NEWHAVEN ESTATE
STAGE 26
PEET NO.1895 PTY LTD

GENERAL NOTES:

SURVEY

1. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) 94, ZONE 55.
2. ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES AND ARE ACCURATE TO WITHIN ±0.05m.
3. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH PEET'S MODIFIED AS4000-1997 AMENDED FROM GENERAL CONDITIONS OF CONTRACT, THE ROAD & DRAINAGE SPECIFICATION, APPROVED MUNICIPALITY SPECIFICATIONS AND STANDARD DRAWINGS AND TO THE SATISFACTION OF THE SUPERINTENDENT AND THE MUNICIPAL ENGINEER OR HIS REPRESENTATIVE.
4. ROAD CHAINAGES REFER TO ROAD CENTRELINES. CHAINAGES FOR INTERSECTIONS AND CUL-DE-SACS REFER TO THE LIP OF KERB

EARTHWORKS

5. THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL LOCAL SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
6. WHERE REQUIRED ANY BUILDINGS, TROUGHS, FENCES AND OTHER STRUCTURES ON SITE ARE TO BE REMOVED AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL IS TO BE INCLUDED IN THE OVERALL EARTHWORKS FIGURE UNLESS A SPECIFIC ITEM FOR REMOVAL IS DENOTED IN THE SCHEDULE.
7. ALL EXCAVATED ROCK AND SURPLUS SPOIL TO BE REMOVED AND DISPOSED OFF SITE UNLESS NOTED OTHERWISE.
8. ALL FILLING ON LOTS AND WITHIN ROAD RESERVES GREATER THAN 200mm IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS.
9. FILLING MATERIAL IS TO BE IN ACCORDANCE WITH THE SPECIFICATION, AS 3798-2007 & TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT.
10. ALL BATTERS SHALL BE 1 IN 6, UNLESS OTHERWISE SHOWN.
11. NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE FOR PUBLIC OPEN SPACE UNLESS OTHERWISE DIRECTED OR APPROVED BY THE SUPERINTENDENT.
12. TBM'S TO BE RE-ESTABLISHED BY THE LICENSED SURVEYOR IF FOUND TO BE MISSING AT THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR CARE AND MAINTENANCE OF T.B.M.'S THEREAFTER.
13. AT LEAST 3 DAYS PRIOR TO COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 1.50m DEEP, A NOTIFICATION FORM MUST BE SENT TO WORKSAFE. THE CONTRACTOR IS TO COMPLY WITH WORKSAFE, THE MINES (TRENCHES) REGULATION 1982, THE MINES ACT 1958 AND OCCUPATIONAL HEALTH AND SAFETY ACT 1985, 2004.
14. ALL SERVICE TRENCHES UNDER DRIVEWAYS, FOOTPATHS AND PARKING BAYS TO BE BACKFILLED WITH CLASS 2 CRUSHED ROCK. SERVICE TRENCHES LESS THAN 750mm BEHIND KERB AND CHANNEL OR PAVED TRAFFIC AREAS ARE ALSO TO BE BACKFILLED WITH COMPACTED CLASS 2 CRUSHED ROCK.
15. WHERE REQUIRED, ALL EXISTING DAMS, DEPRESSIONS AND DRAINS ARE TO BE BREACHED, DRAINED, DESLUDGED AND SHALL BE EXCAVATED TO A CLEAN FIRM BASE. THE SURFACE SHALL BE INSPECTED, APPROVED AND LEVELED BY THE ENGINEER PRIOR TO COMMENCEMENT OF FILLING. THE FILL SHALL BE APPROVED SELECTED ON SITE MATERIAL OR APPROVED IMPORTED MATERIAL. THE FILL SHALL BE PLACED UNDER CONTROLLED MOISTURE CONDITIONS IN ACCORDANCE WITH THE SPECIFICATION
16. NO BLASTING TO BE CARRIED OUT WITHIN THE MUNICIPALITY WITHOUT OBTAINING COUNCILS PERMISSION.

SERVICES

17. GAS AND WATER CONDUITS ARE TO BE ,
    Ø50mm . CLASS 12 P.V.C. - SINGLE SERVICE
    Ø100mm . CLASS 12 P.V.C. - DUAL SERVICE (DRINKING AND NON DRINKING WATER)

    WITH THE FOLLOWING MINIMUM COVER TO FINISHED SURFACE LEVELS:
    ROAD PAVEMENT - 0.80m
    VERGE, FOOTPATHS - 0.45m
18. ALL SERVICE CONDUIT TRENCHES UNDER ROAD PAVEMENTS TO BE BACKFILLED IN ACCORDANCE WITH RELEVANT MUNICIPALITY OR ROAD AUTHORITY SPECIFICATION .
19. WATER TAPPINGS TO BE LOCATED AS PER RELEVANT AUTHORITY STANDARD, UNLESS NOTED OTHERWISE.
20. TELSTRA ARE TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS.

STORM WATER DRAINAGE

21. AG/SUBSOIL DRAIN TO BE LAID BEHIND KERB WHERE REQUIRED IN ACCORDANCE WITH THE COUNCIL STANDARD DRAWINGS AND CONNECTED TO UNDERGROUND DRAINAGE.
22. ALL STORMWATER DRAINS ARE TO BE CLASS '2' R.C. PIPES UNLESS OTHERWISE SHOWN. ALL R.C. JOINTS ARE TO BE RUBBER RING JOINTED (R.R.J.).
23. CENTRELINES OF ALL EASEMENT DRAINS ARE OFFSET 1.0m OR 2.2m (WHERE OUTSIDE OF SEWER) FROM THE PROPERTY LINE UNLESS SHOWN OTHERWISE.
24. WHERE CURVED PIPES ARE SHOWN ON THE FACE PLANS THEY ARE TO BE LAID PARALLEL TO THE BACK OF KERB, EXCEPT WHERE A RADIUS HAS BEEN SPECIFICALLY NOMINATED. CURVED PIPES ARE TO BE APPROVED BY COUNCIL AND IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
25. HOUSE DRAINS NOT OUT OF PIT TO BE OFFSET IN ACCORDANCE WITH COUNCIL STANDARDS UNLESS NOTED OTHERWISE.

PAVEMENT

26. PAVEMENT DEPTHS MAY BE MODIFIED AS DIRECTED BY THE SUPERINTENDENT. PAVEMENT TO BE BOXED OUT TO MINIMUM DEPTH DENOTED, INSPECTED AND IF SUBGRADE IS IN QUESTION, FURTHER TESTING CARRIED OUT TO DETERMINE FINAL PAVEMENT DEPTH.
27. WHERE PAVEMENT IS CONSTRUCTED ON FILLING, FILL MATERIAL IS TO BE APPROVED BY THE SUPERINTENDENT AND COUNCIL. FILLING TO BE CONSTRUCTED IN LAYERS 150mm THICK WITH COMPACTION ACHIEVING 95% AUSTRALIAN STANDARD DENSITY.
28. WHEN PAVEMENT EXCAVATION IS IN ROCK ALL LOOSE MATERIAL (INCLUDING ROCKS AND CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.

SIGNAGE AND LINEMARKING

29. LINEMARKING AND SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AS 1742 SERIES UNLESS NOTED OTHERWISE. STREET SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL STANDARDS.
30. ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE SUPPLIED AND MAINTAINED IN ACCORDANCE WITH AS 1742-3.
31. TACTILE GROUND SURFACE INDICATORS ARE TO BE INSTALLED IN ACCORDANCE WITH THE DISABILITY DISCRIMINATION ACT AND RELEVANT COUNCIL STANDARD DRAWINGS.

ENVIRONMENTAL

32. CONTRACTOR TO PROVIDE AN ENVIRONMENTAL MANAGEMENT PLAN INCLUDING SILT AND SEDIMENT RUNOFF PROTECTION ETC. PRIOR TO THE COMMENCEMENT OF WORKS.
33. ALL TREES AND SHRUBS ARE TO BE RETAINED UNLESS OTHERWISE SHOWN. IF ROAD AND DRAINAGE CONSTRUCTION NECESSITATES THEIR REMOVAL, WRITTEN PERMISSION MUST BE OBTAINED FROM THE SUPERINTENDENT.
34. TREES NOT SPECIFIED FOR REMOVAL ARE TO BE PROTECTED WITH APPROPRIATE EXCLUSION FENCING PRIOR TO COMMENCEMENT OF ANY WORKS.
35. THE CONTRACTOR IS REQUIRED TO OBTAIN A 'PERMIT TO WORK' FROM MELBOURNE WATER'S SURVEILLANCE OFFICER AT THE PRE-COMMENCEMENT MEETING. THE CONTRACTOR IS REQUIRED TO ENSURE THAT THE 'PERMIT TO WORK' IS KEPT UP TO DATE FOR THE DURATION OF THE CONTRACT.

WARNING
BEWARE OF TRANSMISSION LINES
TRANSMISSION POWER LINES IN CLOSE PROXIMITY OF WORKS, INDUCED ELECTRICAL CURRENTS MAY OCCUR. APPROPRIATE SAFETY MEASURES TO BE CARRIED OUT.

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

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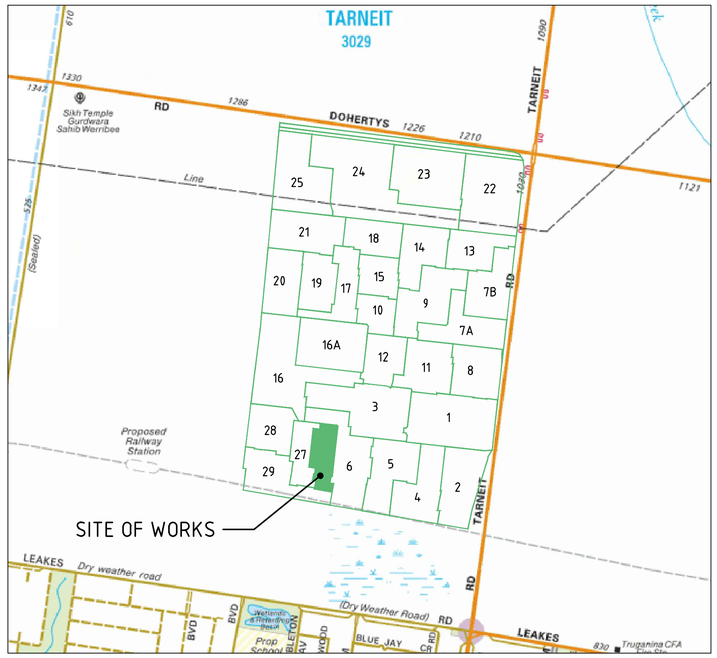
CONTRACTOR TO CONTACT RELEVANT SERVICE AUTHORITIES, ESTABLISH REQUIRED GUIDELINES AND COMPLY WITH AUTHORITIES' REQUIREMENTS.



N
MGA 94
ZONE 55

LOCALITY PLAN

NOT TO SCALE

DRAWING SCHEDULE

DRAWING	DESCRIPTION	SHEET No.	REVISION
CR100	FACE SHEET	1	B
CR200	FACE PLAN	2	B
CR201	SERVICES PLAN	3	B
CR300	ROAD LONG SECTIONS	4	B
CR400	ROAD CROSS SECTIONS - SHEET 1	5	A
CR401	ROAD CROSS SECTIONS - SHEET 2	6	B
CR500	INTERSECTION DETAILS	7	A
CR600	DRAINAGE LONG SECTIONS & PIT SCHEDULE	8	B
CR700	PAVEMENT AND TYPICAL DETAILS	9	A
CR800	SIGNAGE AND LINEMARKING	10	B

B

LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN, VALVE AND HYDRANT	DW	DW
WATER RECYCLED	NDW	NDW
UNDERGROUND ELECTRICITY	E	E
OVERHEAD ELECTRICITY & POLE	OE	OE
TELECOMMUNICATIONS & SERVICE PIT	T	T
OPTIC FIBRE	OF	OF
OVERHEAD TELECOMMUNICATIONS	OT	
GAS MAIN	G	G
SEWER & MAINTENANCE STRUCTURE	S	S
CENTRAL INVERT	>	>
COUNCIL STORMWATER DRAIN AND PIT		
STORM WATER DRAINAGE PROPERTY INLETS		
COUNCIL STORM WATER PITS		
HOUSE DRAIN	H	H
AG DRAIN AND FLUSHER	AG	AG
STORM WATER DRAINAGE PIT NUMBER	Ex.47	1
GAS & WATER CONDUITS	GW	GW
CONCRETE VEHICLE CROSSING		
RIDGE / CHANGE OF GRADE LINE		
SURFACE CONTOUR MINOR	- 169.00 -	169.00
SURFACE CONTOUR MAJOR	- 168.90 -	168.90
SURFACE LEVEL	E123.45	F124.68
BATTER LEVEL (TOP / TOE)	T124.80	T124.80
RETAINING WALL LEVEL (TOP/BOTTOM)	TW112.76	TW128.50 BW126.74
EARTHWORKS GRADE		1 in 150
SIGN AND POST		
LIGHT & POLE (BY OTHERS)		
STREET SIGN		
PERMANENT SURVEY MARK		
TEMPORARY BENCH MARK		
BOLLARD		
ROAD CHAINAGES	CH116.57 (L/R)TP CH116.57	CH116.57 (L/R)TP CH116.57
LOT CHAINAGES	CH20.06	CH20.06
SETOUT POINT		A2
LIMIT OF WORKS		
BATTER		
EXCAVATION GREATER THAN 0.20m		
FILLING GREATER THAN 0.20m		
FENCE - TREE PROTECTION		
FENCE - VEHICLE EXCLUSION		
FENCES		
GUARD RAIL		
TREE (& SURVEYED CANOPY) TO BE RETAINED		
TREE TO BE PROTECTED		
TREE TO BE REMOVED		
VEGETATION LINE		
TREE RING FOR PROPOSED TREE LOCATION		
FOOTPATH		
TACTILE GROUND SURFACE INDICATOR		
KERB TRANSITION		B2 SM2

Rev	Amendments	Approved	Date
B	ISSUED TO COUNCIL	D.S	03/11/23
A	ISSUED TO COUNCIL	D.S	17/10/23

Scale

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spiire.com.au ABN 55 050 029 635

PEET

Designed J.GIANNOPOULOS
Checked D.SEVERINO
Authorised M.HOLMES
Date OCT 2023

NEWHAVEN ESTATE
STAGE 26
ROAD AND DRAINAGE
FACE SHEET
WYNDHAM CITY COUNCIL
PEET NO.1895 PTY LTD

PRELIMINARY
Drg No 306199CR100
Rev B

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WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES

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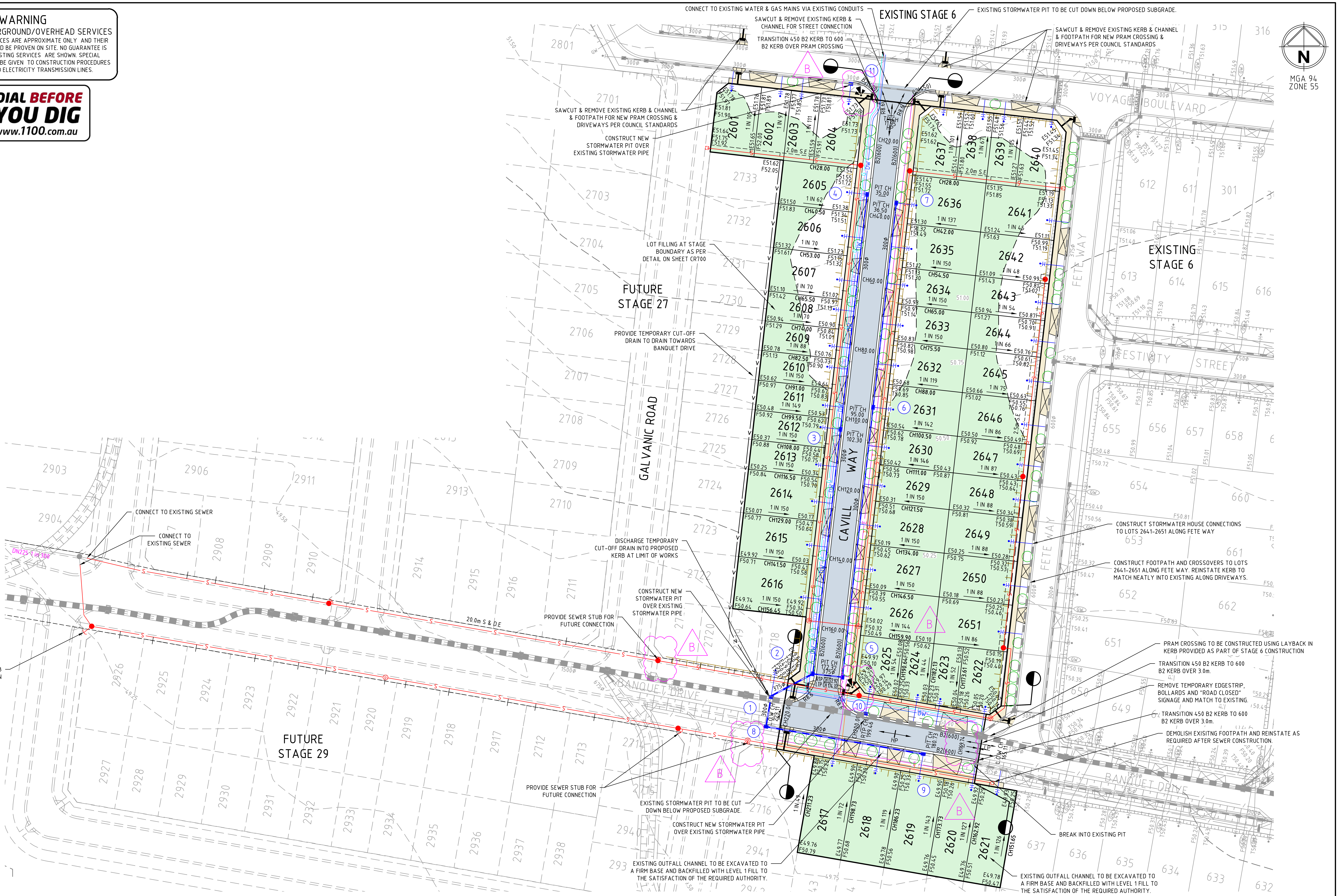

CONNECT TO EXISTING WATER & GAS MAINS VIA EXISTING CONDUITS
SAWCUT & REMOVE EXISTING KERB & CHANNEL FOR STREET CONNECTION
TRANSITION 450 B2 KERB TO 600 B2 KERB OVER PRAM CROSSING
EXISTING STAGE 6
EXISTING STORMWATER PIT TO BE CUT DOWN BELOW PROPOSED SUBGRADE.
SAWCUT & REMOVE EXISTING KERB & CHANNEL & FOOTPATH FOR NEW PRAM CROSSING & DRIVEWAYS PER COUNCIL STANDARDS
SAWCUT & REMOVE EXISTING KERB & CHANNEL & FOOTPATH FOR NEW PRAM CROSSING & DRIVEWAYS PER COUNCIL STANDARDS
CONSTRUCT NEW STORMWATER PIT OVER EXISTING STORMWATER PIPE
N
MGA 94 ZONE 55
VOYAGE BOULEVARD
LOT FILLING AT STAGE BOUNDARY AS PER DETAIL ON SHEET CR700
FUTURE STAGE 27
PROVIDE TEMPORARY CUT-OFF DRAIN TO DRAIN TOWARDS BANQUET DRIVE
GALVANIC ROAD
CAVILL WAY
FETE WAY
FESTIVITY STREET
EXISTING STAGE 6
CONNECT TO EXISTING SEWER
CONNECT TO EXISTING SEWER
DN225 1 in 300
PROVIDE SEWER STUB FOR FUTURE CONNECTION
20.0m S & D.E
DISCHARGE TEMPORARY CUT-OFF DRAIN INTO PROPOSED KERB AT LIMIT OF WORKS
CONSTRUCT NEW STORMWATER PIT OVER EXISTING STORMWATER PIPE
PROVIDE SEWER STUB FOR FUTURE CONNECTION
BANQUET DRIVE
FUTURE STAGE 29
PROVIDE SEWER STUB FOR FUTURE CONNECTION
EXISTING STORMWATER PIT TO BE CUT DOWN BELOW PROPOSED SUBGRADE.
CONSTRUCT NEW STORMWATER PIT OVER EXISTING STORMWATER PIPE
EXISTING OUTFALL CHANNEL TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED WITH LEVEL 1 FILL TO THE SATISFACTION OF THE REQUIRED AUTHORITY.
CONSTRUCT STORMWATER HOUSE CONNECTIONS TO LOTS 2641-2651 ALONG FETE WAY
CONSTRUCT FOOTPATH AND CROSSOVERS TO LOTS 2641-2651 ALONG FETE WAY. REINSTATE KERB TO MATCH NEATLY INTO EXISTING ALONG DRIVEWAYS.
PRAM CROSSING TO BE CONSTRUCTED USING LAYBACK IN KERB PROVIDED AS PART OF STAGE 6 CONSTRUCTION
TRANSITION 450 B2 KERB TO 600 B2 KERB OVER 3.0m.
REMOVE TEMPORARY EDGESTRIP, BOLLARDS AND "ROAD CLOSED" SIGNAGE AND MATCH TO EXISTING.
TRANSITION 450 B2 KERB TO 600 B2 KERB OVER 3.0m.
DEMOLISH EXISITNG FOOTPATH AND REINSTATE AS REQUIRED AFTER SEWER CONSTRUCTION.
BREAK INTO EXISTING PIT
EXISTING OUTFALL CHANNEL TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED WITH LEVEL 1 FILL TO THE SATISFACTION OF THE REQUIRED AUTHORITY.

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Rev	Amendments	Approved	Date
B	ISSUED TO COUNCIL	D.S	03/11/23
A	ISSUED TO COUNCIL	D.S	17/10/23

Scale
H 1:500
SCALE @ A1
0 5 10 15 20 25

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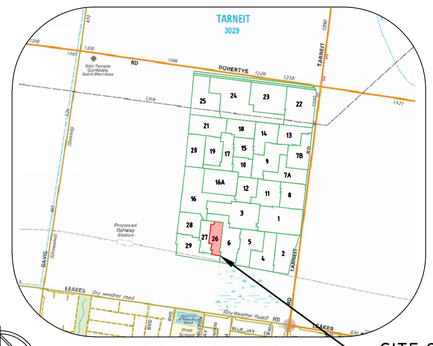
PEET

Designed: J.GIANNOPOULOS
Checked: D.SEVERINO
Authorised: M.HOLMES
Date: OCT 2023

NEWHAVEN ESTATE
STAGE 26
ROAD AND DRAINAGE
FACE PLAN
WYNDHAM CITY COUNCIL
PEET NO.1895 PTY LTD

Drg No: **306199CR200**
Rev: **B**



N

MGA 94
ZONE 55

LOCALITY PLAN

SCALE: 1:20,000 @ A1
1:40,000 @ A3
MELWAY / VICROADS: 359A11

SCHEDULE 8: DRAWING SCHEDULE

DRAWING No.	TITLE	SHEET NO.	CURRENT REVISION
CS100	NOTES, SCHEDULE & LOCATION PLAN	1	A
CS200	DETAIL PLAN	2	A
CS300	LONGITUDINAL SECTIONS SHEET 1	3	A
CS301	LONGITUDINAL SECTIONS SHEET 2	4	A
CS302	LONGITUDINAL SECTION SHEET 3	5	A

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Zero Damage - Zero Harm

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
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GENERAL NOTES:

1. ONLY CONTRACTORS ACCREDITED BY GREATER WESTERN WATER TO SC1(a), SC1 AND SC7 SHALL BE ELIGIBLE TO CONSTRUCT THESE WORKS.
2. ONLY PRODUCTS APPROVED AND CATALOGUED BY THE WATER AGENCY SHALL BE USED.
3. WORKS MUST BE TO CONSTRUCTED ACCORDING TO THE MRWA EDITION OF THE WSAA SEWERAGE CODE OF AUSTRALIA WSA 02-2014-3.1.
4. THE DESIGN CONSULTANT IS RESPONSIBLE FOR THE DESIGN AND COORDINATION OF THE WORKS. ANY PROBLEM ARISING DURING CONSTRUCTION SHALL BE DIRECTED TO THE CONSULTANT.

SURVEY, SET OUT AND ASSET RECORDING

5. ALL CONTOURS AND LEVELS ARE IN METRES TO THE AUSTRALIAN HEIGHT DATUM (A.H.D.) MGA94, ZONE 55.
6. ALL CO-ORDINATES SHOWN ARE TO MAP GRID OF AUSTRALIA (MGA).
7. CHAINAGES SHOWN ON DETAIL PLANS ARE DISCONTINUOUS AT MAINTENANCE STRUCTURES.
   CHAINAGES SHOWN ON LONG SECTION SHEETS ARE CONTINUOUS.
8. COORDINATES ARE TO SEWER LINE INTERSECTION POINT UNLESS OTHERWISE SHOWN.
9. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR MUST COMPLETE A LEVEL CHECK BETWEEN ALL TBM'S TO VERIFY LEVEL VALUES.
10. TBM'S AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION.
    SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE CONSULTANT TO ARRANGE RE-INSTATEMENT AT THE CONTRACTORS EXPENSE.

PROPERTY CONNECTIONS

11. NUMBER OF LOTS IN STAGE: 51 LOTS.
    NUMBER OF LOTS TO BE SEWERED: 72 LOTS
12. ALL PROPERTY CONNECTIONS TO BE DN100 UNLESS OTHERWISE INDICATED.
13. BRANCH TIE DISTANCE SHOWN ON DETAIL PLAN ARE FROM APPROVED SUBDIVISION SURVEY PEGS. BRANCH TIES FOR FUTURE LOTS ARE SHOWN AS A CHAINAGE. (CH) DISTANCE IS FROM THE DOWNSTREAM SEWER STRUCTURE.
14. INVERT LEVEL OF THE PROPERTY CONNECTION POINT IS SHOWN OPPOSITE THE BRANCH POSITION.
15. PROPERTY CONNECTIONS REQUIRING BOUNDARY TRAPS WILL BE DESIGNATED WITH "BT" AT THE END OF THE PROPERTY TYPE DESCRIPTION.
16. DN100 SEWERS SHALL HAVE A GRADE OF 1 IN 60 UNLESS OTHERWISE STATED.

BENDS

17. DETECTABLE MARKERS SHALL BE INSTALLED ABOVE ALL BENDS WHICH ARE NOT DIRECTLY CONNECTED TO MAINTENANCE STRUCTURES. REFER FIGURE 104B-B

EARTHWORKS AND RETAINING WALLS:

18. IN AREAS SUBJECT TO EARTHWORKS, CONSTRUCTION OF SEWERS SHALL NOT COMMENCE UNTIL EARTHWORKS HAS BEEN COMPLETED UNLESS WRITTEN APPROVAL HAS BEEN GIVEN BY THE WATER AUTHORITY.

EMBEDMENT

19. EMBEDMENT SHALL BE TYPE A (REFER MRWA-S-202) UNLESS OTHERWISE SPECIFIED ON THE LONG SECTION.

BACKFILL

20. SELECTION AND COMPACTION OF TRENCH BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE WATER AGENCY ADOPTED VERSION OF MRWA SPECIFICATION NO 04-03.2.
21. REFER TO LONG SECTION DRAWINGS FOR BACKFILL REQUIREMENTS.

COMPACTION TESTING

22. TEST RESULTS SHALL BE PROVIDED TO THE SUPERINTENDENT PRIOR TO PRACTICAL COMPLETION / ACCEPTANCE OF WORKS.
23. THE CONTRACTOR IS REQUIRED TO UNDERTAKE ALL TESTING OF FILL COMPACTION IN ACCORDANCE WITH MRWA BACKFILL SPECIFICATION 04-03.2.

SAFETY:

24. PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004 AND OCCUPATIONAL HEALTH AND SAFETY REGULATIONS 2017, HAVE BEEN AND WILL BE COMPLIED WITH.

WORK ON LIVE SEWERS:

25. ALL WORKS ON LIVE SEWERS MUST BE CARRIED OUT BY A WATER COMPANY ACCREDITED CONTRACTOR.
26. ALL EXISTING SEWERS MUST BE PLUGGED TO STOP GAS EMISSIONS PRIOR TO ANY CONNECTIONS BEING MADE TO THESE SEWERS.
27. TO ENABLE CONNECTIONS TO LIVE ASSETS OR ANY WORK ON LIVE ASSETS, THE CONTRACTOR SHALL SUBMIT THE APPROPRIATE FORMS TO THE SUPERINTENDENT AT LEAST 3 WORKING DAYS PRIOR TO ANY WORKS ON LIVE SEWERS.
28. THE CONTRACTOR IS NOT PERMITTED TO BREAK INTO AN EXISTING LIVE PIPELINE, ENTER A LIVE SEWER OR REMOVE THE COVER TO A LIVE MAINTENANCE STRUCTURE UNLESS AUTHORISED BY THE WATER AGENCY.

TESTING:

29. THE CONTRACTOR IS TO GIVE A MINIMUM OF TWO (2) DAYS NOTICE TO THE SUPERINTENDENT AND WATER AGENCY PRIOR TO THE TESTING BEING UNDERTAKEN. TESTING IS TO BE UNDERTAKEN IN THE PRESENCE OF SUPERINTENDENT.

CULTURAL HERITAGE REQUIREMENTS

30. THE CONTRACTOR IS TO KEEP A COPY OF THE APPROVED CULTURAL HERITAGE MANAGEMENT PLAN ON SITE AT ALL TIMES DURING WORKS.

ENVIRONMENTAL MANAGEMENT PLAN:

31. ON COMMENCEMENT OF CONSTRUCTION WORKS THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE EPA PUBLICATION "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL" (PUBLICATION NO 275 1991).
32. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR IS TO SUBMIT A SITE ENVIRONMENTAL MANAGEMENT PLAN TO MELBOURNE WATER.
33. ALL TREES AND VEGETATION ARE TO BE PROTECTED UNLESS OTHERWISE INDICATED FOR REMOVAL.
    THE EXTENT OF ANY VEGETATION REMOVAL SHALL BE CONFIRMED ON SITE WITH THE SUPERINTENDENT AND LOCAL COUNCIL PRIOR TO COMMENCEMENT, AND IN ACCORDANCE WITH ANY PLANNING PERMITS. ANY REMOVAL SHALL BE DOCUMENTED.
34. ALL AREAS CONTAINING CREEK VEGETATION, TREES AND REVEGETATED AREAS NEAR THE CONSTRUCTION ZONE ARE TO BE FENCED OFF DURING THE WORKS WITH SECURE AND HIGHLY VISIBLE MATERIAL SUCH AS PARA-WEABBING FENCING.
35. ENSURE ALL MACHINERY, EQUIPMENT AND/OR FOOTWEAR ENTERING THE SITE IS WEED AND PATHOGEN FREE.

CONSULTANT'S REQUIREMENTS:

36. THE CONTRACTOR IS TO CONTACT ALL LOCAL SERVICE AUTHORITIES FOR INFORMATION REGARDING EXISTING SERVICE LOCATIONS PRIOR TO COMMENCING ANY EXCAVATION. THE CONTRACTOR IS TO MAKE ALLOWANCE IN TENDER RATES FOR PROOFING OF CRITICAL SERVICES FOR ASSISTANCE IN LOCATING SERVICES OR IN AN EMERGENCY TELEPHONE 'DIAL BEFORE YOU DIG'.
37. THE CONTRACTOR SHALL REINSTATE ANY AFFECTED ASSETS (I.E FOOTPATH, VEHICLE CROSSINGS & NATURE STRIP) TO THE REQUIREMENTS OF THE MUNICIPAL COUNCIL AT CONTRACTORS EXPENSE.
38. CONSTRUCTION PRE COMMENCEMENT DOCUMENTATION MUST BE SUBMITTED TO THE SUPERINTENDENT AS PER WATER AUTHORITY REQUIREMENTS.
39. SETOUT AND VERIFICATION OF LEVELS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.
40. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE HORIZONTAL ALIGNMENT AND FOR OFFSETTING PEGS DURING CONSTRUCTION
41. THE CONTRACTOR SHALL OBTAIN A ROAD OPENING PERMIT FOR ANY WORKS WITHIN THE ROAD RESERVE AND COMPLY WITH ALL REQUIREMENTS
42. ONLY AN ACCREDITED SURVEYOR MAY BE USED TO UNDERTAKE ASSET RECORDING OF THE WORK. ALL SURVEYING WORKS AND DATA TO BE SUBMITTED MUST BE IN ACCORDANCE WITH THE WATER AUTHORITY'S REQUIREMENTS.
43. ALL LONG RADIUS BENDS AND CURVED SEWERS ARE TO HAVE MARKER DISCS PLACED AS PER STANDARD DRAWING MRWA-S-104B WITH EXCEPTION TO DEPTH WHICH IS TO BE LAID AT MAX 1m FROM THE SURFACE.
44. ALL CURVED SEWER TO BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. (24 HOUR CURING TIME FOR GLUE PRIOR TO COLD BENDING REQUIRED)

SCHEDULE 1: NEW PIPE

PIPE SIZE	PIPE TYPE	LENGTH (m)	PIPE CLASS	STANDARD
DN150	UPVC-DWV	1056.00	SN8	WSA PC 230

SCHEDULE 2: PROPERTY CONNECTIONS

CONNECTION TYPE	TYPE 1a	TYPE 1b	TYPE 2	TYPE 4a	TYPE 4b	TYPE S	TYPE 4S	TYPE B	TYPE 4B	JUMP UP TYPE F COUPLINGS (TY2 or 4)
QUANTITIES	-	1	67	-	-	3	-	1	-	15

SCHEDULE 3: SERVICE OFFSETS AND LOCATIONS:

ROAD NAME	POTABLE WATER		RECYCLED WATER		GAS		NBN (TELECOM)		ELECTRICITY			
									POLE		U/G CABLE	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
FETE WAY	W	2.90	W	2.42	W	2.00	E	1.83	E	0.80x	E	2.55
VOYAGER BOULEVARD	N	2.90	N	2.42	N	2.00	S	1.83	S	0.80x	S	2.55
BANQUET DRIVE	N	3.00	N	2.52	N	2.10	S	1.83	S	0.80x	S	2.55
CAVILL WAY	W	3.00	W	2.52	W	2.10	E	1.83	E	0.80x	E	2.55

1. TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRG's.
2. GAS AND WATER MAINS TO BE CONSTRUCTED IN A COMMON TRENCH.
3. x = OFFSET FROM BACK OF KERB (TO BE CONFIRMED BY ELECTRICAL CONSULTANTS PLANS)

SCHEDULE 4: MAINTENANCE STRUCTURES

MAINTENANCE STRUCTURE ID	TYPE - (IS/MS/MC)	COVER CLASS	DEPTH TO INVERT (mm)	SHAFT CONNECTIONS	COMMENTS / REFERENCES (Offsets / Details)
NH26-2MC	MC	B	2740	-	E: 294553.522 N: 5810844.263
NH26-5MS	MS	B	1600	-	E: 294741.757 N: 5810811.525
NH26-7MS	MS	B	1530	1 x DN100	-
NH26-8MS	MS	B	1260	-	-
NH26-9MS	MS	B	2210	-	-
NH26-10MS	MS	B	2100	1 x DN100	-
NH26-12IS	IS	B	1240	-	E: 294762.503 N: 5810962.388
NH26-14IS	IS	B	1250	-	E: 294661.152 N: 5810973.875
NH26-16MC	MC	B	3480	1 x DN100	E: 294553.522 N: 5810844.263
NH26-18MS	MS	B	2810	-	E: 294670.131 N: 5810805.712
NH26-19IS	IS	B	2200	-	E: 294742.347 N: 5810793.152

SCHEDULE 5: WATER AGENCY GRANTED DISPENSATIONS (N/A)

ID	LOCATION	ASSET/FEATURE	DESCRIPTION OF DISPENSATION ACCEPTED
NH26-6	FRONT OF LOT		STRUCTURE WITHIN EASEMENT AT FRONT OF LOT
NH26-7MS	FRONT OF LOT		STRUCTURE WITHIN EASEMENT AT FRONT OF LOT
NH26-8MS	FRONT OF LOT		STRUCTURE WITHIN EASEMENT AT FRONT OF LOT
NH26-11	FOOTPATH		CLEARANCE BETWEEN PIT COVER AND THE BOUNDARY IS 650<800mm
NH26-13	FOOTPATH		CLEARANCE BETWEEN PIT COVER AND THE BOUNDARY IS 560<800mm

SCHEDULE 7: WATER SEALS, BOUNDARY TRAPS AND SYPHONS

STRUCTURE TYPE	BOUNDARY TRAP	WATER SEAL	SYPHONS
QUANTITY	0	0	0

SCHEDULE 6: MAINTENANCE HOLES

MAINTENANCE HOLE ID	MH SHAFT TYPE (GRP/PP (Plastic) / Concrete)	MH TOP TYPE (Conical/Flat)	COVER CLASS	INTERNAL DIAMETER (mm)	MIN. WALL THICKNESS (mm)	DEPTH TO INVERT (mm)	DROPS	LADDER (L) STEP IRONS (S) LANDING (Ld)	CORROSION PROTECTION (Coating / PE or PVC Lining)	SHAFT RE-INFORCEMENT	COMMENTS (Offsets / Details)
Ex. SH-1-5	CONCRETE	CONICAL	B	1050	150	3890	-	S	-	-	EXISTING
NH26-3	CONCRETE	FLAT	B	1050	150	2280	1 x DN150	S	-	-	E: 294644.606 N: 5810828.422
NH26-4	CONCRETE	CONICAL	B	1050	150	2000	-	S	-	-	-
NH26-6	CONCRETE	CONICAL	D	1050	150	1620	-	S	-	-	-
NH26-11	CONCRETE	CONICAL	B	1050	150	2200	-	S	-	-	-
NH26-13	CONCRETE	CONICAL	B	1050	150	1570	-	S	-	-	-
NH26-15	CONCRETE	FLAT	B	1050	150	3720	-	S	-	-	E: 294486.063 N: 5810837.726
NH26-17	CONCRETE	FLAT	B	1050	150	3120	-	S	-	-	E: 294652.875 N: 5810808.713

REV	DESCRIPTION	DATE	REG. ENG.
A	ISSUED TO COUNCIL	16/10/23	D.S

LEGEND
- INSPECTION SHAFT (IS)
- MAINTENANCE SHAFT (MS)
- MAINTENANCE CHAMBER (MC)
- MAINTENANCE HOLE (MH)
- MAINTENANCE HOLE (COVER CENTERED OVER BLACK SEGMENT)
- WATER SEAL
- END OF PIPE (EP)
- LOTS WITHOUT REASONABLE ACCESS

IL = Invert Level
TW = Top of Retaining Wall
TY = Property Connection Type
TP = Tangent Point
BT = Boundary Trap Lot
F100.00 Finished Surface Level
E100.00 Existing Surface Level
T100.00 Top/Toe of Batter Level
RETAINING WALL

EXISTING SERVICES:
- GAS
- OPTIC FIBRE
- TELECOM
- ELECTRICITY
- DRINKING WATER
- NON-DRINKING WATER

DESIGNED	J.GIANNOPOULOS	DATE: 16/10/23
DRAWN	J.GIANNOPOULOS	DATE: 16/10/23
CHECKED		DATE:

PROJECT NUMBER: ####
AUTHORISED: DATE:
REGISTERED ENGINEER
NAME:
PE REG. NO: XXXX
DATE:

PEET NO.1895 PTY LTD
PEET

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Victoria 8007 Australia T 61 3 9993 7888
spiire.com.au ABN 55 050 029 635

Greater Western Water

GREATER WESTERN WATER

WYNDHAM CITY COUNCIL
NEWHAVEN ESTATE STAGE 26
SEWER RETICULATION EXT.NO.
NOTES, SCHEDULES & LOCATION PLAN

SCALE: AS SHOWN
SHEET: 1 OF 5
SPIIRE DWG No.: 306199CS100
REV: A

PRELIMINARY

file name: 306199CS100.dwg layout name: CS100 plotted by: Jacob.Giannopoulos
file location: \\spiire.com.au\media\data\Data1\30\306199\Civil\ACAD plot date: 18/10/2023 2:48 PM Sheet ##### of ##### Sheets

WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES

THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

BEFORE YOU DIG www.byda.com.au

Zero Damage - Zero Harm

NOTE: FOR ALL PROPERTY CONNECTIONS IN MOODY LANE, JOSPA LANE, BOSCO LANE & MOMENTUM LANE, CONTRACTOR TO BRING INSPECTION OPENING TO SURFACE AT 600mm OFFSET FROM PROPERTY BOUNDARY & PLACE TRAFFICABLE COVER AS PER FIGURE 301-B. DEVELOPER ELECTS TO CONSTRUCT SECTION OF PRIVATE PLUMBING FROM INSPECTION OPENING EXTENDING 300mm INTO PROPERTY BOUNDARY AS PER FIGURE 110-B

NOTE: ALL STRUCTURES IN FUTURE AREAS OF FILL TO BE CONSTRUCTED TO FUTURE FS COVER LEVEL. IN ACCORDANCE WITH FIGURE 111-A ON MRWA-S-111

1:500@ A1
SCALE
1:1000@ A3
0 5 10 15 20 25

N
MGA 94
ZONE 55

VOYAGER BOULEVARD
VOYAGER
GALVANIC ROAD
CAVILL WAY
FETE WAY
FESTIVITY STREET
BANQUET DRIVE
FUTURE STAGE 28
FUTURE STAGE 27
FUTURE STAGE 29
EXISTING STAGE 6

EXISTING 150Ø STUB AT IL46.66
CONNECT TO EXISTING 150Ø STUB AT IL45.88
CONNECT TO EXISTING 150Ø STUB AT IL45.88
PROVIDE 150Ø STUB AT IL47.18 FOR FUTURE CONNECTION
PROVIDE 150Ø STUB AT IL48.40 FOR FUTURE CONNECTION
PROVIDE 150Ø STUB AT IL46.02 FOR FUTURE CONNECTION
PROVIDE 150Ø STUB AT IL47.03 FOR FUTURE CONNECTION
PROVIDE 150Ø STUB AT IL47.18 FOR FUTURE CONNECTION
30° LONG RADIUS BEND IP: X=294483.847, Y=5810840.953 IL=45.97
3° LONG RADIUS BEND IP: X=294499.855, Y=5810853.597 IL=46.19
90° LONG RADIUS BEND IP: X=294747.648, Y=5810831.328 IL=48.76
45° LONG RADIUS BEND IP: X=294745.742, Y=5810814.509 IL=48.66

REV	DESCRIPTION	DATE	REG. ENG.
A	ISSUED TO COUNCIL	16/10/23	D.S

LEGEND

- INSPECTION SHAFT (IS)
- MAINTENANCE SHAFT (MS)
- MAINTENANCE CHAMBER (MC)
- MAINTENANCE HOLE (MH)
- MAINTENANCE HOLE (COVER CENTERED OVER BLACK SEGMENT)
- WATER SEAL
- END OF PIPE (EP)
- LOTS WITHOUT REASONABLE ACCESS

IL = Invert Level
TW = Top of Retaining Wall
TY = Property Connection Type
TP = Tangent Point
BT = Boundary Trap Lot
F100.00 Finished Surface Level
E100.00 Existing Surface Level
T100.00 Top/Toe of Batter Level
RETAINING WALL

EXISTING SERVICES:
GAS
OPTIC FIBRE
TELECOM
ELECTRICITY
DRINKING WATER
NON-DRINKING WATER

DESIGNED	J.GIANNOPOULOS	DATE: 16/10/23
DRAWN	J.GIANNOPOULOS	DATE: 16/10/23
CHECKED		DATE:

PROJECT NUMBER ####
AUTHORISED DATE:
REGISTERED ENGINEER
NAME:
PE REG. NO: XXXX
DATE:

PEET NO.1895 PTY LTD
PEET

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Greater Western Water

GREATER WESTERN WATER

WYNDHAM CITY COUNCIL
NEWHAVEN ESTATE STAGE 26
SEWER RETICULATION EXT.NO.
DETAIL PLAN

SCALE: AS SHOWN
SHEET: 2 OF 5
SPIIRE DWG No.: 306199CS200
REV: A

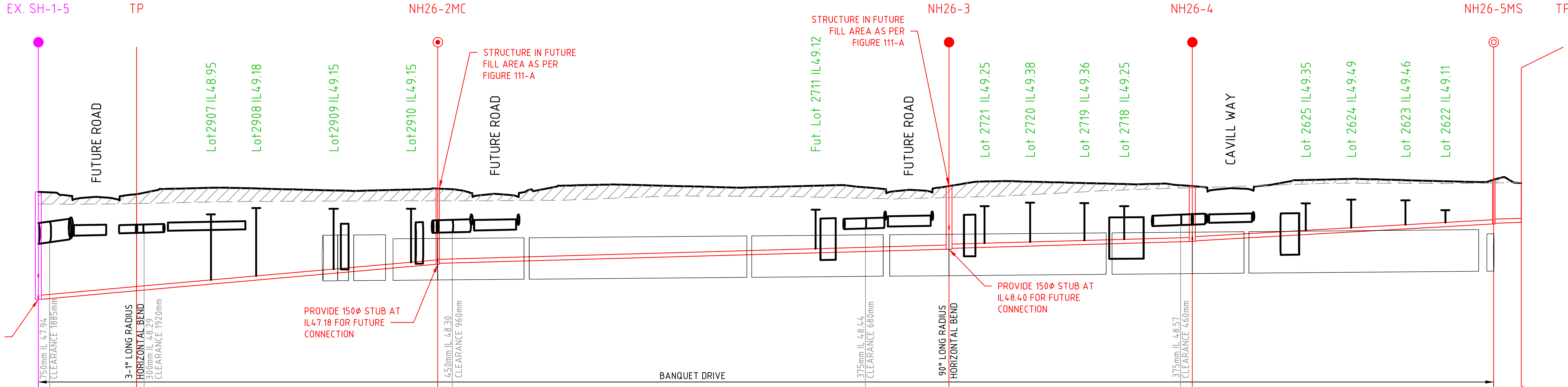
PRELIMINARY

file name 306199CS200.dwg layout name CS200 plotted by Jacob Giannopoulos
file location \\spiire.com.au\melbdata\Data\301-306999\Civil\ACAD plot date 18/10/2023 2:48 PM Sheet ##### of ##### Sheets

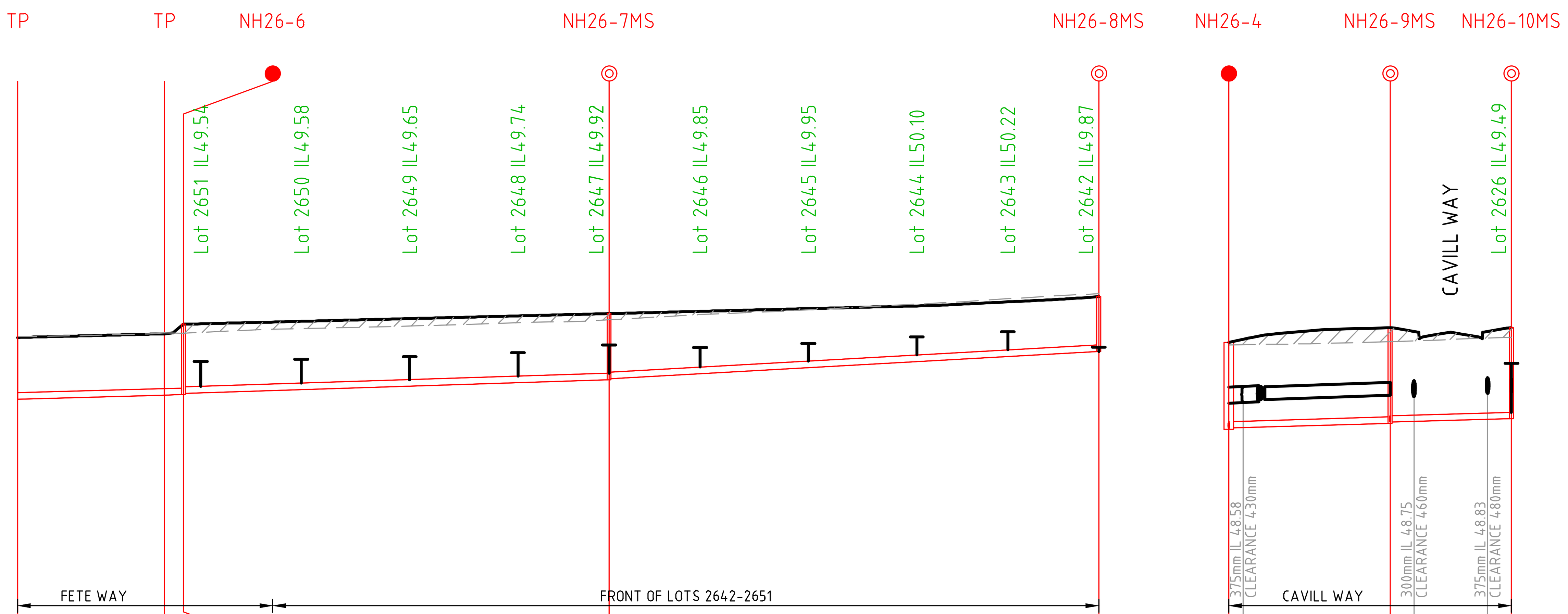
NOTES:

1. CONTRACTOR TO CONSTRUCT FINISHED SURFACE LEVEL OF MAINTENANCE STRUCTURE COVER AS PER TABLE 313-E AND ASSOCIATED NOTES AS SHOWN IN MRWA WSAA SEWER CODE STANDARD DRAWING MRWA-S-313. THE SEWER CONTRACTOR IS TO LIAISE WITH THE ROAD CONTRACTOR TO CONFIRM FINISHED SURFACE LEVELS AND CONSTRUCT THE COVER ABOVE IF REQUIRED BY THE STANDARD DRAWINGS.
2. DEPTH TO INVERT SHOWN ON LONGITUDINAL SECTIONS IS FROM FINISHED SURFACE LEVEL TO THE INVERT. ADDITIONAL DEPTH MAY BE REQUIRED TO SUIT THE RELEVANT MAINTENANCE COVER REQUIREMENTS.

FILL:



DATUM	42						
PIPE DETAILS		150Ø PVC	150Ø PVC	150Ø PVC	150Ø PVC	150Ø PVC	150Ø PVC
GRADE		1:57	1:57	1:180	1:180	1:90	1:180
EMBEDMENT		CH6.00 CH14.82		CH78.36 CH87.02 CH153.22 CH161.87		CH211.36 CH220.01	
BACKFILL TYPE		F R F	F	R F R	F	R F	
DEPTH TO INVERT	3.89	3.49	2.74	2.71 2.28	2.25 2.00	1.97 1.60	1.57 1.42
INVERT LEVEL	45.88	46.19	47.15	47.18 47.69	47.72 47.97	48.00 48.61	48.64 48.66
FINISHED SURFACE LEVEL	49.77	49.68	49.89	49.98	49.97	50.21	50.09
CHAINAGE	0.00	17.77	72.24	164.75	208.77	263.30	268.28
LENGTH		(17.77)	(54.47)	(92.51)	(44.02)	(54.53)	(4.98)



DATUM	43				
PIPE DETAILS		150Ø PVC	150Ø PVC	150Ø PVC	150Ø PVC
GRADE		1:180	1:180	1:159	1:90
EMBEDMENT					
BACKFILL TYPE				F	
DEPTH TO INVERT	1.42	1.42	1.62	1.59 1.53	1.50 1.26
INVERT LEVEL	48.66	48.76	48.77	48.80 49.11	49.14 49.77
FINISHED SURFACE LEVEL	50.09	50.17	50.39	50.64	51.03
CHAINAGE	268.28	285.20	287.40	336.50	393.00
LENGTH		(16.93)	(2.20)	(49.10)	(56.50)

DATUM	43		
PIPE DETAILS		150Ø PVC	150Ø PVC
GRADE		1:180	1:180
EMBEDMENT			CH21.81 CH29.41
BACKFILL TYPE		F	R F
DEPTH TO INVERT	2.00	1.97 2.21	2.18 2.10
INVERT LEVEL	47.97	48.00 48.10	48.13 48.21
FINISHED SURFACE LEVEL	49.97	50.31	50.31
CHAINAGE	0.00	18.61	32.61
LENGTH		(18.61)	(14.00)

H 1:1000 @ A3
H 1:500 @ A1
SCALE
V 1:200 @ A3
V 1:100 @ A1
0 5 10 15 20 25
0 1 2 3 4 5

REV	DESCRIPTION	DATE	REG. ENG.
A	ISSUED TO COUNCIL	16/10/23	D.S

LEGEND

- INSPECTION SHAFT (IS)
- MAINTENANCE SHAFT (MS)
- MAINTENANCE CHAMBER (MC)
- MAINTENANCE HOLE (MH)
- MAINTENANCE HOLE (COVER CENTERED OVER BLACK SEGMENT)
- WATER SEAL
- END OF PIPE (EP)
- LOTS WITHOUT REASONABLE ACCESS

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TY = Property Connection Type
TP = Tangent Point
BT = Boundary Trap Lot
F100.00 Finished Surface Level
E100.00 Existing Surface Level
T100.00 Top/Toe of Batter Level
RETAINING WALL

EXISTING SERVICES:
G GAS
OF OPTIC FIBRE
T TELECOM
E ELECTRICITY
DW DRINKING WATER
NDW NON-DRINKING WATER

DESIGNED	J.GIANNOPOULOS DATE: 16/10/23	
DRAWN	J.GIANNOPOULOS DATE: 16/10/23	
CHECKED	DATE:	

PROJECT NUMBER ####
AUTHORISED DATE:
REGISTERED ENGINEER
NAME:
PE REG. NO: XXXX
DATE:

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PEET

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Greater Western Water

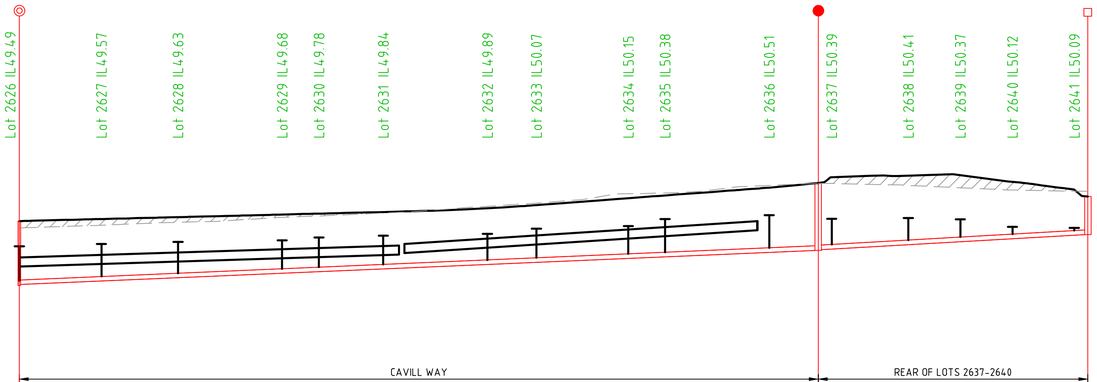
GREATER WESTERN WATER
WYNDHAM CITY COUNCIL
NEWHAVEN ESTATE STAGE 26
SEWER RETICULATION EXT.NO.
LONGITUDINAL SECTION SHEET 1

SCALE: AS SHOWN
SHEET: 3 OF 5
SPIIRE DWG No.: 306199CS300
REV A
PRELIMINARY

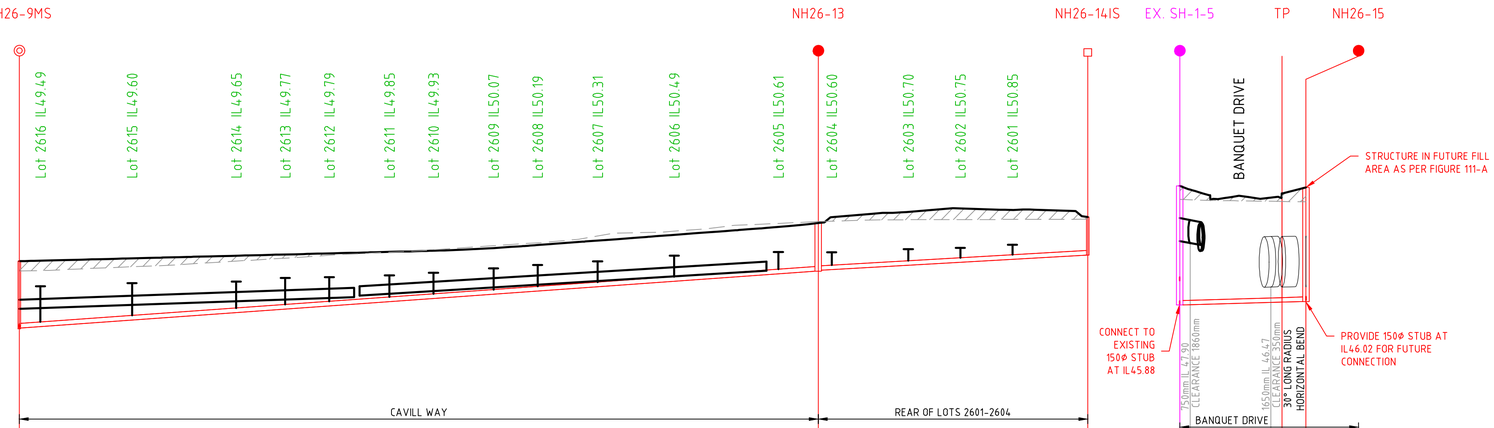
NOTES:

1. CONTRACTOR TO CONSTRUCT FINISHED SURFACE LEVEL OF MAINTENANCE STRUCTURE COVER AS PER TABLE 313-E AND ASSOCIATED NOTES AS SHOWN IN MRWA WSAA SEWER CODE STANDARD DRAWING MRWA-S-313. THE SEWER CONTRACTOR IS TO LIAISE WITH THE ROAD CONTRACTOR TO CONFIRM FINISHED SURFACE LEVELS AND CONSTRUCT THE COVER ABOVE IF REQUIRED BY THE STANDARD DRAWINGS.
2. DEPTH TO INVERT SHOWN ON LONGITUDINAL SECTIONS IS FROM FINISHED SURFACE LEVEL TO THE INVERT. ADDITIONAL DEPTH MAY BE REQUIRED TO SUIT THE RELEVANT MAINTENANCE COVER REQUIREMENTS.

FILL:



DATUM		44				
PIPE DETAILS		150ϕ PVC			150ϕ PVC	
GRADE		1:117			1:90	
EMBEDMENT						
BACKFILL TYPE		F				
DEPTH TO INVERT	2.10	2.07		2.20	2.17	1.24
INVERT LEVEL	48.21	48.24		49.35	49.38	49.87
FINISHED SURFACE LEVEL	50.31			51.56		51.11
CHAINAGE	32.61			163.01		207.01
LENGTH		(130.40)			(44.00)	



DATUM		44					41	
PIPE DETAILS		150ϕ PVC			150ϕ PVC		150ϕ PVC	150ϕ PVC
GRADE		1:70			1:89		1:180	1:180
EMBEDMENT							CH4.85	
BACKFILL TYPE		F					F R	F
DEPTH TO INVERT	2.21	2.18		1.57	1.54	1.25	3.89	3.55	3.72
INVERT LEVEL	48.10	48.13		49.99	50.02	50.51	45.88	45.97	45.99
FINISHED SURFACE LEVEL	50.31			51.56		51.76	49.77	49.52	49.72
CHAINAGE	0.00			130.40		174.40	0.00	16.69	20.61
LENGTH		(130.40)			(44.00)			(16.69)	(3.91)

H 1:1000 @ A3
H 1:500 @ A1
SCALE
V 1:200 @ A3
V 1:100 @ A1
0 5 10 15 20 25
0 1 2 3 4 5

REV	DESCRIPTION	DATE	REG. ENG.
A	ISSUED TO COUNCIL	16/10/23	D.S

LEGEND

- INSPECTION SHAFT (IS)
- MAINTENANCE SHAFT (MS)
- MAINTENANCE CHAMBER (MC)
- MAINTENANCE HOLE (MH)
- MAINTENANCE HOLE (COVER CENTERED OVER BLACK SEGMENT)
- WATER SEAL
- END OF PIPE (EP)
- LOTS WITHOUT REASONABLE ACCESS

IL = Invert Level
TW = Top of Retaining Wall
TY = Property Connection Type
TP = Tangent Point
BT = Boundary Trap Lot
F100.00 Finished Surface Level
E100.00 Existing Surface Level
T100.00 Top/Toe of Batter Level
RETAINING WALL

EXISTING SERVICES:
GAS
OPTIC FIBRE
TELECOM
ELECTRICITY
DRINKING WATER
NON-DRINKING WATER

DESIGNED	J.GIANNOPOULOS	DATE: 16/10/23
DRAWN	J.GIANNOPOULOS	DATE: 16/10/23
CHECKED		DATE:

PROJECT NUMBER ####
AUTHORISED DATE:
REGISTERED ENGINEER
NAME:
PE REG. NO: XXXX
DATE:

PEET NO.1895 PTY LTD
PEET

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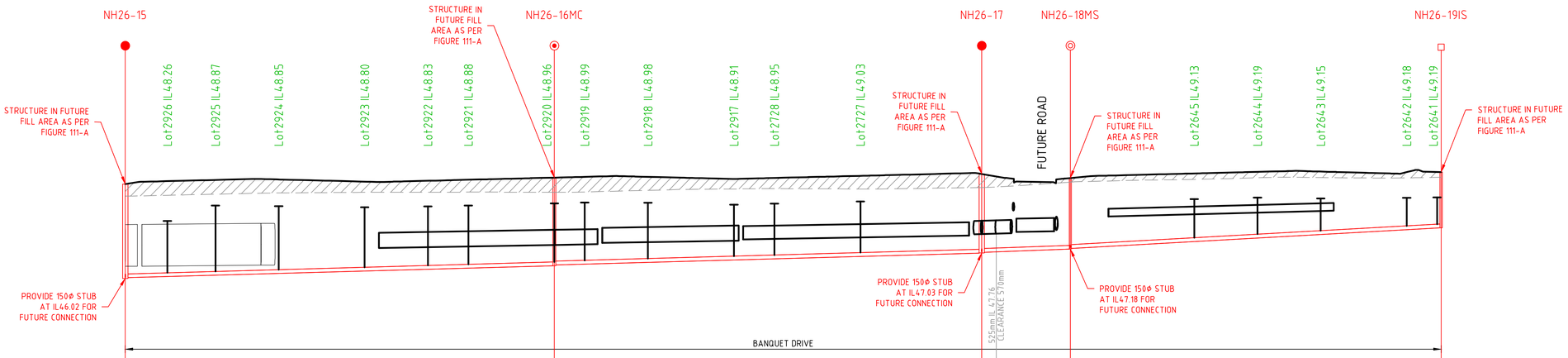
Greater Western Water

GREATER WESTERN WATER

WYNDHAM CITY COUNCIL
NEWHAVEN ESTATE STAGE 26
SEWER RETICULATION EXT.NO.
LONGITUDINAL SECTION SHEET 2

SCALE: AS SHOWN
SHEET: 4 OF 5
SPIIRE DWG No.: 306199CS301
REV: A

PRELIMINARY



DATUM		42																					
PIPE DETAILS		150ø PVC						150ø PVC						150ø PVC				150ø PVC					
GRADE		1:180						1:180						1:140				1:90					
EMBEDMENT														CH196.13			CH204.75						
BACKFILL TYPE								F						R				F					
DEPTH TO INVERT	3.72	3.69				3.48		3.45			3.12		3.09			2.81		2.78				2.20	
INVERT LEVEL	45.99	46.02				46.50		46.53			47.00		47.03			47.15		47.18				47.99	
FINISHED SURFACE LEVEL	49.72					49.97					50.12					49.96						50.20	
CHAINAGE	20.61					105.44					189.92					207.44						280.74	
LENGTH				(84.83)						(84.48)						(17.52)					(73.30)		

NOTES:

1. CONTRACTOR TO CONSTRUCT FINISHED SURFACE LEVEL OF MAINTENANCE STRUCTURE COVER AS PER TABLE 313-E AND ASSOCIATED NOTES AS SHOWN IN MRWA WSAA SEWER CODE STANDARD DRAWING MRWA-S-313. THE SEWER CONTRACTOR IS TO LIAISE WITH THE ROAD CONTRACTOR TO CONFIRM FINISHED SURFACE LEVELS AND CONSTRUCT THE COVER ABOVE IF REQUIRED BY THE STANDARD DRAWINGS.
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FILL:

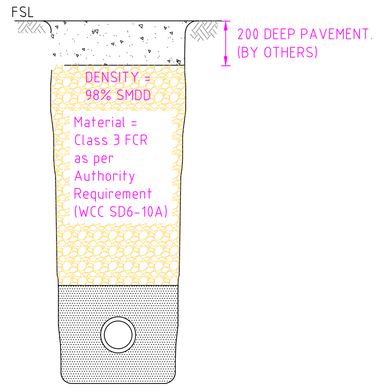

FIGURE 1
TYPE F BACKFILL

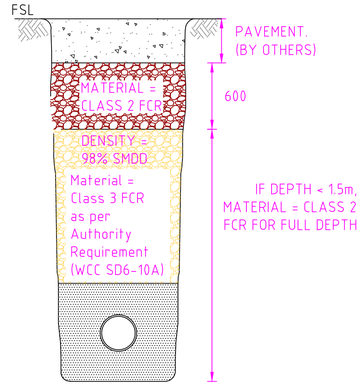

FIGURE 2
TYPE R BACKFILL

H 1:1000 @ A3
H 1:500 @ A1
SCALE
V 1:200 @ A3
V 1:100 @ A1

0 5 10 15 20 25
0 1 2 3 4 5

9.12.1 GITA COMPLIANCE CHECKLIST

As detailed in Section 4.2.3 of the MRWA specification, the GITA is required to provide a checklist for each section of the pipeline where a significantly different clay or clay like cohesive soil is to be used:

Line Description

Section End Description (M structure, X-Y, Address)	Various
Section End Description (M structure, X-Y, Address)	Various
Linear Distance	Various
Number of Compaction Tests Required	1 per 2nd 200mm layer/50m length

Specification	Upper Depth Range	Lower Depth Range
Depth Range	Surface to -4m	Exceeding -4m
Optimum Backfill Material	Excavated insitu materials	VicRoads Crushed Rock (or refer to Section 9.1)
Backfill Material Requirements	95% SMDD/98% SMDD (top 0.3m in all areas)	95% SMDD/98% SMDD (top 0.3m in all areas)
AS2870-2011 Classification	Class H2 to Class E	N/A
High Risk Factors Likely to be Found	1. Pockets of high plasticity clays may result in large soil clods during excavation. Soil clods in this size/form is unsuitable as backfill and shall be broken down to minus 100mm prior to backfilling 2. Side wall collapse – very high risk	N/A
Risk Controls Required	1. Management of soil clods 2. Shielding	N/A
Compaction machine	Excavator	Excavator
Compaction Type	Padfoot wheel attachment	Padfoot wheel attachment
Compaction Weight	20 – 30 tonne	20 – 30 tonne
Number of Passes per Layer	The actual number of passes shall depend on the moisture condition of the fill source, maximum particle size of clods and the size of the excavator. A trial section shall be required at the start of works to determine an appropriate work method, verified by compaction testing and agreed with the GITA.	The actual number of passes shall depend on the moisture condition of the fill source and the size of the excavator. A trial section shall be required at the start of works to determine an appropriate work method, verified by compaction testing and agreed with the GITA.
Loose Layer Thickness	No greater than 200mm	No greater than 200mm
Moisture Limits	85% - 115% moisture ratio	85% - 115% moisture ratio
Max time to Stockpile (20°C - 30°C)	72 hours (if suitably sealed)	N/A
Max time to Stockpile (>30°C)	24 hours	N/A
Material Test Data Results	Refer to section 8.2	N/A
Risk and Cost Assessments	-	-

10. LIMITATIONS

10.1 SUBSIDENCE

Subsidence of the backfilled trenches may occur either in the short term or long term after the works have been completed and is generally caused by consolidation of the underlying soils. Subsidence of a backfill trench may occur as a result of poor workmanship, failure to place the backfill materials in the layer depths/ minimum compaction levels detailed in this document and/or softening of the soils either naturally or under the influence of moisture from damaged services. Ground Science and the contents of this geotechnical field procedure do not warrant the outcome of the trench backfill. Any subsidence that has occurred which has been proved to be a result of the work undertaken by the Contractor, shall be suitably remediated at their own cost. If the subsidence has been caused by poor compaction, the Contractor may be held responsible and accountable.

11. REFERENCES

- AS1289 "Methods of Testing Soils for Engineering Purposes"
- AS1726 "Geotechnical Investigations"
- AS3798 2007 "Guidelines on Earthworks for Commercial and Residential Developments"
- AS2870 2011 "Residential Slabs and Footing

REV	DESCRIPTION	DATE	REG. ENG.
A	ISSUED TO COUNCIL	16/10/23	D.S

LEGEND

- INSPECTION SHAFT (IS)
- MAINTENANCE SHAFT (MS)
- MAINTENANCE CHAMBER (MC)
- MAINTENANCE HOLE (MH)
- MAINTENANCE HOLE (COVER CENTERED OVER BLACK SEGMENT)
- WATER SEAL
- END OF PIPE (EP)
- LOTS WITHOUT REASONABLE ACCESS

IL = Invert Level
TW = Top of Retaining Wall
TY = Property Connection Type
TP = Tangent Point
BT = Boundary Trap Lot
F100.00 Finished Surface Level
E100.00 Existing Surface Level
T100.00 Top/Toe of Batter Level
RETAINING WALL

EXISTING SERVICES:
GAS
OPTIC FIBRE
TELECOM
ELECTRICITY
DRINKING WATER
NON-DRINKING WATER

DESIGNED	J.GIANNOPOULOS	DATE: 16/10/23
DRAWN	J.GIANNOPOULOS	DATE: 16/10/23
CHECKED		DATE:

PROJECT NUMBER: ####
AUTHORISED: DATE:
REGISTERED ENGINEER
NAME:
PE REG. NO: XXXX
DATE:

PEET NO.1895 PTY LTD
PEET

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L6 414 La Trobe Street PO Box 16084 Melbourne Victoria 8007 Australia T 61 3 9993 7888
spiire.com.au ABN 55 050 029 635

Greater Western Water

GREATER WESTERN WATER

WYNDHAM CITY COUNCIL
NEWHAVEN ESTATE STAGE 26
SEWER RETICULATION EXT.NO.
LONGITUDINAL SECTIONS SHEET 3

SCALE: AS SHOWN
SHEET: 5 OF 5
SPIIRE DWG No.: 306199CS302
REV: A
PRELIMINARY

file name 306199CS300.dwg layout name CS302 plotted by Jacob Giannopoulos
file location \\spiire.com.au\mydata\Data\306\199\Civil\ACAD plot date 18/10/2023 2:48 PM Sheet #### of #### Sheets