



Department of Planning,
Housing and Infrastructure

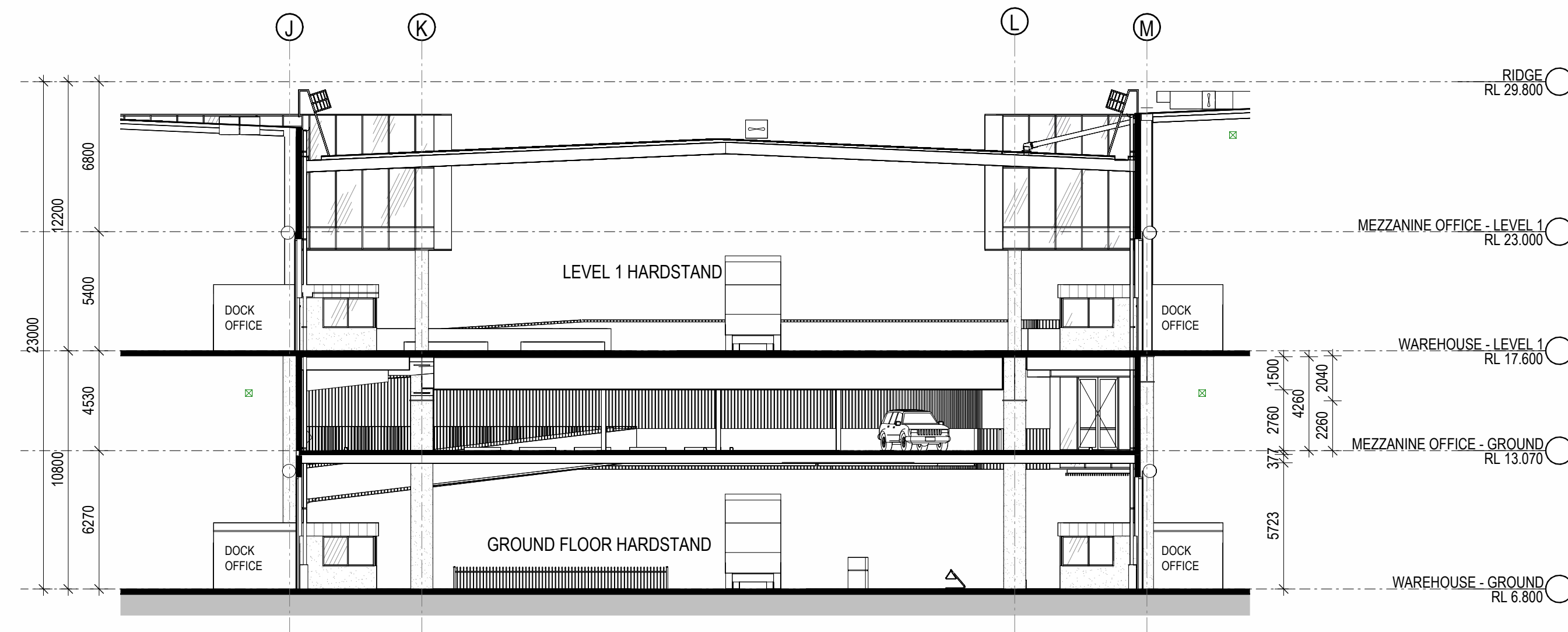
Issued under the *Environmental Planning and Assessment Act 1979*

Approved application number: SSD-55522478

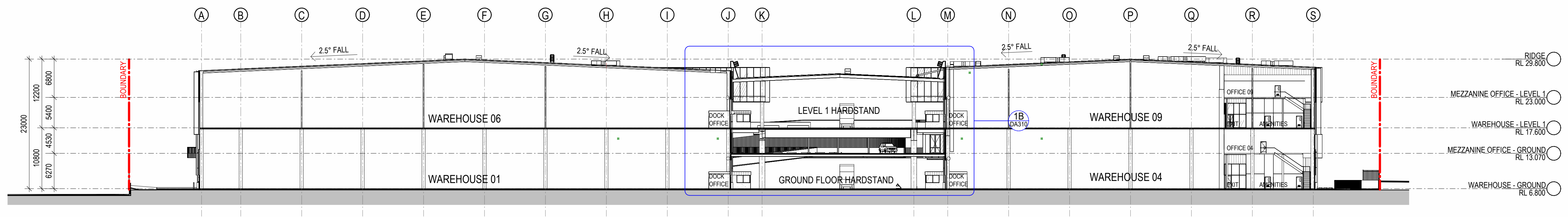
Granted on: 25 July 2024

Signed: JF Sheet number: 19 of 33

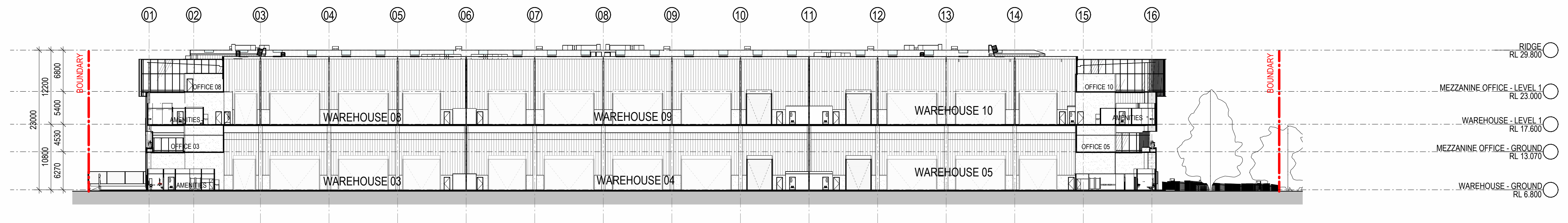
Hale



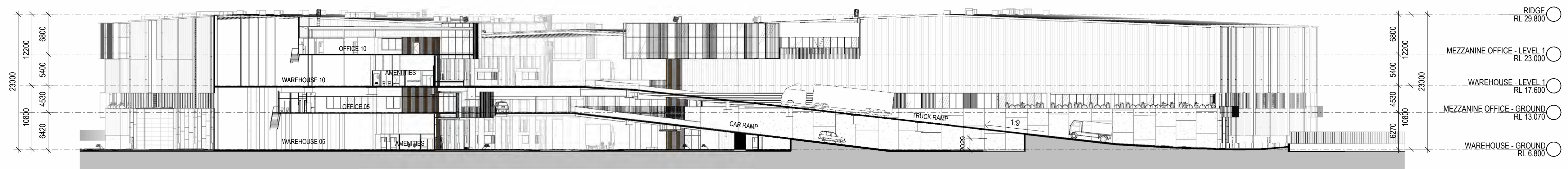
1B SECTION 1 DETAIL 1 : 200



1 SECTION 1 1 : 400



2 SECTION 2 1 : 400



3 SECTION 3 1 : 400

ISSUE FOR DA



9	SSDA REV 2.1	04.03.2024
8	SSDA COMMENTS REV	06.12.2023
7	ISSUE FOR DA	13.09.2023
6	ISSUE FOR DA	02.06.2023
5	ISSUE FOR COORDINATION	25.05.2023
4	ISSUE FOR PRELIMINARY DA SET	20.04.2023
3	ISSUE FOR COORDINATION	13.04.2023
2	ISSUE FOR COORDINATION	24.03.2023
1	ISSUE FOR COORDINATION	24.03.2023

CLIENT:
HALE CAPITAL DEVELOPMENT MANAGEMENT

GRAND AVENUE MULTI-LEVEL WAREHOUSE, ROSEHILL

6 GRAND AVENUE, ROSEHILL NSW 2142

SECTIONS

DATE: 04.03.2024
SCALE: As indicated @ A1

SHEET NO: 22277
DWG NO: DA310

REVISION

9

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 BERMS, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- 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.

LEGEND:

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

-  - DENOTES DIVERSION DRAIN
-  - DENOTES SILT FENCE WITH CATCH DRAIN
-  - DENOTES SILT FENCE ONLY
-  - DENOTES CONSTRUCTION ENTRY
-  - DENOTES OVERLAND FLOW PATH
-  - DENOTES DISTURBED AREA

NOTE:

EXTENT OF EXISTING SLAB TO BE LEFT IN-SITU
CONTRACTOR TO JACK HAMMER THROUGH
EXISTING SLAB IN A 2m GRID.

RUSLE CALCULATION:

TOTAL CATCHMENT AREA = 4.25 ha
DISTURBED CATCHMENT AREA = 0.36 ha

$$A = R \times K \times LS \times P \times C$$

- 2-yr, 6-hr ARI (S) = 6.32;
- RAINFALL EROSIVITY FACTOR (R)
 $R = 164.74(1.177)^S S^{0.6444} = 1091.93$;
- SOIL ERODIBILITY FACTOR (K) = 0.075;
- LENGTH/GRADIENT FACTOR (LS) = 0.26;
- EROSION CONTROL PRACTICE FACTOR (P) = 1.3;
- COVER FACTOR (C) = 1.0

SOIL LOSS (A) = 27.68m³/ha/yr
= 76.89m³/yr

PER BLUE BOOK GUIDELINES SECTION 6.3.2.d, FOR
SITES WITH AVERAGE ANNUAL SOIL LOSS (A) <
150m³/yr, A SEDIMENT RETENTION BASIN MAY BE
CONSIDERED UNNECESSARY.

EXISTING SLAB TO BE MAINTAINED
THROUGHOUT WORKS
EXCEPT WHERE SHOWN OTHERWISE
FOR INSTALLATION OF SERVICES.

STABILISED STOCKPILE
REFER DRG. SSDA25 FOR DETAIL.

STABILISED SITE ENTRY.
REFER TO DRG. SSDA25 FOR DETAILS.

DIVERSION DRAIN
REFER DETAIL ON DRG SSDA25

DISTURBED AREA
0.36ha

SILT FENCE ONLY

SILT FENCE ONLY

SILT FENCE ONLY

EROSION & SEDIMENT CONTROL PLAN
SCALE 1:500

5m 0 10 20 30 40 50m
SCALE 1:500 AT A1 SIZE SHEET



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Housing and Infrastructure

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Granted on: 25 July 2024

Signed: JF Sheet number: 20 of 33

FOR INFORMATION

ARCHITECT



CLIENT



PROJECT

PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142

DESIGNED	DS	DRAWN	IZ	DATE	APR '23	CHECKED	DS	SIZE	A1	SCALE	AS SHOWN	CAD REF:	C014955.00-SSDA20
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CIVIL &
STRUCTURAL
ENGINEERS

DRAWING TITLE

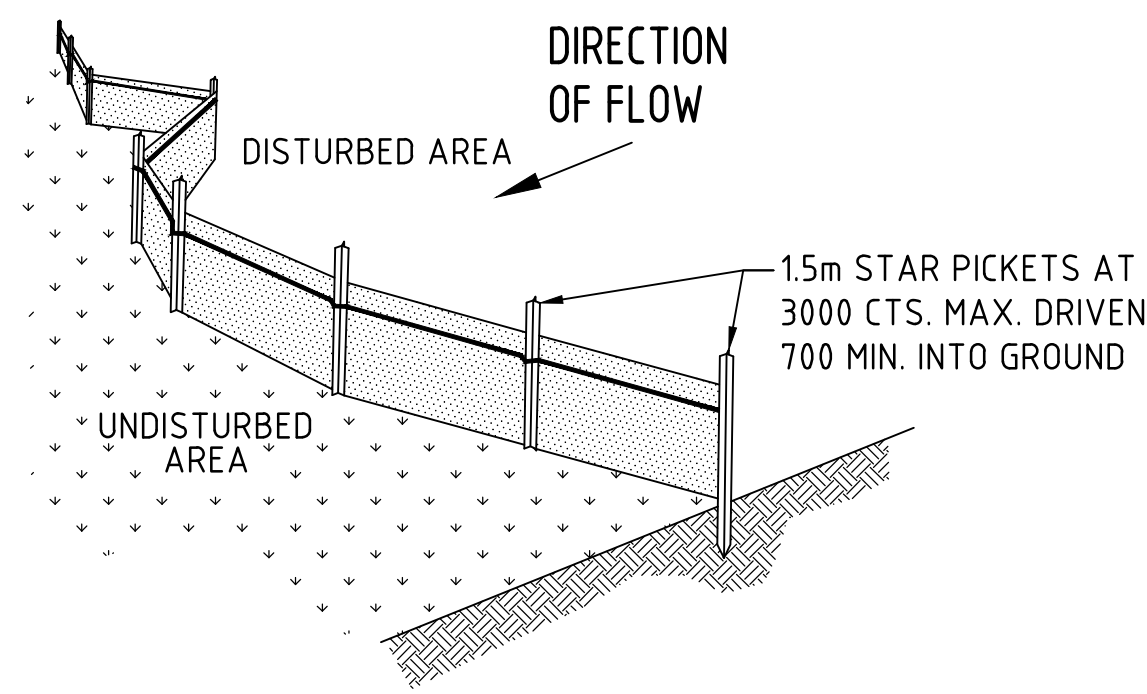
EROSION & SEDIMENT CONTROL PLAN

DRAWING No

C014955.00-SSDA20

ISSUE

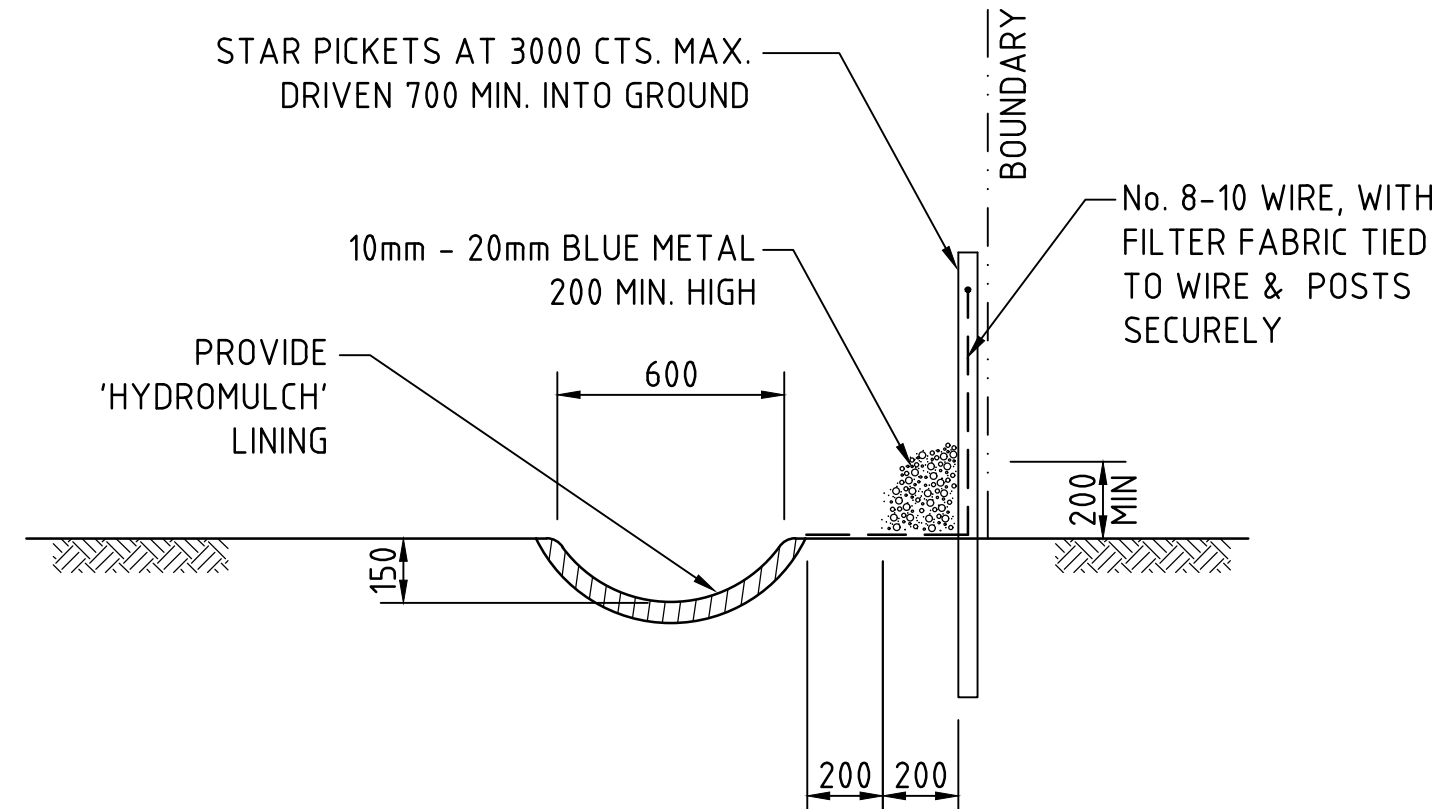
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TYPICAL SILT FENCE DETAIL

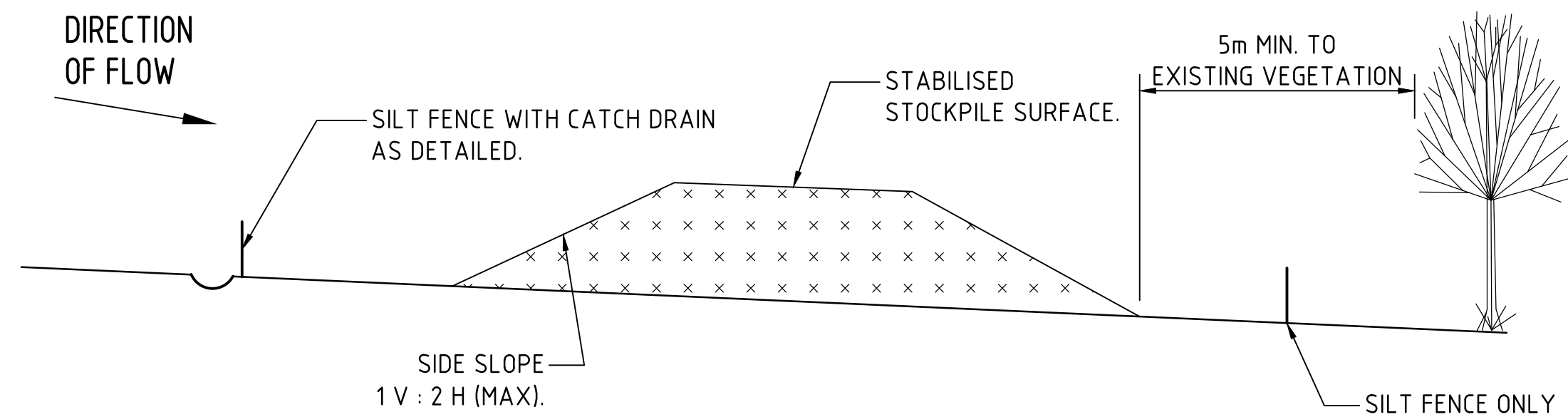
N.T.S

NOTE: PROVIDE 1m RETURNS AT 30m INTERVALS. TYPICAL



TYPICAL OPEN DRAIN & SILT FENCE

SCALE 1:20

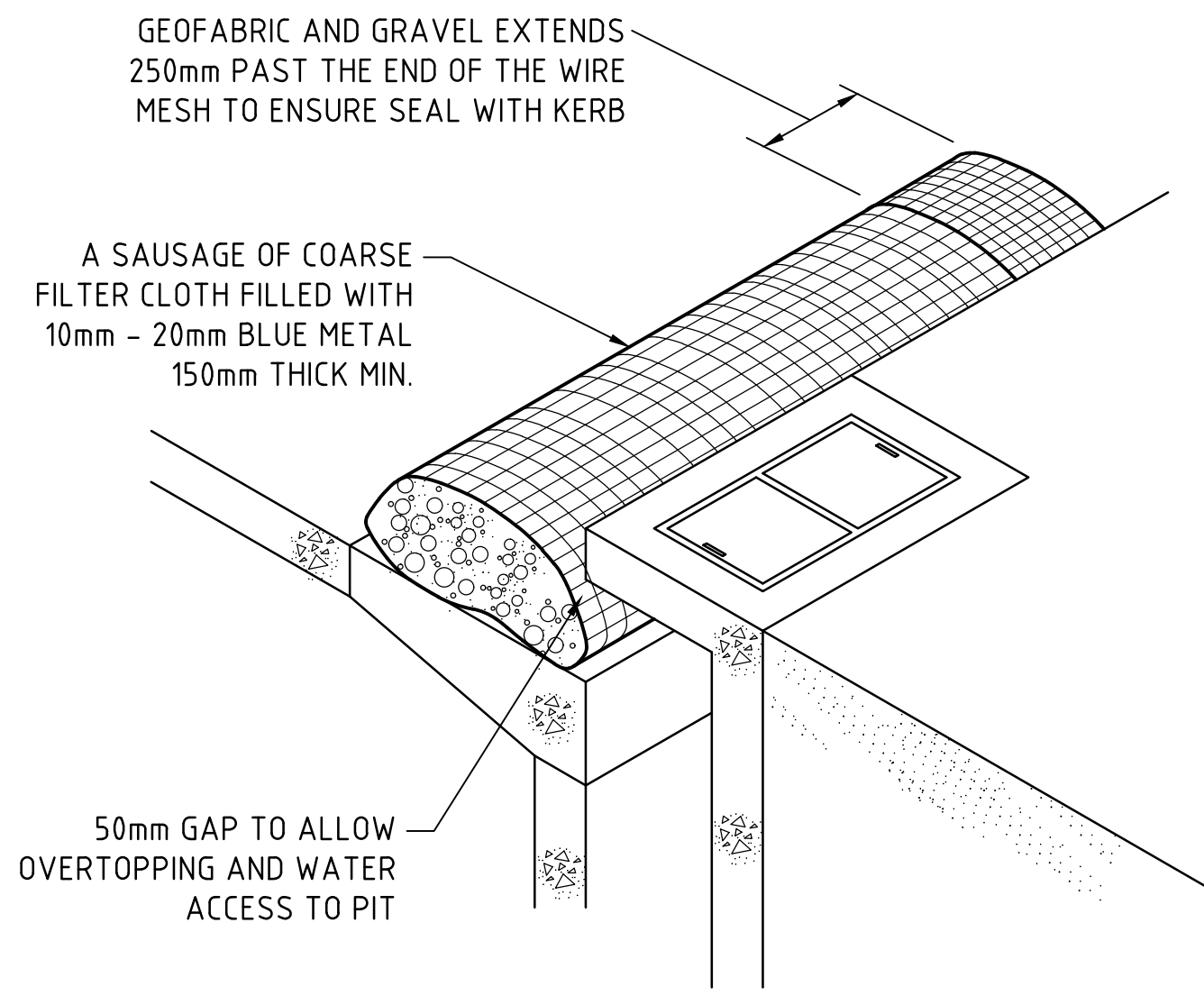


TYPICAL STOCKPILE DETAIL

N.T.S

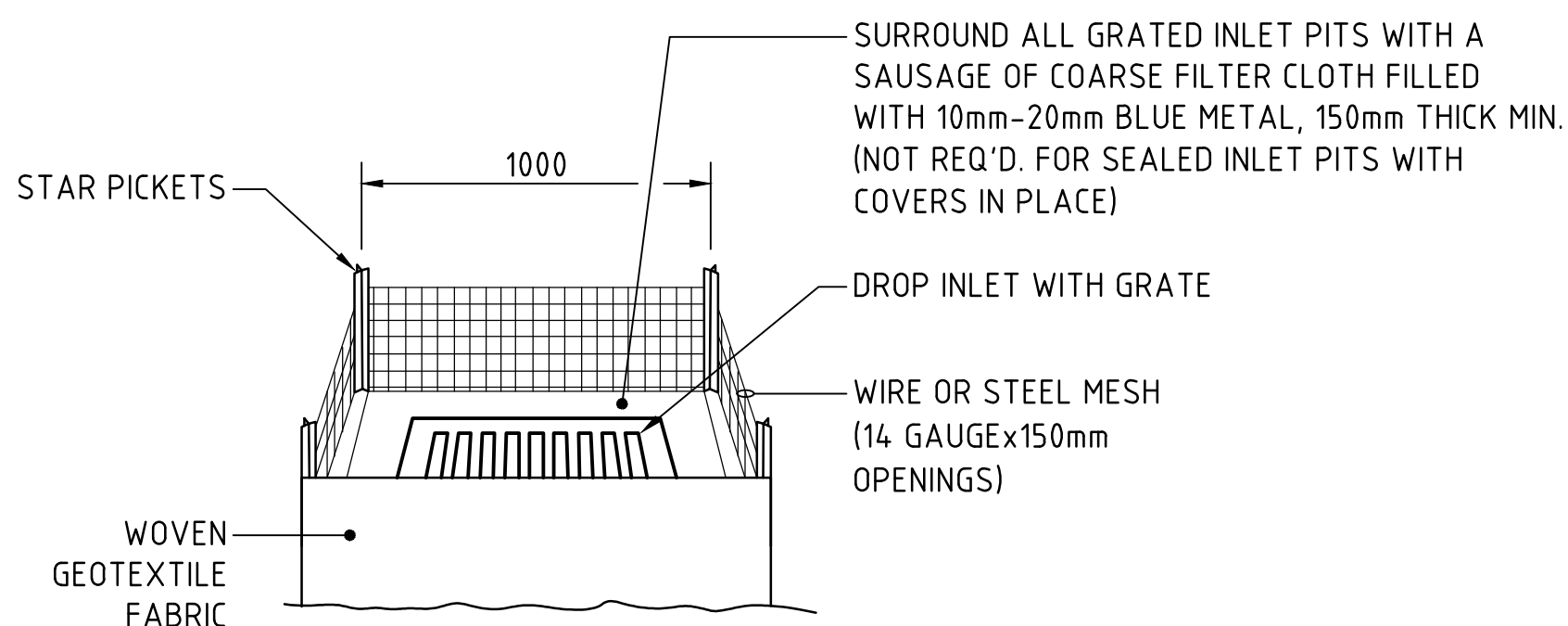
STOCKPILE NOTES

1. PLACE ALL STOCKPILES IN LOCATIONS MORE THAN 5m FROM EXISTING VEGETATION, ROADS & HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT ELONGATED MOUNDS. SIDE SLOPE TO BE 1 V: 2 H MAX.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE STOCKPILES ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE USING WOOD CHIP MULCH - 16 TONNE/Ha.
5. CONSTRUCT SILT FENCE WITH CATCH DRAIN ON UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES & SILT FENCE ONLY 1 TO 2m DOWNSLOPE AS SHOWN.



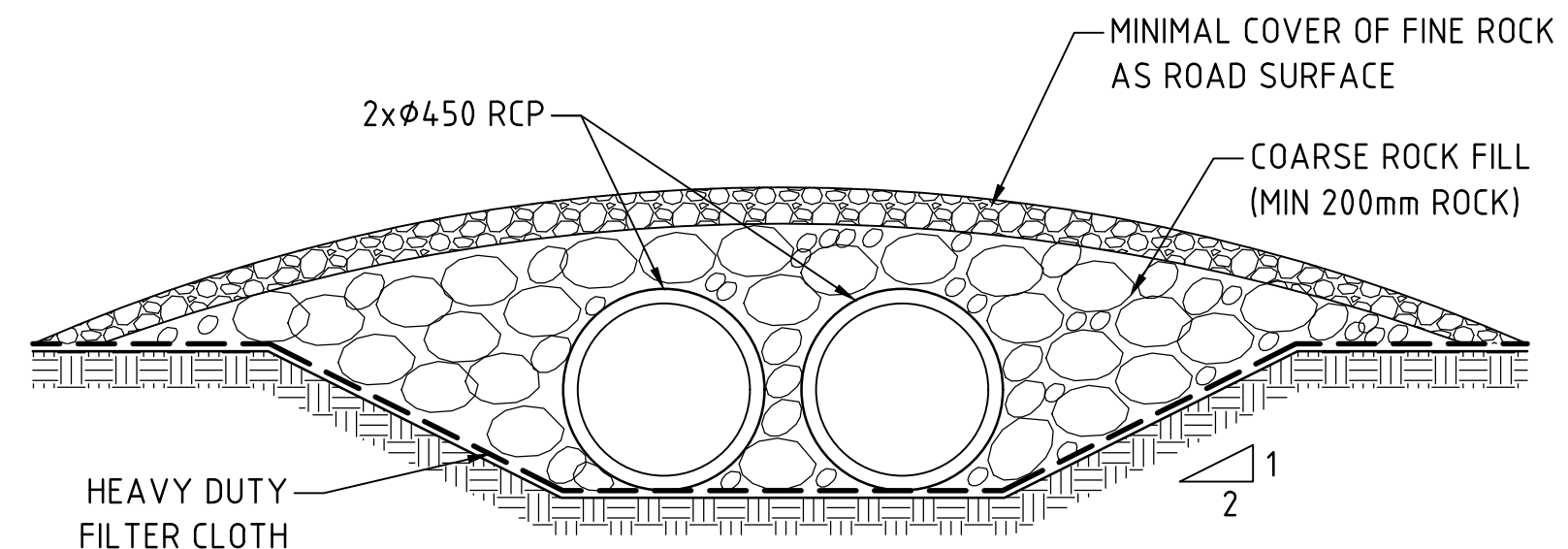
KERB INLET CONTROL

N.T.S



GRATED INLET PIT FILTER DETAIL

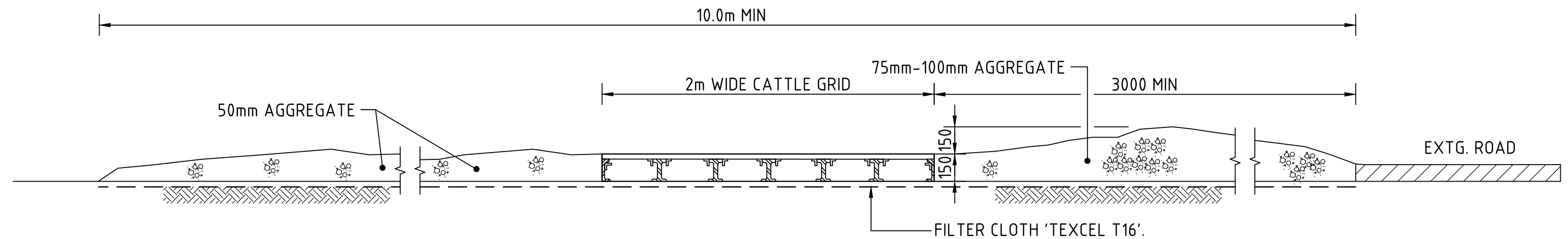
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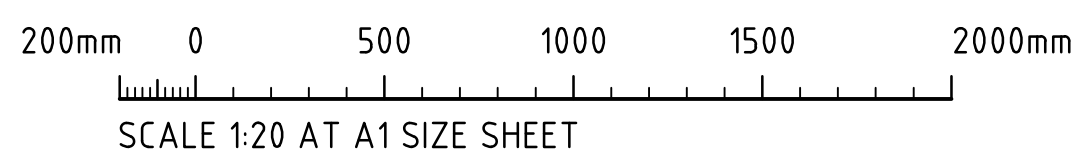
TYPICAL CROSSING OVER DIVERSION CHANNEL

SCALE 1:20

NOTE :
ADOPT ABOVE DETAILS AROUND ALL PITS WITHIN AREA ENCOMPASSED BY SILT FENCE & TO PITS ON THE ROAD ADJACENT TO SITE BOUNDARY.



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



FOR INFORMATION



Department of Planning,
Housing and Infrastructure

Issued under the Environmental Planning and Assessment Act 1979

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Granted on: 25 July 2024

Signed: JF Sheet number: 21 of 33

ARCHITECT



CLIENT



PROJECT
PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
DS	IZ	APR '23	DS	A1	AS SHOWN	C014955.00-SSDA25



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CIVIL &
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ENGINEERS

DRAWING TITLE
EROSION & SEDIMENT CONTROL DETAILS

DRAWING No C014955.00-SSDA25

ISSUE
A



Department of Planning,
Housing and Infrastructure

Issued under the Environmental Planning and Assessment Act 1979

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Granted on: 25 July 2024

Signed: JF Sheet number: 22 of 33

EXISTING PAVEMENT SLAB NOTE

WHERE FILLING EXCEEDS 0.8m, THE CONTRACTOR MAY KEEP THE EXISTING SLAB IN PLACE.
CONTRACTOR TO PROVIDE Ø100 CORE HOLE OR JACKHAMMER EXISTING SLAB AT 2.0m GRID THROUGHOUT SLAB TO REMAIN IN PLACE.

SITE PREPARATION NOTES:

- ALL EARTHWORKS SHALL BE COMPLETED GENERALLY IN ACCORDANCE WITH THE GUIDELINES SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- EXISTING LEVELS ARE BASED ON INFORMATION PROVIDED BY LANDPARTNERS TITLED SY073922.003.1.1 DATED 16/12/2022. STRIP ANY YOP SOIL OR DELETERIOUS MATERIAL AND DISPOSE OF FROM SITE OR STORE AS DIRECTED. TOPSOIL BLENDING IS NOT ACCEPTABLE. ANY BLENDING PROPOSAL IS TO BE REFERRED TO THE ENGINEER.
- 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 OR THE EARTHWORKS DESIGNER.
- SITE WON FILL SHALL BE COMPACTIONED 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 COMPACTIONED 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.
- DURING EARTHWORKS THE CONTRACTOR IS TO ENSURE ALL AREAS ARE FREE DRAINING & WILL NOT RETAIN WATER DURING RAINFALL. PROVIDE TEMPORARY MEASURES AS REQUIRED TO ENSURE FREE FLOWING RUNOFF THROUGH MANAGED DRAINAGE PATHS, DIVERSION DRAINS OR OTHER SUITABLE DISPOSAL METHOD AS AGREED DURING THE WORKS. REFER ANY CONCERNS TO THE ENGINEER. REFER TO EROSION AND SEDIMENT CONTROL DRAWINGS AND NOTES.

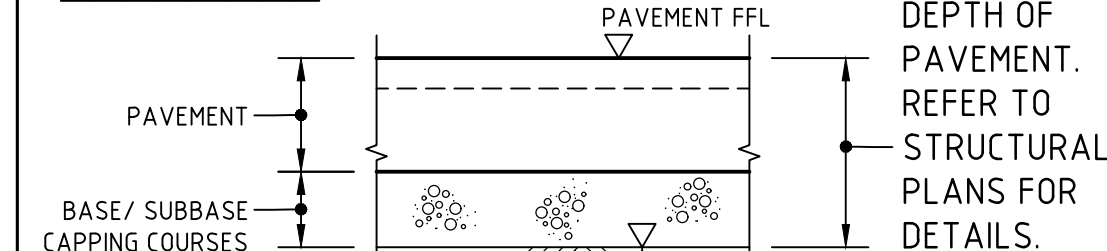
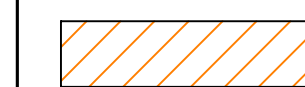
LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS DATED 16/12/22

- 50.00 — - EXISTING CONTOUR (0.2m INTERVAL)
- 50.00 — - B.E.L. CONTOUR (MAJOR 1.0m)
- 50.10 — - B.E.L. CONTOUR (MINOR 0.25m)

▲ 50.00 - B.E.L. SPOT LEVEL



NOMINATED B.E.L. DETAIL

NTS

EARTHWORK ESTIMATES

SITE AREA	= 4.24 Ha
CUT	= - 280m³
FILL	= + 30,120m³
ALLOWANCES	
DETAILED EXCAVATION (2,000m³/Ha)	= - 8,480m³
BALANCE	= + 21,360m³ (i.e. FILL OVER CUT)

NOTE:
BULK EARTHWORKS QUANTITIES ARE APPROXIMATE ONLY. THE QUANTITIES ARE BASED ON NO TOPSOIL STRIP AND LEAVING EXISTING SLABS IN SITU. A NOMINAL 300mm ALLOWANCE HAS BEEN MADE FOR PAVEMENTS ACROSS THE SITE. PAVEMENT DEPTHS ARE TO BE CONFIRMED DURING DETAIL DESIGN DEVELOPMENT. TOPSOIL STRIPPING FOR OFF-SITE DISPOSAL MAY BE REQUIRED. NO ALLOWANCE HAS BEEN MADE FOR EROSION & SEDIMENT CONTROL, BULKING, REMOVAL OF UNSUITABLE OR DELETERIOUS MATERIAL, COMPACTION OF FILLED SOILS, OR OTHER UNSPECIFIED WORKS.

LEVELS NOTE:

LEVELS SHOWN TO BE ±500mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO FINAL GEOTECHNICAL INVESTIGATIONS, ARCHITECTURAL LAYOUT AND ACHIEVING A CUT TO FILL EARTHWORKS BALANCE OVER THE PROPERTY.

BULK EARTHWORKS PLAN

SCALE 1:500

FOR INFORMATION

5m 0 10 20 30 40 50m

SCALE 1:500 AT A1 SIZE SHEET

ARCHITECT



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6 GRAND AVE
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CIVIL &
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DRAWING TITLE

BULK EARTHWORKS PLAN

DRAWING No

C014955.00- SSDA30

ISSUE

B

ISSUED FOR INFORMATION	09.06.23	B
ISSUED FOR INFORMATION	22.05.23	A
AMENDMENTS	DATE	ISSUE

EXISTING PAVEMENT SLAB NOTE

WHERE FILLING EXCEEDS 0.8m, THE CONTRACTOR MAY KEEP THE EXISTING SLAB IN PLACE.
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DEPTH RANGE

No.	FROM DEPTH	TO DEPTH	COLOUR
1	-3.000	-2.000	
2	-2.000	-1.000	
3	-1.000	0.000	
4	0.000	1.000	
5	1.000	2.000	
6	2.000	3.000	
7	3.000	4.000	
8	4.000	5.000	

CUT
FILL

LEGEND:

- DENOTES NO WORKS ZONE

CUT/FILL PLAN
SCALE 1:500

LEVELS NOTE:

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5m 0 10 20 30 40 50m
SCALE 1:500 AT A1 SIZE SHEET

ARCHITECT



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PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142

DESIGNED DS DRAWN IZ DATE APR '23 CHECKED DS SIZE A1 SCALE AS SHOWN CAD REF: C014955.00-SSDA31



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CUT/FILL PLAN

DRAWING No C014955.00-SSDA31

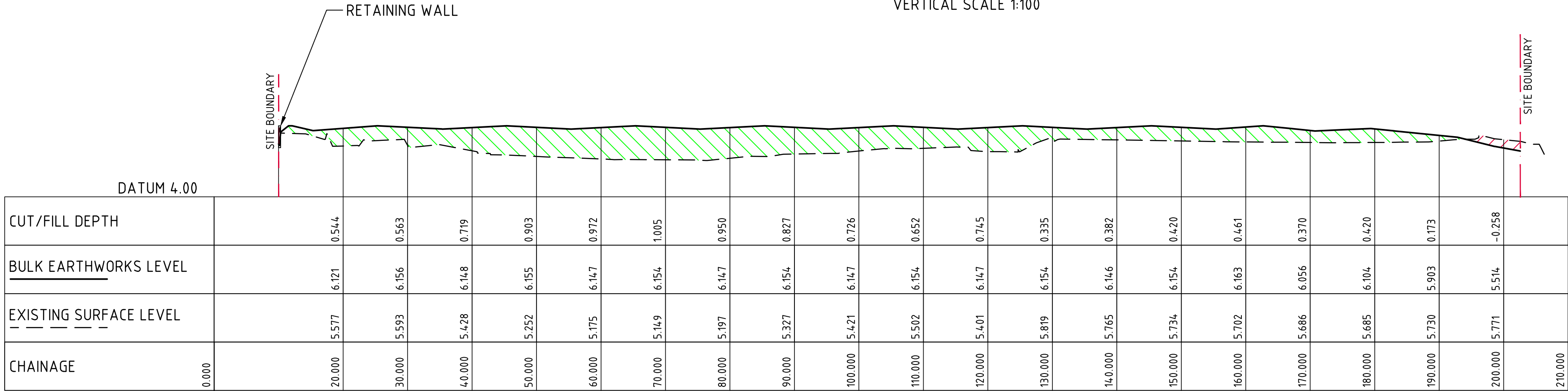
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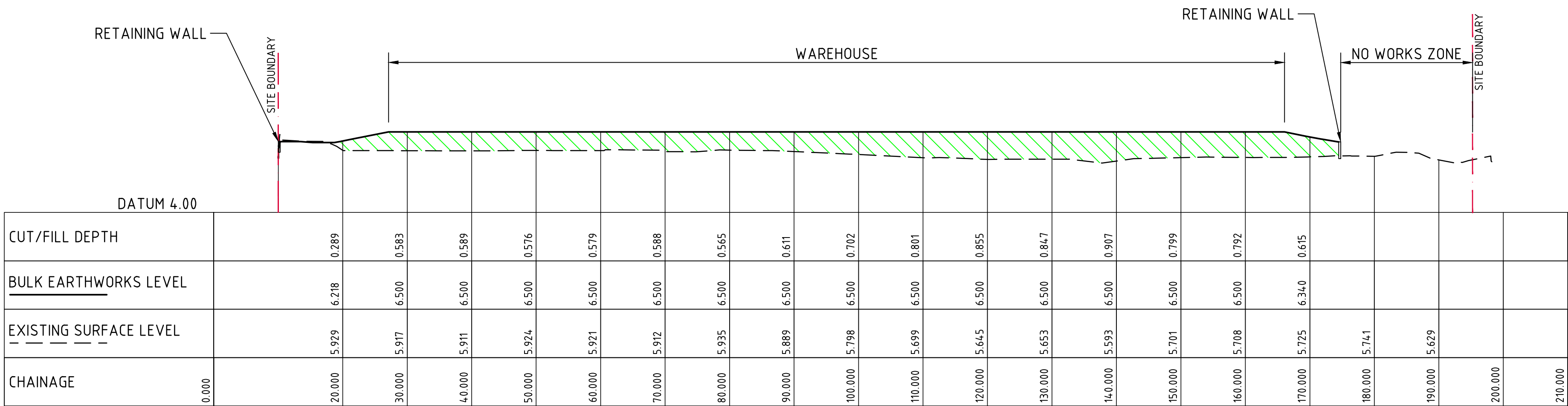
ISSUED FOR INFORMATION	09.06.23	B
ISSUED FOR INFORMATION	22.05.23	A
AMENDMENTS	DATE	ISSUE



SECTION 1
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



SECTION 2
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



SECTION 3
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



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LEGEND:

- DENOTES BULK EARTHWORKS PROFILE
- DENOTES EXISTING PROFILE
- DENOTES AREA IN CUT
- DENOTES AREA IN FILL

5m 0 10 20 30 40 50m

SCALE 1:500 AT A1 SIZE SHEET

1m 0 1 2 3 4 5 6 7 8 9 10m

SCALE 1:100 AT A1 SIZE SHEET

ARCHITECT



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PROPOSED DEVELOPMENT
6 GRAND AVE
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DESIGNED DS DRAWN IZ DATE APR '23 CHECKED DS SIZE A1 SCALE AS SHOWN CAD REF: C014955.00-SSDA35



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CIVIL &
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DRAWING TITLE

BULK EARTHWORKS SECTIONS
SHEET 1

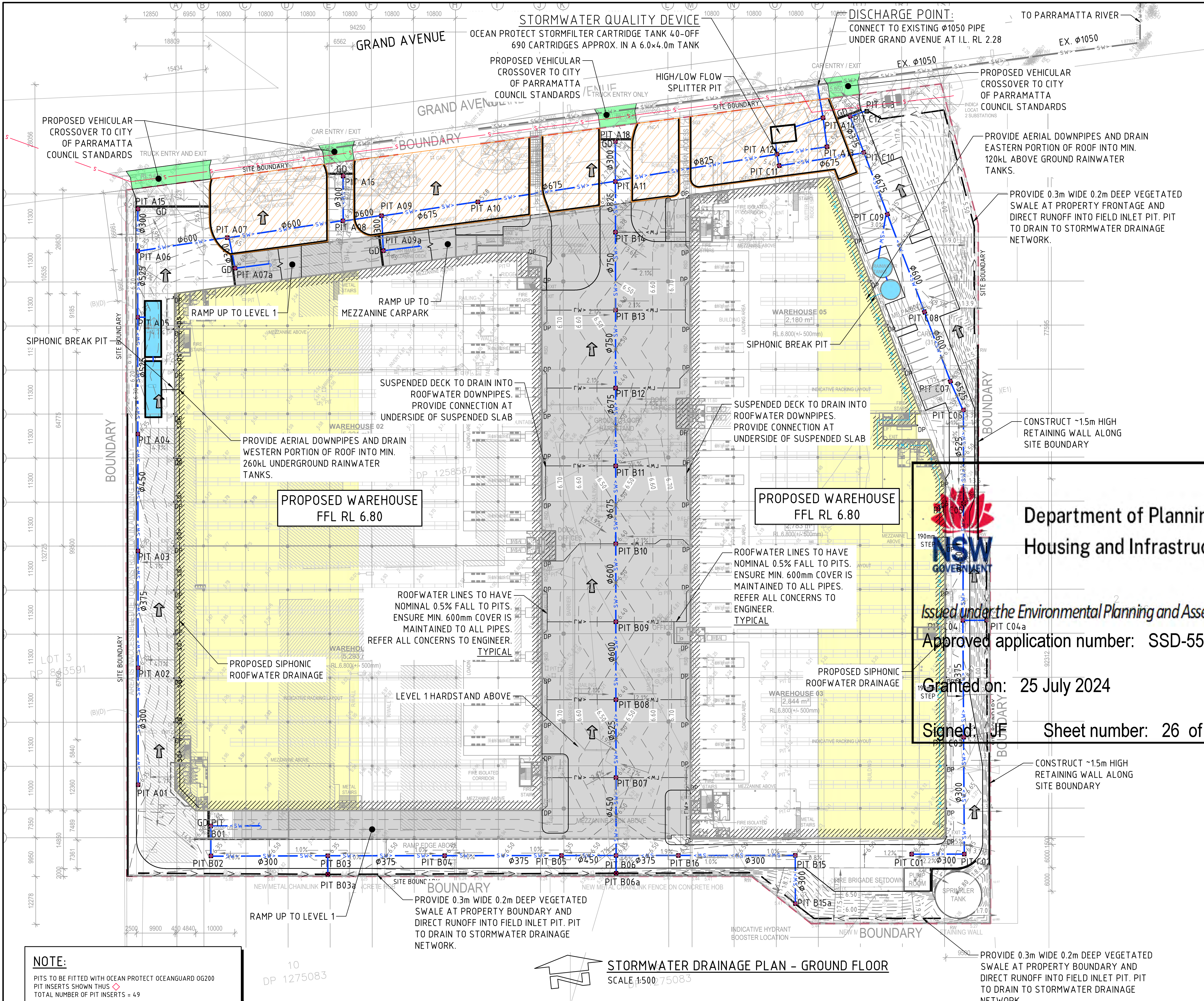
DRAWING No

C014955.00-SSDA35

ISSUE

B

ISSUED FOR INFORMATION	09.06.23	B
ISSUED FOR INFORMATION	22.05.23	A
AMENDMENTS	DATE	ISSUE



- STORMWATER DRAINAGE NOTES:**
- ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3 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 SSDA4.0.
 - 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 ≥ 375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
 - ALL PIPES UP TO AND INCLUDING $\phi 300$ TO BE uPVC GRADE SN8 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 $f'_{c}=25$ MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
 - IN ADDITION TO ITEM 9 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 $\phi 100$ uPVC TO EACH SIDE OF PIPE.
 - ALL SUBSOIL DRAINAGE LINES SHALL BE $\phi 100$ SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/ LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN. WHERE SUBSOIL DRAINAGE PASSES UNDER A PAVEMENT OR A SLAB, UNSLOTTED uPVC ARE TO BE PROVIDED UNLESS NOTED OTHERWISE.
 - ALL PIPE GRADES 1 IN 200 MINIMUM UNO.
 - PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
 - MIN. 600 COVER TO PIPE OVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
 - PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY', THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' U.N.O.
 - PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
 - DOWN PIPES (DPI) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE U.N.O. 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.
 - WHERE CONNECTION TO EXISTING INGROUND DRAINAGE SYSTEMS, OPEN SNALES, CHANNELS OR ANY OTHER EXISTING SYSTEM, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND INVERT ON SITE AT THE BEGINNING OF THE CONSTRUCTION PERIOD. REFER ANY VARIANCE FROM DOCUMENTATION OR SURVEYS TO THE ENGINEER FOR CLARIFICATION.

LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS DATED 16/12/22.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- AERIAL ROOFWATER LINE
- SIPHONIC LINE
- OVERLAND FLOW DIRECTION
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS
- DENOTES SUSPENDED SLAB ABOVE
- PROPOSED SWALE
- DENOTES NO WORKS ZONE
- DENOTES ROOF TO RAINWATER TANK

**Department of Planning,
Housing and Infrastructure**

Issued under the Environmental Planning and Assessment Act 1979

Approved application number: SSD-55522478

Granted on: 25 July 2024

Signed: JF

Sheet number: 26 of 33

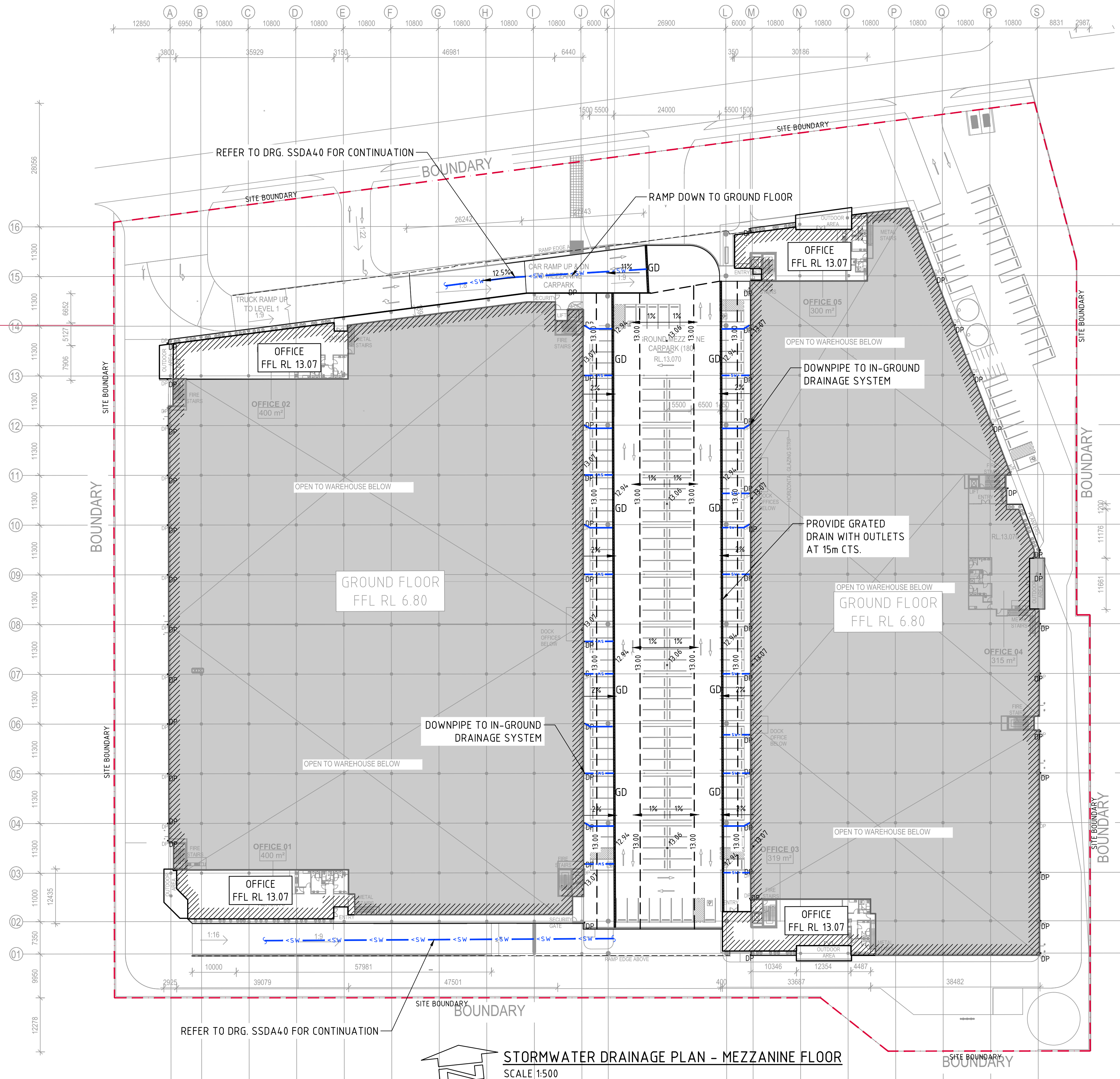
NOTE:

PITS TO BE FITTED WITH OCEAN PROTECT OCEANGUARD OG200
PIT INSERTS SHOWN THUS .
TOTAL NUMBER OF PIT INSERTS = 49

STORMWATER DRAINAGE PLAN - GROUND FLOOR
SCALE 1:500

FOR INFORMATION

REVISED AS CLOUDED 20.06.23 D REVISED AS CLOUDED 16.06.23 C REVISED AS CLOUDED 09.06.23 B ISSUED FOR INFORMATION 02.05.23 A AMENDMENTS DATE ISSUE			ARCHITECT		CLIENT		PROJECT PROPOSED DEVELOPMENT 6 GRAND AVE ROSEHILL, NSW, 2142		COSTIN ROE CONSULTING Pty Ltd. ABN 50 003 696 446 PO Box N419 Sydney NSW 1220 Level 4, 8 Windmill Street, Millers Point NSW 2000 p: +61 2 9251 7699 f: +61 2 9241 3731 e: mail@costinroe.com.au w: costinroe.com.au		CIVIL & STRUCTURAL ENGINEERS		DRAWING TITLE STORMWATER DRAINAGE PLAN GROUND FLOOR		DRAWING No C014955.00- SSDA4.0		ISSUE D	
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LEGEND:
LEVELS DATUM IS AHD.
EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS DATED 16/12/22.

- SGGP, SINGLE GRATED GULLY PIT

- SJP, SEALED JUNCTION PIT

- KIP, KERB INLET PIT

- GD, GRATED DRAIN (300W x 225D UNO)

- PROPOSED DRAINAGE LINE

- EXISTING DRAINAGE LINE

- DP, ROOFWATER DOWNPIPE (INDICATIVE)

- RW, ROOFWATER LINE

- SS, SUBSOIL LINE

- OVERLAND FLOW DIRECTION

- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS

- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS

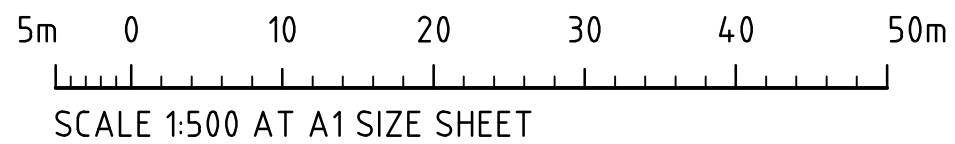
NOTES:
1. REFER TO DRAWING SSDA40 FOR STORMWATER DRAINAGE NOTES.

**Department of Planning,
Housing and Infrastructure**

Issued under the Environmental Planning and Assessment Act 1979
Approved application number: SSD-55522478

Granted on: 25 July 2024

Signed: JF Sheet number: 27 of 33



FOR INFORMATION

ARCHITECT		CLIENT		PROJECT		COSTIN ROE CONSULTING PTY LTD.		DRAWING TITLE	
				PROPOSED DEVELOPMENT 6 GRAND AVE ROSEHILL, NSW, 2142		ABN 50 003 696 446		STORMWATER DRAINAGE PLAN MEZZANINE FLOOR	
REVISED AS CLOUDED				DESIGNED DS		PO Box N419 Sydney NSW 1220 Level 4, 8 Windmill Street, Millers Point NSW 2000 p: +61 2 9251 7699 e: mail@costinroe.com.au		DRAWING No	
ISSUED FOR INFORMATION				DRAWN IZ		CONSULT AUSTRALIA		C014955.00- SSDA41	
AMENDMENTS				DATE		COSTIN ROE CONSULTING		CIVIL & STRUCTURAL ENGINEERS	
				09.06.23		B		ISSUE	
				02.05.23		A		B	
				DATE					
				ISSUE					



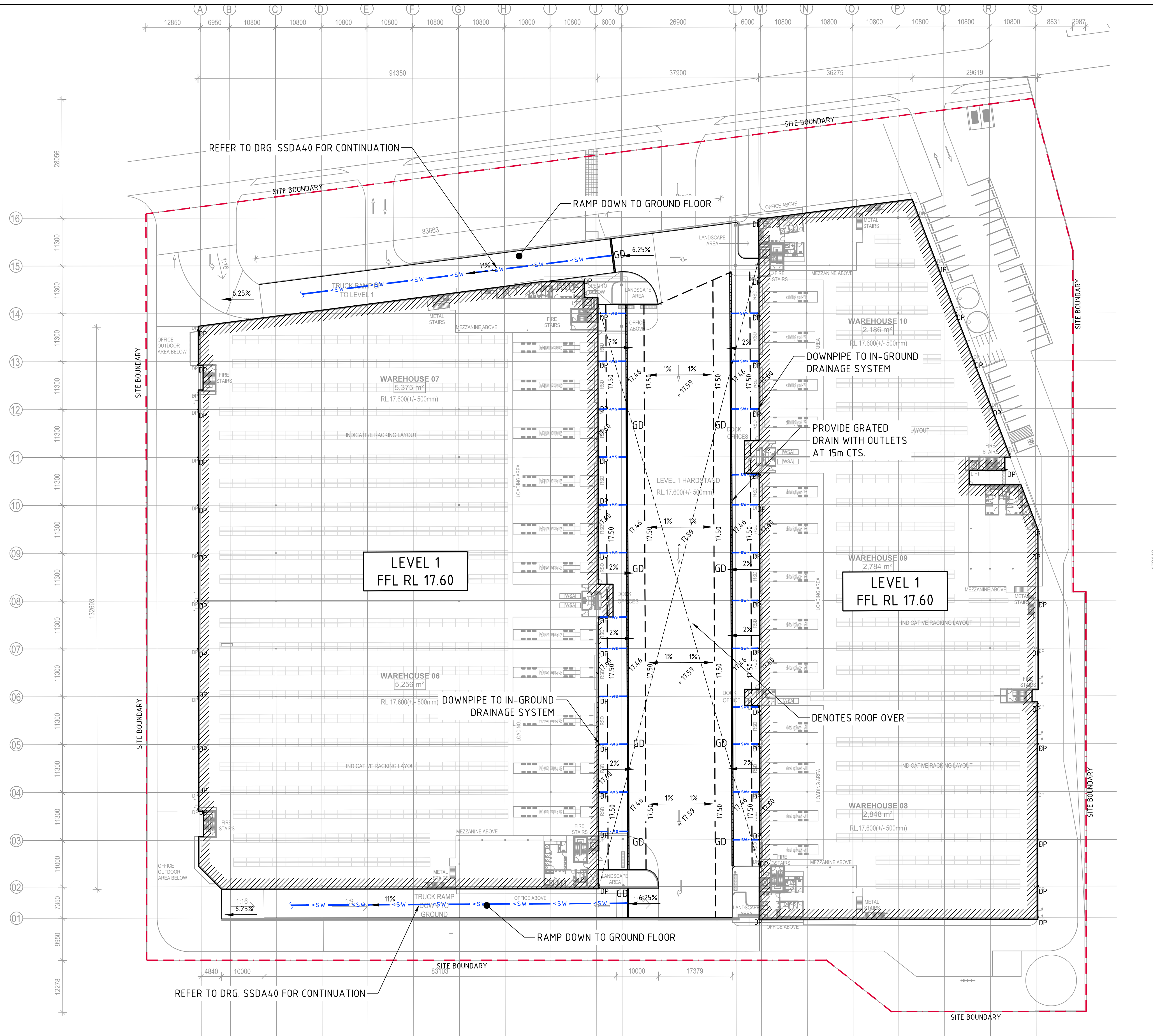
Department of Planning,
Housing and Infrastructure

Issued under the *Environmental Planning and Assessment Act 1979*

Approved application number: SSD-55522478

Granted on: 25 July 2024

Signed: JF Sheet number: 28 of 33



LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS DATED 16/12/22.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- SUBSOIL LINE
- OVERLAND FLOW DIRECTION
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS

NOTES:

- REFER TO DRAWING SSDA40 FOR STORMWATER DRAINAGE NOTES.

5m 0 10 20 30 40 50m
SCALE 1:500 AT A1 SIZE SHEET

FOR INFORMATION

ARCHITECT



CLIENT



PROJECT

PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142



Costin Roe Consulting Pty Ltd.
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CIVIL &
STRUCTURAL
ENGINEERS

DRAWING TITLE

STORMWATER DRAINAGE PLAN
LEVEL 1

DRAWING No

C014955.00-SSDA42

ISSUE

B

REVISED AS CLOUDED	09.06.23	B
ISSUED FOR INFORMATION	02.05.23	A
AMENDMENTS	DATE	ISSUE



Department of Planning,
Housing and Infrastructure

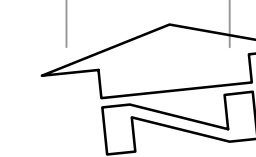
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Approved application number: SSD-55522478

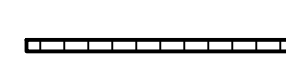
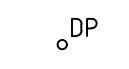
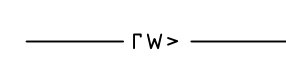
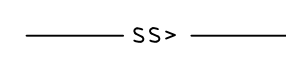
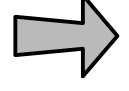
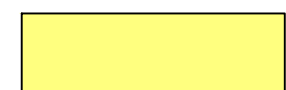
Granted on: 25 July 2024

Signed: JF Sheet number: 29 of 33



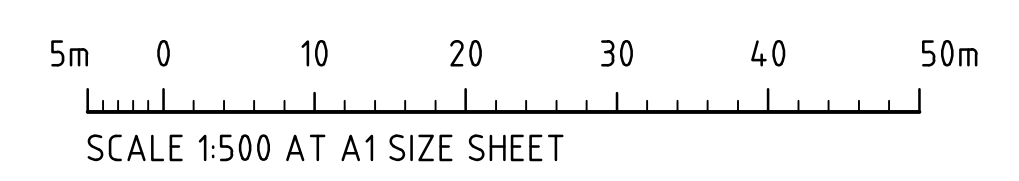
 **STORMWATER DRAINAGE PLAN – ROOF**
SCALE 1:500

LEGEND:

- LEVELS DATUM IS AHD.
EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS DATED 16/12/22.
-  - SGGP, SINGLE GRATED GULLY PIT
 -  - SJP, SEALED JUNCTION PIT
 -  - KIP, KERB INLET PIT
 -  - GD, GRATED DRAIN (300W x 225D UNO)
 -  - PROPOSED DRAINAGE LINE
 -  - EXISTING DRAINAGE LINE
 -  - ROOFWATER DOWNPIPE (INDICATIVE)
 -  - ROOFWATER LINE
 -  - SUBSOIL LINE
 -  - OVERLAND FLOW DIRECTION
 -  - FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
 -  - FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS
 -  - DENOTES ROOF TO RAINWATER TANK

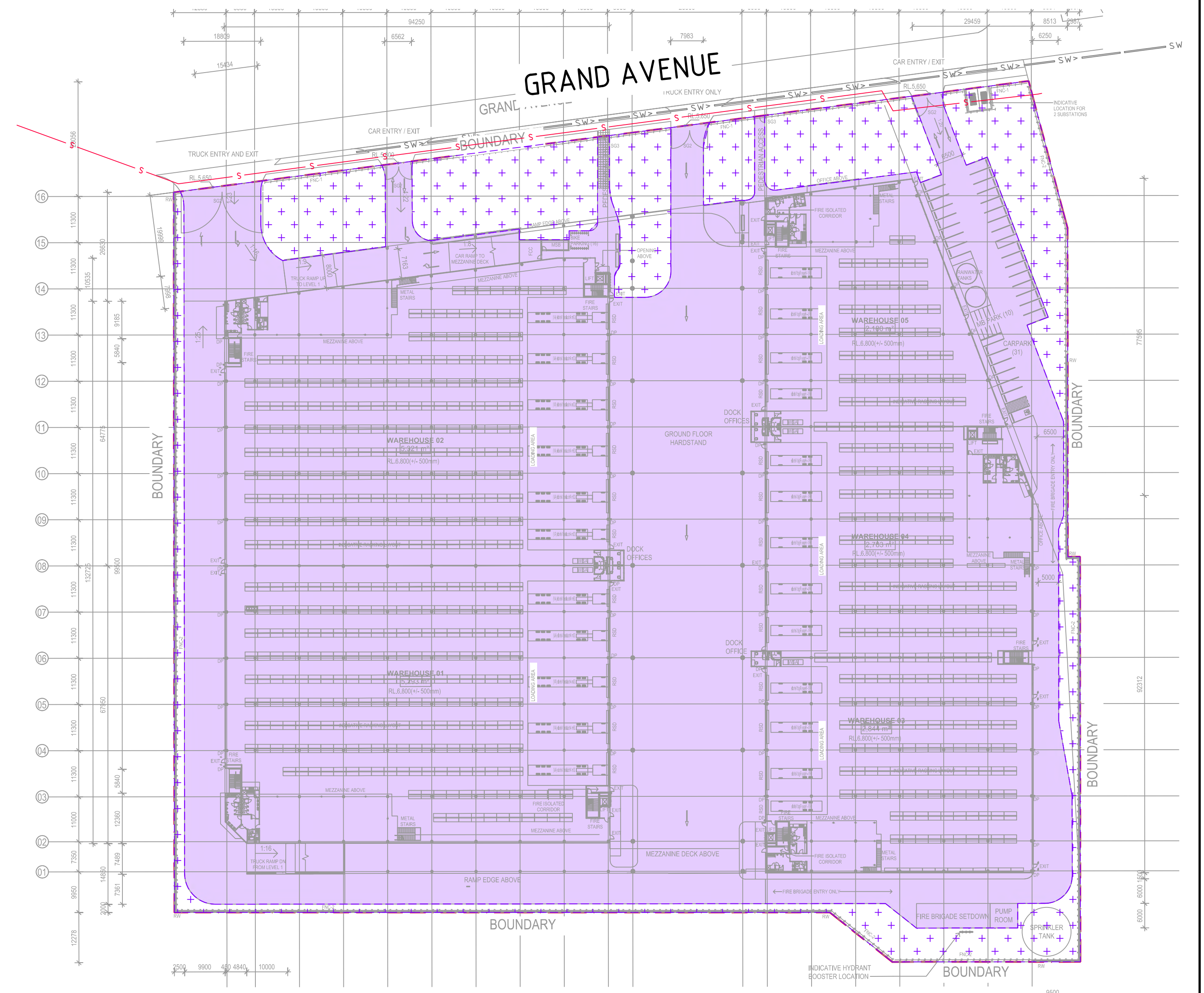
NOTES:

- REFER TO DRAWING SSDA40 FOR STORMWATER DRAINAGE NOTES.
- REFER TO DRAWING SSDA44 FOR PIT SCHEDULE.

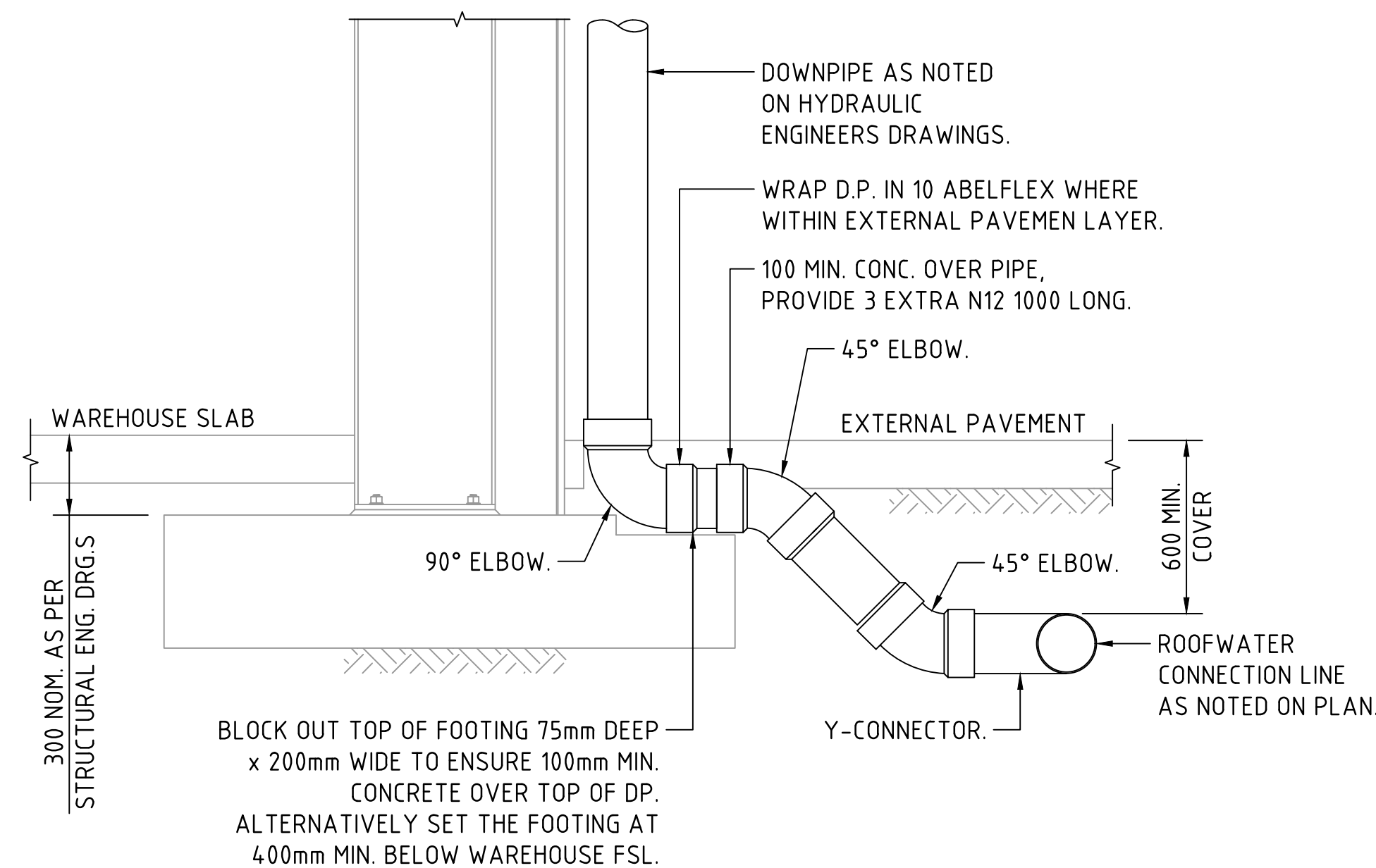


FOR INFORMATION

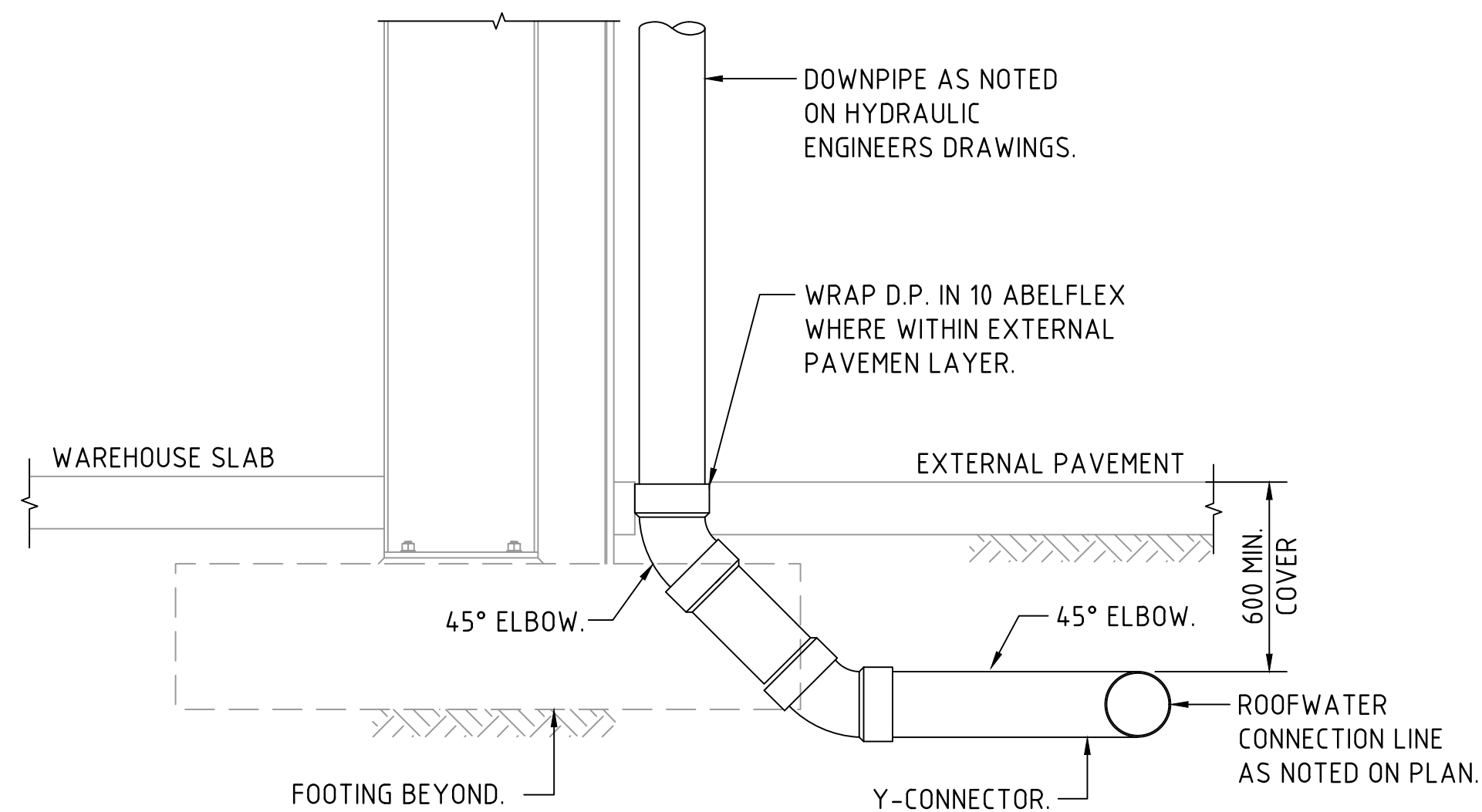
			ARCHITECT		CLIENT		PROJECT						Costin Roe Consulting Pty Ltd. ABN 50 003 696 446 PO Box N419 Sydney NSW 1220 Level 4, 8 Windmill Street, Millers Point NSW 2000 p: +61 2 9251 7699 f: +61 2 9241 3731 e: mail@costinroe.com.au w: costinroe.com.au				DRAWING TITLE															
							PROPOSED DEVELOPMENT 6 GRAND AVE ROSEHILL, NSW, 2142										STORMWATER DRAINAGE PLAN ROOF															
REVISED AS CLOUDED			09.06.23		B		DESIGNED DS		DRAWN IZ								DATE APR '23		CHECKED DS		SIZE A1		SCALE AS SHOWN		CAD REF: C014955.00-SSDA43		DRAWING No		C014955.00-SSDA43		ISSUE	
ISSUED FOR INFORMATION			02.05.23		A																								B			
AMENDMENTS			DATE		ISSUE																											



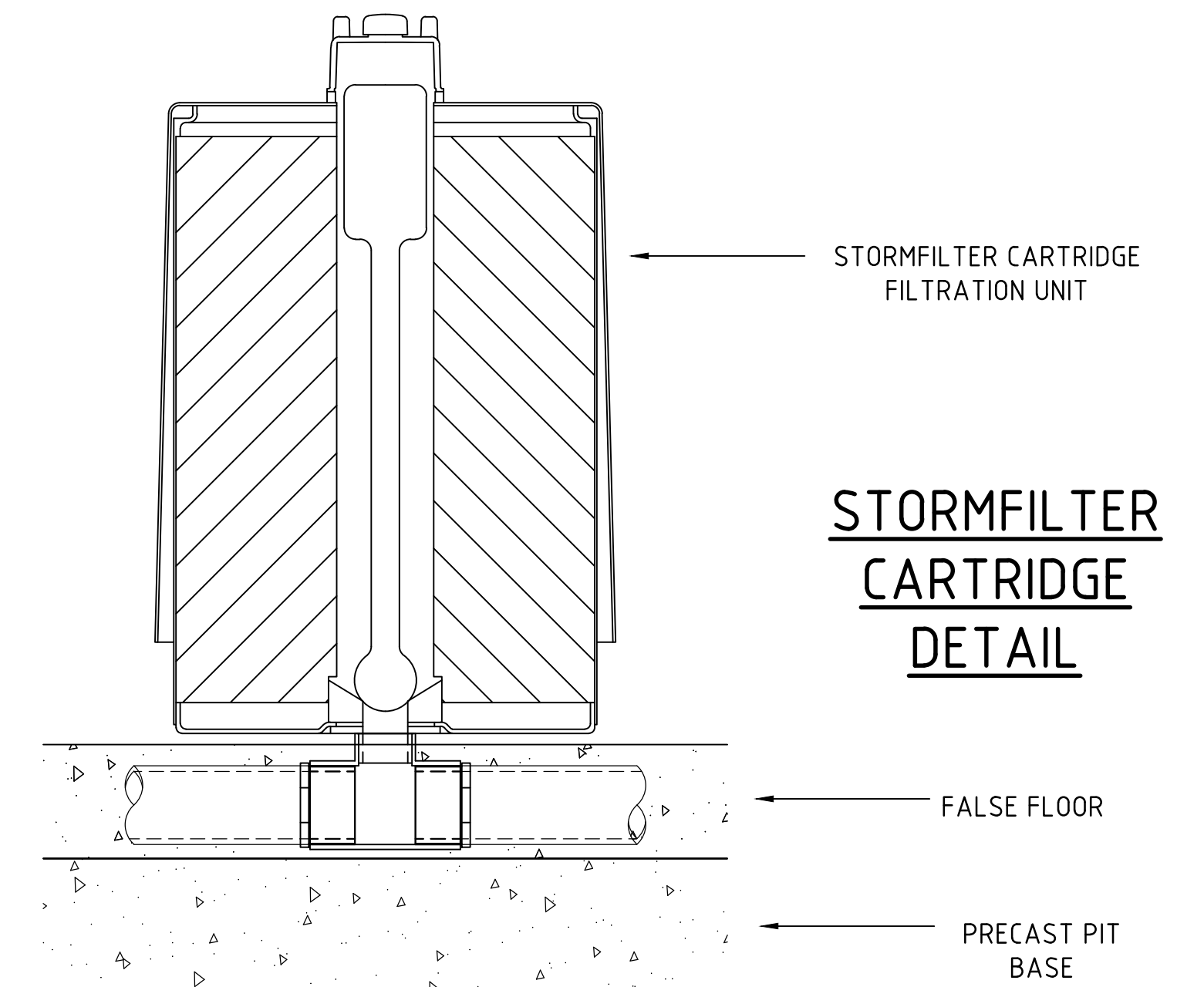
POST-DEVELOPMENT CATCHMENT PLAN
SCALE 1:1000



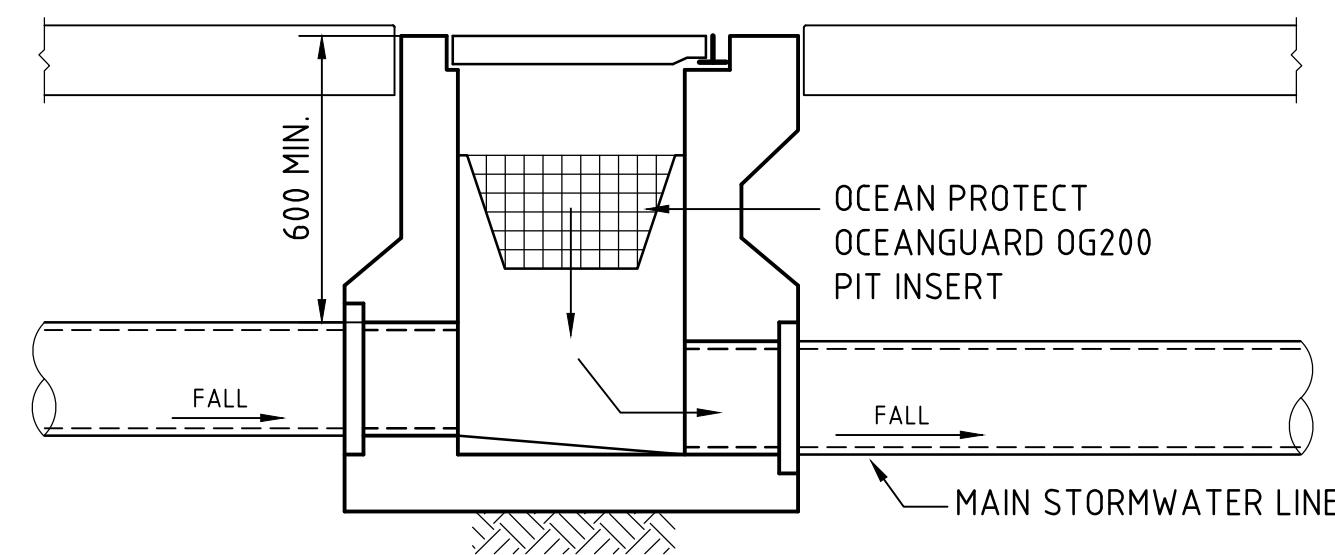
DOWNPIPE TURN-UP DETAIL A
(AT FOOTING LOCATION)
SCALE 1:20



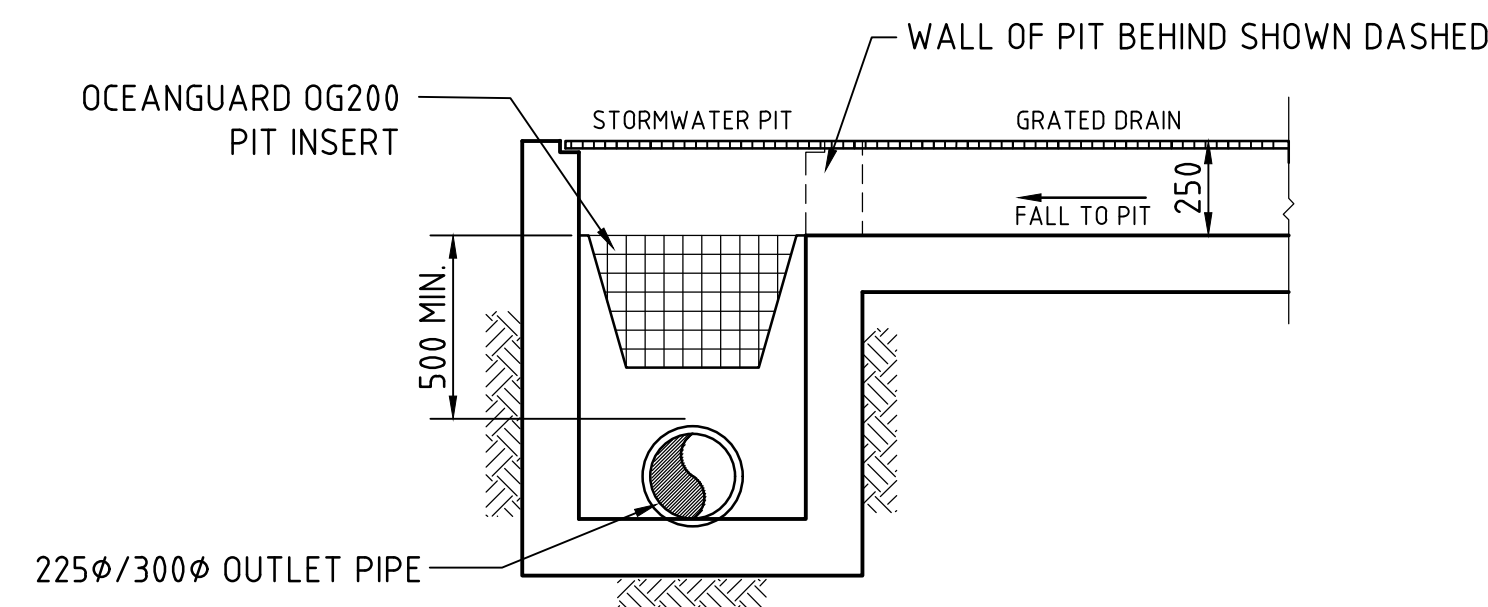
DOWNPIPE TURN-UP DETAIL B
(CLEAR OF FOOTING)
SCALE 1:20



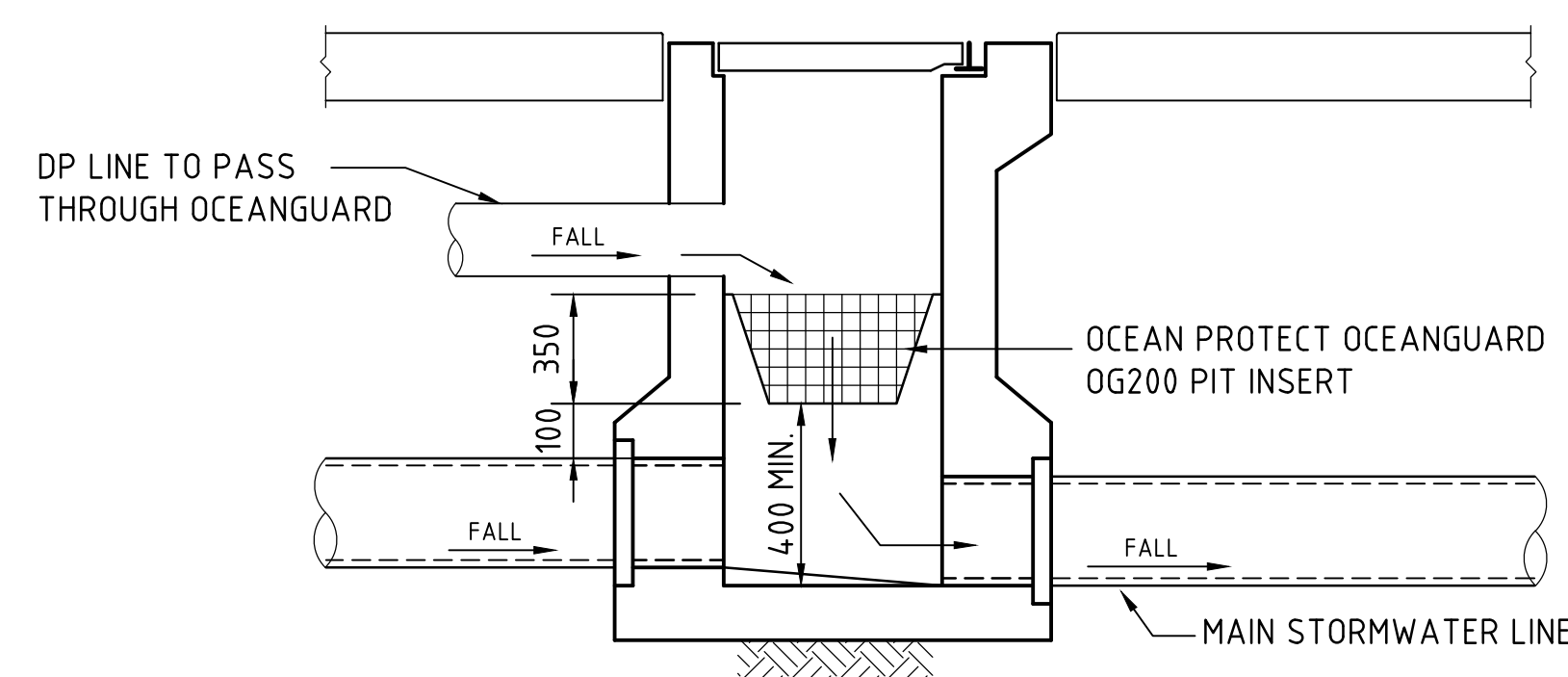
STORMFILTER CARTRIDGE DETAIL



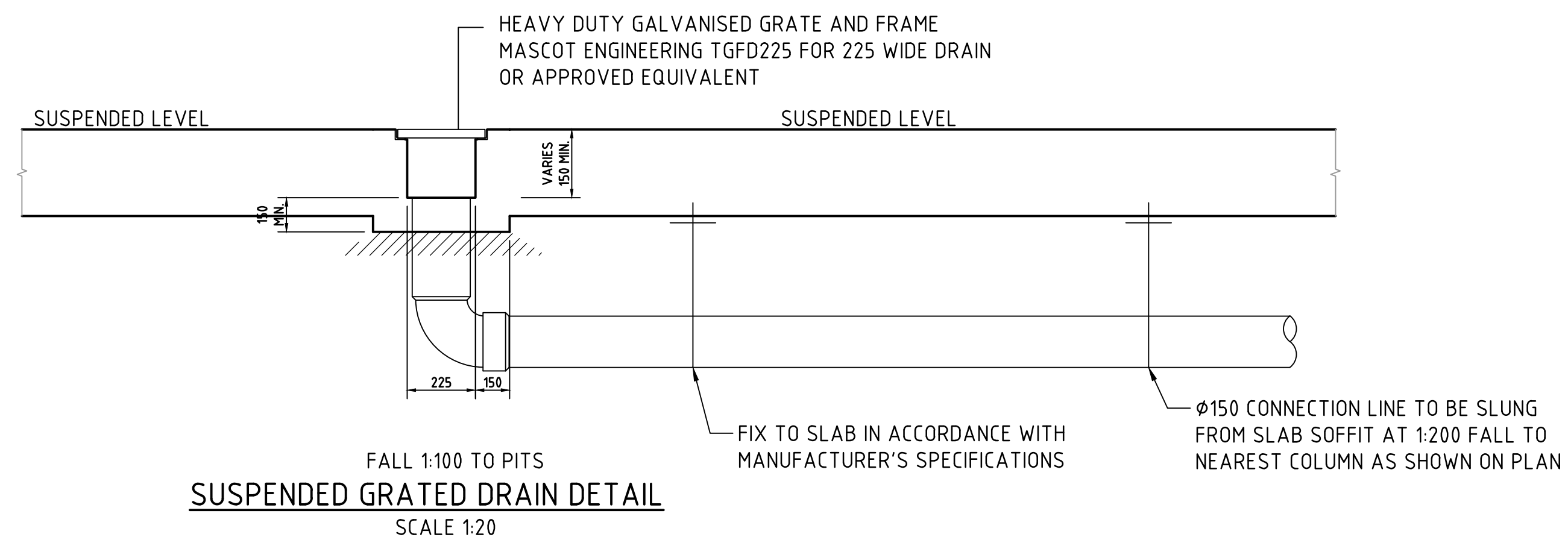
STORMWATER PIT WITH OCEANGUARD CONFIGURATION
SCALE 1:20



GRATED DRAIN/STORMWATER PIT WITH OCEANGUARD CONFIGURATION
SCALE 1:20



ROOFWATER/STORMWATER PIT WITH OCEANGUARD CONFIGURATION
SCALE 1:20



SUSPENDED GRATED DRAIN DETAIL
SCALE 1:20



Department of Planning,
Housing and Infrastructure

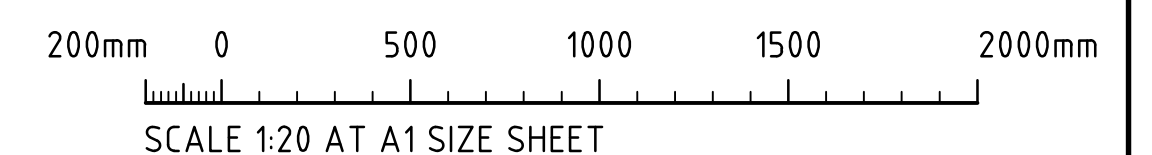
Issued under the *Environmental Planning and Assessment Act 1979*

Approved application number: SSD-55522478

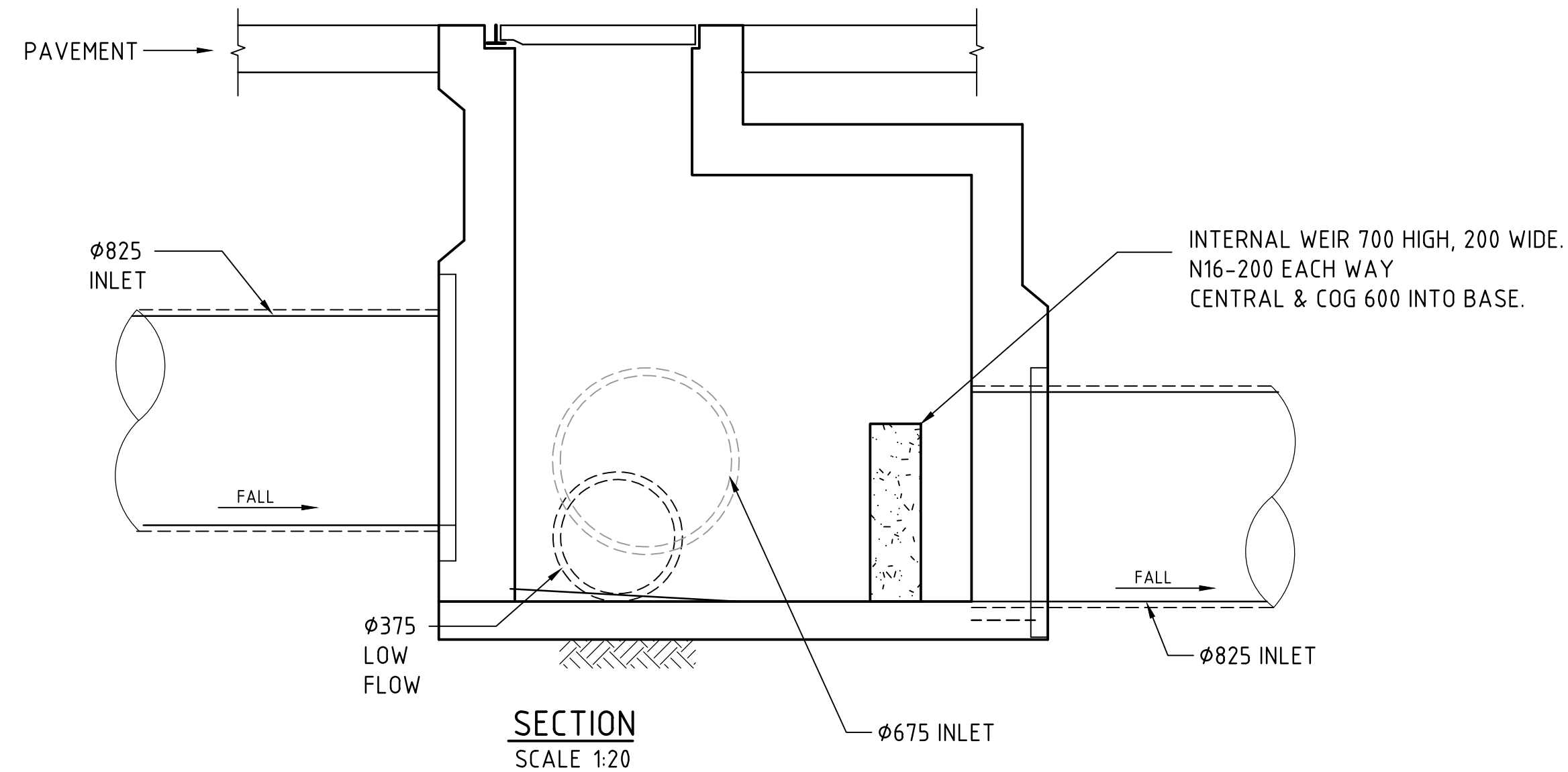
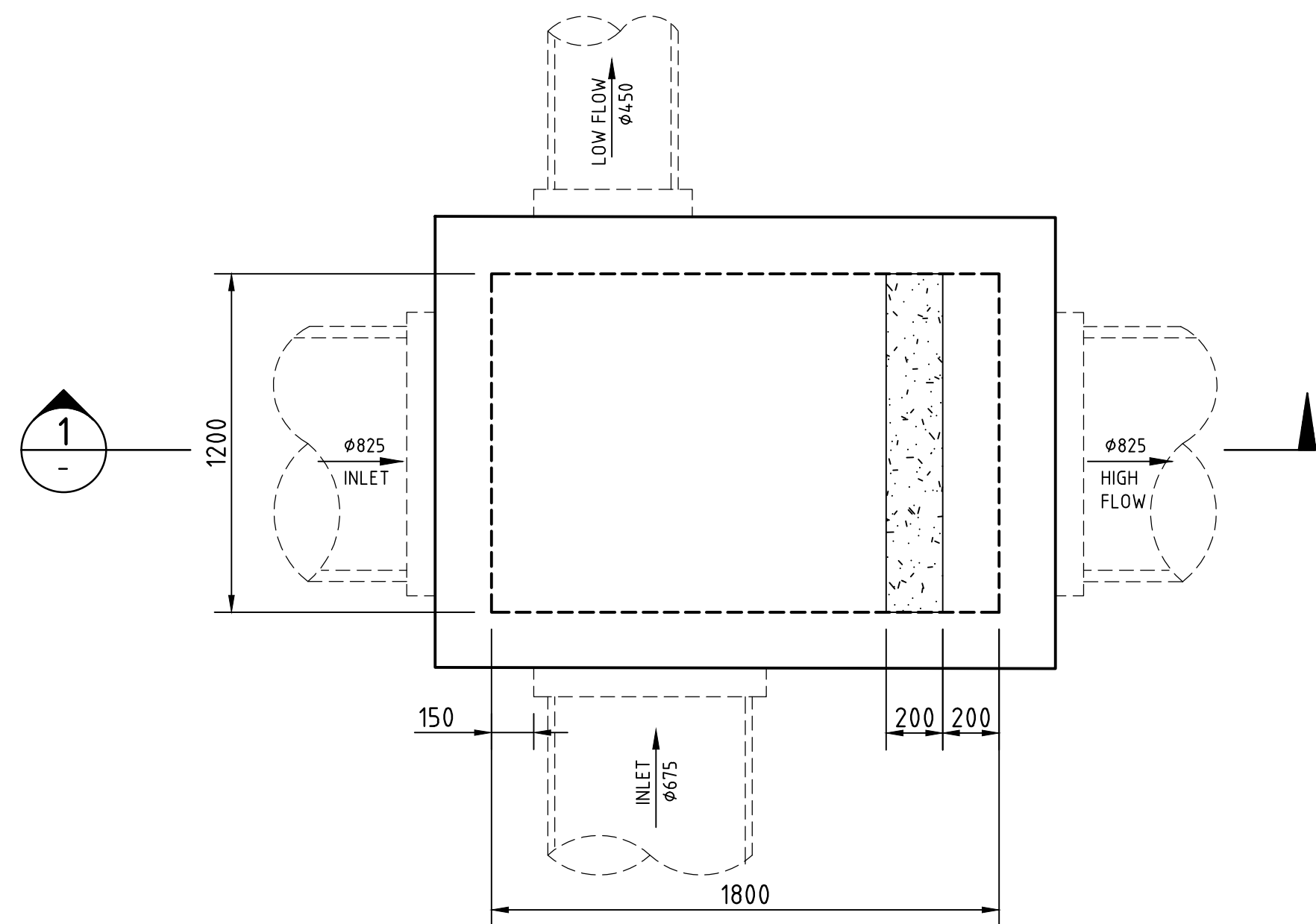
Granted on: 25 July 2024

Signed: JF Sheet number: 32 of 33

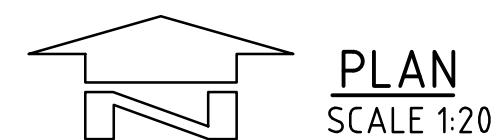
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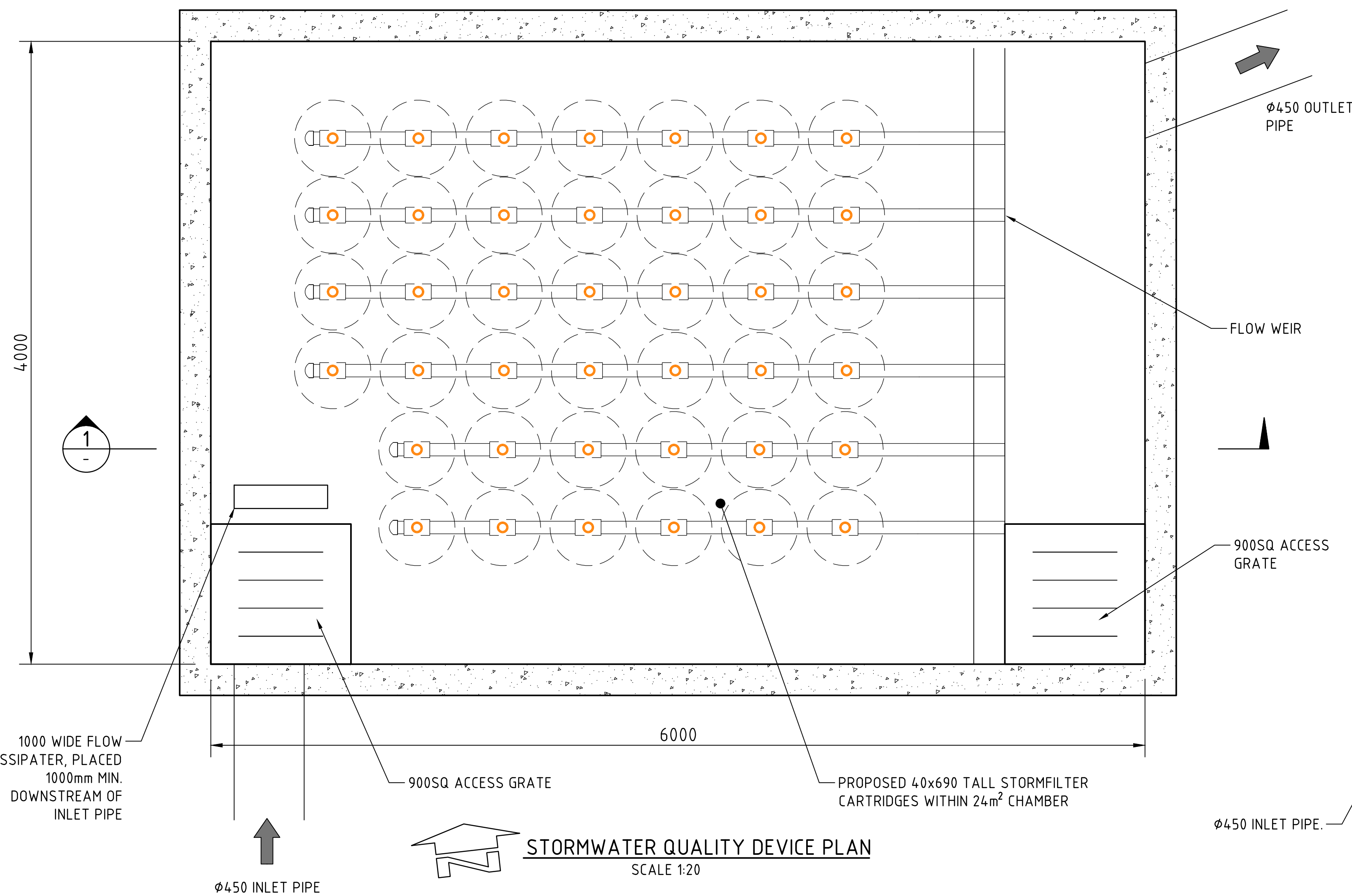
ISSUED FOR INFORMATION 09.06.23 B ISSUED FOR INFORMATION 02.05.23 A AMENDMENTS DATE ISSUE	ARCHITECT SBA ARCHITECTS	CLIENT Hale	PROJECT PROPOSED DEVELOPMENT 6 GRAND AVE ROSEHILL, NSW, 2142 DESIGNED DS DRAWN IZ DATE APR '23 CHECKED DS SIZE A1 SCALE AS SHOWN CAD REF: C014955.00-SSDA46	CONSULT AUSTRALIA	Costin Roe Consulting Pty Ltd. ABN 50 003 696 446 PO Box N419 Sydney NSW 1220 Level 4, 8 Windmill Street, Millers Point NSW 2000 p: +61 2 9251 7699 f: +61 2 9241 3731 e: mail@costinroe.com.au w: costinroe.com.au	CRC COSTIN ROE CONSULTING CIVIL & STRUCTURAL ENGINEERS	DRAWING TITLE STORMWATER DRAINAGE DETAILS SHEET 2 DRAWING No C014955.00-SSDA46 ISSUE B
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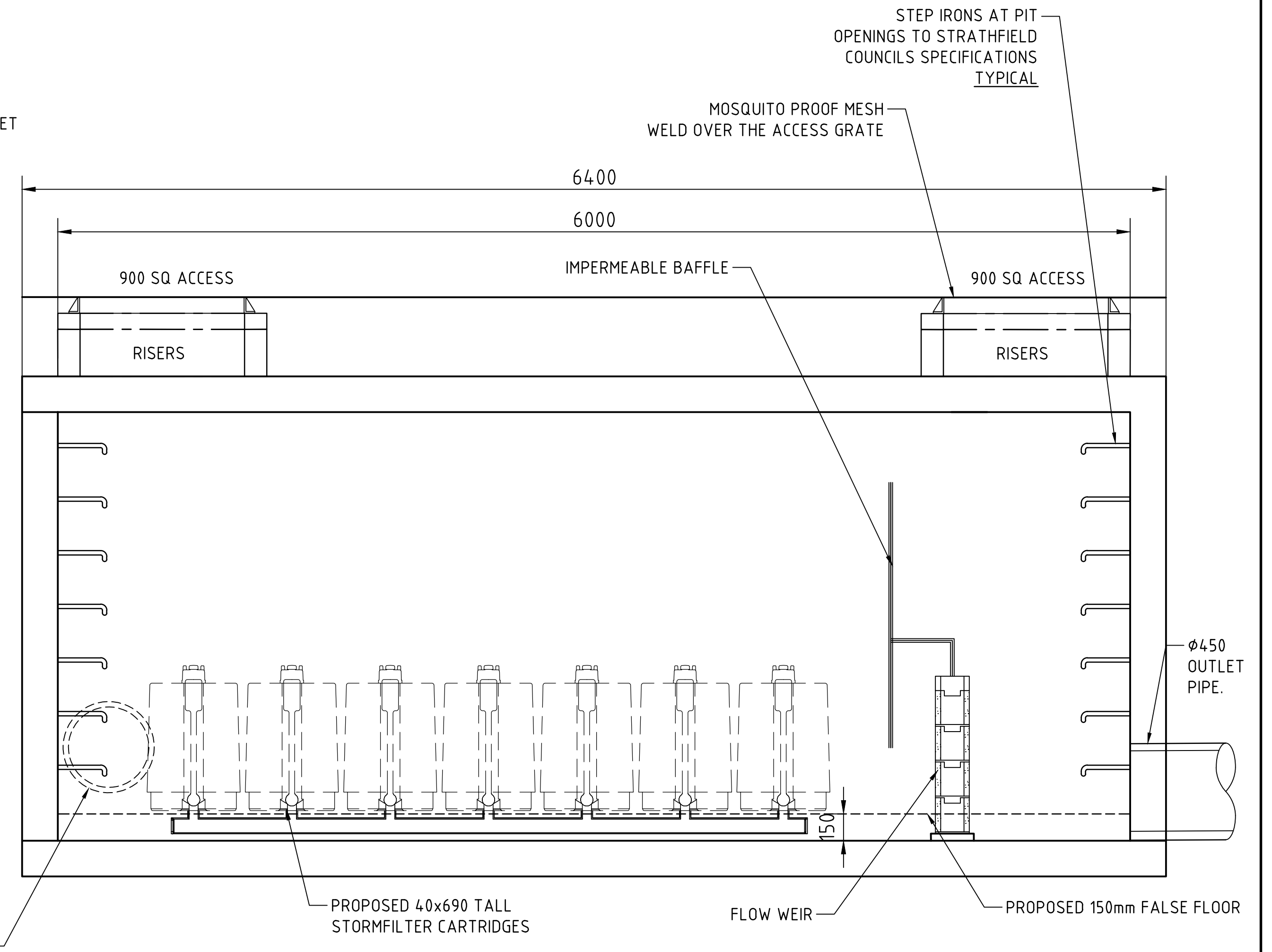
DIVERSION PIT SECTION 1:20



LOW FLOW DIVERSION PIT A12 DETAIL
SCALE 1:20



STORMWATER QUALITY DEVICE PLAN
SCALE 1:20



STORMWATER QUALITY DEVICE SECTION 1:20

200mm 0 500 1000 1500 2000mm
SCALE 1:20 AT A1 SIZE SHEET

FOR INFORMATION



Department of Planning,
Housing and Infrastructure

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PROJECT
PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142



Costin Roe Consulting Pty Ltd.
ABN 50 003 696 446
PO Box N419 Sydney NSW 1220
Level 4, 8 Windmill Street, Millers Point NSW 2000
p: +61 2 9251 7699 f: +61 2 9241 3731
e: mail@costinroe.com.au w: costinroe.com.au



DRAWING TITLE
STORMWATER DRAINAGE DETAILS
SHEET 3

DRAWING No C014955.00-SSDA47

ISSUE
A

ISSUED FOR INFORMATION 09.06.23 A
AMENDMENTS DATE ISSUE