

HOMES NSW - TWEED HEADS

25-27 BOYD STREET, TWEED HEADS
CIVIL ENGINEERING PACKAGE



LOCALITY PLAN

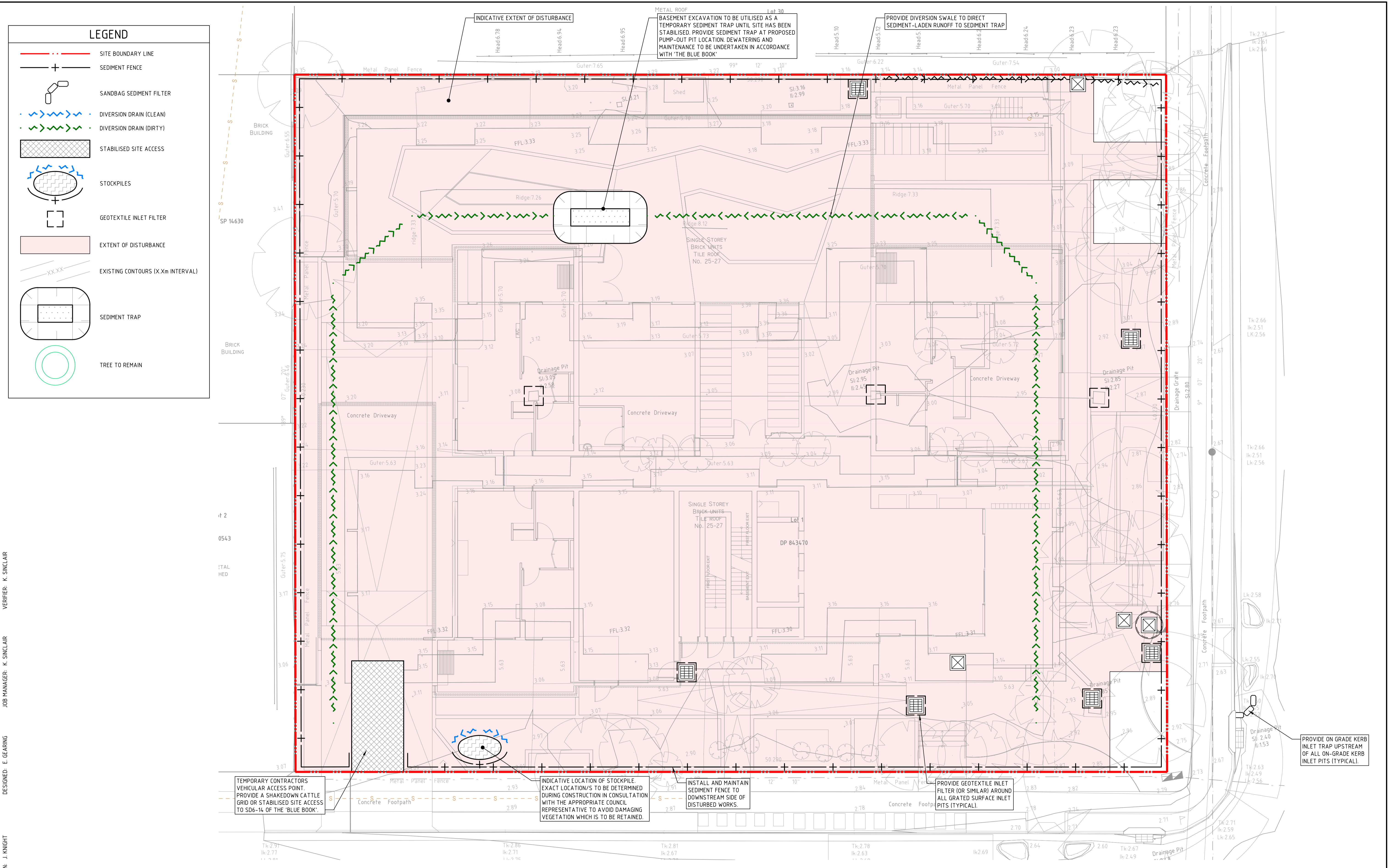
IMAGE SOURCE : NEARMAPS

DRAWING LIST	
DWG No.	DRAWING TITLE
DA-C01.01	COVER SHEET, DRAWING LIST AND LOCALITY PLAN
DA-C02.01	EROSION AND SEDIMENT CONTROL PLAN
DA-C02.11	EROSION AND SEDIMENT CONTROL DETAILS
DA-C03.01	CUT AND FILL PLAN
DA-C04.01	CIVIL WORKS PLAN - GROUND FLOOR
DA-C04.11	CIVIL WORKS PLAN - BASEMENT LEVEL 1
DA-C04.12	CIVIL WORKS PLAN - BASEMENT LEVEL 2
DA-C09.01	CIVIL DETAILS

DRAWN: J. KNIGHT
DESIGNED: E. CEARING
JOB MANAGER: K. SINCLAIR
VERIFIER: K. SINCLAIR

NOT FOR CONSTRUCTION

<table border="1"> <thead> <tr> <th>REVISION</th> <th>DESCRIPTION</th> <th>ISSUED</th> <th>VER'D</th> <th>APP'D</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUED FOR DEVELOPMENT APPLICATION</td> <td>JK</td> <td>KS</td> <td>EG</td> <td>06.12.24</td> </tr> <tr> <td>B</td> <td>RE-ISSUED FOR SSDA APPROVAL</td> <td>JK</td> <td>KS</td> <td>EG</td> <td>29.05.25</td> </tr> </tbody> </table>	REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	A	ISSUED FOR DEVELOPMENT APPLICATION	JK	KS	EG	06.12.24	B	RE-ISSUED FOR SSDA APPROVAL	JK	KS	EG	29.05.25	<p>CLIENT</p>	<p>ARCHITECT</p>	<p>ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.</p> <p>NORTHROP Newcastle Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email newcastle@northrop.com.au ABN 81 094 433 100</p>	<p>PROJECT</p> <p>HOMES NSW - TWEED HEADS 25-27 BOYD STREET, TWEED HEADS</p>	<p>DRAWING TITLE</p> <p>CIVIL ENGINEERING PACKAGE COVER SHEET, DRAWING LIST AND LOCALITY PLAN</p>	<p>JOB NUMBER</p> <p>NL223052</p> <table border="1"> <tr> <td>DRAWING NUMBER</td> <td>REVISION</td> </tr> <tr> <td>DA-C01.01</td> <td>B</td> </tr> </table> <p>DRAWING SHEET SIZE = A1</p>	DRAWING NUMBER	REVISION	DA-C01.01	B
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LEGEND	
	SITE BOUNDARY LINE
	SEDIMENT FENCE
	SANDBAG SEDIMENT FILTER
	DIVERSION DRAIN (CLEAN)
	DIVERSION DRAIN (DIRTY)
	STABILISED SITE ACCESS
	STOCKPILES
	GEOTEXTILE INLET FILTER
	EXTENT OF DISTURBANCE
	EXISTING CONTOURS (X.Xm INTERVAL)
	SEDIMENT TRAP
	TREE TO REMAIN

DRAWN: J. KNIGHT
 DESIGNED: E. GEARING
 JOB MANAGER: K. SINCLAIR
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ARCHITECT

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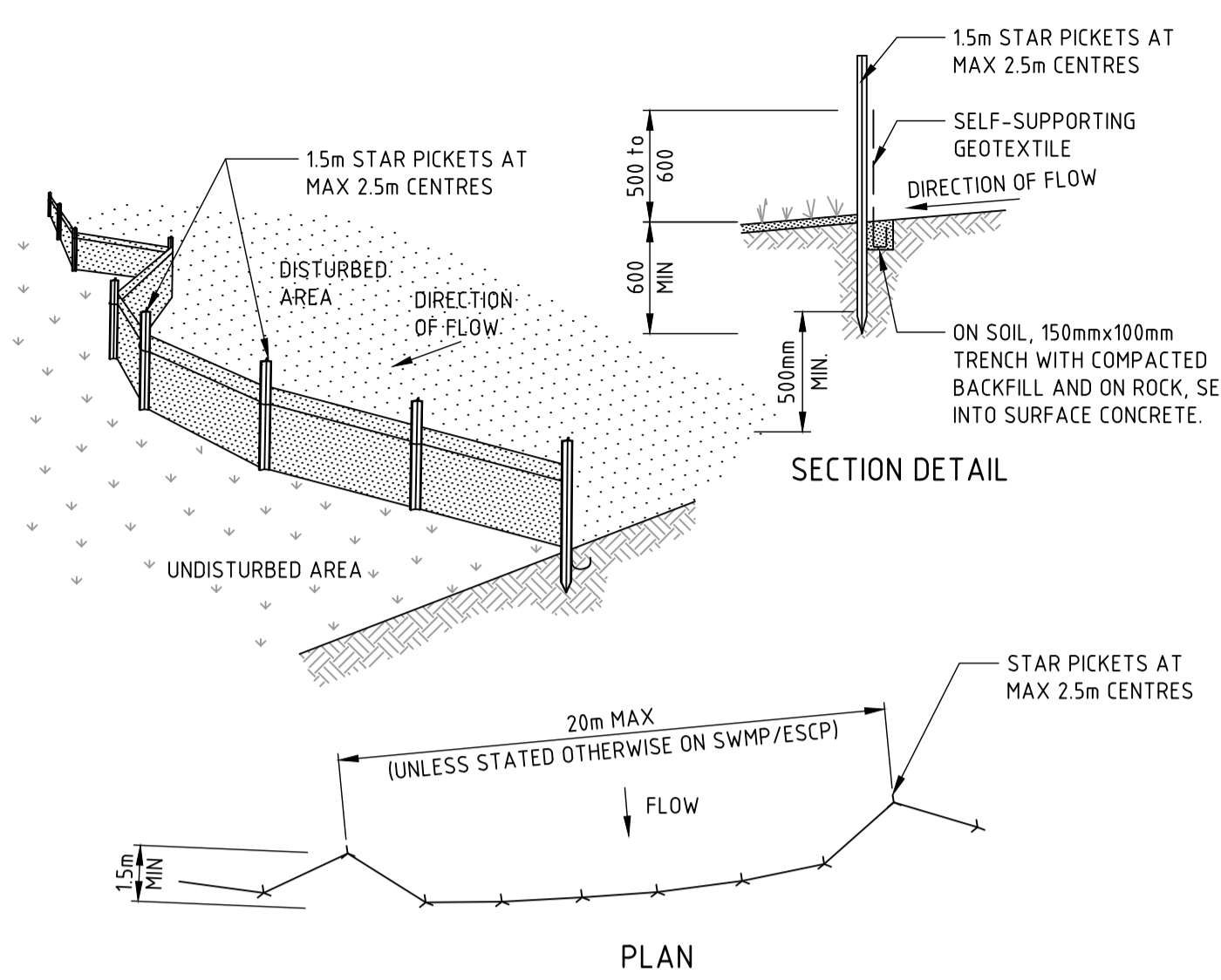
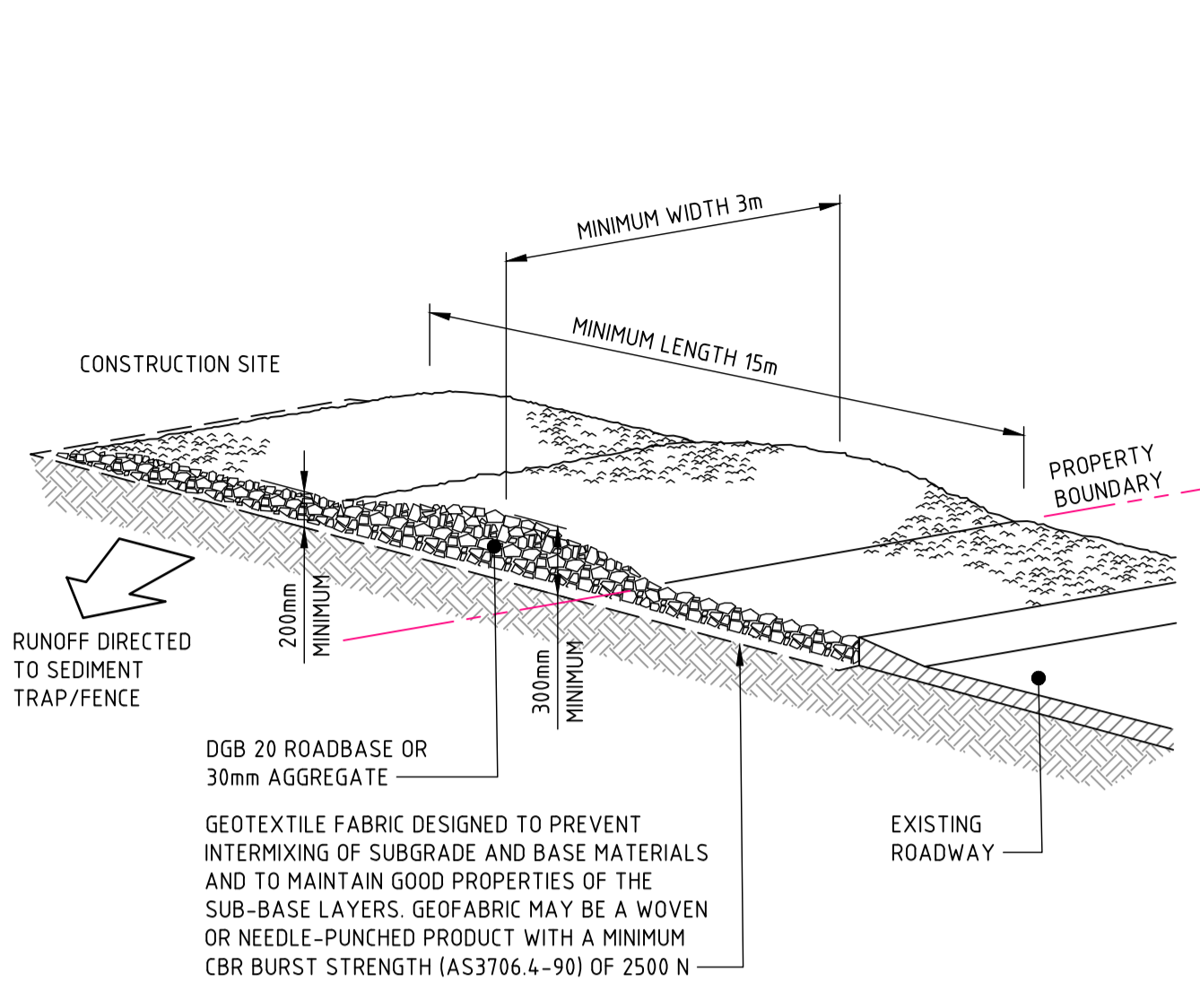
SCALE 1:100 @ A1

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 ABN 81 094 433 100

PROJECT
HOMES NSW - TWEED HEADS
 25-27 BOYD STREET, TWEED HEADS

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
EROSION AND SEDIMENT CONTROL PLAN

JOB NUMBER	
NL223052	
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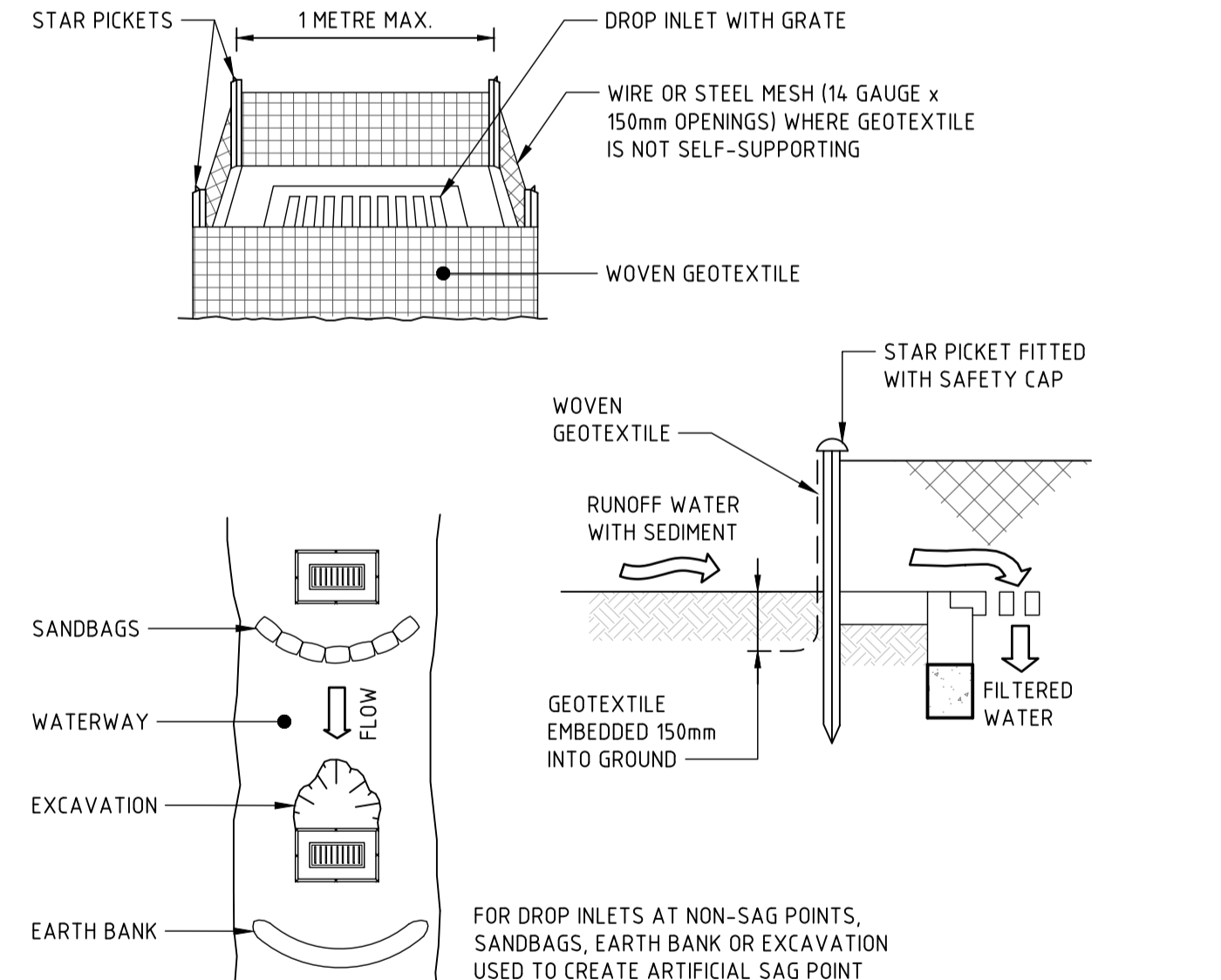
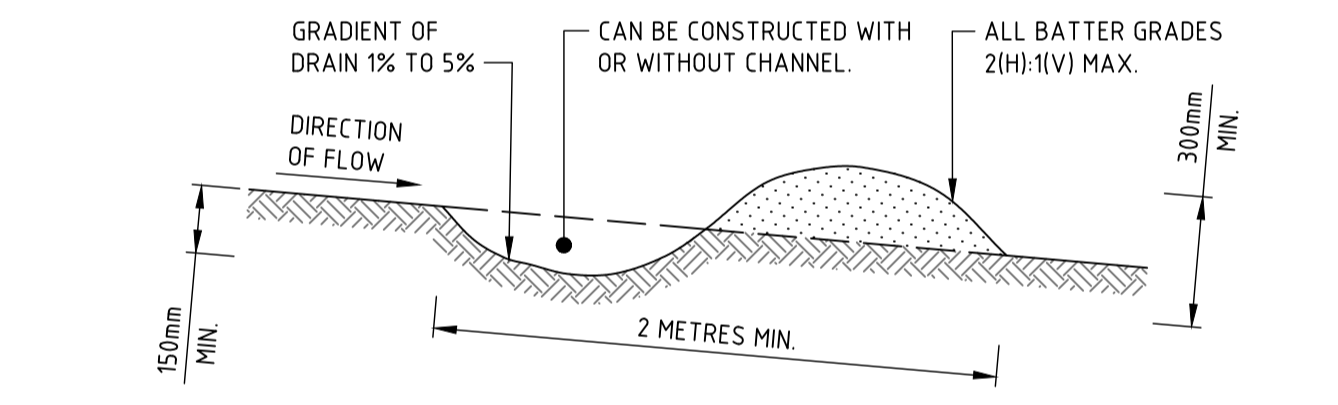


- CONSTRUCTION NOTES**
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
 2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
 3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
 4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

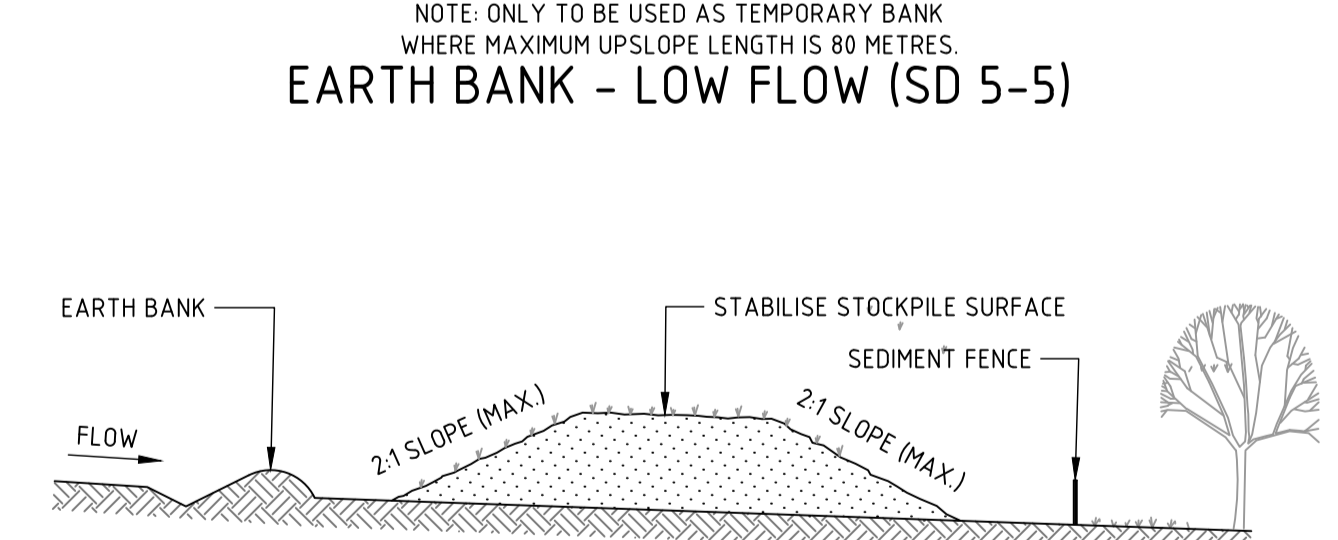
- CONSTRUCTION NOTES**
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
 2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
 3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
 4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
 5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

STABILISED SITE ACCESS (SD 6-14)

SEDIMENT FENCE (SD 6-8)



- CONSTRUCTION NOTES**
1. BUILD WITH GRADIENTS BETWEEN 1 AND 5 PERCENT.
 2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
 3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
 4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
 5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
 6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.



- CONSTRUCTION NOTES**
1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
 2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
 3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
 4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
 5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

STOCKPILES (SD 4-1)

GEOTEXTILE INLET FILTER (SD 6-12)

- 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 GEOTEXTILE. 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.

- CONSTRUCTION SEQUENCE**
1. INSTALL SEDIMENT FENCING AND CUT DRAINS TO MEET THE REQUIREMENTS OF THE SEDIMENT AND EROSION CONTROL PLAN AND TWEED SHIRE COUNCIL'S REQUIREMENTS.
 2. CONSTRUCT STABILISED SITE ACCESS.
 3. REDIRECT CLEAN WATER AROUND THE CONSTRUCTION SITE.
 4. INSTALL SEDIMENT CONTROL PROTECTION MEASURES AT NATURAL AND MAN-MADE DRAINAGE STRUCTURES. MAINTAIN UNTIL ALL THE DISTURBED AREAS ARE STABILISED.
 5. CLEAR AND STRIP THE WORK AREAS. MINIMISE THE DAMAGE TO GRASS AND LOW GROUND COVER OF NON-DISTURBED AREAS.
 6. ANY DISTURBED AREAS, OTHER THAN ROAD PAVEMENT AREAS, SHALL BE COVERED WITH SITE TOPSOIL AND SEEDED WITHIN 7 DAYS OF COMPLETION OF BULK LEVELS.
 7. APPLY PERMANENT STABILISATION TO SITE (LANDSCAPING).

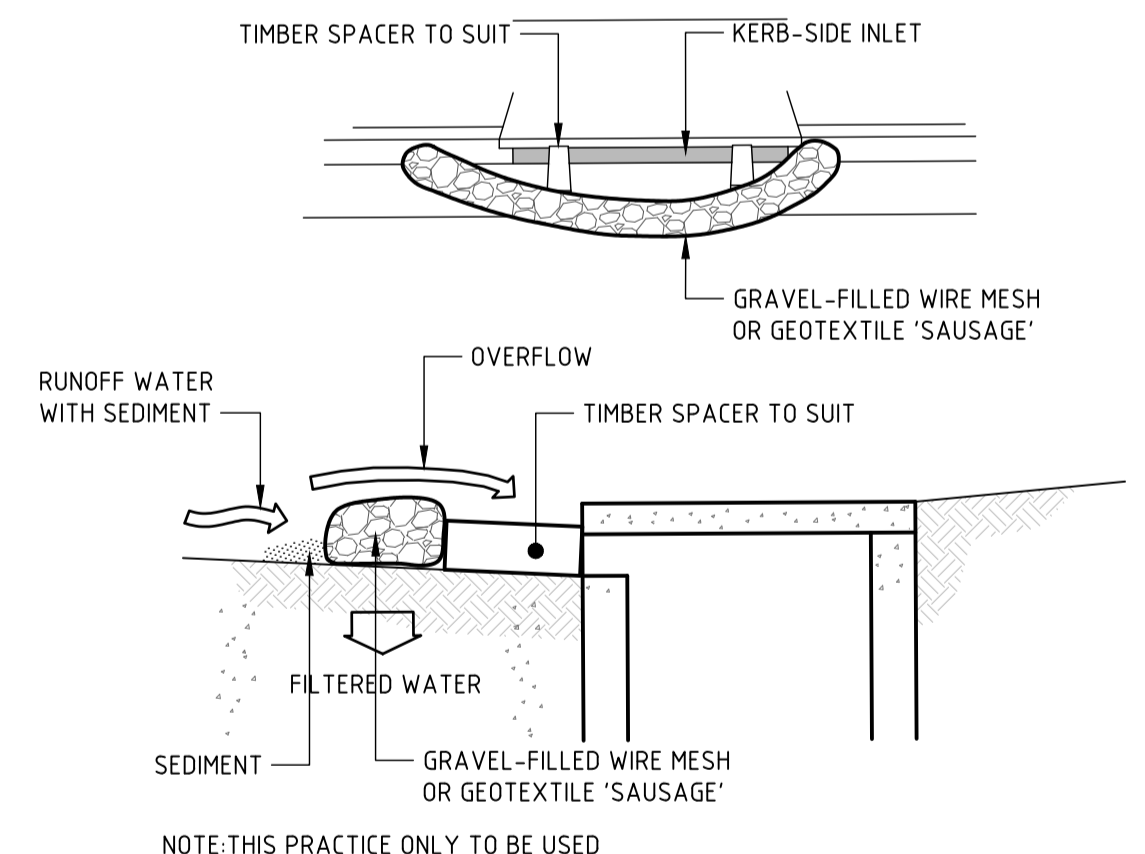
- EROSION AND SEDIMENTATION CONTROL NOTES:**
1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE APPROPRIATE FOR THE SEDIMENT TYPE(S) OF THE SOILS ON-SITE, IN ACCORDANCE WITH THE 'BLUE BOOK' (MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION LANDCOM, 2004), OR OTHER CURRENT RECOGNISED INDUSTRY STANDARDS FOR EROSION AND SEDIMENT CONTROL FOR AUSTRALIAN CONDITIONS. THIS INCLUDES SEDIMENT TRAPS AND LINING OF CHANNELS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION AND SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A DAILY BASIS AND SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY/ALL MAINTENANCE, CLEANING AND BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.
 3. INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
 4. ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
 5. INSTALL SEDIMENT FENCING, OR OTHER SEDIMENT CONTROL DEVICES, AROUND INDIVIDUAL BUILDING ZONES/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT OR APPROPRIATE COUNCIL OFFICER.
 6. ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAY'S WORK.
 7. THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB AND GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION.
 8. ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ON-SITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
 9. STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE SPREAD ON-SITE AS DIRECTED BY THE SUPERINTENDENT OR REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
 10. CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
 11. ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
 12. PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
 13. ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.

SEDIMENT BASIN SIZING CALCULATION:

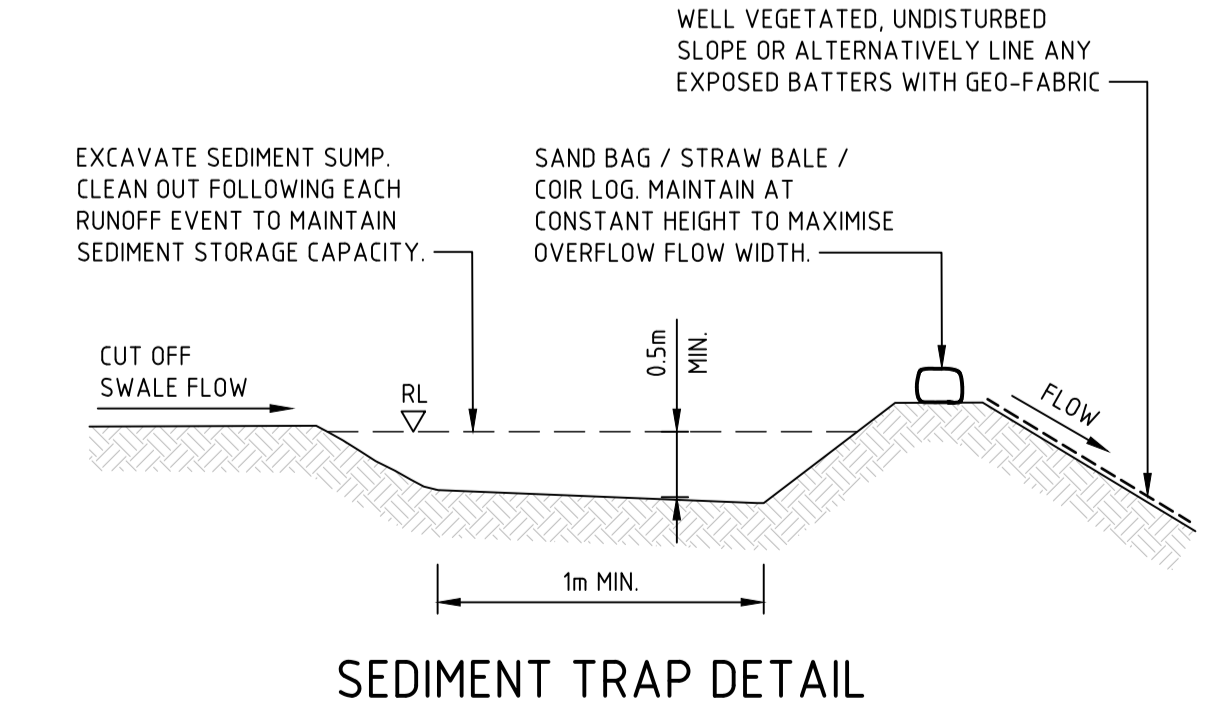
THE SITE IS LOCATED WITHIN THE KINGSCLIFF LANDSCAPE AND PRIMARILY CONSISTS OF AEOLIAN SAND (AS PER THE SITE SPECIFIC GEOTECHNICAL INVESTIGATION BY BARNSON REF: 39941-GR01_C), WHICH HAS THE FOLLOWING PROPERTIES (IN ACCORDANCE WITH TABLE C1 OF THE 'BLUE BOOK')

SITE PARAMETERS	
CONSTRAINT	VALUE
SEDIMENT TYPE	C
SOIL HYDROLOGY GROUP	A
K = SOIL ERODIBILITY (K-FACTOR)	0.009
R = RAINFALL EROSIIVITY (R-FACTOR)	5250
S = 2 YEAR, 6 HOUR STORM INTENSITY	15.3
LS = SLOPE LENGTH / GRADIENT	0.18 (60m SLOPE @ 1% GRADE)
P = EROSION CONTROL PRACTICE (P-FACTOR)	1.3 (TYPICAL)
C = GROUND COVER (C-FACTOR)	1.0 (TYPICAL FOR STRIPPED SITE)
SOIL LOSS (RUSLE METHOD) (tonnes/ha/yr)	11
EROSION HAZARD (TABLE 4.2 BLUE BOOK)	VERY LOW

NOTE: THE AVERAGE SOIL LOSS FROM THE AREA OF DISTURBANCE IS LESS THAN 150M3 PER YEAR. BUILDING A SEDIMENT BASIN IS THEREFORE UNNECESSARY IN ACCORDANCE WITH THE BLUE BOOK SECTION 6.3.2 (D).



- CONSTRUCTION NOTES**
1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
 2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
 3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
 4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
 5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
 6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.



SEDIMENT TRAP DETAIL

SANDBAG SEDIMENT FILTER (SD 6-11) NOT FOR CONSTRUCTION

VERIFIER: K. SINCLAIR
JOB MANAGER: K. SINCLAIR
DESIGNED: E. GEARING
DRAWN: J. KNIGHT

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A	ISSUED FOR INFORMATION	JK	KS	KS	10.10.24	NSW GOVERNMENT Homes NSW
B	ISSUED FOR DEVELOPMENT APPLICATION	JK	KS	EG	06.12.24	
C	RE-ISSUED FOR SSDA APPROVAL	JK	KS	EG	29.05.25	

ARCHITECT: **JKDS**

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PROJECT: **HOMES NSW - TWEED HEADS**
25-27 BOYD STREET, TWEED HEADS

DRAWING TITLE: **CIVIL ENGINEERING PACKAGE**
EROSION AND SEDIMENT CONTROL DETAILS

JOB NUMBER: NL223052	
DRAWING NUMBER: DA-C02.11	REVISION: C
DRAWING SHEET SIZE = A1	

LEGEND

- SITE BOUNDARY LINE
- EXTENT OF BASEMENT LEVEL 1
- EXTENT OF BASEMENT LEVEL 2
- X.XX BULK EARTHWORKS DEPTH (CUT)
- X.XX BULK EARTHWORKS DEPTH (FILL)
- EXISTING CONTOURS (X.Xm INTERVAL)

DEPTH OF CUT

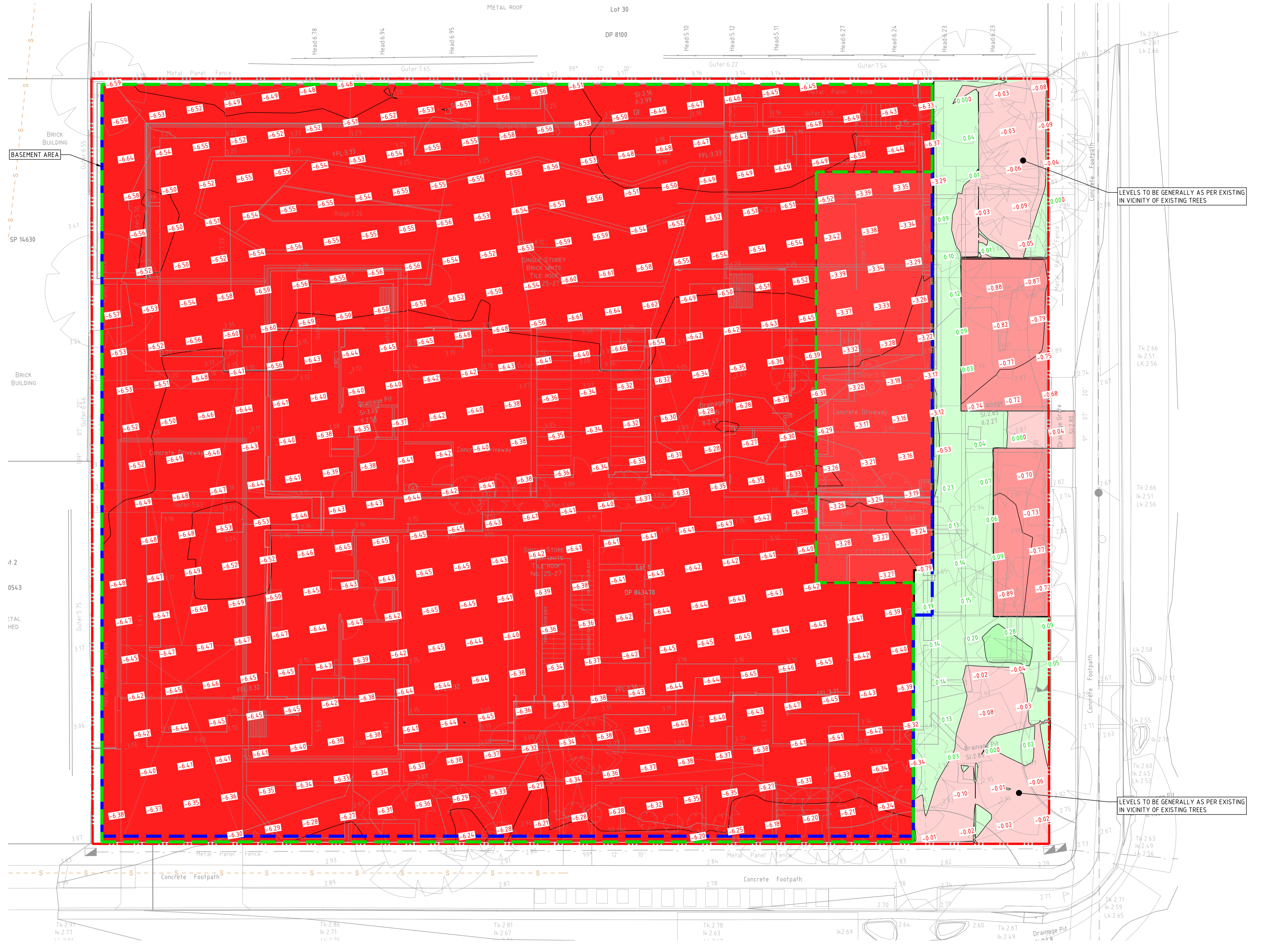
	-999m TO -7.0m
	-7.0m TO -5.0m
	-5.0m TO -3.0m
	-3.0m TO -2.0m
	-2.0m TO -1.55m
	-1.0m TO -0.5m
	-0.5m TO -0.25m
	-0.25m TO -0.0m

DEPTH OF FILL

	0.0m TO 0.25m
	0.25m TO 0.5m
	0.5m TO 0.75m
	0.75m TO 1.0m
	1.0m TO 1.25m
	1.25m TO 1.5m
	1.5m TO 2.0m
	2.0m TO 999m

NOTES

1. BULK EARTHWORKS LEVELS AND VOLUMES ARE BASED ON A COMPARISON OF THE DESIGN BULK EARTHWORKS SURFACE AND THE EXISTING SURFACE LEVEL AS SURVEYED WITH NO ALLOWANCE FOR TOPSOIL STRIPPING. THE FOLLOWING ALLOWANCES HAVE BEEN MADE TO GENERATE DESIGN BULK EARTHWORKS SURFACE:
FINISHED DESIGN SURFACE MINUS 200mm.
2. NO ALLOWANCE HAS BEEN MADE FOR SELECT LAYERS OR UNSUITABLE MATERIAL.
3. NO ALLOWANCE HAS BEEN MADE FOR TEMPORARY SEDIMENT DAMS
4. NO ALLOWANCE HAS BEEN MADE FOR SERVICE TRENCHES, DRAINAGE TRENCHES, DRAINAGE INFRASTRUCTURE (PITS, CULVERTS, ETC) IN THE LEVELS OR VOLUMES PRESENTED ON THIS PLAN.
5. NO ALLOWANCE FOR ANY TEMPORARY BATTERS DURING WORKS.
6. NO BULKING FACTORS HAVE BEEN CONSIDERED/ALLOWED FOR.
7. APPROXIMATE BULK EARTHWORKS VOLUMES BASED ON THE NOTES ABOVE ARE AS FOLLOWS:
 - BULK CUT = 10,746m³
 - BULK FILL = 11,233m³
 - BULK CUT/FILL BALANCE = 10,734m³ (CUT)
8. ALL BULK EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH SITE SPECIFIC GEOTECHNICAL REPORT AND BULK EARTHWORKS NOTES.



LEVELS TO BE GENERALLY AS PER EXISTING IN VICINITY OF EXISTING TREES

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CUT AND FILL PLAN

JOB NUMBER NL223052	
DRAWING NUMBER DA-C03.01	REVISION C
DRAWING SHEET SIZE = A1	

LEGEND

- SITE BOUNDARY LINE
- EXTENT OF BASEMENT BELOW
- EXISTING CONTOURS (0.25m INTERVALS)
- STORMWATER PIPE
- STORMWATER PIT AND TAG COVER LEVEL / INVERT LEVEL
- ATLAN FLOWFILTER. DETAILS TO BE PROVIDED AT CC STAGE
- OVERLAND FLOWPATH
- GRATED TRENCH DRAIN AND TAG COVER LEVEL
- EXISTING KERB INLET PIT
- RETAINING / PLANTER / STRUCTURAL WALL. DETAILS TO BE PROVIDED AT CC STAGE
- ON-SITE DETENTION TANK
- PROPOSED SPOT HEIGHT
- EXISTING SPOT HEIGHT
- PROPOSED TOP OF WALL HEIGHT
- DIRECTION OF GRADE
- PROPOSED FINISHED FLOOR LEVEL
- TREE TO REMAIN
- PROPOSED BUILDING FOOTPRINT TO ARCHITECTS DETAILS
- PROPOSED NON TRAFFICABLE CONCRETE PAVEMENT / SLAB. REFER STRUCTURAL ENGINEERS DRAWINGS FOR DETAILS
- PROPOSED NON TRAFFICABLE PAVER. DETAILS TO BE PROVIDED AT CC STAGE
- PROPOSED TRAFFICABLE PAVEMENT / SLAB. DETAILS TO BE PROVIDED AT CC STAGE
- PROPOSED LANDSCAPING BY OTHERS
- PROPOSED DRIVEWAY CROSSOVER IN ACCORDANCE WITH COUNCIL DETAILS
- PROPOSED PAVEMENT BY OTHERS

NOTE
ALL EXISTING INTERNAL STORMWATER TO BE DEMOLISHED

MAINTAIN EXISTING LEVELS ALONG WESTERN BOUNDARY

ACCESS RAMP TO HAVE CREST AT MINIMUM 300mm ABOVE 1% AEP FLOOD LEVEL (RL 3.10)

DRIVEWAY CROSSOVER IN ACCORDANCE WITH TWEED SHIRE COUNCIL'S STANDARDS

OSD TANK 2 TO PROVIDE MINIMUM 15KL OSD STORAGE VOLUME WITH MINIMUM SURFACE AREA OF 30m². INVERT OF OSD STORAGE TO BE AT RL 2.60 AHD. ASSUMED SOFFIT AT RL 2.60 AHD. GRATED LIDS TO BE PROVIDED IN PAVEMENT ABOVE TO BE PROVIDED AS HIGH LEVEL OVERFLOW AT RL 3.40

BELOW GROUND STORAGE BASIN 3 TO PROVIDE MINIMUM 20KL OSD STORAGE VOLUME WITH MINIMUM SURFACE AREA OF 50m². INVERT OF BASIN TO BE AT RL 2.35m AHD WITH EFFECTIVE OSD STORAGE FROM RL 2.55 AHD AND TOP WATER LEVEL 2.94

PROVIDE SPLITTER PIT TO DIVERT LOW FLOWS TO THE ATLAN FLOWFILTER DEVICE AND HIGH FLOWS TO DOWNSTREAM DISCHARGE CONTROL PIT

PROVIDE ATLAN FLOWFILTER PROPRIETARY DEVICE OFF-LINE WITH MINIMUM 250mm FALL THROUGH DEVICE. DETAILS TO BE PROVIDED AT CC STAGE

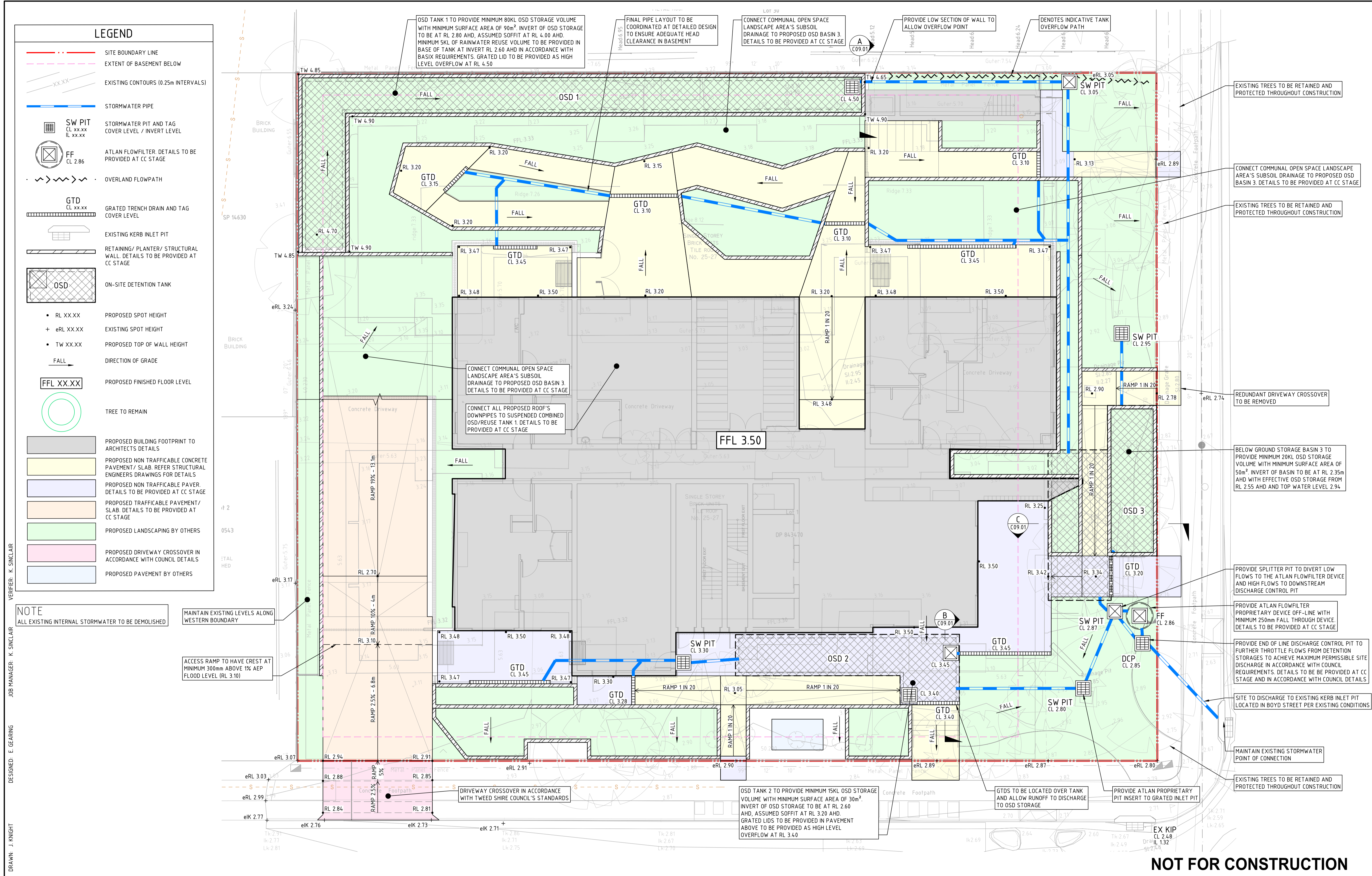
PROVIDE END OF LINE DISCHARGE CONTROL PIT TO FURTHER THROTTLE FLOWS FROM DETENTION STORAGES TO ACHIEVE MAXIMUM PERMISSIBLE SITE DISCHARGE IN ACCORDANCE WITH COUNCIL REQUIREMENTS. DETAILS TO BE PROVIDED AT CC STAGE AND IN ACCORDANCE WITH COUNCIL DETAILS

SITE TO DISCHARGE TO EXISTING KERB INLET PIT LOCATED IN BOYD STREET PER EXISTING CONDITIONS

MAINTAIN EXISTING STORMWATER POINT OF CONNECTION

EXISTING TREES TO BE RETAINED AND PROTECTED THROUGHOUT CONSTRUCTION

NOT FOR CONSTRUCTION



DRAWN: J. KNIGHT
DESIGNED: E. GEARING
JOB MANAGER: K. SINCLAIR
VERIFIER: K. SINCLAIR

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
A	ISSUED FOR INFORMATION	JK	KS	KS	10.10.24	
B	ISSUED FOR INFORMATION	RG	KS	KS	30.10.24	
C	ISSUED FOR DEVELOPMENT APPLICATION	JK	KS	EG	06.12.24	
D	RE-ISSUED FOR SSDA APPROVAL	JK	KS	EG	29.05.25	

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PROJECT
HOMES NSW - TWEED HEADS
25-27 BOYD STREET, TWEED HEADS

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
CIVIL WORKS PLAN - GROUND FLOOR


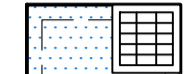
JOB NUMBER
NL223052

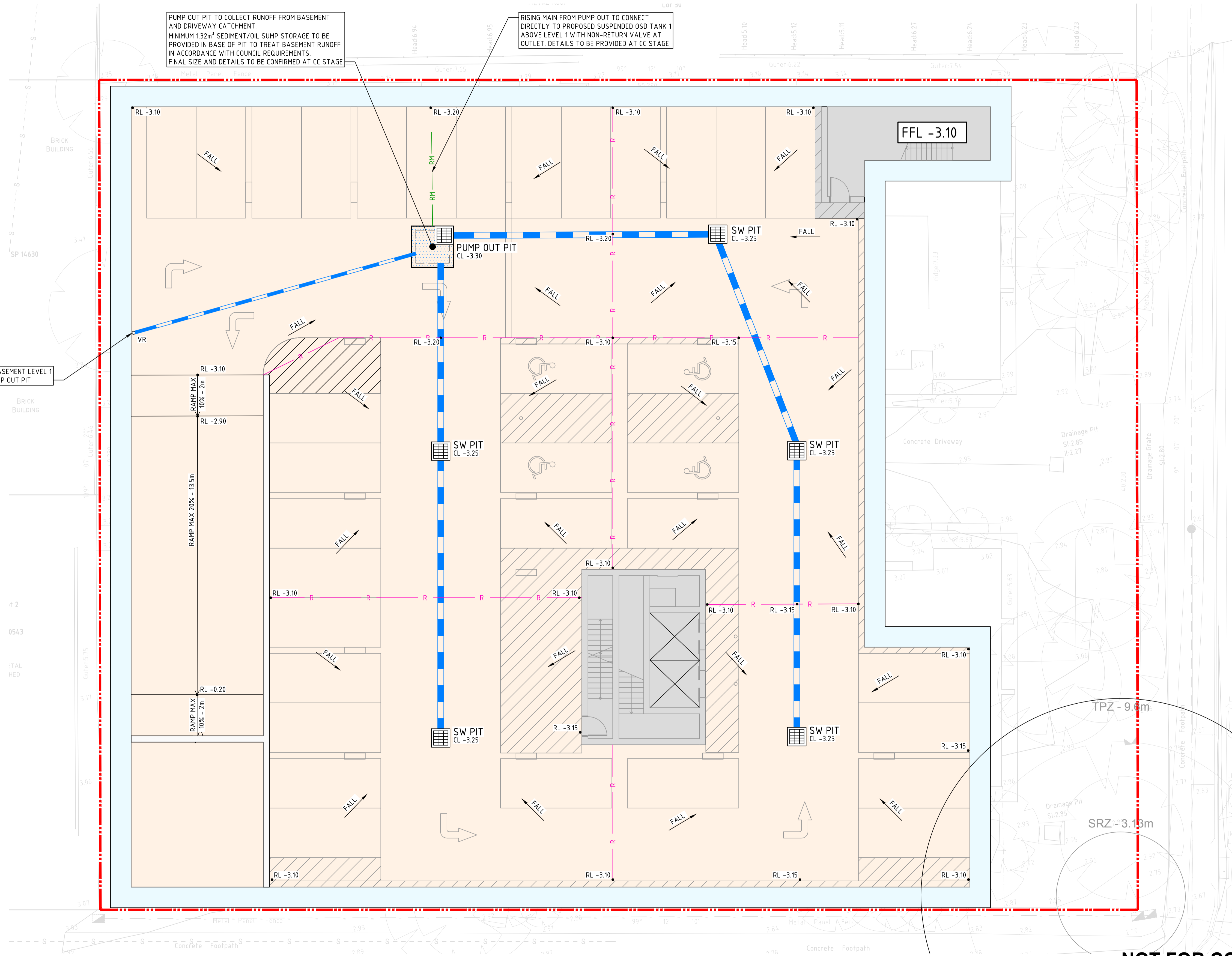
DRAWING NUMBER
DA-C04.01

REVISION
D

DRAWING SHEET SIZE = A1

LEGEND

- SITE BOUNDARY LINE
- STORMWATER PIPE
- PROPOSED RISING MAIN
-  SW PIT
CL xx.xx
IL xx.xx
-  PUMP OUT PIT. DETAILS TO BE PROVIDED AT CC STAGE
- RL XX.XX PROPOSED SPOT HEIGHT
- FALL DIRECTION OF GRADE
- RIDGE IN FINISHED PAVEMENT LEVEL
- FFL XX.XX PROPOSED FINISHED FLOOR LEVEL
- PROPOSED BUILDING FOOTPRINT TO ARCHITECTS DETAILS
- PROPOSED TRAFFICABLE PAVEMENT/SLAB. DETAILS TO BE PROVIDED AT CC STAGE
- PERIMETER WALL TO ARCHITECTS DETAILS



DRAWN: J. KNIGHT DESIGNED: E. GEARING JOB MANAGER: K. SINCLAIR VERIFIER: K. SINCLAIR

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CLIENT



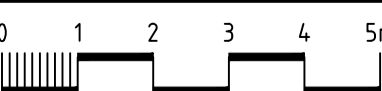
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PROJECT
HOMES NSW - TWEED HEADS
25-27 BOYD STREET, TWEED HEADS

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
CIVIL WORKS PLAN - BASEMENT LEVEL 2

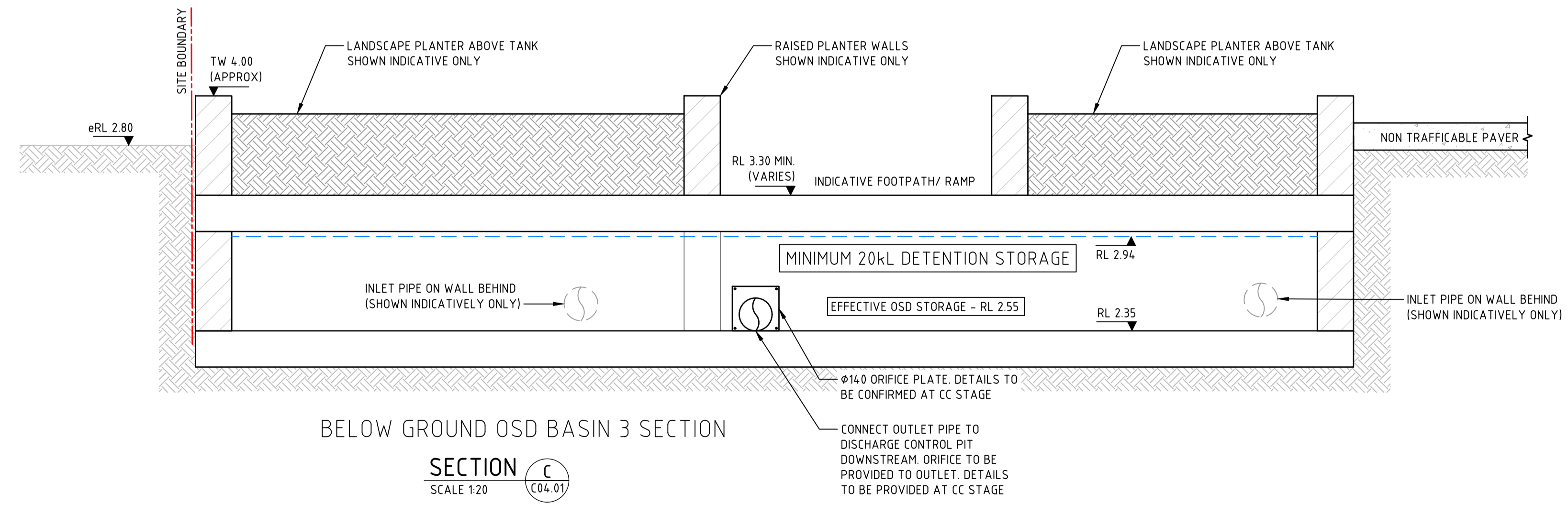
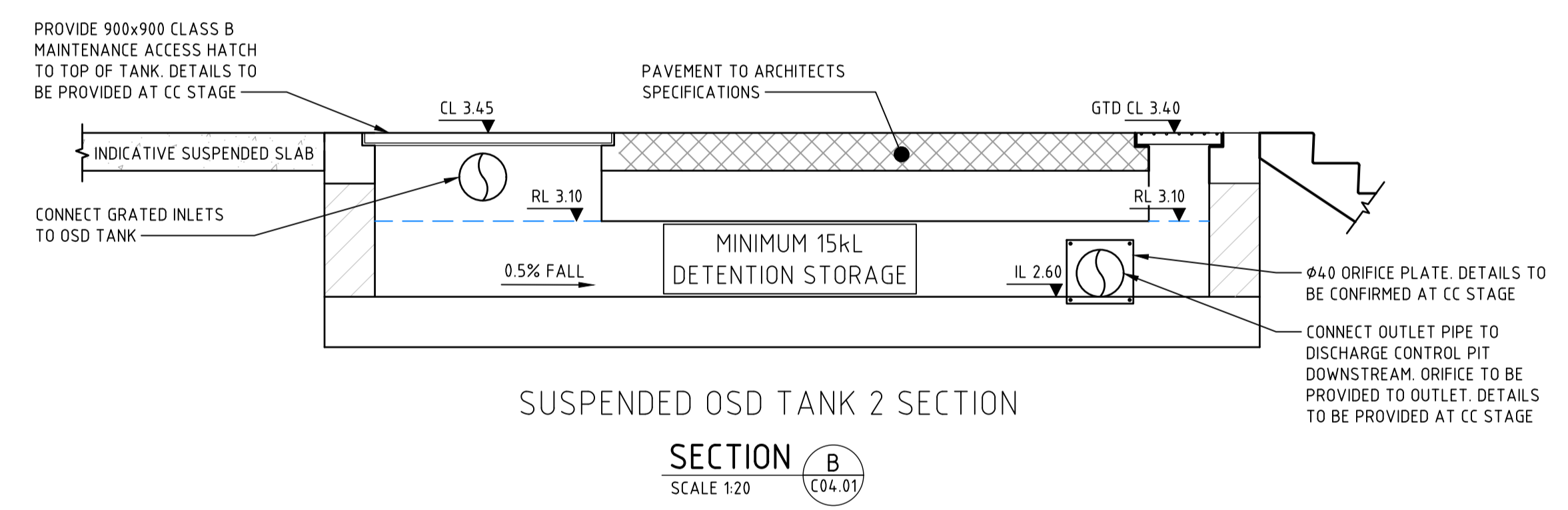
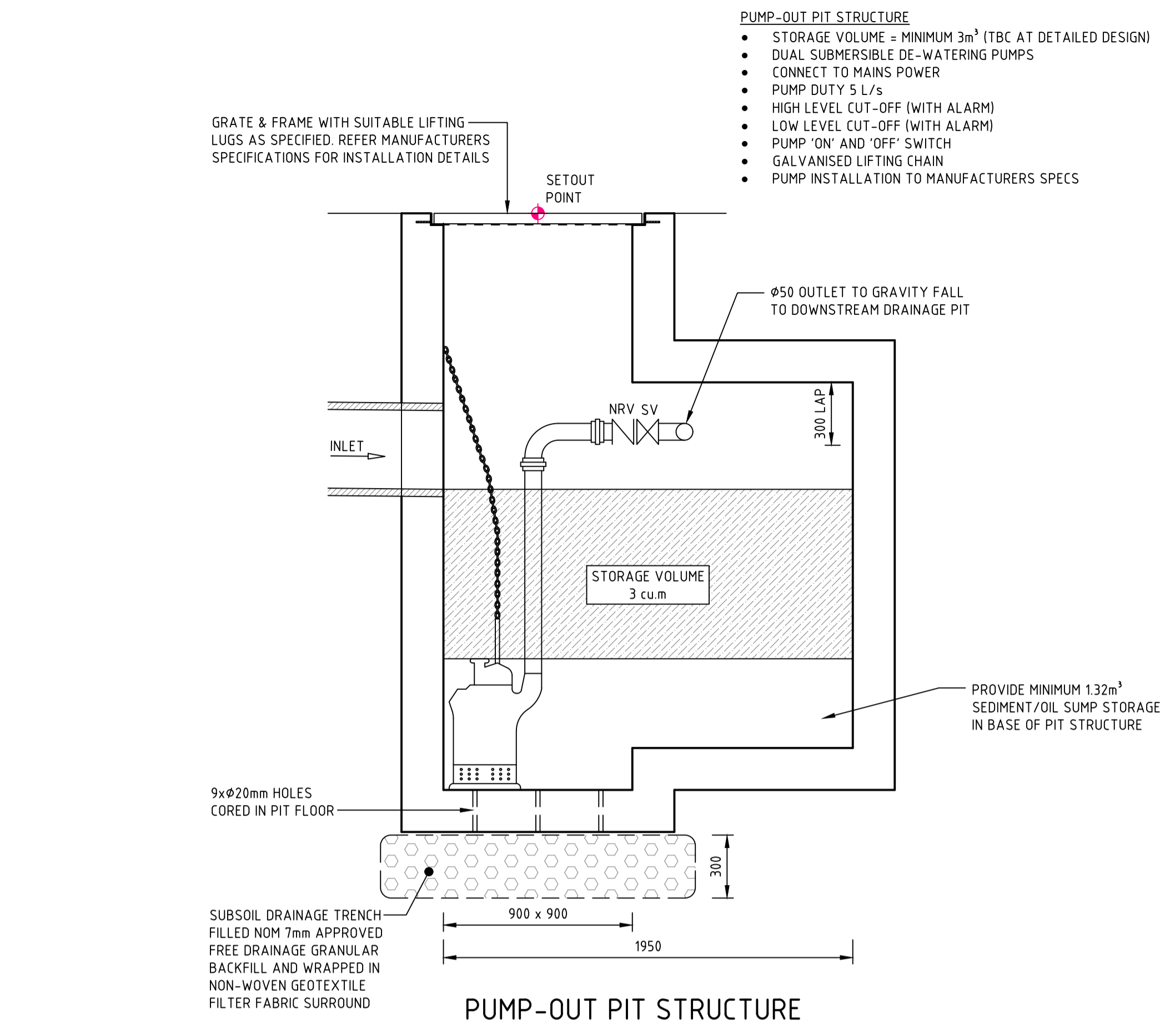
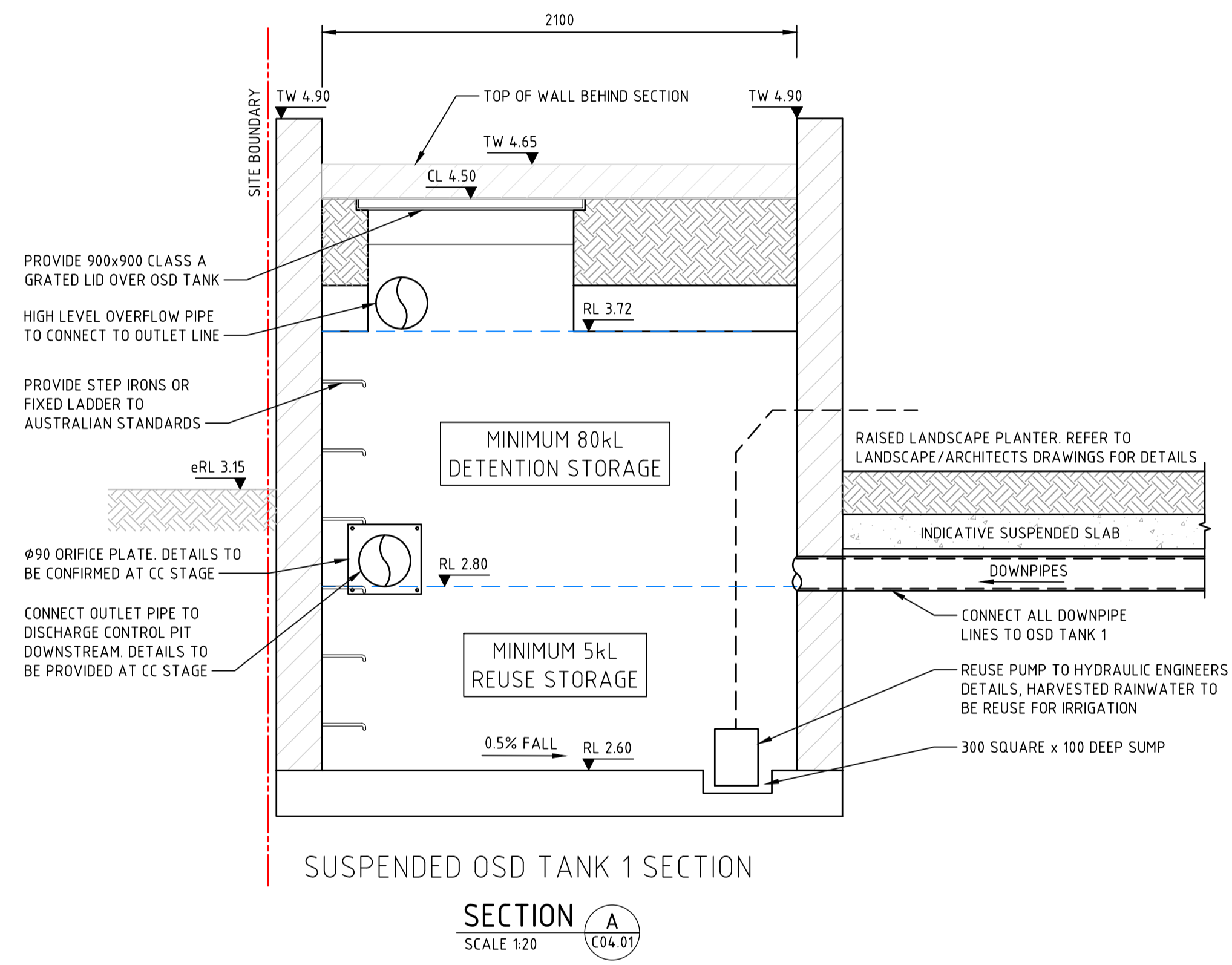
JOB NUMBER
NL223052

DRAWING NUMBER
DA-C04.12

REVISION
B

DRAWING SHEET SIZE = A1

DRAWN: J. KNIGHT
DESIGNED: E. GEARING
JOB MANAGER: K. SINCLAIR
VERIFIER: K. SINCLAIR



- PUMP-OUT PIT STRUCTURE**
- STORAGE VOLUME = MINIMUM 3m³ (TBC AT DETAILED DESIGN)
 - DUAL SUBMERSIBLE DE-WATERING PUMPS
 - CONNECT TO MAINS POWER
 - PUMP DUTY 5 L/s
 - HIGH LEVEL CUT-OFF (WITH ALARM)
 - LOW LEVEL CUT-OFF (WITH ALARM)
 - PUMP 'ON' AND 'OFF' SWITCH
 - GALVANISED LIFTING CHAIN
 - PUMP INSTALLATION TO MANUFACTURERS SPECS

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PROJECT: **HOMES NSW - TWEED HEADS**
25-27 BOYD STREET, TWEED HEADS

DRAWING TITLE: **CIVIL ENGINEERING PACKAGE**
CIVIL DETAILS

JOB NUMBER: NL223052	
DRAWING NUMBER: DA-C09.01	REVISION: D
DRAWING SHEET SIZE = A1	