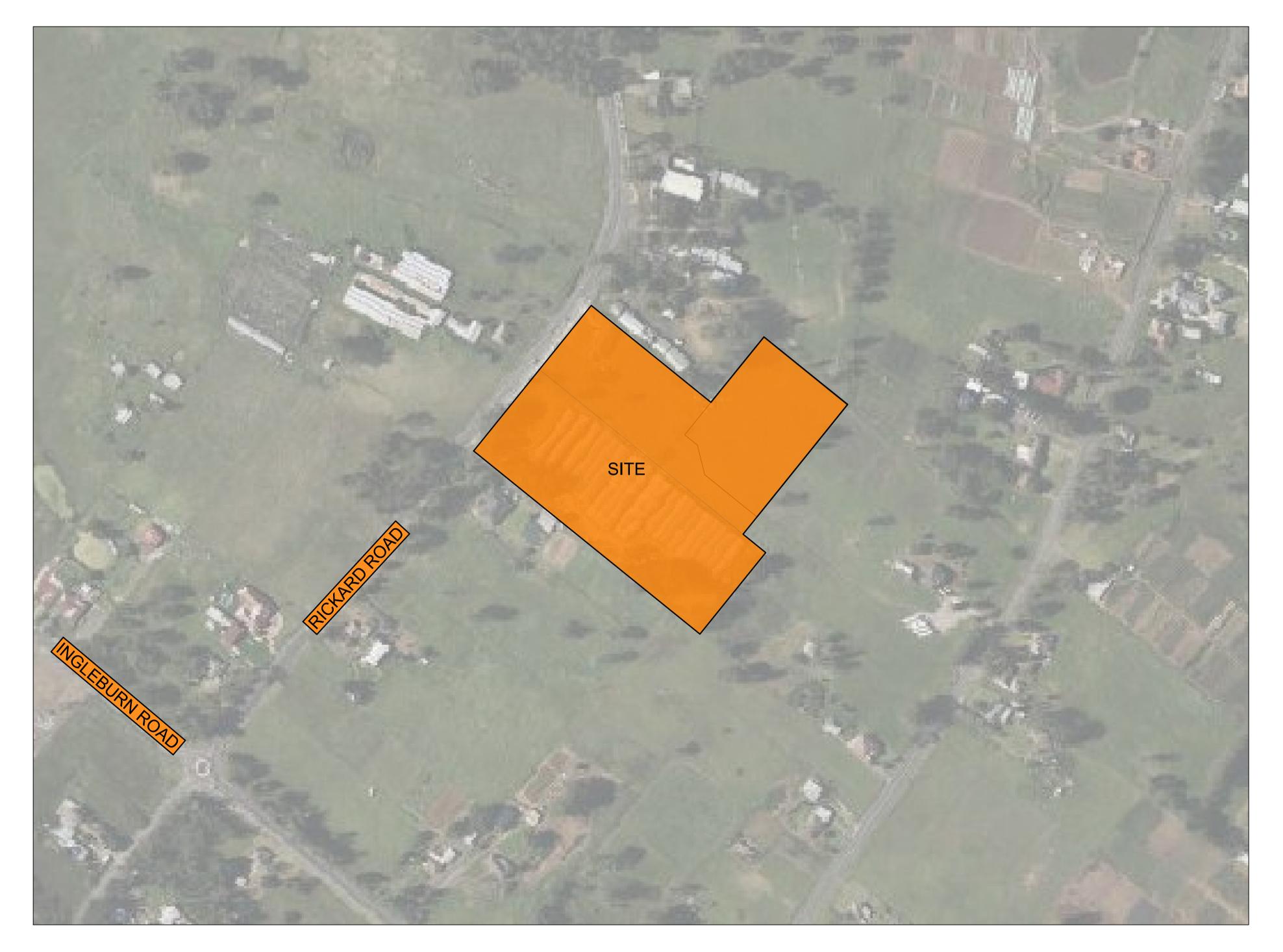
# **NEW HIGH SCHOOL FOR LEPPINGTON AND DENHAM COURT** LEPPINGTON, NSW 2179



3	REF SUBMISSION	SF RT 14.01.2025	5			
2	SCHEMATIC DESIGN FOR REF	SF RT 13.12.2024	1			
1	FINAL DRAFT ISSUE FOR REF	SF RT 21.11.2024	ł			
Rev	Description	Eng Draft Date	Rev Description	Eng Draft Date	Rev Description	Eng Draft Date

NUMBER

GENERAL-00000



School Infrastructure NSW



NEW HIGH SCHOOL FOR LEPPINGTON AND **DENHAM COURT** LEPPINGTON, NSW 2179



## NOT FOR CONSTRUCTION

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DRAWING TITLE

SEIVER VIE-00000	
LHS-TTW-01-00-DR-C-00001 LHS-TTW-01-00-DR-C-00003 LHS-TTW-01-00-DR-C-00401 LHS-TTW-01-00-DR-C-00402 LHS-TTW-01-00-DR-C-01501	GENERAL COVER SHEET GENERAL NOTES AND LEGEND GENERAL ARRANGEMENT PLAN SHEET 1 GENERAL ARRANGEMENT PLAN SHEET 2 ROAD TYPICAL SECTION
EROSION AND SEDIMENT CON	TROL-02000
LHS-TTW-01-00-DR-C-02001 LHS-TTW-01-00-DR-C-02101	EROSION AND SEDIMENT CONTROL NOTES AND LEGEND EROSION AND SEDIMENT CONTROL PLAN
EARTHWORKS-03000	
LHS-TTW-01-00-DR-C-03101	EARTHWORKS CUT AND FILL VOLUMES PLAN
STORMWATER-04000	
LHS-TTW-01-00-DR-C-04001 LHS-TTW-01-00-DR-C-04101 LHS-TTW-01-00-DR-C-04102 LHS-TTW-01-00-DR-C-04501 LHS-TTW-01-00-DR-C-04502	STORMWATER NOTES AND LEGEND STORMWATER AND SUBSOIL DRAINAGE PLAN SHEET 1 STORMWATER AND SUBSOIL DRAINAGE PLAN SHEET 2 STORMWATER DETAILS SHEET 1 STORMWATER DETAILS SHEET 2
RETAINING WALLS-06000	
LHS-TTW-01-00-DR-C-06501	RETAINING WALL DETAILS
PAVEMENT-07000	
LHS-TTW-01-00-DR-C-07001 LHS-TTW-01-00-DR-C-07101 LHS-TTW-01-00-DR-C-07102	PAVEMENT NOTES AND LEGEND PAVEMENT PLAN SHEET 1 PAVEMENT PLAN SHEET 2
LHS-TTW-01-00-DR-C-07501	PAVEMENT DETAILS SHEET 1
SIGNAGE AND LINEMARKING-0	8000
LHS-TTW-01-00-DR-C-08101	SIGNAGE AND LINEMARKING PLAN

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#### **GENERAL**

- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO 1.
- COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE SUPERINTENDENT. STRIP ALL TOPSOIL FROM THE CONSTRUCTION AREA. ALL STRIPPED TOPSOIL SHALL BE DISPOSED OF OFF-SITE UNLESS DIRECTED OTHERWISE.
- MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.
- COMPACT SUBGRADE UNDER BUILDINGS AND PAVEMENTS TO MINIMUM 98% STANDARD MAXIMUM 4 DRY DENSITY IN ACCORDANCE WITH AS 1289 5.1.1. COMPACTION UNDER BUILDINGS TO EXTEND 2M MINIMUM BEYOND BUILDING FOOTPRINT.
- 5. ALL WORK ON PUBLIC PROPERTY, PROPERTY WHICH IS TO BECOME PUBLIC PROPERTY, OR ANY WORK WHICH IS TO COME UNDER THE CONTROL OF THE STATUTORY AUTHORITY; THE CONTRACTOR IS TO ENSURE THAT THE DRAWINGS USED FOR CONSTRUCTION HAVE BEEN APPROVED BY ALL RELEVANT AUTHORITIES PRIOR TO COMMENCEMENT SITE.
- 6. ALL WORK ON PUBLIC PROPERTY, PROPERTY WHICH IS TO BECOME PUBLIC PROPERTY, OR ANY WORK WHICH IS TO COME UNDER THE CONTROL OF THE STATUTORY AUTHORITY IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT AUTHORITY. THE CONTRACTOR SHALL OBTAIN THESE REQUIREMENTS FROM THE AUTHORITY. WHERE THE REQUIREMENTS OF THE AUTHORITY ARE DIFFERENT TO THE DRAWINGS AND SPECIFICATIONS,
- THE REQUIREMENTS OF THE AUTHORITY SHALL BE APPLICABLE. 7. FOR ALL TEMPORARY BATTERS REFER TO GEOTECHNICAL RECOMMENDATIONS.

#### REFERENCE DRAWINGS

1. THESE DRAWINGS HAVE BEEN BASED FROM, AND TO BE READ IN CONJUNCTION WITH THE FOLLOWING CONSULTANTS DRAWINGS. ANY CONFLICT TO THE DRAWINGS MUST BE NOTIFIED IMMEDIATELY TO THE ENGINEER.

CONSULTANT	DRAWING TITLE	DRAWING NUMBER	REVISION	DATE
DRJD	OVERALL GROUND FLOOR PLAN - STAGE 01	LHS-DJRD-00-GF-DR-A-0 250-CAD(P04)	P04	10.01.2025
PROJECT SURVEYORS	SURVEY		С	16.02.2024
SITE IMAGE	LANDSCAPE	S1-100	A	05.08.2024

#### **BOUNDARIES AND EASEMENTS**

- 1. THE PROPERTY BOUNDARY AND EASEMENT LOCATIONS SHOWN ON TAYLOR THOMSON WHITTING DRAWING'S HAVE BEEN BASED ON INFORMATION RECEIVED FROM : PROJECT SURVEYORS
- 2. TAYLOR THOMSON WHITTING MAKES NO GUARANTEES THAT THE BOUNDARY OR EASEMENT INFORMATION SHOWN IS CORRECT. TAYLOR THOMSON WHITTING WILL ACCEPT NO LIABILITIES FOR BOUNDARY INACCURACIES. THE CONTRACTOR/BUILDER IS ADVISED TO CHECK/CONFIRM ALL BOUNDARIES IN RELATION TO ALL PROPOSED WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. BOUNDARY INACCURACIES FOUND ARE TO BE REPORTED TO THE SUPERINTENDENT PRIOR TO CONSTRUCTION STARTING.

#### SURVEY

ORIGIN OF LEVELS:	PM 44282 RL 95.924
DATUM OF LEVELS:	AHD
COORDINATE SYSTEM:	GDA2020
SURVEY PREPARED BY:	PHILLIP KIM

TAYLOR THOMSON WHITTING DOES NOT GUARANTEE THAT THE SURVEY INFORMATION SHOWN ON THESE DRAWINGS IS ACCURATE AND WILL ACCEPT NO LIABILITY FOR ANY INACCURACIES IN THE SURVEY INFORMATION PROVIDED TO US FROM ANY CAUSE WHATSOEVER.

#### **UNDERGROUND SERVICES - WARNING**

- THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ON TAYLOR THOMSON WHITTINGS DRAWINGS HAVE BEEN PLOTTED FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES. THIS INFORMATION HAS BEEN PREPARED SOLELY FOR THE AUTHORITIES OWN USE AND MAY NOT NECESSARILY BE UPDATED OR ACCURATE.
- THE POSITION OF SERVICES AS RECORDED BY THE AUTHORITY AT THE TIME OF INSTALLATION MAY NOT REFLECT CHANGES IN THE PHYSICAL ENVIRONMENT SUBSEQUENT TO INSTALLATION.
- THE CONTRACTOR MUST CONFIRM THE EXACT LOCATION AND EXTENT OF SERVICES PRIOR TO
- CONSTRUCTION AND NOTIFY ANY CONFLICT WITH THE DRAWINGS IMMEDIATELY TO THE ENGINEER/SUPERINTENDENT. THE CONTRACTOR IS TO GET APPROVAL FROM THE RELEVANT STATE SURVEY DEPARTMENT, TO
- REMOVE/ADJUST ANY SURVEY MARK. THIS INCLUDES BUT IS NOT LIMITED TO; STATE SURVEY MARKS (SSM), PERMANENT MARKS (PM), CADASTRAL REFERENCE MARKS OR ANY OTHER SURVEY MARK WHICH IS TO BE REMOVED OR ADJUSTED IN ANY WAY.
- TAYLOR THOMSON WHITTING PLANS DO NOT INDICATE THE PRESENCE OF ANY SURVEY MARK. THE CONTRACTOR IS TO UNDERTAKE THEIR OWN SEARCH.

#### **BEFORE YOU DIG AUSTRALIA (BYDA)**

- 1. PUBLIC SERVICE UTILITY INFORMATION SHOWN ON PLAN HAS BEEN COMPLIED FROM INFORMATION RECEIVED FROM DIAL BEFORE YOU DIG INQUIRY, REFERENCE NUMBER 36829765 OBTAINED ON 04.06.2024 UNLESS SPECIFICALLY SHOWN OTHERWISE, THIS LOCATION AND DEPTH OF SERVICES SHOWN ON THIS PLAN HAVE NOT BEEN VERIFIED.
- 2. THE LOCATION OF SERVICES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED AS ACCURATELY AS POSSIBLE FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES AND SHOULD BE CONFIRMED BY SITE INSPECTION."

#### SITE WORKS

- MATERIAL
- **DENSITY IN ACCORDANCE WITH AS 1289 5.2.1**

#### PUBLIC DOMAIN WORKS

#### DESIGN AND CONSTRUCT DOCUMENTATION

- FULLY WITH OTHER CONSULTANTS.
- FUNCTIONAL OBJECTIVE OF THIS DOCUMENTATION.

#### SAFETY IN DESIGN

CONTRACTOR TO REFER TO APPENDIX B OF THE CIVIL SPECIFICATION FOR THE CIVIL RISK AND SOLUTIONS REGISTER.

- 1. EXISTING SERVICES RELOCATE.
- 2. EXISTING STRUCTURES FAR AS PRACTICABLY POSSIBLE FROM EXISTING STRUCTURE(S).
- 3. EXISTING TREES
- GROUNDWATER
- 5. EXCAVATIONS ENGINEER.
- 6. GROUND CONDITIONS REPORT BY
- GEOTECHNICS DATED 3RD SEPTEMBER 2024 (REF.35910LTrpt)
- 7. HAZARDOUS MATERIALS GEOTECHNICAL/ENVIRONMENTAL REPORT BY
- BY JBS&G DATED 15TH AUSGUST 2024 (REF. JBS&G 67303) SMEC DATED 18TH MARCH 2024 (REF. 30018043)
- 8. CONFINED SPACES
- 9. MANUAL HANDLING AND ASSESSMENTS ARE IN PLACE PRIOR TO COMMENCING WORKS.
- 10. WATER POLLUTION
- 11. SITE ACCESS/EGRESS PERSONNEL AND PUBLIC.
- 12. VEHICLE MOVEMENT VEHICLE MOVEMENTS WHERE NECESSARY.

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Re	v Description	Eng Draft Date	Rev Description	Eng Dra	t Date	Rev Description	Eng D	raft	Date



#### 1. ALL BASECOURSE MATERIAL TO COMPLY WITH RMS SPECIFICATION NO 3051 AND COMPACTED TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. 2. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT

3. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED SELECT MATERIAL AND COMPACTED TO A MINIMUM 98% MODIFIED MAXIMUM DRY

1. PUBLIC DOMAIN WORKS ARE NOT TO COMMENCE UNTIL THESE DRAWINGS ARE STAMPED AS APPROVED. SINSW TO CONFIRM IF THESE DRAWINGS WILL BE STAMPED AS APPROVED.

1. THE LEVEL OF DETAIL / DESIGN REFLECTED IN THESE DOCUMENTS IS BASED ON THE UNDERSTANDING THIS WILL BE BUILT AS PART OF A DESIGN & CONSTRUCT CONTRACT. 2. THE CONTRACTOR SHALL RETAIN THE RESPONSIBILITY TO UNDERTAKE DETAILED DESIGN, CONFIRM COMPLIANCE WITH RELEVANT STANDARDS, CONSENT CONDITIONS & THE SPECIFICATION. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE FINAL DESIGN IS CO-ORDINATED

4. NO VARIATION WILL BE ACCEPTED FOR DESIGN AMENDMENTS REQUIRED TO MEET THE

CONTRACTOR TO BE AWARE EXISTING SERVICES ARE LOCATED WITHIN THE SITE. LOCATION OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORKS CONTRACTOR TO CONFIRM WITH RELEVANT AUTHORITY REGARDING MEASURES TO BE TAKEN TO ENSURE SERVICES ARE PROTECTED OR PROCEDURES ARE IN PLACE TO DEMOLISH AND/OR

CONTRACTOR TO BE AWARE EXISTING STRUCTURES MAY EXIST WITHIN THE SITE. TO PREVENT DAMAGE TO EXISTING STRUCTURE(S) AND/OR PERSONNEL, SITE WORKS TO BE CARRIED OUT AS

CONTRACTOR TO BE AWARE EXISTING TREES EXIST WITHIN THE SITE WHICH NEED TO BE PROTECTED. TO PREVENT DAMAGE TO TREES AND/OR PERSONNEL, SITE WORKS TO BE CARRIED OUT AS FAR AS PRACTICABLY POSSIBLE FROM EXISTING TREES. ADVICE NEEDS TO BE SOUGHT FROM ARBORIST AND/OR LANDSCAPE ARCHITECT ON MEASURES REQUIRED TO PROTECT TREES.

CONTRACTOR TO BE AWARE GROUND WATER LEVELS ARE CLOSE TO EXISTING SURFACE LEVEL. TEMPORARY DE-WATERING MAY BE REQUIRED DURING CONSTRUCTION WORKS.

DEEP EXCAVATIONS DUE TO STORMWATER DRAINAGE WORKS IS REQUIRED. CONTRACTOR TO ENSURE SAFE WORKING PROCEDURES ARE IN PLACE FOR WORKS, ALL EXCAVATIONS TO BE FENCED OFF AND BATTERS ADEQUATELY SUPPORTED TO APPROVAL OF GEOTECHNICAL

CONTRACTOR TO BE AWARE OF THE SITE GEOTECHNICAL CONDITIONS. REFER TO GEOTECHNICAL

- GEOTECHNICAL INVESTIGATION FOR PROPOSED LEPPINGTON HIGH SCHOOL PREPARED BY JK

EXISTING ASBESTOS PRODUCTS & CONTAMINATED MATERIAL MAY BE PRESENT ON SITE CONTRACTOR TO ENSURE ALL HAZARDOUS MATERIALS ARE IDENTIFIED PRIOR TO COMMENCING WORKS. SAFE WORKING PRACTICES AS PER RELEVANT AUTHORITY TO BE ADOPTED AND APPROPRIATE PPE TO BE USED WHEN HANDLING ALL HAZARDOUS MATERIALS. REFER TO

PROPOSED LEPPINGTON HIGH SCHOOL - HAZEDOUS BUILDING MATERIALS SURVEY PREPARED - DETAILED SITE INVESTIGATION LEPPINGTON HIGH SCHOOL - ADJACENT SITES PREPARED BY

CONTRACTOR TO BE AWARE OF POTENTIAL HAZARDS DUE TO WORKING IN CONFINED SPACES SUCH AS STORMWATER PITS, TRENCHES AND/OR TANKS. CONTRACTOR TO PROVIDE SAFE WORKING METHODS AND USE APPROPRIATE PPE WHEN ENTERING CONFINED SPACES.

CONTRACTOR TO BE AWARE MANUAL HANDLING MAY BE REQUIRED DURING CONSTRUCTION. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ENSURE MANUAL HANDLING PROCEDURES

CONTRACTOR TO ENSURE APPROPRIATE MEASURES ARE TAKEN TO PREVENT POLLUTANTS FROM CONSTRUCTION WORKS CONTAMINATING THE SURROUNDING ENVIRONMENT.

CONTRACTOR TO BE AWARE SITE WORKS OCCUR IN CLOSE PROXIMITY TO FOOTPATHS AND ROADWAYS. CONTRACTOR TO ERECT APPROPRIATE BARRIERS AND SIGNAGE TO PROTECT SITE

CONTRACTOR TO SUPPLY AND COMPLY WITH TRAFFIC MANAGEMENT PLAN AND PROVIDE ADEQUATE SITE TRAFFIC CONTROL INCLUDING A CERTIFIED TRAFFIC MARSHALL TO SUPERVISE

#### CIVIL INSPECTION CERTIFICATES

THE FOLLOWING MUST BE PROVIDED BY THE CONTRACTOR A MINIMUM 2 WEEKS PRIOR TO THE REQUESTED DATE OF A CIVIL INSPECTION CERTIFICATE FOR OCCUPATION CERTIFICATE. SUBMISSIONS MUST BE PROVIDED PROGRESSIVELY AS WORKS ARE COMPLETED IN ACCORDANCE WITH THE CIVIL SPECIFICATION. THE PROGRAM MUST ALLOW ADEQUATE TIME FOR DEFECTS TO BE RECTIFIED SHOULD THIS BE REQUIRED.

- 1. NOTIFICATION THAT ALL CIVIL WORKS TO BE CERTIFIED HAVE BEEN COMPLETED TO ALLOW A FINAL INSPECTION TO BE UNDERTAKEN.
- 2. 2.WRITTEN CONFIRMATION FROM THE CONTRACTOR THAT ALL CIVIL SITE INSPECTION REPORTS HAVE BEEN CLOSED OUT 3. 3.CCTV (INCLUDING WINCAN LOG OR EQUIVALENT) OF ALL CIVIL STORMWATER WORKS TO BE
- CERTIFIED. 4. 4.WAE FROM A REGISTERED SURVEYOR (PDF & DWG) FOR ALL CIVIL STORMWATER TO BE
- CERTIFIED. 5. 5.WAE FROM A REGISTERED SURVEYOR (PDF, DWG & 3D TIN) FOR ALL EXTERNAL CIVIL LEVELS TO
- BE CERTIFIED. 6.HEAD CONTRACTORS STATEMENT OF CONSTRUCTION COMPLIANCE.
- 7.HYDRAULIC CONTRACTORS INSTALLATION CERTIFICATE.
- 8.3RD PARTY INSTALLATION CERTIFICATES FOR PROPRIETARY PRODUCTS AND/OR D&C ELEMENTS. 9. 9.COMPACTION TEST RESULTS IN ACCORDANCE WITH THE CIVIL SPECIFICATION. 10. 10.MATERIALS CERTIFICATES PRIOR TO INSTALLATION IN ACCORDANCE WITH THE CIVIL
- SPECIFICATION. 11. 11.WRITTEN CONFIRMATION FROM TFNSW AND/OR COUNCIL CONFIRMING COMPLETION AND ACCEPTANCE OF S138 WORKS IF APPLICABLE.

## BOUNDARIES

REMOVED

\_\_\_\_\_

EXISTING

BUILDINGS

EXISTING

REMOVED



LANDSCAPE

SOFT LANDSCAPE

## **EXISTING SERVICES**

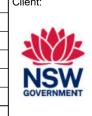
cG Ø50 GAS
cS Ø150 SEWER
cW Ø150 CW Ø150 WATER
- x - x - x - x - x - x - x - x - SERVICE TO BE DEMOLISHED

#### CLASSIFICATION OF EXISTING UTILITY INFORMATION

- SIGHTED, MUST BE LOCATED, THEN POTHOLED. UTILITY MUST BE PHYSICALLY SIGHTED AND MEASURED.
- ELECTRONICALLY DETECTED AND LOCATED ON SITE USING VARIOUS TRACING METHODS.
- ALIGNED FROM SURFACE FEATURES AND DIGITISED DATA.
- DIGITISED DATA (DIAL BEFORE YOU DIG). D

#### NOTE

- 1. BELOW GROUND SERVICES CAN BE REPRESENTED AS GREY FOR EXISTING AND BLACK FOR PROPOSED DEPENDING
- ON THE PLAN. 2. EXISTING SERVICES PITS, STRUCTURES AND COLUMNS ARE ILLUSTRATED AS PER THE ORIGINAL SURVEY.



School Infrastructure NSW





## NOT FOR CONSTRUCTION

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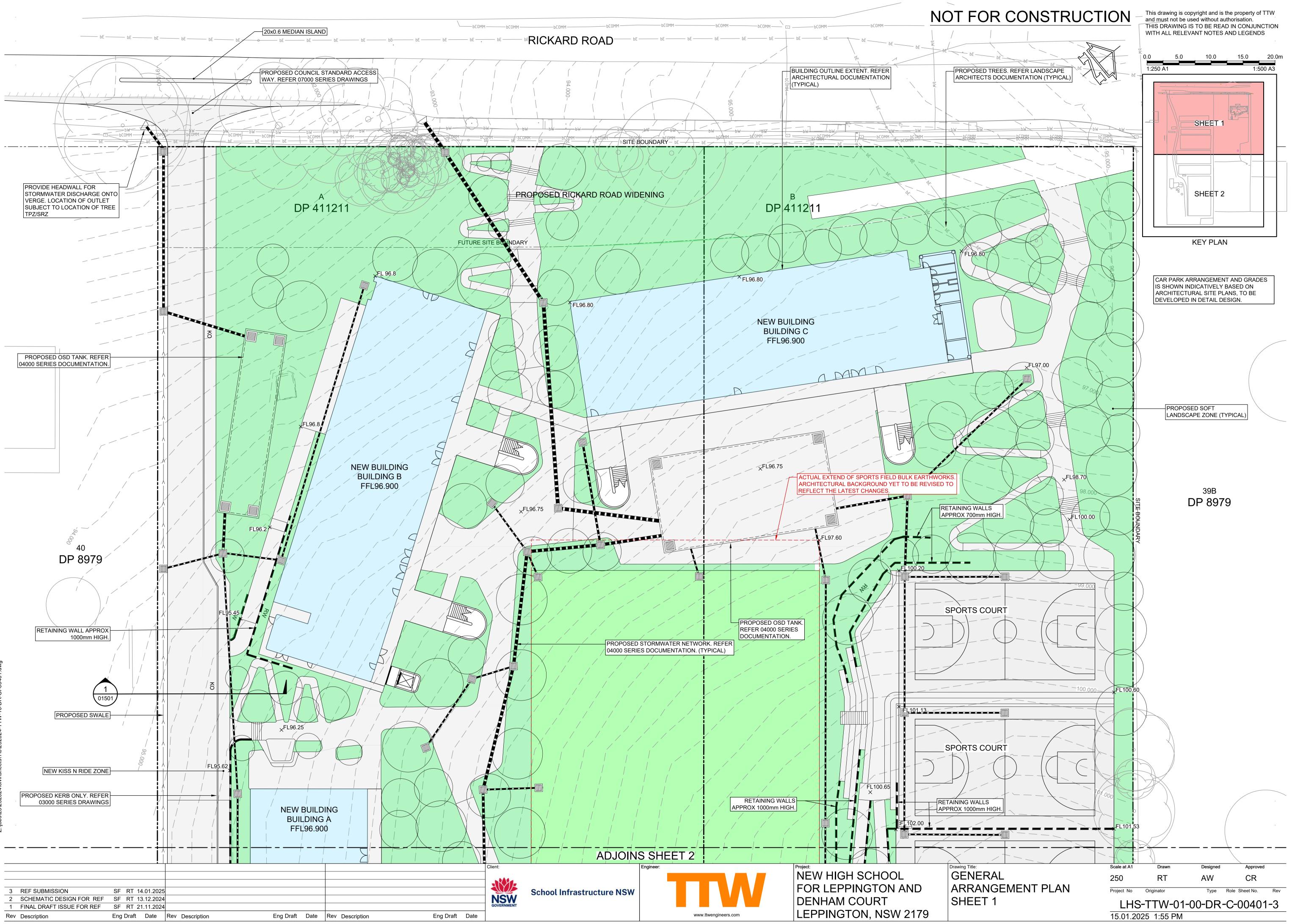
PROPOSED

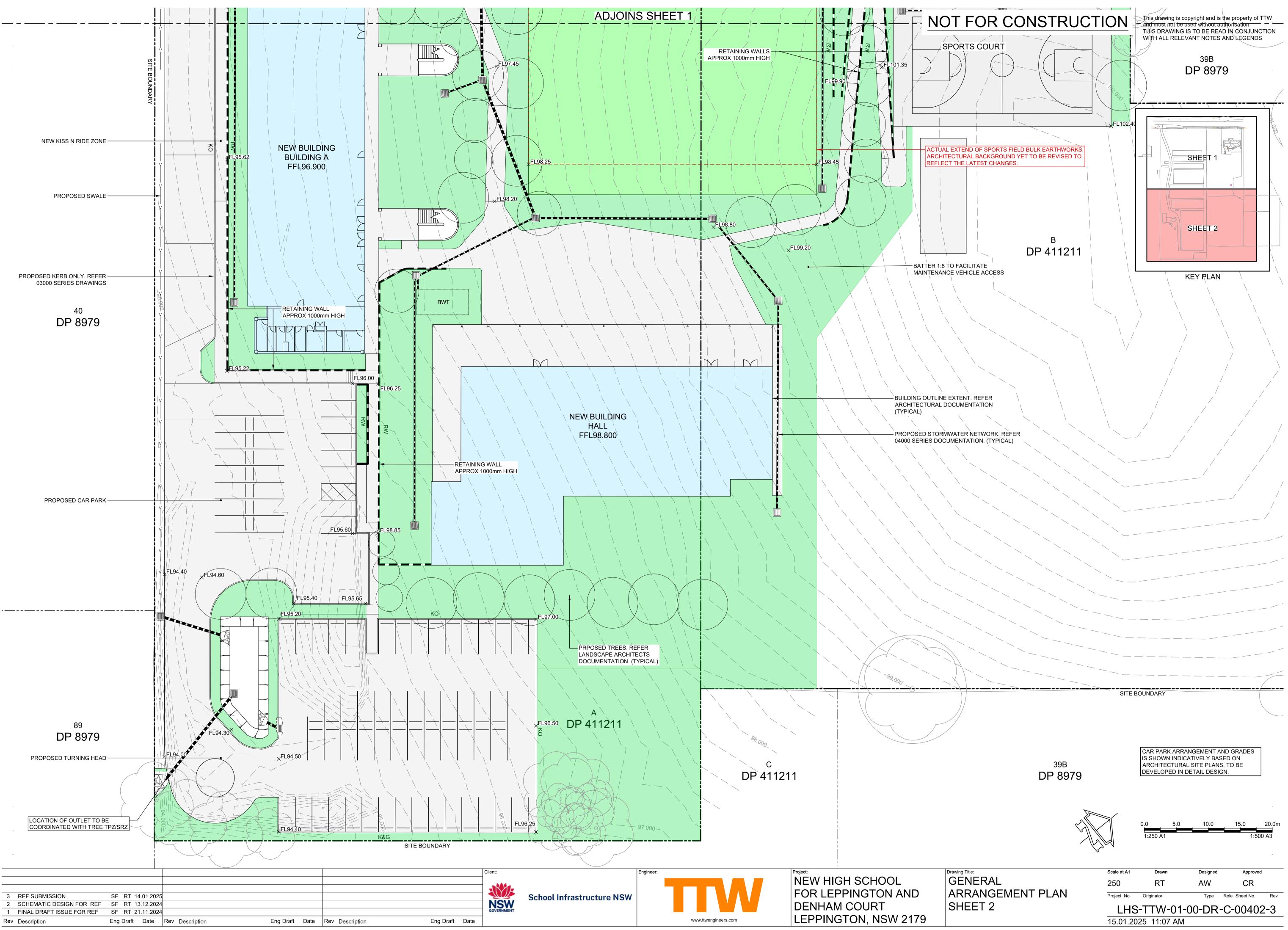
**BLOCK BOUNDARY** 

PROPOSED **BUILDING ENVELOPE** 

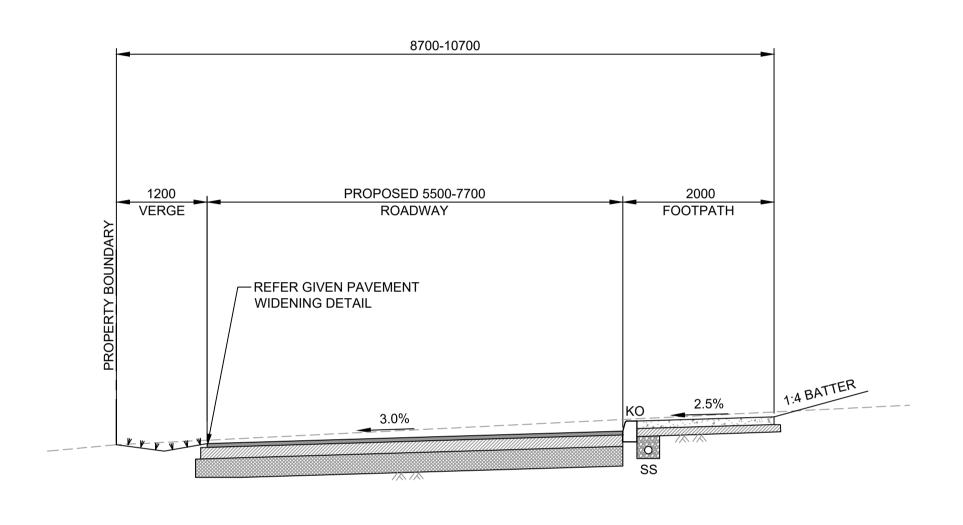
FUTURE BUILDING ENVELOPE

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Engineer:



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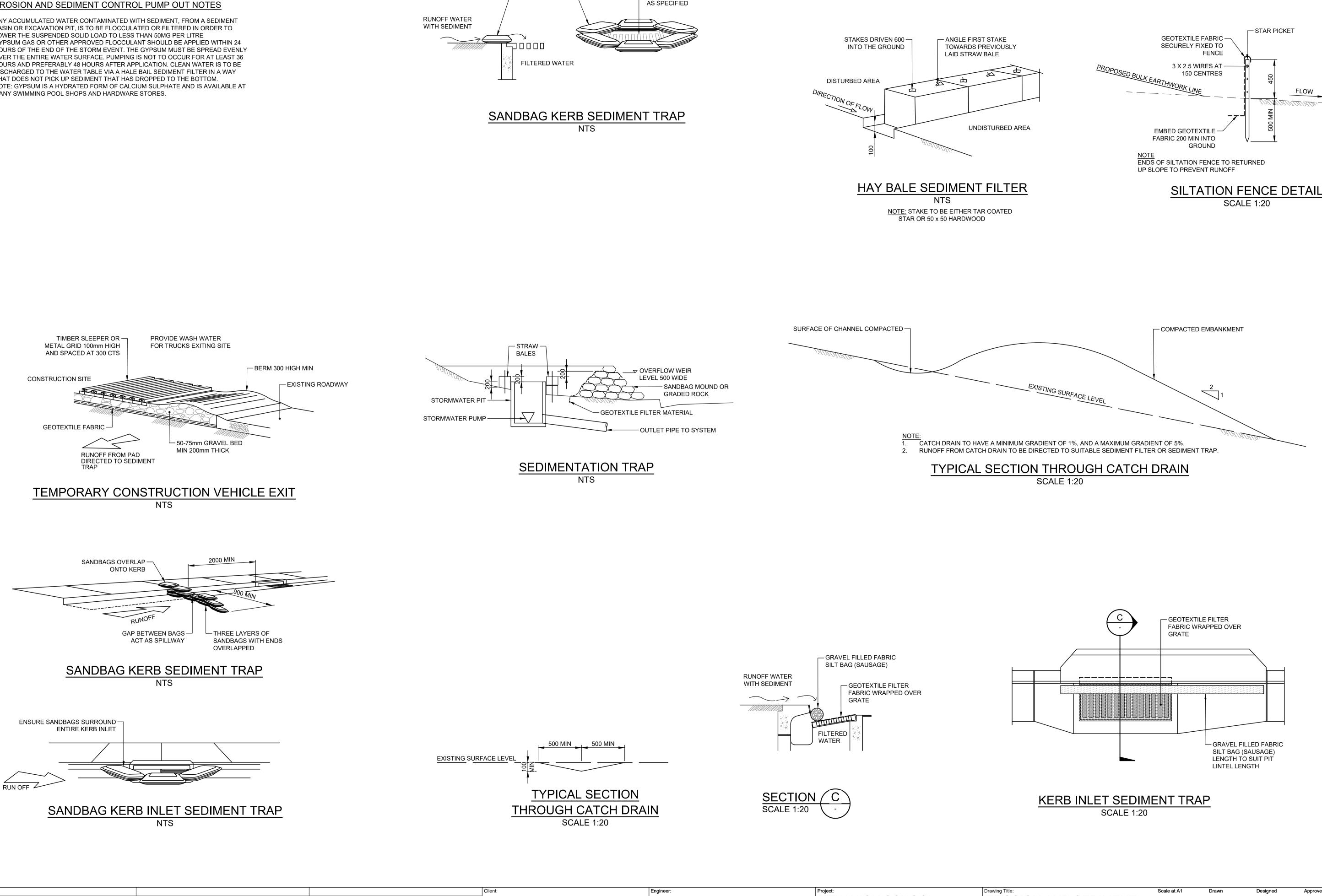


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#### EROSION AND SEDIMENT CONTROL PUMP OUT NOTES

ANY ACCUMULATED WATER CONTAMINATED WITH SEDIMENT, FROM A SEDIMENT BASIN OR EXCAVATION PIT, IS TO BE FLOCCULATED OR FILTERED IN ORDER TO LOWER THE SUSPENDED SOLID LOAD TO LESS THAN 50MG PER LITRE GYPSUM GAS OR OTHER APPROVED FLOCCULANT SHOULD BE APPLIED WITHIN 24 HOURS OF THE END OF THE STORM EVENT. THE GYPSUM MUST BE SPREAD EVENLY OVER THE ENTIRE WATER SURFACE. PUMPING IS NOT TO OCCUR FOR AT LEAST 36 HOURS AND PREFERABLY 48 HOURS AFTER APPLICATION. CLEAN WATER IS TO BE DISCHARGED TO THE WATER TABLE VIA A HALE BAIL SEDIMENT FILTER IN A WAY THAT DOES NOT PICK UP SEDIMENT THAT HAS DROPPED TO THE BOTTOM. NOTE: GYPSUM IS A HYDRATED FORM OF CALCIUM SULPHATE AND IS AVAILABLE AT MANY SWIMMING POOL SHOPS AND HARDWARE STORES.

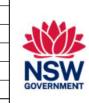


- EXISTING GRATE OR

- SANDBAG FILTER -

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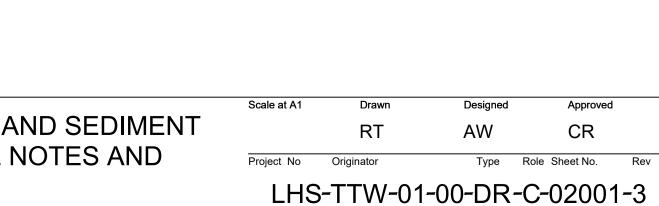




NEW HIGH SCHOOL FOR LEPPINGTON AND **DENHAM COURT** LEPPINGTON, NSW 2179

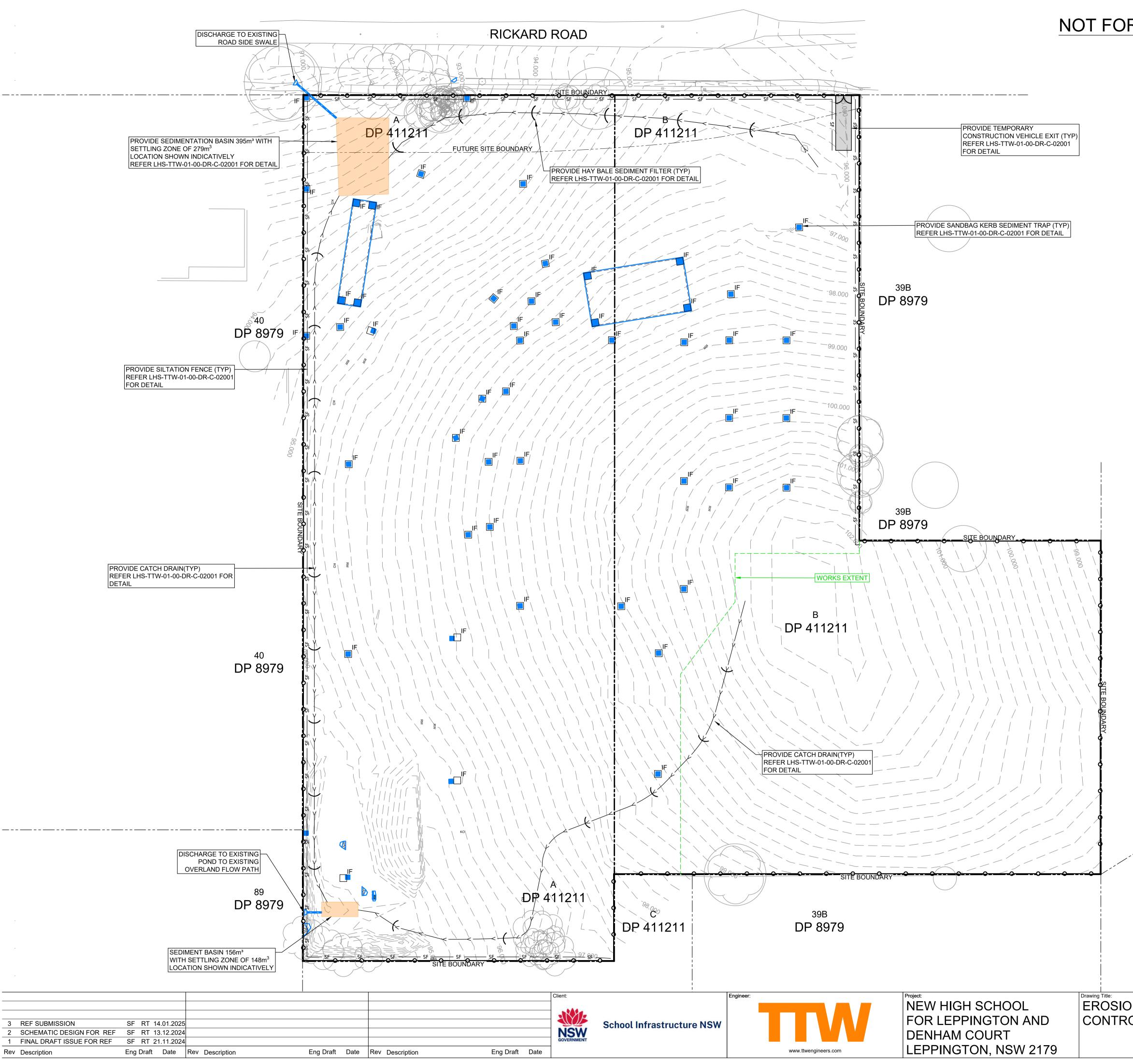


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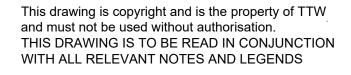


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1	FINAL DRAFT ISSUE FOR REF	SF RT 21.11.2024					
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3	REF SUBMISSION	SF RT 14.01.2025					

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## NOT FOR CONSTRUCTION



## TURFED LANDSCAPING 150mm

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**BULK EARTHWORKS NOTES** All bulk earthworks setout from grid lines U.N.O.

- All batters at a slope of 2 (H) : 1 (V) U.N.O.
- Excavated material may be used as structural fill provided, (i) it complies with the specification requirements for fill material,
- (ii) the placement moisture content complies with the Geotechnical
- Consultants requirements, and allows filling to be placed and proofrolled in accordance with the specification. Where
- necessary the Contractor must moisture condition the

excavated material to meet these requirements.

Compact fill a	reas and subgrade to not less than: 
Location	Standard dry danaity Maiatura

Location	(AS 1289 standard c		Moisture OMC)	
Under building slabs o Under roads and carp Landscaped areas:	•	98% 98% 95%	±2% ±2% ±2%	

5. Before placing fill, proof roll exposed subgrade with a 12 tonne minimum roller to test subgrade and then remove soft spots(areas with more than 3mm movement under roller). Soft spots to be replaced with granular fill U.N.O.

- 6. Contractor shall place safety barriers around excavations in accordance with relevant safety regulations. 7. For interpretation of bulk earthworks foot print line shown on the bulk earthworks
- drawings refer to the bulk earthworks construction legend. 8. Bulk earthwork drawings are not to be used for detailed excavation.
- Refer to Geotechnical Report 9
- 10. Detailed earthworks such as piling, pile caps, ground beams, lift pits, service
- trenching & landscape mounding etc is excluded. 11. All bulk earthworks in accordance with AS3798-2007 Guidelies on earthworks for commercial and residential developments.

	LEVELS TABLE					
No.	FROM LEVEL (m)	TO LEVEL (m)	COLOUR			
1	-2.75	-2.20				
2	-2.20	-1.70				
3	-1.70	-1.20				
4	-1.20	-0.70				
5	-0.70	-0.20				
6	-0.20	0.00				
7	0.00	0.50				
8	0.50	1.00				
9	1.00	1.50				
10	1.50	2.00				
11	2.00	2.50				
12	2.50	3.17				

#### CUT/FILL SUMMARY

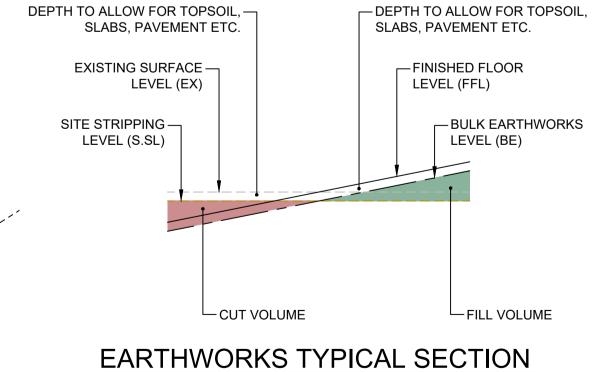
AREA (m²)	CUT (m³)	FILL (m <sup>3</sup> )	NET (m³)
27948	13366	8742	4624(CUT)

#### NOTES:

1. SITE STRIP OF TOPSOIL HAS NOT BEEN SEPARATED FOR CUT AND FILL VOLUMES. CONTRACTOR TO MAKE ALLOWANCE FOR SITE STRIP, STOCKPILE AND DISPOSAL

2. STRUCTURAL SLAB ON GRADE SOLUTION FOR GROUND FLOOR BUILDING SLABS ASSUMES REMOVAL OF THE EXISTING FILL AND RE-COMPACTION OF SITE-WON CLAY TO A MAXIMUM DEPTH OF 500mm. ANY ADDITION FILLING REQUIRED TO MEET BULK EXCAVATION LEVELS IS TO USE A NON-REACTIVE GRANULAR MATERIAL. REFER TO THE GEOTECHNICAL ADVICE FOR FURTHER DETAIL.

- 3. BULK EARTHWORKS PREPARED TO A SCHEMATIC DESIGN LEVEL ONLY BASED ON INFORMATION AVAILABLE. CONTRACTOR TO CONDUCT THEIR OWN ASSESSMENT OF BULK EARTHWORKS CUT AND FILL VOLUMNS.
- 4. CONTRACTOR TO MAKE ALLOWANCE FOR STOCKPILE/ SPREADING OF EXCESS CUT ON SITE.



## LEGEND

LEPPINGTON, NSW 2179

www.ttwengineers.com

-----EX308.00 -----

EXISTING SURFACE CONTOUR

— — — BE308.80 — — —

#### BULK EARTHWORKS CONTOUR

	Scale at A1	Drawn	Designed	Approved		
IWORKS	500	RT	AW	CR		
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#### STORMWATER DRAINAGE

- 1. STORMWATER DESIGN CRITERIA (A) AVERAGE EXCEEDANCE PROBABILITY: -- 1% AEP FOR ROOF DRAINAGE TO FIRST EXTERNAL PIT - 5% AEP FOR PAVED AND LANDSCAPED AREAS (B) RAINFALL INTENSITIES : -- TIME OF CONCENTRATION: 5 MINUTES - 1% AEP = 226mm/hr - 5% AEP = 168mm/hr (C) RAINFALL LOSSES: -
  - IMPERVIOUS AREAS: IL = 1mm CL = 0mm/hr - PERVIOUS AREAS: IL = 25.96mm CL = 0.92mm/hr
- 2. PIPES 300 DIA AND LARGER TO BE REINFORCED CONCRETE CLASS "-" APPROVED SPIGOT AND
- SOCKET WITH RUBBER RING JOINTS U.N.O. 3. PIPES UP TO 300 DIA MAY BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS, SUBJECT TO
- APPROVAL BY THE ENGINEER
- 4. EQUIVALENT STRENGTH VCP OR FRP PIPES MAY BE USED SUBJECT TO APPROVAL 5. PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY ENGINEER.
- 6. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE MANUFACTURED FITTINGS WHERE PIPES ARE
- LESS THAN 300 DIA. 7. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED
- UPVC SEWER GRADE PIPE IS TO BE USED. 8. GRATES AND COVERS SHALL CONFORM WITH AS 3996-2006, AND AS 1428.1 FOR ACCESS
- REQUIREMENTS.
- 9. PIPES ARE TO BE INSTALLED IN ACCORDANCE WITH AS 3725. ALL BEDDING TO BE TYPE H2 U.N.O. 10. CARE IS TO BE TAKEN WITH INVERT LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- 11. ALL STORMWATER PIPES TO BE 150 DIA AT 1.0% MIN FALL U.N.O.
- 12. SUBSOIL DRAINS TO BE SLOTTED FLEXIBLE UPVC U.N.O. 13. ADOPT INVERT LEVELS FOR PIPE INSTALLATION (GRADES SHOWN ARE ONLY NOMINAL).

#### STORMWATER PIPE INFORMATION

PIPE LENGTH

#### PIPE INFORMATION

TIE INFORMATION

TIE LENGTH

TIE DEPTH

TIE DIAMETER

SW

L 10.0m

D 1.0m

Ø150

UPSTREAM INVERT LEVEL PIPE INTERNAL DIAMETER PIPE MATERIAL AND CLASS HYDRAULIC FLOW RATE

PIPE GRADE DOWNSTREAM INVERT LEVEL

#### STORMWATER STRUCTURE IDENTIFICATION

SW1-2

USIL

Ø000

0.0m

0.0 m/s

%0.0

DSIL

LINE NUMBER 1 - STRUCTURE NUMBER 2

SUBSOIL DRAINAGE
------------------

- uPVC SEWER GRADE PIPE IS TO BE USED.

- FOR SUBSOIL SETOUT.

#### STORMWATER LEGEND

	STORMWATER
°DP	DOWN PIPE
o <sup>RP</sup>	RODDING POINT
oPO	PLANTER OUTLET
• <sup>RO</sup>	RAINWATER OUTLET
GPT	GROSS POLLUTANT T
$\rightarrow$	OVERLAND FLOW AR
	CONCRETE INCASED
	SWALE DRAIN

#### STORMWATER ANNOTATIONS

IL	PIPE INVERT LEVEL
OL	PIPE OBVERT LEVEL
CL	PIT COVER LEVEL
WL	WATER LEVEL

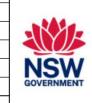
#### <u>NOTE</u>

STORMWATER DRAINAGE NOTES AND LEGEND IS TO READ IN CONJUNCTION WITH GENERAL NOTES AND LEGEND. REFER DRAWING No. 00002

3	REF SUBMISSION	SF RT 14.01.2025				
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Rev	/ Description	Eng Draft Date	Rev Description	Eng Draft Date	Rev Description	Eng Draft Date

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PIT COVER LEVEL SHOWN IN PIT SCHEDULE 1. ALL SUBSOIL DRAINAGE WORKS ARE TO BE COMPLETED IN ACCORDANCE WITH THE RELEVANT STANDARDS AND SPECIFICATIONS OUTLINED IN THE PROJECT SPECIFICATION. 2. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS UNSLOTTED 3. SUBSOIL DRAINS TO BE Ø100 SLOTTED FLEXIBLE uPVC UNLESS NOTED OTHERWISE. 4. ALL SUBSOIL DRAINS ARE TO BE AT MINIMUM 1% GRADE UNLESS NOTED OTHERWISE. 5. ALL SUBSOIL DRAINS TO BE RODDED PRIOR TO THE PLACEMENT OF ASPHALT. 6. ALL SUBSOIL DRAINS ARE DRAWN DIAGRAMMATICALLY FOR CLARITY. REFER TO TYPICAL DETAIL PIPE INVERT LEVEL SHOWN ON PIT AND PIPE PLANS AND LONGITUDINAL SECTIONS TRAP ROW PIPE INVERT LEVEL SHOWN ON ) PIPE PLANS AND LONGITUDINAL SECTIONS PIT DEPTH SHOWN IN PIT SCHEDULE ----**DESIGN INVERT LEVELS** AT STORMWATER STRUCTURES



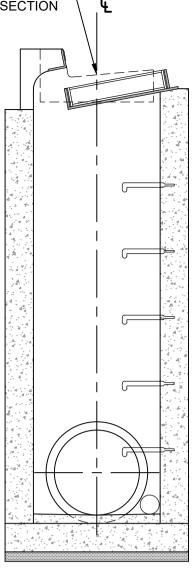
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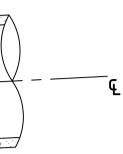


SCALE 1:20

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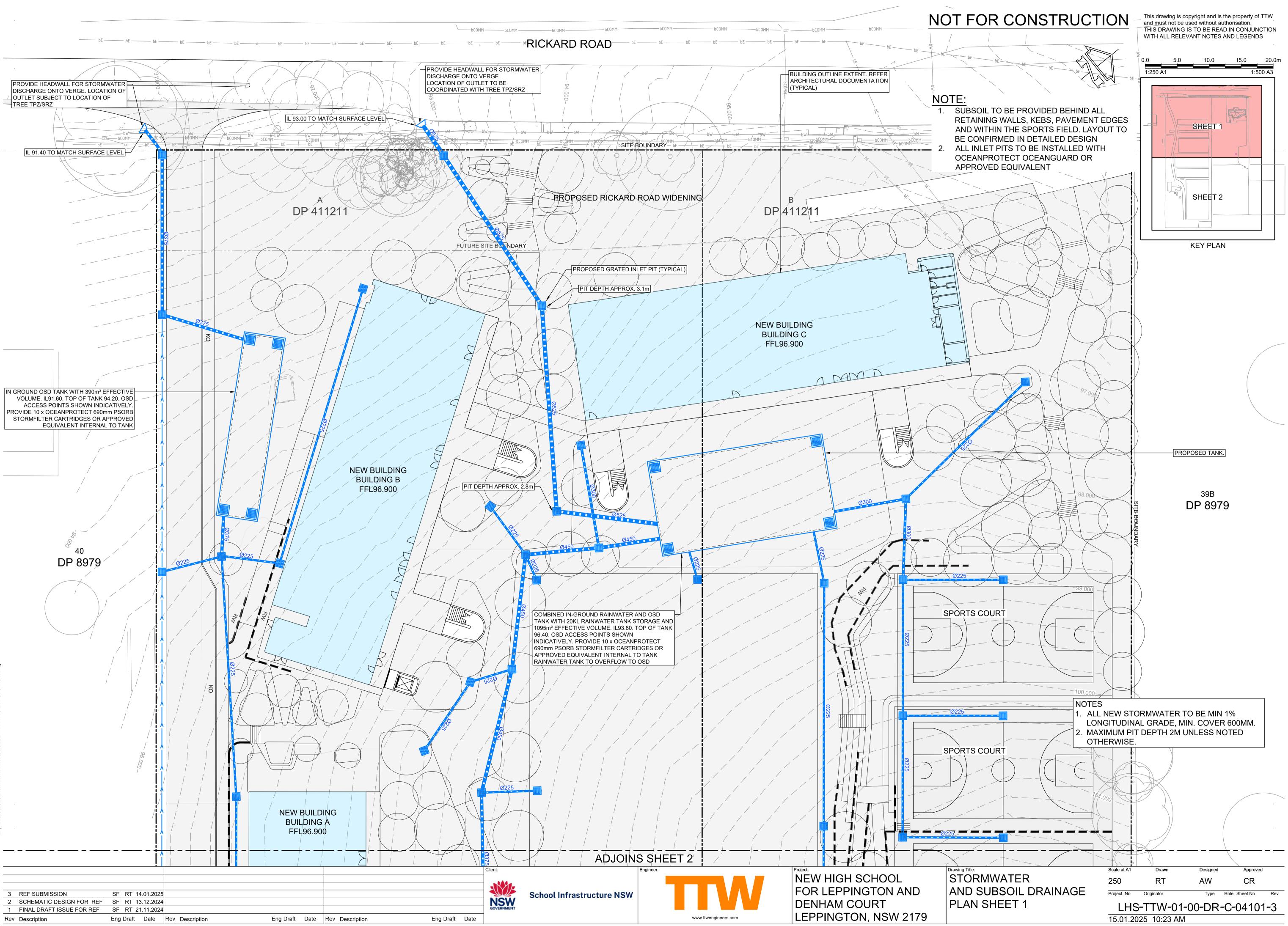
KIS SUMP COVER LEVEL ON -STORMWATER LONGITUDINAL SECTION

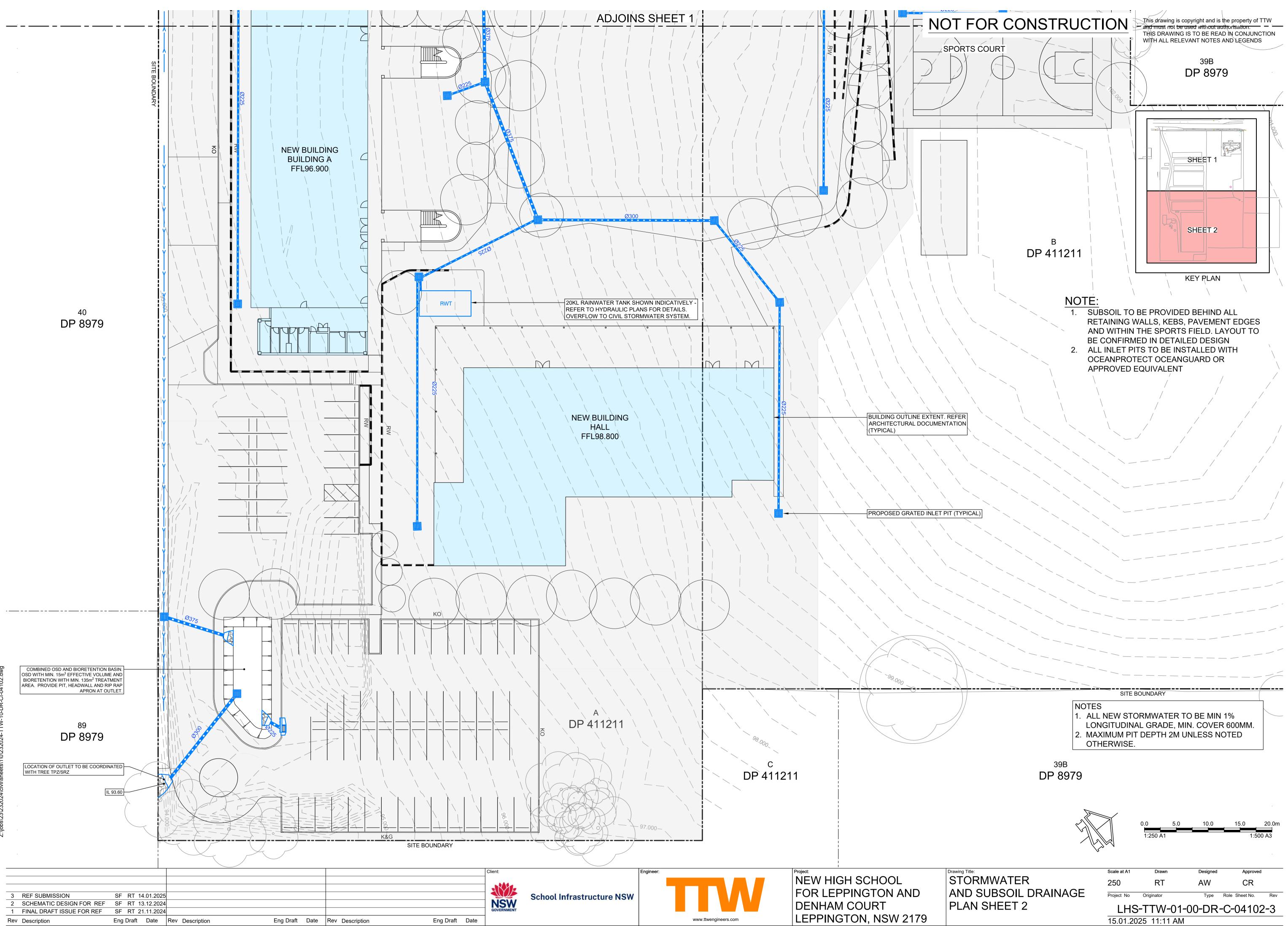


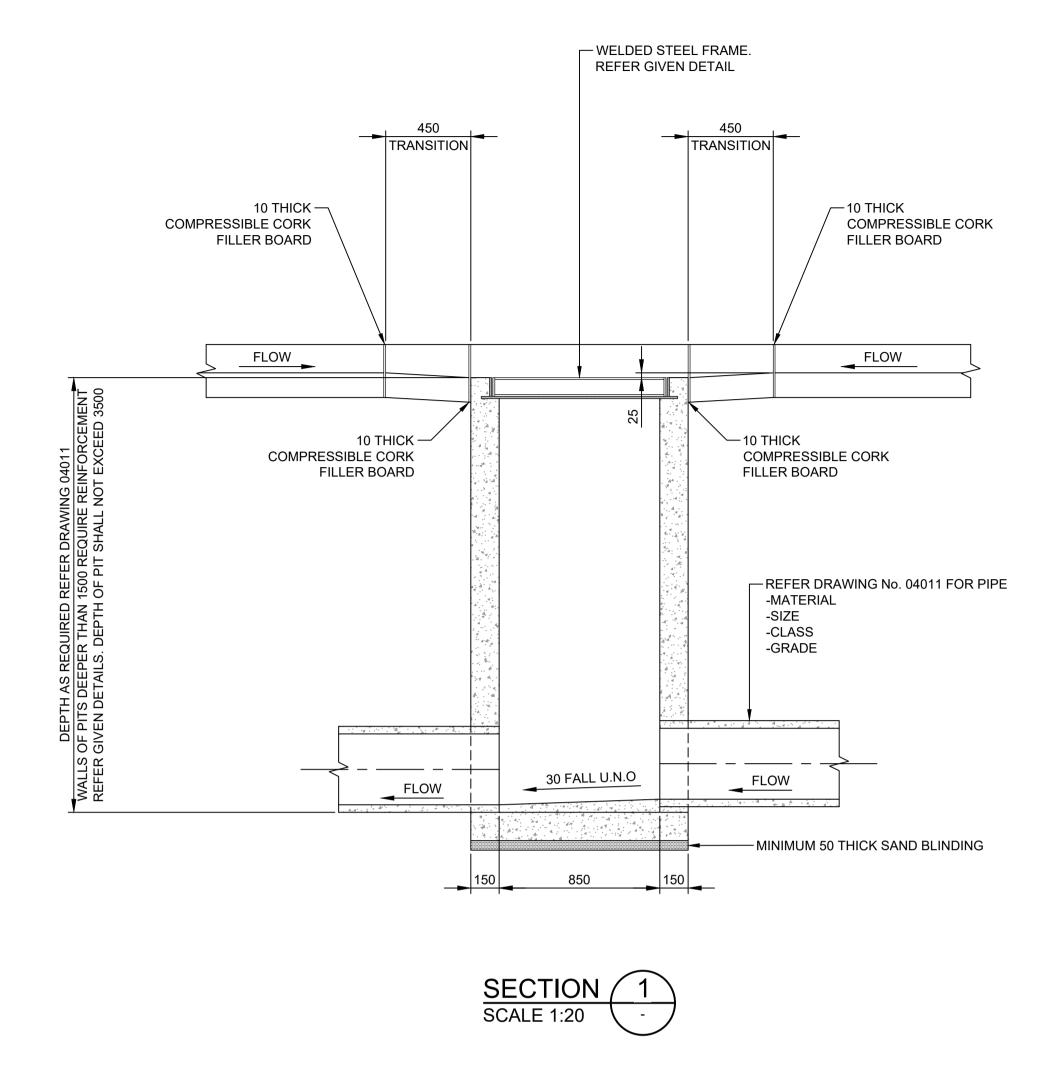


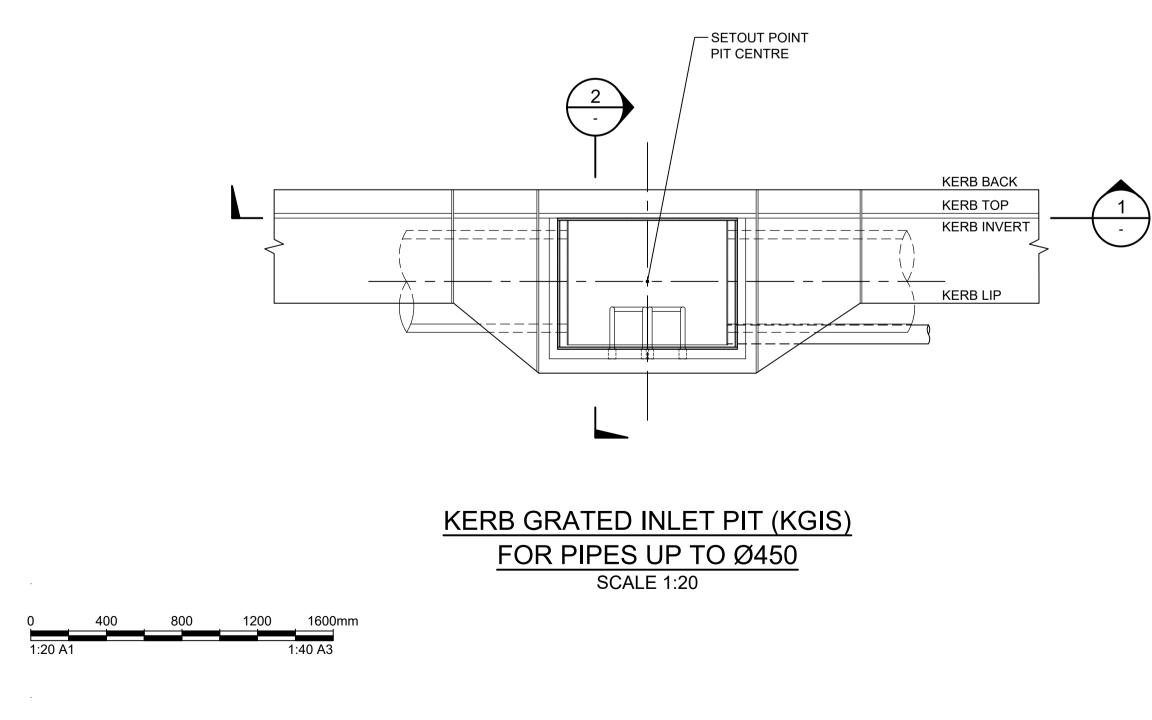
#### KERB INLET STRUCTURE (KIS) COVER LEVEL FOR KIS IN ROAD **SCALE 1:20**

	Scale at A1	Drawn	Designed	Approved	
MWATER		RT	AW	CR	
S AND LEGEND	Project No	Originator	Туре	Role Sheet No.	Rev
	LHS	S-TTW-01	-00-DR	-C-0400 <sup>-</sup>	1-3
	14.01.20	025 4:32 PM			



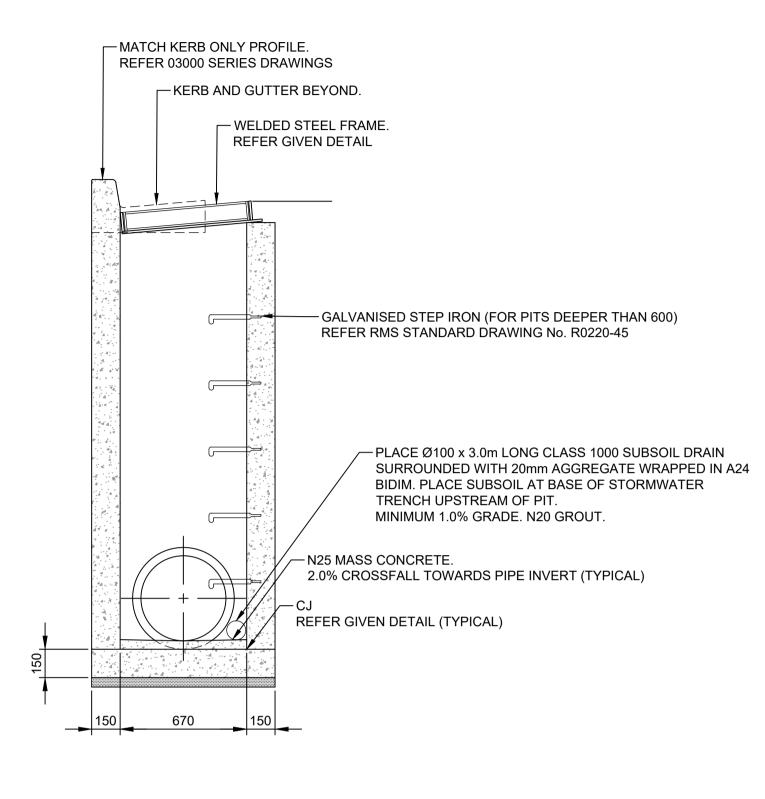




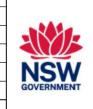


3	REF SUBMISSION	SF RT 14.01.202	5			
2	SCHEMATIC DESIGN FOR REF	SF RT 13.12.2024	1			
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Re	V Description	Eng Draft Date	Rev Description	Eng Draft Date	Rev Description	Eng Draft Date

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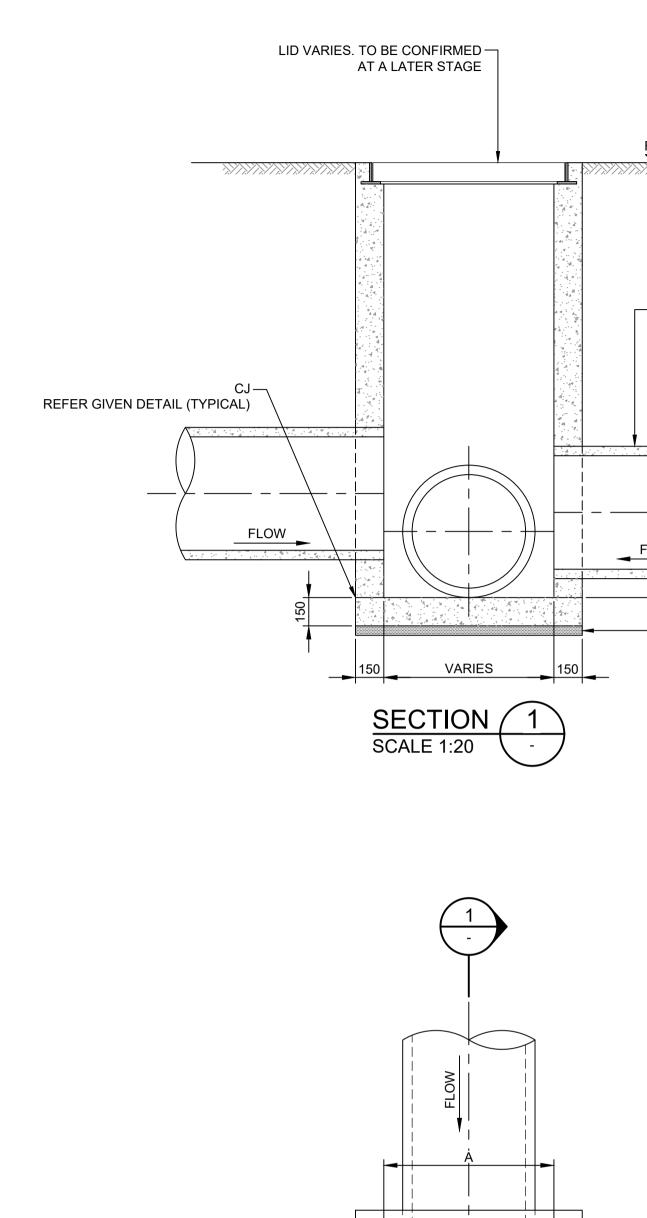


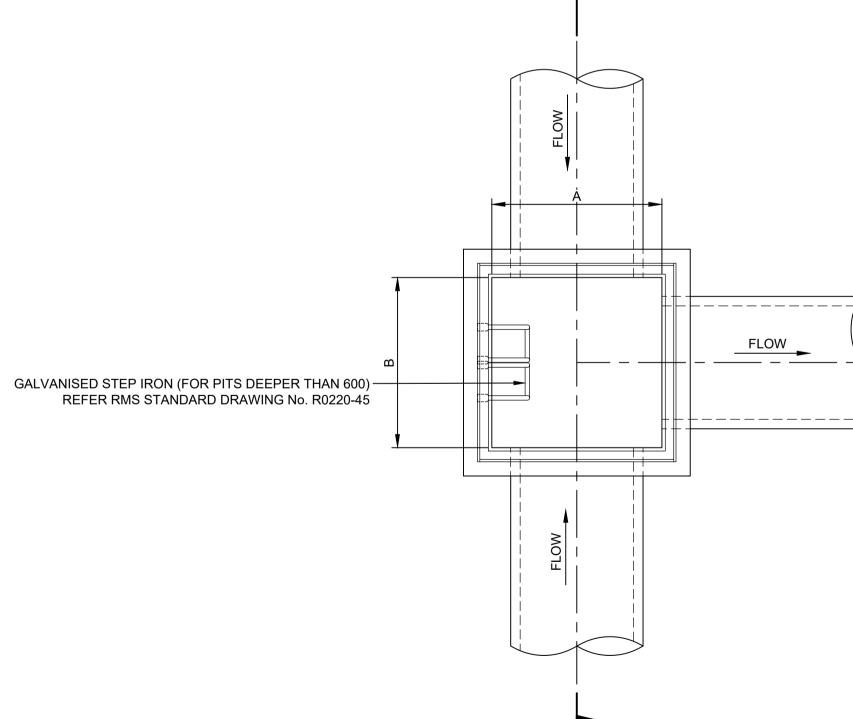
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MWATER		RT	AW	CR	
LS	Project No	Originator	Туре	Role Sheet No.	Rev
Г 1	LHS	6-TTW-01	-00-DR-	- <b>C-0450</b> 1	-3
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## JUNCTION PIT (JP) FOR PIPES UP TO Ø900 SCALE 1:20

0	400	800	1200	1600m
1:20 A	1			1:40 A3

3	REF SUBMISSION	SF RT 14.01	.2025							
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1	FINAL DRAFT ISSUE FOR REF	SF RT 21.11	.2024							
Rev	Description	Eng Draft Da	ate	Rev Description	Eng Dra	t Date	Rev Description	Eng D	raft	Date

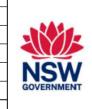
## NOT FOR CONSTRUCTION

FINISHED SURFACE	
REFER DRAWING No. 04011 FOR PIPE -MATERIAL -SIZE -CLASS -GRADE	DEPTH AS REQUIRED REFER DRAWING 04011 WALLS OF PITS DEEPER THAN 1500 REQUIRE REINFORCEMENT REFER GIVEN DETAILS. DEPTH OF PIT SHALL NOT EXCEED 3500

- MINIMUM 50 THICK SAND BLINDING

SIZE REQUIREMENTS			
GOVERNED BY MAXIMUM PIPE DIAMETER			
PIPE Ø	A, B		
300	600		
600	900		
900	1200		
1200	1600		

NOTES 1. CONCRETE STRENGTH 25MPa. SIDE WALLS OF PITS DEEPER THAN 1500 ARE TO BE REINFORCED IN ACCORDANCE WITH GIVEN DETAIL.
STEP IRONS ARE REQUIRED WHERE PITS ARE DEEPER THAN 1200.REFER DRAWING No. 00002 FOR CONCRETE NOTES



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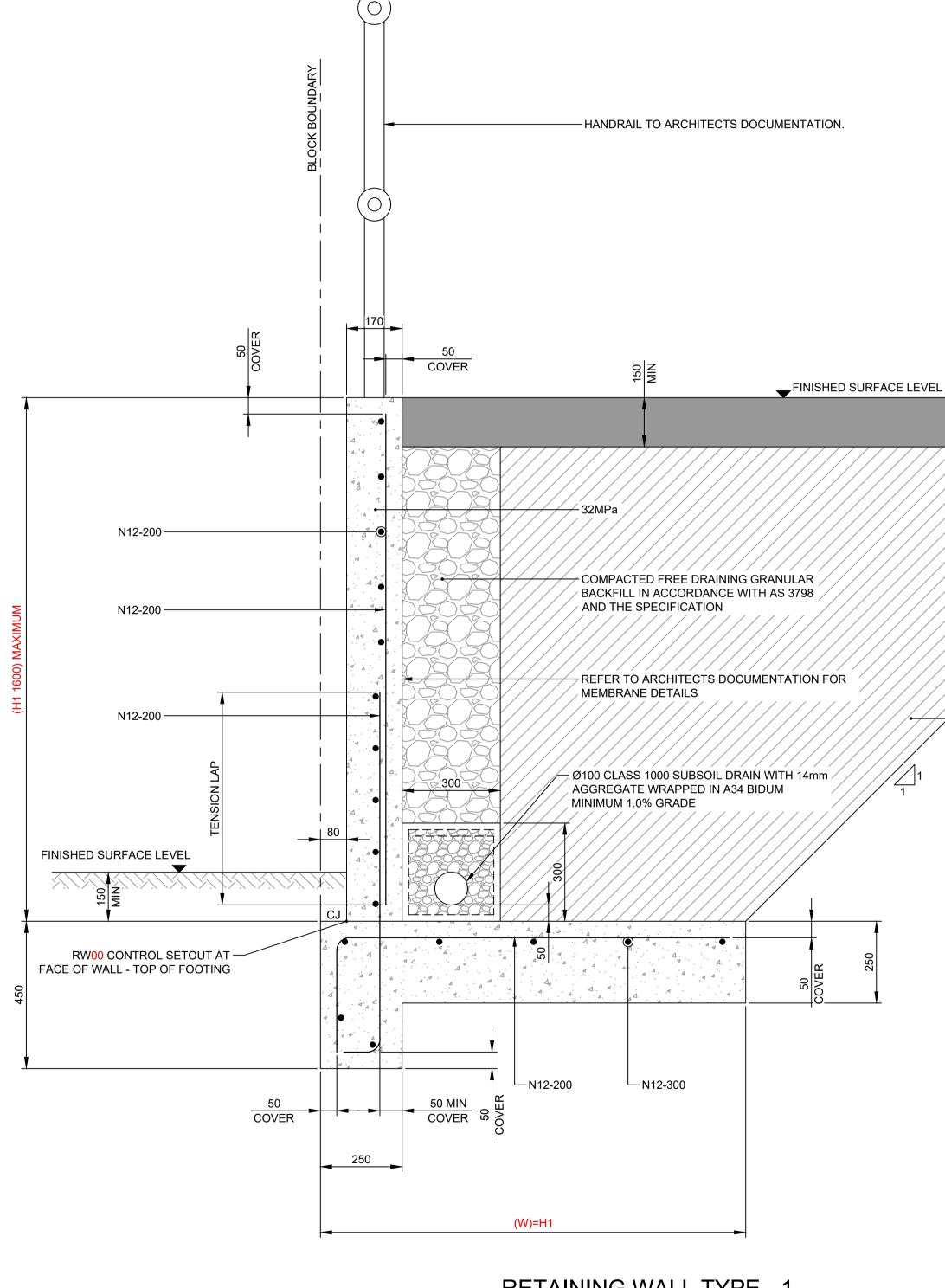
Engineer:



Project: NEW HIGH SCHOOL FOR LEPPINGTON AND DENHAM COURT LEPPINGTON, NSW 2179

Drawing Title:	Scale at A1	Drawn	Designed	Approved	
STORMWATER		RT	AW	CR	
DETAILS	Project No	Originator	Туре	Role Sheet No.	Rev
SHEET 2	LHS	6-TTW-01	-00-DR-	-C-04502	2-3
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## NOTE: RETAINING WALLS ARE SHOWN INDICATIVELY AND ARE SUBJECT TO DETAILED DESIGN

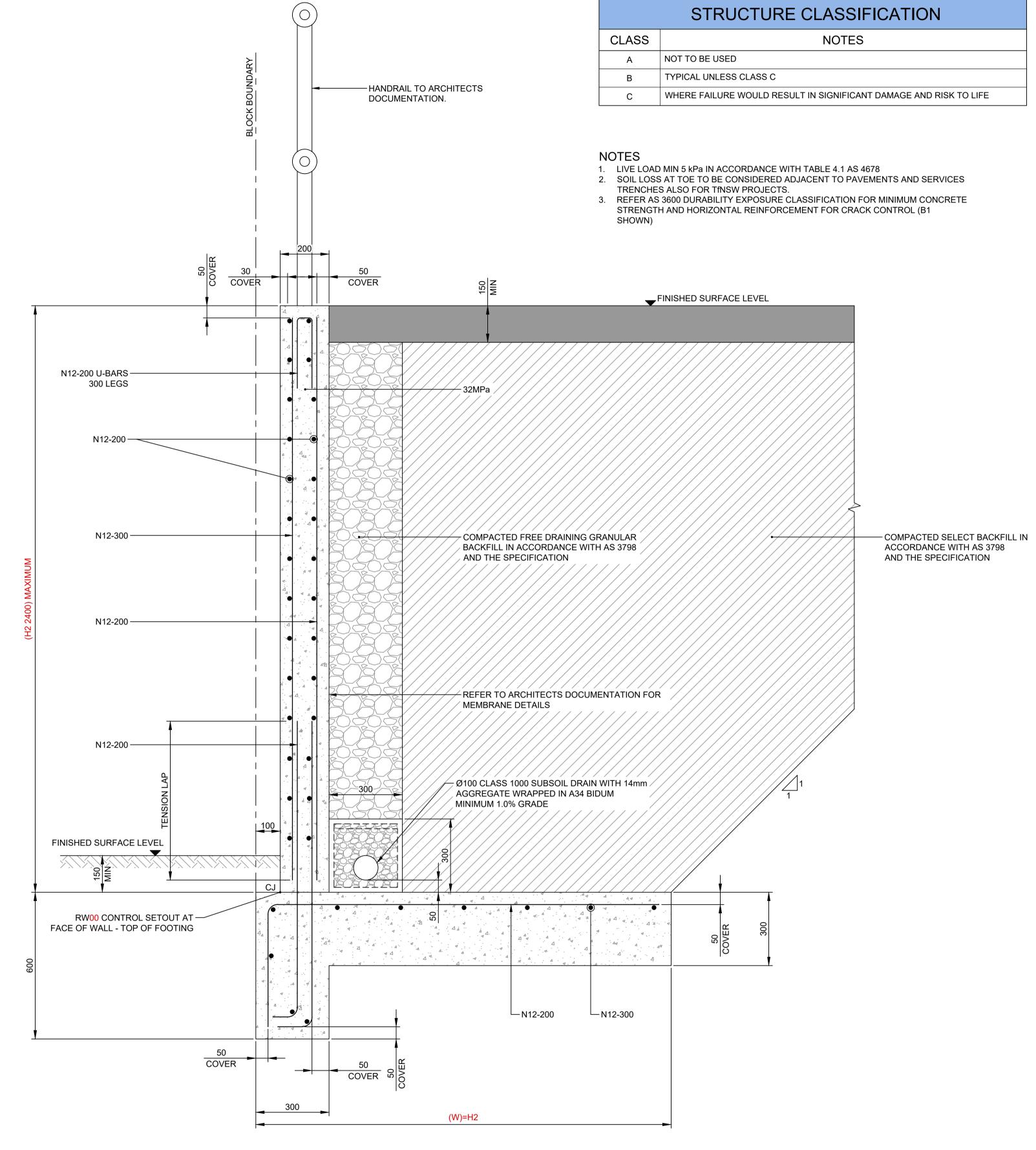


## **RETAINING WALL TYPE - 1 170 THICK REINFORCED CONCRETE**

SCALE 1:10

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RETAINING WALL TYPE - 2 200 THICK REINFORCED CONCRETE SCALE 1:10

NEW HIGH SCHOOL FOR LEPPINGTON AND **DENHAM COURT** LEPPINGTON, NSW 2179



- COMPACTED SELECT BACKFILL IN ACCORDANCE WITH AS 3798 AND THE SPECIFICATION



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	STRUCTURE CLASSIFICATION				
CLASS	NOTES				
A	NOT TO BE USED				
В	TYPICAL UNLESS CLASS C				
С	WHERE FAILURE WOULD RESULT IN SIGNIFICANT DAMAGE AND RISK TO LIFE				

	Scale at A1	Drawn	Designed	Approved	
NING WALLS	10	RT	AW	CR	
_S	Project No	Originator	Type R	ole Sheet No.	Rev
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#### CONCRETE

1. PLACE CONCRETE OF THE FOLLOWING CHARACTERISTIC COMPRESSIVE STRENGTH fc IN

#### ACCORDANCE WITH AS 1379. 2

LOCATION	f'c MPa (28 DAYS)	SPECIFIED SLUMP	NOMINAL AGG. SIZE
KERBS	S20	80	20
RETAINING WALL FOOTINGS	S40	80	20

- 3. USE TYPE 'GP' CEMENT, UNLESS OTHERWISE SPECIFIED.
- 4. ALL CONCRETE SHALL BE SUBJECT TO PROJECT ASSESSMENT AND TESTING TO AS 1379. CONSOLIDATE BY MECHANICAL VIBRATION. CURE ALL CONCRETE SURFACES AS DIRECTED IN THE SPECIFICATION.
- 6. FOR ALL FALLS IN SLAB, DRIP GROOVES, REGLETS, CHAMFERS ETC. REFER TO ARCHITECTS
- DRAWINGS AND SPECIFICATIONS. UNLESS SHOWN ON THE DRAWINGS, THE LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE
- SUBMITTED TO ENGINEER FOR REVIEW.
- NO HOLES OR CHASES SHALL BE MADE IN THE SLAB WITHOUT THE APPROVAL OF THE ENGINEER 9. CONDUITS AND PIPES ARE TO BE FIXED TO THE UNDERSIDE OF THE TOP REINFORCEMENT LAYER.
- 10. SLURRY USED TO LUBRICATE CONCRETE PUMP LINES IS NOT TO BE USED IN ANY STRUCTURAL MEMBERS.
- 11. ALL SLABS CAST ON GROUND REQUIRE SAND BLINDING WITH A CONCRETE UNDERLAY

#### CONCRETE FINISHING

- 1. ALL EXPOSED CONCRETE PAVEMENTS ARE TO BE BROOMED FINISHED. 2. ALL EDGES OF THE CONCRETE PAVEMENT INCLUDING KEYED AND DOWELLED JOINTS ARE TO BE
- FINISHED WITH AN EDGING TOOL. 3. CONCRETE PAVEMENTS WITH GRADES GREATER THAN 10 % SHALL BE HEAVILY BROOMED
- FINISHED.
- 4. CARBORUNDUM TO BE ADDED TO ALL STAIR TREADS AND RAMPED CROSSINGS U.N.O.

#### FORMWORK

1. THE DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF THE FORMWORK, FALSEWORK AND BACKPROPPING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PROPOSED METHOD OF INSTALLATION AND REMOVAL OF FORMWORK IS TO BE SUBMITTED TO THE SUPERINTENDENT FOR COMMENT PRIOR TO WORK BEING CARRIED OUT.

#### PAVEMENT LEGEND

PT1	CONCRETE BLEACHERS
PT2	HARDSTANDING - PEDESTRIAN PAVEMENT 125MM THICK 32MPA CONCRETE (COLOUR OXIDE TO LANDSCAPE SPECIFICATION) SL72 ON, 150MM THICK COMPACTED FINE CRUSHED ROCK (DGB20) ON, COMPACTED SUBGRADE
PT3	CARPARK AND DELIVERY ZONE 40mm COMPACTED THICKNESS AC14 WEARING COURSE ON 150mm COMPACTED THICKNESS DGB20 CLASS 1 BASE TO 98% MMDD AT ±2% OMC ON 175mm COMPACTED THICKNESS DGS20 SUBBASE TO 98% MMDD AT ±2% OMC ON SUBGRADE MIN. CBR 4% COMPACTED TO 98% SMDD AT ±2% OMC
PT4	MULTI SPORTS COURTS TO LANDSCAPE ARCHITECT'S DOCUMENTATION
PT5	SPORTS FIELD TO LANDSCAPE ARCHITECT'S DOCUMENTATION
PT6	HARDSTANDING - PEDESTRIAN PAVEMENT 125MM THICK 32MPA CONCRETE (COLOUR OXIDE TO LANDSCAPE SPECIFICATION) SL72 ON, 150MM THICK COMPACTED FINE CRUSHED ROCK (DGB20) ON, COMPACTED SUBGRADE
PT8	RIGID PAVEMENT - LOADING DOCK AND WASTE 170MM THICK FC 32MPA WITH F82 MESH 100MM THICK COMPACTED FINE CRUSHED ROCK (DGB20) ON, COMPACTED SUBGRADE
	LANDSCAPING REFER TO LANDSCAPE ARCHITECT'S DOCUMENTATION

#### NOTES:

- 1. PAVEMENT BUILDUPS ARE INDICATIVE AND TO BE DEVELOPED IN DETAILED DESIGN. 2. ADOPTED DESIGN PARAMETERS:
- DESIGN TRAFFIC 5x10<sup>5</sup> ESA, SUBGRADE 4% CBR MIN.

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Eng Draft Date Rev Description

#### CONCRETE REINFORCEMENT

FIX REINFORCE
AS SHOWN BEL
SIZE IN MILLIME

#### SYMBO N R SL RL

2. PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING CONCRETE COVER TO ALL REINFORCEMENT UNLESS OTHERWISE NOTED ON DRAWINGS.

#### LO

FOOTINGS WALLS

#### **FABRIC LAP**

	TENSION LAPS	
BAR SIZE	TOP BARS IN BANDS AND BEAMS	ALL OTHER BARS
N12	570	480
N16	800	700
N20	1150	950
N24	1500	1250
N28	1850	1500
N32	2250	1800
N36	2700	2100

COMPRES	SION LAPS
BAR SIZE	
N16	640
N20	800
N24	960
N28	1120
N32	1280
N36	1440
1130	1440

**ASSUMPTIONS:** 1. TOP BARS IN BANDS AND BEAMS:

- MORE THAN 300mm OF CONCRETE BELOW THE BAR.
- FOR 32Mpa CONCRETE,
- 3. f'c = 32Mpa ALL OTHER BARS:
- BARS = 2 X Cd = 50 mm.
- 3. f'c = 32Mpa.
- COLUMNS:
- 2. COVERS FOR FIRE RATING ARE TO BE DESIGNED BY THE ENGINEER.

## NOT FOR CONSTRUCTION

EMENT AS SHOWN ON DRAWINGS. THE TYPE AND GRADE IS INDICATED BY A SYMBOL LOW. ON THE DRAWINGS THIS IS FOLLOWED BY A NUMERAL WHICH INDICATES THE ETRES OF THE REINFORCEMENT.

)L	TYPE	GRADE
	HOT ROLLED RIBBED BAR	DN500N
	PLAIN ROUND BAR	R250N
	SQUARE MESH	500L
	RECTANGULAR MESH	500L

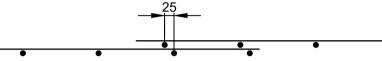
CATION	COVER (MM)
	50
	30

3. COVER TO REINFORCEMENT ENDS TO BE 50 mm U.N.O.

4. PROVIDE N12-450 SUPPORT BARS TO TOP REINFORCEMENT AS REQUIRED, LAP 500 U.N.O. 5. MAINTAIN COVER TO ALL PIPES, CONDUITS, REGLETS, DRIP GROOVES ETC

6. ALL COGS TO BE STANDARD COGS UNLESS NOTED OTHERWISE. 7. FABRIC END AND SIDE LAPS ARE TO BE PLACED STRICTLY IN ACCORDANCE WITH THE

MANUFACTURERS REQUIREMENTS TO ACHIEVE A FULL TENSILE LAP. FABRIC SHALL BE LAID SO THAT THERE IS A MAXIMUM OF 3 LAYERS AT ANY LOCATION.



8. LAPS IN REINFORCEMENT SHALL BE MADE ONLY WHERE SHOWN ON THE DRAWINGS UNLESS OTHERWISE APPROVED. LAP LENGTHS AS PER TABLE BELOW.

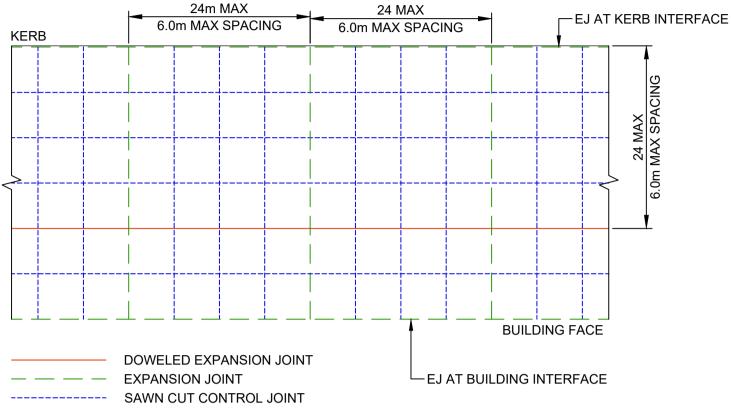
2. MINIMUM COVER OF 25mm AND MINIMUM STIRRUP SIZE OF N12 GIVING Cd=37mm; THEREFORE MINIMUM CLEAR SPACING BETWEEN BARS = 2 X Cd = 74mm. MINIMUM COVER IS BASED ON THE NEW A2 EXPOSURE CLASSIFICATION FOR INTERIOR, NON-RESIDENTIAL WHICH REQUIRES 25mm COVER

1. LESS THAN 300mm OF CONCRETE BELOW THE BAR. 2. MINIMUM COVER OF 25mm GIVING Cd = 25mm; THEREFORE MINIMUM CLEAR SPACING BETWEEN

1. COVER TO COLUMNS = 40mm (30+10)k7 = 1.25

#### VEHICULAR PAVEMENT JOINTING (03000 SERIES DRAWINGS)

- 1. ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.
- 2. DOWEL BARS ARE TO BE IN ACCORDANCE WITH GIVEN DETAIL. REFER 03000 SERIES DRAWINGS. 3. DOWELED EXPANSION JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 24.0M CENTRES.
- 4. SAWN JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6.0M CENTRES OR 1.5 X THE
- SPACING OF PERPENDICULAR SAWN JOINTS. 5. PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS BETWEEN BUILDINGS/STRUCTURES AND ALL
- CONCRETE OR UNIT PAVERS. 6. THE TIMING OF THE SAW CUT IS TO BE CONFIRMED BY THE CONTRACTOR ON SITE. SITE CONDITIONS WILL DETERMINE HOW MANY HOURS AFTER THE CONCRETE POUR BEFORE THE SAW CUTS ARE COMMENCED. REFER TO THE SPECIFICATION FOR WEATHER CONDITIONS AND TEMPERATURES REQUIRED.
- 7. VEHICULAR PAVEMENT JOINTING AS FOLLOWS.



#### PEDESTRIAN PATH JOINTING (03000 SERIES DRAWINGS)

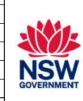
- 1. EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND
- ELSEWHERE AT MAX 6.0M CENTRES.
- 2. WEAKENED PLANE JOINTS ARE TO BE LOCATED AT A MAX 1.5 X WIDTH OF THE PAVEMENT. 3. WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.
- 4. ALL PEDESTRIAN FOOTPATH JOINTING AS FOLLOWS (UNO).

-	6.0m MAX SP	6.0m MAX
	EXPANSION JC WEAKENED PL	1.5xW

#### <u>KERBING</u>

INCLUDES ALL KERBS, GUTTERS, DISH DRAINS, CROSSINGS AND EDGES.

- 1. ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON MINIMUM 75mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- 2. EXPANSION JOINTS (EJ) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT 12M CENTRES EXCEPT FOR
- INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN SLABS. 3. WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3M CENTRES EXCEPT FOR INTEGRAL KERBS WHERE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN
- SLABS. 4. BROOMED FINISHED TO ALL RAMPED AND VEHICULAR CROSSINGS, ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- 5. IN THE REPLACEMENT OF KERBS EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm FROM LIP OF GUTTER. UPON COMPLETION OF NEW KERBS, NEW BASE COURSE AND SURFACE IS TO BE LAID 900mm WIDE TO MATCH EXISTING MATERIALS AND THICKNESSES. EXISTING ALLOTMENT DRAINAGE PIPES ARE TO BE BUILT INTO THE NEW KERB WITH A 100mm DIA HOLE. EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.



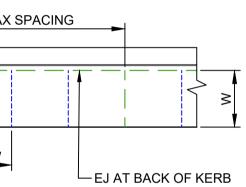
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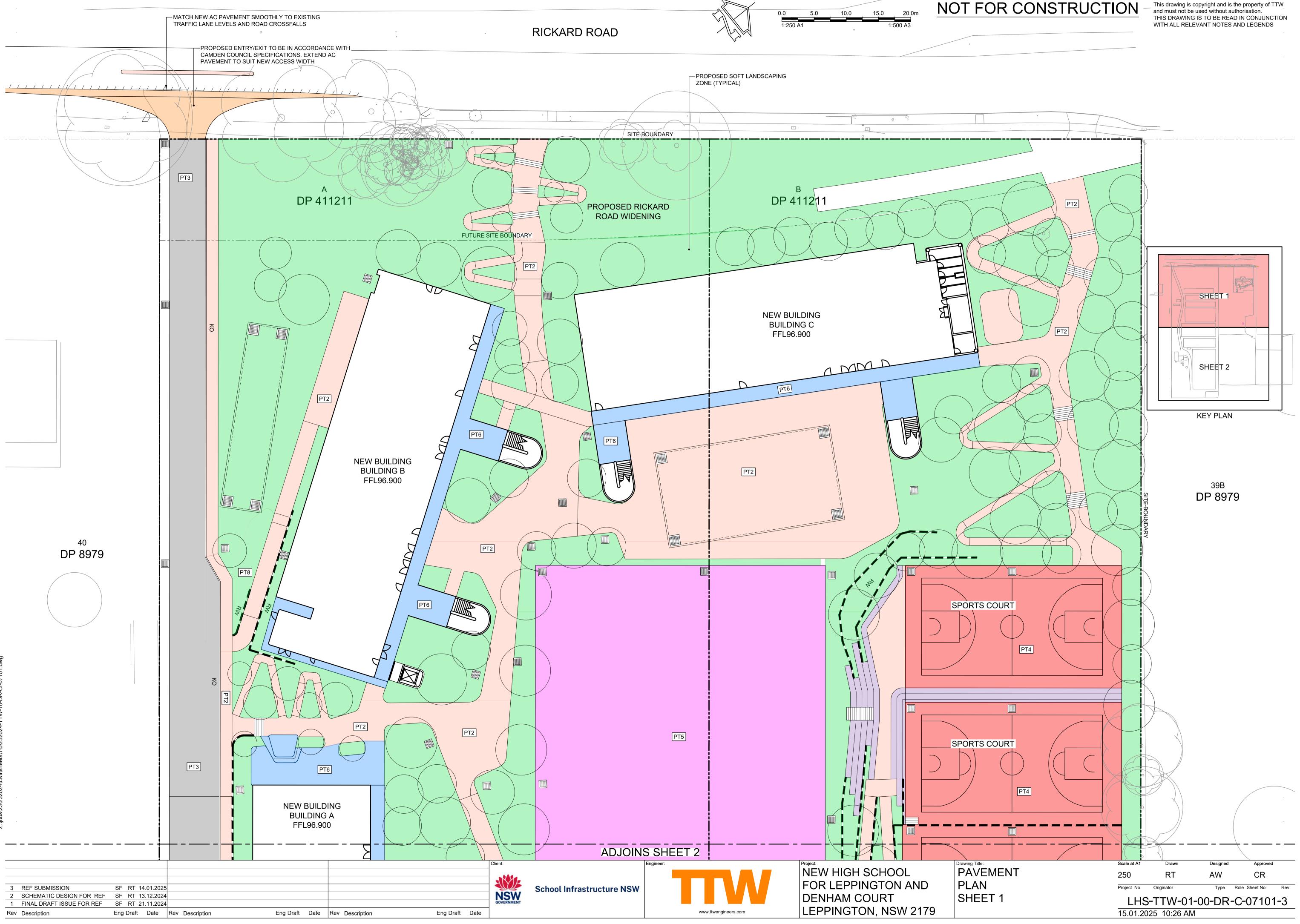
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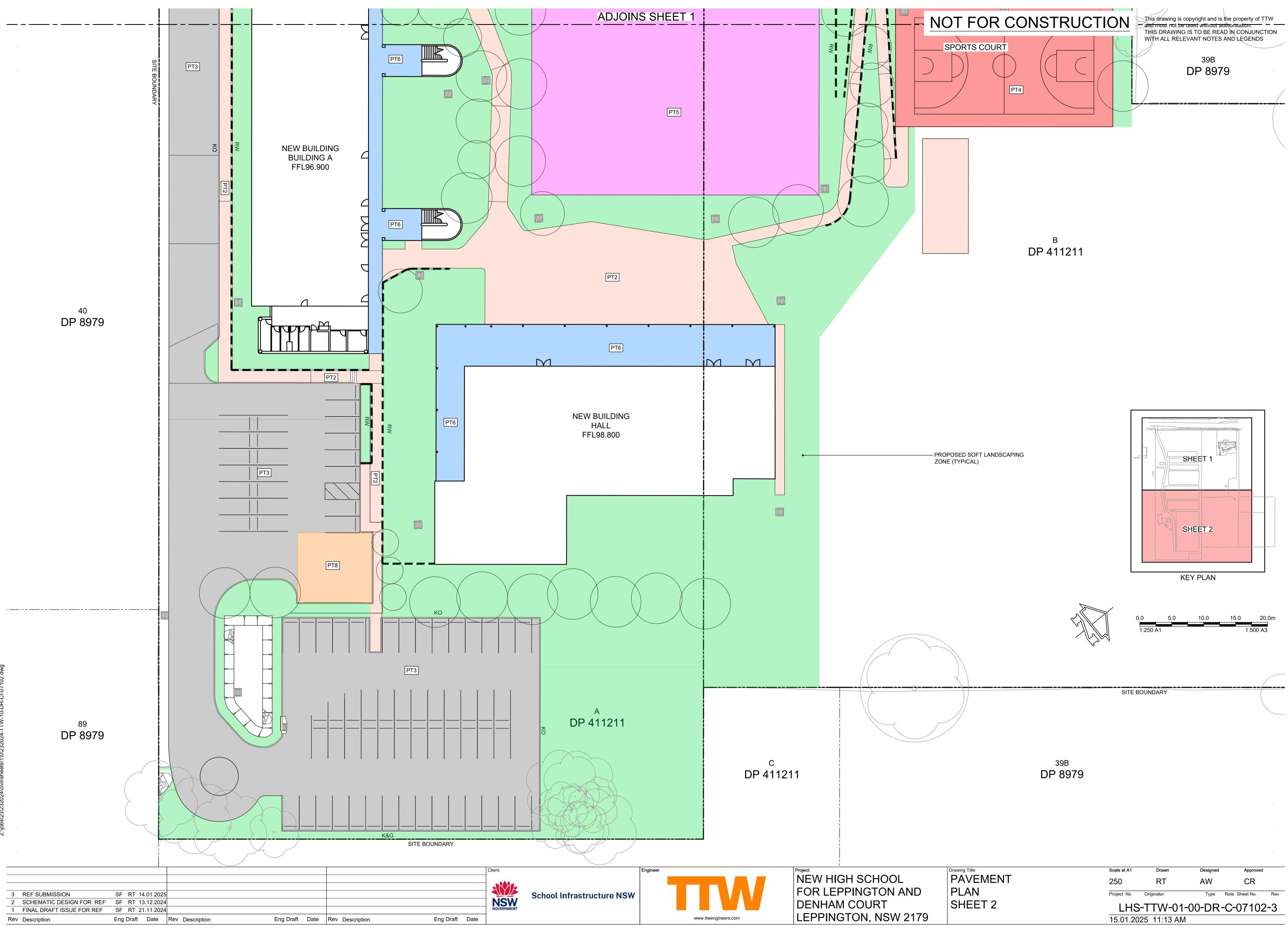
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MENT		RT	AW	CR	
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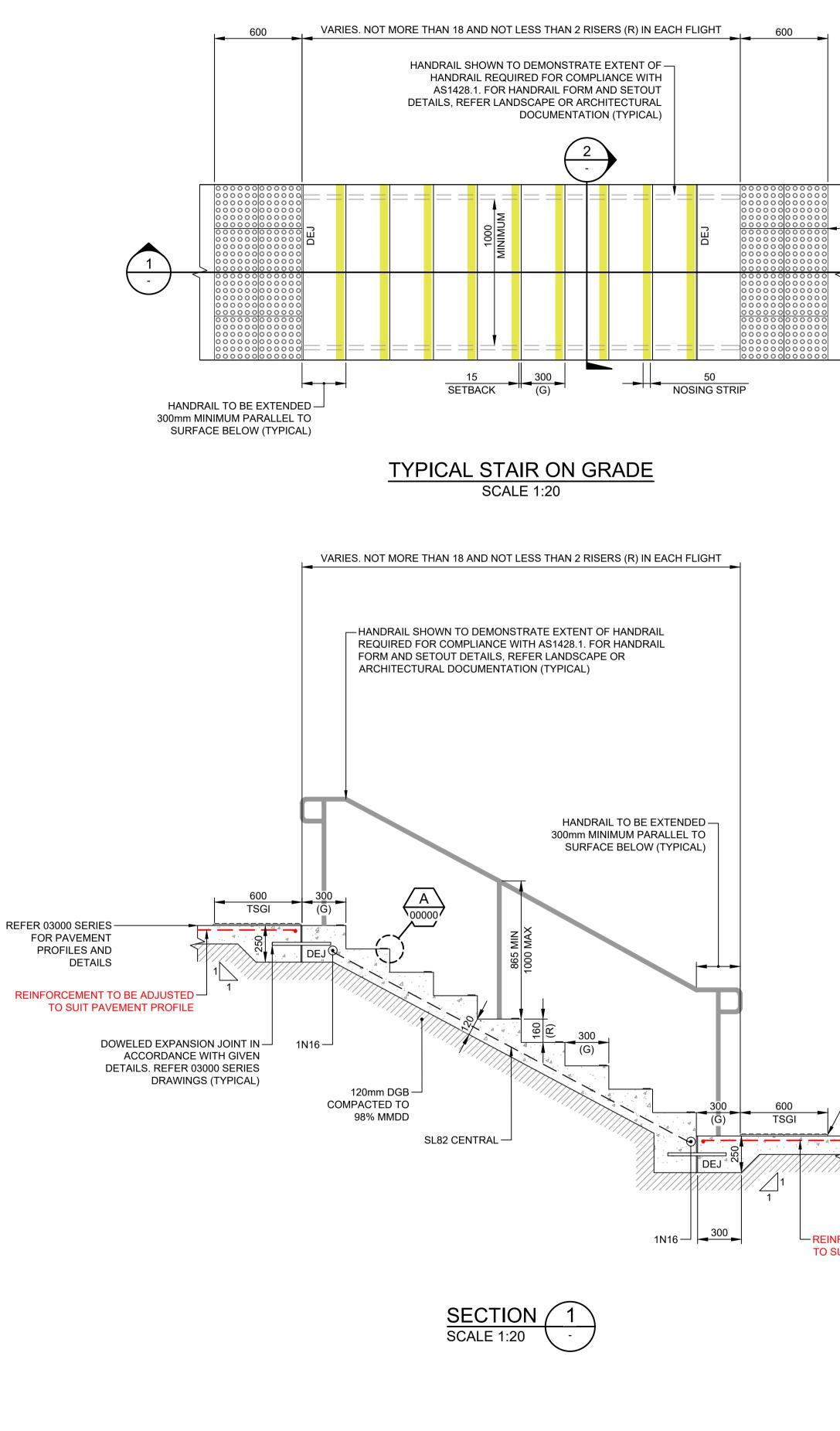


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	Scale at A1	Drawn	Designed	Approved	
MENT	250	RT	AW	CR	
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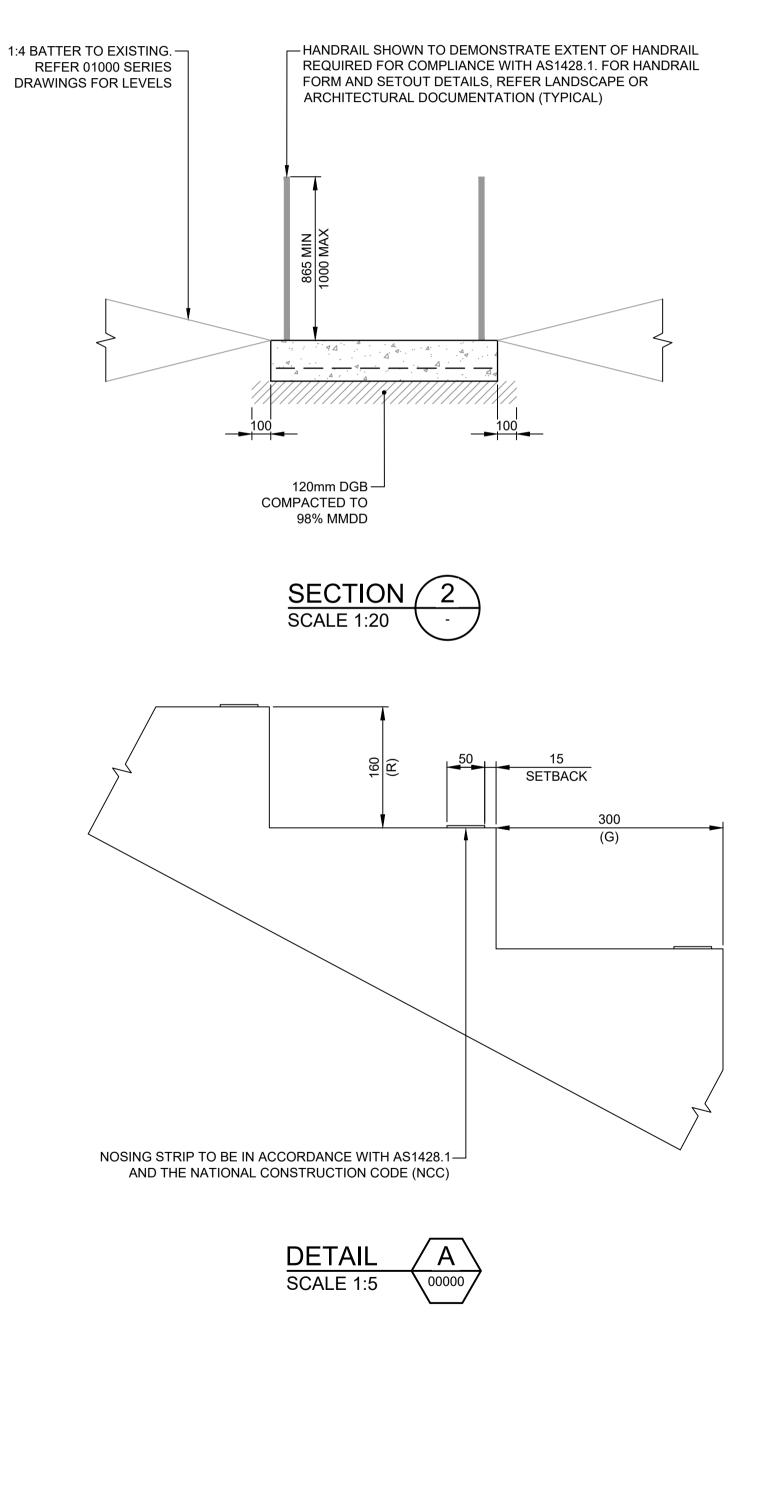
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STAIRS 

NOTES 2.

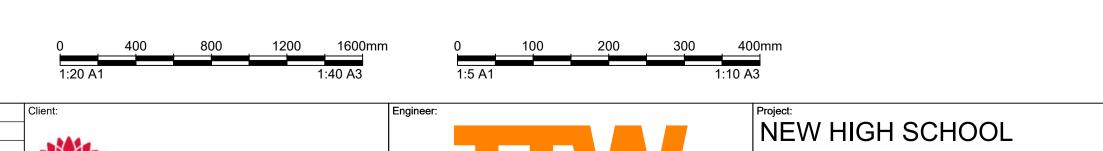
- TACTILE INDICATORS ARE SHOWN TO ILLUSTRATE THEIR POSITION IN RELATION TO THE STAIRS IN ACCORDANCE WITH AS1428.1. FOR DETAILS ON THE TYPE AND COLOUR OF TACTILE INDICATORS, REFER LANDSCAPE OR ARCHITECTURAL DOCUMENTATION (TYPICAL)



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-REFER 03000 SERIES FOR PAVEMENT PROFILES AND DETAILS

REINFORCEMENT TO BE ADJUSTED TO SUIT PAVEMENT PROFILE





School Infrastructure NSW



FOR LEPPINGTON AND **DENHAM COURT** LEPPINGTON, NSW 2179



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### **RISER AND GOING DIMENSIONS**

STAIR TYPE	RISER (R)		GOING (G)		SLOPE RELATIONSHIP (2R+G)	
	MAX	MIN	MAX	MIN	MAX	MIN
RS (OTHER THAN SPRIAL)	190	115	355	240	700	550
SPIRAL	220	140	370	210	680	590

CONCRETE STRENGTH TO BE 32MPa

REFER SITE PLANS FOR SETOUT, LEVELS AND GEOMETRY 3. FOR MINIMUM SLIP RESISTANCE OF STAIR TREADS AND LANDINGS

REFER LANDSCAPE OR ARCHITECTURAL DOCUMENTATION

	Scale at A1	Drawn	Designed	Approved	
ENT	20	RT	AW	CR	
S	Project No	Originator	Туре	Role Sheet No.	Rev
	LHS	S-TTW-01	-00-DR-	-C-07501	1-3
	14.01.20	25 4:35 PM			

