PROPOSED INDUSTRIAL DEVELOPMENT 100 SOUTH CREEK ROAD, CROMER, NSW CIVIL ENGINEERING DRAWINGS FOR DEVELOPMENT APPLICATION

DRAWING LIST

CO13674.01-DA41

CO13674.01-DA48

DRAWING NO. DRAWING TITLE CO13674.01-DA10 DRAWING LIST & GENERAL NOTES CO13674.01-DA20 EROSION & SEDIMENT CONTROL PLAN CO13674.01-DA25 **EROSION & SEDIMENT CONTROL DETAILS - SHEET 1** EROSION & SEDIMENT CONTROL DETAILS - SHEET 2 CO13674.01-DA26

STORMWATER DRAINAGE PLAN - GROUND LEVEL

CO13674.01-DA42 STORMWATER DRAINAGE PLAN - BASEMENT CO13674.01-DA45 STORMWATER DETAILS - SHEET 1 STORMWATER DETAILS - SHEET 2 CO13674.01-DA46 CO13674.01-DA47 STORMWATER DETAILS - SHEET 3 STORMWATER DETAILS - SHEET 4

CO13674.01-DA51 FINISHED LEVELS PLAN - GROUND LEVEL CO13674.01-DA52 FINISHED LEVELS PLAN - BASEMENT CO13674.01-DA55 TYPICAL SECTIONS

CO13674.01-DA65 RETAINING WALL DETAILS

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 DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- G2 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT STANDARDS AUSTRALIA CODES AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
- G3 ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR ENGINEER'S DRAWINGS ISSUED IN ANY ELECTRONIC FORMAT MUST NOT BE USED FOR DIMENSIONAL

REFER TO THE ARCHITECT'S DRAWINGS FOR ALL DIMENSIONAL SETOUT INFORMATION.

- G4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
- G5 UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
- G6 ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH ACCEPTABLE SAFETY STANDARDS & APPROPRIATE SAFETY SIGNS SHALL BE INSTALLED AT ALL TIMES DURING THE PROGRESS OF THE JOB.

ELECTRONIC INFORMATION NOTES:

- THE ISSUED DRAWINGS IN HARD COPY OR PDF FORMAT TAKE PRECEDENCE OVER ANY ELECTRONICALLY ISSUED INFORMATION, LAYOUTS OR DESIGN MODELS.
- THE CONTRACTOR'S DIRECT AMENDMENT OR MANIPULATION OF THE DATA OR INFORMATION THAT MIGHT BE CONTAINED WITHIN AN ENGINEER-SUPPLIED DIGITAL TERRAIN MODEL AND ITS SUBSEQUENT USE TO UNDERTAKE THE WORKS WILL BE SOLELY AT THE DISCRETION OF AND THE RISK OF THE CONTRACTOR.
- THE CONTRACTOR IS REQUIRED TO HIGHLIGHT ANY DISCREPANCIES BETWEEN THE DIGITAL TERRAIN MODEL AND INFORMATION PROVIDED IN THE CONTRACT AND/OR DRAWINGS AND IS REQUIRED TO SEEK CLARIFICATION FROM THE SUPERINTENDENT.
- THE ENGINEER WILL NOT BE LIABLE OR RESPONSIBLE FOR THE POSSIBLE ON-GOING NEED TO UPDATE THE DIGITAL TERRAIN MODEL, SHOULD THERE BE ANY AMENDMENTS OR CHANGES TO THE DRAWINGS OR CONTRACT INITIATED BY THE CONTRACTOR.

SITE PREPARATION NOTES:

- ALL EARTHWORKS SHALL BE COMPLETED GENERALLY IN ACCORDANCE WITH THE GUIDELINES SPECIFIED IN THE GEOTECHNICAL REPORT.
- 2. EXISTING LEVELS ARE BASED ON INFORMATION PROVIDED BY LTS LOCKLEY TITLED 50384001DT DATED 21/06/16.
- 3. STRIP ANY TOP SOIL OR DELETERIOUS MATERIAL AND DISPOSE OF FROM SITE OR STORE AS DIRECTED.
- 4. COMPLETE CUT TO FILL EARTHWORKS TO ACHIEVE THE REQUIRED LEVELS AS INDICATED ON THE DRAWINGS WITHIN A TOLERANCE OF +0mm/-10mm THROUGH BUILDING PADS/PAVEMENTS AND +0mm/-20mm ELSEWHERE.
- 5. PREPARE STEEP BATTERS TO RECEIVE FILL BY CONSTRUCTING BENCHING TO FACILITATE FILL PLACEMENT AND COMPACTION
- 6. AREAS TO RECEIVE FILL (THAT ARE NOT ON BENCHED BATTERS) AND AREAS IN CUT SHALL BE PROOF ROLLED TO IDENTIFY ANY SOFT HEAVING MATERIAL. SOFT MATERIAL SHALL BE BOXED OUT AND REMOVED PRIOR TO FILL PLACEMENT. PROOF ROLLING TO BE INSPECTED BY A GEOTECHNICAL ENGINEER OR THE EARTHWORKS DESIGNER.
- SITE WON FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HILF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HILF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET
- IMPORTED FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HILF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HILF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET
- 9. ALL ENGINEERED FILL PARTICLES SHALL BE ABLE TO BE INCORPORATED WITHIN A SINGLE LAYER. FURTHER, LESS THAN 30% OF PARTICLES SHALL BE RETAINED ON THE 37.5 MM SIEVE. ENGINEERED FILL SHALL BE ABLE TO BE TESTED IN ACCORDANCE WITH THE STANDARD COMPACTION METHOD (AS1289.5.4.1) OR HILF TEST METHOD (AS1289.5.7.1). THESE METHODS REQUIRE LESS THAN 20% RETAINED ON THE 37.5 MM SIEVE. WHERE BETWEEN 20% AND 30% OF PARTICLES ARE RETAINED ON THE 37.5 MM SIEVE THE ABOVE TEST METHODS SHALL STILL BE ADOPTED AND TEST REPORTS ANNOTATED APPROPRIATELY. THESE REQUIREMENTS SHOULD BE MET BY THE MATERIAL AFTER PLACEMENT AND COMPACTION
- 10. ALL THE EARTHWORKS UNDERTAKEN AND THE SUBGRADE CONDITION IN THE CUT AREAS (IN THE STATED PERIOD) ARE DOCUMENTED IN THE REPORTS AND HAVE BEEN UNDERTAKEN IN ACCORDANCE WITH THE SPECIFICATION (EG. COSTIN ROE SITE PREPARATION NOTES IN DWG C013003.01-EWC10)
- 11. PRIOR TO ANY EARTHWORKS, EROSION CONTROL AS OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE COMPLETED.
- 12. EXISTING ROCK, IF ANY, SHALL BE REMOVED BY HEAVY ROCK BREAKING OR RIPPING
- 13. MATCH EXISTING LEVELS AT BATTER INTERFACE.
- 14. CONTRACTOR TO MATCH EXISTING LEVELS AT THE INTERFACE OF EARTHWORKS AND EXISTING SURFACE AT BATTER LOCATIONS OR WHERE NO RETAINING WALLS ARE PRESENT. ANY DISCREPANCY BETWEEN DESIGN AND EXISTING LEVELS TO BE REFERRED TO THE ENGINEER FOR DIRECTION OR ADJUSTMENTS TO DESIGN LEVELS.

FINISHED LEVELS PLAN NOTES:

- LEVELS DATUM IS A.H.D.
- 2. ALL CONTOUR LINES & SPOT LEVELS INDICATE FINISHED PAVEMENT LEVELS U.N.O. ON PLAN.
- 3. THE MAJOR CONTOUR INTERVAL IS 0.5m
- THE MINOR CONTOUR INTERVAL IS 0.1m.
- MINIMUM PAVEMENT GRADE IS TO BE 1:100 (1%).
- MAXIMUM PAVEMENT GRADE IS TO BE 1:20 (5%) IN CARPARKING AREAS AND 1:25 (4%) ELSEWHERE.
- MAXIMUM RAMP GRADES ARE TO BE 1:12 (8.3%) U.N.O. ON PLAN
- PROVIDE MINIMUM 3.0m LONG TRANSITION WHERE CHANGES GRADE EXCEDE
- 9. PERMANENT BATTER SLOPES ARE TO HAVE A MAXIMUM GRADE OF 1V:3H.
- 10. ALL BATTER SLOPE WITH GRADES AT OR EXCEDING 1V:6H ARE TO BE TURFED IMMEDIATELY OR APPROPRIATE EROSION CONTROL IS TO BE PROVIDED TO THE SATISFACTION OF THE ENGINEER.
- 11. THE ACCESS ROAD TO THE HARDSTAND AREA IS TO HAVE A CROSSFALL OF 2% AS INDICATED ON PLAN.
- 12. ALL FOOTPATHS ARE TO FALL AWAY FROM THE BUILDING AT 2.5%
- 13. ALL PAVEMENTS ARE TO BE SET AT 50mm BELOW THE FINISHED FLOOR LEVEL OF THE WAREHOUSE AND OFFICE AREAS. FOR DEVELOPMENT APPLICATION

EROSION CONTROL NOTES

ALL CONTROL WORK INCLUDING DIVERSION BANKS AND CATCH DRAINS, V-DRAINS AND SILT FENCES SHALL BE COMPLETED DIRECTLY FOLLOWING THE COMPLETION OF THE FARTHWORKS.

- SILT FENCES AND SILT FENCE RETURNS SHALL BE ERECTED CONVEX TO THE CONTOUR TO POND WATER.
- 2. HAY BALE BARRIERS AND GEOFABRIC FENCES ARE TO BE CONSTRUCTED TO TOE OF BATTER, PRIOR TO COMMENCEMENT OF EARTHWORKS, IMMEDIATELY AFTER CLEARING OF VEGETATION AND BEFORE REMOVAL OF TOP
- 3. ALL TEMPORARY EARTH BERMS, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- 4. CLEAR WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO THE DRAINAGE SYSTEM.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROVIDING ON GOING ADJUSTMENT TO EROSION CONTROL MEASURES AS REQUIRED DURING CONSTRUCTION
- 6. ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING, TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE, APPROVED LOCATION
- 7. ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE MAINTAINED UNTIL THE END OF THE DEFECTS LIABILITY PERIOD.
- 8. ALL EARTHWORKS AREAS SHALL BE ROLLED ON A REGULAR BASIS TO SEAL THE EARTHWORKS.
- 9. ALL FILL AREAS ARE TO BE LEFT WITH A BUND AT THE TOP OF THE SLOPE AT THE END OF EACH DAYS EARTHWORKS. THE HEIGHT OF THE BUND SHALL BE A MINIMUM OF 200MM.
- 10. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND HYDROMULCHED WITHIN 10 DAYS OF COMPLETION OF
- 11. AFTER REVEGETATION OF THE SITE IS COMPLETE AND THE SITE IS STABLE IN THE OPINION OF A SUITABLY QUALIFIED PERSON ALL TEMPORARY WORK SUCH AS SILT FENCE, DIVERSION DRAINS ETC SHALL BE REMOVED.
- 12. ALL TOPSOIL STOCKPILES ARE TO BE SUITABLY COVERED TO THE SATISFACTION OF THE SITE MANAGER TO PREVENT WIND AND WATER EROSION.
- 13. ANY AREA THAT IS NOT APPROVED BY THE CONTRACT ADMINISTRATOR FOR CLEARING OR DISTURBANCE BY THE CONTRACTOR'S ACTIVITIES SHALL BE CLEARLY MARKED AND SIGN POSTED, FENCED OFF OR OTHERWISE APPROPRIATELY PROTECTED AGAINST ANY SUCH DISTURBANCE.
- 14. ALL STOCKPILE SITES SHALL BE SITUATED IN AREAS APPROVED FOR SUCH USE BY THE SITE MANAGER. A 6m BUFFER ZONE SHALL EXIST BETWEEN STOCKPILE SITES AND ANY STREAM OR FLOW PATH. ALL STOCKPILES SHALL BE ADEQUATELY PROTECTED FROM EROSION AND CONTAMINATION OF THE SURROUNDING AREA BY USE OF THE MEASURES APPROVED IN THE EROSION AND SEDIMENTATION CONTROL PLAN.
- 15. ACCESS AND EXIT AREAS SHALL INCLUDE SHAKE-DOWN OR OTHER METHODS APPROVED BY THE SITE MANAGER FOR THE REMOVAL OF SOIL MATERIALS FORM MOTOR VEHICLES.
- 16. THE CONTRACTOR IS TO ENSURE RUNOFF FROM ALL AREAS WHERE THE NATURAL SURFACE IS DISTURBED BY CONSTRUCTION, INCLUDING ACCESS ROADS, DEPOT AND STOCKPILE SITES, SHALL BE FREE OF POLLUTANTS BEFORE IT IS EITHER DISPERSED TO STABLE AREAS OR DIRECTED TO NATURAL WATERCOURSES.
- 17. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SLOPES, CROWNS AND DRAINS ON ALL EXCAVATIONS AND EMBANKMENTS TO ENSURE SATISFACTORY DRAINAGE AT ALL TIMES WATER SHALL NOT BE ALLOWED TO POND ON THE WORKS UNLESS SUCH PONDING IS PART OF AN APPROVED ESCP / SWMP.

STORMWATER DRAINAGE NOTES:

- ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3:2003 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
- 2. THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT
- ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS DA51 & DA52.
- 4. PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN. EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO
- BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON
- 6. ALL STORMWATER PIPES ϕ 375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
- 7. ALL PIPES UP TO AND INCLUDING \$\phi 300 TO BE uPVC GRADE \$N8
- PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS
- ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE F'c 25 MPA. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- 10. IN ADDITION TO ITEM 6 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
- 11. PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAM AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMMERS OR OTHER SUITABLE TAMPING DETAILS.
- 12. CONCRETE PIPES UNDER, OR WITHIN THE ZONE OF INFLUENCE OF PAVED AREAS SHALL BE LAID USING HS2 TYPE SUPPORT, AS A MINIMUM, IN ACCORDANCE WITH AS 3725. AGGREGATE BACKFILL SHALL NOT BE USED FOR PIPE BEDDING AND OR HAUNCH/SIDE
- 13. WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED \$100 uPVC TO EACH SIDE OF
- 14. ALL SUBSOIL DRAINAGE LINES SHALL BE \$\phi\$100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE, LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
- 15. ALL PIPE GRADES 1 IN 100 MINIMUM UNO.
- PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
- 17. MIN. 600 COVER TO PIPE OBVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
- PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY', THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' U.N.O.
- 19. PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
- 20. DOWN PIPES (DP) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE U.N.O. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
- 21. PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.



DATE ISSUE

ISSUED FOR INFORMATION ONLY

ARCHITECT



GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES



Costin Roe Consulting Pty Ltd. Consulting Engineers ACN 003 696 446 Level 1, 8 Windmill Street Walsh Bay, Sydney NSW 2000 Tel: (02) 9251-7699 Fax: (02) 9241-3731



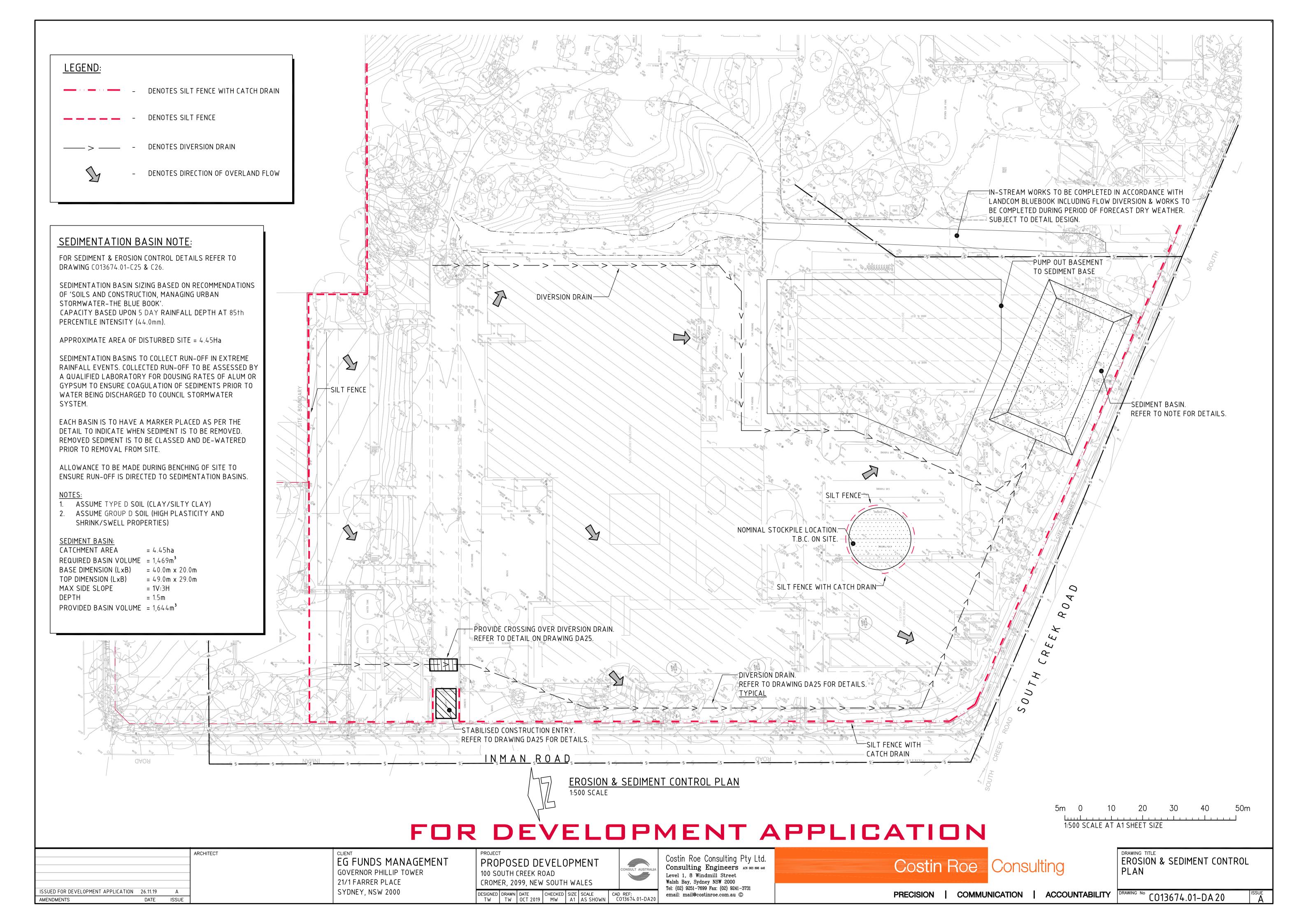
DRAWING LIST & GENERAL NOTES

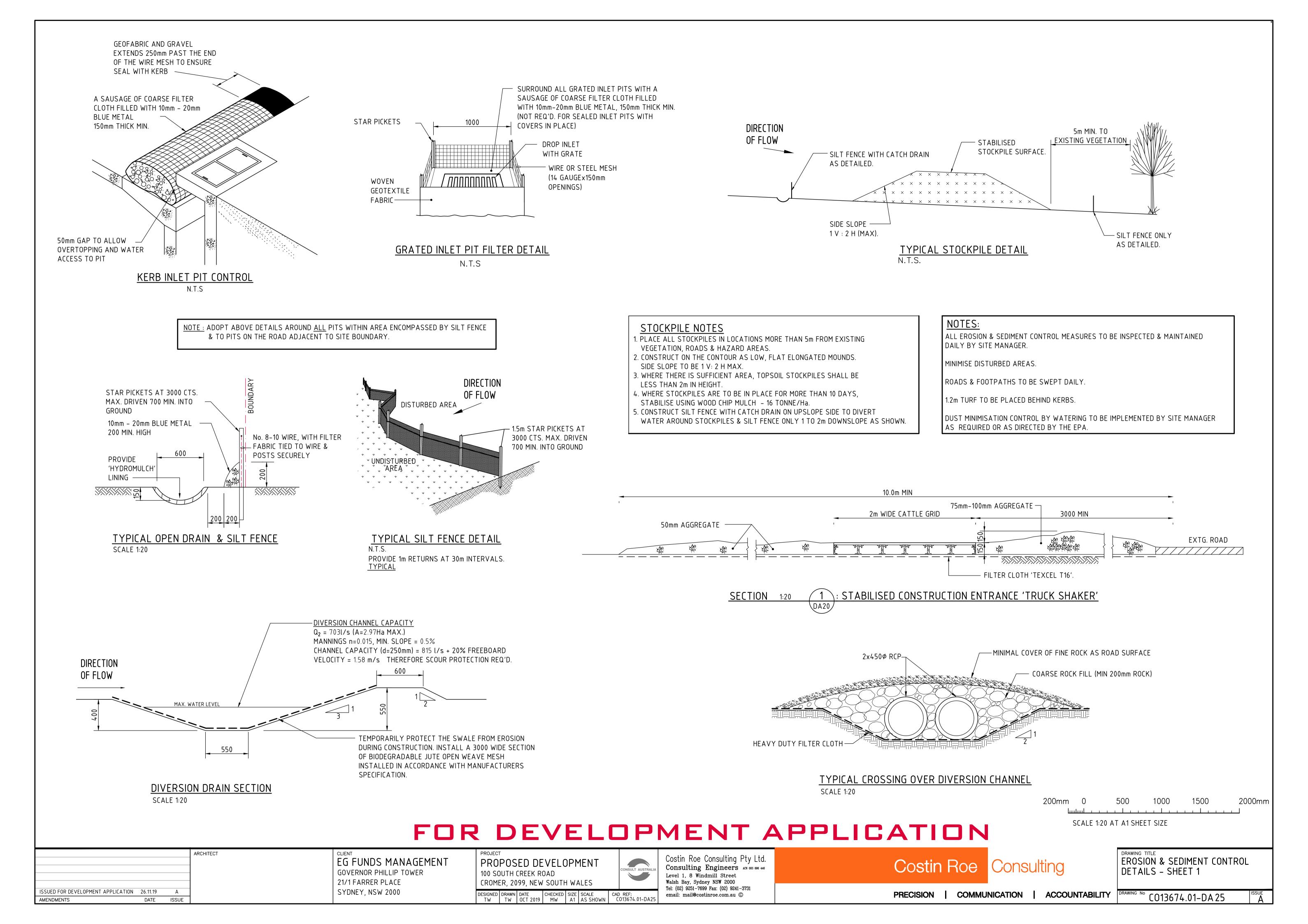
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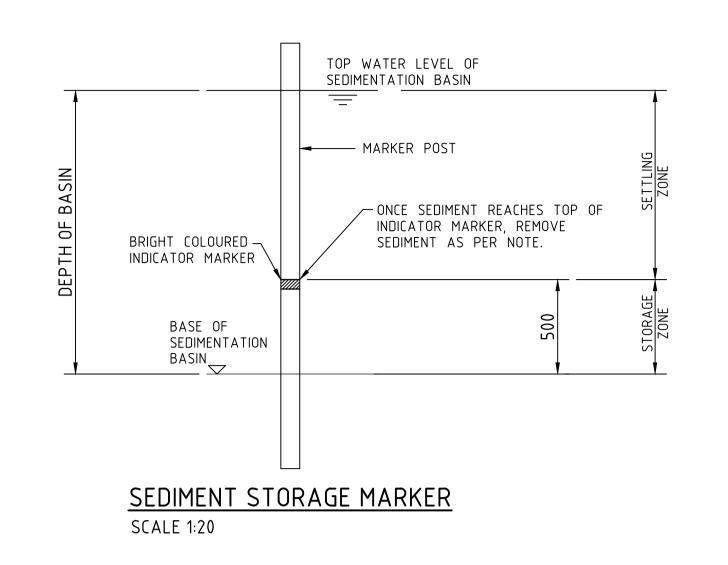
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TW TW OCT 2019 MW A1 AS SHOWN C013674.01-DA10 email: mail@costinroe.com.au ©

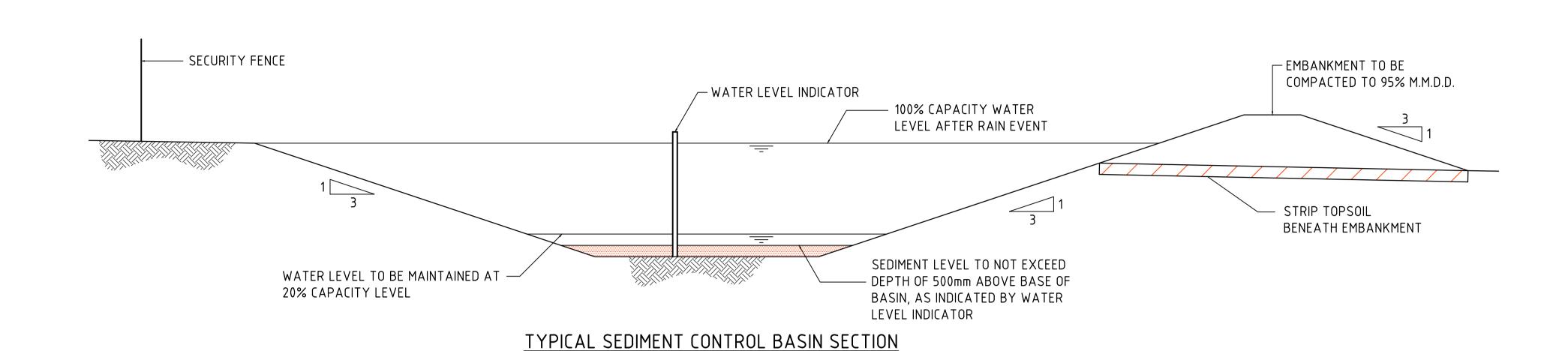
SYDNEY, NSW 2000

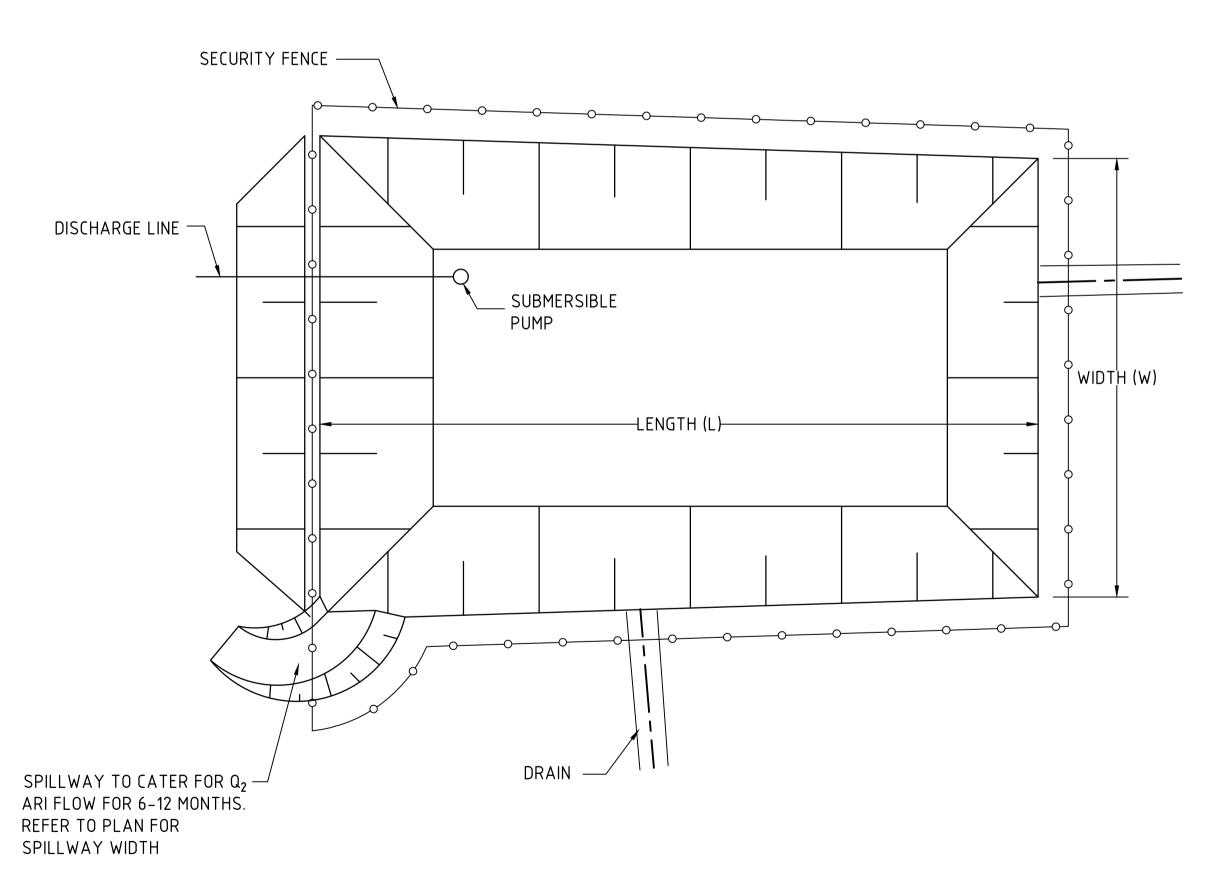
COMMUNICATION











TYPICAL SEDIMENT CONTROL POND PLAN SCALE 1:250

FOR DEVELOPMENT APPLICATION

SCALE 1:50

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19 DATE ISSUE

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES



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DRAWING TITLE **EROSION & SEDIMENT CONTROL** DETAILS - SHEET 2

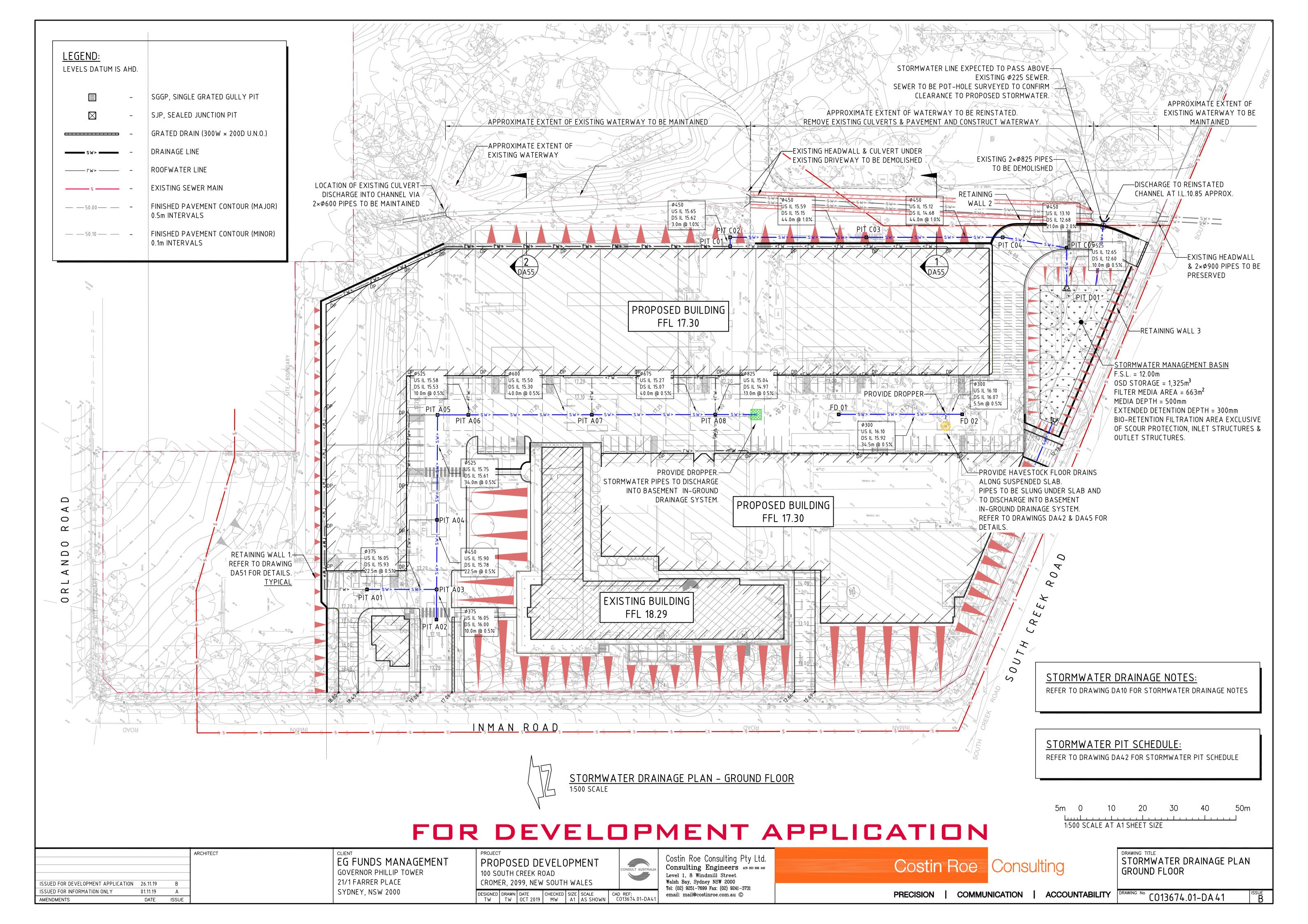
SCALE 1:20 AT A1 SHEET SIZE

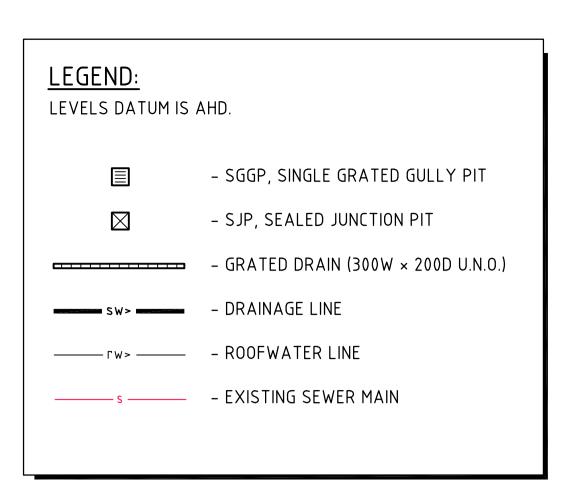
SCALE 1:50 AT A1 SHEET SIZE

SCALE 1:250 AT A1 SHEET SIZE

COMMUNICATION | ACCOUNTABILITY | DRAWING No CO13674.01-DA 26

2000mm





PIT SCHEDULE

NETWORK A

PIT No.	GRATE RL	TYPE	SIZE	COMMENT
PIT A 01	17.05	SGGP	900×900	\oplus
PIT A 02	17.05	SGGP	900×900	\oplus
PIT A 03	17.05	SGGP	900×900	\oplus
PIT A 04	17.05	SGGP	900×900	\oplus
PIT A 05	17.12	SJP	900×900	
PIT A 06	17.00	SGGP	900×900	\oplus
PIT A 07	17.00	SGGP	900×900	\oplus
PIT A 08	17.00	SGGP	900×900	\oplus

NETWORK B

PIT No.	GRATE RL	TYPE	SIZE	COMMENT
PIT B 01	14.05	SGGP	900×900	\oplus
PIT B 02	14.05	SGGP	900×900	\oplus
PIT B 03	14.05	SGGP	900×900	\oplus
PIT B 04	14.05	SGGP	900×900	\oplus
PIT B 05	14.05	SGGP	900×900	\oplus
PIT B 06	14.05	SGGP	900×900	\oplus
PIT B 07	14.05	SGGP	900×900	\oplus
PIT B 08	14.05	SGGP	900×900	\oplus
PIT B 09	14.05	SGGP	900×900	\oplus
PIT B 10	14.05	SGGP	900×900	\oplus
PIT B 11	14.05	SGGP	900×900	\oplus
PIT B 12	14.05	SGGP	900×900	\oplus
PIT B 13	14.05	SGGP	900×900	\oplus
PIT B 14	14.05	SGGP	900×900	\oplus
PIT B 15	14.05	SGGP	900×900	\oplus
PIT B 16	14.05	SGGP	900×900	\oplus
PIT B 17	14.05	SGGP	900×900	\oplus
PIT B 18	14.05	SGGP	900×900	\oplus
PIT B 19	13.70	SJP	900×900	

NETWORK C

PIT No.	GRATE RL	TYPE	SIZE	COMMENT
PIT C 01	17.25	SJP	900×900	
PIT C 02	17.00	SJP	900×900	
PIT C 03	15.00	SJP	900×900	
PIT C 04	13.92	SJP	900×900	
PIT C 05	13.50	SGGP	900×900	\oplus

NETWORK D

PIT No.	GRATE RL	TYPE	SIZE	COMMENT
PIT D 01	12.45	BIP	1200×1200	

→ DENOTES PIT TO BE FITTED WITH OCEANGUARD OCEANPROTECT PIT INSERT

—STORMWATER DISCHARGE POINT. REFER TO DRAWING DA41 FOR DETAILS. SELF STORAGE UNITS FFL 11.00 GROUND- FLOOR STORMWATER DISCHARGES -STORMWATER MANAGEMENT BASIN INTO IN-GROUND DRAINAGE SYSTEM. REFER TO DRAWING DA41 FOR DETAILS REFER TO DRAWING DA41 FOR CONTINUATION. GROUND- FLOOR STORMWATER DISCHARGES— INTO IN-GROUND DRAINAGE SYSTEM. US IL 12.13 REFER TO DRAWING DA41 FOR CONTINUATION. DS IL 12.00 21.5m @ 0.5% **15.0m @ 0.5%** PIT B02 PIT B04 PIT B05 ## 825 US IL 12.65 US IL 12.54 US IL 12.54 US IL 12.54 US IL 12.43 US IL 12.45 US IL 12.43 US IL 12.34 US IL 12.54 DS IL 12.34 17.5m @ 0.5% V US IL 13.05 US IL 12.93 - US IL 12.81 US IL 12.72 17.5m @ 0.5% 17.5m @ 0.5% 17.5m @ 0.5% DS IL 12.50 Y DS IL 12.61 15.5m @ 0.5% _17.5m @ 0.5% 15.0m @ 0.5% IT B10 ≈ / PIT B11 ≈ /PIT B12 ≈ Y US IL 12.93 US IL 12.81 DS IL 12.84 DS IL 12.96 717.5m @ 0.5% 17.5m @ 0.5% 7 # > EXISTING BUILDING 0 FFL 14.85 US IL 13.05 VI US IL 12.93 _____DS IL 12.84 - | -17.5m @ 0.5% SITE - BOUNDARY INMAN ROAD STORMWATER DRAINAGE NOTES: REFER TO DRAWING DA10 FOR STORMWATER DRAINAGE NOTES STORMWATER DRAINAGE PLAN - BASEMENT 1:500 SCALE 1:500 SCALE AT A1 SHEET SIZE FOR DEVELOPMENT APPLICATION

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19 ISSUED FOR INFORMATION ONLY AMENDMENTS DATE ISSUE

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES



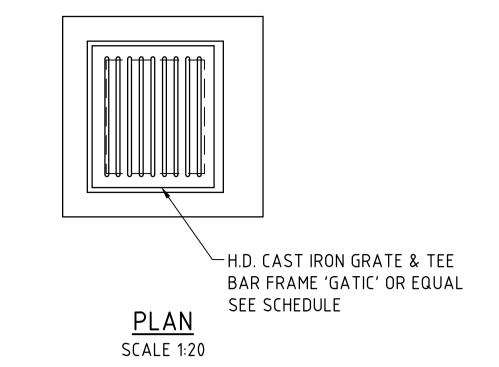
Costin Roe Consulting Pty Ltd. Consulting Engineers ACN 003 696 446 Level 1, 8 Windmill Street Walsh Bay, Sydney NSW 2000 Tel: (02) 9251-7699 Fax: (02) 9241-3731 email: mail@costinroe.com.au ©

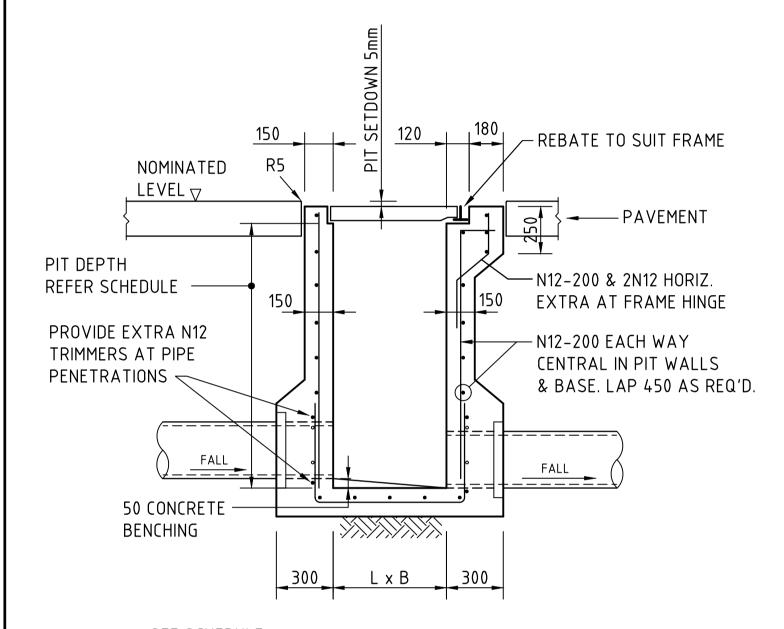
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STORMWATER DRAINAGE PLAN **BASEMENT**

DESIGNED DRAWN DATE CHECKED SIZE SCALE CAD REF:
TW TW OCT 2019 MW A1 AS SHOWN C013674.01-DA42

COMMUNICATION | ACCOUNTABILITY | DRAWING No CO13674.01-DA 42





SEE SCHEDULE L DIMENSION IN DIRECTION OF DOWNSTREAM PIPE

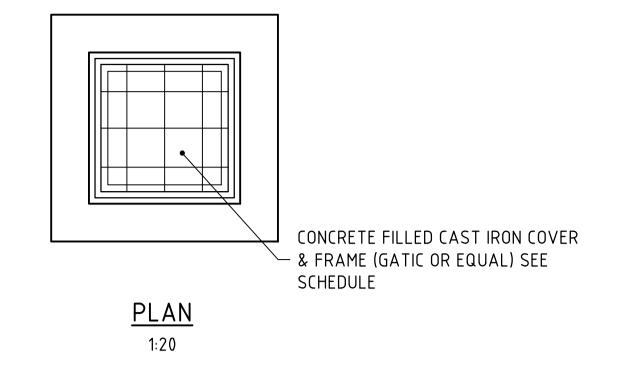
> **SECTION** SCALE 1:20

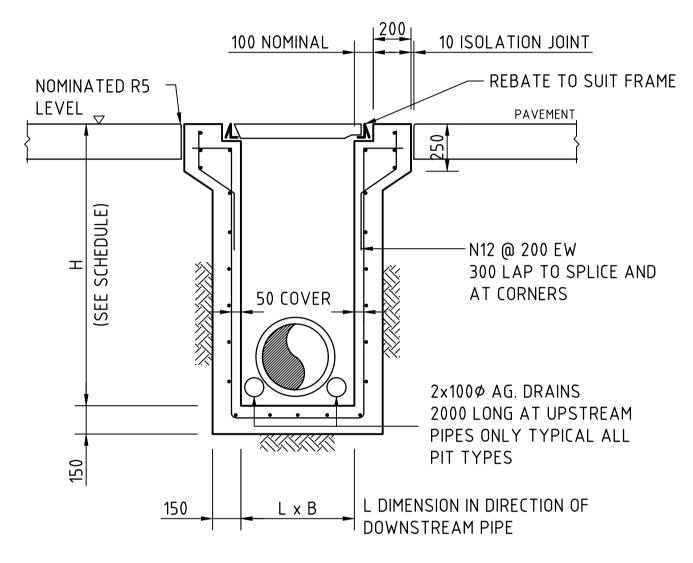
SINGLE GRATED GULLY PIT - SGGP

NOTES:

- 1. WHERE GULLY PIT IS LOCATED ON KERB RETURNS OR BULB OF CUL-DE-SACS PROVIDE CURVED PRECAST CONCRETE LINTELS.
- 2. SAG PITS SHALL HAVE LINTEL PLACED CENTRALLY ABOUT THE GRATE.
- 3. ALL REINFORCING TO HAVE 30 MIN. CLEAR CONCRETE COVER.
- 4. FOR PITS DEEPER THAN 1200mm CLIMB RAILS SHALL BE PROVIDED.

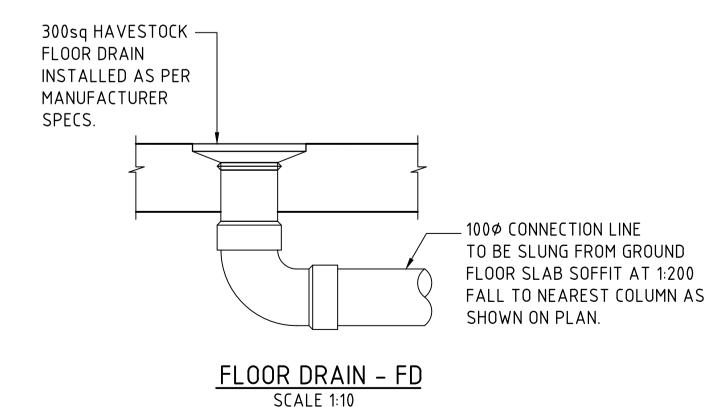
CONCRETE QUALITY					
ELEMENT SLUMP AGGREGATE CEMENT ADMIXTURE F'C (MAX. SIZE) TYPE (MPa)					
PIT 80 20 GP NIL 25					



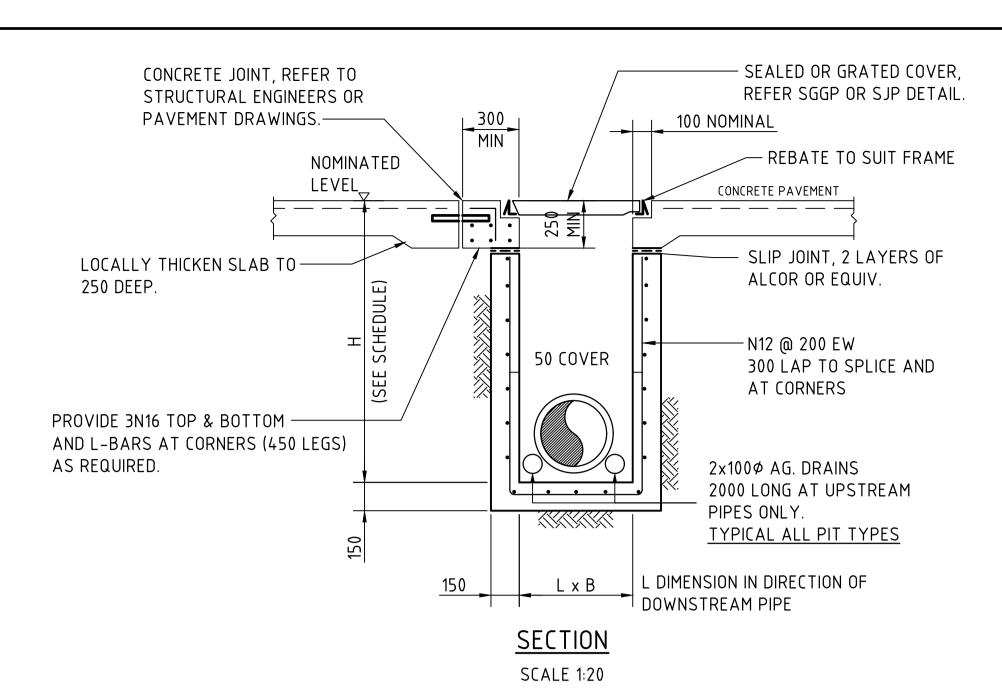


SECTION SCALE 1:20

SEALED JUNCTION PIT - SJP

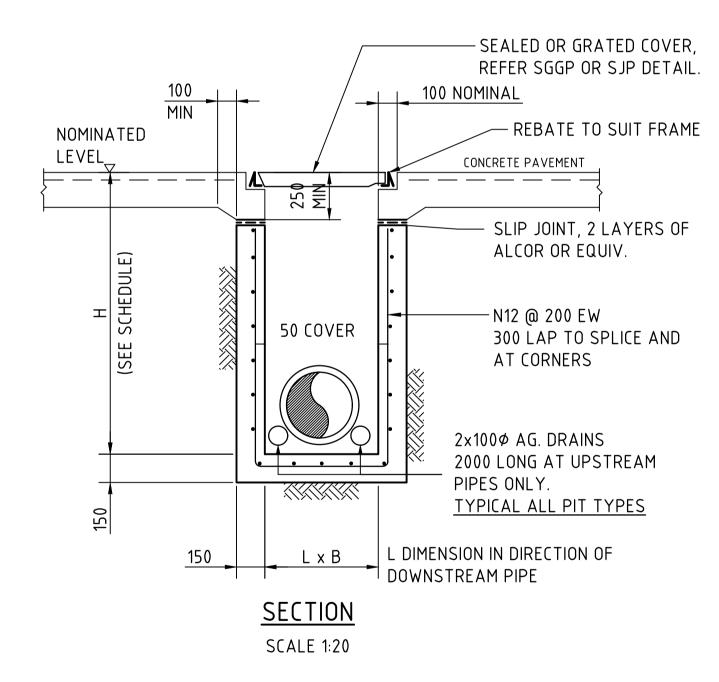


(FOR USE IN SUSPENDED SLABS)



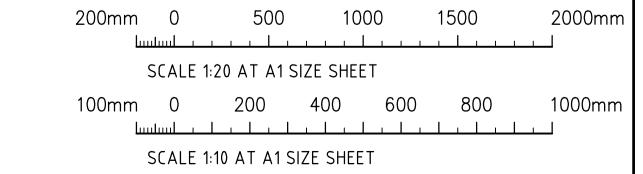
SJP/CIS & SGGP/CIS (CAST IN SLAB) PIT DETAIL GRATE/COVER SUPPORT CAST-INTO PAVEMENT SLAB

(ADOPT IN CONCRETE PAVEMENT FOR SGGP's & SJP's, WHERE PITS ARE LOCATED IN THE CORNER OF SLAB PANELS OR ADJACENT TO SLAB PANEL JOINTS)



SJP/CIS & SGGP/CIS (CAST IN SLAB) PIT DETAIL GRATE/COVER SUPPORT CAST-INTO PAVEMENT SLAB

(ADOPT IN CONCRETE PAVEMENTS FOR SGGP's & SJP's, WHERE JOINTS ARE NOT LOCATED WITHIN PROXIMITY OF THE GRATE)



FOR DEVELOPMENT APPLICATION

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19 ISSUED FOR INFORMATION ONLY ISSUE DATE

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES



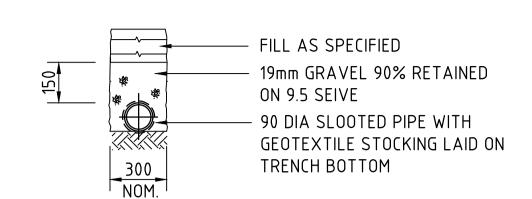
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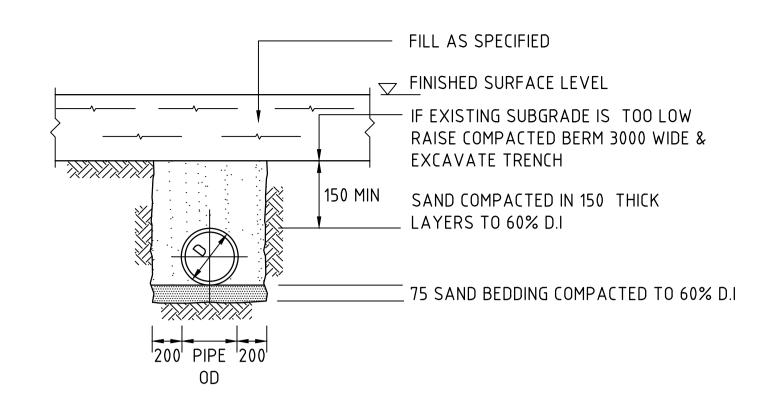
DRAWING TITLE STORMWATER DRAINAGE DETAILS SHEET 1

DESIGNED DRAWN DATE CHECKED SIZE SCALE CAD REF:
TW TW OCT 2019 MW A1 AS SHOWN C013674.01-DA45

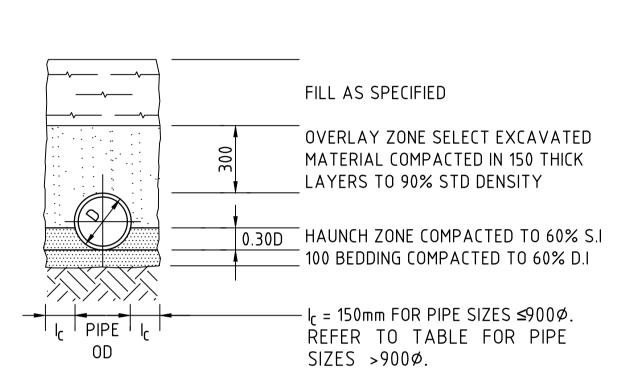
COMMUNICATION | ACCOUNTABILITY | DRAWING No CO13674.01-DA 45

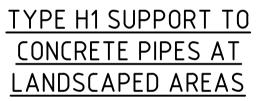


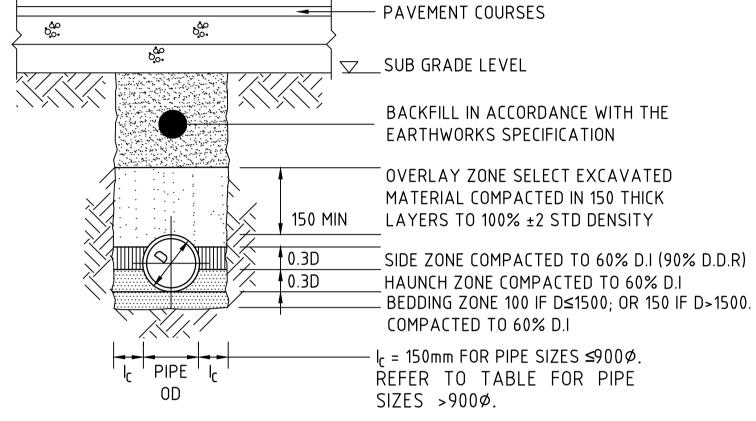
SUPPORT TO AG. DRAIN



SUPPORT TO uPVC PIPES







TYPE HS2 SUPPORT TO **CONCRETE PIPES** UNDER PAVEMENT

D≤ 1350, MAX FILL = 4.0m D> 1350, MAX FILL = 3.0m

BEDDING & HAUNCH MATERIAL GRADING			
SIEVE SIZE	WEIGHT PASSING(%)		
19	100		
2.36	100 TO 50		
0.60	90 TO 20		
0.30	60 TO 10		
0.15	25 TO 0		
0.075	10 TO 0		

SIDE ZONE MA	SIDE ZONE MATERIAL GRADING			
SIEVE SIZE WEIGHT PASSING(%)				
75 9.5 2.36 0.60 0.075	100 100 TO 50 100 TO 30 50 TO 15 25 TO 0			

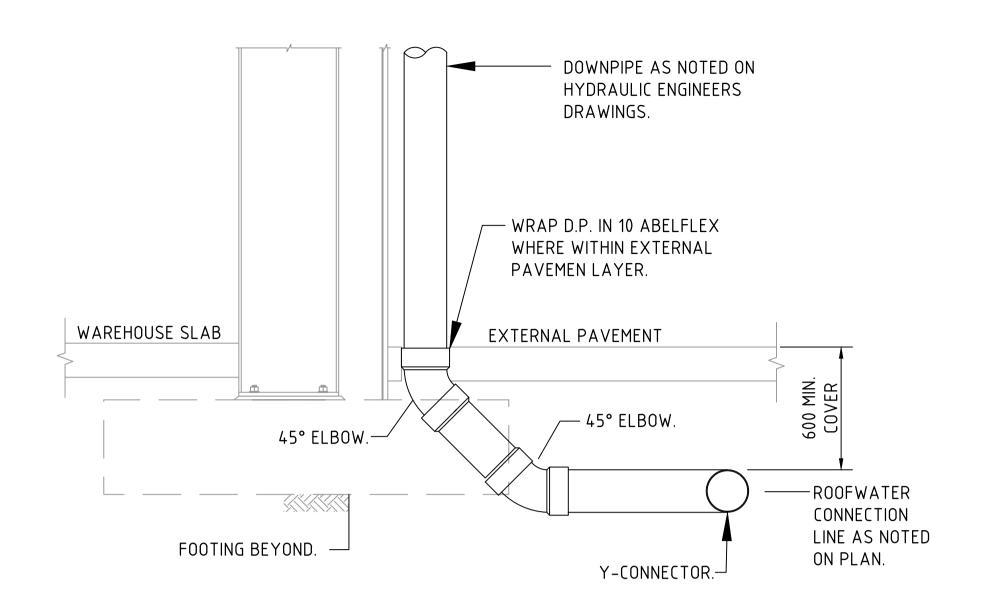
SELECT FILL MATERIAL IN ACCORDANCE WITH TABLE 1 AS 3725

SIDE ZONE WIDTH		
PIPE SIZE	I _C (mm)	
≤900ø	150	
1050Ø	175	
1200Ø	200	
1350¢	225	
1500¢	250	
1650¢	275	
1800 <i>ø</i>	300	

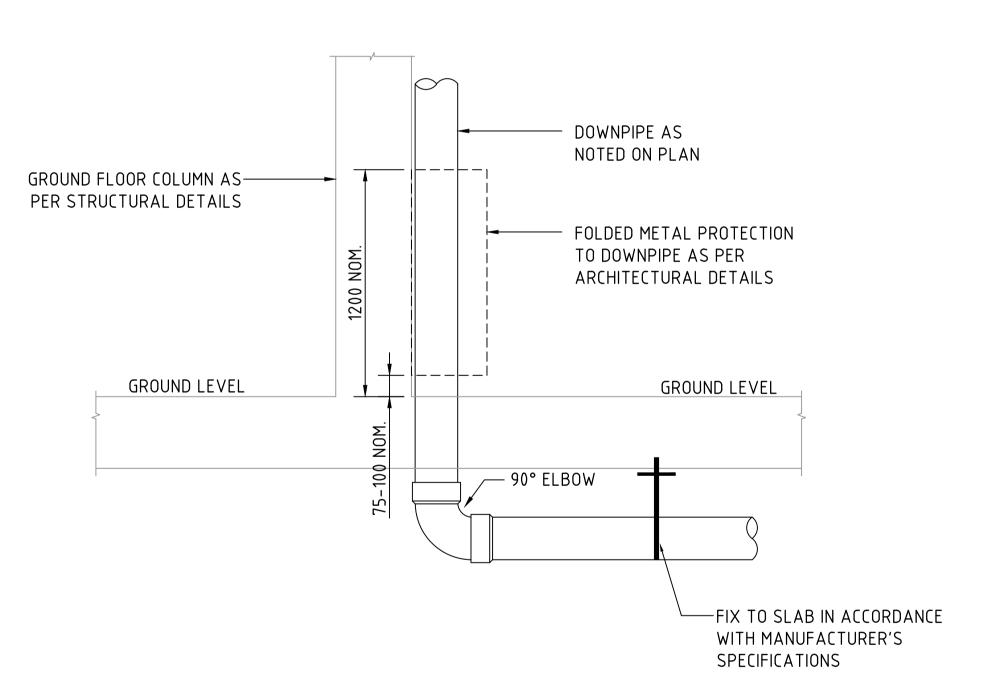
REFER TO ENGINEER FOR TRENCH WIDTHS FOR PIPE SIZES GREATER THAN 1800Ø

PIPE LAYING DETAILS

SCALE 1:20



DOWNPIPE TURN-UP DETAIL (CLEAR OF FOOTING) SCALE 1:20



DOWNPIPE TURN-UP DETAIL (AT COLUMN LOCATION) SCALE 1:20

FOR DEVELOPMENT APPLICATION

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19 ISSUED FOR INFORMATION ONLY 01.11.19 AMENDMENTS DATE ISSUE

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES DESIGNED DRAWN DATE CHECKED SIZE SCALE CAD REF:
TW TW OCT 2019 MW A1 AS SHOWN C013674.01-DA46



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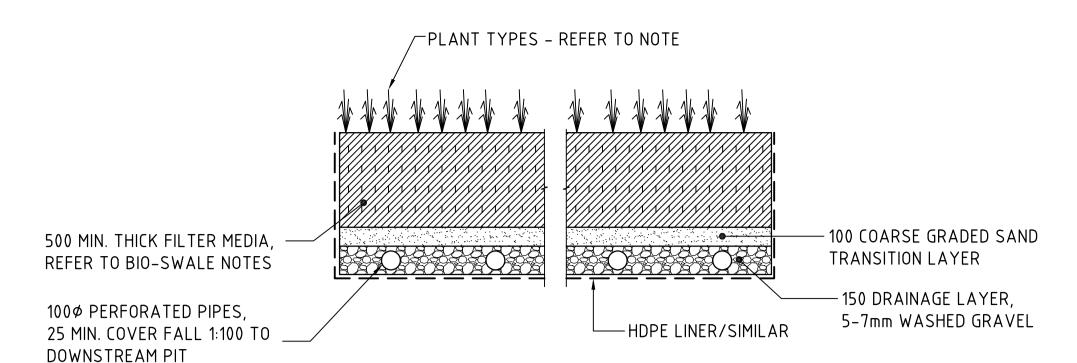
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DRAWING TITLE STORMWATER DRAINAGE DETAILS SHEET 2

SCALE 1:20 AT A1 SIZE SHEET

COMMUNICATION | ACCOUNTABILITY | DRAWING No CO13674.01-DA 46

2000mm



TYPICAL BIO-RETENTION DETAIL SCALE 1:20

BIO-RETENTION NOTES:

FILTER MEDIA TO BE LOAMY SAND WITH A PERMEABILITY NOT LESS THAN 200mm/hr. FILTER MEDIA TO BE FREE OF RUBBISH, DELETERIOUS MATERIAL. TOXICANTS, DECLARED PLANTS AND LOCAL WEEDS, AND IS TO NOT BE HYDROPHOBIC.

FILTER MEDIA TO HAVE THE FOLLOWING COMPOSITION RANGE:

CLAY & SILT (<0.05mm) <3% 5-30% VERY FINE SAND (0.05-0.15mm) 10-30% FINE SAND (0.15-0.25mm) MEDIUM TO COARSE SAND (0.25-1.00mm) 40-60% COARSE SAND (1.0-2.0mm) 7-10% FINE GRAVEL (2.0-3.4mm) <3%

FILTER MEDIA THAT DOES NOT MEET THE FOLLOWING CRITERIA SHALL BE REJECTED:

- a. ORGANIC MATTER CONTENT TO BE IDEALLY WITHIN 1% TO 3% (W/W) AND TO BE NO GREATER THAN 5%(W/W).
- b. PH TO BE BETWEEN 5.5 AND 7.5
- c. PHOSPHOROUS CONTENT TO BE NO GREATER THAN 35mg/kg

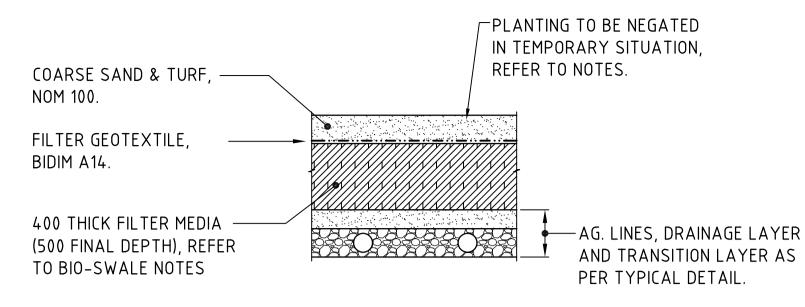
FILTER MEDIA TO BE ASSESSED BY QUALIFIED HORTICULTURALIST TO ENSURE CAPABILITY OF SUPPORTING PLANT LIFE.

DRAINAGE LAYER TO BE CLEAN GRAVEL 5-7mm.

PLANTS TO BE IN ACCORDANCE WITH NORTHERN BEACHES CITY COUNCIL REQUIREMENTS.

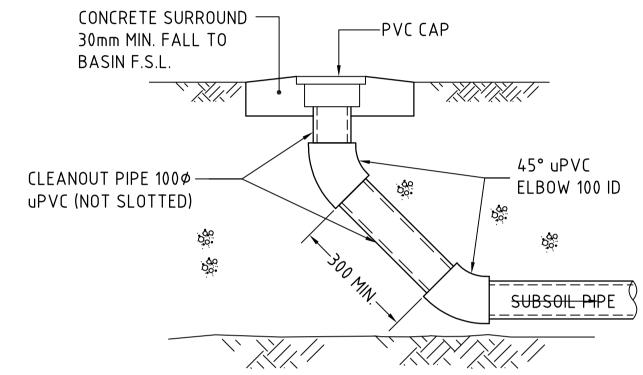
PROVIDE 100mm TOPSOIL AND TEMPORARY EROSION PROTECTION (JUTEMASTER OR EQUIV) TO SWALE BATTER SLOPES AND ADJACENT LANDSCAPED AREAS. NOTE THAT NO TOPSOIL IS TO BE PLACED OVER FILTRATION MEDIA. PROVIDE SILT FENCE TO TOP OF BANK UNTIL SUCH TIME AS THIS STABILISING AND VEGETATION HAS BEEN COMPLETED.

BIO-RETENTION TO BE PARTIALLY INSTALLED, FOLLOWING COMPLETION OF THE ROAD, WITH THE TOP 75-100mm OF FILTER MEDIA REPLACED WITH A FINE TO COARSE SAND UNDERLAIN WITH A GEOTEXTILE LAYER (REFER TO DETAIL). FOLLOWING COMPLETION OF THE UPSTREAM DEVELOPMENT AND SITE STABILISATION, THE SAND IS TO BE REMOVED, REPLACED WITH FILTER MATERIAL AND PLANTED OUT. REFER TO TEMPORARY BIO-BASIN DETAIL



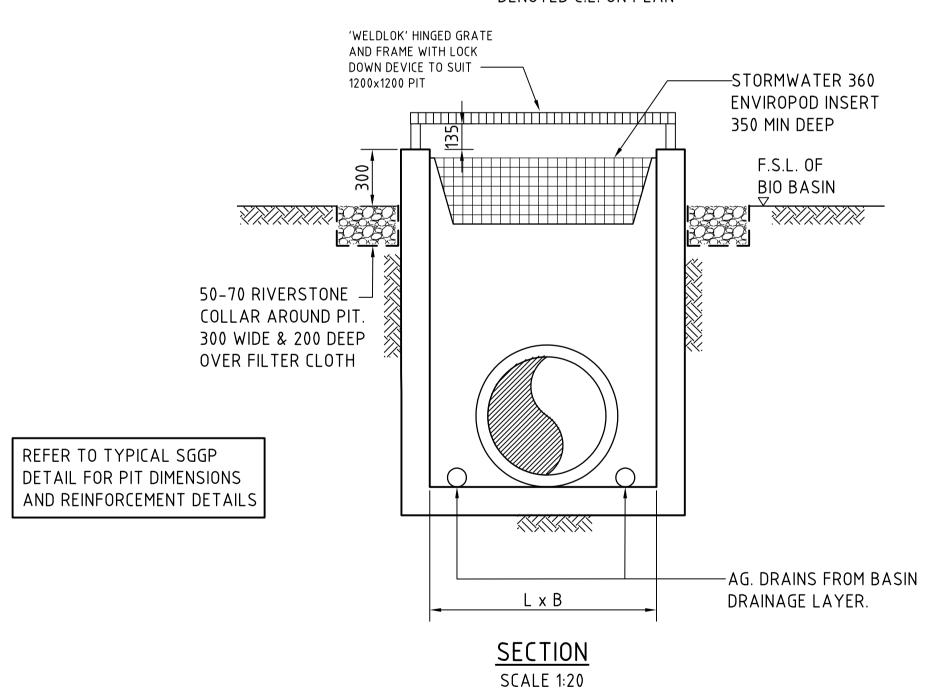
TEMPORARY BIO-RETENTION PROTECTION DETAIL

SCALE 1:20 TEMPORARY CONSTRUCTION REQUIREMENT DETAIL -REFER TO NOTES FOR IMPLEMENTATION PERIODS

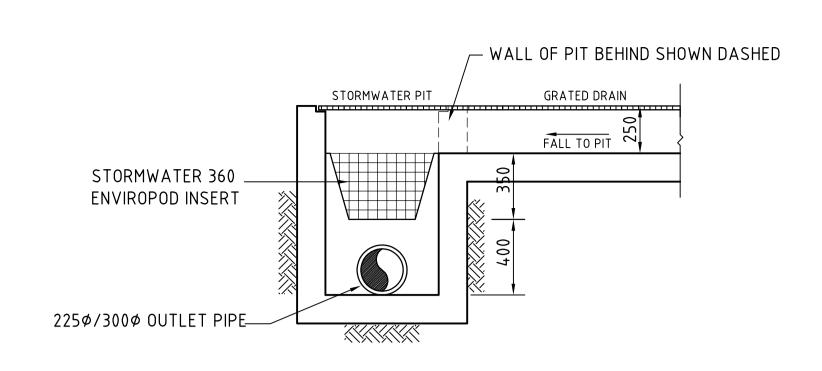


BIORETENTION CLEANOUT EYE ELEVATION

SCALE 1:20 DENOTED C.E. ON PLAN



BASIN INLET PIT - BIP



GRATED DRAIN/STORMWATER PIT WITH **ENVIROPOD CONFIGURATION** SCALE 1:20

BIO-RETENTION BASIN DETAILS

FOR DEVELOPMENT APPLICATION

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19 ISSUED FOR INFORMATION ONLY 01.11.19 AMENDMENTS DATE ISSUE

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES

DESIGNED DRAWN DATE CHECKED SIZE SCALE CAD REF:
TW TW OCT 2019 MW A1 AS SHOWN C013674.01-DA47

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STORMWATER DRAINAGE DETAILS SHEET 3

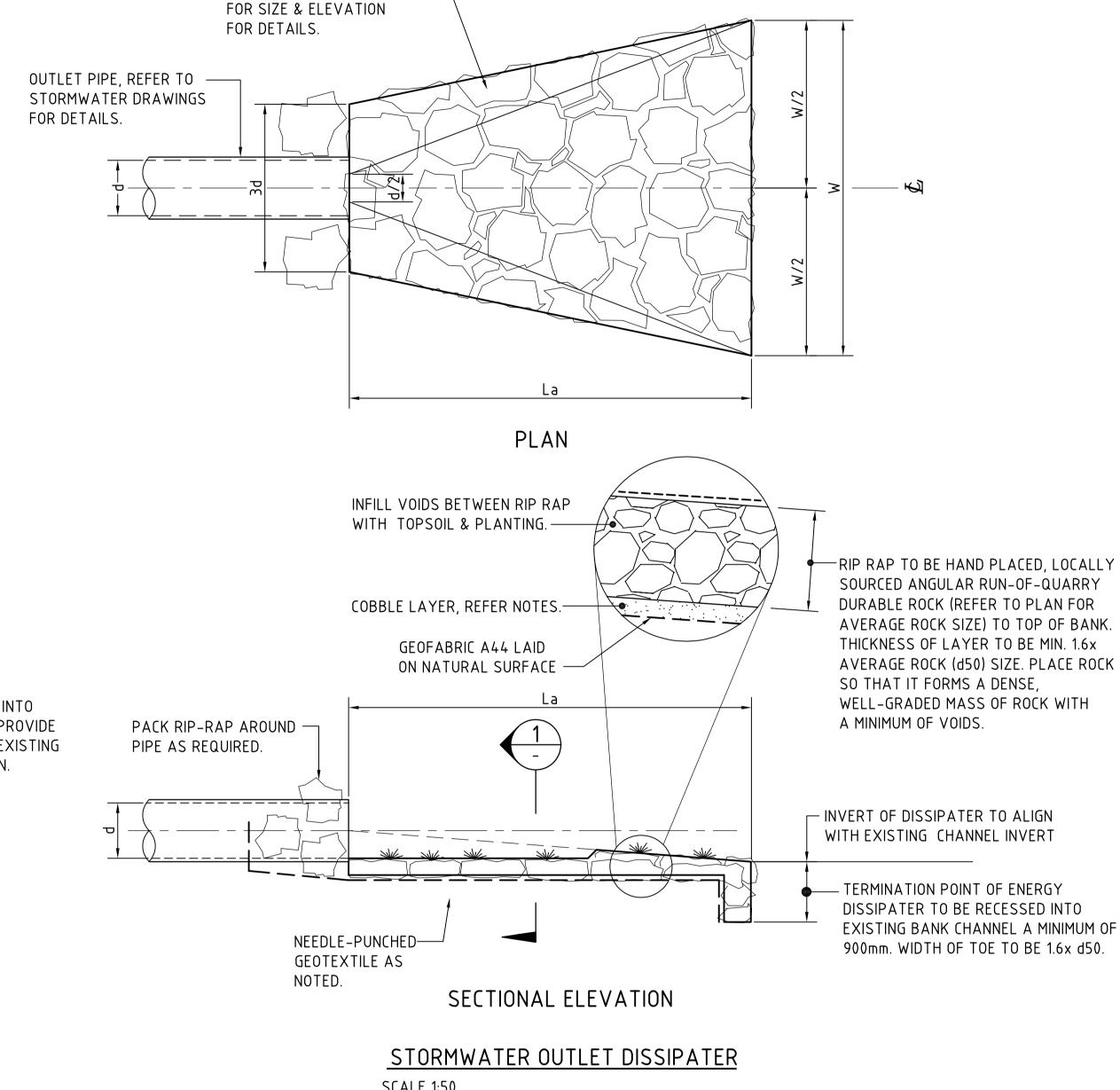
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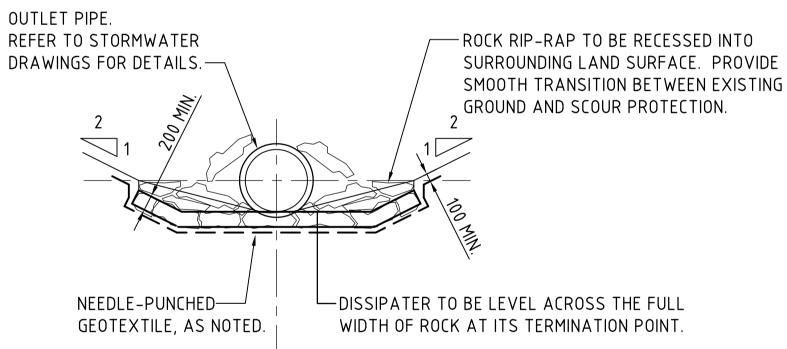
2000mm

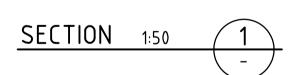
SCALE 1:20 AT A1 SIZE SHEET

DISSIPATER NOTES:

- ALIGN STRUCTURE EVENLY WITH BANK.
- 2. LOCATE STRUCTURE AT INVERT LEVEL OF STREAM AND POINT IN A DOWNSTREAM DIRECTION.
- 3. PIPE TO REST ON, AND BE PACKED IN, BY RIP-RAP (SIZE AS
- 4. DISCHARGE INTO STREAM WHERE BEDROCK IS PRESENT, OTHERWISE SCOUR PROTECT AS REQUIRED.
- 5. SCOUR PROTECT THE OPPOSITE BANK AS REQUIRED. SCOUR PROTECTION TO BE PROVIDED WHERE OPPOSITE BANK IS WITHIN 12-14 TIMES THE PIPE DIAMETER.
- 6. RIP-RAP TO CONSIST OF ANGULAR RUN-OF-QUARRY ROCK (d50= 150mm MINIMUM) AS NOTED ON THE PLAN. RIP-RAP TO BE MINIMUM THICKNESS OF RIP-RAP LAYER TO BE 1.6x AVERAGE ROCK SIZE
- RIP-RAP IS TO BE PLACED OVER A 200mm LAYER OF 140mm COBBLES OVER NEEDLE-PUNCHED GEOFAB A44.
- 8. PLACE ROCK SO THAT IT FORMS A DENSE, WELL-GRADED MASS OF ROCK WITH A MINIMUM OF VOIDS. THE FINISHED RIP-RAP SURFACE SHOULD BE FREE OF POCKETS OF SMALL ROCK OR CLUSTERS OF LARGE ROCKS.
- 9. GAPS IN RIP-RAP TO BE HAND PACKED WITH TOPSOIL & PLANTED WITH NATIVE SEDGES & RUSHES TO PROVIDE. THE INTENT IS FOR THERE TO BE NO VOIDS BETWEEN RIP-RAP BOULDERS.
- 10. ENSURE THE FINISHED ROCK SURFACE BLENDS WITH THE SURROUNDING GROUND LEVELS. NO OVERFALL OR PROTRUSION OF ROCK SHOULD BE APPARENT
- 11. ENSURE THAT STORMWATER FROM SURROUNDING GROUND IS FREE TO ENTER THE STRUCTURE WITHOUT CAUSING UNDESIRABLE PONDING OR SCOUR.







SCALE 1:50

RIP-RAP. REFER SCHEDULE —

FOR DEVELOPMENT APPLICATION

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19 DATE ISSUE AMENDMENTS

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER, 2099, NEW SOUTH WALES

DESIGNED DRAWN DATE CHECKED SIZE SCALE CAD REF:
TW TW OCT 2019 MW A1 AS SHOWN C013674.01-DA48

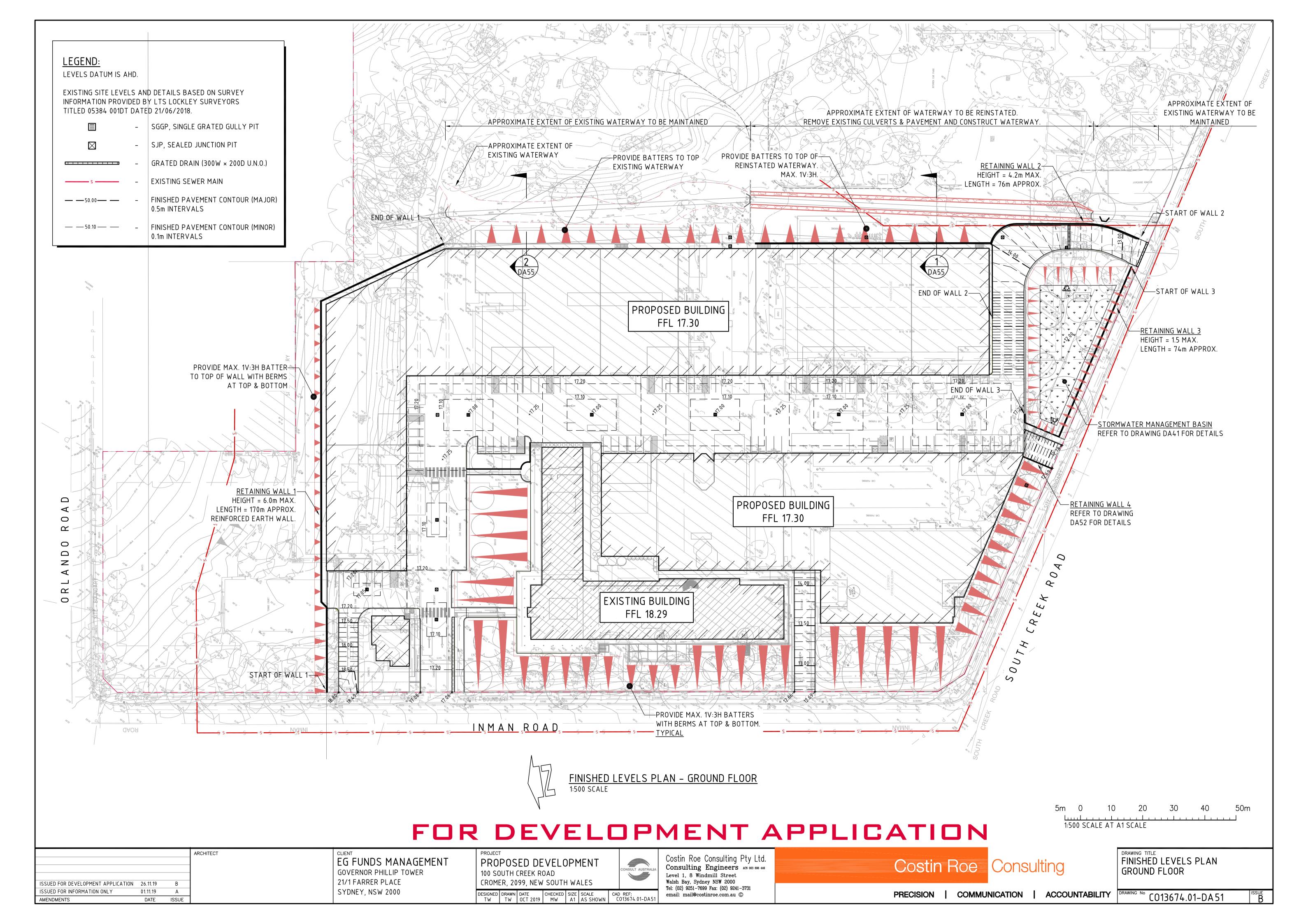
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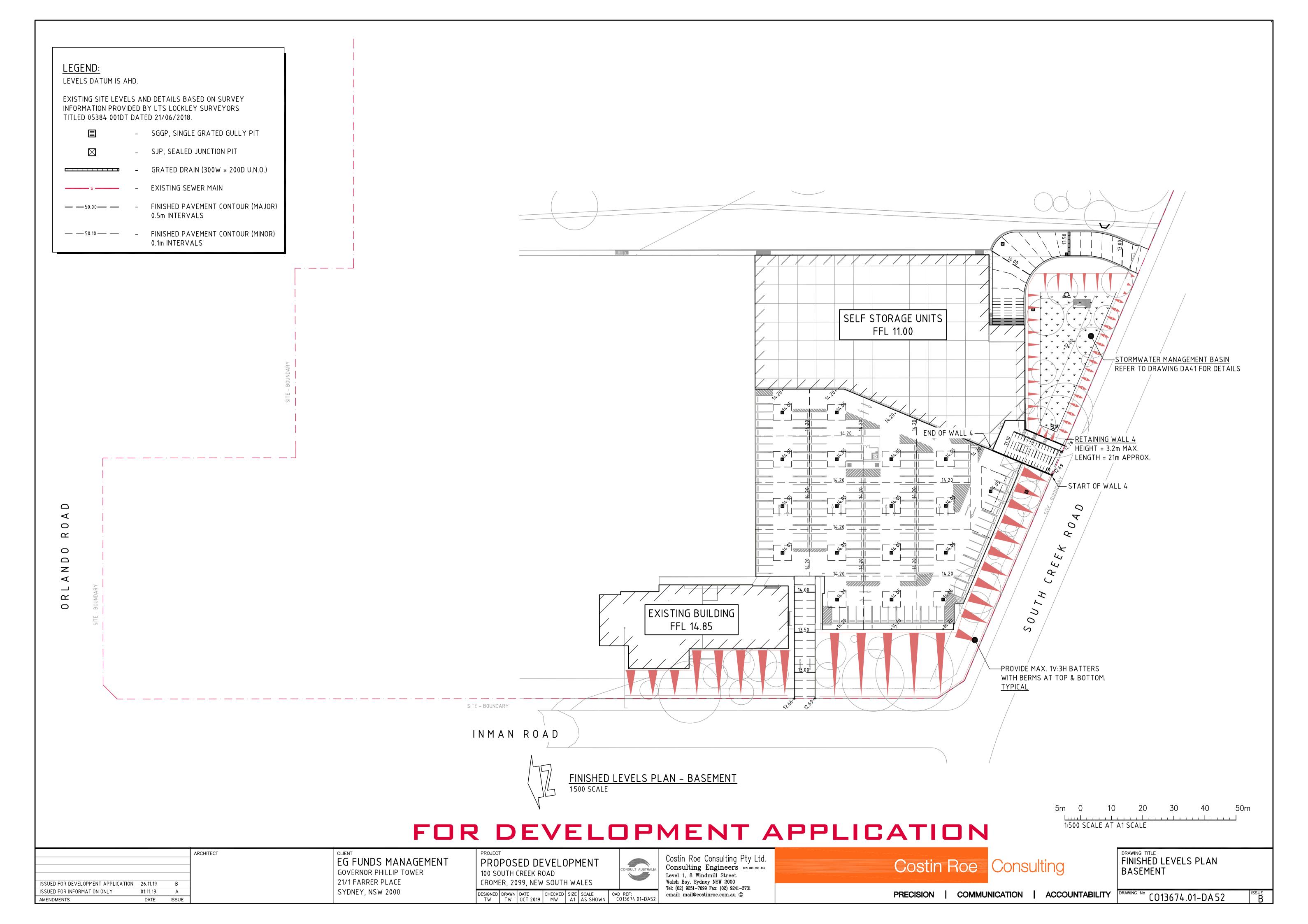
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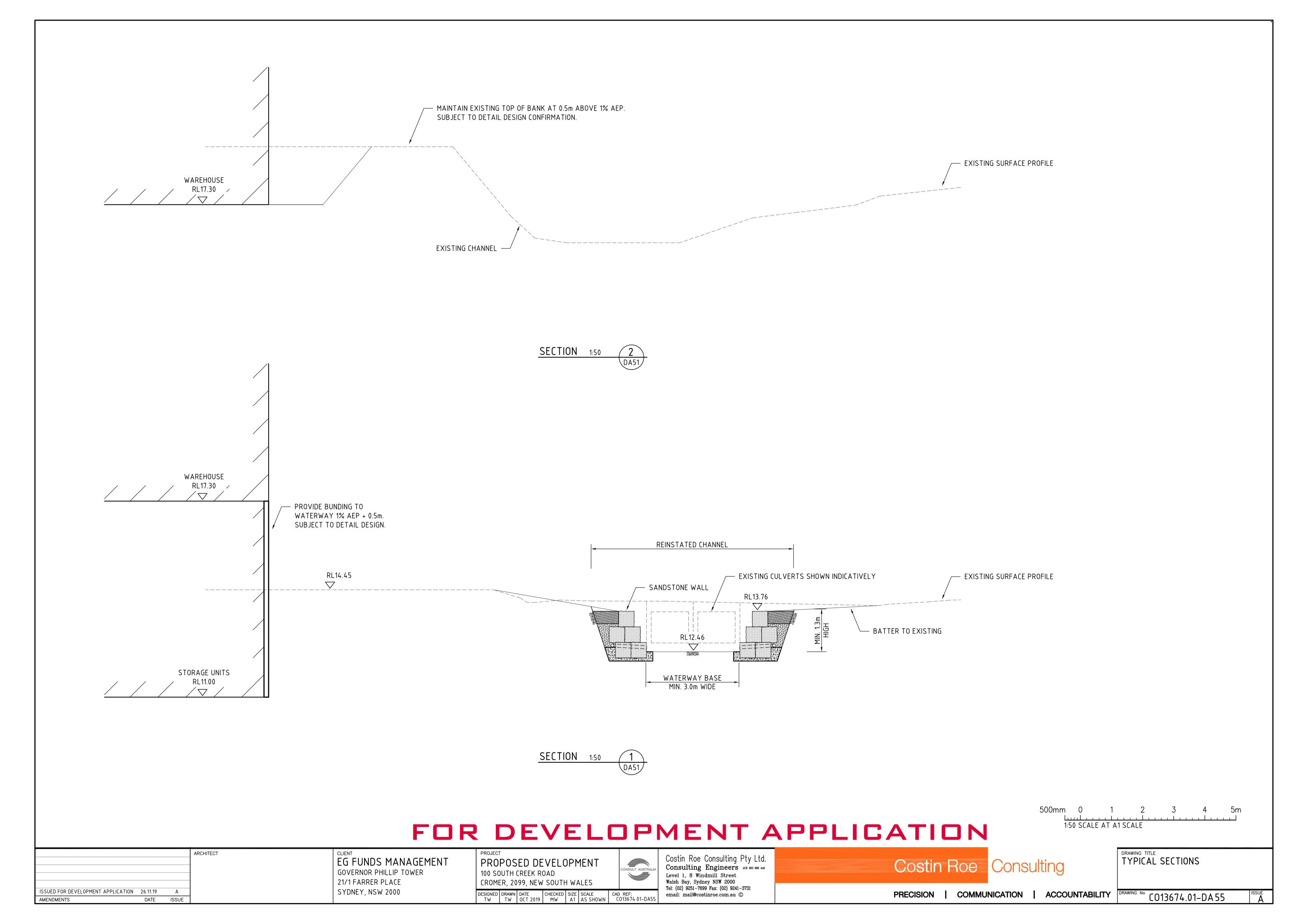
STORMWATER DRAINAGE DETAILS SHEET 4

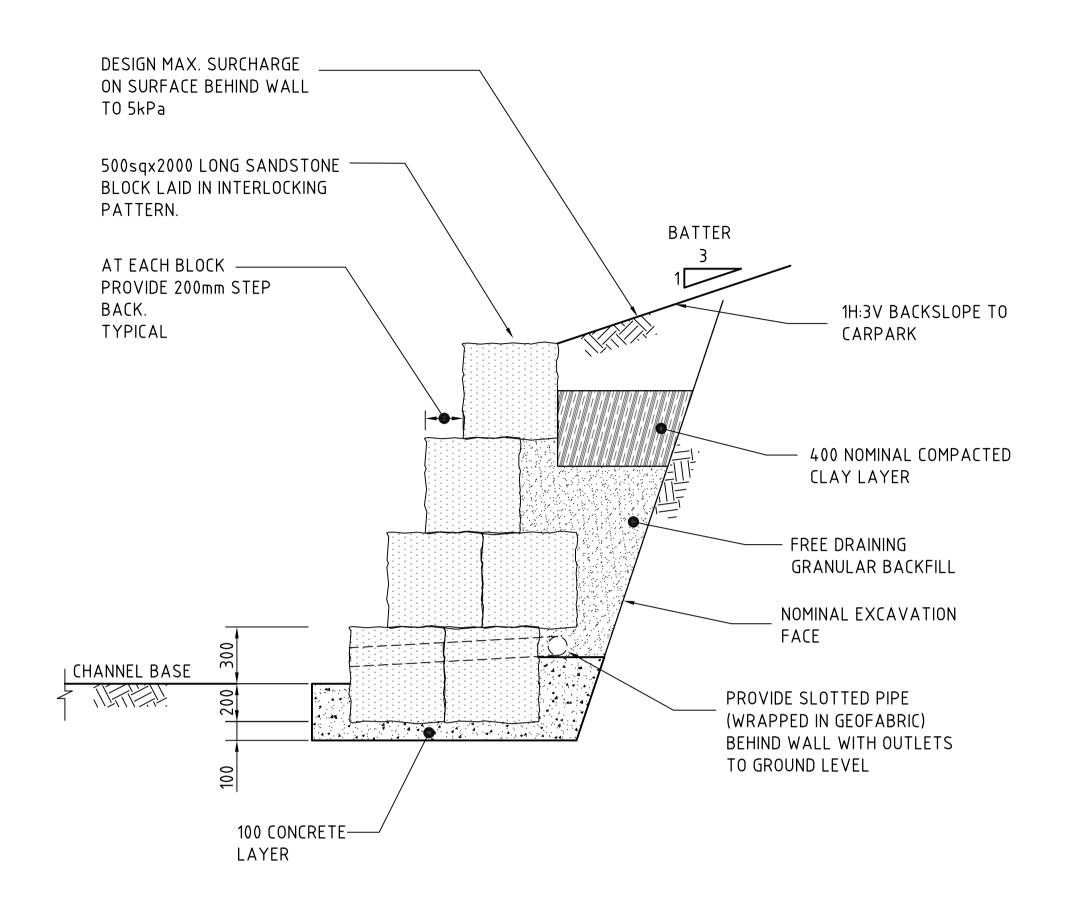
SCALE 1:50 AT A1 SIZE SHEET

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TOP OF WALL CLASS 1 CONTROLLED FILL CRUSHED SANDSTONE OR EQUIVALENT COMPACTED TO 100% STANDARD DENSITY 300 WIDE - SPACING OF GEOGRID DRAINAGE GEOGRID BLANKET KEYSTONE CONCRETE **BLOCK UNITS** GEOGRID LENGTHS "L BOTTOM OF WALL SUBSOIL DRAIN -SUBGRADE — FOOTING

SANDSTONE WALL DETAIL

SCALE 1:20

NOTE:

BASED ON 500x500x2000 LONG STANDARD CUT SANDSTONE BLOCKS LAID IN INTERLOCKING BRICK PATTERN:

- FIRST TWO COURSES TO BE 2xSANDSTONE BLOCKS IN 100 MASS CONCRETE BEDDING.
- THIRD & FOURTH COURSE TO BE 1 SANDSTONE BLOCK.
- STEP EACH SUCCESSIVE COURSES 200mm BACK

REINFORCED EARTH RETAINING WALL SCALE 1:20

WALL HEIGHT "H"	GEOGRID LENGTH "L"	GEOGRID TYPE
2300	2600	GX50/30
3300	3500	GX50/30
4300	4700	GX50/30
5300	5800	GX50/30
6400	6900	GX50/30
7400	7600	GX50/30

NOTE: INDICATIVE DETAIL ONLY. DESIGN TO BE CONFIRMED / PROVIDED BY D+C CONTRACTOR.

REINFORCED EARTH RETAINING WALL NOTES:

- 1. ALL COMPONENTS AND INSTALLATION SHALL COMPLY WITH AS4678 AND THE STANDARDS REFERRED TO THEREIN.
- 2. MINIMUM HEIGHT (H) TO GEOGRID REINFORCEMENT LENGTH (L) TO BE 1.0.
- MINIMUM BEARING CAPACITY OF FOUNDATION (BASED ON MINIMUM H/L RATIO OF 1.0) TO BE AS FOLLOWS:
 - a. H MAX. 2.0m = 100 kPa
 - b. H MAX. 3.5m = 150 kPa
 - c. H MAX. 5.0m = 200 kPa

BEFORE COMMENCEMENT OF CONSTRUCTION THE FOUNDATION SHALL BE INSPECTED AND VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER.

- 4. WHERE MINIMUM BEARING IS NOT ACHIEVABLE OR NOT MEETING DESIGN REQUIREMENT, THE FOUNDATION MATERIAL IS TO BE EXCAVATED AND REPLACED WITH APPROVED MATERIAL PLACED IN ACCORDANCE WITH THE FILLING SPECIFICATION TO A MINIMUM COMPACTION OF 100% SMDD AND PLACED WITHIN 2% OF OMC.
- 5. MINIMUM SURCHARGE LOADS TO BE APPLIED AS FOLLOWS U.N.O. ON PLAN:
 - a. LIVE LOAD = 20 kPa
 - b. DEAD LOAD = 5 kPa
 - c. CONSTRUCTION TRAFFIC LIVE LOAD = 10 kPa
- THE GEOGRIDS SHALL BE OF THE TYPE AND INDEX STRENGTH NOMINATED ON THE DRAWINGS. THE MINIMUM GEOGRIDS SHALL BE A SINGLE LENGTH IN THE DIRECTION OF DESIGN TENSION, NOT LAPPED, MAKING PROVISION FOR CONNECTION TO THE FACING ACROSS THE WHOLE WIDTH OF THE FACING AND PROVIDING FOR THE SPECIFIED ANCHORAGE WITHIN THE DESIGNATED ANCHORAGE ZONE. GEOGRIDS SHALL COVER THE WHOLE OF THE PLAN AREA BEHIND THE WALL FOR THE SPECIFIED ANCHORAGE LENGTH AND SHALL BE LAPPED WITH ADJACENT SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- MINIMUM WALL EMBEDMENT AT THE TOE OF THE WALL TO BE
- DESIGN LIFE OF STRUCTURE IS TO BE 100 YEARS.
- 9. SELECT BACKFILL MATERIAL WITHIN THE REINFORCED SOIL BLOCK SHALL BE SOUND GRANULAR MATERIAL OF NATURAL OR INDUSTRIAL ORIGIN, NON-EXPANSIVE, FREE FROM ORGANIC OR OTHER DELETERIOUS MATERIAL CONFORMING TO THE PHYSICAL, CHEMICAL AND ELECTROCHEMICAL LIMITS AS SPECIFIED AND SHALL NOT BE SUBJECT TO BREAKDOWN UNDER COMPACTION. THE SELECT BACKFILL MATERIAL IS TO HAVE THE FOLLOWING PARAMETERS:
 - a. MINIMUM INTERNAL FRICTION, $\emptyset = 34^{\circ}$
 - b. EFFECTIVE COHESION, C'= 0 kPa
 - c. UNIT WEIGHT = 21 kN/m^3
 - d. PH BETWEEN 4 AND 9.
- 10. SELECT BACKFILL IS TO BE PLACED AND COMPACTED IN LAYERS NOT MORE THAN 300mm (LOOSE). COMPACTION TO NOT LESS THAN 100% SMDD WILL BE ACHIEVED AND MATERIAL PLACED WITHIN 2% OF OMC. DENSITY TESTING SHALL BE PERFORMED IN EACH COMPACTED LIFT IN ACCORDANCE WITH AS3798.
- 11. PROVIDE A DRAINAGE LAYER DIRECTLY BEHIND THE FACING UNITS IN A MINIMUM 300mm WIDE 12-20mm AGGREGATE LAYER. FACING UNIT VOIDS TO BE FILLED WITH AGGREGATE. PROVIDE 100mm MINIMUM AG. DRAIN IN GEOTEXTILE SOCK AT TOE OF WALL FACING AND CONNECT TO DRAINAGE SYSTEM AT 30m MAX. SPACING.
- 12. THE NEED FOR A CHIMNEY DRAIN OR DRAINAGE AT THE REAR OF THE MASS SOIL BLOCK IS TO BE CONFIRMED ON SITE BY THE GEOTECHNICAL ENGINEER AND DESIGNER FOLLOWING PREPARATION OF THE FOUNDATION AND PRIOR TO CONSTRUCTION OF THE MASS SOIL BLOCK.
- 13. CONSTRUCTION EQUIPMENT WEIGHING MORE THAN 500kG STATIC WEIGHT IS TO BE KEPT BACK 1.5m FROM THE REAR FACE OF THE WALL FACING UNITS. COMPACTION OF THE SELECT FILL MATERIAL WITHIN THE 1.5m STRIP ADJACENT TO THE WALL SHALL BE ACHIEVED BY LIGHT MECHANICAL TAMPERS (VIBRATING PLATE, TRENCH COMPACTOR OR SIMILAR) TO GIVE THE SAME DENSITY AS IN THE REMAINDER OF THE SELECT FILL.
- 14. ALL DESIGN AND CONSTRUCT WALL SYSTEM TO BE COMPLETED IN ACCORDANCE WITH THESE NOTES.

200mm 0 1000 1500 2000mm SCALE 1:20 AT A1 SIZE SHEET

FOR DEVELOPMENT APPLICATION

ARCHITECT ISSUED FOR DEVELOPMENT APPLICATION 26.11.19

DATE ISSUE

AMENDMENTS

EG FUNDS MANAGEMENT GOVERNOR PHILLIP TOWER 21/1 FARRER PLACE SYDNEY, NSW 2000

PROPOSED DEVELOPMENT 100 SOUTH CREEK ROAD CROMER. 2099. NEW SOUTH WALES



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COMMUNICATION

RETAINING WALL DETAILS

ACCOUNTABILITY DRAWING No CO13674.01-DA65