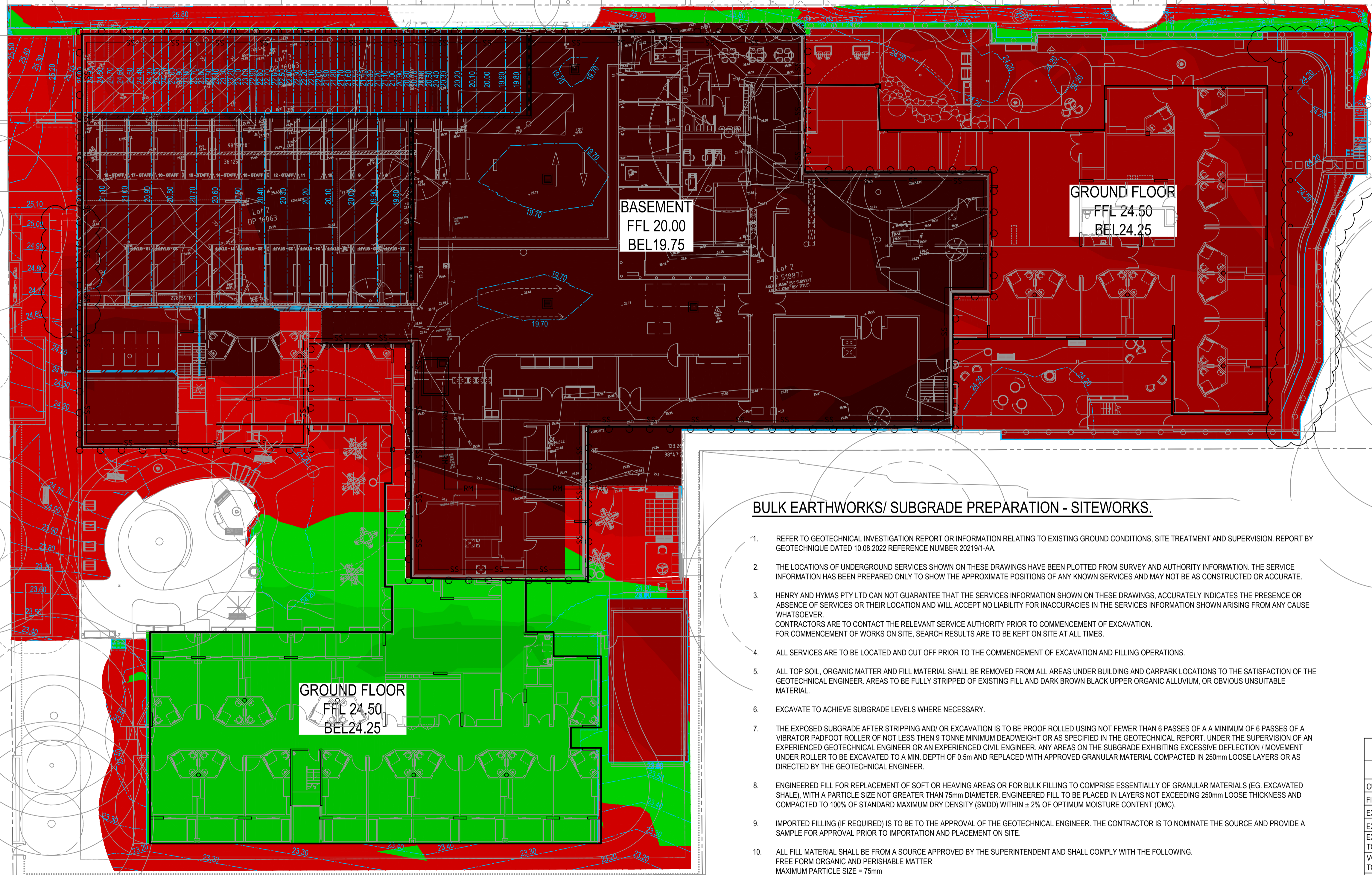


KARNE STREET



**LEGEND**

DEPTH RANGE			
Lower_value	Upper_value	Colour	
-6	to	-4	Meters
-4	to	-2	Meters
-2	to	-1	Meters
-1	to	-0.8	Meters
-0.8	to	-0.6	Meters
-0.6	to	-0.4	Meters
-0.4	to	-0.2	Meters
-0.2	to	-0.1	Meters
-0.1	to	-0.05	Meters
-0.05	to	0	Meters
0	to	0.05	Meters
0.05	to	0.1	Meters
0.1	to	0.2	Meters
0.2	to	0.4	Meters
0.4	to	0.6	Meters
0.6	to	0.8	Meters
0.8	to	1	Meters
1	to	2	Meters
2	to	4	Meters
4	to	6	Meters

**LEGEND**

21.00 CONTOURS BE

**BULK EARTHWORKS/ SUBGRADE PREPARATION - SITEWORKS.**

- REFER TO GEOTECHNICAL INVESTIGATION REPORT OR INFORMATION RELATING TO EXISTING GROUND CONDITIONS, SITE TREATMENT AND SUPERVISION. REPORT BY GEOTECHNIQUE DATED 10.08.2022 REFERENCE NUMBER 20219/1-AA.
- THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM SURVEY AND AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.
- HENRY AND HYMAS PTY LTD CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS, ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN ARISING FROM ANY CAUSE WHATSOEVER. CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION. FOR COMMENCEMENT OF WORKS ON SITE, SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.
- ALL SERVICES ARE TO BE LOCATED AND CUT OFF PRIOR TO THE COMMENCEMENT OF EXCAVATION AND FILLING OPERATIONS.
- ALL TOP SOIL, ORGANIC MATTER AND FILL MATERIAL SHALL BE REMOVED FROM ALL AREAS UNDER BUILDING AND CARPARK LOCATIONS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. AREAS TO BE FULLY STRIPPED OF EXISTING FILL AND DARK BROWN BLACK UPPER ORGANIC ALLUVIUM, OR OBVIOUS UNSUITABLE MATERIAL.
- EXCAVATE TO ACHIEVE SUBGRADE LEVELS WHERE NECESSARY.
- THE EXPOSED SUBGRADE AFTER STRIPPING AND/ OR EXCAVATION IS TO BE PROOF ROLLED USING NOT FEWER THAN 6 PASSES OF A A MINIMUM OF 6 PASSES OF A VIBRATOR PADFOOT ROLLER OF NOT LESS THEN 9 TONNE MINIMUM DEADWEIGHT OR AS SPECIFIED IN THE GEOTECHNICAL REPORT. UNDER THE SUPERVISION OF AN EXPERIENCED GEOTECHNICAL ENGINEER OR AN EXPERIENCED CIVIL ENGINEER. ANY AREAS ON THE SUBGRADE EXHIBITING EXCESSIVE DEFLECTION / MOVEMENT UNDER ROLLER TO BE EXCAVATED TO A MIN. DEPTH OF 0.5m AND REPLACED WITH APPROVED GRANULAR MATERIAL COMPACTED IN 250mm LOOSE LAYERS OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- ENGINEERED FILL FOR REPLACEMENT OF SOFT OR HEAVING AREAS OR FOR BULK FILLING TO COMPRISE ESSENTIALLY OF GRANULAR MATERIALS (EG. EXCAVATED SHALE), WITH A PARTICLE SIZE NOT GREATER THAN 75mm DIAMETER. ENGINEERED FILL TO BE PLACED IN LAYERS NOT EXCEEDING 250mm THICKNESS AND COMPACTED TO 100% OF STANDARD MAXIMUM DRY DENSITY (SMDD) WITHIN ± 2% OF OPTIMUM MOISTURE CONTENT (OMC).
- IMPORTED FILLING (IF REQUIRED) IS TO BE TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. THE CONTRACTOR IS TO NOMINATE THE SOURCE AND PROVIDE A SAMPLE FOR APPROVAL PRIOR TO IMPORTATION AND PLACEMENT ON SITE.
- ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE SUPERINTENDENT AND SHALL COMPLY WITH THE FOLLOWING.  
FREE FORM ORGANIC AND PERISHABLE MATTER  
MAXIMUM PARTICLE SIZE = 75mm  
MAXIMUM PLASTICITY INDEX = 15%  
MIN CBR 5%
- ALL IMPORTED FILL MATERIAL SHALL BE IN ACCORDANCE WITH SPECIFICATIONS FROM GEOTECH REPORT BY GEOTECHNIQUE DATED 10.08.2022 REFERENCE NUMBER 20219/1-AA.
- ALL EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH GEOTECH REPORT BY GEOTECHNIQUE DATED 10.08.2022 REFERENCE NUMBER 20219/1-AA.
- IN-SITU DENSITY TESTING AND SUPERVISION MUST BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED WITHIN GEOTECH REPORT BY GEOTECHNIQUE DATED 10.08.2022 REFERENCE NUMBER 20219/1-AA.

**BULK EARTHWORKS QUANTITIES**

TOTAL AREA (6409m <sup>2</sup> )	
CUT	17363 m <sup>2</sup>
FILL	709 m <sup>2</sup>
EXCESS OF CUT OVER FILL	16654 m <sup>2</sup>

EXCAVATION FOR RETAINING WALLS HAS BEEN ESTIMATED IN CALCULATION  
EXCAVATION FOR SERVICE TRENCHES NOT INCLUDED IN CALCULATION BUT SUBJECT TO FUTURE STRUCTURAL DESIGN  
VOLUME HAS BEEN CALCULATED AFTER STRIPPING THE SITE OF TOPSOIL - ASSUMED TOPSOIL DEPTH 150mm. STRIPPED MATERIAL NOT INCLUDED IN ABOVE QUANTITIES  
ASSUMED 250mm PAVEMENT SET DOWN

**BULK EARTHWORKS CUT AND FILL PLAN**

SCALE: 1:200



SCALE 1:200

**FOR DA ONLY**

**SURVEY INFORMATION**

SURVEYED BY: V.MARK  
DATUM: AHD  
ORIGIN OF LEVELS:  
SSM 108411  
RL 27.054

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
07	ISSUED FOR DA ONLY	MB	NH	07.07.2023					
06	ISSUED FOR DA ONLY	MB	NH	04.07.2023					
05	ISSUED FOR DA ONLY	SC	NH	26.06.2023					
04	ISSUED FOR DA ONLY	IK	NH	27.04.2023					
03	ISSUED FOR DA ONLY	IK	AF	05.12.2022					
02	ISSUED FOR DA ONLY	IK	AF	29.11.2022					
01	ISSUED FOR DA ONLY	IK	NH	25.11.2022					

Client  
**OPAL HEALTHCARE**  
Architect  
**GROUP GSA**

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Project  
**NARWEE PARKLANDS CARE COMMUNITY**  
**59-67 KARNE STREET, NORTH NARWEE, NSW**  
Title  
**BULK EARTHWORKS CUT AND FILL PLAN**

Drawn	Designed	Date
S.Chen	N.Heazlewood	AUG 2022
Checked	Approved	Scale
N.Heazlewood	A.Francis	Scale @A1 1:200
Drawing number	Revision	
<b>22M21_DA_BE01</b>	<b>07</b>	

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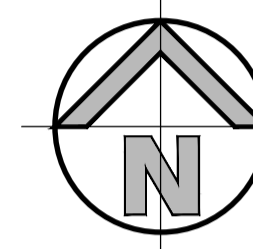
# NARWEE PARKLANDS CARE COMMUNITY

## 59-67 KARNE STREET, NORTH NARWEE, NSW

### CIVIL ENGINEERING WORKS

#### GENERAL NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH CANTERBURY - BANKSTOWN COUNCIL SPECIFICATION. CONTRACTOR TO OBTAIN AND RETAIN A COPY ON SITE DURING THE COURSE OF THE WORKS.
- ALL NEW WORKS ARE TO MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS AND MARRY IN A WORKMANLIKE MANNER.
- THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL SERVICES WITH EACH RELEVANT AUTHORITY. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED BY THE CONTRACTOR OR THE RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE. SERVICES SHOWN ON THESE PLANS ARE ONLY THOSE EVIDENT AT THE TIME OF SURVEY OR AS DETERMINED FROM SERVICE DIAGRAMS. H & H CONSULTING ENGINEERS PTY. LTD CANNOT GUARANTEE THE INFORMATION SHOWN NOR ACCEPT ANY RESPONSIBILITY FOR INACCURACIES OR INCOMPLETE DATA.
- SERVICES & ACCESSES TO THE EXISTING PROPERTIES ARE TO BE MAINTAINED IN WORKING ORDER AT ALL TIMES DURING CONSTRUCTION.
- ADJUST EXISTING SERVICE COVERS TO SUIT NEW FINISHED LEVELS TO RELEVANT AUTHORITY REQUIREMENTS WHERE NECESSARY.
- REINSTATE AND STABILISE ALL DISTURBED LANDSCAPED AREAS.
- MINIMUM GRADE OF SUBSOIL SHALL BE 0.5% (1:200) FALL TO OUTLETS.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, EROSION AND SEDIMENTATION CONTROL PLAN AND CANTERBURY - BANKSTOWN COUNCIL REQUIREMENTS WHERE APPLICABLE.
- CONTRACTOR TO CHECK AND CONFIRM SITE DRAINAGE CONNECTIONS ACROSS THE VERGE PRIOR TO COMMENCEMENT OF SITE DRAINAGE WORKS.
- PROPERTIES AFFECTED BY THE WORKS ARE TO BE NOTIFIED IN ADVANCE WHERE DISRUPTION TO EXISTING ACCESS IS LIKELY.



**LOCALITY SKETCH**  
SCALE: N.T.S.

#### SITING NOTES

- DATUM : A.H.D.
- ORIGIN OF LEVELS : REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF THE SUPERINTENDENT.
- EXISTING SERVICES UNLESS SHOWN ON THE SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS ACHIEVED.
- THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATION IS TO BE UNDERTAKEN OVER TELSTRA OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
- MAKE SMOOTH TRANSITION TO EXISTING SURFACES AND MAKE GOOD.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED LANDSCAPE, ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED RELATING TO DEVELOPMENT AT THE SITE.
- TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN Ø80 uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.
- GRADES TO PAVEMENTS TO BE AS IMPLIED BY RL'S ON PLAN. GRADE EVENLY BETWEEN NOMINATED RL'S. AREAS EXHIBITING PONDING GREATER THAN 5mm DEPTH WILL NOT BE ACCEPTED UNLESS IN A DESIGNATED SAG POINT.
- ALL COVERS AND GRATES ETC TO EXISTING SERVICE UTILITIES ARE TO BE ADJUSTED TO SUIT NEW FINISHED SURFACE LEVELS WHERE APPLICABLE.

#### SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY THE SURVEYOR SPECIFIED IN THE TITLE BLOCK. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. HENRY AND HYMAS PTY. LTD. DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS. SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT HENRY AND HYMAS PTY. LTD. THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM ORIGINAL SURVEY DOCUMENTS.

#### EXISTING SERVICES & FEATURES

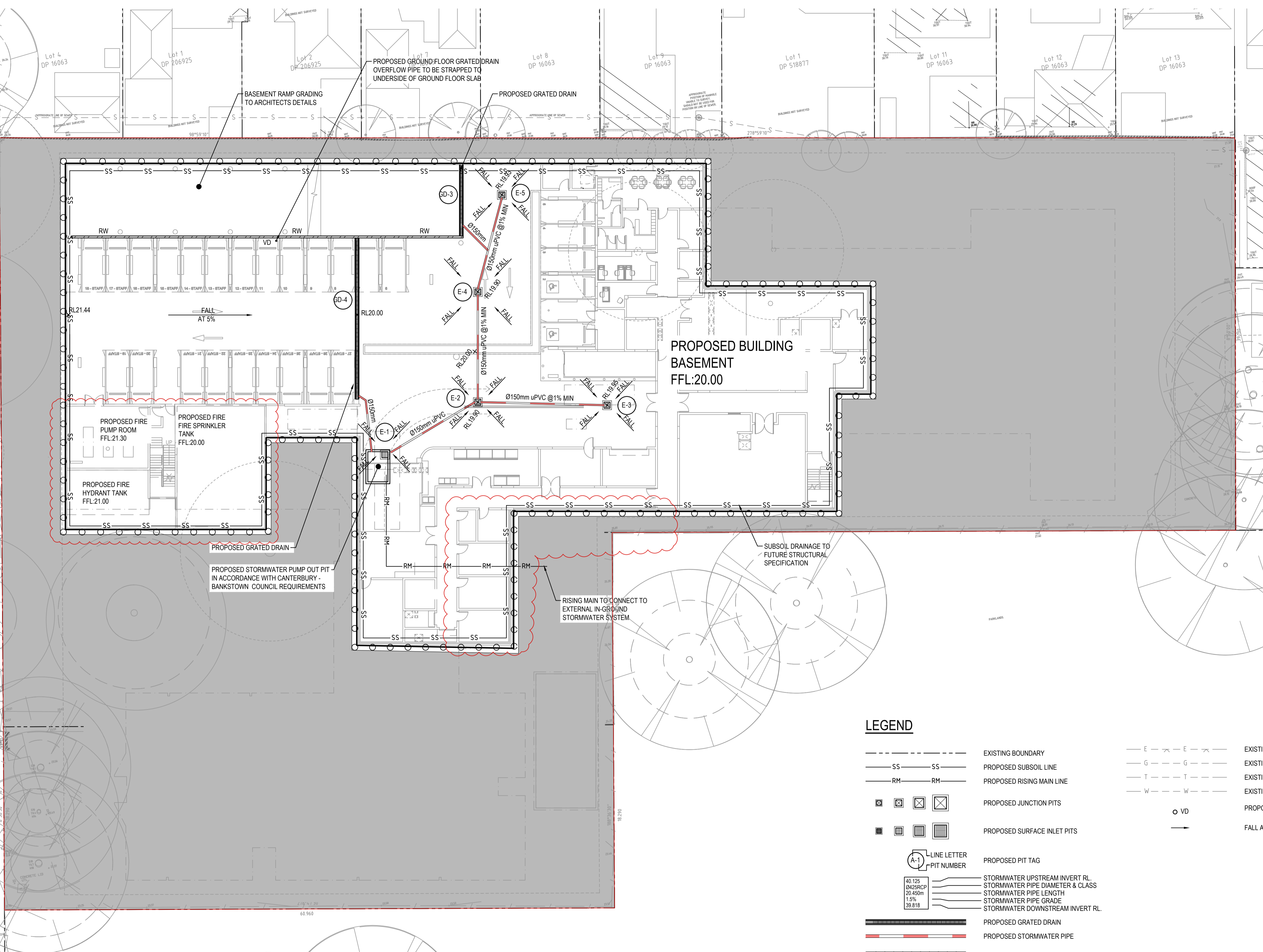
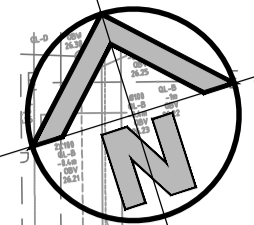
- THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA OR AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
- THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
- PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF HIS PROGRAM FOR THE RELOCATION/ CONSTRUCTION OF TEMPORARY SERVICES.
- CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN SUPPLY TO EXISTING BUILDING REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED, THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
- INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL. CONTRACTOR TO GAIN APPROVAL FROM THE SUPERINTENDENT FOR TIME OF INTERRUPTION.
- EXISTING SERVICES, BUILDINGS, EXTERNAL STRUCTURES AND TREES SHOWN ON THESE DRAWINGS ARE EXISTING FEATURES PRIOR TO ANY DEMOLITION WORKS.
- EXISTING SERVICES UNLESS SHOWN ON SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE A 'DIAL BEFORE YOU DIG' SEARCH AND TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN Ø80 uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.

DRAWING SCHEDULE	
22M21_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH
22M21_DA_C100	DETAIL PLAN - GROUND FLOOR
22M21_DA_C101	DETAIL PLAN - BASEMENT
22M21_DA_C110	TYPICAL SECTIONS
22M21_DA_C200	STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE
22M21_DA_C201	OSD TANK PLAN, DETAILS AND SECTION
22M21_DA_SE01	SEDIMENT AND EROSION CONTROL PLAN
22M21_DA_SE02	SEDIMENT AND EROSION CONTROL TYPICAL DETAILS
22M21_DA_BE01	BULK EARTHWORKS CUT AND FILL PLAN

**FOR DA ONLY**

SURVEY INFORMATION		Client		Project		Drawn		Designed		Date	
SURVEYED BY: VMARK		OPAL HEALTHCARE		NARWEE PARKLANDS CARE COMMUNITY		S.Chen		N.Heazlewood		AUG 2022	
DATUM: AHD		Architect		59-67 KARNE STREET, NORTH NARWEE, NSW		Checked		Approved		Scale: 0/1	
ORIGIN OF LEVELS:		GROUP GSA		Title		N.Heazlewood		A.Francis		NTS	
SSM 108411		This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.		Cover Sheet, Drawing Schedule, Notes and Locality Sketch		Drawing number		Revision		22M21_DA_C000 04	
RL 27.054											
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	AMENDMENT	DRAWN	DESIGNED	DATE	AMENDMENT	DRAWN	DESIGNED
04	ISSUED FOR DA ONLY	SC	NH	30.06.2023							
03	ISSUED FOR DA ONLY	MB	NH	27.04.2023							
02	ISSUED FOR DA ONLY	MP	NH	05.12.2022							
01	ISSUED FOR DA ONLY	MP	NH	25.11.2022							

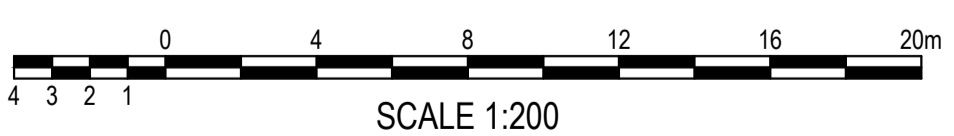




DETAIL PLAN - BASEMENT  
SCALE: 1:200

LEGEND

- EXISTING BOUNDARY
- SS SS PROPOSED SUBSOIL LINE
- RM RM PROPOSED RISING MAIN LINE
- ☒ ☒ ☒ ☒ PROPOSED JUNCTION PITS
- ■ ■ ■ PROPOSED SURFACE INLET PITS
- LINE LETTER PIT NUMBER
- 40.125 STORMWATER UPSTREAM INVERT RL
- 0425RCP STORMWATER PIPE DIAMETER & CLASS
- 20.450m STORMWATER PIPE LENGTH
- 1.5% STORMWATER PIPE GRADE
- 39.818 STORMWATER DOWNSTREAM INVERT RL
- PROPOSED GRATED DRAIN
- PROPOSED STORMWATER PIPE
- PROPOSED BATTER LINE
- 23.58 EXISTING CONTOURS
- 24.10 PROPOSED CONTOURS
- RL 24.12 PROPOSED SPOT LEVEL
- 23.80 EXISTING SPOT LEVEL
- E --- E --- EXISTING ELECTRICAL LINE OVERHEAD
- G --- G --- EXISTING GAS LINE
- T --- T --- EXISTING TELSTRA LINES
- W --- W --- EXISTING WATER LINE
- VD PROPOSED VERTICAL DROPPER
- FALL ARROWS



SCALE 1:200

FOR DA ONLY

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
06	ISSUED FOR DA ONLY	MB	NH	10.07.2023					
05	ISSUED FOR DA ONLY	MB	NH	04.07.2023					
04	ISSUED FOR DA ONLY	MB	NH	31.04.2023					
03	ISSUED FOR DA ONLY	MP	AF	05.12.2022					
02	ISSUED FOR DA ONLY	MS	AF	29.11.2022					
01	ISSUED FOR DA ONLY	MP	NH	25.11.2022					

Client  
**OPAL HEALTHCARE**

Architect  
**GROUP GSA**

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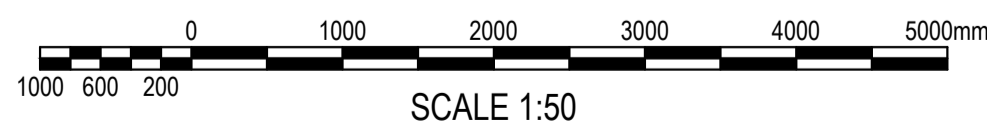
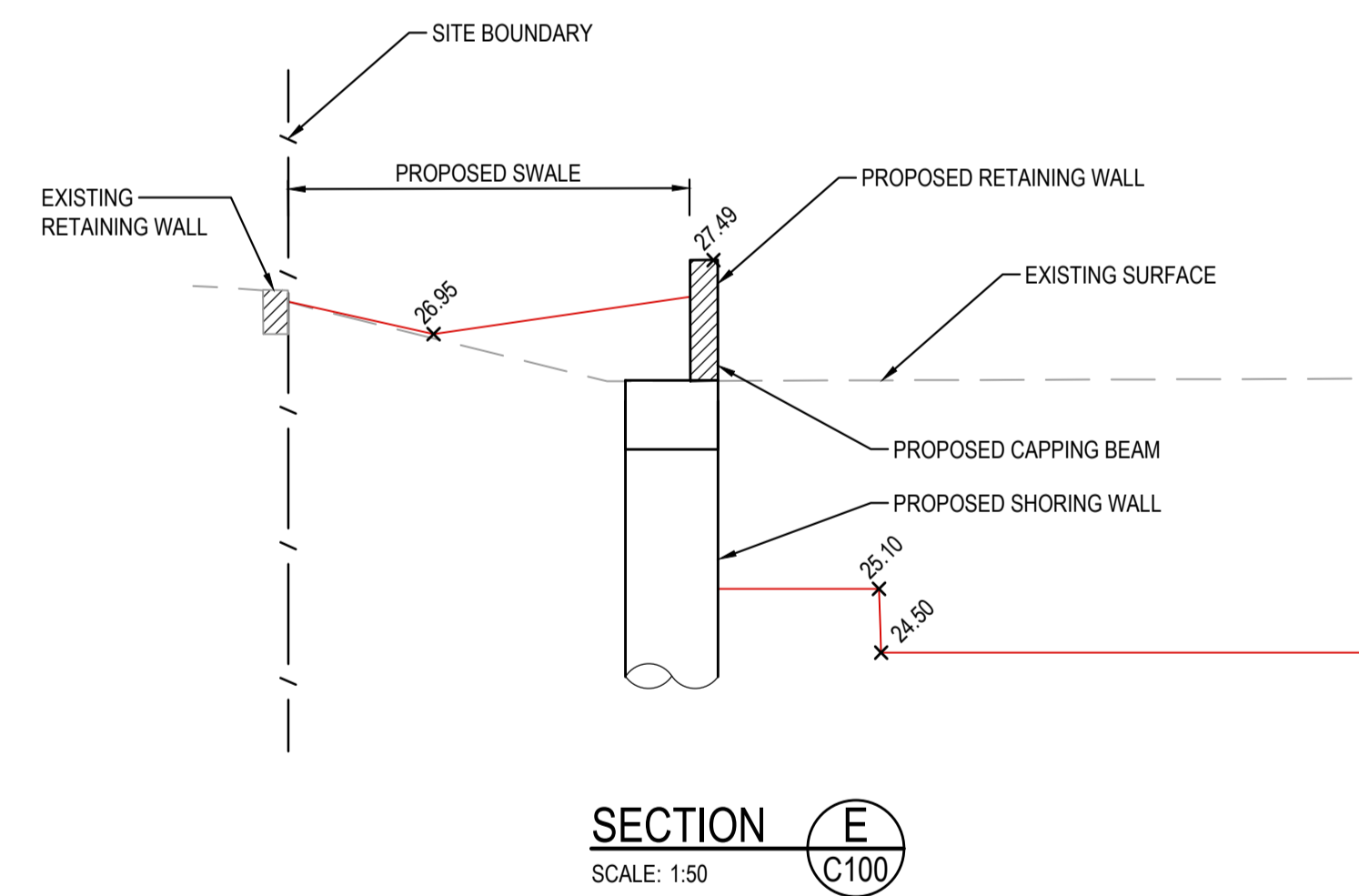
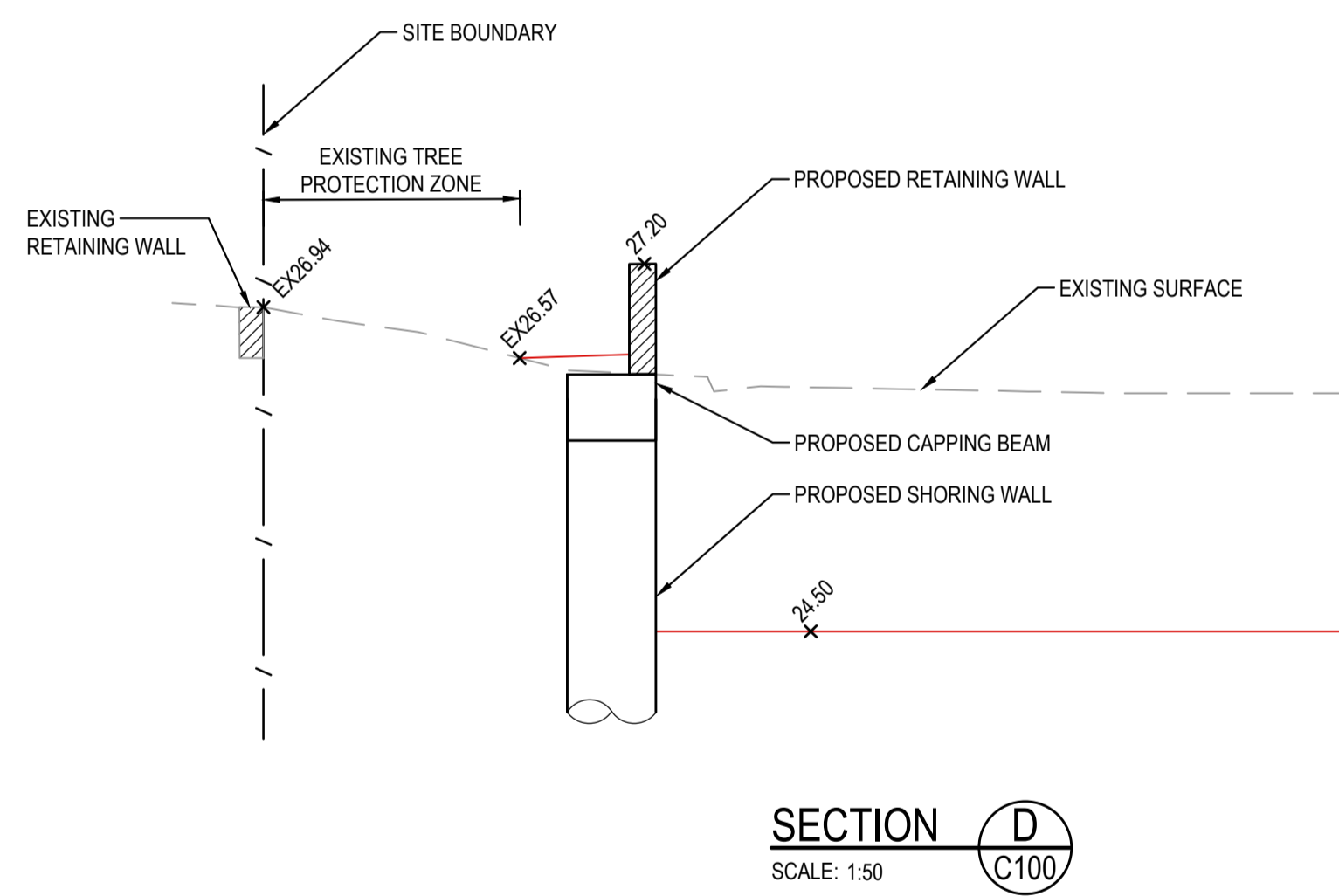
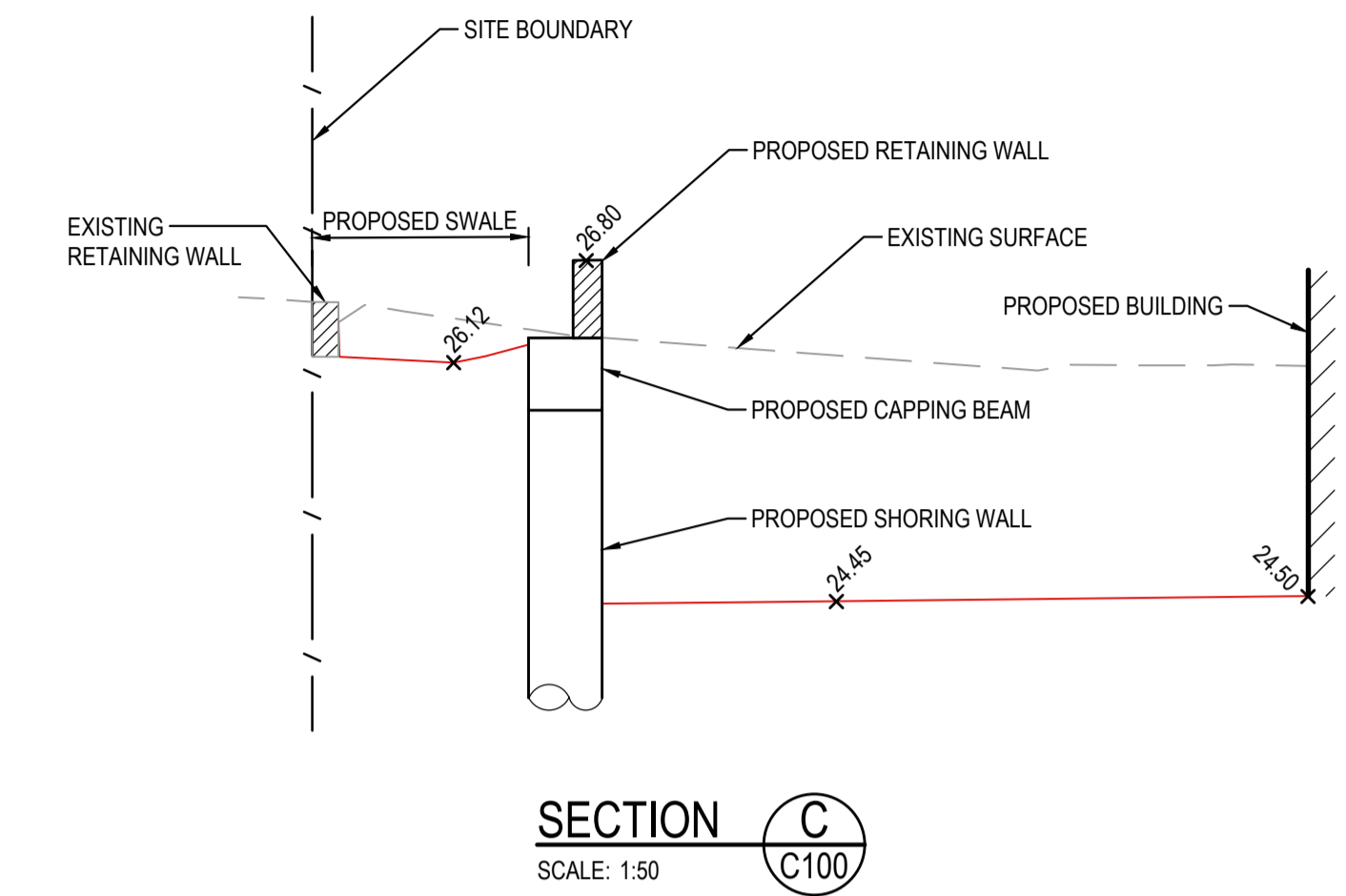
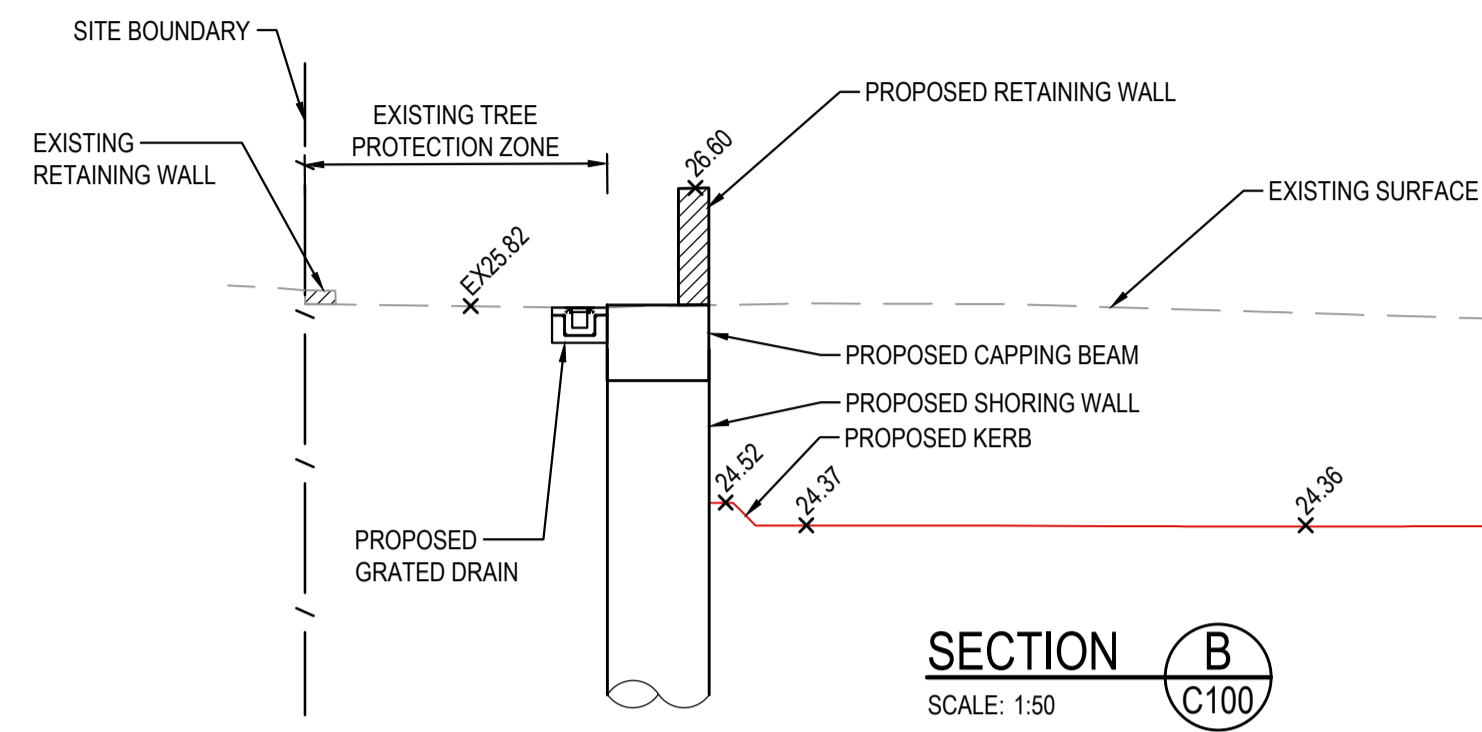
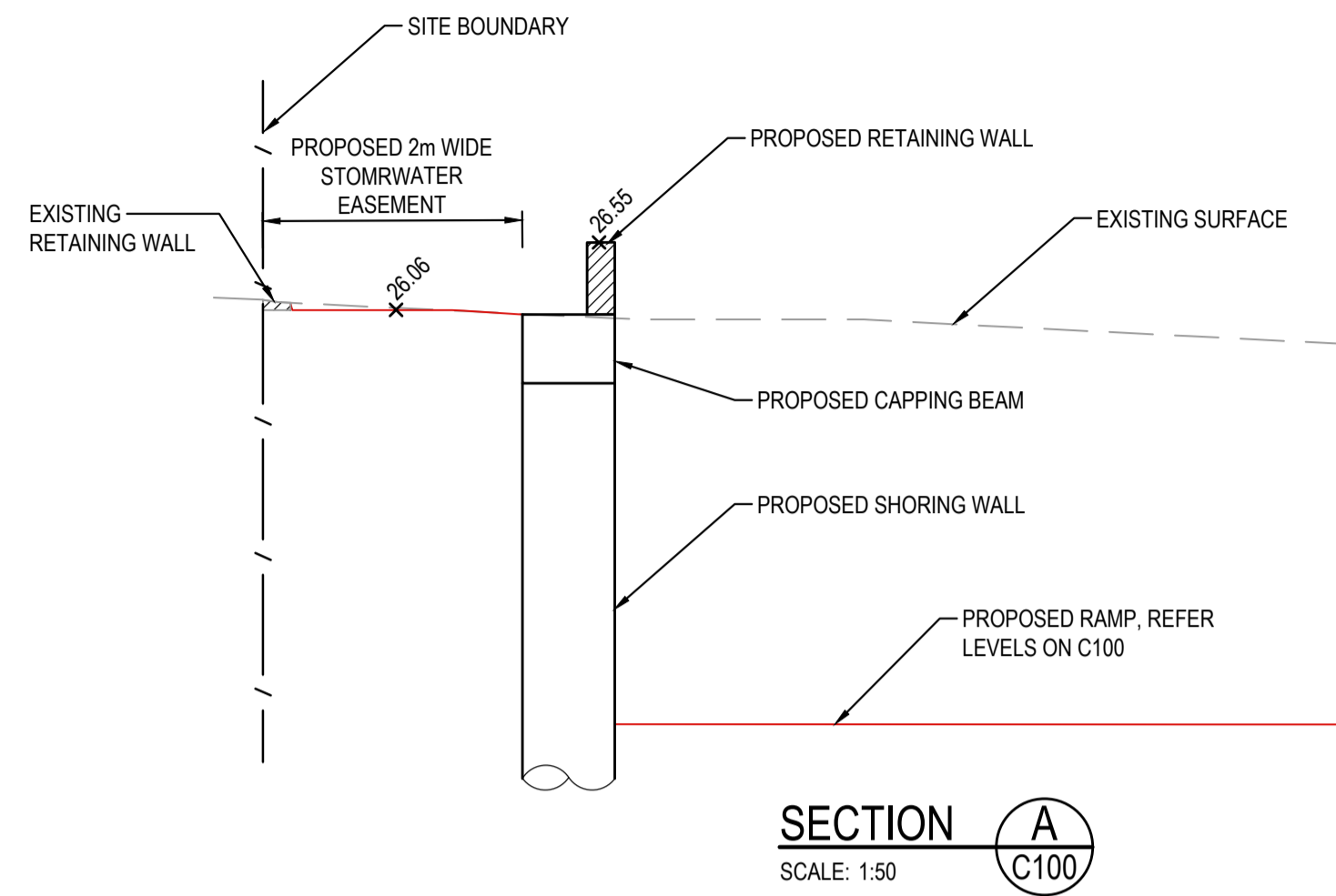
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Project  
**NARWEE PARKLANDS CARE COMMUNITY**  
59-67 KARNE STREET, NORTH NARWEE, NSW

Title  
**DETAIL PLAN**  
**BASEMENT**

Drawn	Designed	Date
S.Chen	N.Heazlewood	AUG 2022
Checked N.Heazlewood	Approved A.Francis	Scale @A1 1:200
Drawing number	Revision	
<b>22M21_DA_C101</b>	<b>06</b>	



**FOR DA ONLY**

SURVEY INFORMATION				Client			
SURVEYED BY: VMARK				OPAL HEALTHCARE			
DATUM: AHD				Suite 2.01			
ORIGIN OF LEVELS:				828 Pacific Highway			
SSM 108411				Gordon NSW 2072			
RL 27.054				Telephone			
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				Facsimile			
				+61 2 9417 8337			
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Designer				Project			
GROUP GSA				NARWEE PARKLANDS CARE COMMUNITY			
				59-67 KARNE STREET, NORTH NARWEE, NSW			
				Title			
				TYPICAL SECTIONS			

Drawn		Designed		Date	
S.Chen	N.Heazlewood				AUG 2022
Checked		Approved		Scale	
N.Heazlewood	A.Francis			Scale B/A1	
Drawing number		Revision			
22M21_DA_C110		02			

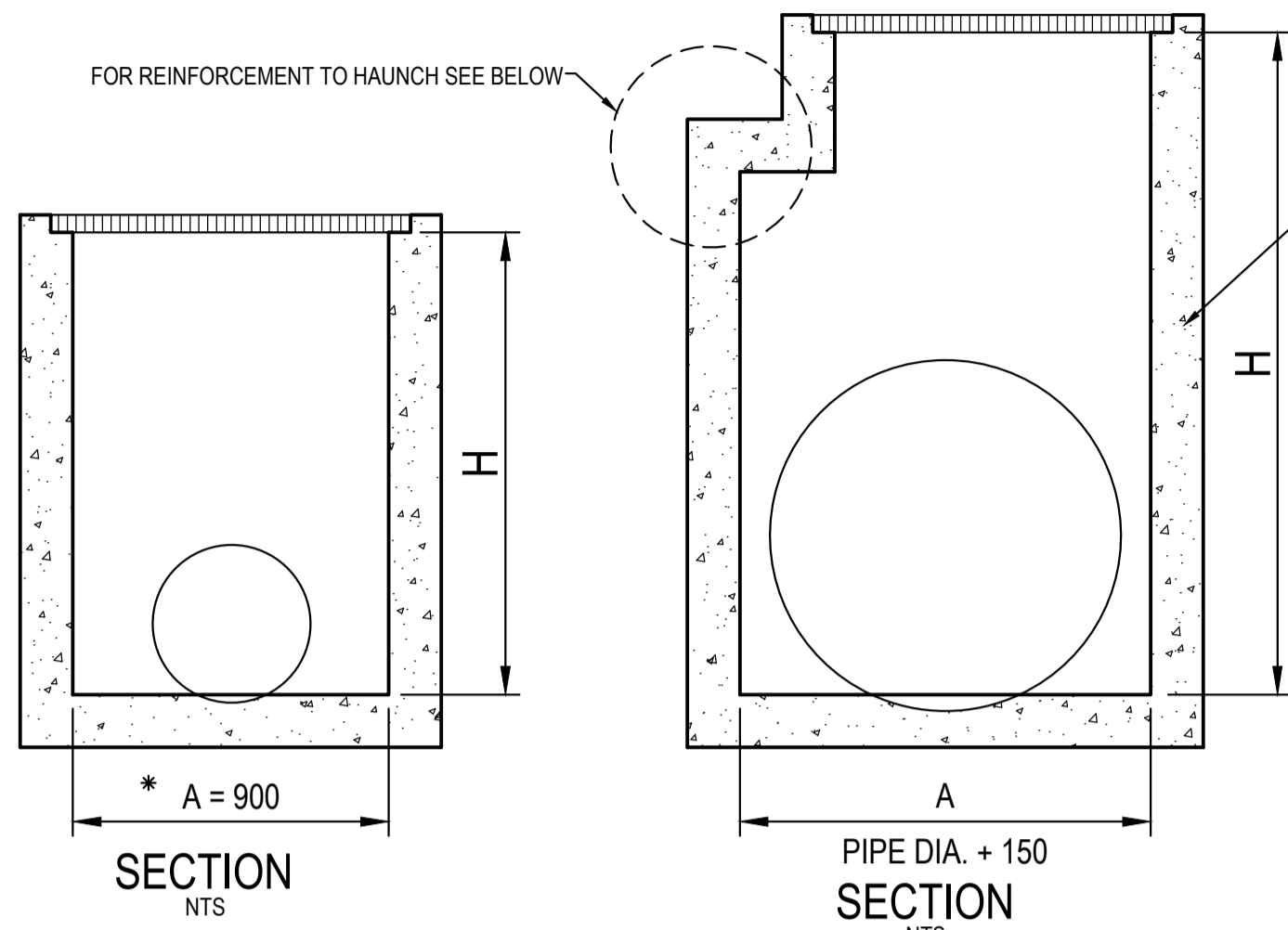
02

TYPICAL PIT CHAMBER SIZES

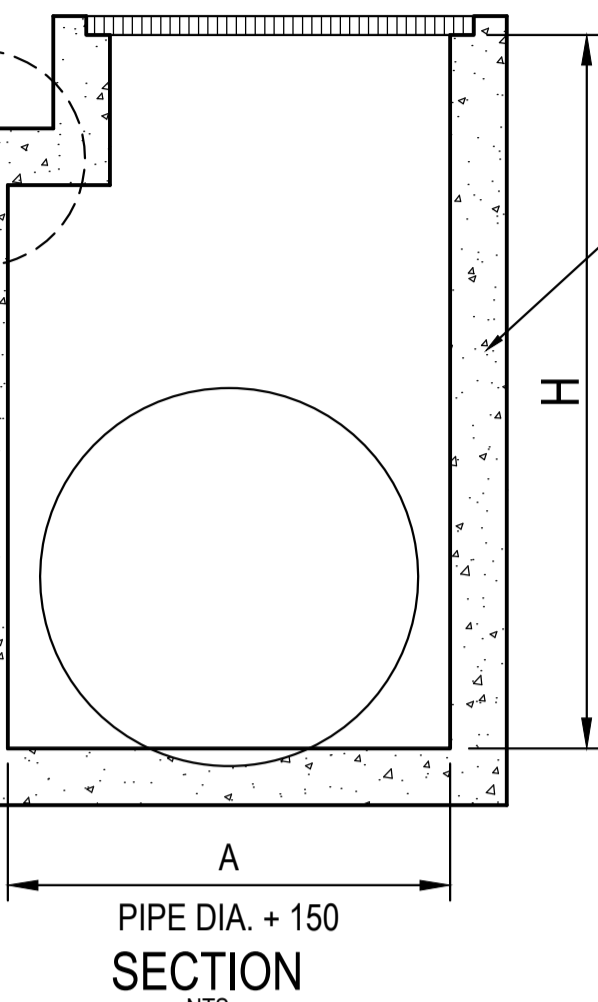
IT IS THE CONTRACTORS RESPONSIBILITY TO SELECT PIT CHAMBER SIZE WITH REGARDS TO PIPE SIZE, DEPTH TO INVERT AND SKEW ANGLE. REFER SKETCHES BELOW.

- SELECT PIT CHAMBER USING THE STEPS BELOW.
- SELECT PIT CHAMBER SIZE DEPENDING ON THE PIPE DIAMETERS.
- CHECK PIT CHAMBER SIZE TO SATISFY DEPTH TO INVERT REQUIREMENTS.
- CHECK PIT CHAMBER DIMENSIONS TO SATISFY THE SKEW ANGLE IN THE TABLE.

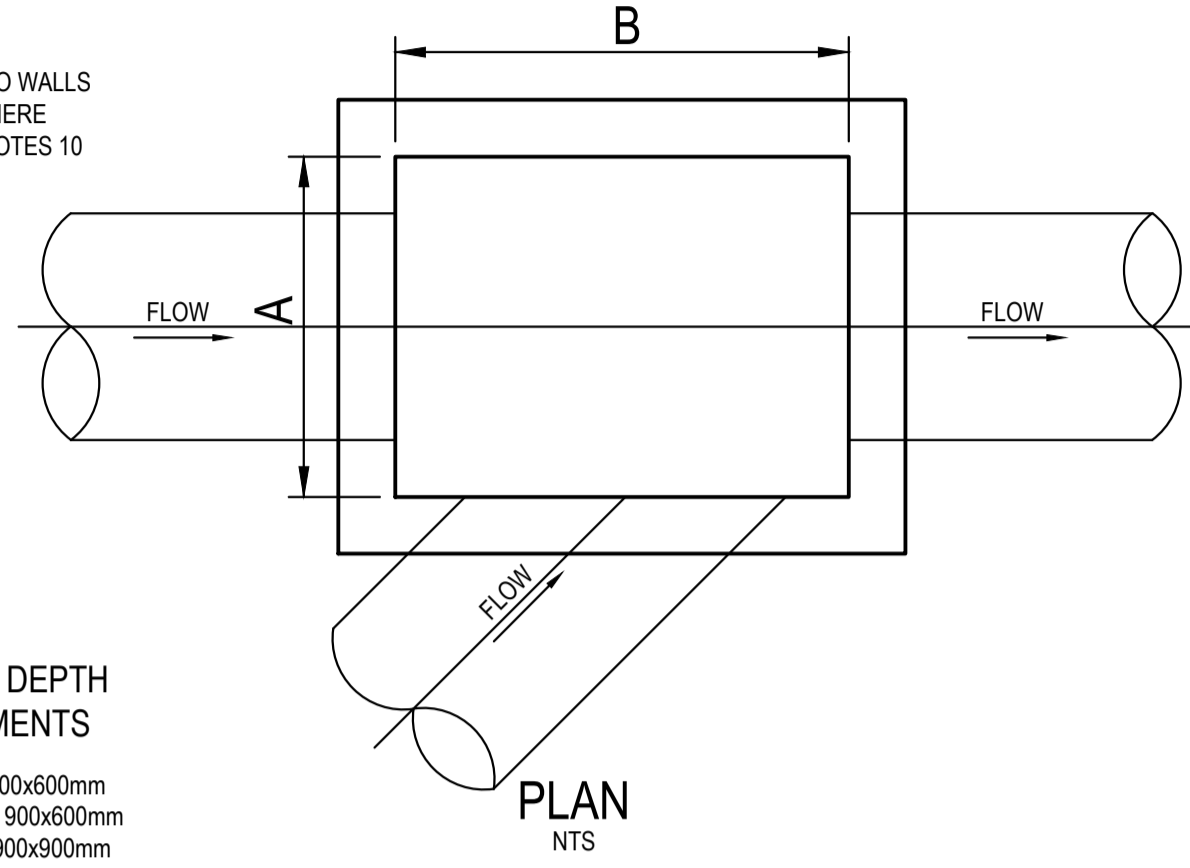
FOR B = 600mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 225mm  
 FOR B = 900mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 375mm  
 FOR B = 1200mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 600mm  
 FOR B = 1500mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 825mm  
 FOR B = 1900mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 1050mm



1 PIT CHAMBER DIMENSIONS FOR PIPES UP TO 600 DIA.



2 PIT CHAMBER FOR PIPES GREATER THAN 600 DIA.



3 PIT CHAMBER FOR SIDE ENTRY ON SKEW

\*A = 600 FOR PIPES UP TO 375 DIA.

1

2

3

SIEVE SIZE (MM)	WEIGHT PASISNG (%)
75.0	100
9.5	100 TO 50
2.36	100 TO 30
0.60	50 TO 15
0.075	25 TO 0

SIEVE SIZE (MM)	WEIGHT PASISNG (%)
19.0	100
2.36	100 TO 50
0.60	90 TO 20
0.30	60 TO 10
0.15	25 TO 0
0.075	10 TO 0

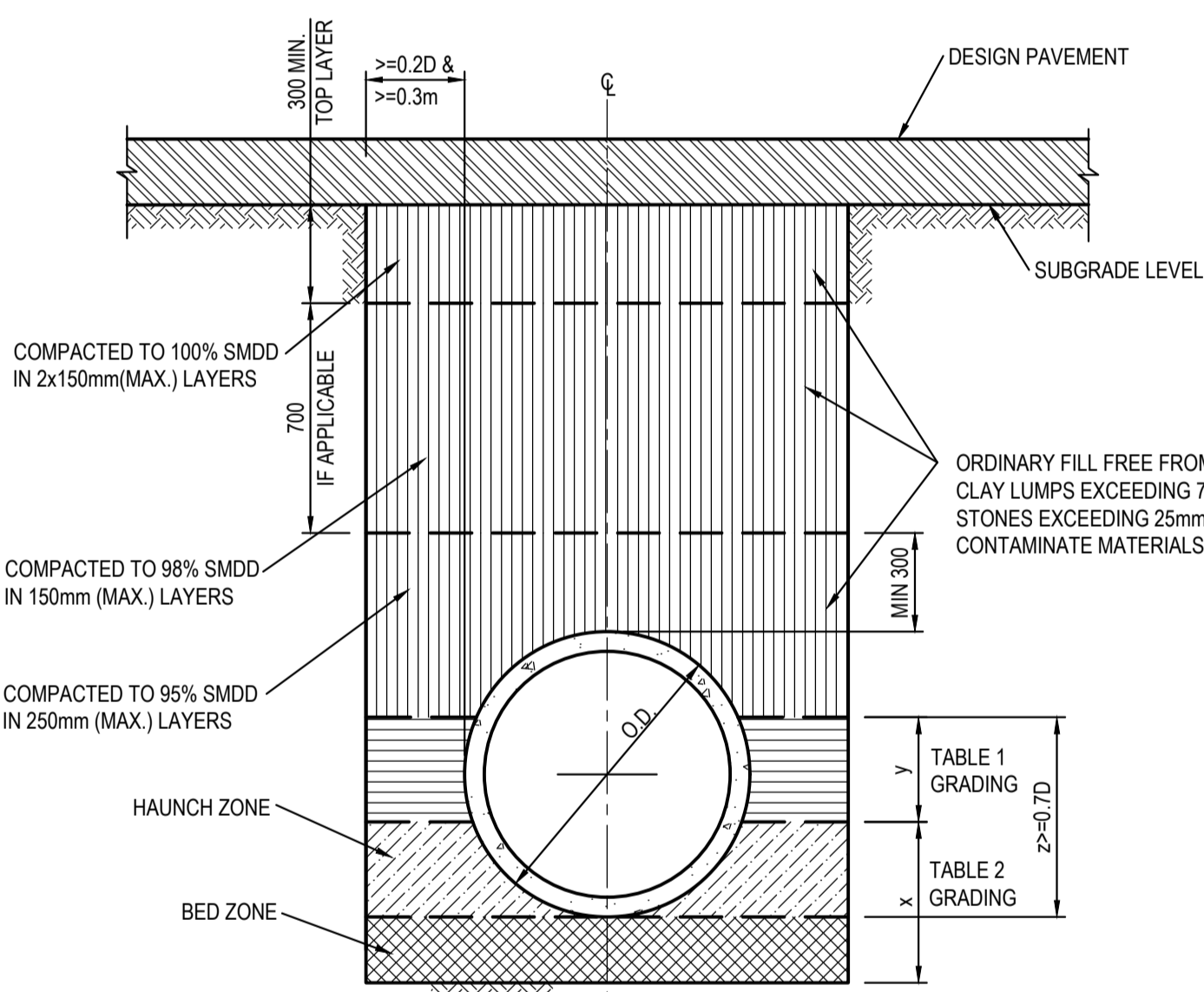
SUPPORT TYPE	BED ZONE X	HAUNCH ZONE Y	BED AND HAUNCH ZONES COMPACTION	MAX BEDDING FACTOR
HS1		0.1D	50	2.0
HS2	100 IF D<=1500, OR 150 IF D>=1500	0.3D	60	2.5
HS3		0.3D	70	4.0

PIT LID SCHEDULE

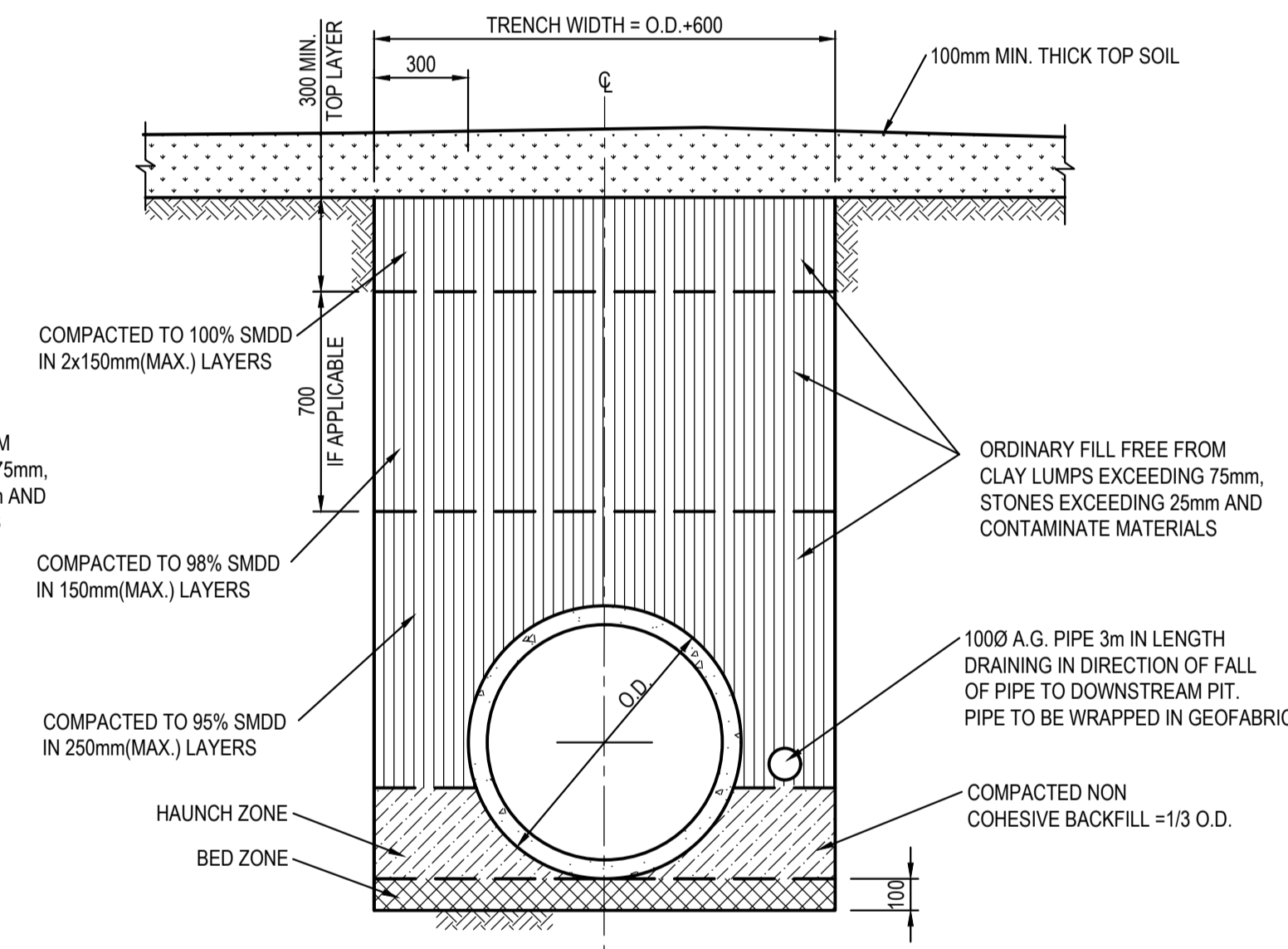
PIT/STRUCTURE NUMBER	DESCRIPTION
A-1 A-2 A-3 A-4	PROPOSED INLET PIT WITH 900x900 HINGED LIGHT DUTY GRATED LID CLASS "B" WITHIN OSD TANK IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
A-6 B-1 B-2 B-3 B-4	PROPOSED INLET PIT WITH 900x900 HINGED LIGHT DUTY GRATED LID CLASS "B" IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
C-1 C-2 C-3 C-4 B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 A-5 A-6 A-7 E-1 E-2 E-3 E-4 E-5	PROPOSED INLET PIT WITH 600x600 HINGED LIGHT DUTY GRATED LID CLASS "B" IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
B-6a B-6b	PROPOSED INLET PIT WITH 450x450 HINGED LIGHT DUTY GRATED LID CLASS "B" IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
6D-1 6D-3 6D-4	PROPOSED 225mm WIDE LIGHT DUTY GRATED DRAIN CLASS "B" IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
B-10	PROPOSED JUNCTION PIT WITH 900x900 LIGHT DUTY SEALED LID CLASS "B", IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
D-2	PROPOSED INLET PIT WITH 900x900 HINGED LIGHT DUTY GRATED LID CLASS "C" IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
D-1	PROPOSED JUNCTION PIT WITH 900x900 HEAVY DUTY SEALED LID CLASS "D", IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
F-1	PROPOSED INLET PIT WITH 900x900 HINGED MEDIUM DUTY GRATED LID CLASS "C" IN ACCORDANCE WITH CANTERBURY BANKSTOWN COUNCIL REQUIREMENT.
6D-2	PROPOSED 200mm WIDE GRATED DRAIN.
EX-1	EXISTING KERB INLET PIT.

DRAINAGE NOTES:

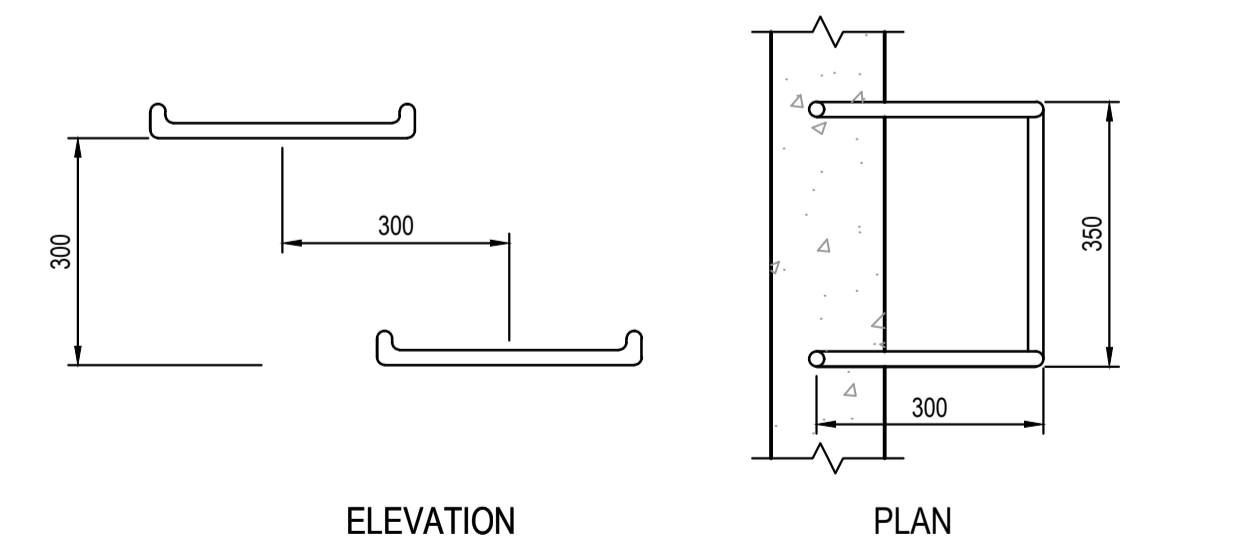
- ALL STORMWATER WORK TO COMPLY WITH AS 3500 PART 3.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MINIMUM COVER OF 600mm ON ALL PIPES.
- PROTECTION OF PIPES DUE TO LOADS EXCEEDING W7 WHEEL LOAD SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- BEDDING TYPE SHALL BE TYPE H2 FOR RCP. WHERE NECESSARY THE OVERLAY ZONE SHALL BE REDUCED TO ACCOMMODATE PAVEMENT REQUIREMENTS. REFER TO THIS DRAWING FOR DETAILS.
- MINIMUM COVER OVER EXISTING PIPES FOR PROTECTION DURING CONSTRUCTION SHALL BE 800mm.
- NO CONSTRUCTION LOADS SHALL BE APPLIED TO PLASTIC PIPES.
- FINISHED SURFACE LEVELS SHOWN ON LAYOUT PLAN DRGS TAKE PRECEDENCE OVER DESIGN DRAINAGE SURFACE LEVELS.
- ALL PIPES UP TO AND INCLUDING 300 DIA. SHALL BE SOLVENT OR RUBBER RING JOINTED PVC CLASS SH PIPE TO AS1260. ALL OTHER PIPES TO BE RCP USING CLASS 2 RUBBER RING JOINTED PIPE. HARDIES FRC PIPE MAY BE USED IN LIEU OF RCP IF DESIRED IN GROUND. ALL AERIAL PIPES TO BE PVC CLASS SH.
- ALL PITS IN NON TRAFFICABLE AREAS TO BE PREFABRICATED POLYESTER CONCRETE "POLYCRETE" WITH "LIGHT DUTY" CLASS B GALV. MILD STEEL GRATING AND FRAME. ALL PITS IN TRAFFICABLE AREAS (CLASS "D" LOADING MAX) TO HAVE 150mm THICK CONCRETE WALLS AND BASE CAST IN-SITU  $f_c=20$  MPa, REINFORCED WITH N12@200 BOTH LOADING WAYS CENTRALLY PLACE. U.N.O. ON SEPARATE DESIGN DRAWINGS IN THIS SET. GALV. MILD STEEL GRATING AND FRAME TO SUIT DESIGN LOADING. PRECAST PITS, RECTANGULAR OR CIRCULAR IN SHAPE, MAY BE USED IN LIEU AND SHALL COMPLY WITH RELEVANT AUSTRALIAN STANDARDS.
- ALL PITS, GRATINGS AND FRAMES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION AND TO BE IN ACCORDANCE WITH AS3500.3 AND AS3996.
- PIT CHAMBER DIMENSIONS ARE TO BE SELECTED TO SATISFY THE FOLLOWING:
  - PIPE SIZE
  - DEPTH TO INVERT
  - SKEW ANGLE
 REFER TYPICAL PIT CHAMBER DETAILS BELOW  
 IF PIT LID SIZE IS SMALLER THAN THE PIT CHAMBER SIZE THEN THE PIT LID IS TO BE CONSTRUCTED ON THE CORNER OF THE PIT CHAMBER WITH THE STEP IRONS DIRECTLY BELOW. ALTERNATIVELY THE PIT LID TO BE USED, IS TO BE THE SAME SIZE AS THE PIT CHAMBER.
- FOR PIPE SIZES GREATER THAN Ø300mm, PIT FLOOR IS TO BE BENCH TO FACILITATE FLOW.
- GALVANISED STEP IRONS SHALL BE PROVIDED AT 300 CTS FOR PITS HAVING A DEPTH EXCEEDING 1200mm. SUBSOIL DRAINAGE PIPE SHALL BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES. (MINIMUM LENGTH 3m).
- ALL SUBSOIL PIPES SHALL BE 100mm SLOTTED PVC IN A FILTER SOCK, UNO, WITH 3m INSTALLED UPSTREAM OF ALL PITS.
- ALL PIPEWORK SHALL HAVE MINIMUM DIAMETER 100.
- MINIMUM GRADE FOR ROOFWATER DRAINAGE LINES SHALL BE 1%.
- ALL PIPE JUNCTIONS AND TAPER UP TO AND INCLUDING 300 DIA. SHALL BE VIA PURPOSE MADE FITTINGS.
- ALL ROOF DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH AS3500, PART 3. TESTING TO BE UNDERTAKEN AND REPORTS PROVIDED TO THE SUPERINTENDENT.
- LOCATION OF THE DIRECT DOWN PIPE CONNECTIONS MAY VARY ON SITE TO SUIT SITE CONDITIONS, WHERE CONNECTION SHOWN ON LONG SECTIONS CHAINAGES ARE INDICATIVE ONLY.
- PITS IN EXCESS OF 1.5 m DEEP TO HAVE WALL AND FLOOR THICKNESS INCREASED TO 200mm. REINFORCED WITH N12@200 CTS CENTRALLY PLACED BOTH WAYS THROUGHOUT U.N.O. ON SEPARATE DESIGN DRAWINGS IN THIS SET. IF DEPTH EXCEEDS 5m CONTACT ENGINEER.
- SUBSOIL DRAINAGE LINES FOR LANDSCAPE AREA NOT SHOWN ON THESE DRAWINGS. REFER TO LANDSCAPING PLANS FOR DETAILS.
- ALL STORMWATER PITS TO HAVE Ø100 uPVC SLOTTED SUBSOIL PIPES CONNECTED TO THEM. THESE SUBSOILS TO EXTEND 3m UPSTREAM OF THE PIT AT A MINIMUM GRADE.



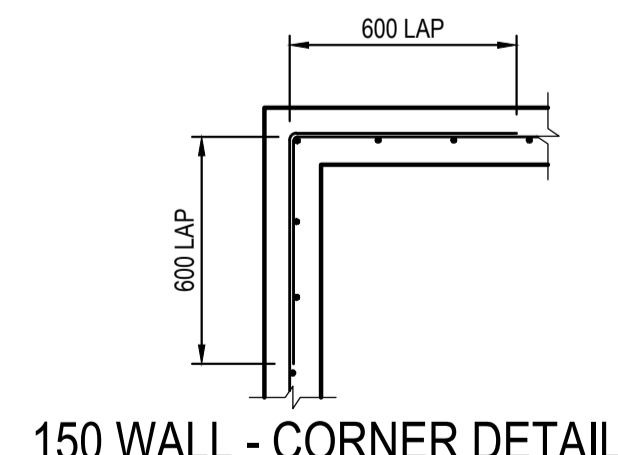
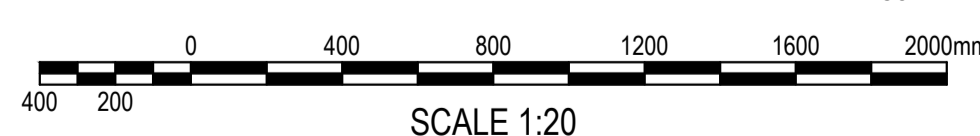
PIPE TRENCH INSTALLATION BENEATH PAVEMENT (HS SUPPORT TO BE USED UNDER ROADWAY) SCALE 1:20



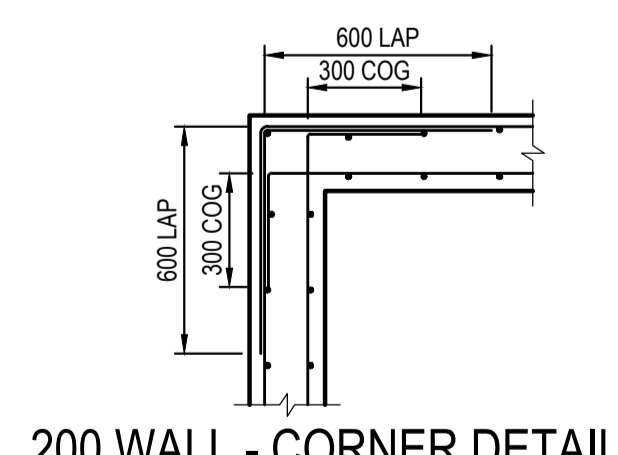
PIPE TRENCH INSTALLATION IN LANDSCAPE AREAS (H1 & H2 SUPPORT) SCALE 1:20



TYPICAL STEP IRON DETAIL SCALE 1:10

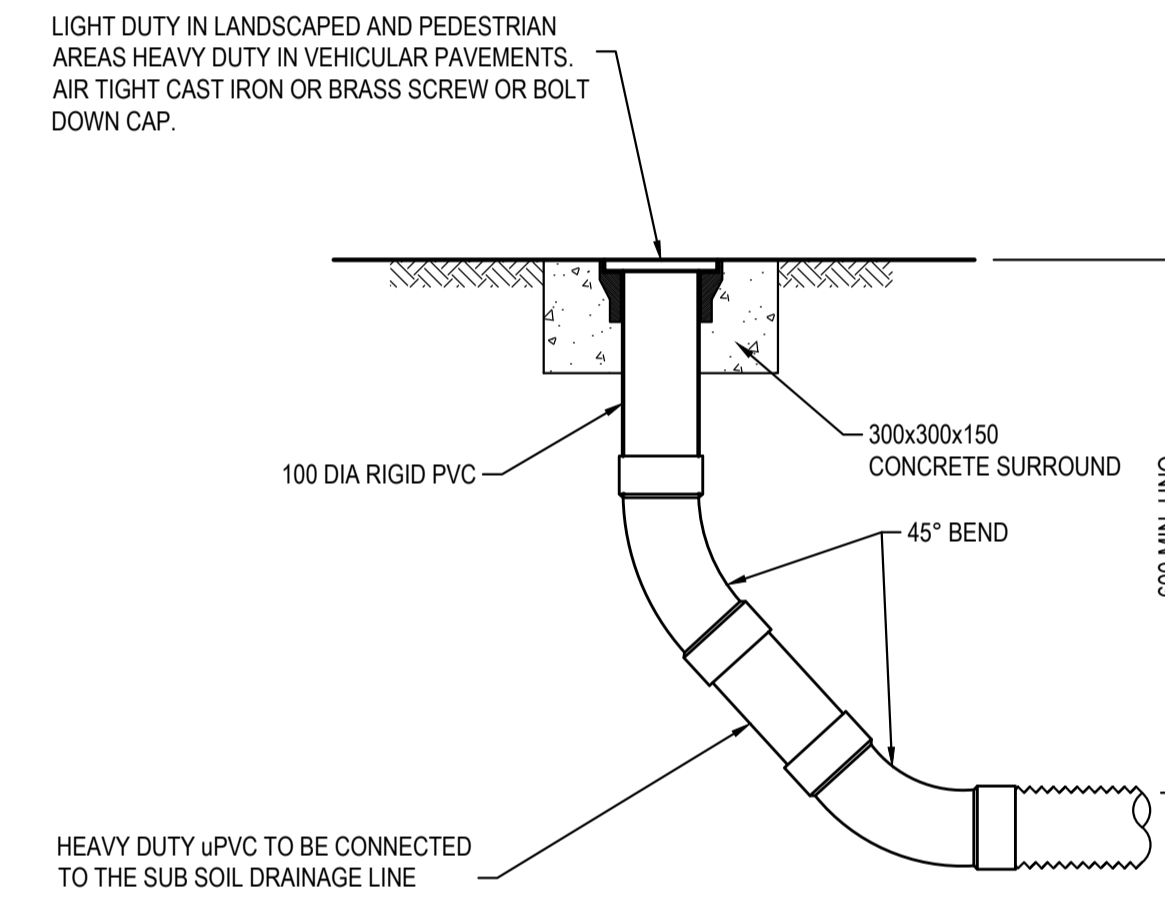


150 WALL - CORNER DETAIL SCALE 1:20



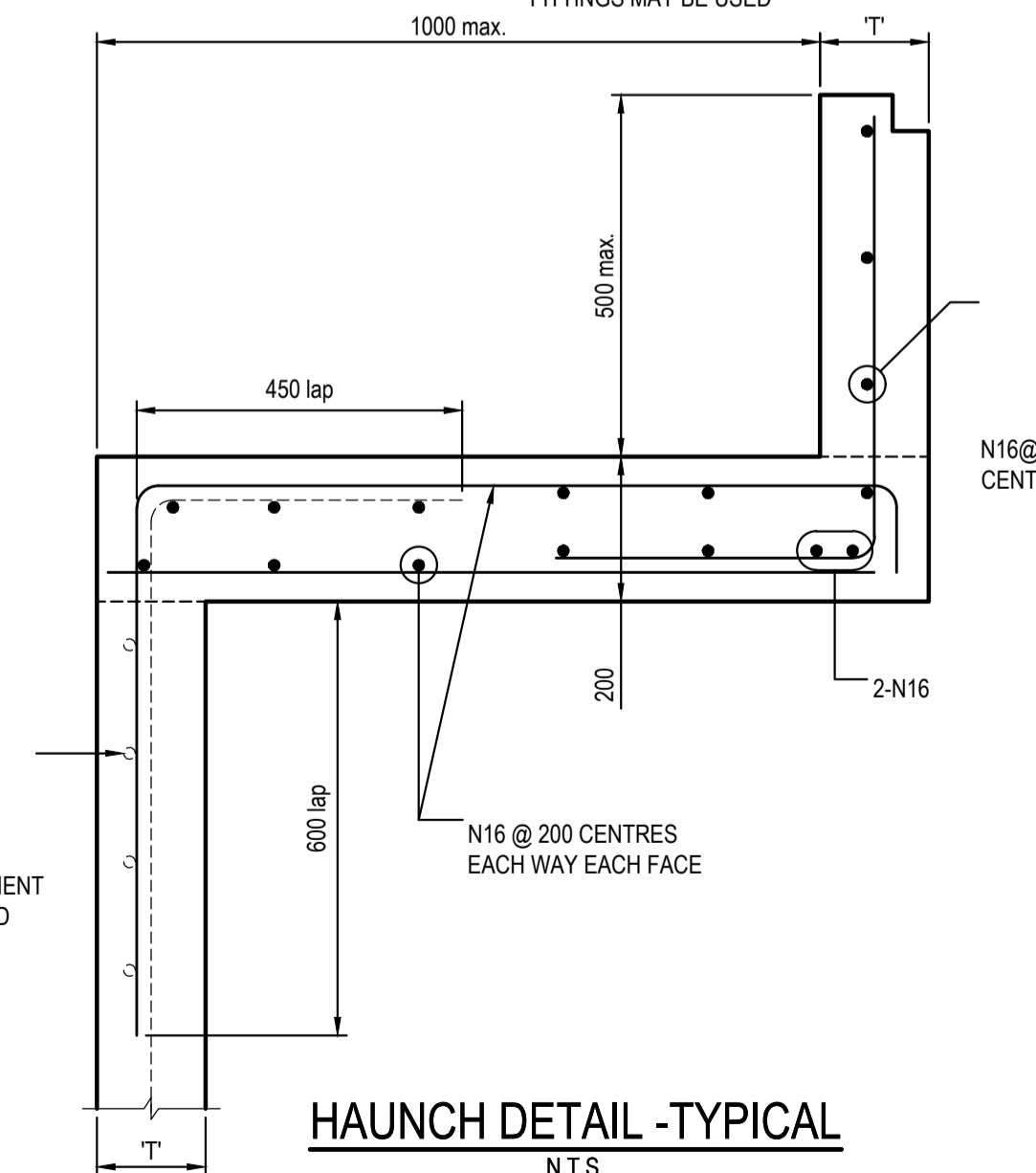
200 WALL - CORNER DETAIL SCALE 1:20

PIT REINFORCEMENT SHOWN DOTTED



FLUSHING POINT (FP) SCALE 1:10

NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



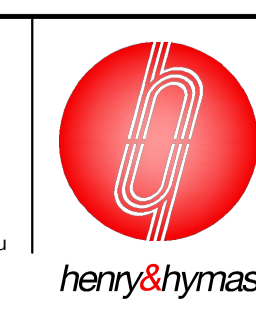
HAUNCH DETAIL - TYPICAL N.T.S.

FOR DA ONLY

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	Client	Project	Drawn	Designed	Date
05	ISSUED FOR DA ONLY	MB	NH	04.07.2023						OPAL HEALTHCARE	NARWEE PARKLANDS CARE COMMUNITY	M.Pereira	N.Heazlewood	AUG 2022
04	ISSUED FOR DA ONLY	MB	NH	31.04.2023						GROUP GSA	59-67 KARNE STREET, NORTH NARWEE, NSW	Checked	Approved	Scale @A1
03	ISSUED FOR DA ONLY	MP	NH	05.12.2022								N.Heazlewood	A.Francis	NTS
02	ISSUED FOR DA ONLY	MB	NH	02.12.2022										
01	ISSUED FOR DA ONLY	MP	NH	25.11.2022										

Client: OPAL HEALTHCARE  
 Architect: GROUP GSA

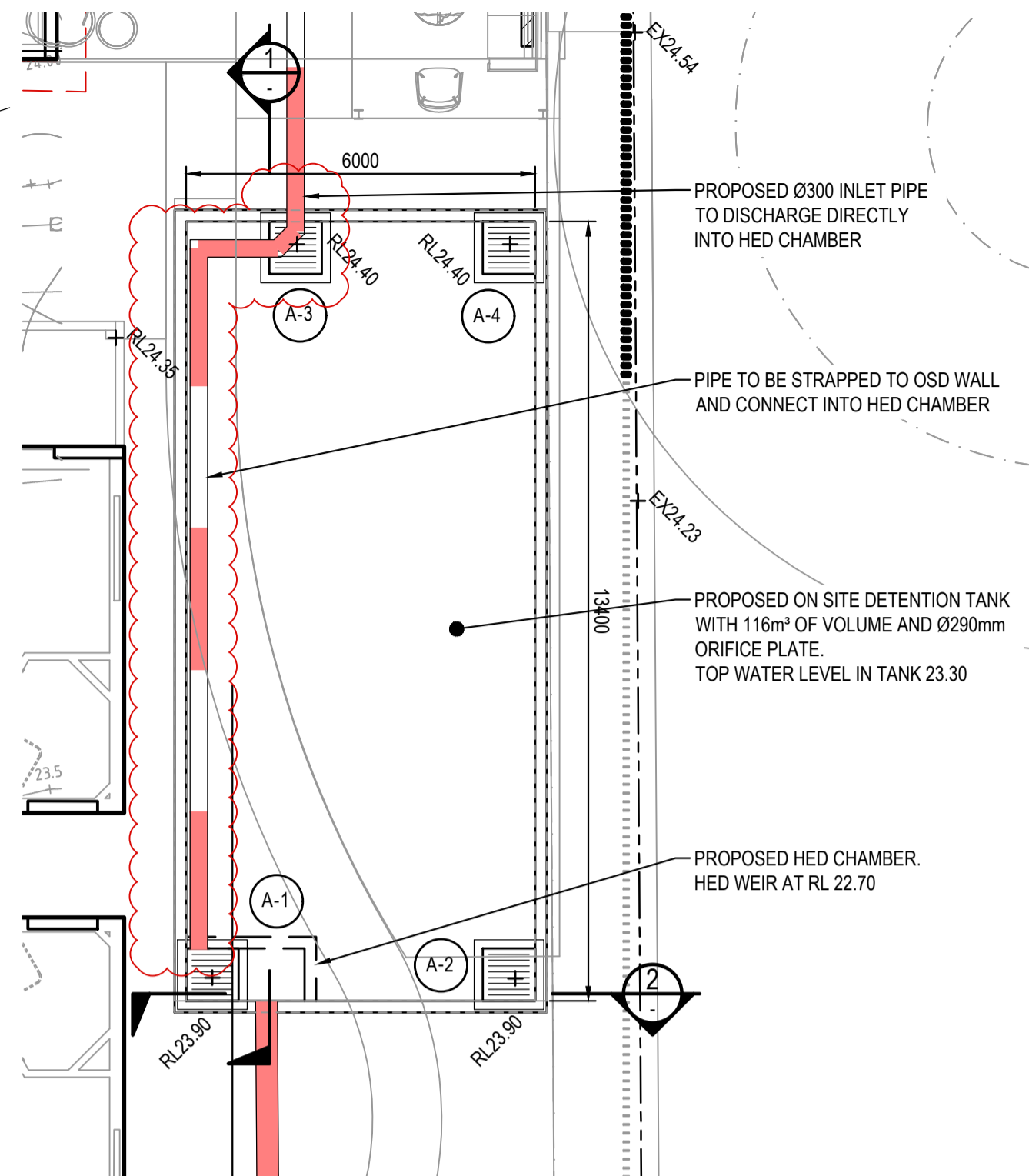
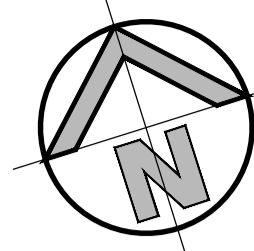
Suite 2.01  
 828 Pacific Highway  
 Gordon NSW 2072  
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 Facsimile: +61 2 9417 8337  
 Email: email@hhconsult.com.au  
 Web: www.henryandhymas.com.au



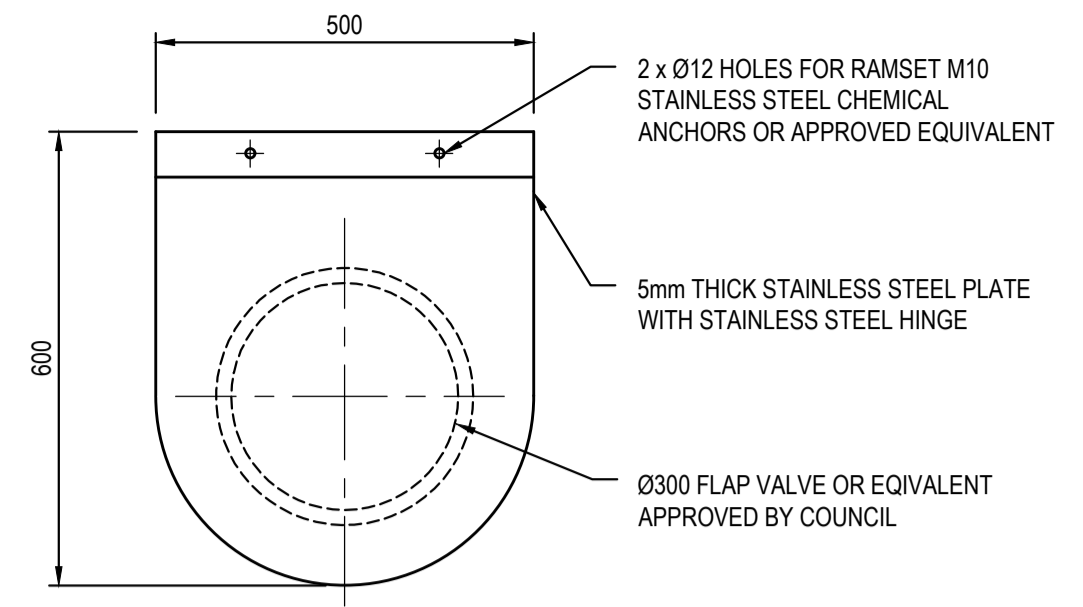
Project: NARWEE PARKLANDS CARE COMMUNITY  
 59-67 KARNE STREET, NORTH NARWEE, NSW  
 Title: STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE

Drawn: M.Pereira  
 Designed: N.Heazlewood  
 Date: AUG 2022  
 Drawing number: 22M21\_DA\_C200  
 Revision: 05

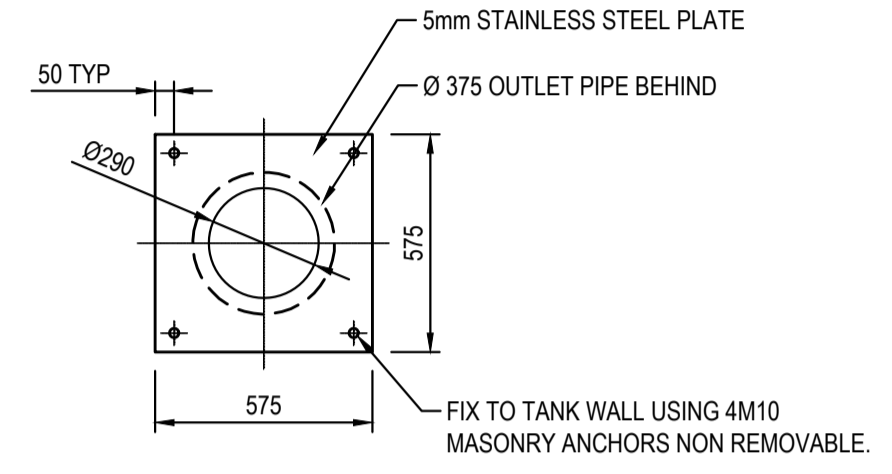
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**OSD TANK PLAN**  
SCALE: 1:100



**FLAP VALVE DETAIL**  
SCALE 1:10

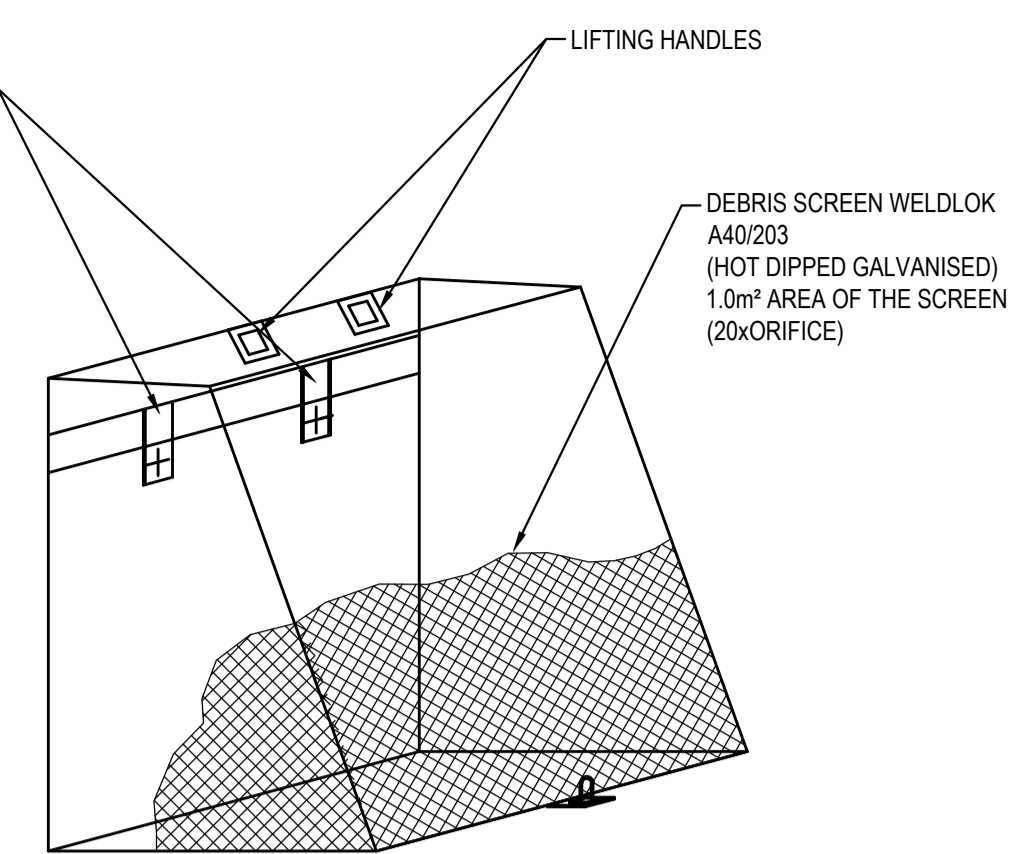


**ORIFICE PLATE DETAIL**  
SCALE 1:20

100 x 16 MOUNTING BAR WITH BRACKETS, SCREEN TO BE ATTACHED (GENERALLY ON A SLIDING MECHANISM) TO THE WALL, BUT SHOULD BE REMOVABLE (WITHOUT THE USE OF TOOLS) TO PERMIT CLEANSING AND EASY INSPECTION OF THE OUTLET CONTROL. ALL STEEL TO BE HOT DIPPED GALVANISED.

SCREEN TYPE WELDLOK A40/203 IS RECOMMENDED FOR ORIFICES LARGER THAN 150mm AND SCREEN AREA 20 x THE ORIFICE AREA FOR THAT TYPE OF SCREEN - REFER UPRCT SECTION 4-13

MAXIMESH RH3030 IS RECOMMENDED FOR ORIFICES LESS THAN 150mm IN DIAMETER AND SCREEN AREA 50xTHE ORIFICE AREA.



**DEBRIS SCREEN DETAIL**  
NOT TO SCALE  
ALL STEEL TO BE HOT DIPPED GALVANISED

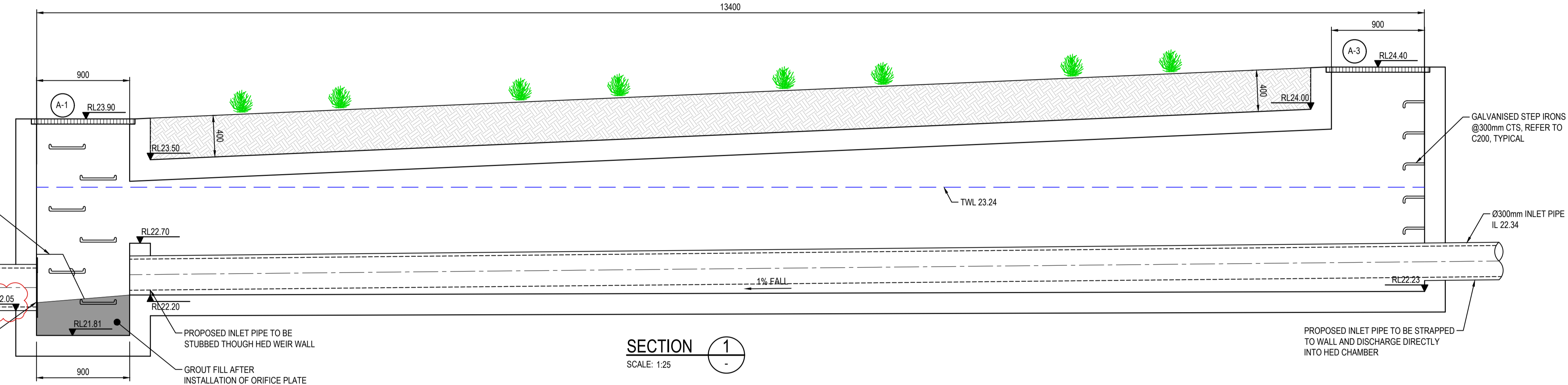


A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANKS/ CONFINED SPACE AT ALL ACCESS POINTS OF THE TANK/ CONFINED SPACE.

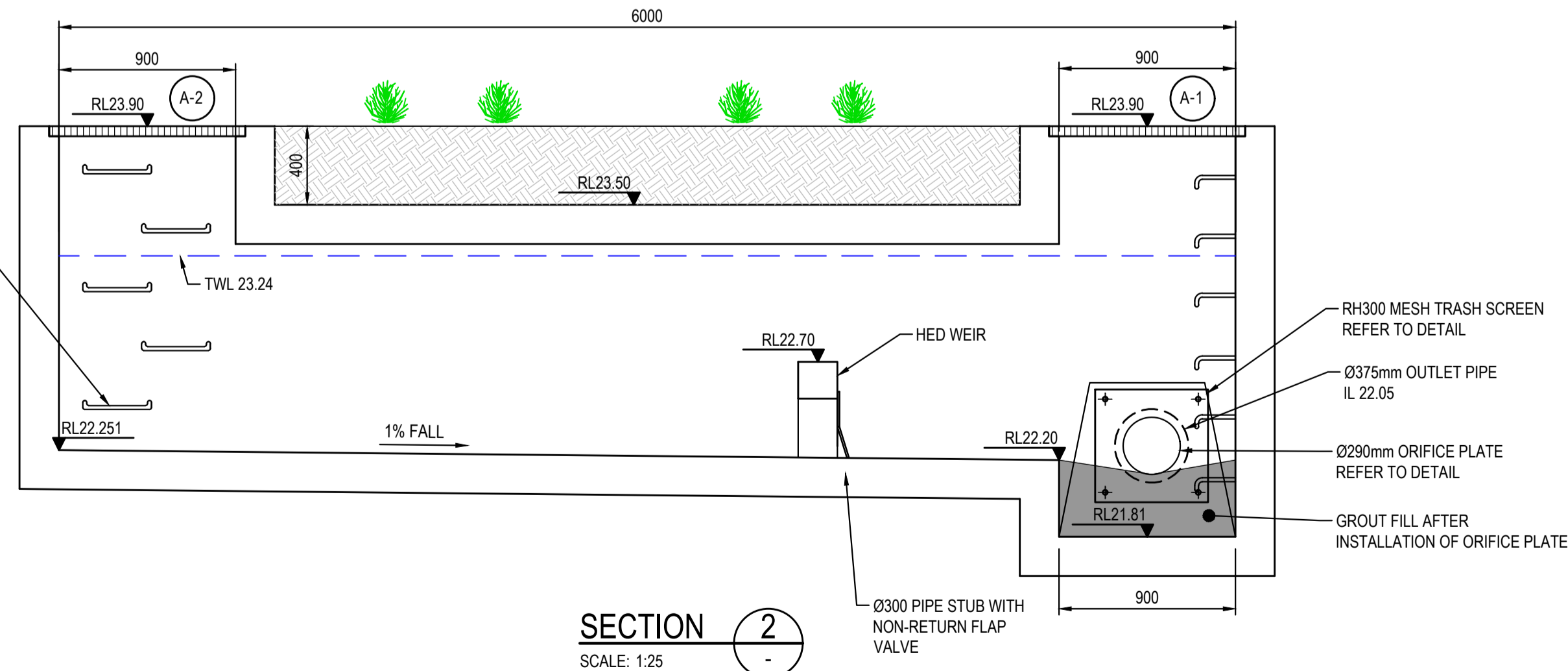
B) SIGN TO BE MINIMUM DIMENSIONS: 250mm x 180mm ENTRIES I.E. GRATES, MANHOLES

C) SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED METAL OR POLYPROPYLENE

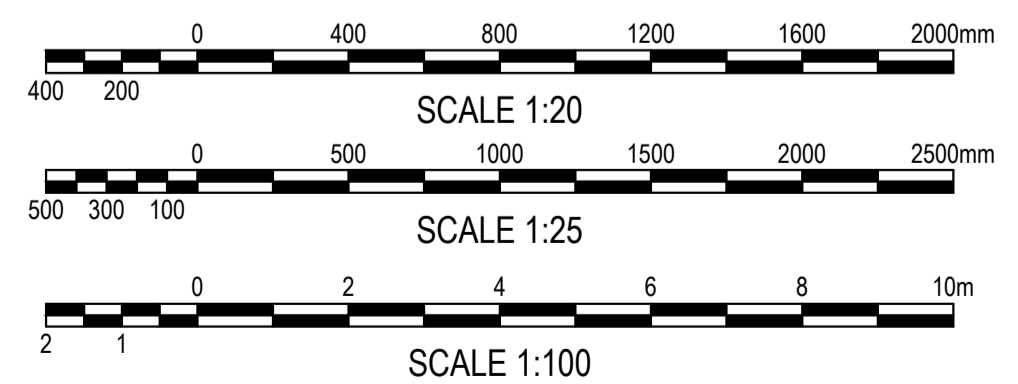
D) SIGN SHALL BE AFFIXED TO A SURFACE WITH SCREWS AT EACH CORNER.



**SECTION 1**  
SCALE: 1:25

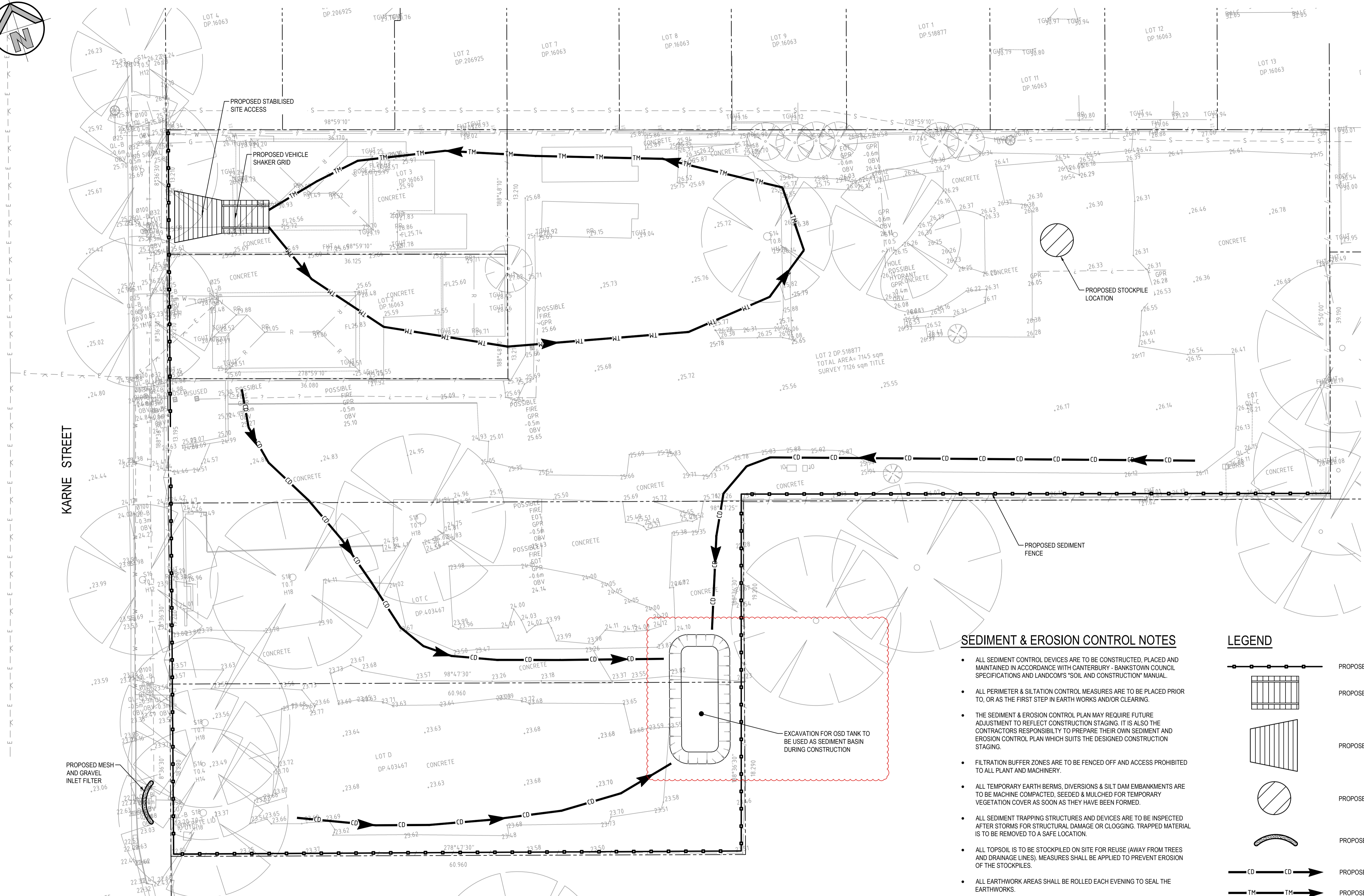
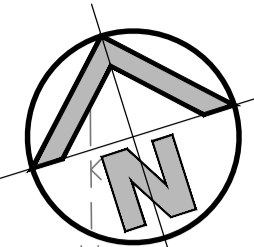


**SECTION 2**  
SCALE: 1:25



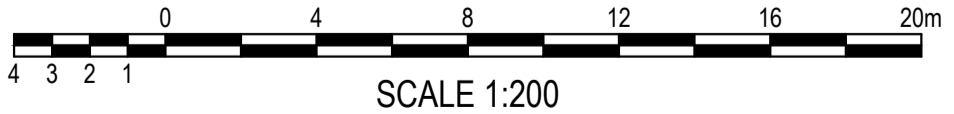
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<b>SURVEY INFORMATION</b> SURVEYED BY: VMARK DATUM: AHD ORIGIN OF LEVELS: SSM 108411 RL 27.054				Client: <b>OPAL HEALTHCARE</b> Architect: <b>GROUP GSA</b> Suite 2.01 826 Pacific Highway Gordon NSW 2072 Telephone: +61 2 9417 8400 Facsimile: +61 2 9417 8337 Email: email@hhconsult.com.au Web: www.henryandhymas.com.au				Project: <b>NARWEE PARKLANDS CARE COMMUNITY</b> <b>59-67 KARNE STREET, NORTH NARWEE, NSW</b> Title: <b>OSD PLAN, DETAILS AND SECTIONS</b>				Drawn: S.Chen Checked: N.Heazlewood Design: N.Heazlewood Approved: A.Francis Date: AUG 2022 Scale: @A1 AS NOTED	
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**SEDIMENT AND EROSION CONTROL PLAN**

SCALE: 1:200



**SEDIMENT & EROSION CONTROL NOTES**

- ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH CANTERBURY - BANKSTOWN COUNCIL SPECIFICATIONS AND LANDCOM'S "SOIL AND CONSTRUCTION" MANUAL.
- ALL PERIMETER & SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN EARTH WORKS AND/OR CLEARING.
- THE SEDIMENT & EROSION CONTROL PLAN MAY REQUIRE FUTURE ADJUSTMENT TO REFLECT CONSTRUCTION STAGING. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO PREPARE THEIR OWN SEDIMENT AND EROSION CONTROL PLAN WHICH SUITS THE DESIGNED CONSTRUCTION STAGING.
- FILTRATION BUFFER ZONES ARE TO BE FENCED OFF AND ACCESS PROHIBITED TO ALL PLANT AND MACHINERY.
- ALL TEMPORARY EARTH BERMS, DIVERSIONS & SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED & MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE LOCATION.
- ALL TOPSOIL IS TO BE STOCKPILED ON SITE FOR REUSE (AWAY FROM TREES AND DRAINAGE LINES). MEASURES SHALL BE APPLIED TO PREVENT EROSION OF THE STOCKPILES.
- ALL EARTHWORK AREAS SHALL BE ROLLED EACH EVENING TO SEAL THE EARTHWORKS.
- ALL FILLS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND STRAW MULCHED WITHIN 14 DAYS OF COMPLETION OF FORMATION U.N.O. BY LANDSCAPE ARCHITECTS.
- UPON COMPLETION OF ALL EARTHWORKS OR AS DIRECTED BY COUNCIL SOIL CONSERVATION TREATMENTS SHALL BE APPLIED SO AS TO RENDER AREAS THAT HAVE BEEN DISTURBED, EROSION PROOF WITHIN 14 DAYS.
- EROSION AND SILT PROTECTION MEASURES ARE TO BE MAINTAINED AT ALL TIMES.

**LEGEND**

- PROPOSED SEDIMENTATION FENCE
- PROPOSED VEHICLE SHAKER GRID
- PROPOSED STABILISED SITE ACCESS
- PROPOSED STOCKPILE LOCATION
- PROPOSED MESH & GRAVEL INLET FILTER
- PROPOSED CATCH DIVERSION DRAIN
- PROPOSED TRAFFIC MANOEUVRING

**FOR DA ONLY**

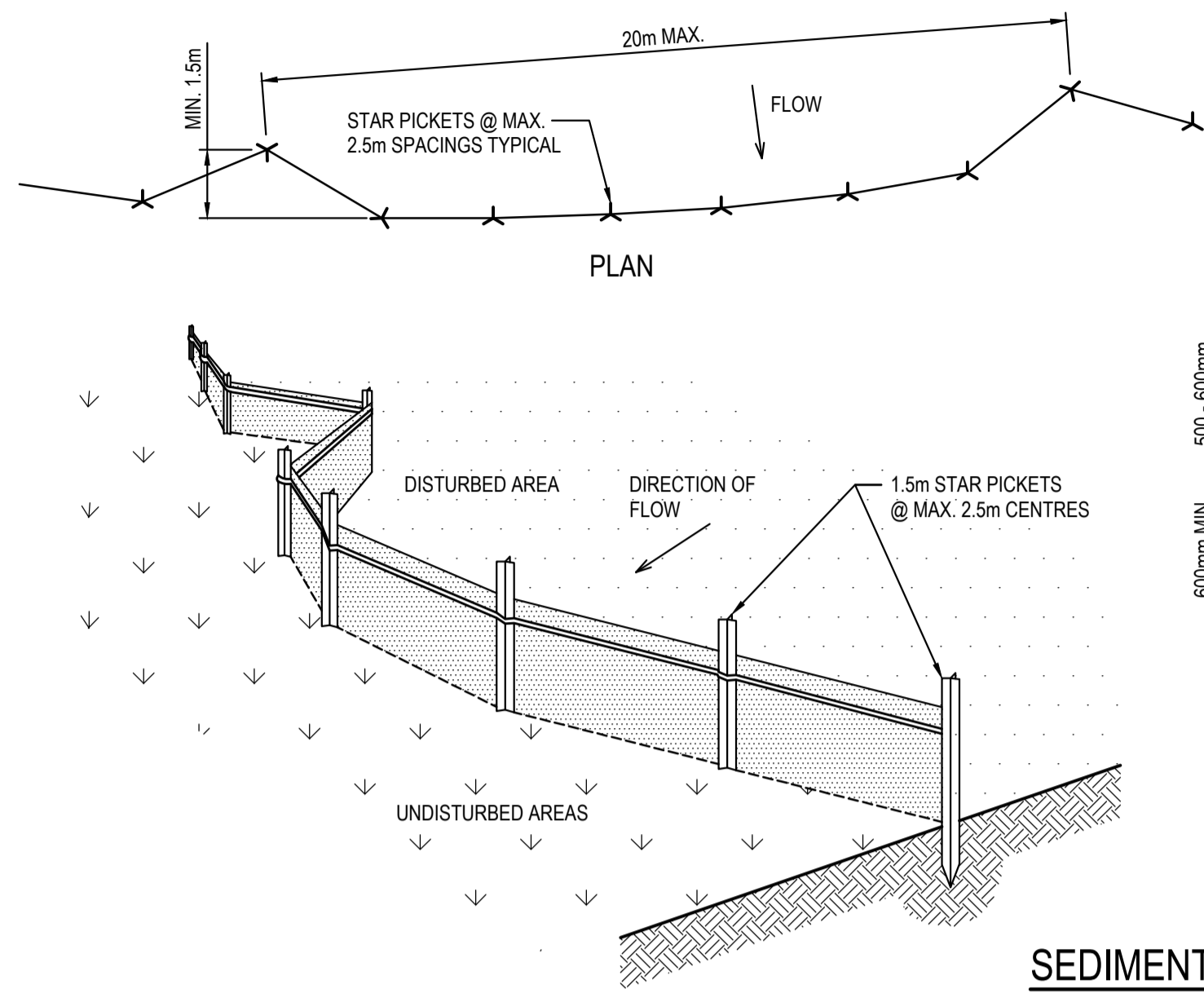
SURVEY INFORMATION		Client	
SURVEYED BY: V.MARK		OPAL HEALTHCARE	
DATUM: AHD		Architect: GROUP GSA	
ORIGIN OF LEVELS: SSM 108411		Suite 2.01, 828 Pacific Highway, Gordon NSW 2072	
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REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MB	NH	27.04.2023
02	ISSUED FOR DA ONLY	MP	NH	06.12.2022
01	ISSUED FOR DA ONLY	MP	NH	25.11.2022

Client	Project
OPAL HEALTHCARE	NARWEE PARKLANDS CARE COMMUNITY
GROUP GSA	59-67 KARNE STREET, NORTH NARWEE, NSW
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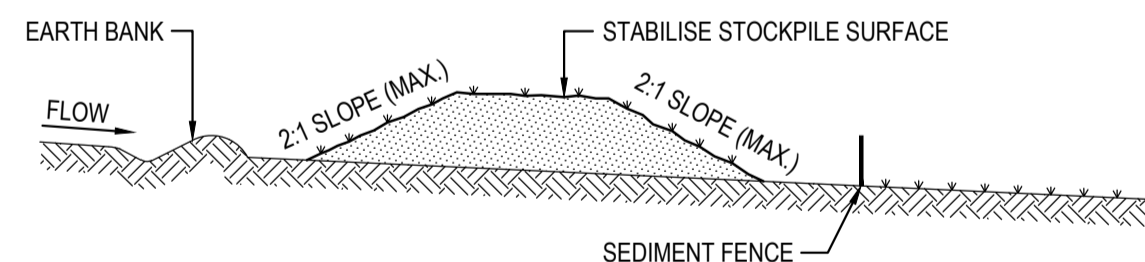
Drawn	Designed	Date
S.Chen	N.Heazlewood	AUG 2022
Checked	Approved	Scale @A1
N.Heazlewood	A.Francis	1:200
Drawing number		Revision
22M21_DA_SE01		03

Project	Title
NARWEE PARKLANDS CARE COMMUNITY	SEDIMENT AND EROSION CONTROL PLAN
59-67 KARNE STREET, NORTH NARWEE, NSW	



**SEDIMENT FENCE CONSTRUCTION NOTES:**

- 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.
- CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- DRIVE 1.5m LONG STAR PICKETS INTO GROUND @ 2.5m INTERVALS (MAX.) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
- 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.
- JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
- BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

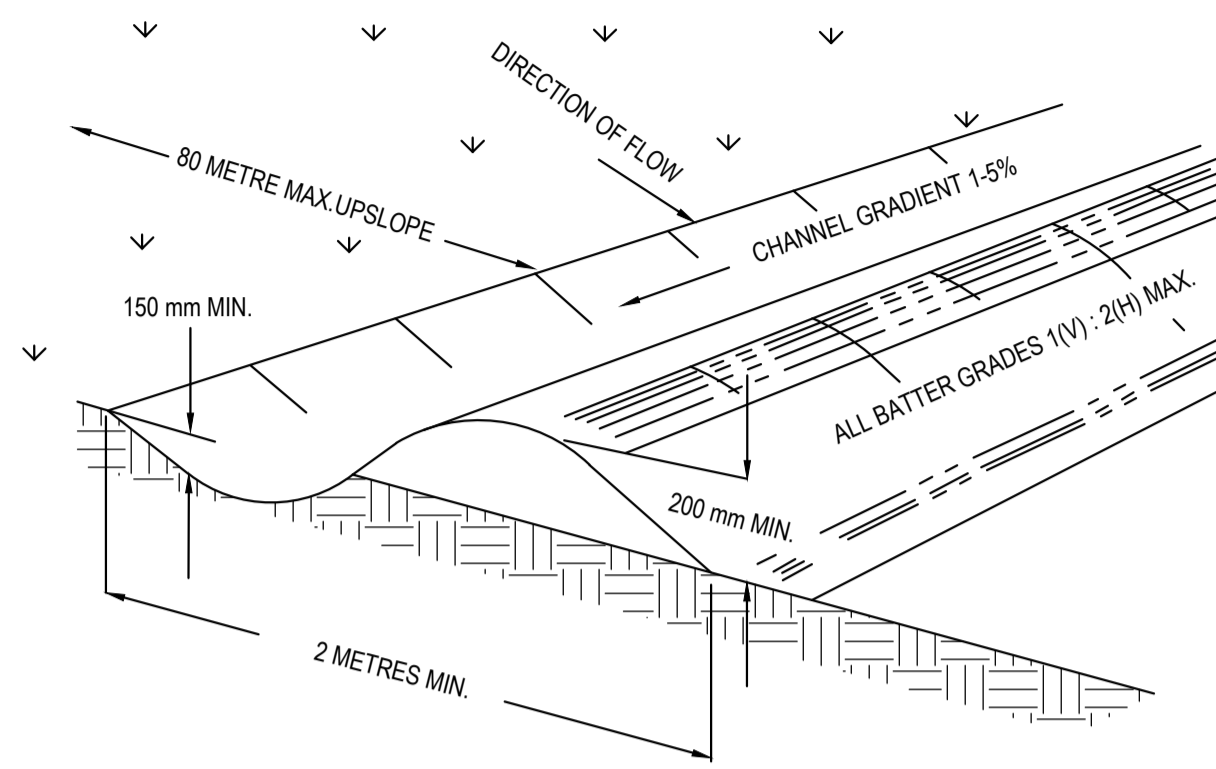


**STOCKPILE CONSTRUCTION NOTES:**

- PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
- CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
- WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
- WHERE THEY ARE TO BE PLACED FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED E.S.C.P. OR S.W.M.P. TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
- CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

**STOCKPILES**

SCALE N.T.S.



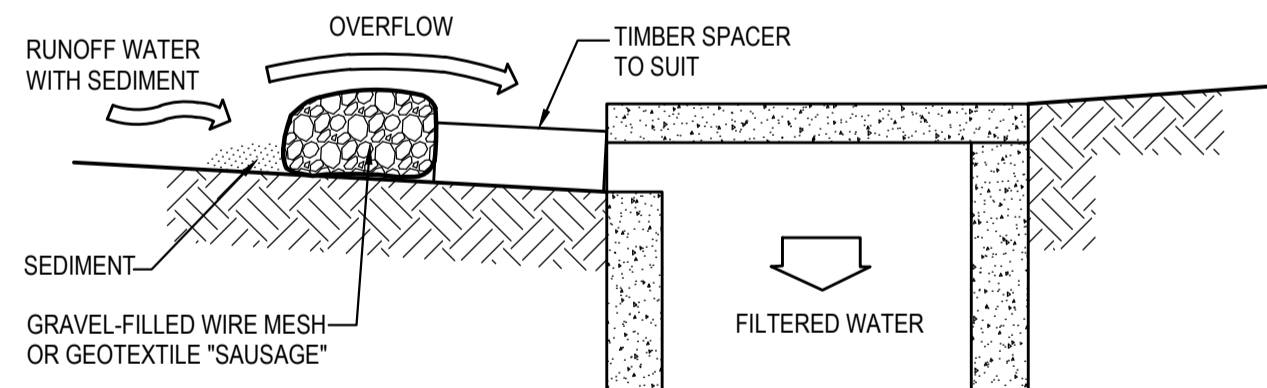
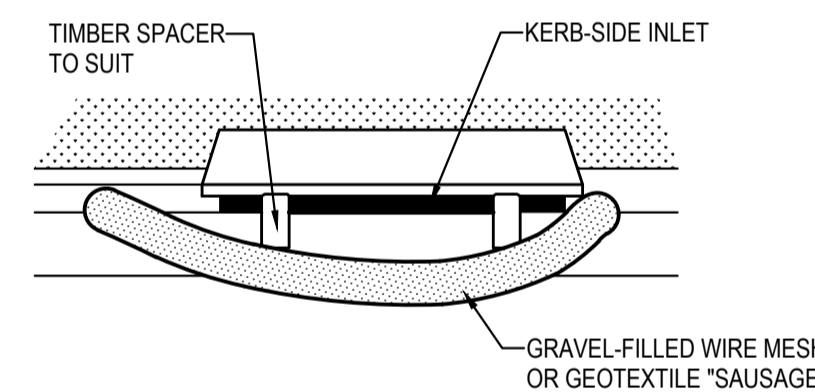
NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAC UPSLOPE LENGTH IS 80 METERS.

**CATCH DRAIN CONSTRUCTION NOTES:**

- CONSTRUCT ALONG GRADIENT AS SPECIFIED.
- MAXIMUM SPACING BETWEEN BANKS SHALL BE 80 METRES.
- DRAINS TO BE OF PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED.
- EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE.
- CONSTRUCTION IS OF A TEMPORARY NATURE AND SHALL BE COMPACTED AT THE END A DAYS WORK OR IMMEDIATELY PRIOR RAIN.
- ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO SEDIMENT BASIN OR SIMILAR.
- DISCHARGE RUNOFF COLLECTED FROM UNDISTURBED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL AISTE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED.
- COMPACT WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS.
- EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDE NORMAL FLOW.

**CATCH DRAINS SD 5-8**

SCALE N.T.S.

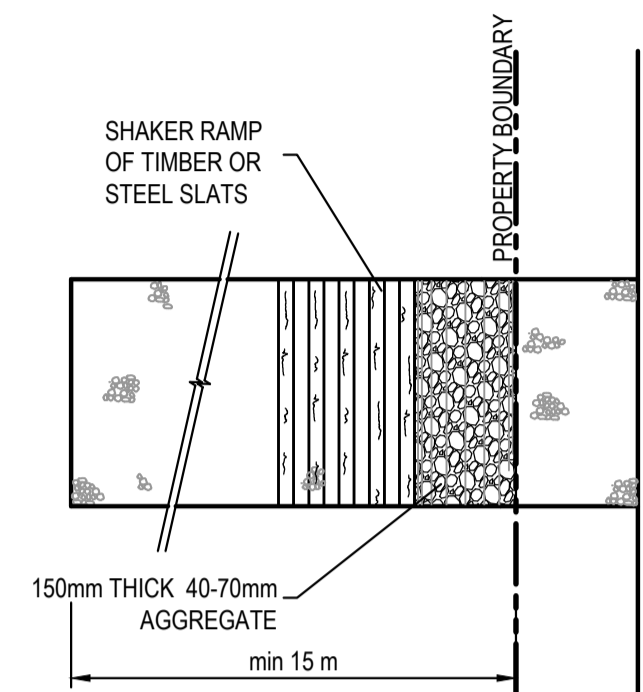


**MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:**

- 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.
- FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
- PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
- FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
- SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY CAN FIRMLY ABUT EACH OTHER AND SEDIMENT / LADEN WATERS CANNOT PASS BETWEEN.

**MESH & GRAVEL INLET FILTER**

SCALE N.T.S.

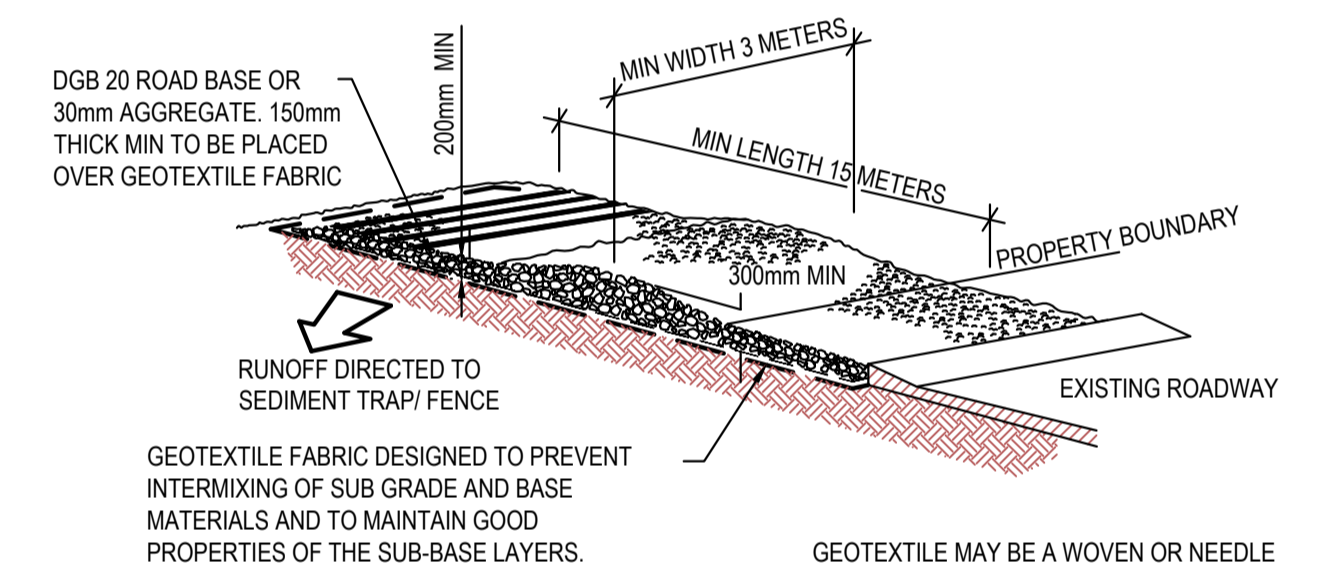


**PLAN**

**STABILISED SITE ACCESS WITH SHAKER RAMP**

N.T.S.

CONSTRUCTION SITE



GEOTEXTILE MAY BE A WOVEN OR NEEDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500 N

**STABILISED SITE ACCESS WITH SHAKER RAMP**

N.T.S.

**NOTES:**

- THIS DEVICE IS TO BE LOCATED AT ALL EXITS FROM CONSTRUCTION SITE.
- THIS DEVICE IS TO BE REGULARLY CLEANED OF DEPOSITED MATERIAL SO AS TO MAINTAIN A 50mm DEEP SPACE BETWEEN PLANKS.
- ANY UNSEALED ROAD BETWEEN THIS DEVICE AND NEAREST ROADWAY IS TO BE TOPPED WITH 100mm THICK 40-70mm SIZE AGGREGATE.
- ALTERNATIVELY, THREE(3) PRECAST CONCRETE CATTLE GRIDS (AS MANUFACTURED BY "HUMES CONCRETE MAY BE USED. 1, 2 & 3 ABOVE ALSO APPLY.

**FOR DA ONLY**

**SURVEY INFORMATION**  
SURVEYED BY: VMARK

DATUM: AHD  
ORIGIN OF LEVELS:  
SSM 108411  
RL 27 054

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MB	NH	27.04.2023					
02	ISSUED FOR DA ONLY	MP	NH	05.12.2022					
01	ISSUED FOR DA ONLY	MP	NH	25.11.2022					

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Architect <b>GROUP GSA</b>		



Project <b>NARWEE PARKLANDS CARE COMMUNITY</b> 59-67 KARNE STREET, NORTH NARWEE, NSW	Drawn S.Chen	Designed N.Heazlewood	Date AUG 2022
Title <b>SEDIMENT AND EROSION CONTROL</b> TYPICAL DETAILS	Checked N.Heazlewood	Approved A.Francis	Scale Scale @A1 N.T.S.
Drawing number <b>22M21_DA_SE02</b>	Revision <b>03</b>		

<b>FOR DA ONLY</b>			
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