PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW
CIVIL ENGINEERING WORKS

GENERAL NOTES:

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH PENRITH CITY COUNCIL'S SPECIFICATION. CONTRACTOR TO OBTAIN AND RETAIN A COPY ON SITE DURING THE COURSE OF THE WORKS.
2. ALL NEW WORKS ARE TO MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS AND MARRY IN A 'WORKMANLIKE' MANNER.
3. 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.
4. SERVICES & ACCESSES TO THE EXISTING PROPERTIES ARE TO BE MAINTAINED IN WORKING ORDER AT ALL TIMES DURING CONSTRUCTION.
5. ADJUST EXISTING SERVICE COVERS TO SUIT NEW FINISHED LEVELS TO RELEVANT AUTHORITY REQUIREMENTS WHERE NECESSARY.
6. REINSTATE AND STABILISE ALL DISTURBED LANDSCAPED AREAS.
7. MINIMUM GRADE OF SUBSOIL SHALL BE 0.5% (1:200) FALL TO OUTLETS.
8. 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 PENRITH CITY COUNCIL'S REQUIREMENTS WHERE APPLICABLE.
9. CONTRACTOR TO CHECK AND CONFIRM SITE DRAINAGE CONNECTIONS ACROSS THE VERGE PRIOR TO COMMENCEMENT OF SITE DRAINAGE WORKS.
10. PROPERTIES AFFECTED BY THE WORKS ARE TO BE NOTIFIED IN ADVANCE WHERE DISRUPTION TO EXISTING ACCESS IS LIKELY.

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.

LOCALITY SKETCH

SCALE: N.T.S.

DRAWING SCHEDULE

231664_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH
231664_DA_C100	GENERAL ARRANGEMENT PLAN
231664_DA_C101	DETAIL PLAN - SHEET 1 OF 2
231664_DA_C102	DETAIL PLAN - SHEET 2 OF 2
231664_DA_C110	SITE SECTIONS
231664_DA_C200	STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE
231664_DA_C201	OSD TANK PLAN AND SECTIONS
231664_DA_C202	STORMWATER TYPICAL DETAILS
231664_DA_C203	STORMWATER LONGITUDINAL SECTIONS
231664_DA_C251	POST DEVELOPMENT CATCHMENT PLAN
231664_DA_SE01	SEDIMENT AND EROSION CONTROL PLAN
231664_DA_SE02	SEDIMENT AND EROSION CONTROL DETAILS
231664_DA_BE01	BULK EARTHWORK CUT AND FILL PLAN

SITEWORKS 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.

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.

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024					
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024					

Client
HBB

Architect
nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

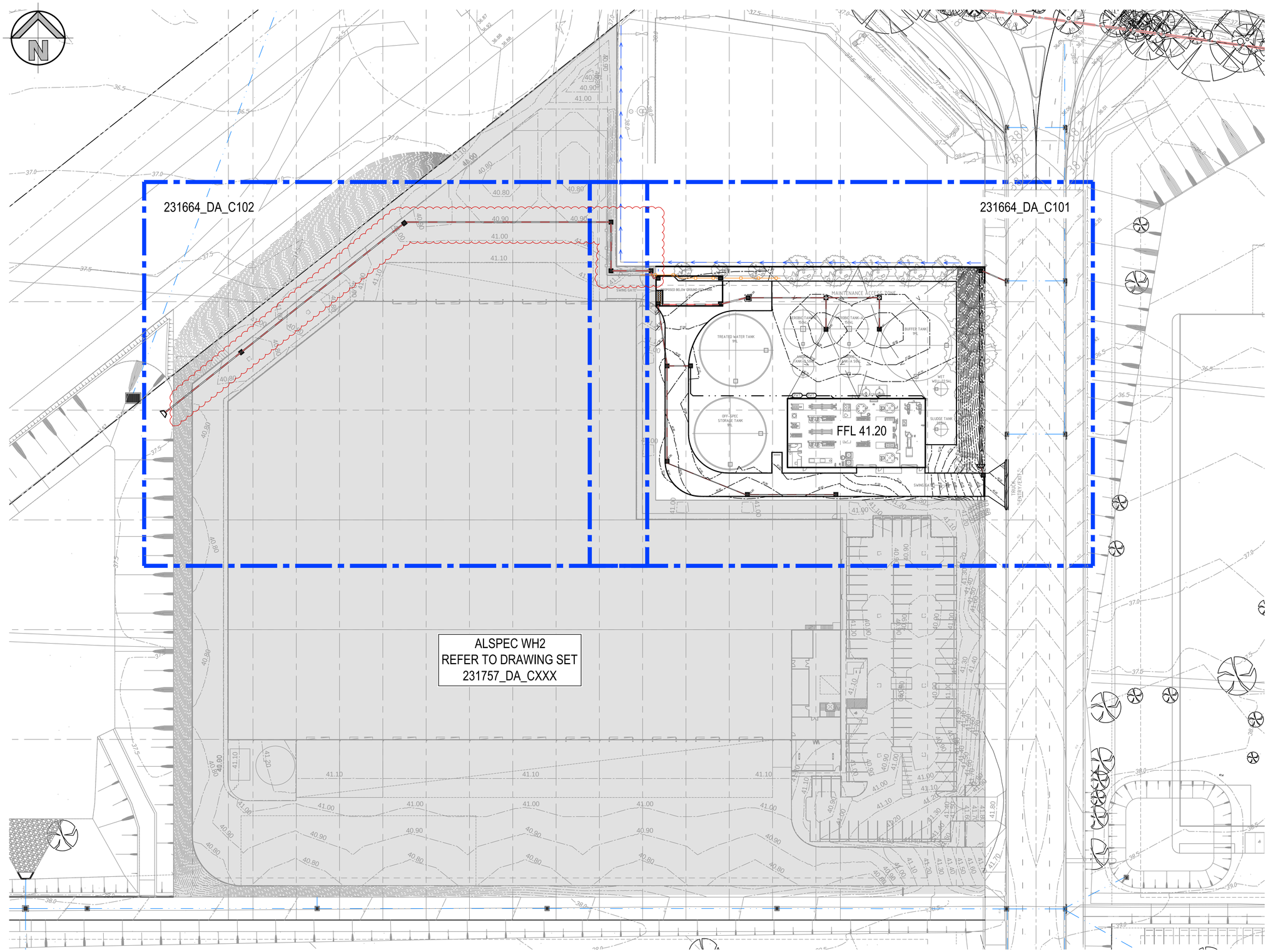
henry&hymas

Project
PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title
COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	N.T.S.

Drawing number: 231664_DA_C000
Revision: 02



LEGEND

- EXISTING BOUNDARY
- R — PROPOSED RIDGE LINE
- V — PROPOSED VALLEY LINE
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS
- PROPOSED LINTEL ONGRADE & SAG PITS
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- 40.125 / Ø425RCP / 20.450m / 1.5% / 39.818 — STORMWATER UPSTREAM INVERT RL. / STORMWATER PIPE DIAMETER & CLASS / STORMWATER PIPE LENGTH / STORMWATER PIPE GRADE / STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED GRATED DRAIN
- PROPOSED STORMWATER PIPE
- PROPOSED STRAPPED STORMWATER PIPE
- PROPOSED EASEMENT
- 36.5 — EXISTING CONTOURS
- 41.10 — PROPOSED CONTOURS
- RL41.20 — PROPOSED SPOT LEVEL
- EX38.50 — PROPOSED SPOT LEVEL
- TW41.20 — PROPOSED TOP OF WALL LEVEL
- BW38.50 — PROPOSED BOTTOM OF WALL LEVEL
- KO — PROPOSED KERB ONLY
- ES — PROPOSED EDGE STRIP
- RW — PROPOSED RETAINING WALL
- H=7.20m — PROPOSED HEIGHT OF WALL
- DP — PROPOSED DOWNPIPE (DP)
- ROOF DRAINAGE COLLECTION LINE
- PROPOSED CRASH BARRIER

GENERAL ARRANGEMENT PLAN

SCALE: 1:500

0 10 20 30 40 50m
10 8 6 4 2
SCALE 1:500

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
04	ISSUED FOR DA ONLY	NH	NH	10.02.2025
03	ISSUED FOR DA ONLY	MB	NH	28.01.2025
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024

Client: HBB

Architect: nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

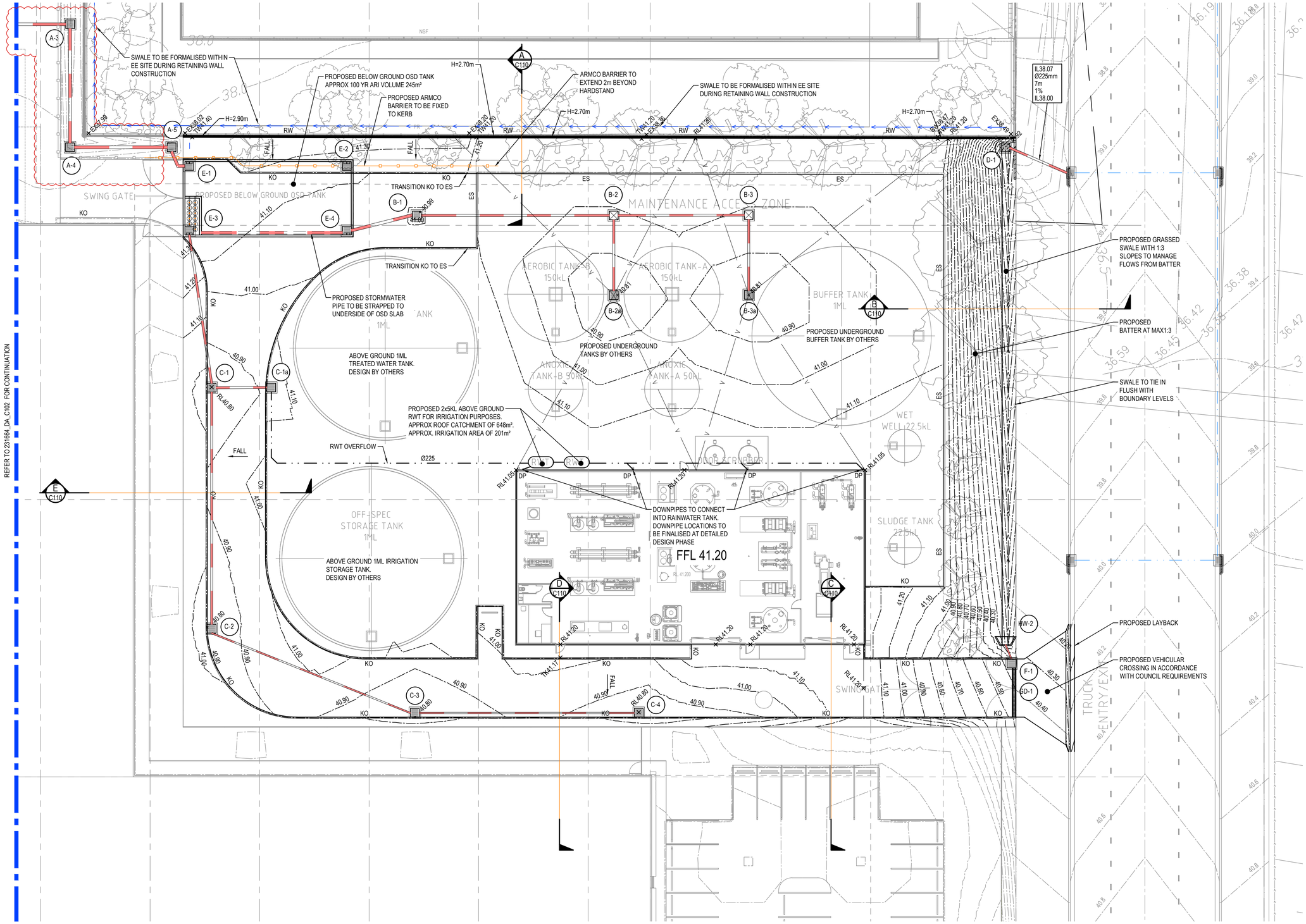
henry&hymas

Project: PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title: GENERAL ARRANGEMENT PLAN

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	1:500

Drawing number: 231664_DA_C100
Revision: 04



DETAIL PLAN

SCALE: 1:200

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
07	ISSUED FOR DA ONLY	NH	NH	10.02.2025
06	ISSUED FOR DA ONLY	MB	NH	28.01.2025
05	ISSUED FOR DA ONLY	NH	NH	05.11.2024
04	ISSUED FOR DA ONLY	NH	NH	31.10.2024
03	ISSUED FOR DA ONLY	NH	NH	18.10.2024
02	ISSUED FOR DA ONLY	MB	NH	10.07.2024
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024

Client: HBB

Architect: nettletontribe

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Web www.henryandhymas.com.au

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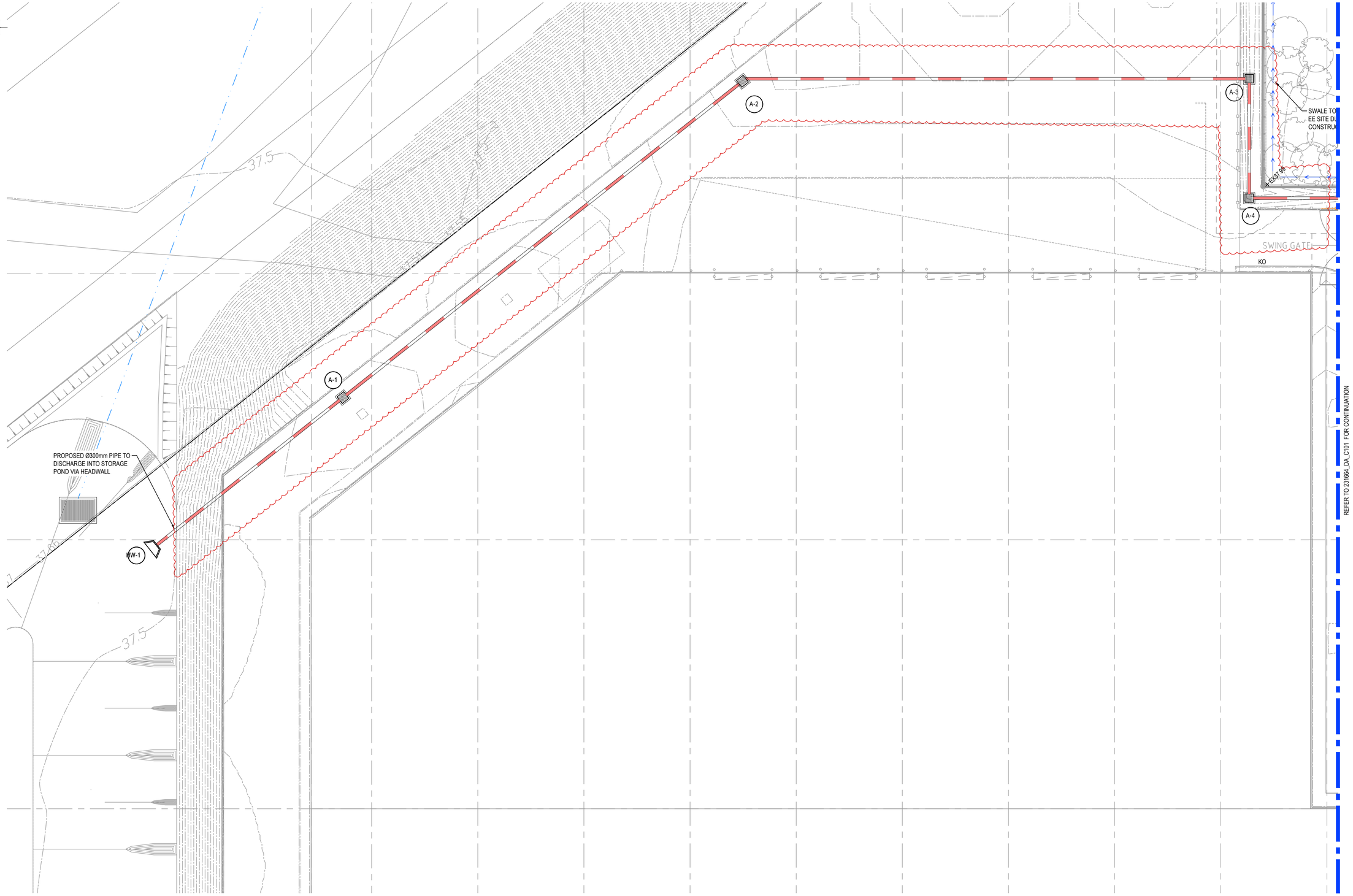
Project: PROPOSED SEWER TREATMENT FACILITY PATONS LANE ORCHARD HILLS NSW

Title: DETAIL PLAN SHEET 1 OF 2

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	1:200

Drawing number: 231664_DA_C101

Revision: 07



DETAIL PLAN

SCALE: 1:200

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
04	ISSUED FOR DA ONLY	NH	NH	10.02.2025
03	ISSUED FOR DA ONLY	MB	NH	28.01.2025
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024

Client
HBB

Architect
nettletontribe

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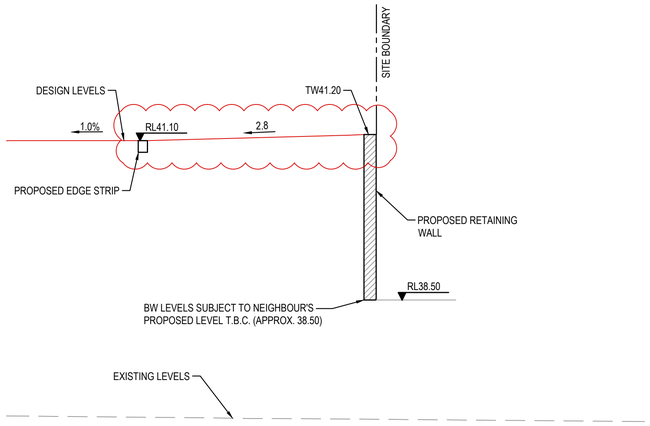
Project
PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title
DETAIL PLAN
SHEET 2 OF 2

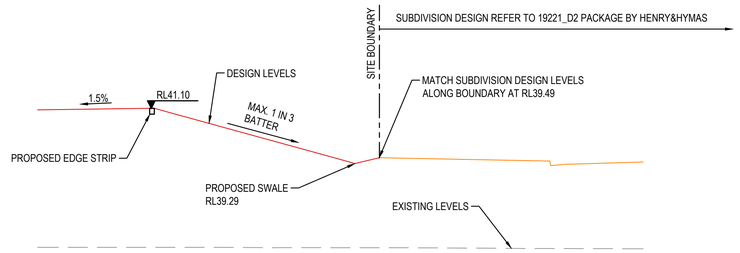
Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	1:200

Drawing number: 231664_DA_C102

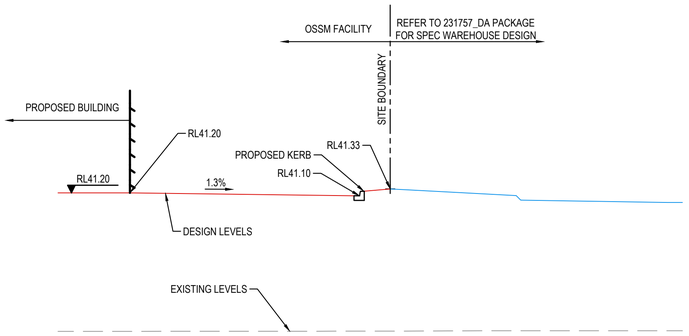
Revision: 04



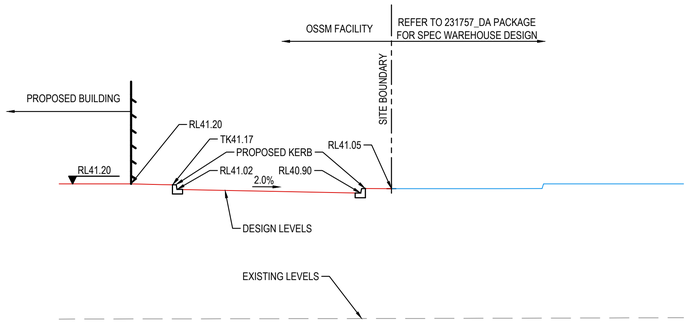
SECTION A C101
SCALE: 1:50



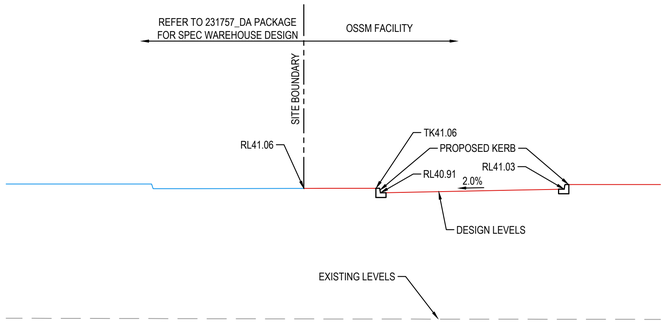
SECTION B C101
SCALE: 1:100



SECTION C C101
SCALE: 1:100



SECTION D C101
SCALE: 1:100



SECTION E C101
SCALE: 1:100

0 1000 2000 3000 4000 5000mm
1000 600 200
SCALE 1:50

0 2 4 6 8 10m
2 1
SCALE 1:100

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA	MB	NH	28.01.2025					
01	ISSUED FOR DA	SC	NH	05.07.2024					

Client
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Email email@hhconsult.com.au
Web www.henryandhymas.com.au

DRAWING TO BE PRINTED IN COLOUR

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Project
PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title
SITE SECTIONS

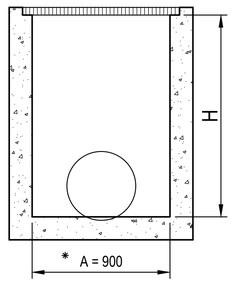
Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	**Approved**	**Scale @A1**
N.Heazlewood	T.Rozehnal	AS NOTED

Drawing number: 231664_DA_C110
Revision: 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.

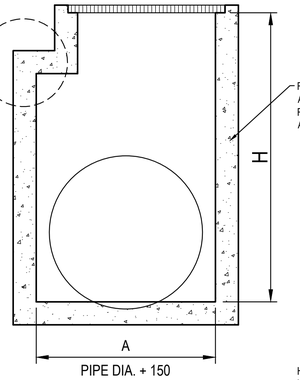
1. SELECT PIT CHAMBER USING THE STEPS BELOW:
2. SELECT PIT CHAMBER SIZE DEPENDING ON THE PIPE DIAMETERS.
3. CHECK PIT CHAMBER SIZE TO SATISFY DEPTH TO INVERT REQUIREMENTS.
   CHECK PIT CHAMBER DIMENSIONS TO SATISFY THE SKEW ANGLE IN THE TABLE.



SECTION
NTS

*A = 600 FOR PIPES UP TO 375 DIA.

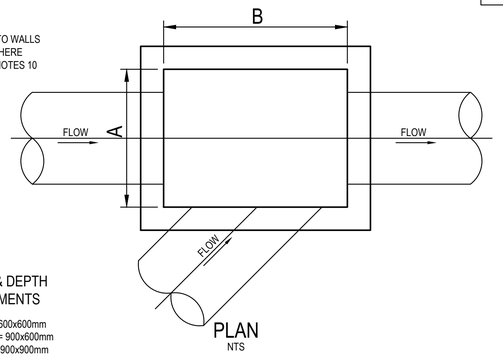
(1) PIT CHAMBER DIMENSIONS FOR PIPES UP TO 600 DIA.



SECTION
NTS

(1) PIT CHAMBER FOR PIPES GREATER THAN 600 DIA.

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



PLAN
NTS

(2) PIT SIZE & DEPTH REQUIREMENTS

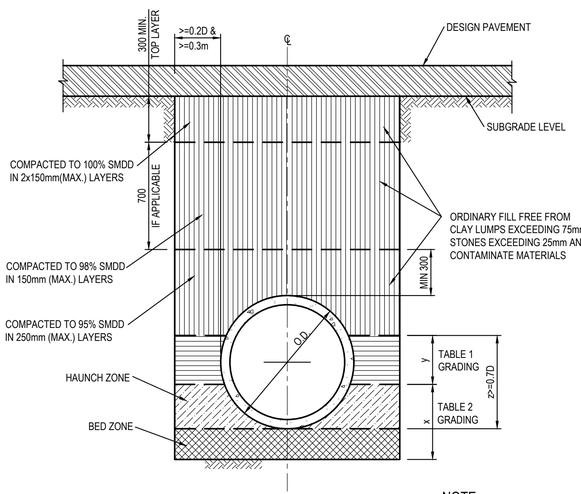
H = 0-900mm - AxB = 600x600mm
H = 900-1200mm - AxB = 900x600mm
H = >1200mm - AxB = 900x900mm

(3) PIT CHAMBER FOR SIDE ENTRY ON SKEW

TABLE 1	
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

TABLE 2	
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

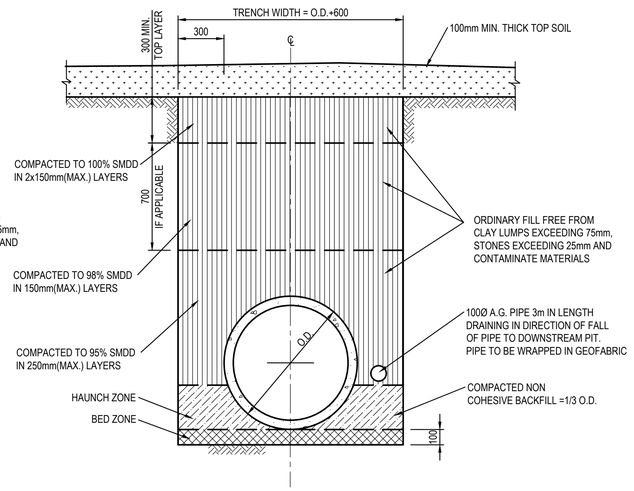
TABLE 3				
SUPPORT TYPE	BED ZONE X	HAUNCH ZONE Y	BED AND HAUNCH ZONES COMPACTION	MAX BEDDING FACTOR
HS1	100 IF D<=1500, OR 150 IF D>=1500	0.1D	50	2.0
HS2		0.3D	60	2.5
HS3		0.3D	70	4.0



PIPE TRENCH INSTALLATION BENEATH PAVEMENT

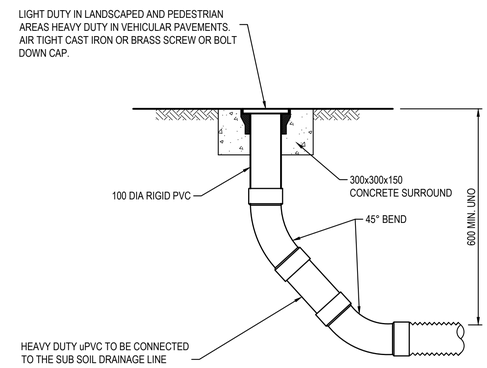
(HS SUPPORT TO BE USED UNDER ROADWAY)
SCALE 1:20

NOTE:
TYPE HS2 TO BE USED AS A TYPICAL SUPPORT FOR TRENCHES UNDER ROADWAY UNLESS SPECIFIED SEPERATELY



PIPE TRENCH INSTALLATION IN LANDSCAPE AREAS

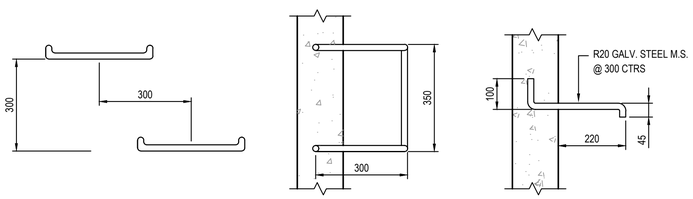
(H1 & H2 SUPPORT)
SCALE 1:20



FLUSHING POINT (FP)

SCALE 1:10

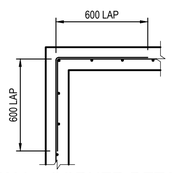
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



ELEVATION PLAN SECTION

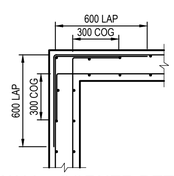
TYPICAL STEP IRON DETAIL

SCALE 1:10



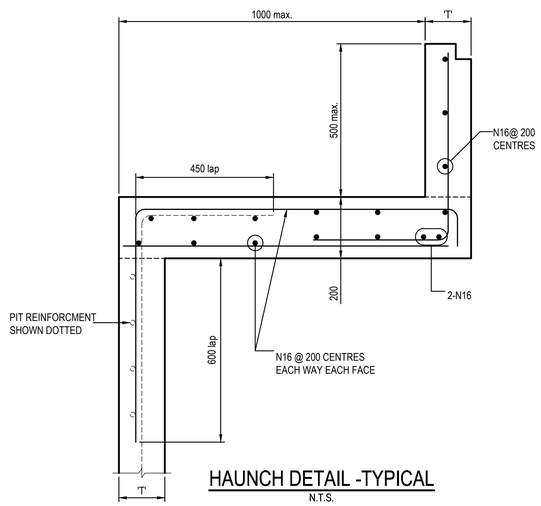
150 WALL - CORNER DETAIL

SCALE 1:20



200 WALL - CORNER DETAIL

SCALE 1:20



HAUNCH DETAIL -TYPICAL

N.T.S.

PIT LID SCHEDULE

PIT/STRUCTURE NUMBER	DESCRIPTION
A-1, A-2, A-3, A-4, A-5, B-1, B-2a, B-3a, C-1, C-1a, C-2, C-3, C-4, D-1, F-1	PROPOSED SURFACE INLET PIT WITH HINGED 900x900 HEAVY DUTY GRATED LID CLASS 'D' IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
B-2, B-3	PROPOSED JUNCTION PIT WITH 900x900 HEAVY DUTY SEALED LID CLASS "D" IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS OR APPROVED EQUIVALENT.
E-1, E-2, E-3, E-4	PROPOSED INLET PIT WITH 900x900 HINGED HEAVY DUTY GRATED LID CLASS "D" WITHIN OSD TANK IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENT.
GD-1	PROPOSED 225mm WIDE GRATED DRAIN WITH HINGED HEAVY DUTY GRATE CLASS 'D' IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
HW-1, HW-2	PROPOSED HEADWALL

NOTE:
ALL INLET PITS TO BE FITTED WITH OCEANGUARD PIT BASKETS

DRAINAGE NOTES:

1. ALL STORMWATER WORK TO COMPLY WITH AS 3500 PART 3.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MINIMUM COVER OF 600mm ON ALL PIPES.

3. PROTECTION OF PIPES DUE TO LOADS EXCEEDING W7 WHEEL LOAD SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

4. 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.

5. MINIMUM COVER OVER EXISTING PIPES FOR PROTECTION DURING CONSTRUCTION SHALL BE 800mm.

6. NO CONSTRUCTION LOADS SHALL BE APPLIED TO PLASTIC PIPES.

7. FINISHED SURFACE LEVELS SHOWN ON LAYOUT PLAN DRGS TAKE PRECEDENCE OVER DESIGN DRAINAGE SURFACE LEVELS.

8. 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.

9. 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=32 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.

10. ALL PITS, GRATINGS AND FRAMES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION AND TO BE IN ACCORDANCE WITH AS3500.3 AND AS3996.
11. 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.

12. FOR PIPE SIZES GREATER THAN Ø300mm, PIT FLOOR IS TO BE BENCHED TO FACILITATE FLOW.

13. 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).

14. ALL SUBSOIL PIPES SHALL BE 100mm SLOTTED PVC IN A FILTER SOCK, UNO, WITH 3m INSTALLED UPSTREAM OF ALL PITS.

15. ALL PIPEWORK SHALL HAVE MINIMUM DIAMETER 100.

16. MINIMUM GRADE FOR ROOFWATER DRAINAGE LINES SHALL BE 1%.

17. ALL PIPE JUNCTIONS AND TAPER UP TO AND INCLUDING 300 DIA. SHALL BE VIA PURPOSE MADE FITTINGS.

18. ALL ROOF DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH AS3500, PART 3. TESTING TO BE UNDERTAKEN AND REPORTS PROVIDED TO THE SUPERINTENDENT.

19. 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.

20. 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.

21. SUBSOIL DRAINAGE LINES FOR LANDSCAPE AREA NOT SHOWN ON THESE DRAWINGS. REFER TO LANDSCAPING PLANS FOR DETAILS.

22. 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.

0 400 800 1200 1600 2000mm
400 200
SCALE 1:20

0 200 400 600 800 1000mm
200 100
SCALE 1:10

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024

Client: HBB
Architect: nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

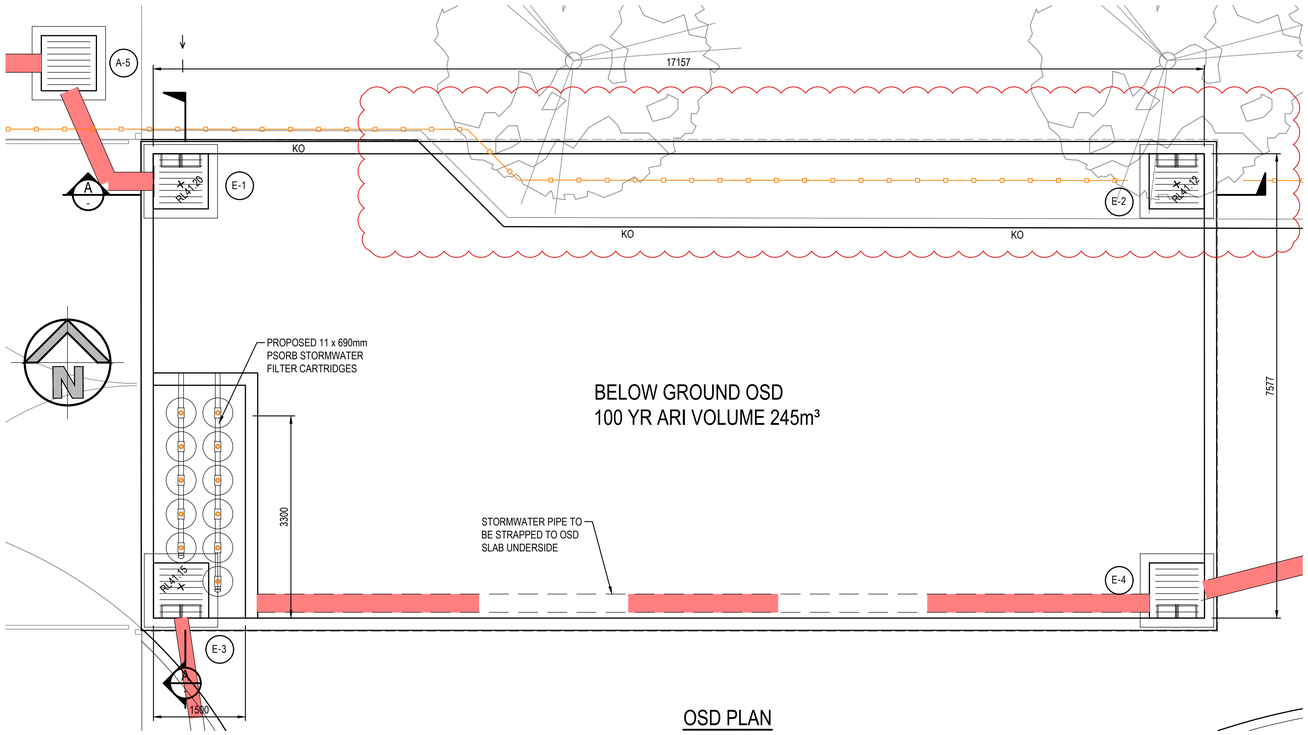
henry&hymas

Project: PROPOSED SEWER TREATMENT FACILITY PATONS LANE ORCHARD HILLS NSW

Title: STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE

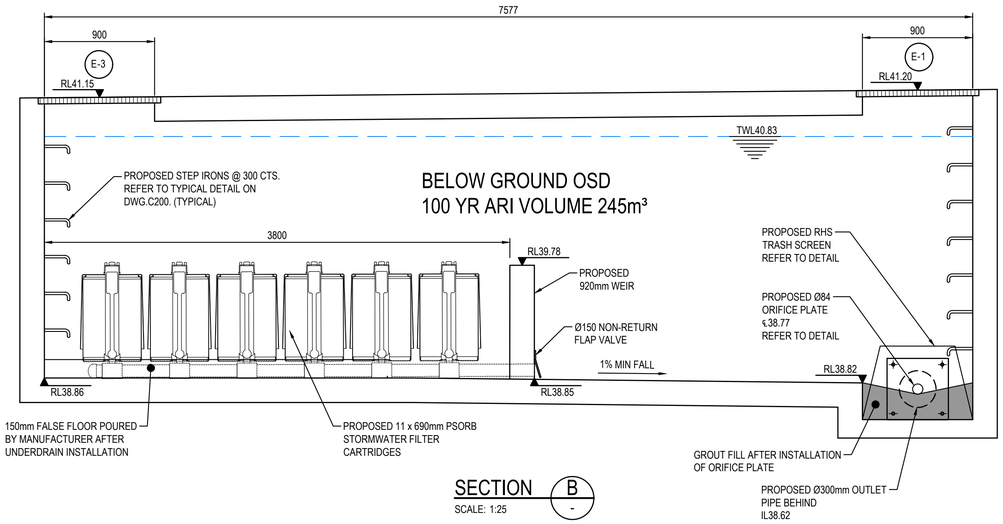
Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	N.T.S.

Drawing number: 231664_DA_C200
Revision: 02



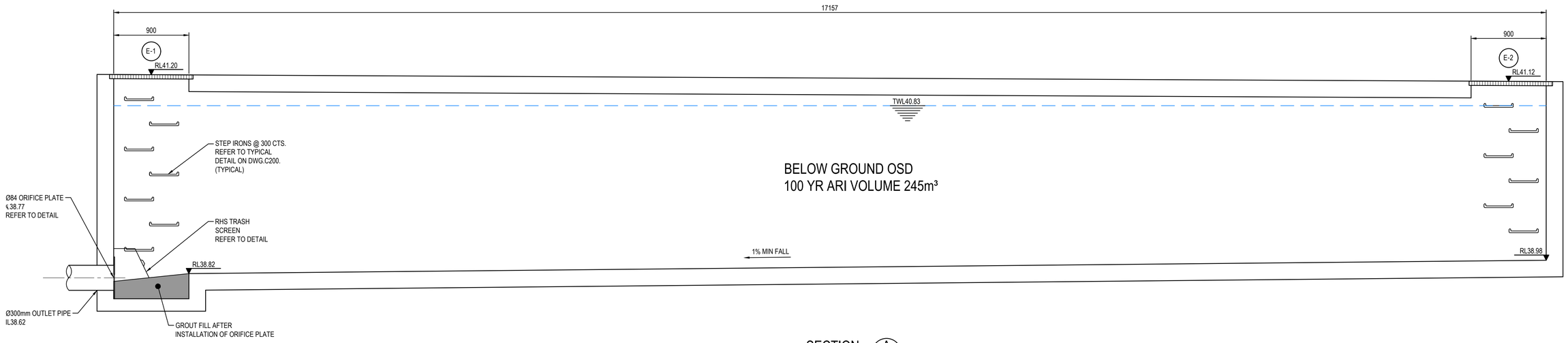
OSD PLAN

SCALE: 1:50



SECTION B

SCALE: 1:25



SECTION A

SCALE: 1:25

0 1000 2000 3000 4000 5000mm
1000 600 200
SCALE 1:50

0 500 1000 1500 2000 2500mm
500 300 100
SCALE 1:25

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
04	ISSUED FOR DA ONLY	MB	NH	28.01.2025					
03	ISSUED FOR DA ONLY	NH	NH	31.10.2024					
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024					
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024					

Client
HBB

Architect
nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

henry&hymas

Project
PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title
OSD TANK PLAN AND SECTIONS

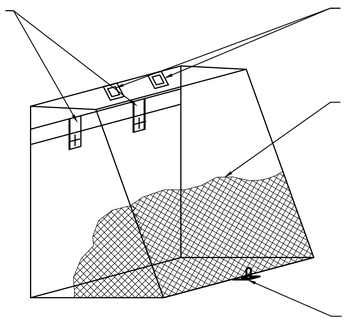
Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	AS NOTED

Drawing number: 231664_DA_C201
Revision: 04

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 RECOMENDED 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 REFER BURWOOD COUNCIL AND UPPER PARRAMATTA RIVER CATCHMENT TRUST HANDBOOK.



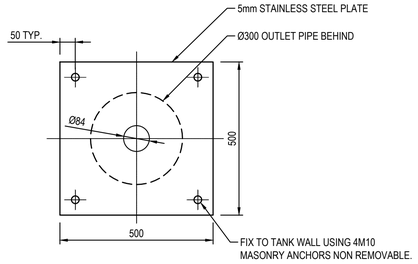
LIFTING HANDLES

DEBRIS SCREEN WELDLOK A40/203 (HOT DIPPED GALVANISED) 1.0m² AREA OF THE SCREEN (20xORIFICE)

60 x 5mm LOCK DOWN PLATE WITH PENETRATION. REFER DETAIL

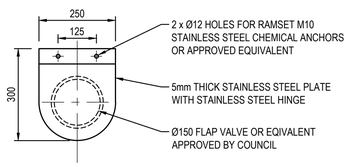
DEBRIS SCREEN DETAIL

NOT TO SCALE
ALL STEEL TO BE HOT DIPPED GALVANISED



ORIFICE PLATE DETAIL

SCALE 1:10



FLAP VALVE DETAIL

SCALE 1:10

200 100 0 200 400 600 800 1000mm

SCALE 1:10

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024					
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024					

Client
HBB

Architect
nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

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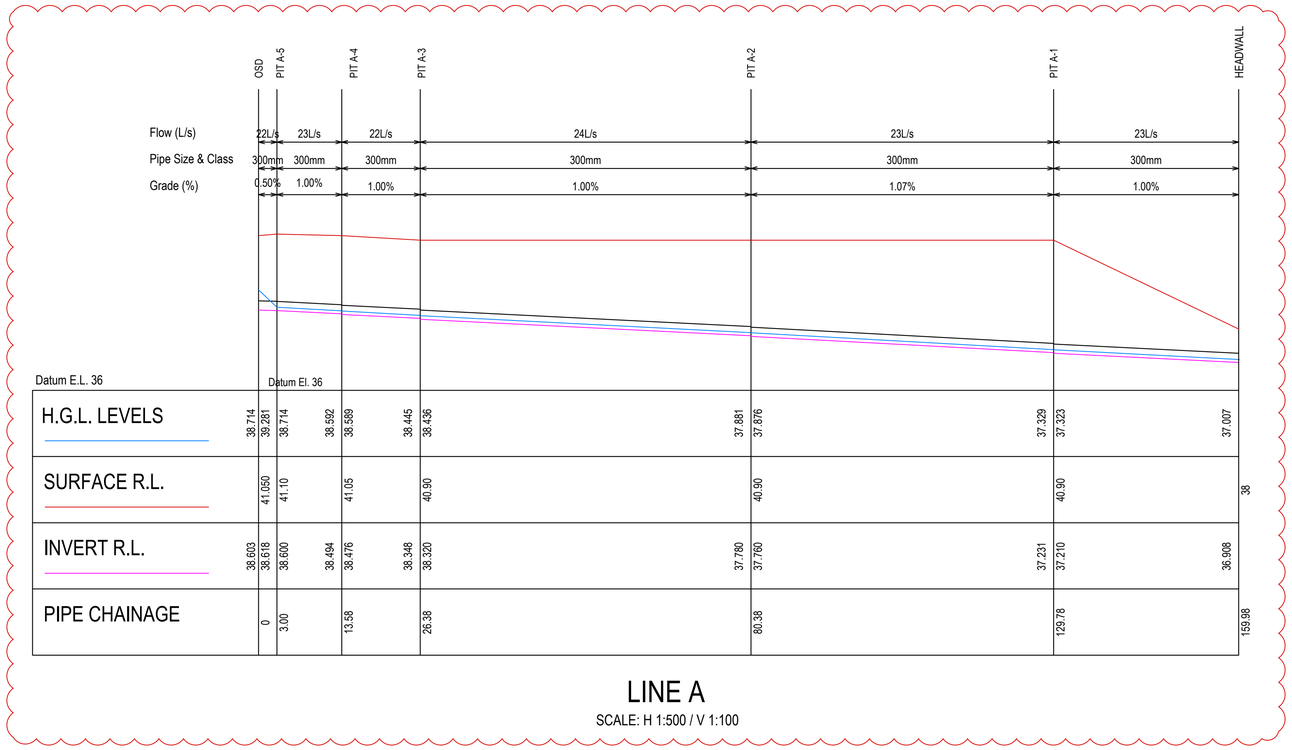
Project
PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title
STORMWATER TYPICAL DETAILS

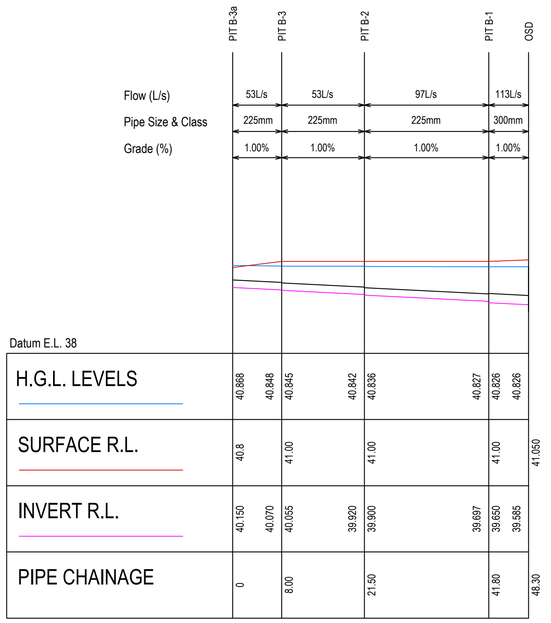
Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	AS NOTED

Drawing number: 231664_DA_C202
Revision: 02



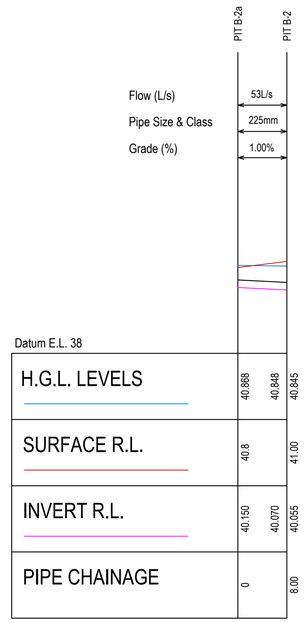
LINE A

SCALE: H 1:500 / V 1:100



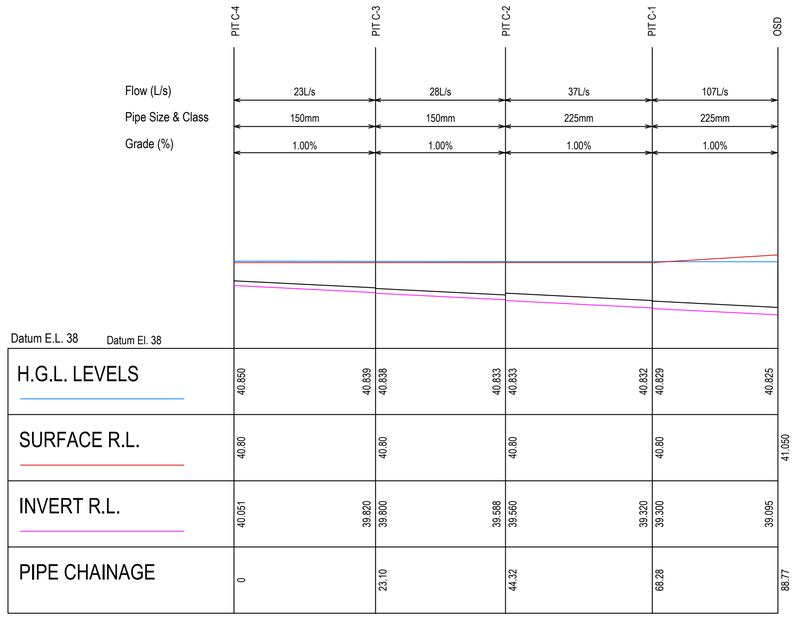
LINE B3a - OSD

SCALE: H 1:500 / V 1:100



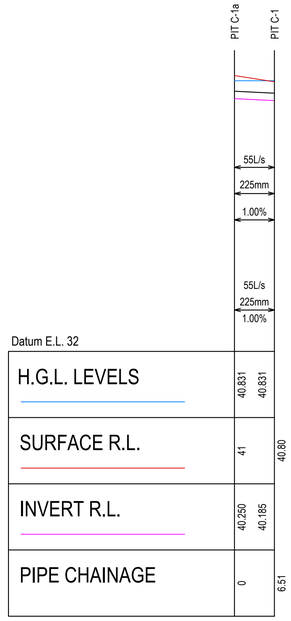
LINE B2a - B2

SCALE: H 1:500 / V 1:100



LINE C4 - OSD

SCALE: H 1:500 / V 1:100



LINE C1a - C1

SCALE: H 1:500 / V 1:100

0 2 4 6 8 10m
2 1
SCALE 1:100

0 10 20 30 40 50m
10 8 6 4 2
SCALE 1:500

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SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MB	NH	28.01.2025
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024
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Client: HBB
Architect: nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

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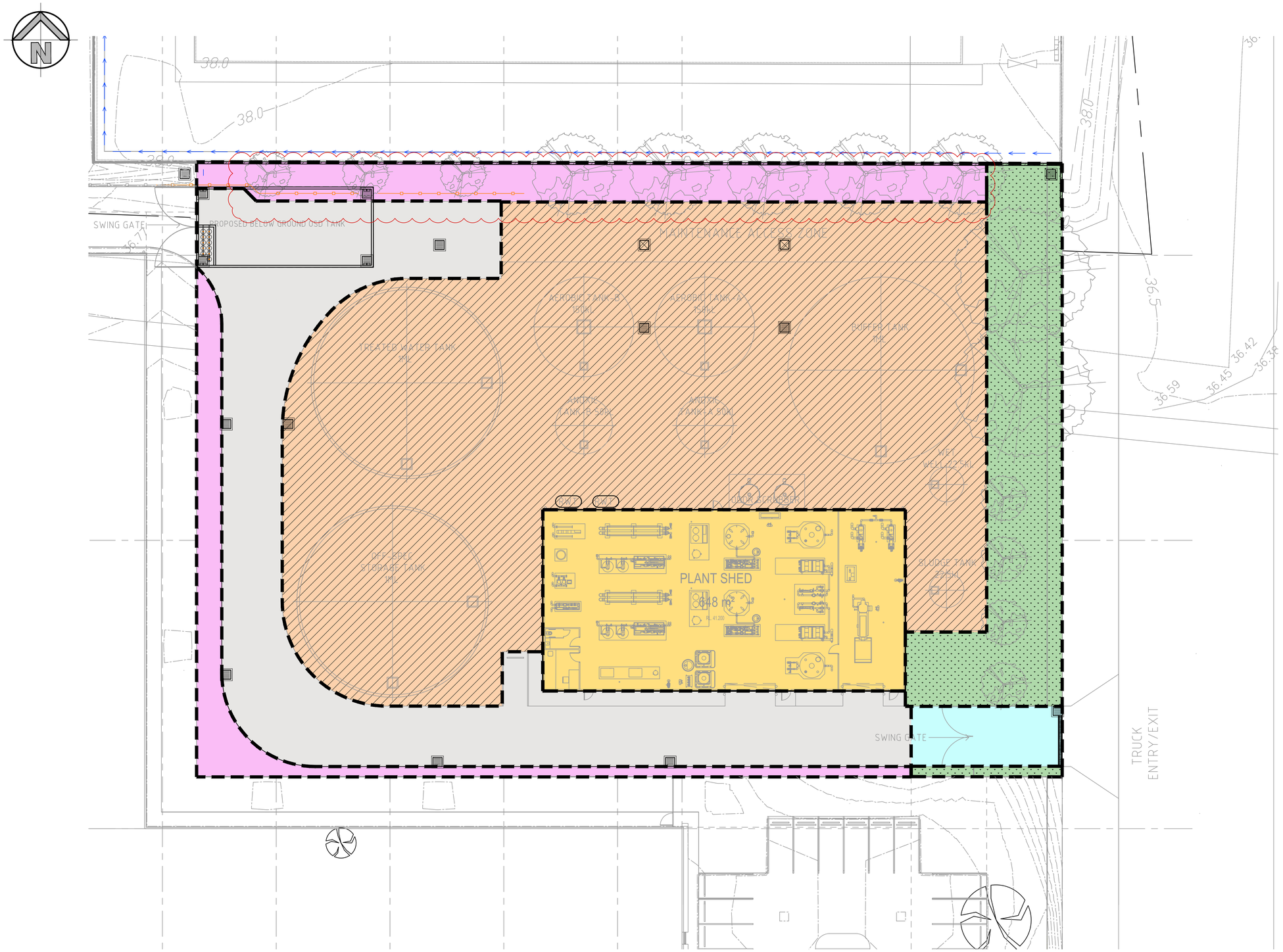
Project: PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title: STORMWATER LONGITUDINAL SECTIONS

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	AS NOTED

Drawing number: 231664_DA_C203
Revision: 03



TOTAL SITE = 5242.0m²

- PROPOSED HARDSTAND DRAINING TO OSD — AREA = 1028.0m²
- PROPOSED ROOF AREA DRAINING TO OSD — AREA = 648.0m²
- PROPOSED DRIVEWAY BYPASSING OSD — AREA = 90.0m²
- PROPOSED LANDSCAPING BYPASSING OSD — AREA = 479.0m²
- PROPOSED LANDSCAPING TO OSD — AREA = 508.0m²
- PROPOSED GRAVEL AREA TO OSD — AREA = 2489.0m²

POST DEVELOPMENT CATCHMENT PLAN

SCALE: 1:200

0 4 8 12 16 20m
4 3 2 1
SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
05	ISSUED FOR DA ONLY	NH	NH	11.02.2025					
04	ISSUED FOR DA ONLY	MB	NH	28.01.2025					
03	ISSUED FOR DA ONLY	NH	NH	12.07.2024					
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024					
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024					

Client
HBB

Architect
nettletontribe

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Suite 2.01
828 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

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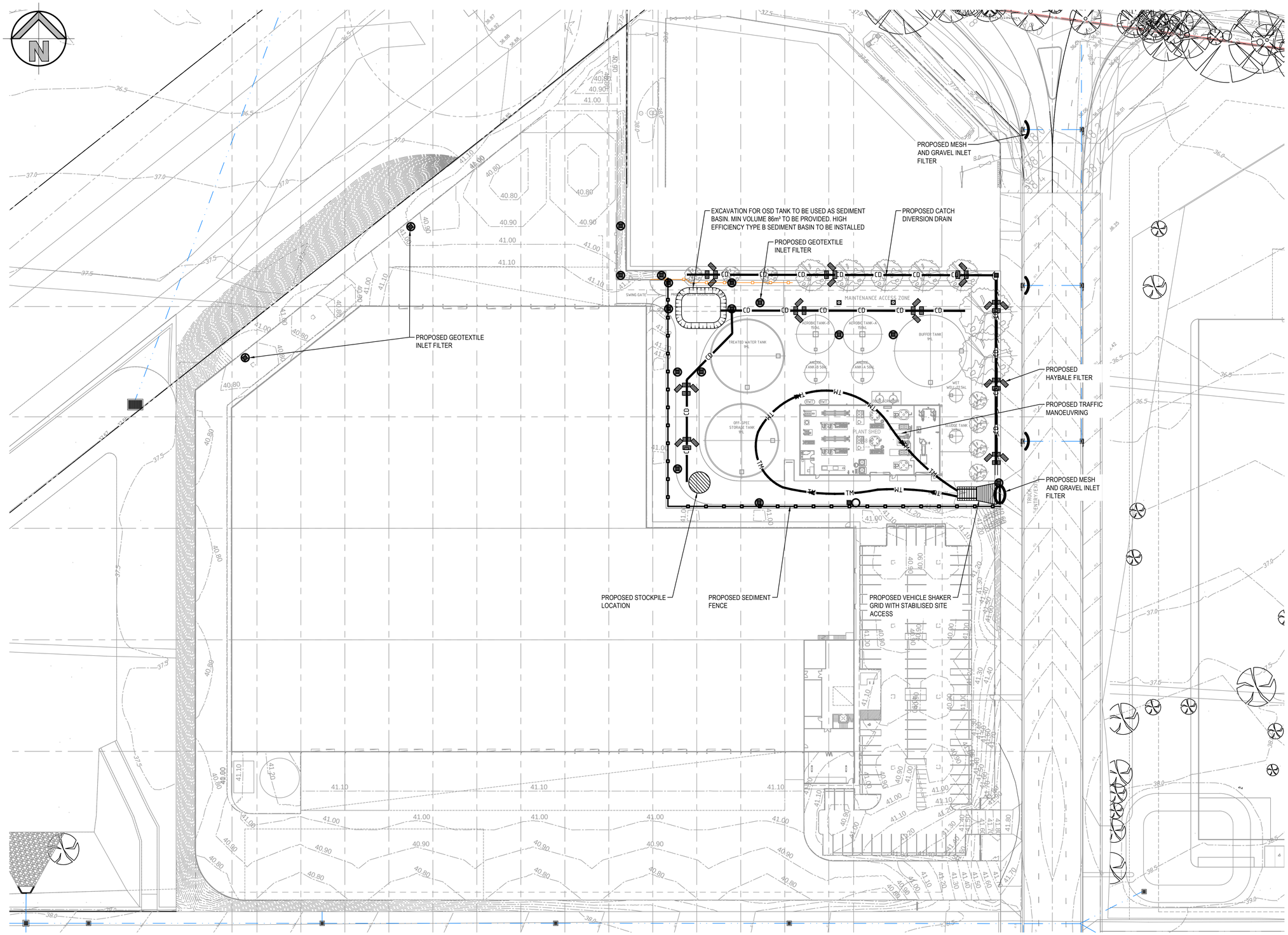
Project
PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title
POST DEVELOPMENT CATCHMENT PLAN

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	1:200

Drawing number: 231664_DA_C251
Revision: 05



LEGEND

- SITE BOUNDARY
- PROPOSED SEDIMENTATION FENCE
- PROPOSED CATCH DIVERSION DRAIN
- PROPOSED TRAFFIC MANOEUVRING
- PROPOSED STOCKPILE LOCATION
- PROPOSED VEHICLE SHAKER GRID
- PROPOSED STABILISED SITE ACCESS
- PROPOSED GEO-TEXTILE INLET FILTER
- PROPOSED MESH AND GRAVEL INLET FILTER
- PROPOSED SEDIMENT BASIN

SEDIMENT & EROSION CONTROL NOTES

- ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH PENRITH CITY COUNCIL'S 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 CONTRACTORS RESPONSIBILTY 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.

NOTE:

1. THE SEDIMENT BASIN HAS BEEN DESIGNED TO TREAT 80% OF AVERAGE RUNOFF VOLUME TO 50mg/L TSS OR LESS AND PH LEVELS IN THE RANGE OF 6.5-8.5. BASIN MANAGEMENT TO ENSURE THESE PARAMETERS ARE ACHIEVED FOR ALL STORMWATER DISCHARGING FROM THE SEDIMENT BASINS ON SITE.

SEDIMENT AND EROSION CONTROL PLAN

SCALE: 1:500

0 10 20 30 40 50m
10 8 6 4 2
SCALE 1:500

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
05	ISSUED FOR DA ONLY	NH	NH	10.02.2025
04	ISSUED FOR DA ONLY	MB	NH	28.01.2025
03	ISSUED FOR DA ONLY	NH	NH	31.10.2024
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024

Client: HBB

Architect: nettletontribe

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Suite 2.01
826 Pacific Highway
Gordon NSW 2072
Global-Mark.com.au/B
Telephone +61 2 9417 8400
Facsimile +61 2 9417 8337
Email email@hhconsult.com.au
Web www.henryandhymas.com.au

DRAWING TO BE PRINTED IN COLOUR

henry&hymas

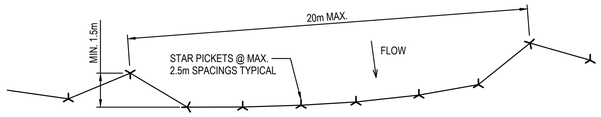
Project: PROPOSED SEWER TREATMENT FACILITY
PATONS LANE ORCHARD HILLS NSW

Title: SEDIMENT AND EROSION CONTROL PLAN

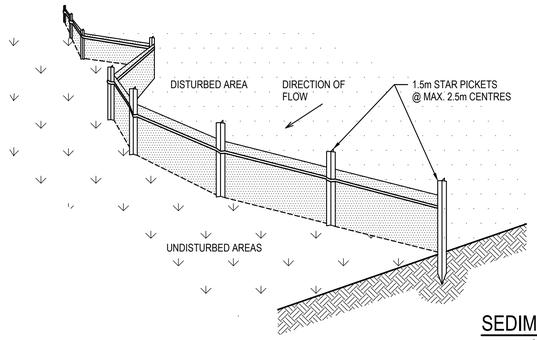
Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	1:500

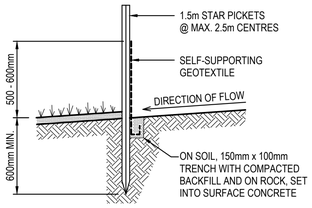
Drawing number: 231664_DA_SE01

Revision: 05



PLAN





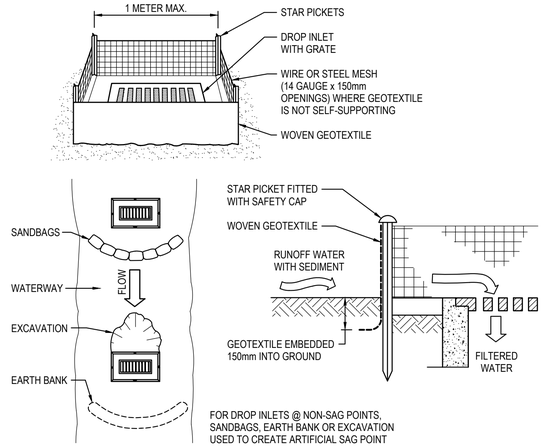
SECTION DETAIL

SEDIMENT FENCE

SCALE N.T.S.

SEDIMENT FENCE CONSTRUCTION NOTES:

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

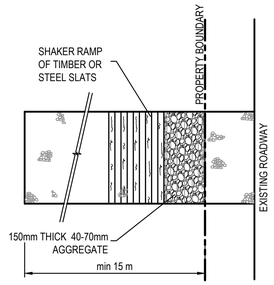


GEOTEXTILE INLET FILTER CONSTRUCTION NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.
2. PICKET SPACING TO BE MAXIMUM 1.0m.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILES UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER

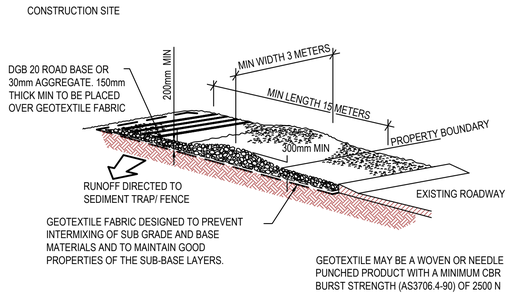
SCALE N.T.S.



PLAN

STABILISED SITE ACCESS WITH SHAKER RAMP

N.T.S.

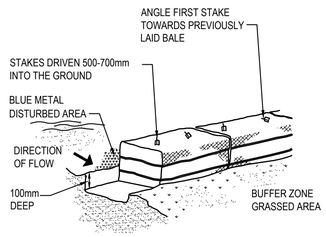


STABILISED SITE ACCESS WITH SHAKER RAMP

N.T.S.

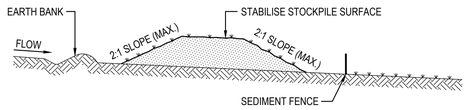
NOTES:

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



HAYBALE BARRIERS

N.T.S.

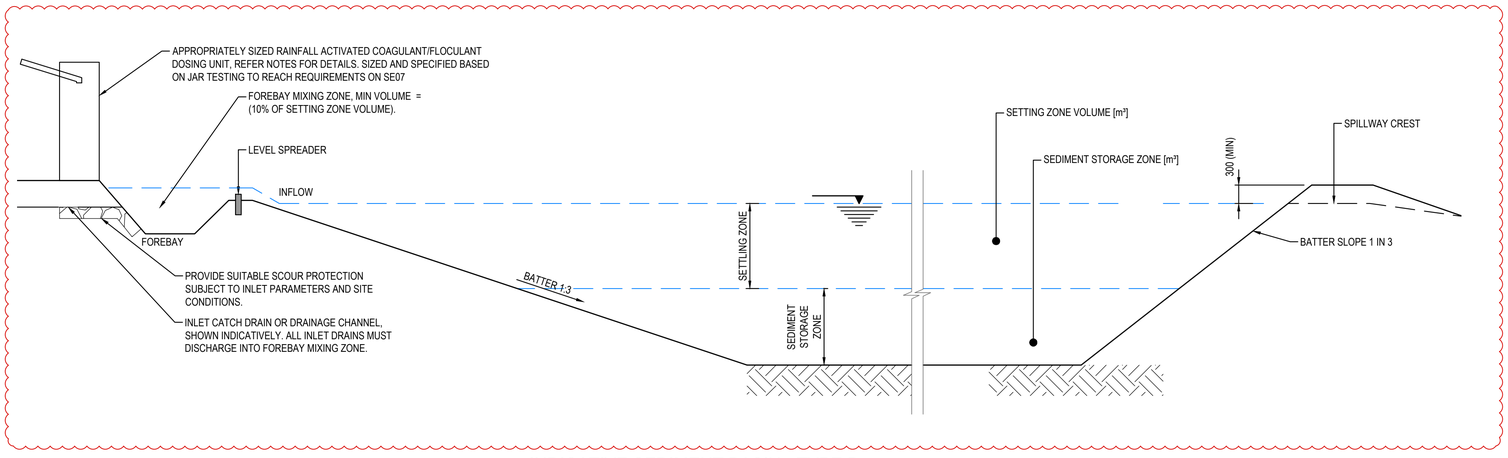


STOCKPILE CONSTRUCTION NOTES:

1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. 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.
5. CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

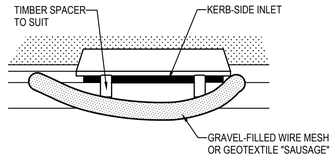
STOCKPILES

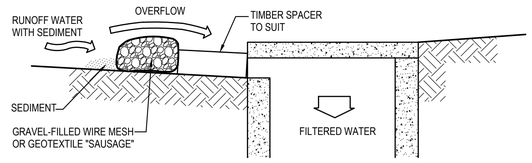
SCALE N.T.S.



INDICATIVE SEDIMENT BASIN - TYPE B

N.T.S.





MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:

1. 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.
2. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
5. 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.

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
WATSDON BUCHAN
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MB	NH	31.10.2024					
02	ISSUED FOR DA ONLY	MB	NH	05.07.2024					
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024					

Client: HBB

Architect: nettletontribe

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Suite 2.01
828 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

DRAWING TO BE PRINTED IN COLOUR

henry&hymas

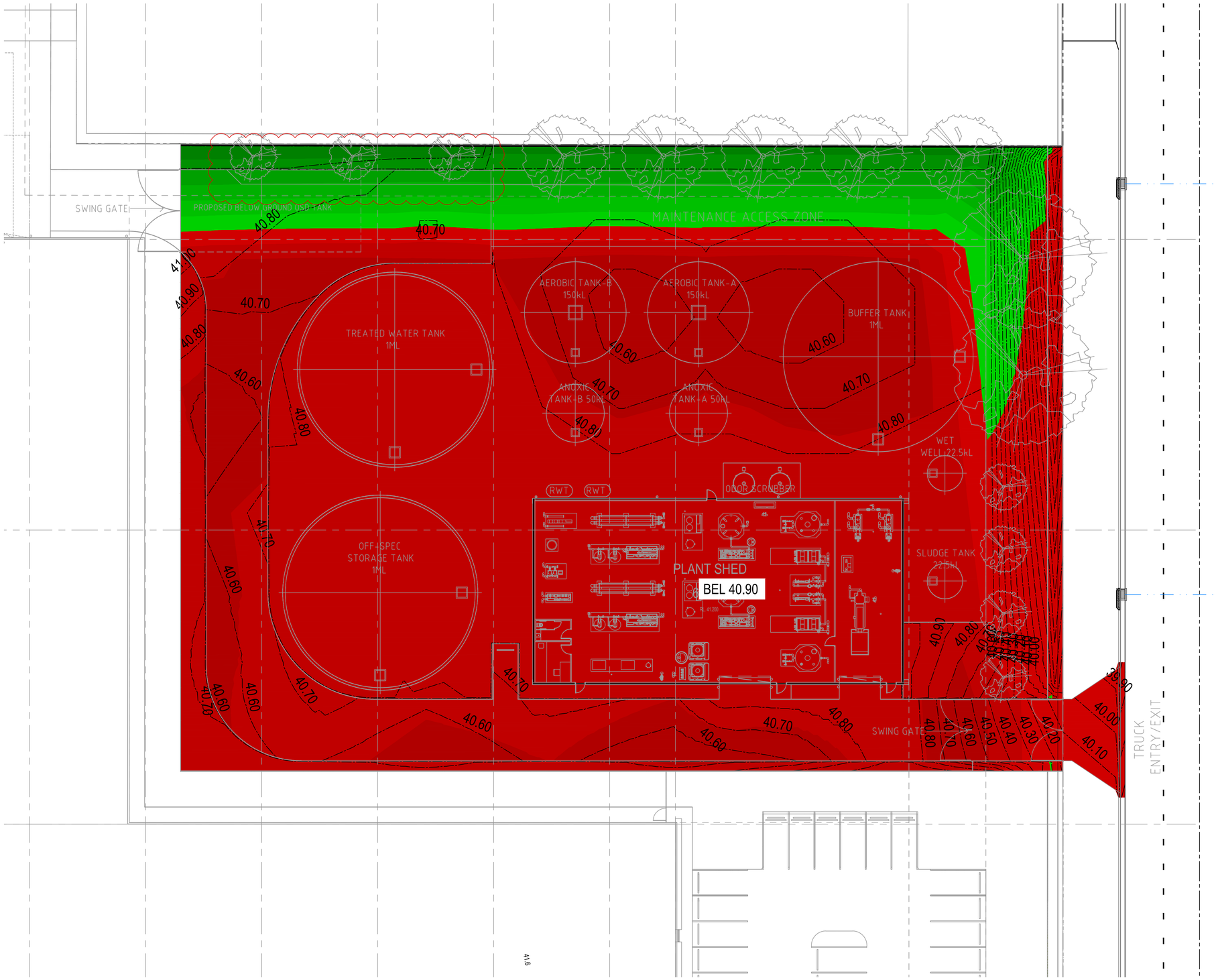
Project: PROPOSED SEWER TREATMENT FACILITY PATONS LANE ORCHARD HILLS NSW

Title: SEDIMENT AND EROSION CONTROL DETAILS

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	**Approved**	**Scale @A1**
N.Heazlewood	T.Rozehnal	N.T.S.

Drawing number: 231664_DA_SE02

Revision: 03



LEGEND

EXISTING BOUNDARY

41.20 BE CONTOURS

DEPTH RANGE Lower_value		Upper_value	Colour
-20	to	-10	Meters
-10	to	-8	Meters
-8	to	-7	Meters
-7	to	-6	Meters
-6	to	-5	Meters
-5	to	-4	Meters
-4	to	-3	Meters
-3	to	-2	Meters
-2	to	-1	Meters
-1	to	-.1	Meters
-.1	to	-.05	Meters
-.05	to	0	Meters
0	to	.05	Meters
.05	to	.1	Meters
.1	to	.2	Meters
.2	to	.4	Meters
.4	to	.6	Meters
.6	to	.8	Meters
.8	to	1	Meters
1	to	2	Meters
2	to	4	Meters
4	to	6	Meters
6	to	10	Meters
10	to	20	Meters

EARTHWORKS QUANTITIES

(APPROXIMATE ONLY)

NOT TO BE USED FOR CONTRACTUAL PURPOSES. TENDERERS TO DETERMINE VOLUMES USING THEIR OWN METHOD OF CALCULATION.

- EARTHWORKS QUANTITIES -	
TOTAL AREA (5,297 m²)	
CUT	3,760 m³
FILL	932m³
EXCESS OF CUT OVER FILL	2,828 m³
EXCAVATION FOR SERVICE TRENCHES NOT INCLUDED IN CALCULATION	
EXCAVATION FOR RETAINING WALLS NOT INCLUDED IN CALCULATION	
NO TOPSOIL STRIPPING. BULK EARTHWORKS VOLUME CALCULATED AGAINST THE DESIGN BULK SURFACE FOR THE SUBDIVISION WORKS DA DESIGN.	

PAVEMENT THICKNESS "INCLUDING BEDDING THICKNESS"		
ALL AREAS	300	mm

BULK EARTHWORKS CUT AND FILL PLAN

SCALE: 1:200

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION

SURVEYED BY WATSDON BUCHAN

DATUM: A.H.D.

ORIGIN OF LEVELS: SSM 22740 RL41.10

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MB	NH	28.01.2025
02	ISSUED FOR DA ONLY	SC	SC	05.07.2024
01	ISSUED FOR PRELIMINARY	MB	AM	02.05.2024

Client: HBB

Architect: nettletontribe

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Telephone +61 2 9417 8400
Facsimile +61 2 9417 8337
Email email@hhconsult.com.au
Web www.henryandhymas.com.au

DRAWING TO BE PRINTED IN COLOUR

henry&hymas

Project: PROPOSED SEWER TREATMENT FACILITY PATONS LANE ORCHARD HILLS NSW

Title: BULK EARTHWORKS CUT AND FILL PLAN

Drawn	Designed	Original issue date
M.Barrozo	N.Heazlewood	April 2024
Checked	Approved	Scale @A1
N.Heazlewood	T.Rozehnal	1:500

Drawing number: 231664_DA_BE01

Revision: 03