

# NSW GOVERNMENT

## MOREE BESS

### WSP CIVIL DRAWINGS



LOCALITY PLAN  
N.T.S.

DRAWING SCHEDULE	
DRAWING No.	DRAWING TITLE
C000	COVER SHEET, LOCALITY PLAN AND DRAWING SCHEDULE
C005	EROSION AND SEDIMENT CONTROL LAYOUT PLAN
C006	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 1 OF 2
C007	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 2 OF 2
C010	BULK EARTHWORKS LAYOUT PLAN
C011	VEHICLE TURNING PATHS
C030	STORMWATER DRAINAGE LAYOUT PLAN
C031	STORMWATER DRAINAGE LAYOUT PLAN
C032	STORMWATER CATCHMENTS LAYOUT PLAN
C100	CIVIL DETAILS - SHEET 1 OF 2
C101	CIVIL DETAILS - SHEET 2 OF 2

										CLIENT: NSW GOVERNMENT		PROJECT: MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400		SCALE @ A1: N/A		CHECKED: JM		APPROVED: SN					
B A		20/02/2025 28/03/2024		FM FM		BASIN AMENDED PRELIMINARY ISSUE		JM JM		SN SN		ARCHITECT: -		TITLE: COVER SHEET, LOCALITY PLAN AND DRAWING INDEX		PROJECT NUMBER: PS212248		DRAWN: FM		DATE: 20/02/2025			
REV.		DATE		BY		DESCRIPTION		CHK		APP				DRAWING No: C000				REV: B					
DRAWING STATUS: PRELIMINARY												© WSP Australia Pty Ltd											



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LEGEND

PROPOSED BUILDING AREA

TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION  
REFER DETAIL DWG 0000

PROPOSED STABILISED SITE ENTRY/EXIT  
LOCATION TO BE DETERMINED BY CONTRACTOR

PROPOSED 100mm TOPSOIL AND HYDROSEED  
WITH SHORT AND LONG TERM SEEDING

PROPOSED CONSTRUCTION ACCESS ROAD  
REFER DETAIL DWG 0000

OVERLAND FLOW PATH

PROPOSED STORMWATER DRAINAGE PIPE AND MANHOLE

PROPOSED SEDIMENT FENCE

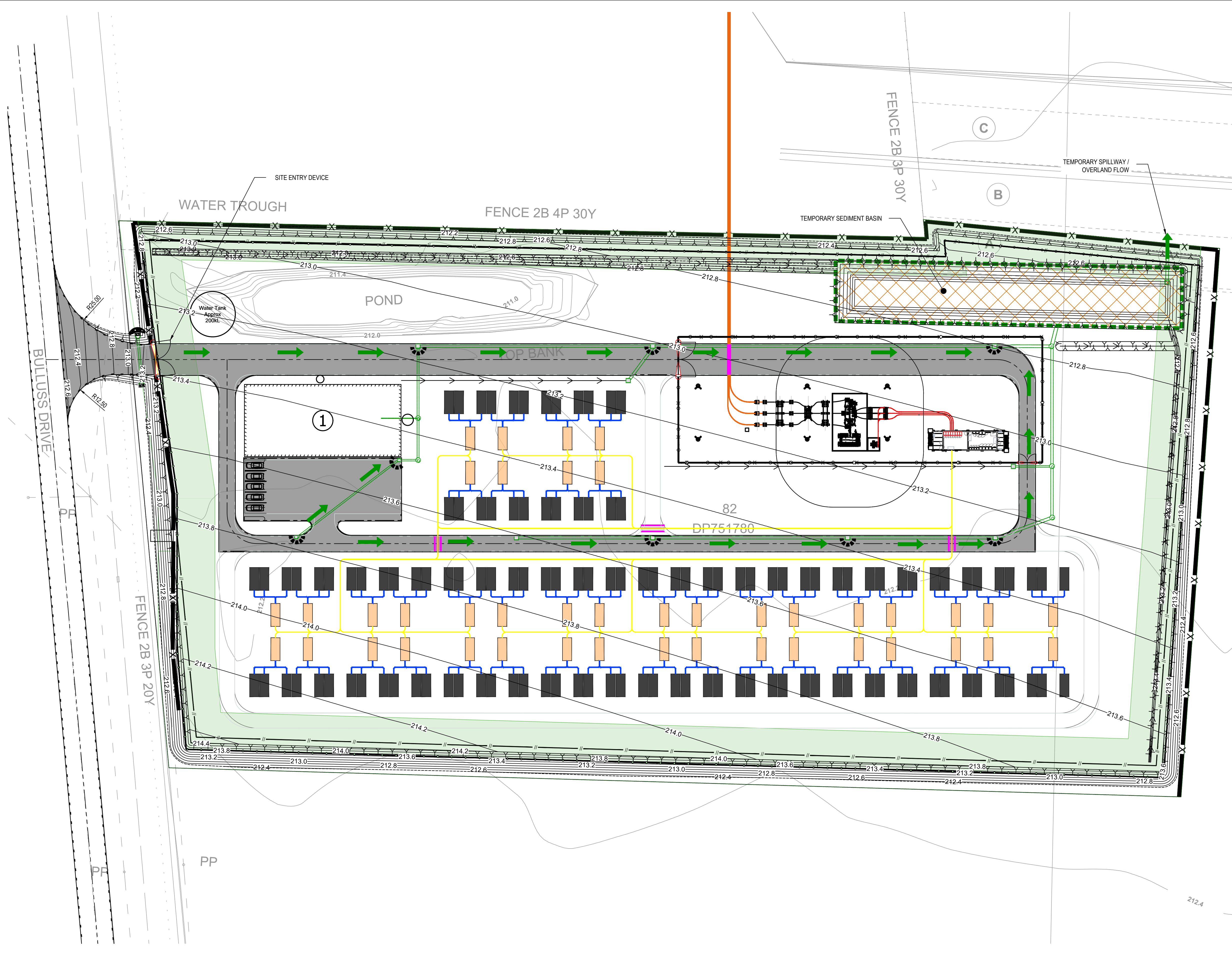
PROPOSED INLET SEDIMENT TRAP

PROPOSED ROCK CHECK DAM

PROPOSED TEMPORARY DIVERSION DRAIN

PROPOSED SWALE DRAIN

PROPOSED FINISHED PLATFORM LEVELS CONTOUR



B	20/02/2025	FM	BASIN AMENDED	JM	SN
A	28/03/2024	FM	PRELIMINARY ISSUE	JM	SN
REV	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS:			PRELIMINARY		

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CLIENT:	NSW GOVERNMENT
ARCHITECT:	

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	EROSION AND SEDIMENT CONTROL LAYOUT PLAN

SCALE @ A1:	1:500	CHECKED:	JM	APPROVED:	SN
PROJECT NUMBER:	PS212248	DRAWN:	FM	DATE:	20/02/2025
DRAWING No: C005					REV: B
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EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, LANDSCAPING PLANS AND WRITTEN INSTRUCTIONS RELATING TO THE SUBJECT DEVELOPMENT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION INCLUDING THE MAINTENANCE PERIOD.
- THE EXTENT AND POSITION OF THE EROSION AND SEDIMENT CONTROL MEASURES TO BE DETERMINED ON SITE BY THE CONTRACTOR TO SUIT THE CONSTRUCTION PROGRAM.
- THESE PLANS PRESENT CONCEPTS ONLY AND THE MEASURES SHOWN ON THIS DRAWING(S) ARE MINIMUM REQUIREMENTS ONLY.
- THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT, MANAGEMENT AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES TO MEET COUNCIL STANDARDS.
- LARGE OPEN AREAS OR STEEP BATTERS SHOULD NOT BE LEFT EXPOSED/UNSTABILISED FOR MORE THAN 10 DAYS OR IF WET WEATHER IS FORECAST.
- EXPOSED AREAS INCLUDING BATTERS WHICH REMAIN UN-WORKED FOR MORE THEN 10 DAYS SHOULD BE STABILISED USING TEMPORARY HYDROMULCHING, HYDROSEEDING OR MULCHING, EVEN IF AREAS WILL BE WORKED AT A LATER TIME.
- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF THE INSTITUTION OF ENGINEERS AUSTRALIA, 'SOIL EROSION AND SEDIMENT CONTROL - ENGINEERING GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES.
- THE CONTRACTOR SHALL BE AWARE OF ITS RESPONSIBILITIES FOR PROTECTING THE DOWNSTREAM ENVIRONMENT AND RECEIVING WATER FROM POLLUTION AND ENVIRONMENTAL HARM, UNDER THE ENVIRONMENTAL PROTECTION ACT. 1994.
- ADDITIONALLY THE CONTRACTOR SHALL BE AWARE OF ITS DUTY TO NOTIFY THE LOCAL AUTHORITY AND THE ENVIRONMENTAL PROTECTION AGENCY (QLD) OF A POTENTIAL OR ACTUAL INCIDENT OF ENVIRONMENTAL HARM, UNDER THE ENVIRONMENTAL PROTECTION ACT. 1994.

RECOMMENDED IMPLEMENTATION SEQUENCE:

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO WORKS COMMENCING AND IN THE FOLLOWING SEQUENCE.
  - CONSTRUCT TEMPORARY STABILISED SITE ACCESS, ENSURING ADJACENT STORMWATER RUN OFF IS DIVERTED AWAY FROM ACCESS
  - INSTALL SEDIMENT FENCING AND/OR BARRIER FENCING TO CONFIN EGRESS TO AND EGRESS FROM THE SITE TO STABILISED ACCESS POINT(S) ONLY.
  - PROVIDE INLET PROTECTION TO STORMWATER INLETS AND GULLIES ON ALL ROADS ADJOINING THE SITE.
  - CONSTRUCT BARRIER FENCING AROUND RESTRICTED 'NO-GO' ZONES OF RETAINED VEGETATION, AREAS NOT TO BE DISTURBED AND AREAS WHICH WILL REMAIN UN-WORKED.
  - CONSTRUCT UPSTREAM DIVERSION CHANNELS TO DIVERT CLEAN WATER AROUND WORKSITE, AND INSTALL APPROPRIATE CHANNEL STABILISATION.
  - CONSTRUCT LOW FLOW EARTH BANKS AS CATCH DRAINS PARALLEL TO CONTOURS TO LIMIT LARGE SLOPE LENGTHS (SLOPES SHOULD BE LESS THEN 80M IN LENGTH).
  - INSTALL ALL TEMPORARY SEDIMENT FENCES.
  - CONSTRUCT ANY NOMINATED SEDIMENT BASINS AND SEDIMENT TRAPS.
  - STABILISE ALL DISTURBED AREAS ASAP AND PROGRESSIVELY AS WORKS ARE COMPLETED. TEMPORARY STABILISATION TO BE DONE USING MULCHING, HYDROMULCHING, HYDROSEEDING OR DIRECT SEEDING TO GIVE A 70% COVERAGE OF GROUND SURFACE WITHIN 14 DAYS OF WORKS COMPLETING (EVEN IF WORKS MAY CONTINUE LATER).
- UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO MINIMUM WORKABLE AREAS.
- DISTURBED AREAS TO EXTEND NO MORE THAN 5 METRES (PREFERABLY 2 METRES) FROM ESSENTIAL WORKS AREAS.
- WORK AREAS TO BE DELINEATED BY BARRIER FENCING AND DIVERSION CHANNEL UPSLOPE AND SEDIMENT FENCING DOWNSLOPE.
- THE CONTRACTOR SHALL ENSURE THAT THE EXISTING VEGETATION AND GROUND COVER IS RETAINED AS MUCH AS POSSIBLE.
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON SITE.
- NATIVE SITE VEGETATION REQUIRED AND APPROVED FOR CLEARING SHOULD BE MULCHED AND STOCKPILED FOR LATER USE IN LANDSCAPING, STABILISATION AND/OR SITE REHABILITATION WORKS.
- AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT ANY DOWNSTREAM CONSTRUCTION AND RECEIVING ENVIRONMENTS.
- EROSION AND SEDIMENT CONTROL PROTECTION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONTRACT.
- PLANS AND CONTROL MEASURES FOR LARGE SITES WILL NEED TO BE REVISED AND UPDATED TO REFLECT THE SITE STAGES AND PROGRESSION OF WORKS.
- MEASURES INCLUDING SEDIMENT FENCES SHOULD BE MOVED AND REINSTATED AS WORKS PROGRESS.
- FOOT AND VEHICULAR TRAFFIC TO BE RESTRICTED IN RECENTLY STABILISED AREAS INCLUDING THOSE HYDROSEEDED, TURFED OR SEEDD.

CONTROL MEASURES

- FINAL SITE LANDSCAPING SHALL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS OF CONSTRUCTION COMPLETION
- SEDIMENT LADEN WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM BY USING INLET PROTECTION.
- ALL PERIMETER BANKS AND CHANNEL DRAINS SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED ONCE SITE IS STABILISED AND UPSTREAM WORKS HAVE BEEN COMPLETED.
- AT CONSTRUCTION COMPLETION ALL TEMPORARY EARTH STRUCTURES, INCLUDING SOIL STOCKPILES ARE TO BE TRACK ROLLED AND SEEDD. THE CONTRACTOR IS TO ENSURE A 70% COVERAGE WITHIN 14 DAYS.

DUST CONTROL

- DURING WINDY AND DRY WEATHER ANY UNPROTECTED AREAS SHALL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL. WHERE WATER IS NOT AVAILABLE IN SUFFICIENT QUANTITIES, SOIL BINDERS OR DUST RETARDANTS TO BE USED FOR DUST SUPPRESSION.
- EXPOSED SURFACES INCLUDING BATTERS SHOULD BE LEFT ROUGH TO REDUCE WIND SPEEDS AND POTENTIAL FOR WIND EROSION.
- USE OPEN WEAVE BARRIER FENCING ON WINDWARD SIDE OF SITE IF REQUIRED (REFER DETAIL). FENCING IS GENERALLY REQUIRED WHERE AREA OF DISTURBANCE IS >500m<sup>2</sup>.

OTHER MATTERS

- ACCEPTABLE RECEPTORS AND DISPOSAL PRACTICES WILL BE USED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHERS, LITTER AND GENERAL WASTE MATERIALS.
- ANY EXISTING TREES WHICH ARE NOT REQUIRED OR APPROVED TO BE CLEARED FOR THE WORKS AND/OR FORM PART OF THE FINAL LANDSCAPING PLAN SHOULD BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
  - PROTECTING THEM WITH BARRIER FENCING OR MARKERS.
  - ENSURING NOTHING IS NAILED TO THEM
  - PROHIBITING PAVING, GRADED OR PLACING OF STOCKPILES WITHIN DRIP LINE.
- ALL VEHICLE AND EQUIPMENT WASHING SHOULD BE CONTAINED IN SPECIFIC BUNDED AREAS, DISCONNECTED FROM CONCENTRATED FLOW PATHS AND THE STORMWATER SYSTEM.
- ANY NECESSARY VEHICLE OR EQUIPMENT REFUELING SHOULD BE UNDERTAKEN AWAY FROM CONCENTRATED FLOW PATHS AND PREFERABLY WITHIN A BUNDED AREA.
- ANY ONSITE FUEL STORAGE AREAS SHOULD BE COVERED AND BUNDED.

MAINTENANCE OF PUBLIC ROADS

- ALL CONSTRUCTION VEHICLES DEPARTING FROM THE SITE SHALL HAVE THEIR TYRES WASHED DOWN OR SEDIMENT REMOVED BY A STABILISED SITE ACCESS DEVICE.
- THE STABILISED SITE ACCESS AREAS SHALL BE LOCATED SUCH THAT SILTED WATER IS FILTERED THROUGH A SUITABLE SEDIMENT TRAP (SUCH AS A SEDIMENT FENCE) INSTALLED DOWNSTREAM OF ACCESS. THE CONTRACTOR SHALL INSPECT THE PUBLIC ROADS ADJACENT TO THE SITE DAILY AND MANUALLY REMOVE ANY SEDIMENT DEPOSITS (BY SWEEPING NOT WASH DOWN).

SITE INSPECTION AND MAINTENANCE

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED REGULARLY, IMMEDIATELY BEFORE SITE CLOSURE, PRIOR TO PREDICTED LARGE STORM EVENTS AND AFTER EVERY SIGNIFICANT (> 5MM) RAINFALL EVENT OR AT LEAST ON A WEEKLY BASIS.
- THE CONTRACTOR WILL AS A MINIMUM CONDUCT EACH INSPECTION IN LINE WITH THE FOLLOWING
  - RECORD TYPE OF DEVICE/CONTROL MEASURE BEING INSPECTED AND ITS LOCATION;
  - RECORD THE CONDITION OF EVERY CONTROL MEASURE;
  - RECORD MAINTENANCE REQUIREMENTS FOR EVERY CONTROL DEVICE;
  - RECORD SEDIMENT VOLUMES REMOVED FROM SEDIMENT TRAPPING DEVICES;
  - RECORD DETAILS OF SEDIMENT BASIN TREATMENT, FLOCCULANT DOSAGE AND CLEANOUT;
  - RECORD SEDIMENT DISPOSAL PROCEDURES AND LOCATION.
- REPAIRS AND MAINTENANCE OF ALL DEVICES AND MEASURES INCLUDING DIVERSION CHANNELS SHALL BE UNDERTAKEN AS REQUIRED, ENSURING ALL MEASURES ARE FULLY FUNCTIONAL AT ALL TIMES.
- ENSURE SEDIMENT LADEN WATER HAS NOT BEEN DIVERTED AROUND DEVICES.
- REPAIR SCOUR DAMAGE TO SEDIMENT CONTROL MEASURES AFTER RAINFALL EVENTS AND REINSTATE DEVICES AS NECESSARY.
- SEDIMENT FENCES WILL REQUIRE CLEANING WHEN SEDIMENT REACHES 300MM DEPTH OR ONE-HALF THE HEIGHT OF THE FILTER FABRIC AND ALL OTHER SEDIMENT TRAPS WILL REQUIRE CLEANING OUT WHEN 30% OF DESIGN CAPACITY IS REACHED.
- ALL INLET AND GULLY TRAPS TO BE CLEANED NOT HOSED AFTER EVERY RAINFALL EVENT, (1>5mm) OR AT LEAST ON A WEEKLY BASIS.
- SEDIMENT REMOVED FROM ANY TRAPPING DEVICE TO BE RELOCATED, ENSURING FURTHER POLLUTION TO DOWNSTREAM ENVIRONMENTS WILL NOT OCCUR.
- ALL SEEDING, HYDROSEEDING AND TURFING REQUIRES REGULAR WATERING, UNTIL EFFECTIVE COVER ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. WATERING SHOULD VARY DEPENDING ON WEATHER AND SOIL CONDITIONS.
- WATERING SHOULD START IMMEDIATELY AFTER PLANTING AND SHOULD COMPLY WITH THE FOLLOWING AS A MINIMUM:

WEEK 1	3 WATERINGS/WEEK
WEEK 2-6	2 WATERINGS/WEEK
WEEK 7-12	1 WATERING/WEEK
- EXCESSIVE VEGETATION GROWTH WILL BE CONTROLLED THROUGH MOWING OR SLASHING.
- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE INSPECTION, MAINTENANCE AND TESTING OF DEVICES IS UNDERTAKEN ON SITE.
- THE CONTRACTOR TO KEEP DETAILED AND LEGIBLE RECORDS OF ALL INSPECTION AND MAINTENANCE UNDERTAKEN ON THE EROSION AND SEDIMENT CONTROL DEVICES.
- ALL SITE WASTE INCLUDING GENERAL RUBBISH TO BE DISPOSED OF IN AN ENVIRONMENTALLY RESPONSIBLE MANNER IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION (WASTE MANAGEMENT) POLICY 2000 AND ENVIRONMENTAL PROTECTION (WASTE MANAGEMENT) REGULATION 2000.
- THE CONTRACTOR SHALL CONSTRUCT AND IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO ENSURE PROTECTION OF DOWNSTREAM ENVIRONMENTS.

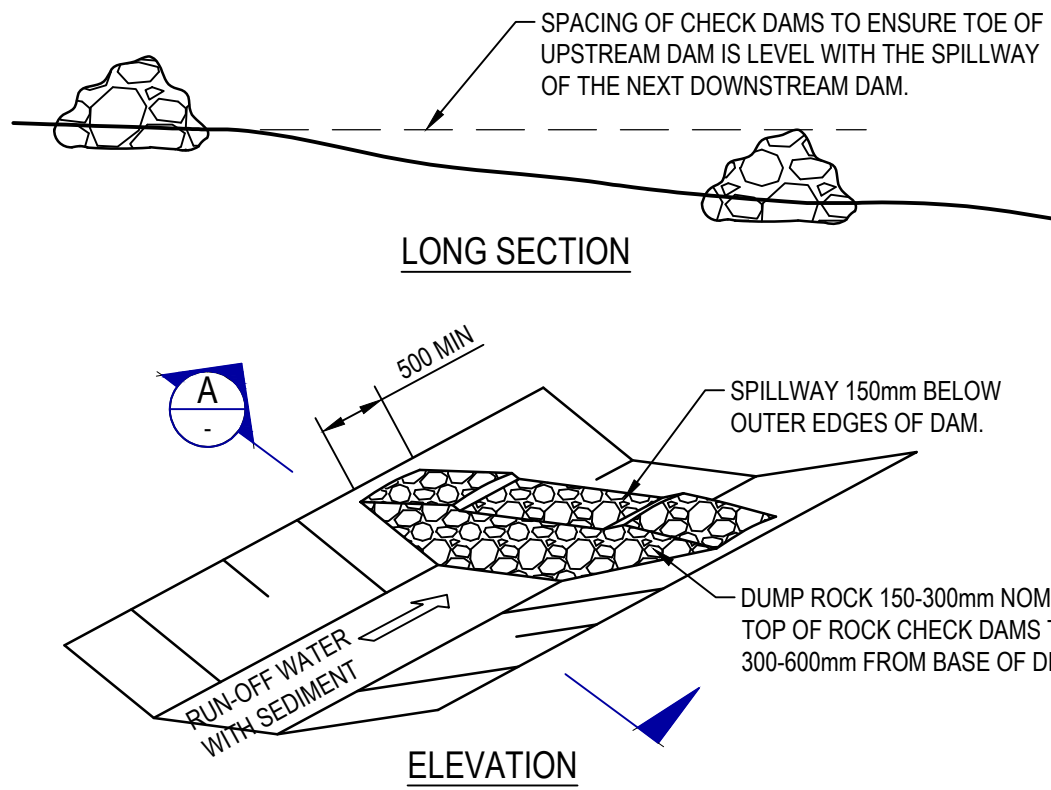
SEDIMENT BASIN MAINTENANCE

- THE CONTRACTOR SHALL KEEP DETAILED AND ACCURATE RECORDS OF THE MONITORING, TREATMENT, TESTING AND MAINTENANCE OF THE SEDIMENT BASIN INCLUDING RECORDED RAINFALL VOLUME, FLOCCULATING AGENTS USED AND TEST RESULTS PRIOR TO DEWATERING.
- THE STORMWATER RUNOFF COLLECTED IN THE SEDIMENT BASIN SHALL BE MONITORED, TREATED AND TESTED PRIOR TO DISCHARGE, INCLUDING WATER TO BE REUSED ON SITE.
- WATER TESTING TO BE UNDERTAKEN BY A SUITABLY QUALIFIED PERSON.
- ALL LABORATORY TESTING TO BE UNDERTAKEN BY A NATA ACCREDITED LABORATORY.
- ALL WATER PUMPED FROM THE SEDIMENT BASIN SHALL BE TESTED FOR ENVIRONMENTAL COMPLIANCE AGAINST THE RELEASE CRITERIA IN THE TABLE BELOW (AS A MINIMUM), UNLESS ALTERNATIVE (MORE STRINGENT) STANDARDS ARE SPECIFIED BY THE LOCAL AUTHORITY PRIOR TO RELEASE.

PARAMETER	RELEASE CRITERIA
SUSPENDED SOLIDS	50mg/l MAX
pH	WITHIN RANGE 6.5-8.5
VISUAL AMENITY	NO VISUAL PLUME

- WATER TESTING TO BE UNDERTAKEN USING EITHER A HANDHELD PH/TURBIDITY METER OR SAMPLES COLLECTED FOR LABORATORY TESTING PRIOR TO BASIN DEWATERING.
- THE SEDIMENT BASIN SHALL BE TREATED BY FLOCCULATION AFTER ALL RAINFALL EVENTS (> 5MM) USING GYPSUM OR ALUM. MANUAL DOSAGE OF BASIN SHALL BE UNDERTAKEN USING A MINIMUM RATE OF 32kg/100m<sup>3</sup> FOR GYPSUM AND 1.5-8kg/100m<sup>3</sup> FOR ALUM. HIGHER DOSAGE MAY BE REQUIRED DEPENDING ON SOIL TYPE AND APPLICATION TECHNIQUE.
- THE CHOSEN FLOCCULENT SHALL BE SPREAD EVENLY OVER THE BASIN SURFACE AREA. THE BASIN WILL REQUIRE A PUMP SYSTEM TO SPRAY SLURRY OF FLOCCULANTS OVER SURFACE AT AN ANGLE OF 10 - 20 DEGREES.
- THE TREATED BASIN SHALL BE DEWATERED WITH A PUMP SYSTEM WITH A FLOATING INLET TO ENSURE SETTLED SEDIMENT IS NOT ENTRAINED AND DISCHARGED.
- BASIN DEWATERING SHALL OCCUR WITHIN 5 DAYS FROM CONCLUSION OF RAINFALL EVENT.
- SEDIMENT BASINS WILL REQUIRE DEWATERING AND SEDIMENT CLEANOUT ONCE STORAGE CAPACITY REACHES 70%.
- CAPTURED SEDIMENT WILL BE DISPOSED OF IN AN ENVIRONMENTALLY RESPONSIBLE MANNER AS TO NOT CAUSE FURTHER CONTAMINATION OR DOWNSTREAM POLLUTION. SEDIMENT SHOULD NOT BE DISPOSED OF IN CONCENTRATED FLOWS, WHERE IT CAN BE RE-ENTRAINED OR WHERE THE RECEIVING WATER HAS A PH OF < 5.5.
- THE BASIN AND ALL OTHER CONTROL DEVICES WILL BE MAINTAINED IN AN OPERATIONAL STATE UNTIL SITE STABILISED.
- REPAIR ANY SCOUR DAMAGE TO THE SEDIMENT BASIN BATTERS AND EMERGENCY SPILLWAY FOLLOWING RAINFALL EVENTS.
- SEDIMENT BASIN SHOULD NOT BE CONSTRUCTED WITH SMOOTH INTERNAL SLOPES AND BASIN BATTERS SHOULD NOT BE STEEPER THEN 3H:1(V).
- BASINS SHOULD BE APPROPRIATELY FENCED AND MARKED BY WARNING SIGNS IF UNSUPERVISED PUBLIC ACCESS IS LIKELY AND PUBLIC SAFETY IS AT RISK.

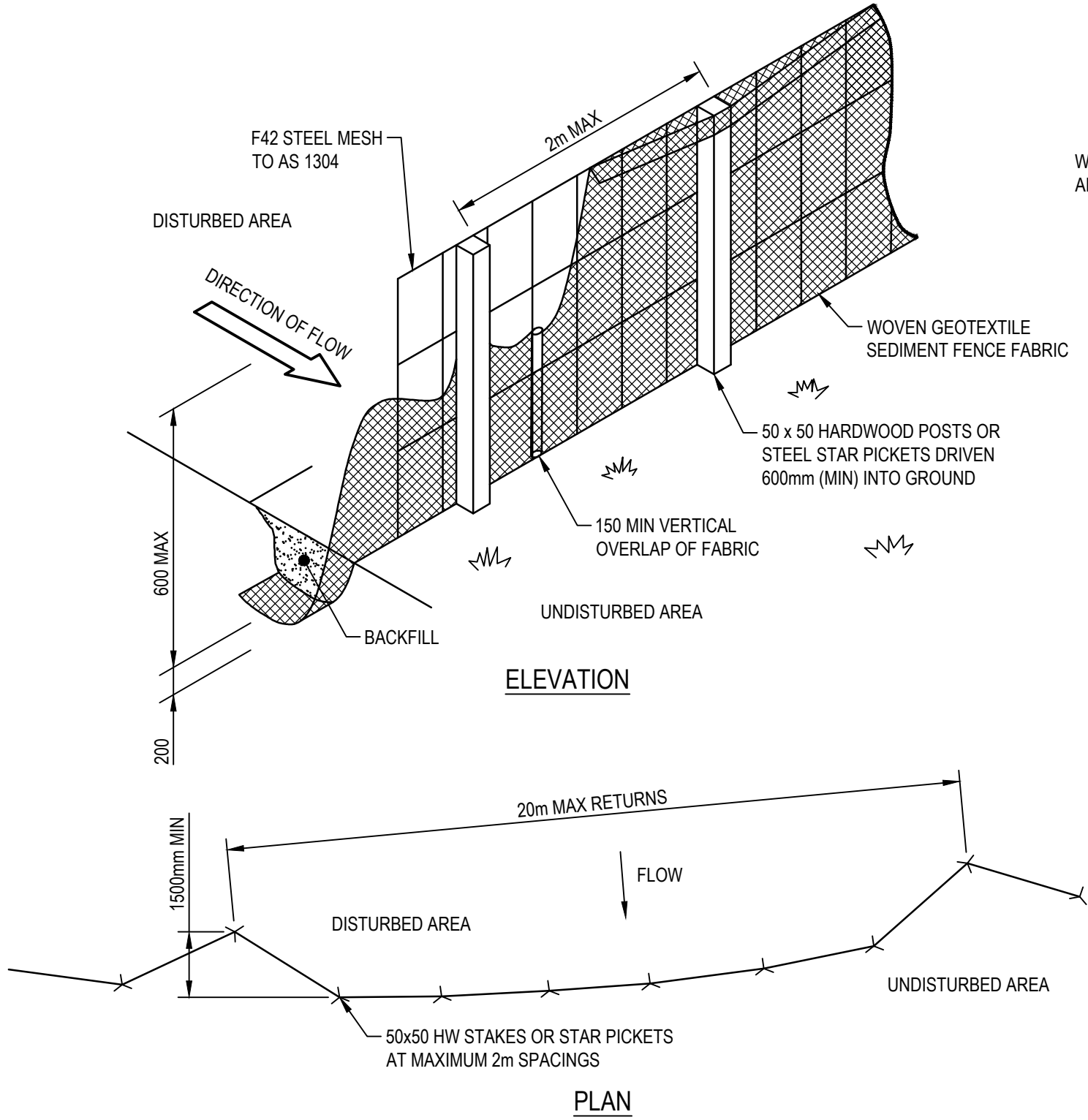
NOTE: ALL NOTES ON THIS PAGE ARE MINIMUM REQUIREMENTS AND ARE TO BE CONFIRMED BY THE CERTIFYING CPESC OR RPEQ ENGINEER



ROCK CHECK DAM DETAIL  
NTS

NOTES

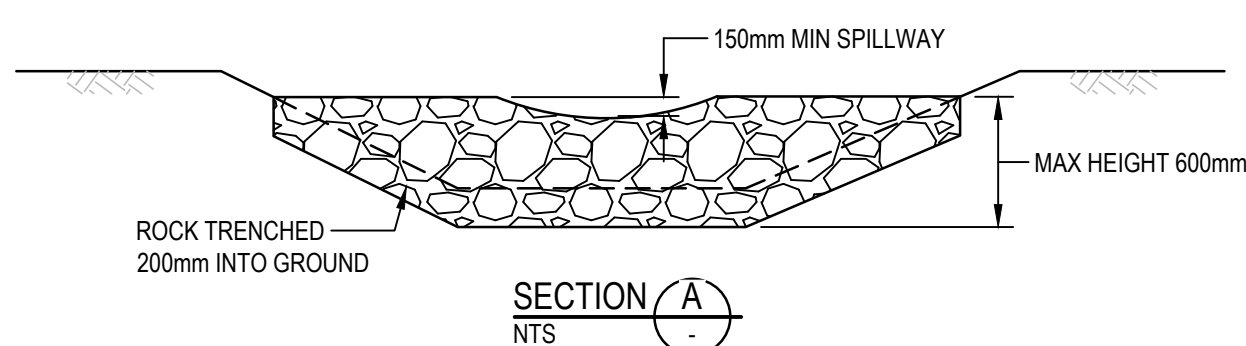
- INSPECT DAMS REGULARLY FOR SIGNS OF SCOUR, UNDERCUTTING AND SEDIMENT BUILD-UP.
- MAINTAIN THE DAM SO THAT RUNOFF WILL FLOW THOUGH WASHED ROCK OR OVER SPILLWAY AND NOT ERODE STREAM BANKS.
- REMOVE SEDIMENT ACCUMULATED BEHIND DAM WHEN NOTED.



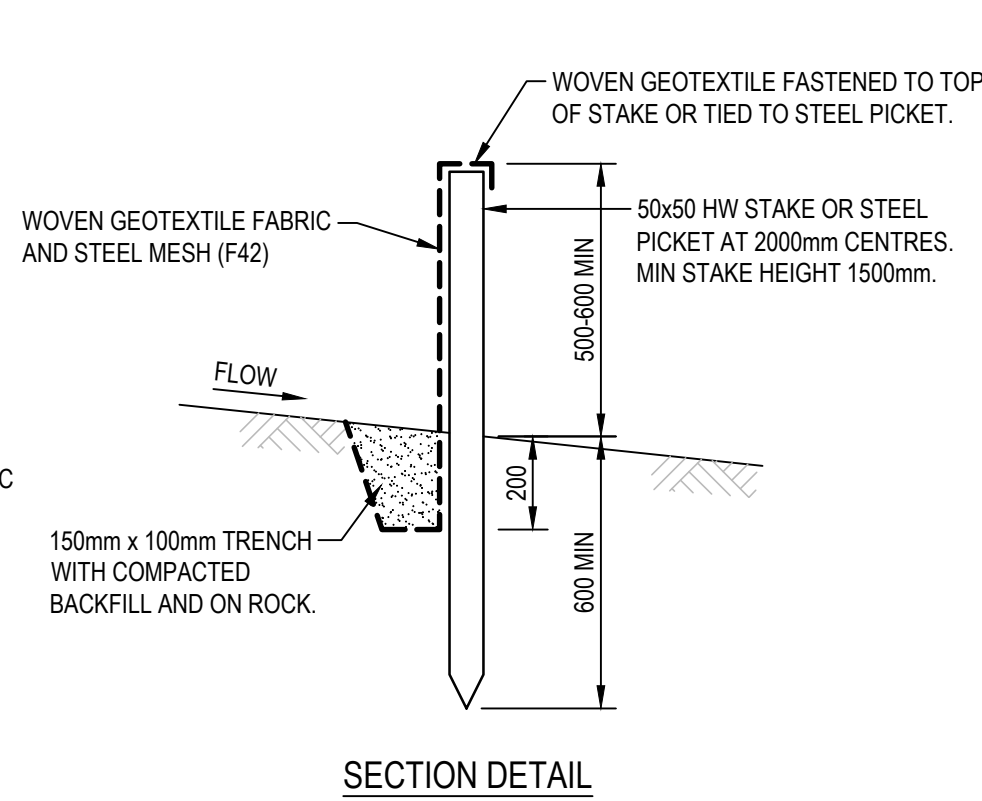
SEDIMENT FENCE DETAIL  
NTS

NOTES:

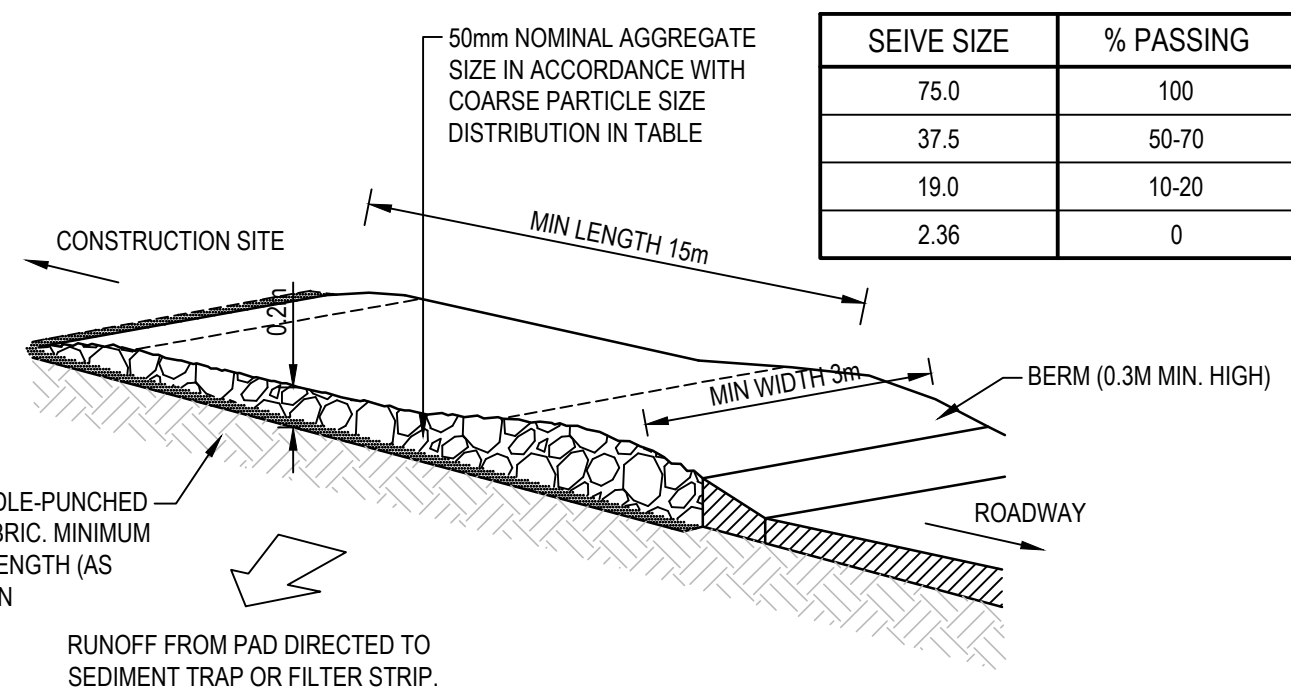
- HORIZONTAL BAR STEEL MESH TO BE FLUSH WITH TOP OF GEOTEXTILE FABRIC WITH NO VERTICAL BARS PROTRUDING PAST TOP OF SEDIMENT FENCE.
- NO SHADE CLOTH TO BE USED FOR SEDIMENT FENCING.
- CATCHMENT DRAINING TO SEDIMENT FENCE SHOULD BE MAX 0.6ha.
- UPSTREAM SLOPE TO BE 1:2 MAX AND SLOPE LENGTH 60m MAX.
- SEDIMENT FENCES ARE TO BE INSTALLED PARALLEL TO CONTOURS WHERE POSSIBLE AND HAVE RETURNS EVERY 20m, TO LIMIT CONTRIBUTING CATCHMENT AND ENCOURAGE PONDING
- SEDIMENT FENCES TO BE INSTALLED NO MORE THAN 5m FROM DISTURBED AREAS OR STOCKPILES.



SECTION A-A  
NTS



SECTION DETAIL



TEMPORARY STABILISED SITE ENTRY/EXIT (ROCK)  
NTS

NOTES:

- STABILISED ACCESS SHOULD BE CLEANED AND MAINTAINED AFTER EVERY RAINFALL EVENT (>5mm) AND WHEN SEDIMENT ACCUMULATION IS NOTED.
- FINE ACCUMULATED SEDIMENTS SHOULD BE REMOVED FROM AGGREGATE REGULARLY.

B	20/02/2025	FM	BASIN AMENDED	JM	SN
A	28/03/2024	FM	PRELIMINARY ISSUE	JM	SN
REV.	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS:			PRELIMINARY		

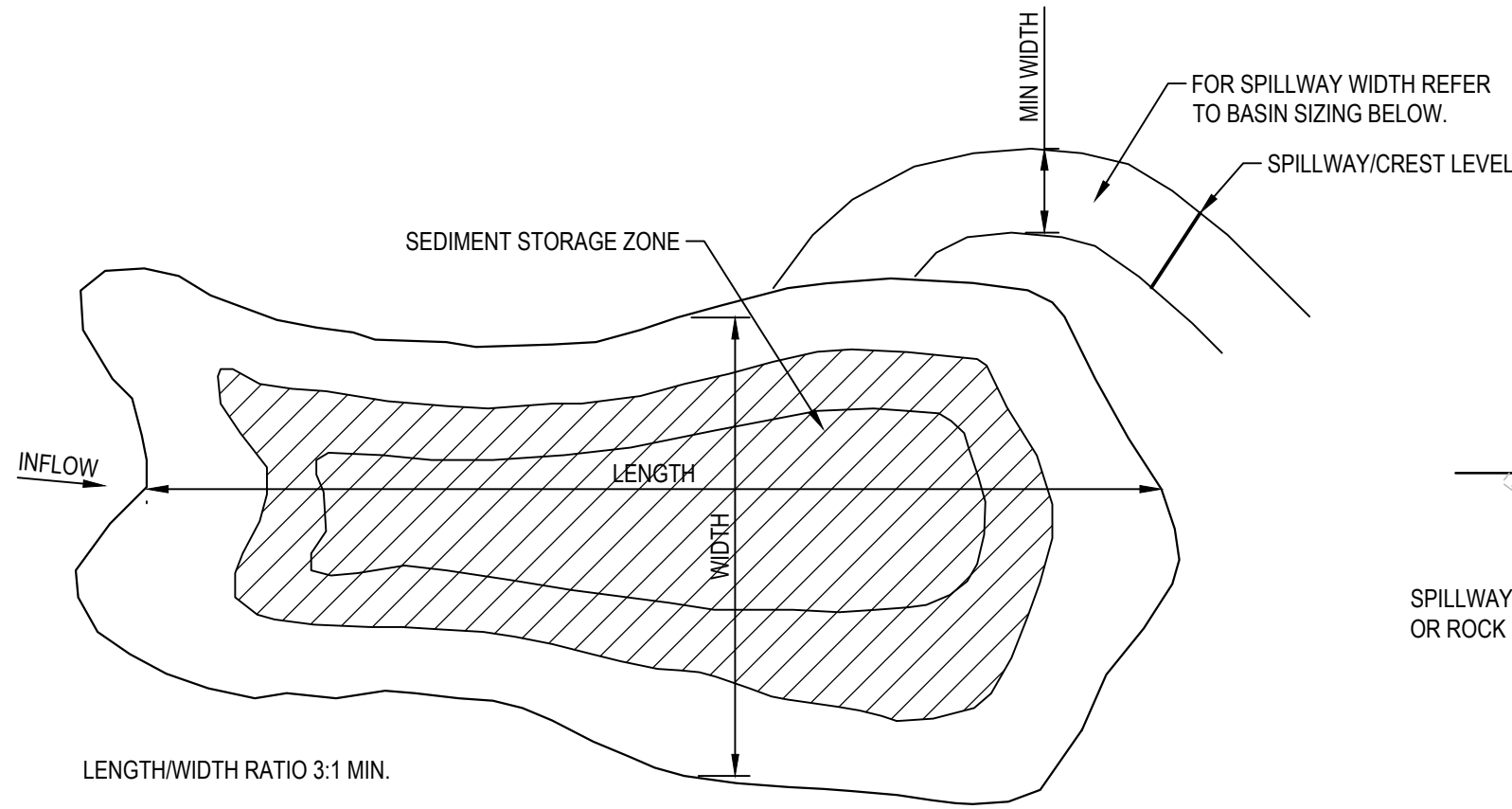


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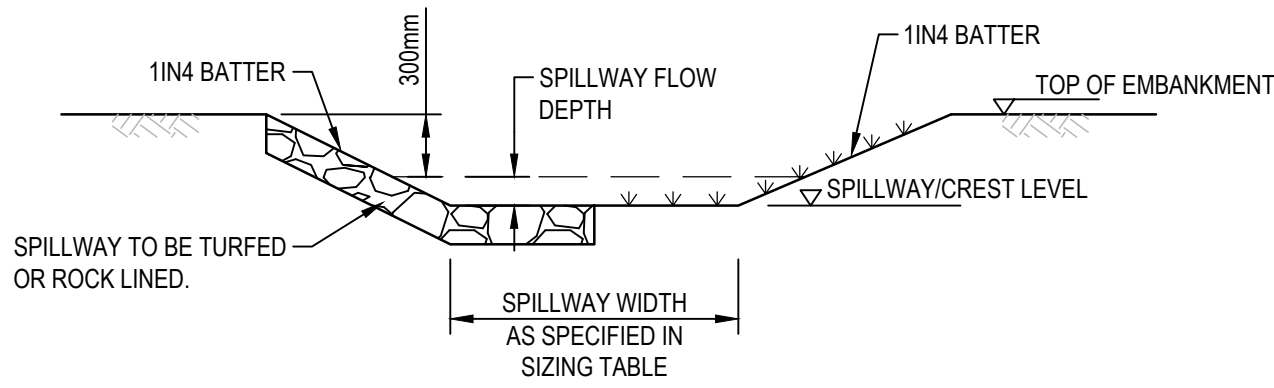
PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS SHEET 1 OF 2

SCALE @ A1:		CHECKED:		APPROVED:	
AS SHOWN		JM		SN	
PROJECT NUMBER:		DRAWN:		DATE:	
PS212248		FM		20/02/2025	
DRAWING No:				REV:	
C006				B	
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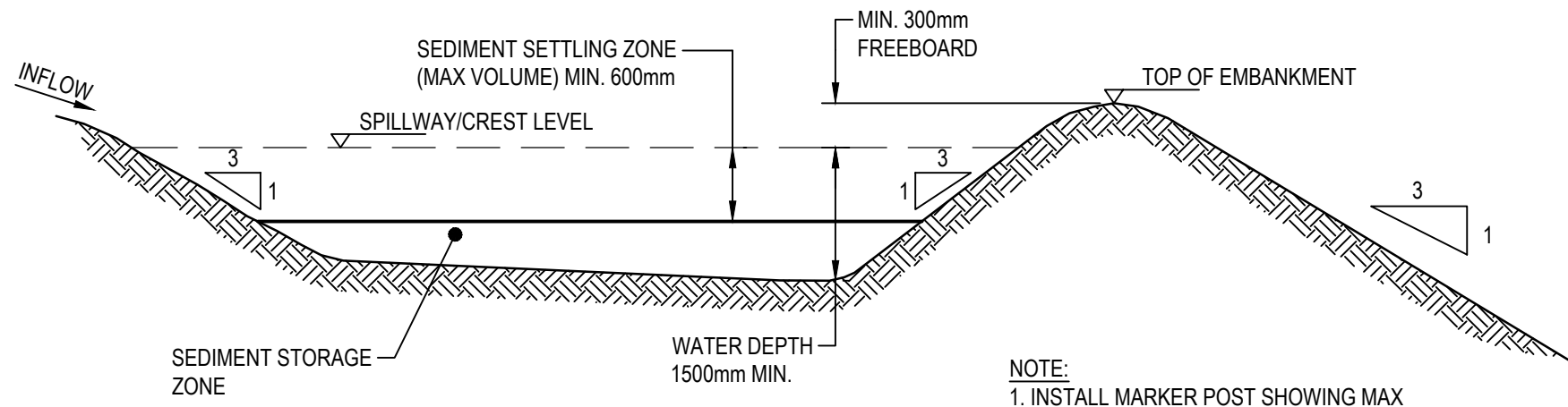




PLAN



TYPICAL SPILLWAY DETAIL  
NTS



CROSS SECTION

SEDIMENT BASIN - TYPE D AND F DETAIL  
NTS

TEMPORARY SEDIMENT BASIN SIZING (MINIMUM)							
BASIN NAME	TOTAL VOLUME	SETTLING ZONE VOLUME	SEDIMENT STORAGE VOLUME	TOTAL CATCHMENT AREA	DISTURBED CATCHMENT AREA	SPILLWAY WIDTH	SPILLWAY FLOW DEPTH
BASIN A	3774m³	2516m³	1258m³	18.5ha	6.5ha	13m	200mm
BASIN B	816m³	544m³	272m³	4ha	4ha	11m	200mm
BASIN C	1632m³	1088m³	544m³	8ha	8ha	19m	200mm
BASIN D	245m³	163m³	82m³	1.2ha	1.2ha	4m	200mm
BASIN E	3468m³	2312m³	1156m³	17ha	4ha	25m	250mm
BASIN F	1020m³	680m³	340m³	5ha	1.2ha	13m	200mm
BASIN G	3672m³	2448m³	1224m³	18ha	10ha	20m	200mm

NOTE: ALL NOTES ON THIS PAGE ARE MINIMUM REQUIREMENTS AND ARE TO BE CONFIRMED BY THE CERTIFYING CPESC OR RPEQ ENGINEER

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PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS SHEET 2 OF 2

SCALE @ A1:	AS SHOWN	CHECKED:	JM	APPROVED:	SN
PROJECT NUMBER:	PS212248	DRAWN:	FM	DATE:	20/02/2025
DRAWING No:	C007	REV:	B	© WSP Australia Pty Ltd	



DO NOT SCALE



LEGEND

- PROPOSED TOP OF BATTER
- PROPOSED BOTTOM OF BATTER
- PROPOSED FINISHED BULK EARTHWORKS LEVELS CONTOUR
- PROPOSED BULK EARTHWORKS LEVEL
- PROPOSED CUT-OFF DRAIN
- PROPOSED LOW SECURITY FENCE TYPE

BULK EARTHWORKS DEPTHS

-5.0	to	-4.5	m	
-4.5	to	-4.0	m	
-4.0	to	-3.5	m	
-3.5	to	-3.0	m	
-3.0	to	-2.5	m	
-2.5	to	-2.0	m	
-2.0	to	-1.5	m	
-1.5	to	-1.0	m	
-1.0	to	-0.5	m	
-0.5	to	0	m	
0	to	0.5	m	
0.5	to	1.0	m	
1.0	to	1.5	m	
1.5	to	2.0	m	
2.0	to	2.5	m	
2.5	to	3.0	m	
3.0	to	3.5	m	
3.5	to	4.0	m	
4.0	to	4.5	m	
4.5	to	5.0	m	

BULK EARTHWORKS CUT/FILL VOLUMES

\*ALLOW FOR 100mm STRIPPING (NO GEOTECHNICAL REPORT PROVIDED - DEPTH TO BE CONFIRMED)  
TOTAL CUT -405.600  
TOTAL FILL 41779.615  
EXCESS OF CUT OVER FILL 41374.015

PRIOR TO COMMENCEMENT OF EARTHWORKS OPERATIONS, THE EXISTING DAM TO BE EMPTIED OUT OF ANY WATER AND ALL UNSUITABLE SATURATED MATERIAL TO BE REMOVED AS DIRECTED BY GEOTECHNICAL ENGINEER.

NEW DETENTION/PERMANENT SEDIMENT BASIN. AVERAGE SIZE 87.0m LONG x 16.0m WIDE x 0.93m DEEP - TOTAL VOLUME 1294.5m³. THIS INCLUDES 326m³ OF PERMANENT SEDIMENT STORAGE AND 948m³ OF DETENTION/FIRE WATER STORAGE. THIS ALLOWS FOR EXTRA VOLUME OF WATER CAPTURED BY THE REMOVED DAM. REFER TYPICAL SECTION FOR BASIN DETAILS.

1 IN 3 BATTER (TYP)

FENCE 2B 4P 30Y

FENCE 2B 3P 30Y

EXISTING DAM VOLUME 1273m³

1

1 IN 3 TYPICAL

FENCE 2B 3P 20Y

1 IN 3 BATTER (TYP)

PROPOSE LOW SECURITY FENCE. REFER DETAIL ON C100.

1 IN 3 TYPICAL

PROPOSED HIGH SECURITY FENCE. REFER DETAIL ON C100.

1 IN 3 TYPICAL

20 10 0 20 40 60m  
1:1000 @A1

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DRAWING STATUS:			PRELIMINARY		



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CLIENT:

NSW GOVERNMENT

ARCHITECT:

PROJECT:

MOREE BESS  
LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601  
BULLUSS DRIVE, MOREE NSW 2400

TITLE:

BULK EARTHWORKS  
LAYOUT PLAN

SCALE @ A1:

1:500

CHECKED:

JM

APPROVED:

SN

PROJECT NUMBER:

PS212248

DRAWN:

FM

DATE:

20/02/2025

DRAWING No:

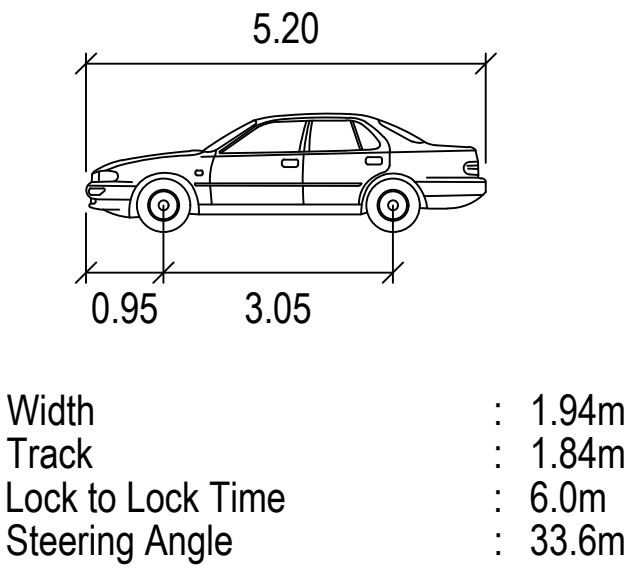
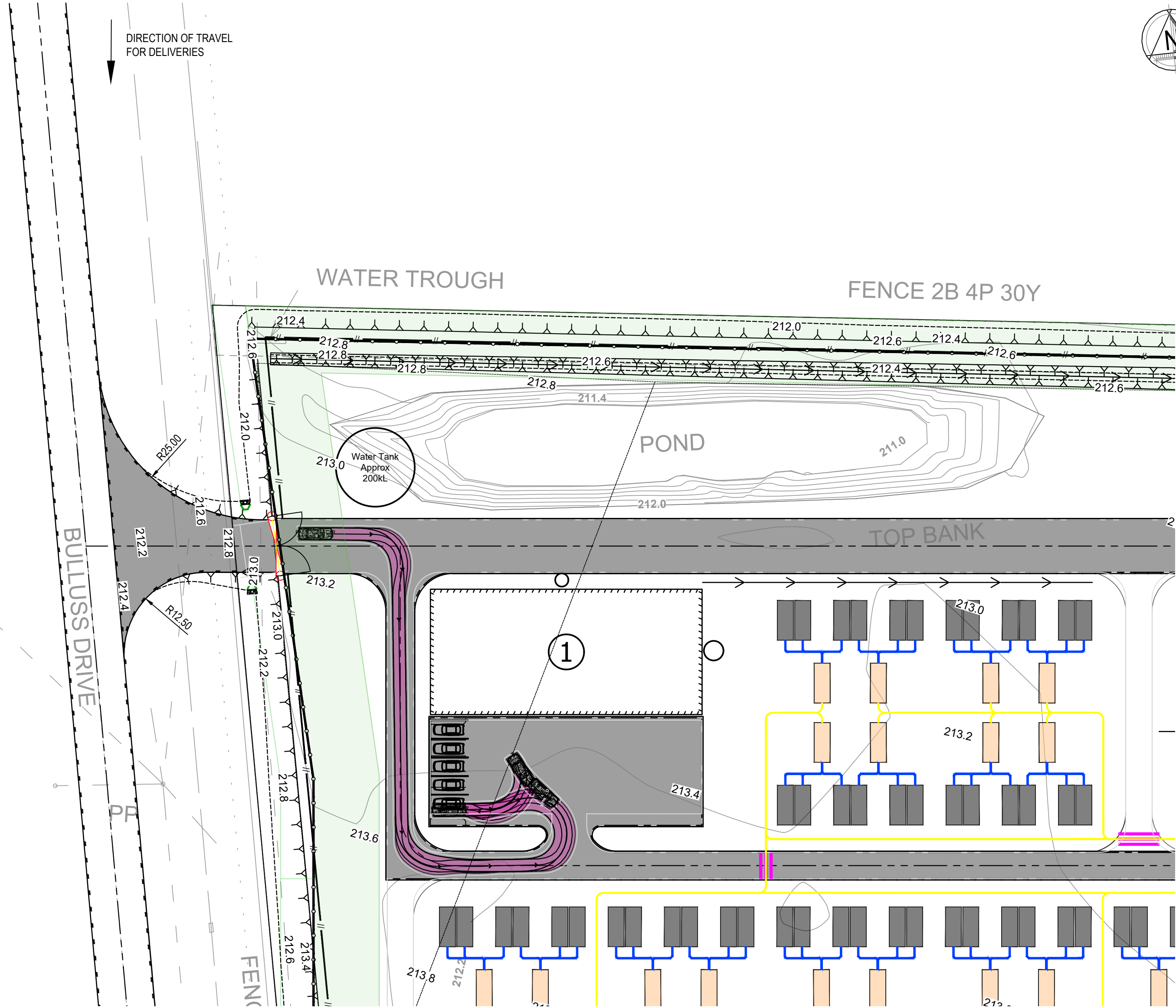
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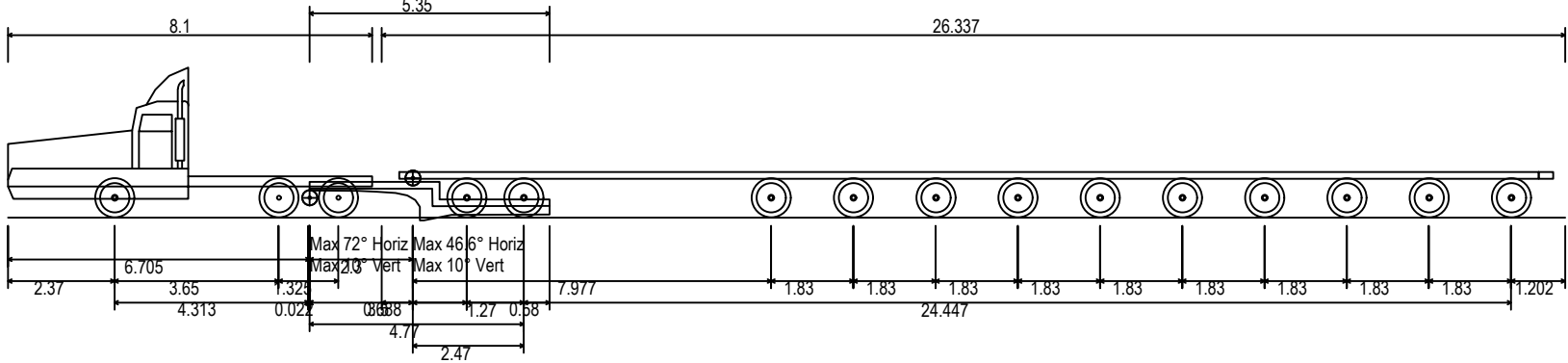
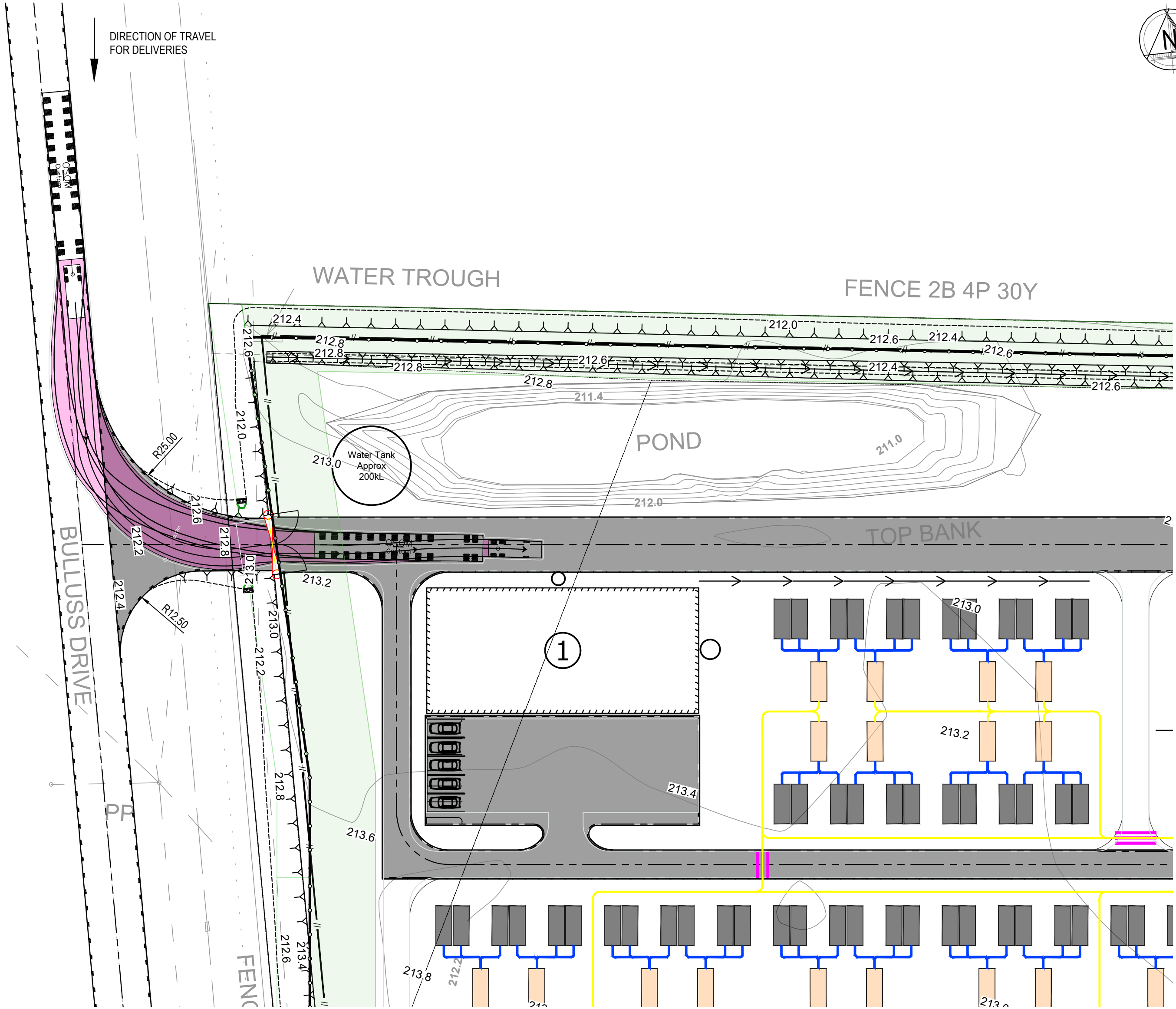
B

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PASSENGER-CAR  
NTS



Drake 10 (4 Row) (4.00Trailer) (3.73m Dolly)  
Overall Length 34.654m  
Overall Width 4.000m  
Overall Body Height 3.341m  
Min Body Ground Clearance -0.062m  
Max Track Width 4.000m  
Lock-to-lock time 6.00s  
Wall to Wall Turning Radius 23.400m  
  
OSOM DESIGN VEHICLE PROFILE  
NTS

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DRAWING STATUS:			PRELIMINARY		



CLIENT:	NSW GOVERNMENT
ARCHITECT:	

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	VEHICLE TURNING PATHS LAYOUT PLAN

SCALE @ A1:	AS SHOWN	CHECKED:	JM	APPROVED:	SN
PROJECT NUMBER:	PS212248	DRAWN:	FM	DATE:	20/02/2025
DRAWING No:	C011	REV:	B	© WSP Australia Pty Ltd	



DO NOT SCALE



LEGEND

- PROPOSED STORMWATER DRAINAGE PIPE AND MANHOLE
- PROPOSED TOP OF BATTER
- PROPOSED BOTTOM OF BATTER
- PROPOSED FINISHED PLATFORM LEVELS CONTOUR
- PROPOSED CUT-OFF DRAIN
- PROPOSED HIGH SECURITY FENCE TYPE
- PROPOSED LOW SECURITY FENCE TYPE
- PROPOSED SEMI MOUNTABLE KERB
- PROPOSED SLOTTED MOUNTABLE KERB (SL)
- PROPOSED 2 COAT SEAL PAVEMENT - REFER DWG C100

BULLUSS DRIVE

WATER TROUGH

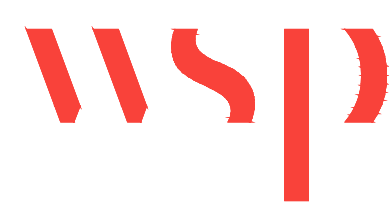
FENCE 2B 4P 30Y

FENCE 2B 3P 30Y

FENCE 2B 3P 20Y

20 10 0 20 40 60m  
1:1000 @A1

B	20/02/2025	FM	BASIN AMENDED	JM	SN
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REV	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS:			PRELIMINARY		



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CLIENT:	NSW GOVERNMENT
ARCHITECT:	

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	ROAD WORKS AND STORMWATER DRAINAGE LAYOUT PLAN

SCALE @ A1:	1:500	CHECKED:	JM	APPROVED:	SN
PROJECT NUMBER:	PS212248	DRAWN:	FM	DATE:	20/02/2025
DRAWING No:	C030	REV:	B	© WSP Australia Pty Ltd	



DO NOT SCALE



LEGEND

PROPOSED STORMWATER DRAINAGE PIPE AND MANHOLE

PROPOSED TOP OF BATTER

PROPOSED BOTTOM OF BATTER

PROPOSED FINISHED PLATFORM LEVELS CONTOUR

PROPOSED CUT-OFF DRAIN

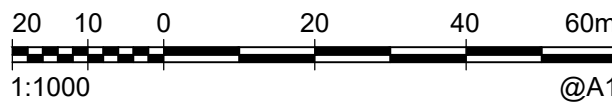
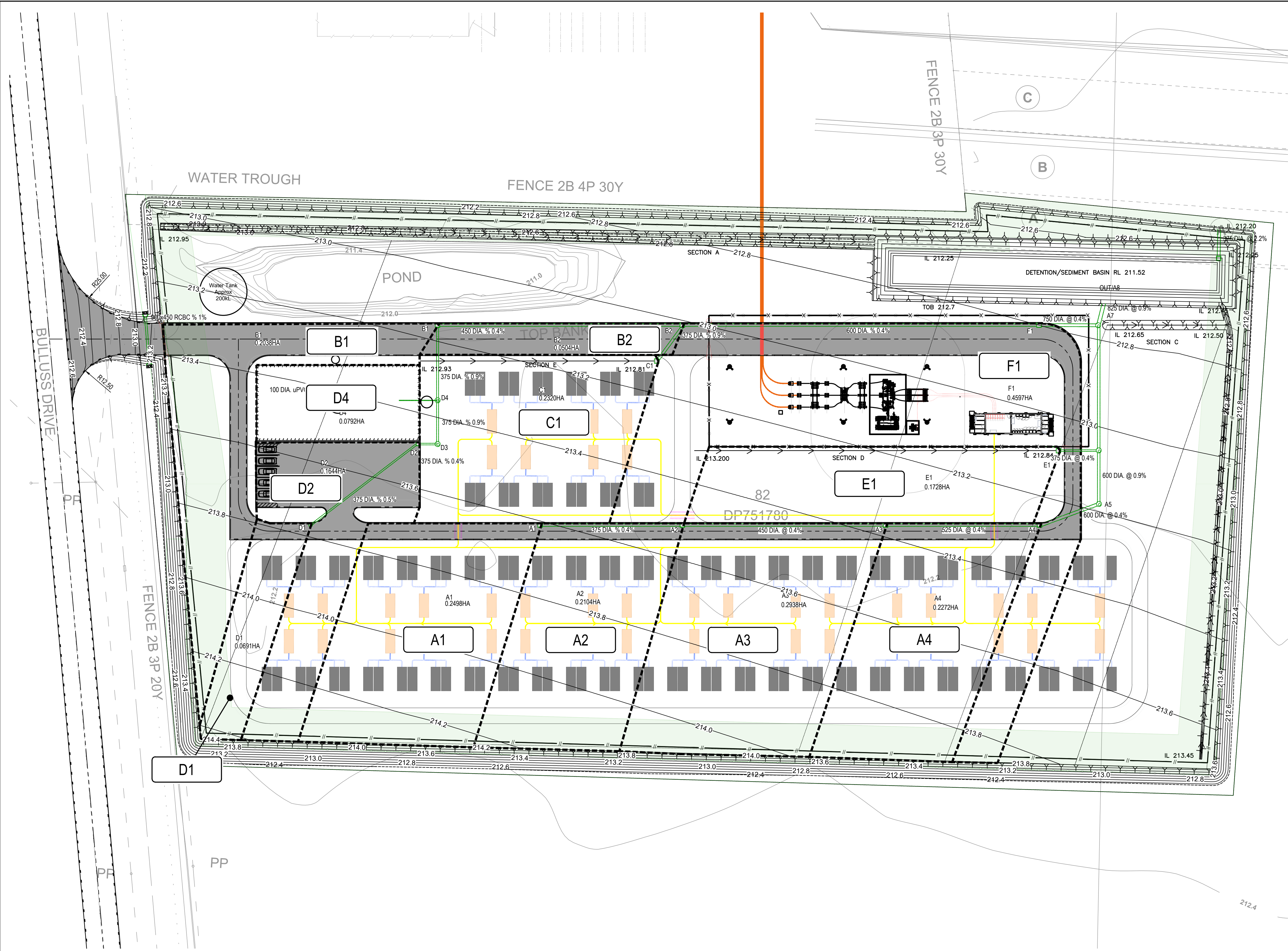
PROPOSED HIGH SECURITY FENCE TYPE

PROPOSED LOW SECURITY FENCE TYPE

PROPOSED CATCHMENT BOUNDARY

PROPOSED CATCHMENT NUMBER

CATCHMENT AREA	
CATCHMENT ID	CATCHMENT AREA (ha)
A1	0.2498
A2	0.2104
A3	0.2938
A4	0.2272
B1	0.2038
B2	0.0504
C1	0.2320
D1	0.0691
E1	0.1728
F1	0.1728



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DRAWING STATUS:			PRELIMINARY		

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CLIENT:	NSW GOVERNMENT
ARCHITECT:	

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	STORMWATER CATCHMENTS LAYOUT PLAN

SCALE @ A1:	1:500	CHECKED:	JM	APPROVED:	SN
PROJECT NUMBER:	PS212248	DRAWN:	FM	DATE:	20/02/2025
DRAWING No:					REV:
C031					B
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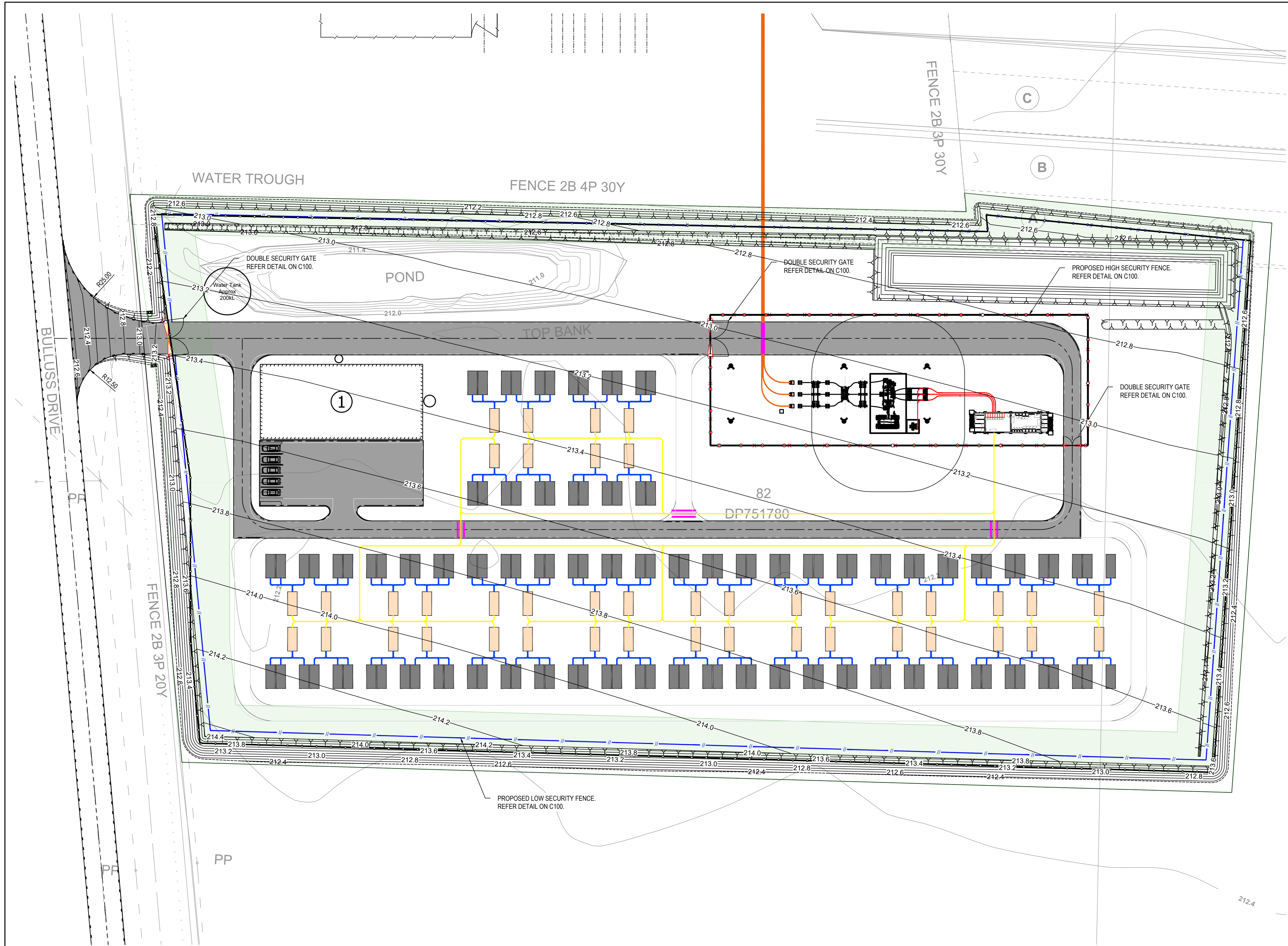


DO NOT SCALE



LEGEND

- PROPOSED TOP OF BATTER
- PROPOSED BOTTOM OF BATTER
- 250 PROPOSED FINISHED PLATFORM LEVELS CONTOUR
- PROPOSED HIGH SECURITY FENCE TYPE
- PROPOSED LOW SECURITY FENCE TYPE



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DRAWING STATUS:			PRELIMINARY		

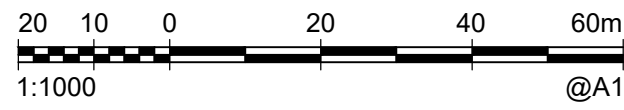


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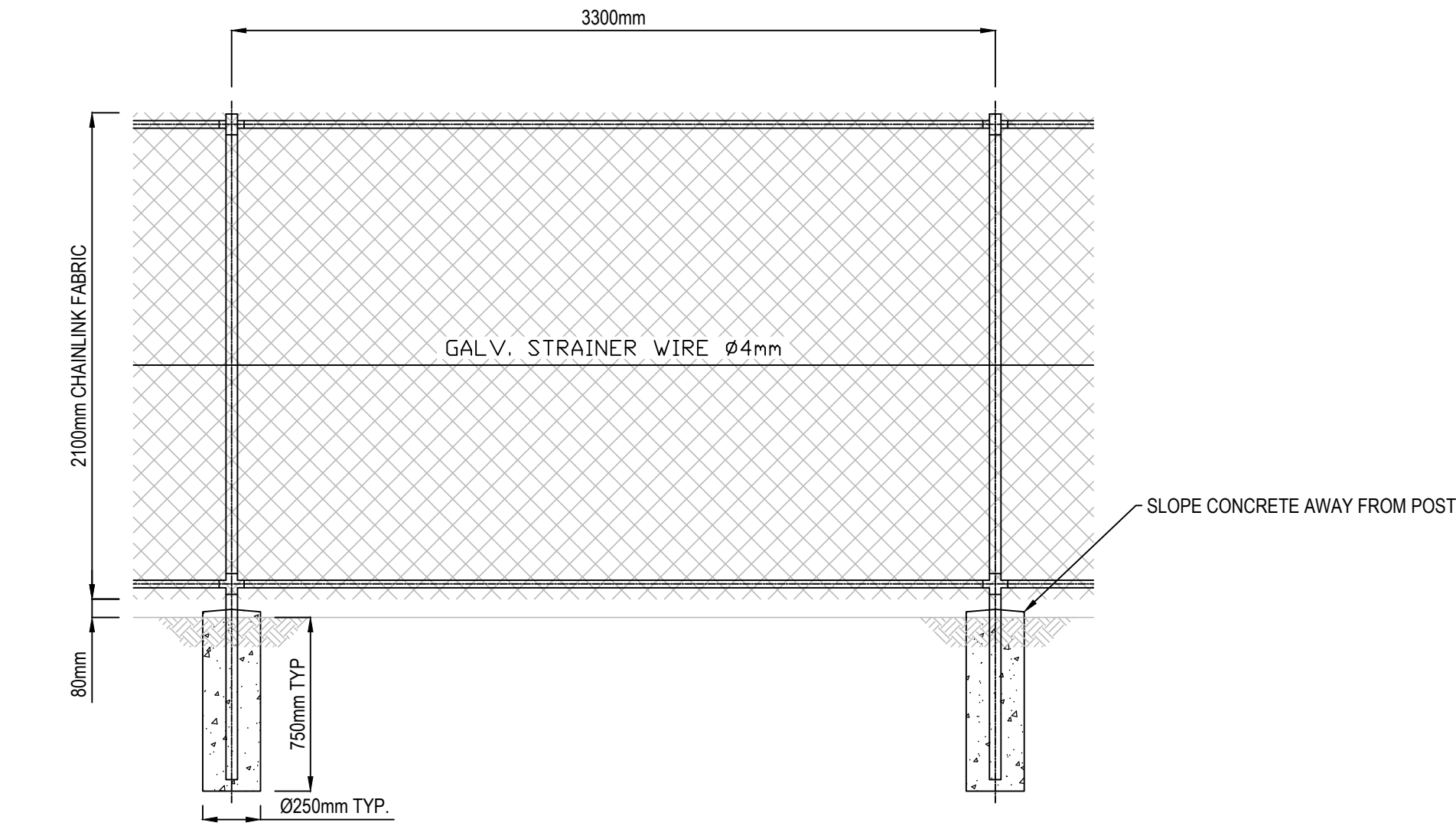
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ARCHITECT:	

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	FENCE LAYOUT PLAN

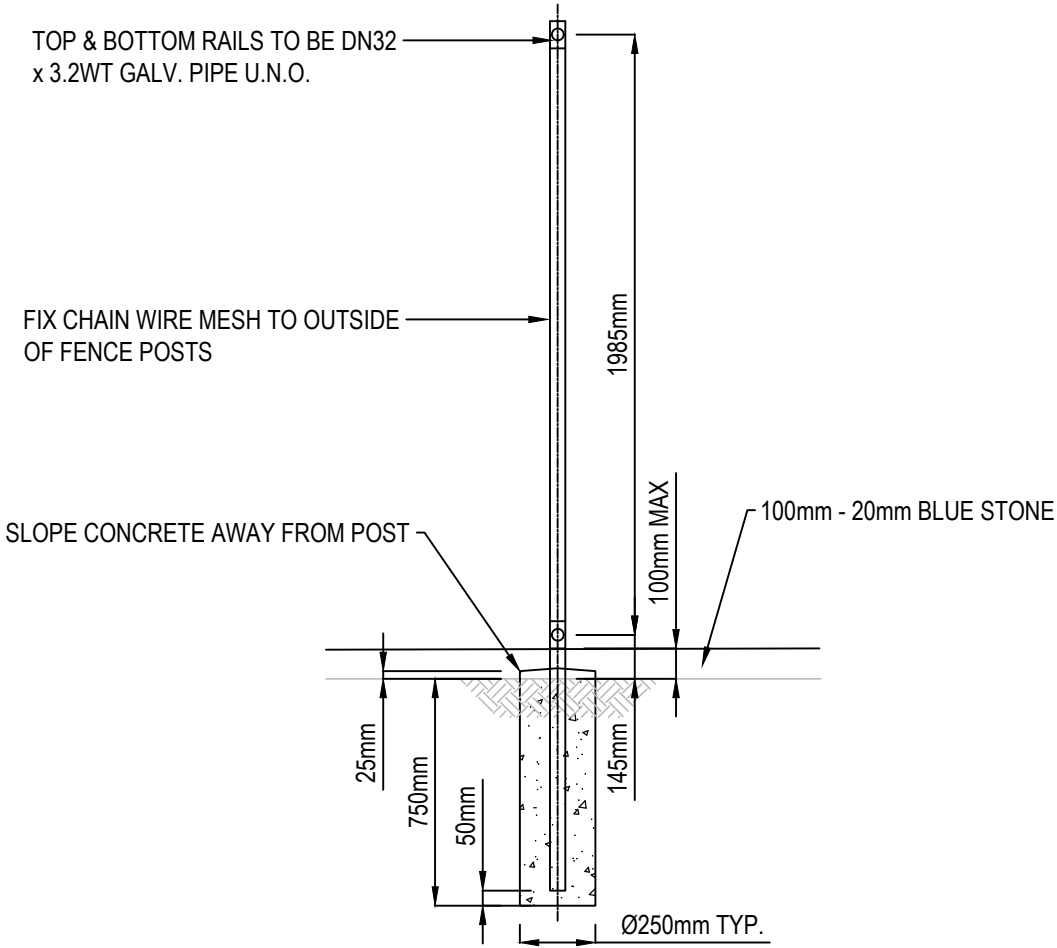
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PROJECT NUMBER:	PS212248	DRAWN:	FM	DATE:	20/02/2025
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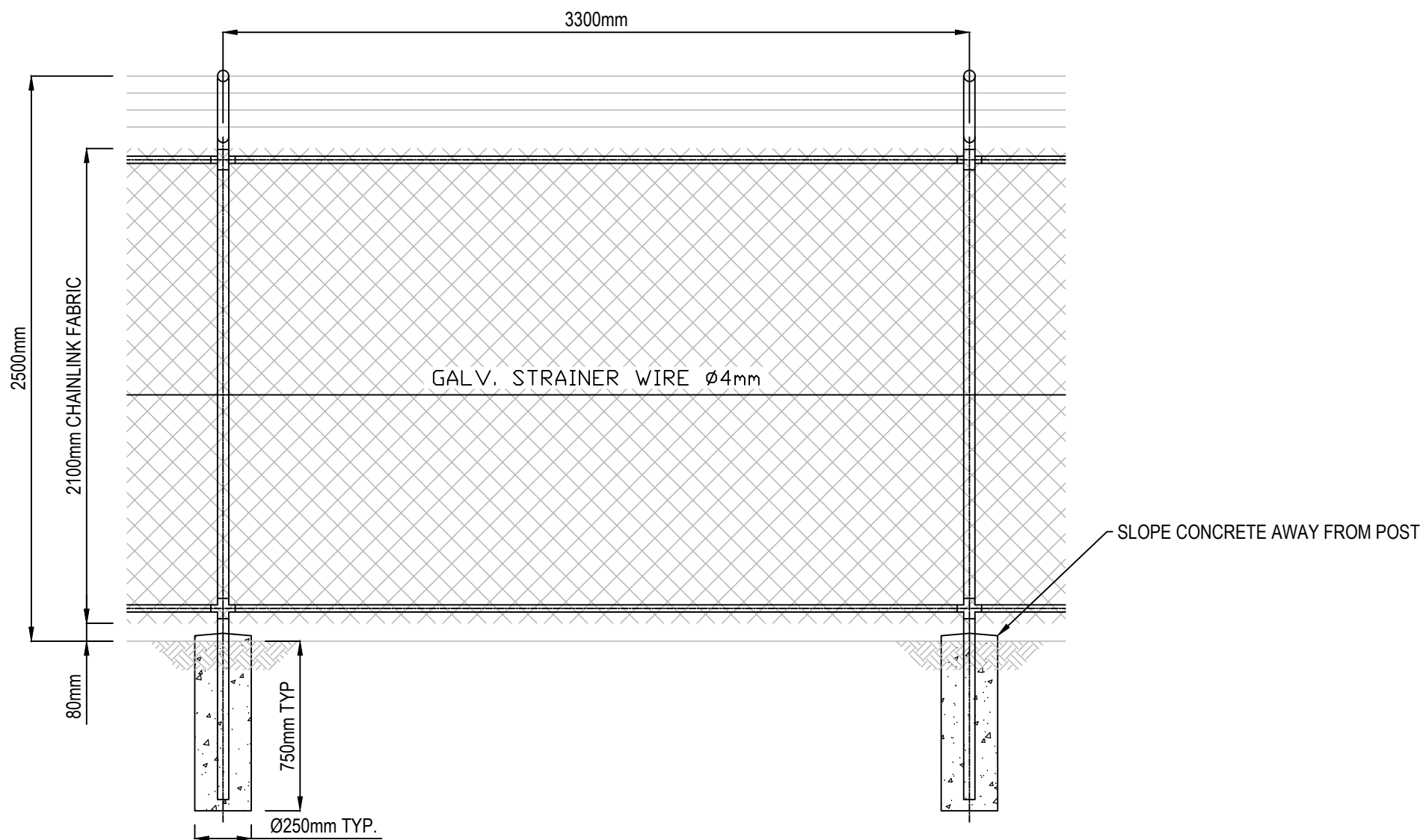




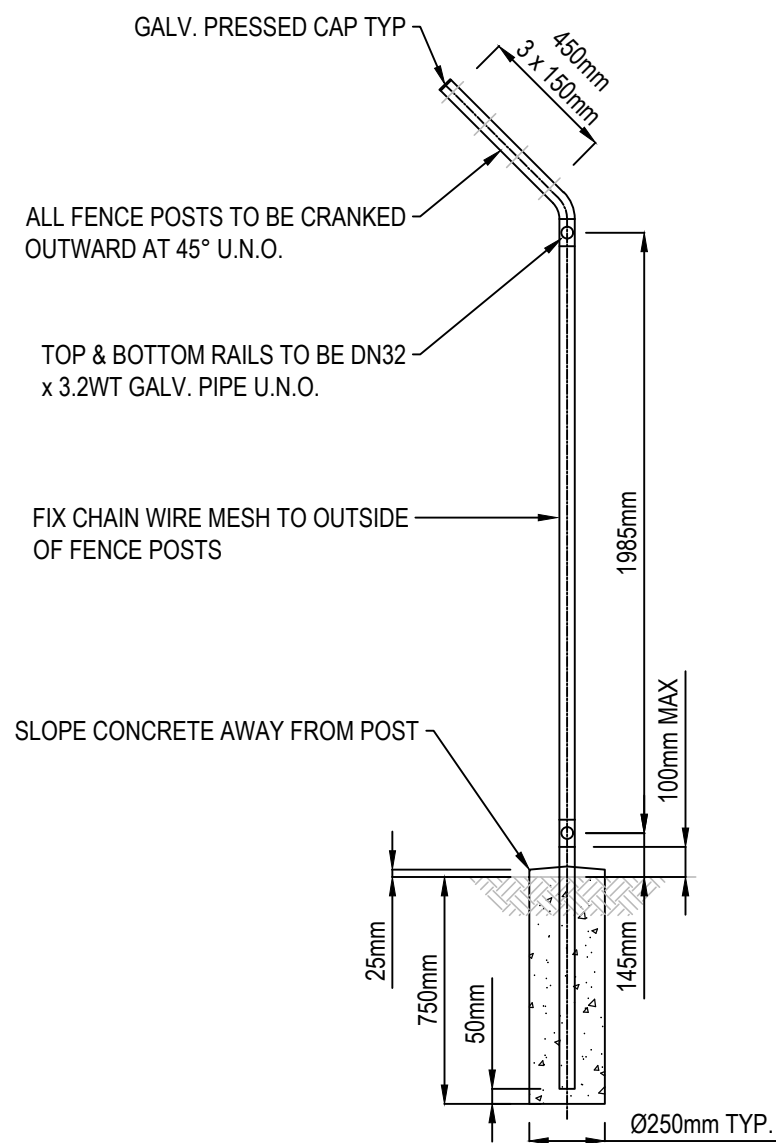
LOW SECURITY FENCE ELEVATION  
SCALE 1:25



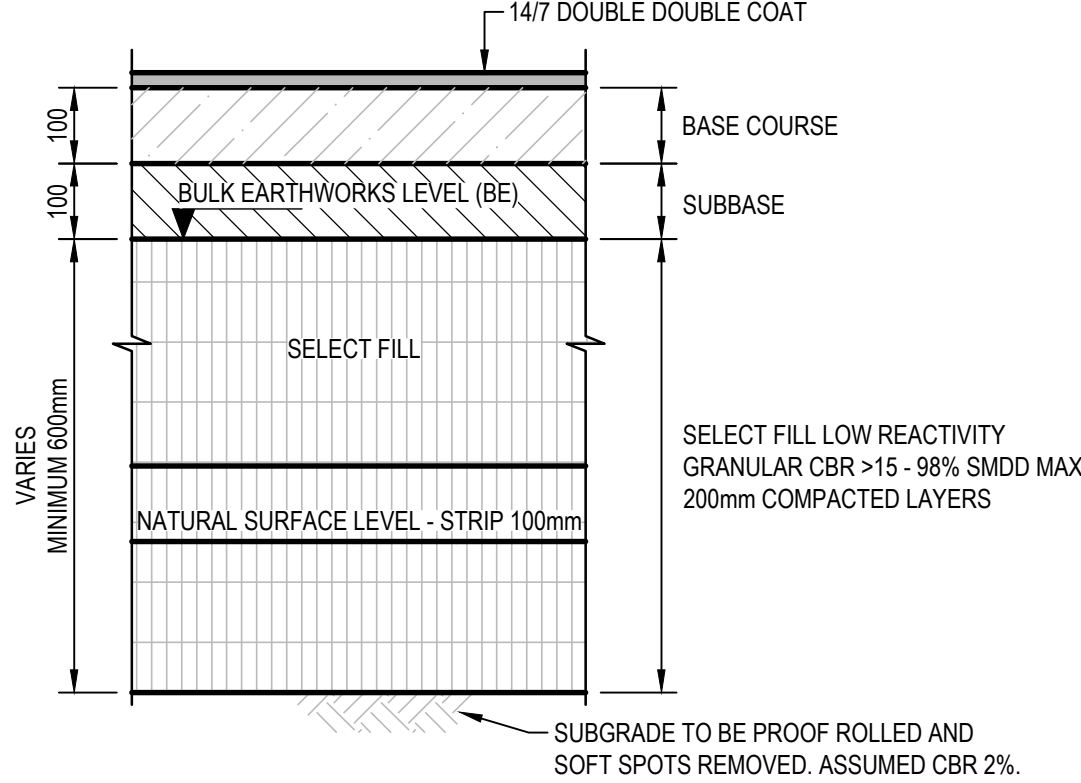
TYP LOW SECURITY FENCE POST  
SCALE 1:25



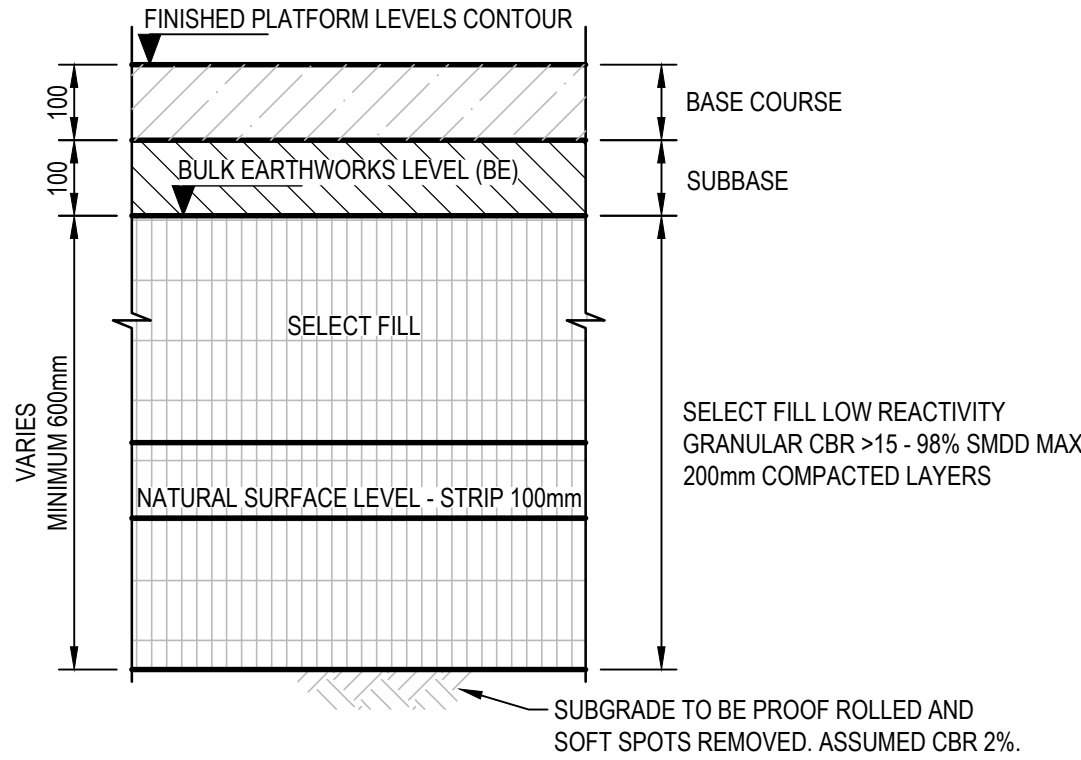
HIGH SECURITY FENCE ELEVATION  
SCALE 1:25



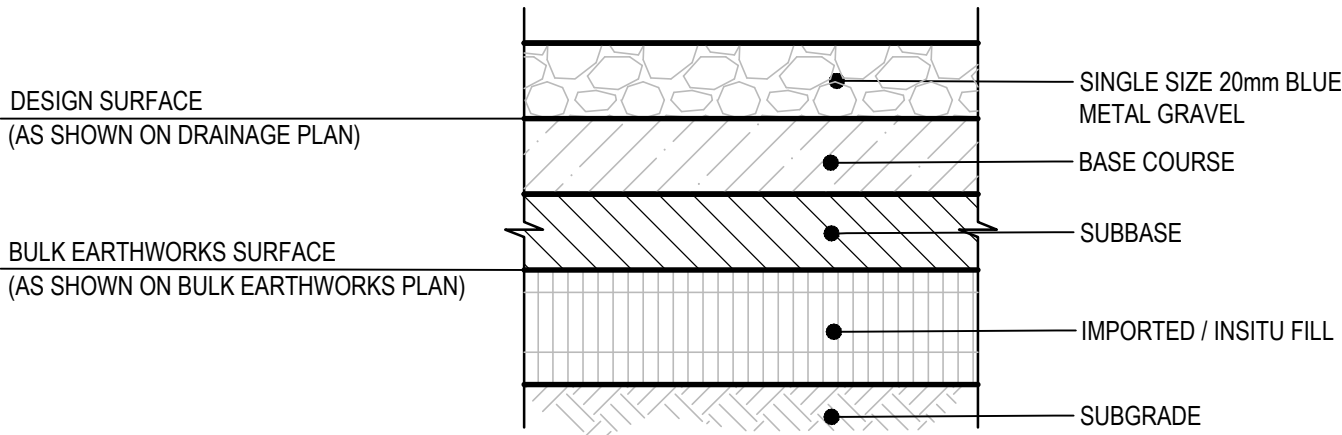
TYP HIGH SECURITY FENCE POST  
SCALE 1:25



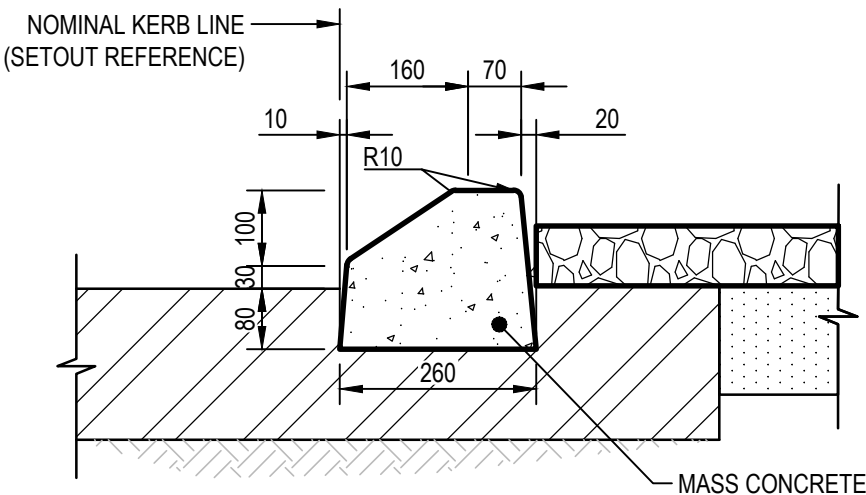
TYPICAL SEALED INTERANL ROADWAY  
SCALE 1:10



TYPICAL ACCESS TRACK & BESS YARD PAVEMENT DETAIL  
SCALE 1:10

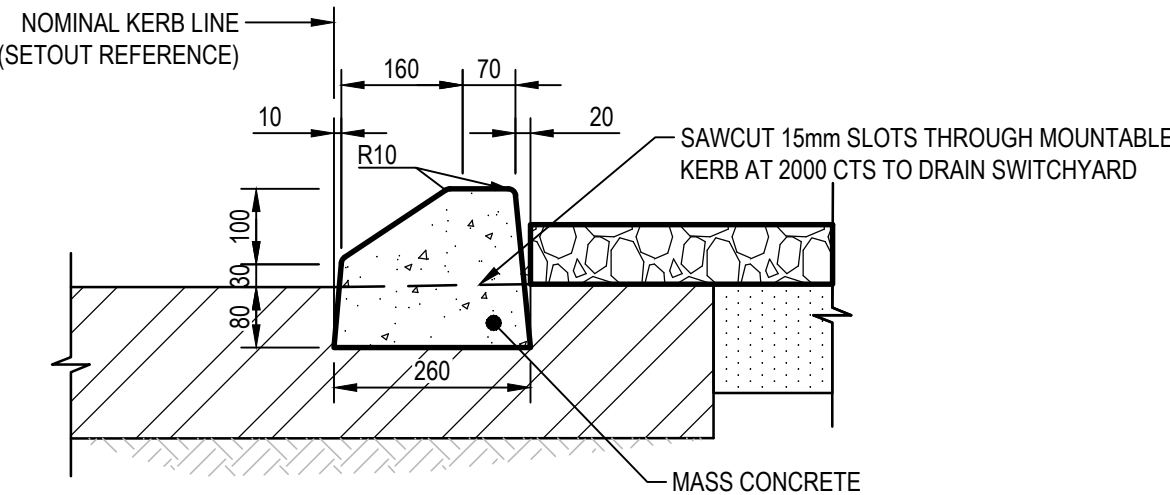


TYPICAL SWITCHYARD SURFACING  
SCALE 1:10



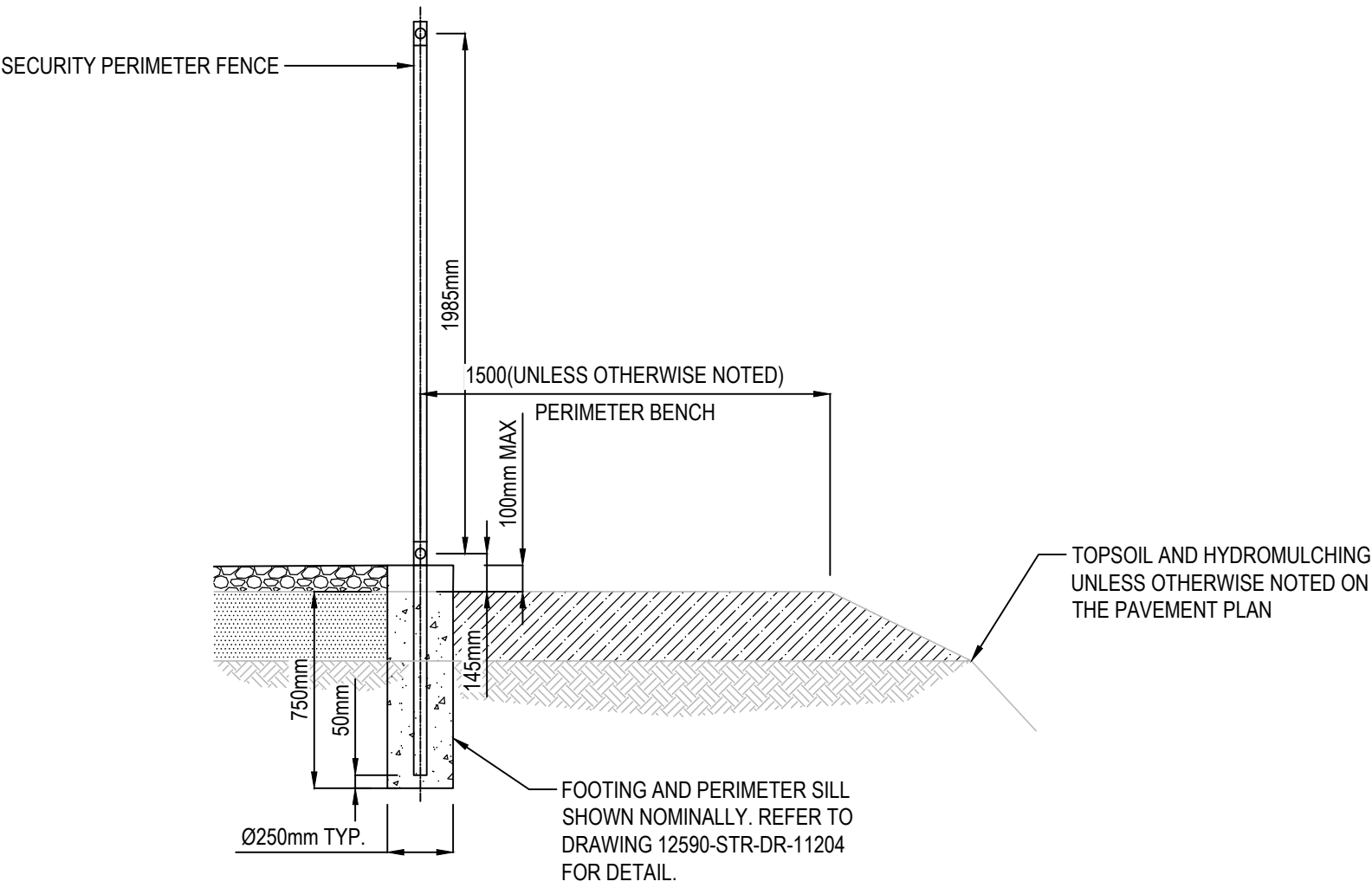
SEMI MOUNTABLE KERB - SMK  
SCALE 1:10

RMS STANDARD SF KERB  
IN ACCORDANCE WITH RMS STANDARD DRAWING R0300-01



SLOTTED MOUNTABLE KERB - SMK (SL)  
SCALE 1:10

RMS STANDARD SF KERB  
IN ACCORDANCE WITH RMS STANDARD DRAWING R0300-01



TYP PERIMETER BENCH DETAIL - LOW SECURITY PERIMETER FENCE  
SCALE 1:25

PAVEMENT SCHEDULE				
DESIGNATION	LAYER	THICKNESS	MATERIAL QUALITY	COMPACTION REQUIREMENTS
BESS YARD BENCH	CRUSHED ROCK	100mm - BESS YARD	SIZE 20mm (BLUE METAL GRAVEL)	NONE
		100mm - SUBSTATION		
		100mm - O&M AREA		
	BASE COURSE	100	PLASTICITY INDEX OF BETWEEN 6% AND 12%; 4-DAY SOAKED (BR OF AT LEAST 80%; MAXIMUM PARTICLE SIZE OF 20mm; BETWEEN 35% AND 65% OF MATERIAL TO BE RETAINED ON A 2.36mm SIEVE; A FINES (% LESS THAN 0.075mm) CONTENT OF BETWEEN 10% AND 40% MAXIMUM AGGREGATE WET/DRY STRENGTH VARIATION OF 35%.	MINIMUM 98% MODIFIED COMPACTION
SUBSTATION BENCH	SUBBASE COURSE	100mm - BESS YARD	CONFORM TO AUSROADS (2008), APPENDIX B - "CLASS 3" CRUSHED ROCK, OR IPWEA NSW (2010), "CLASS R2"	MINIMUM 95% MODIFIED COMPACTION
		100mm - SUBSTATION		
		100mm - O&M AREA		
O&M YARD BENCH	SELECT**	150	LOW PERMEABILITY MATERIAL WITH A MINIMUM CBR VALUE OF 4% AND CBR SWELL < 15%, OR LIME STABILISATION OF SUBGRADE TO DEPTH OF 200mm, TARGETING A CBR VALUE OF ATLEAST 4%	MINIMUM 100% STANDARD COMPACTION
	SUBGRADE	-	MINIMUM CBR 2% WITH THE TOP 150mm BELOW SUBGRADE LEVEL HAVING A CBR VALUE OF ATLEAST 4%	MINIMUM 100% STANDARD COMPACTION

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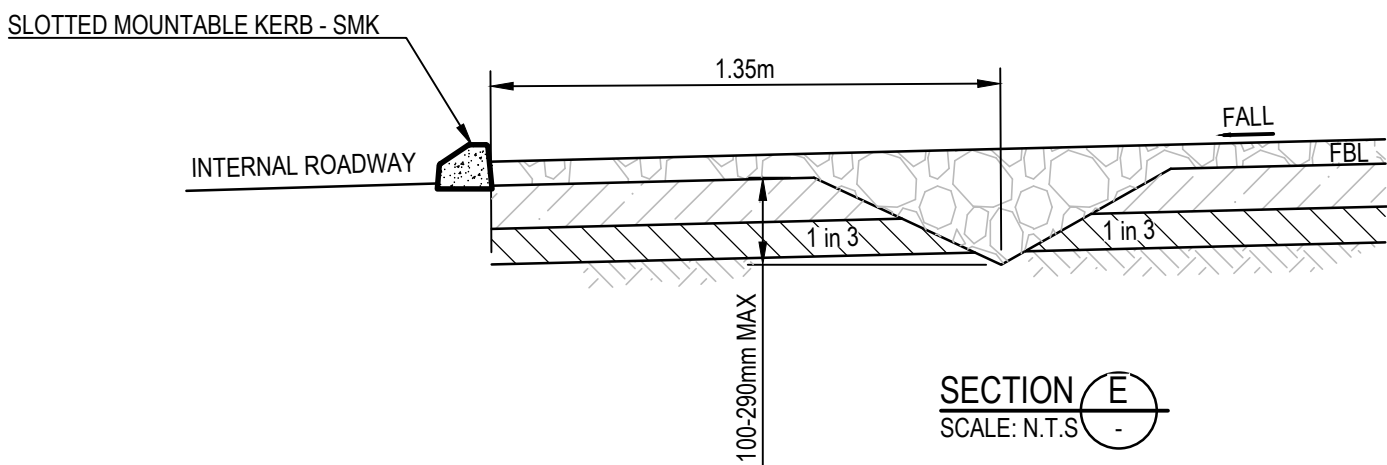
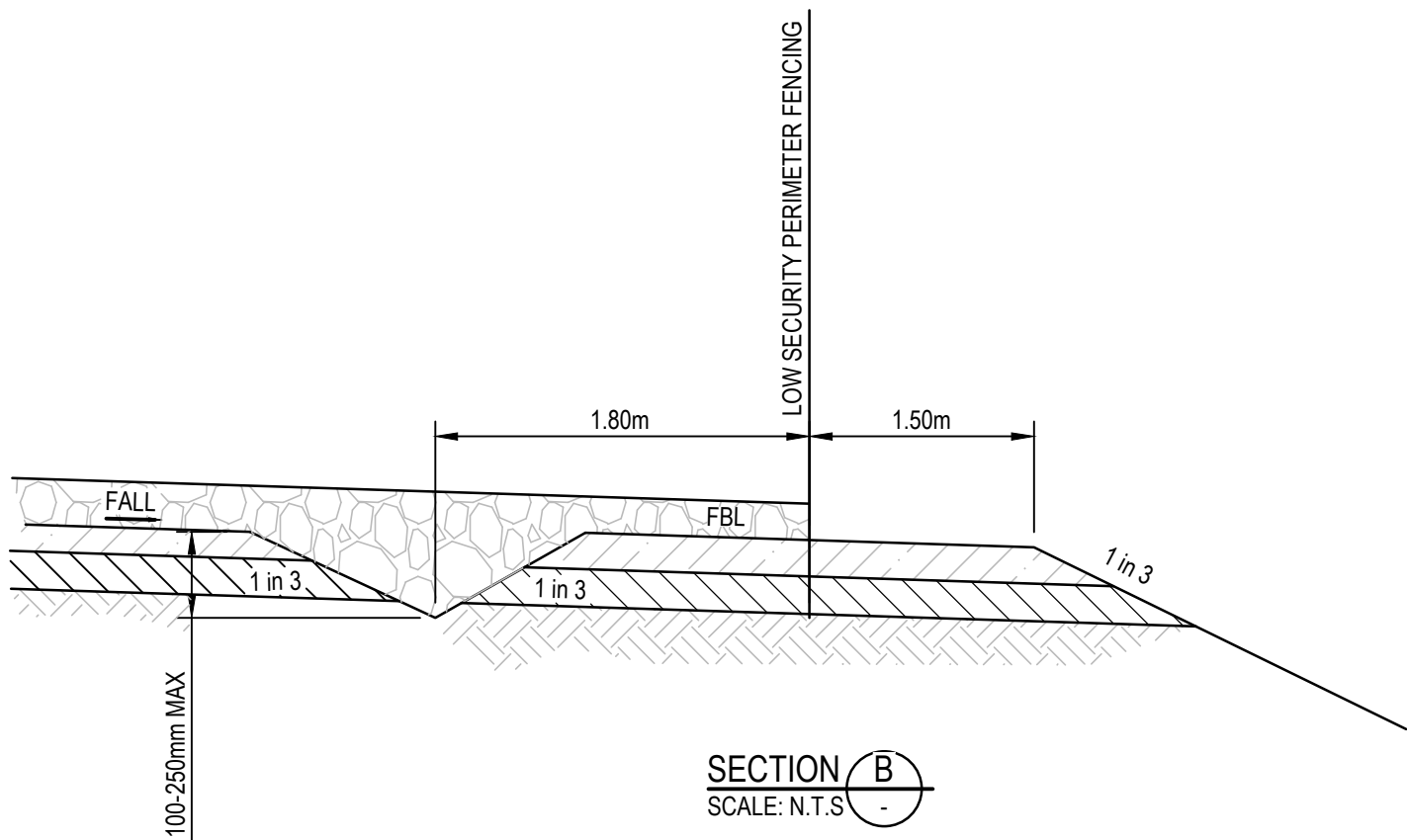
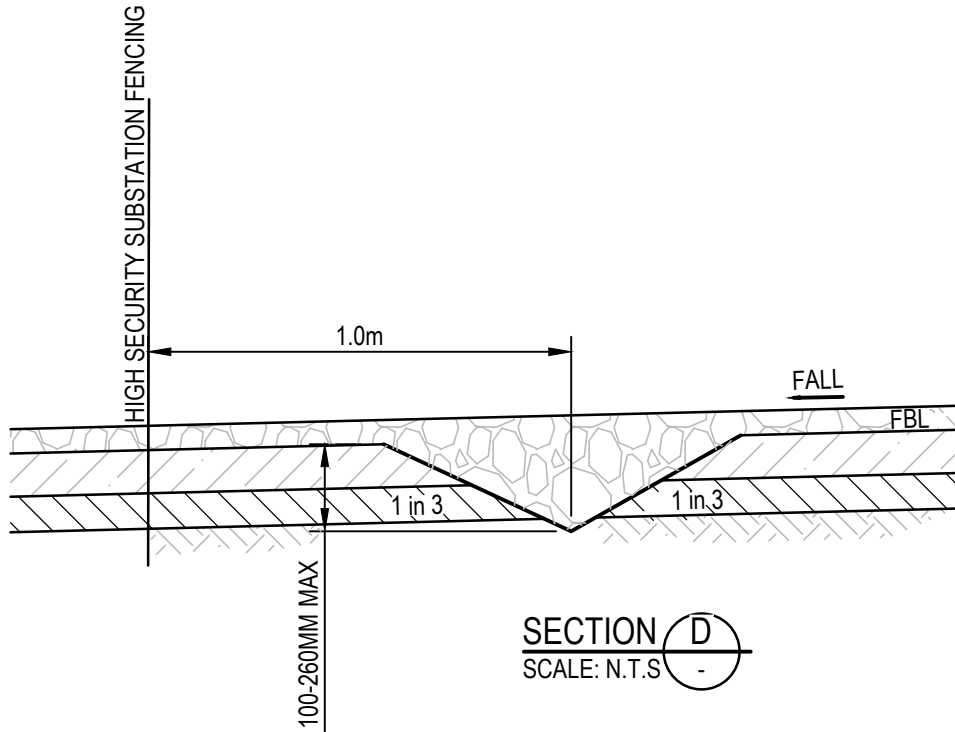
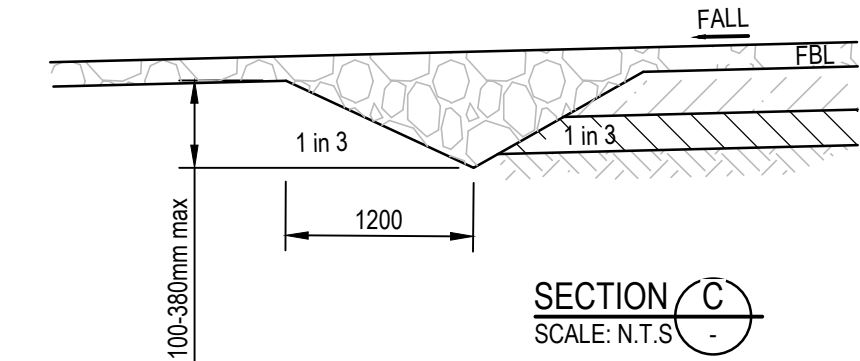
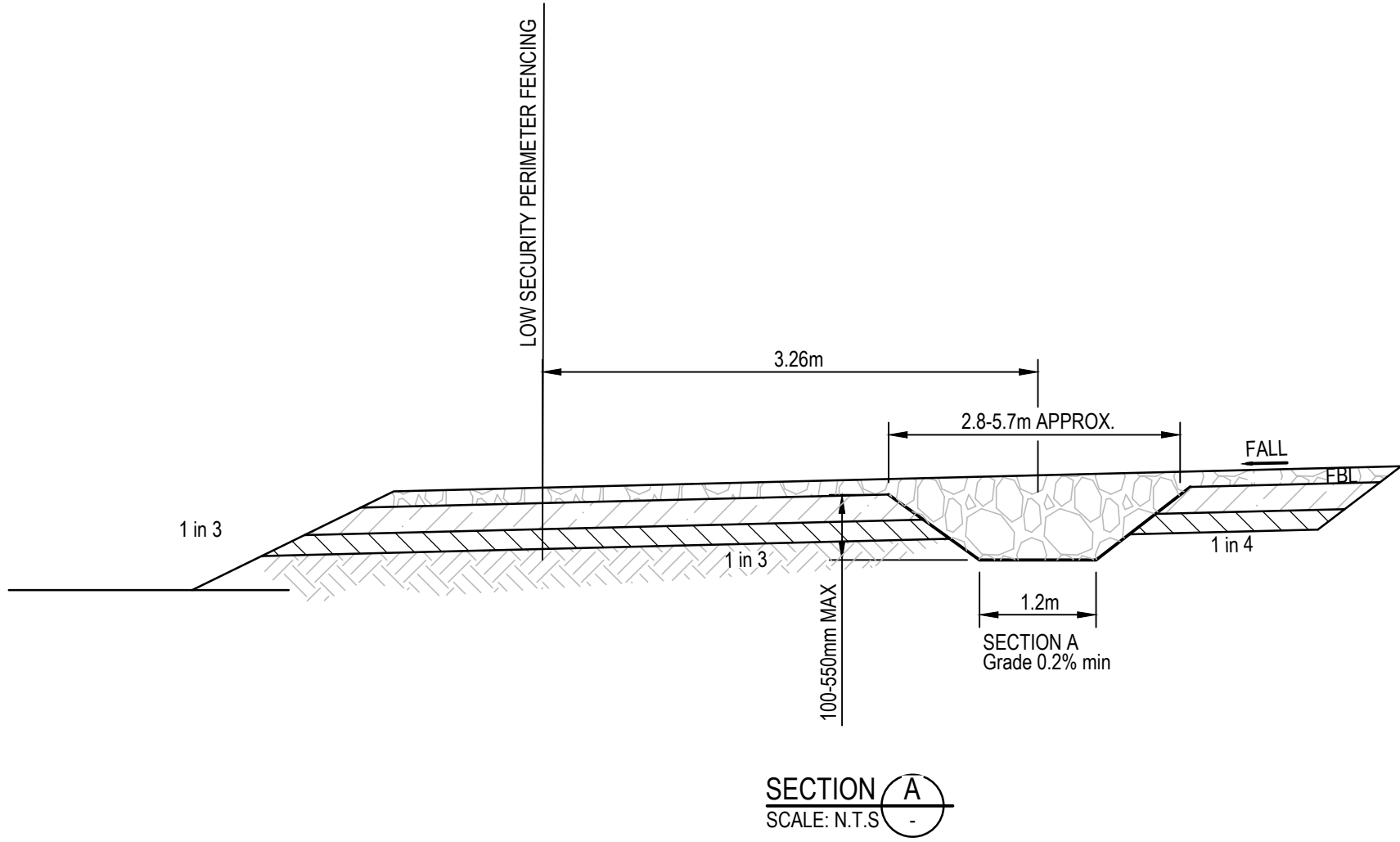


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ARCHITECT:	-

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	CIVIL DETAILS SHEET 1 OF 2

SCALE @ A1:	AS SHOWN	CHECKED:	JM	APPROVED:	SN
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CLIENT:	NSW GOVERNMENT
ARCHITECT:	-

PROJECT:	MOREE BESS LOTS 82 & 144, DP 751782 AND LOT 201, DP 1186601 BULLUSS DRIVE, MOREE NSW 2400
TITLE:	CIVIL DETAILS SHEET 2 OF 2

SCALE @ A1:	AS SHOWN	CHECKED:	JM	APPROVED:	SN
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