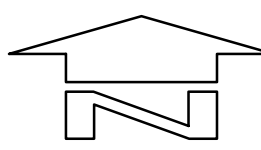


PROPOSED WAREHOUSE DISTRIBUTION AND OFFICE DEVELOPMENT 28 MCPHERSON ST, BANKSMMEADOW CIVIL PACKAGE FOR SSD

DRAWING LIST

DRAWING NO.	DRAWING TITLE
C09349.12-DA10	DRAWING LIST & GENERAL NOTES
C09349.12-DA20	EROSION & SEDIMENT CONTROL PLAN & DETAILS
C09349.12-DA30	SITE PREPARATION PLAN
C09349.12-DA40	STORMWATER KEY PLAN
C09349.12-DA41	STORMWATER DRAINAGE PLAN -SHEET 1
C09349.12-DA42	STORMWATER DRAINAGE PLAN -SHEET 2
C09349.12-DA45	STORMWATER DRAINAGE DETAILS- SHEET 1
C09349.12-DA51	FINISHED LEVELS PLAN-SHEET 1
C09349.12-DA52	FINISHED LEVELS PLAN-SHEET 2



LOCALITY PLAN
N.T.S

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.
- 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.
- ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ENGINEER'S DRAWINGS ISSUED IN ANY ELECTRONIC FORMAT MUST NOT BE USED FOR DIMENSIONAL SETOUT. REFER TO THE ARCHITECT'S DRAWINGS FOR ALL DIMENSIONAL SETOUT INFORMATION.
- 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.
- UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
- 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.

STORMWATER DRAINAGE NOTES:

- ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3:2003 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
- 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.
- 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 SITE.
- ALL STORMWATER PIPES Ø375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
- ALL PIPES UP TO AND INCLUDING Ø300 TO BE uPVC GRADE S80 UNO.
- 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 Fc 25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- IN ADDITION TO ITEM 6 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
- 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.
- 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 SUPPORT.
- WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Ø100 uPVC TO EACH SIDE OF PIPE.
- ALL SUBSOIL DRAINAGE LINES SHALL BE Ø100 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.
- ALL PIPE GRADES 1 IN 100 MINIMUM UNO.
- PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
- 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' UNO.
- PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
- DOWN PIPES (DP) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE UNO. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
- 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.

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 BY THE GEOTECHNICAL ENGINEER UNDER LEVEL 1 SUPERVISION.
- EXISTING LEVELS ARE BASED ON INFORMATION PROVIDED BY RYGATE SURVEYORS. TITLED PLAN SHOWING DETAIL AND PLAN LEVELS LOT 9 D/P 1205673 NO 28 MCPHERSON STREET DATED 30.10.18.
- STRIP ANY TOP SOIL OR DELETERIOUS MATERIAL AND DISPOSE OF FROM SITE OR STORE AS DIRECTED.
- 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.
- PREPARE STEEP BATTERS TO RECEIVE FILL BY CONSTRUCTING BENCHING TO FACILITATE FILL PLACEMENT AND COMPACTION.
- 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.
- SITE WON FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HLF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HLF 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 HLF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HLF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET.
- 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 HLF 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.
- 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.
- PRIOR TO ANY EARTHWORKS, EROSION CONTROL AS OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE COMPLETED.
- EXISTING ROCK, IF ANY, SHALL BE REMOVED BY HEAVY ROCK BREAKING OR RIPPING.
- MATCH EXISTING LEVELS AT BATTER INTERFACE.
- 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.

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 EARTHWORKS.

- SILT FENCES AND SILT FENCE RETURNS SHALL BE ERECTED CONVEX TO THE CONTOUR TO POND WATER.
- 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 SOIL.
- ALL TEMPORARY EARTH BERMES, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- CLEAR WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO THE DRAINAGE SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROVIDING ON GOING ADJUSTMENT TO EROSION CONTROL MEASURES AS REQUIRED DURING CONSTRUCTION.
- 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.
- ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE MAINTAINED UNTIL THE END OF THE DEFECTS LIABILITY PERIOD.
- ALL EARTHWORKS AREAS SHALL BE ROLLED ON A REGULAR BASIS TO SEAL THE EARTHWORKS.
- 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.
- ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND HYDROMULCHED WITHIN 10 DAYS OF COMPLETION OF FORMATION.
- 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.
- ALL TOPSOIL STOCKPILES ARE TO BE SUITABLY COVERED TO THE SATISFACTION OF THE SITE MANAGER TO PREVENT WIND AND WATER EROSION.
- 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.
- 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.
- 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.
- 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.
- 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.

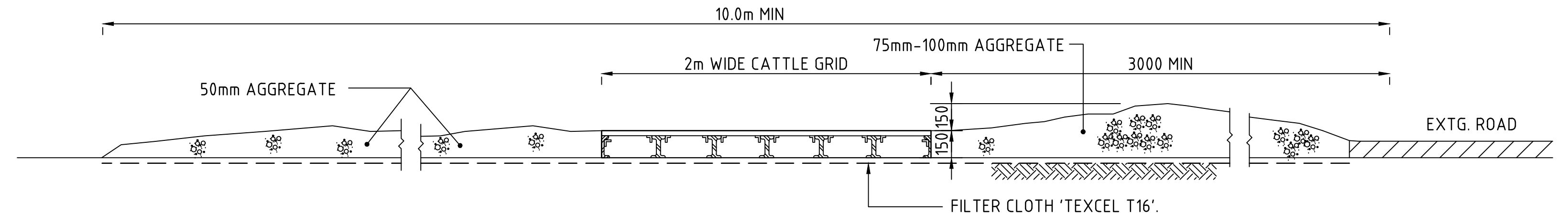
FINISHED LEVELS PLAN NOTES:

- LEVELS DATUM IS A.H.D.
- ALL CONTOUR LINES & SPOT LEVELS INDICATE FINISHED PAVEMENT LEVELS U.N.O. ON PLAN.
- 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 EXCEED 1:20 (5%)
- PERMANENT BATTER SLOPES ARE TO HAVE A MAXIMUM GRADE OF 1V:3H.
- ALL BATTER SLOPE WITH GRADES AT OR EXCEEDING 1V:6H ARE TO BE TURFED IMMEDIATELY OR APPROPRIATE EROSION CONTROL IS TO BE PROVIDED TO THE SATISFACTION OF THE ENGINEER.
- ALL FOOTPATHS ARE TO FALL AWAY FROM THE BUILDING AT 2.5% NOMINAL GRADE.
- ALL PAVEMENTS ARE TO BE SET AT 50mm BELOW THE FINISHED FLOOR LEVEL OF THE WAREHOUSE AND OFFICE AREAS.

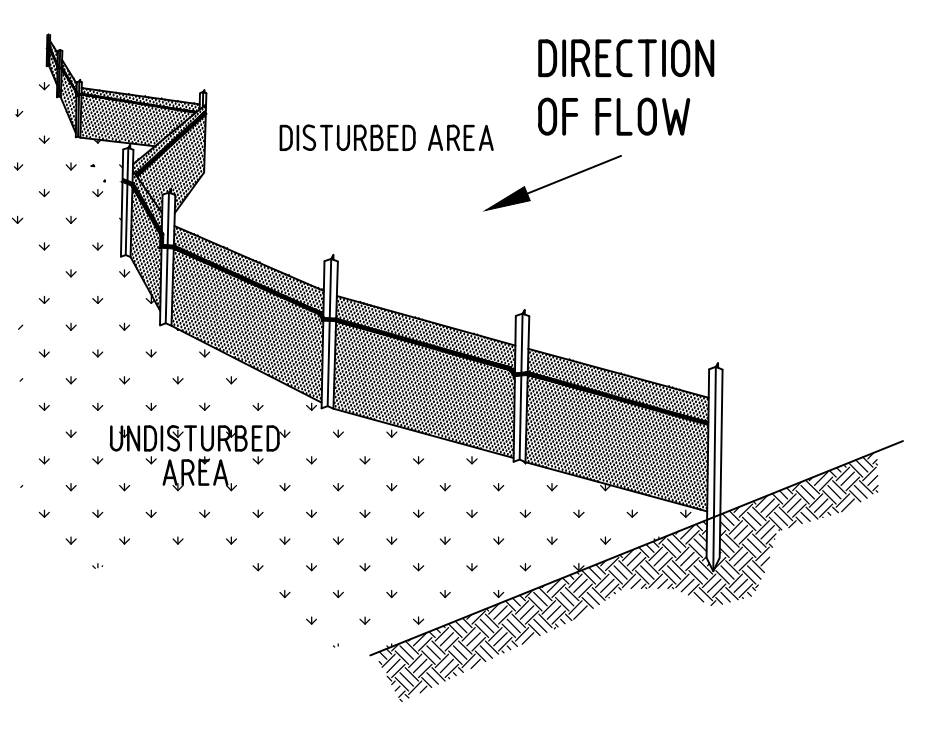
FOR INFORMATION ONLY

RE-ISSUED FOR RESPONSES TO SUBMISSIONS ISSUED FOR INFORMATION ONLY ISSUED FOR INFORMATION ONLY AMENDMENTS			24.07.20 30.01.19 30.11.18			C B A			AMENDMENTS			DATE			ISSUE		
ARCHITECT			CLIENT			PROJECT			DESIGNED			CHECKED			SCALE		
AXIS ARCHITECTURAL 6 / 112 Conyngham Street Cronulla NSW 2230 M + 0414 954 405 P + 02 9523 7858 E + david@axisarchitects.com.au			DBL Property Pty Limited Development Managers and Property Advisors Suite 5 Upper Ground Floor 402 Kent Street Sydney NSW 2000 P + 61 2 9777 7862 M + 61 2 9777 7862 E + david@dblproperty.com.au			PROPOSED WAREHOUSE DISTRIBUTION AND OFFICE DEVELOPMENT 28 MCPHERSON ST BANKSMMEADOW NSW			COSTIN ROE CONSULTING PTY LTD. Consulting Engineers Level 1, 8 Macdonell Street Wahbah Bay, Sydney NSW 2000 Tel: (02) 8261-7899 Fax: (02) 8261-3721 email: mail@costinroe.com.au			PRECISION COMMUNICATION ACCOUNTABILITY			DRAWING TITLE DRAWING LIST AND GENERAL NOTES		
DRAWING NO.			DRAWING TITLE			DRAWING NO.			DRAWING TITLE			DRAWING NO.			DRAWING TITLE		
C09349.12-DA10			DRAWING LIST & GENERAL NOTES			C09349.12-DA10			DRAWING LIST & GENERAL NOTES			C09349.12-DA10			DRAWING LIST & GENERAL NOTES		

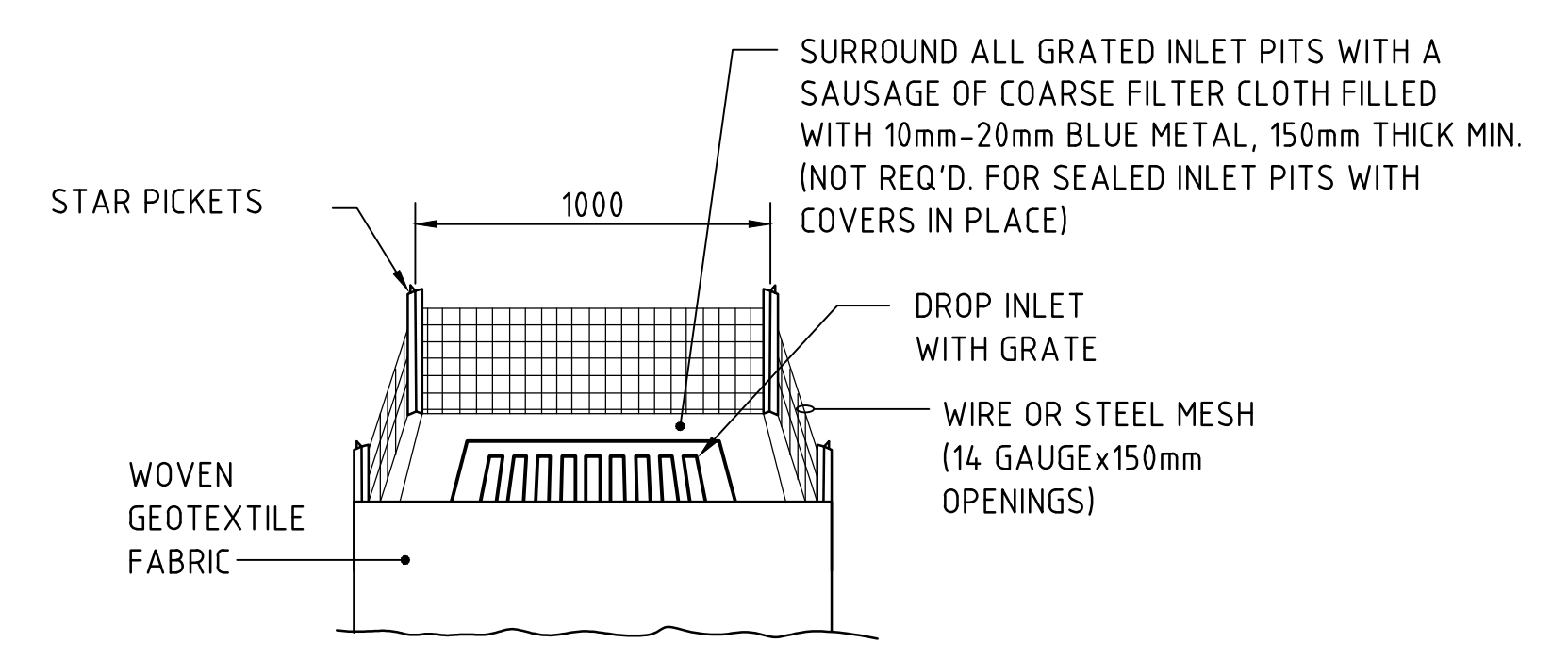
SPRINGVALE
NANT



SECTION 1:20 1 : STABILISED CONSTRUCTION ENTRANCE 'TRUCK SHAKER'
DA20



TYPICAL SILT FENCE DETAIL
N.T.S.
PROVIDE 1m RETURNS AT 30m INTERVALS.
TYPICAL



GRATED INLET PIT FILTER DETAIL
N.T.S.

LEGEND:
PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS.
TYPICAL (N.S.O.P.)

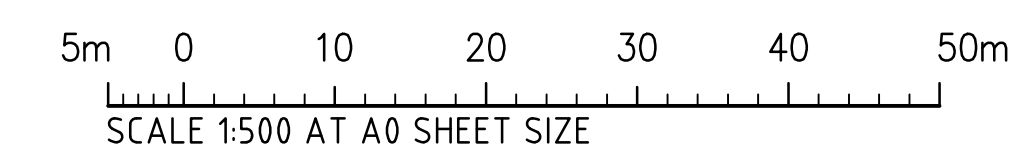
← - DENOTES DIRECTION OF OVERLAND FLOW
- - - DENOTES SILT FENCE WITH CATCH DRAIN
[] DENOTES GRATED INLET PIT FILTER

NOTE:
NO SEDIMENTATION BASIN IS REQUIRED AS THE TOTAL DISTURBED AREA IS LESS THAN 2,500m². ALTERNATE METHODS HAVE BEEN EMPLOYED TO PROTECT THE RECEIVING WATERS.

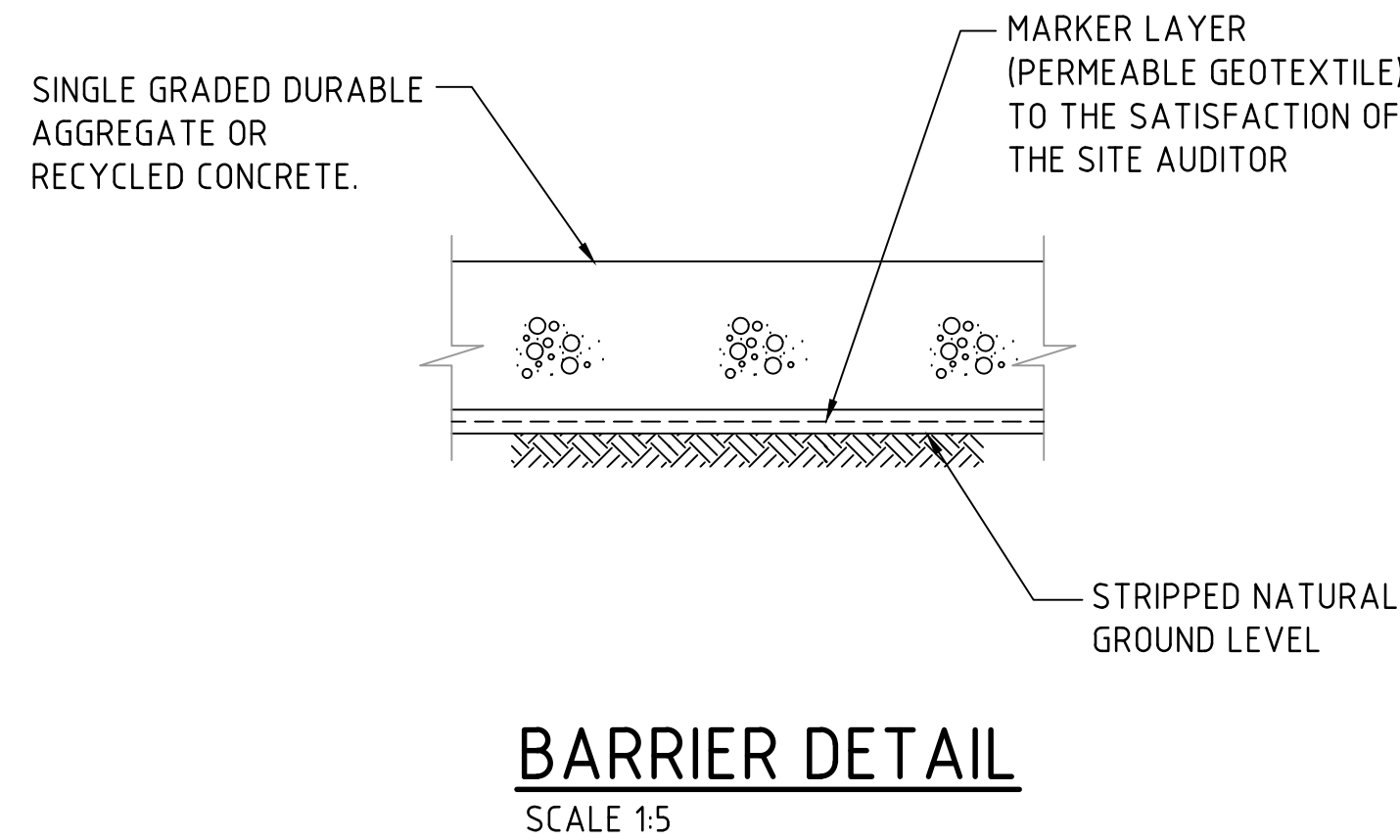
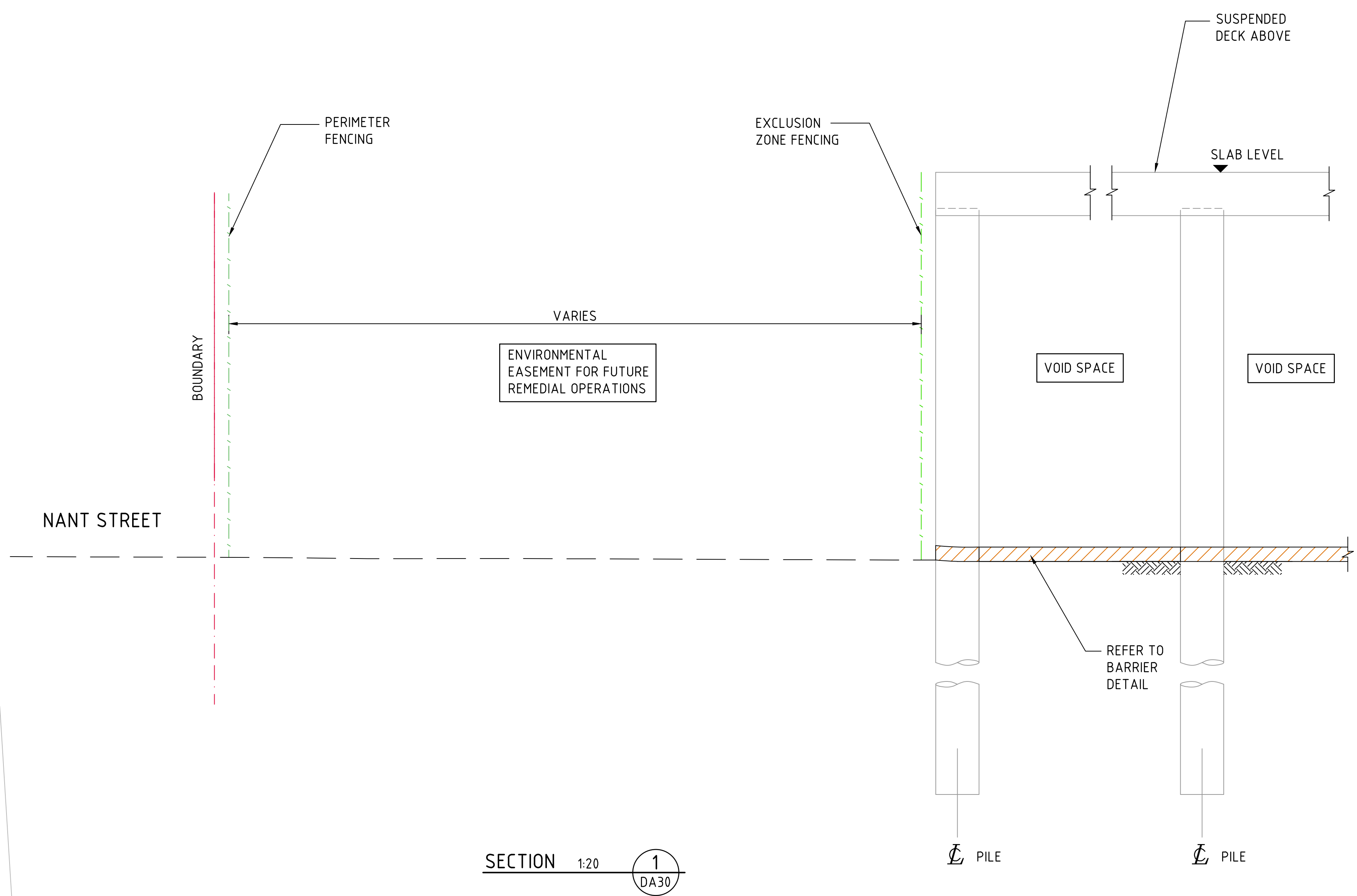
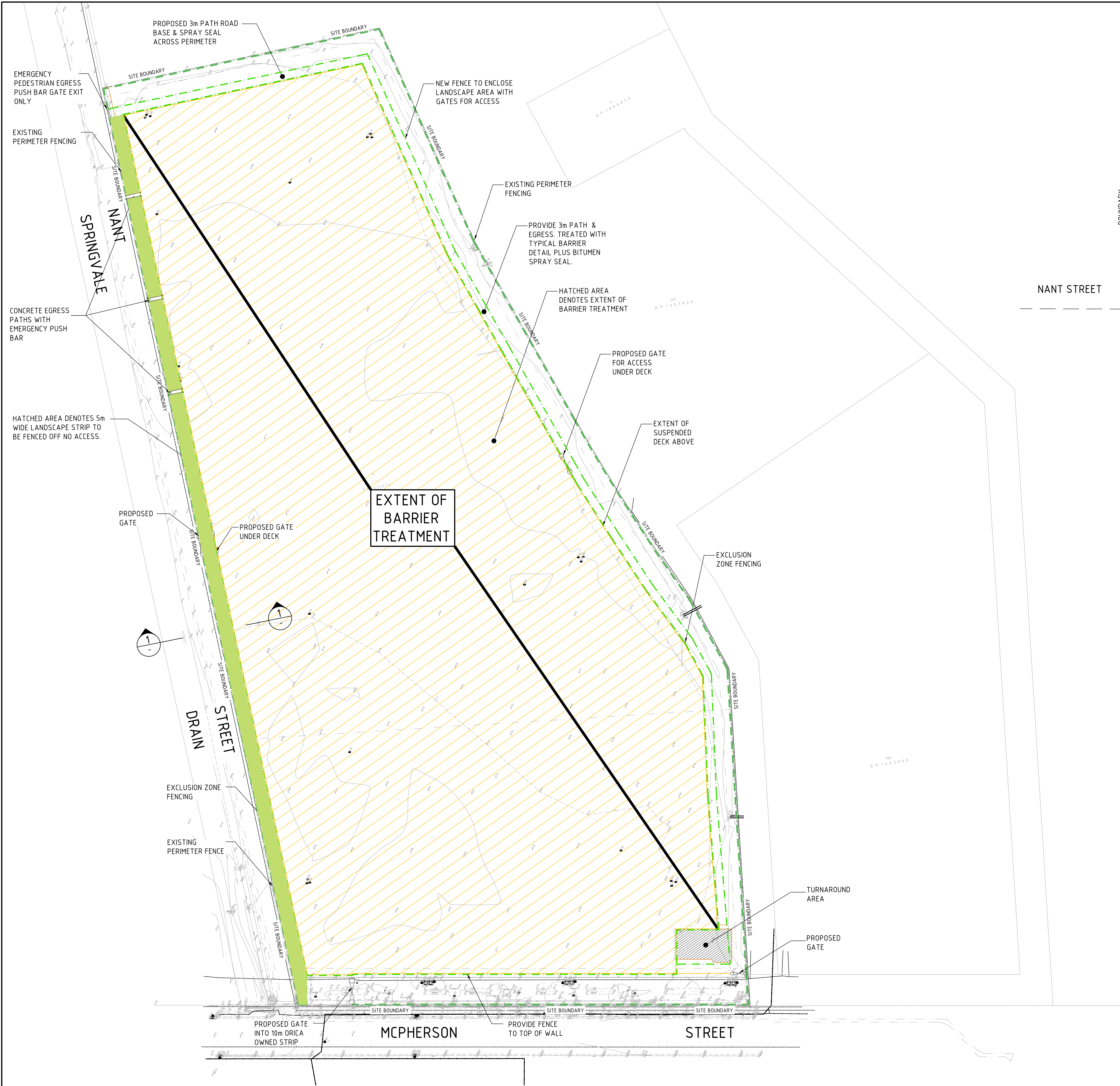
NOTE:
REFER TO DRAWING C0934.9.12-DA10 FOR EROSION CONTROL NOTES.

 EROSION AND SEDIMENT CONTROL PLAN & DETAILS
1:500

FOR INFORMATION ONLY

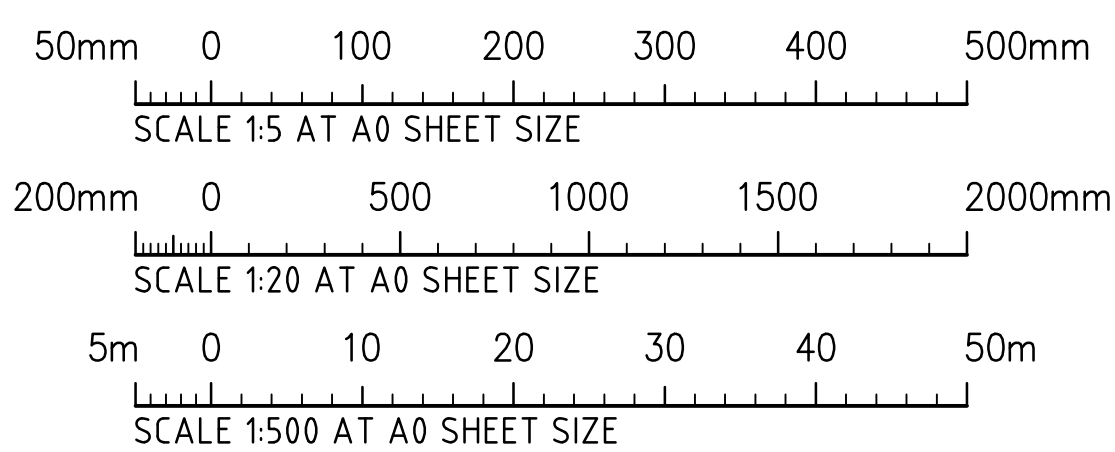


RE-ISSUED FOR RESPONSES TO SUBMISSIONS										24.07.20		C	ISSUED FOR INFORMATION ONLY										30.01.19		B	ISSUED FOR INFORMATION ONLY										30.11.18		A	AMENDMENTS										DATE		ISSUE		AMENDMENTS										DATE		ISSUE		AMENDMENTS										DATE		ISSUE																																																		
ARCHITECT										 AXIS ARCHITECTURAL 6 / 112 Cronulla Street Cronulla NSW 2230 M + 0414 954 405 P + 02 9523 7858 E + dan@axisarchitects.com.au										CLIENT										 DBL Property Pty Limited Development Managers and Property Advisors Suite 3, Upper Ground Floor 407 Kent Street Sydney NSW 2000 P + 02 9777 7862 M + 02 9777 7862 E + dan@dbll.com.au W www.dbll.com.au										PROJECT										 Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 8 Wadswill Street Wahah Bay, Sydney NSW 2000 Tel: (02) 8251-7899 Fax: (02) 8241-3721 email: mail@costinroe.com.au																				DRAWING TITLE										EROSION AND SEDIMENT CONTROL PLAN & DETAILS										DRAWING No.										934.9.12-DA 20										ISSUE										C									



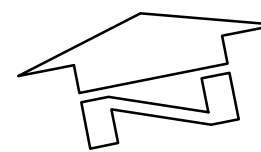
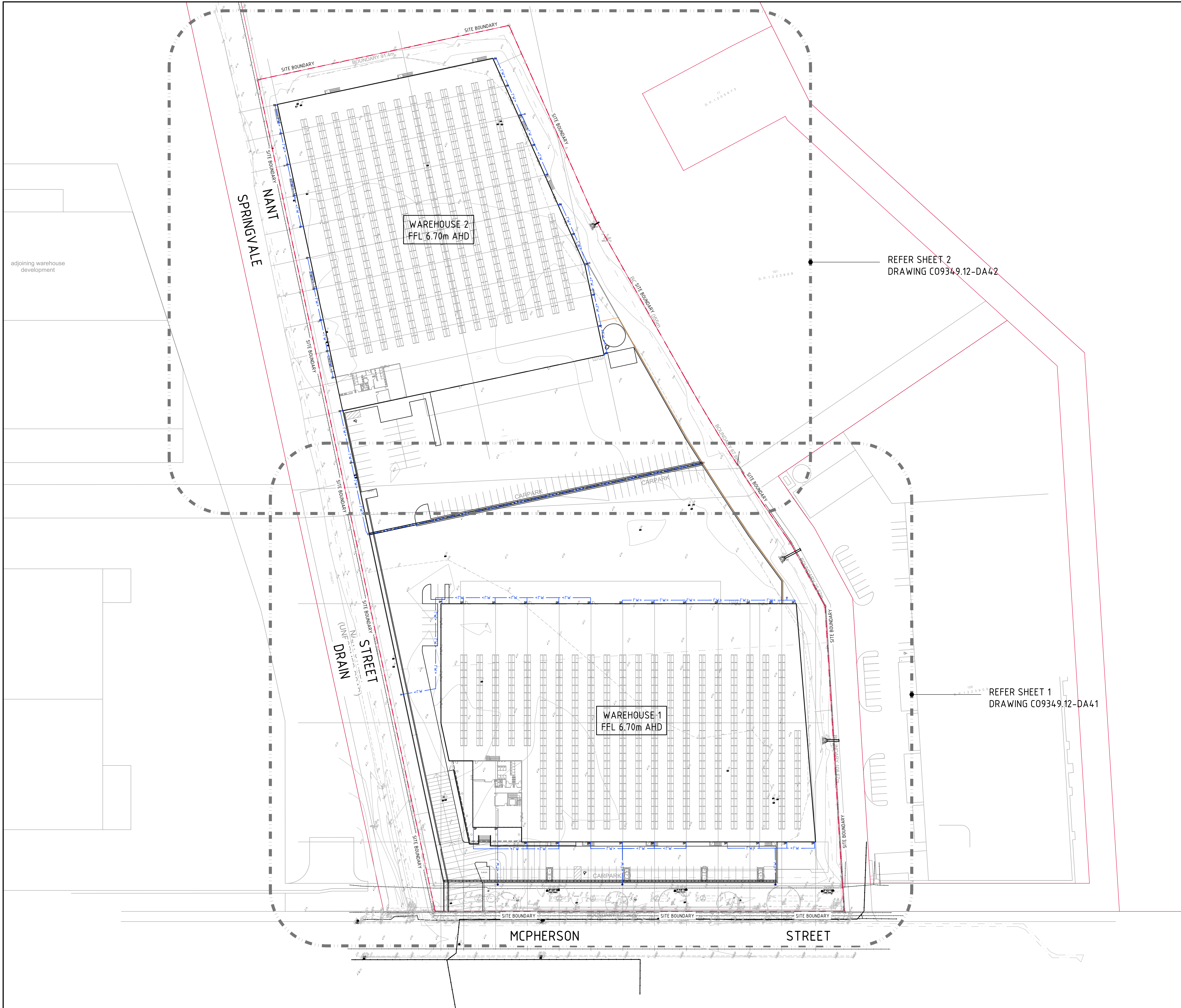
- SITE PREPARATION NOTES:**
- STRIP ANY TOPSOIL OR DELETERIOUS MATERIAL AND DISPOSE OFF FROM SITE OR STORE AS DIRECTED.
 - EXISTING SUBGRADE TO BE PROOF ROLLED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
 - INSTALL MARKER LAYER TO THE SATISFACTION OF THE SITE AUDITOR.
 - PLACE MATERIAL AS NOTED ON BARRIER DETAIL.
- NOTE:**
- THE BARRIER MATERIAL SHALL BE SINGLE GRADED DURABLE AGGREGATE OR RECYCLED CONCRETE WITH PERMEABILITY RATE GREATER THAN NATURAL UNDERLYING SAND. MATERIAL GRADING SPECIFICATION TO BE PROVIDED AT DETAIL DESIGN.

- LEGEND:**
- DENOTES EXTENT OF BARRIER TREATMENT
 - DENOTES EXTENT OF FENCED LANDSCAPED AREA (NO ACCESS)
 - DENOTES PERIMETER FENCING
 - DENOTES EXCLUSION ZONE FENCING
 - DENOTES GATES



SITE PREPARATION PLAN
1:500

FOR INFORMATION ONLY



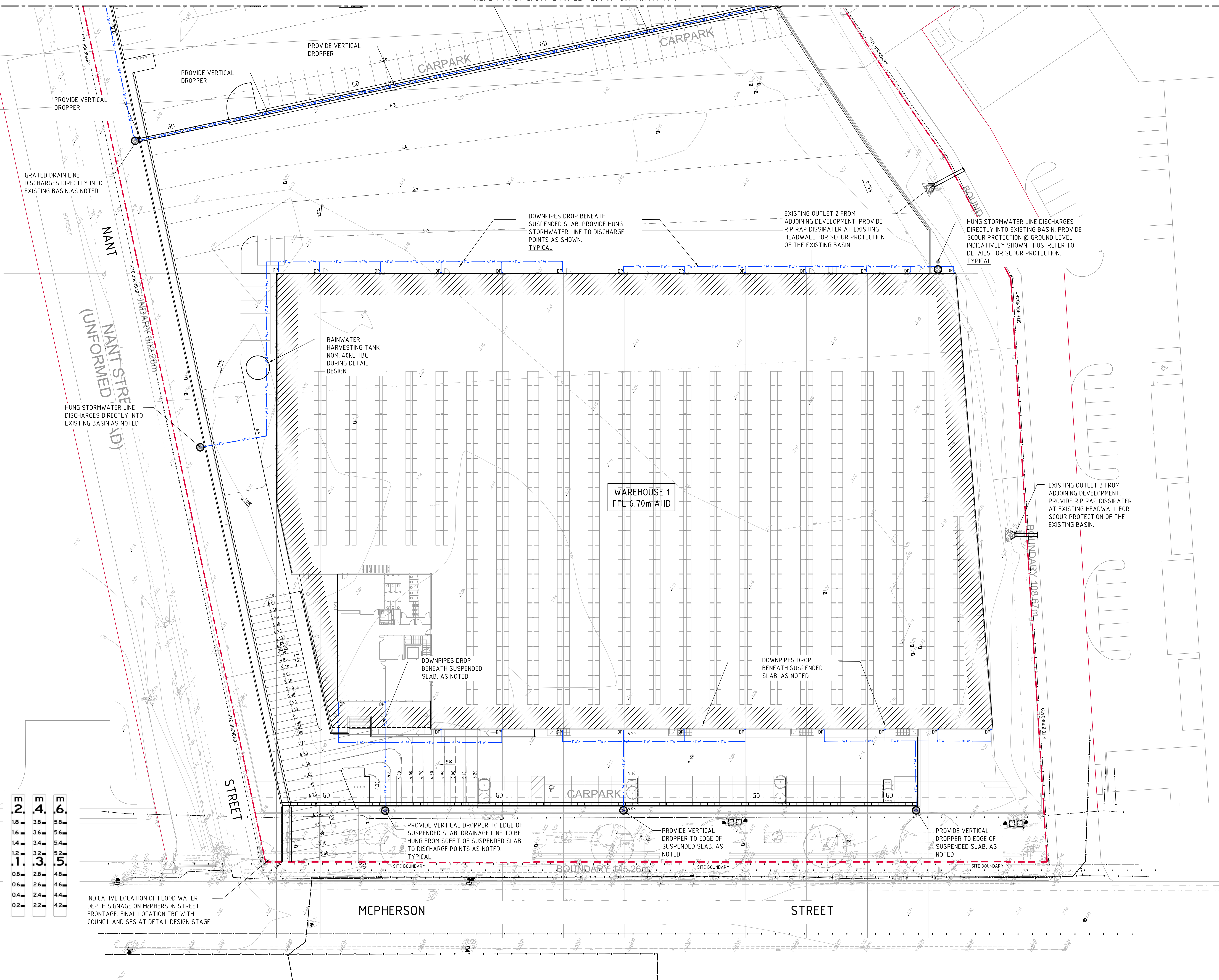
STORMWATER KEY PLAN
1:500

NOTE:
REFER TO DRAWING C09349.12-DA10 FOR STORMWATER NOTES.



FOR INFORMATION ONLY

RE-ISSUED FOR RESPONSES TO SUBMISSIONS24.07.20C ISSUED FOR INFORMATION ONLY30.01.19B ISSUED FOR INFORMATION ONLY30.11.18A AMENDMENTS				AMENDMENTS DATE ISSUE AMENDMENTS DATE ISSUE				ARCHITECT AXIS AXIS ARCHITECTURAL 6 / 112 Cronulla Street Cronulla NSW 2230 M + 04 954 495 P + 02 9523 7858 E + dave@axisarchitects.com.au		CLIENT DBL Property Pty Limited Development Managers and Property Advisors Suite 3, Upper Ground Floor 401 Kene Street Sydney NSW 2000 M + 02 9277 7602 M + 02 9277 7602 E + dave@axisarchitects.com.au		PROJECT PROPOSED WAREHOUSE DISTRIBUTION AND OFFICE DEVELOPMENT 28 MCPHERSON ST BANKSMEADOW NSW		COSTIN ROE CONSULTING COSTIN ROE CONSULTING Level 1, 8 Windmill Street Wahah Bay, Sydney NSW 2000 Tel: (02) 9251-7899 Fax: (02) 9241-3721 email: mail@costinroe.com.au		PRECISION COMMUNICATION ACCOUNTABILITY		DRAWING TITLE STORMWATER KEY PLAN PLAN & DETAILS		DRAWING No. 9349.12-DA 40		ISSUE C	
--	--	--	--	---	--	--	--	---	--	--	--	---	--	--	--	---	--	---	--	---	--	-------------------------------	--

**LEGEND:**

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION TITLED PLANS SHOWING DETAIL AND PLAN LEVELS LOT 9 DP 1205673 NO 28 MCPHERSON STREET BY RYGADE SURVEYORS DATED 30.10.18

- ROOFWATER DOWNPIPE (INDICATIVE)
- SPOT LEVEL
- PAVEMENT FALL DIRECTION AND GRADE
- PROPOSED ROOFWATER LINE
- PROPOSED STORMWATER LINE
- GRATED DRAIN
- VERTICAL DROPPER
- DRAIN TO EXISTING BASIN
- DENOTES LOCATION OF 'PIT INSERT' 200µm TREATMENT DEVICES PRIOR TO DISCHARGE INTO BASIN
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR)

NOTE:

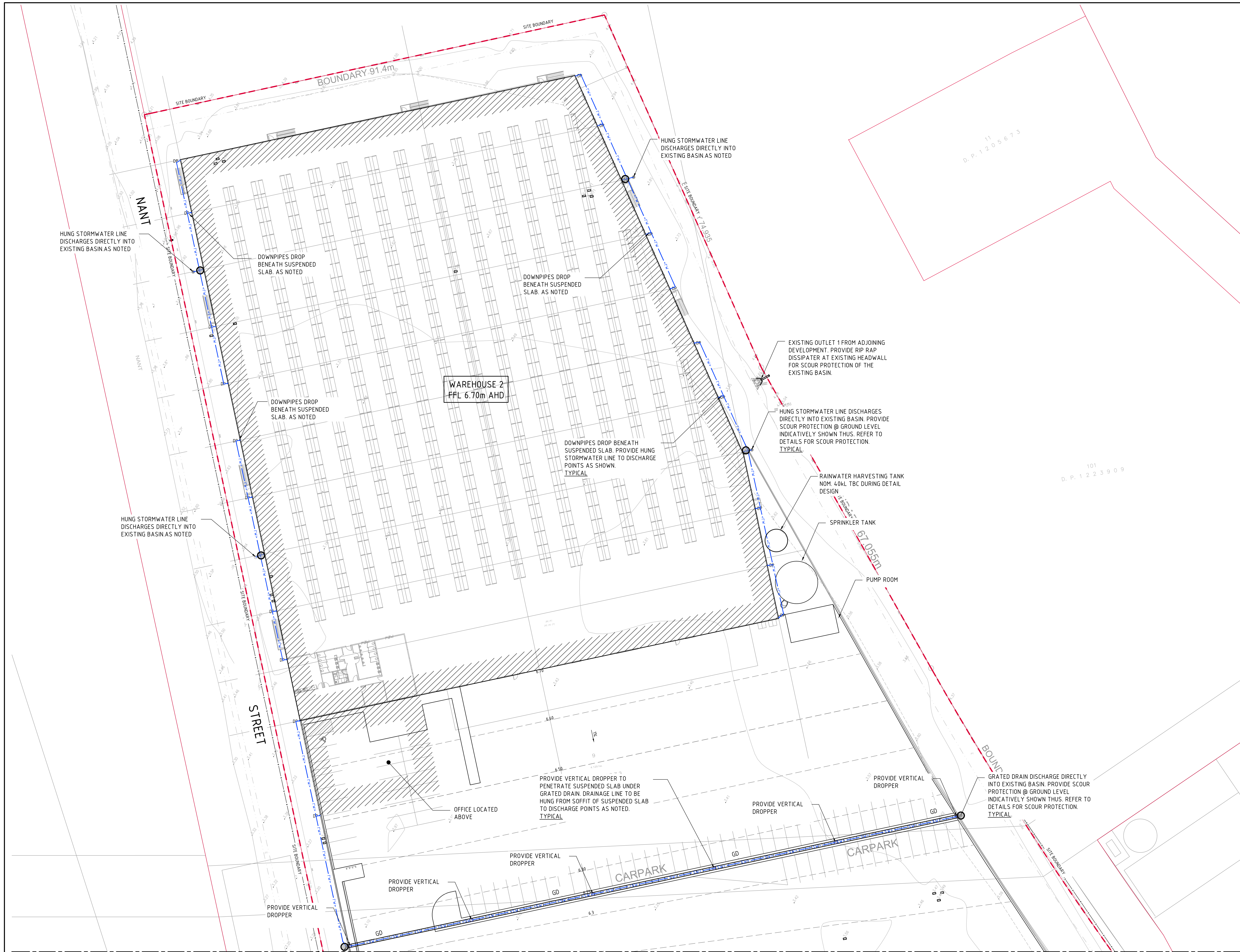
FLOODWAY WARNING SIGN TO BE INSTALLED TO ALL ACCESS POINTS TO THE OPEN BASIN AREA.

N.T.S
SUGGESTED SIZE 600mm x 450mm**NOTE:**

REFER TO DRAWING C0934.9.12-DA10 FOR STORMWATER NOTES.

2m 0 5 10 15 20 25m
SCALE 1:250 AT A0 SHEET SIZE**FOR INFORMATION ONLY**

RE-ISSUED FOR RESPONSES TO SUBMISSIONS ISSUED FOR INFORMATION ONLY AMENDMENTS	24.07.20 C 30.01.19 B 30.11.18 A	AMENDMENTS DATE ISSUE	ARCHITECT AXIS 4/112 Cronulla Street Cronulla NSW 2230 M + 0414 954 405 P + 02 9523 7858 E + dave@axisarchitects.com.au	CLIENT DBL Property Pty Limited Development Managers and Property Advisors Suite 3, Upper Ground Floor 402 Kook Street Sydney NSW 2000 Tel: (02) 9737 7860 M + 02 9737 7860 E + dave@axisarchitects.com.au	PROJECT PROPOSED WAREHOUSE DISTRIBUTION AND OFFICE DEVELOPMENT 28 MCPHERSON ST BANKSMEADOW NSW DESIGNED: [] DATE: [] CHECKED: [] DATE: [] SIZE: [] SCALE: [] CAD: [] REF: []	Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 8 Windmill Street Walsh Bay, Sydney NSW 2000 Tel: (02) 9251-7899 Fax: (02) 9241-3721 email: mail@costinroe.com.au	Costin Roe Consulting PRECISION COMMUNICATION ACCOUNTABILITY	DRAWING TITLE STORMWATER DRAINAGE PLAN SHEET 1 DRAWING NO. 9349.12-DA 41
---	--	-----------------------------	--	---	--	---	--	---



LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION TITLED PLANS SHOWING DETAIL AND PLAN LEVELS LOT 9 DP 1205673 NO.28 MCPHERSON STREET BY RYGATE SURVEYORS DATED 30.10.18

- DP - ROOFWATER DOWNPIPE (INDICATIVE)
- +60.00 - SPOT LEVEL
- 1% - PAVEMENT FALL DIRECTION AND GRADE
- RW - PROPOSED ROOFWATER LINE
- SW - PROPOSED STORMWATER LINE
- GRATED DRAIN
- - VERTICAL DROPPER
- - DRAIN TO EXISTING BASIN
- - DENOTES LOCATION OF 'PIT INSERT' 200µm TREATMENT DEVICES PRIOR TO DISCHARGE INTO BASIN
- 50.00 - FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- 50.10 - FINISHED PAVEMENT CONTOUR (MINOR)

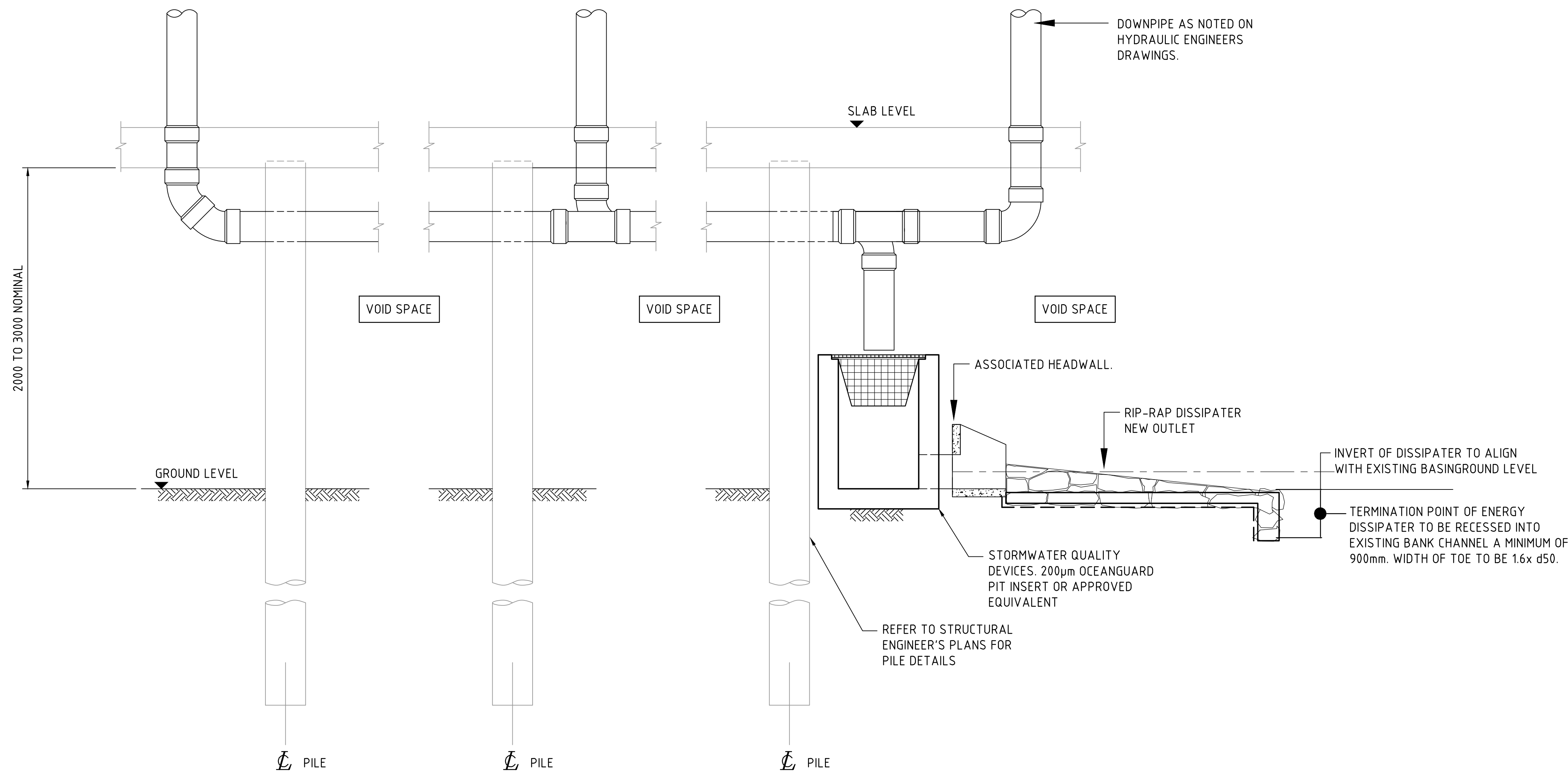
NOTE:

FLOODWAY WARNING SIGN TO BE INSTALLED TO ALL ACCESS POINTS TO THE OPEN BASIN AREA.

N.T.S
SUGGESTED SIZE 600mm x 450mm

NOTE:

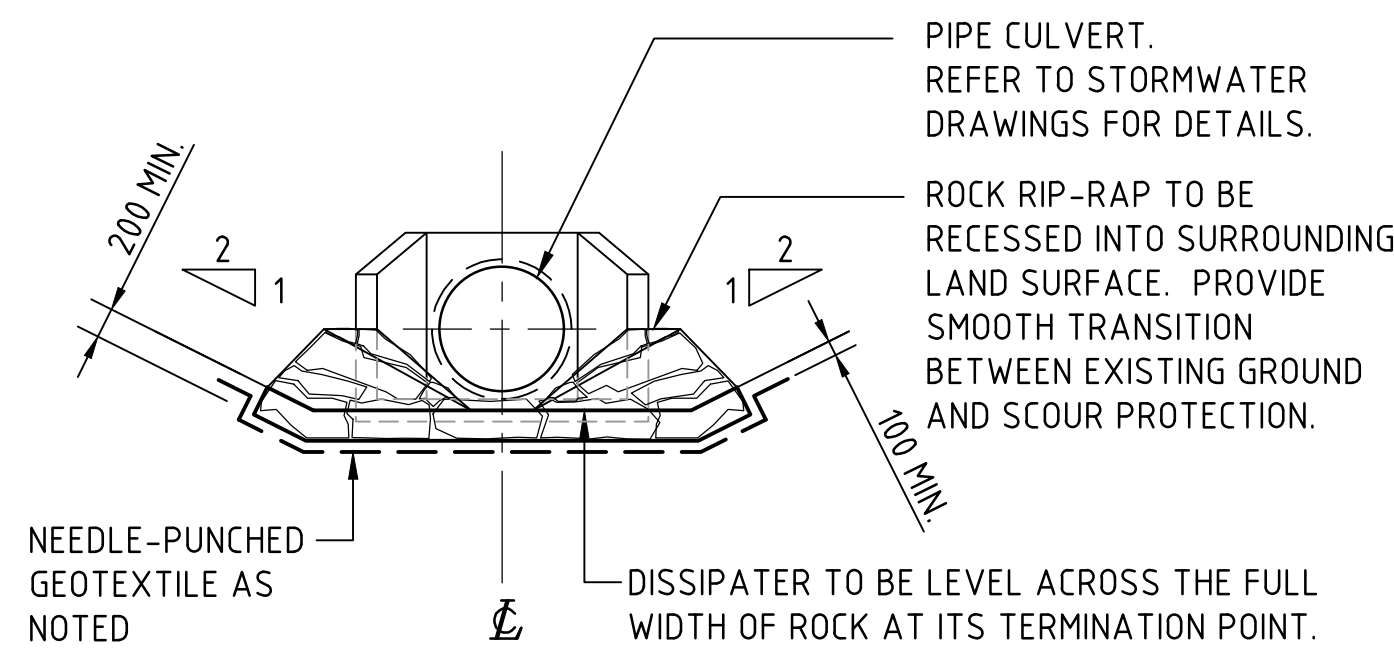
REFER TO DRAWING C0934.9.12-DA10 FOR STORMWATER NOTES.



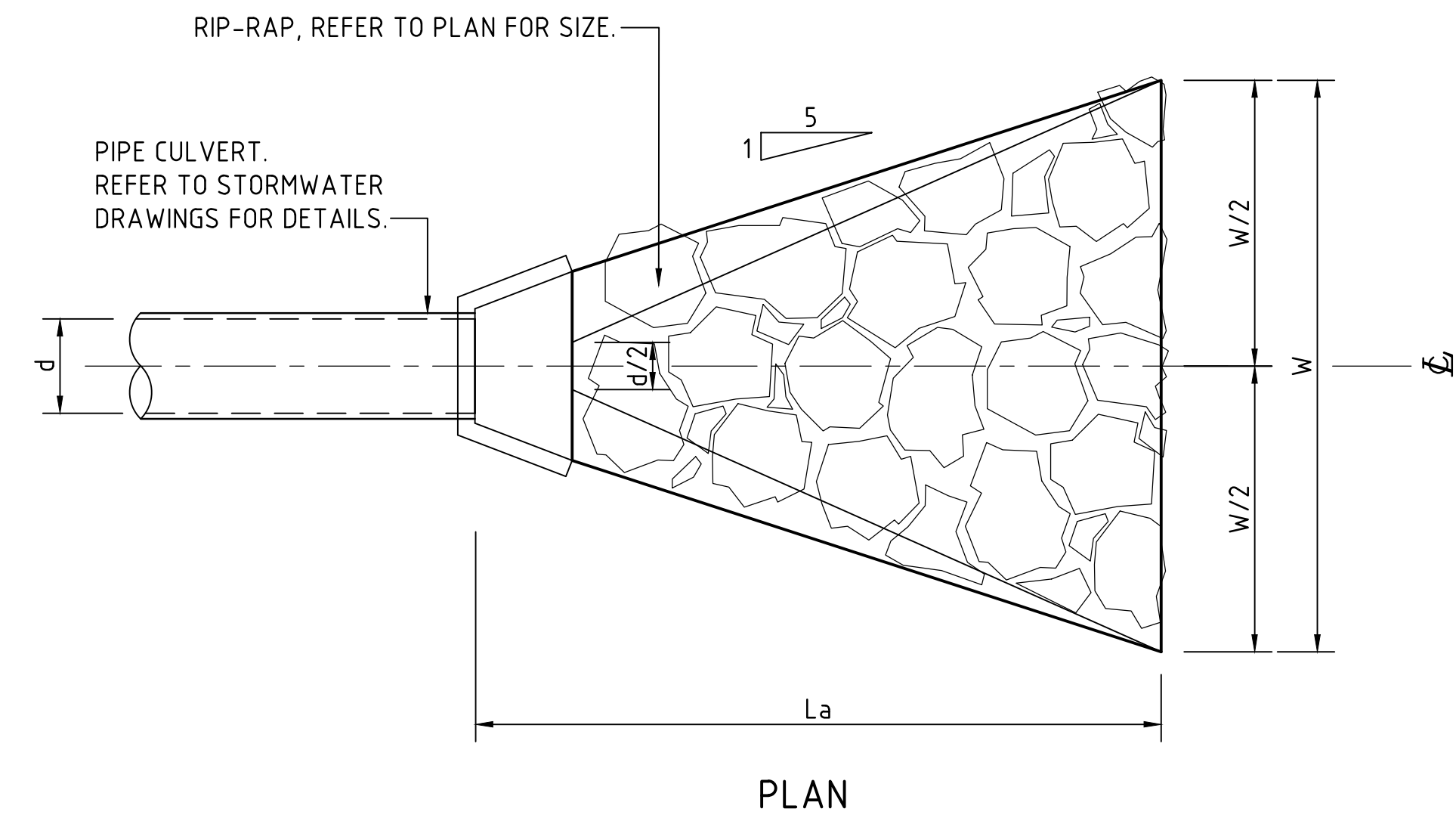
TYPICAL OUTLET TO EXISTING BASIN
SCALE 1:20

- DISSIPATER NOTES :**
1. 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 NOTED).
 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 (d50).
 7. RIP-RAP IS TO BE PLACED OVER A 200mm LAYER OF 14.0mm COBBLES OVER NEEDLE-PUNCHED GEOFAB A4.4.
 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.

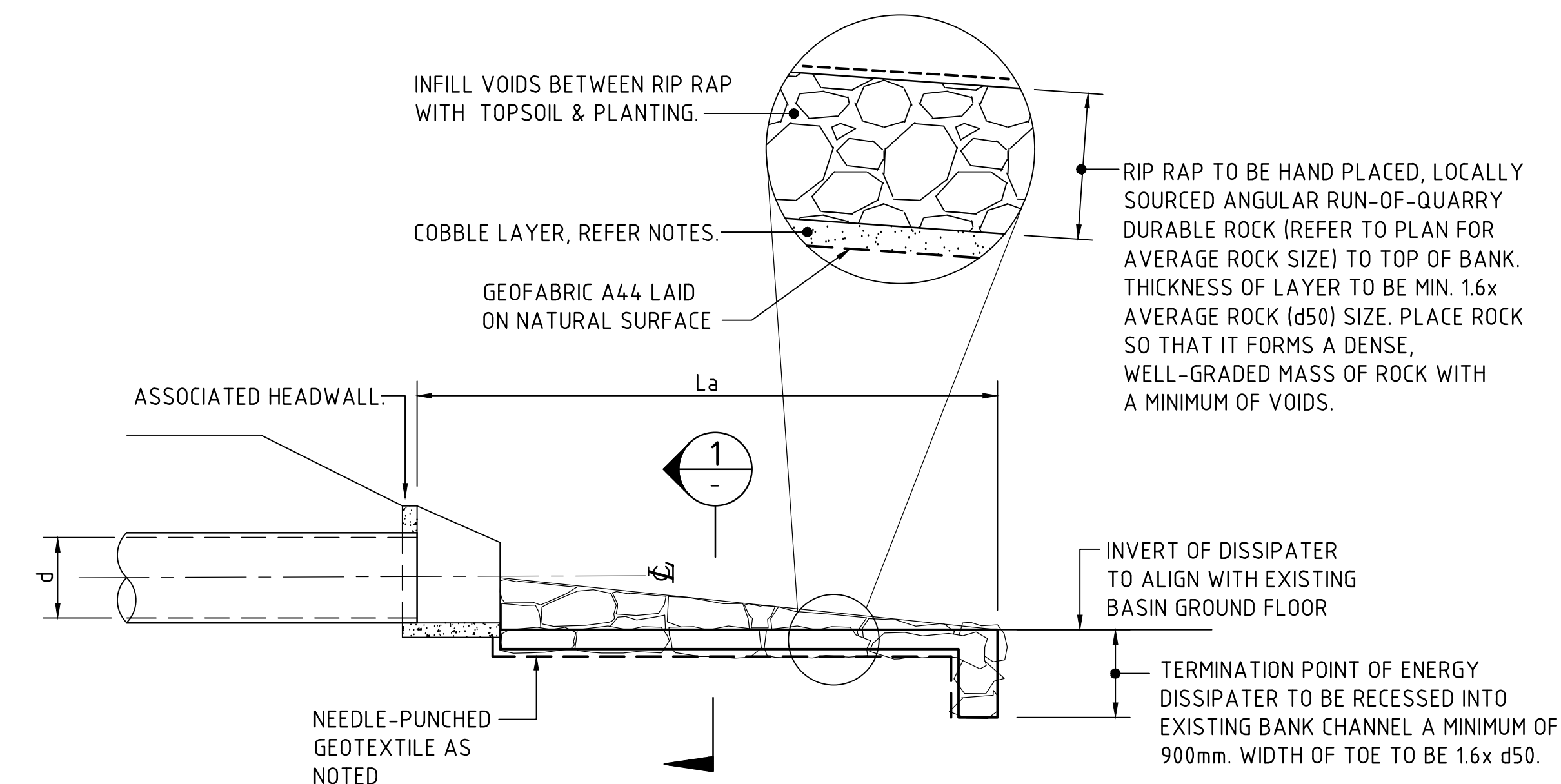
DISCHARGE POINT	d	La	W	RIP-RAP (d50)
EX OUTLET 1	EX 225	2000	2300	150
EX OUTLET 2	EX 600	5500	6100	200
EX OUTLET 3	EX 600	5100	6100	200
NEW OUTLET	300	3200	3500	200



SECTION 150

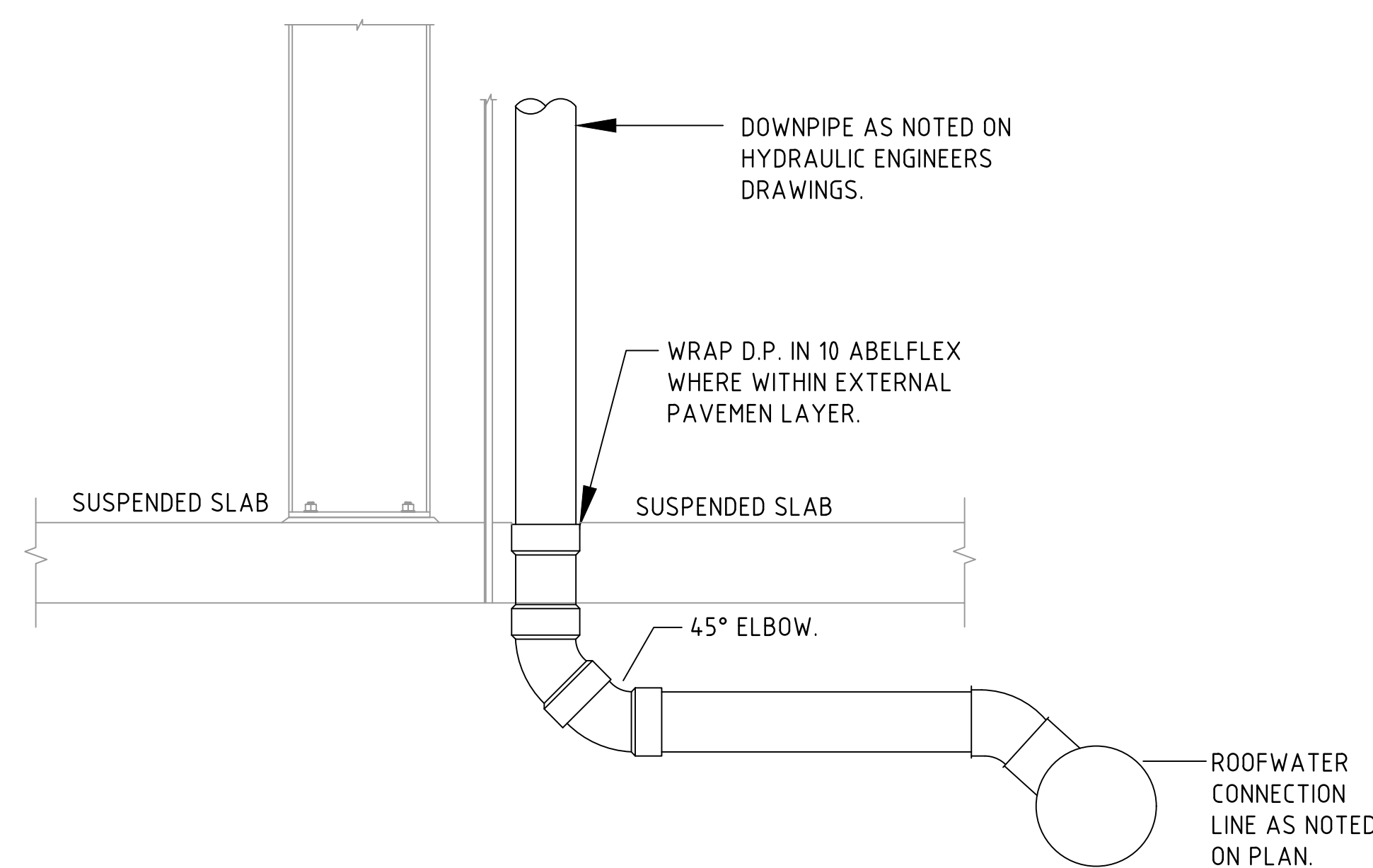


PLAN

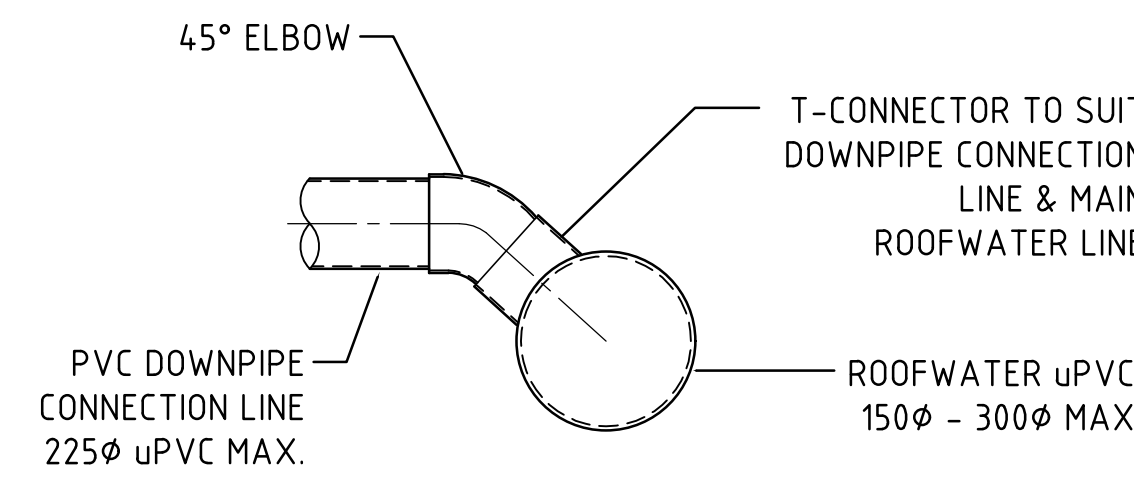


SECTIONAL ELEVATION

STORMWATER OUTLET DISSIPATER WITH HEADWALL
SCALE 1:50



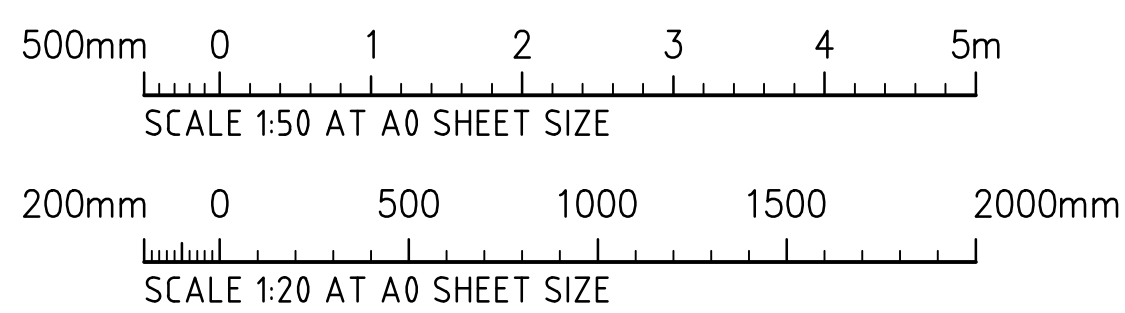
DOWNPIPE TURN-UP DETAIL
(SUSPENDED SLAB)
SCALE 1:20



DOWN PIPE CONNECTION TO uPVC PIPE

1. PROPRIETARY T-PIECE CONNECTORS SHALL BE USED TO WHERE DIRECT CONNECTIONS ARE REQUIRED TO uPVC PIPES .
2. ALL JOINTS TO BE SEALED WITH SOLVENT WELDED JOINTS.
3. THE PVC PIPE SHALL NOT PROTUDE BEYOND THE INNER SURFACE OF THE STORMWATER PIPE.

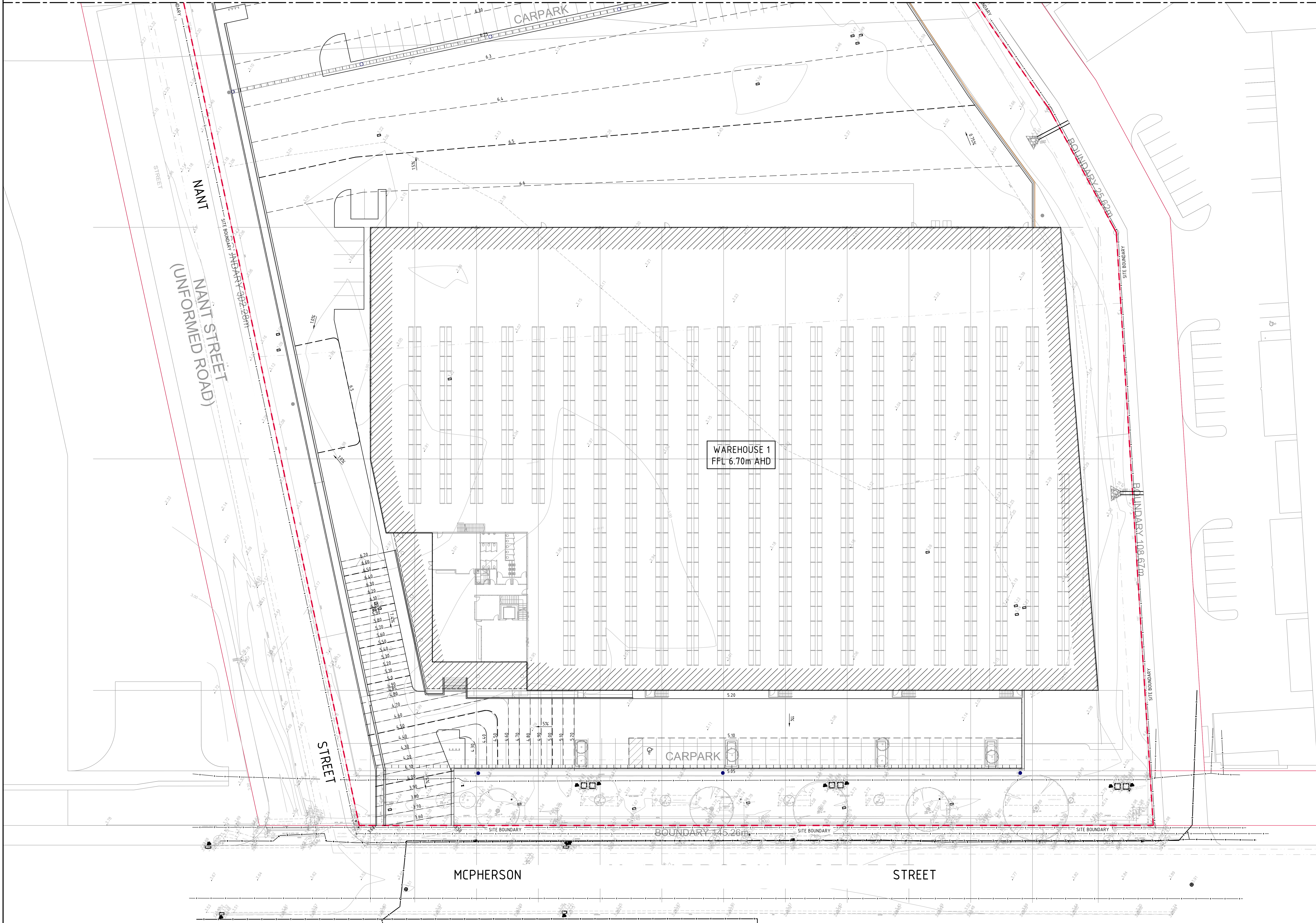
DOWNPIPE CONNECTION DETAILS
SCALE 1:20



FOR INFORMATION ONLY

RE-ISSUED FOR RESPONSES TO SUBMISSIONS										24.07.20		C		ISSUED FOR INFORMATION										30.01.19		B		ISSUED FOR INFORMATION										30.11.18		A		AMENDMENTS										DATE		ISSUE		AMENDMENTS										DATE		ISSUE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
AMENDMENTS										DATE		ISSUE		AMENDMENTS										DATE		ISSUE		AMENDMENTS										DATE		ISSUE		AMENDMENTS										DATE		ISSUE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
ARCHITECT										 AXIS ARCHITECTURAL 6 / 112 Cronulla Street Cronulla NSW 2230 M = 041 954 405 P = 0523 7858 E = gavin@axisarchitects.com.au										CLIENT										 DBL Property Pty Limited Development Managers and Property Advisors Batho 2, Upper Cronulla Floor 407 Cronulla Street Sydney NSW 2000 P = 02 9253 1602 M = 041 954 405 E = gavin@axisarchitects.com.au W = www.axisarchitects.com										PROJECT										 Costin Roe Consulting Pty Ltd. Consulting Engineers 435 68 68 68 Level 1, 8 Widdowill Street Wahah Bay, Sydney NSW 2000 Tel: (02) 9251-7899 Fax: (02) 9241-3731 email: mail@costinroe.com.au																				DRAWING TITLE										STORMWATER DRAINAGE DETAILS- SHEET 1										DRAWING No										9349.12-DA.45										ISSUE										C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
PRECISION										COMMUNICATION										ACCOUNTABILITY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

REFER TO DRG. DA52 (SHEET 2) FOR CONTINUATION



- LEGEND:**
LEVELS DATUM IS AHD.
- EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION TITLED PLANS SHOWING DETAIL AND PLAN LEVELS LOT 9 D.P. 1205673 NO.28 MCPHERSON STREET BY RYGATE SURVEYORS DATED 30.10.18
- DP - ROOFWATER DOWNPIPE (INDICATIVE)
 - +6.00 - FINISHED LEVEL SPOT LEVEL
 - +6.70 - EXISTING SPOT HEIGHT
 - 1% - PAVEMENT FALL DIRECTION AND GRADE
 - - GRATED DRAIN
 - o - VERTICAL DROPPER
 - o - DRAIN TO EXISTING BASIN
 - 56.00--- - FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
 - 50.10--- - FINISHED PAVEMENT CONTOUR (MINOR)

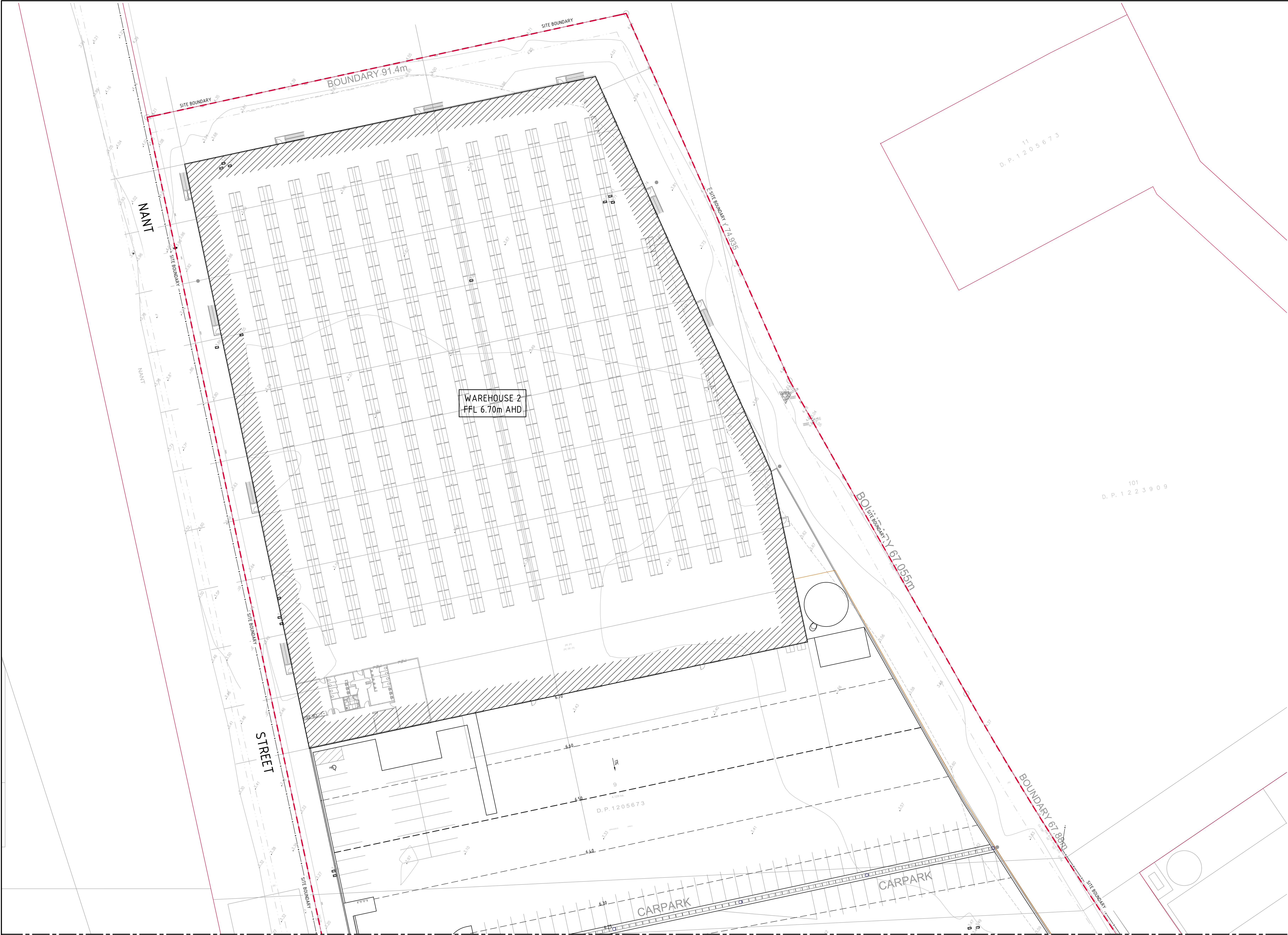
NOTE:
REFER TO DRAWING C0934.9.12-DA10 FOR FINISHED LEVELS NOTES.

FINISHED LEVELS PLAN SHEET 1
1:250

2m 0 5 10 15 20 25m
SCALE 1:250 AT A1 SIZE PLOT

FOR INFORMATION ONLY

RE-ISSUED FOR RESPONSES TO SUBMISSIONS ISSUED FOR INFORMATION ONLY ISSUED FOR INFORMATION ONLY AMENDMENTS				24.07.20 30.01.19 30.11.18 DATE ISSUE AMENDMENTS DATE ISSUE				ARCHITECT AXIS AXIS ARCHITECTURAL 6 / 112 Cronulla Street Cronulla NSW 2230 M + 0414 954 405 P + 02 9523 7858 E + david@axisarchitects.com.au				CLIENT DBL Property Pty Limited Development Managers and Property Advisors Suite 3, Upper Ground Floor 407 Kent Street Sydney NSW 2000 M + 0414 954 405 P + 02 9523 7858 E + david@axisarchitects.com.au				PROJECT PROPOSED WAREHOUSE DISTRIBUTION AND OFFICE DEVELOPMENT 28 MCPHERSON ST BANKSMEADOW NSW DESIGNED [DRAWN] DATE MW SM NOV '18 CHECKED XC SIZE SCALE A0 AS SHOWN CAD REF: 934.9.12-DA51				COSTIN ROE CONSULTING Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 8 Windmill Street Wahah Bay, Sydney NSW 2000 Tel: (02) 9251-7899 Fax: (02) 9241-3721 email: mail@costinroe.com.au				Costin Roe Consulting PRECISION COMMUNICATION ACCOUNTABILITY				DRAWING TITLE FINISHED LEVELS PLAN SHEET 1 DRAWING No. 934.9.12-DA 51 ISSUE C			
--	--	--	--	--	--	--	--	---	--	--	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--



REFER TO DRG. DA52 (SHEET 2) FOR CONTINUATION

LEGEND:
LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION TITLED PLANS SHOWING DETAIL AND PLAN LEVELS LOT 9 D.P. 1205673 NO.28 MCPHERSON STREET BY RYGATE SURVEYORS DATED 30.10.18

- DP - ROOFWATER DOWNPIPE (INDICATIVE)
- +6.00 - FINISHED LEVEL SPOT LEVEL
- +6.70 - EXISTING SPOT HEIGHT
- 1% - PAVEMENT FALL DIRECTION AND GRADE
- GRATED DRAIN
- VERTICAL DROPPER
- DRAIN TO EXISTING BASIN
- 50.00 - FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- 50.10 - FINISHED PAVEMENT CONTOUR (MINOR)

NOTE:
REFER TO DRAWING C0934.9.12-DA10 FOR FINISHED LEVELS NOTES.

FINISHED LEVELS PLAN SHEET 2
1:250

