE SITE AS THOSE OBLIGATIONS RESIDE WITH THE CONTRACTORS AND/OR SUB-CONTRACTORS WHO OCCUPY OR HAVE CONTROL OF THE SITE IN ACCORDANCE WITH APPLICABLE OCCUPATIONAL HEALTH AND SAFETY LEGISLATION, CODES OR PRACTICE, GUIDANCE NOTES, AUSTRALIAN STANDARDS AND OTHER RELEVANT DOCUMENTATION.
3. ANY ADVICE OR GUIDANCE CONCERNING OCCUPATIONAL HEALTH AND SAFETY ISSUES ARISING AT THE SITE SHOULD BE DIRECTED TO THE HEALTH AND SAFETY EXECUTIVE OR OFFICER NOMINATED FOR THE PROJECT.

NOTE:
THIS PROJECT SHOULD BE READ IN CONJUNCTION WITH ALL OTHER SERVICES CONSULTANTS ASSOCIATED WITH THIS PROJECT BEFORE COMMENCEMENT OF ANY WORKS.

ALL EXISTING PROPERTY SERVICES' LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE VERIFIED ON SITE.
THE CONTRACTOR SHOULD SUPPLY PRECISE LOCATIONS AND DEPTHS TO THE SUPERINTENDENT FOR REVIEW PRIOR TO ANY WORKS THAT MAY AFFECT THESE SERVICES.

GEOTECHNICAL DESIGN COMPLIANCE AND SITE INSPECTION ATTENDANCE

THESE DESIGN PLANS SHALL BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT No. 8593 DATED 30 JANUARY 2024 PREPARED BY STANTEC. THE PROVISIONS AND RECOMMENDATION CONTAINED WITHIN THE REPORT ARE TO BE STRICTLY COMPLIED WITH.

ALL COMPACTION REQUIREMENT RESULTS SHALL BE CARRIED OUT IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMMENDATIONS.

LATENT CONDITIONS (SUBGRADE IMPROVEMENTS)

ANY ADDITIONAL WORKS WHICH MAY LEAD TO A VARIATION SHALL BE APPROVED BY THE SUPERINTENDENT PRIOR TO THE COMMENCEMENT OF ANY WORKS AND INCLUDE THE FOLLOWING PROVISIONS:

a) NOTIFICATIONS FOR INSPECTIONS TO SUPPORT POTENTIAL VARIATION CLAIMS REQUIRE MINIMUM 48 HOUR NOTICE PERIOD. (SITE REPRESENTATION WILL BE AT THE DISCRETION OF THE SUPERINTENDENT).
b) SUBGRADE IMPROVEMENTS ARE TO BE MANAGED BY THE PROJECT GEOTECHNICAL ENGINEER WITH INPUT FROM THE SUPERINTENDENT.
c) CONSULTANT COSTS FOR GEOTECHNICAL REPRESENTATION AND REPORTING TO BE BORNE BY THE CONTRACTOR
d) ADDITIONAL INSPECTIONS BY THE SUPERINTENDENT TO SUPPORT VARIATION CLAIMS FOR LATENT CONDITIONS SHALL BE BORNE BY CONTRACTOR

BEFORE YOU DIG
www.byda.com.au

WARNING
PROPOSED SERVICES

THE LOCATION AND EXTENT OF PROPOSED SERVICES IS INDICATIVE ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. REFER TO AUTHORISED DOCUMENTATION BY RELEVANT AUTHORITY FOR CONSTRUCTION DETAILS

WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT: NSW GOVERNMENT — School Infrastructure NSW

PROJECT: VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

TITLE: COVER SHEET, DRAWING INDEX AND LOCALITY PLAN

STATUS: **SCHEMATIC DESIGN**
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		N.T.S

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0010	P3

DWG FILE: \\au.meinhardtgroup.com\mhg-fs\Sydney\Projects\projdir\132571 - SINSW Vincentia HS\5_BIM\3_CIV\2_Drafting\VHS-MHT-00-00-DR-C-0010.dwg - MH PLOT TIME: 18 Feb 2025, 1:46pm

STANDARD CIVIL NOTES

1. GENERAL

1.1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS, AND SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK. THESE PLANS ARE BASED UPON THE EXISTING CONDITION SURVEY PREPARED BY OTHERS. WHERE SITE CONDITIONS DIFFER TO THE SURVEY OR DESIGN DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENT PRIOR TO PROCEEDING WITH WORKS.

1.2 IF ANY DISCREPANCY OCCURS ON THE DRAWINGS OR BETWEEN THE DRAWINGS AND SPECIFICATION, THE TENDERER SHALL DURING TENDER REFER THE DISCREPANCY TO THE SUPERINDENDENT. OR ASSUME THAT THE DRAWINGS TAKE PRECEDENCE OVER THE SPECIFICATION. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT FOR WRITTEN CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

1.3 THESE DRAWINGS MUST NOT BE SCALED.

1.4 ALL DIMENSIONS AND REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.

1.5 THE CONTRACTOR SHALL SET OUT THE WORKS FROM THE NOMINATED DESIGN LINES, SURVEY BENCHMARKS AND CONTROL POINTS SHOWN ON THE PLANS AND TO THE SPECIFIED DETAILS. UPON REQUEST AN ELECTRONIC BASE PLAN OF THE CIVIL DRAWING CAN BE SUPPLIED FOR INFORMATION, MEINHARDT HOLDS NO LIABILITY TO THE ACCURACY OF ELECTRONIC FILES.

1.6 ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA 2020).

1.7 ALL SPOT LEVELS SHOWN ARE TO INVERT (FACE) OF KERB OR EDGE OF PAVEMENT WHERE APPLICABLE, UNLESS SHOWN OTHERWISE.

1.8 EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED AND MAY NOT BE ACCURATE.

1.9 GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY. WHERE FINISHED SURFACE LEVELS ARE NOT SHOWN, THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN AND MATCH ADJACENT SURFACES OR STRUCTURES.

1.10 MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN AND RESPONSIBLE AUTHORITY STANDARDS.

1.11 THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORKS.

1.12 ONLY SUBSTITUTIONS APPROVED IN WRITING BY THE SUPERINTENDENT SHALL BE ACCEPTED.

1.13 ALL WORKS WITHIN THE ROAD RESERVE SHALL BE IN ACCORDANCE WITH THE RESPONSIBLE ROAD AUTHORITY SPECIFICATIONS AND DRAWINGS AND ENGINEERING, DESIGN AND CONSTRUCTION MANUAL/S.

1.14 SERVICE INFORMATION SHOWN IS BASED ON PLANS SUPPLIED BY AUTHORITIES AND IS APPROXIMATELY ONLY. PRIOR TO COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES AND COMPLY WITH ALL REQUIREMENTS OF THOSE AUTHORITIES.

1.15 WHERE CIVIL DRAWINGS HAVE BEEN PROVIDED IN AUTOCAD OR DIGITAL FORMAT, THE CONTRACTOR SHALL UTILISE THESE FOR INFORMATION ONLY. DESIGN DRAWINGS ARE TO BE REFERENCED FOR SURFACE LEVELS AND WILL TAKE PRECEDENCE FOR SETOUT OVER 3D MODELS. ANY INFORMATION EXTRACTED FROM 3D MODELS ARE TO BE CROSSCHECKED WITH FORMALLY ISSUED PDF FILES AND SITE CONDITIONS. IF ANY DISCREPANCIES EXIST, THE SUPERINTENDENT IS TO BE CONSULTED FOR REVIEW.

1.16 SHOP DRAWING REVIEW OF SUBCONTRACTOR DRAWINGS ARE NOT WITHIN THE CIVIL SCOPE. WHERE SHOP DRAWINGS ARE PRODUCED, MEINHARDT DOES NOT TAKE ANY RESPONSIBILITY TO THE SUITABILITY OF ACCURACY OF THESE DRAWINGS.

1.17 THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS.

2. EARTHWORKS AND GEOTECHNICAL

2.1 THE CONTRACTOR SHALL COMPLY WITH THE CURRENT EDITIONS OF THE FOLLOWING ROAD AUTHORITY AND AUSTRALIAN STANDARDS:
- AS 1289 TESTING SOILS FOR ENGINEERING PURPOSES
- AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
- ROAD AUTHORITY SPECIFICATION - SITE CLEARING

2.2 GRANULAR MATERIAL SPECIFIED AS PER GEOTECHNICAL REPORT SUBJECT TO SUPERINTENDENT'S APPROVAL.

2.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT ALL CONTROL AND COMPLIANCE EXAMINATION AND TESTING OF MATERIALS AND WORK. UNLESS OTHERWISE SPECIFIED, ALL TESTS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROPRIATE AUSTRALIAN STANDARD TEST METHOD. WHERE THERE IS NO RELEVANT AUSTRALIAN STANDARD TEST METHOD THEN THE CURRENT APPROPRIATE ROAD AUTHORITY TEST METHOD OR OTHER SPECIFIED TEST METHOD SHALL BE USED. ALL TESTS SHALL BE CONDUCTED BY EXPERIENCED TESTING OFFICERS IN A LABORATORY ACCREDITED BY THE NATIONAL ASSOCIATION OF TESTING AUTHORITIES (NATA).

2.4 DETERMINATION OF THE NATURE AND QUANTITY(IES) OF THE EXISTING SITE MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR (GEOTECHNICAL REPORT PREPARED BY OTHERS). THE GEOTECHNICAL REPORT WAS USED AS THE BASIS OF DESIGN. INTERPRETATION OF THE REPORT/S SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ENGAGE THEIR OWN GEOTECHNICAL ENGINEER DURING CONSTRUCTION TO VERIFY ACTUAL SITE CONDITIONS.

2.5 THE CONTRACTOR SHALL BE DEEMED TO HAVE ALLOWED IN THE CONTRACT SUM FOR EXCAVATION IN ALL MATERIAL. NO ADDITIONAL PAYMENT SHALL BE MADE FOR EXCAVATION IN ROCK NOR ANY HARD OR SOFT MATERIAL.
SUITABLE MATERIAL EXCAVATED FROM THE SITE MAY BE USED AS FILL ONLY WHERE APPROVED IN WRITING BY THE SUPERINTENDENT, OR WHERE SHOWN ON THE DRAWINGS.
IMPORTED FILL SHALL BE APPROVED MATERIALS COMPRISING GRANULAR IGNEOUS WEATHERED ROCK OR QUARRY WASTE (SUCH AS 40mm CLASS 3 OR CLASS 4), SANDY CLAY OR WEATHERED SEDIMENTARY ROCK. THE FILL MATERIAL MAXIMUM PARTICLE SIZE AFTER COMPACTION SHALL NOT EXCEED 40mm, NOT LESS THAN 50% OF THE MATERIAL SHALL BE COARSER THAN 75 MICRON AND IT SHALL HAVE A LIQUID LIMIT NOT EXCEEDING 35%. GRANULAR MATERIAL SHALL BE WELL GRADED.
UNSUITABLE MATERIAL SHALL MEAN ANY MATERIAL WHICH CONTAINS VEGETABLE MATTER, ROOTS, STUMPS AND OR ANY OTHER PERISHABLE, FOREIGN OR DELETERIOUS MATTER, OR CONTAINS CLAY HAVING A LIQUID LIMIT EXCEEDING 80% AND OR A PLASTICITY INDEX EXCEEDING 50% OR CONTAINS ROCK, GRAVEL OR OTHER PIECES WHOSE LEAST DIMENSION EXCEEDS 100mm, OR IS SILTY MATERIAL OR IS OTHERWISE CONSIDERED AS BEING UNSUITABLE.

2.6 WHEN A SURFACE IS UNABLE TO SUPPORT CONSTRUCTION EQUIPMENT OR IT IS NOT POSSIBLE TO COMPACT THE OVERLYING MATERIALS BECAUSE OF HIGH MOISTURE CONTENT, THEN ONE OR MORE OF THE FOLLOWING ALTERNATIVE ACTIONS MAY BE TAKEN:
A) ALLOW THE MATERIAL TO DRY TO A MOISTURE CONTENT WHICH ALLOW IT TO BE COMPACTED AND ALLOW THE PLACEMENT AND COMPACTION OF OVERLYING MATERIAL
B) SCARIFY THE MATERIAL TO A DEPTH OF 200mm AND WORK AS NECESSARY TO ACCELERATE DRYING. RECOMPACT AS SPECIFIED WHEN MOISTURE CONTENT APPROXIMATES OPTIMUM
EXCAVATE AND REPLACE THE SOFT MATERIAL.
THE ACTION TO BE ADOPTED SHALL BE AT THE CONTRACTOR'S DISCRETION AND EXPENSE, BUT SHALL BE ADVISED TO THE SUPERINTENDENT BEFORE ACTION COMMENCES.
IF THE CONTRACTOR ELECTS PURSUANT TO (A) ABOVE TO ALLOW THE MATERIAL TO DRY, RESULTING DELAYS, IF ANY, SHALL NOT CONSTITUTE GROUNDS FOR AN EXTENSION OF CONTRACT PERIOD OR DATE OF PRACTICAL COMPLETION.

2.7 THE NATURAL SUBGRADE SHALL BE MOISTURE CONDITIONED TO WITHIN THE RANGE 98% TO 102% OF STANDARD OPTIMUM MOISTURE CONTENT AND COMPACTED TO ACHIEVE A MINIMUM STANDARD DRY DENSITY RATIO TO A MINIMUM DEPTH OF 200mm. IF REQUIRED THE AREA SHOULD BE TYNED AND SCARIFIED FULL DEPTH TO FACILITATE THIS PROCESS.

2.8 ANY SOFT, WEAK OR UNSTABLE AREAS EXPOSED BY THE COMPACTION PROCESS, OR DURING TEST ROLLING, AND WHICH DO NOT RESPOND TO FURTHER COMPACTION OR MOISTURE CONDITIONING SHALL BE EXCAVATED AND REPLACED.
THE CONTRACTOR SHALL BE DEEMED TO HAVE ASSESSED THE EXTENT OF UNSTABLE AREAS AND SHALL BE DEEMED TO HAVE INCLUDED IN THE CONTRACT SUM FOR ALL ACTIVITIES REQUIRED FOR UNSTABLE AREA RECTIFICATION INCLUDING THE DELIVERY, PLACING AND COMPACTING OF APPROVED MATERIAL AS WELL AS THE EXCAVATION AND DISPOSAL OF REPLACED MATERIAL.

2.9 THE FINISHED SUBGRADE SHALL NOT BE DISTURBED BY TRAFFIC OR OTHER OPERATIONS, AND SHALL BE PROTECTED AND MAINTAINED BY THE CONTRACTOR UNTIL THE FIRST LAYER OF FILL OR SUB-BASE IS PLACED THEREON. THE SUBGRADE SHALL BE KEPT DRAINED AND COMPLETELY FREE OF STANDING WATER AT ALL TIMES. THE CONTRACTOR SHALL PLAN AND CARRY OUT THE WHOLE OF THE WORKS TO MINIMISE THE EFFECTS OF RUN-OFF AND EROSION ON THE SITE AND ON DOWNSTREAM AREAS. THE CONTRACTOR SHALL AVOID UNNECESSARY GROUND DISTURBANCE AND PROVIDE AS NECESSARY FOR THE PROPER CONTROL OF STORMWATER RUN-OFF AT EVERY STAGE OF THE WORKS.

2.10 ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN LAYERS NOT EXCEEDING A MAXIMUM LOOSE THICKNESS OF 250mm TO THE DENSITIES SPECIFIED BELOW:
A) LANDSCAPED AREAS 95% STANDARD DRY DENSITY
B) FILL UNDER ANY FOOTINGS AND FLOOR SLABS FOR ANY STRUCTURE
- FINE CRUSHED ROCK 98% MODIFIED DRY DENSITY
C) FILL UNDER ROAD PAVEMENTS
- FINE CRUSHED ROCK 98% MODIFIED DRY DENSITY
D) ROAD PAVEMENT MATERIALS
- SUBBASE AND BASE COURSE 98% MODIFIED DRY DENSITY

2.11 WHERE EXCAVATED MATERIAL IS NOT SUITABLE FOR FILLING, "IMPORTED FILL" SHALL BE USED. COMPACT IMPORTED BULK FILL IN LAYERS OF 150mm MAXIMUM COMPACTED DEPTH AND AT OPTIMUM MOISTURE CONTENT. THE CONTRACTOR SHALL CARRY OUT TESTING AT A FREQUENCY WHICH IS SUFFICIENT TO ENSURE THAT THE MATERIALS AND WORK SUPPLIED UNDER THE CONTRACT COMPLIES WITH THE SPECIFIED REQUIREMENTS AND CONFORMING TO AS3798 TABLE 8.1 (ADOPTING WHICHEVER GIVES THE MOST TEST RESULTS). NO FILL SHALL BE PLACED OVER LAYERS NOT TESTED AND HAVING UNSATISFACTORY RESULTS.

2.12 EXCAVATION TO THE LINES, LEVELS AND GRADES AS REQUIRED FOR UNDERGROUND SERVICES SPECIFIED IN THE RELEVANT SERVICES SECTIONS, INCLUDING DRAINAGE, HYDRAULIC, ELECTRICAL AND THE LIKE. UNLESS OTHERWISE SPECIFIED MAKE THE TRENCHES STRAIGHT BETWEEN MANHOLES, INSPECTION POINTS, JUNCTIONS AND THE LIKE, WITH VERTICAL SIDES AND UNIFORM GRADES. DEPTH SHALL BE AS REQUIRED BY THE RELEVANT SERVICES AND ITS BEDDING. CUT BACK ROOTS ENCOUNTERED IN TRENCHES TO LESS THAN 600mm CLEAR OF THE RELEVANT SERVICE. REMOVE SUCH OTHER OBSTRUCTIONS INCLUDING ROOTS, STUMPS, BOULDERS, REDUNDANT SERVICES AND THE LIKE WHICH MAY, IN THE OPINION OF THE SUPERINTENDENT, INTERFERE WITH THE PROPER FUNCTIONING OF THE SERVICE.
LAY AND BED SERVICES IN ACCORDANCE WITH THE RELEVANT SERVICES SPECIFICATION SECTION.

2.13 BACKFILL AND COMPACT SERVICE TRENCHES AS SOON AS POSSIBLE AFTER APPROVAL OF LAID AND BEDDED SERVICE. COMPACT BACKFILL IN PIPE TRENCHES SO THAT THE PIPE IS BUTTRESSED BY THE WALLS OF THE TRENCH.

2.14 WHERE FILLING IS DESIGNATED BY THE CONTRACT OR IS SHOWN ON THE DRAWINGS AS STRUCTURAL OR CONTROLLED FILL THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT GEOTECHNICAL TESTING AUTHORITY TO SUPERVISE SUBGRADE PREPARATION, FILL PLACEMENT, COMPACTION AND TO UNDERTAKE SAMPLING AND TESTING AND REPORTING TO SATISFY THE REQUIREMENTS OF THIS SPECIFICATION AND THOSE OF AS 2870 AND AS 3798, FOR CONTROLLED FILL.

2.15 UNLESS OTHERWISE PERMITTED, NO FILLING SHALL BE PLACED AGAINST ANY STRUCTURES, WING WALLS OR RETAINING WALLS WITHIN FOURTEEN DAYS OF CASTING. STRUT WALLS AS NECESSARY TO PREVENT MOVEMENT DURING PLACING AND COMPACTION. PLACE AND COMPACT FILLING OVER AND AROUND PIPES, CULVERTS, BRIDGES AND OTHER STRUCTURES SO AS TO AVOID UNBALANCED LOADING OR MOVEMENT. UNLESS OTHERWISE DETAILED BACKFILL AT STRUCTURES SHALL BE FILLED AS FOLLOWS:
A) WHERE THE GAP BETWEEN THE STRUCTURE AND UNDISTURBED GROUND EXCEEDS 2m, BACKFILL THE ZONE WITHIN 2m OF THE STRUCTURE WITH CLASS 3 FINE CRUSHED ROCK AND BACKFILL IN THE ZONE BEYOND 2m OF THE STRUCTURE WITH SELECT FILL TO THE APPROVAL OF THE SUPERINTENDENT OR CLASS 3 FINE CRUSHED ROCK. UNLESS OTHERWISE DETAILED, MATERIAL WITHIN 300mm OF WEEPHOLES SHALL BE AN APPROVED GRANULAR FILTER MEDIUM OF COARSE SAND OR CRUSHED STONE WRAPPED AND SURROUNDED WITH AN APPROVED GEOTEXTILE SEPARATION LAYER.

2.16 AREAS UPON WHICH FILL IS TO BE CONSTRUCTED, ALL LAYERS OF FILLING, AND MATERIALS LESS THAN 150mm BELOW PERMANENT SUBGRADE LEVEL IN CUT, SHALL BE COMPACTED SO AS TO BE CAPABLE OF WITHSTANDING TEST ROLLING, WITHOUT VISIBLE DEFORMATION OR SPRINGING, WITH A PNEUMATIC TYRED ROLLER OR HIGHWAY TRUCK BALLASTED TO COMPLY WITH THE FOLLOWING:
A) PNEUMATIC TYRED - NOT LESS THAN 3t PER TYRE WITH TYRES INFLATED TO 550 kPa.
B) HIGHWAY TRUCK - WITH REAR AXLE OR AXLES LOADED TO NOT LESS THAN 8t EACH WITH TYRES INFLATED TO 550 kPa
TEST ROLLING SHALL BE CARRIED OUT IMMEDIATELY BEFORE OVERLYING LAYERS ARE PLACED.
WHERE TEST ROLLING IS REQUIRED AT SOME LATER DATE, THE SURFACE SHALL BE MOISTURE CONDITIONED AS REQUIRED AND GIVEN NOT LESS THAN FOUR COVERAGES OF THE TEST ROLLER BEFORE TEST ROLLING COMMENCES.

2.17 THE WORK SHALL NOT BE ACCEPTED AS COMPLETE UNLESS ALL TEST RESULTS ARE PROVIDED TO THE SUPERINTENDENT AND APPROVED. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL PROPERTY AND QUALITY TEST RESULTS TO THE SUPERINTENDENT.

3. SITE CLEAN UP

3.1 ALL EXISTING REDUNDANT CONCRETE, PAVEMENT, SOIL, RUBBISH AND CONSTRUCTION DEBRIS SHALL BE TAKEN UP AND REMOVED FROM SITE.

3.2 PRIOR TO COMPLETION, THE CONTRACTOR SHALL ENSURE THE SITE OF WORKS IS TIDIED AND OBTAIN A CLEARANCE FROM THE SUPERINTENDENT.

3.3 APPROPRIATE CLEANING FACILITIES WILL BE INSTALLED ON SITE TO ENSURE THERE IS NO MUD, SOIL OR DEBRIS DEPOSITED BY VEHICLES ON ABUTTING PUBLIC ROADS.

3.4 SITE ACCESS ROADS AND ABUTTING PUBLIC ROADS TO BE REGULARLY SWEPT TO KEEP THEM CLEAN AND DEBRIS FREE.

4. STORMWATER DRAINAGE

4.1 ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS.
- AS 1260 UNPLASTICISED PVC (UPVC) PIPES AND FITTINGS FOR SEWERAGE APPLICATIONS.
- AS 1597 PRECAST REINFORCED CONCRETE BOX CULVERTS PART 1, SMALL CULVERTS (NOT EXCEEDING 1200mm WIDTH AND 900mm DEPTH).
- AS 1631 CAST IRON NON-PRESSURE PIPES AND PIPE FITTINGS
- AS 1650 GALVANISED COATINGS
- AS 1657 FIXED PLATFORMS, WALKWAYS, STAIRWAYS AND LADDERS
- AS 2032 CODE OF PRACTICE FOR INSTALLATION OF UPVC PIPE SYSTEMS
- AS 2439 PERFORATED PLASTICS DRAINAGE AND EFFLUENT PIPE FITTINGS. PART 1, PERFORATED DRAINAGE PIPE AND ASSOCIATED FITTINGS
- AS 3500.3 NATIONAL PLUMBING AND DRAINAGE CODE, PART 3, STORMWATER DRAINAGE
- AS 3725 LOADS ON BURIED CONCRETE PIPES
- AS 3996 METAL ACCESS COVERS, ROAD GRATES AND FRAMES
- AS 4058 PRECAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE)
- AS 4139 FIBRE REINFORCED CONCRETE PIPES AND FITTINGS

4.2 ALL BEDDING TO BE TYPE H2 IN ACCORDANCE WITH AS3725 UNLESS NOTED OTHERWISE.

4.3 THE CONTRACTOR SHALL COMPLY WITH THE 'MINES (TRENCHES) REGULATIONS 1982' FOR ALL SHORING, SUPPORT OF TRENCHES, QUALIFICATIONS OF PERSONNEL AND NOTIFICATION TO THE RESPONSIBLE AUTHORITY.

4.4 TRENCHES MUST BE KEPT CLEAR OF WATER AT ALL TIMES AND TIMBERED >1m DEPTH WHERE NECESSARY TO PREVENT COLLAPSE.

4.5 SUITABLE SAFETY BARRIERS SHALL BE PROVIDED AROUND THE EXCAVATION AT ALL TIMES. THE BARRIERS SHALL BE SUITABLY ILLUMINATED OVERNIGHT TO THE SATISFACTION OF THE SUPERINTENDENT.

4.6 PIPES SHALL BEAR EVENLY ON THE BED PREPARED AS SPECIFIED ABOVE AND LAID WITH THE SOCKETS POINTED UPGRADE. ALL PIPES SHALL BE LAID IN STRAIGHT LINES, TO TRUE INVERT LEVELS AND GRADES AS SHOWN ON PLANS. EACH PIPE SHALL BE SEPARATELY LEVELLED BETWEEN ACCURATELY ESTABLISHED GRADE POINTS. THE CONTRACTOR SHALL ADHERE TO THE DRAWINGS AND SHALL NOT BE PERMITTED TO VARY THE LINE, LEVELS OR LOCATION OF THE DRAIN WITHOUT THE SUPERINTENDENT'S WRITTEN APPROVAL.

4.7 ALL PIPE JOINTING SHALL BE CARRIED OUT IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS FOR THE TYPE OF PIPE BEING USED.

4.8 FOR REACTIVE CLAY SITES, ALL STORMWATER DRAINAGE CONNECTIONS SHALL BE PROVIDED WITH A MECHANICAL FLEXIBLE JOINT AT THE INTERFACE BETWEEN THE STRUCTURE AND IN-GROUND PIPE INSTALLATION.

4.9 WHERE ANY PIPE IS CUT INTO A LARGER PIPE, SUCH CONNECTION SHALL BE NEATLY MADE AND NO PART OF THE PIPE OR DOWNPIPE SHALL BE ALLOWED TO PROJECT. ANY CUT-IN JUNCTION SHALL BE MADE IN THE TOP HALF OF THE LARGER PIPE. SUCH JUNCTION TO CONCRETE PIPES SHALL BE SURROUNDED WITH A NEAT COLLAR OF CEMENT MORTAR AS DIRECTED BY THE SUPERINTENDENT OR AS DETAILED ON THE DRAWINGS. JUNCTIONS BETWEEN PVC PIPES SHALL USE PROPRIETY FITTINGS INTENDED FOR THE PURPOSE.

4.10 THE ENDS OF PIPES WHICH CONNECT WITH SIDE ENTRY, JUNCTION OR OTHER PITS SHALL BE NEATLY CUT TO FIT THE INNER FACE OF THE CONCRETE. WHERE UPVC PIPES ENTER/LEAVE PITS A RUBBER RING JOINT MANHOLE COUPLING SHALL BE CAST INTO THE PIT WALL.

4.11 ALL PITS AND ENDWALLS SHALL BE CONSTRUCTED IN THE POSITIONS AND TO THE LEVELS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE SUPERINTENDENT.
PIT COVERS SHALL BE PLACED IN ACCORDANCE WITH THE DETAIL SITE PLANS AND PIT SCHEDULE (IF PROVIDED) IN REGARD TO TYPE, SIZE, LOCATION AND LEVEL.
THE BASE OF EACH PIT SHALL BE INFILLED AND SHAPED WITH CONCRETE OR CEMENT MORTAR TO PROVIDE A SMOOTH FLOW PATH.
PIT COVER LEVELS ARE SHOWN FOR GUIDANCE ONLY. THE CONTRACTOR SHALL ALLOW TO CONSTRUCT THE COVERS ON A SLOPE AS REQUIRED TO SUIT THE FINAL SURFACE SHAPES AND GRADES.

4.12 ALL DRAINAGE TO BE SETOUT A MINIMUM OF 1000mm FROM ADJACENT BUILDINGS UNLESS NOTED OTHERWISE.

4.13 ALL DRAINAGE PITS TO BE EITHER CAST IN-SITU CONCRETE PITS AS DETAILED OR AN APPROVED PRECAST PIT COMPLYING WITH THE RELEVANT AUSTRALIAN STANDARDS. CONTRACTOR TO OBTAIN APPROVAL FROM THE MAINTAINING AUTHORITY TO INSTALL PRECAST PITS. PITS LOCATED IN GROUND WATER OR COASTAL AREAS SHALL HAVE MINIMUM 80mm COVER TO REINFORCEMENT AT ALL FACES.

4.14 UNLESS NOTED OTHERWISE, ALL DRAINAGE PITS SHALL BE FITTED WITH BOLT-DOWN CONCRETE INFILL COVERS AND/OR FABRICATED STEEL GRATES COMPLYING WITH AS 3996 AS REQUIRED, OR AS DIRECTED BY SUPERINTENDENT.

4.15 UNLESS NOTED OTHERWISE, ALL PIT COVERS SHALL MEET THE FOLLOWING MINIMUM CLASS:
CLASS B FOR PITS WITHIN LANDSCAPING OR AREAS NOT SUBJECT TO VEHICLE TRAFFIC
CLASS C FOR PITS WITHIN LIGHT-VEHICLE TRAFFICKED AREAS AND PRIVATE ROADWAYS
CLASS D FOR PITS WITHIN HEAVY-VEHICLE TRAFFICKED AREAS AND/OR PUBLIC ROADWAYS
IF ANY DISCREPANCY EXISTS BETWEEN THE ABOVE AND THE PIT SCHEDULE DRAWING, THE DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT FOR REVIEW AND DIRECTION.

4.16 CONTRACTOR TO ALLOW TO FINISH PITS FLUSH WITH SURROUNDING LEVELS ON COMPLETION. COVER LEVELS ON THE DRAWINGS AND PIT SCHEDULE ARE TO THE CENTER OF THE PIT AND MAY BE MODIFIED ONSITE ± 20mm TO MEET CONSTRUCTION TOLERANCES AND FINISHED PAVEMENT LEVELS.

4.17 ALL DOWNPIPES SHALL BE CONNECTED TO THE END OF A PIPE OR ELBOW AND WHICH THEY SHALL ENTER CENTRALLY.
WHERE PVC DOWNPIPES AND UNDERGROUND DRAINAGE ARE USED, THE DOWNPIPES SHALL BE CONNECTED TO THE UNDERGROUND DRAINS WITH SUITABLE STANDARD FITTINGS, BENDS ETC AND WITH SOLVENT JOINTS. THE CONTRACTOR SHALL LAY AND GRADE DRAINS FROM DOWNPIPES TO COMPLY WITH THE REQUIREMENTS FOR PIPE MATERIAL AND COVER REQUIRED BY AS3500.3. WHERE THE REQUIREMENTS OF AS3500.3 CANNOT BE MET THE CONTRACTOR SHALL REFER THE MATTER TO THE SUPERINTENDENT.

4.18 UNLESS NOTED OTHERWISE, ALL DOWNPIPES & GRATED INLETS SHALL BE CONNECTED TO PITS OR MAIN STORMWATER DRAINS WITH PVC SN8 OR SN10 OF THE FOLLOWING SIZES LAID AT MINIMUM GRADE OF 1 IN 100:
A) 100Ø SN10 FOR DOMESTIC CONSTRUCTION
B) 150Ø SN8 FOR COMMERCIAL/INDUSTRIAL CONSTRUCTION
C) 100Ø SN10 FOR BASEMENT GRATED INLETS
D) IF U.P.V.C. OR OTHER PIPES ARE TO BE USED, APPROVAL MUST BE GIVEN BY THE SUPERINTENDENT
E) GREEN STAR PROJECTS SHALL SUBSTITUTE PVC WITH APPROVED EQUIVALENT HDPE OR PP PIPES.

4.19 ALL IN GROUND DOWNPIPE CONNECTIONS ARE TO BE 150Ø UPVC OR EQUAL TO THE DOWNPIPE SIZE, WHICHEVER IS GREATER, UNLESS SHOWN OTHERWISE. DOWNPIPE CONNECTIONS TO THE MAIN STORMWATER DRAINAGE SHALL BE VIA A 45° OBLIQUE JUNCTION OR BANDAGE JOINT AS DETAILED OR DIRECT TO A STORMWATER PIT. SUSPENDED DOWNPIPE CONNECTIONS WITHIN THE BUILDING ARE TO BE SUPPORTED WITH APPROVED HANGERS AT 1.2m CENTRES. THE ALIGNMENT OF SUSPENDED DRAINS IS SCHEMATIC ONLY. THE FINAL ALIGNMENT IS TO COMPLY WITH THE ARCHITECTURAL PLANS.

4.20 ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING ONE OF THE FOLLOWING TYPES OF PIPES WITH RUBBER RING JOINTS:
A) 300Ø AND ABOVE, MIN. CLASS 2 RCP OR SHOWN OTHERWISE ON PLAN IN ACCORDANCE WITH AS4058
B) 100Ø STIFFNESS SN10. 150Ø AND ABOVE STIFFNESS SN8 P.V.C. IN ACCORDANCE WITH AS1260
C) CLASS 2 F.R.C. OR SHOWN OTHERWISE ON PLAN TO AS4139
D) IF U.P.V.C. OR OTHER PIPES ARE TO BE USED, APPROVAL MUST BE GIVEN BY THE SUPERINTENDENT.
E) ALL STORMWATER DRAINAGE PIPES 225Ø AND LESS TO BE SEWER QUALITY UPVC WITH SOLVENT WELDED JOINTS, UNLESS NOTED OTHERWISE.

4.21 FOR SYPHONIC ROOF DRAINAGE SYSTEMS, REFER TO HYDRAULIC DRAWINGS FOR SIZE OF ALL CONNECTIONS BETWEEN DOWNPIPES AND MAIN STORMWATER DRAINS. THE CONNECTOR TO THE STORMWATER SYSTEM SHALL HAVE THREE TIMES THE CAPACITY OF THE FLOW RATE FROM THE SYPHONIC SYSTEM.

4.22 FOR SUBSOIL DRAINAGE, 100Ø CLASS 1000 IN THE ROAD RESERVE AND CLASS 400 UPVC AGI (AG) DRAINS ELSEWHERE WITH 20mm N.S. SCREENINGS BACKFILL SHALL BE INSTALLED BEHIND ALL KERBING AND RETAINING WALLS UNLESS OTHERWISE NOTED, AT MINIMUM GRADE OF 1 IN 250 AND CONNECTED TO THE NEAREST DRAIN OR PIT. WHERE AGI DRAINS PASS UNDER SLABS OR PAVEMENTS, UNSLOTTED SECTIONS OF PIPE ARE TO BE USED.

4.23 THE CONTRACTOR SHALL ENSURE THAT CONSTRUCTION MACHINERY DOES NOT TRAFFIC DIRECTLY OVER STORMWATER DRAINAGE. WHERE THIS IS NOT POSSIBLE, ENSURE THAT MINIMUM 300mm COVER IS PROVIDED OVER THE STORMWATER DRAINAGE FOR THE DURATION OF THE WORKS. WHERE MINIMUM COVER OVER STORMWATER DRAINAGE IS NOT AVAILABLE, THE CONTRACTOR SHALL USE APPROPRIATE MEASURES TO PROTECT THE INTEGRITY OF THE PIPE OR INCREASE THE CLASS OF THE PIPE.

4.24 FOR BASEMENTS WITHIN THE GROUNDWATER TABLE, ALL STORMWATER DRAINAGE CONNECTIONS ARE TO BE SEALED WITH AN APPROVED SEALANT TO PREVENT GROUNDWATER INGRESS INTO THE DRAINAGE SYSTEM, AND FIXED IN PLACE TO PREVENT FLOTATION DUE TO BUOYANCY, UNLESS NOTED OTHERWISE.

4.25 UNLESS NOTED OTHERWISE, GROUNDWATER IS NOT TO BE DISCHARGED INTO THE LOCAL STORMWATER SYSTEM IN THE PERMANENT CONDITION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A TRADE WASTE AGREEMENT WITH THE RELEVANT AUTHORITY FOR THE TEMPORARY DISCHARGE OF GROUNDWATER DURING CONSTRUCTION.

4.26 IN CIRCUMSTANCES WHERE FIRE TEST DRAINS HAVE BEEN CONNECTED TO THE STORMWATER SYSTEM, TESTS CANNOT BE CARRIED OUT WITHIN ONE HOUR OF A STORM EVENT.

4.27 OUTFALL DRAINAGE CONNECTION INVERT LEVELS ARE TO BE VERIFIED & CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS ON SITE. ANY DISCREPANCIES TO BE NOTIFIED TO THE SUPERINTENDENT.

4.28 SUPPLY APPARATUS AND MATERIALS NECESSARY FOR, AND CARRY OUT THE TESTS REQUIRED BY THE SPECIFICATION OR REGULATORY AUTHORITIES, IN THE PRESENCE OF THE SUPERINTENDENT AND THE RELEVANT AUTHORITY. LEAVE PIPE JOINTS EXPOSED TO ENABLE OBSERVATION DURING THE TESTS. ENSURE PVC SOLVENT CEMENT JOINTS HAVE BEEN CURED FOR AT LEAST 24 HOURS BEFORE TESTING.

4.29 THE CONTRACTOR SHALL PRESSURE TEST WITH WATER, ALL STORMWATER PIPEWORK IN OR UNDER THE STRUCTURE, IN ACCORDANCE WITH AS 3500.3.

4.30 WHERE WATER TANKS ARE SPECIFIED, APPROPRIATE FILTERS ARE TO BE INCORPORATED TO ENSURE GROSS POLLUTANTS AND LITTER ARE PREVENTED FROM ENTERING THE TANKS. NOMINAL APERTURE SIZE OF 5mm IS RECOMMENDED. AN EFFECTIVE MAINTENANCE PROGRAM INCLUDING REGULAR CLEANING OF FILTERS IS TO BE ADOPTED TO ENSURE SYSTEM REMAINS FULLY FUNCTIONAL.

4.31 PROPRIETARY STORMWATER FILTRATION/TREATMENT SYSTEMS AND PUMPS ARE TO BE INSTALLED AND CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.

4.32 FOR SITES WHERE STORMWATER INFRASTRUCTURE IS CONSIDERED A LIGATURE RISK, THE CONTRACTOR IS RESPONSIBLE FOR PROCURING SUITABLE ANTI-LIGATURE PRODUCTS FOR PIT LIDS, GRATES, ETC.

5. CONCRETE

5.1 ALL WORKMANSHIP AND CONCRETE MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING AUSTRALIAN STANDARDS AS APPLICABLE, THE SPECIFICATION AND DETAILS ON THE DRAWINGS UNLESS INSTRUCTED OTHERWISE BY THE SUPERINTENDENT:
- AS 1012 METHODS OF TESTING CONCRETE
- AS 2758.1 DENSE NATURAL AGGREGATES
- AS 1478 CHEMICAL ADMIXTURES FOR USE IN CONCRETE
- AS 1379 READY MIXED CONCRETE
- AS 3972 PORTLAND AND BLENDED CEMENTS
- AS 1302 STEEL REINFORCING BARS FOR CONCRETE
- AS 1303 HARD DRAWN STEEL REINFORCING WIRE FOR CONCRETE
- AS 1304 HARD DRAWN STEEL WIRE REINFORCING FABRIC FOR CONCRETE
- AS 3600 CONCRETE STRUCTURES
- AS 3610 FORMWORK FOR CONCRETE

THE WATER USED SHALL BE FREE OF ALL SUBSTANCES HARMFUL TO CONCRETE AND ITS REINFORCEMENT. ADMIXTURES SHALL NOT BE USED WITHOUT WRITTEN PERMISSION FROM THE SUPERINTENDENT. ALL CONCRETE SHALL BE READY MIXED CONCRETE.

5.2 UNLESS OTHERWISE SPECIFIED, SHOWN ON THE DRAWINGS, OR DIRECTED BY THE SUPERINTENDENT, REINFORCEMENT FOR CONCRETE SHALL BE FREE FROM ANY COATING WHICH WILL REDUCE, OR PREVENT BONDING OF THE CONCRETE TO THE STEEL.

5.3 UNLESS OTHERWISE SHOWN ON THE DRAWINGS, THE MINIMUM CLEAR COVER TO REINFORCEMENT SHALL BE 1.5 TIMES THE DIAMETER OF THE BARS OR 40mm, WHICHEVER IS GREATER, AND 80mm COVER IN GROUNDWATER OR COASTAL AREAS.

5.4 ALL KERBS, KERB & CHANNEL, SPOON DRAINS ETC. SHALL BE LAID OVER 75mm MINIMUM DEPTH OF COMPACTED CLASS 2 CRUSHED ROCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

5.5 WHERE REQUIRED MATCH ALL NEW KERBS TO EXISTING LEVEL NEATLY, ENSURING MINIMUM 1 IN 200 GRADE, SAW CUTTING AND REINSTATING PAVEMENT IN FRONT OF KERB TO FALL TOWARDS OR AWAY FROM NEW KERB LEVEL.

5.6 SCHEDULE OF CONCRETE PROPERTIES TO BE USED FOR THE PARTICULAR SECTION OF WORK SHALL BE AS FOLLOWS UNLESS STATED OTHERWISE INSTRUCTED OR SHOWN ON THE DRAWINGS: (MIX DESIGNS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE SUPERINTENDENT FOR INSPECTION 28 DAYS PRIOR TO POUR).

LOCATION	GRADE (MPa)	MAX. AGGREGATE (mm)	SLUMP (mm)
KERBS, PITS, HEADWALLS	N25	20	80 ± 15
FOOTPATHS, RETAINING WALLS	N32	20	80 ± 15
VEHICULAR PAVEMENT	N32 TYPE 1	20	80 ± 15

TYPE 1 CONCRETE SHALL HAVE THE PROPERTIES OF NORMAL N32 CONCRETE WITH A FLEXURAL STRENGTH OF F't=4.4MPa

5.7 ALL REINFORCEMENT IN SLABS AND BEAMS SHALL BE SUPPORTED ON CHAIRS TO GIVE THE REQUIRED COVER. SPACING OF REINFORCEMENT CHAIRS SHALL NOT EXCEED 800mm IN ANY DIRECTION.

5.8 MINIMUM LAPS FOR REINFORCEMENT SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
FABRIC 2 CROSS WIRES + 25mm.
N12: 400mm. N24: 1100mm
N16: 600mm. N28: 1350mm
N20: 800mm. N32: 1500mm
COG AND HOOK PIN DIAMETERS AND OVERALL DIMENSIONS SHALL BE AS PER THE REQUIREMENTS OF AS 3600 UNLESS NOTED OTHERWISE.

5.9 ALL BAR CRANKS SHALL BE NO GREATER THAN 1 IN 6, UNLESS NOTED OTHERWISE. REINFORCEMENT GRADES SHALL BE AS FOLLOWS:
BARS: GRADE 500N TO AS/NZS 4671.
FABRIC: HARD DRAWN WIRE FABRIC TO AS/NZS 4671.
LIGS & TIES: HARD DRAWN WIRE, GRADE 450W, TO AS/NZS 4671.
ANY STEELWORK SOURCED FROM MILLS LOCATED OUTSIDE AUSTRALIA ARE TO BE PROVIDED WITH CERTIFICATES PROVING ABOVE REQUIREMENTS VERIFIED BY NATA REGISTERED ORGANISATIONS.

5.10 CONSTRUCTION JOINTS, WHERE NOT SHOWN ON THE DRAWINGS, SHALL BE LOCATED TO THE APPROVAL OF THE SUPERINTENDENT.

5.11 THE MINIMUM CLEAR SPACING BETWEEN CONDUITS, CABLES, PIPES AND BARS SHALL BE AS REQUIRED BY AS 3600 BUT NOT LESS THAN THREE DIAMETERS HORIZONTALLY FOR HORIZONTAL CONDUITS, ETC. IN SLABS, WALLS AND FOOTINGS AND NOT LESS THAN ONE DIAMETER FOR ALL OTHER CONDUITS, ETC.

ALL PRIMARY REINFORCEMENT SHALL BE PLACED OUTERMOST.

5.12 CONCRETE SHALL NOT BE PLACED UNTIL THE SUPERINTENDENT HAS EXAMINED BOTH FORMWORK AND REINFORCEMENT IN PLACE AND GIVEN THEIR CONSENT TO PROCEED. 48 HOURS NOTICE SHALL BE GIVEN TO THE SUPERINTENDENT BEFORE PLACEMENT OF ANY CONCRETE HAS COMMENCED. CONCRETE SHALL NOT BE PLACED UNDER WATER OR DROPPED THROUGH A DISTANCE GREATER THAN 1.5M WITHOUT THE CONSENT OF THE SUPERINTENDENT.
DURING AND IMMEDIATELY AFTER THE PLACING OPERATION CONCRETE SHALL BE THOROUGHLY COMPACTED BY TAMPING, VIBRATION OR OTHER MEANS APPROVED BY THE SUPERINTENDENT.
THE CONCRETE SHALL BE SPRAYED WITH AN APPROVED CURING MEMBRANE SUCH AS CONCURE WB, IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

6. CONCRETE JOINTING

6.1 THE JOINTS IN THE NEW WORK SHALL COINCIDE WITH THOSE IN ABUTTING CONCRETE PAVING, OR OTHER JOINTED WORK, WHICH IS EITHER EXISTING OR PROPOSED. IF THE SPACING OF THE JOINTS IN EXISTING OR PROPOSED WORK IS VERY MUCH GREATER THAN THAT SPECIFIED FOR THE NEW WORK THEN ONE OR MORE EQUALLY SPACED JOINTS SHALL BE MADE IN THE NEW WORK BETWEEN EXISTING OR PROPOSED JOINTS SUCH THAT THE SPECIFIED SPACING WILL BE RETAINED AS NEATLY AS POSSIBLE.

6.2 N12 DIAGONAL CORNER BARS 1200 LONG ARE REQUIRED AT ALL RE-ENTRANT CORNERS OF OPENINGS IN FOOTPATHS.

6.3 EDGINGS
WHEN USING AN EXTRUSION MACHINE THE JOINTS SHALL BE MADE BY A METHOD APPROVED BY THE SUPERINTENDENT. WHEN USING FORMWORK, THEY SHALL CONSIST OF 3mm THICK STEEL PLATE PROFILED TO MATCH THE ITEM BEING CONSTRUCTED AND SHALL HAVE AN AREA NOT LESS THAN 75% OF THE SECTION BEING CONSTRUCTED. AS SOON AS IT IS PRACTICABLE AFTER THE FINISHING OF ANY WORK, THE TEMPLATES SHALL BE REMOVED AND THE RESULTANT GAP FINISHED WITH A GROOVING TOOL TO A DEPTH OF NOT LESS THAN 25mm TO PRODUCE A NEAT GROOVE WITH ROUNDED ARISES. JOINTS SHALL BE AT REGULAR INTERVALS AND THE SPACING BETWEEN JOINTS SHALL NOT EXCEED 3 METRES WITHOUT THE APPROVAL OF THE SUPERINTENDENT.

6.4 PROVIDE EXPANSION JOINTS AT 30m MAXIMUM CENTRES AND OR COINCIDE WITH THE JOINT SPACING IN THE ADJACENT ROADS OR FOOTPATHS. EXPANSION JOINTS SHALL ALSO BE PLACED AT EACH TANGENT POINT (START AND END OF HORIZONTAL CURVES) AND EACH SIDE OF LAYBACKS OR THE LIKE. THE EXPANSION JOINTS SHALL CONSIST OF 15mm THICK PREFORMED CORK OF THE FULL SHAPE OF THE ABUTTING KERB OR KERB AND CHANNEL ETC. NO EXPANSION OR OTHER CONSTRUCTION JOINT SHALL BE MADE WITHIN A DISTANCE OF 3m OF ANY RETURN IN THE KERBS OR FINISHING POINT OF THE CHANNEL.

6.5 FOOTPATHS AND SURFACING
EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT EXCEEDING 15m, ON EITHER SIDE OF VEHICLE CROSSINGS, AT CHANGES IN DIRECTION, AND AT JUNCTIONS WITH BRIDGES. THEY SHALL BE 15mm WIDE AND FILLED WITH AN APPROVED CORK FILLER EXTENDING FOR THE FULL WIDTH AND FULL DEPTH OF THE PAVING. THE FILLER SHALL BE PLACED IN POSITION BEFORE
CONCRETE IS PLACED, AND SHALL BE HELD FIRMLY IN POSITION DURING THE PLACING OF THE CONCRETE. WHERE POSSIBLE IT SHALL BE GLUED WITH AN APPROVED WATERPROOF GLUE TO THE EXISTING FACE OF THE JOINT.
TOOLED OR SAWCUT JOINTS AT LEAST 30mm DEEP AND 5mm WIDE SHALL BE FORMED WITH A CUTTING TOOL AT INTERVALS NOT EXCEEDING 2.5m OR AS DIRECTED BY THE SUPERINTENDENT.

6.6 JOINTS BETWEEN EDGINGS/FOOTPATHS/SURFACING/STRUCTURES:
EXCEPT ON NARROW MEDIANS (LESS THAN 0.6m WIDE) SURFACED FULL WIDTH, BOND BETWEEN THE CONCRETE ELEMENT AND OTHER STRUCTURE SHALL BE PREVENTED BY USING A STRIP OF 12mm PREFORMED CORK FILLER OR OTHER APPROVED MATERIAL BETWEEN THEM.

6.7 VEHICULAR PAVEMENT JOINTS
JOINTING SHALL BE CONSTRUCTED AS DOCUMENTED. WHERE AN ALTERNATIVE JOINTING SOLUTION HAS BEEN ADOPTED WITHOUT THE SUPERINTENDENT'S APPROVAL, THE CONTRACTOR IS RESPONSIBLE FOR ANY LIABILITY ARISING FROM THE PERFORMANCE OF THE PAVEMENTS.

6.8 DOWELLED SAWCUT, EXPANSION AND CONSTRUCTION JOINTS SHALL BE PROVIDED AS SPECIFIED TO ALL VEHICULAR PAVEMENTS NOT EXCEEDING 6.0m INTERVALS. JOINT SPACING SHALL ENSURE SLAB LENGTH IS NO GREATER THAN 1.5 TIMES SLAB WIDTH. EXPANSION JOINTS SHALL BE NO GREATER THAN 25m INTERVALS.

6.9 ALTERNATIVE DOWEL SYSTEMS MUST NOT BE USED WITHOUT THE PRIOR CONSENT OF THE SUPERINTENDENT. THE SUBCONTRACTOR SHALL SUBMIT A MANUFACTURER SPECIFICATION AND TESTING DATA OF THE PROPOSED SAMPLE FOR APPROVAL.

6.10 EXPOSED SURFACES
ALL EDGINGS SHALL BE RENDERED WITH A STEEL TROWEL FINISH UNLESS SPECIFIED OTHERWISE BY THE LANDSCAPE ARCHITECT. FRESH FOOTPATH AND SURFACING CONCRETE SHALL BE COMPACTED AND WORKED UNTIL ALL OF THE COARSE AGGREGATE IS BELOW THE SURFACE THE MORTAR COMES TO THE TOP. IT SHALL THEN BE STRUCK OFF AND FINISHED WITH A WOODEN FLOAT. AS SOON AS THE CONCRETE HAS SET SUFFICIENTLY, SUITABLE FILLING SHALL BE PLACED AND THOROUGHLY COMPACTED BEHIND AND UP TO THE LEVEL OF THE TOP OF THE KERB.

7. PAVEMENTS

7.1 ALL PAVEMENT MATERIALS SHALL COMPLY WITH THE RESPONSIBLE STATE/ROAD AUTHORITY STANDARD SPECIFICATIONS AND BE OF CONSISTENT QUALITY.

7.2 ALL BASE COURSE AND SUB-BASE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL UNLESS SPECIFIED OTHERWISE AND COMPLY WITH THE RESPONSIBLE STATE/ROAD AUTHORITY STANDARD SPECIFICATIONS.

7.3 AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL, A CERTIFIED RECYCLED CRUSHED CONCRETE MATERIAL COMPLYING WITH STATE/ROAD AUTHORITY STANDARDS WILL BE CONSIDERED SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF THE SUPERINTENDENT.

7.4 CONCRETE PAVEMENT
N16 DIAGONAL CORNER BARS 1200mm LONG ARE REQUIRED AT ALL RE-ENTRANT CORNERS OF OPENINGS IN PAVEMENT SLABS.

7.5 ALL EXISTING PAVEMENT ADJACENT TO THE PROPOSED KERB OR PROPOSED JOINTS SHALL BE SAWCUT IN A NEAT LINE TO THE SATISFACTION OF THE SUPERINTENDENT AND HAVE 300mm OVERLAP.

7.6 ALL TRENCHING WORKS IN EXISTING PAVEMENTS SHALL BE NEATLY SAWCUT, NEW PAVEMENT REINSTATED WITH DOWELS AND TO NEATLY MATCH EXISTING LEVELS.

7.7 ASPHALT PAVEMENT
ASPHALT LAYERS UP TO 50mm THICKNESS SHALL BE COMPACTED TO 94% CHARACTERISTIC VALUE OF DENSITY RATIO
ASPHALT LAYERS GREATER THAN 50mm THICKNESS SHALL BE COMPACTED TO 96% CHARACTERISTIC VALUE OF DENSITY RATIO. ASPHALT WEARING COURSE SHALL NOT BE LAID IN THE RAIN, AND THE PREPARED PAVEMENT BASE LAYERS SHALL BE DRY AND FREE OF EXCESS MOISTURE PRIOR TO THE LAYING OF ASPHALT.

7.8 THE SURFACE FINISH OF THE ASPHALT LAYERS SHALL BE OF UNIFORM COMPOSITION AND OF CONSISTENT DENSITY. ANY 'BONEY' OR UNEVEN AREAS THAT ARE EVIDENT SHALL BE FULLY REWORKED TO THE SUPERINTENDENT'S SATISFACTION.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25

Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591

Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
School Infrastructure NSW

PROJECT
VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

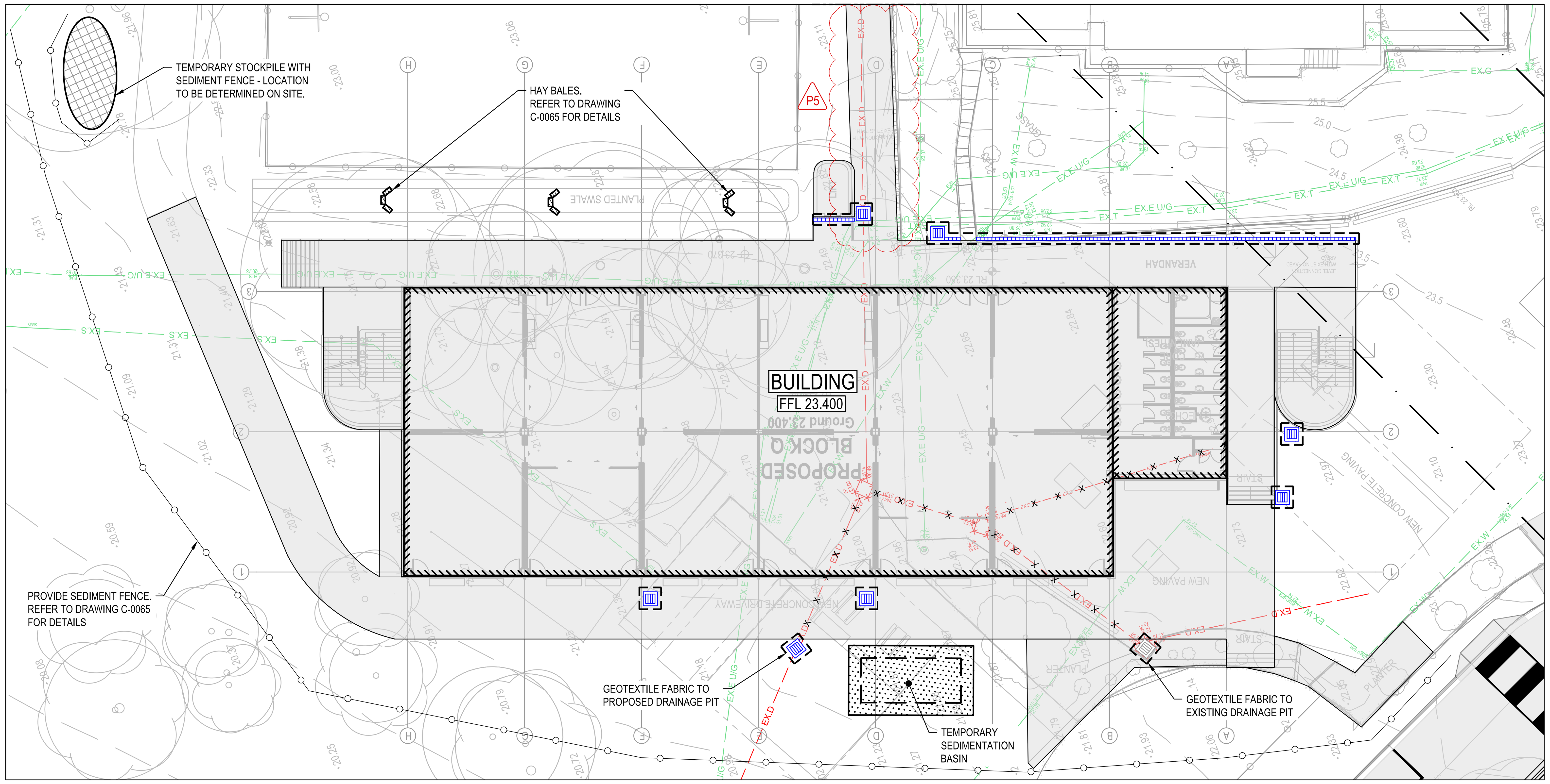
TITLE
STANDARD NOTES

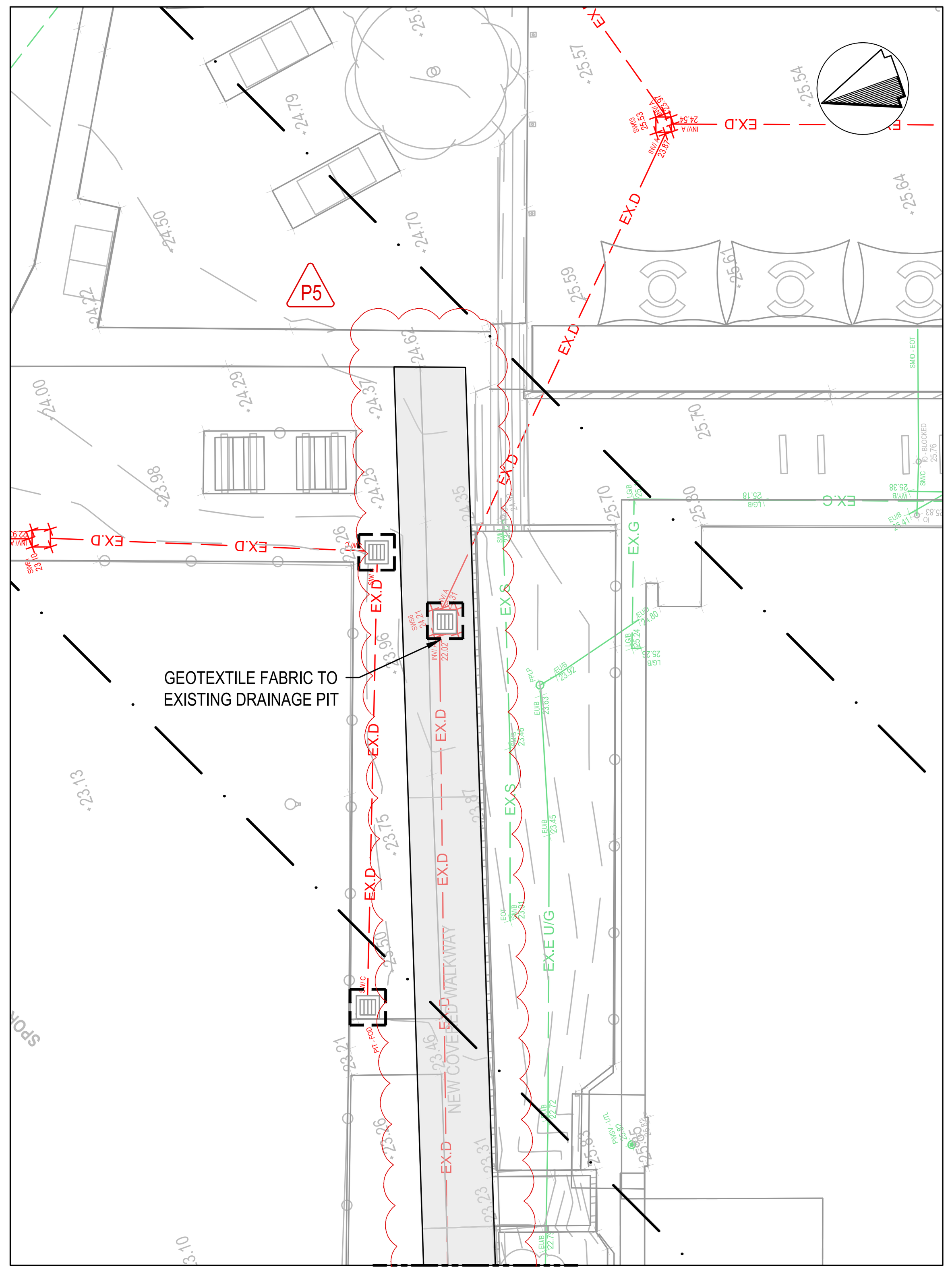
STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		N.T.S

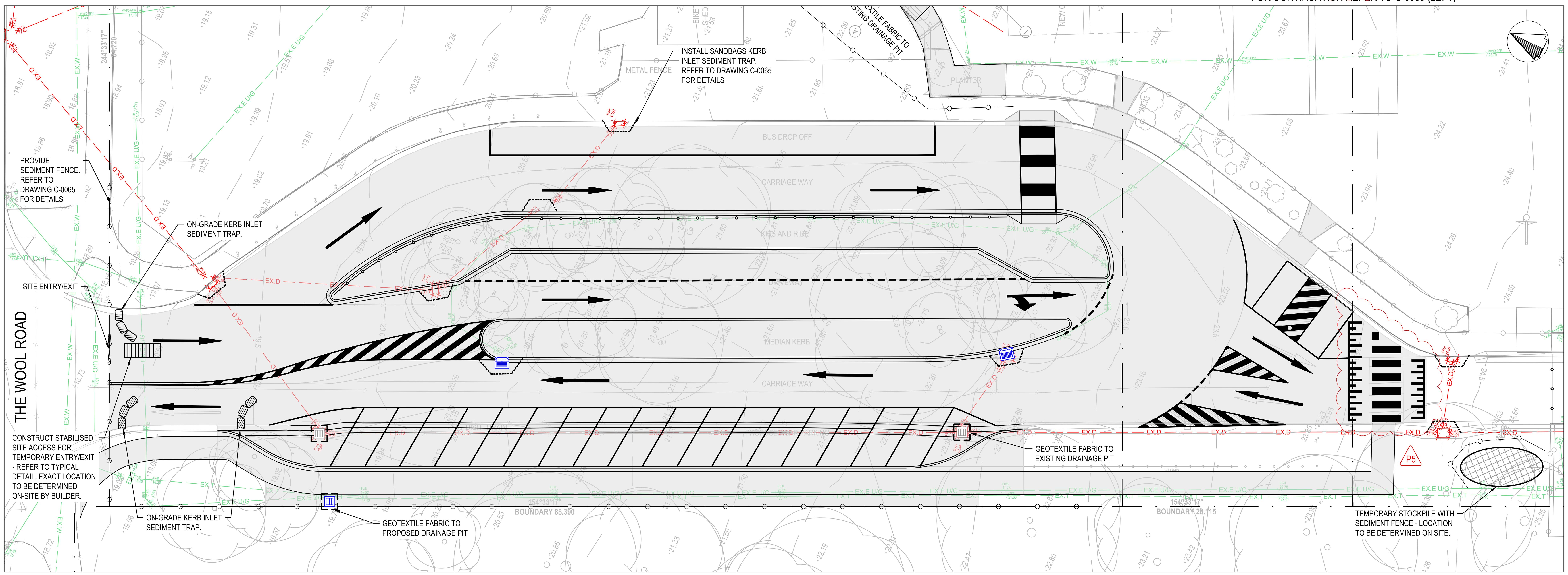
PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0020	P3

FOR CONTINUATION REFER TO C-0060 (RIGHT)





FOR CONTINUATION REFER TO C-0060 (LEFT)



LEGEND

ITEM	DESCRIPTION
23.00	EXISTING SURFACE CONTOURS
	TITLE BOUNDARY
EX.D	EXISTING STORMWATER DRAIN
	EXISTING STORMWATER PIT
EX.S	EXISTING SEWER
EX.G	EXISTING GAS
EX.W	EXISTING WATER
EX.W(R)	EXISTING RECYCLED WATER
EX.E	EXISTING ELECTRICITY
EX.E.O/H	EXISTING OVERHEAD ELECTRICITY
EX.E.LV	EXISTING LOW VOLTAGE ELECTRICITY
EX.E.HV	EXISTING HIGH VOLTAGE ELECTRICITY
EX.T	EXISTING TELECOM CABLE
EX.F.O	EXISTING FIBRE OPTIC CABLE
EX.NBN	EXISTING NBN COMMS CABLE
X X	EXISTING FEATURES TO BE REMOVED
	EXISTING TREE
	HOARDING/SECURITY FENCE
	SEDIMENT FENCE
	STABILISED SITE ACCESS
	SEDIMENT BASIN (LOCATION TBC ON-SITE)
	TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
	TEMPORARY STORMWATER DIVERSION GRAVEL TRENCH
	TEMPORARY GRAVEL DIVERSION BASIN WITH STRAW BALES AND GEOFABRIC FILTER SURROUND (LOCATION TBC ON-SITE)
	GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
	SANDBAGS INSTALLED ON EXISTING PIT
	ON-GRADE KERB INLET SEDIMENT TRAP
	OVERLAND FLOW
	HAY BALES
	KERB INLET PIT

BEFORE YOU DIG
www.byda.com.au

WARNING

PROPOSED SERVICES

THE LOCATION AND EXTENT OF PROPOSED SERVICES IS INDICATIVE ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. REFER TO AUTHORISED DOCUMENTATION BY RELEVANT AUTHORITY FOR CONSTRUCTION DETAILS

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	D.H	A.M	B.K	27.02.25
P5	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

0 2 4 6 8 10m
SCALE 1:200 @ A1 ; SCALE 1:400 @ A3

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
NSW GOVERNMENT School Infrastructure NSW

PROJECT
VINCENTIA HIGH SCHOOL
143 THE WOOL ROAD, VINCENTIA, NSW 2540

TITLE
EROSION AND SEDIMENT CONTROL PLAN

STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		1:200

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0060	P5

SOIL AND WATER MANAGEMENT NOTES

1. IT HAS BEEN ASSUMED THAT HOARDINGS/SILT FENCING WILL BE PROVIDED TO THE STAGE BOUNDARY SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING SITE (EXCEPT IN THE CASE OF ENTRY/EXIT LOCATIONS WHERE TEMPORARY CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP ARE PROVIDED). IF THIS IS NOT THE CASE, PROVIDE SEDIMENT FENCE TO STANDARD DETAIL BELOW AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING SITE, DIRECT RUNOFF TO SEDIMENT BASIN.
2. ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".
3. MINIMISE CLEARING OUTSIDE BASEMENT EXTENT AND IN ACCORDANCE WITH THE ARBORIST REPORT.
4. SEDIMENT CONTROL FOR LANDSCAPED WORKS DOWNSTREAM OF THE BUILDING TO INCLUDE A SILTFENCE AND SANDBAGS AS REQUIRED. INSTALL BUND TO DIVERT UPSTREAM CATCHMENT AWAY FROM DISTURBED SOIL AREA. TO BE MANAGED AT A RATE OF 166L/S PER HA BY THE CONTRACTOR ON SITE.

SEDIMENT CONTROL CONDITIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES) AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
3. STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARD AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
4. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
5. TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. CONTRACTOR TO DESIGN/SIZE/CONSTRUCT TEMPORARY SEDIMENT BASIN, WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES REQUIREMENTS PRIOR TO DISCHARGE . ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

SITE INSPECTION & MAINTENANCE CONDITIONS

THE SITE MANAGER WILL INSPECT THE SITE AT LEAST WEEKLY AND WILL:

1. ENSURE THAT DRAINS OPERATE PROPERLY & TO EFFECT ANY NECESSARY REPAIRS
2. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5m FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS & PAVED AREAS.
3. REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS WITHIN THE STRUCTURE
4. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS APPROPRIATE.
5. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS.
6. MAINTAIN EROSION & SEDIMENT CONTROL MEASURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
7. REMOVE TEMPORARY SOIL CONSERVATION STRUCTURES AS THE LAST ACTIVITY IN THE REHABILITATION PROGRAM.

AS PART OF THE STATUTORY 'DILIGENCE OF CARE' RESPONSIBILITIES, THE SITE MANAGER WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL.
ENTRIES WILL INCLUDE:

1. THE VOLUME & INTENSITY OF ANY RAINFALL EVENTS
2. THE CONDITION OF ANY SOIL & WATER MANAGEMENT WORKS
3. THE CONDITION OF VEGETATION & ANY NEED TO IRRIGATE
4. THE NEED FOR DUST PREVENTION STRATEGIES
5. ANY REMEDIAL WORKS TO BE UNDERTAKEN

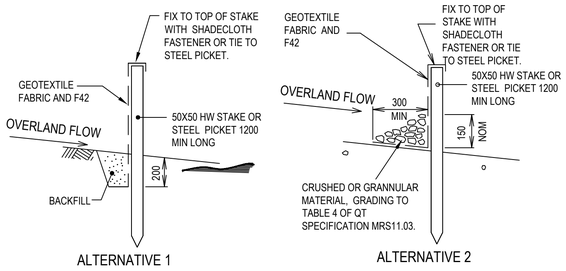
THE BOOK WILL BE KEPT ONSITE & MADE AVAILABLE TO ANY AUTHORISED PERSON ON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF WORKS.

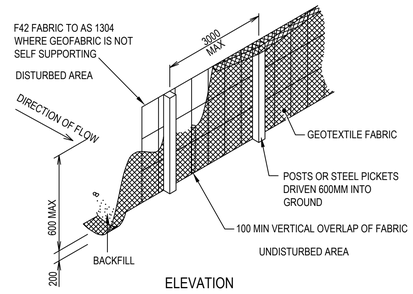
TREE PROTECTION

REFER TO ARBORIST REPORT FOR THE EXTENT OF TREES PROTECTION ZONE AND THE PROTECTION MEASURES REQUIRED.

RAILCORP

ALL SURFACE WATER TO BE EITHER DIVERTED INTO SWALE OR DIRECTED TOWARDS SEDIMENTATION TANK TO PREVENT ATER INFILTRATION TOWARDS TUNNELS AS DOCUMENTED ON THIS SHEET.

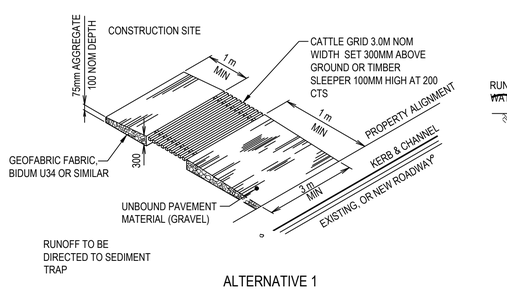




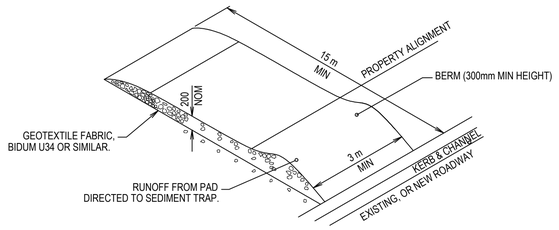
ELEVATION

SEDIMENT FENCE

NOT TO SCALE



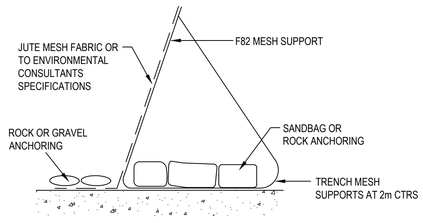
ALTERNATIVE 1



ALTERNATIVE 2

TEMPORARY CONSTRUCTION VEHICLE ENTRY/EXIT SEDIMENT TRAP

NOT TO SCALE

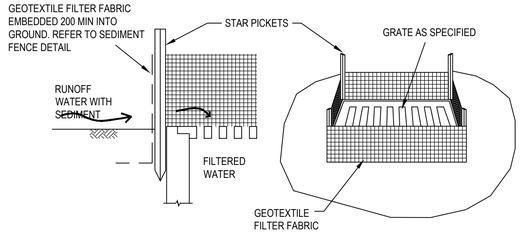


ALTERNATIVE SEDIMENT FENCE

NOT TO SCALE

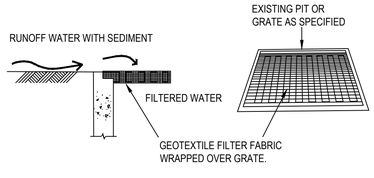
ALTERNATIVE SEDIMENT FENCE NOTES

1. INSTALL THIS TYPE OF SEDIMENT FENCE WHEN USE OF SUPPORT POSTS IS NOT DESIRABLE OR NOT POSSIBLE. SUCH CONDITIONS MIGHT APPLY, FOR EXAMPLE, WHERE APPROVAL IS GRANTED FROM THE APPROPRIATE AUTHORITIES TO PLACE THESE FENCES IN HIGHLY SENSITIVE ESTUARINE AREAS.
2. USE BENT TRENCH MESH TO SUPPORT THE F82 WELDED MESH FACING AS SHOWN ON THE DRAWING ABOVE. ATTACH THE JUTE MESH TO THE WELDED MESH FACING USING UV-RESISTANT CABLE TIES.
3. STABILISE THE WHOLE STRUCTURE WITH SANDBAG OR ROCK ANCHORING OVER THE TRENCH MESH AND THE LEADING EDGE OF THE JUTE MESH. THE ANCHORING SHOULD BE SUFFICIENTLY LARGE TO ENSURE STABILITY OF THE STRUCTURE IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.



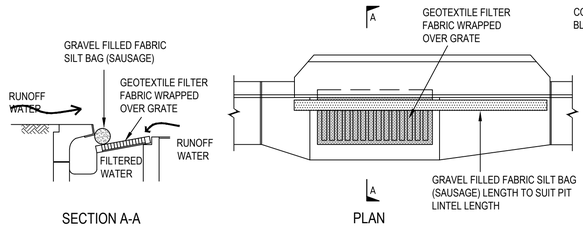
GEOTEXTILE PIT FILTER 1

NOT TO SCALE



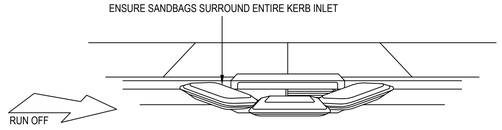
GEOTEXTILE PIT FILTER 2

NOT TO SCALE



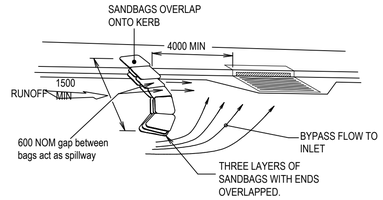
KERB INLET SEDIMENT TRAP

NOT TO SCALE



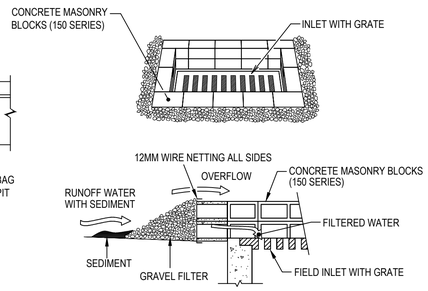
SANDBAG KERB INLET SEDIMENT TRAP

NOT TO SCALE



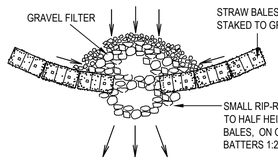
ON GRADE KERB INLET SEDIMENT TRAP

NOT TO SCALE



FIELD INLET SEDIMENT TRAP

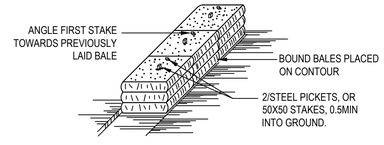
NOT TO SCALE



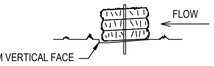
PLAN

STRAW BALE AND STONE TRAP SEDIMENT CONTROL (CONCENTRATE FLOW)

NOT TO SCALE



ANCHORING DETAIL



BEDDING DETAIL

STRAW BALE BANK SEDIMENT CONTROL

NOT TO SCALE

BEFORE YOU DIG www.byda.com.au

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25

Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT: NSW GOVERNMENT School Infrastructure NSW

PROJECT: VINCENTIA HIGH SCHOOL
144 THE WOOL ROAD, VINCENTIA, NSW 2540

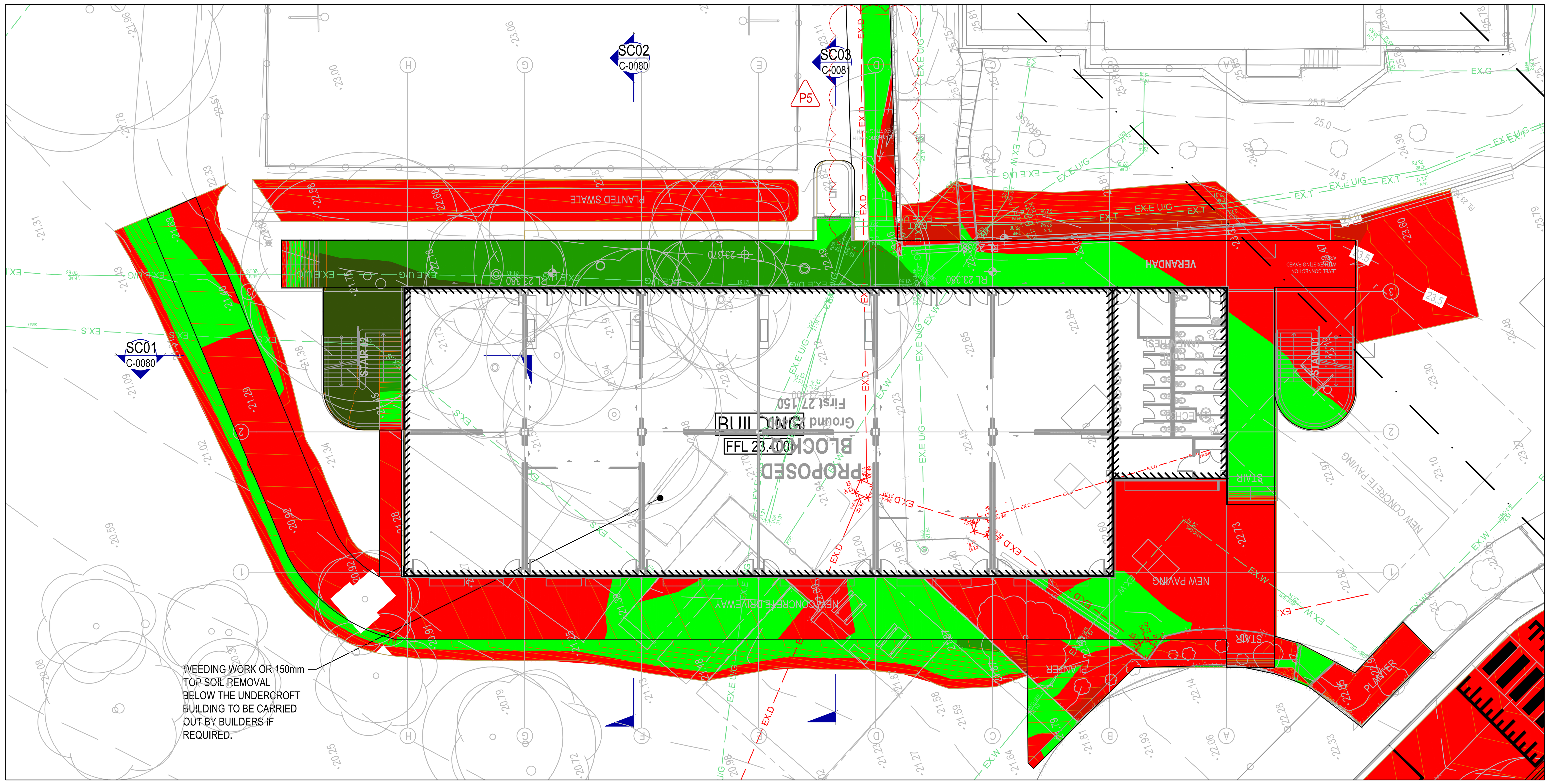
TITLE: EROSION AND SEDIMENT CONTROL DETAILS

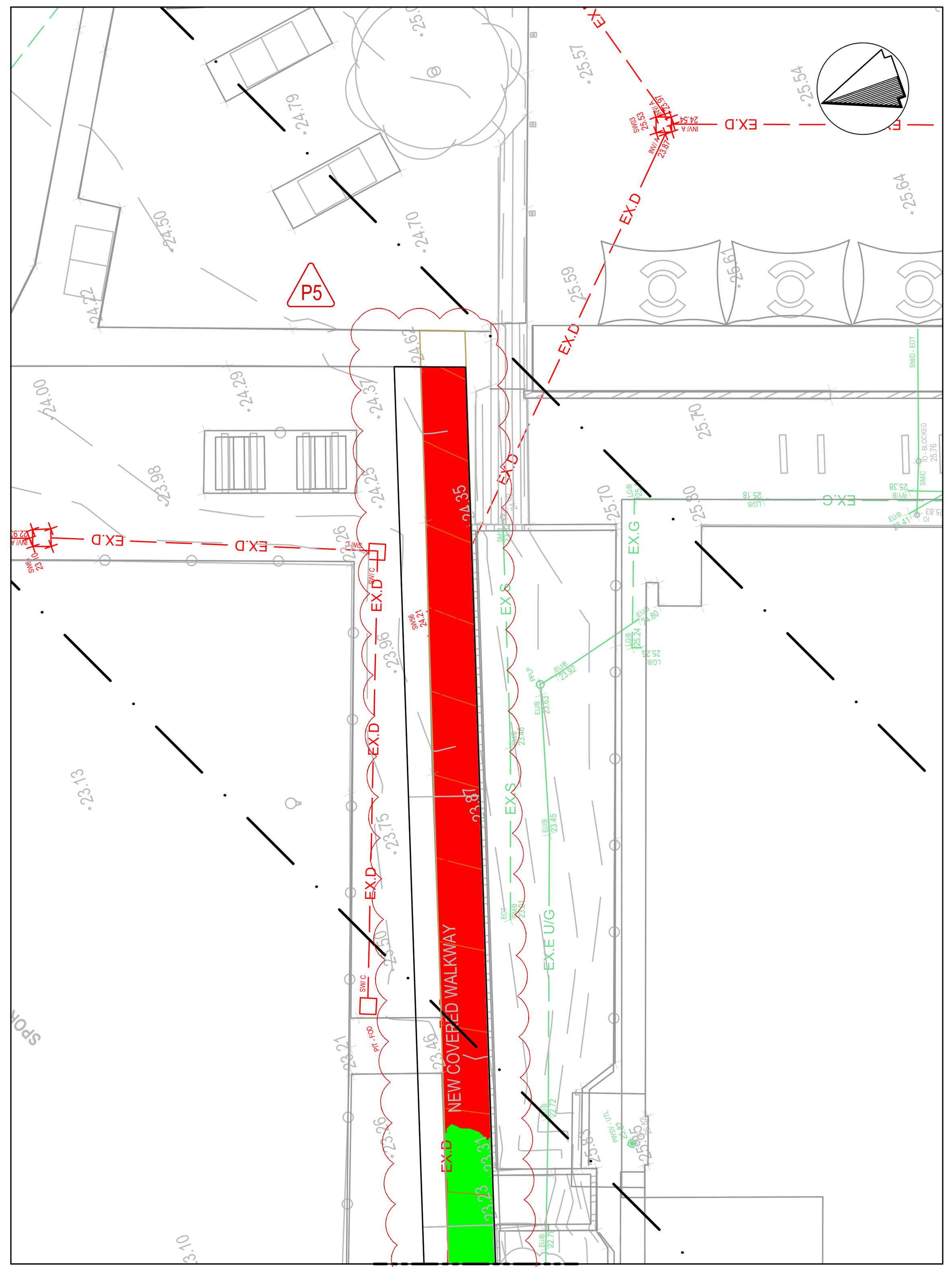
STATUS: SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		N.T.S

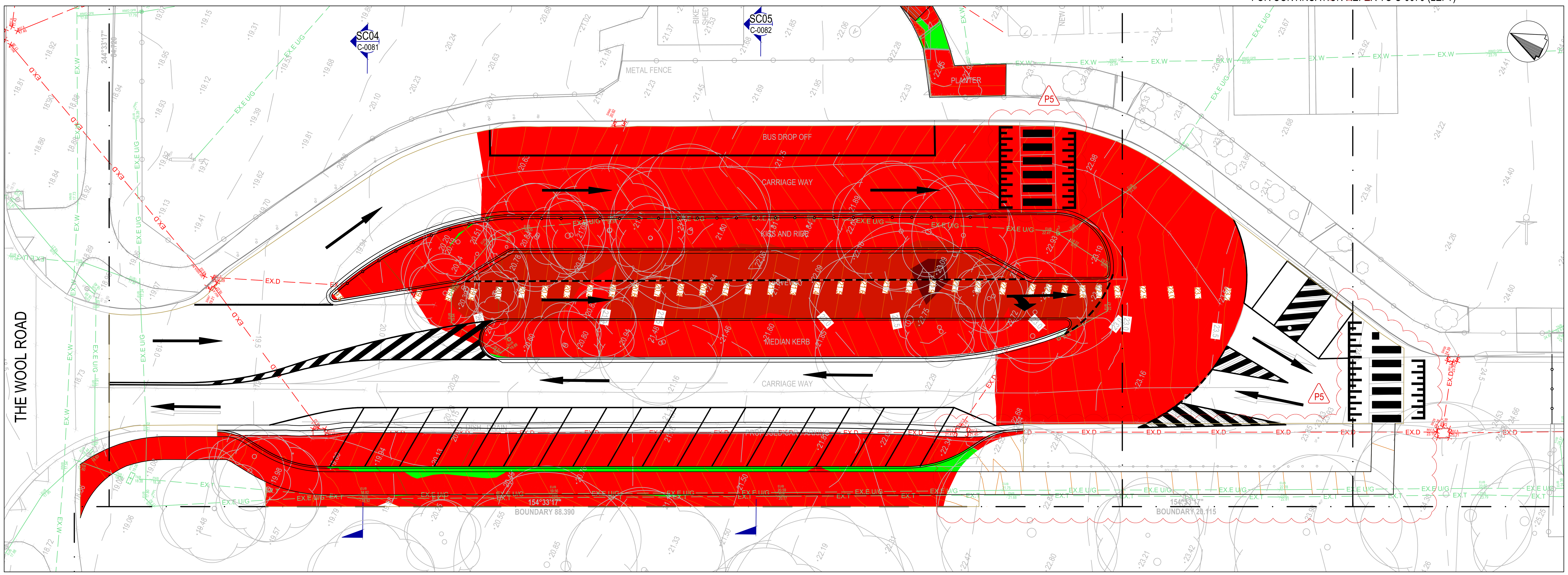
PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0065	P3

FOR CONTINUATION REFER TO C-0070 (RIGHT)





FOR CONTINUATION REFER TO C-0070 (LEFT)



LEGEND

ITEM	DESCRIPTION
23.00	EXISTING SURFACE CONTOURS
23.50	PROPOSED SURFACE CONTOURS
+24.00	EXISTING SURFACE SPOT LEVELS
	TITLE BOUNDARY
EX.D	EXISTING STORMWATER DRAIN
EX.S	EXISTING SEWER
EX.G	EXISTING GAS
EX.W	EXISTING WATER
EX.W(R)	EXISTING RECYCLED WATER
EX.E	EXISTING ELECTRICITY
EX.E.O/H	EXISTING OVERHEAD ELECTRICITY
EX.E.LV	EXISTING LOW VOLTAGE ELECTRICITY
EX.E.HV	EXISTING HIGH VOLTAGE ELECTRICITY
EX.T	EXISTING TELECOM CABLE
EX.FO	EXISTING FIBRE OPTIC CABLE
EX.COMM	EXISTING COMMS CABLE
	BUILDING OUTLINE
	SECTION MARK
RW	PROPOSED RETAINING WALL

Vincentia HS

Lower_value		Upper_value		Colour
-100	to	-1	m	
-1	to	-.5	m	
-.5	to	0	m	
0	to	.5	m	
.5	to	1	m	
1	to	100	m	

EARTHWORKS QUANTITIES

TOTAL CUT VOLUME =	785.410m³
TOTAL FILL VOLUME =	202.007m³
NET IMPORT VOLUME =	583.403m³

(NET VOLUME EXCLUDES STRIPPED SOIL, AS THIS IS ASSUMED TO BE REMOVED FROM SITE)

EARTHWORKS SUMMARY

NOTES:

1. BULK EARTHWORKS SURFACE IS DESIGN SURFACE MINUS THE FOLLOWING:
   - NATURAL SURFACE (150mm)
2. EXCLUDES COMPACTION FACTORS.
3. ALL BATTERS TO BE 1 IN 4 MAX UNLESS NOTED OTHERWISE.
4. THE ABOVE VOLUMES ARE APPROXIMATE ONLY. IT IS RESPONSIBILITY OF THE TENDERERS TO CONFIRM THE SCOPE OF WORKS, CONDUCT OWN EARTHWORK CHECK AND CONFIRM ACCURACY.
5. BULK EARTHWORKS ARE TO FFL AND NO ALLOWANCE FOR SLAB THICKNESS.

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	D.H	A.M	B.K	27.02.25
P5	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

0 2 4 6 8 10m

SCALE 1:200 @ A1 ; SCALE 1:400 @ A3

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
NSW GOVERNMENT School Infrastructure NSW

TITLE
BULK EARTHWORKS PLAN

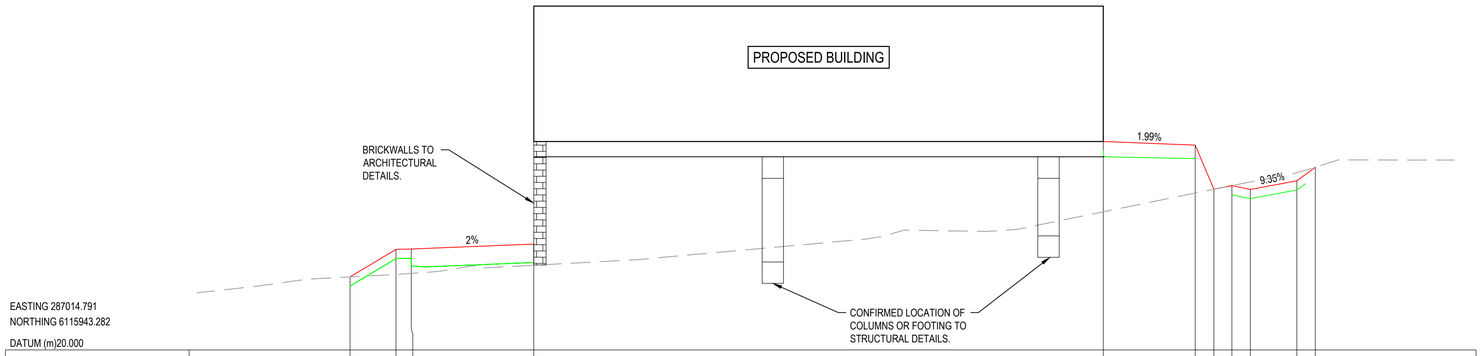
PROJECT
VINCENTIA HIGH SCHOOL
145 THE WOOL ROAD, VINCENTIA, NSW 2540

STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		1:200

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0070	P5

DWG FILE: \\au.meinhardtgroup.com\mhg-fs\Sydney\Projects\projdir\132571 - SINSW Vicentia HS\5_BIM\3_CIVIL\2_Drafting\VHS-MHT-00-00-DR-C-0070.dwg - MH PLOT TIME: 31 Mar 2025, 6:32pm



EASTING 287014.791
NORTHING 6115943.282
DATUM (m)20.000

DESIGN LEVEL	21.191	21.640	21.645	21.725	23.400	23.340	22.621	22.681	22.617	22.760	22.980
EARTHWORKS LEVEL		21.490	21.345	21.425	23.250	23.120		22.531	22.467	22.610	22.830
EXISTING SURFACE LEVEL	21.191	21.230	21.248	21.381	22.253	22.558	22.621	22.681	22.739	22.892	22.980
DESIGN OFFSET	5.346	6.846	7.346	11.346	29.936	32.936	33.548	34.136	34.736	36.256	36.856

SECTION SC02
1:100 (H)
1:50 (V)
C-0070

EASTING 287040.414
NORTHING 6115939.038
DATUM (m)20.000

DESIGN LEVEL	23.400	21.660	22.884	22.879	23.370	23.320	21.474	21.380	21.593	21.608	21.602	21.607	21.279
EARTHWORKS LEVEL	23.250	23.240	22.734	22.729	23.220	23.170		21.230	21.443	21.308	21.302	21.457	
EXISTING SURFACE LEVEL	21.660	21.660	21.656	21.624	21.624	21.475	21.474	21.380	21.371	21.365	21.318	21.311	21.279
DESIGN OFFSET	10.115	10.125	10.317	11.702	11.704	15.302	15.314	17.867	18.731	19.273	22.973	23.515	24.778

SECTION SC01
1:100 (H)
1:50 (V)
C-0070

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25

SCALE 1:100 HORIZONTAL
1:50 VERTICAL
AT ORIGINAL SIZE (A1)

Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591

Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
School Infrastructure NSW

PROJECT
VINCENTIA HIGH SCHOOL
146 THE WOOL ROAD, VINCENTIA, NSW 2540

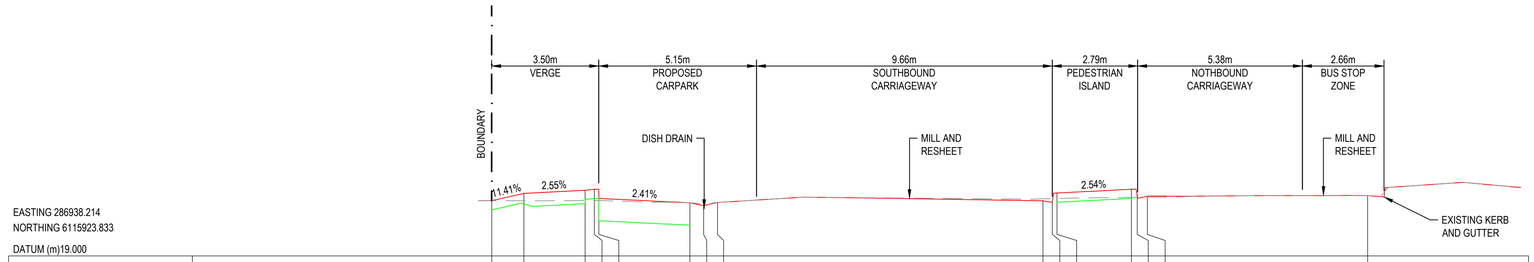
TITLE
BULK EARTHWORKS SITE SECTIONS
SHEET 1

STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		AS SHOWN

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0080	P3

DWG FILE: \\au.meinhardtgroup.com\mhg-fs\Sydney\Projects\projdir\132571 - SINSW Vicentia HS\5_BIM\3_CIV\2_Drafting\VHS-MHT-00-00-DR-C-0080-0082.dwg - MH PLOT TIME: 18 Feb 2025, 2:54pm



EASTING 286938.214
NORTHING 6115923.833
DATUM (m)19.000

DESIGN LEVEL	19.900	20.019	20.070	20.087	19.937	19.866	19.819	19.871	19.899	19.874	20.025	20.086	19.984	19.971	19.984
EARTHWORKS LEVEL	19.750	19.799	19.850	19.937	19.572	19.501						19.936			
EXISTING SURFACE LEVEL	19.900	19.900	19.902	19.903	19.903	19.865	19.819	19.871	19.930	19.933	19.935	19.955	19.956	19.958	19.984
DESIGN OFFSET	10.000	11.046	13.046	13.346	13.496	16.467	16.917	17.367	27.992	28.297	28.449	30.881	31.070	31.400	38.593

SECTION SC04
C-0070
1:100 (H)
1:50 (V)

EASTING 287010.395
NORTHING 6115931.084
DATUM (m)20.000

DESIGN LEVEL	21.759	22.187	22.192	22.272	23.400	23.325	23.289	22.927
EARTHWORKS LEVEL		22.037	21.892	21.972	23.250	23.105		
EXISTING SURFACE LEVEL	21.759	21.895	21.933	22.000	22.465	22.703	22.927	22.927
DESIGN OFFSET	5.477	6.905	7.405	11.405	29.995	34.495	38.095	38.107

SECTION SC03
C-0070
1:100 (H)
1:50 (V)

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25

SCALE 1:100 HORIZONTAL
1:50 VERTICAL
AT ORIGINAL SIZE (A1)

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591

Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
NSW GOVERNMENT
School Infrastructure NSW

PROJECT
VINCENTIA HIGH SCHOOL
146 THE WOOL ROAD, VINCENTIA, NSW 2540

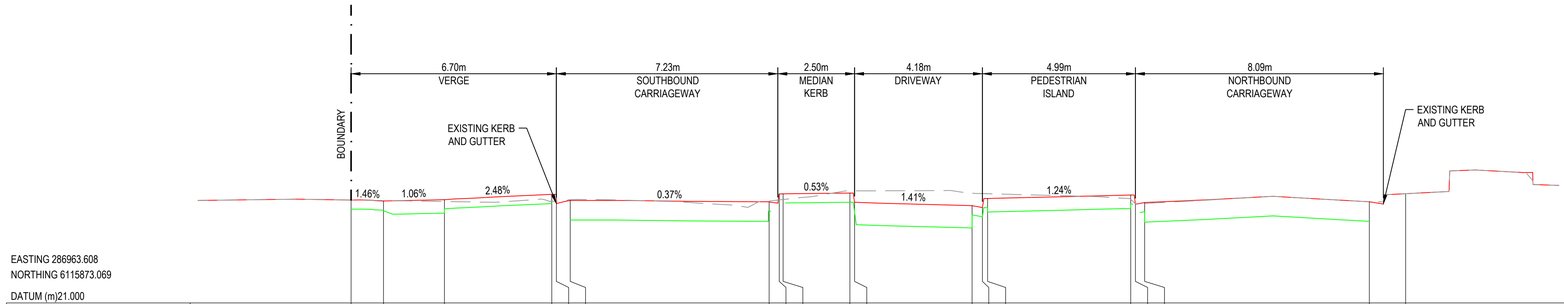
TITLE
BULK EARTHWORKS SITE SECTIONS
SHEET 2

STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		AS SHOWN

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0081	P3

DWG FILE: \\au.meinhardtgroup.com\mhg-fs\Sydney\Projects\projdir\132571 - SINSW Vicentia HS\5_BIM\3_CIV\2_Drafting\VHS-MHT-00-00-DR-C-0080-0082.dwg - MH PLOT TIME: 18 Feb 2025, 2:20pm



EASTING 286963.608
NORTHING 6115873.069
DATUM (m)21.000

DESIGN LEVEL	22.678	22.663	22.684	22.771	22.621	22.672	22.648	22.778	22.779	22.791	22.641	22.587	22.555	22.702	22.760	22.610	22.637	22.650	22.782
EARTHWORKS LEVEL	22.528	22.443	22.464				22.498			22.641	22.276	22.222	22.405	22.482	22.540	22.460	22.317		
EXISTING SURFACE LEVEL	22.678	22.670	22.653	22.646	22.621	22.683	22.663	22.679	22.685	22.827	22.827	22.788	22.783	22.781	22.689	22.618	22.623	22.650	22.782
DESIGN OFFSET	8.881	9.939	11.931	15.434	15.584	16.035	22.527	22.860	22.985	25.167	25.317	29.152	29.493	29.663	34.337	34.487	34.787	42.125	43.308

SECTION SC06
C-0070
1:100 (H)
1:50 (V)

EASTING 286952.954
NORTHING 6115892.855
DATUM (m)20.000

DESIGN LEVEL	21.656	21.715	21.766	21.777	21.627	21.555	21.474	21.567	21.493	21.466	21.616	21.681	21.531	21.482	21.455	21.605	21.675	21.525	21.552	21.593
EARTHWORKS LEVEL	21.506	21.495	21.546	21.627	21.262	21.190					21.466	21.531	21.166	21.117	21.305	21.385	21.455	21.375	21.232	
EXISTING SURFACE LEVEL	21.656	21.622	21.579	21.577	21.576	21.551	21.474	21.567	21.454	21.445	21.510	21.652	21.658	21.972	21.934	21.918	21.587	21.523	21.501	21.593
DESIGN OFFSET	10.000	11.053	13.048	13.349	13.499	16.457	16.907	17.357	22.596	22.896	23.046	26.247	26.397	32.097	32.397	32.547	35.378	35.528	35.828	43.201

SECTION SC05
C-0070
1:100 (H)
1:50 (V)

DWG FILE: \\au.meinhardtgroup.com\mhg-fs\Sydney\Projects\projdir\132571 - SINSW Vicentia HS\5_BIM\3_CIV\2_Drafting\VHS-MHT-00-00-DR-C-0080-0082.dwg - MH PLOT TIME: 31 Mar 2025, 4:51pm

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

SCALE 1:100 HORIZONTAL
1:50 VERTICAL
AT ORIGINAL SIZE (A1)

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591

Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
NSW GOVERNMENT
School Infrastructure NSW

PROJECT
VINCENTIA HIGH SCHOOL
147 THE WOOL ROAD, VINCENTIA, NSW 2540

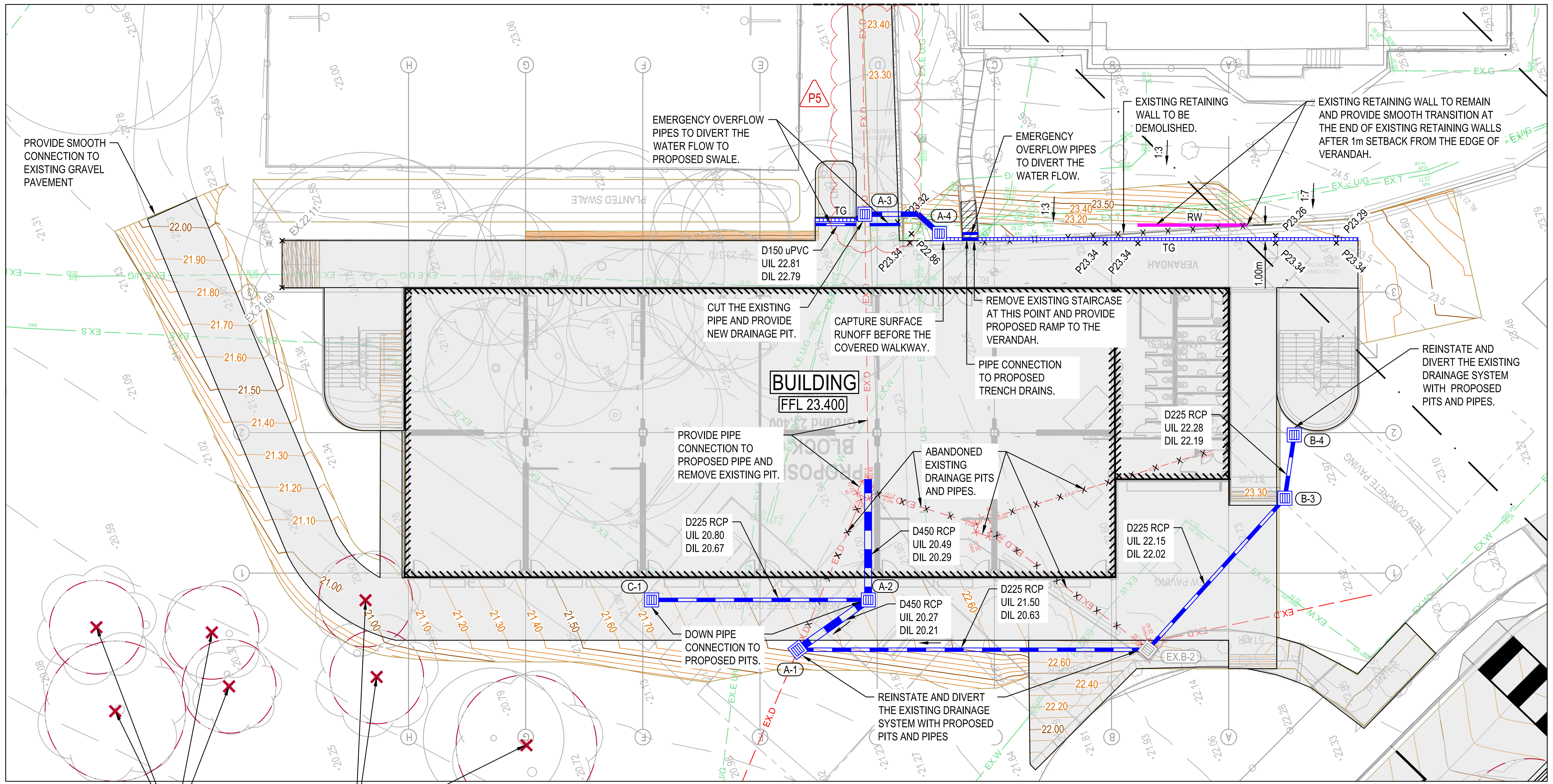
TITLE
BULK EARTHWORKS SITE SECTIONS
SHEET 3

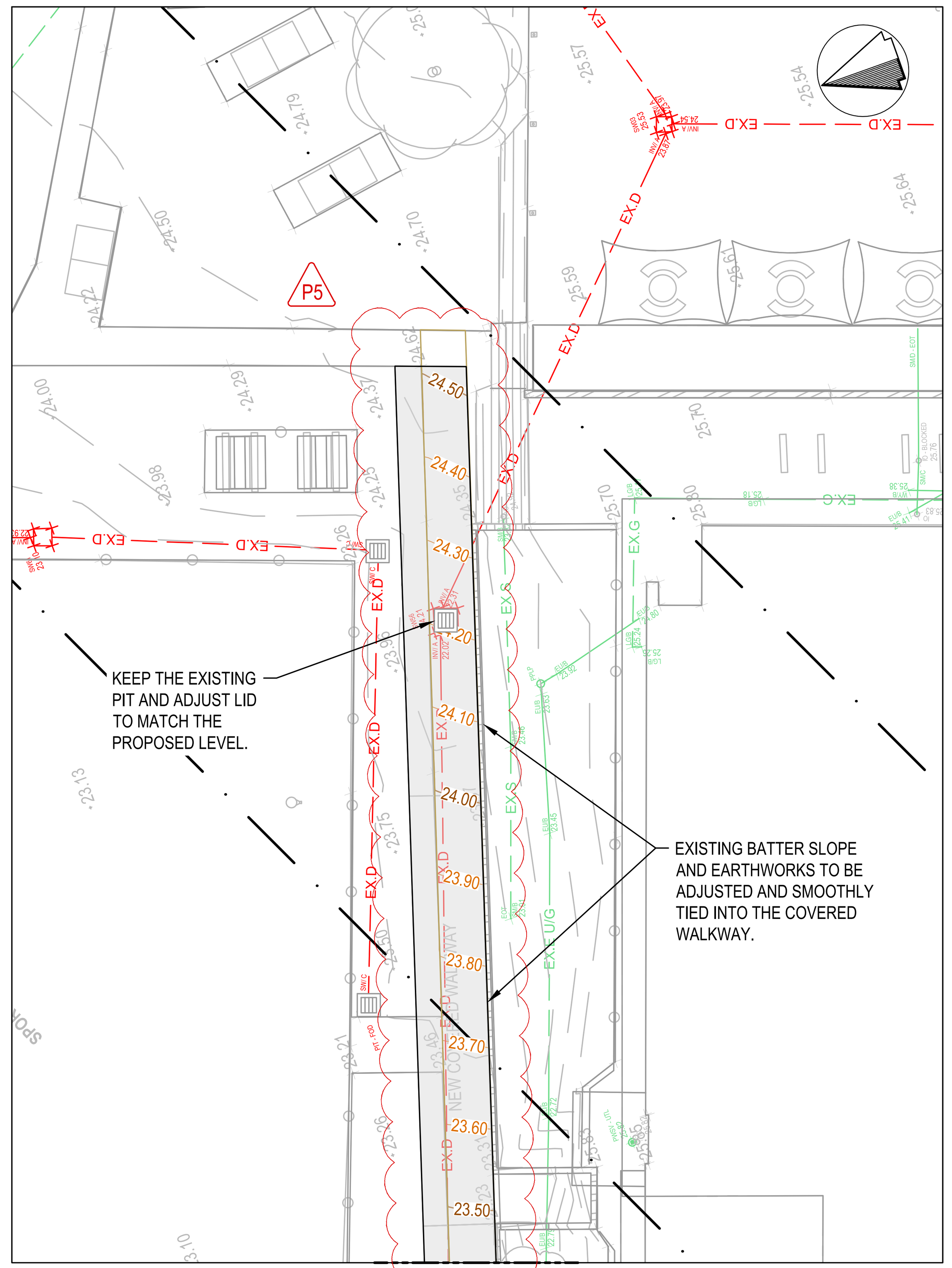
STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		AS SHOWN

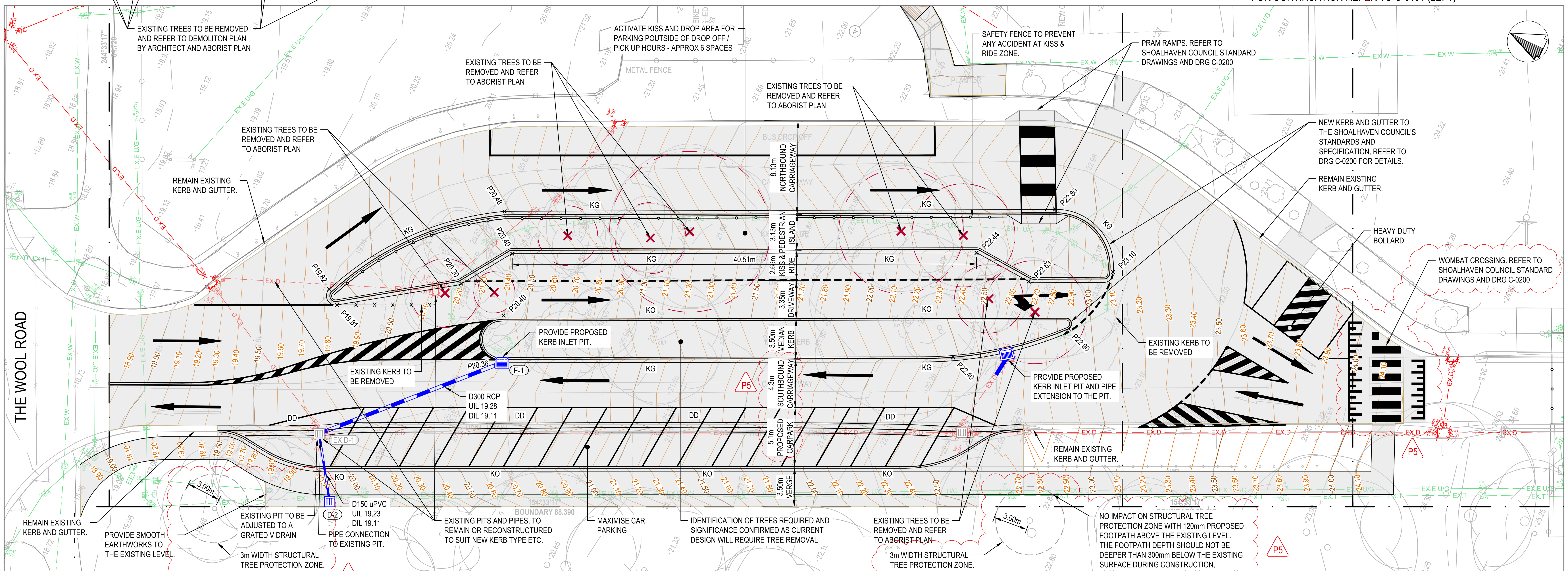
PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0082	P4

FOR CONTINUATION REFER TO C-0101 (RIGHT)





FOR CONTINUATION REFER TO C-0101 (LEFT)



LEGEND

ITEM	DESCRIPTION
23.00	EXISTING SURFACE CONTOURS
23.50	PROPOSED SURFACE CONTOURS
+24.00	EXISTING SURFACE SPOT LEVELS
+24.000	PROPOSED SURFACE SPOT LEVELS
+ TW 23.500	TOP OF WALL LEVEL
+ BW 22.000	BOTTOM OF WALL AT GROUND LEVEL
CL 23.000	PIT COVER LEVEL
	TITLE BOUNDARY
KG KG	PROPOSED CONCRETE KERB AND CHANNEL
KO KO	PROPOSED KERB ONLY
SKG SKG	PROPOSED SLOTTED KERB AND CHANNEL
RW	PROPOSED RETAINING WALL
EX.D	EXISTING STORMWATER DRAIN
RM	PROPOSED RISING MAIN PIPE
225Ø	PROPOSED STORMWATER DRAIN AND FLOW DIRECTION
	SYPHONIC CONNECTION (REFER HYDRAULIC ENGINEERS DRG'S)
AG	PROPOSED 100Ø UPVC AGRICULTURAL DRAIN CLASS 400
	EXISTING STORMWATER PIT
	EXISTING STORMWATER PIT TO BE MODIFIED
	PROPOSED STORMWATER PIT
GI	100Ø GRATED INLET (UNLESS NOTED OTHERWISE)
DP	DOWNPIPE
IO	INSPECTION OPENING
B	HEAVY DUTY BOLLARD
TG	TRENCH GRATE
	OVERLAND FLOW ARROW
EX.S	EXISTING SEWER
EX.G	EXISTING GAS
EX.W	EXISTING WATER
EX.W(R)	EXISTING RECYCLED WATER
EX.E	EXISTING ELECTRICITY
EX.E O/H	EXISTING OVERHEAD ELECTRICITY
EX.E L/V	EXISTING LOW VOLTAGE ELECTRICITY
EX.E H/V	EXISTING HIGH VOLTAGE ELECTRICITY
EX.T	EXISTING TELECOM CABLE
EX.FO	EXISTING FIBRE OPTIC CABLE
EX.NBN	EXISTING NBN COMMS CABLE
X X	EXISTING FEATURES TO BE REMOVED
	BUILDING OUTLINE
	EXISTING TREES TO BE REMOVED

THESE PLANS ARE BASED UPON THE EXISTING CONDITIONS SURVEY PREPARED BY ASTREA PTY LTD, REFERENCE No. A4066 - VINCENTIA DATED 30 OCTOBER 2023.

THESE DESIGN PLANS SHALL BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT No. 8593 DATED 30 JANUARY 2024 PREPARED BY STANTEC. THE PROVISIONS AND RECOMMENDATIONS CONTAINED WITHIN THE REPORT ARE TO BE STRICTLY COMPLIED WITH. ALL COMPACTION REQUIREMENT RESULTS SHALL BE CARRIED OUT IN ACCORDANCE WITH GEOTECHNICAL REPORT RECOMMENDATIONS.

WARNING
PROPOSED SERVICES

THE LOCATION AND EXTENT OF PROPOSED SERVICES IS INDICATIVE ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. REFER TO AUTHORISED DOCUMENTATION BY RELEVANT AUTHORITY FOR CONSTRUCTION DETAILS

WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	D.H	A.M	B.K	27.02.25
P5	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

0 2 4 6 8 10m
SCALE 1:200 @ A1 ; SCALE 1:400 @ A3

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
NSW GOVERNMENT School Infrastructure NSW

PROJECT
VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

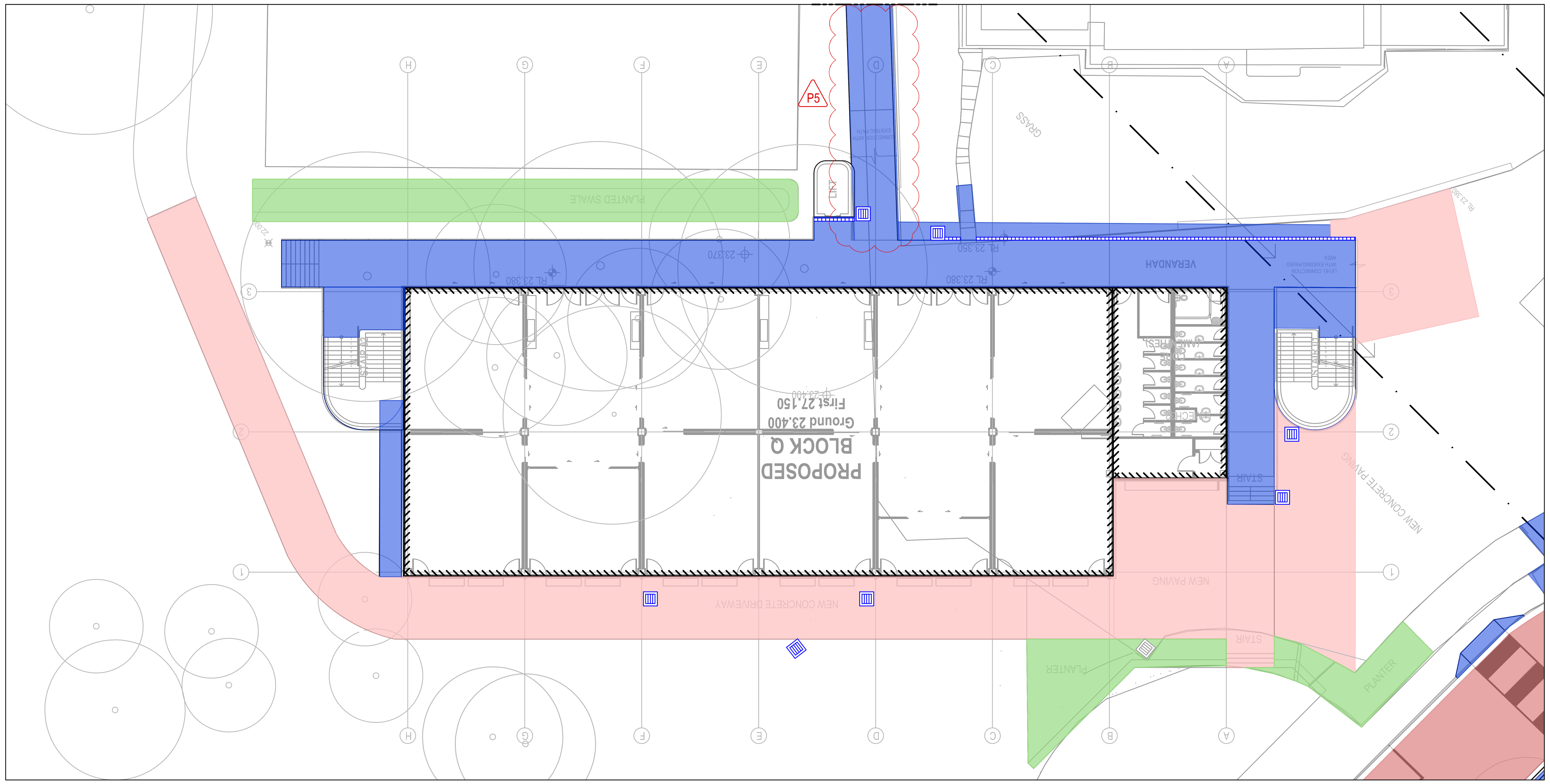
TITLE
CIVIL SITEWORKS PLAN

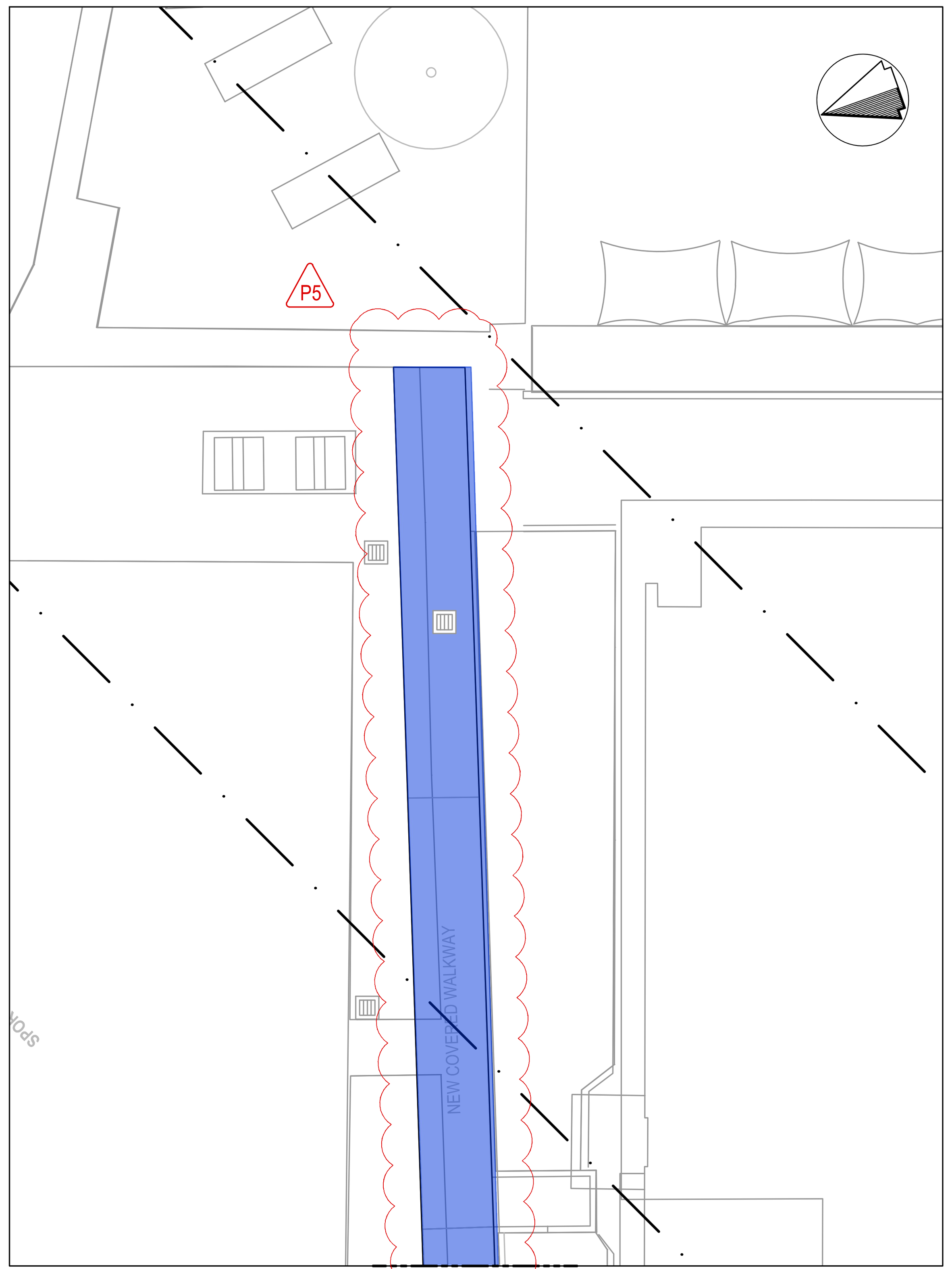
STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		1:200

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0101	P5

FOR CONTINUATION REFER TO C-0110 (RIGHT)

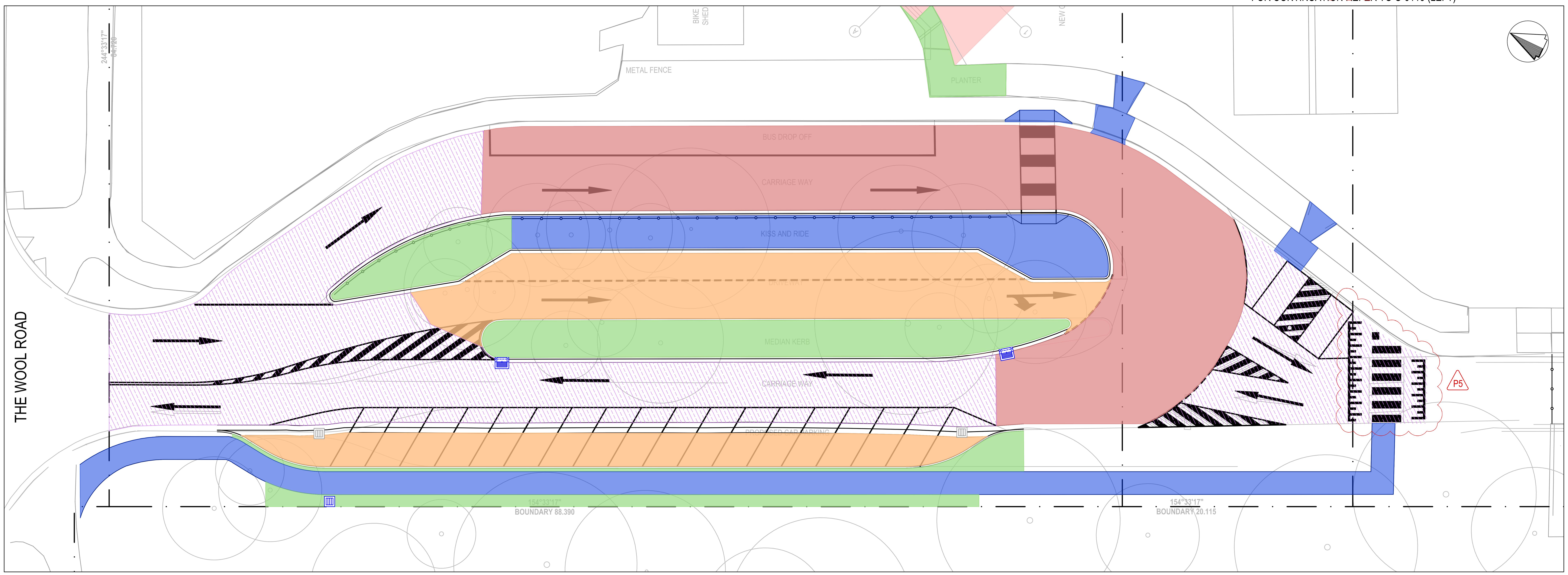




FOR CONTINUATION REFER TO C-0110 (LEFT)

PAVEMENT LEGEND

(blue)	LIGHT DUTY CONCRETE PAVEMENT-PEDESTRIAN
(light pink)	MEDIUM DUTY CONCRETE PAVEMENT
(dark pink)	HEAVY DUTY CONCRETE PAVEMENT
(orange)	MEDIUM DUTY ASPHALT PAVEMENT (CARPARK)
(hatched)	50mm MILL AND RESHEET
(green)	LANDSCAPING AND NATURE STRIP AREAS. REFER TO ARCHITECT DRAWINGS FOR LOCATIONS.



BEFORE YOU DIG www.byda.com.au

WARNING

PROPOSED SERVICES

THE LOCATION AND EXTENT OF PROPOSED SERVICES IS INDICATIVE ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. REFER TO AUTHORISED DOCUMENTATION BY RELEVANT AUTHORITY FOR CONSTRUCTION DETAILS

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	D.H	A.M	B.K	27.02.25
P5	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

0 2 4 6 8 10m

SCALE 1:200 @ A1 ; SCALE 1:400 @ A3

Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591

Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT: School Infrastructure NSW

PROJECT: VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

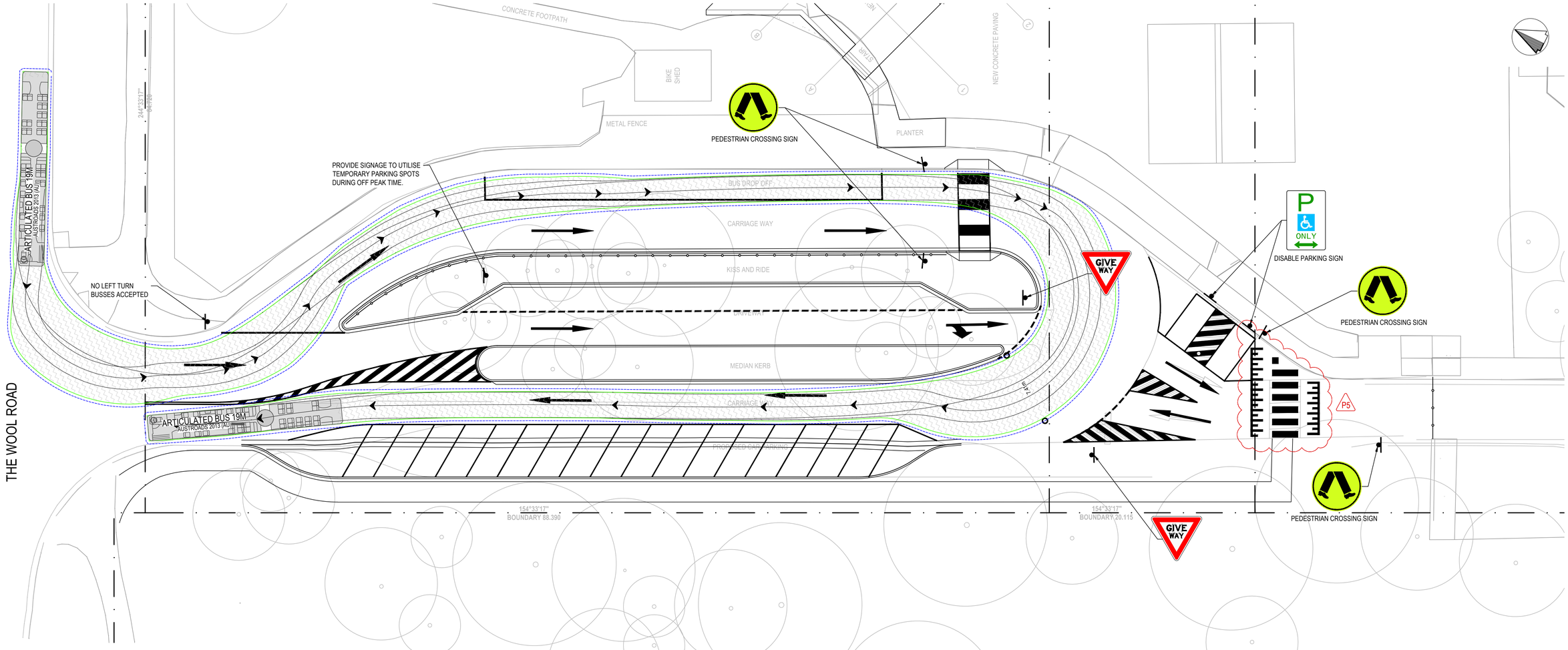
TITLE: PAVEMENT PLAN

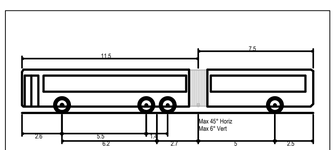
STATUS: **SCHEMATIC DESIGN**
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		1:200

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0110	P5

DWG FILE: \\au.meinhardtgroup.com\mhg-fs\Sydney\Projects\projdir\132571 - SINSW Vincentia HS





Articulated Bus (19.0m)

Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	2.823m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m

BEFORE YOU DIG www.byda.com.au

WARNING
PROPOSED SERVICES
THE LOCATION AND EXTENT OF PROPOSED SERVICES IS INDICATIVE ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. REFER TO AUTHORISED DOCUMENTATION BY RELEVANT AUTHORITY FOR CONSTRUCTION DETAILS

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	D.H	A.M	B.K	27.02.25
P5	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

0 2 4 6 8 10m
SCALE 1:200 @ A1 ; SCALE 1:400 @ A3

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT: NSW GOVERNMENT School Infrastructure NSW

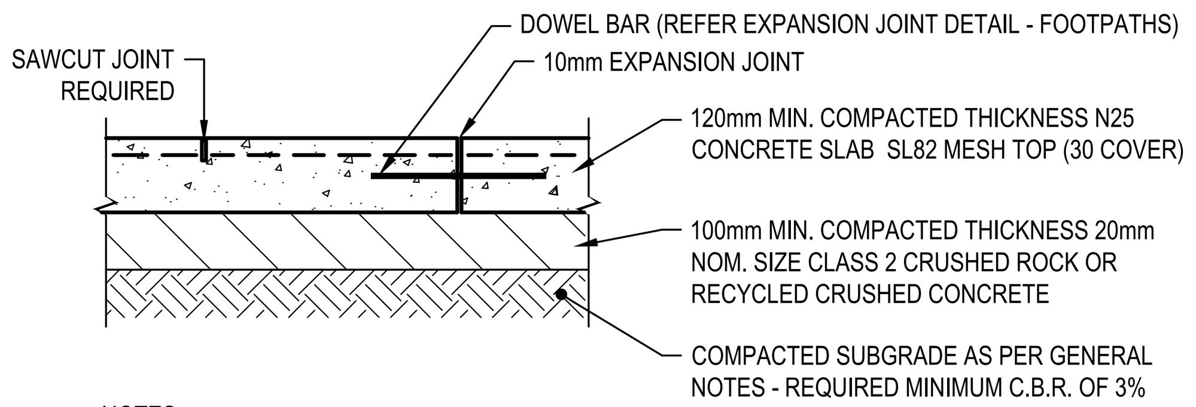
TITLE: LINE MARKING AND SIGNAGE PLAN

PROJECT: VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

STATUS: **SCHEMATIC DESIGN**
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		1:200

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0120	P5



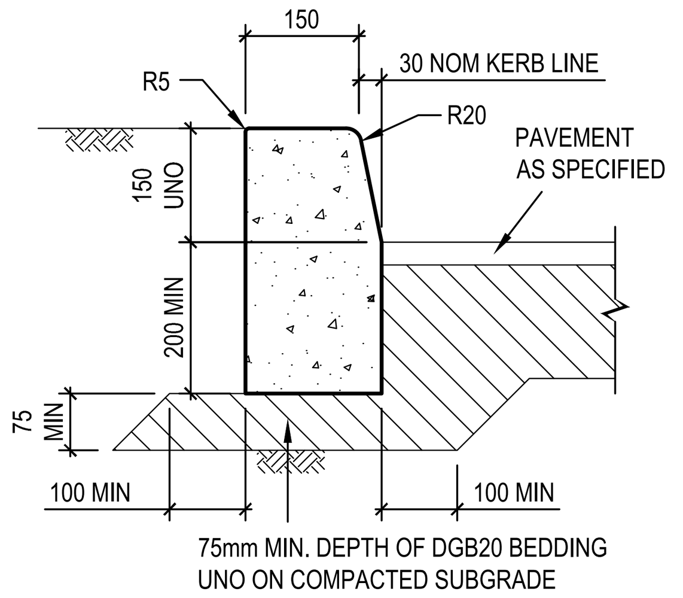
NOTES:
1. SAWCUT JOINTS 3mm WIDE x 1/4 SLAB DEEP CUT EVERY CROSS BAR
2. FULL DEPTH EXPANSION JOINTS WITH APPROVED EXPANSION JOINT MATERIAL SHALL BE PLACED, AT EVERY CHANGE OF GRADE AND AT CORNERS
3. REFER DESIGN PLAN FOR JOINTING LAYOUT
4. ALL ASPHALT AND CRUSHED ROCK MATERIALS AND CONSTRUCTION PROCEDURES SHALL COMPLY IN ALL RESPECTS WITH THE RELEVANT ROAD AUTHORITY SPECIFICATIONS

LIGHT DUTY CONCRETE PAVEMENT

N.T.S.

(PEDESTRIAN TRAFFIC AREAS ONLY)

AS SHOWN ON PLAN

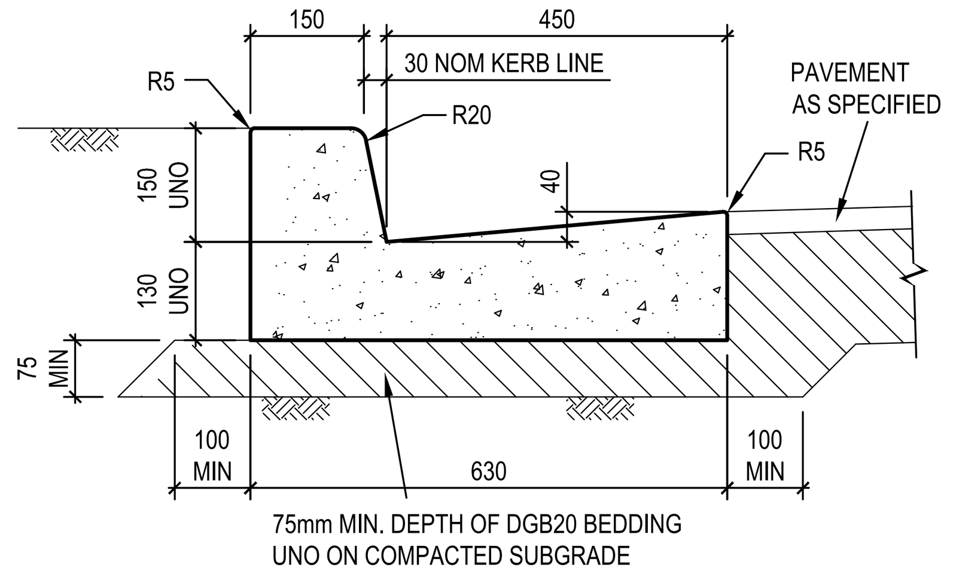


KERB ONLY (KO)

SCALE 1:10

KO

NOTE: PROVIDE SUBSOIL AS PER DETAIL TO ALL KERB

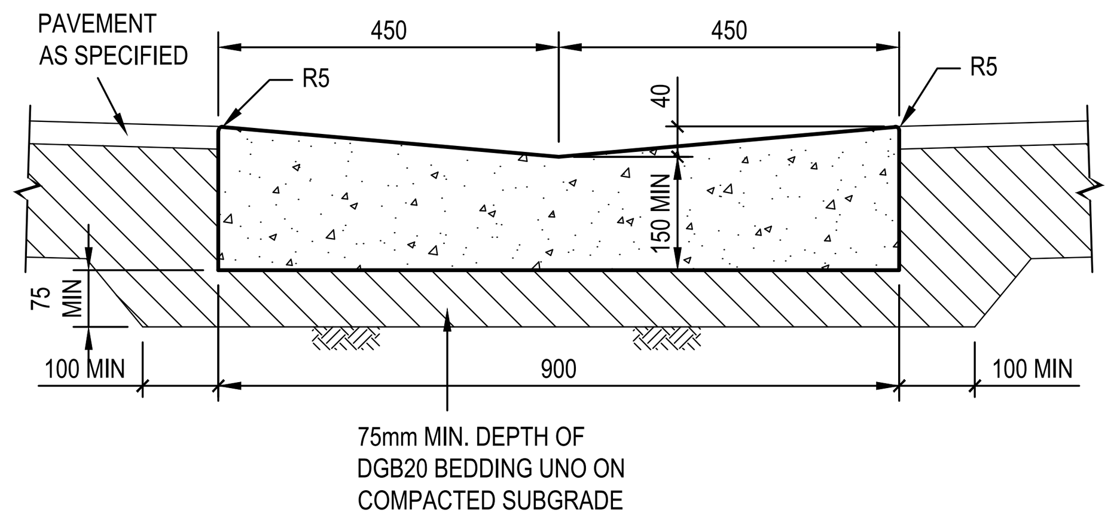


KERB AND GUTTER (K&G)

SCALE 1:10

KG

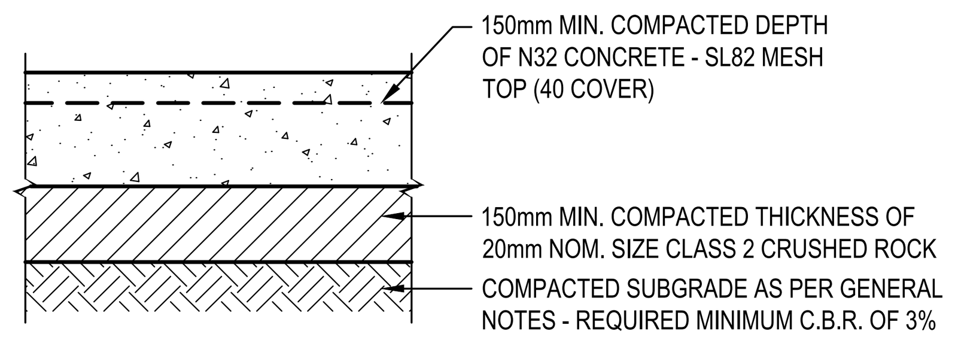
NOTE: PROVIDE SUBSOIL AS PER DETAIL TO ALL KERB



DISH DRAIN (DD)

SCALE 1:10

P4

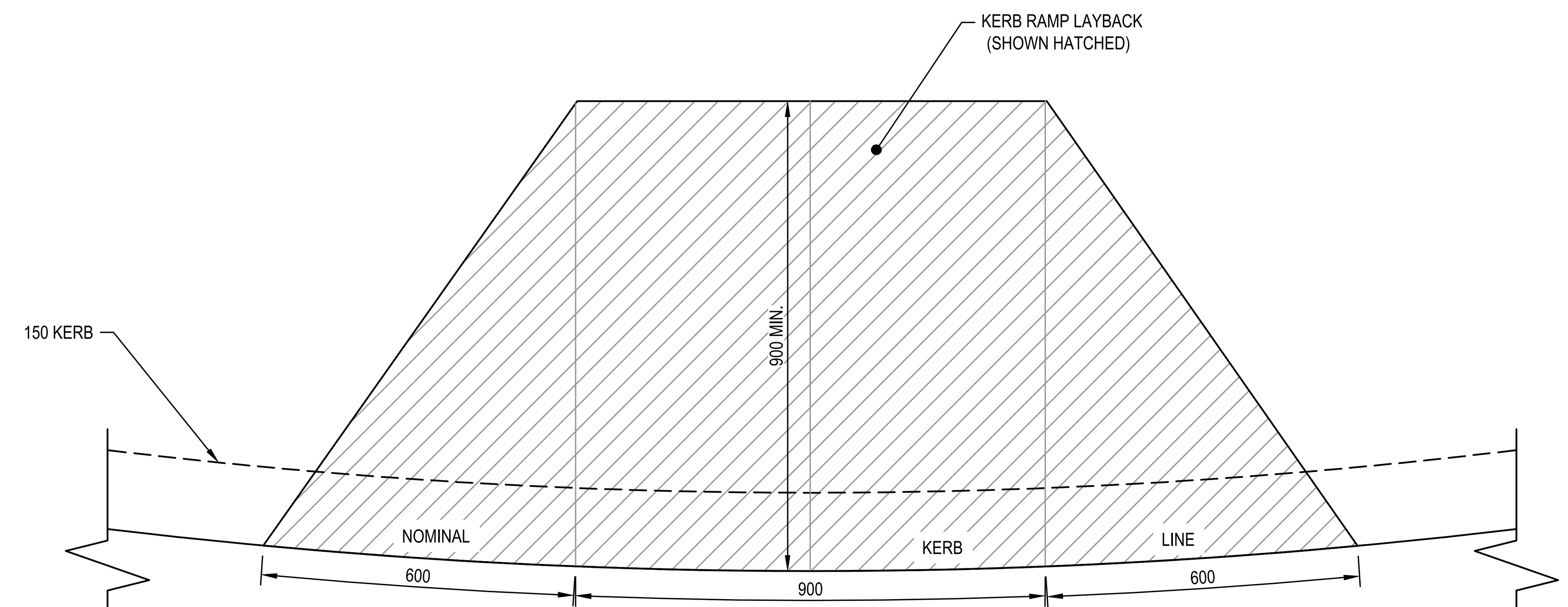


NOTE:
ALL ASPHALT, CRUSHED ROCK MATERIALS AND CONSTRUCTION PROCEDURES SHALL COMPLY IN ALL RESPECTS WITH THE RELEVANT ROAD AUTHORITY SPECIFICATIONS

MEDIUM DUTY CONCRETE PAVEMENT

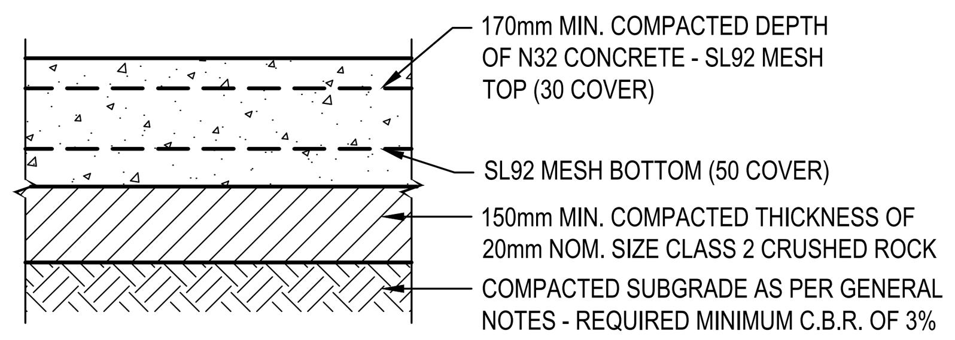
N.T.S.

AS SHOWN ON PLAN



PLAN VIEW

SCALE 1:10

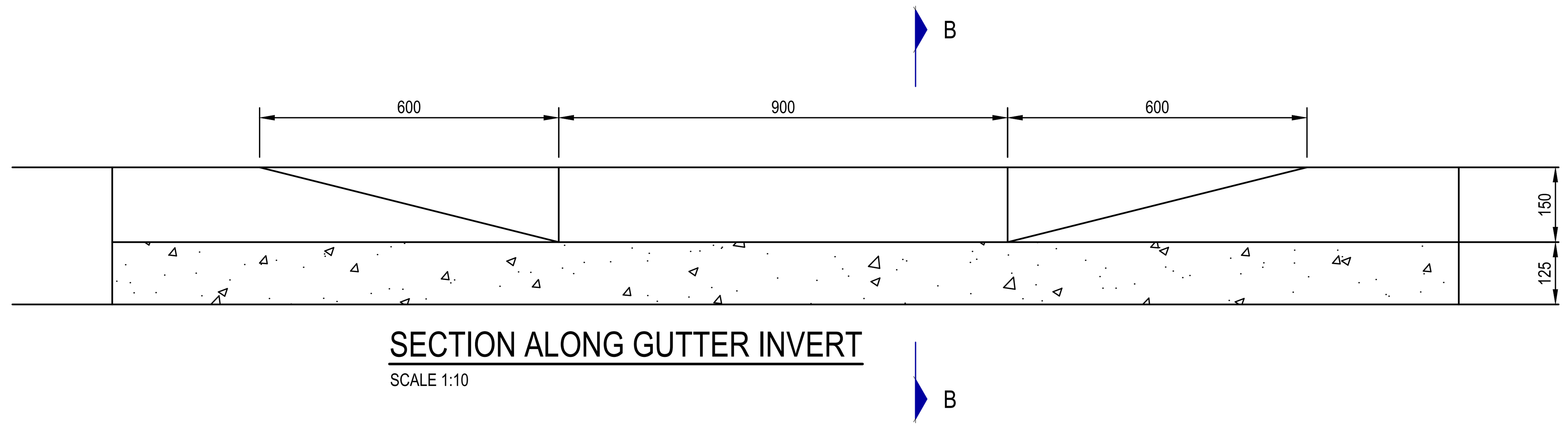


NOTE:
ALL ASPHALT, CRUSHED ROCK MATERIALS AND CONSTRUCTION PROCEDURES SHALL COMPLY IN ALL RESPECTS WITH THE RELEVANT ROAD AUTHORITY SPECIFICATIONS

HEAVY DUTY CONCRETE PAVEMENT

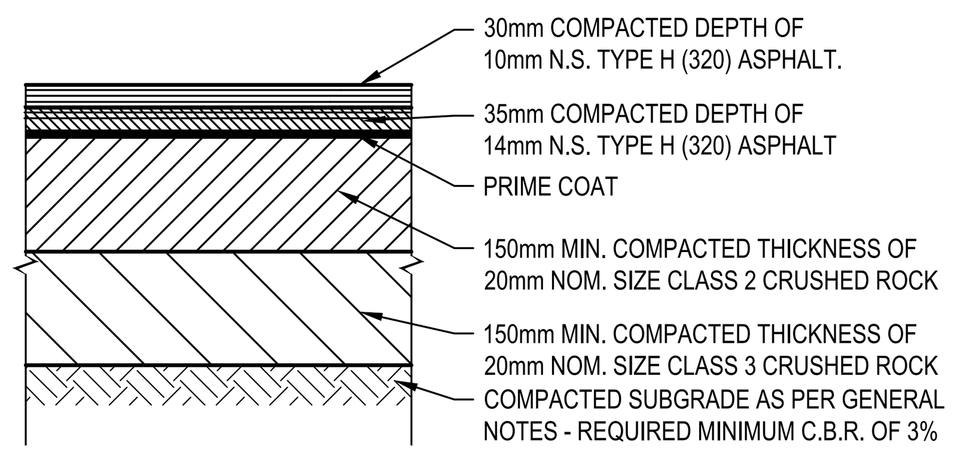
N.T.S.

AS SHOWN ON PLAN



SECTION ALONG GUTTER INVERT

SCALE 1:10

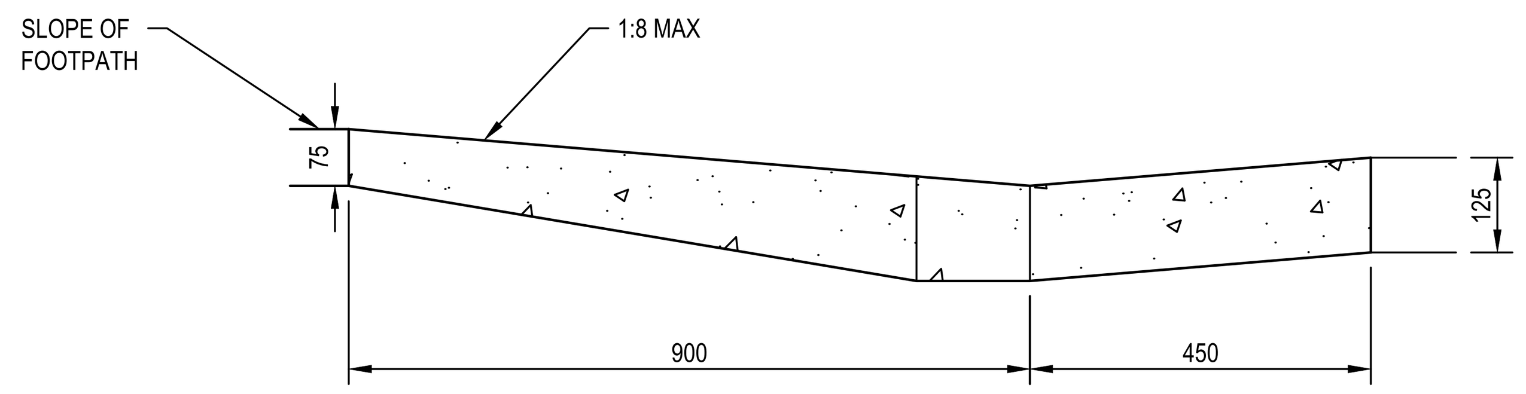


NOTE:
ALL ASPHALT AND CRUSHED ROCK MATERIALS AND CONSTRUCTION PROCEDURES SHALL COMPLY IN ALL RESPECTS WITH THE RELEVANT ROAD AUTHORITY SPECIFICATIONS

MEDIUM DUTY ASPHALT PAVEMENT

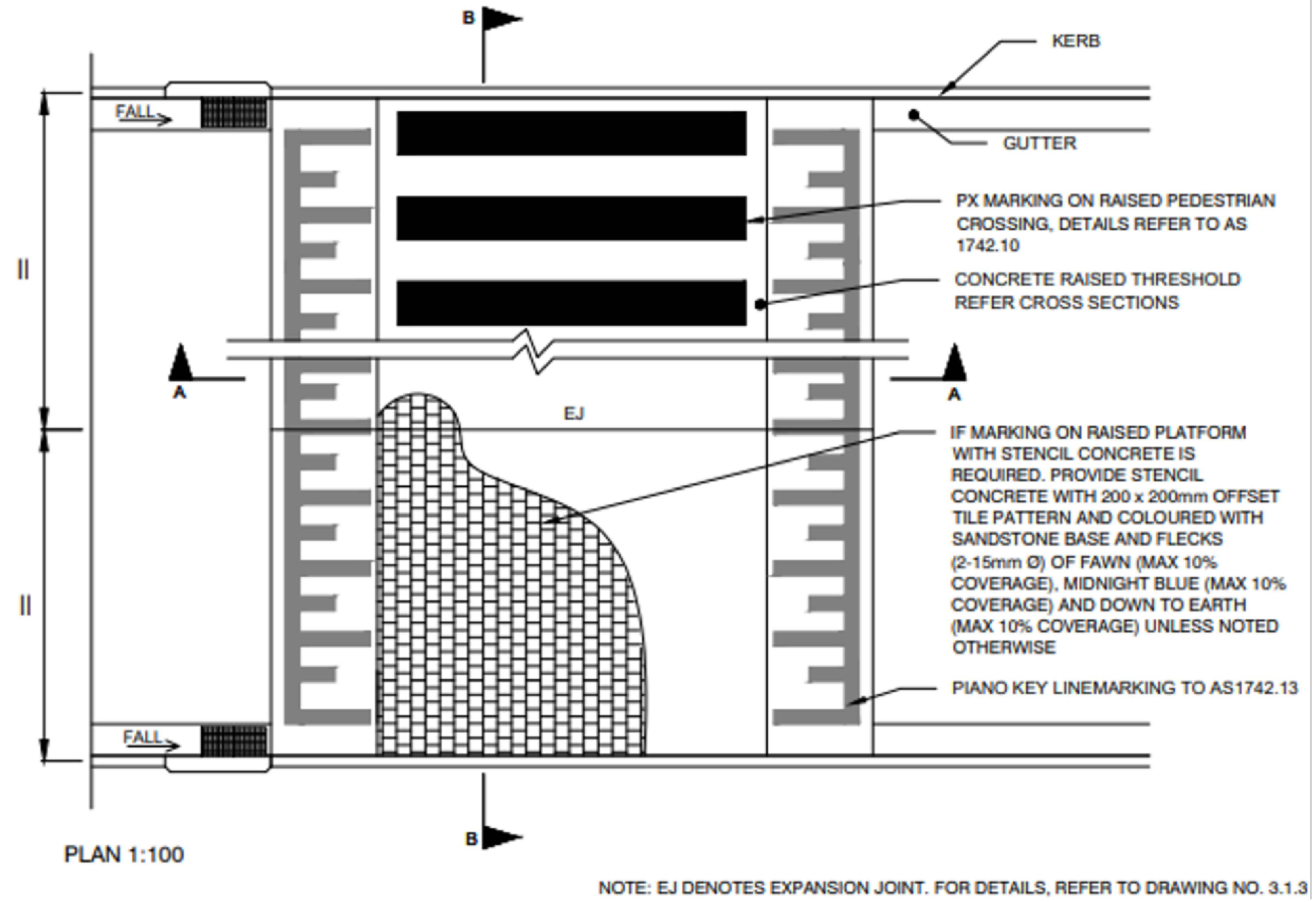
N.T.S.

AS SHOWN ON PLAN



SECTION B-B

SCALE 1:10

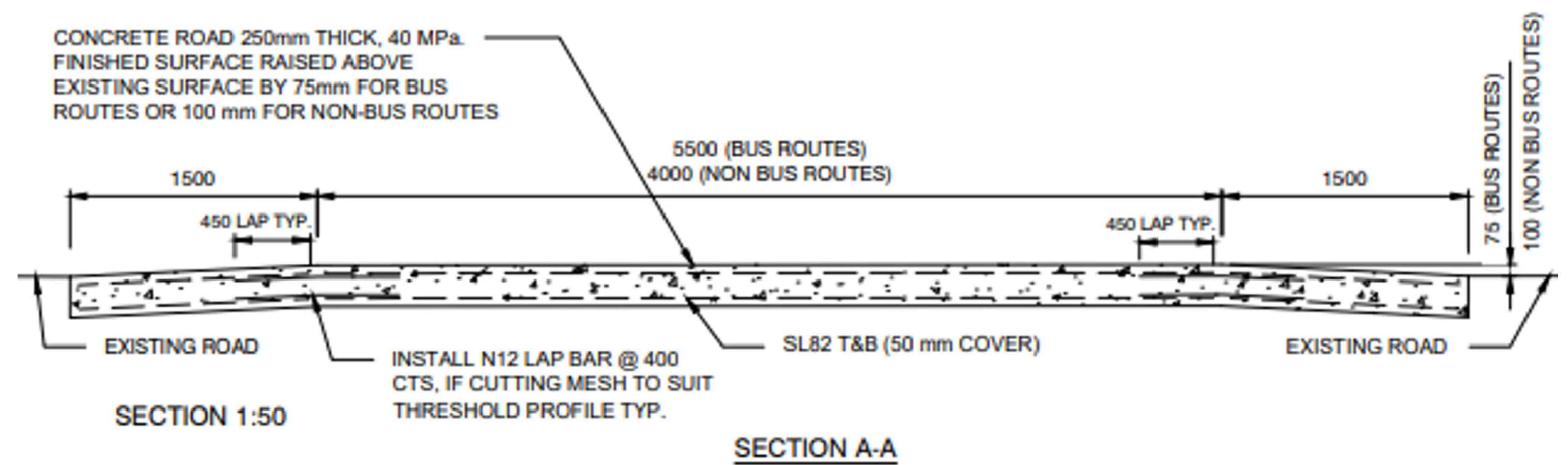


PLAN 1:100

NOTE: EJ DENOTES EXPANSION JOINT. FOR DETAILS, REFER TO DRAWING NO. 3.1.3

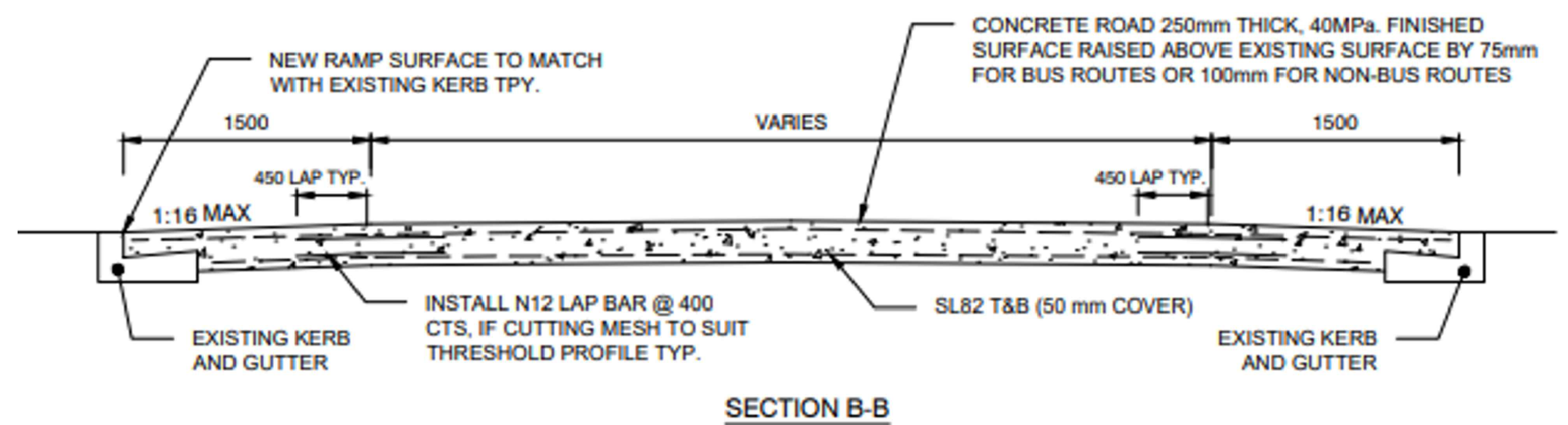
WOMBAT CROSSING

N.T.S



SECTION 1:50

SECTION A-A



SECTION B-B

SECTION 1:50

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25
P4	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	31.03.25

0 0.1 0.2 0.3 0.4 0.5m
SCALE 1:10 @ A1 ; SCALE 1:20 @ A3

0 0.2 0.4 0.6 0.8 1m
SCALE 1:20 @ A1 ; SCALE 1:40 @ A3

MEINHARDT
Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT
NSW GOVERNMENT School Infrastructure NSW

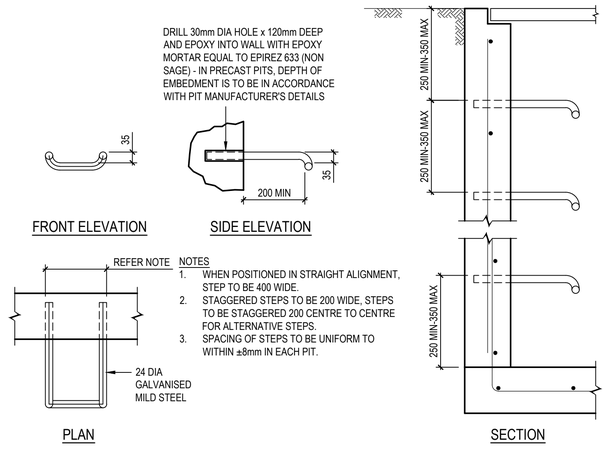
PROJECT
VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

TITLE
CIVIL DETAILS
SHEET 1

STATUS
SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		AS SHOWN

PROJECT No	DRAWING No	REV
132571	VHS-MHT-00-00-DR-C-0200	P4

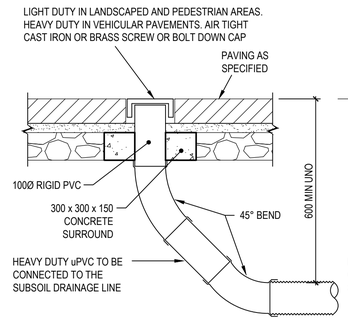


NOTES

1. WHEN POSITIONED IN STRAIGHT ALIGNMENT, STEP TO BE 400 WIDE.
2. STAGGERED STEPS TO BE 200 WIDE, STEPS TO BE STAGGERED 200 CENTRE TO CENTRE FOR ALTERNATIVE STEPS.
3. SPACING OF STEPS TO BE UNIFORM TO WITHIN ±8mm IN EACH PIT.

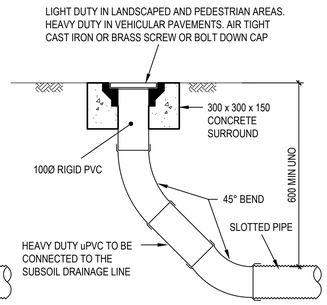
PIT ACCESS STEP DETAIL

SCALE 1:10



FLUSHOUT RISER (FOR) IN PAVING BRICKS

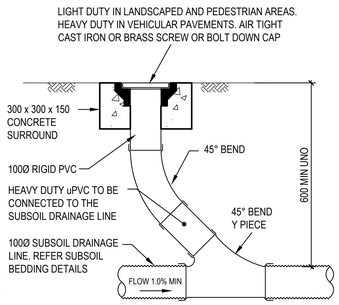
SCALE 1:10



FLUSHOUT RISER (FOR)

SCALE 1:10

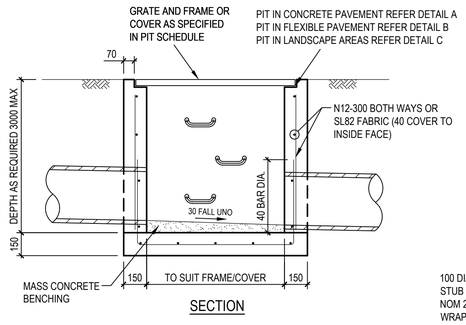
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS WITHIN DRAINAGE LAYER ONLY

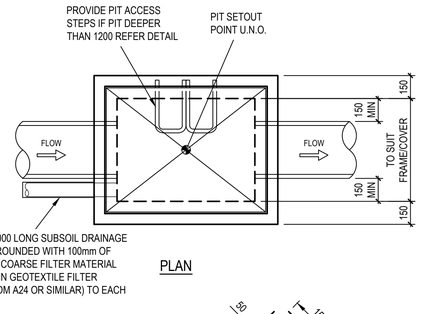


INTERMEDIATE RISER

SCALE 1:10

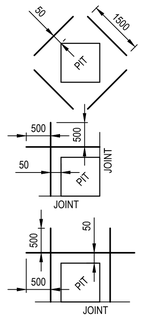
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED





SURFACE INLET/JUNCTION PIT DETAIL

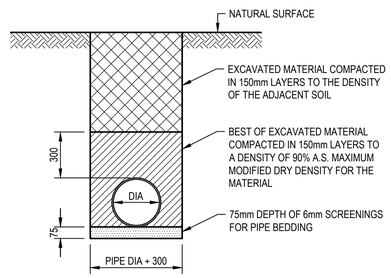
SCALE 1:20



NOTE:
ALL BARS N16
TOP AND BOTTOM
25mm COVER

DETAIL OF SLAB REINFORCEMENT AT PITS IN CONCRETE PAVEMENT

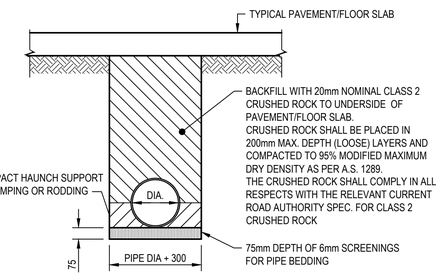
N.T.S



PIPE LAYING DETAILS (ALL PIPES)

UNDER LANDSCAPED AREAS

N.T.S.



NOTE:
AVOID RUNNING CONSTRUCTION EQUIPMENT OVER THE PIPES UNTIL BACKFILL MATERIAL IS 300mm MIN. ABOVE CROWN OF PIPE.

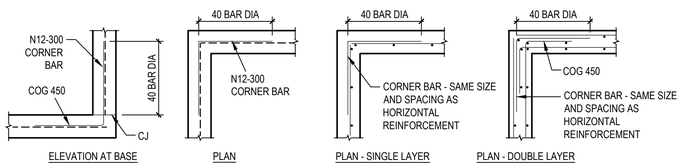
PIPE LAYING DETAILS

UNDER ALL PAVEMENTS/FLOORS

N.T.S

STORMWATER PIT NOTES

1. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH (F'c) OF 25 MPa AT 28 DAYS.
2. REINFORCEMENT NOT REQUIRED IF DEPTH OF PIT IS LESS THAN 1000mm. PITS GREATER THAN 3000mm DEEP TO HAVE WALL AND BASE 200mm THICK REINFORCED WITH N12-250 EACH WAY EACH FACE WITH CONCRETE STRENGTH F'c = 40 MPa.
3. PROVIDE STEP IRONS AT MAX 350mm CTRS IF DEPTH OF PIT EXCEEDS 1200mm.
4. IF REINFORCING MESH IS TO BE USED REFER TO WALL AND CORNER DETAILS
5. PRECAST PITS ARE TO GENERALLY COMPLY WITH THESE DETAILS.
6. PRECAST PIT MAY BE USED SUBJECT TO ENGINEERS APPROVAL.
7. ALL PITS TO BE LOCKABLE.
8. FINAL INTERNAL PIT DIMENSIONS ARE TO COMPLY WITH AS 3500.
9. ALL PIT AND TRENCH GRATE COVERS IN TRAFFICABLE AREAS TO BE HEAVY DUTY.

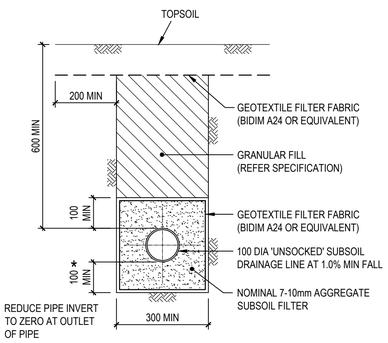


FABRIC REINFORCEMENT

PIT CORNER DETAILS

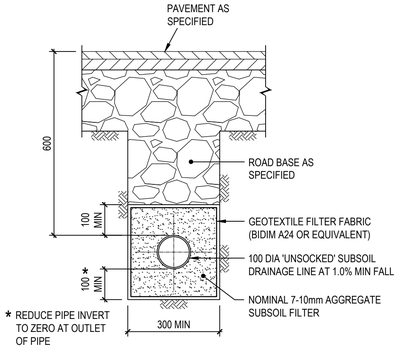
SCALE 1:20

NOTE: DESIGNER TO VERIFY EXTENT OF DETAILING



SUBSOIL IN LANDSCAPED AREAS

SCALE 1:10



SUBSOIL IN PAVED AREAS

SCALE 1:10

REV	DESCRIPTION	BY	DES	CHKD	DATE
P1	80% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	12.12.24
P2	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	21.01.25
P3	100% SCHEMATIC DESIGN ISSUE	J.G	A.M	B.K	18.02.25

0 0.1 0.2 0.3 0.4 0.5m
SCALE 1:10 @ A1 ; SCALE 1:20 @ A3

0 0.2 0.4 0.6 0.8 1m
SCALE 1:20 @ A1 ; SCALE 1:40 @ A3

Meinhardt Infrastructure and Environment PTY. LTD.
A.C.N. 051 627 591
Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
F: +61 2 9319 7518
info@meinhardtgroup.com
http://www.meinhardtgroup.com

CLIENT: School Infrastructure NSW

TITLE: CIVIL DETAILS SHEET 2

PROJECT: VINCENTIA HIGH SCHOOL
142 THE WOOL ROAD, VINCENTIA, NSW 2540

STATUS: SCHEMATIC DESIGN
NOT TO BE USED FOR CONSTRUCTION

DRAWN	DESIGNED	CHECKED	APPROVED	DATE	SCALE @ A1
J.G	A.M	B.K	B.L		AS SHOWN

PROJECT No: 132571
DRAWING No: VHS-MHT-00-00-DR-C-0201
REV: P3