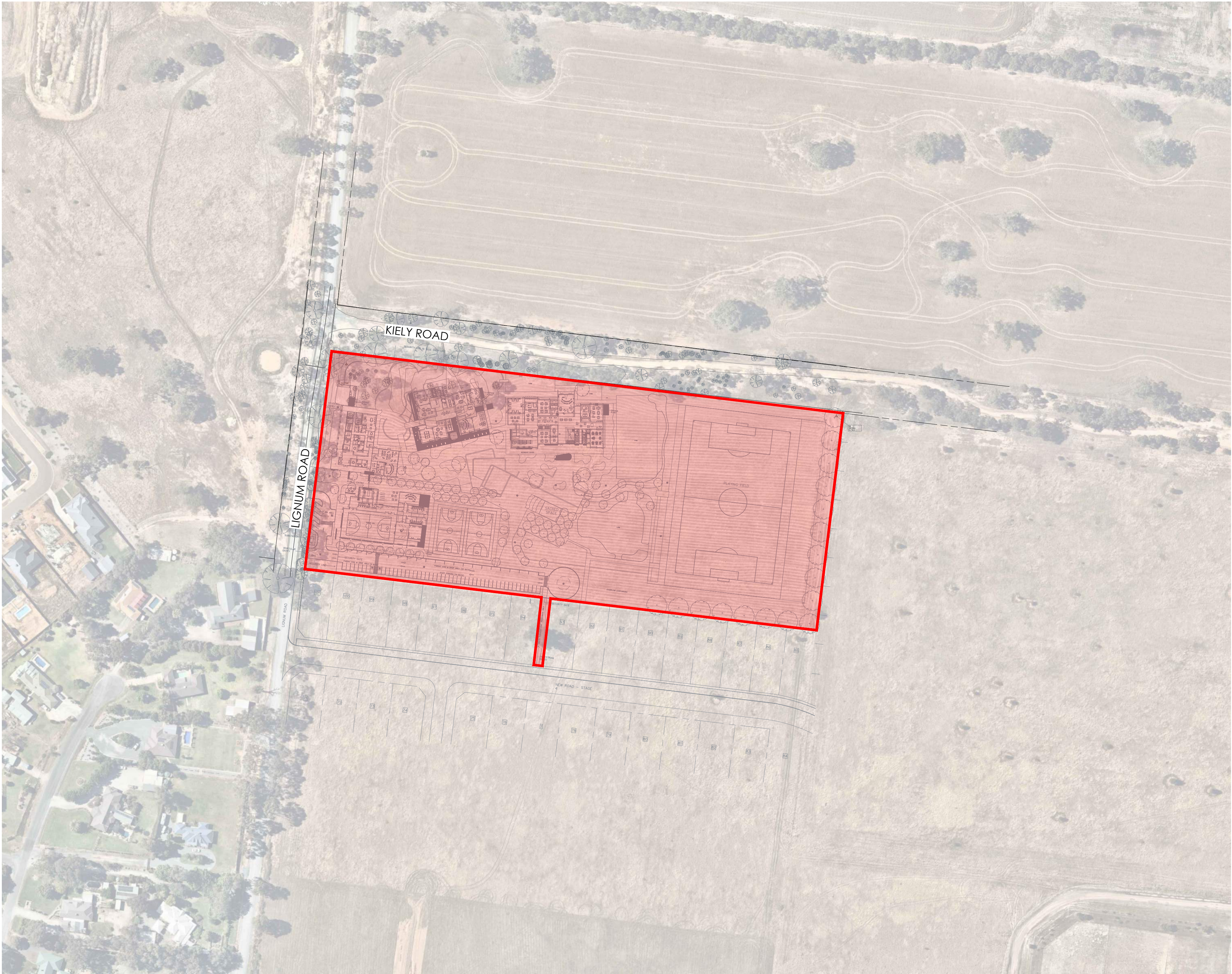


BLESSED CARLO COLLEGE
LIGNUM ROAD & KIELY ROAD, MOAMA, NSW, 2731

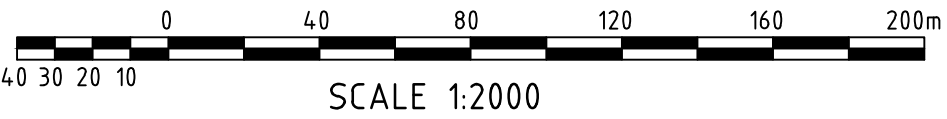


DRAWING LIST	
No.	DRAWING TITLE
C001	COVER SHEET AND LOCALITY PLAN
C002	GENERAL NOTES AND LEGENDS
C100	SITEWORKS AND STORMWATER PLAN
C110	TYPICAL DETAILS - SHEET 1
C111	TYPICAL DETAILS - SHEET 2
C200	EROSION AND SEDIMENT CONTROL PLAN
C210	EROSION AND SEDIMENT CONTROL DETAILS - SHEET 1
C211	EROSION AND SEDIMENT CONTROL DETAILS - SHEET 2

LOCALITY PLAN
SCALE 1:1500

LOCALITY PLAN LEGEND

<div></div>	EXTENT OF WORKS
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NOT TO BE USED FOR CONSTRUCTION			
AMDT	DATE	DESCRIPTION	BY
2	20.12.21	RE-ISSUED FOR SSDA CONCEPT	DM
1	17.12.21	ISSUED FOR SSDA CONCEPT	DM



CLIENT
CLARKE HOPKINS CLARKE
STATUS
PRELIMINARY
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DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
COVER SHEET AND LOCALITY PLAN

PROJECT
BLESSED CARLO COLLEGE
ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA
NSW, 2731

PROJECT DETAILS
DESIGN LM
DRAWN DM
DATE DEC 2021
DRG SIZE A1
SCALE AS SHOWN
PROJECT LM
MGR
WWW.JN.COM.AU
N0201396
C001 2

BLESSED CARLO COLLEGE

LIGNUM ROAD & KIELY ROAD, MOAMA, NSW, 2731

STANDARD SYMBOLS & NOTATIONS	
SYMBOL	DESCRIPTION
	BOUNDARY LINE
	PROPOSED STORMWATER DRAINAGE LINE (IN THE GROUND) Ø100 @ 1.0% MIN GRADE UNO.
	PROPOSED RAINWATER DRAINAGE LINE Ø100 @ 1.0% MIN GRADE UNO. USE PRESSURE GRADE PIPES FOR CHARGED SYSTEM
	EXISTING STORMWATER DRAINAGE PIT AND PIPE
	PUMP RISING MAIN
	900 SUBSOIL LINE CONNECT TO STORMWATER OUTLET OR VERTICAL SLOT DRAIN
	SPOON / SWALE DRAIN
	GRATED SURFACE INLET PIT WITH (OVERLAND FLOW DIRECTION); PIT DIMENSIONS ARE GOVERNED BY DEPTH REFER DETAIL
	SEALED JUNCTION PIT
	GRATED DRAIN
	KERB INLET PIT WITH LINTEL
	RAINWATER DRAINAGE OUTLET
	CATCHMENT AREA TO STORMWATER PIT
	DRAINAGE CELL PLANTER OUTLET
	INDICATIVE DOWNPIPE - LOCATION AND MINIMUM SIZE
	DOWNPIPE WITH RAINWATER HEAD OVERFLOW
	DOWNPIPE WITH SUMP HIGH CAPACITY OVERFLOW
	DOWNPIPE WITH SUMP-SIDE OVERFLOW
	GUTTER
	INSPECTION OPENING
	VERTICAL DROP IN STORMWATER LINE (FROM ABOVE)
	VERTICAL DROP IN STORMWATER LINE (TO BELOW)
	DOWNPIPES WITH SPREADER
	PROPOSED RAINWATER TANK
	EXISTING SURFACE LEVEL
	EXISTING SURVEY CONTOUR
	FINISHED SURFACE LEVEL
	FINISHED PAVEMENT LEVEL
	TOP OF NEW KERB LEVEL
	TOP OF NEW RETAINING WALL LEVEL
	PROPOSED PIT SURFACE LEVEL
	PROPOSED PIT INVERT LEVEL
	PROPOSED FINISHED FLOOR LEVEL
	PIPE SIZE, TYPE AND GRADE < > DENOTES DIRECTION OF FLOW
	RIGID PVC PIPE
	REINFORCED CONCRETE PIPE
	ROLL KERB & GUTTER
	KERB & GUTTER
	150 HIGH KERB ONLY
	OVERLAND FLOW PATH
	FALL DIRECTION
	RETAINING WALL WITH HEIGHT
	EXISTING SEWER LINE
	EXISTING TELSTRA LINE
	EXISTING GAS LINE
	EXISTING ELECTRICITY LINE
	EXISTING WATER MAIN

ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

DEPTH AND LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED BY BUILDER ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

GENERAL

- ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION. WHERE A SPECIFICATION HAS NOT BEEN NOMINATED THEN THE CURRENT NSW DEPARTMENT OF HOUSING CONSTRUCTION SPECIFICATION IS TO BE USED. THE NOMINATED SPECIFICATION SHALL TAKE PRECEDENCE TO THESE NOTES.
- ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER CONSULTANTS.
- THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY(IES) TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY AND IS NOT GUARANTEED COMPLETE NOR CORRECT.
- CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT SPECIFIED.
- PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS. FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS.

SURVEY

- JIN ARE NOT RESPONSIBLE FOR THE ACCURACY OF ANY 3RD PARTY INFORMATION PROVIDED ON THIS DRAWING.
- ALL LEVELS ARE TO A.H.D.
- ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES.
- SET OUT COORDINATES ARE BASED ON SURVEY DRAWINGS PROVIDED FOR THE PURPOSE OF CARRYING OUT THE ENGINEERING DESIGN.
- CONTRACTOR SHALL VERIFY ALL SET OUT COORDINATES SHOWN ON THE PLANS WITH A REGISTERED SURVEYOR.
- CONTRACTOR SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.
- ANY DISCREPANCIES SHOULD BE CLARIFIED IN WRITING WITH THE ENGINEER PRIOR TO COMMENCEMENT OF THE WORK FOR CONFIRMATION OF THE SURVEY.

EARTHWORKS

- PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION.
- OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOP SOIL, AVERAGE 200mm THICK, REMOVE FROM SITE, EXCEPT TOP SOIL FOR RE-USE. CUT AND FILL OVER THE SITE TO LEVELS REQUIRED.
- PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND, PROOF ROLL THE EXPOSED SURFACE WITH A ROLLER OF MINIMUM WEIGHT OF 5TONNES WITH A MINIMUM OF 10 PASSES.
- EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT \pm 2%.
- FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH EXCAVATION IS TAKEN.
- FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 S.1.1).
- MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT \pm 2% SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR FILL TO APPROVAL.
- COMPACTION TESTING SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRES PER LAYER BY A REGISTERED NATA LABORATORY. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
- BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT : 4 HORIZ. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL PAVEMENT.
- ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP SOILED WITH 150mm APPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

DRAWING STATUS

PRELIMINARY

PRELIMINARY DRAWINGS ARE NOT TO BE USED FOR TENDER OR CONSTRUCTION PURPOSES.

TENDER

TENDER DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES AND ARE INTENDED FOR AN EXTENT OF WORKS. ALL OTHER CONSULTANT DRAWINGS AND CONTRACT DOCUMENTS SHOULD BE READ IN CONJUNCTION WITH THESE DOCUMENTS TO DETERMINE THE FULL EXTENT OF WORKS.

CONSTRUCTION CERTIFICATE

CONSTRUCTION CERTIFICATE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS APPROVED & STAMPED BY THE PCA.

CONSTRUCTION

CONSTRUCTION DRAWINGS CAN BE USED FOR CONSTRUCTION PURPOSES AND/OR FOR THE CREATION OF FABRICATION DRAWINGS.

PROJECT INFORMATION TABLE

THE TABLES BELOW ARE TO BE READ IN CONJUNCTION WITH THE ADJACENT NOTES.

GEOTECHNICAL INFORMATION

COMPANY	REPORT No.	DATED

SURVEY INFORMATION

COMPANY	DATED
NORTH EAST SURVEY DESIGN	MAY 2021

PROOF ROLLING

PROOF ROLLING SPECIFICATION

(min) ROLLER WEIGHT	(min) NUMBER OF PASSES
5 TONNE	10

COMPACTION TESTING

RATE OF TESTS	TEST AREA PER LAYER
2	1000m ²

- TESTING SHALL BE CARRIED OUT BY A REGISTERED NATA LABORATORY

RIGID PAVEMENT DESIGN

DESIGN VEHICLE	DESIGN CBR	DESIGN TRAFFIC
MRV	-----	----- ESA

FLEXIBLE PAVEMENT DESIGN

DESIGN VEHICLE	DESIGN CBR	DESIGN TRAFFIC
MRV	-----	----- ESA

STORMWATER DRAINAGE

- STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS AND COUNCIL'S SPECIFICATION.
- PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC.
- PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
- ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
- PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS.
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
- PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O.
- SURFACE DRAINAGE STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT.
- BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
- ANY PIPES OVER 1.6% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
- PITS SHALL BE AS DETAILED WITH METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1000mm TO HAVE CLIMB IRONS.
- BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
- ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE, LOAD CLASS A, UNLESS NOTED OTHERWISE.
- ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE, LOAD CLASS D, UNLESS NOTED OTHERWISE.
- INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS, TO COUNCIL'S STANDARDS UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED.
- PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
- DOWNPIPES SHOWN ARE INDICATIVE ONLY. ALL ROOF GUTTERING AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS.
- ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- HAND-EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS.
- FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FIT THE COUNCIL'S ISSUED LEVELS.
- GEOTEXTILE FABRIC TO BE PLACED UNDER RCP RAP SCOUR PROTECTION.
- ALL BASES OF PITS TO BE BENCHMARKED TO HALF PIPE DEPTH AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE.
- SUBSOIL LINE: PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS, LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL. PROVIDE FLUSHING EYES AT HIGH POINTS OR TO COUNCILS REQUIREMENTS.
- SHOULD THE CONTRACTOR ELECT TO INSTALL PRECAST STORMWATER PITS AND THEY ARE PERMITTED BY COUNCIL AND THE CLIENT, THE PRECAST PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH RMS STANDARDS INCLUDING:
 - SEAL THE SEGMENTS TOGETHER USING A SITE-APPROVED NON-SHRINK GROUT OR MASTIC-TYPE PRODUCT. APPLY THE SEALANT IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S REQUIREMENTS.
 - ENSURE THAT NO GAPS REMAIN AND THAT A SMOOTH FACE EXISTS BETWEEN MULTIPLE UNITS.
 - LEAVE THE SEGMENTS UNDISTURBED UNTIL THE PERIOD OF CURING IS COMPLETED IN ACCORDANCE WITH THE GROUT OR SEALANT PRODUCT MANUFACTURER'S REQUIREMENTS.

DRAINAGE INSTALLATION

RCP CONVENTIONAL INSTALLATIONS & ROAD CROSSINGS

- SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
- BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:
 - COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS:

SIEVE SIZE (mm)	19	2.36	0.60	0.30	0.15	0.075
% MASS PASSING	100	50-100	20-90	10-60	0-25	0-10

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

- BEDDING DEPTH UNDER THE PIPE TO BE 100mm.
- BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER, THIS REPRESENTS THE 'HAUNCH ZONE'.
- THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE. TOP COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL.
- COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & GUTTER OR PAVEMENT.
- BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO ITS SELF COMPACTING ABILITY.
- A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA.

SAFETY IN DESIGN

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

PAVEMENT LEGEND

SYMBOL	DESCRIPTION
	EXTENT OF CONCRETE PAVEMENT
	DOWELLED JOINT
	KEYED JOINT
	SAW CUT JOINT
	BUTT JOINT
	2N12 TRIMMERS X 1500 LONG (TIED UNDER TOP MESH)
	150mm HIGH KERB & GUTTER
	150mm HIGH KERB ONLY
	EXTENT OF BITUMEN PAVEMENT
	PAVEMENT TYPE 1 - CONCRETE
	PAVEMENT TYPE 2 - BITUMEN
	PAVEMENT TYPE 3 - CONCRETE FOOTPATH
	PAVEMENT TYPE 4 - GRAVEL
	PAVEMENT TYPE 5 - PAVERS
	LANDSCAPE PLANTING AREA
	LANDSCAPE TILED AREA
	LANDSCAPE WATER AREA

PAVEMENT - FLEXIBLE

- THE PAVEMENT DESIGN AS DETAILED ASSUMES A PROPERLY PREPARED UNIFORM AND STABLE SUBGRADE. CONFIRMATION OF DESIGN CBR RATIO IS REQUIRED BY A GEOTECHNICAL ENGINEER PRIOR TO WORKS COMMENCING.
- ASSUMED DESIGN CBR TO BE CONFIRMED ONSITE DURING CONSTRUCTION PRIOR TO PLACEMENT OF PAVEMENT MATERIALS. THE CONTRACTOR IS TO UNDERTAKE SUFFICIENT CBR TESTING TO CONFIRM THE ASSUMED VALUE. WHERE LESSER VALUE HAS BEEN DETERMINED, THE SUPERVISING ENGINEER IS TO BE NOTIFIED TO DETERMINE A REVISED PAVEMENT DESIGN.
- PAVEMENT TO BE CONSTRUCTED AS FOLLOWS:
 - SURFACE COURSE - DENSE GRADED ASPHALT PRIMERSEAL
 - EMULSION BASED HOT BITUMEN BASE COURSE - DGB 20
 - SUB BASE - DGB 40
- SUBGRADE SHALL BE COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY RATIO AT OPTIMUM MOISTURE CONTENT \pm 2%, IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS.
- SUBBASE COURSE SHALL BE COMPACTED TO 95% MODIFIED MAXIMUM DRY DENSITY.
- BASECOURSE SHALL BE COMPACTED TO 98% MODIFIED MAXIMUM DRY DENSITY.
- PRIOR TO THE PLACEMENT OF THE PRIMERSEAL AND AFTER THE REQUIRED DENSITY IS ACHIEVED, THE PAVEMENT IS TO BE ALLOWED TO DRY BACK TO APPROXIMATELY 60% TO 70% OPTIMUM MOISTURE CONTENT.
- ALL WORKMANSHIP AND MATERIALS FOR CONCRETE WORK SHALL BE IN ACCORDANCE WITH AS 3600 AND AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- CONCRETE QUALITY ALL CEMENT SHALL BE TYPE SL SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972

PAVEMENT - RIGID

- PREPARATION FOR PAVEMENT: CLEAR SITE, STRIP TOPSOIL, CUT AND FILL AND PREPARATION OF SUBGRADE SHALL BE AS DESCRIBED IN 'EARTHWORKS' NOTES.
 - SUBGRADE SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT \pm 2% IN ACCORDANCE WITH AS 1289 S.1.1.
 - BASE COURSE SHALL BE CONSTRUCTED FROM FINE CRUSHED ROCK DGB20 COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT \pm 2% IN ACCORDANCE WITH AS 1289 S.1.1.
 - CONCRETE PAVEMENT SLABS SHALL BE AS DETAILED ON THE DRAWINGS.
 - ALL WORKMANSHIP AND MATERIALS FOR CONCRETE WORK SHALL BE IN ACCORDANCE WITH AS 3600 AND AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
 - CONCRETE QUALITY ALL CEMENT SHALL BE TYPE SL SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972
- | ELEMENT | STRENGTH GRADE (MPa) | SLUMP | MAXIMUM AGGREG. SIZE (mm) |
|----------|----------------------|-------|---------------------------|
| PAVEMENT | 32 | 80 | 20 |
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 3600. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
 - CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm.
 - CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
 - THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS. COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. CONCRETE SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
 - CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT.
 - REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

PAVEMENT - SEGMENTAL

- PREPARATION FOR PAVEMENT: CLEAR SITE, STRIP TOPSOIL, CUT AND FILL AND PREPARATION OF SUBGRADE SHALL BE AS DESCRIBED IN 'EARTHWORKS'.
- SUBGRADE SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT \pm 2% IN ACCORDANCE WITH AS 1289 S.1.1.
- BASECOURSE SHALL BE CONSTRUCTED FROM FINE CRUSHED ROCK DGB20 COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT \pm 2% IN ACCORDANCE WITH AS 1289 S.1.1.
- PROVIDE CONCRETE WORKING SLAB 20MPa MIN 100mm THICK AS DETAILED ON DRAWING.
- SEGMENTAL PAVING SHALL BE AS DETAILED ON THE DRAWINGS, AND ARE TO BE SUPPLIED WITH UNITS OF MAXIMUM GROSS PLAN AREA <0.1m². WHERE THIS AREA IS EXCEEDED REFER CONCRETE FLAG PAVEMENT SPECIFICATION.
- ALL WORKMANSHIP AND MATERIALS FOR PAVEMENT SHALL BE IN ACCORDANCE WITH ALL AS 4455, AS4456, AS4459, T44, T45, T46, CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENT.
- PAVER QUALITY:

APPLICATIONS	CHARACTERISTIC BREAKING LOAD (kN)	CHARACTERISTIC FLEXURAL STRENGTH (MPa)
RESIDENTIAL PEDESTRIAN	2	2
RESIDENTIAL DRIVEWAYS	5	3
PUBLIC FOOTPATHS	5	3
ROADS	5	3
INDUSTRIAL PAVEMENTS	10	4

- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 4456.4 AND AS 4456.5.
- PAVERS TO BE BEDDED AND SOUND EDGE RESTRAINTS ARE TO BE PROVIDED.
- JOINTS TO BE FULLY GROUTED.

ENVIRONMENTAL SITE MANAGEMENT

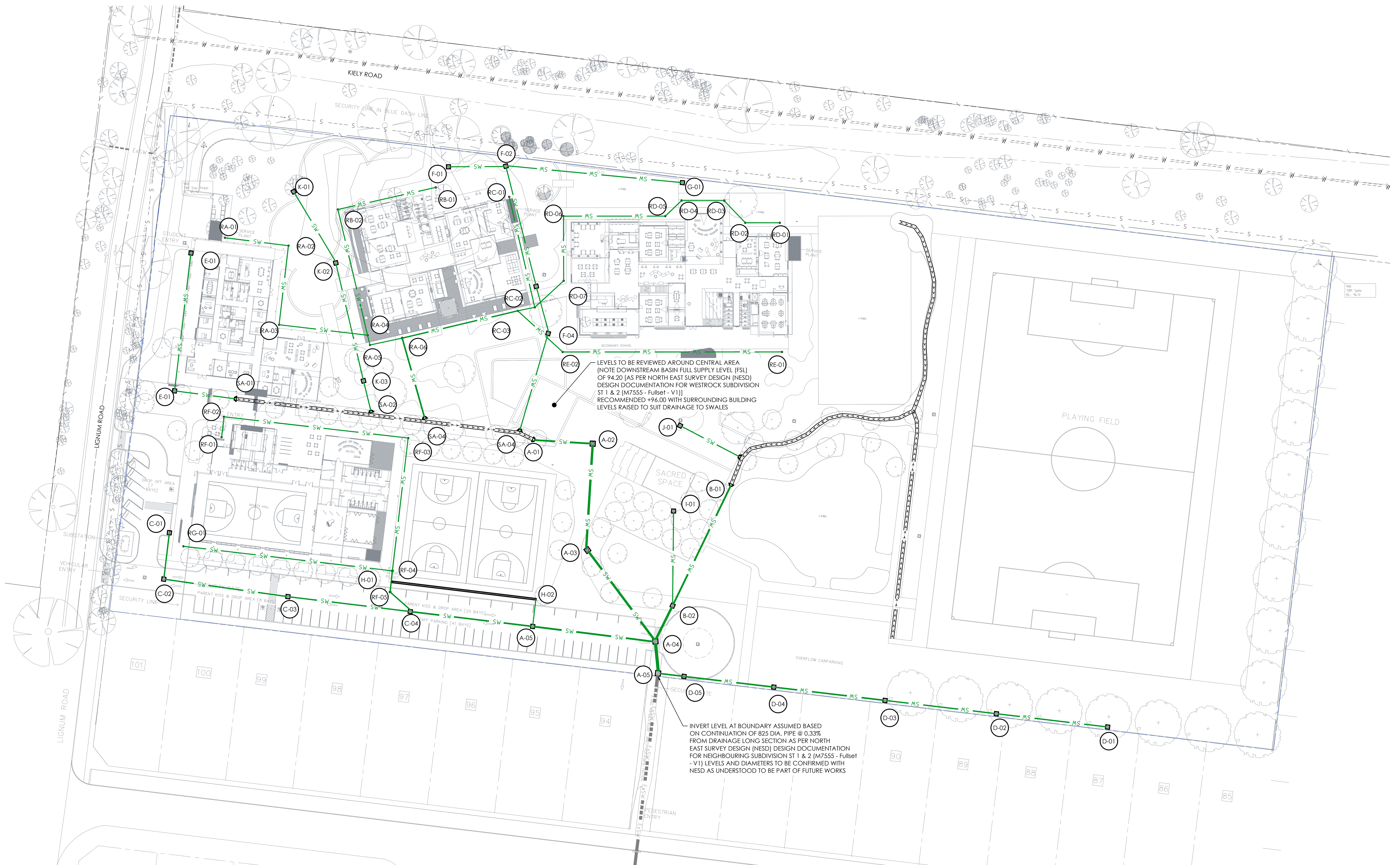
- EROSION & SEDIMENT CONTROLS TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S SPECIFICATION & THE NSW DEPARTMENT OF HOUSING 'BLUE BOOK' - SOILS AND CONSTRUCTION - MANAGING URBAN STORMWATER, 2004. REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS 'SD'.
- SEDIMENT & EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM. SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
- RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNHILL OF STOCKPILE.
- AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERVISING ENGINEER MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS.
- ALL DISTURBED AREAS ARE TO BE SEEDED & FERTILISED WITHIN 14 DAYS OF EXPOSURE.
- ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.
- INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER, UNTIL SURROUNDING AREAS ARE PAVED OR REGRADED. GRAVEL OR GEOTEXTILE INLET FILTERS TO SD6-11 & SD6-12.
- ALL SILT FENCES & BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER & REGULARLY DESILTED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO SD6-8 OR SD6-9.
- STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
- WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN.
- NO MORE THAN 150m OF TRENCHING TO BE OPEN AT ANY ONE TIME, IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACINGS. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED.
- ALL VEHICLES LEAVING THE SITE MUST PASS OVER THE STABILISED SITE ACCESS BALLAST AREA (SIMILAR TO SD6-14) TO SHAKE OFF SITE CLAY AND SOIL. IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN. BALLAST IS TO BE MAINTAINED & REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD.
- THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN.
- ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY.
- PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
- CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
- DELIVERY VEHICLES MUST NOT STAND WITHIN THE PUBLIC ROADWAY FOR MORE THAN 20 MINUTES AT A TIME.
- TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. (NO SEMITRAILERS)
- ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM THE ENGINEER.
- TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED.
- DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENT.
- DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL [MIN HEIGHT 400mm] WHERE DIRECTED. MATERIAL TO BE RESPAVED ON FOOTWAYS AFTER FINAL TRIMMING.
- UNDISTURBED BUFFER ZONE AREAS ARE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE NOTED BY THE SUPERINTENDENT AND ACCESS TO THE SEWER OR C.D.L. TRENCHING WILL BE AS SHOWN, OR HEAVY PENALTIES MAY BE IMPOSED.
- TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH 'R.T.A. TRAFFIC CONTROL AT WORK SITES - CURRENT EDITION' AND AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES'.
- PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES'.

NOT TO BE USED FOR CONSTRUCTION

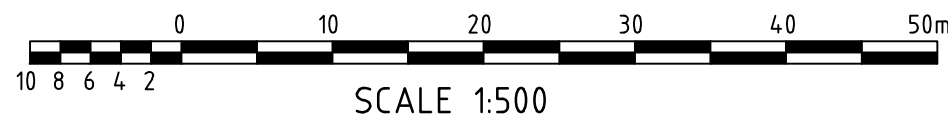
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CLIENT

CLARKE HOPKINS CLARKE



SITWORKS AND STORMWATER PLAN
SCALE 1:500



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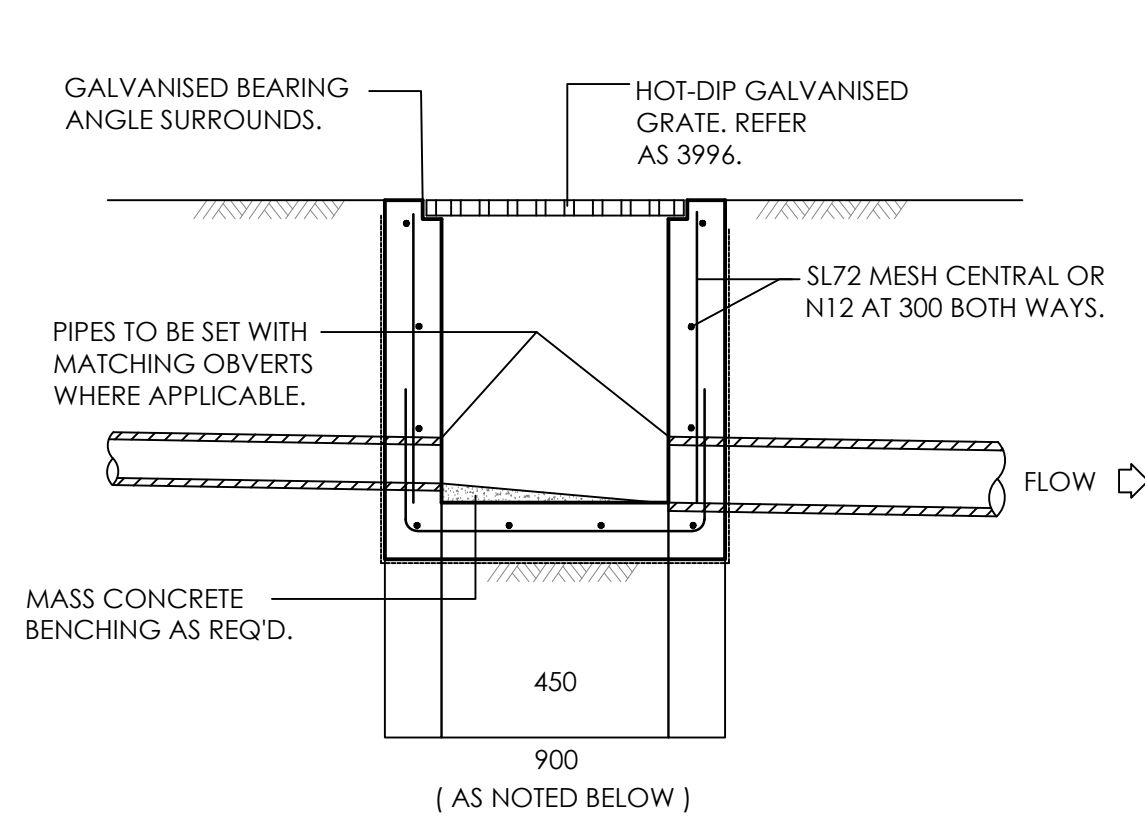
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STATUS
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DRAWING TITLE
SITWORKS AND STORMWATER PLAN

PROJECT
BLESSED CARLO COLLEGE
ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA
NSW, 2731

PROJECT DETAILS
DESIGN LM
DRAWN DM
DATE DEC 2021
DRG SIZE A1
SCALE AS SHOWN
PROJECT LM
MGR
WWW.JN.COM.AU
N0201396
C100 1

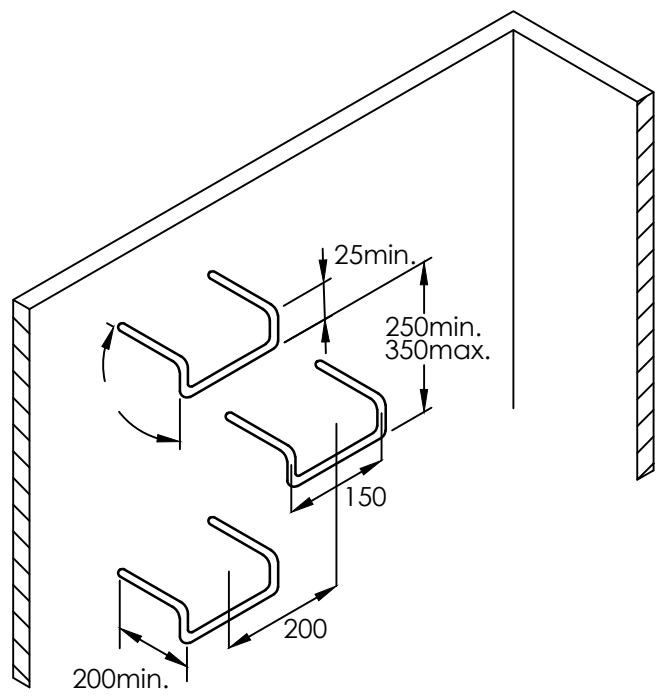


TYPICAL GRATED INLET PIT -
NATURAL SURFACE

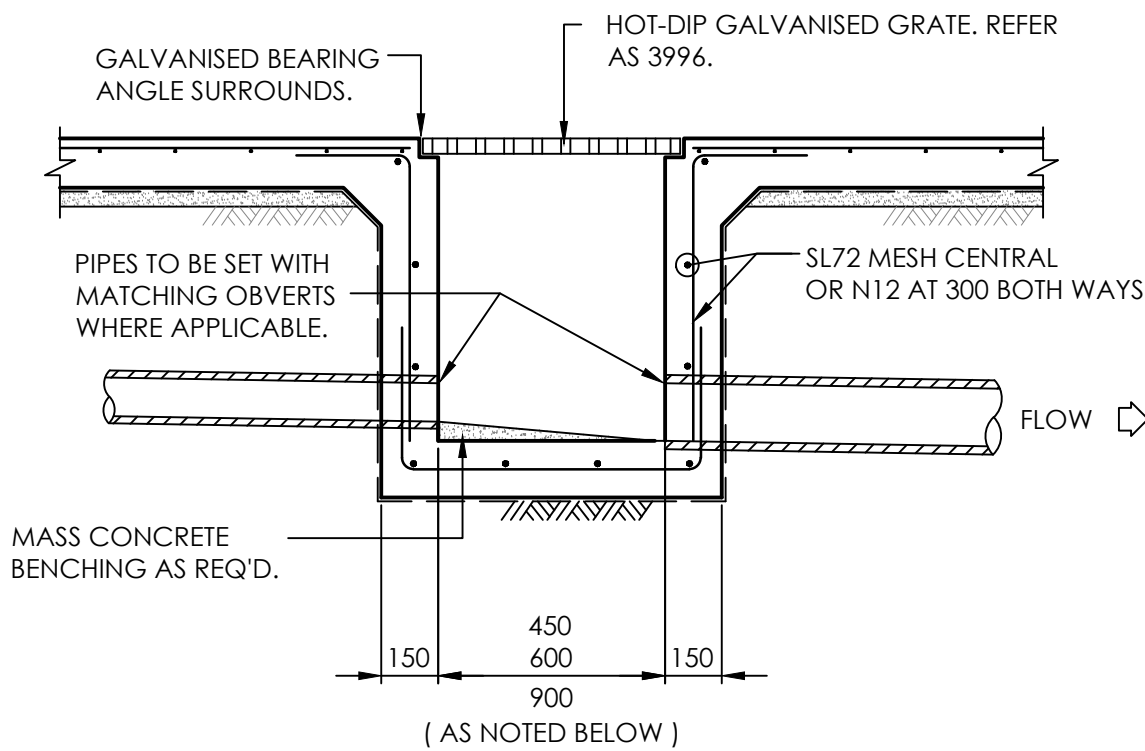
MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS			
DEPTH TO INVERT OF OUTLET		PIT MINIMUM INTERNAL DIMENSIONS (mm)	
		WIDTH	LENGTH
> 600	< 600	450	450
		600	600
		600	900
		900	900
> 1200		900	900
STEP IRONS SHALL BE PROVIDED FOR PITS WITH DEPTHS EXCEEDING 1200mm			

NOTES

1. REINFORCEMENT NOTED IS ONLY REQUIRED FOR PITS EXCEEDING 900 DEEP, SUBJECT TO COUNCIL REQUIREMENTS. PITS GREATER THAN 3000 DEEP WILL REQUIRE STRUCTURAL ENGINEERS DESIGN.
2. PROVIDE 90Ø x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC. (BIDUM A24 OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.
3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
4. CONCRETE STRENGTH F_c = 32 MPa



STEP IRON DETAIL
N.T.S

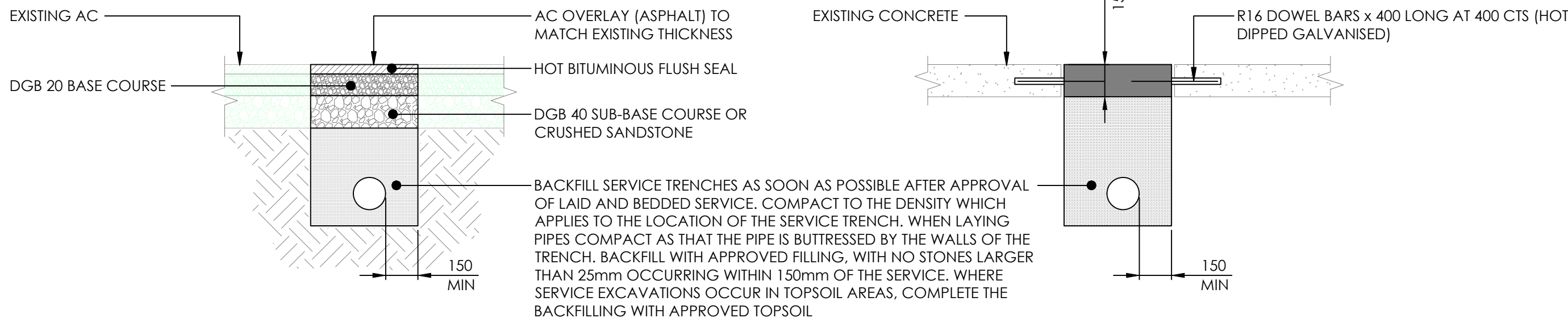


TYPICAL GRATED INLET PIT -
CONCRETE SURFACE

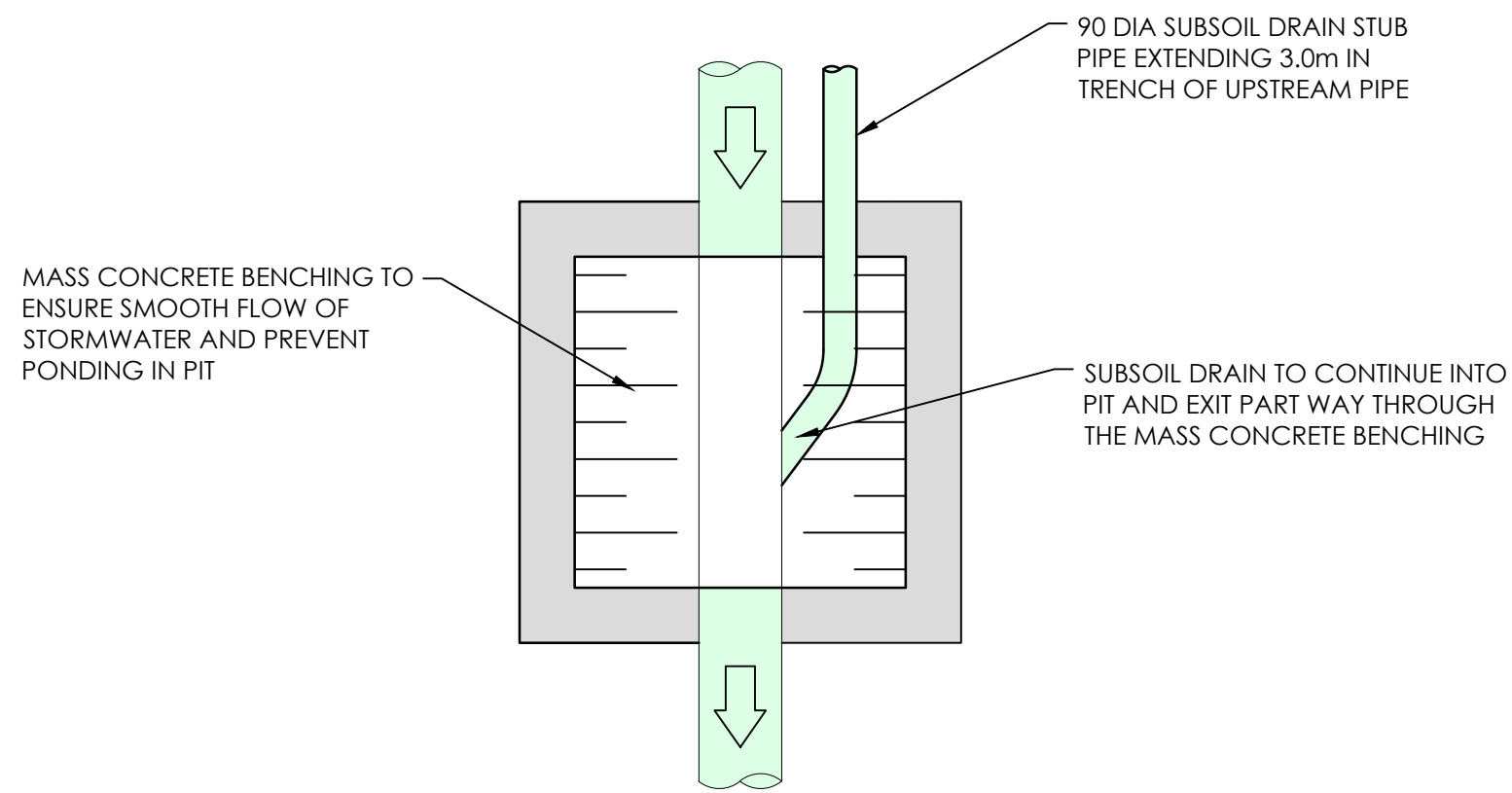
MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS			
DEPTH TO INVERT OF OUTLET		PIT MINIMUM INTERNAL DIMENSIONS (mm)	
		WIDTH	LENGTH
	< 600	450	450
> 600		600	600
> 900		600	900
> 1200		900	900
STEP IRONS SHALL BE PROVIDED FOR PITS WITH DEPTHS EXCEEDING 1200mm			

NOTES

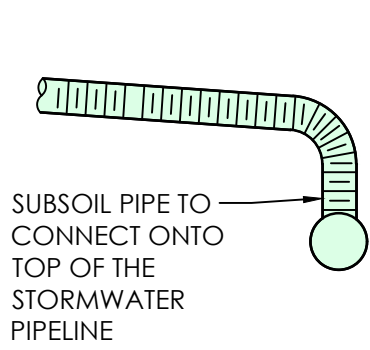
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3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
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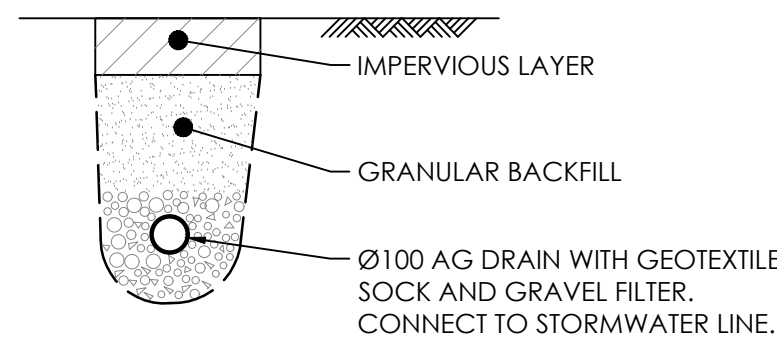
TYPICAL SERVICE TRENCH DETAIL
SCALE 1 : 20



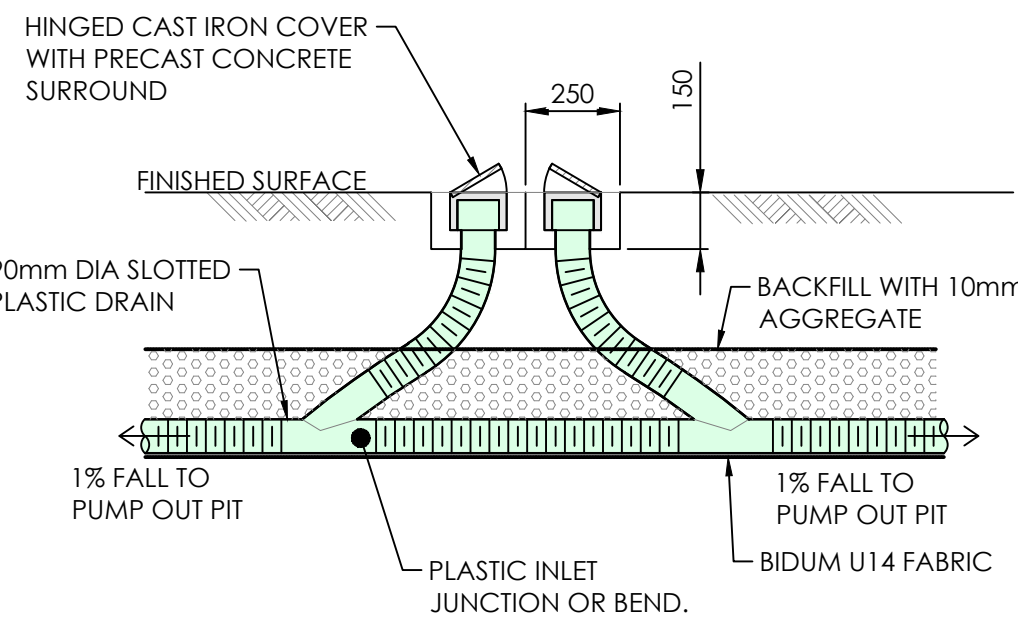
TYPICAL SUBSOIL PIPE/PIT BENCHING
SCALE 1:20



SUBSOIL PIPE CONNECTION
N.T.S



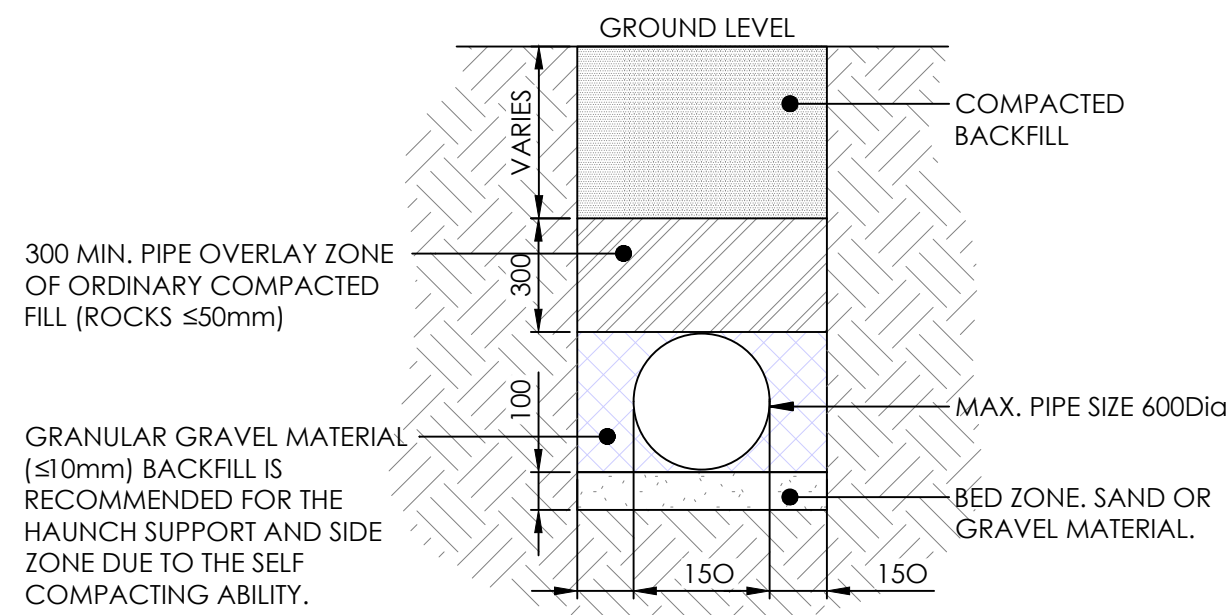
TYPICAL SUBSOIL LINE
N.T.S



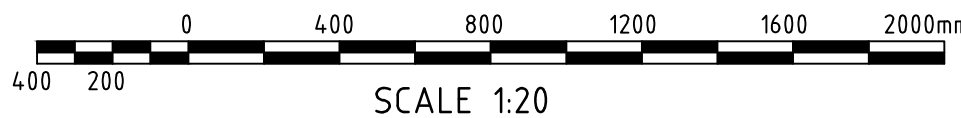
NOTES :

- MINIMUM GRADE OF SUBSOIL DRAINAGE PIPES IS TO BE 1.0%. JOINTS IN FILTER FABRIC TO BE LAPPED A MINIMUM 300mm.

SUBSOIL PIPE FLUSHING POINT
N.T.S



TYPICAL SCHEMATIC PIPE TRENCH DETAIL
SCALE 1 : 20



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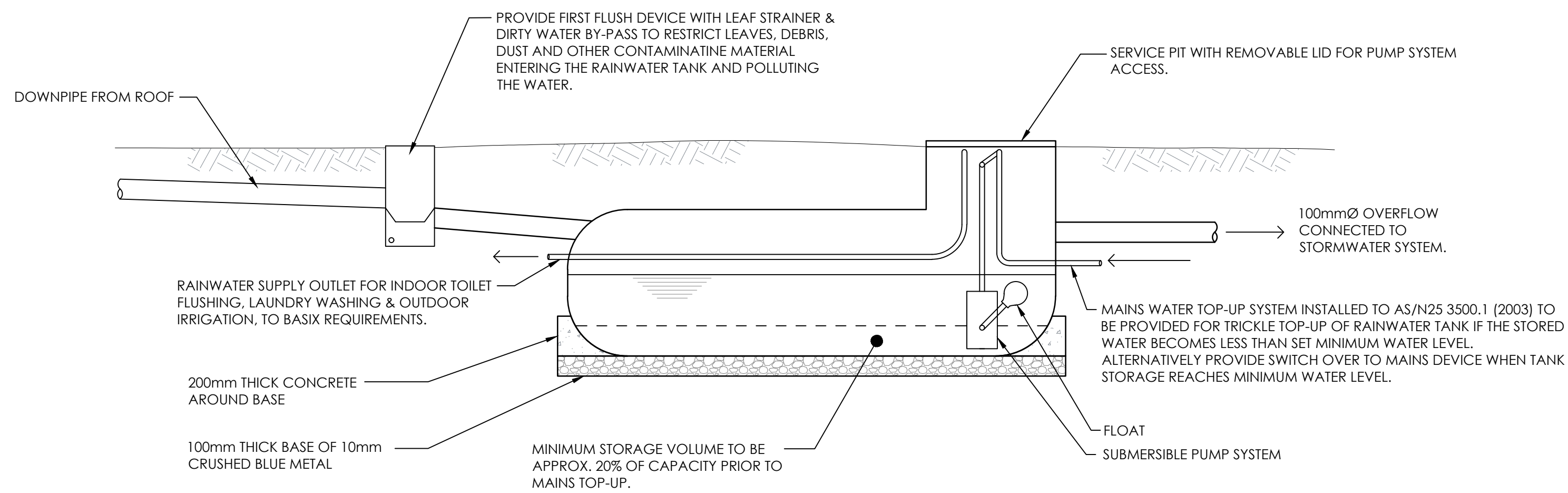
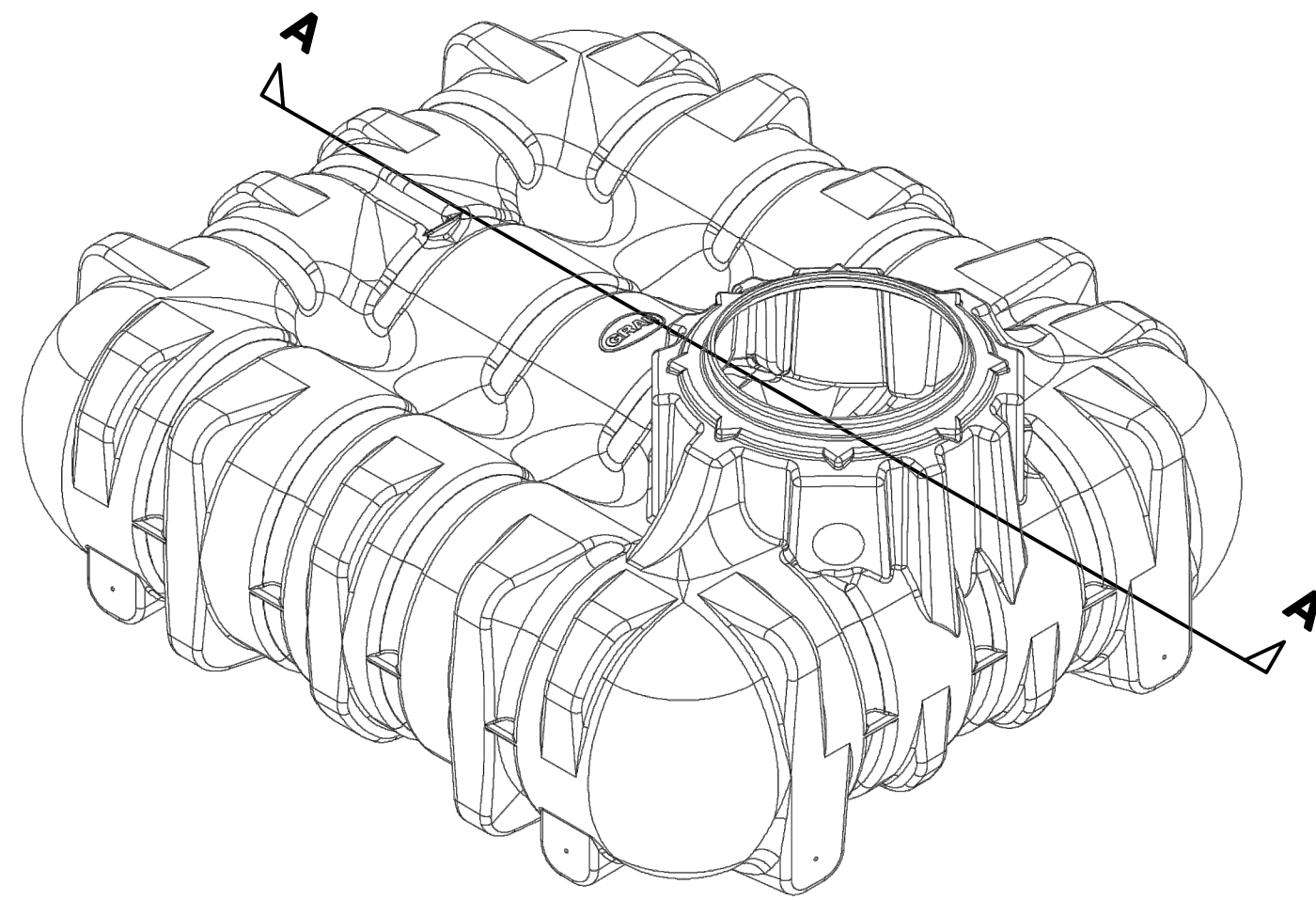
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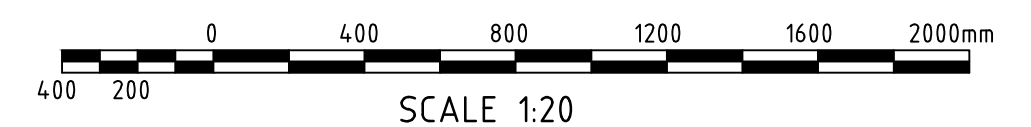
DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
TYPICAL DETAILS
SHEET 1

PROJECT
BLESSED CARLO COLLEGE
ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA
NSW, 2731

PROJECT DETAILS
DESIGN LM
DRAWN DM
DATE DEC 2021
DRG SIZE A1
SCALE AS SHOWN
PROJECT LM
MGR
WWW.JN.COM.AU
N0201396
C110 0



SECTION A-A
UNDERGROUND RAINWATER TANK DETAIL
4 x 3,000 LITRE CAPACITY UNDERGROUND RAINWATER TANKS.



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DESIGN LM
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EROSION AND SEDIMENT CONTROL PLAN
SCALE 1:500



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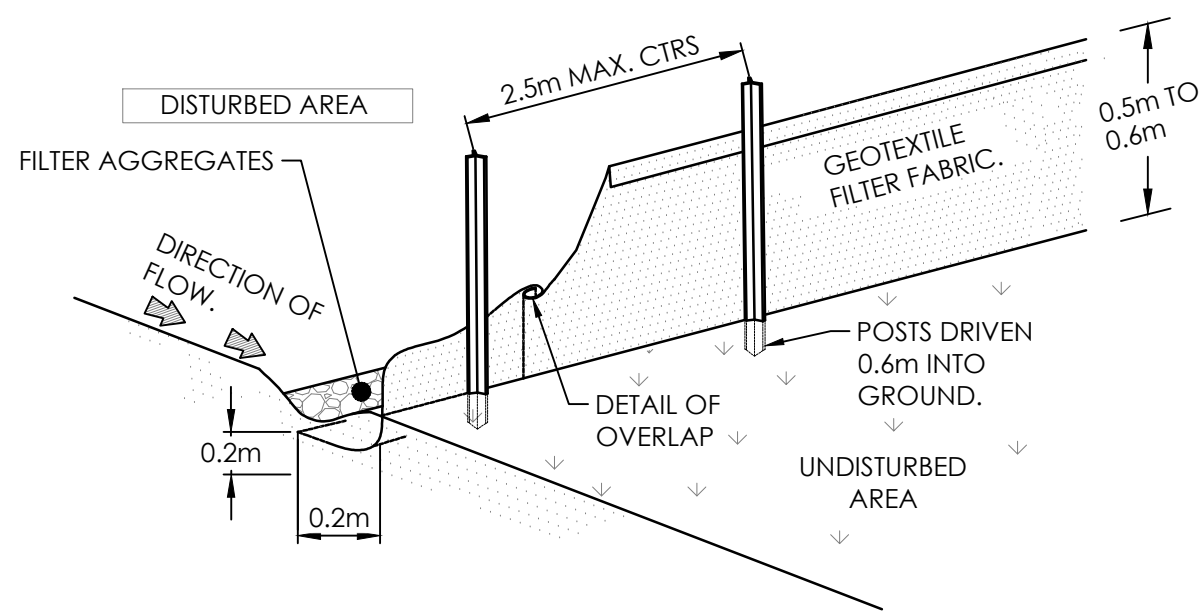
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DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
EROSION AND SEDIMENT
CONTROL PLAN

PROJECT
BLESSED CARLO COLLEGE
ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA
NSW, 2731

PROJECT DETAILS
DESIGN LM
DRAWN DM
DATE DEC 2021
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SCALE AS SHOWN
PROJECT LM
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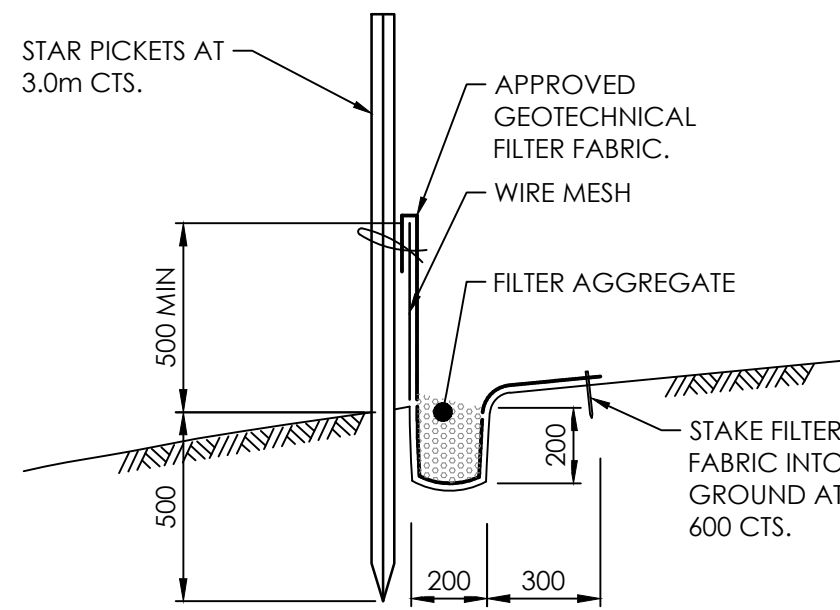
NOTE: DRAINAGE AREA 0.6HA. MAX.
SLOPE GRADIENT 1:2 MAX. SLOPE LENGTH 60M MAX.

SEDIMENT FENCE

N.T.S

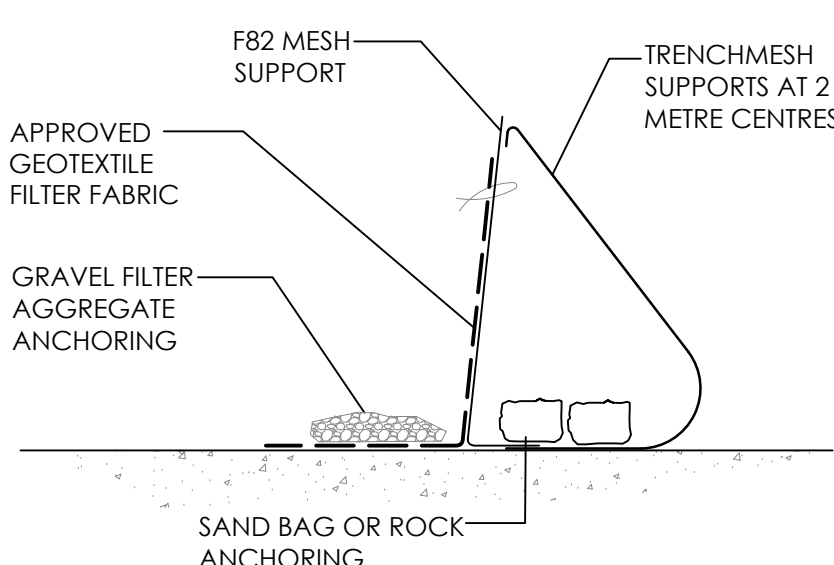
GENERAL CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS IN GROUND 3m APART.
3. DIG A 200mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP.



SILT FENCE DETAIL

N.T.S

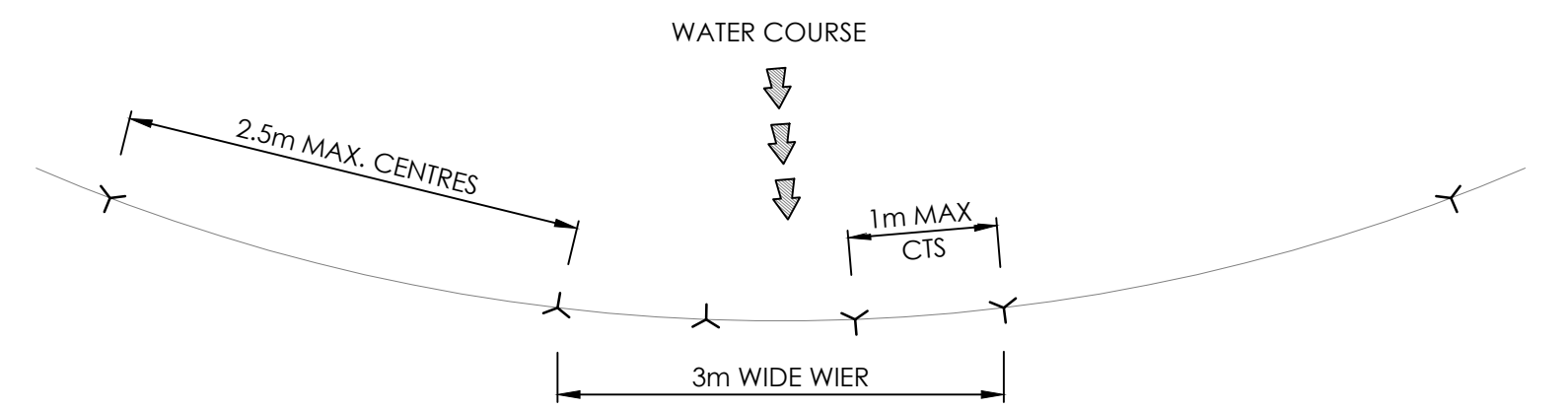


ALTERNATIVE SEDIMENT FENCE (ON CONCRETE)

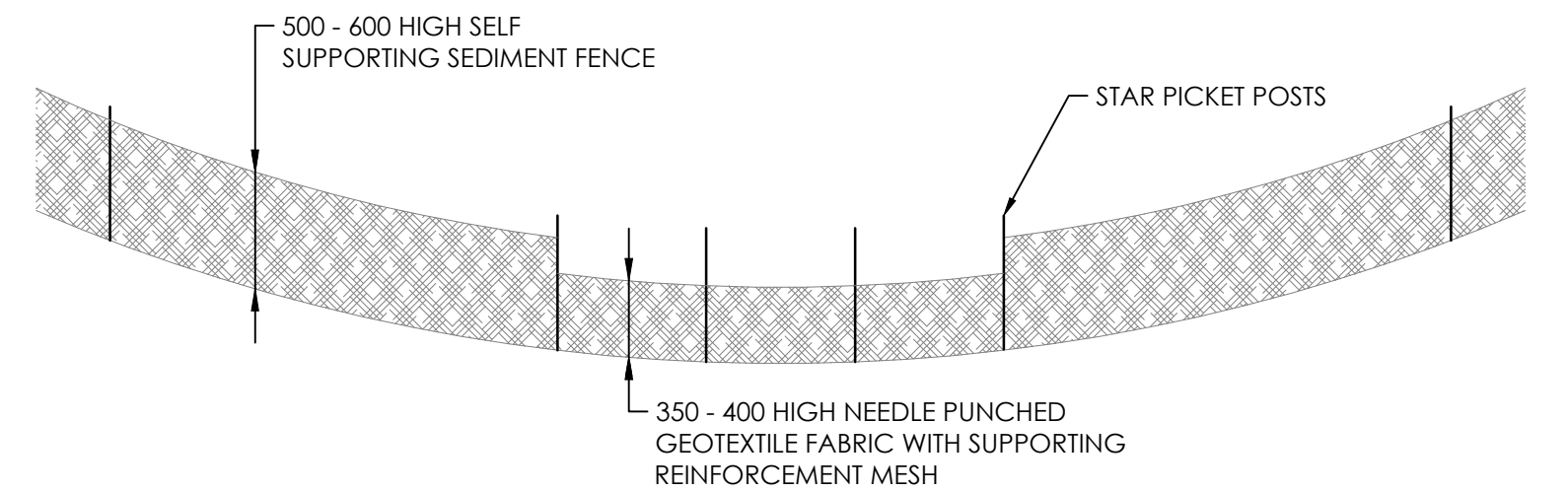
N.T.S.

GENERAL CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
3. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP.
4. REFER TO DETAIL SD 6-9 "BLUE BOOK"



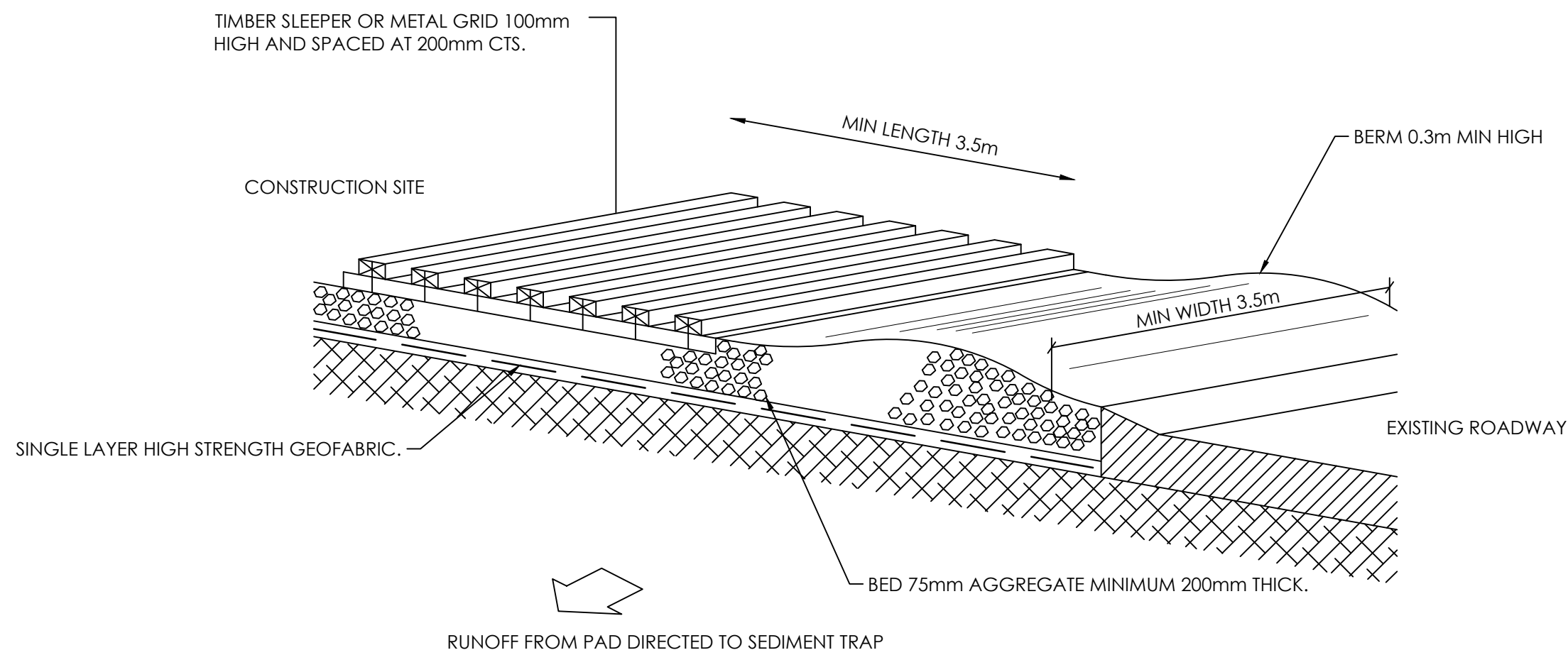
PLAN



ELEVATION

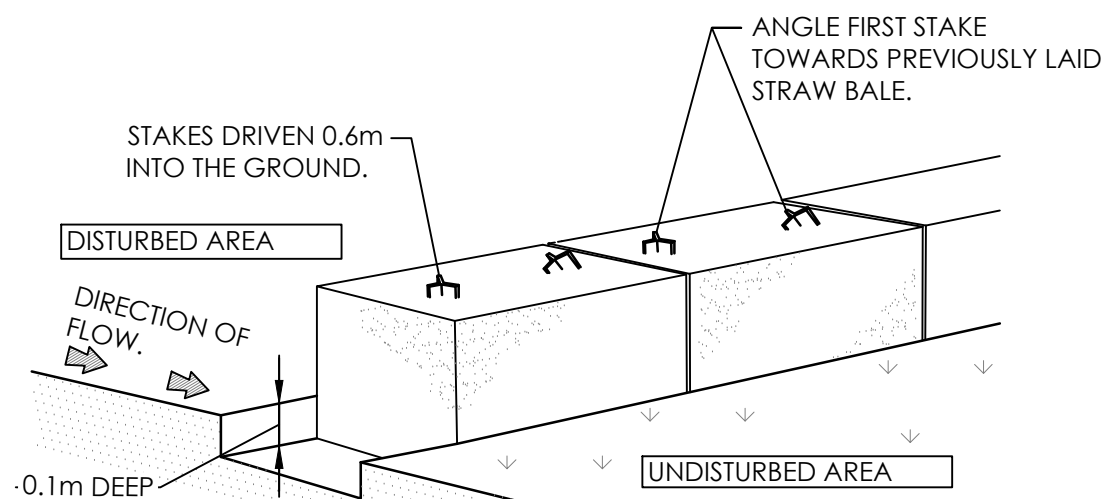
SEDIMENT FENCE WEIR AT CONCENTRATED FLOW LOCATIONS

N.T.S



STABILISED SITE ACCESS

N.T.S

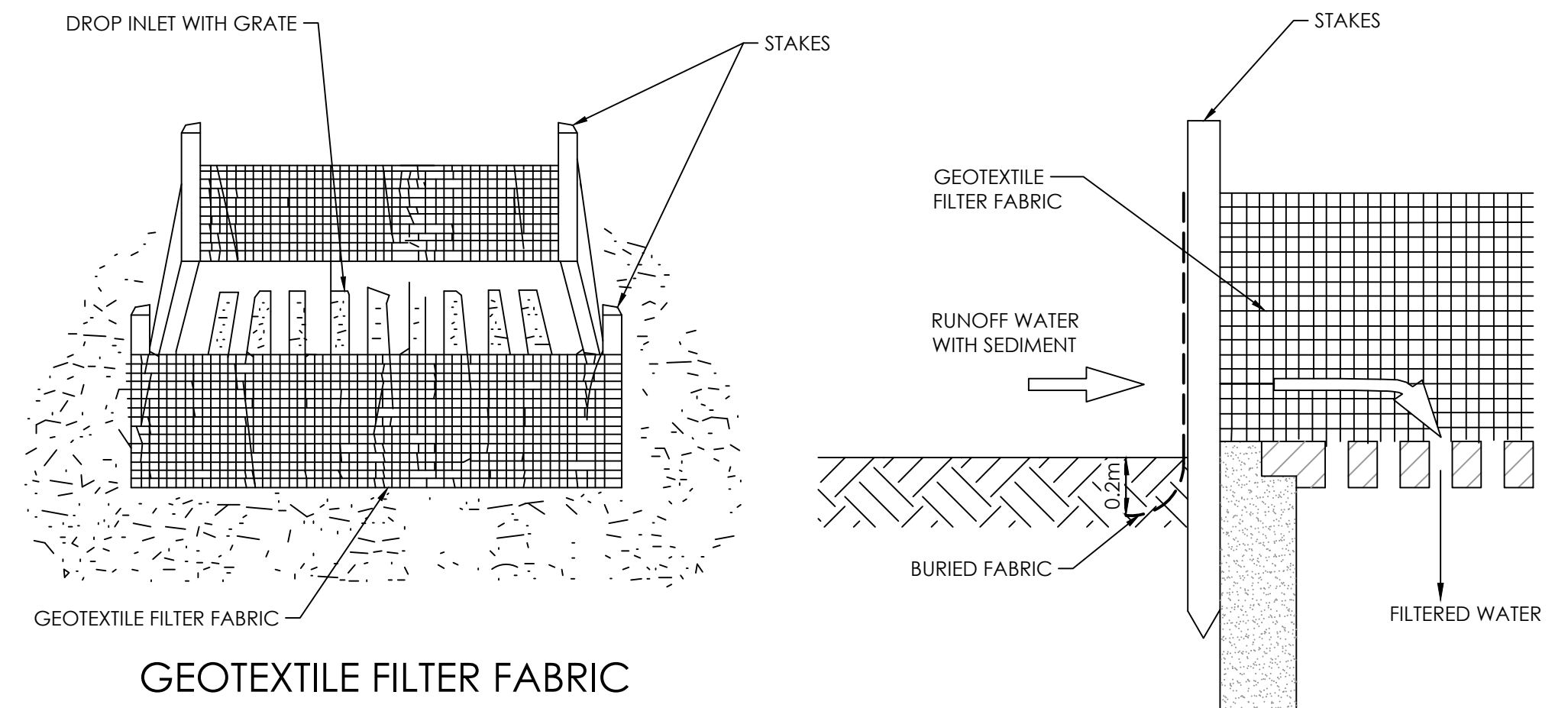


* DRAINAGE AREA 0.4HA MAX. SLOPE GRADIENT 1:2 MAX. SLOPE LENGTH 40m MAX.

STRAW BALE SEDIMENT FILTER

STRAW BALE CONSTRUCTION NOTES

1. CONSTRUCT STRAW BALE FILTER AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE OR THE TOE OF A SLOPE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS TO BE PLACED PARALLEL TO GROUND.
3. MAXIMUM HEIGHT OF FILTER IS ONE BALE.
4. ON SOFT MATERIALS EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2m STAR PICKETS. ANGLE THE FIRST STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE STAKES 600mm INTO THE GROUND AND FLUSH WITH THE TOP OF THE BALES.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER THE BALES SHOULD BE LOCATED 1.5 TO 2m DOWNSLOPE FROM THE TOE OF THE BATTER.
6. STRAW BALES TO BE WRAPPED IN APPROVED GEOTEXTILE FABRIC.



GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP

N.T.S

GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP DETAIL

N.T.S

NOT TO BE USED FOR CONSTRUCTION

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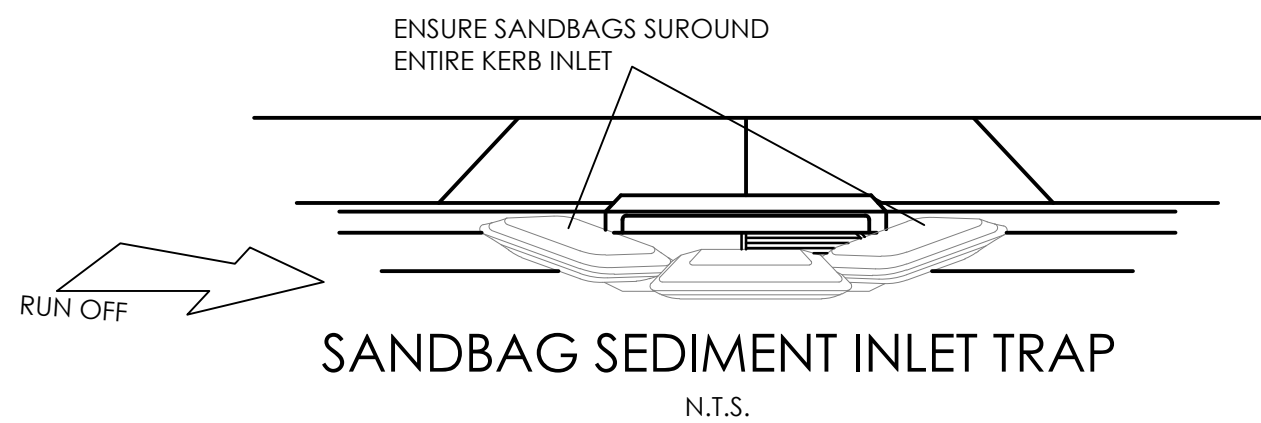
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CIVIL DESIGN
DRAWING TITLE
EROSION AND SEDIMENT
CONTROL DETAILS - SHEET 1

PROJECT
BLESSED CARLO COLLEGE

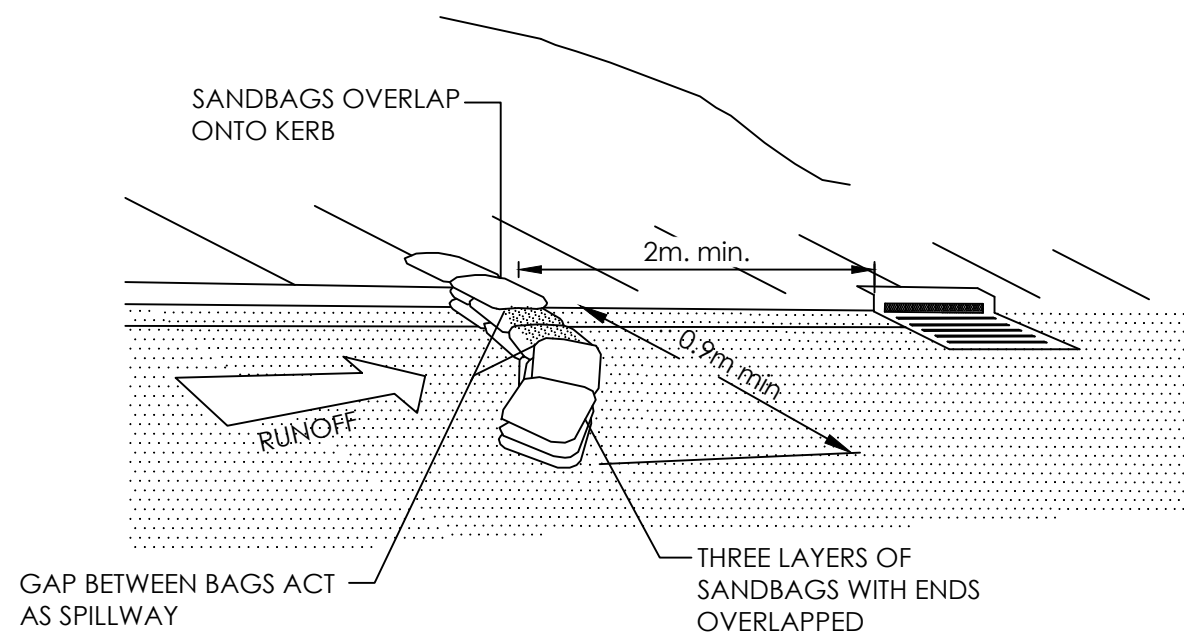
ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA
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DRG SIZE A1
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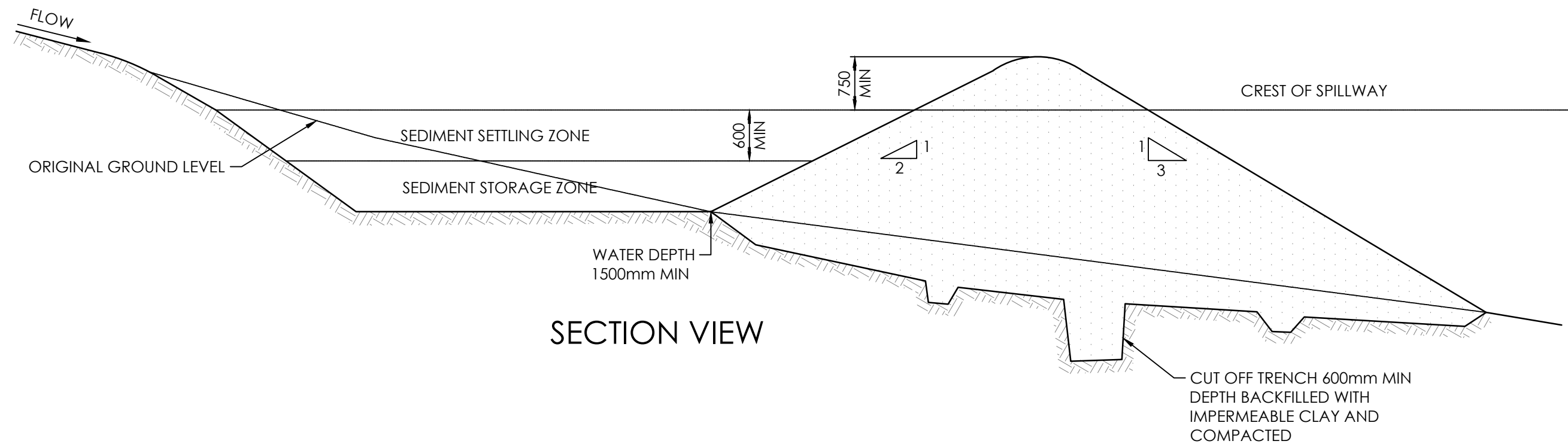
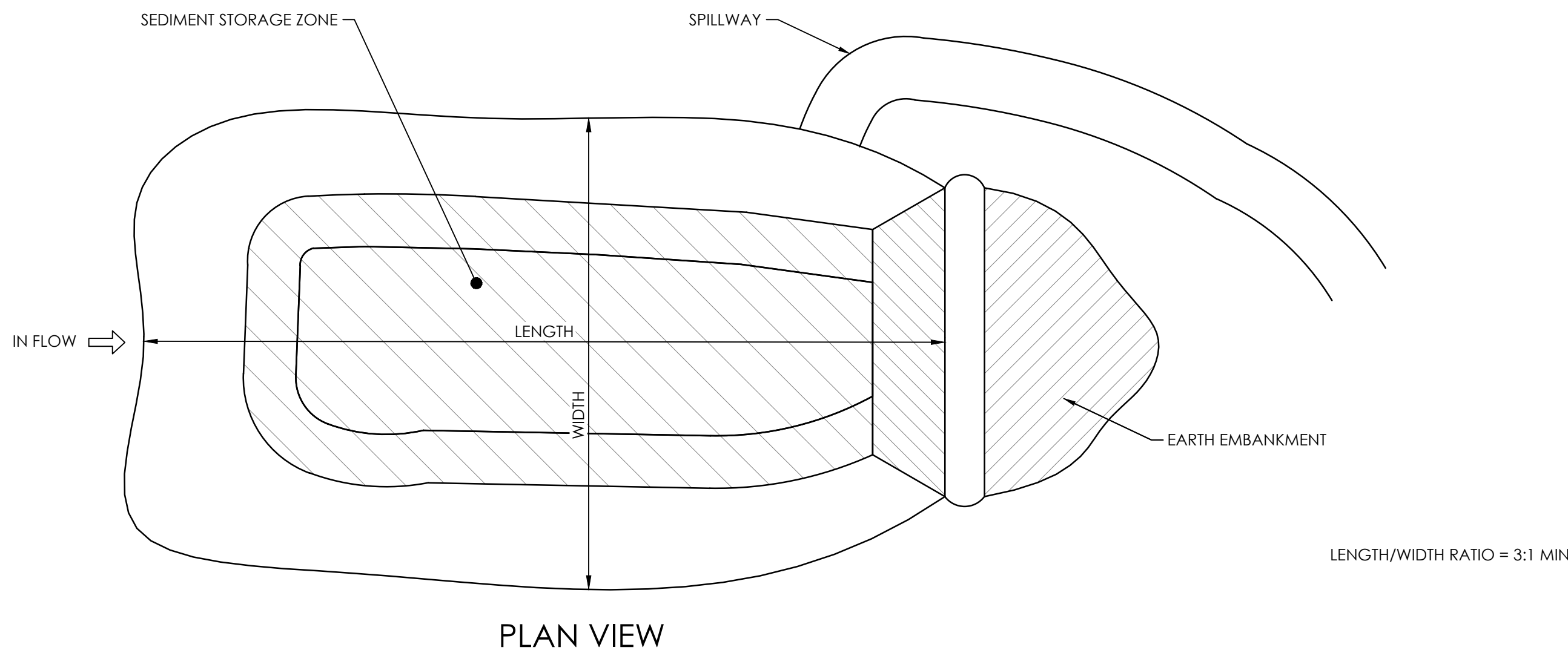
N0201396
C210 1



1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT.
2. FILL THE SLEEVE WITH 25mm TO 50MM GRAVEL.
3. FORM AN ELIPTICAL CROSS SECTION ABOUT 150mm HIGH X 400mm WIDE.
4. PLACE THE FILTER AT THE OPNEING OF THE KERB INLET LEAVING A 100MM GAP AT THE TOP TO ACT AS AN EMERGENCY SPILL WAY.
5. MAINTAIN A CLEAR DISTANCE AWAY FROM THE PIT WITH SPACER BLOCKS.
6. FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER.
7. FIT TO ALL KERB INLETS AS SHOWN.



SANDBAG KERB SEDIMENT TRAP
N.T.S.



EARTH BASIN - WET
N.T.S.

GENERAL CONSTRUCTION NOTES

1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
2. CONSTRUCT A CUT-OFF TRENCH 600mm DEEP AND 1200mm WIDE ALONG THE CENTERLINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT SPECIFIED IN THE SWMP TO 95% STANDARD PROCTOR DENSITY.
4. SELECT FILL ACCORDING TO THE DIRECTIONS OF THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING AT LEAST 100mm DEEP TO HELP BOND COMPACT FILL TO EXISTING SUBSTRATE.
6. SPREAD FILL IN 100mm TO 150mm LAYERS AND COMPACT AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH SWMP.
7. CONSTRUCT EMERGENCY SPILLWAY.
8. REHABILITATE STRUCTURE IN ACCORDANCE WITH THE SWMP.
9. PLACE A "FULL OF SEDIMENT" MARKER TO SHOW WHEN LESS THAN DESIGN CAPACITY OCCURS AND SEDIMENT REMOVAL IS REQUIRED.
10. BASIN MUST BE FULLY DRAINED BETWEEN STORM EVENTS TO ENSURE THE BASINS HAVE THE REQUIRED STORAGE VOLUME PRIOR TO THE START OF THE NEXT STORM.
11. THIS SOIL IS HIGHLY SUSCEPTIBLE TO TUNNELING OR PIPING FAILURE. IT MUST BE WELL COMPACTED THROUGHOUT TO REDUCE PERMEABILITY AND SATURATION SETTLEMENT. THE SOIL SHOULD BE COMPACTED TO AT LEAST 90% MDD BY ENSURING ADEQUATE MOISTURE CONTENT. IF DRIER THAN OPTIMUM, GYPSUM OR HYDRATED LINE SHOULD BE INCORPORATED INTO THE SOIL AT RATES BASED ON LABORATORY TESTING - THE METHOD TO BE DETERMINED BY SITE AND EQUIPMENT CONSTRAINTS. FOR ADDITIONAL STABILITY, THE STRUCTURE SHOULD BE DESIGNED TO HOLD NO MORE THAN 1.0m OF WATER AGAINST THE WALL AND BATTER GRADES SHOULD BE DECREASED TO 3.5:1 (H:V) UPSTREAM AND 3:1 (H:V) DOWNSTREAM.

NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
1	20.12.21	ISSUED FOR SSDA CONCEPT	DM



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CLARKE HOPKINS CLARKE
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EROSION AND SEDIMENT
CONTROL DETAILS - SHEET 2

PROJECT
BLESSED CARLO COLLEGE

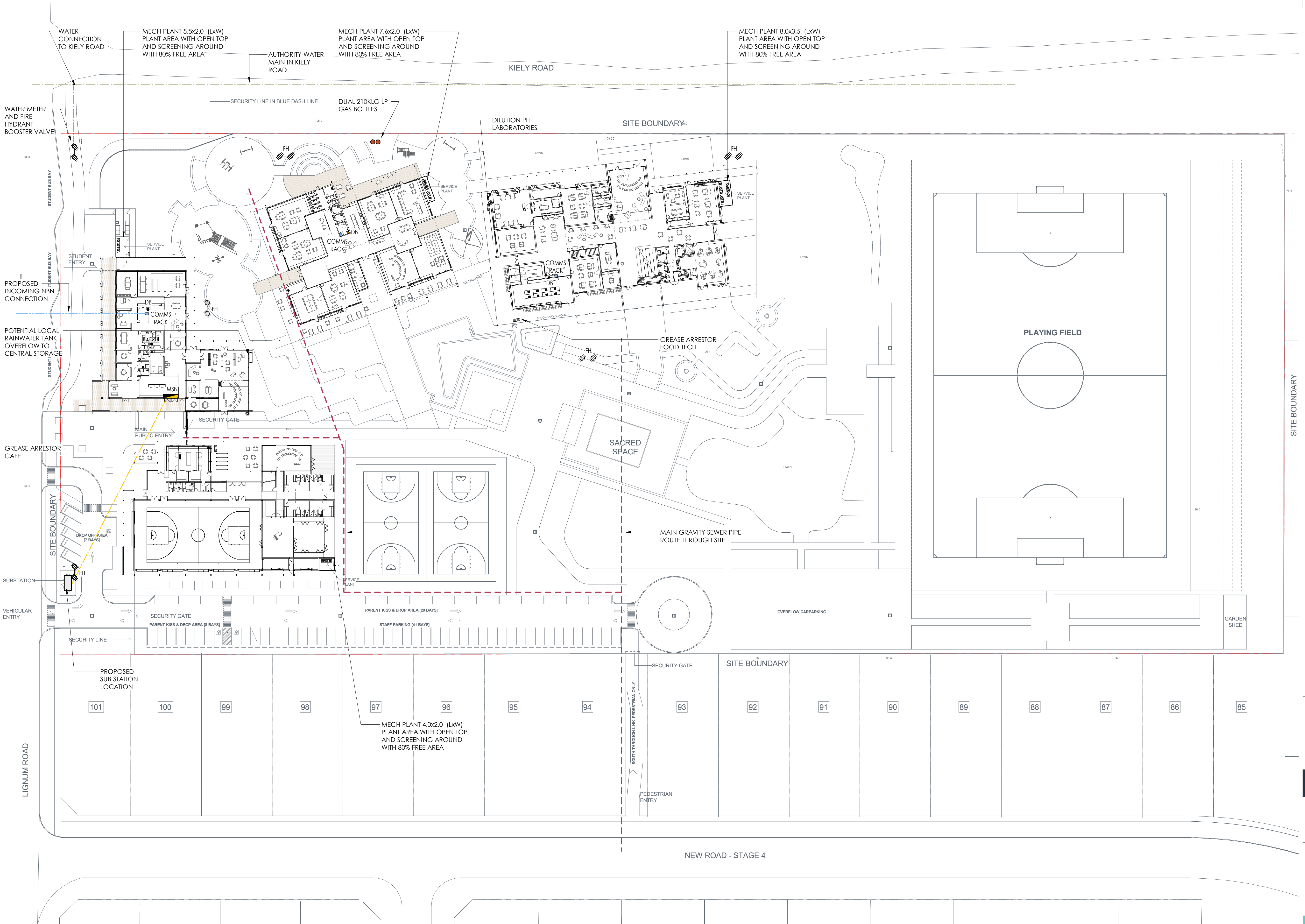
ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA
NSW, 2731

PROJECT DETAILS

DESIGN LM
DRAWN DM
DATE DEC 2021
DRG SIZE A1
SCALE AS SHOWN
PROJECT LM
MGR
WWW.JN.COM.AU

N0201396
C211 1

No	DATE	DESCRIPTION	BY
1	24.11.21	PRELIMINARY ISSUE	GF
2	13.01.22	PRELIMINARY ISSUE	GF
3	28.01.22	PRELIMINARY ISSUE	GF



SITE INFRASTRUCTURE PLAN
SCALE 1 : 500



CLIENT
CLARKE HOPKINS CLARKE

STATUS
PRELIMINARY
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DISCIPLINE
CO-ORDINATION

DRAWING TITLE
SITE INFRASTRUCTURE PLAN

PROJECT
BLESSED CARLO COLLEGE -
K-12 EDUCATION CAMPUS

ADDRESS
LIGNUM ROAD & KIELY ROAD, MOAMA, NSW, 2731

PROJECT DETAILS
DESIGN
DRAWN
DATE
DRG SIZE
SCALE
PROJECT
MGR
NOV 21
A1
1 : 500
GC
WWW.JN.COM.AU
N0201396
B100 3