ROSEVILLE COLLEGE - SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE NSW 2069
CIVIL SERVICES - SITEWORKS PACKAGE

GENERAL NOTES

1. 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.
2. 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.
6. 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.
7. 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.
8. 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.**

SITEWORKS NOTES

1. ORIGIN OF LEVELS :- AUSTRALIAN HEIGHT DATUM (A.H.D.)
2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE PRINCIPAL'S REPRESENTATIVE.
4. EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPAL'S REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
5. WHERE NEW WORKS ABUT EXISTING, THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
7. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
8. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED NON-NATURAL GRANULAR MATERIAL AND COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS.1289.5.1.1 AND THE COMPACTION NOTES.
9. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
10. PROVIDE 10mm 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. MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD.
13. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS.
14. THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
15. ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL INCLUDING, BUT NOT LIMITED TO, KERBS, FOOTPATHS, CONCRETE AREAS, GRASS AND LANDSCAPED AREAS.

COMPACTION NOTES

1. STRIP TOPSOIL TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE FOR SELECTIVE RE-USE OR DISPOSE OFF-SITE AS DIRECTED BY THE SUPERINTENDENT.
2. UNCONTROLLED FILLING IS TO BE REMOVED FROM THE FOOTPRINT OF THE BUILDING AND PAVEMENT AREA. THE STRIPPED SURFACE SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER.
3. REMOVE ANY FILLING WITHIN THE PROPOSED PAVEMENT FOOTPRINT TO A DEPTH OF AT LEAST 0.5m BELOW DESIGN SUBGRADE LEVEL, OR TO THE TOP OF NATURAL SOIL, WHICHEVER IS SHALLOWER.
4. WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE, PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A ROLLER IN NON - VIBRATING MODE (MINIMUM STATIC WEIGHT OF 12 TONNES) IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER.
5. ALL SOFT, WET OR UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
6. ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE SUPERINTENDENT AND SHALL COMPLY WITH THE FOLLOWING :
   a. FREE FROM ORGANIC, PERISHABLE AND CONTAMINATED MATTER
   b. MAXIMUM PARTICLE SIZE 80MM
   c. PLASTICITY INDEX BETWEEN 2% AND 15%
7. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200MM THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 1289 E3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E1.1 :

LOCATION	STANDARD DRY DENSITY
UNDER BUILDING SLABS	100%
AREAS OF SERVICE TRENCHES	100%
EXTERNAL PAVED AREAS, ROADS AND CARPARKS	100%
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 DENSITY
UNDER BUILDING SLABS	100%
PAVEMENTS AND CARPARKS	100%

8. DENSITY TESTING SHALL BE IN ACCORDANCE WITH AS3798-2007, TO AT LEAST A LEVEL 2 STANDARD.
9. 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.
10. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.
11. ALL EARTHWORKS AND GEOTECHNICAL WORKS SHALL BE UNDERTAKEN IN STRICT ACCORDANCE WITH THE SITE GEOTECHNICAL REPORT PREPARED BY DOUGLAS PARTNERS (REF. 85310.01).

STORMWATER NOTES

1. ALL STORMWATER DRAINAGE PIPES LARGER THAN 300 DIA. SHALL BE CLASS "2" APPROVED SPIGOT AND SOCKET FRC OR VCP PIPES WITH RUBBER RING JOINTS (U.N.O.). ALL DOWNPIPE DRAINAGE LINES SHALL BE SEWER GRADE uPVC WITH SOLVENT WELD JOINTS. (U.N.O.)
2. EQUIVALENT STRENGTH REINFORCED CONCRETE PIPES MAY BE USED.
3. ALL PIPE JUNCTIONS UP TO AND INCLUDING 450 DIA. AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.
4. MINIMUM GRADE TO STORMWATER LINES TO BE 1%. (U.N.O.)
5. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
6. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
7. PRECAST PITS SHALL NOT BE USED UNLESS WRITTEN APPLICATION 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 MATERIAL 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 100% STANDARD MAX. DRY DENSITY.
9. BEDDING SHALL BE TYPE H2 IN LANDSCAPE AREAS AND TYPE HS2 UNDER PAVEMENTS AND IN TRAFFICABLE AREAS(U.N.O.), 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.
13. ALL PROPOSED SURFACE INLET PITS TO BE FITTED WITH PROPRIETARY FILTER BASKETS. OCEANGUARD BY OCEAN PROTECT OR EQUIVALENT TO DETAILS ON DRAWING C11.05.

EXISTING SERVICES AND FEATURES

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

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.

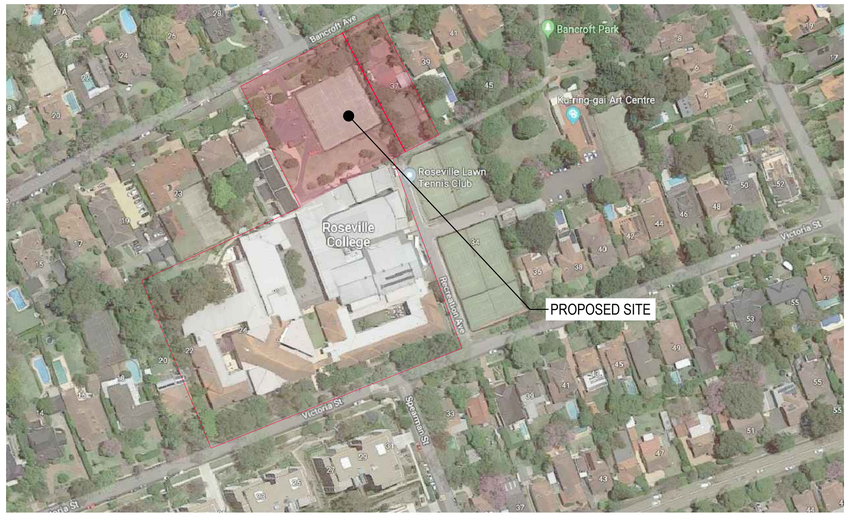
OTHER MATTERS

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.



Map data © 2019 Google

LOCALITY PLAN
NTS

CIVIL LEGEND

←	INDICATIVE DIRECTION OF FALL
○ EXDP	EXISTING DOWNPIPE
• CL56.20	PROPOSED COVER LEVEL
• EX CL56.20	EXISTING COVER LEVEL
• P56.20	PROPOSED SURFACE LEVEL
• EX56.20	EXISTING SURFACE LEVEL
• IL56.20	INVERT LEVEL
	STORMWATER PIT
	EXISTING STORMWATER PIT
SW	STORMWATER DRAINAGE LINE WITH:
USIL 10.00	INVERT LEVEL UPSTREAM
Ø375 uPVC	PIPE SIZE AND MATERIAL CLASS
1.0%	PIPE GRADE
10m	PIPE LENGTH
DSIL 9.90	INVERT LEVEL DOWNSTREAM
RW	ROOFWATER DRAINAGE
GD	PROPOSED GRATED DRAIN ACO KS100 WITH CLASS 'B' HEELSAFE GRATE
X X X X X X X X X X X X X X	SERVICES TO BE REMOVED OR DECOMMISIONED
RWT	RAINWATER TANK (RWT)
OSD	ON SITE DETENTION (OSD)
	OVERLAND FLOW PATH

DRAWING LIST

DWG No.	DESCRIPTION	REVISION
C11.01	COVER SHEET, LEGEND AND NOTES	A
C11.05	DETAILS - SHEET 1	A
C11.06	DETAILS - SHEET 2	A
C11.07	DETAILS - SHEET 3	A
C11.08	DETAILS	A
C13.01	CIVIL WORKS PLAN	A
C13.02	CIVIL WORKS PLAN	A
C13.15	STORMWATER CATCHMENT PLAN	A
C15.01	SOIL EROSION AND AND SEDIMENT CONTROL PLAN	A

SOIL EROSION AND SEDIMENT CONTROL LEGEND

	SEDIMENT FENCE
	SAND BAG SEDIMENT TRAP
	STABILISED CONSTRUCTION EXIT
	FILTER FABRIC DROP INLET PIT
	TEMPORARY CUT OFF DRAIN
	MOBILE SEDIMENT CONTROL TANK

EXISTING SERVICES LEGEND

EX/S	EXISTING SEWER
EX/W	EXISTING WATER
EX/G	EXISTING WATER
EX/T	EXISTING COMMUNICATIONS
EX/SW	EXISTING STORMWATER
EX/E	EXISTING ELECTRICAL

DIAL BEFORE YOU DIG

DIAL BEFORE YOU DIG www.1100.com.au

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

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Issue	Description	Date	Drawn	Approved
A	ISSUE FOR DEVELOPMENT APPLICATION	17.09.19	DK	MB

North

Client
ROSEVILLE COLLEGE
27-29 BANCROFT AVE, ROSEVILLE

Architect
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Project
ROSEVILLE COLLEGE SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
COVER SHEET, LEGEND AND NOTES

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	N/A		
Designed	Project No.		Dwg. No.	Issue
MB	SY190030		C11.01	A

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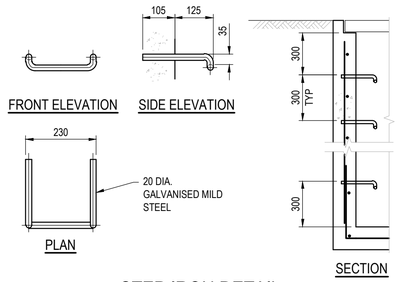
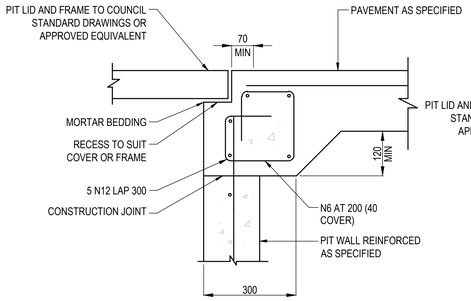
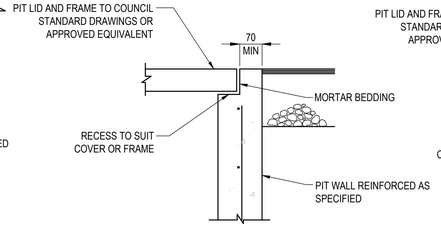


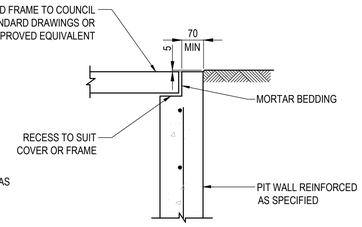
STEP IRON DETAIL
SCALE 1:10



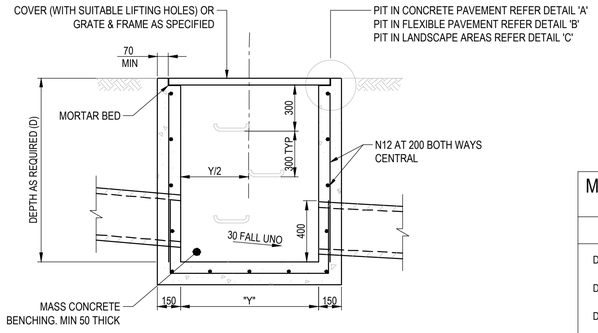
PIT EDGE DETAIL "A"
IN CONCRETE PAVEMENT
SCALE 1:10



PIT EDGE DETAIL "B"
IN FLEXIBLE PAVEMENT
SCALE 1:10



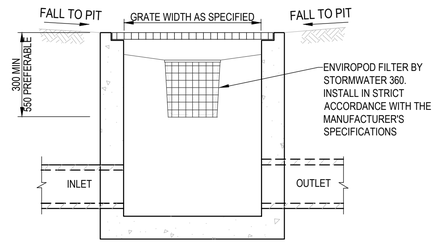
PIT EDGE DETAIL "C"
IN LANDSCAPE AREAS
SCALE 1:10



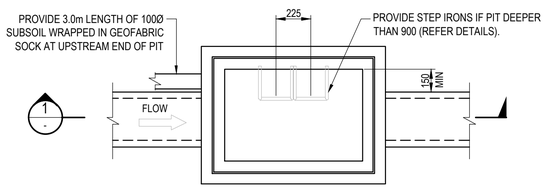
SECTION 1
SCALE 1:20

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

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

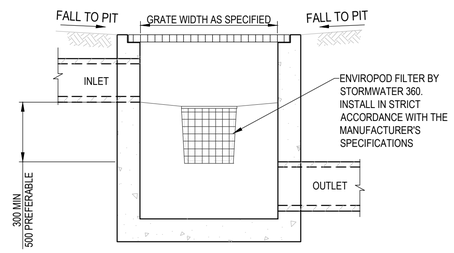


TYPICAL SURFACE INLET
OCEANGUARD CONFIGURATION DETAIL
NOT TO SCALE
NOTE:
REFER TO MANUFACTURER'S DRAWINGS FOR OCEANGUARD
FILTER CONFIGURATION AND COMPONENTS DETAILS



PLAN

SURFACE INLET/JUNCTION PIT
SCALE 1:20



TYPICAL DROP PIT
OCEANGUARD CONFIGURATION DETAIL
NOT TO SCALE
NOTE:
REFER TO MANUFACTURER'S DRAWINGS FOR OCEANGUARD
FILTER CONFIGURATION AND COMPONENTS DETAILS

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A	ISSUE FOR DEVELOPMENT APPLICATION	17.09.19	DK	MB

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Project
ROSEVILLE COLLEGE
SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
DETAILS
SHEET 1

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	AS SHOWN		
Designed	Project No.	Dwg. No.	Issue	
MB	SY190030	C11.05	A	

Oct 18, 2019 - 2:46pm
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OSD AND RWT NOTES:

1. OSD / RWT STRUCTURE TO STRUCTURAL ENGINEER'S DETAILS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR OSD / RWT SETOUT.
3. OSD / RWT WATERPROOFING SYSTEM TO ARCHITECT'S DETAILS.

DANGER
CONFINED SPACE
NO ENTRY WITHOUT CONFINED SPACE TRAINING

THIS IS AN ONSITE DETENTION SYSTEM. IT IS AN OFFENCE TO REDUCE THE VOLUME OF THE TANK OR BASIN OR INTERFERE WITH ANY PART OF STRUCTURE THAT CONTROLS THE OUTFLOW

OSD SIGN

OSD SIGN IN ACCORDANCE WITH COUNCIL REQUIREMENTS AND IS TO BE PLACED AS PER COUNCIL STANDARDS

CONFINED SPACE DANGER SIGN

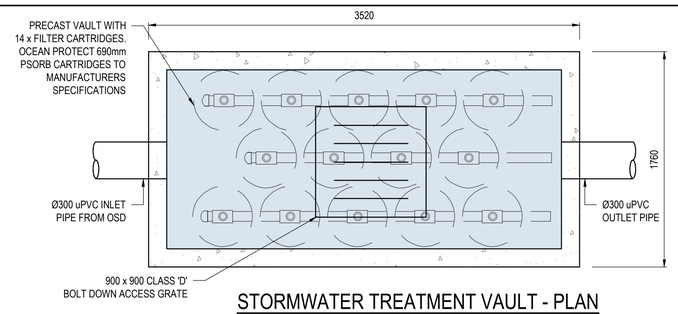
A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.

B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS) -250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN

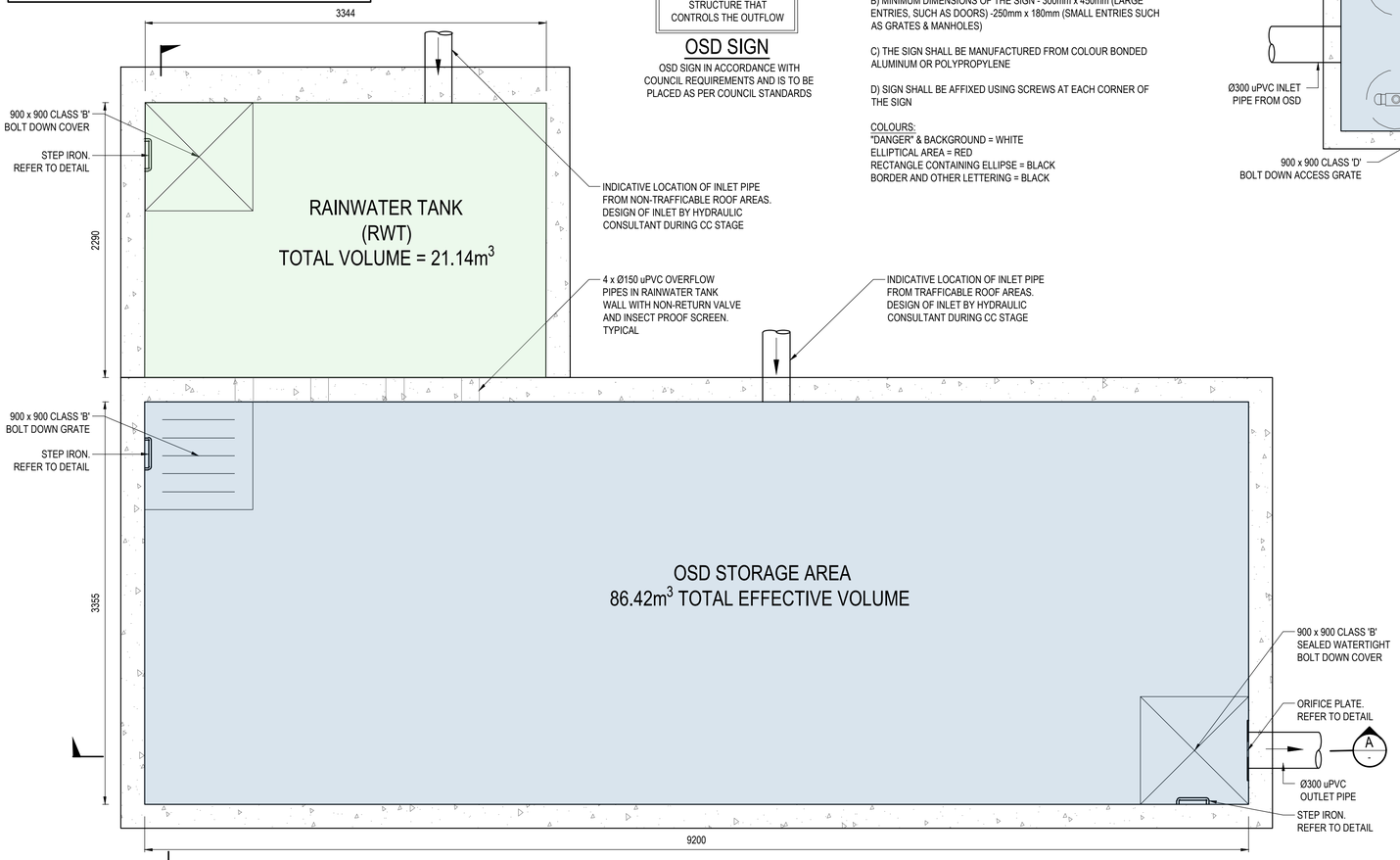
COLOURS:
"DANGER" & BACKGROUND = WHITE
ELLIPTICAL AREA = RED
RECTANGLE CONTAINING ELLIPSE = BLACK
BORDER AND OTHER LETTERING = BLACK



STORMWATER TREATMENT VAULT - PLAN

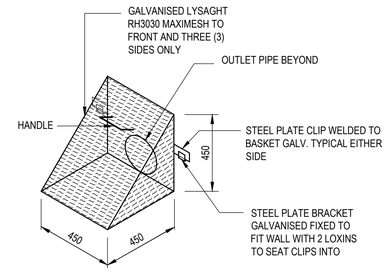
SCALE 1:25

NOTE: DETAILS AND WORKSHOP DRAWINGS OF STORMWATER TREATMENT VAULT TO BE BE SUPPLIED BY CONTRACTOR FOR REVIEW AND APPROVAL BY THE CIVIL ENGINEER PRIOR TO ORDERING AND CONSTRUCTION



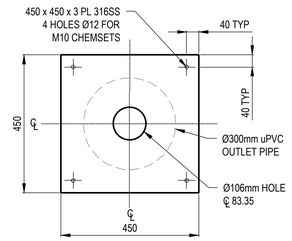
OSD PLAN

SCALE 1:25



TRASH SCREEN DETAIL

NTS



ORIFICE PLATE

SCALE 1:10

DESIGN CRITERIA

DEVELOPMENT IS TYPE 6 - BUSINESS, COMMERCIAL OR RETAIL PREMISES

LOCATION OF DEVELOPMENT: ROSEVILLE COLLEGE SWELL CENTRE - 27 BANCROFT AVE, ROSEVILLE

CATCHMENT DETAIL

CATCHMENT NAME = MC1 - MOORES CREEK
CATCHMENT DISCHARGE RATE = 0.0136 L/Sec/m² **A**
CATCHMENT STORAGE RATE = 0.0315m³/m² **B**

SITE DETAILS

SITE AREA = 3029m² 60% OF SITE AREA = N/A **C**

TOTAL IMPERVIOUS AREA (roofs, driveways, paving, etc.) = 3029m² **D**
IMPERVIOUS AREA BYPASSING DETENTION SYSTEM = 0m² **E**

PERMITTED SITE DISCHARGE

C[3029m²] x **A**[0.0136 L/Sec/m²] = 41.19 L/Sec **FLOW 1**
ADJUSTMENT FOR ANY UNCONTROLLED IMPERVIOUS FLOW **E/D** = 0 (<0.25) **F**
FLOW 1 [41.19 L/Sec] x **F**[0] = 0 L/Sec **FLOW 2**
FLOW 1 [41.19] - **FLOW 2** [0] = 41.19**L/Sec** **PSD**

SITE STORAGE REQUIREMENT

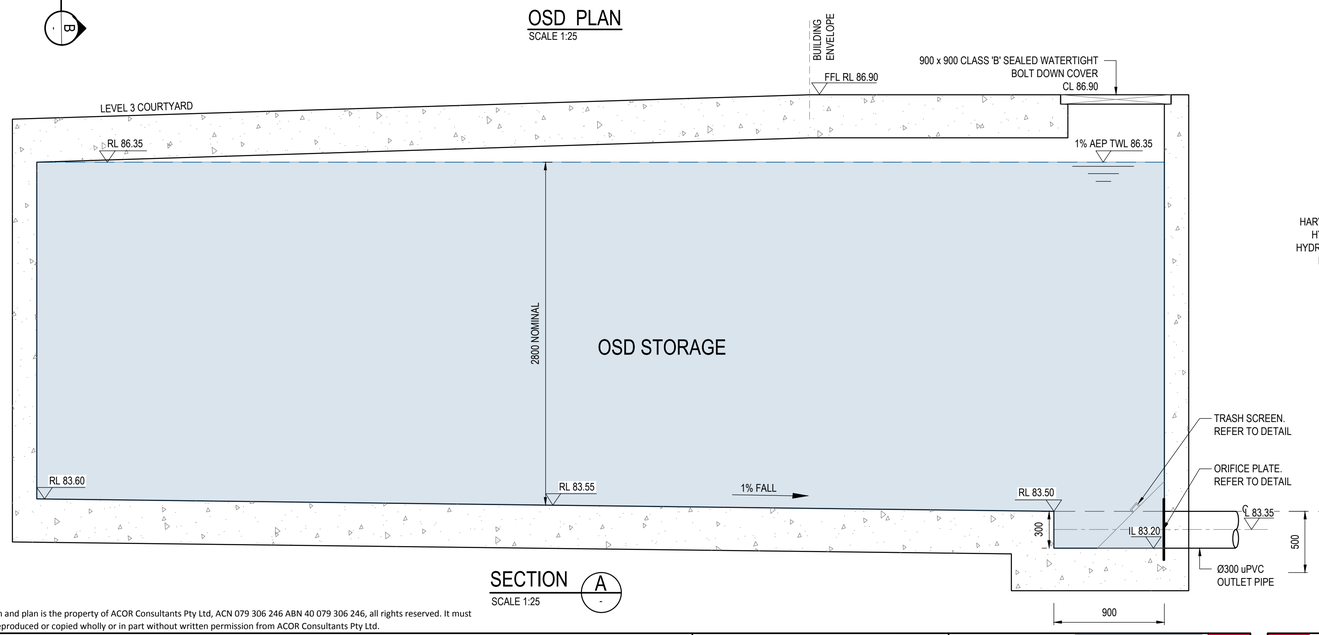
C[3029m²] x **B**[0.0315m³/m²] = 95.41**m³** **SSR1**
IF THE STORAGE IS IN LANDSCAPED BASIN, **SSR1** x 1.2 = 114.49**m³** **SSR2**

RAINWATER STORAGE PROVIDED = 21.14**m³**
OSD OFFSET FOR RAINWATER REUSE = 0.1 x 95.41 = 9.54**m³**
SSR (ADJUSTED) = 95.41 - 9.54 = 85.87**m³**
ACTUAL OSD VOLUME PROVIDED = 86.42**m³** (> SSR ADJUSTED)

OUTLET CONTROL

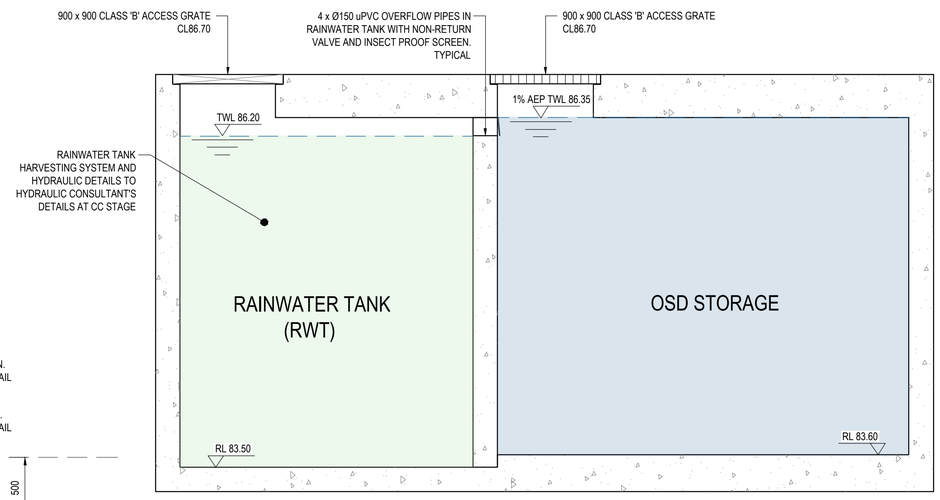
HEIGHT DIFFERENCE BETWEEN TOP WATER SURFACE LEVEL AND THE CENTER OF THE ORIFICE = 3.00m **G**
ORIFICE DIAMETER $21.8 \times \frac{PSD}{\sqrt{G}}$ = 106**mm** **OD**

PSD = PERMITTED SITE DISCHARGE
SSR1 = SITE STORAGE REQUIREMENT (EXCEPT FOR LANDSACPED BASINS)
SSR2 = SITE STORAGE REQUIREMENT (LANDSCAPED BASINS)(NOTE: USE ONLY SSR1 OR SSR2)
OD = ORIFICE DIAMETER



SECTION A

SCALE 1:25



SECTION B

SCALE 1:25

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Issue	Description	Date	Drawn	Approved
A	ISSUE FOR DEVELOPMENT APPLICATION	17.09.19	DK	MB

North

Client
ROSEVILLE COLLEGE
27-29 BANCROFT AVE, ROSEVILLE

Architect
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Project
ROSEVILLE COLLEGE SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
DETAILS SHEET 2

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	AS SHOWN		
Designed	Project No.	Dwg. No.	Issue	
MB	SY190030	C11.06	A	

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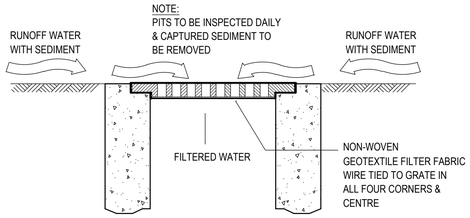
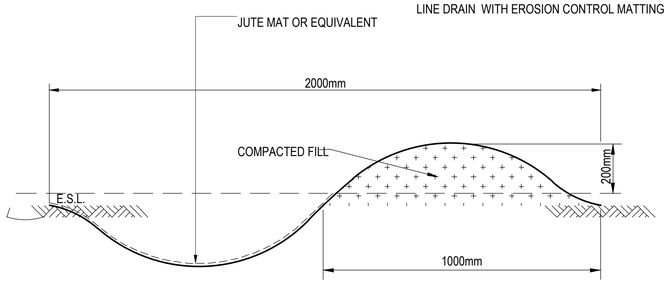


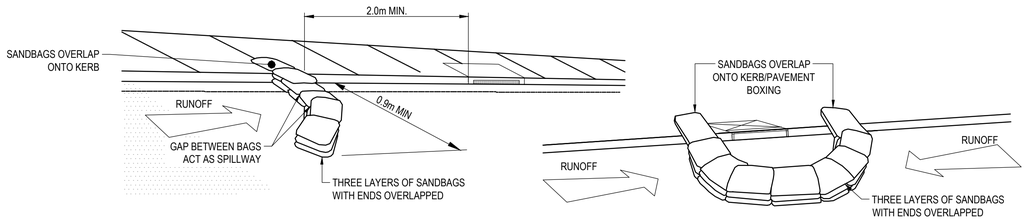
INLET TRAP

NTS



CUT-OFF DRAIN - 2.0m WIDE

NTS



SANDBAG SEDIMENT TRAP - AT ON GRADE PIT

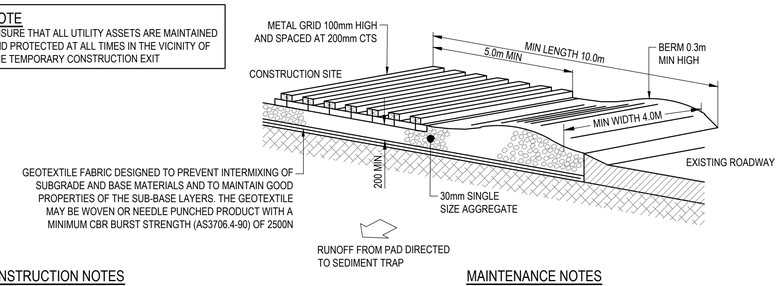
SANDBAG SEDIMENT TRAP - AT KERB SAG PIT

SANDBAG SEDIMENT TRAP

NTS

NOTE

ENSURE THAT ALL UTILITY ASSETS ARE MAINTAINED AND PROTECTED AT ALL TIMES IN THE VICINITY OF THE TEMPORARY CONSTRUCTION EXIT



CONSTRUCTION NOTES

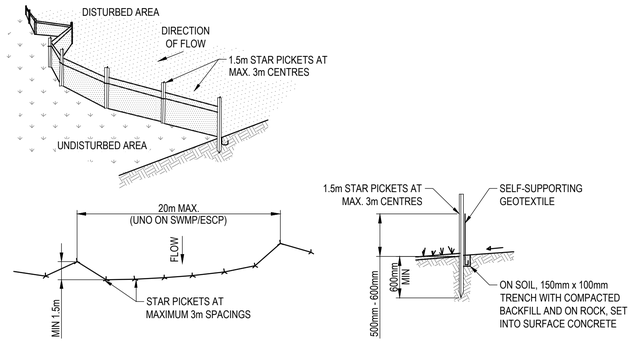
1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING 30mm SINGLE SIZE AGGREGATE.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP WHERE THE SEDIMENT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

NTS



PLAN

SECTION DETAIL

CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 3 METRES APART.
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC.
5. FIX SELF-SUPPORTING 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

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A	ISSUE FOR DEVELOPMENT APPLICATION	17.09.19	DK	MB

North

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Architect
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Project
ROSEVILLE COLLEGE
SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
DETAILS
SHEET 3

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	AS SHOWN		
Designed	Project No.		Dwg. No.	Issue
MB	SY190030		C11.07	A

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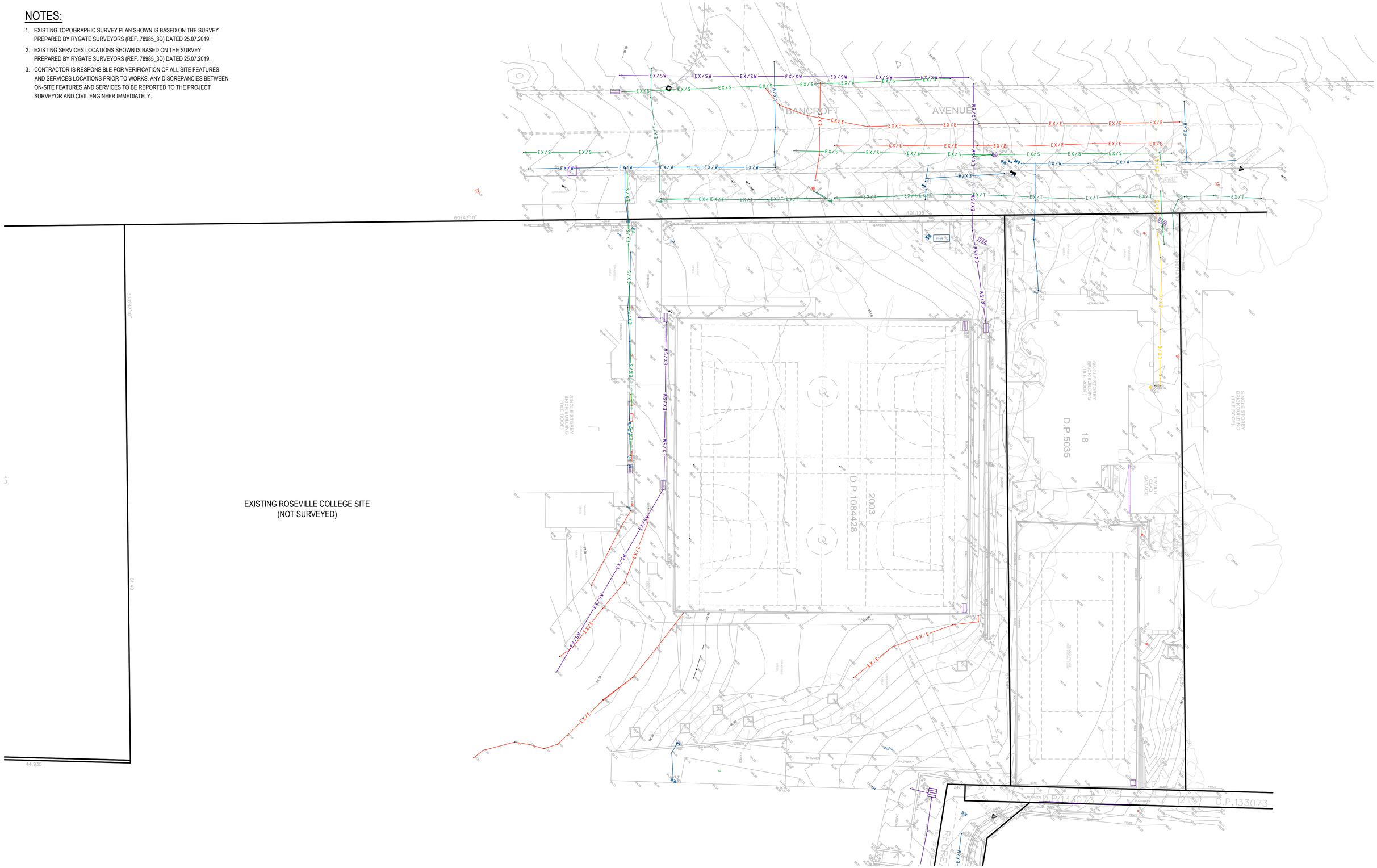
Oct 18, 2019 - 2:46pm

NOTES:

1. EXISTING TOPOGRAPHIC SURVEY PLAN SHOWN IS BASED ON THE SURVEY PREPARED BY RYGATE SURVEYORS (REF. 78985_3D) DATED 25.07.2019.
2. EXISTING SERVICES LOCATIONS SHOWN IS BASED ON THE SURVEY PREPARED BY RYGATE SURVEYORS (REF. 78985_3D) DATED 25.07.2019.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL SITE FEATURES AND SERVICES LOCATIONS PRIOR TO WORKS. ANY DISCREPANCIES BETWEEN ON-SITE FEATURES AND SERVICES TO BE REPORTED TO THE PROJECT SURVEYOR AND CIVIL ENGINEER IMMEDIATELY.



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1cm at full size

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Project
ROSEVILLE COLLEGE
SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
EXISTING SURVEY AND SERVICES PLAN

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	1:200		
Designed	Project No.		Dwg. No.	Issue
MB	SY190030		C13.00	A

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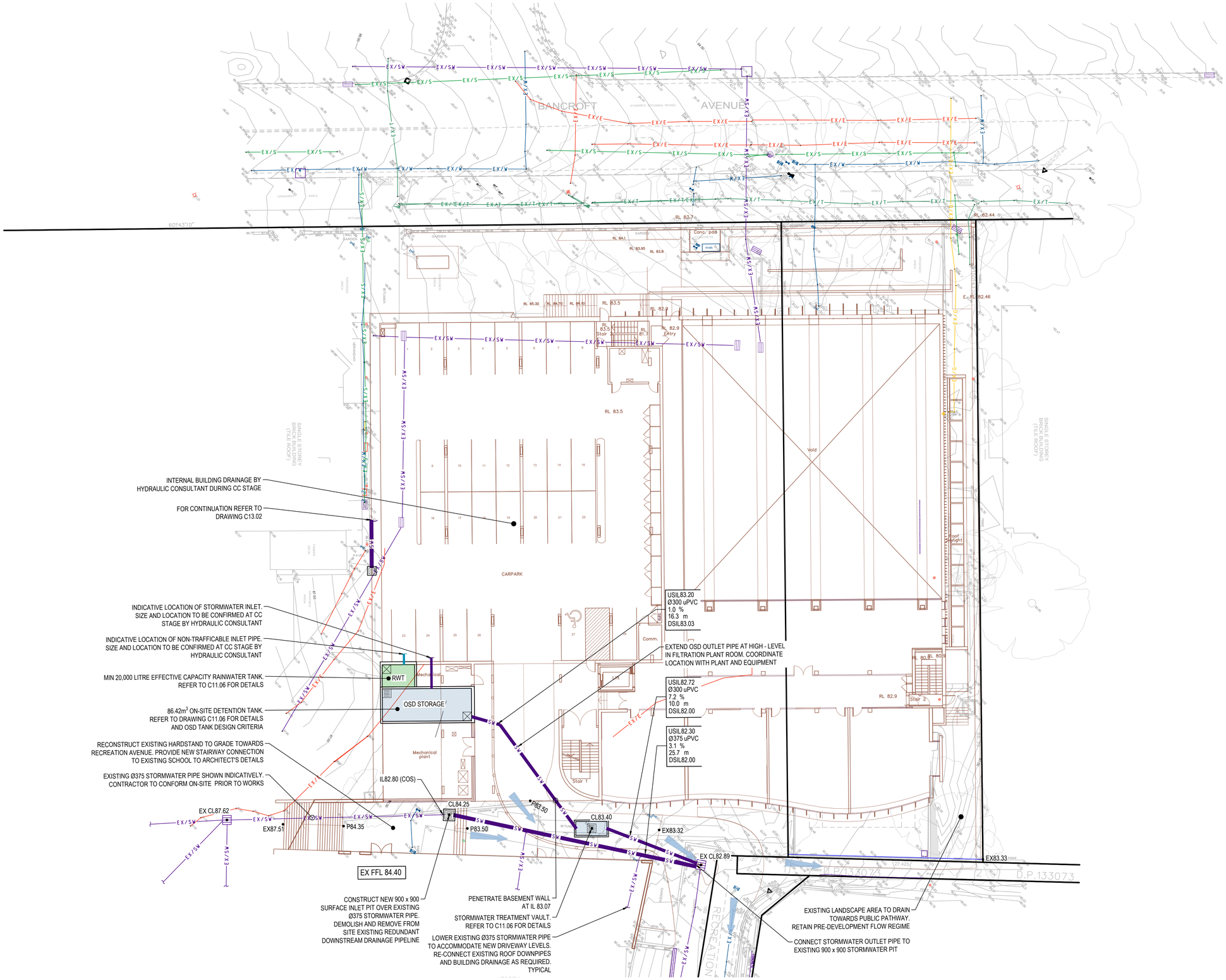

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Project
ROSEVILLE COLLEGE SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
CIVIL WORKS PLAN LEVEL 2

Drawn	Date	Scale	A1	Q.A. Check	Date
DK	AUG 2019	1:200			
Designed	Project No.			Dwg. No.	Issue
MB	SY190030			C13.01	A

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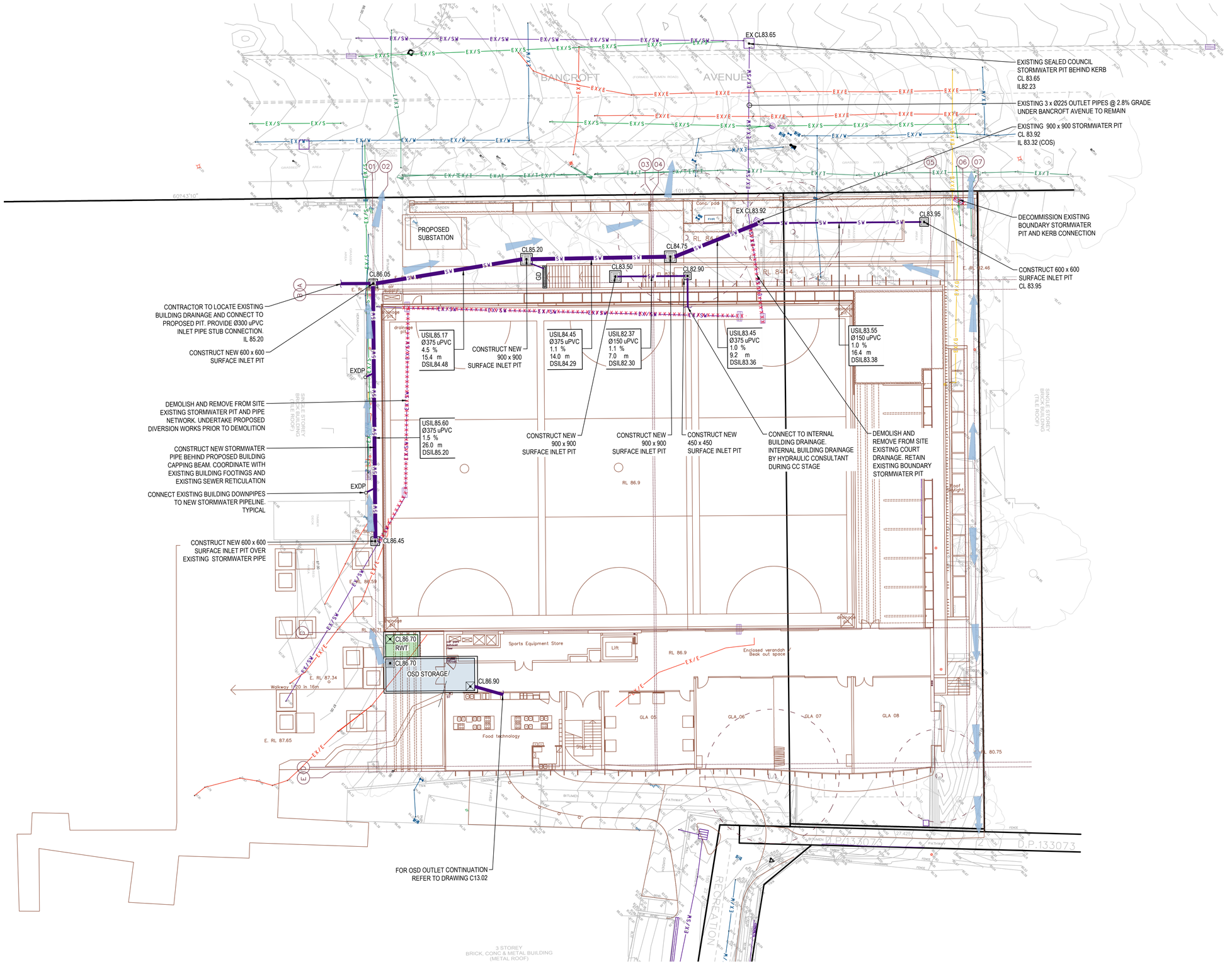

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Project
ROSEVILLE COLLEGE SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
CIVIL WORKS PLAN LEVEL 3

Drawn	Date	Scale	Q.A. Check	Date
DK	AUG 2019	1:200 A1		
Designed	Project No.		Dwg. No.	Issue
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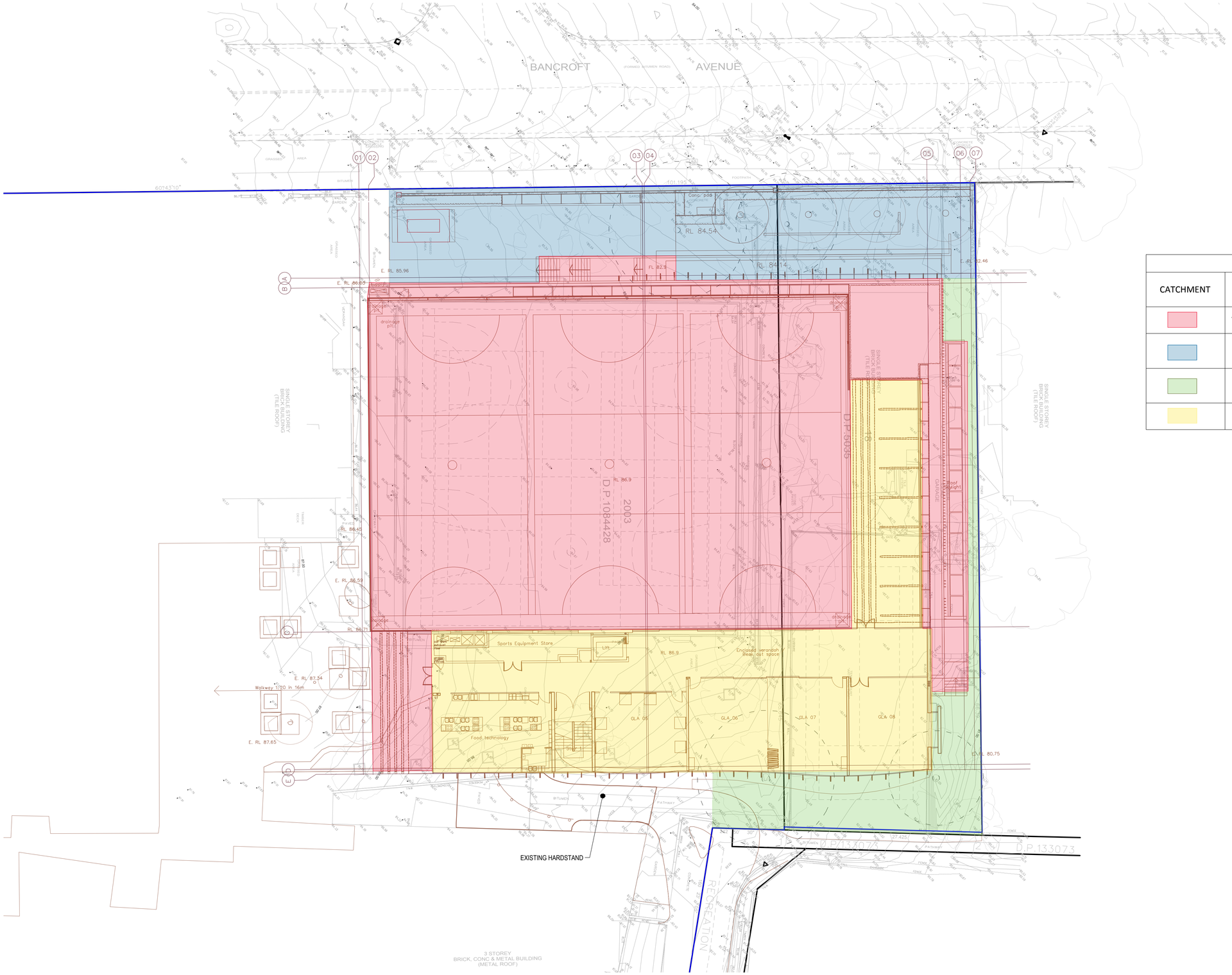

STORMWATER CATCHMENT DETAILS				
CATCHMENT	TYPE	AREA (m2)	IMPERVIOUS (%)	REMARKS
	TRAFFICABLE ROOF	2105	100	TRAFFICABLE ROOF DRAINING TO OSD (DRAINING TO RECREATION AVE)
	SOFT LANDSCAPE (BYPASS)	538	5	BYPASSING OSD (DRAINING TO BANCROFT AVE)
	SOFT LANDSCAPE (BYPASS)	269	5	BYPASSING OSD (DRAINING TO RECREATION AVE)
	NON-TRAFFICABLE ROOF	924	100	NON-TRAFFICABLE ROOF TO RWT (DRAINING TO RECREATION AVE)

TOTAL: 3836m^2

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Project
ROSEVILLE COLLEGE SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
STORMWATER CATCHMENT PLAN

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	1:200		
Designed	Project No.		Dwg. No.	Issue
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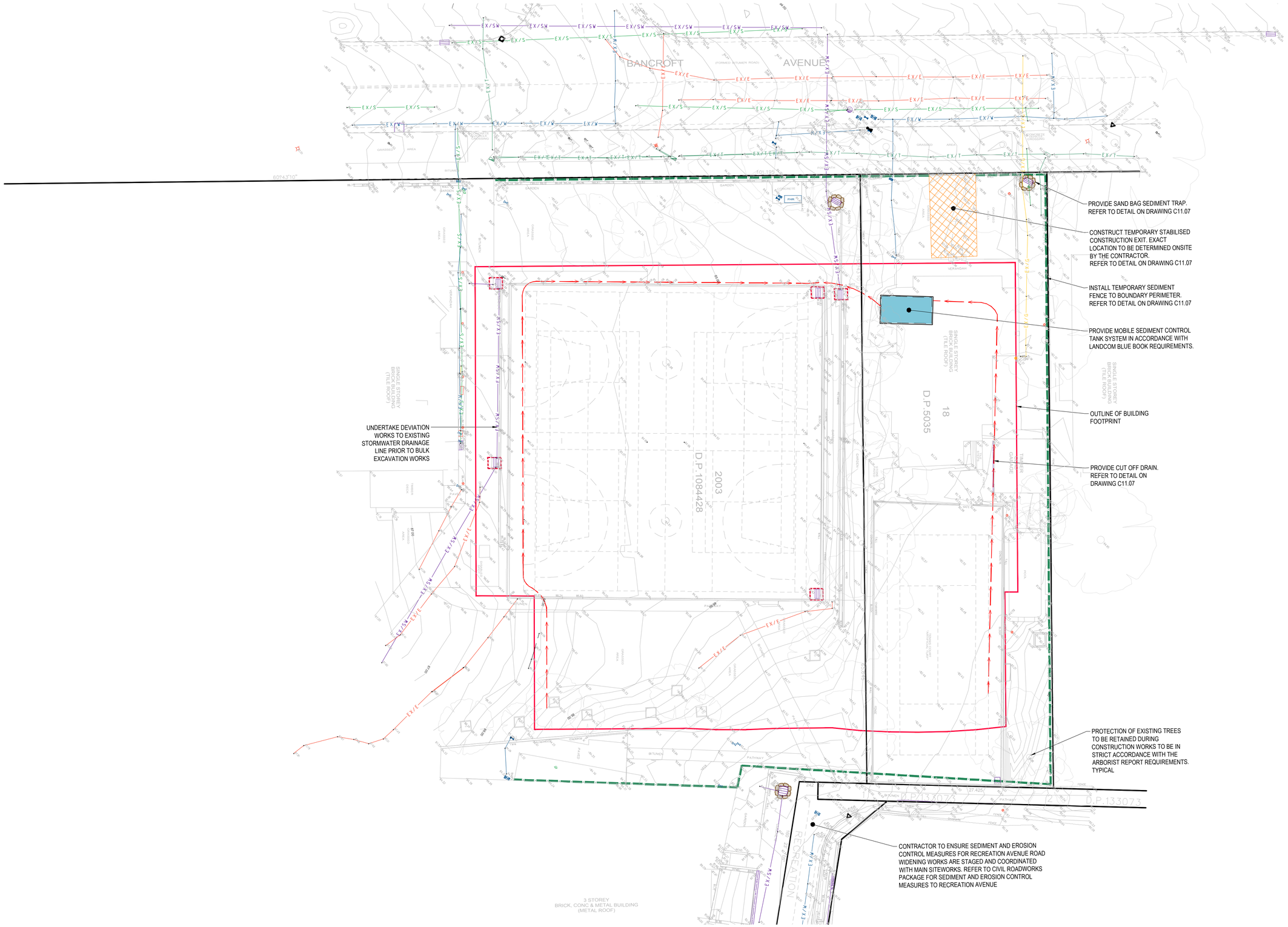

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1cm at full size 10cm 20cm

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Project
ROSEVILLE COLLEGE SWELL CENTRE
27-29 BANCROFT AVENUE, ROSEVILLE

Drawing Title
SOIL EROSION AND AND SEDIMENT CONTROL PLAN

Drawn	Date	Scale A1	Q.A. Check	Date
DK	AUG 2019	1:200		
Designed	Project No.	Dwg. No.	Issue	
MB	SY190030	C15.01	A	

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