

PROPOSED INDUSTRIAL DEVELOPMENT
4-12 BREESE PARADE, FORSTER
STORMWATER CONCEPT DESIGN

GENERAL WORKS LEGEND	
SITE BOUNDARY	
CONTOUR	100.00
RETAINING WALL	RW
VEHICULAR CROSSING	VC
BUILDING FINISHED FLOOR LEVEL	FFL 10.00
FINISHED LEVEL	F 10.00
INVERT LEVEL	IL 10.00
INGROUND STORMWATER PIPE	
INGROUND STORMWATER PIPE (EXISTING)	
ROOF STORMWATER PIPE	
CHARGED STORMWATER PIPE	
OVERFLOW STORMWATER PIPE	
SUBSOIL STORMWATER PIPE	
STORMWATER PIPE	
SUSPENDED TO SLAB UNDERSIDE	
STORMWATER PIPE CAST-IN SLAB	
STORMWATER PUMP RISING MAIN	
AC UNIT TUNDISH	
STORMWATER BALCONY GRADE LINE	
STORMWATER CHANNEL / SWALE	
GRADE AND FLOW DIRECTION	3.0%
PIPE SIZE AND TYPE	Ø100mm uPVC @1%
OVERLAND FLOW DIRECTION	
KERB INLET PIT (ONGRADE / SAG)	
SURFACE INLET PIT / JUNCTION PIT	
STORMWATER PIT TAG	A/01
GRATED TRENCH DRAIN	
CONCRETE / STACKED ROCK HEADWALL	
DOWNPIPES COLLECTING ROOF WATER	Ø100mm RDP
DOWNPIPES	Ø100mm DP
DOWNPIPES TO LOWER FLOOR	
RAINWATER OUTLETS	RWO
BALCONY OUTLETS	BO
DISH DRAIN OUTLETS	DDO
FLOOR WASTE OUTLETS	FW
PLANTER BOX OUTLETS	PD
OVERFLOW SLOTS	O/F
FIRE COLLAR	FC
BASEMENT PENETRATION POINT	
PUMP-OUT RISING MAIN	SWRM
RAINWATER TANK FIRST FLUSH ABOVE GROUND	FF
RAINWATER TANK FIRST FLUSH BELOW GROUND	FF
PUMP-OUT CONTROL BOX	
PUMP-OUT WARNING FLASH LIGHT	
CLEAN OUT POINT	CO
SUBSOIL /PIPE INTERMEDIATE RISER	IR
RAINWATER TANK	RWT
TELECOMMUNICATION LINE	C
UNDERGROUND ELECTRICAL LINE	E
OVERHEAD ELECTRICAL LINE	OH
FIRE HYDRANT LINE	F
GAS LINE	G
WATER LINE	W
SEWER LINE	S



SOURCE: GOOGLE MAP 2023

DRAWING REGISTER		
DRAWING NO.	TITLE	REVISION
DA-SW100	COVERSHEET	3
DA-SW101	GENERAL NOTES AND SPECIFICATIONS	3
DA-SW200	STORMWATER CONCEPT DESIGN - SHEET 1 OF 2	3
DA-SW201	STORMWATER CONCEPT DESIGN - SHEET 2 OF 2	3
DA-SW300	STORMWATER CONCEPT DESIGN - DETAILS SHEET - SHEET 1 OF 2	3
DA-SW301	STORMWATER CONCEPT DESIGN - DETAILS SHEET - SHEET 2 OF 2	3
DA-SW400	STORMWATER CONCEPT DESIGN - OSD CATCHMENT PLAN	3
DA-SW500	STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN	3
DA-SW600	EROSION AND SEDIMENT CONTROL - PLAN	3
DA-SW601	EROSION AND SEDIMENT CONTROL - DETAILS	3

		Client		JCP CONSTRUCTIONS		JCO CONSULTANTS PTY LTD				Project		Job Number		Scale		North Point		Status	
										PROPOSED INDUSTRIAL DEVELOPMENT 4-12 BREESE PARADE, FORSTER STORMWATER CONCEPT DESIGN		20230139		NTS		N		DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION	
		Architect		SBA ARCHITECTS		SUITE 801C, No.1 RIDER BOULEVARD, RHODES NSW 2138 EMAIL: Jason@jcoconsultants.com.au				Drawing Title		Drawing Number		Size				Scale	
										COVERSHEET		DA-SW100		A1					
REV.		DATE		AMENDMENT		INT.		APP.		Design		Drawn		Validate					
3		26/11/2024		ISSUED FOR DA		J.H		J.H		J.H		J.H		J.H					
2		21/06/2024		ISSUED FOR DA		J.H		J.H											
1		8/03/2024		ISSUED FOR REVIEW		J.H		J.H											

GENERAL

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S CONSTRUCTION SPECIFICATIONS (REFER BELOW), BUILDING CODE OF AUSTRALIA, NSW CODE OF PRACTICE AND THE TO THE RELEVANT SERVICE CODES.
2. ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS (U.N.O.). DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OF THESE DRAWINGS. USE FIGURED DIMENSIONS ONLY.
3. BENCHMARKS HAVE BEEN ESTABLISHED WHERE INDICATED ON THE DRAWINGS. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.). THE CONTRACTOR SHALL UNDERTAKE ALL NECESSARY SURVEY WORK TO ENSURE THAT THE WORKS ARE CONSTRUCTED TO DESIGN LINE AND LEVEL.
4. SETTING OUT DIMENSIONS AND LEVELS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR.
5. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SAFETY FENCES, WARNING SIGNS, TRAFFIC DIVERSIONS AND THE LIKE DURING CONSTRUCTION. ALL WORKS TO COMPLY WITH WORK HEALTH AND SAFETY REQUIREMENTS AND OTHER RELEVANT AUTHORITY SAFETY REQUIREMENTS.
7. NO TREES SHALL BE REMOVED, CUTBACK OR RELOCATED WITHOUT THE WRITTEN INSTRUCTION FROM THE SUPERINTENDENT.
8. DESIGN LEVELS GIVEN ARE TO FINISHED SURFACE LEVEL AND INCLUSIVE OF TOPSOIL. (TOPSOIL DEPTH VARIES)
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FROM THE UTILITY SERVICES AUTHORITIES A CURRENT COPY OF UNDERGROUND SERVICES SEARCH FOR THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK AND NOTIFY ANY CONFLICT WITH THE DRAWINGS IMMEDIATELY. CLEARANCE SHALL BE OBTAINED FROM THE RELEVANT REGULATORY AUTHORITY. CONTRACTOR TO KEEP COPY OF UNDERGROUND SERVICES SEARCH ON SITE AT ALL TIMES. ANY DAMAGES TO SERVICES OR SERVICES ADJUSTMENTS SHALL BE CARRIED OUT BY THE CONTRACTOR OR RELEVANT AUTHORITY AT THE DEVELOPERS EXPENSE.
10. VISIT THE SITE BEFORE SUBMITTING THE FINAL TENDER PRICE TO ASSESS 'ON SITE' CONDITIONS. FAILURE TO DO SO WILL FORFEIT ANY CLAIM FOR NOT BEING AWARE OF CONDITIONS AFFECTING THE TENDER.
11. THE CONTRACTOR SHALL PREPARE ACCURATE WORK-AS-EXECUTED DRAWINGS FOLLOWING THE COMPLETION OF ALL WORKS.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN PLACE & MAINTAIN TRAFFIC FACILITIES AT ALL TIMES DURING CONSTRUCTION.
13. A ROAD OCCUPANCY APPLICATION SHALL BE APPROVED BY COUNCIL'S TRAFFIC SECTION PRIOR TO COMMENCEMENT OF WORKS.

SURVEY

1. THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN SUPPLIED BY REGISTERED SURVEYORS TO PROVIDE A BASIS FOR DESIGN. THE USE OF THIS SURVEY BASE DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.
2. SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT THE SUPERINTENDENT.
3. THE RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES ARE DIAGRAMMATIC ONLY. WHERE DISTANCES TO BOUNDARIES ARE CRITICAL THEY SHOULD BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION BY FURTHER SURVEY.
4. LEVELS ON SURVEY PLAN CALCULATED IN USING RELEVANT BENCHMARK. CONTRACTOR TO VERIFY BENCHMARK BEFORE WORK IS CARRIED OUT. DETAILS OF BENCHMARK FOUND IN SITEWORKS PLAN.



DIAL BEFORE YOU DIG SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON SITE

TM: TRADE MARK OF THE ASSOCIATION OF DIAL BEFORE YOU DIG SERVICES LTD. USED UNDER LICENSE.

EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION TO THE SATISFACTION OF COUNCIL, NSW OFFICE OF WATER, OFFICE OF ENVIRONMENT AND HERITAGE. THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE DRAWINGS SHALL ONLY BE USED AS A GUIDE BY THE CONTRACTOR, AND SHALL REPRESENT THE MINIMUM REQUIREMENT ONLY.
2. THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED OR AS OTHERWISE DIRECTED BY THE SUPERINTENDENT.
ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
(i) LOCAL AUTHORITY REQUIREMENTS.
(ii) EPA REQUIREMENTS.
(iii) LATEST REVISION OF LANDCOM MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION".
3. BEFORE EARTHWORKS CAN COMMENCE THE EROSION & SEDIMENT CONTROL MEASURES MUST BE IN PLACE. DURING THE CONSTRUCTION PERIOD, THESE CONTROL MEASURES WILL NEED TO BE INSPECTED & MAINTAINED REGULARLY, ESPECIALLY AFTER STORM EVENTS, BY THE CONTRACTOR, TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
4. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS. ISOLATE EXISTING STORMWATER PITS WITH STRAW BALES OR SILT TRAPS TO FILTER ALL INCOMING FLOWS.
5. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
(i) INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. PROVIDE SILT FENCE/STRAW BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS. THE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
(ii) CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE DO SO IN A FORWARD DIRECTION.
(iii) INSTALL SEDIMENT BASIN AS SHOWN ON PLAN. INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
(iv) UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.
6. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.
7. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
8. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.
9. 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.
10. 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.
11. 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.
12. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
13. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
14. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
(i) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE.
(ii) ENSURING THAT NOTHING IS NAILED TO THEM.
(iii) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:
- ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER.
- A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH.
- CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

EARTHWORKS

1. AT THE COMMENCEMENT OF THE CUT AND FILLING OPERATIONS FOR BULK EARTHWORKS A GEOTECHNICAL ENGINEER IS TO VISIT THE SITE & CONFIRM THE SUITABILITY OF THE METHODOLOGY OF ACHIEVING THE REQUIRED BUILDING PLATFORMS AND COMPACTION REQUIREMENTS. SUBSEQUENTLY, THE HEAD CONTRACTOR IS TO CONFIRM, IN WRITING TO THE DESIGNING CIVIL & STRUCTURAL ENGINEERS, THAT THE METHODOLOGY APPROVED AT THE TIME OF THE GEOTECHNICAL ENGINEERS VISIT WAS MAINTAINED DURING ALL THE BULK EARTHWORKS PROCESS.
2. STRIP TOPSOIL, ORGANIC MATTER AND RUBBLE FROM CONSTRUCTION AREA TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE AS DIRECTED BY THE SUPERINTENDENT.
3. WHERE FILLING, STRUCTURAL SLABS OR PAVEMENTS ARE REQUIRED, PROOF ROLL THE EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A SMOOTH DRUM NON-VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER) IN THE PRESENCE OF THE SUPERINTENDENT. THE CONTRACTOR IS TO ALLOW TO REMOVE AND REPLACE A PROVISIONAL QUANTITY OF UNSUITABLE SUBGRADE MATTER.
4. ALL SOFT, WET OR UNSUITABLE MATERIAL IS TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
5. EXCAVATED MATERIAL IS NOT TO BE USED AS STRUCTURAL FILL UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER.
6. THE CONTRACTOR IS TO PROVIDE CERTIFICATES VERIFYING THE QUALITY OF IMPORTED MATERIAL FOR THE SUPERINTENDENTS APPROVAL.
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 AS1289 E3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 E5.1.1.1:

LOCATION	COMPACTION REQUIREMENT
UNDER BUILDING SLABS	98% SMDD
LANDSCAPED AREAS	95% SMDD
ROADS & PAVED AREAS	98% SMDD
8. FOR NON COHESIVE MATERIAL, COMPACT TO NOT LESS THAN

UNDER ROAD	80% DENSITY
OTHER AREA	75% DENSITY
9. THE CONTRACTOR IS TO ALLOW FOR COMPACTION TESTING BY NATA REGISTERED LABORATORY FOR PLATFORMS AND FILL LAYERS IN ACCORDANCE WITH THE LATEST VERSION OF AS3798 - FOR TYPE 1 OPERATIONS (MINIMUM 3 TESTS PER LAYER).
10. FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN:
(i) 1 TEST PER 200m³ Of FILL PLACED PER 300mm LAYER OF FILL
(ii) 3 TESTS PER VISIT
(iii) 1 TEST PER 1000m² OF EXPOSED SUBGRADE
(iv) TESTING SHALL BE "LEVEL 1" UNDERTAKEN IN ACCORDANCE WITH AS1398.
11. WHERE TEST RESULTS ARE BELOW THE SPECIFIED COMPACTION, RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION STANDARD IS ACHIEVED.
12. ALLOW FOR EXCAVATION IN ALL MATERIALS AS FOUND U.N.O. NO ADDITIONAL PAYMENTS WILL BE MADE FOR EXCAVATION IN WET OR HARD GROUND.
13. WHERE THERE IS INSUFFICIENT EXCAVATED MATERIAL SUITABLE FOR FILLING OR SUBGRADE REPLACEMENT, THE CONTRACTOR IS TO ALLOW TO IMPORT FILL. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING:
(i) MAXIMUM SIZE 50mm. PASSING 75 MICRON SIEVE (<25%).
(ii) PLASTICITY INDEX BETWEEN 2-15% AND CBR>8.
(iii) FREE FROM ORGANIC AND PERISHABLE MATTER.
14. REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT FOR GENERAL REQUIREMENTS ON SITE PREPARATION AND RE-USE OF EXISTING SITE MATERIAL AS ENGINEERED FILL.
15. 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 AT THEIR COST.
16. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE AND MAINTAIN THE INTEGRITY OF ALL SERVICES, CONDUITS AND PIPES DURING CONSTRUCTION, SPECIFICALLY DURING THE BACKFILLING AND COMPACTION PROCEDURE. ANY AND ALL DAMAGE TO NEW OR EXISTING SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXTRA COST.
17. PROTECT FINAL SURFACE WITH EITHER A TEMPORARY LOOSE SOIL LAYER OR A GRANULAR SUB-BASE LAYER TO PREVENT DRYING OUT PRIOR TO ON-GROUND SLAB CONSTRUCTION.

STORMWATER DRAINAGE

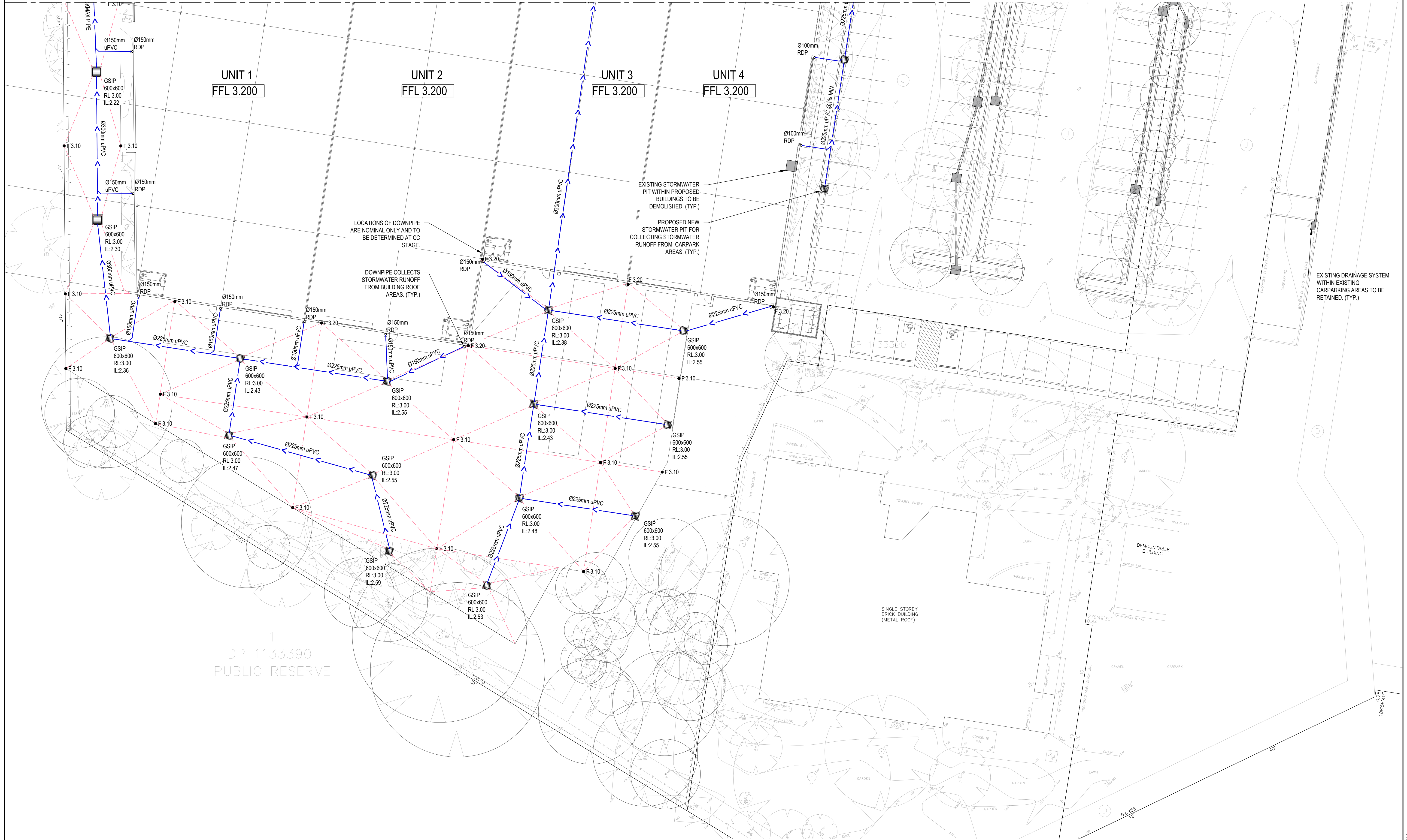
1. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF THE LATEST REVISION OF AS3500.3-2003:STORMWATER DRAINAGE.
2. PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC (CLASS SN4) WITH SOLVENT WELDED JOINTS.
3. PIPES 375 DIA. AND LARGER TO BE REINFORCED CONCRETE MIN CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. MANUFACTURED TO AS4058 U.N.O.
4. ALL PIPES ARE TO BE LAID AT MIN 1.0% GRADE (UNO). MIN SIZE 100mm DIAMETER (UNO). FOR STORMWATER DRAINAGE PIPES THAT EXCEED 1:5 GRADE, REINFORCED CONCRETE ANCHOR BLOCKS SHALL BE INSTALLED. ANCHOR BLOCKS TO BE CONSTRUCTED TO SPECIFICATIONS SET OUT IN AS3500.3-2018 SECTION 8.10.
5. MINIMUM PIPE COVER TO BE 600mm UNDER TRAFFICABLE AREAS AND 300mm ELSEWHERE (UNO).
6. EQUIVALENT STRENGTH FRC PIPES MAY BE USED TO DESIGN ENGINEER AND SUPERINTENDENTS APPROVAL.
7. ALL PIPES ARE TO BE UNIFORMLY SUPPORTED ALONG THE LENGTH OF THE BARREL BY SUITABLE FILL MATERIAL. REFER TO BEDDING SUPPORT TYPE.
8. PIPES WITH SOCKETS SHALL BE LAID IN BEDDING WHERE SUITABLE RECESSES HAVE BEEN PROVIDED TO ENSURE PIPES DO NOT BEAR ON THEIR SOCKETS.
9. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
10. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE.
11. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
12. PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS.
13. WHERE WORKING METHODS REQUIRE HIGHER CLASS PIPE, THE CONTRACTOR SHALL REFER TO AS 3725 (2007) TO DETERMINE THE APPROPRIATE PIPE CLASS. PROPOSED PIPE CLASS SHALL BE REVIEWED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
14. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. PIPES SHALL BE TRUE TO GRADES SHOWN AND ALIGNED SO THAT THE CENTRE OF THE INLET PIPE INTERSECTS WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT.
15. BED ALL PIPES FIRMLY AND EVENLY WITH IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN SOIL AND 200mm IN ROCK.
16. LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS3725-2007:DESIGN FOR INSTALLATION OF BURIED CONCRETE PIPES.
17. EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO REUSE FOR TRENCH BACKFILL. REMAINING MATERIAL TO BE REMOVED FROM SITE. BACKFILL PIPES WITH IMPORTED FILL. PROVIDE 200mm SIDE SUPPORT AND 150mm OVERLAY ABOVE PIPE CROWN. TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR THE FOOTWAY SHALL BE AS FOLLOW:
- UNDER ROADWAY
TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED HEREIN OF EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RMS QA SPECIFICATION 3051 OR SIMILAR.
- OTHER THAN ROADWAY
TRENCH MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED HEREIN AND SHALL NOT CONTAIN MORE THAN 20% OF STONES OF SIZE BETWEEN 25mm AND 75mm AND NONE LARGER THAN 75mm. PRIOR TO USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER.
18. COMPACT BEDDING. EMBEDMENT AND TRENCH FILL MATERIALS AS FOLLOW:
- EMBEDMENT: FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOIL) e.g. COARSE AGGREGATE FILL, THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%.
- TRENCH FILL: FOR GRANULAR MATERIAL (NON COHESIVE SOILS), THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%. FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS), THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN 95%.
19. PRECAST PITS MAY BE USED SUBJECT TO WRITTEN APPROVAL BY THE DESIGN ENGINEER.
20. ALL PIPE PENETRATIONS (EXISTING, IN-SITU AND PRECAST) ARE TO BE FINISHED FLUSH WITH THE INTERNAL PIT WALL AND PROPERLY SEALED WITH CEMENT RENDER. MASS CONCRETE BENCHING IS TO BE INSTALLED TO MATCH THE OUTLET PIPE INVERT LEVEL AND A LOCKABLE HINGED GRATE AND FRAME WITH CONCRETE SURROUND INSTALLED U.N.O.
21. ALL EXPOSED EDGES TO BE ROUNDED WITH 20mm RADIUS, OR CHAMFERED 20mm x 20mm.
22. ALL DRAINAGE AND SERVICE PIT LIDS THROUGHOUT THE PUBLIC DOMAIN SHALL BE INFILL PIT LID TYPE AND BICYCLE SAFE, FINISH FLUSH WITH THE ADJACENT PAVEMENT TO AVOID TRIP HAZARDS AND BE CLEAR OF OBSTRUCTIONS FOR EASY CLEANING AND OPENING.

STORMWATER DRAINAGE (CONT.)

23. COVERS
(i) USE HOT DIPPED GALVANISED GRATES AND CONCRETE FILLED COVERS WITH HINGES AND HOLD DOWN BOLTS COMPLYING WITH AS3996 AND OTHER RELEVANT AUSTRALIAN AND COUNCIL STANDARDS.
(ii) ALL COVERS AND GRATES TO BE POSITIONED IN A FRAME AND MANUFACTURED AS A UNIT.
(iii) ALL COVERS AND GRATES TO BE FITTED WITH POSITIVE COVER LIFTING KEYS.
(iv) OBTAIN SUPERINTENDENT'S APPROVAL FOR THE USE OF CAST IRON SOLID COVERS AND GRATES. CAST IRON SOLID COVERS (IF APPROVED) TO CONSIST OF CROSS-WEBBED, CELLULAR CONSTRUCTION WITH THE RIBS UPPERMOST TO ALLOW INFILLING WITH CONCRETE. INSTALL POSITIVE COVER LIFTING KEYS AND PLASTIC PLUGS.
(v) UNLESS DETAILED OR SPECIFIED OTHERWISE COVERS AND GRATES TO BE CLASS "D" IN VEHICULAR PAVEMENTS AND CLASS "B" ELSEWHERE.
(vi) GRATES TO PITS IN FOOTPATH AREAS SHALL BE HEEL SAFE COMPLYING WITH THE DISABLED ACCESS CODE.
24. NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER.
25. Ø100mm SUB-SOIL DRAINAGE LINES SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT min. 0.5% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS:
(i) ADJACENT ALL TRAFFICKED AND CARPARK PAVEMENT AREAS (BEHIND KERB);
(ii) ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS;
(iii) BEHIND RETAINING WALLS (IN ACCORDANCE WITH DRAWINGS);
(iv) BELOW ALL TRAFFICABLE DISH DRAINS;
(v) ALL OTHER AREAS SHOWN ON THE DRAWINGS.
26. THE CONTRACTOR SHALL INSTALL FLUSHING POINTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS, AT MAXIMUM 60m CENTRES AND AT ALL UPSTREAM ENDPOINTS.
27. PROVIDE 3.0m LENGTH OF Ø100 SUBSOIL DRAINAGE PIPE WRAPPED IN A NON-WOVEN GEOTEXTILE FABRIC, TO THE UPSTREAM SIDE OF STORMWATER PITS. LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO THE DRAINAGE PIT.
28. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
29. SUBSOIL DRAINAGE SHALL CONSIST OF A SLOTTED 100mm DIAMETER PLASTIC PIPE WRAPPED IN GEOTEXTILE AND PLACED A MINIMUM OF 600mm BELOW THE SUBGRADE LEVEL AND COVERED WITH 500mm OF 20mm GRAVEL. PROVIDE A MINIMUM OF 150mm GRAVEL AROUND SUBSOIL PIPE. TRENCH TO BE LINED WITH GEOTEXTILE FABRIC TYPE BIDIM A24.
30. ALL RECTANGULAR HOLLOW SECTIONS (RHS) SPECIFIED AS STORMWATER CONDUITS TO BE HOT DIPPED GALVANISED AND HAVE (MINIMUM) 5mm WALL THICKNESS.
31. ALL BOX CULVERTS SHALL BE STRUCTURALLY DESIGNED BY THE MANUFACTURER AND DELIVERED TO SITE AS FIT FOR PURPOSE.
32. ELECTRICAL PITS ARE TO DRAIN TO THE NEAREST STORMWATER PIT WITH VERMIN PROOF NON-RETURN FLAP VALVES AS REQUIRED. THE CONTRACTOR IS TO CONFIRM WITH THE ELECTRICAL DESIGNER AS PART OF THE TENDER.
33. THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION. ANY AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT, AND AT NO EXTRA COST.
34. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
35. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.
36. EXISTING PIPES WHICH FORM NO PART OF THE DRAINAGE SYSTEM SHALL BE REMOVED OR SEALED AS INDICATED ON THE PLANS. PIPES UP TO 300mm DIAMETER SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS (U.N.O.). ALL PIPE JUNCTIONS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS. THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY THE WORKS.
37. CONTRACTOR TO PROVIDE WORKSHOP COORDINATED DRAWINGS PRIOR TO COMMENCING WORKS ON SITE. WORKSHOP DRAWINGS TO BE REVIEWED AND APPROVED BY DESIGN ENGINEER.
38. ALL EXTERNAL AREA TO HAVE A MINIMUM 1% FALL TO OUTLETS PROVIDED.
39. PROVIDE OVERFLOWS TO ALL AREAS TO ARCHITECT'S SPECIFICATIONS.
40. ALL RAINWATER OUTLETS TO OPEN AREAS SHALL BE SPS TRUFLO TYPE T1A100F UNLESS NOTED OTHERWISE. DO NOT INSTALL BALCONY OUTLETS OR SIMILAR IN AREAS SUBJECT TO DIRECT RAINFALL.
41. ANY VARIATION TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR APPROVAL. DOWN PITS.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FOR CONTINUATION REFER DRG. DA-SW200



REV.	DATE	AMENDMENT	INT.	APP.
3	26/11/2024	ISSUED FOR DA	J.H.	J.H.
2	21/06/2024	ISSUED FOR DA	J.H.	J.H.
1	8/03/2024	ISSUED FOR REVIEW	J.H.	J.H.

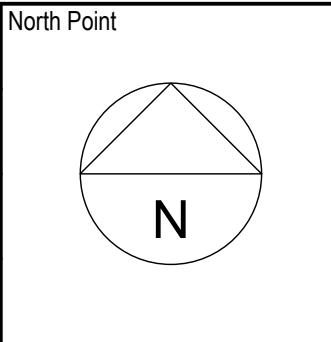
Client	JCP CONSTRUCTIONS
Architect	SBA ARCHITECTS

JCO CONSULTANTS PTY LTD
SUITE 801C, No.1 RIDER BOULEVARD, RHODES NSW 2138
EMAIL: Jason@jcoconsultants.com.au



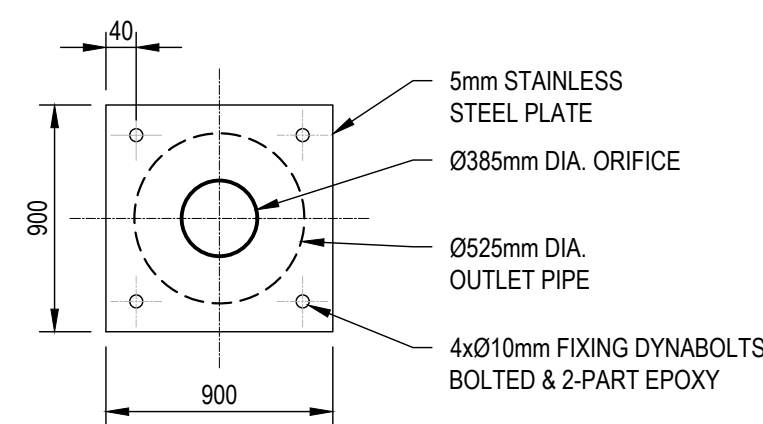
Project	PROPOSED INDUSTRIAL DEVELOPMENT
	4-12 BREESE PARADE, FORSTER
	STORMWATER CONCEPT DESIGN
Drawing Title	STORMWATER CONCEPT DESIGN - SHEET 2 OF 2
Design	J.H.
Drawn	J.H.
Validate	J.H.

Job Number	20230139
Drawing Number	DA-SW201
Scale	1:200
Date	26/11/2024
Size	A1
Datum	A.H.D.

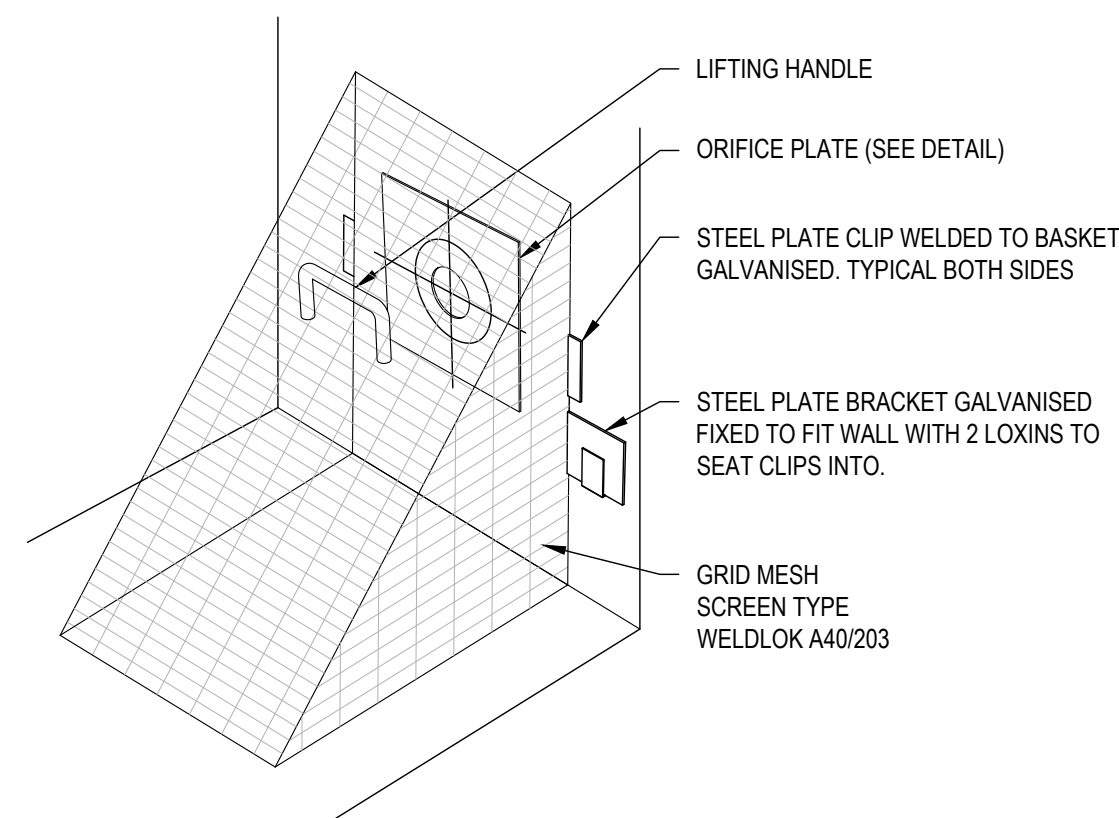


Status	DEVELOPMENT APPLICATION
	NOT FOR CONSTRUCTION
Scale	0 5 10 15 20m
SCALE 1:200	@A1

DRAINS-OSD-UNIT A RESULTS										
TOTAL SITE AREA (m2)	PRE-DEV. IMPERVIOUS (%)	POST-DEV. IMPERVIOUS (%)	STORM (YR)	PRE-DEV. FLOW (m3/s)	POST-DEV. FLOW (m3/s)	PIPE OUTFLOW (m3/s)	WEIR OUTFLOW (m3/s)	BYPASS FLOW (m3/s)	TOTAL PSD (m3/s)	OSD VOL. (m3)
7775	50	90	5	0.253	0.326	0.249	0	0	0.249	84.10
			10	0.290	0.366	0.258	0	0	0.258	
			20	0.340	0.418	0.270	0	0	0.270	
			50	0.367	0.444	0.280	0	0	0.280	
			100	0.412	0.490	0.292	0	0	0.292	



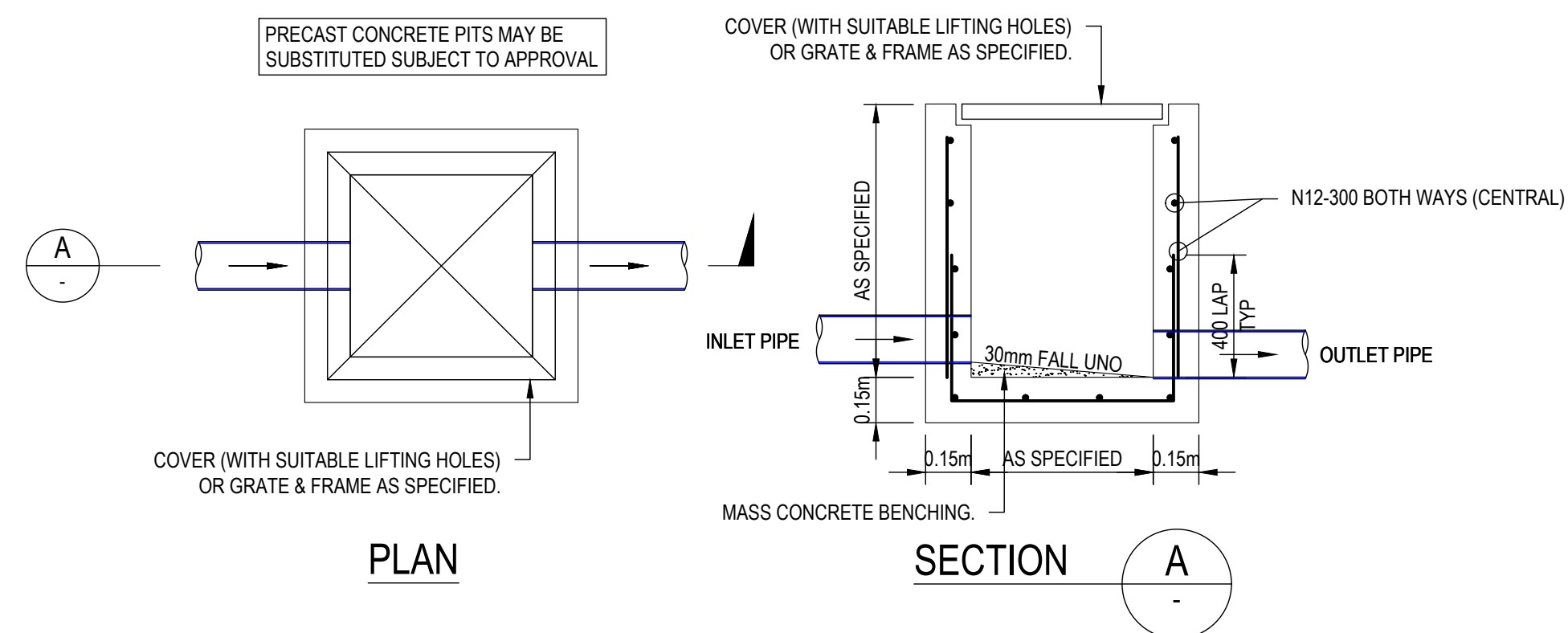
ORIFICE PLATE



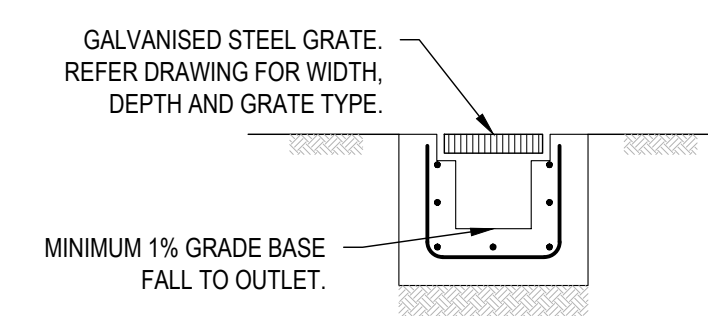
DEBRIS SCREEN
SCALE 1:10



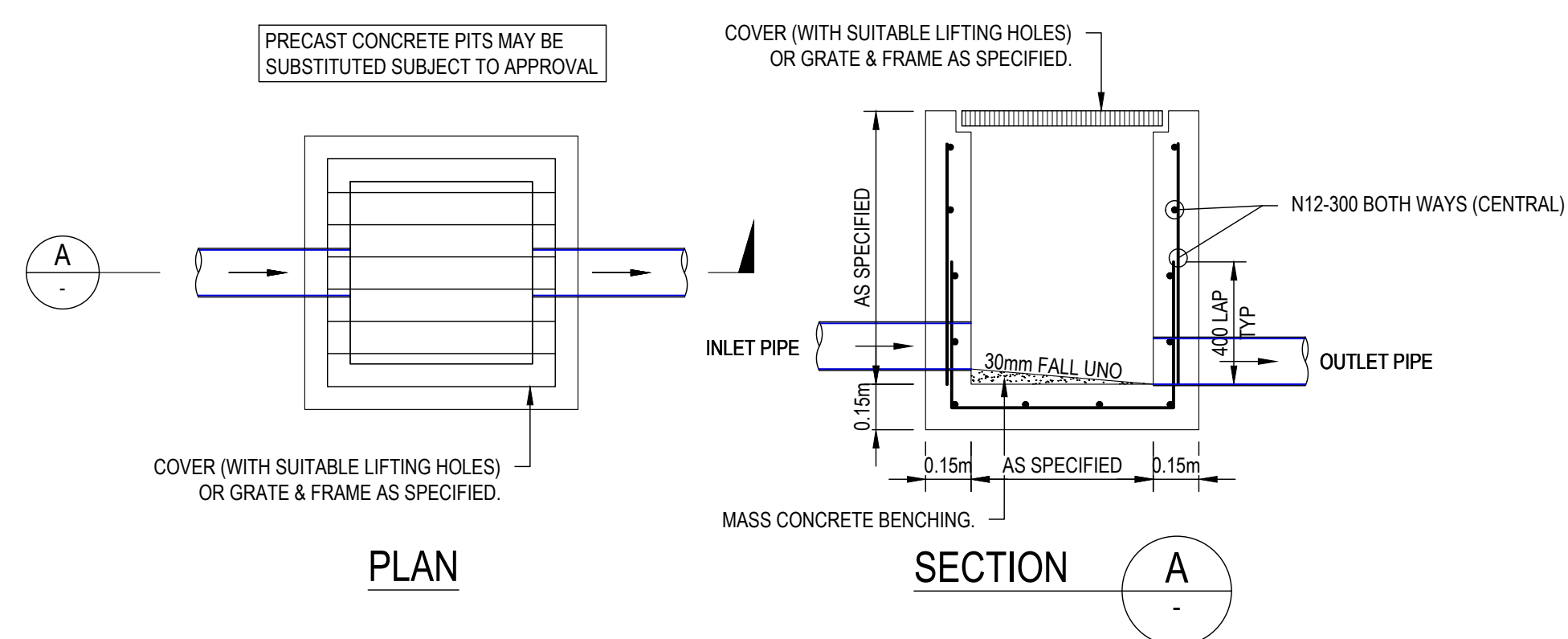
OSD SIGN
NOT TO SCALE



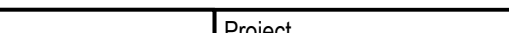
TYPICAL JUNCTION PIT (JP)
SCALE 1:20

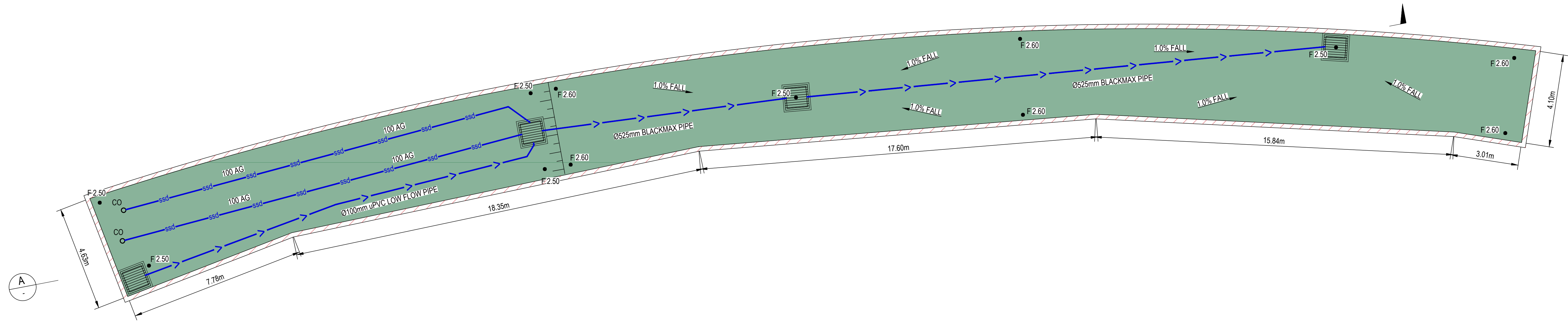


GRATED TRENCH DRAIN

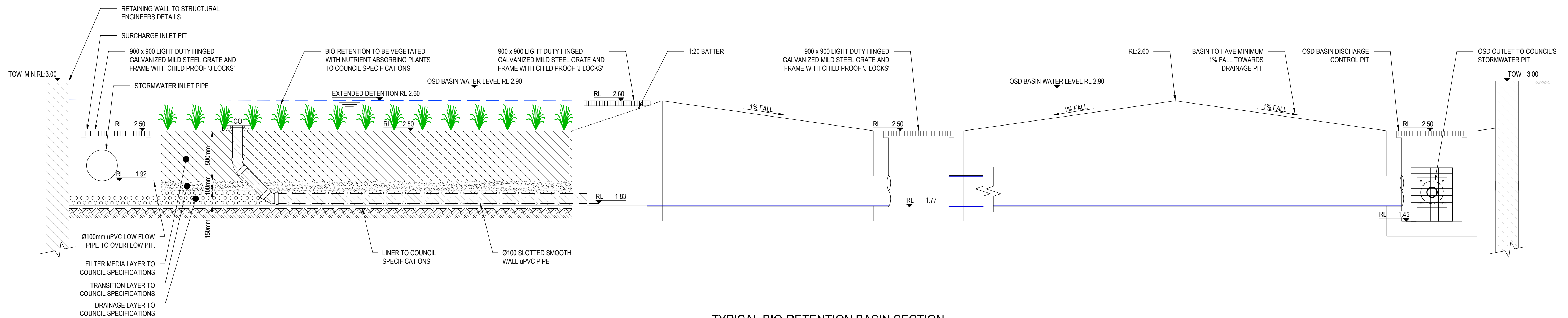


TYPICAL SURFACE INLET PIT (GSIP)

				Client		Project		Job Number		Scale		North Point		Status	
				JCP CONSTRUCTIONS		JCO CONSULTANTS PTY LTD				20230139		AS SHOWN		DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION	
										Date 26/11/2024					
3 26/11/2024 ISSUED FOR DA				J.H J.H		Architect		SUITE 801C, No.1 RIDER BOULEVARD, RHODES NSW 2138		Drawing Title		Drawing Number		Scale	
2 21/06/2024 ISSUED FOR DA				J.H J.H		SBA ARCHITECTS		EMAIL: Jason@jcoconsultants.com.au		STORMWATER CONCEPT DESIGN - DETAILS SHEET - SHEET 1 OF 2		DA-SW300			
1 8/03/2024 ISSUED FOR REVIEW				J.H J.H				Design		Drawn		Validate		Datum	
REV. DATE AMENDMENT				INT. APP.				J.H		J.H		J.H		A.H.D	



OSD/BIO-RETENTION
BASIN PLAN VIEW



TYPICAL BIO-RETENTION BASIN SECTION

NOT TO SCALE

REV.	DATE	AMENDMENT	INT.	APP.
3	26/11/2024	ISSUED FOR DA	J.H	J.H
2	21/06/2024	ISSUED FOR DA	J.H	J.H
1	8/03/2024	ISSUED FOR REVIEW	J.H	J.H

Client	JCP CONSTRUCTIONS
Architect	SBA ARCHITECTS

JCO CONSULTANTS PTY LTD
SUITE 801C, No.1 RIDER BOULEVARD, RHODES NSW 2138
EMAIL: Jason@jcoconsultants.com.au



Project	PROPOSED INDUSTRIAL DEVELOPMENT
	4-12 BREESE PARADE, FORSTER
	STORMWATER CONCEPT DESIGN
Drawing Title	STORMWATER CONCEPT DESIGN - DETAILS SHEET - SHEET 2 OF 2
Design	J.H
Drawn	J.H
Validate	J.H

Job Number	20230139
Scale	AS SHOWN
Date	26/11/2024
Drawing Number	DA-SW301
Size	A1
Datum	A.H.D

North Point	
Status	DEVELOPMENT APPLICATION
	NOT FOR CONSTRUCTION
Scale	



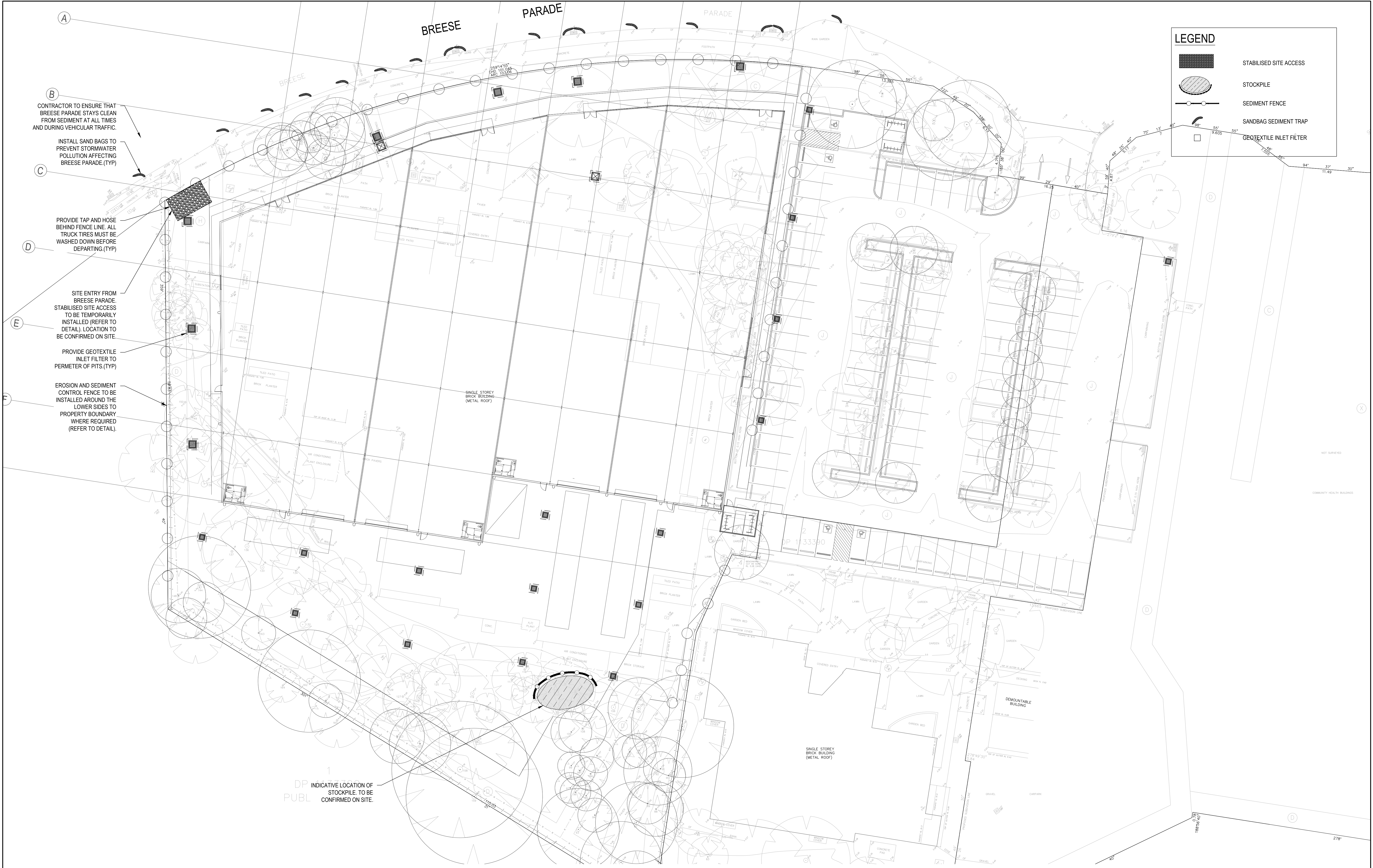
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



						Client		JCP CONSTRUCTIONS		JCO CONSULTANTS PTY LTD				Project		Job Number		Scale				Status	
						Architect		SBA ARCHITECTS		SUITE 801C, No.1 RIDER BOULEVARD, RHODES NSW 2138 EMAIL: Jason@jcoconsultants.com.au				PROPOSED INDUSTRIAL DEVELOPMENT 4-12 BREESE PARADE, FORSTER STORMWATER CONCEPT DESIGN		20230139		1:250					
3				26/11/2024		ISSUED FOR DA		J.H		J.H				Drawing Title		Drawing Number		Size					
2				21/06/2024		ISSUED FOR DA		J.H		J.H				STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN		DA-SW500		A1					
1				8/03/2024		ISSUED FOR REVIEW		J.H		J.H				Design		Drawn		Validate		Datum			
REV.				DATE		AMENDMENT		INT.		APP.				J.H		J.H		J.H		A.H.D		@A1	

CAD File: P:\2023\20230139-2-14 Breese Parade, Forster\Civil\cad\DA Stormwater\DA-SW500.dwg

DATE PLOTTED: 26 November 2024 10:35 AM



REV.	DATE	AMENDMENT	INT.	APP.
3	26/11/2024	ISSUED FOR DA	J.H	J.H
2	21/06/2024	ISSUED FOR DA	J.H	J.H
1	8/03/2024	ISSUED FOR REVIEW	J.H	J.H

Client	JCP CONSTRUCTIONS
Architect	SBA ARCHITECTS

Project	JCO CONSULTANTS PTY LTD
Drawing Title	SUITE 801C, No.1 RIDER BOULEVARD, RHODES NSW 2138 EMAIL: Jason@jcoconsultants.com.au

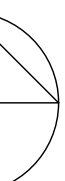


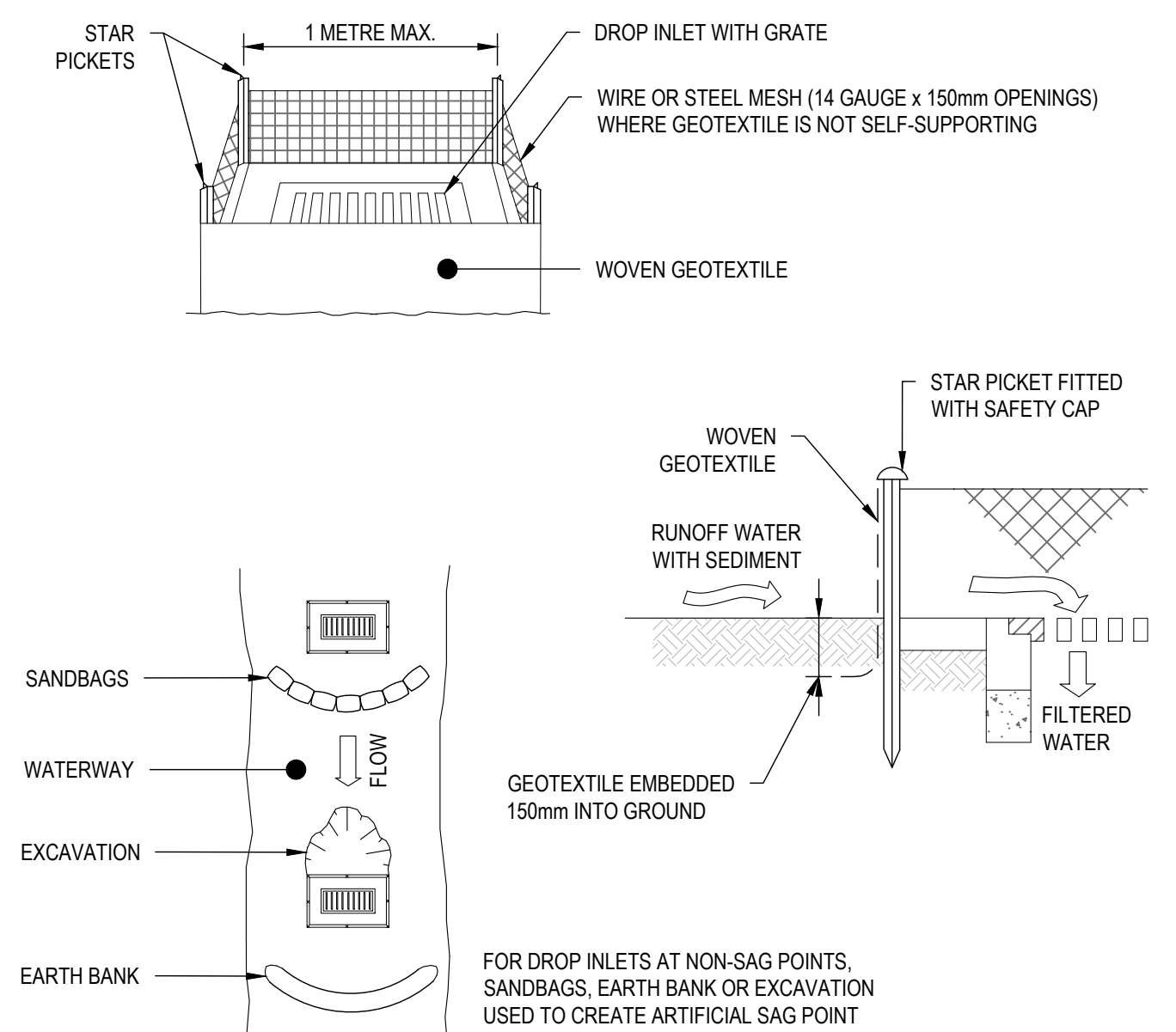
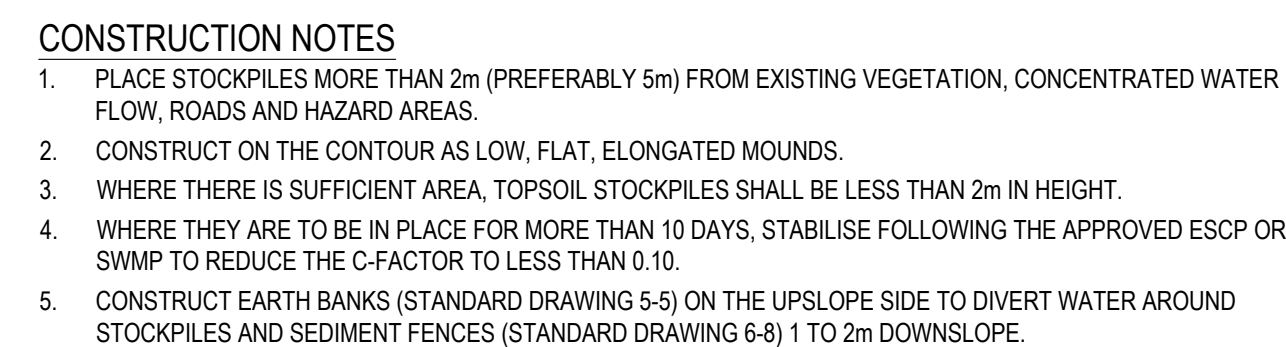
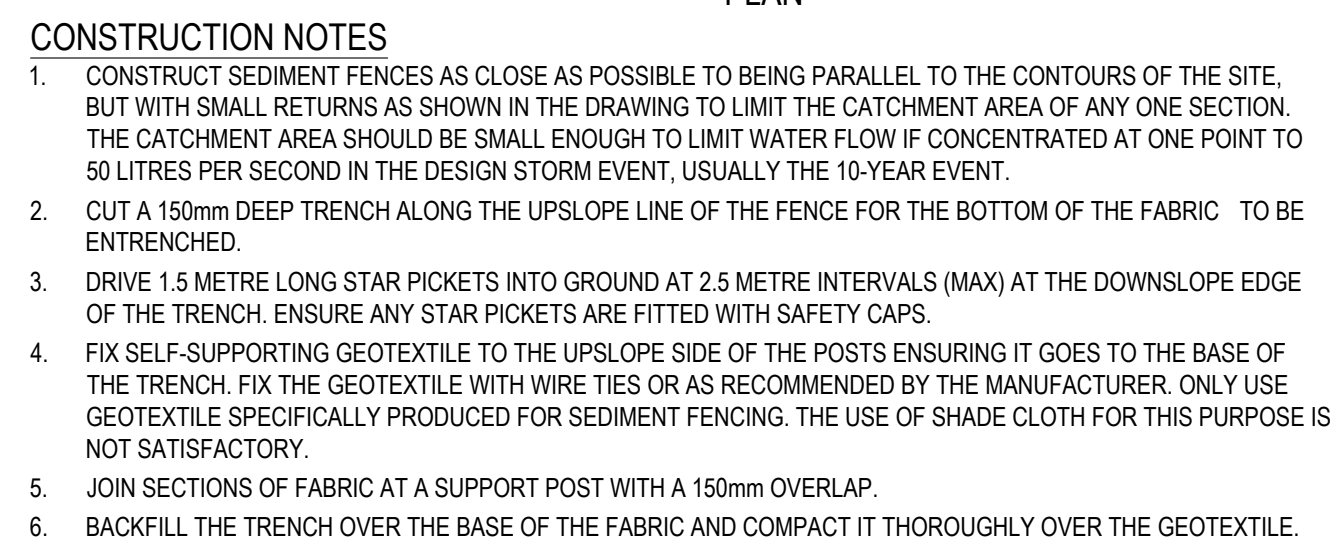
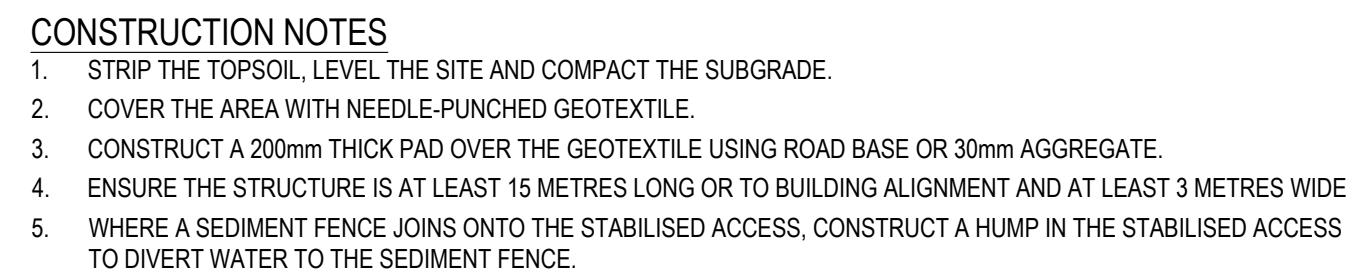
Project	PROPOSED INDUSTRIAL DEVELOPMENT 4-12 BREESE PARADE, FORSTER STORMWATER CONCEPT DESIGN
Drawing Title	EROSION AND SEDIMENT CONTROL - PLAN
Design	J.H
Drawn	J.H
Validate	J.H

Job Number	20230139
Drawing Number	DA-SW600

Scale	1:250
Date	26/11/2024
Size	A1
Datum	A.H.D

Status	DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION
Scale	0 5 10 15 20 25m SCALE 1:250





CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOBARRIER. REDUCE THE PICKET SPACING TO 1 METRE CENTRES
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER (SD 6-12)

[illegible]