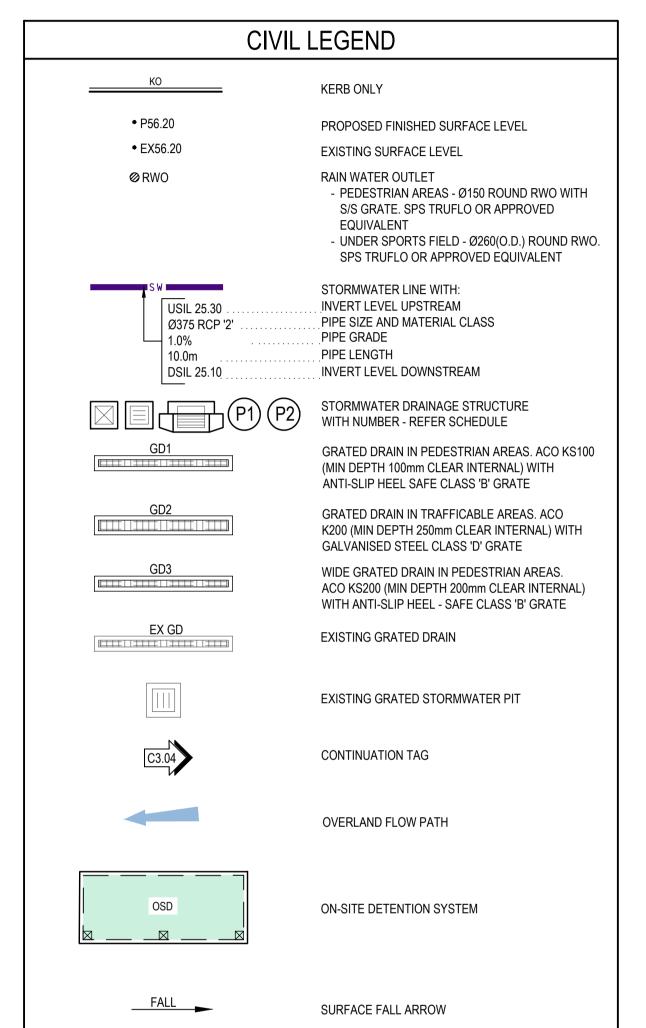
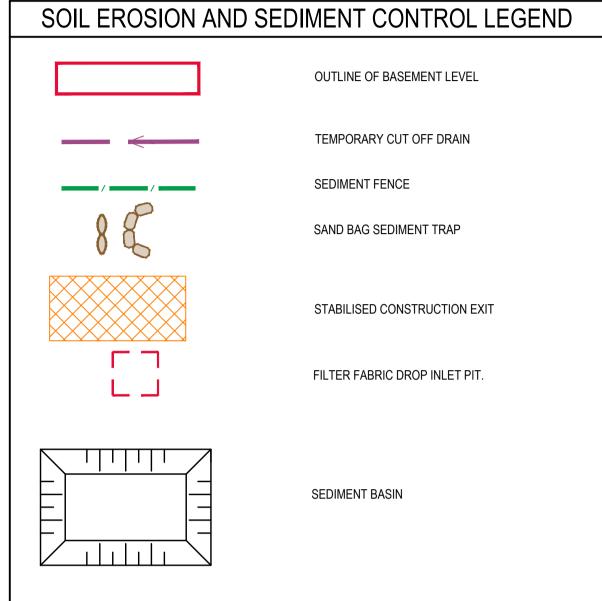
TRINITY GRAMMAR SCHOOL - TGS RENEWAL PROJECT 119 PROSPECT ROAD, SUMMER HILL NSW 2130

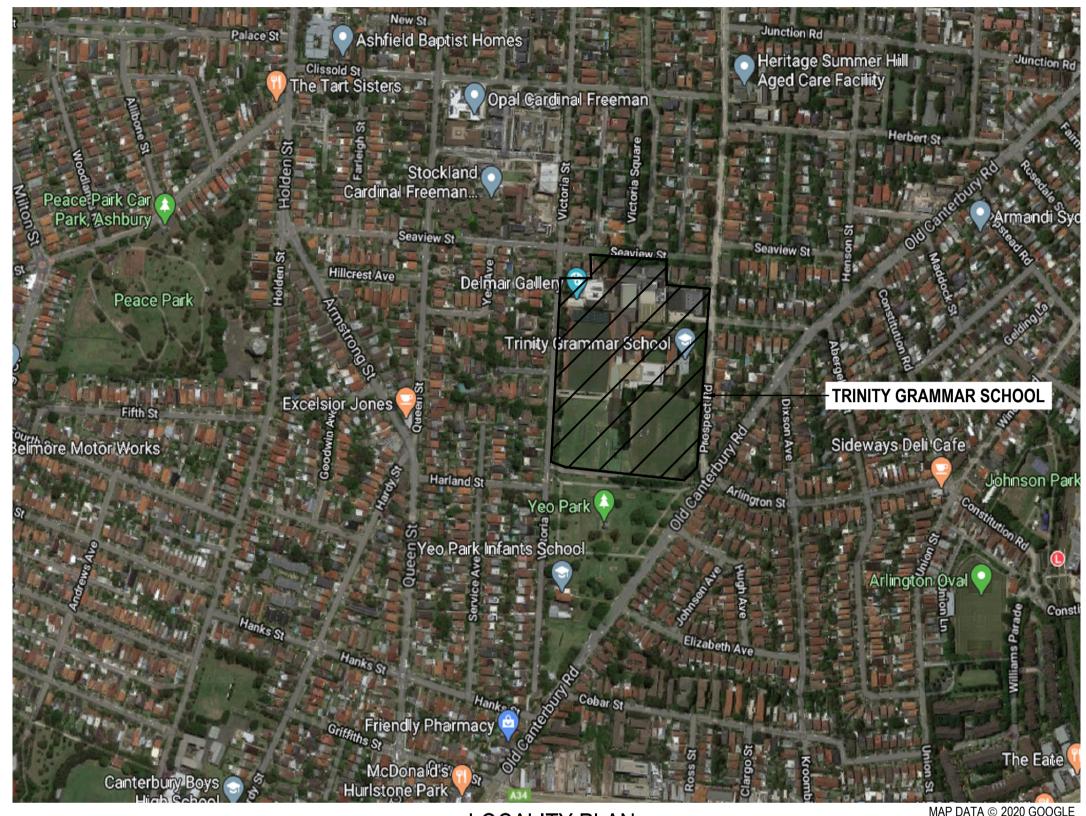
CIVIL SERVICES





EXISTING SERVICES LEGEND			
————EX/S———	EXISTING SEWER		
———— E X / W———	EXISTING WATER		
———— E X / G———	EXISTING GAS		
————E X / T ———	EXISTING COMMUNICATIONS		
——— OF ———	EXISTING OPTIC FIBER		
———— E X / S W ————	EXISTING STORMWATER		
————E X / E———	EXISTING ELECTRICAL		
——ОНЕ ——	EXISTNG OVERHEAD ELECTRICAL		
NBNNBN	EXISTNG NBN		

DRAWING LIST			
DWG No. DESCRIPTION			
C1.01	COVER SHEET AND LEGENDS	А	
C1.02	NOTES	А	
C1.05	DETAILS - SHEET 1	А	
C1.06	DETAILS - SHEET 2	А	
C1.07	DETAILS - SHEET 3	А	
C1.08	DETAILS - SHEET 4	А	
C1.09	DETAILS - SHEET 5	А	
C1.10	DETAILS - SHEET 6	А	
C2.01	BULK EARTHWORKS - CUT AND FILL PLAN	А	
C3.00	KEY PLAN	А	
C3.01	CIVIL WORKS PLAN - SHEET 1 - BASEMENT 2	А	
C3.02	CIVIL WORKS PLAN - SHEET 2 - BASEMENT 1	А	
C3.03	CIVIL WORKS PLAN - SHEET 3 - LEVEL 0	А	
C3.04	CIVIL WORKS PLAN - SHEET 4 - LEVEL 0	А	
C3.05	CIVIL WORKS PLAN - SHEET 5 - LEVEL 0	А	
C3.06	CIVIL WORKS PLAN - SHEET 6 - LEVEL 0	А	
C3.07	CIVIL WORKS PLAN - SHEET 7 - LEVEL 0	А	
C3.08	CIVIL WORKS PLAN - SHEET 8 - LEVEL 0	А	
C3.50	CATCHMENT PLAN	А	
C5.01	SOIL EROSION AND AND SEDIMENT CONTROL PLAN	А	
C5.02	SOIL EROSION AND AND SEDIMENT CONTROL DETAILS	Α	



LOCALITY PLAN

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ARCHITECTURE INTERIORS



St Leonards NSW 2065 T +61 2 9438 5098

ACOR Consultants Pty Ltd | Project | TRINITY GRAMMAR SCHOOL -TGS RENEWAL PROJECT

COVER SHEET AND LEGENDS

Feb-20

NOT FOR CONSTRUCTION

ICONSULTANTS ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

GENERAL NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
- ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION
- 3. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- 4. ALL DIMENSIONS ON DETAILS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. ALL PLANS AND LEVELS ARE EXPRESSED IN METRES.
- 5. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL STABILITY OF THE WORKS AND ENSURE NO PARTS BE OVER STRESSED UNDER CONSTRUCTION ACTIVITIES.
- WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT S.A.A. CODES INCLUDING ALL AMENDMENTS, AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE ENGINEER BUT IS NOT AN AUTHORISATION FOR A VARIATION. ANY VARIATIONS INVOLVED MUST BE TAKEN UP WITH THE ARCHITECT OR PROJECT MANAGER BEFORE THE WORK COMMENCES.
- ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE ENGINEER FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- 9. THE BUILDER SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS.
- 10. BUILDING FROM THESE DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES
- 11. THE WORD 'ENGINEER' USED IN THESE NOTES REFER TO AN EMPLOYEE OR NOMINATED REPRESENTATIVE OF **ACOR CONSULTANTS PTY.LTD**.

COMPACTION NOTES

- ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH THE SITE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY DOUGLAS PARTNERS (REF: 86861)
- 2. STRIP TOPSOIL TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE FOR SELECTIVE RE-USE OR DISPOSE OFF-SITE AS DIRECTED BY THE SUPERINTENDENT.
- WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A DEADWEIGHT (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER.
- 4. ALL SOFT, WET OR UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
- 5. ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE GEOTECHNICAL ENGINEER
 - AND SHALL COMPLY WITH THE FOLLOWING: a. FREE FROM ORGANIC, PERISHABLE AND CONTAMINATED MATTER
 - b. MAXIMUM PARTICLE SIZE 75MM
 - c. PLASTICITY INDEX BETWEEN 2% AND 15%
- 6. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 250MM THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 1289 E3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E1.1:

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

THE UPPER 0.5m THICKNESS FOR THE FOLLOWING AREAS MUST BE COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) AS FOLLOWS

LOCATION	STANDARD DRY I	DENSITY
UNDER BUILDING SLABS		100%
EXTERNAL PAVED AREAS, ROADS A	ND CARPARKS	100%

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

SITEWORKS NOTES

- 1. ORIGIN OF LEVELS :- AUSTRALIAN HEIGHT DATUM (A.H.D.)
- 2. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE PRINCIPAL'S
- EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPAL'S REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- 4. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- 5. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- 7. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED NON-NATURAL GRANULAR MATERIAL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS.1289.5.1.1.
- 8. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ON COMPLETION OF PIPE INSTALLATION ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.
- 10. PROVIDE 12mm WIDE EXPANDING CORK JOINTS BETWEEN CONCRETE PAVEMENTS AND ALL BUILDINGS, WALLS, FOOTINGS, COLUMNS, KERBS, DISH DRAINS, GRATED DRAINS, BOLLARD FOOTINGS ETC
- 11. CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS.
- 12. ALL BATTERS TO BE GRASSED LINED WITH MINIMUM 100 TOPSOIL AND APPROVED COUCH LAID AS TURF.

EXISTING SERVICES AND FEATURES

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

STORMWATER NOTES

- 1. ALL 375 DIA. DRAINAGE PIPES AND LARGER SHALL BE CLASS "2" APPROVED SPIGOT AND SOCKET FRC OR RCP PIPES WITH RUBBER RING JOINTS. (U.N.O.) ALL DOWNPIPE DRAINAGE LINES SHALL BE SEWER GRADE uPVC WITH SOLVENT WELD JOINTS. (U.N.O.)
- 2. EQUIVALENT STRENGTH REINFORCED CONCRETE PIPES MAY BE USED.
- 3. ALL PIPE JUNCTIONS UP TO AND INCLUDING 450 DIA. AND TAPERS SHALL BE VIA PURPOSE
- 4. MINIMUM GRADE TO STORMWATER LINES TO BE 1%. (U.N.O.)
- CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
- 6. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
- 7. PRECAST PITS SHALL NOT BE USED UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE SUPERINTENDENT.
- 8. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN. 50MM CONCRETE BED (OR 75MM THICK BED OF 12MM BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. IN OTHER THAN ROCK, PIPES SHALL BE LAID ON A 75MM THICK SAND BED. IN ALL CASES BACKFILL THE TRENCH WITH SAND TO 200MM ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH WITH SAND OR APPROVED GRANULAR BACKFILL COMPACTED IN 150MM LAYERS TO 98% STANDARD MAX. DRY DENSITY.
- 9. BEDDING SHALL BE (U.N.O.) TYPE H2, IN ACCORDANCE WITH CURRENT RELEVANT AUSTRALIAN STANDARDS.
- 10. WHERE STORMWATER LINES PASS UNDER FLOOR SLABS SEWER GRADE RUBBER RING JOINTS ARE TO BE USED.
- 11. WHERE SUBSOIL DRAINAGE LINES PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS UNSLOTTED UPVC SEWER GRADE PIPE SHALL BE USED.
- 12. PROVIDE 3.0M LENGTH OF 100 DIA. SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK. AT UPSTREAM END OF EACH PIT.

RAINWATER REUSE SYSTEM

MARKING & LABELLING

1. THE WATER SUPPLY SYSTEM FROM A RAINWATER TANK SHALL BE CLEARLY MARKED 'RAINWATER' AT INTERVALS NOT EXCEEDING 1m WITH CONTRASTING COLOURED WORDING. WATER OUTLETS SHALL BE IDENTIFIED AS 'RAINWATER' WITH A LABEL OR A RAINWATER TAP IDENTIFIED BY A GREEN COLOURED INDICATOR WITH THE LETTERS 'RW'.

NON-DRINKING WATER SERVIES - HOSE TAP OUTLETS

2. HOSE TAP OUTLETS SHALL: -

- a. BE CLEARLY MARKED 'WARNING: NOT FOR DRINKING' IN ACCORDANCE WITH THE REQUIREMENTS OF AS 1319.
- b. BE OF A TYPE THAT HAS A REMOVABLE HANDLE.

PROXIMITY TO OTHER SERVICES

THE FOLLOWING APPLIES:

- ABOVEGROUND INSTALLATION OF NON-DRINKING WATER SERVICES SHALL NOT BE INSTALLED WITHIN 100mm OF ANY PARALLEL DRINKING WATER SERVICE, EXCEPT WHEN INSTALLED IN PIPE DUCT OR STRUCTURALLY SEPARATED
- BELOW-GROUND INSTALLATIONS OF NON-DRINKING WATER SERVICES SHALL NOT BE INSTALLED WITHIN 300mm OF ANY PARALLEL DRINKING WATER SUPPLY.

MARKING & LABELLING OF NON-DRINKING WATER PIPES & OUTLETS

- ALL PIPES, PIPE SLEEVES, IDENTIFICATION TAPES, & OUTLETS SHALL BE COLOURED LILAC (P23) IN ACCORDANCE WITH AS 2700
- b. ALL PIPES, PIPE SLEEVES & IDENTIFICATION TAPES, IN ACCORDANCE WITH AS 1345, SHALL BE MARKED WITH THE FOLLOWING, WARNING: RECYCLED OR RECLAIMED -WATER - DO NOT DRINK

BELOW GROUND PIPES

a. ALL BELOW GROUND PIPES SHALL HAVE AN IDENTIFICATION TAPE IN ACCORDANCE WITH CLAUSE GENERAL INSTALLED ON TOP OF THE WATER PIPELINE, RUNNING LONGITUDINALLY, & FASTENED TO THE PIPE AT NOT MORE THAN 3m INTERVALS.

OUTLET POINTS

a. ALL OUTLET POINTS SHALL BE CLEARLY & PERMANENTLY MARKED 'WARNING: NOT FOR DRINKING' WITH SAFETY SIGNS TO COMPLY WITH AS 1319 & AS 1345.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- E1. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND ANY OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO DEVELOPMENT AT THE SUBJECT SITE.
- E2. THE SITE SUPERINTENDENT WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THIS SPECIFICATION.
- E3. ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

CONSTRUCTION SEQUENCE

- E4. THE SOIL EROSION POTENTIAL ON THIS SITE SHALL BE MINIMISED. HENCE WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
 - a. INSTALL SEDIMENT FENCES, TEMPORARY CONSTRUCTION EXIT AND SANDBAG KERB INLET SEDIMENT TRAP.
 - b. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

- E5. DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- E6. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

FENCING

- E7. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- E8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- E9. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- E10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

- E11. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- E12. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.

SITE INSPECTION & MAINTENANCE

E13. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIR AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED.

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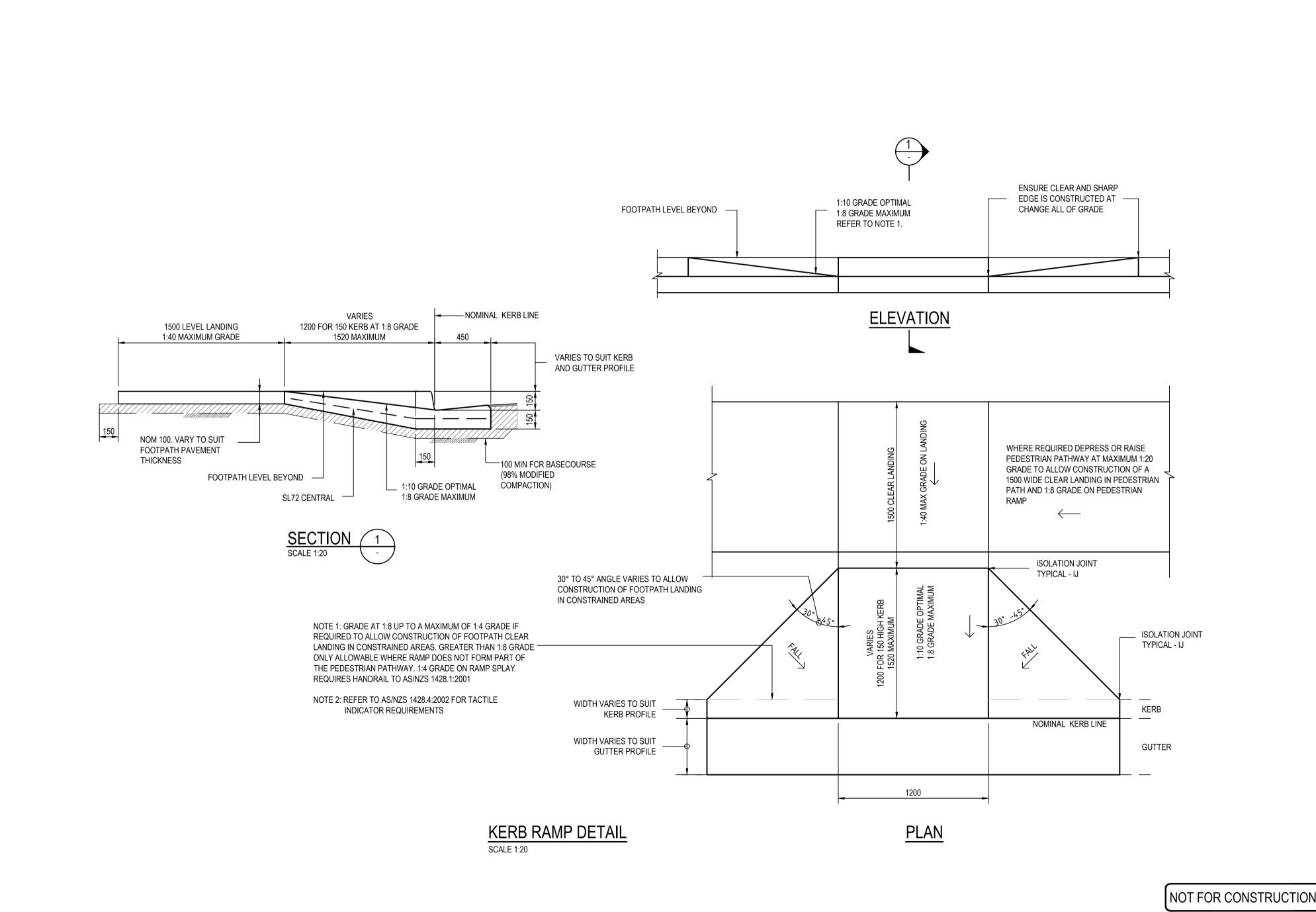
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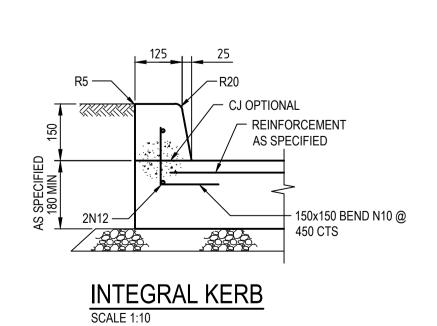
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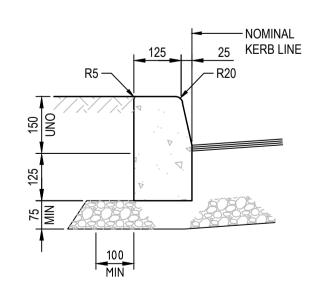
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KERB ONLY SCALE 1:10 SHOWN AS "KO"

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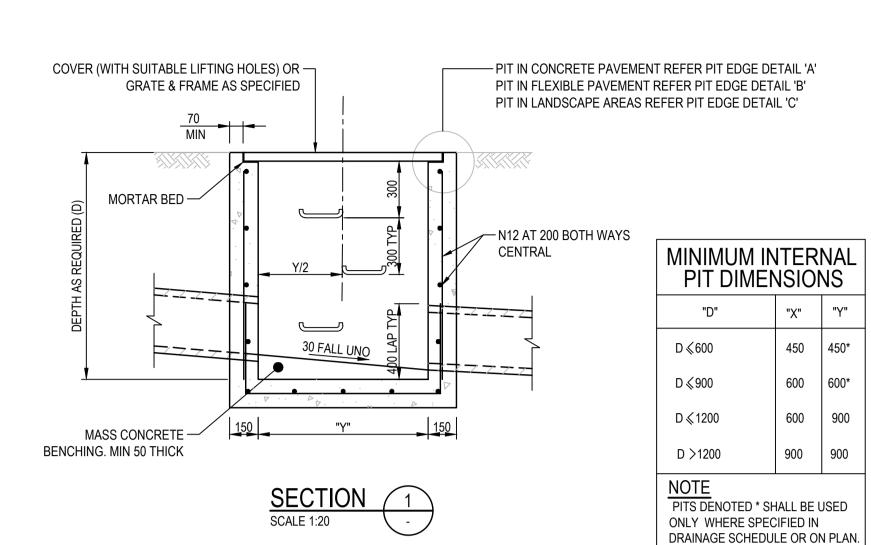
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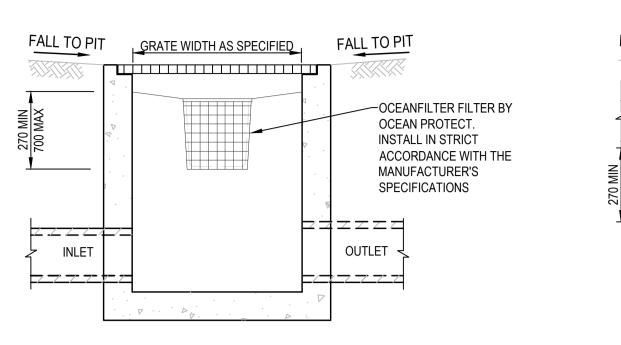
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DETAILS SHEET 1

A1 Q.A. Check Feb-20 AS SHOWN Project No. **SY180989** C1.05





TYPICAL OCEANGUARD ARRANGEMENT DETAIL -

SURFACE INLET TREATMENT

REFER TO MANUFACTURER'S DRAWINGS FOR OCEANGUARD

FILTER ARRANGEMENT AND COMPONENTS DETAILS

NOT TO SCALE

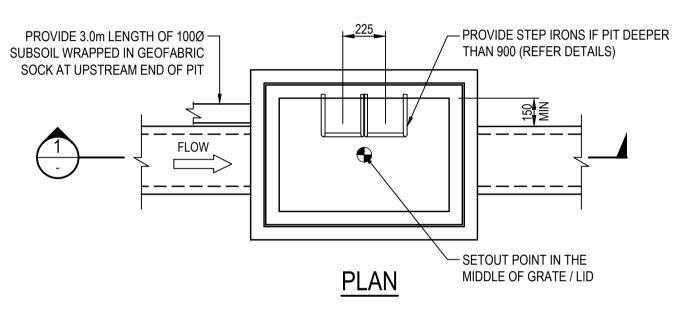
NOTE:

FALL TO PIT FALL TO PIT GRATE WIDTH AS SPECIFIED ✓OCEANGUARD FILTER INLET BY OCEAN PROTECT. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S **SPECIFICATIONS** OUTLET \rightarrow \rightarrow \rightarrow \rightarrow

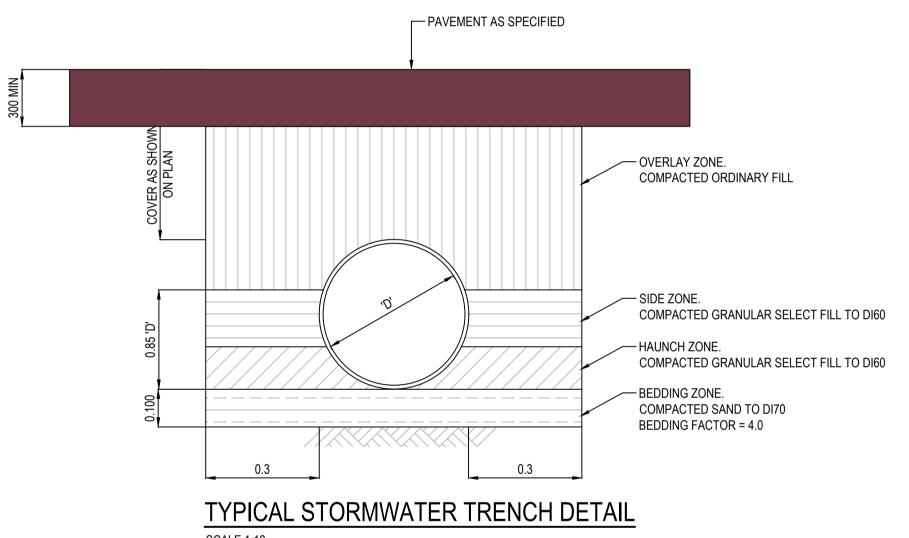
TYPICAL OCEANGUARD ARRANGEMENT DETAIL -DOWNPIPE CONNECTION / DROP PIT

NOT TO SCALE

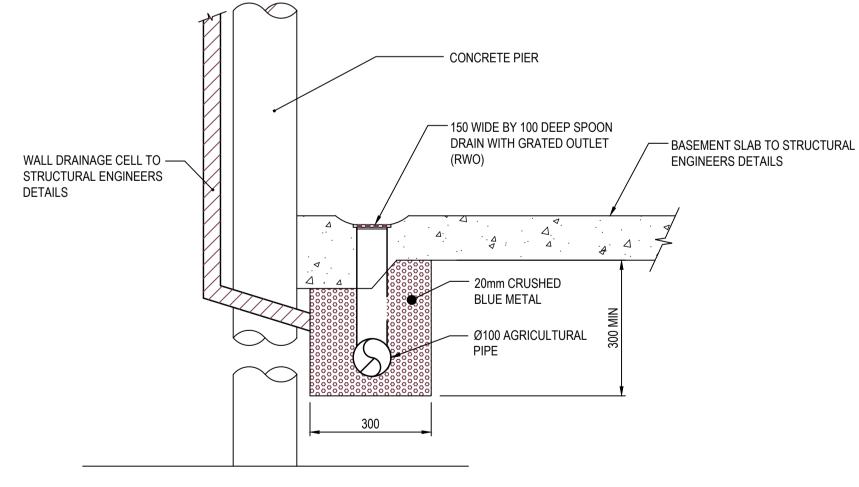
REFER TO MANUFACTURER'S DRAWINGS FOR OCEANGUARD FILTER ARRANGEMENT AND COMPONENTS DETAILS



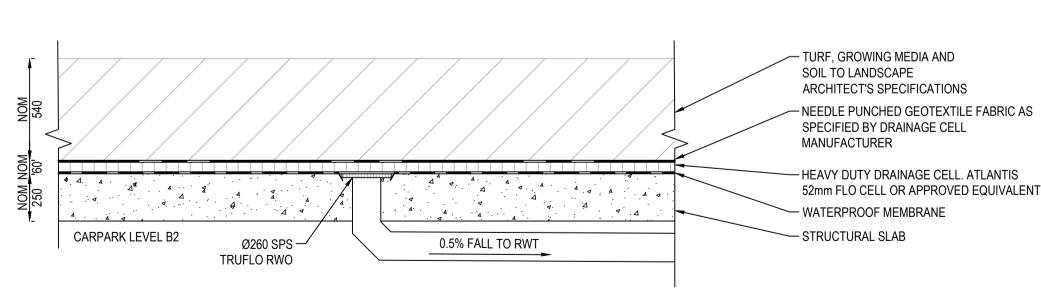
SURFACE INLET/JUNCTION PIT TYPE "A"



NOTE STORMWATER PIPE INSTALLATION TO BE IN ACCORDANCE WITH AS3725, AS3500.3, AS2566.1, CURRENT CPAA SPECIFICATIONS AND ALL OTHER RELEVANT STANDARDS

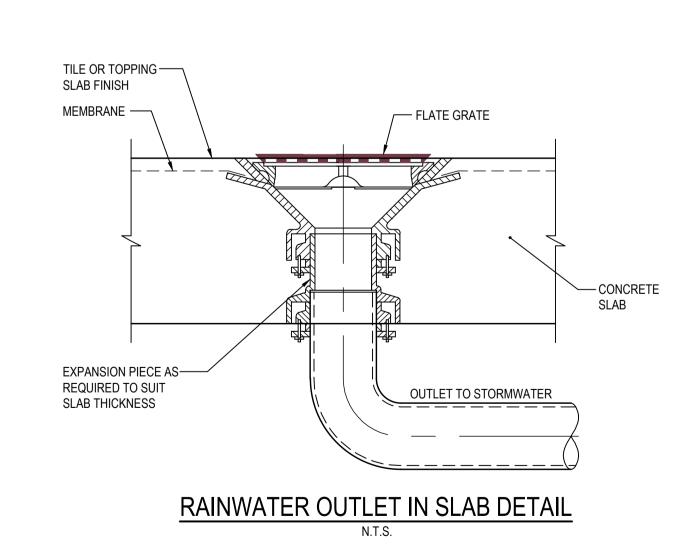


SPOON DRAIN & WALL DRAINAGE CELL



RAINWATER OUTLET DETAIL (UNDER SPORTS FIELD) NOT TO SCALE

SCHEDULE OF STORMWATER DRAINAGE PITS PIT CLEAR INTERNAL DIMENSIONS, SIZE AND TYPE PIT NUMBER 900X900 WITH CLASS 'B' GALVANISED MILD STEEL, HEEL SAFE, ANTI P1 SLIP GRATE AND FRAME. GRATE TO BE HINGED TO FRAME 600X600 WITH CLASS 'B' GALVANISED MILD STEEL, HEEL SAFE, ANTI P2 SLIP GRATE AND FRAME. GRATE TO BE HINGED TO FRAME 900X900 WITH CLASS 'D' GALVANISED MILD STEEL GRATE AND P3 FRAME. GRATE TO BE HINGED TO FRAME 900X900 WITH CLASS 'B' CAST IRON SOLID COVER AND FRAME. P4 COVER TO BE CONCRETE INFILLED 900X900 WITH CLASS 'D' CAST IRON SOLID COVER AND FRAME. P5 **COVER TO BE CONCRETE INFILLED** 600X600 WITH CLASS 'B' CAST IRON SOLID COVER AND FRAME. P6 COVER TO BE CONCRETE INFILLED 600X600 WITH CLASS 'D' GALVANISED MILD STEEL AND FRAME. P7 GRATE TO BE HINGED TO FRAME 900X900 WITH CLASS 'B' GALVANISED MILD STEEL, HEEL SAFE, ANTI SLIP GRATE AND FRAME. GRATE TO BE HINGED TO FRAME.PIT TO BE P8 CAST INTO STRUCTURAL SLAB 1800X1800 WITH CLASS 'D' GALVANISED MILD STEEL AND FRAME. P9 GRATE TO BE HINGED TO FRAME 1200X1200 WITH CLASS 'D' GALVANISED MILD STEEL AND FRAME. P10 GRATE TO BE HINGED TO FRAME 1500X1500 WITH CLASS 'D' CAST IRON SOLID COVER AND FRAME. P11 COVER TO BE CONCRETE INFILLED 1200X1200 WITH CLASS 'D' CAST IRON SOLID COVER AND FRAME. P12 **COVER TO BE CONCRETE INFILLED** EXISTING PIT TO BE RECONSTUCTED TO SUIT NEW PIPES P13



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TRINITY GRAMMAR SCHOOL -TGS RENEWAL PROJECT

DETAILS SHEET 2

Feb-20 AS SHOWN SY180989 C1.06

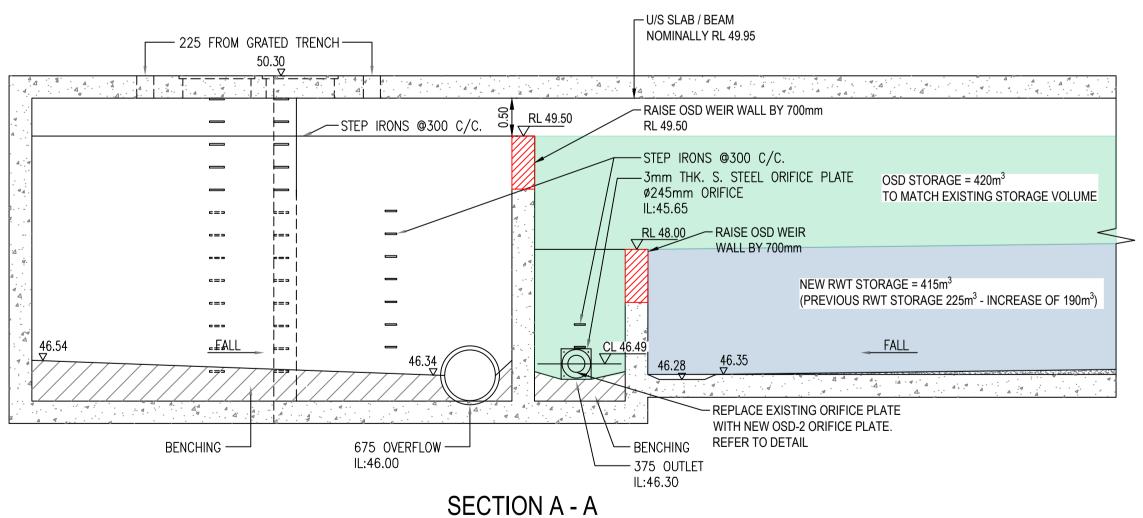
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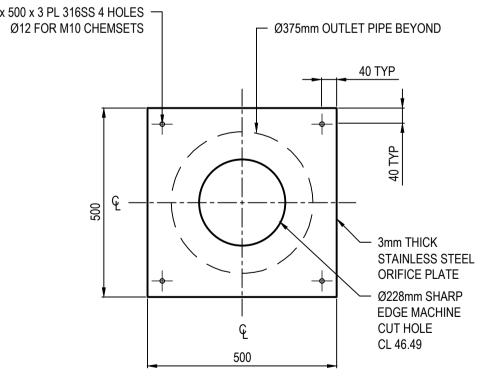
ARCHITECTURE INTERIORS MASTERPLANNING

T +61 2 9438 5098

1 119 PROSPECT RD, SUMMER HILL NSW 2130 **CONSULTANTS** ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

NOTE: EXISTING OSD CONFIGURATION IS BASED ON AVAILABLE DESIGN DRAWINGS PREPARED BY LHO GROUP FOR THE OVAL 2 CARPARK (REF:0808-0015-H06-T) CONFIRMATION OF OSD CONFIGURATION TO BE UNDERTAKEN PRIOR TO ANY WORKS STEP IRONS @300 C/C. — 5x300 INLET ____ 225 FROM 225 FROM ----GRATED TRENCH GRATED TRENCH 225 FROM ----GRATED TRENCH - 900x900 LD COVER 900x900 LD COVER -225 INLET FROM GRTED TRENCH STEP IRONS @300 C/C. OSD TWL:48.80 OSR TWL:47.30 OSR OVERFLOW WEIR CREST LEVEL 47.30 OSD OVERFLOW WEIR rSTEP IRONS @300 C/C.-CREST LEVEL 48.80 -3mm THK. S. STEEL ORIFICE PLATE ø245mm ORIFICE • 46.40 IL:45.65 • 46.54 - 300 INLET - 600×600 PUMP SUMP FALL FALL WITH NOSSITER SUBMERSIBLE PUMP DUTY 1L/S @18m HEAD • 46.54 4 4 4 4 375 OUTLET IL:46,30 IL:49.50 675 OVERFLOW IL:46.00 UUUU TANK's INLET & OUTLET TO BE PROTECTED WITH MOSQUITO PROOF MESH SCREEN (1x1mm OPENING) RAINWATER RE-USED FOR LANDSCAPE IRRIGATION U/S SLAB / BEAM NOMINALLY RL 49.95 ---- 225 FROM GRATED TRENCH-- RAISE OSD WEIR WALL BY 700mm -STEP IRONS @300 C/C. ST RL 49.50 RL 49.50 500 x 500 x 3 PL 316SS 4 HOLES --STEP IRONS @300 C/C.





OSD-2 ORIFICE PLATE

EXISTING OVAL 2 OSD/RWT MODIFICATIONS (OSD-2)
SCALE 1:50

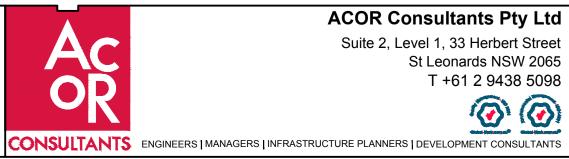
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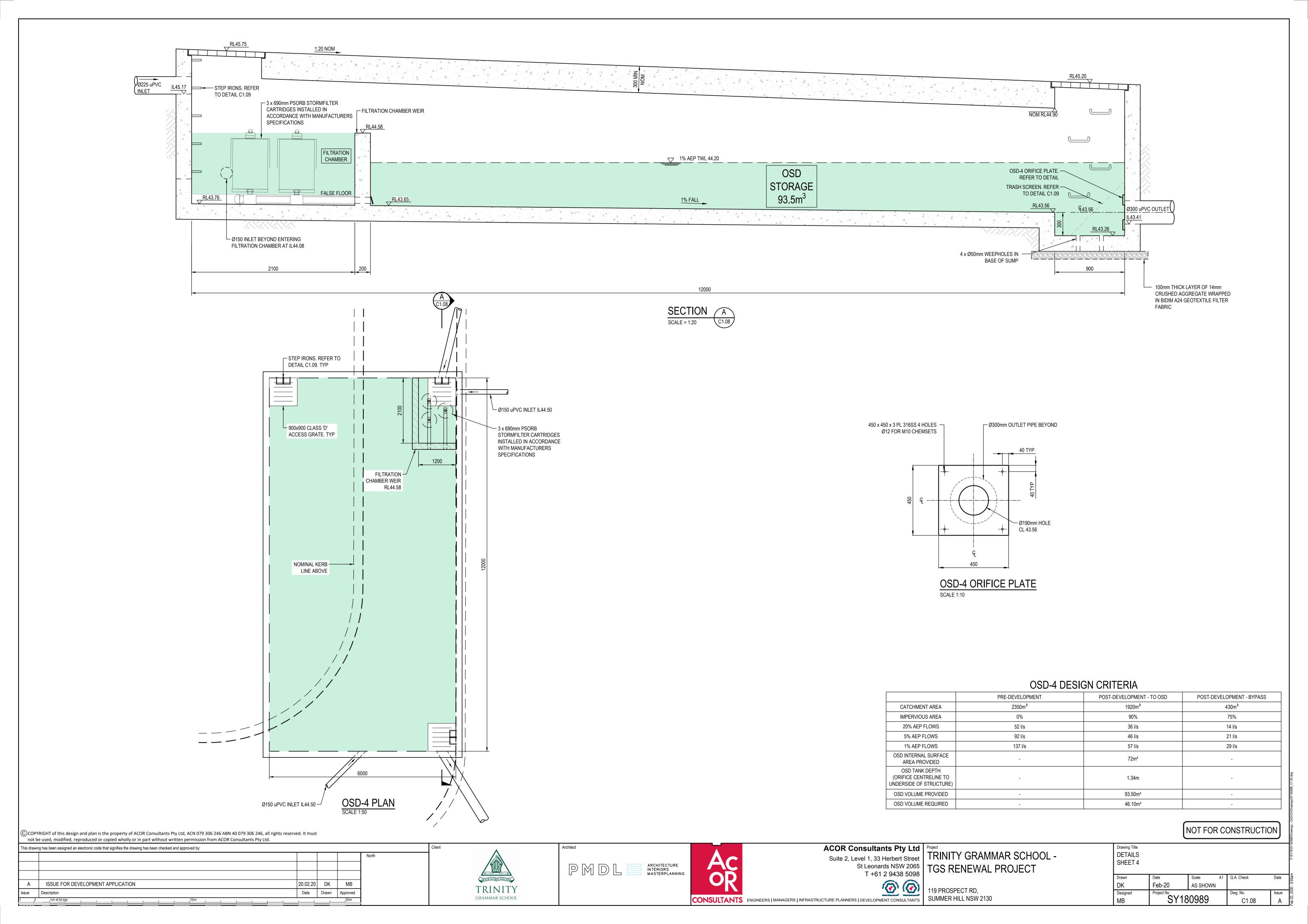
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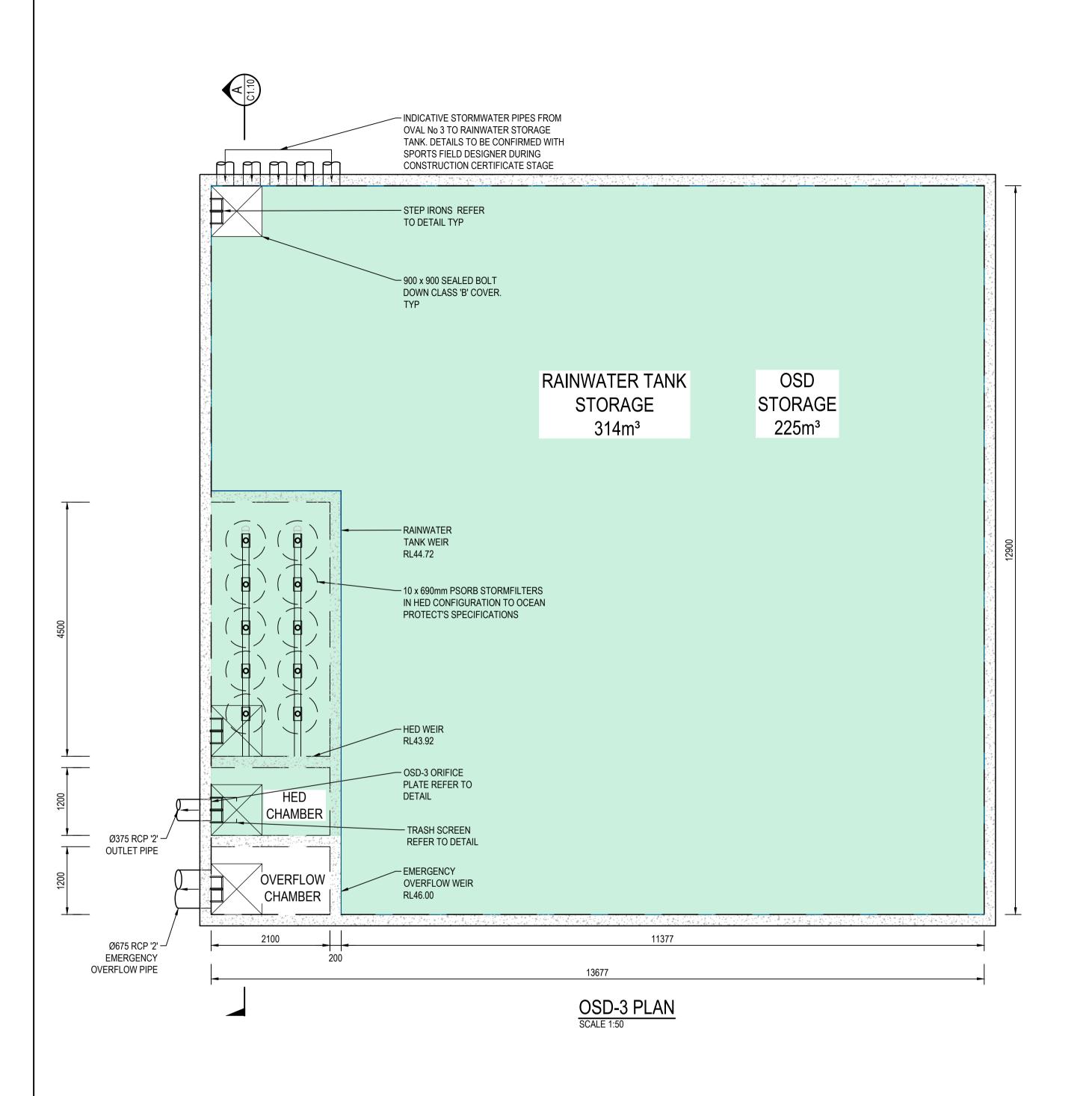
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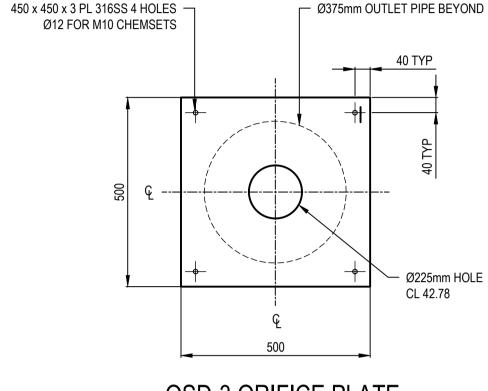
SUMMER HILL NSW 2130

DETAILS SHEET 3

Drawn	Date	Scale	A1	Q.A. Check	Date
DK	Feb-20	AS SHOWN			
Designed	Project No.			Dwg. No.	Issue
MB	SY18	0989		C1.07	Α

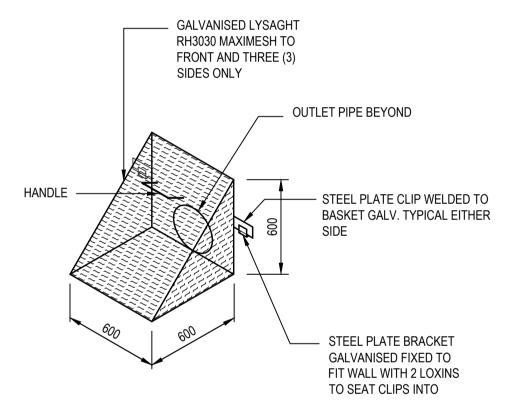






OSD-3 ORIFICE PLATE

SCALE 1:10



TRASH SCREEN DETAIL NTS

SIDE ELEVATION

GALVANISED MILD

STEP IRON DETAIL N.T.S.

STEEL

FRONT ELEVATION

<u>PLAN</u>

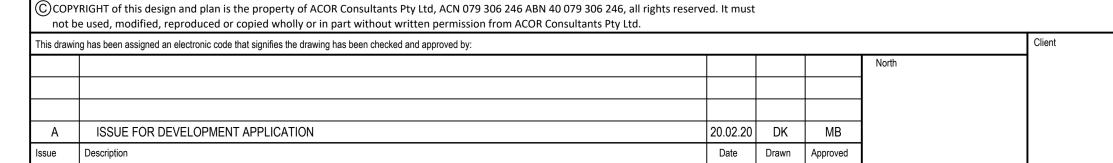
OSD-3 DESIGN CRITERIA

000 0 000 0 111 0 111 1				
	PRE-DEVELOPMENT	POST-DEVELOPMENT - TO OSD	POST-DEVELOPMENT - DRIVEWAY BYPASS	
CATCHMENT AREA	10,000m²	8350m²	1020m²	
IMPERVIOUS AREA	0%	65%	98%	
20% AEP FLOWS	156 l/s	140 l/s	39 l/s	
5% AEP FLOWS	284 l/s	154 l/s	56 l/s	
1% AEP FLOWS	459 l/s	174 l/s	77 l/s	
OSD INTERNAL SURFACE AREA PROVIDED	-	173.2m²	-	
OSD TANK DEPTH	-	1.28m	-	
OSD VOLUME PROVIDED	-	225m³ (INCLUDING FILTER CHAMBER)	-	
OSD VOLUME REQUIRED	-	216.3m³	-	

- 1. REFER TO STORMWATER MANAGMENT REPORT FOR FULL YEO PARK CATCHMENT DISCHARGE RATES AND JUSTIFICATION OF PRE VS POST FLOWS.
- REDUCTION IS POST-DEVELOPMENT CATCHMENT AREA IS DUE TO PAVILION BYPASS FLOWS DIRECTLY TO OVAL 1. REFER TO STROMWATER MANAGEMENT REPORT FOR FURTHER DETAILS

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SECTION











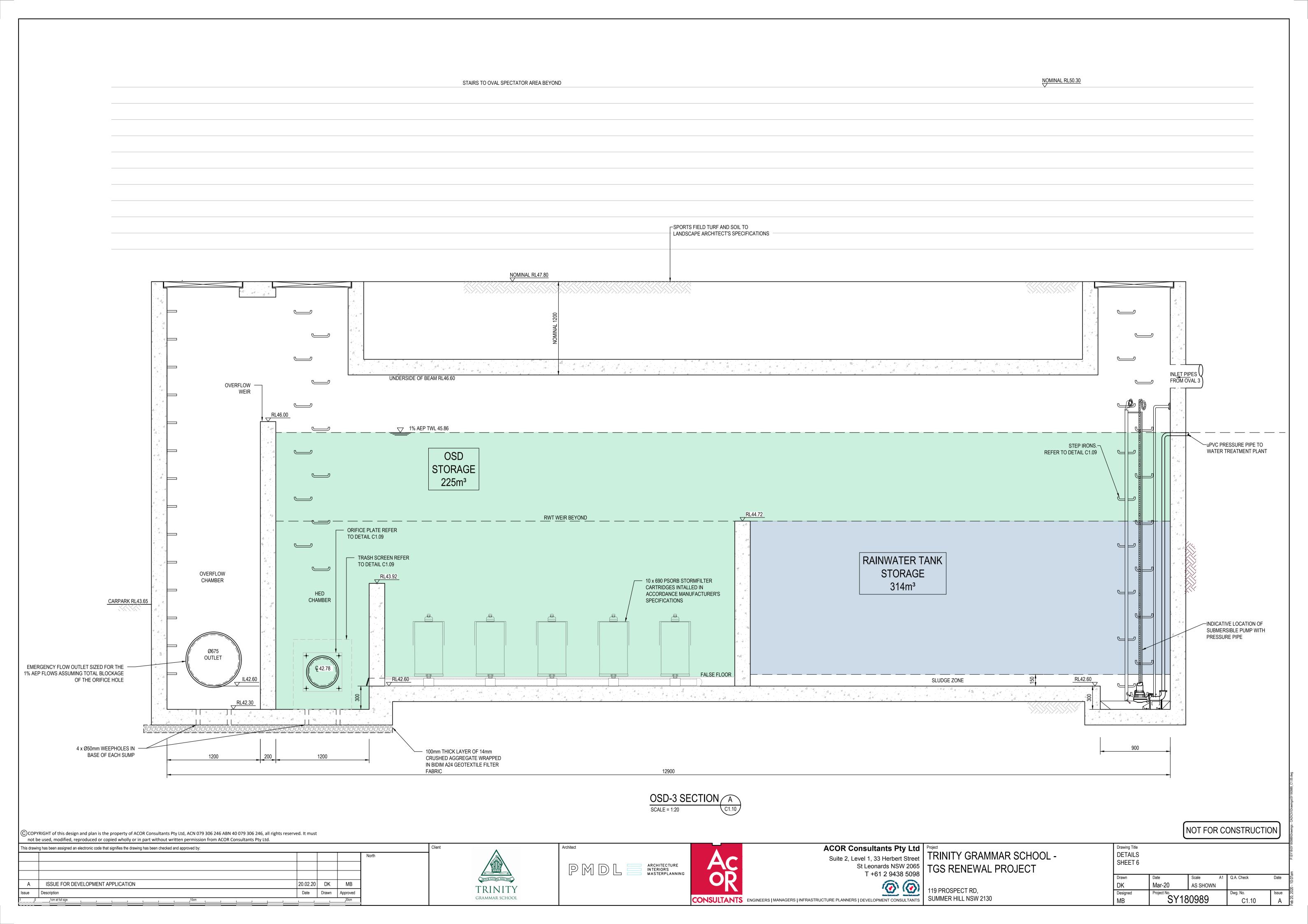
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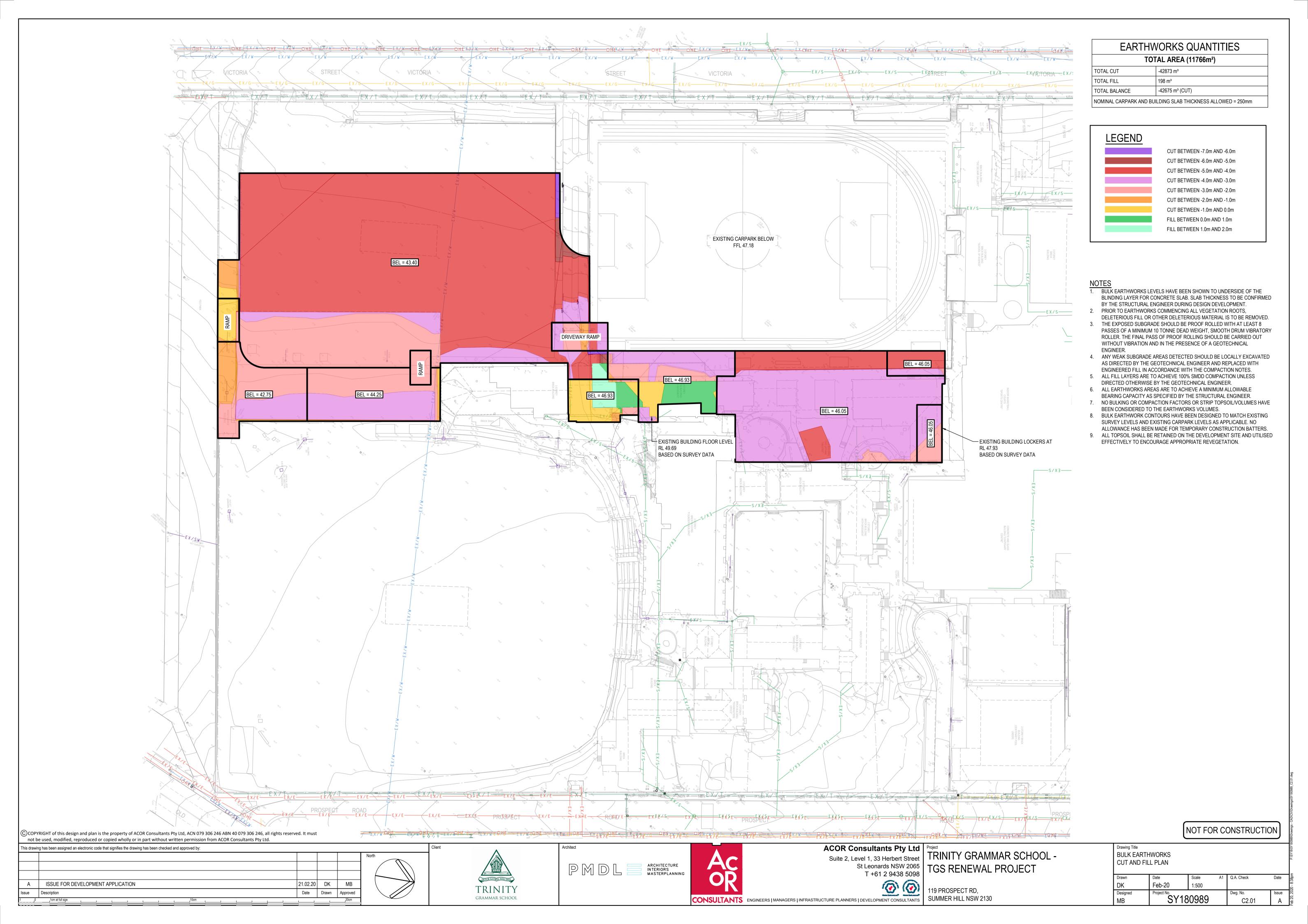
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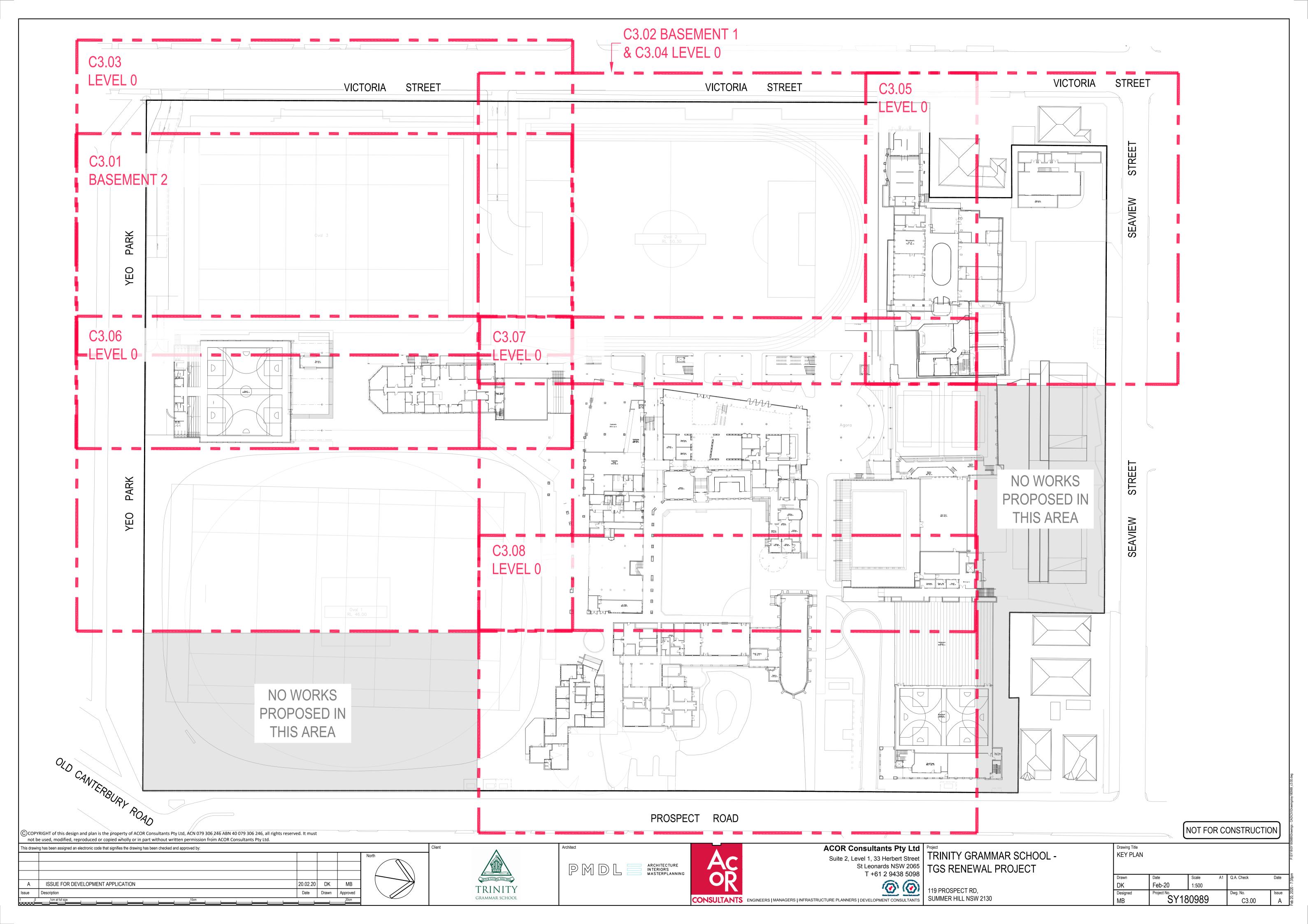
SUMMER HILL NSW 2130

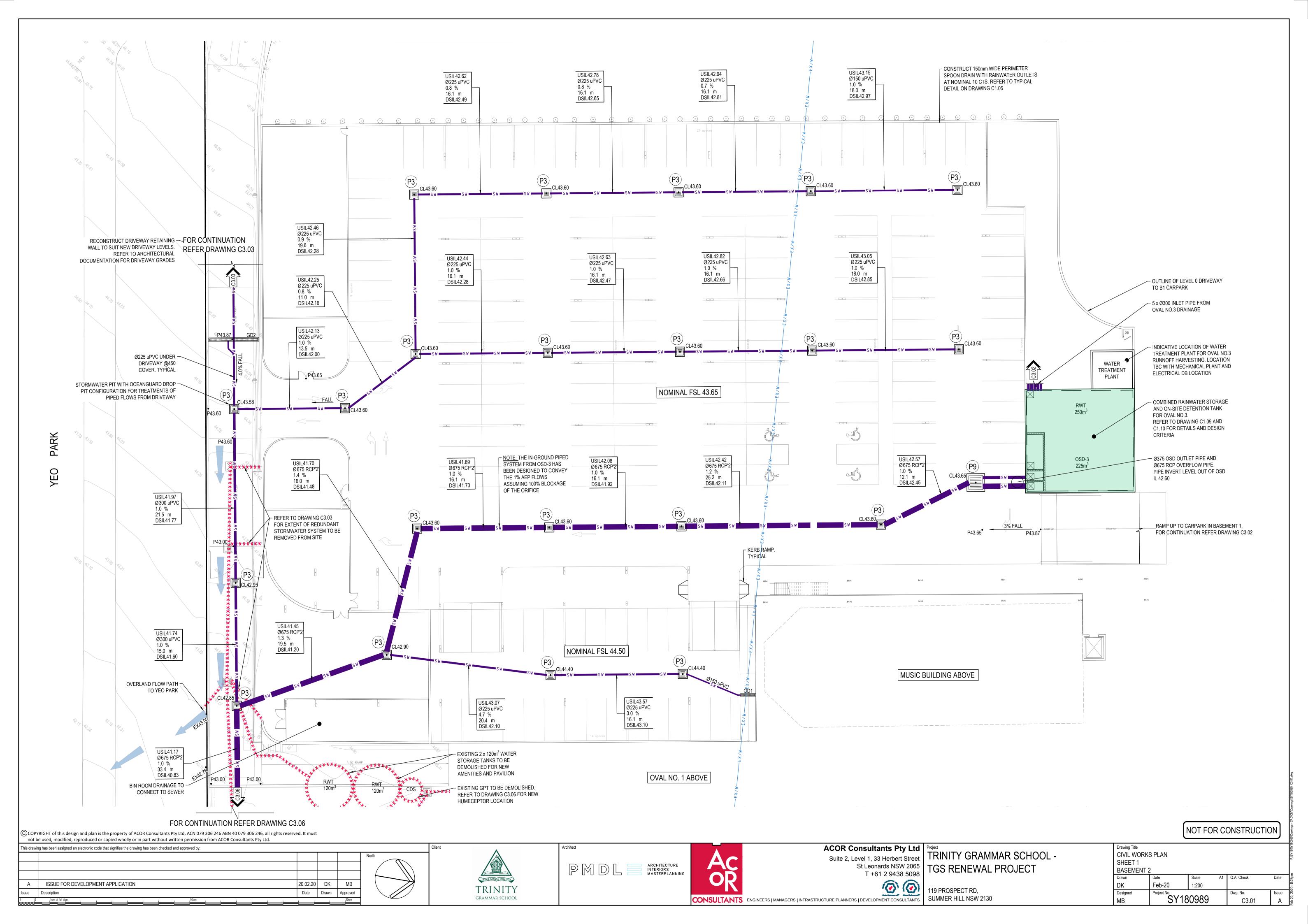
DETAILS SHEET 5

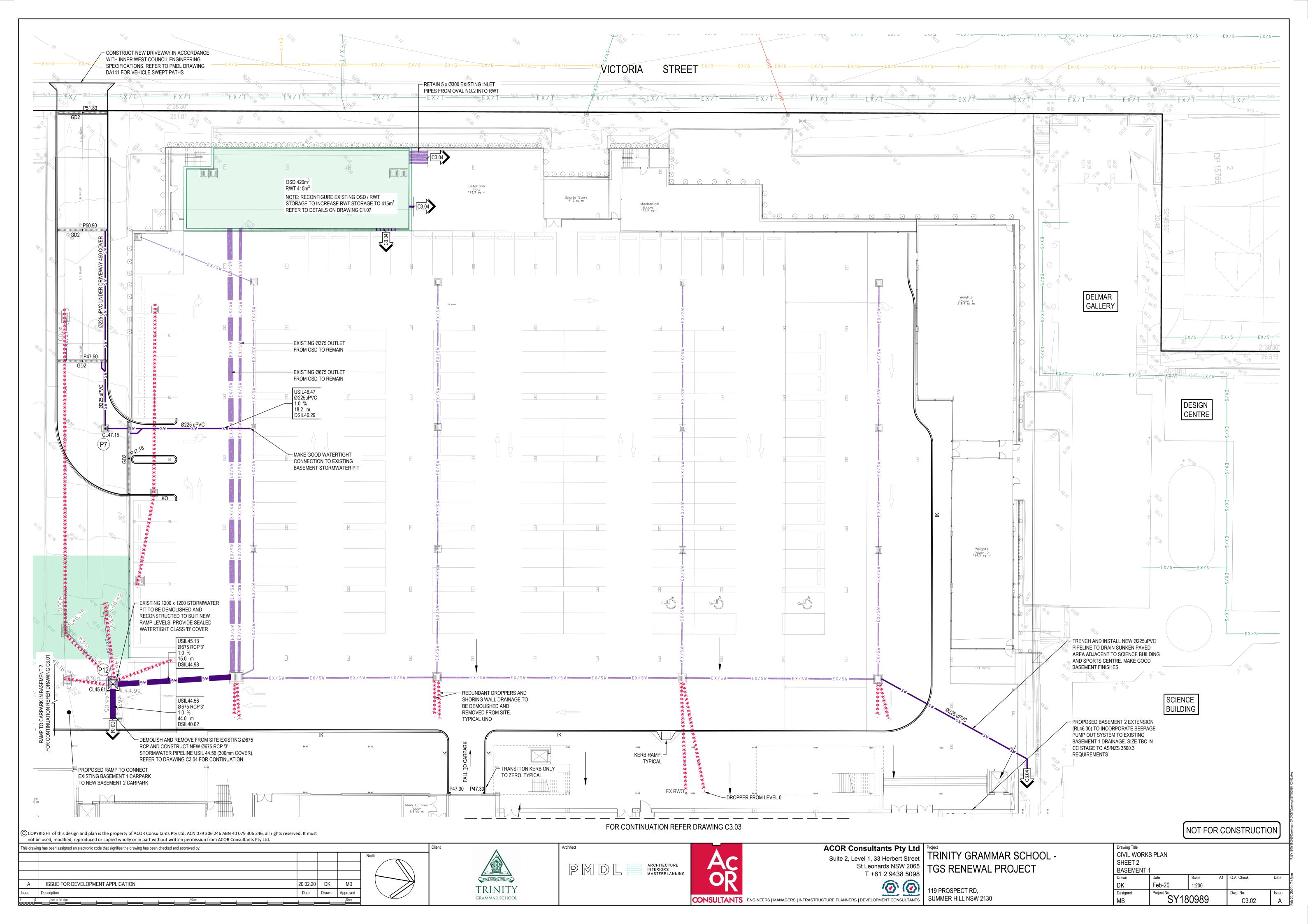
Feb-20 AS SHOWN Project No. SY180989 C1.09

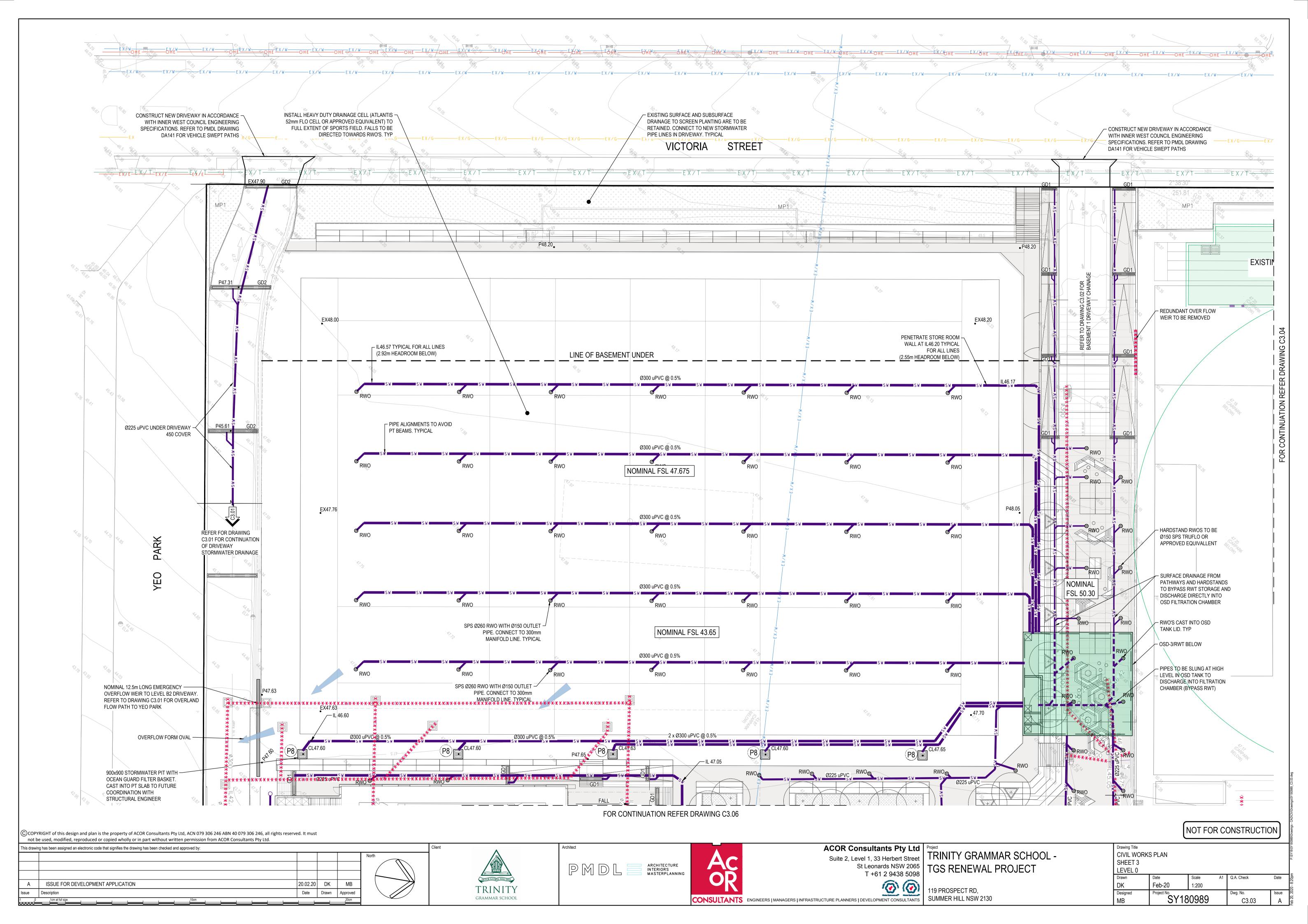


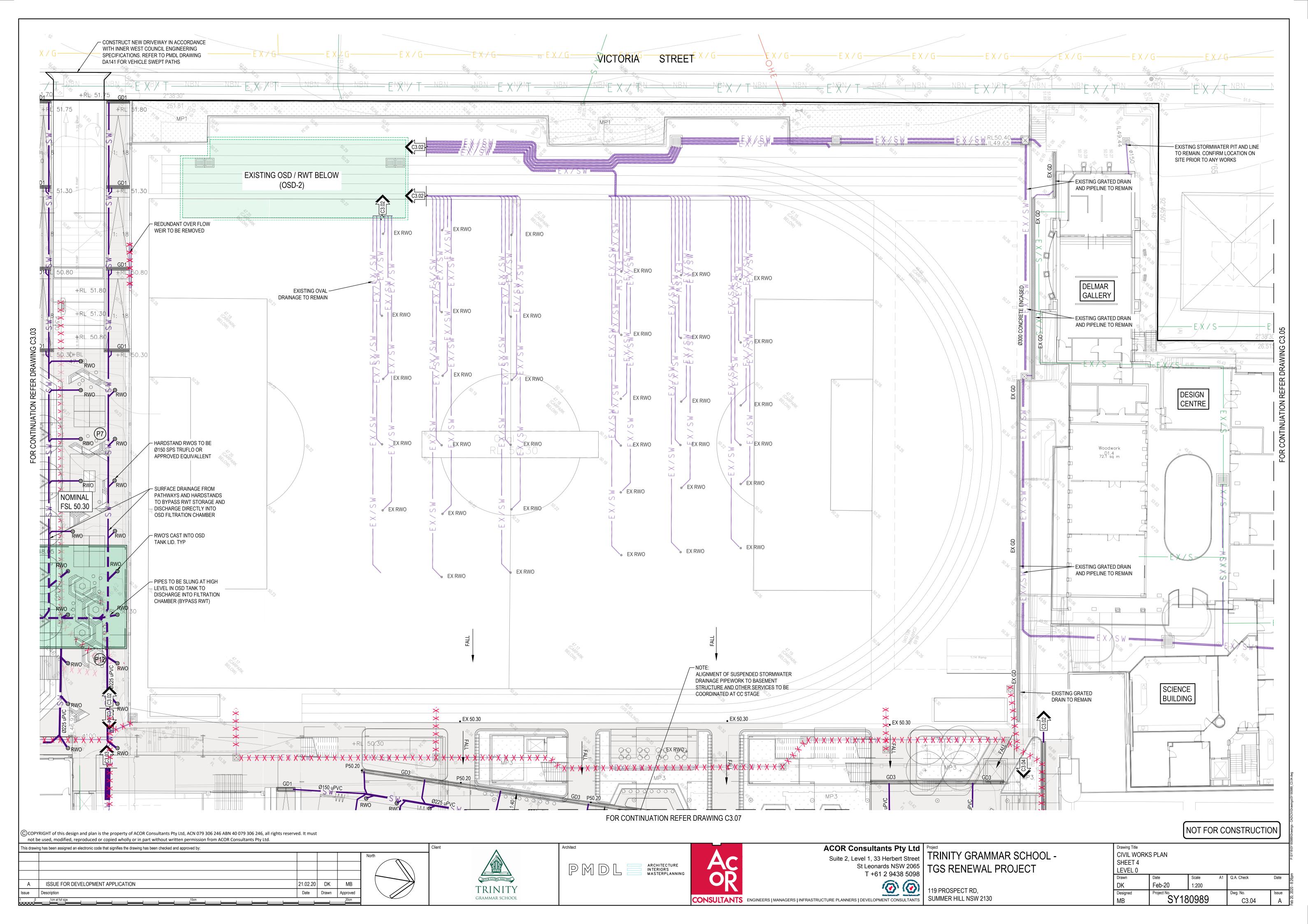


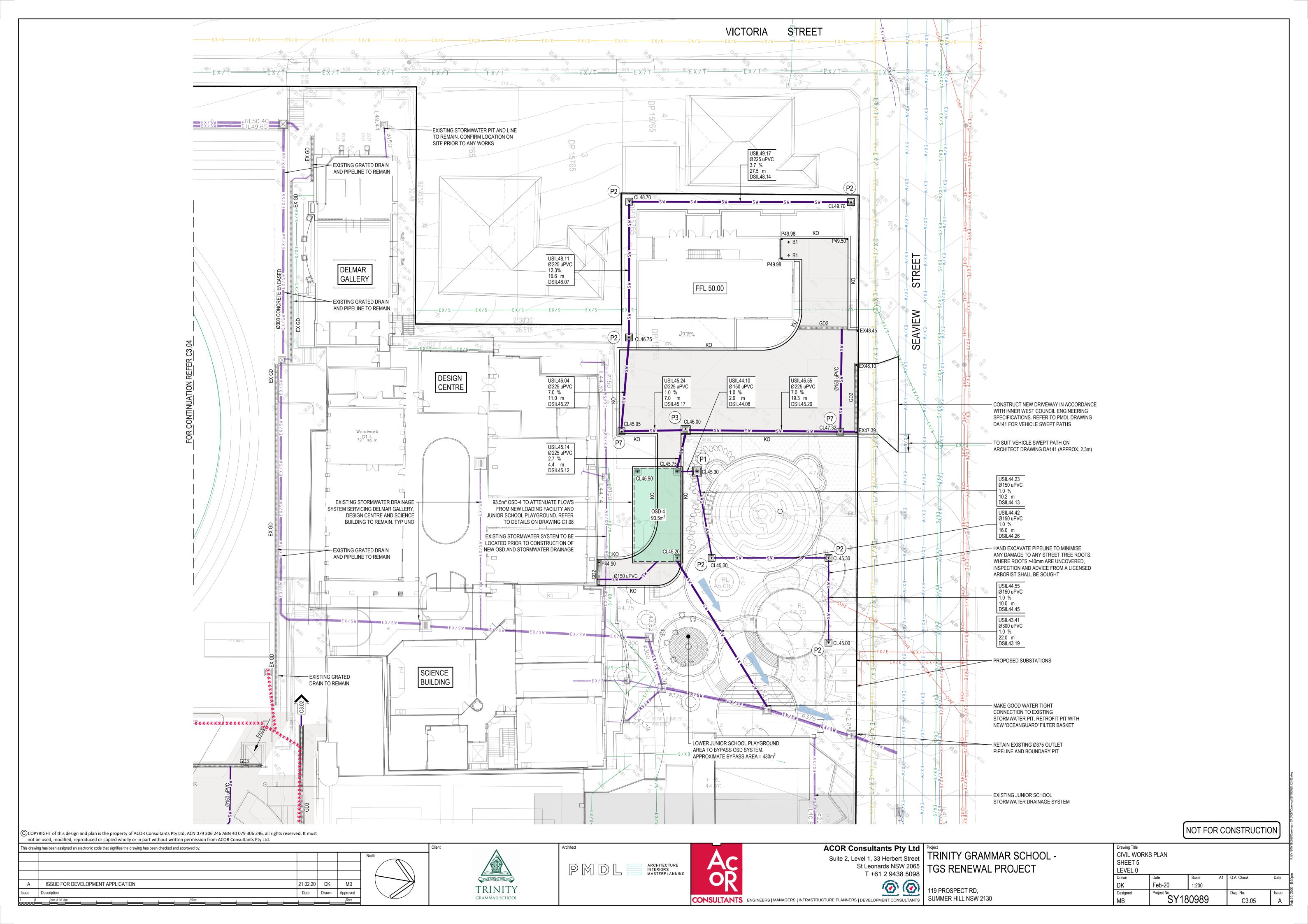


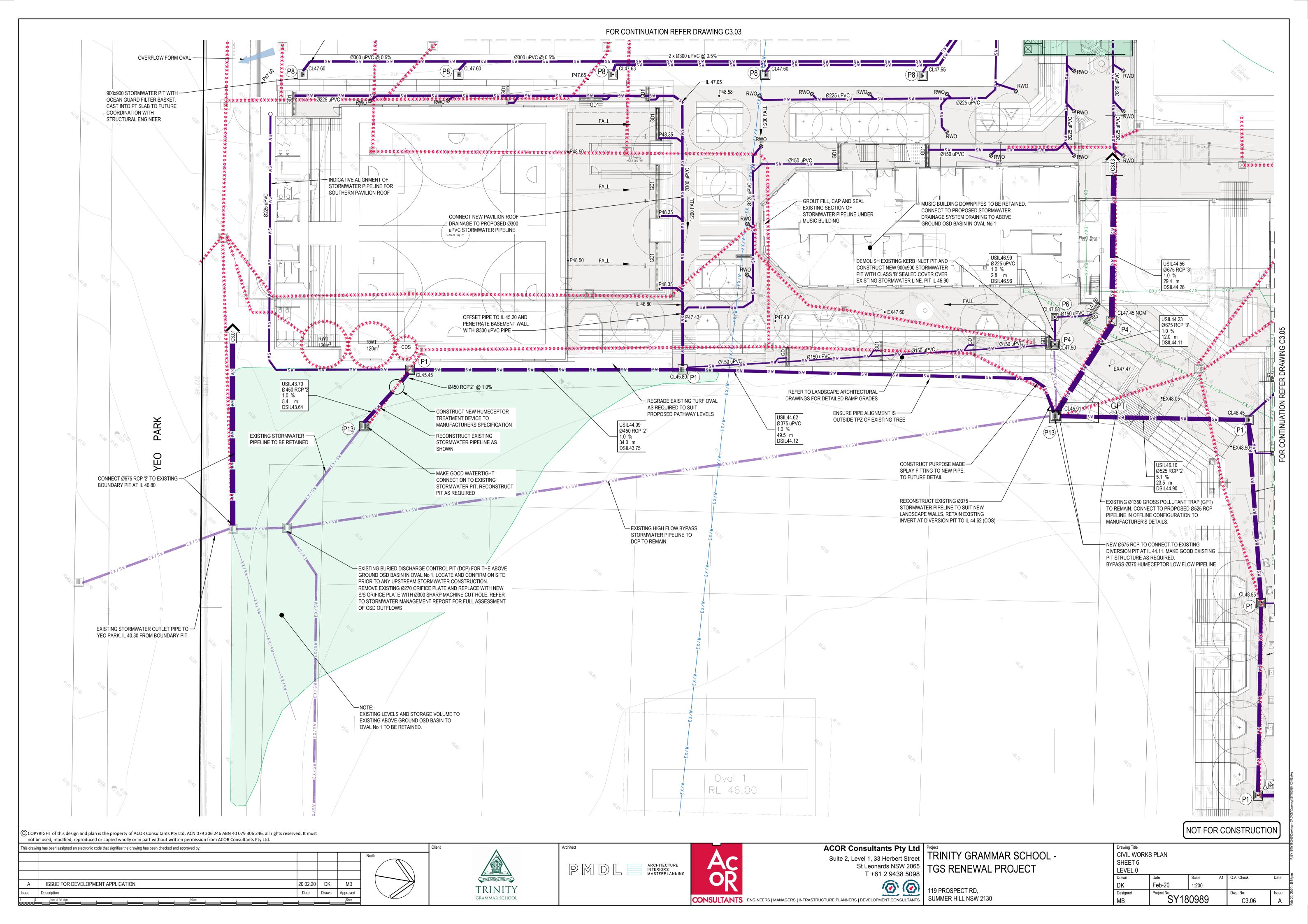


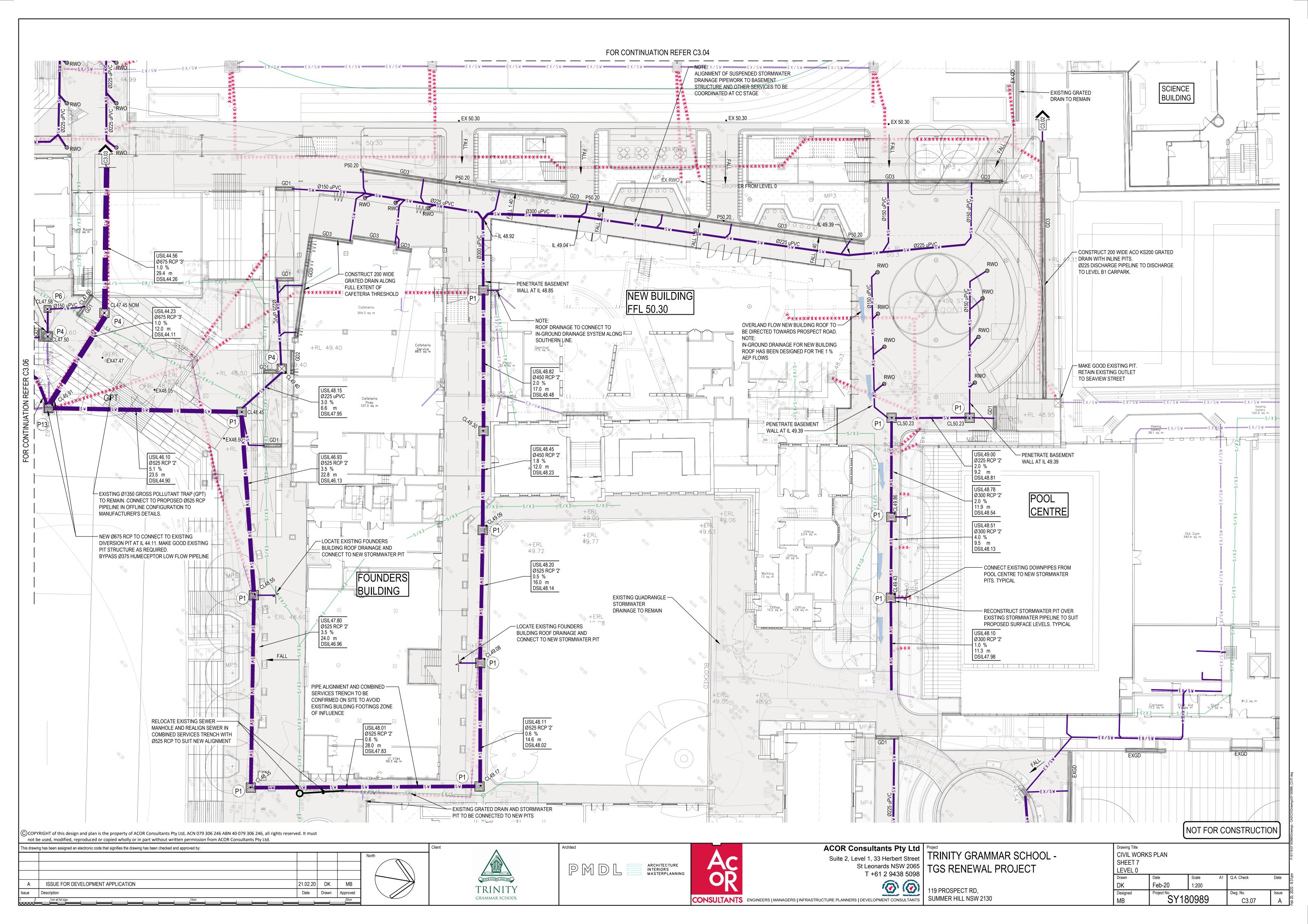


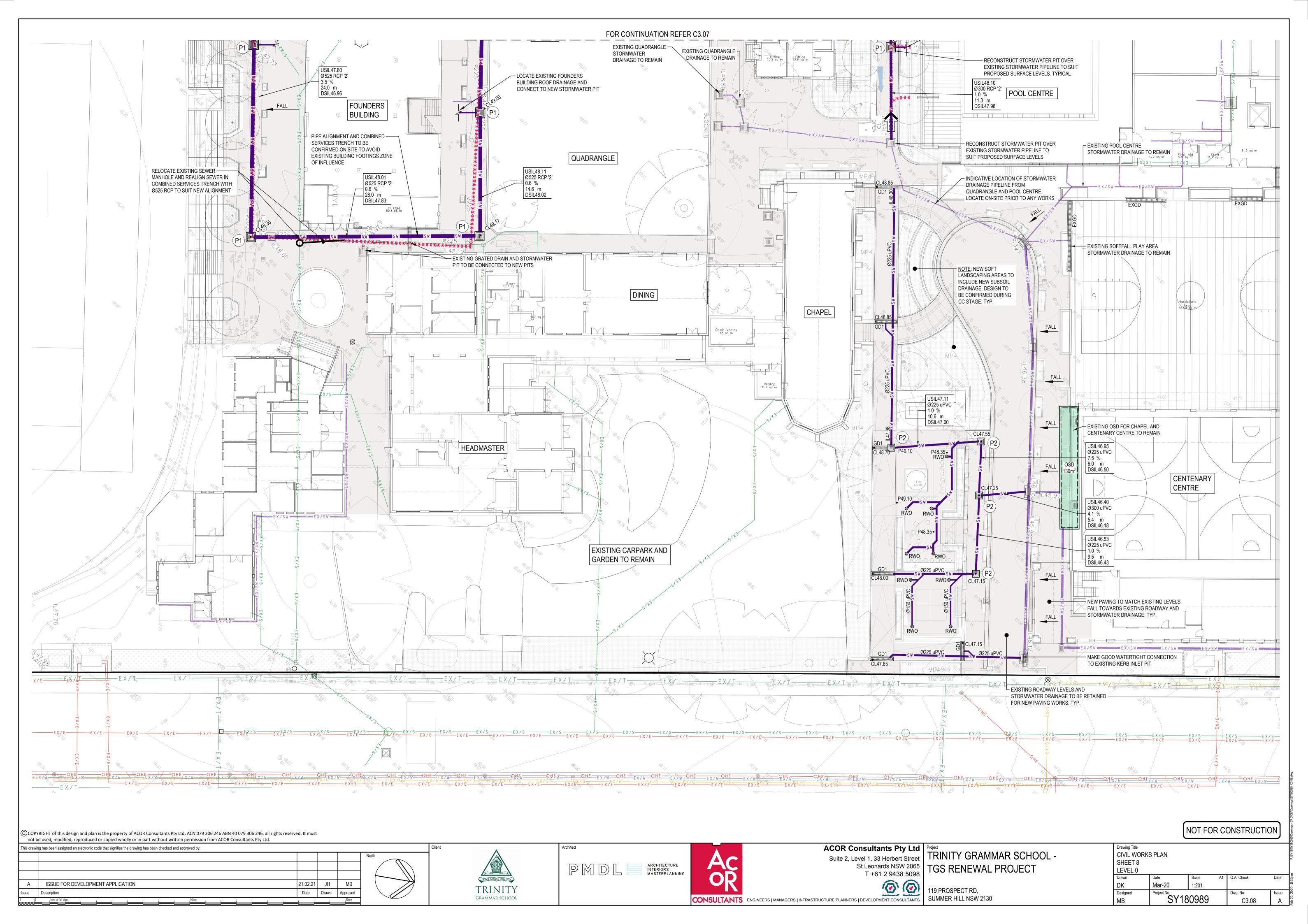


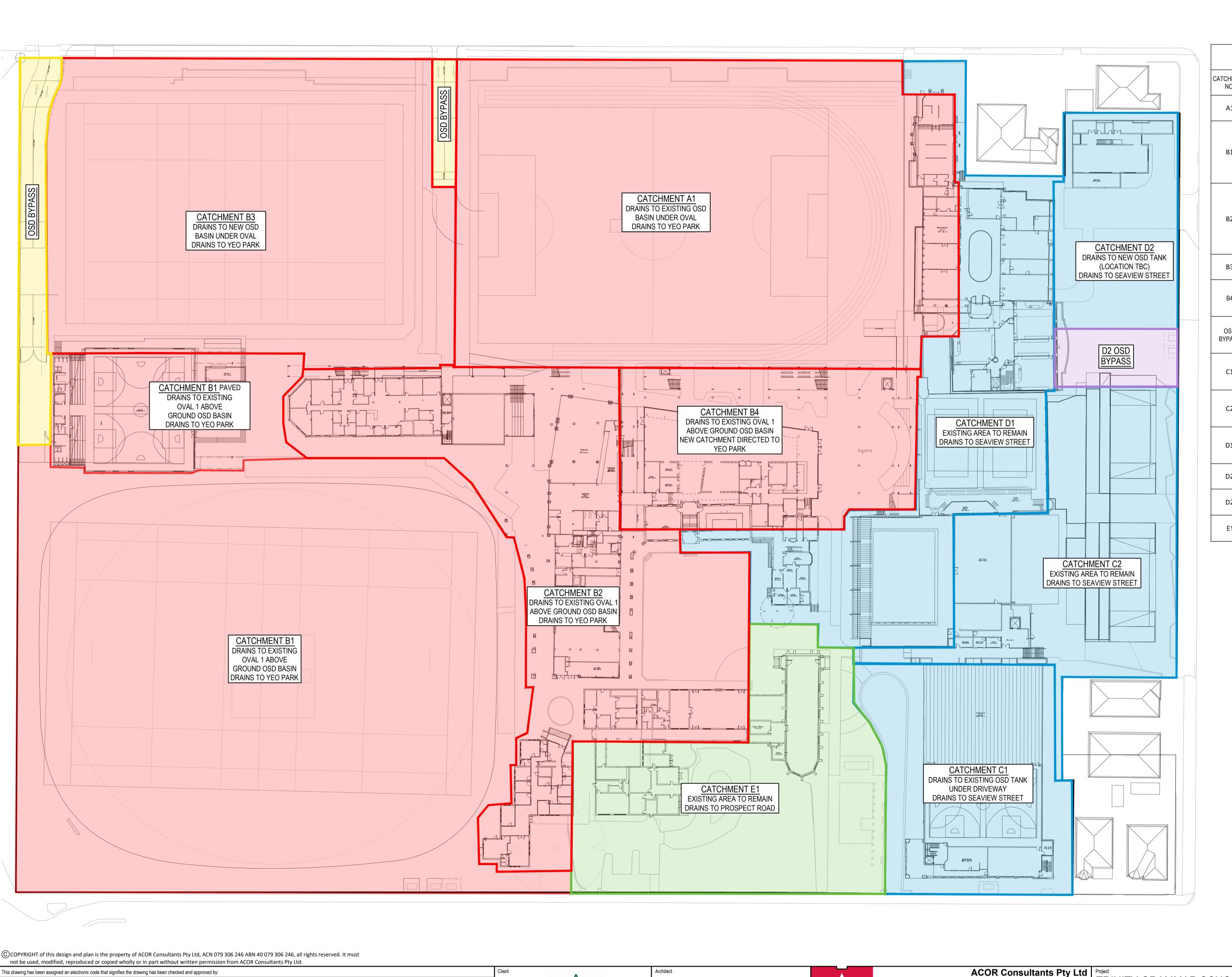










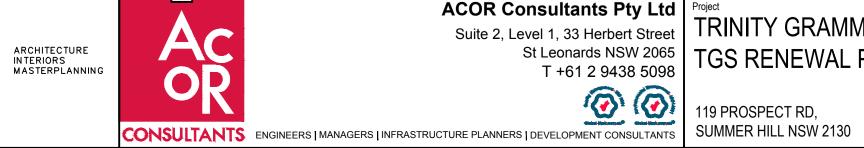


		CATCHI	MENT SUMI	MARY	
CATCHMENT NO.	DESCRIPTION	AREA	% IMPERVIOUS	TREATMENT MEASURES	SUB CATCHMENT
A1	NO.2 OVAL (SYNTHETIC)	10,750	100	TO LEVEL B1 RWT AND HUMECEPTOR	
B1	NO.1 OVAL (GRASS)	15,050	0	EXCLUDED - TO REMAIN AS PER PRE-DEVELOPMENT CONDITIONS	
	HARDSTAND, MULTIPURPOSE PAVILION (ROOF)	2,000	100	TO HUMECEPTOR	
	MUSIC HALL, QUAD, DINNING, FOUNDERS BUILDING (ROOF)	6800	100	TO OCEAN GUARDS	YEO PARK
В2	QUADRANGLE		52	AND HUMECEPTOR	
В3	NO.2 OVAL	8,350	0	TO LEVEL B2 RWT AND STORMFILTERS	
B4	LIBRARY	3,300	0 (MUSIC) 65 (DRAINS)	TO OCEAN GUARDS AND HUMECEPTOR	
OSD BYPASS	DRIVEWAY BYPASS CATCHMENT	1020	100	HUMCEPTOR	BYPASS (YEO PARK)
C1	CENTENARY CENTRE	3,050	100	EXCLUDED - NOT TO BE REDEVELOPMENT	
C2	HALL, JUNIOR SCHOOL	3,850	85	EXCLUDED - NOT TO BE REDEVELOPMENT	SEAVIEW STREET
D1	QUAD, POOL,SPORT CENTRE,SCIENCE, DESIGN	4,800	95	EXCLUDED - NOT TO BE REDEVELOPMENT	
D2	NEW MAINTENANCE, JUNIOR SCHOOL PLAY	2,350	85	TO OCEANGUARDS AND STORMFILTERS	
D2	OSD BYPASS	430	75	TO OCEAN GUARDS	SEAVIEW STREET
E1	HEADMASTER'S RESIDENCE, CHAPEL	4,300	70	EXCLUDED - NOT TO BE REDEVELOPMENT	PROSPECT ROAD
	TOTAL AREA	66,050			

ISSUE FOR DEVELOPMENT APPLICATION 21.02.20 DK

Date Drawn Approved

TRINITY GRAMMAR SCHOOL



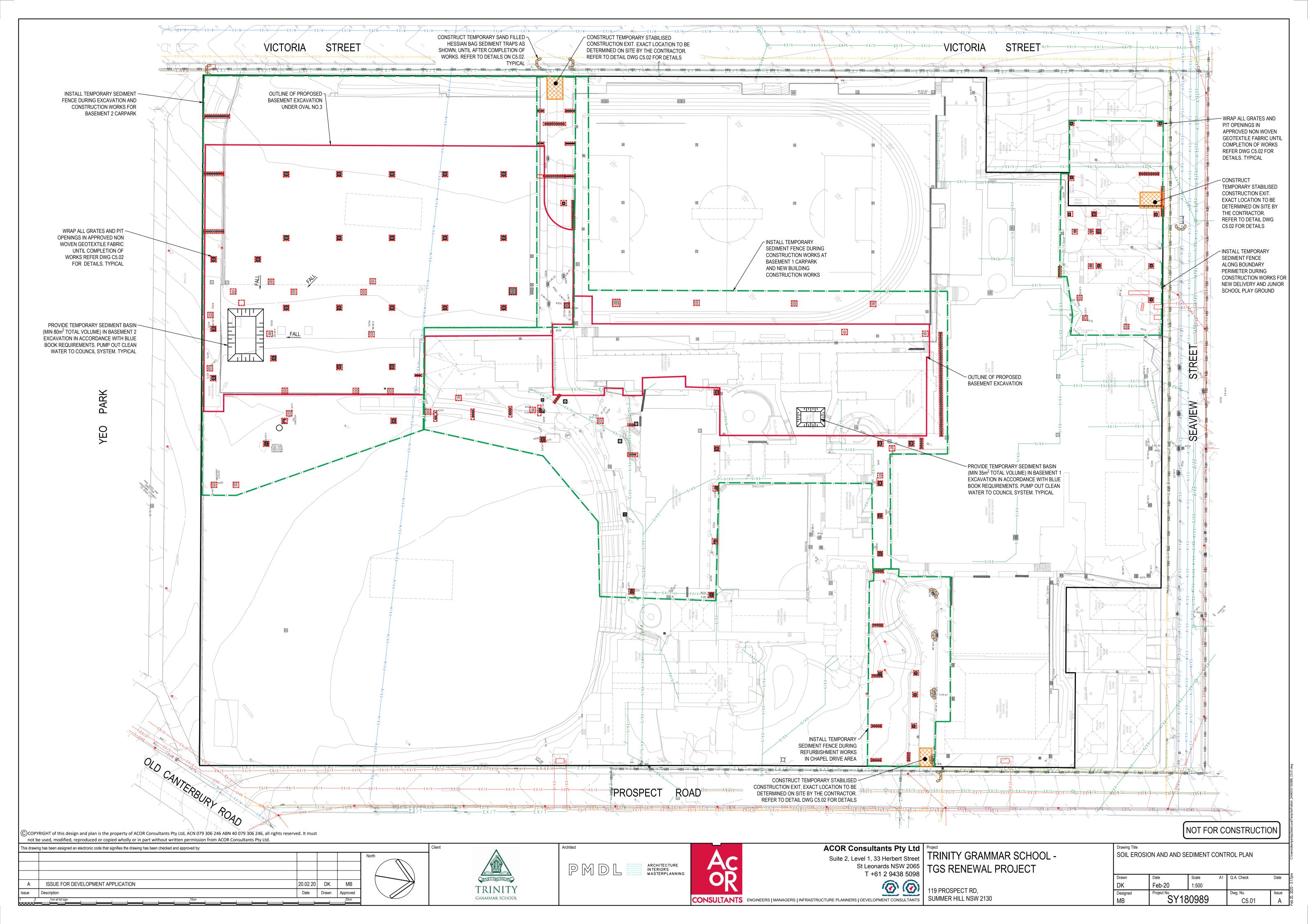
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St Leonards NSW 2065
T +61 2 9438 5098

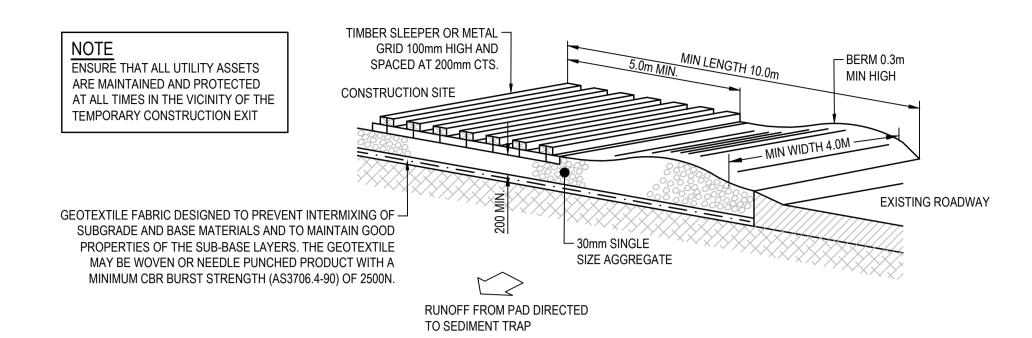
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TRINITY GRAMMAR SCHOOL TGS RENEWAL PROJECT

OSD CATCHMENT PLAN

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A1 Q.A. Check Feb-20 1:500 Project No. SY180989 C3.50





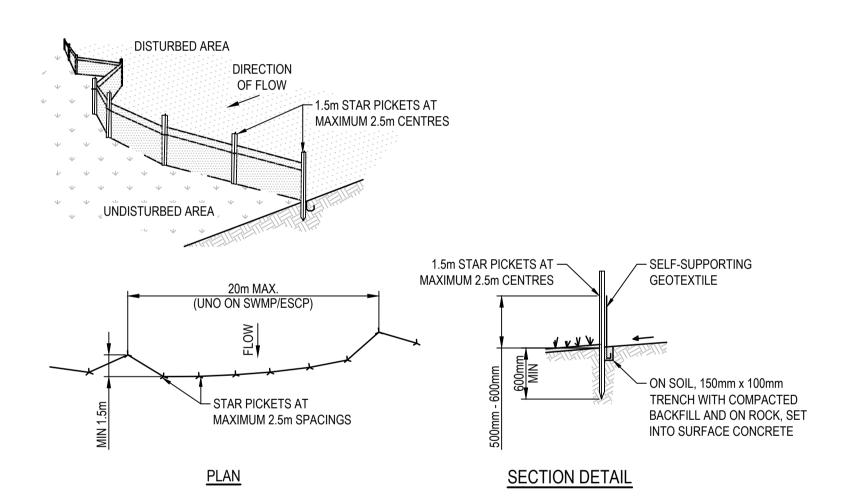
CONSTRUCTION NOTES

- STRIP TOPSOIL AND LEVEL SITE. COMPACT SUBGRADE.
- COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING
- 30mm SINGLE SIZE AGGREGATE.
- CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP WHERE THE SEDIMENT IS COLLECTED AND REMOVED.

MAINTENANCE NOTES

THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT OFF THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OFF THE CONSTRUCTION SITE MUST BE REMOVED IMMEDIATELY.

TEMPORARY STABILISED CONSTRUCTION EXIT



CONSTRUCTION NOTES

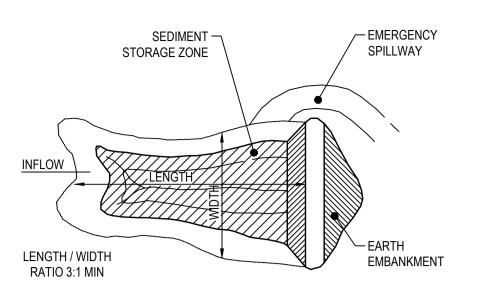
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO

- THE CONTOURS OF THE SITE.
- 2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 2.5 METRES APART (MAX). ENSURE STAR PICKETS ARE FITTED WITH SAFETY CAPS. 3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE
- FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- BACKFILL TRENCH OVER BASE OF FABRIC.
- 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 POST WITH A 150mm OVERLAP.

SEDIMENT CONTROL FENCE

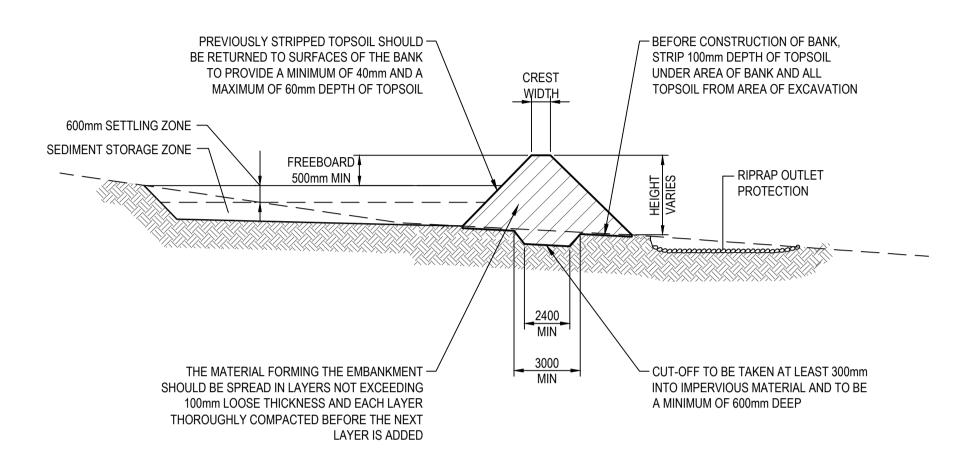
Date Drawn Approved

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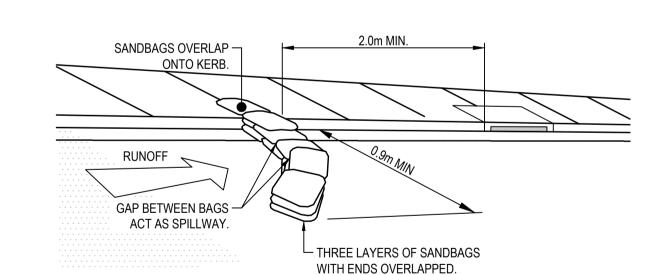


SEDIMENT BASIN (TYPICAL) PLAN - TYPE D AND F SOILS

NOT TO SCALE



SEDIMENT BASIN (TYPICAL) CROSS SECTION - TYPE D AND F SOILS



SANDBAG KERB INLET SEDIMENT TRAP

SANDBAG SEDIMENT TRAP DETAILS

SANDBAG SEDIMENT TRAP - AT OTHER THAN KERB SAG PIT

PITS TO BE INSPECTED DAILY &

CAPTURED SEDIMENT TO BE REMOVED

FILTERED WATER

INLET TRAP

TO BE USED IN PAVED AREAS WHERE

SANDBAG SEDIMENT TRAP - AT KERB SAG PIT

TRAFFIC ACCESS IS REQUIRED

SANDBAGS OVERLAP

ONTO KERB/PAVEMENT

BOXING

RUNOFF WATER

WITH SEDIMENT

RUNOFF

GAP BETWEEN BAGS -

ACT AS SPILLWAY

RUNOFF WATER

WITH SEDIMENT

- NON-WOVEN GEOTEXTILE

FILTER FABRIC WIRE TIED

RUNOFF

THREE LAYERS OF SANDBAGS

WITH ENDS OVERLAPPED.

RUNOFF

THREE LAYERS OF SANDBAGS

WITH ENDS OVERLAPPED.

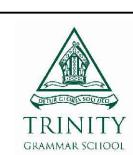
TO GRATE IN ALL 4

CORNERS & CENTRE

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TRINITY GRAMMAR SCHOOL -TGS RENEWAL PROJECT

119 PROSPECT RD, SUMMER HILL NSW 2130 SOIL EROSION AND AND SEDIMENT CONTROL DETAILS

Feb-20 AS SHOWN SY180989 C5.02

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