

CIVIL OPERATIONAL WORKS

VANTAGE YATALA - STAGE 3

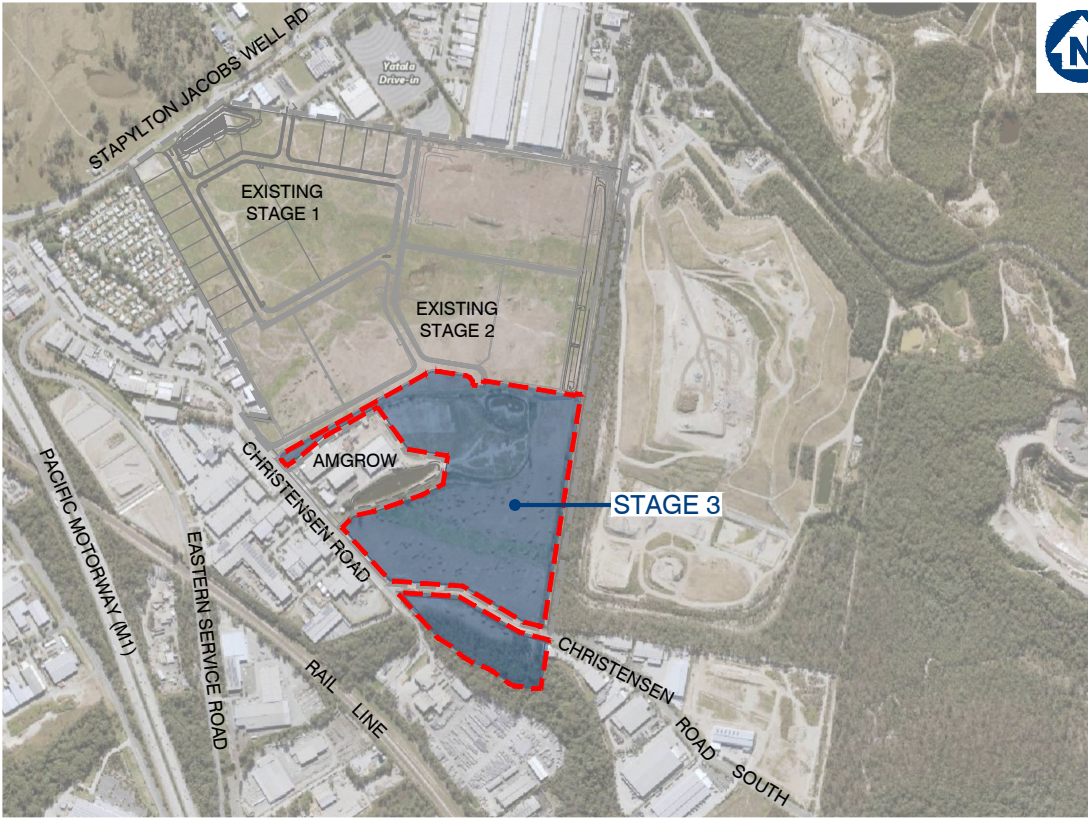


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5941 ENG CW3 900	C	SWEPT PATH ANALYSIS PLAN

STANDARD DRAWINGS			
DRAWING No.	REV.	ASSOCIATION	DRAWING TITLE
DS-010	F	IPWEA	ACCESS CHAMBER – STORMWATER ACCESS CHAMBER DETAILS – 1050 TO 2100 DIA
DS-015	C	IPWEA	ACCESS CHAMBER – MANHOLE FRAME – ROADWAY AND NON ROADWAY – 1050 TO 2100 DIA
DS-018	C	IPWEA	ACCESS CHAMBER – MANHOLE RISER DETAILS
DS-019	C	IPWEA	ACCESS CHAMBER – MANHOLE ROVER (ROADWAY)
DS-020	C	IPWEA	ACCESS CHAMBER – MANHOLE ROVER (NON ROADWAY)
DS-021	C	IPWEA	ACCESS CHAMBER – MANHOLE COVER CONCRETE INFILL (PEDESTRIAN TRAFFIC) 1050 TO 2100 DIA
DS-030	F	IPWEA	EXCAVATION, BEDDING & BACKFILL – RIGID & FLEXIBLE DRAINAGE PIPES
DS-031	D	IPWEA	EXCAVATION, BEDDING & BACKFILL PRECAST – BOX CULVERTS
DS-040	E	IPWEA	SEDIMENT CONTROL – SEDIMENT CONTROL DEVICES – SEDIMENT FENCE, ENTRY/EXIT SEDIMENT TRAP
DS-041	E	IPWEA	SEDIMENT CONTROL – SEDIMENT CONTROL DEVICES – KERB AND FIELD INLET, CHECK DAMS & STRAW BALES
DS-050	E	IPWEA	DRAINAGE PITS – FIELD INLET TYPE 1 AND TYPE 2
DS-061	B	IPWEA	DRAINAGE PITS – KERB INLET – PRECAST LINTEL DETAILS
DS-062	D	IPWEA	DRAINAGE PITS – KERB INLET – GRATE AND FRAME
DS-063	C	IPWEA	DRAINAGE PITS – KERB INLET – LIP IN LINE – GENERAL ARRANGEMENT
DS-065	I	IPWEA	PATHWAYS – CONCRETE PATHWAY CONSTRUCTION DETAILS
DS-073	A	IPWEA	BIORETENTION DRAINAGE PROFILE – TYPE 3 – CONVENTIONAL
DS-075	A	IPWEA	LARGE BIORETENTION SEDIMENT FOREBAY
DS-076	A	IPWEA	BIORETENTION WEIR
DS-078	A	IPWEA	BIORETENTION STANDARD NOTES
GS-041	D	IPWEA	FENCING – CHAIN WIRE SECURITY FENCING
RS-049	E	IPWEA	VEHICLE CROSSING – RESIDENTIAL DRIVEWAYS – PLAN 1 OF 2
RS-050	G	IPWEA	VEHICLE CROSSING – RESIDENTIAL DRIVEWAYS – PLAN 2 OF 2
RS-080	F	IPWEA	KERB AND CHANNEL – PROFILES AND DIMENSIONS – INCLUDING EDGE RESTRAINTS, MEDIAN & CHANNEL
RS-090	J	IPWEA	KERB RAMPS – RAMPED PEDESTRIAN
RS-091	F	IPWEA	KERB RAMPS – RAMPED AND CUT THROUGH TREATMENTS – FOR PEDESTRIAN CROSSINGS, SLIP LANES AND MEDIANS
RS-094	F	IPWEA	KERB RAMPS – LOCATIONS AND CONFIGURATIONS
RS-130	F	IPWEA	ROAD FURNITURE – STREET NAME SIGN AND LOCATION (FINGERBOARD)
RS-131	G	IPWEA	ROAD FURNITURE – TRAFFIC SIGN INSTALLATION DETAILS
RS-140	F	IPWEA	SUBSOIL DRAINS – DETAILS AND LOCATION
RS-142	F	IPWEA	SUBSOIL DRAINS – ACCESS POINTS
SDI033	K	DTMR	KERB AND CHANNEL
SDI304	N	DTMR	PIPE CULVERTS – WINGWALLS, HEADWALLS AND APRON FOR PIPE DIA 750 TO 2400
02-003	2	CoGC	TYPICAL CROSS SECTIONS – COLLECTOR STREETS – PLAN 2 OF 2
02-005	I	CoGC	PUBLIC UTILITY PLANT CORRIDOR ALLOCATIONS IN PUBLIC ROAD VERGES
02-601	I	CoGC	NEW ROADS – SERVICE CONDUIT CROSSINGS
02-602	I	CoGC	ROAD CROSSING – TRENCH RESTORATION – FLEXIBLE PAVEMENTS
03-008	I	CoGC	FIELD INLET AND INTER-ALLOTMENT DRAINAGE PIT
03-101	I	CoGC	STORMWATER ACCESS CHAMBER 1050 DIA TO 1500 DIA
03-102	I	CoGC	STORMWATER ACCESS CHAMBER 1050 DIA TO 1500 DIA ROOF SLABS
03-201	I	CoGC	EXCAVATION AND BEDDING OF CONCRETE STORMWATER PIPES
05-014	I	CoGC	CHAIN WIRE FENCING – 1.8m HIGH

SURVEY CONTROL DETAILS	
LEVEL DATUM	AHD
MERIDIAN	IS260952
PSM	I72620
PSM COORDINATES	LOCAL GRID
RL (m)	–



Source: qldglobe.information.qld.gov.au

LOCALITY PLAN

1:8000 (A1)

CLIENT



FPI QUEENSLAND
PTY. LTD.

VantageYatala

SITE ADDRESS

LOT 504 on SP329485
LOT 504 HOMESTEAD DRIVE
STAPYLTON QLD 4207

ISSUED FOR CONSTRUCTION

DWG NO.5941 ENG CW3 001 - O

MARCH 2026

1. CONTRACT DOCUMENTATION
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION AND CoGC STANDARD DRAWINGS AND SPECIFICATIONS.
2. DATUM
LEVELS SHOWN ON THE PLANS ARE A.H.D.
3. SURVEY SETOUT
THE SURVEY SET OUT INFORMATION TO ALLOW THE CONTRACTOR TO ACCURATELY SET OUT THE WORKS HAS BEEN ESTABLISHED ON SITE BY THE PRINCIPAL'S SURVEYOR. THE CONTRACTOR IS NOT TO SCALE FROM THESE PLANS AS A MEANS OF OBTAINING SETOUT INFORMATION.
4. EXISTING SURVEY CONTROL STATIONS
IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT EXISTING SURVEY CONTROL STATIONS ARE NOT DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES. SHOULD THE CONTRACTOR IDENTIFY ANY CONFLICT BETWEEN EXISTING SURVEY CONTROL AND THE REQUIRED CONSTRUCTION ACTIVITIES THE SUPERINTENDENT IS TO BE NOTIFIED IMMEDIATELY.
5. EXISTING SERVICES
THE LOCATION OF EXISTING SERVICES WHERE SHOWN ON THE PLANS ARE INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE RELEVANT SERVICE AUTHORITIES TO ASCERTAIN THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS AND TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING SERVICES.
6. SITE ACCESS
THE CONTRACTOR SHALL ONLY GAIN ACCESS TO THE SITE VIA ACCESS LOCATIONS APPROVED BY THE SUPERINTENDENT. FREEDOM OF ACCESS TO OTHER WORK AREAS ON THE SITE SHALL BE MAINTAINED AT ALL TIMES.
7. PROVISION FOR TRAFFIC
PROVISION FOR TRAFFIC ON LOCAL ROADS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND CoGC COUNCIL REQUIREMENTS.
8. WORK EXTENT
THE CONTRACTOR IS TO RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS WORKS AREAS UNDER THE CONTRACT. AT NO TIME IS THE CONTRACTOR TO ENTER ADJOINING PROPERTIES OR CONTRACT AREAS WITHOUT THE WRITTEN AUTHORISATION OF THE SUPERINTENDENT.
9. TESTING
ALL TESTING IS TO BE CARRIED OUT BY AN APPROVED N.A.T.A TESTING AUTHORITY IN ACCORDANCE WITH THE PROJECT SPECIFICATION AND REQUIREMENTS OF CoGC COUNCIL.
10. "AS CONSTRUCTED" SURVEY
"AS CONSTRUCTED" SURVEY SHALL BE CARRIED OUT BY THE PRINCIPAL'S SURVEYOR AS WORK PROCEEDS. THE CONTRACTOR IS TO PROVIDE ADEQUATE NOTICE TO THE PRINCIPAL'S SURVEYOR ON WHEN THIS IS REQUIRED TO ENSURE COMPLIANCE WITH THE REQUIREMENTS OF CoGC COUNCIL.
11. MAINTENANCE OF SITE CONDITION
AT THE COMPLETION OF WORKS THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT AND CoGC.

EARTHWORKS

1. PREDENCECE
EARTHWORKS SPECIFICATION PREPARED BY PROJECT GEOTECHNICAL ENGINEER TO TAKE PRECEDENCE OVER STANDARD COUNCIL EARTHWORKS NOTES.
2. TOPSOIL STRIPPING
TOPSOIL SHALL BE STRIPPED ACROSS THE ENTIRE LIMIT OF THE EARTHWORKS CUT AND FILL AREAS AND SHALL BE STOCKPILED IN A LOCATION APPROVED BY THE SUPERINTENDENT. THE EXISTING STRATA IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PLACING ANY FILL.
3. EARTHWORKS LEVELS
EARTHWORKS LEVELS SHOWN ON THE DRAWING ARE TO FINISHED SURFACE LEVELS AND INCLUDE 100mm OF TOPSOIL. THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCY BEFORE COMMENCEMENT OF CONSTRUCTION.
4. UNDESIRABLE MATERIAL
THE ENTIRE SITE/WORK AREAS SHALL BE CLEARED OF ALL UNDESIRABLE MATTER. THIS SHALL INCLUDE DEAD TIMBER, GRASS, OLD FOUNDATIONS, CONCRETE, MASONRY REMAINS, GARBAGE, DEBRIS AND ALL OTHER OBSTRUCTIONS TO THE WORKS UNLESS NOTED OTHERWISE. HOLES LEFT BY THE REMOVAL OF ANY OF THE ABOVE SHALL BE FILLED WITH APPROVED COMPACTED MATERIAL WITH PROPERTIES AT LEAST SIMILAR TO INSITU SOILS.
5. COMPACTION STANDARD
FILL MATERIAL SHALL BE COMPACTED TO THE FOLLOWING STANDARD, WHERE DRY DENSITY RATIO IS DETERMINED IN ACCORDANCE WITH AS 1289 USING STANDARD COMPACTION METHODS.
 - a. 100% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 80% IN COHESIONLESS MATERIAL FOR ROAD SUBGRADE.
 - b. 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 65% IN COHESIONLESS MATERIAL FOR ALL AREAS OTHER THAN THE ROADWAY AND BUILDING PADS.
 - c. 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 70% IN COHESIONLESS MATERIAL FOR BUILDING PADS.
5. PAVEMENT DEPTHS
EARTHWORKS VOLUMES DO NOT INCLUDE DESIGN PAVEMENT DEPTHS AS INDICATED ON THE TYPICAL BULK EARTHWORKS ROAD SECTION.
6. TESTING
ALL EARTHWORKS TO BE CARRIED OUT UNDER LEVEL 1 SUPERVISION IN ACCORDANCE WITH AUSTRALIAN STANDARDS AS 3798 UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT. ALL COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A TESTING AUTHORITY.
7. ROCK
THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR EARTHWORKS RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT DOCUMENT.

- ## SEDIMENT AND EROSION

- a. THE OBJECTIVES OF THE EROSION AND SEDIMENT CONTROL PROGRAM ARE:
 - a. ALLOW STORMWATER TO PASS THROUGH THE SITE IN A CONTROLLED MANNER AT NON-EROSIVE FLOW VELOCITIES.
 - b. MINIMISE SOIL EROSION FROM WATER AND WIND
 - c. MINIMISE ADVERSE EFFECTS OF SEDIMENT RUNOFF.
 - d. MINIMISE OR PREVENT ENVIRONMENTAL HARM ASSOCIATED WITH DISCHARGE FROM THE CONSTRUCTED SITE.
 - e. ENSURE THAT THE VALUE AND USE OF RESIDENTIAL AND INDUSTRIAL PROPERTIES ADJACENT TO THE DEVELOPMENT ARE NOT DIMINISHED AS A RESULT OF THE MIGRATION OF SEDIMENT FROM THE DEVELOPMENT.
2. THE EROSION AND SEDIMENT CONTROL PROGRAM SHALL COMPLY WITH THE ENVIRONMENTAL BEST ENGINEERING GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES. THE CURRENT INSTITUTION OF ENGINEERS AUSTRALIA AND LOCAL AUTHORITY GUIDELINES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTIONS INCLUDING THE MAINTENANCE PERIOD. NOTWITHSTANDING THE FINISHED EARTHWORK DESIGN SHOWN ON THE DRAWINGS THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT ADDITIONAL SEDIMENT CONTROL MEASURES AND DEVICES USING BEST PRACTICES AS NECESSARY TO MINIMISE THE QUANTITY LEAVING THE SITE DURING CONSTRUCTION AND UPON COMPLETION OF EARTHWORKS.
3. THE CONTRACTOR IS TO FOLLOW CONSTRUCTION PHASE AS OUTLINED IN THE CONSTRUCTION SEQUENCE/SILT MANAGEMENT PROGRAM. ALL SEDIMENT CONTROL DEVICES SHALL BE MONITORED, CLEANED AND/OR REPLACED WHENEVER THE ACCUMULATED SEDIMENT REDUCES THE CAPACITY BY 50%. ALL PERIMETER BANK/SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT ANY DOWNSTREAM CONSTRUCTION AND GULLY INLETS. INLETS TO HAVE SILT PROTECTION IN ACCORDANCE WITH KERB INLET PROTECTION DETAIL AT LOCATIONS SHOWN OR AS INDICATED BY THE ENGINEER.
4. PRIOR TO THE COMMENCEMENT OF EARTHWORKS, THE CONTRACTOR IS TO CARRY OUT SOIL TESTING (IF REQUIRED BY SUPERINTENDENT) TO DETERMINE THE DISPERSIVE CHARACTERISTICS OF THE SOIL AND RESULTS TO BE GIVEN TO THE ENGINEERS SO THE FINALIZATION OF THE EROSION AND SEDIMENT CONTROL PLAN CAN BE COMPLETE.
5. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN LOCATIONS AGREED WITH THE SUPERINTENDENT. CLEARING OF SITE AND STOCKPILE AREAS TO BE AS DIRECTED BY THE SUPERVISING ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AT ALL TIMES INCLUDING WEEKENDS AND PUBLIC HOLIDAYS.
6. SUITABLE ACCESS SHALL BE PROVIDED TO ALLOW MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES (IT IS TO BE NOTED THAT CLEARING SHALL ONLY OCCUR IN AREAS WHERE THERE IS NO OTHER ALTERNATIVE TO GAIN ACCESS TO THE LOCATION OF THE SEDIMENT CONTROL DEVICES). APPROVAL FOR REMOVAL OF PROTECTED SIZE VEGETATION MUST BE OBTAINED PRIOR TO CLEARING.
7. ROCK BUNDS TO BE PLACED AROUND ALL HEADWALLS DURING CONSTRUCTION.
8. 0.8m TURF IS TO BE PLACED BEHIND ON ALL BATTERS WITHIN PRIVATE OPEN SPACE STEEPER THAN 1:4 UNLESS OTHERWISE NOTED. THE EXTENT OF GRASSING SHALL BE DETERMINED BY THE ENGINEER AND SHALL BE SEEDED, AS SPECIFIED, WITHIN 7 DAYS OF FINAL TRIMMING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT GRASS STRIKE RATES ARE ACHIEVED AT ON AND OFF MAINTENANCE INSPECTION IN ACCORDANCE WITH COUNCIL REQUIREMENTS.
9. TURF IS TO BE PLACED FROM BACK OF KERB TO ROAD RESERVE BOUNDARY ON ALL ROADS AFTER EARTHWORKS ARE COMPLETE.
10. GEO-FABRIC LINING OF CHANNELS AND CHECK DAMS MAY BE REQUIRED SUBJECT TO THE SITE CONDITIONS.
11. FILLING AND OR MAINTENANCE OF EXISTING AND OR SEDIMENT BASINS MAY REQUIRE FLOCCULATION.
12. BATTERS WITHIN PUBLIC OPEN SPACE TO BE VEGETATED IN ACCORDANCE WITH THE APPROVED OPEN SPACE MANAGEMENT PLAN (OSMP).
13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN OUT GPT'S, SEDIMENT FOREBAYS AND ALL OTHER SEDIMENT CONTROL DEVICES DURING CONSTRUCTION AND PRIOR BOTH ON AND OFF MAINTENANCE INSPECTIONS WITH CoGc. THE CONTRACTOR SHALL ALLOW FOR THE COST OF THESE WORKS WITHIN THEIR SUBMITTED TENDER PRICE.

- PRE START**

 - a. ERECT SITE SIGNAGE, CONSTRUCT ENTRY AND EXIT POINT AS INDICATED CONSTRUCT VEHICLE WASH-DOWN AREA AND ASSOCIATED SILT MANAGEMENT DEVICES.
 - b. CONSTRUCT SITE OFFICE AND STORAGE COMPOUND AREA
 - c. ERECT SILT FENCE AT LOW POINTS OF THE SITE AS DEMONSTRATED
 - d. ERECT TEMPORARY TREE PROTECTION FENCING FOR VEGETATION TO BE RETAINED IN ACCORDANCE WITH AN OPW (TREE CLEARING) APPROVAL OR IN ACCORDANCE WITH AS4970 PROTECTION OF TREES ON DEVELOPMENT SITE.
 - e. CONSTRUCT ROCK CHECK DAMS AND SILT FENCE DOWN STREAM OF BASIN.
 - f. CONSTRUCT BASIN TO FULL DEPTH.
 - g. CONSTRUCT BANK OF BASIN IN CONJUNCTION WITH CLEARING AND BULK EARTHWORKS OPERATIONS.
 - h. BASIN TO BE UTILISED AS A TEMPORARY SEDIMENT BASIN. DO NOT FILL IN FILTRATION MATERIAL UNTIL CONSTRUCTION OF DEVELOPMENT IS COMPLETE.
- 2. CLEARING AND BULK EARTHWORKS**

THERE SHALL BE NO CLEARING OF PROTECTED SITE VEGETATION WITHOUT AN APPROVED TREE CLEARING PLAN WHICH SHALL BE IN ACCORDANCE WITH AS4970.

SILT FENCE, SAND BAGS AND SAND RILLS WITHIN ROADS TO BE ERECTED AS INDICATED OR REQUIRED DURING CLEARING & EARTHWORKS.

SUPERINTENDENT TO CONFIRM THE EXTENT OF CLEARING PRIOR TO COMMENCEMENT OF WORKS.
- 3. CONSTRUCTION OF SEWER/ROOFWATER / STORMWATER SERVICES**

EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH AND TO PROTECT PIPE WORK AND DIRECT SURFACE MATERIAL AWAY FROM EXCAVATIONS.

TOPSOIL AND GRASS SEED AREAS IN ALLOTMENTS IMMEDIATELY AFTER COMPLETING THE SEWER AND ROOFWATER DRAINAGE CONSTRUCTION.

DEPRESS GROUND AROUND TEMPORARY FIELD INLETS TO CREATE SILT POND.
- 4. CONSTRUCTION – SEDIMENT BASINS**

SEDIMENT BASIN TO BE CONSTRUCTED TO THE EARTHWORK PROFILES SHOWN.

STORMWATER OUTLET PIPES TO BE TEMPORARY BLOCKED OFF UNTIL DECOMMISSIONING OF SEDIMENT BASIN (SUBSEQUENT TO CONSTRUCTION OF ALL STAGES).

PLACE SPOIL FROM SEDIMENT BASIN INTO ALLOCATED AREAS AS ENGINEERED FILL IN ACCORDANCE WITH THE STAGING ORDER.

SEDIMENT BASIN SHALL ONLY BE REMOVED AFTER APPROVAL BY SUPERINTENDENT AND COUNCIL.
- 5. CONSTRUCTION – STOCKPILING**

TEMPORARY SILT FENCE TO BE ERECTED 5m FROM TOE OF BATTER ON LOW SIDE OF STOCKPILING.

STOCKPILE SITE TO BE CLEARED OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE NUISANCE TO ADJOINING PROPERTIES.

NO STOCKPILES ARE TO BE LOCATED WITHIN THE DRIP ZONE OR STRUCTURAL ROOT ZONE OF ANY RETAINED VEGETATION.
- 6. CONSTRUCTION – ROADWORKS**

SILT FENCES TO ALLOTMENTS TO BE ERECTED.

KERB INLET PROTECTION TO BE PROVIDED TO ALL GULLIES.
- 7. CONSTRUCTION – ALLOTMENTS**

TOPSOIL AND SEED ALLOTMENTS.

SILT FENCES TO ALLOTMENTS TO BE RE-ERECTED.

COVERS TO GULLY GRATES TO BE REMOVED IF THE SUPERINTENDENT INDICATE THE GRASS STRIKE IS SUFFICIENT (80% WITHIN 30 CALENDAR DAYS OF FINAL ALLOTMENT RIMMING).
- 8. POST CONSTRUCTION – ALLOTMENTS**

TOPSOIL AND GRASS SEED ALL ALLOTMENTS.

COVERS TO GULLY GRATES TO BE REMOVED IF THE SUPERINTENDENT INDICATES THE GRASS STRIKE IS SUFFICIENT (80% WITHIN 30 CALENDAR DAYS OF FINAL ALLOTMENT TRIMMING).
- 9. POST CONSTRUCTION – BASIN**

BASIN TO CONTINUE ACTING AS SEDIMENT BASIN UNTIL COMPLETION OF ALL STAGES.
- 10. POST CONSTRUCTION – ROAD RESERVES**

TOPSOIL AND TURFING IS TO BE PROVIDED BEHIND KERB.
- 11. MAINTENANCE (PRE TO POST CONSTRUCTION)**

THE SILT FENCES ARE TO BE INSPECTED WEEKLY.

ANY REPAIRS REQUIRED ARE TO BE EFFECTED IMMEDIATELY.

SILT AFTER RAIN IS TO BE CLEANED FROM STREETS AND ALLOTMENTS IMMEDIATELY AND CORRECTIVE ACTION TAKEN TO AVOID A RE-OCCURRENCE OF THE FAILURE.



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LOT 504 HOMESTEAD DRIVE, STAPYLTON QLD, 4207					
RPD:					
Lot:		504			
Plan:		SP329485			
Local Authority:		CITY OF GOLD COAST			
Level Datum:		AHD			
Meridian:					
PSM:					
RL:					
ISSUED FOR CONSTRUCTION					
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Drawing Title:					
GENERAL NOTES SHEET 1 OF 2					
A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG	
A	25/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.			A1 UNREDUCED		
CULVERT AND PIPE SIZES IN MILLIMETERS			A3 REDUCED		
Scale:					
NOT APPLICABLE					
PROJECT NORTH POINT					
Project No.: 5941					
Designed: JH			Drafted: JH		
Approved:			MG		
RPEQ			16939		
Signed:					
Date:			28/09/2023		
Drawing No:			Revision		
5941 ENG CW3 002			A		

g:\Projects\5941\Engineering\Acad\civil works stage 3\Current\5941 ENG CW3 002.dwg

HES BASIN GENERAL NOTES

AUTO DOSER

1. PROVIDED AS EITHER 'FLOC BOX' OR 'IFOD-RAIN' DOSING UNIT OR APPROVED EQUIVALENT TO MANUFACTURERS SPECIFICATION.
2. DOSER AND SUPPLY OF FLOCCULANT TO BE PROVIDED ON LEVEL PAD 4mX4m WITHIN 10m OF DOSING POINT.
3. ALL-WEATHER ACCESS TRACK TO BE PROVIDED TO DOSER.
4. FLOCCULANT PROVIDED AS TURBICLEAR (ACH) OR APPROVED EQUIVALENT. IF ALTERNATIVE FLOCCULANT USED THEN THE BASIN SIZE IS TO BE INCREASED ACCORDING TO JAR SETTLEMENT TEST (REFER TO TABLE BELOW).

JAR SETTLEMENT AFTER 15 MINS	MULTIPLICATION FACTOR TO SETTLING ZONE
(mm)	VOLUME
50	x3.0
75	x2.0
100	x1.5
150	x1.0

BASIN CONSTRUCTION

MATERIALS

5. EARTH FILL: CLEAN SOIL WITH EMERSON CLASS 2(i), 3, 4 OR 5 AND FREE OF ROOTS, WOODY VEGETATION, ROCKS AND OTHER UNSUITABLE MATERIAL. SOIL WITH EMERSON CLASS 4 AND 5 MAY NOT BE SUITABLE DEPENDING ON PARTICLE SIZE DISTRIBUTION AND DEGREE OF DISPERSION. CLASS 2 (i) SHOULD ONLY BE USED UPON RECOMMENDATION FROM GEOTECHNICAL SPECIALIST.
6. SPILLWAY ROCK: HARD, ANGULAR, DURABLE, WEATHER RESISTANT AND EVENLY GRADED ROCK WITH 50% BY WEIGHT LARGER THAN THE SPECIFIED NOMINAL (D50) ROCK SIZE. LARGE ROCK SHOULD DOMINATE, WITH SUFFICIENT SMALL ROCK TO FILL THE VOIDS BETWEEN LARGER ROCK. THE DIAMETER OF THE LARGEST ROCK SHOULD BE NO LARGER THAN 1.5 TIMES THE NOMINAL ROCK SIZE. THE SPECIFIC GRAVITY SHOULD BE AT LEAST 2.5.
7. GEOTEXTILE FABRIC: HEAVY DUTY, NEEDLE-PUNCHED, NON-WOVEN CLOTH, MINIMUM 'BIDIM' A24 OR EQUIVALENT.

CONSTRUCTION

8. NOTWITHSTANDING ANY DESCRIPTION CONTAINED WITH APPROVED PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING THEMSELVES AS TO THE NATURE AND EXTENT OF THE SPECIFIED WORKS AND THE PHYSICAL AND LEGAL CONDITIONS UNDER WHICH THE WORKS WILL BE CARRIED OUT. THIS SHALL INCLUDE MEANS OF ACCESS, EXTENT OF CLEARING, NATURE OF THE MATERIALS TO BE EXCAVATED, TYPE AND SIZE OF MECHANICAL PLANT REQUIRED, LOCATION AND SUITABILITY OF WATER SUPPLY FOR CONSTRUCTION AND TESTING PURPOSES, AND ANY OTHER LIKELY MATTERS AFFECTING THE CONSTRUCTION OF THE WORKS.
9. REFER TO APPROVED PLANS FOR LOCATION, DIMENSIONS, AND CONSTRUCTION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
10. BEFORE STARTING ANY CLEARING OR CONSTRUCTION, ENSURE ALL THE NECESSARY MATERIALS AND COMPONENTS ARE ON THE SITE TO AVOID DELAYS IN COMPLETING THE SEDIMENT BASIN ONCE WORKS BEGIN.
11. INSTALL REQUIRED SHORT TERM SEDIMENT CONTROL MEASURES DOWNSTREAM OF THE PROPOSED EARTHWORKS TO CONTROL SEDIMENT RUNOFF DURING CONSTRUCTION OF THE BASIN.
12. THE AREA TO BE COVERED BY THE EMBANKMENT, BORROW PITS AND INCIDENTAL WORKS, TOGETHER WITH AN AREA EXTENDING BEYOND THE LIMITS OF EACH FOR A DISTANCE NOT EXCEEDING FIVE (5) METRES ALL AROUND MUST BE CLEARED OF ALL TREES, SCRUB, STUMPS, ROOTS, DEAD TIMBER AND RUBBISH AND DISPOSED OF IN A SUITABLE MANNER. DELAY CLEARING THE MAIN BASIN AREA UNTIL THE EMBANKMENT IS COMPLETE.
13. ENSURE ALL HOLES MADE BY GRUBBING WITHIN THE EMBANKMENT FOOTPRINT ARE FILLED WITH SOUND MATERIAL, ADEQUATELY COMPACTED, AND FINISHED FLUSH WITH THE NATURAL SURFACE.
- CUT-OFF TRENCH
14. BEFORE CONSTRUCTION OF THE CUT-OFF TRENCH OR ANY ANCILLARY WORKS WITHIN THE EMBANKMENT FOOTPRINT, ALL GRASS GROWTH AND TOPSOIL MUST BE REMOVED FROM THE AREA TO BE OCCUPIED BY THE EMBANKMENT AND MUST BE DEPOSITED CLEAR OF THIS AREA AND RESERVED FOR TOPDRESSING THE COMPLETED EMBANKMENT.

15. EXCAVATE A CUT-OFF TRENCH ALONG THE CENTRE LINE OF THE EARTH FILL EMBANKMENT. CUT THE TRENCH TO STABLE SOIL MATERIAL, BUT IN NO CASE MAKE IT LESS THAN 600mm DEEP. THE CUT-OFF TRENCH MUST EXTEND INTO BOTH ABUTMENTS TO AT LEAST THE ELEVATION OF THE OUTLET SPILLWAY CREST. MAKE THE MINIMUM BOTTOM WIDTH WIDE ENOUGH TO PERMIT OPERATION OF THE EXCAVATION AND COMPACTION EQUIPMENT, BUT IN NO CASE LESS THAN 600mm. MAKE THE SIDE SLOPES OF THE TRENCH NO STEEPER THAN 1:2 (H:V).
16. ENSURE ALL WATER, LOOSE SOIL, AND ROCK ARE REMOVED FROM THE TRENCH BEFORE BACKFILLING COMMENCES. THE CUT-OFF TRENCH MUST BE BACKFILLED WITH SELECT EARTH-FILL OF THE TYPE SPECIFIED FOR THE EMBANKMENT, AND THIS SOIL MUST HAVE A MOISTURE CONTENT AND DEGREE OF COMPACTION THE SAME AS SPECIFIED FOR THE CORE ZONE.
17. MATERIAL EXCAVATED FROM THE CUT-OFF TRENCH MAY BE USED IN THE CONSTRUCTION OF THE EMBANKMENT PROVIDED IT IS SUITABLE AND IT IS PLACED IN THE CORRECT ZONE ACCORDING TO ITS CLASSIFICATION.

EMBANKMENT

18. SCARIFY AREAS ON WHICH FILL IS TO BE PLACED BEFORE PLACING THE FILL.
19. ENSURE ALL FILL MATERIAL USED TO FORM THE EMBANKMENT MEETS THE SPECIFICATIONS CERTIFIED BY A SOIL SCIENTIST OF GEOTECHNICAL SPECIALIST.
20. THE FILL MATERIAL MUST CONTAIN SUFFICIENT MOISTURE SO IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, IT IS TOO WET FOR PROPER COMPACTION. PLACE FILL MATERIAL IN 150 TO 200mm CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL AREA AND THEN COMPACT BEFORE PLACEMENT OF FURTHER FILL.
21. UNLESS SPECIFIED ON THE APPROVED PLANS, COMPACT THE SOIL AT ABOUT 1% TO 2% WET OPTIMUM AND TO 95% MODIFIED OR 100% STANDARD COMPACTION.
22. WHERE BOTH DISPERSIVE AND NON-DISPERSIVE CLASSIFIED EARTH-FILL MATERIALS ARE AVAILABLE, NON-DISPERSIVE EARTH-FILL MUST BE USED IN THE CORE ZONE. THE REMAINING CLASSIFIED EARTH-FILL MATERIALS MUST ONLY BE USED AS DIRECTED BY THE SITE SUPERINTENDENT.
23. WHERE SPECIFIED, CONSTRUCT THE EMBANKMENT TO AN ELEVATION 10% HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLING; OTHERWISE FINISHED DIMENSIONS OF THE EMBANKMENT AFTER SPREADING OF TOPSOIL MUST CONFORM TO THE DRAWING WITH A TOLERANCE OF 75mm FROM SPECIFIED DIMENSIONS.
24. ENSURE DEBRIS AND OTHER UNSUITABLE BUILDING WASTE IS NOT PLACED WITHIN THE EARTH EMBANKMENT.
25. AFTER COMPLETION OF THE EMBANKMENT ALL LOOSE UNCOMPACTED EARTH-FILL MATERIAL ON THE UPSTREAM AND DOWNSTREAM BATTER MUST BE REMOVED PRIOR TO SPREADING TOPSOIL.
26. TOPSOIL AND RE-VEGETATE/STABILISE ALL EXPOSED EARTH AS DIRECTED WITHIN THE APPROVED PLANS.

ESTABLISHING THE SETTLING POND

27. THE AREA TO BE COVERED BY THE STORED WATER OUTSIDE OF THE LIMITS OF THE BORROW PITS MUST BE CLEARED OF RUBBISH. TREES MUST BE CUT DOWN STUMP HIGH AND REMOVED FROM THE IMMEDIATE VICINITY OF THE WORK.
28. ESTABLISH ALL REQUIRED INFLOW CHUTES AND INLET BAFFLES IF SPECIFIED TO ENABLE WATER TO DISCHARGE INTO THE BASIN IN A MANNER THAT WILL NOT CAUSE SOIL EROSION OR THE RE-SUSPENSION OF SETTLED SEDIMENT.
29. INSTALL A SEDIMENT STORAGE LEVEL MARKER POST WITH A CROSS MEMBER SET JUST BELOW THE TOP OF THE SEDIMENT STORAGE ZONE (AS SPECIFIED ON THE APPROVED PLANS). USE AT LEAST A 75mm WIDE POST FIRMLY SET INTO THE BASIN FLOOR.
30. IF SPECIFIED, INSTALL INTERNAL SETTLING POND BAFFLES. ENSURE THE CREST OF THESE BAFFLES IS SET LEVEL WITH, OR JUST BELOW, THE ELEVATION OF THE EMERGENCY SPILLWAY.
31. INSTALL ALL APPROPRIATE MEASURES TO MINIMISE SAFETY RISK TO ON-SITE PERSONNEL AND THE PUBLIC CAUSED BY THE PRESENCE OF THE SETTLING POND. AVOID STEEP, SMOOTH INTERNAL SLOPES. APPROPRIATELY FENCE THE SETTLING POND AND POST WARNING SIGNS IF UNSUPERVISED PUBLIC ACCESS IS LIKELY OR THERE IS CONSIDERED TO BE AN UNACCEPTABLE RISK TO THE PUBLIC.

SPILLWAY CONSTRUCTION

32. THE SPILLWAY MUST BE EXCAVATED AS SHOWN ON THE PLANS, AND THE EXCAVATED MATERIAL IF CLASSIFIED AS SUITABLE, MUST BE USED IN THE EMBANKMENT, AND IF NOT SUITABLE IT MUST BE DISPOSED OF INTO SPOIL HEAPS.
33. ENSURE EXCAVATED DIMENSIONS ALLOW ADEQUATE BOXING-OUT SUCH THAT THE SPECIFIED ELEVATIONS, GRADES, CHUTE WIDTH, AND ENTRANCE AND EXIT SLOPES FOR THE EMERGENCY SPILLWAY WILL BE ACHIEVED AFTER PLACEMENT OF THE ROCK OR OTHER SCOUR PROTECTION MEASURES AS SPECIFIED IN THE PLANS.
34. PLACE SPECIFIED SCOUR PROTECTION MEASURES ON THE EMERGENCY SPILLWAY. ENSURE THE FINISHED GRADE BLENDS WITH THE SURROUNDING AREA TO ALLOW A SMOOTH FLOW TRANSITION FROM SPILLWAY TO DOWNSTREAM CHANNEL.
35. IF A SYNTHETIC FILTER FABRIC UNDERLAY IS SPECIFIED, PLACE THE FABRIC DIRECTLY ON THE PREPARED FOUNDATION. IF MORE THAN 1 SHEET OF FILTER FABRIC IS REQUIRED, OVERLAP THE EDGES BY AT LEAST 300mm AND PLACE ANCHOR PINS AT MINIMUM 1m SPACING ALONG THE OVERLAP. BURY THE UPSTREAM END OF THE FILTER FABRIC A MINIMUM 300mm BELOW GROUND AND WHERE NECESSARY, BURY THE LOWER END OF THE FABRIC OR OVERLAP A MINIMUM 300mm OVER THE NEXT DOWNSTREAM SECTION AS REQUIRED. ENSURE THE FILTER FABRIC EXTENDS AT LEAST 1000mm UPSTREAM OF THE SPILLWAY CREST.
36. TAKE CARE NOT TO DAMAGE THE FABRIC DURING OR AFTER PLACEMENT. IF DAMAGE OCCURS, REMOVE THE ROCK AND REPAIR THE SHEET BY ADDING ANOTHER LAYER OF FABRIC WITH A MINIMUM OVERLAP OF 300mm AROUND THE DAMAGED AREA. IF EXTENSIVE DAMAGE IS SUSPECTED, REMOVE AND REPLACE THE ENTIRE SHEET.
37. WHERE LARGE ROCK IS USED, OR MACHINE PLACEMENT IS DIFFICULT, A MINIMUM 100mm LAYER OF FINE GRAVEL, AGGREGATE, OR SAND MAY BE NEEDED TO PROTECT THE FABRIC.
38. PLACEMENT OF ROCK SHOULD FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE FILTER FABRIC. PLACE ROCK SO THAT IT FORMS A DENSE, WELL GRADED MASS OF ROCK WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF ROCK THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY AND CONTROLLED DUMPING DURING FINAL PLACEMENT.
39. THE FINISHED SLOPE SHOULD BE FREE OF POCKETS OF SMALL ROCK OR CLUSTERS OF LARGE ROCKS. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE PROPER DISTRIBUTION OF ROCK SIZES TO PRODUCE A RELATIVELY SMOOTH, UNIFORM SURFACE. THE FINISHED GRADE OF THE ROCK SHOULD BLEND WITH THE SURROUNDING AREA. NO OVER FALL OR PROTRUSION OF ROCK SHOULD BE APPARENT.
40. ENSURE THAT THE FINAL ARRANGEMENT OF THE SPILLWAY CREST WILL NOT PROMOTE EXCESSIVE FLOW THROUGH THE ROCK SUCH THAT THE WATER CAN BE RETAINED WITHIN THE SETTLING BASIN AT THE ELEVATION NO LESS THAN 50mm ABOVE OF BELOW THE NOMINATED SPILLWAY CREST ELEVATION.

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504

Plan: SP329485

Local Authority: CITY OF GOLD COAST

Level Datum: AHD

Meridian: PTM:

RL:

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CONSTRUCTION

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Drawing Title:

GENERAL NOTES
SHEET 2 OF 2

A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:

NOT APPLICABLE

PROJECT NORTH POINT

Project No.	5941
Designed: JH	Drafted: JH
Approved: MG	
RPEQ	16939
Signed:	
Date:	28/09/2023

Drawing No:	Revision
5941 ENG CW3 003	A

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FEATURE LEGEND

	OVERLAND FLOW PATH/SWALE
	CATCH DRAIN (NOT LINED)
	DIVERSION CHANNEL
	TABLE DRAIN
	STREAM INVERT
	CATCH DRAIN (CONCRETE LINED)
	SUBSOIL DRAINAGE
	SAWCUT
	SEDIMENT FENCE
	CHAINWIRE FENCE
	WOODEN FENCE
	BRIFEN WIRE SAFETY BARRIER
	GUARDRAIL (STANDARD)
	RETAINING WALL (PILED)
	RETAINING WALL (WITH FOOTINGS)
	RETAINING WALL
	ROCKBLOCK RETAINING WALL
	TOP OF BATTER / BERM
	NOISE WALL
	EDGE OF VEGETATION
	PROPERTY LINE
	PROPERTY LINE WITH FENCE
	PROPOSED KERB, FOOTPATH
	CONTROL LINE / CENTER OF ROAD
	RAILWAY (MAJOR)
	RAILWAY (MINOR)
	EXISTING PROPERTY LINE
	EXISTING PROPERTY LINE WITH FENCE
	EXISTING KERB, FOOTPATH
	EXISTING EDGE OF BITUMEN
	EXISTING RAILWAY (MAJOR)
	EXISTING RAILWAY (MINOR)
	LIMIT OF WORKS
	LIMIT OF SITE
	CATCHMENT BOUNDARY
	EXISTING CONTOURS
	DESIGN CONTOURS

SERVICES LEGEND

	PROPOSED RISING MAIN
	PROPOSED SEWER
	PROPOSED STORMWATER
	PROPOSED ROOFWATER
	PROPOSED ROOFWATER
	PROPOSED SUBSOIL
	PROPOSED WATER
	PROPOSED RECYCLED WATER
	PROPOSED OIL
	PROPOSED FUEL
	PROPOSED GAS
	PROPOSED PIPELINE
	PROPOSED HIGH VOLTAGE ELECTRICITY
	PROPOSED UNDERGROUND ELECTRICITY
	PROPOSED OVERHEAD ELECTRICITY
	PROPOSED LIGHTING
	PROPOSED TELSTRA
	PROPOSED COMMUNICATIONS
	PROPOSED GAS, ELECT
	PROPOSED GAS, TELSTRA
	PROPOSED ELECT, TELSTRA
	PROPOSED GAS, ELECTRICITY, TELSTRA
	EXISTING RISING MAIN
	EXISTING SEWER
	EXISTING STORMWATER
	EXISTING ROOFWATER
	EXISTING ROOFWATER
	EXISTING SUBSOIL
	EXISTING WATER
	EXISTING RECYCLED WATER
	EXISTING OIL
	EXISTING FUEL
	EXISTING GAS
	EXISTING PIPELINE
	EXISTING HIGH VOLTAGE ELECTRICITY
	EXISTING UNDERGROUND ELECTRICITY
	EXISTING OVERHEAD ELECTRICITY
	EXISTING LIGHTING
	EXISTING TELSTRA
	EXISTING COMMUNICATIONS
	EXISTING GAS, ELECT
	EXISTING GAS, TELSTRA
	EXISTING ELECT, TELSTRA
	EXISTING GAS, ELECTRICITY, TELSTRA
	DEMOLISH RISING MAIN
	DEMOLISH SEWER
	DEMOLISH STORMWATER
	DEMOLISH SUBSOIL
	DEMOLISH WATER
	DEMOLISH OIL
	DEMOLISH FUEL
	DEMOLISH HIGH VOLTAGE ELECTRICITY
	DEMOLISH UNDERGROUND ELECTRICITY
	DEMOLISH OVERHEAD ELECTRICITY
	DEMOLISH LIGHTING
	DEMOLISH GAS
	DEMOLISH PIPELINE
	DEMOLISH TELSTRA
	DEMOLISH COMMUNICATIONS

SYMBOLS

BK(A)	BARRIER KERB (A)
BK(B)	BARRIER KERB (B)
BK(G)	BARRIER KERB (G)
MK(D)	MOUNTABLE KERB (D)
SMK(C)	SEMI MOUNTABLE KERB (C)
ER(E)	EDGE RESTRAINT (E)
KER(F)	KERB EDGE RESTRAINT (F)
RK&C(H)	ROLL TOP KERB & CHANNEL (H)
BK&C(J)	BARRIER KERB & CHANNEL (J)
ERH	KERB EDGE RESTRAINT (HIGH)
ERL	KERB EDGE RESTRAINT (LOW)
CS(K/L)	CHANNEL SECTION (K/L)
PMB	PRECAST MOTOR BED
DD	DISH DRAIN
K&G	KERB AND GUTTER
K&T	KERB AND TOE
KO	KERB ONLY
MK	MOUNTABLE KERB
RK	ROLL KERB
	EXISTING SIGN
	PROPOSED SIGN
	PROPOSED ROAD EDGE GUIDE POST
	EXISTING BIN
	POST BOX
	TELEPHONE BOX
	TELSTRA PIT
	TELSTRA MARKER POST
	WATER METER
	WATER VALVE
	FIRE HYDRANT
	WATER TAP
	WATER HYDRANT
	WATER TEE
	WATER REDUCER
	WATER ENDCAP
	WATER CONNECTION
	WATER CROSSING
	WATER DIEL
	SEWER MAINTENANCE HOLE
	SEWER RODDING END
	SEWER BEND
	SEWER MAINTENANCE SHAFT
	SEWER 'T' END
	SEWER SLUICE VALVE
	SEWER PIT
	SEWER PUMP STATION
	TEMPORARY SEWER PUMP STATION
	SEWER / STORMWATER PIT NO/LINE
	SETOUT POINT
	OFFSET PIT WITH GRATE
	IN LINE PIT WITH GRATE
	JUNCTION PIT
	LETTERBOX PIT
	GRATED INLET PIT
	MANHOLE
	GULLY PIT (LIP INLINE) BARRIER KERB - GRADE
	GULLY PIT (LIP INLINE) BARRIER KERB - SAG
	GULLY PIT (LIP INLINE) ROLL TOP KERB - GRADE
	GULLY PIT (LIP INLINE) ROLL TOP KERB - SAG
	GULLY PIT (KERB INLINE) - GRADE
	GULLY PIT (KERB INLINE) - SAG
	INFILTRATION TRENCH
	HEADWALL
	GROSS POLLUTANT TRAP
	STORMWATER CHAMBER

	BUND
	POWER POLE
	POWER POLE WITH LIGHT
	LIGHT POLE
	STAY POLE
	LIGHT POLE WITH EXTENSION
	ELECTRICAL INSPECTION BOX
	ELECTRICAL POLE
	ELECTRICAL TURRET
	TRAFFIC SIGNAL
	MAIN ROADS PIT
	TANGENT POINT
	KERB RETURN NO.
	PRAM RAMP
	GRAVEL ROCK CHECK DAM
	MESH & GRAVEL INLET FILTER
	STORMWATER INLET FILTER
	DIRECTION OF OVERLAND FLOW
	VEHICLE SHAKEDOWN
	GATE
	NOT IN SCOPE OF WORKS
	DEMOLITION
	PROPOSED CONCRETE FOOTPATH
	SCOUR PROTECTION
	TREES
	TADPOLE

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

LEGEND

A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

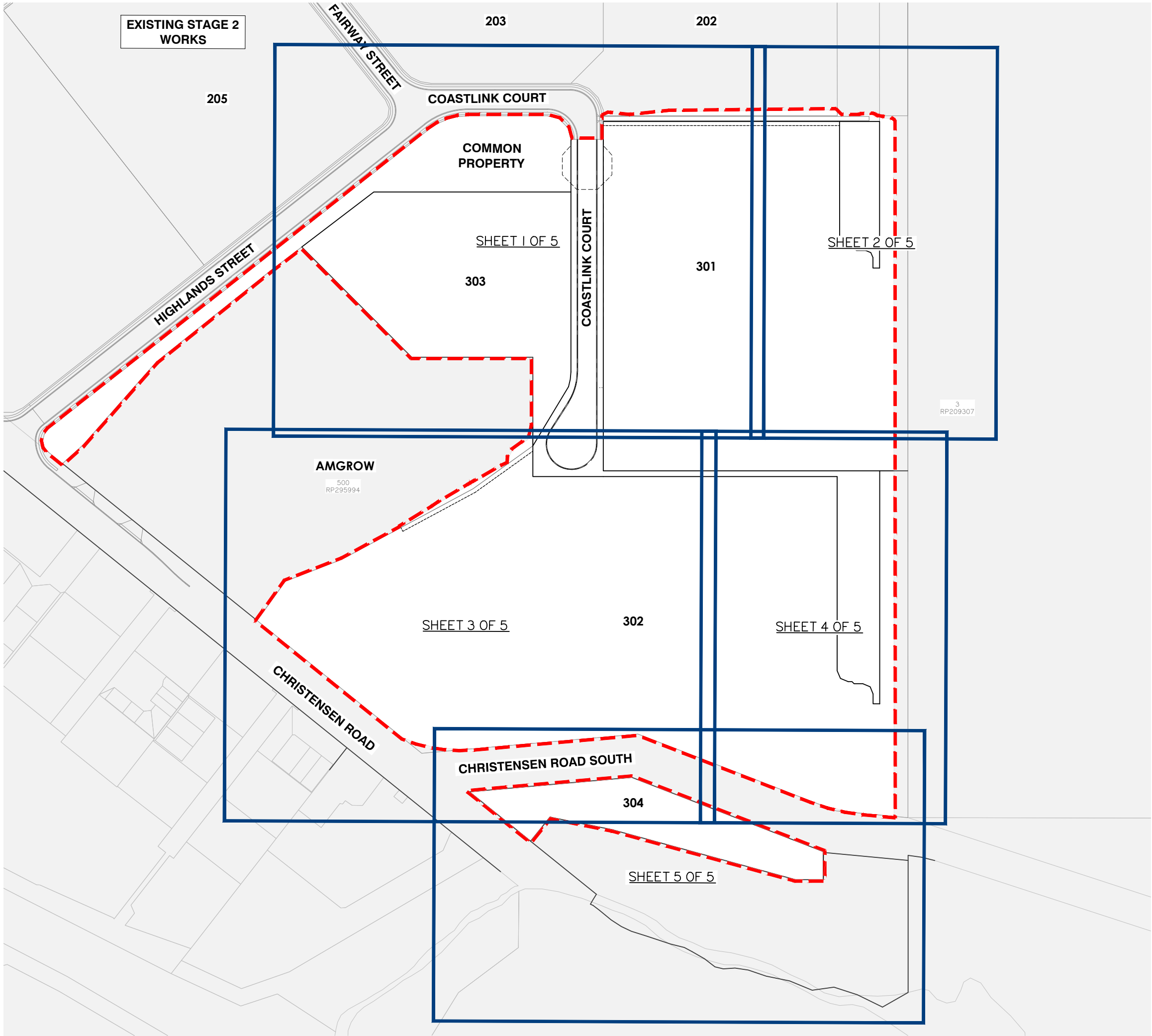
A1 UNREDUCED
A3 REDUCED

Scale:

NOT TO SCALE

PROJECT NORTH POINT

Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No: 5941 ENG CW3 004	Revision: A



KEY LAYOUT PLAN

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

KEY LAYOUT PLAN

B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	LOT NUMBER UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

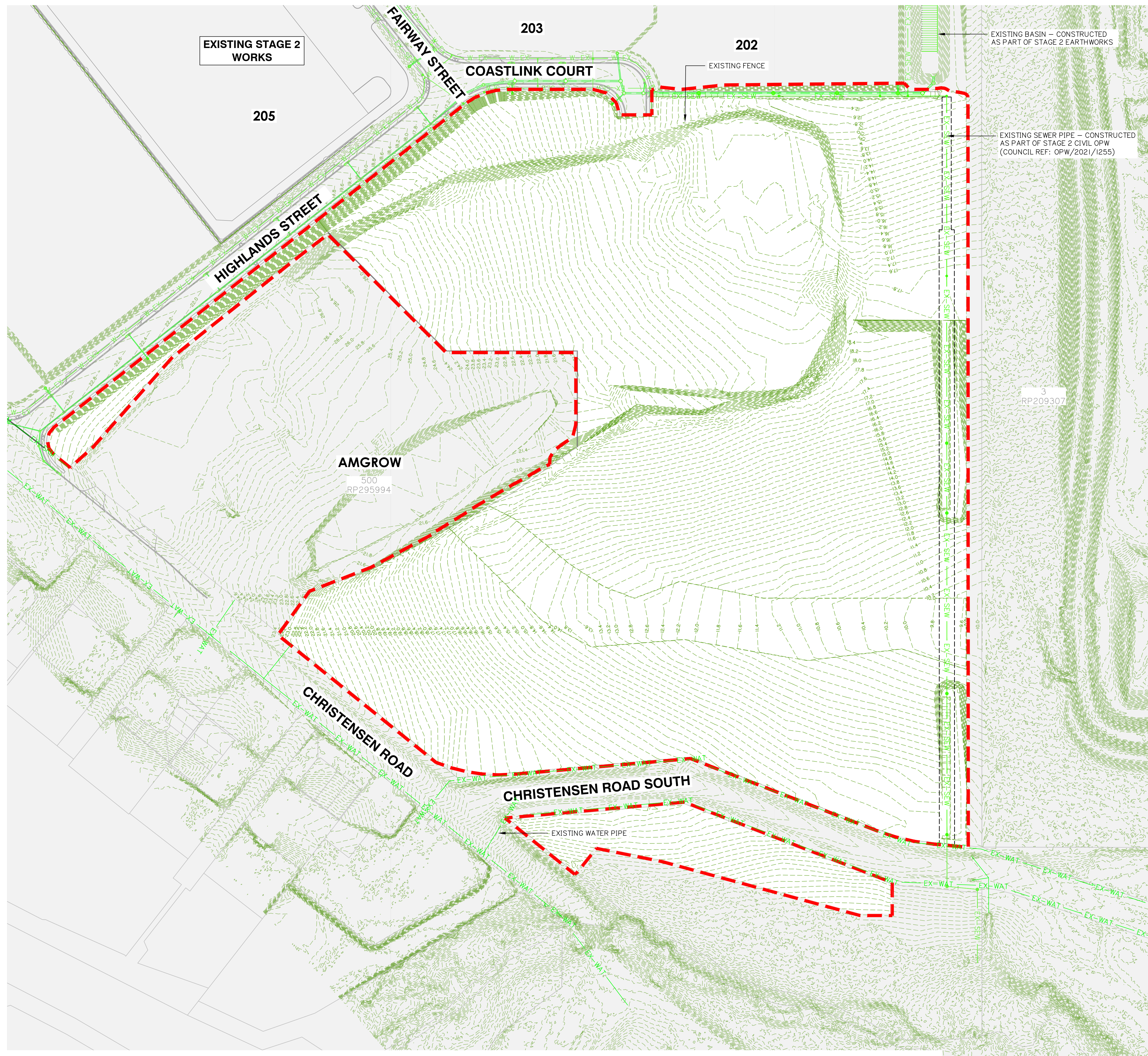
Scale:
0 25 50 75 100m
1:1250 (A1) 1:2500 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
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Drawing No: 5941 ENG CW3 005
Revision: B



Rev	Date	Description	JH	MG
H	11/04/25	SWD MANHOLE ADDED	JH	MG
G	11/04/25	LAYOUT UPDATED	JH	MG
F	26/03/25	STORMWATER LINE UPDATED	JH	MG
E	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
D	11/12/24	LAYOUT UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	DESIGN UPDATED	ML	MG
		ORIGINAL ISSUE	JH	MG

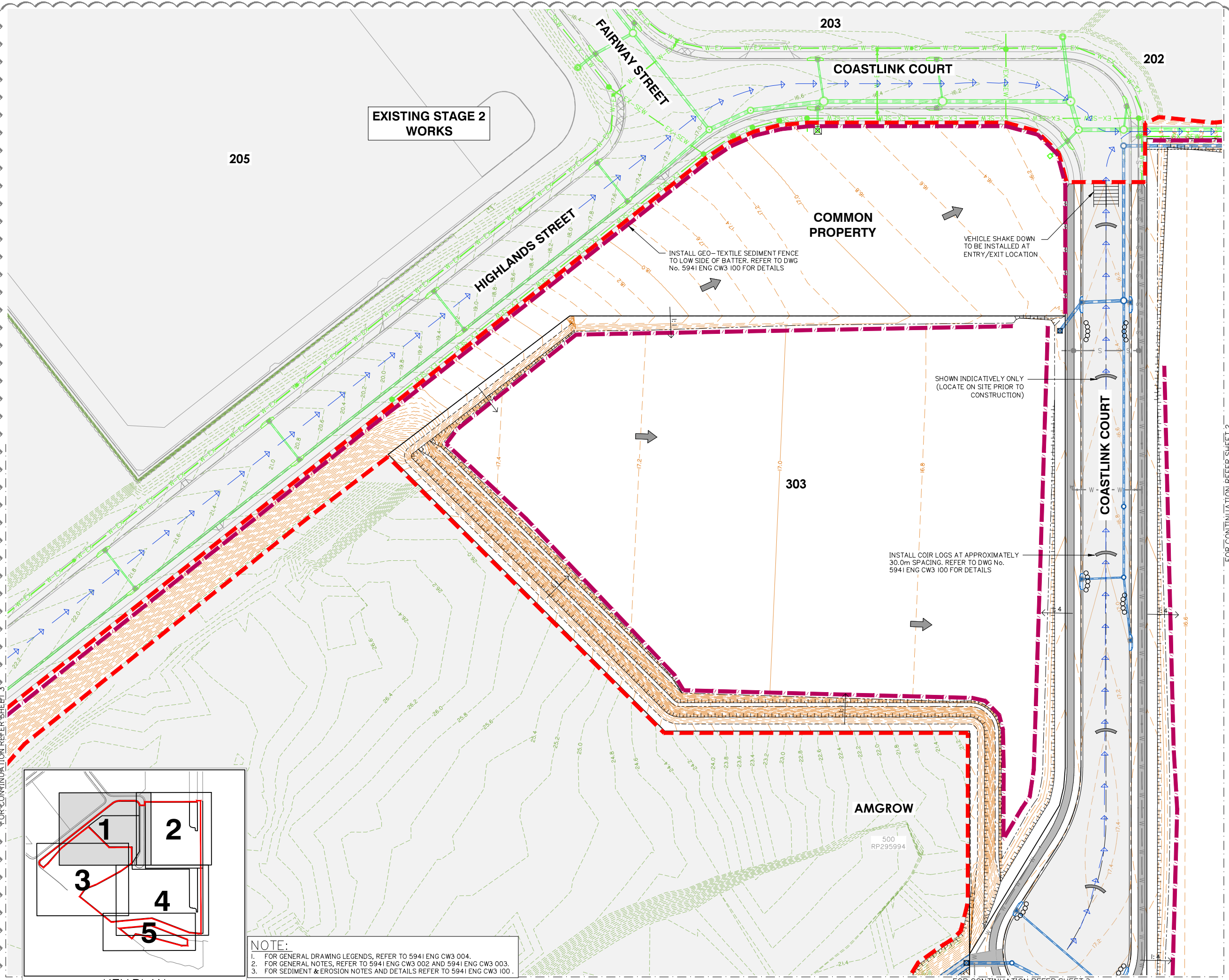
DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE: A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT

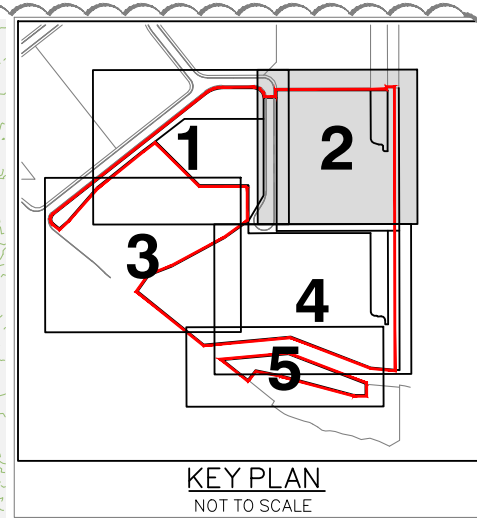
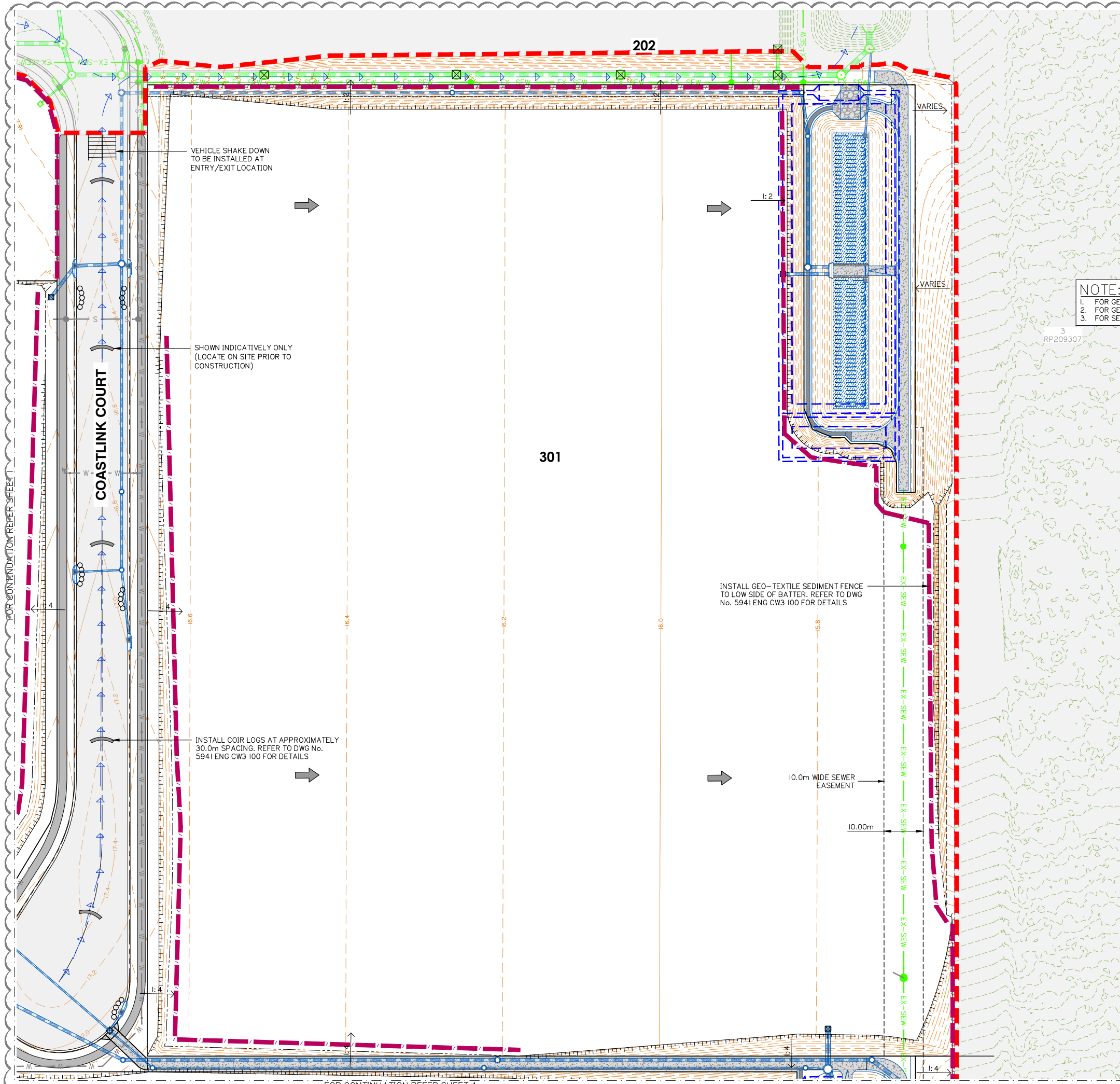


Project No:	5941
Designed:	JH
Drafted:	ML
Approved:	MG
RPEQ:	16939
Signed:	
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Drawing No:	5941 ENG CW3 110
Revision:	H



NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG CW3 004.
2. FOR GENERAL NOTES, REFER TO 5941 ENG CW3 002 AND 5941 ENG CW3 003.
3. FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG CW3 100.

KEY PLAN
NOT TO SCALE



NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG CW3 004.
2. FOR GENERAL NOTES, REFER TO 5941 ENG CW3 002 AND 5941 ENG CW3 003.
3. FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG CW3 100.



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Client:



FPI QUEENSLAND PTY. LTD.

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD DRIVE, STAPYLTON QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM:
RL:

ISSUED FOR CONSTRUCTION

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Drawing Title:

SEDIMENT AND EROSION CONTROL PLAN
SHEET 2 OF 5

Rev	Date	Description	DRN	CHK
H	11/04/25	SWD MANHOLE ADDED	JH	MG
G	11/04/25	LAYOUT UPDATED	JH	MG
F	26/03/25	STORMWATER LINE UPDATED	JH	MG
E	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
D	11/11/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	21/12/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT

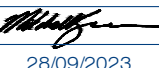


Project No. 5941

Designed: JH
Drafted: ML

Approved: MG

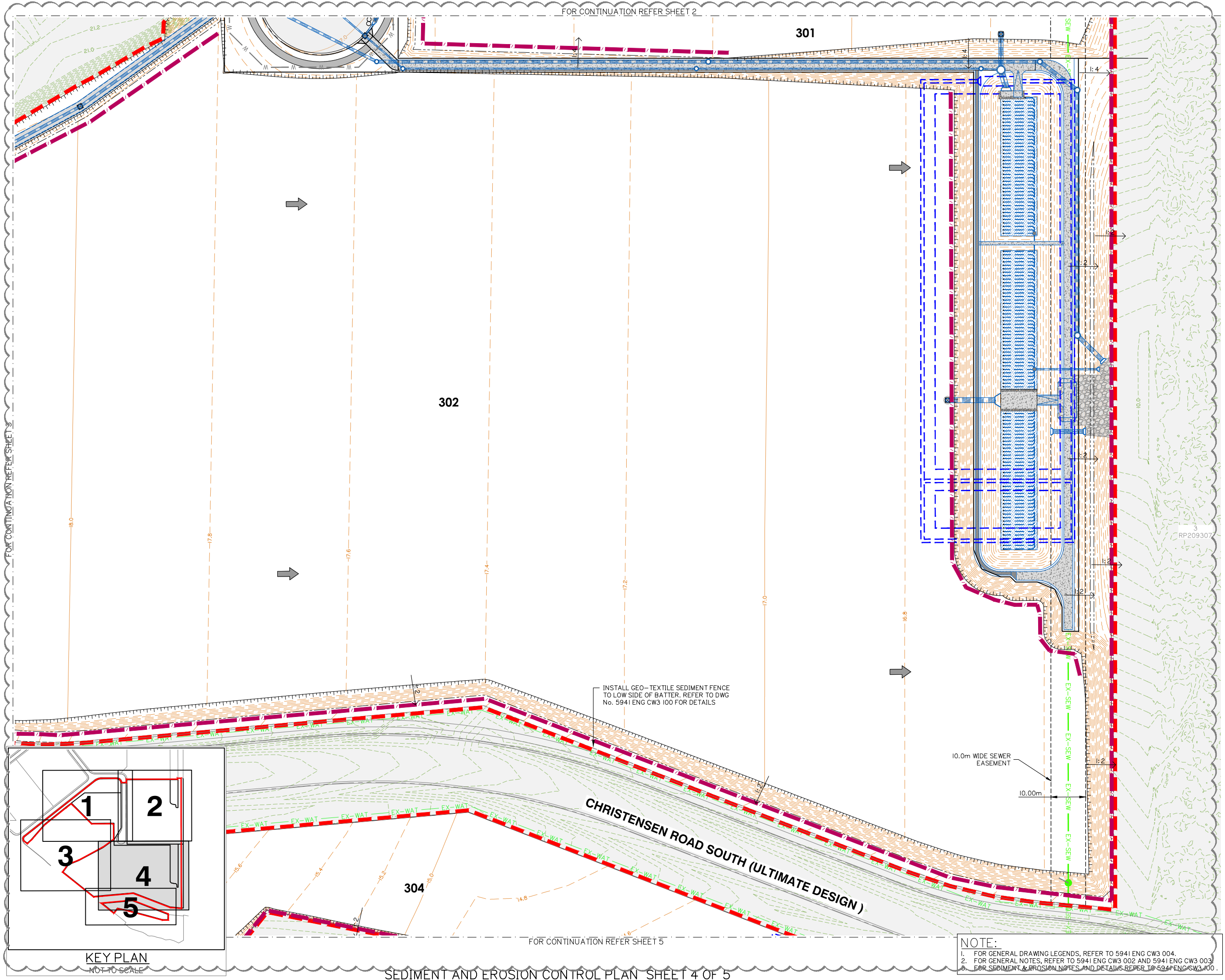
RPEQ 16939

Signed: 

Date: 28/09/2023

Drawing No. 5941 ENG CW3 111
Revision H

g:\Projects\5941\Engineering\Acad\civil works stage 3\Current\5941 ENG CW3 110.dwg





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Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



**FRASERS
PROPERTY**

FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM
RL:

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GENERAL NOTES.

Drawing Title:

SEDIMENT AND EROSION
CONTROL PLAN
SHEET 4 OF 5

Rev	Date	Description	DRN	CHK
E	11/04/25	LAYOUT UPDATED	JH	MG
D	11/11/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	21/12/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE

A1 UNREDUCED
A3 REDUCED

Scale:

0 10 20 30 40m

1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Approved:

RPEQ:

Signed:

Date:

Drawing No:

5941 ENG CW3 113

Drafted: ML

MG

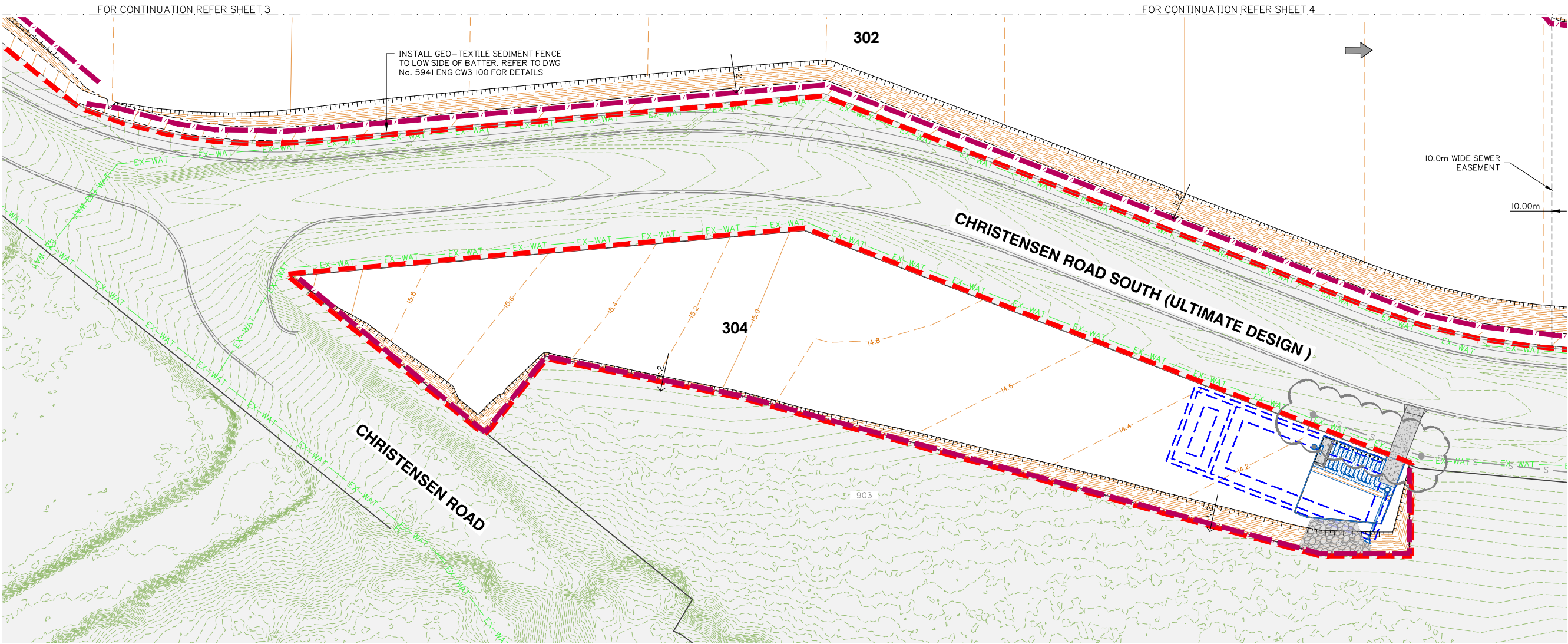
16939

28/09/2023

Revision

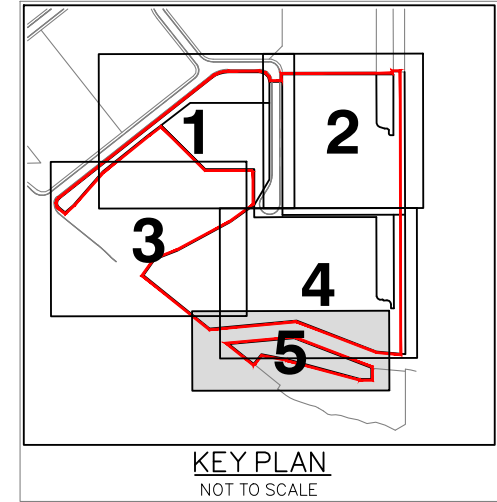
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g:\Projects\5941\Engineering\Acadocivil works stage 3\Current\5941 ENG CW3 110.dwg



NOTE:

- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG CW3 004.
- FOR GENERAL NOTES, REFER TO 5941 ENG CW3 002 AND 5941 ENG CW3 003.
- FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG CW3 100.



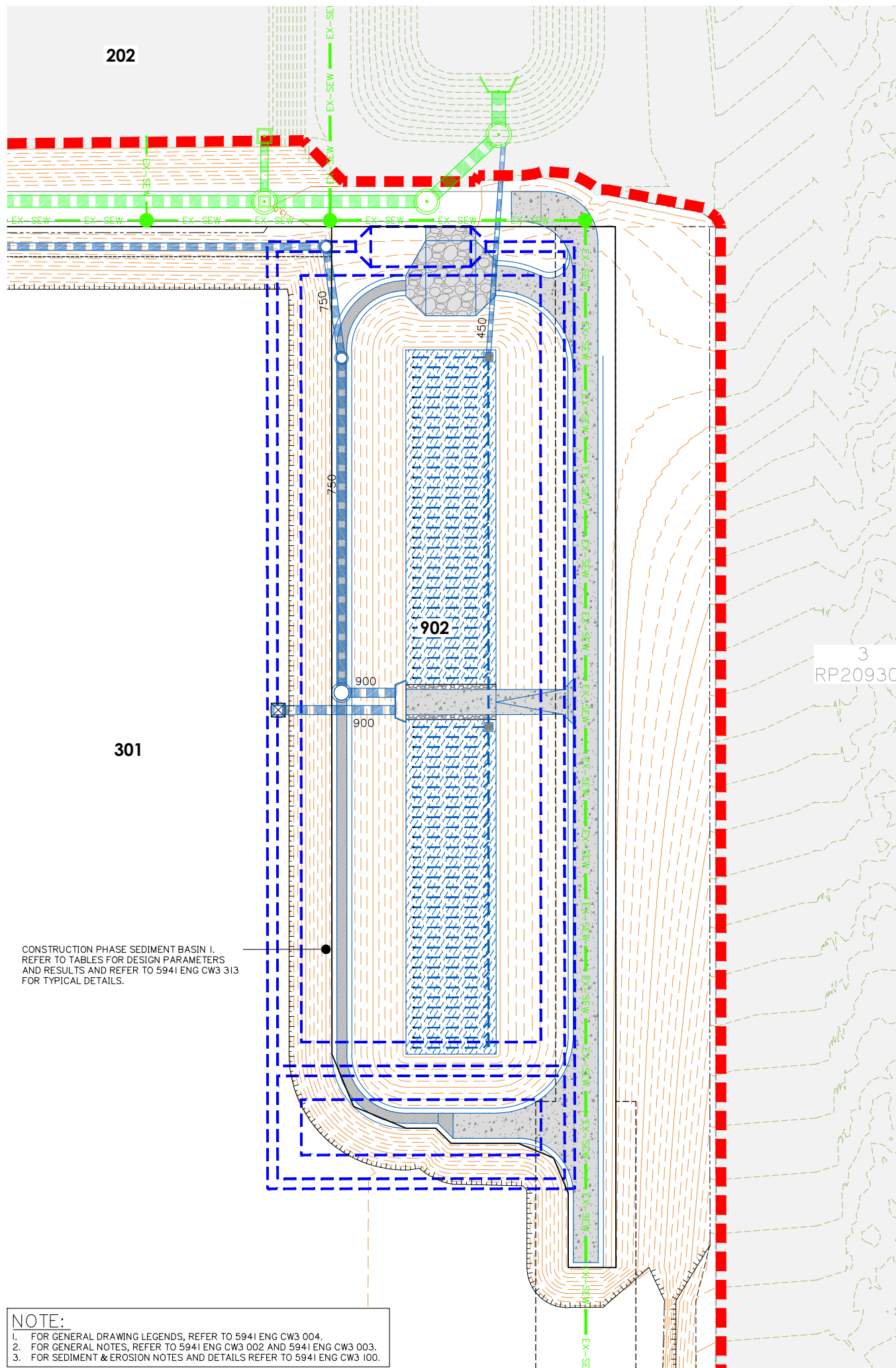
Rev	Date	Description	DRN	CHK
C	21/03/25	SEWER LINE UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	21/12/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

0 10 20 30 40m
1:500 (A1) 1:1000 (A3)



SEDIMENT BASIN I DESIGN												
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT					
No. I	> 12 MONTHS	NO	LEASE	> 5Ha	NO	TYPE B	IFOD—RAIN					

BASIN ID	CATCHMENT AREA	DESIGN EVENT	I_x yr, 24 hr	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W:L	OPTIMUM LOW-FLOW DECAN T RATE	SELECTED LOW-FLOW DECAN T RATE (Q_A)	MIN SETT LING ZONE VOLUME (Min V_s)	MIN SETT LING ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
	(Ha)	(I: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(I: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
	No. I	5.26	I	64.2	20	—	0.8	3	—	—	1081.0	—

SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C_{10}	C	t_c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)				
No. I	> 12 MONTHS	I: 20	0.80	0.84	20.00	34.40	0.46	0.50	0.80	13.50	14.45

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
	No. I	1404.8	78.9	26.3	0.8	163.9	10.8	26.3	0.8	1.7	13.50	14.45

NOTE:

1. FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG CW3 004.
2. FOR GENERAL NOTES, REFER TO 5941 ENG CW3 002 AND 5941 ENG CW3 003.
3. FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG CW3 100.

Site Address:
LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

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CONSTRUCTION**

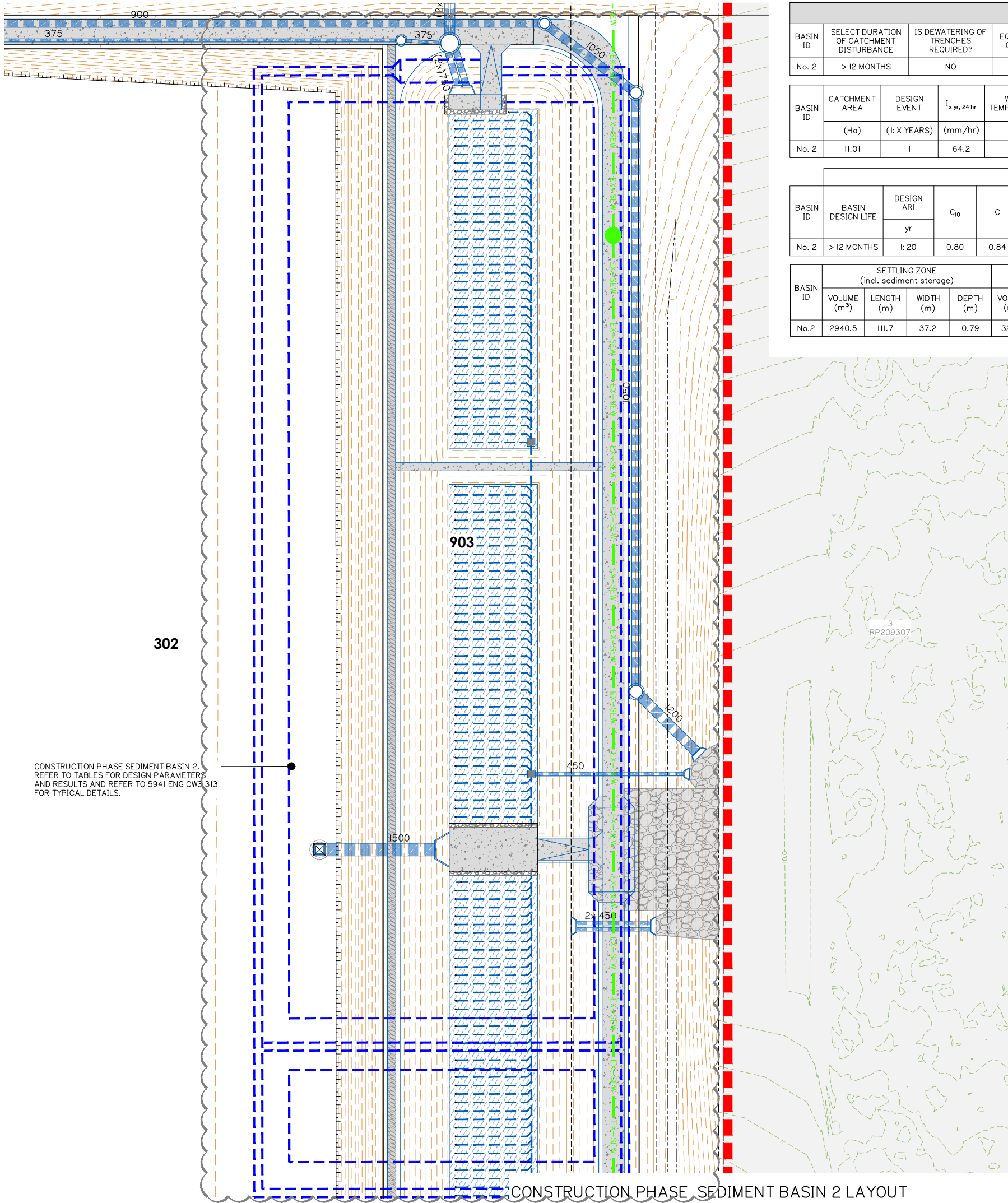
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[illegible]

PROJECT NORTH POINT	
Project No: 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	
5941 ENG CW3 310	
Revision	
A	

CONSTRUCTION PHASE SEDIMENT BASIN I LAYOUT



SEDIMENT BASIN 2 DESIGN											
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT				
No. 2	> 12 MONTHS	NO	LEASE	> 5Ha	NO	TYPE B	IFOD-RAIN				

BASIN ID	CATCHMENT AREA	DESIGN EVENT	I _x yr, 24 hr	WATER TEMPERATURE	K _s	SETTLING ZONE DEPTH (D _s)	W:L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q _d)	MIN SETTLING ZONE VOLUME (Min V _s)	MIN SETTLING ZONE SURFACE AREA (Min A _s)	LIMITING CRITERIA
	(Ha)	(1:X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1:X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
No. 2	11.01	1	64.2	20	—	0.8	3	—	—	2904.5	—	VOLUME

SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	t _c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)	(m)	(m)	(m)	(m)
No. 2	> 12 MONTHS	1:20	0.80	0.84	20.00	34.40	0.46	0.50	0.80	13.65	13.95

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
No.2	2940.5	111.7	37.2	0.79	327.4	11.2	37.2	0.79	3.5	13.65	13.95	13.45

CONSTRUCTION PHASE SEDIMENT BASIN 2 LAYOUT



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Client:



FPI QUEENSLAND PTY. LTD.

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD DRIVE, STAPYLTON QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM
RL:

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Drawing Title:

CONSTRUCTION PHASE SEDIMENT BASIN 2 LAYOUT

Rev	Date	Description	DRN	CHK
C	11/12/24	SWD & BASIN 2 UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED A3 REDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 2.5 5.0 7.5 10 12.5m
1:250 (A1) 1:500 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

5941 ENG CW3 311

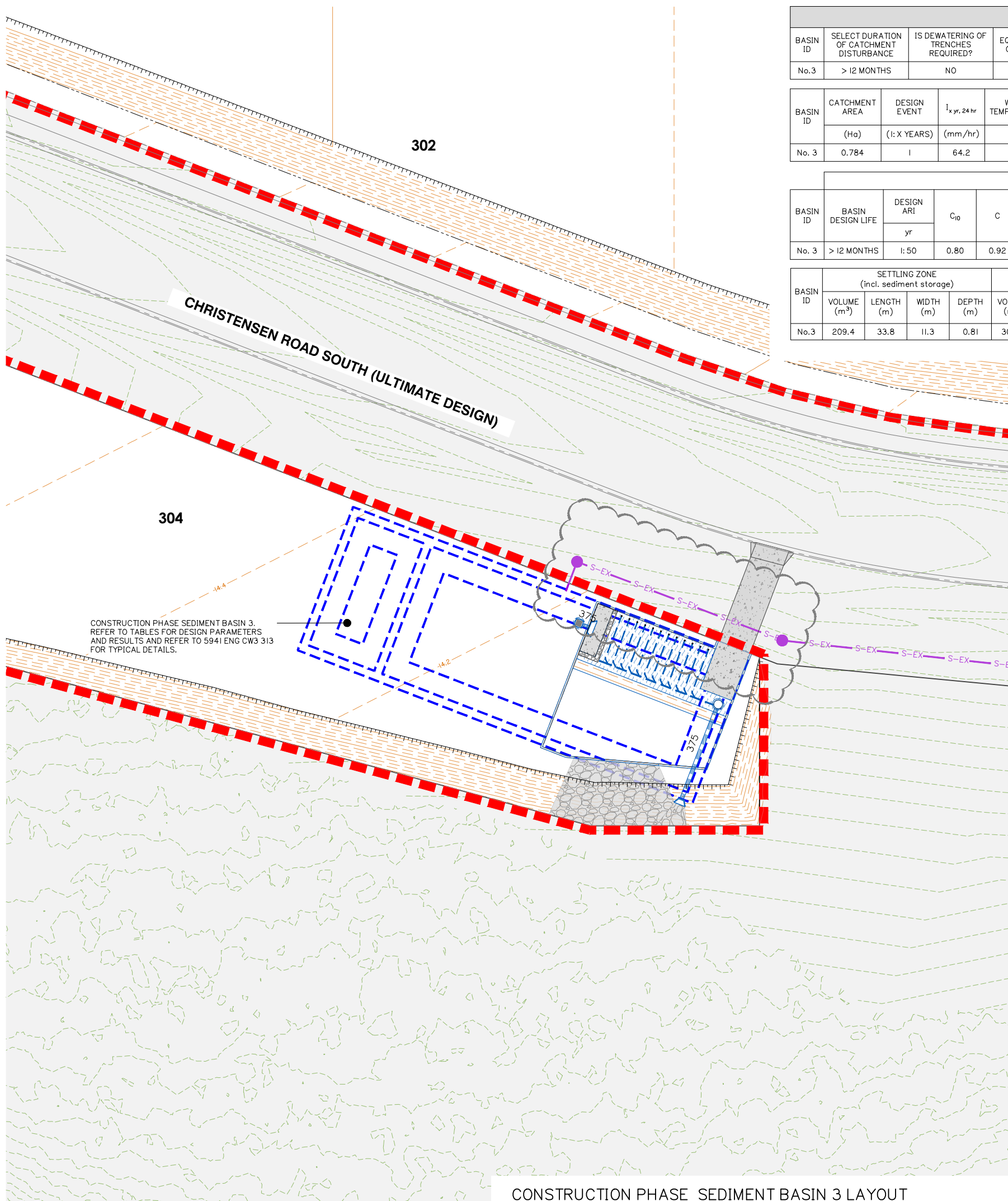
Revision

C

NOTE:

- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG CW3 004.
- FOR GENERAL NOTES, REFER TO 5941 ENG CW3 002 AND 5941 ENG CW3 003.
- FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG CW3 100.

g:\Projects\5941\Engineering\Acadocivil works stage 3\Current\5941 ENG CW3 310.dwg



SEDIMENT BASIN 3 DESIGN							
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT
No.3	> 12 MONTHS	NO	LEASE	< 5Ha	NO	TYPE B	FLOC-BOX

BASIN ID	CATCHMENT AREA	DESIGN EVENT	$I_{x \text{ yr, 24 hr}}$	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W:L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q_d)	MIN SETTling ZONE VOLUME (Min V_s)	MIN SETTling ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
	(Ha)	(1:X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1:X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
No. 3	0.784	1	64.2	20	—	0.6	3	—	—	161	—	VOLUME

SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C_{10}	C	t_c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)	(m)	(m)	(m)	(m)
No. 3	> 12 MONTHS	1:50	0.80	0.92	20.00	34.40	0.07	0.30	3.00	13.90	14.20

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
No.3	209.4	33.8	11.3	0.81	30.77	3.4	11.3	0.81	3.0	13.90	14.2	13.92

Client:

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian:
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Drawing Title:

CONSTRUCTION PHASE
SEDIMENT BASIN 3
LAYOUT

Rev	Date	Description	DRN	CHK
C	21/03/25	SEWER LINE UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 2.5 5.0 7.5 10 12.5m
1:250 (A1) 1:500 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

5941 ENG CW3 312

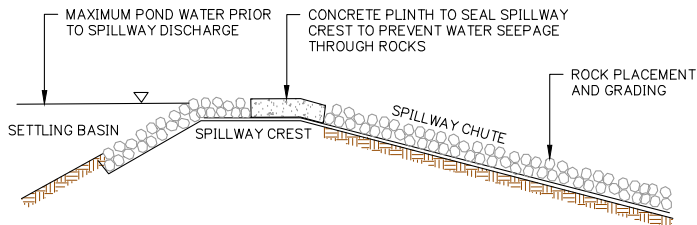
Revision

C

NOTE:

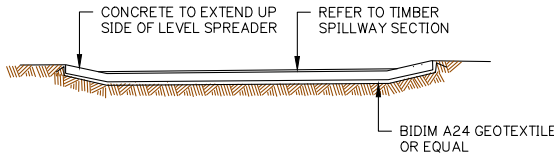
- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG CW3 004.
- FOR GENERAL NOTES, REFER TO 5941 ENG CW3 002 AND 5941 ENG CW3 003.
- FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG CW3 100.

CONSTRUCTION PHASE SEDIMENT BASIN 3 LAYOUT



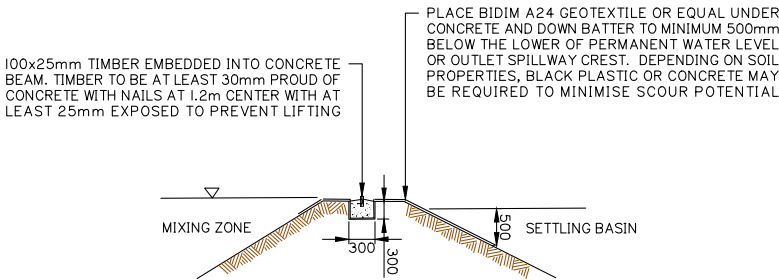
OUTLET SPILLWAY DETAILS
TYPICAL CROSS SECTION

NOT TO SCALE



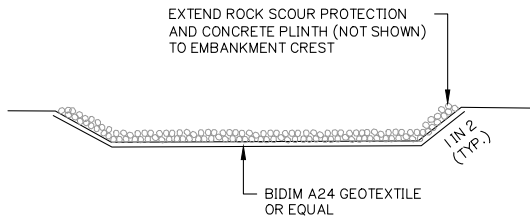
LEVEL SPREADER DETAILS
TYPICAL LONG SECTION

NOT TO SCALE



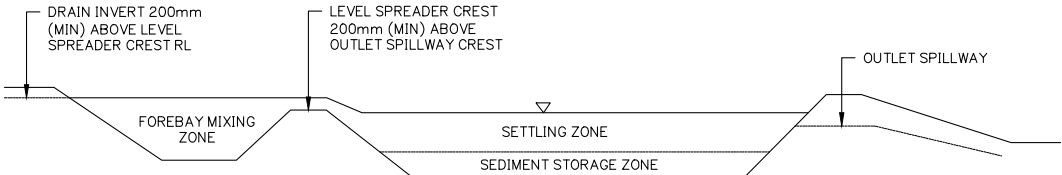
LEVEL SPREADER DETAILS
TYPICAL CROSS SECTION

NOT TO SCALE



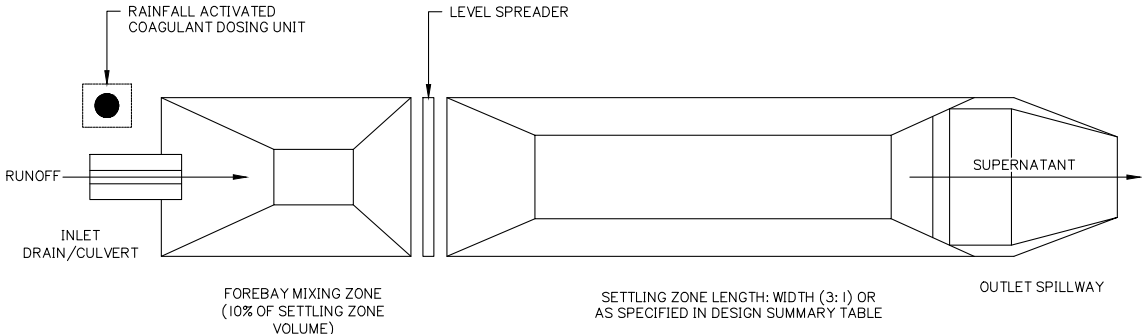
OUTLET SPILLWAY DETAILS
TYPICAL LONGITUDINAL SECTION

NOT TO SCALE



TYPE A SEDIMENT BASIN LONGITUDINAL SECTION (TYP.)

NOT TO SCALE



TYPE A SEDIMENT BASIN PLAN VIEW (TYP.)

NOT TO SCALE

CONSTRUCTION PHASE SEDIMENT BASIN TYPICAL SECTIONS

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
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Drawing Title:

CONSTRUCTION PHASE
SEDIMENT BASIN
TYPICAL SECTIONS

A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE: A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:

NOT APPLICABLE

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

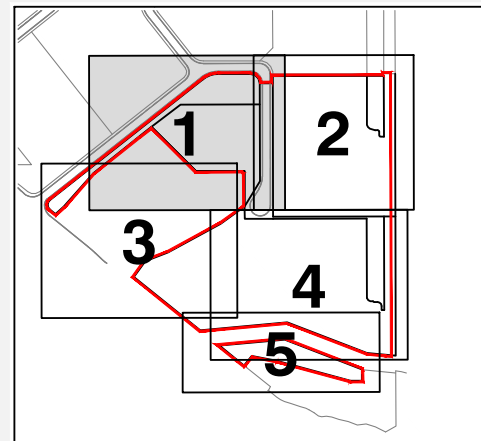
Drawing No:

Revision

5941 ENG CW3 313

A

FOR CONTINUATION REFER SHEET 3



KEY PLAN
NOT TO SCALE

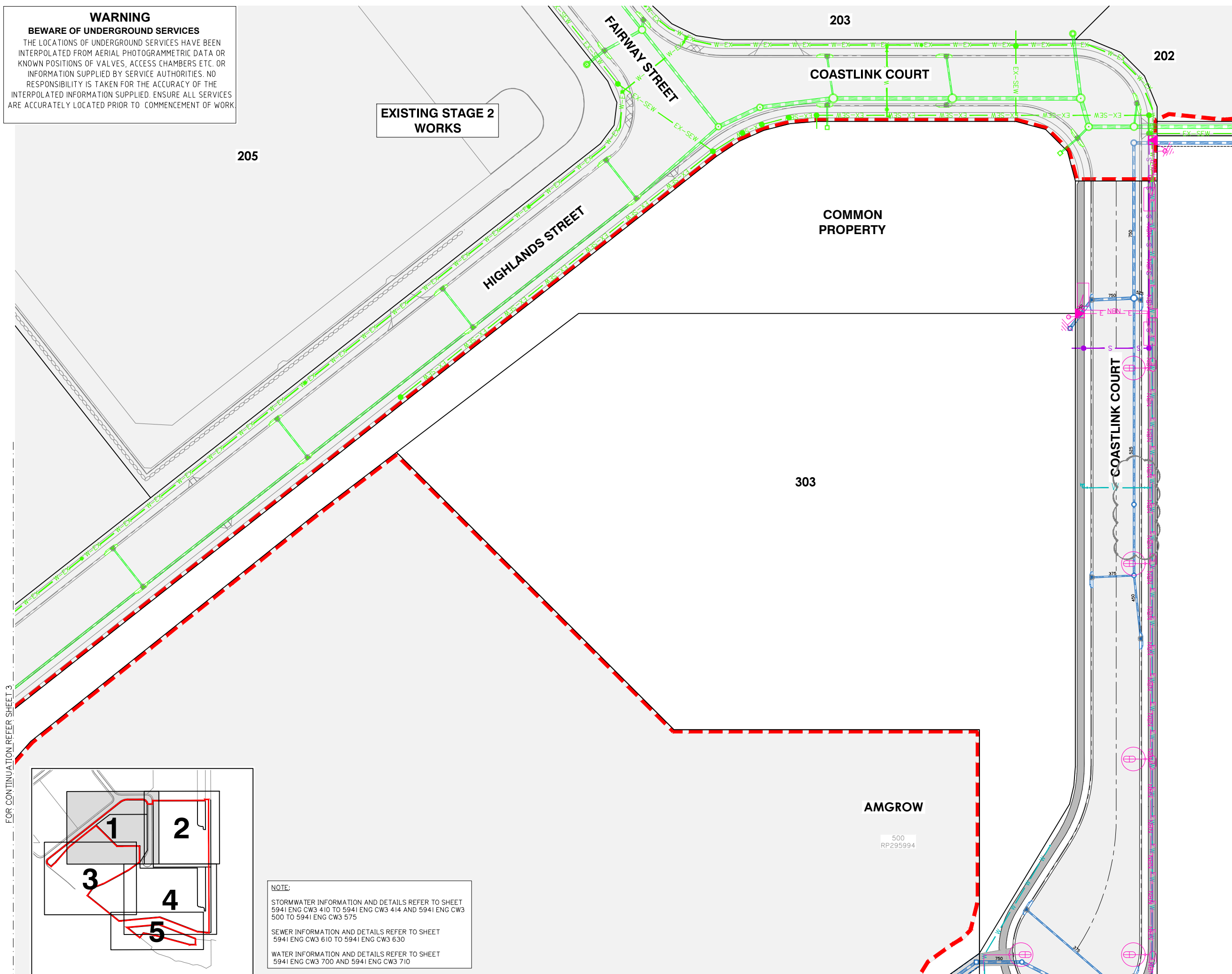
NOTE:

STORMWATER INFORMATION AND DETAILS REFER TO SHEET
594I ENG CW3 410 TO 594I ENG CW3 414 AND 594I ENG CW3
590 TO 594I ENG CW3 575

SEWER INFORMATION AND DETAILS REFER TO SHEET
594I ENG CW3 610 TO 594I ENG CW3 630

WATER INFORMATION AND DETAILS REFER TO SHEET
594I ENG CW3 700 AND 594I ENG CW3 710

OVERALL SERVICES LAYOUT PLAN SHEET 1 OF 5



FOR CONTINUATION REFER SHEET 2



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Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
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GENERAL NOTES.

Drawing Title:

OVERALL SERVICES
LAYOUT PLAN
SHEET 1 OF 5

F	11/04/25	SWD MANHOLE ADDED	JH	MC
E	26/03/25	STORMWATER LINE UPDATED	JH	MC
D	05/03/25	STORMWATER LAYOUT UPDATED	JH	MC
C	11/12/24	SWD & BASIN 2 UPDATED	JH	MC
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MC
B	08/02/24	FOOTPATH AMENDED	JH	MC
A	25/05/23	ORIGINAL ISSUE	JH	MC
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:

0 10 20 30 40m

1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Approved:

MG

RPEQ

16939

Cinco

~~11/1/15~~

Date:

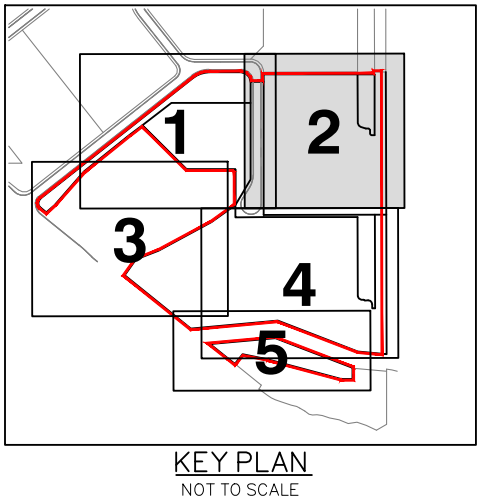
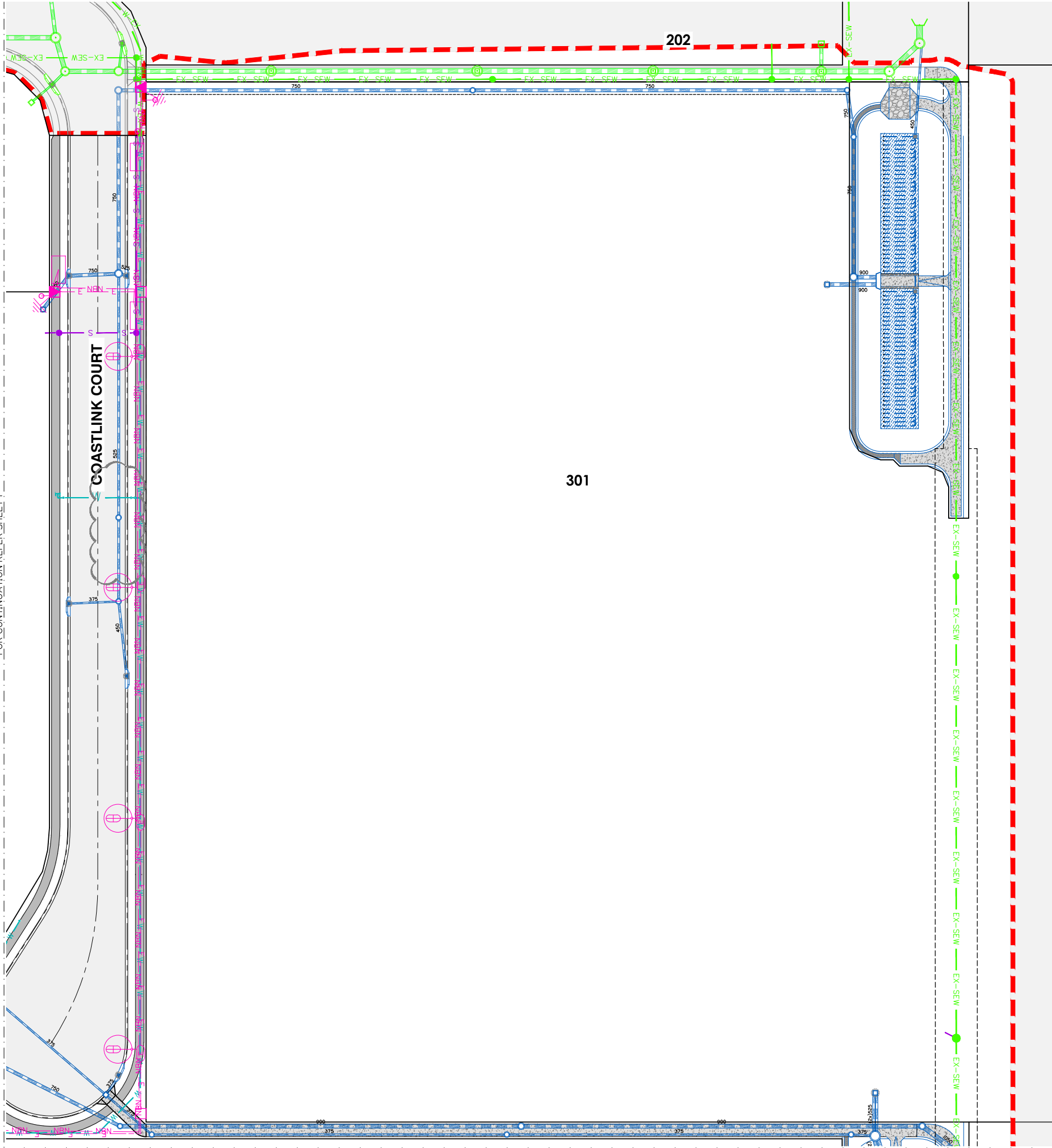
28/09/2023

Drawing No:

5941 ENG CW3 380

Revision

1



WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:
STORMWATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 410 TO 5941 ENG CW3 414 AND 5941 ENG CW3 500 TO 5941 ENG CW3 575
SEWER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 610 TO 5941 ENG CW3 630
WATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 700 AND 5941 ENG CW3 710

3
RP209307

Rev	Date	Description	JH	MG
G	11/04/25	SWD MANHOLE ADDED	JH	MG
F	26/03/25	STORMWATER LINE UPDATED	JH	MG
E	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
D	11/11/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM
RL:

ISSUED FOR
CONSTRUCTION

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Drawing Title:

OVERALL SERVICES
LAYOUT PLAN
SHEET 4 OF 5

Rev	Date	Description	DRN	CHK
D	11/12/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE: A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

5941 ENG CW3 383

Revision

D

302

3
RP209307

304

CHRISTENSEN ROAD SOUTH (ULTIMATE DESIGN)

WARNING

BEWARE OF UNDERGROUND SERVICES

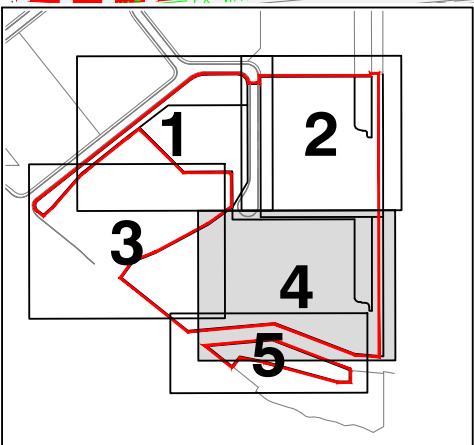
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN
INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR
KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR
INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO
RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE
INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES
ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:

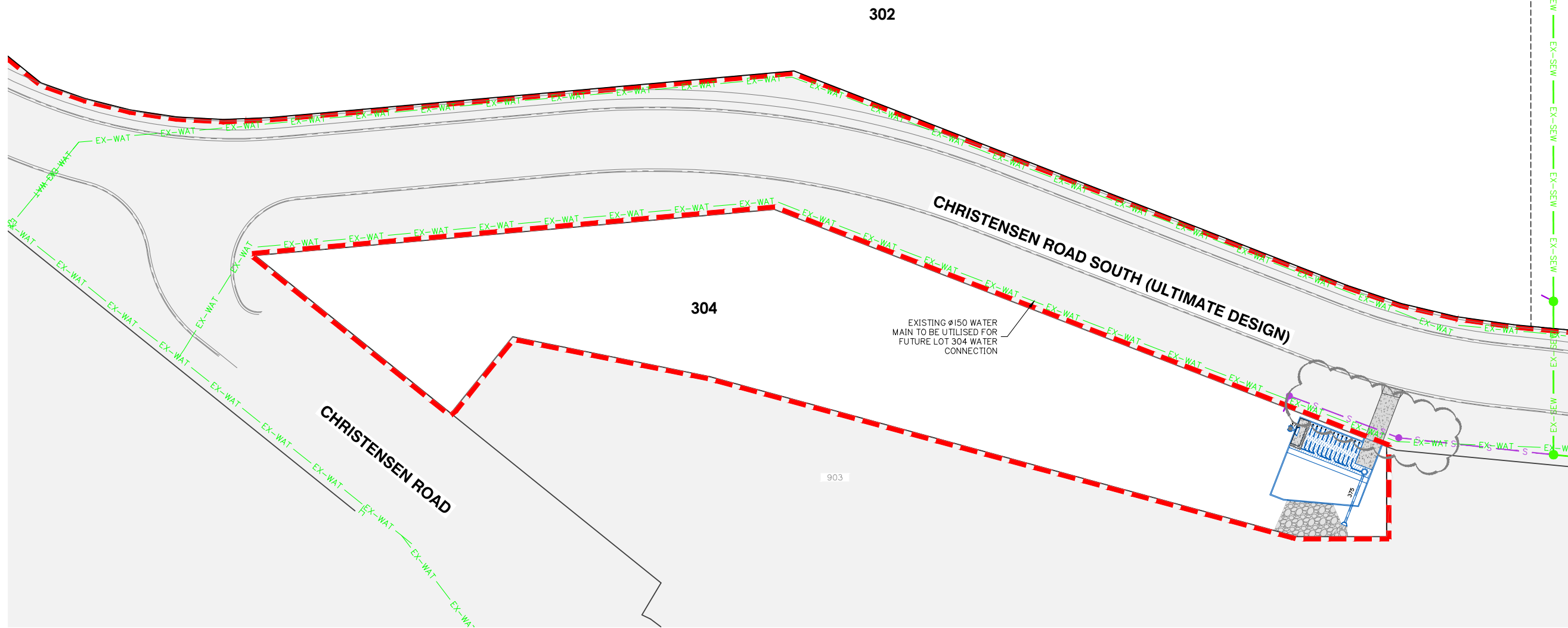
STORMWATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG CW3 410 TO 5941 ENG CW3 414 AND 5941 ENG CW3
500 TO 5941 ENG CW3 575

SEWER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG CW3 610 TO 5941 ENG CW3 630

WATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG CW3 700 AND 5941 ENG CW3 710



KEY PLAN
NOT TO SCALE

**WARNING****BEWARE OF UNDERGROUND SERVICES**

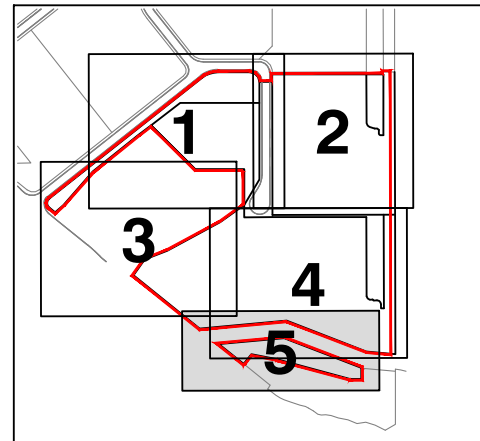
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:

STORMWATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 410 TO 5941 ENG CW3 414 AND 5941 ENG CW3 500 TO 5941 ENG CW3 575

SEWER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 610 TO 5941 ENG CW3 630

WATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 700 AND 5941 ENG CW3 710



KEY PLAN
NOT TO SCALE

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

OVERALL SERVICES
LAYOUT PLAN
SHEET 5 OF 5

Rev	Date	Description	DRN	CHK
C	21/03/25	SEWER LINE UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

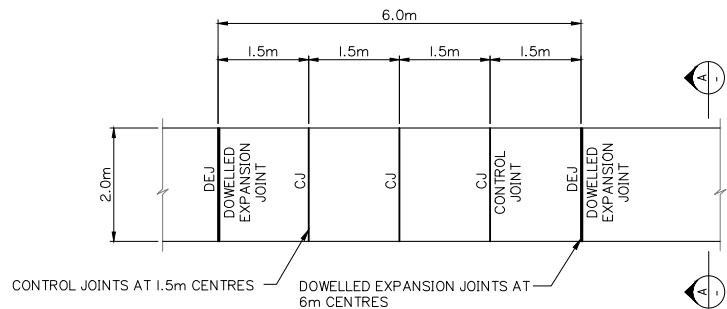
28/09/2023

Drawing No:

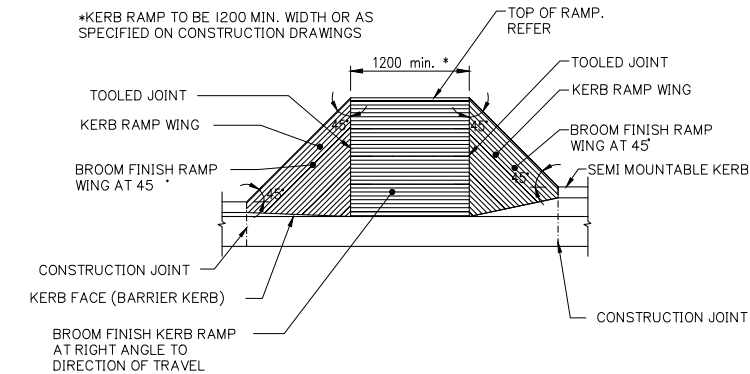
5941 ENG CW3 384

Revision

C

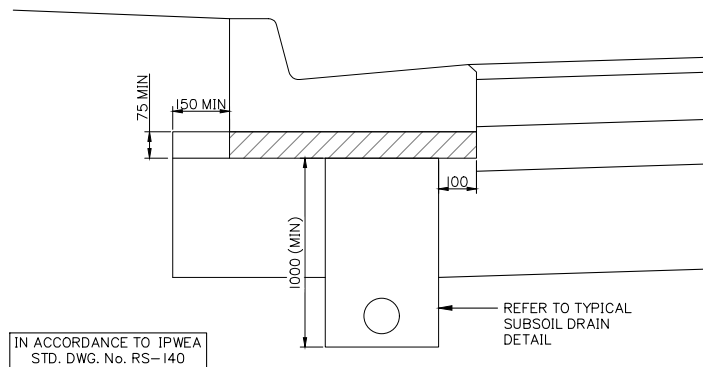


JOINT PLAN
SCALE: N.T.S

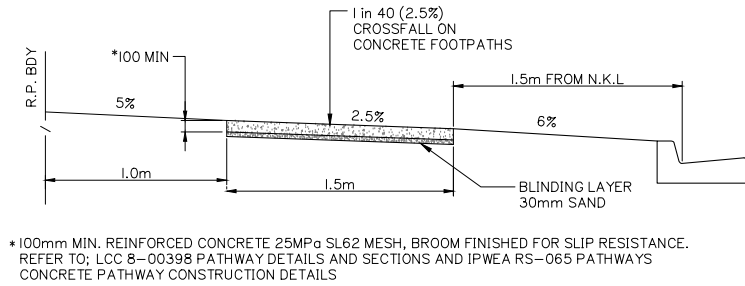


TYPICAL COMPLIANT KERB RAMP DETAIL
NOT TO SCALE

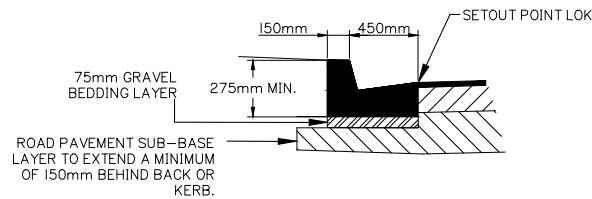
NOTE: KERB RAMPS ARE DESIGNED IN ACCORDANCE TO IPWEAQ STANDARD DWGS No. RS-090 & RS-091



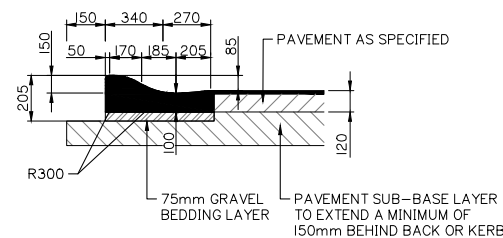
TYPICAL SUBSOIL DRAIN
SCALE: N.T.S



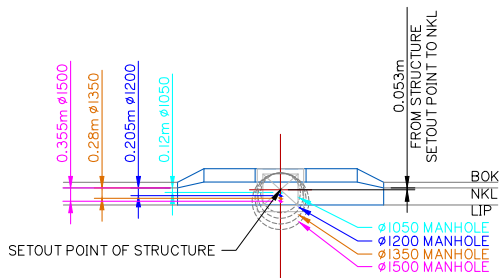
1.5m CONCRETE FOOTPATH DETAIL



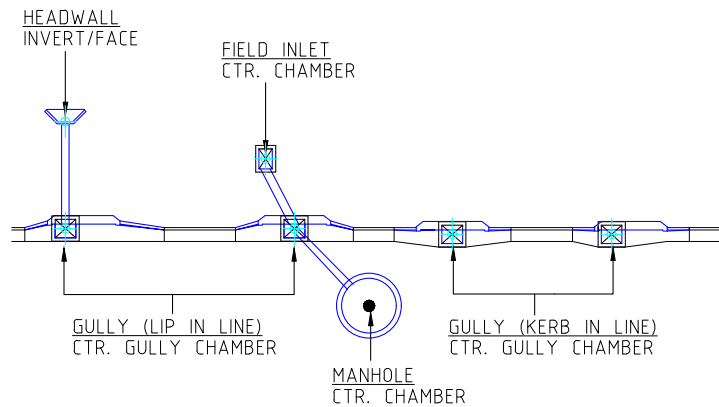
BARRIER KERB AND CHANNEL (TYPE B1 IPWEAQ)



MOUNTABLE KERB (TYPE M3 IPWEAQ)

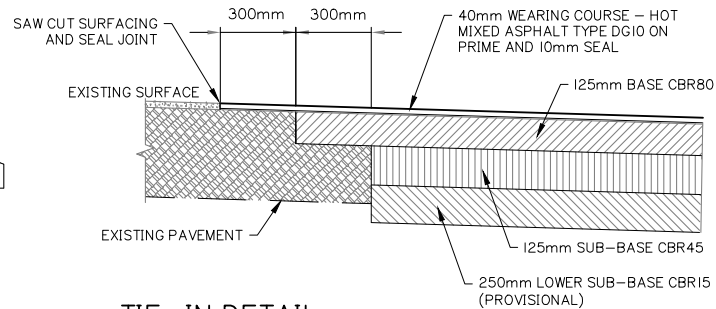


SETOUT DETAIL FOR DRAINWAY STRUCTURES
N.T.S.



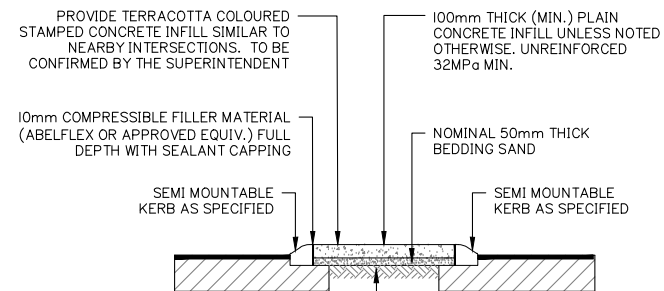
NOTE: 1. ALL SETOUT POINT LOCATIONS ARE AT CENTRE OF GULLY OR MANHOLE CHAMBER

DETAIL - SETOUT POINTS FOR IPWEA GULLIES, MANHOLES, FIELD INLETS AND HEADWALLS
N.T.S.

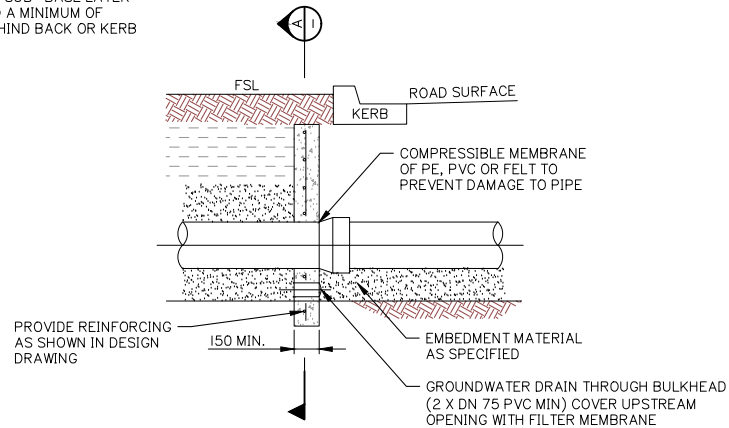


TIE-IN DETAIL
NOT TO SCALE

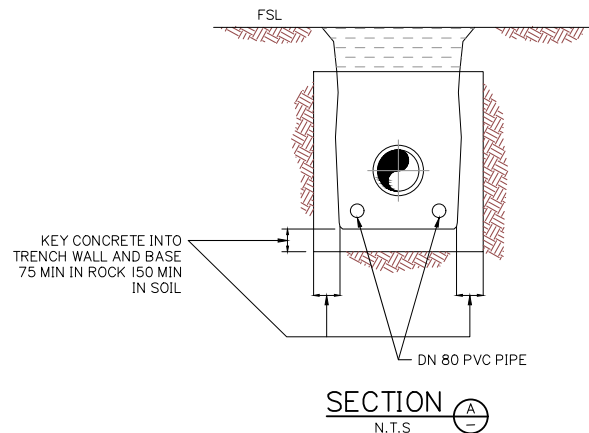
NOTE: PAVEMENT PROFILE INDICATIVE ONLY. SUBJECT TO IN-SITU CBR TESTING AND PAVEMENT DESIGN & APPROVAL BY COUNCIL



MEDIAN ISLAND INFILL
N.T.S.
AS PER STANDARD DRAWING IPWEA STD DWG No. RS-065.



TYPICAL ROAD CROSSING BULKHEAD
N.T.S.



SECTION
N.T.S.

Client:



Project:

**VANTAGE YATALA
STAGE 3**

Site Address:

**LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207**

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian: PSM:
RL:

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Drawing Title:

**ROADWORKS AND
DRAINAGE TYPICAL
DETAILS SHEET 1 OF 3**

Rev	Date	Description	DRN	CHK
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	DETAIL AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED

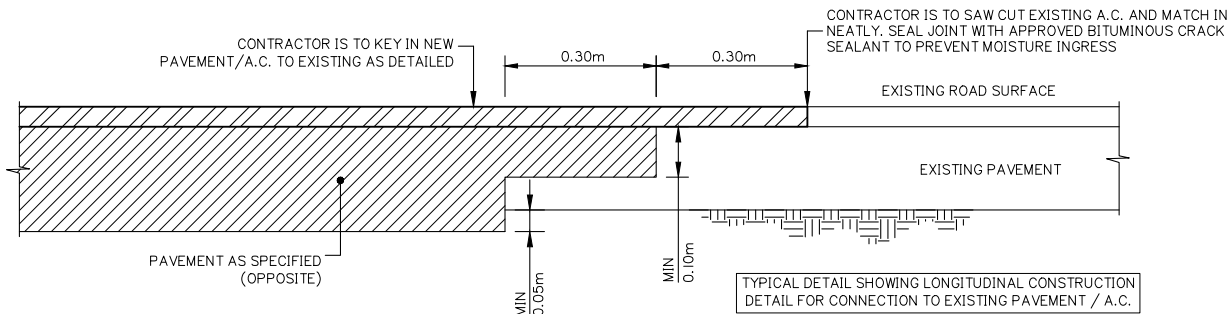
Scale:

NOT TO SCALE

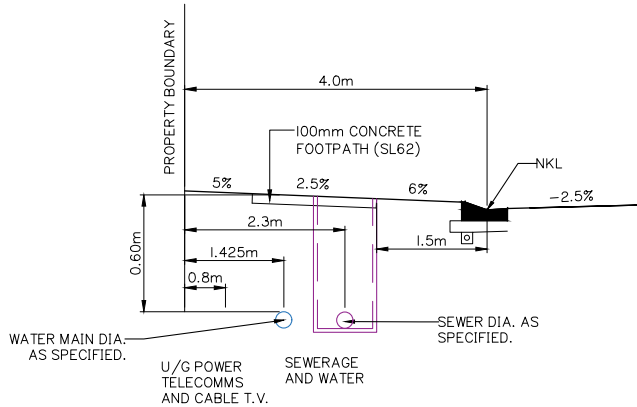
PROJECT NORTH POINT



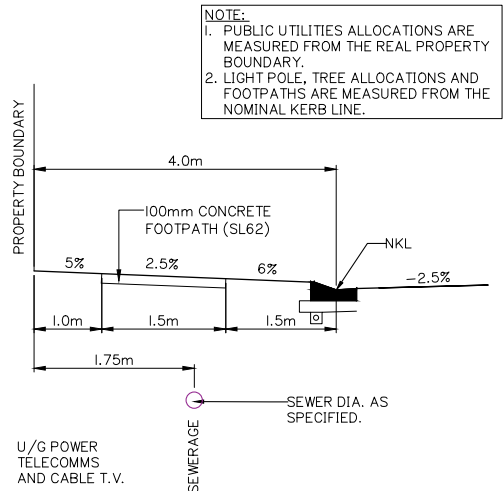
Project No. 5941	Revision
Designed: JH	Drafted: JH
Approved: MG	
RPEQ 16939	
Signed: [Signature]	
Date: 28/09/2023	
Drawing No: 5941 ENG CW3 400	



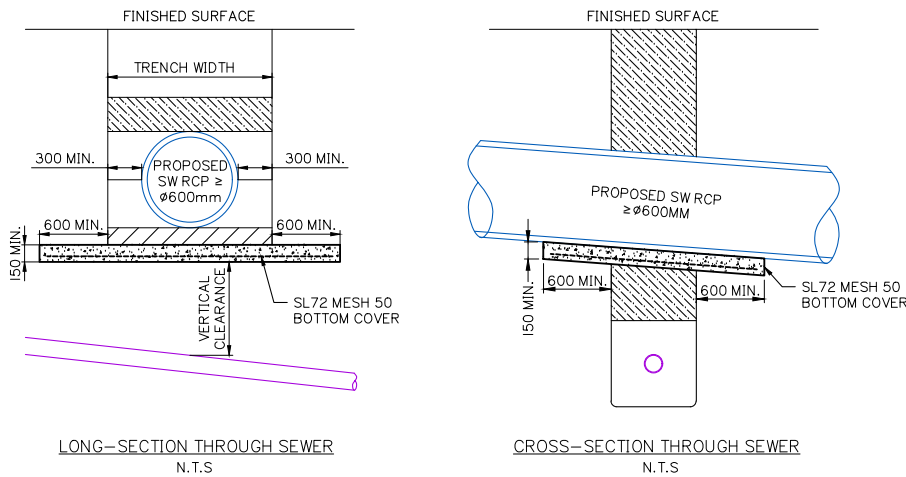
CONNECTION TO EXISTING PAVEMENT
N.T.S



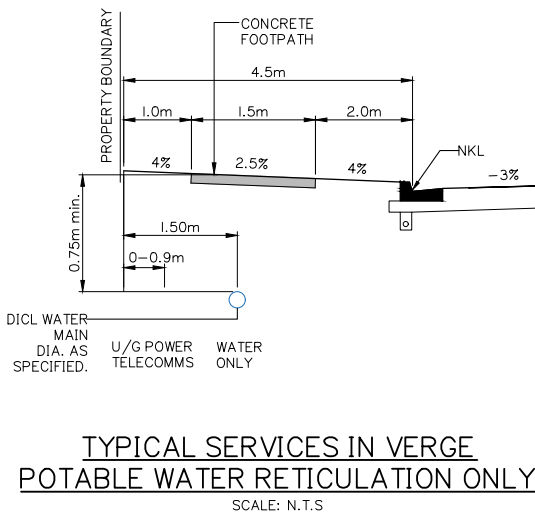
TYPICAL SERVICES POTABLE WATER
AND SEWER RETICULATION
SCALE: N.T.S



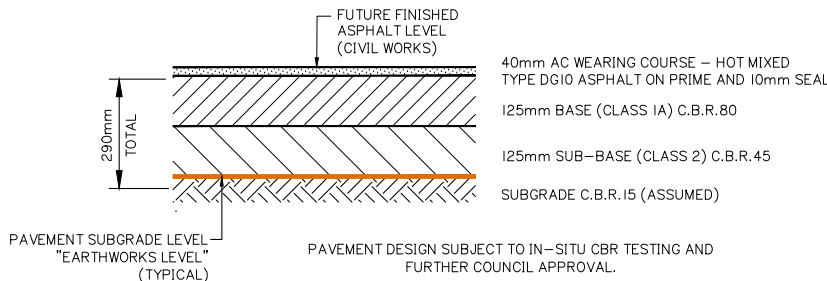
TYPICAL SERVICES SEWER
RETICULATION ONLY
SCALE: N.T.S



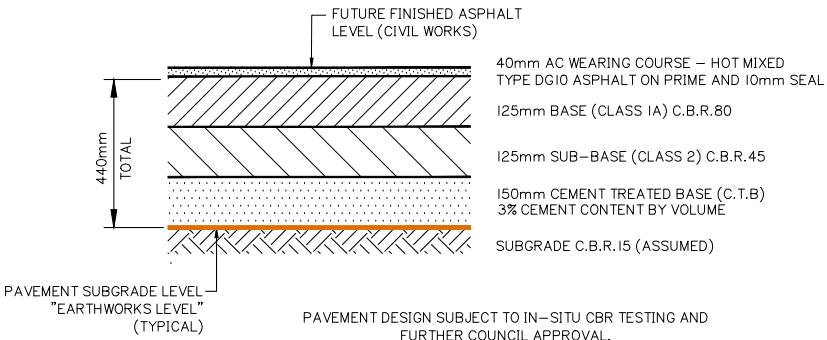
CONCRETE BRIDGING SLAB FOR
STORMWATER PIPES $\geq \phi 600$ mm
SCALE: N.T.S



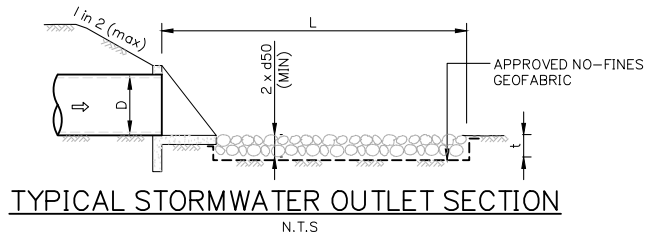
TYPICAL SERVICES IN VERGE
POTABLE WATER RETICULATION ONLY
SCALE: N.T.S



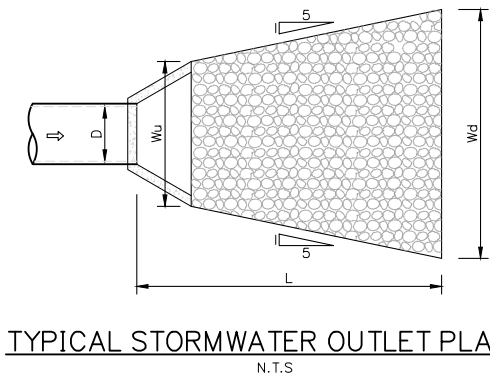
NOMINAL ROAD PAVEMENT DETAIL – IN FILL AREAS
INDUSTRIAL COLLECTOR & ACCESS STREET
N.T.S



NOMINAL ROAD PAVEMENT DETAIL – IN CUT AREAS
INDUSTRIAL COLLECTOR & ACCESS STREET
N.T.S



TYPICAL STORMWATER OUTLET SECTION
N.T.S



TYPICAL STORMWATER OUTLET PLAN
N.T.S

ROCK GRADATION TABLE						
SMALLEST DIMENSION IN (mm)						% OF ROCK SMALLER THAN SIZE SHOWN
150d ₅₀	200d ₅₀	300d ₅₀	400d ₅₀	500d ₅₀	600d ₅₀	
300	380	525	630	750	850	100
200	300	450	550	650	750	50–70
150	200	300	400	500	600	35–50
50	75	100	130	150	175	2–10

ROCK SIZE (M)	ROCK MASS (KG)	MIN. PERCENTAGE OF ROCKS LARGER THAN
0.40	100	0
0.30	35	50
0.15	25	90

NOTES:

- MINIMUM THICKNESS ROCK PROTECTION: 800mm MIN – UNDERLAY ROCK PROTECTION WITH 'TERRAFIX' XP310 GEOFABRIC OR EQUIVALENT.
- ROCKS SHALL BE DENSE, HARD & DURABLE.
- ANGULAR ROCK TO BE LAYED WITH LARGEST FACE VISIBLE.
- ROCK SIZE TO BE GRADED AS PER TABLE SHOWN.
- REFER ALSO ENERGY DISSIPATION DESIGN CALCULATIONS (ABOVE)

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian: PSM:
RL:

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Drawing Title:

ROADWORKS AND
DRAINAGE TYPICAL
DETAILS SHEET 2 OF 3

A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

NOT TO SCALE

PROJECT NORTH POINT



Project No:	5941	
Designed:	JH	Drafted: JH
Approved:		MG
RPEQ		16939
Signed:		
Date:		28/09/2023
Drawing No:	5941 ENG CW3 401	Revision A

FPI QUEENSLAND
PTY. LTD.

VANTAGE YATALA STAGE 3

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

Level Datum: AHD
Meridian:
PSM:
RL:

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ROADWORKS AND
DRAINAGE TYPICAL
DETAILS SHEET 3 OF 3

B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	DETAIL AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

NOT TO SCALE

Drawing No:	Revision
5941 ENG CW3 402	B



Rev	Date	Description	DRN	CHK
G	11/04/25	SWD MANHOLE ADDED	JH	MG
F	11/04/25	LAYOUT UPDATED	JH	MG
E	26/03/25	STORMWATER LINE UPDATED	JH	MG
D	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
C	11/12/24	LAYOUT UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

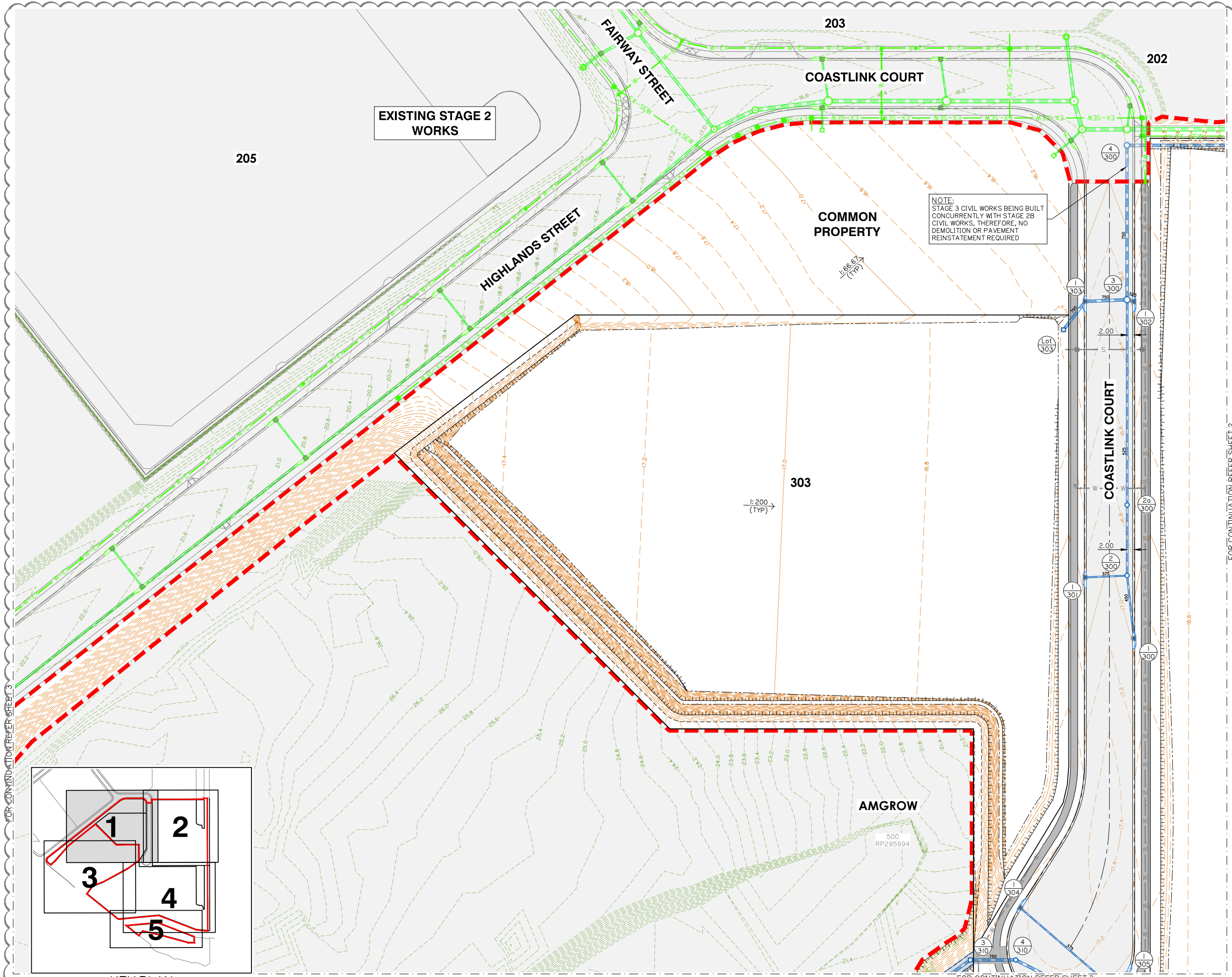
DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE: A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

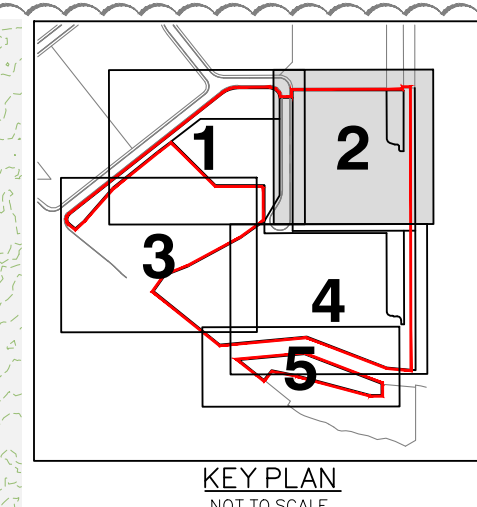
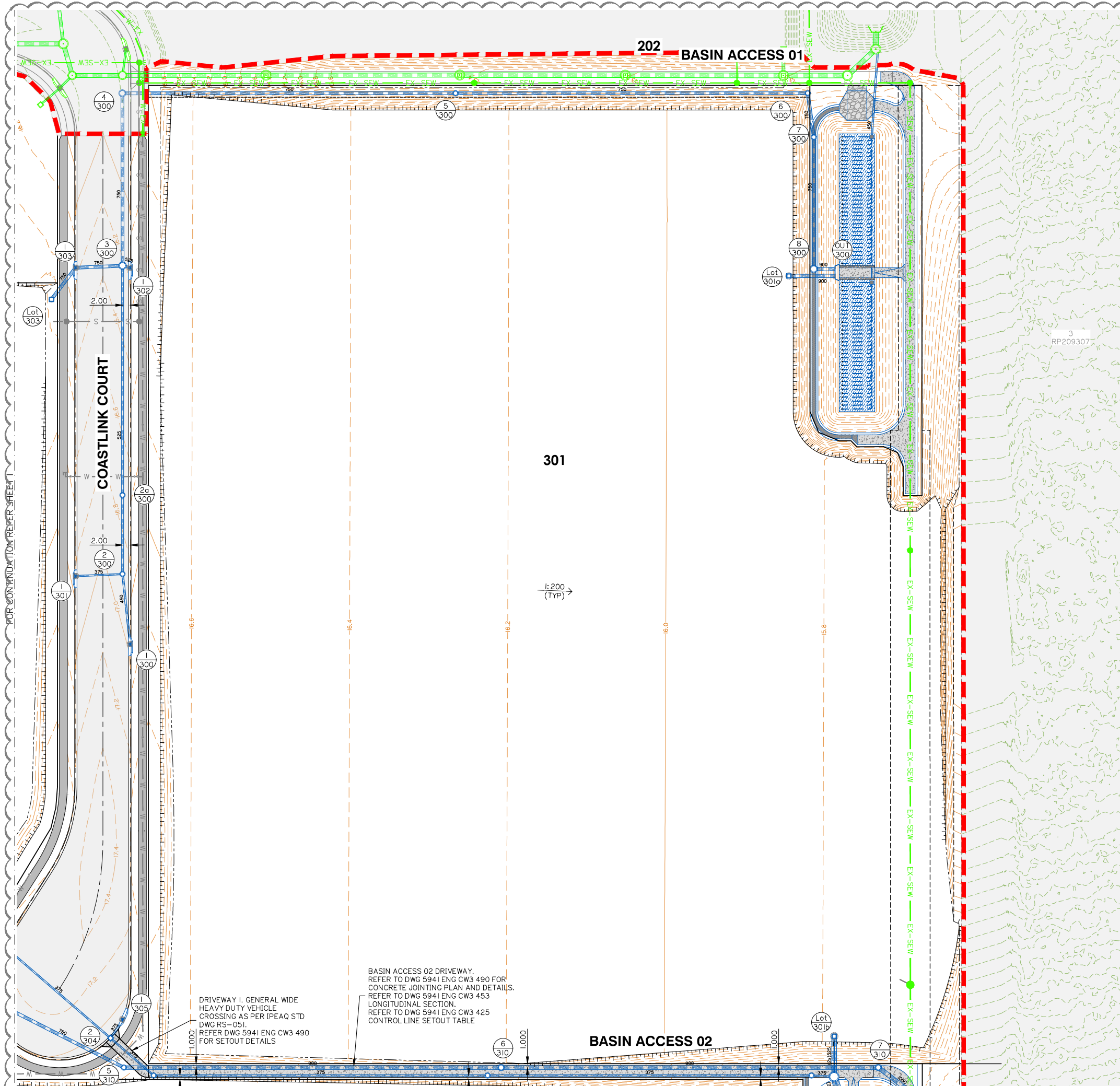
Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No:	5941
Designed:	JH
Drafted:	JH
Approved:	MG
RPEQ:	16939
Signed:	
Date:	28/09/2023





Client:



Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot:	504
Plan:	SP329485
Local Authority:	CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 2 OF 5

H	11/04/25	SWD MANHOLE ADDED	JH	MG
G	11/04/25	LAYOUT UPDATED	JH	MG
F	26/03/25	STORMWATER LINE UPDATED	JH	MG
E	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
D	11/12/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AVENUE	JH	MG
A	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:



PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

169.39

Signed

[Signature]

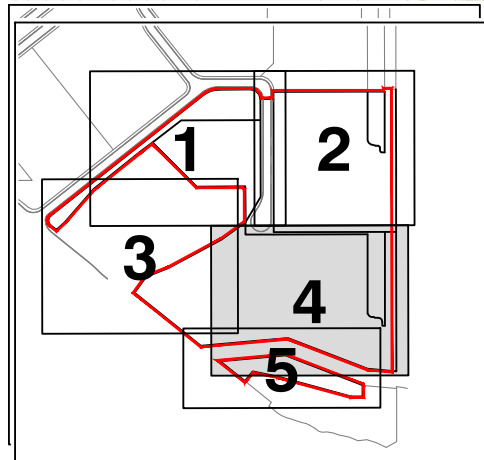
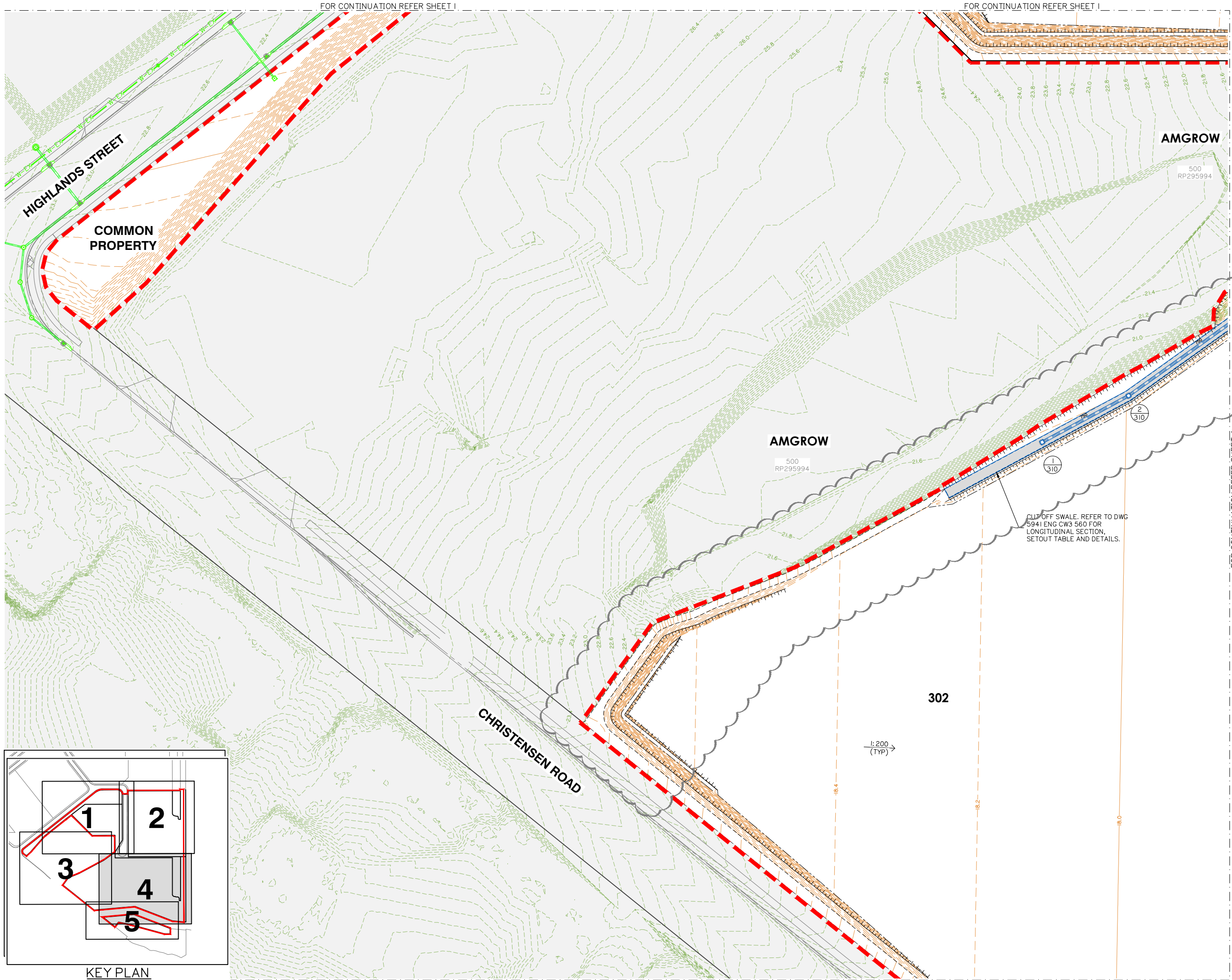
Date:

Drawing No:

5941 ENG CW3 411

Revision

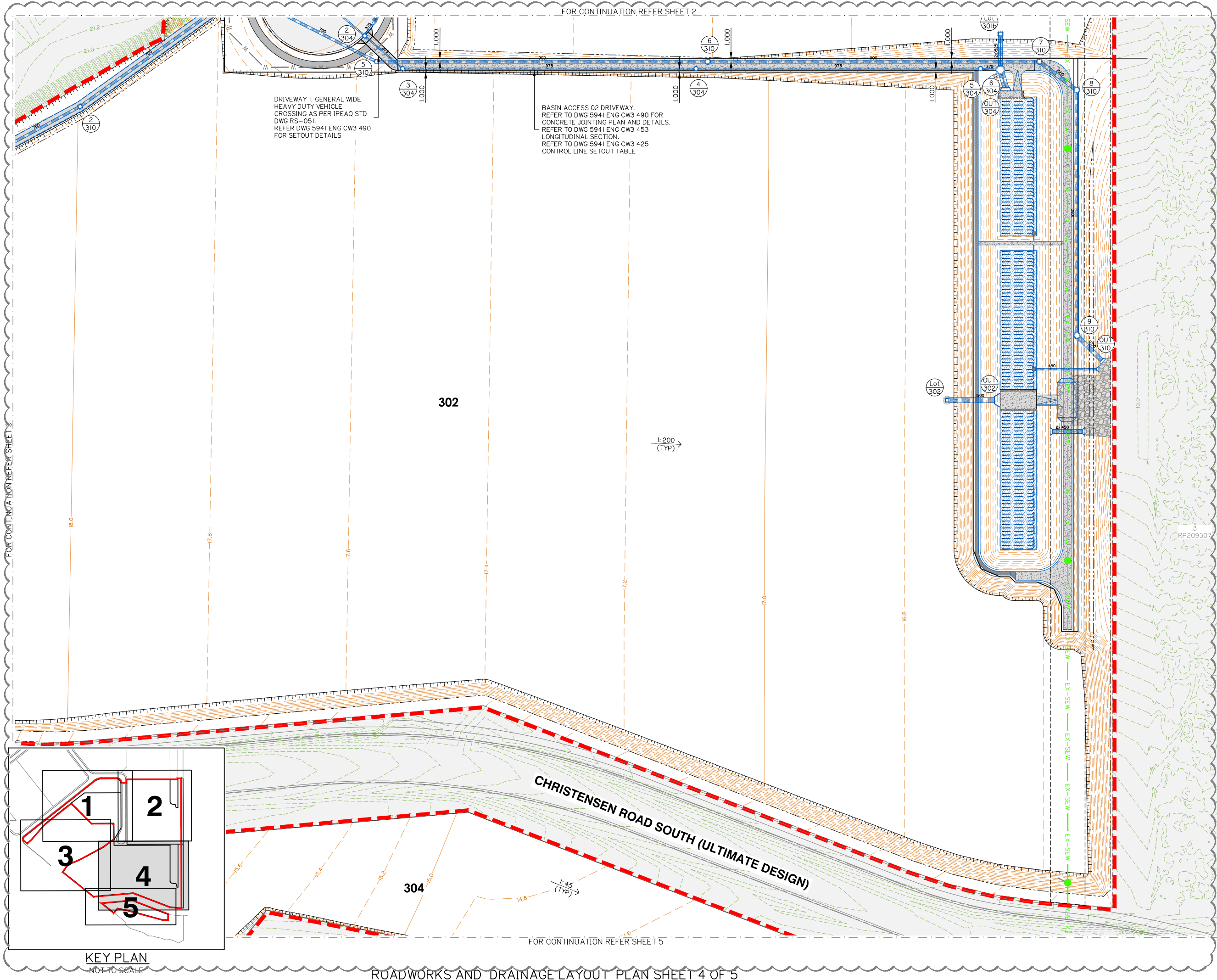
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Rev	Date	Description	DRN	CHK
B	11/12/24	LAYOUT UPDATED	JH	MG
A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

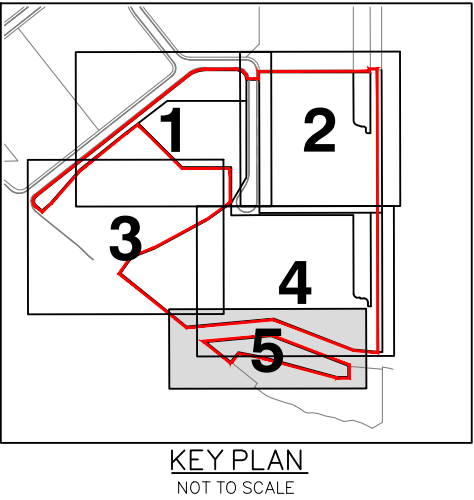
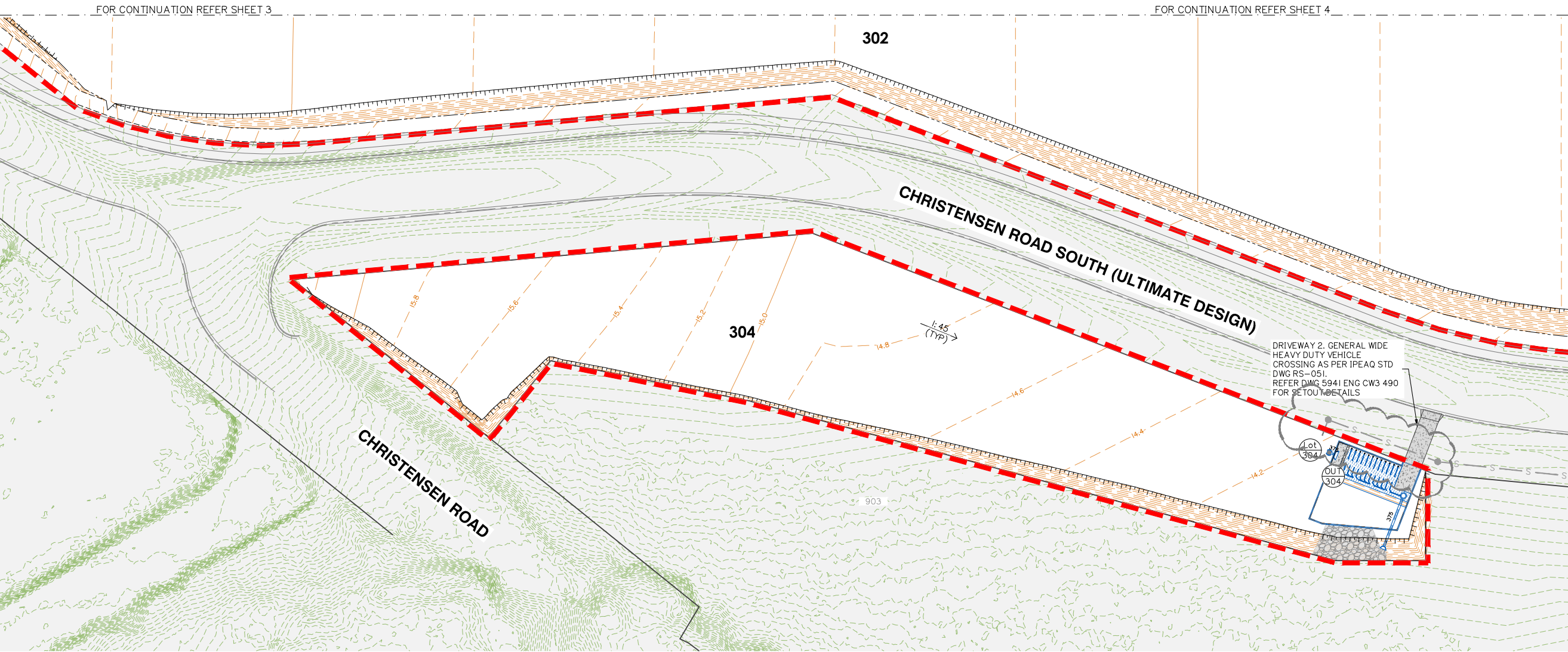
Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)



Rev	Date	Description	DRN	CHK
E	11/04/25	LAYOUT UPDATED	JH	MG
D	11/11/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
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B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)



ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 5 OF 5



planning | environment | landscape | engineering | survey
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Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR
CONSTRUCTION

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Drawing Title:

ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 5 OF 5

Rev	Date	Description	DRN	CHK
C	21/03/25	SEWER LINE UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

5941 ENG CW3 414

Revision

C

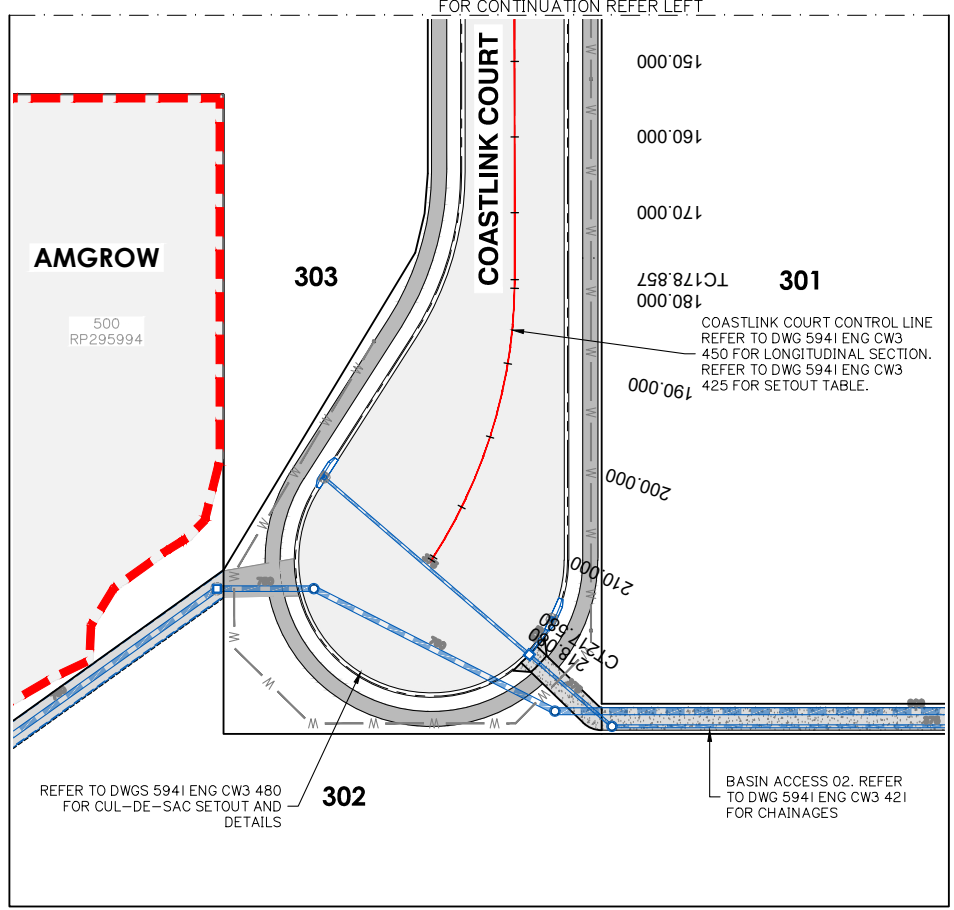
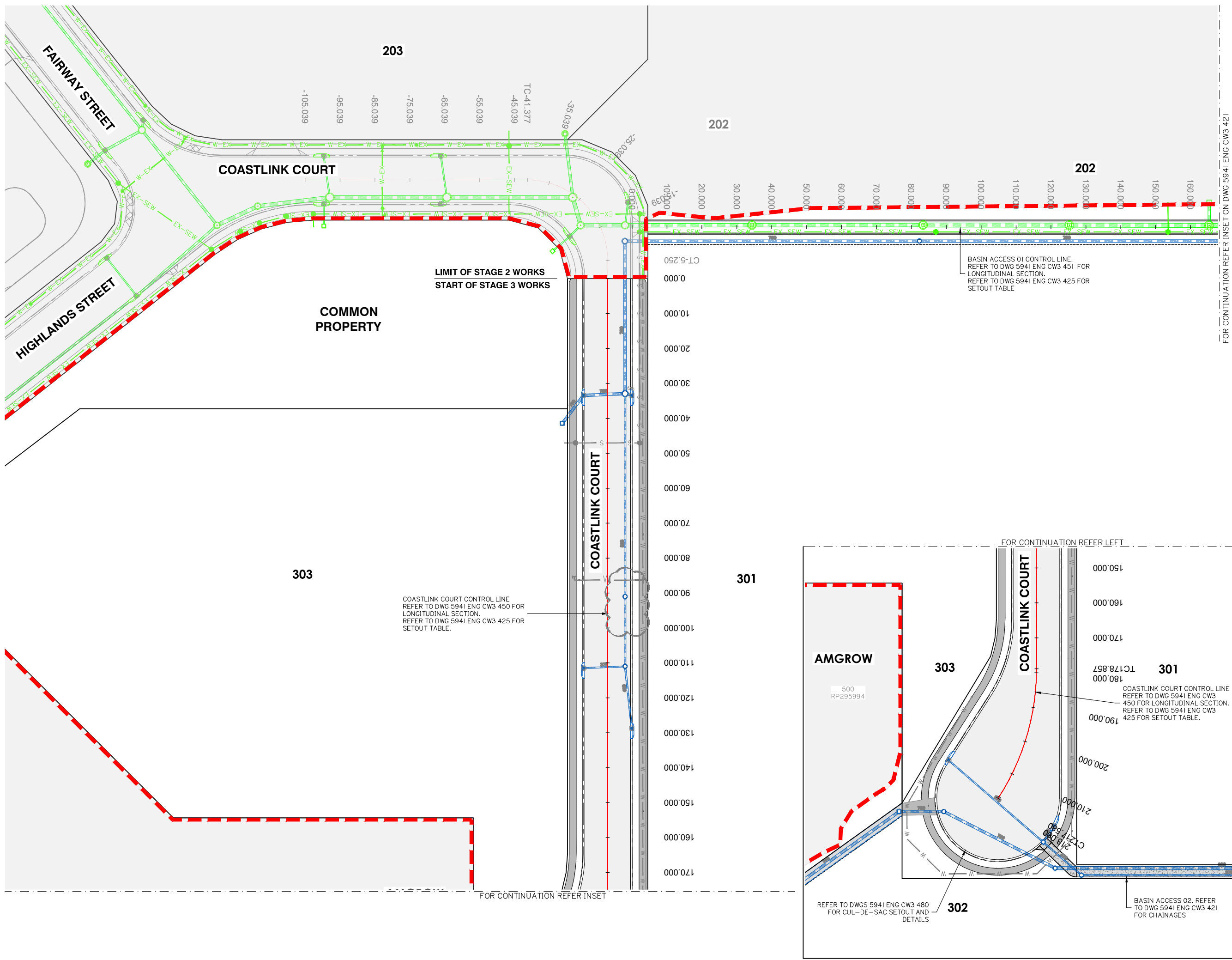
Rev	Date	Description	DRN	CHK
E	11/04/25	SWD MANHOLE ADDED	JH	MG
D	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
C	11/12/24	SWD UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

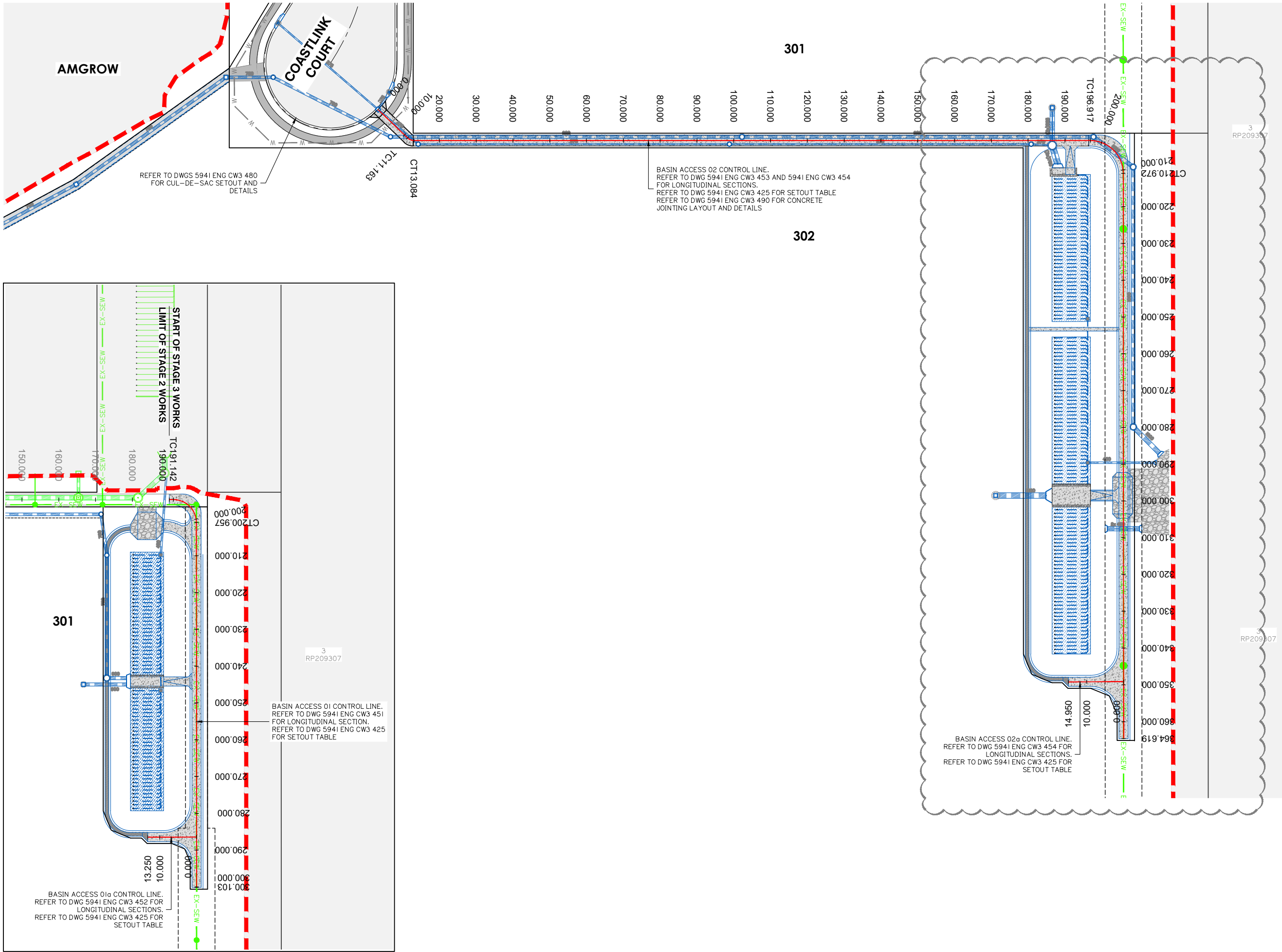
DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)



Project No:	5941
Designed:	JH
Drafted:	JH
Approved:	MG
RPEQ:	16939
Signed:	
Date:	28/09/2023
Drawing No:	5941 ENG CW3 420
Revision:	E





Rev	Date	Description	DRN	CHK
C	11/12/24	SWD & BASIN 2 UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

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COASTLINK COURT – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE	STAGE
IP 1	-105.039	2771.372	6552.735	16.713	99°13'15.55"				STAGE 2
	-100.000	2776.345	6551.927	16.662	99°13'15.55"				
	-90.000	2786.216	6550.325	16.562	99°13'15.55"				
	-80.000	2796.087	6548.722	16.462	99°13'15.55"				
	-70.000	2805.958	6547.120	16.362	99°13'15.55"				
TC	-60.000	2815.828	6545.518	16.262	99°13'15.55"				
	-50.000	2825.699	6543.915	16.162	99°13'15.55"				
	-41.377	2834.211	6542.533	16.076	99°13'15.55"				
	-40.000	2835.563	6542.272	16.062	102°39'05.75"				
	-30.000	2844.547	6538.062	15.971	127°33'46.10"				
IP 2	-23.313	2856.913	6538.848	15.938		R = 23.000	36.127	89°59'51.40"	STAGE 3
	-20.000	2850.922	6530.460	15.930	152°28'26.45"				
	-10.000	2853.501	6520.880	15.942	177°23'06.80"				
CT	-5.250	2853.228	6516.146	15.967	189°13'06.95"				
IP 3	0.000	2852.387	6510.964	16.008					
	10.000	2850.785	6501.093	16.118	189°13'09.83"				
	20.000	2849.183	6491.222	16.232	189°13'09.83"				
	30.000	2847.581	6481.352	16.342	189°13'09.83"				
	40.000	2845.978	6471.481	16.443	189°13'09.83"				
	50.000	2844.376	6461.610	16.536	189°13'09.83"				
	60.000	2842.774	6451.739	16.621	189°13'09.83"				
	70.000	2841.172	6441.868	16.703	189°13'09.83"				
	80.000	2839.570	6431.997	16.785	189°13'09.83"				
	90.000	2837.968	6422.127	16.867	189°13'09.83"				
	100.000	2836.365	6412.256	16.949	189°13'09.83"				
	110.000	2834.763	6402.385	17.031	189°13'09.83"				
	120.000	2833.161	6392.514	17.112	189°13'09.83"				
	130.000	2831.559	6382.643	17.194	189°13'09.83"				
	140.000	2829.957	6372.773	17.276	189°13'09.83"				
	150.000	2828.355	6362.902	17.358	189°13'09.83"				
	160.000	2826.753	6353.031	17.438	189°13'09.83"				
	170.000	2825.150	6343.160	17.488	189°13'09.83"				
TC	178.857	2823.731	6334.417	17.503	189°13'09.83"				
	180.000	2823.539	6333.291	17.503	190°10'55.43"				
	190.000	2821.055	6323.613	17.482	198°36'28.49"				
IP 4	198.219	2820.543	6314.772	17.439		R = 68.000	38.722	32°37'36.22"	
	200.000	2817.180	6314.405	17.428	207°02'01.55"				
	210.000	2811.997	6305.863	17.368	215°27'34.61"				
CT	217.580	2807.266	6299.947	17.323	221°50'46.05"				
IP 5	218.080	2806.932	6299.574	17.320	221°50'46.05"				

BASIN ACCESS 01 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE	STAGE
IP 1	0.000	2861.659	6524.401	15.699	99°13'15.46"				STAGE 2
	10.000	2871.530	6522.798	15.720	99°13'15.46"				
	20.000	2881.401	6521.196	15.199	99°13'15.46"				
	30.000	2891.271	6519.593	14.677	99°13'15.46"				
	40.000	2901.142	6517.991	14.155	99°13'15.46"				
	50.000	2911.013	6516.389	13.634	99°13'15.46"				
	60.000	2920.884	6514.786	13.530	99°13'15.46"				
	70.000	2930.755	6513.184	13.480	99°13'15.46"				
	80.000	2940.625	6511.581	13.430	99°13'15.46"				
	90.000	2950.496	6509.979	13.380	99°13'15.46"				
	100.000	2960.367	6508.376	13.330	99°13'15.46"				
	110.000	2970.238	6506.774	13.280	99°13'15.46"				
	120.000	2980.108	6505.172	13.230	99°13'15.46"				
	130.000	2989.979	6503.569	13.180	99°13'15.46"				
	140.000	2999.850	6501.967	13.130	99°13'15.46"				
	150.000	3009.721	6500.364	13.080	99°13'15.46"				
	160.000	3019.592	6498.762	13.030	99°13'15.46"				
	170.000	3029.462	6497.159	12.980	99°13'15.46"				
	180.000	3039.333	6495.557	12.980	99°13'15.46"				
TC	190.000	3049.204	6493.955	13.141	99°13'15.46"				STAGE 3
	191.142	3050.331	6493.772	13.195	99°13'15.46"				
IP 2	196.049	3056.498	6492.771	13.430		R = 6.250	9.815	89°58'38.81"	
	200.000	3055.579	6487.556	13.619	180°25'38.24"				
CT	200.957	3055.499	6486.603	13.665	189°11'54.27"				
	210.000	3054.053	6477.676	13.700	189°11'54.27"				
	220.000	3052.455	6467.805	13.700	189°11'54.27"				
	230.000	3050.856	6457.934	13.700	189°11'54.27"				
	240.000	3049.258	6448.062	13.700	189°11'54.27"				
	250.000	3047.659	6438.191	13.700	189°11'54.27"				
	260.000	3046.061	6428.319	13.700	189°11'54.27"				
	270.000	3044.462	6418.448	13.700	189°11'54.27"				
	280.000	3042.864	6408.577	13.700	189°11'54.27"				
	290.000	3041.265	6398.705	13.700	189°11'54.27"				
	300.000	3039.667	6388.834	13.700	189°11'54.27"				
IP 3	300.103	3039.650	6388.732	13.700	189°11'54.27"				

BASIN ACCESS 02 – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2817.700	6285.150	16.891	143°15'26.80"			
	10.000	2823.682	6277.137	17.402	143°15'26.80"			
TC	11.163	2824.378	6276.205	17.448	143°15'26.80"			
IP 2	12.123	2824.982	6275.395	17.486		R = -2.500	1.921	44°02'05.33"
	13.084	2825.980	6275.233	17.513	99°13'21.47"			
CT	20.000	2832.807	6274.125	17.416	99°13'21.47"			
	30.000	2842.678	6272.522	17.276	99°13'21.47"			
	40.000	2852.548	6270.919	17.135	99°13'21.47"			
	50.000	2862.419	6269.316	16.995	99°13'21.47"			
	60.000	2872.290	6267.714	16.855	99°13'21.47"			
	70.000	2882.160	6266.111	16.715	99°13'21.47"			
	80.000	2892.031	6264.508	16.574	99°13'21.47"			
	90.000	2901.902	6262.906	16.434	99°13'21.47"			
	100.000	2911.773	6261.303	16.294	99°13'21.47"			
	110.000	2921.643	6259.700	16.079	99°13'21.47"			
	120.000	2931.514	6258.097	15.769	99°13'21.47"			
	130.000	2941.385	6256.495	15.459	99°13'21.47"			
	140.000	2951.256	6254.892	15.149	99°13'21.47"			
	150.000	2961.126	6253.289	14.839	99°13'21.47"			
	160.000	2970.997	6251.687	14.529	99°13'21.47"			
	170.000	2980.868	6250.084	14.219	99°13'21.47"			
	180.000	2990.739	6248.481	13.950	99°13'21.47"			
	190.000	3000.609	6246.878	13.950	99°13'21.47"			
TC	196.917	3007.437	6245.770	13.950	99°13'21.47"			
	200.000	3010.336	6244.766	13.950	118°57'37.43"			
IP 3	203.944	3016.267	6244.336	13.950		R = 8.950	14.055	89°58'32.80"
	210.000	3014.940	6236.471	13.950	182°58'40.90"			
CT	210.972	3014.837	6235.505	13.950	189°11'54.26"			
	220.000	3013.394	6226.593	13.950	189°11'54.26"			
	230.000	3011.795	6216.721	13.950	189°11'54.26"			
	240.000	3010.197	6206.850	13.950	189°11'54.26"			
	250.000	3008.598	6196.978	13.950	189°11'54.26"			
	260.000	3007.000	6187.107	13.950	189°11'54.26"			
	270.000	3005.401	6177.236	13.950	189°11'54.26"			
	280.000	3003.803	6167.364	13.950	189°11'54.26"			
	290.000	3002.204	6157.493	13.950	189°11'54.26"			
	300.000	3000.606	6147.621	13.650	189°11'54.26"			
	310.000	2999.007	6137.750	13.950	189°11'54.26"			
	320.000	2997.409	6127.879	13.950	189°11'54.26"			
	330.000	2995.810	6118.007	13.950	189°11'54.26"			
	340.000	2994.211	6108.136	13.950	189°11'54.26"			
	350.000	2992.613	6098.264	13.950	189°11'54.26"			
	360.000	2991.014	6088.393	13.950	189°11'54.26"			
IP 4	364.619	2990.276	6083.833	13.950	189°11'54.26"			

BASIN ACCESS 01a – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	3041.832	6402.206	13.700	279°11'53.97"
	10.000	3031.961	6403.805	13.700	279°11'53.97"
IP 2	13.250	3028.753	6404.324	13.700	279°11'53.97"

BASIN ACCESS 02A – SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	2992.746	6099.084	13.950	279°11'53.97"
	10.000	2982.874	6100.683	13.950	279°11'53.97"
IP 2	14.950	2977.988	6101.474	13.950	279°11'53.97"

Site Address:
LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot:	504
Plan:	SP329485
Local Authority:	CITY OF GOLD COAST
Level Datum:	AHD
Meridian:	
PSM:	
RL:	

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Drawing Title:

COASTLINK COURT
LONGITUDINAL SECTION

C	11/04/25	LONG SECTION UPDATED	JH	MG	
B	11/12/24	SWD UPDATED	JH	MG	
A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG	
A	25/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE			A1 UNREDUCED		
CULVERT AND PIPE SIZES IN MILLIMETRES			A3 REDUCED		

Scale:

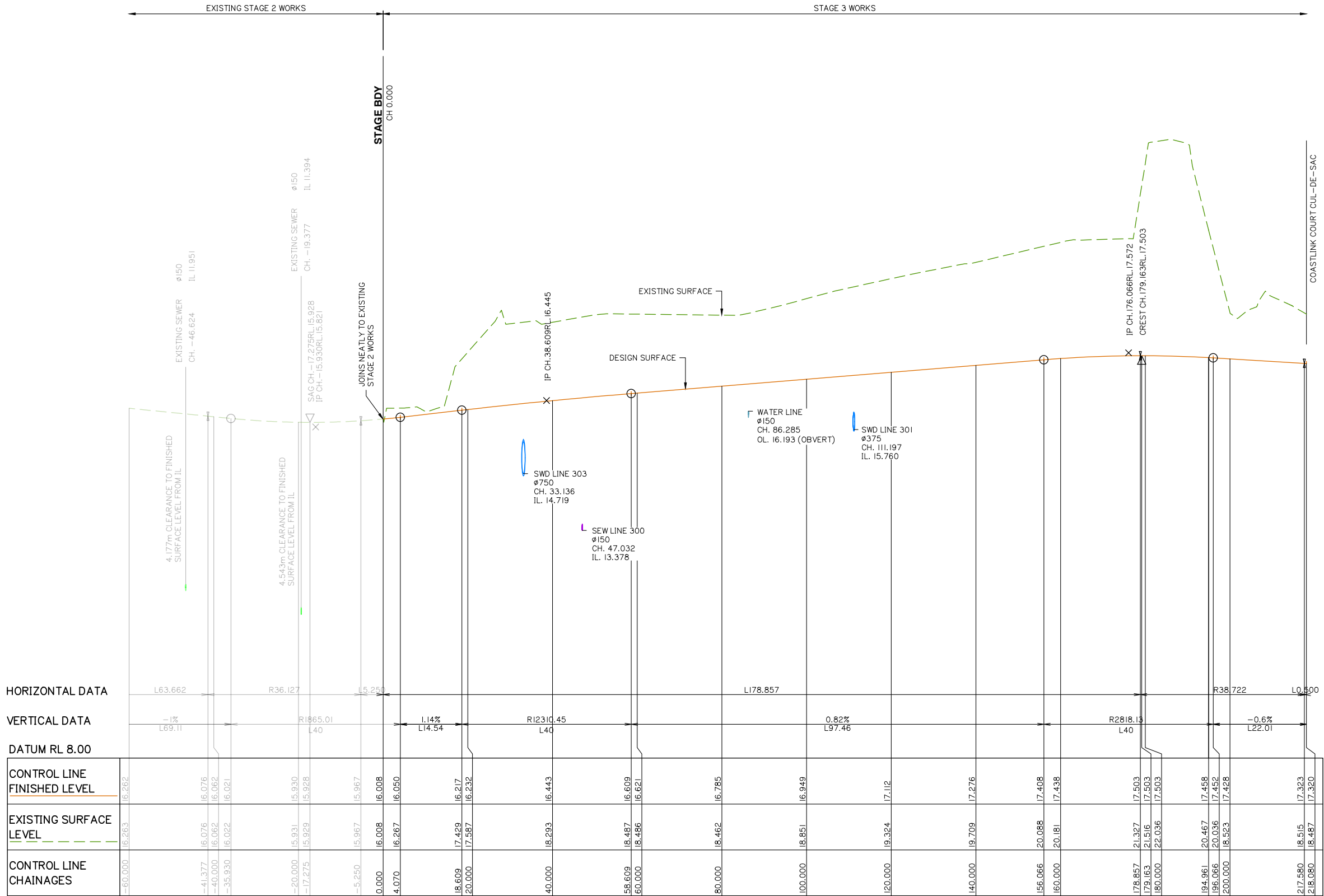
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1:500 (A1) 1:1000 (A3)

0 1 2 3 4m
1:50 (A1) 1:100 (A3)

PROJECT NORTH POINT



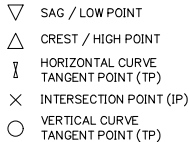
Project No:	5941
Designed:	JH
Drafted:	ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 450	C



COASTLINK COURT – LONGITUDINAL SECTION

AI HORZ SCALE 1: 500
AI VERT SCALE 1: 50

COASTLINK COURT LONGITUDINAL SECTION



VERTICAL DATA

DATUM RL 6.00

CONTROL LINE CHAINAGES	EXISTING SURFACE LEVEL	CONTROL LINE FINISHED LEVEL
0.000	15.699	15.699
1.800	15.915	15.924
3.500	15.961	15.967
4.504	16.001	16.007
20.000	15.131	15.199
40.000	14.131	14.155
51.145	13.574	13.574
60.000	13.530	13.530
100.000	13.330	13.330
120.000	13.230	13.230
140.000	13.130	13.130
160.000	13.030	13.030
169.977	12.980	12.980
180.000	12.980	12.980
186.640	12.980	12.980
191.142	13.285	13.165
200.000	13.087	13.530
200.957	13.132	13.570
201.688	13.166	13.700
220.000	13.985	13.700
240.000	15.030	13.700
260.000	15.973	13.700
280.000	16.790	13.700
300.000	17.608	13.700
300.103	17.612	13.700

AI HORZ SCALE 1: 500
AI VERT SCALE 1: 50

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

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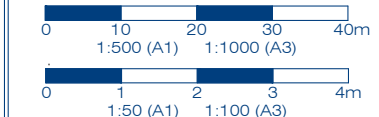
Drawing Title:

BASIN ACCESS 01
LONGITUDINAL SECTION

B	19/02/24		ISSUED FOR CONSTRUCTION	ML	MC
A	08/01/24		NOTES ADDED	JH	MC
A	25/05/23		ORIGINAL ISSUE	JH	MC
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CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:



PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: ML

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

Revision

5941 ENG CW3 451

B

Client:



FPI QUEENSLAND
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VANTAGE YATALA
STAGE 3

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LOT 504 HOMESTEAD
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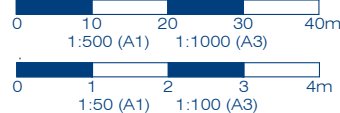
Drawing Title:

BASIN ACCESS 02 & 02a
LONGITUDINAL SECTIONS

D	11/12/24	LONG SECTIONS UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	JH	MG
C	08/01/24	NOTES ADDED	JH	MG
B	06/11/23	SECTION UPDATED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
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A3 REDUCED

Scale:



PROJECT NORTH POINT



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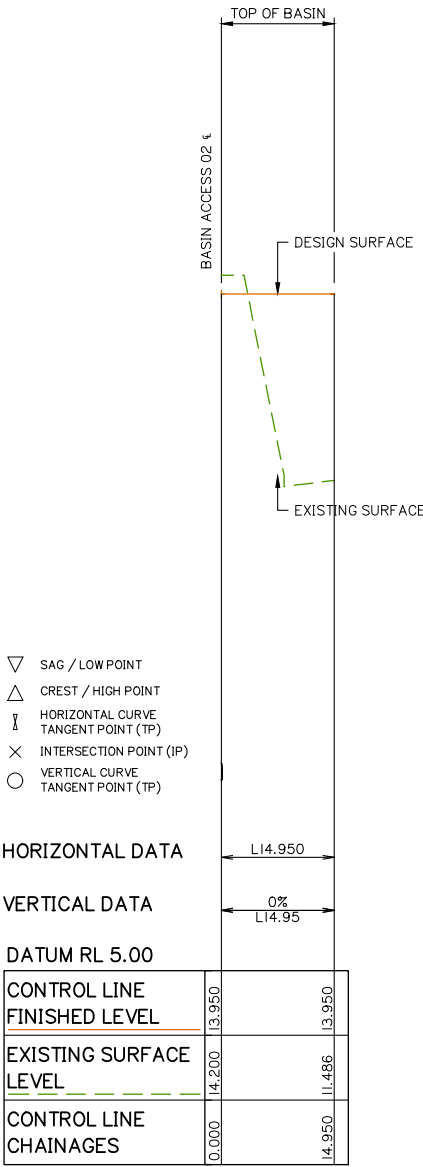
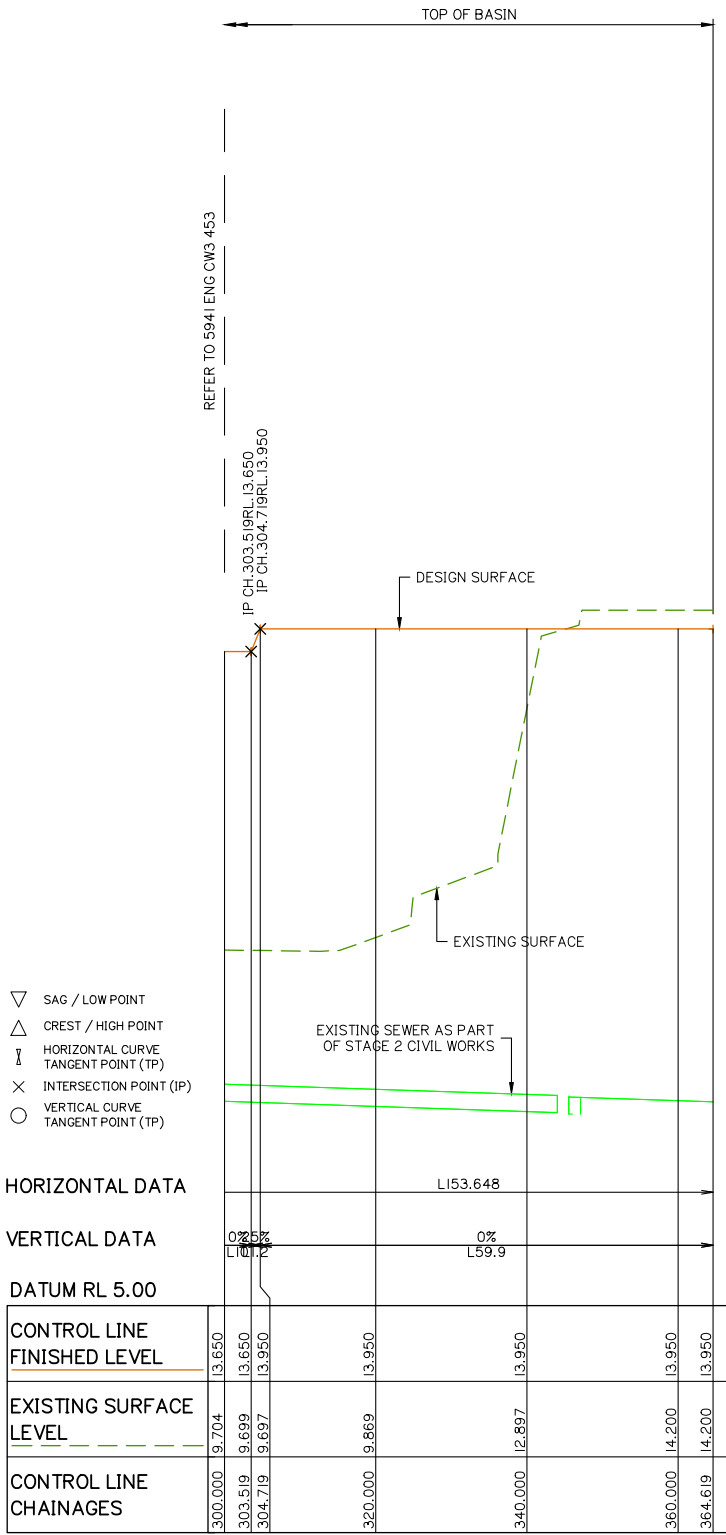
28/09/2023

Drawing No:

Revision

5941 ENG CW3 454

D



Client:



FPI QUEENSLAND
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VANTAGE YATALA
STAGE 3

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Drawing Title:

ROADWORKS CROSS
SECTIONS SHEET 1 OF 5

Rev	Date	Description	DRN	CHK
F	11/04/25	CROSS SECTIONS UPDATED	JH	MG
E	11/04/25	CROSS SECTIONS UPDATED	JH	MG
C	11/12/24	SWD UPDATED	JH	MG
D	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	SECTION UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 2 4 6 8m
1:100 (A1) 1:200 (A3)
0 2 4 6 8m
1:100 (A1) 1:200 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: ML

Approved:

MG

RPEQ

16939

Signed:

Date:

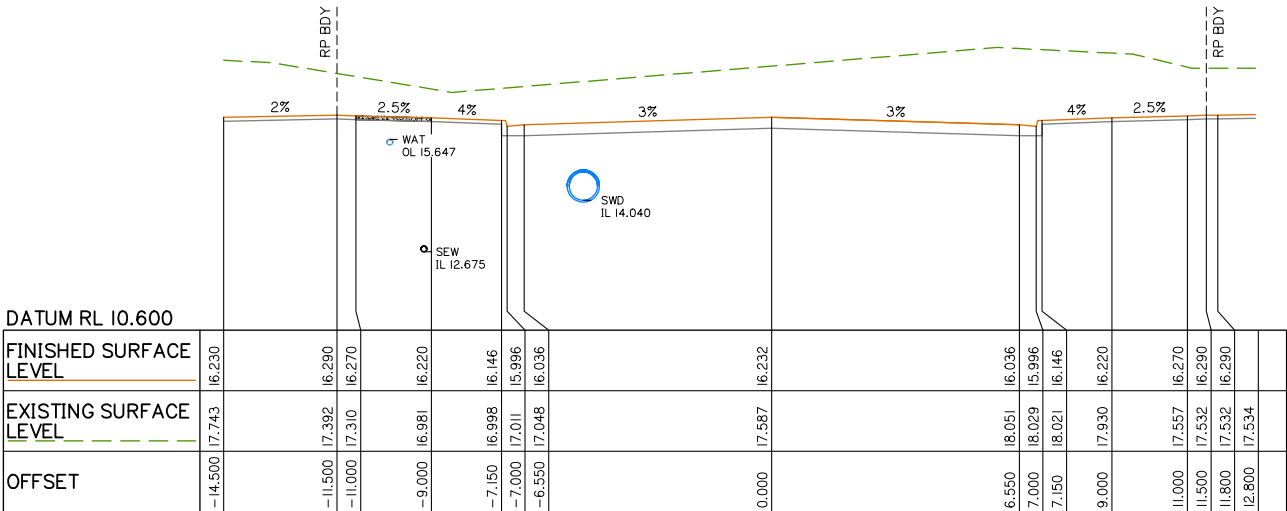
28/09/2023

Drawing No:

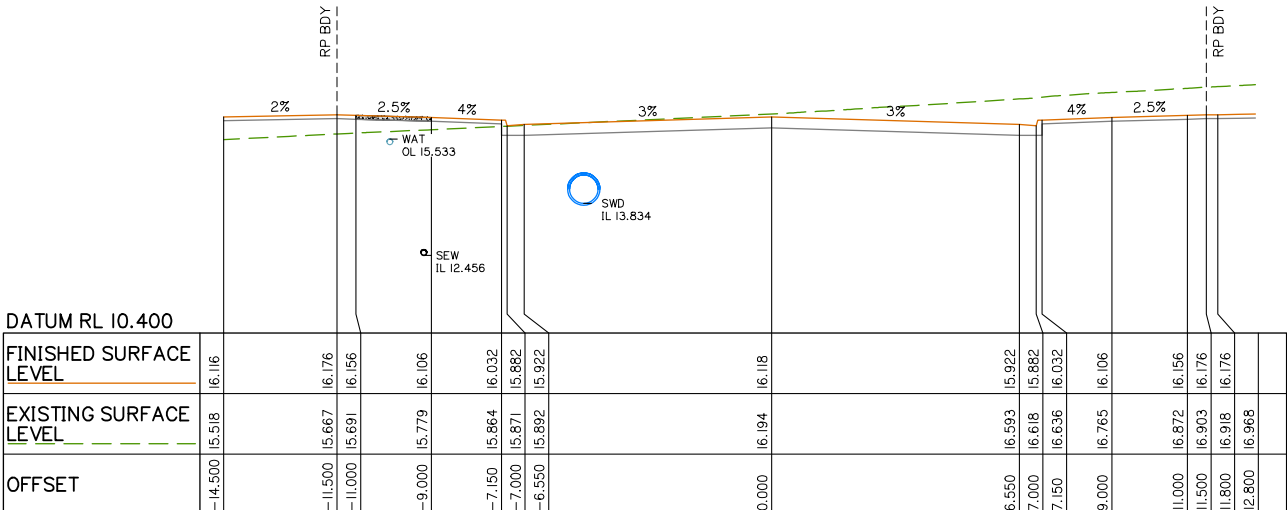
Revision

5941 ENG CW3 470

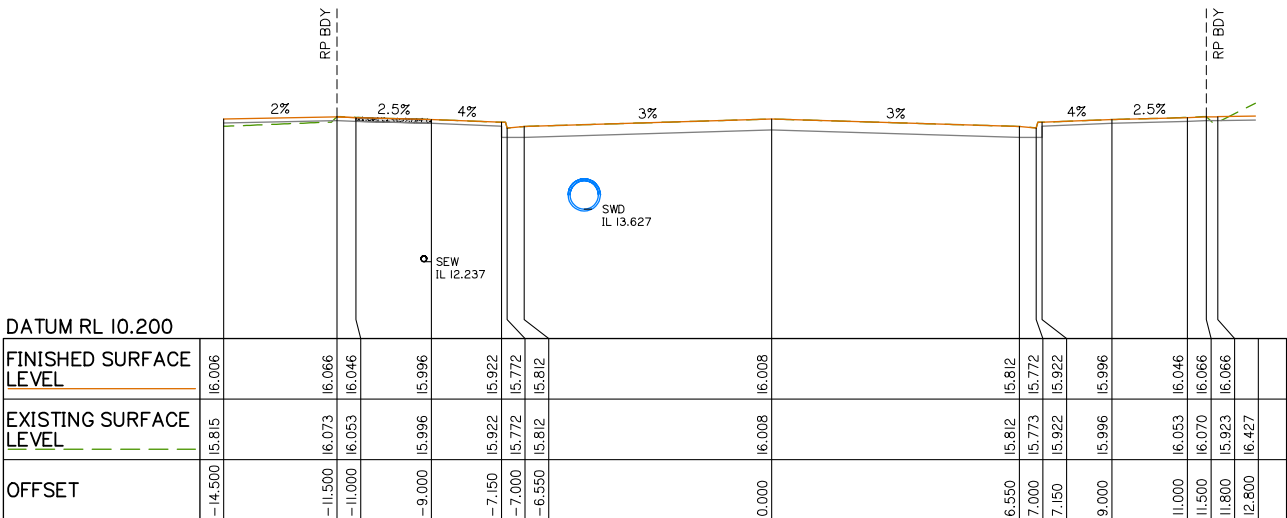
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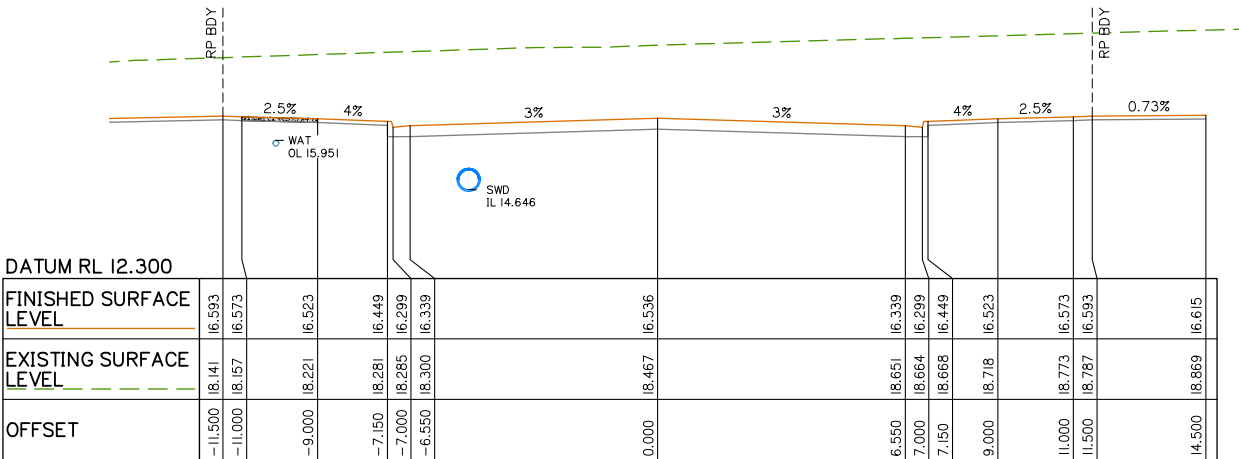
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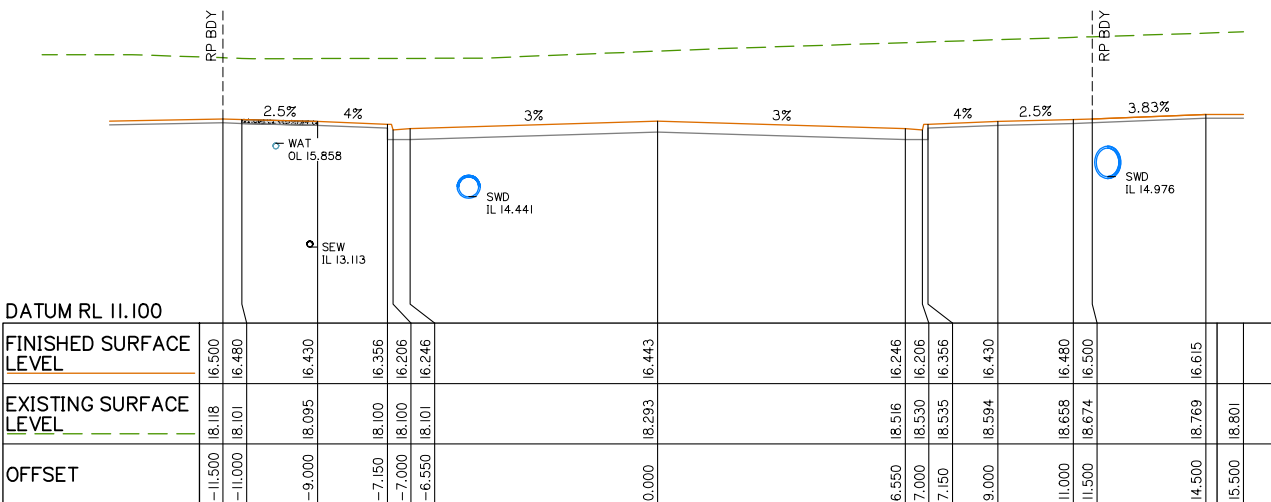
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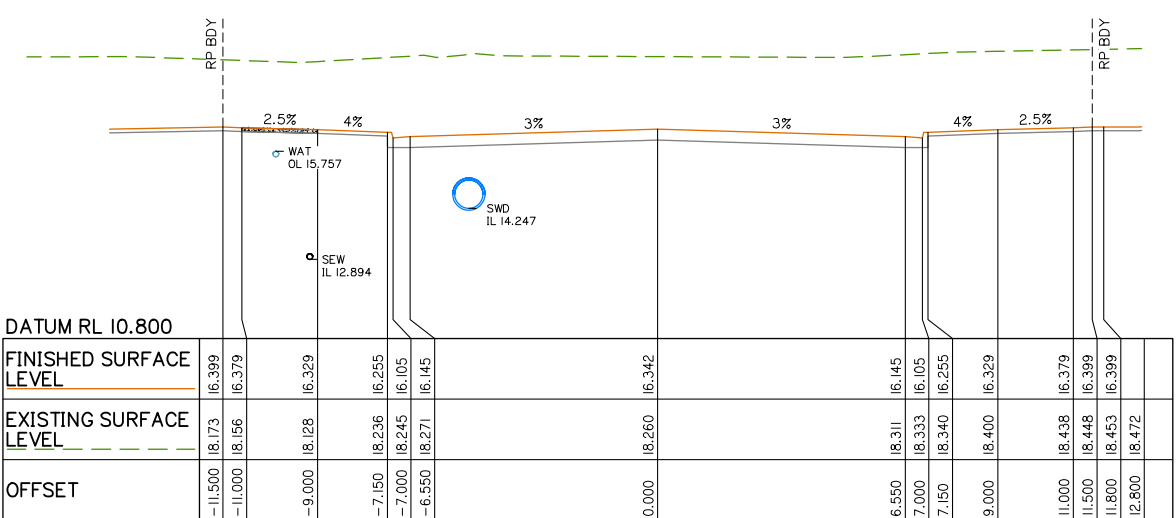
CH 0.000



CH 50.000



CH 40.000



CH 30.000

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

ROADWORKS CROSS
SECTIONS SHEET 3 OF 5

E	11/04/25	CROSS SECTIONS UPDATED	JH	MG
D	11/04/25	CROSS SECTIONS UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	SECTION UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

0 2 4 6 8m
1:100 (A1) 1:200 (A3)

0 2 4 6 8m
1:100 (A1) 1:200 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: ML

Approved:

MG

RPEQ

16939

Signed:

Date:

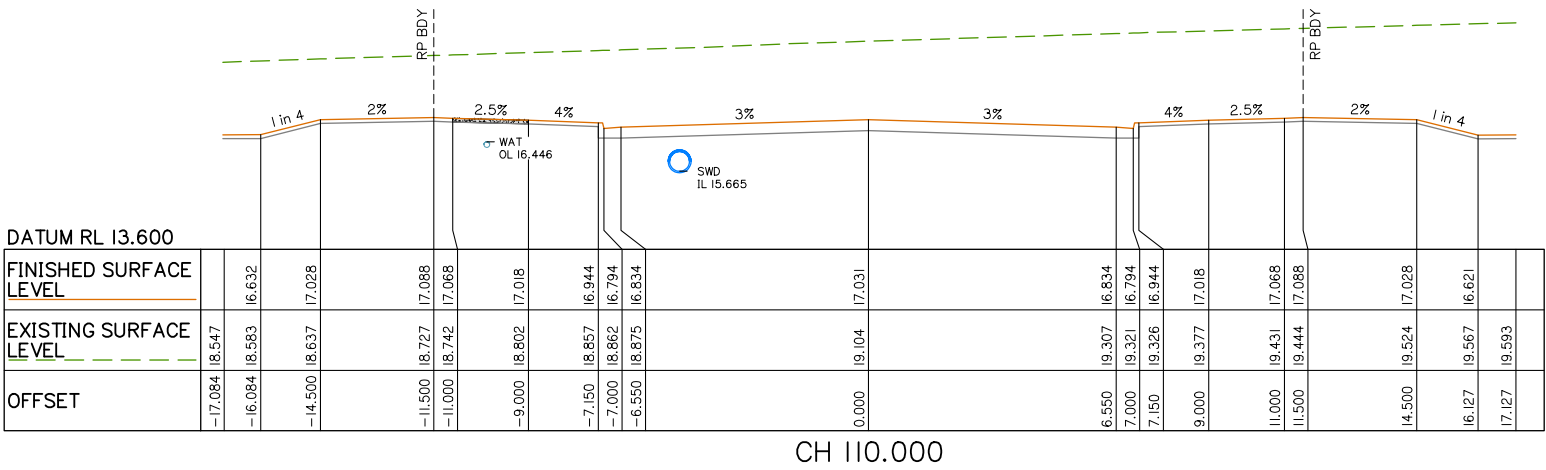
28/09/2023

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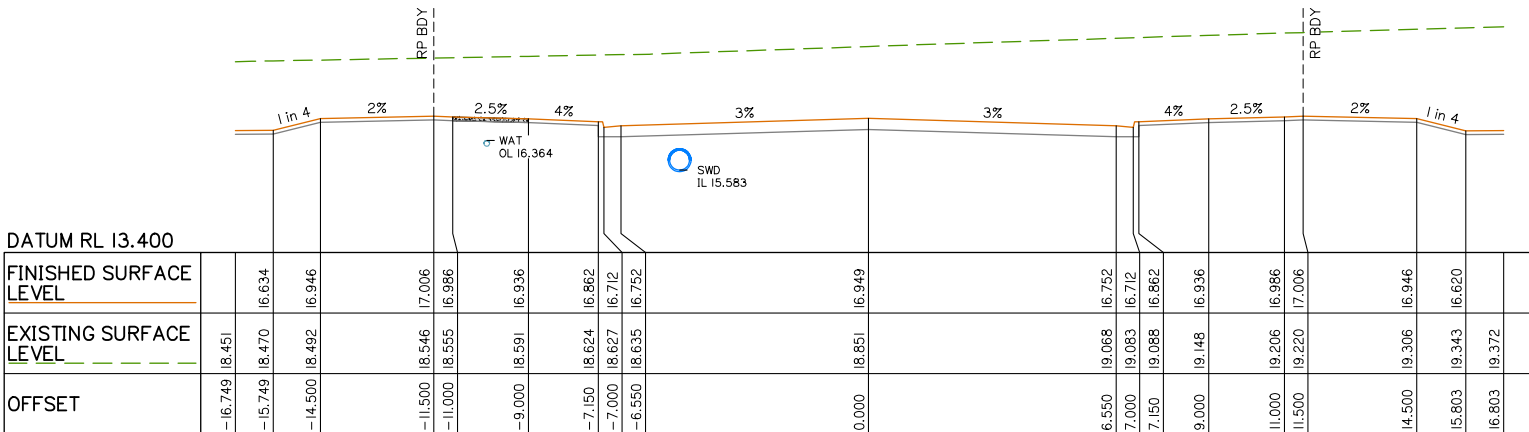
Revision

5941 ENG CW3 472

E



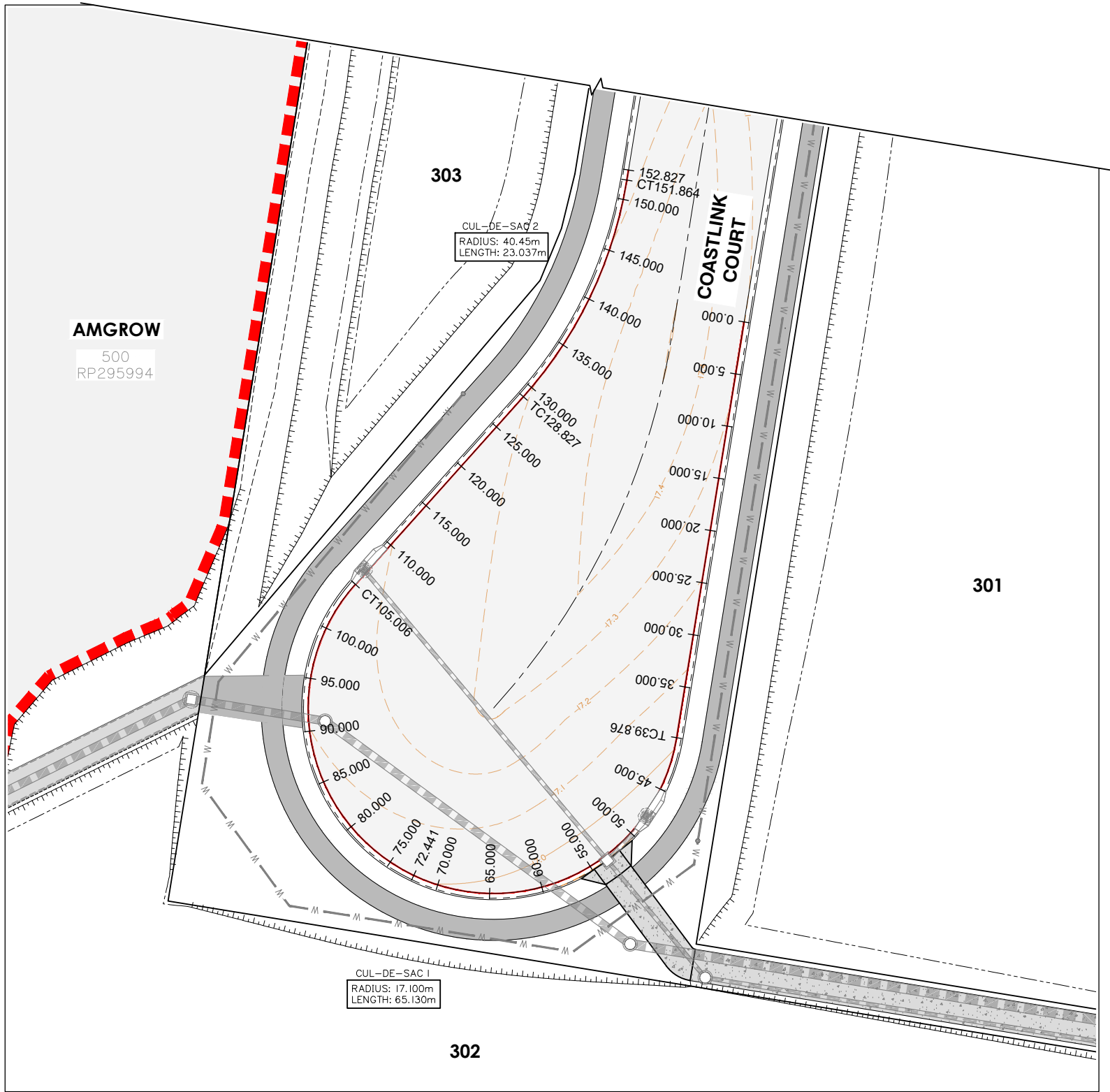
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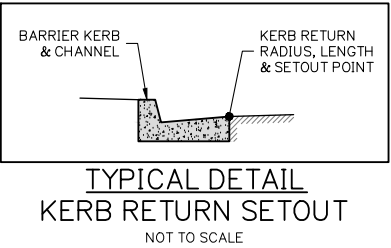
CH 100.000



CH 90.000



CUL-DE-SAC – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2830.644	6336.123	17.303	189°13'09.48"			
	5.000	2829.843	6331.187	17.304	189°13'09.48"			
	10.000	2829.042	6326.252	17.293	189°13'09.48"			
	15.000	2828.241	6321.317	17.272	189°13'09.48"			
	20.000	2827.440	6316.381	17.239	189°13'09.48"			
	25.000	2826.638	6311.446	17.196	189°13'09.48"			
TC	30.000	2825.837	6306.510	17.142	189°13'09.48"			
	35.000	2825.036	6301.575	17.077	189°13'09.48"			
	39.876	2824.255	6296.762	17.013	189°13'09.48"			
	40.000	2824.235	6296.640	17.012	189°37'32.32"			
	45.000	2822.713	6291.895	16.963	205°56'57.22"			
	50.000	2819.918	6287.769	16.936	222°16'22.12"			
IP 2	55.000	2816.077	6284.595	16.932	238°35'47.02"			
	56.158	2820.502	6273.641	16.934		R = 17.550	32.565	106°18'56.26"
	60.000	2811.498	6282.628	16.948	254°55'11.93"			
	65.000	2806.551	6282.028	16.973	271°14'36.83"			
	70.000	2801.635	6282.843	16.998	287°34'01.73"			
	72.441	2799.367	6283.738	17.011	295°32'05.73"			
CC	75.000	2797.146	6285.006	17.023	303°53'26.63"			
	80.000	2793.446	6288.344	17.048	320°12'51.54"			
	85.000	2790.833	6292.587	17.073	336°32'16.44"			
	88.723	2778.231	6293.835	17.092		R = 17.550	32.565	106°18'56.26"
	90.000	2789.518	6297.393	17.098	352°51'41.34"			
	95.000	2789.607	6302.375	17.123	9°11'06.24"			
CT	100.000	2791.093	6307.132	17.148	25°30'31.14"			
	105.000	2793.855	6311.279	17.173	41°49'56.05"			
	105.006	2793.859	6311.283	17.173	41°51'01.99"			
	110.000	2797.191	6315.004	17.198	41°51'01.99"			
	115.000	2800.527	6318.728	17.223	41°51'01.99"			
	120.000	2803.863	6322.452	17.248	41°51'01.99"			
TC	125.000	2807.199	6326.177	17.273	41°51'01.99"			
	128.827	2809.753	6329.027	17.292	41°51'01.99"			
	130.000	2810.522	6329.913	17.298	40°11'20.30"			
	135.000	2813.505	6333.922	17.313	33°06'24.03"			
	140.000	2815.970	6338.268	17.315	26°01'27.77"			
	140.346	2817.652	6337.847	17.314		R = -40.450	23.037	32°37'52.52"
IP 4	145.000	2817.881	6342.885	17.303	18°56'31.50"			
	150.000	2819.208	6347.702	17.278	11°51'35.23"			
	151.864	2819.549	6349.535	17.267	9°13'09.48"			
	152.827	2819.704	6350.486	17.260	9°13'09.48"			



Client:

 **FRASERS**
PROPERTY
FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR
CONSTRUCTION

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Drawing Title:

CUL-DE-SAC PLAN
AND SETOUT TABLE

Rev	Date	Description	JH	MG
C	11/04/25	CUL-DE-SAC UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 5 10 15 20m
1:250 (A1) 1:500 (A3)

PROJECT NORTH POINT

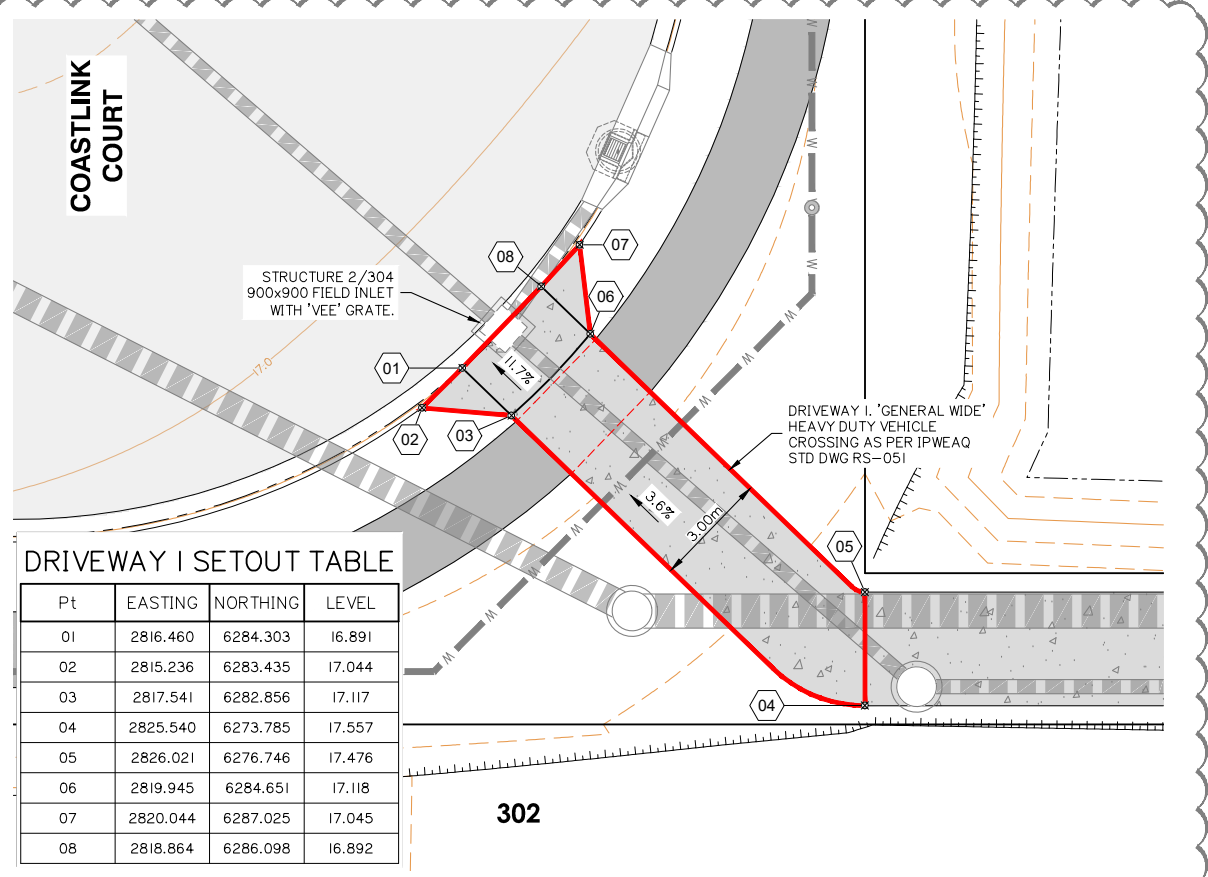


Project No: 5941

Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 480	C

CUL-DE-SAC PLAN AND SETOUT TABLE

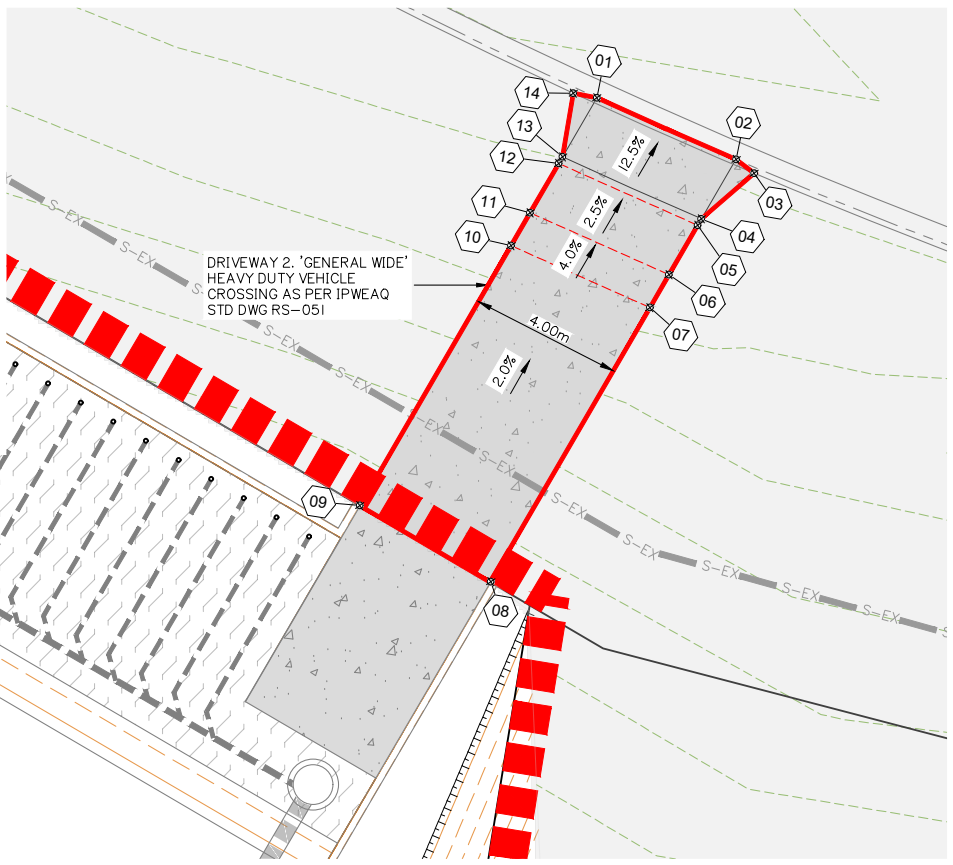
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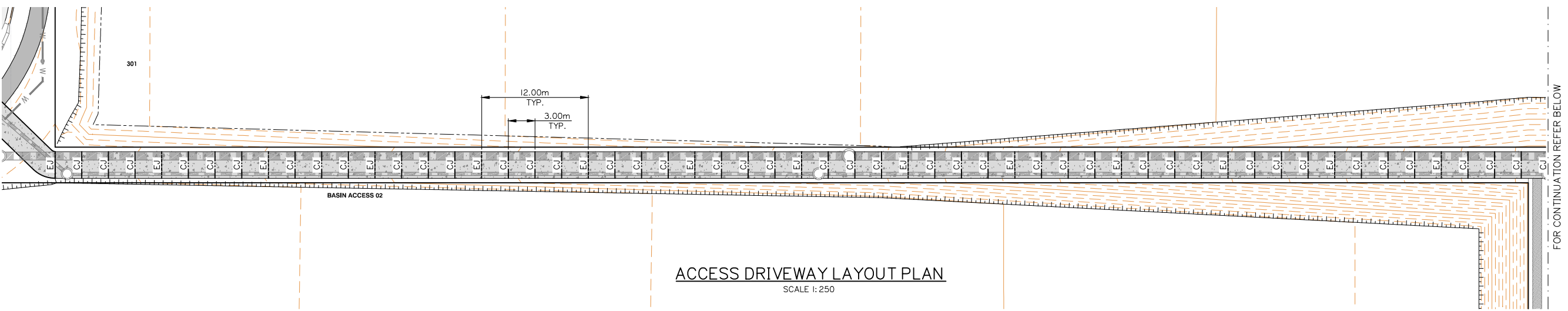
DRIVEWAY 1 SETOUT TABLE			
Pt	EASTING	NORTHING	LEVEL
01	2816.460	6284.303	16.891
02	2815.236	6283.435	17.044
03	2817.541	6282.856	17.117
04	2825.540	6273.785	17.557
05	2826.021	6276.746	17.476
06	2819.945	6284.651	17.118
07	2820.044	6287.025	17.045
08	2818.864	6286.098	16.892

DRIVEWAY 1 SETOUT PLAN
SCALE 1:100

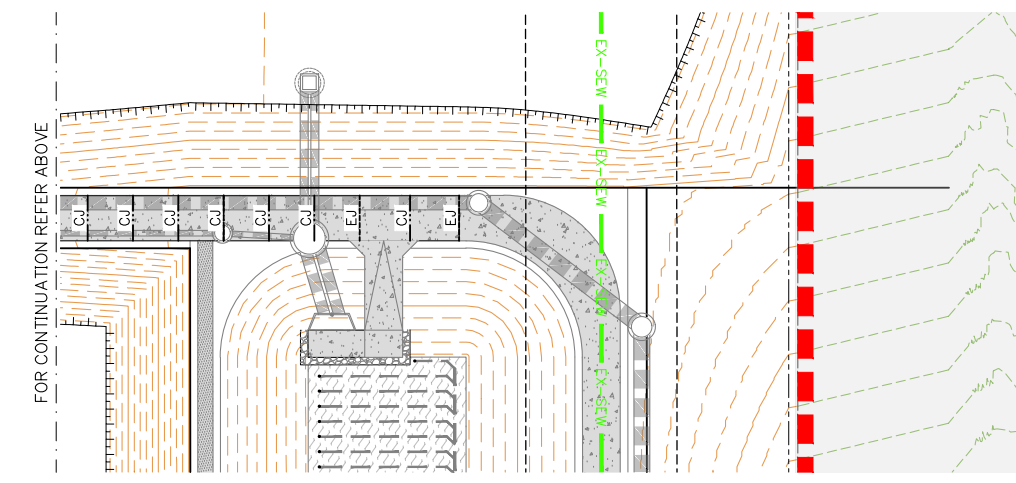
DRIVEWAY 2 SETOUT TABLE			
Pt	EASTING	NORTHING	LEVEL
01	2938.694	5999.341	13.628
02	2942.379	5997.710	13.589
03	2942.855	5997.345	13.733
04	2941.457	5996.139	13.814
05	2941.362	5995.970	13.815
06	2940.604	5994.663	13.854
07	2940.098	5993.792	13.895
08	2935.890	5986.544	14.100
09	2932.422	5988.558	14.100
10	2936.424	5995.431	13.934
11	2936.929	5996.300	13.893
12	2937.685	5997.603	13.854
13	2937.786	5997.777	13.853
14	2938.071	5999.462	13.784



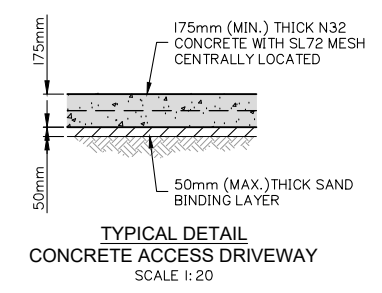
DRIVEWAY 2 SETOUT PLAN
SCALE 1:100



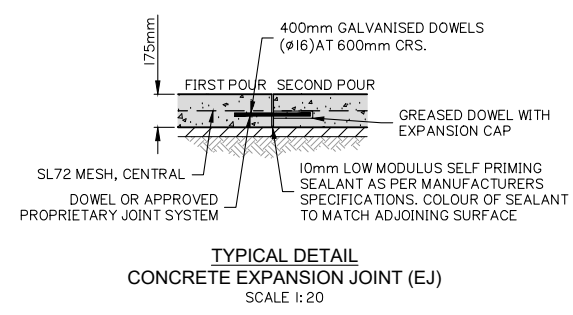
ACCESS DRIVEWAY LAYOUT PLAN
SCALE 1:250



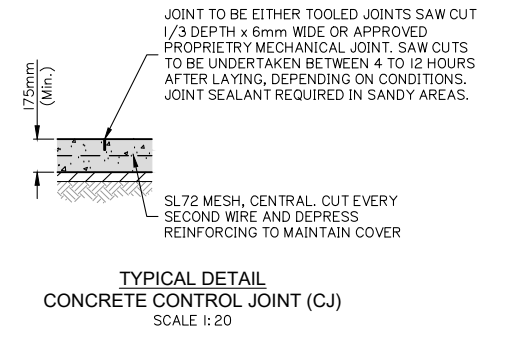
ACCESS DRIVEWAY LAYOUT PLAN
SCALE 1:250



TYPICAL DETAIL
CONCRETE ACCESS DRIVEWAY
SCALE 1:20



TYPICAL DETAIL
CONCRETE EXPANSION JOINT (EJ)
SCALE 1:20



TYPICAL DETAIL
CONCRETE CONTROL JOINT (CJ)
SCALE 1:20

VEHICLE CROSSING AND ACCESS DRIVEWAY LAYOUT PLAN

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planning | environment | landscape | engineering | survey

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Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:

FRASERS
PROPERTY

FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

VEHICLE CROSSING AND
ACCESS DRIVEWAY
LAYOUT PLAN

Rev	Date	Description	DRN	CHK
E	11/04/25	VXO UPDATED	JH	MG
D	11/11/2224	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

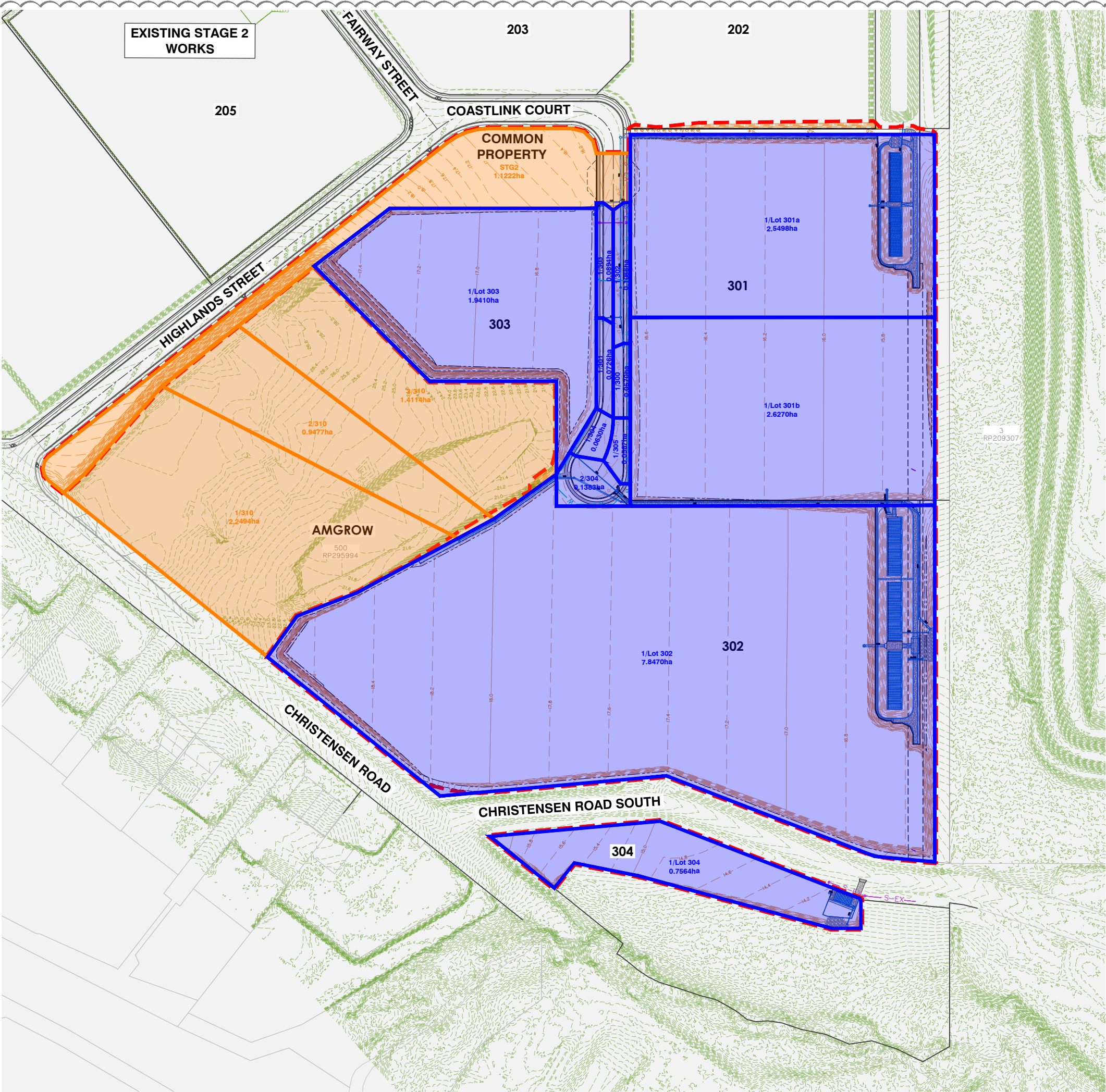
PROJECT NORTH POINT

Project No: 5941

Designed: JH
Approved: MG
RPEQ: 16939
Signed: [Signature]
Date: 28/09/2023

Drawing No: 5941 ENG CW3 490
Revision: E

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STORMWATER CATCHMENT TABLE

CATCHMENT	AREA (ha)
I/300	0.0570
I/301	0.0703
I/302	0.1088
I/303	0.0894
I/304	0.0630
2/304	0.1383
I/305	0.0578
I/310	2.2494
2/310	0.9477
3/310	1.4114
I/Lot301a	2.5498
I/Lot301b	2.6270
I/Lot302	7.8470
I/Lot303	1.9410
I/Lot304	0.7564
STG2	1.1222



planning | environment | landscape | engineering | survey
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Gold Coast | 76 Business Street, Yatala QLD | PO Box 362, Beenleigh 4207

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

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DRIVE, STAPYLTON
QLD, 4207

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Plan: SP329485
Local Authority: CITY OF GOLD COAST

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Drawing Title:

STORMWATER DRAINAGE
CATCHMENT PLAN

I	11/04/25	SWD MANHOLE ADDED	JH	MG
H	11/04/25	LAYOUT UPDATED	JH	MG
G	26/03/25	STORMWATER LINE UPDATED	JH	MG
F	21/03/25	SEWER LINE UPDATED	JH	MG
E	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
D	11/12/24	SWD & BASIN 2 UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

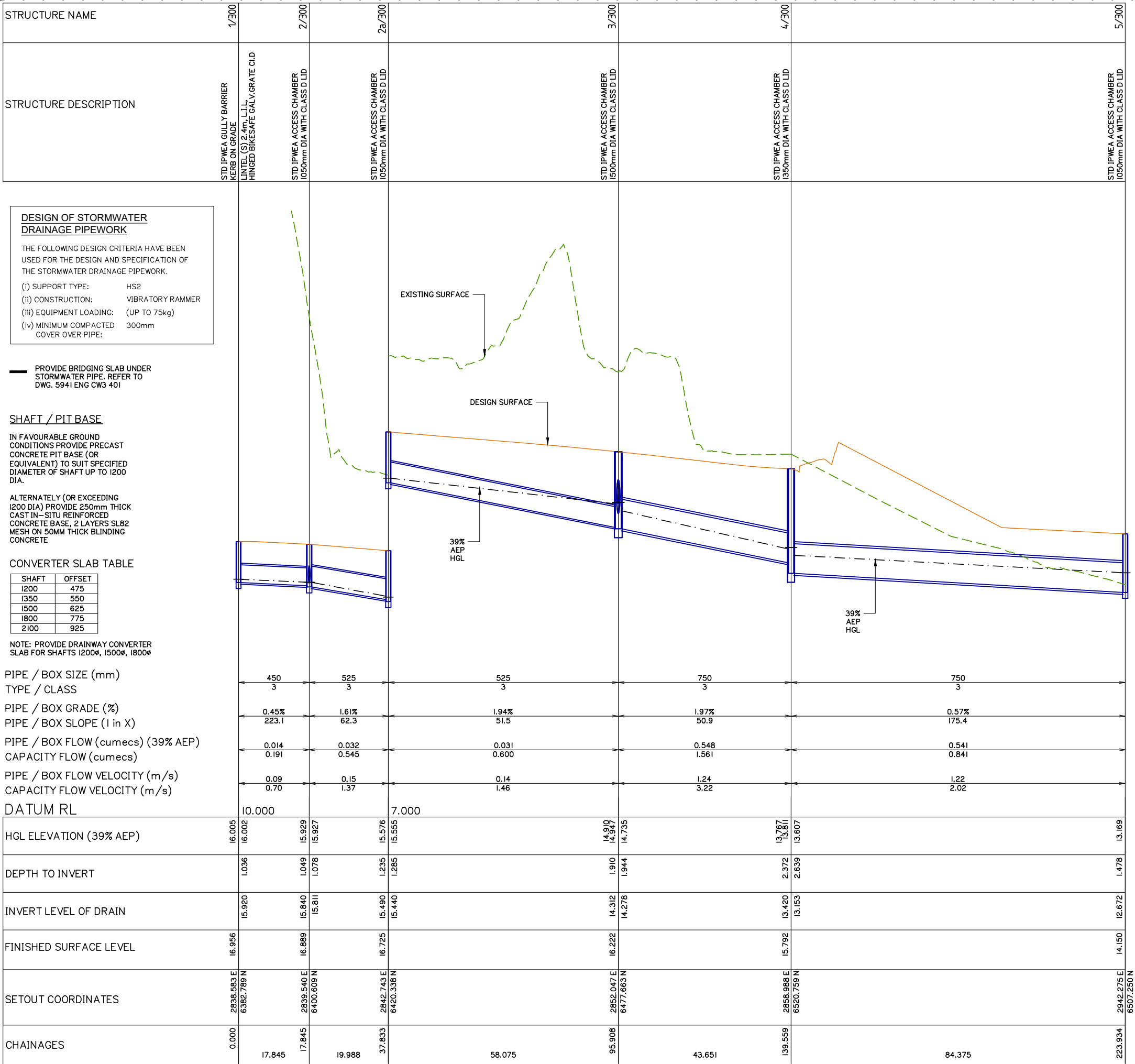
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PROJECT NORTH POINT



Project No.	5941	Revision	
Designed:	JH	Drafted:	JH
Approved:			MG
RPEQ			16939
Signed:			
Date:			28/09/2023
Drawing No:	5941 ENG CW3 500		

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Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM:
RL:

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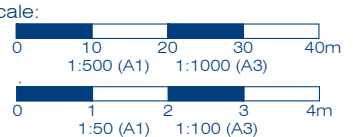
Drawing Title:

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 1 OF 6

H	17/03/26	LONG SECTIONS UPDATED	JH	MG	
G	11/04/25	LONG SECTIONS UPDATED	JH	MG	
F	11/04/25	LONG SECTIONS UPDATED	JH	MG	
E	26/03/25	LINE 300, 301 & 302 UPDATED	JH	MG	
D	05/03/25	LONG SECTIONS UPDATED	JH	MG	
C	11/12/24	LONG SECTIONS UPDATED	JH	MG	
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG	
B	06/11/23	SECTION UPDATED	ML	MG	
A	25/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

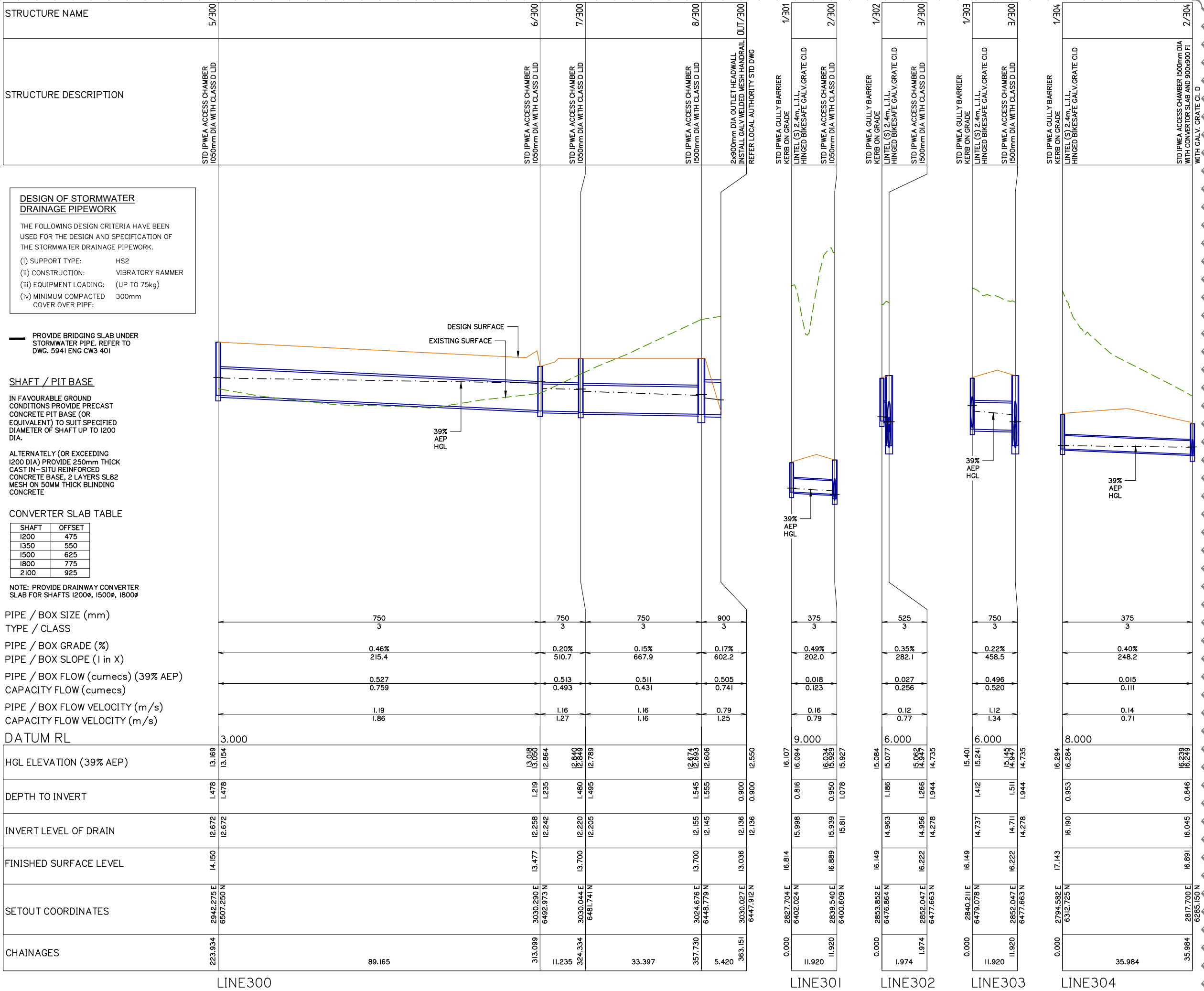
A1 UNREDUCED
A3 REDUCED



PROJECT NORTH POINT

Project No:	5941	
Designed:	JH	Drafted: ML
Approved:		MG
RPEQ		16939
Signed:		
Date:		28/09/2023
Drawing No:	5941 ENG CW3 510	Revision H

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STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2 OF 6

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian: PSM:
RL:

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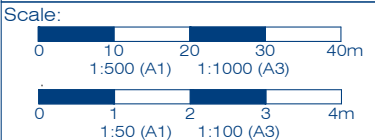
Drawing Title:

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 2 OF 6

Rev	Date	Description	JH	MG
I	17/03/26	LONG SECTIONS UPDATED	JH	MG
H	11/04/25	LONG SECTIONS UPDATED	JH	MG
G	11/04/25	LONG SECTIONS UPDATED	JH	MG
F	26/03/25	LINE 300, 301 & 302 UPDATED	JH	MG
E	05/03/25	LONG SECTIONS UPDATED	JH	MG
D	11/12/24	LONG SECTIONS UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	NOTE AMENDED	JH	MG
B	06/11/23	SECTION UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

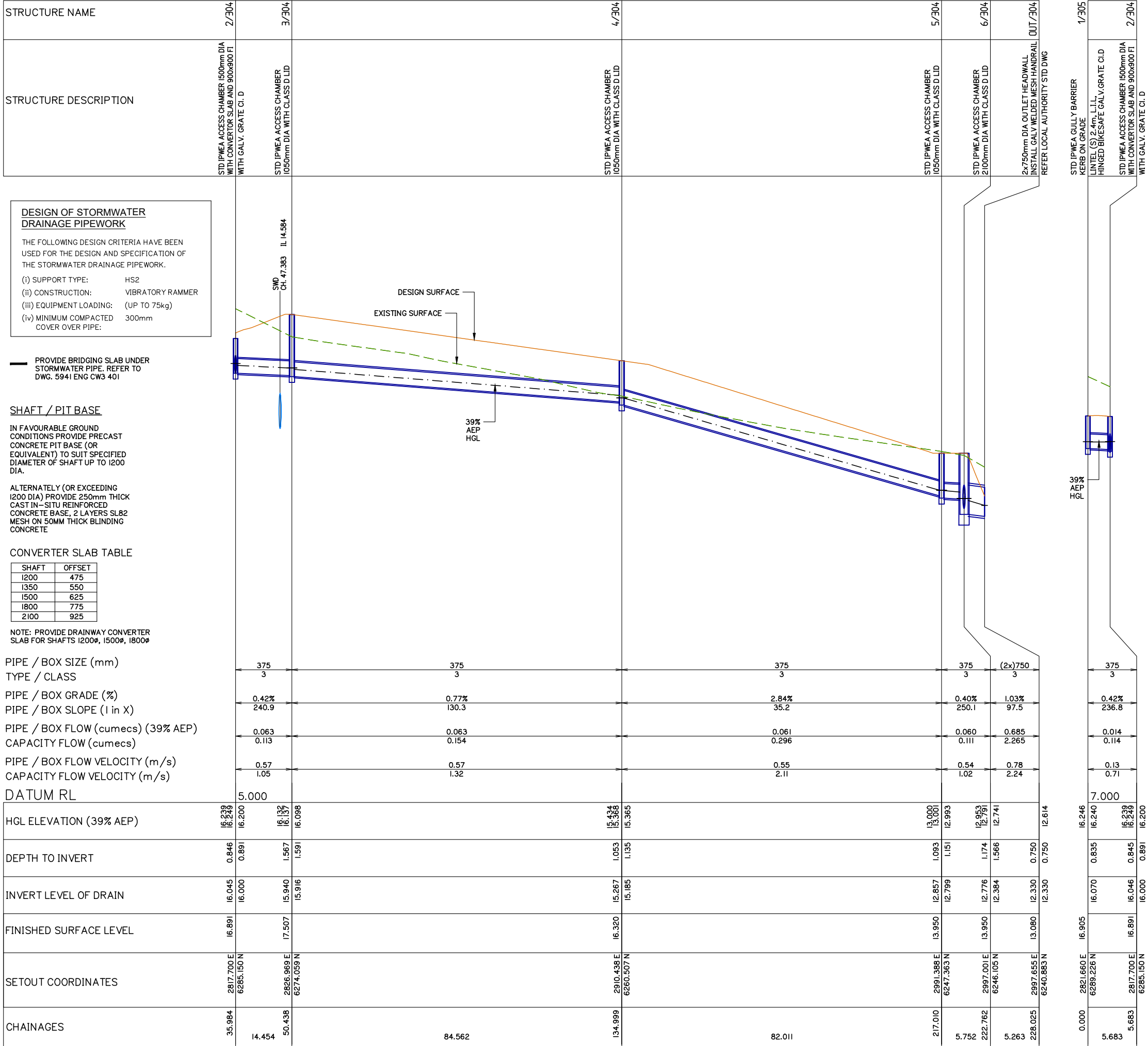
A1 UNREDUCED
A3 REDUCED



PROJECT NORTH POINT

Project No. 5941	
Designed: JH	Drafted: ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 511	I

g:\Projects\5941\Engineering\Acad\civil works stage 3\Current\5941 ENG CW3 510.dwg



Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM:
RL:

ISSUED FOR
CONSTRUCTION

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Drawing Title:

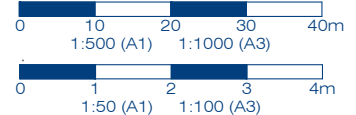
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 3 OF 6

F	17/03/26	LONG SECTIONS UPDATED	JH	MG	
E	11/04/25	LONG SECTIONS UPDATED	JH	MG	
D	11/12/24	LONG SECTIONS UPDATED	JH	MG	
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG	
C	08/02/24	NOTE AMENDED	JH	MG	
B	06/11/23	SECTION UPDATED	ML	MG	
A	25/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:



PROJECT NORTH POINT

Project No: 5941

Designed: JH

Drafted: ML

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

Revision

5941 ENG CW3 512

F

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 4 OF 6

STRUCTURE NAME

6/310

STRUCTURE DESCRIPTION

STD IPWEA ACCESS CHAMBER
1200mm DIA WITH CLASS D LID

7/310

STD IPWEA ACCESS CHAMBER
1350mm DIA WITH CLASS D LID

8/310

STD IPWEA ACCESS CHAMBER
1350mm DIA WITH CLASS D LID

9/310

STD IPWEA ACCESS CHAMBER
1500mm DIA WITH CLASS D LID

10/310

1050mm DIA OUTLET HEADWALL
INSTALL GALV WELDED MESH HANDRAIL
REFER LOCAL AUTHORITY STD DWG

1/LOT 301a

STD IPWEA ACCESS CHAMBER 1500mm DIA
WITH CONVERTOR SLAB AND 900x900 FI
WITH GALV. GRATE CI. D

OUT/LOT 301b

2x900mm DIA OUTLET HEADWALL
INSTALL GALV WELDED MESH HANDRAIL
REFER LOCAL AUTHORITY STD DWG

1/LOT 301b

STD IPWEA ACCESS CHAMBER 1500mm DIA
WITH CONVERTOR SLAB AND 900x900 FI
WITH GALV. GRATE CI. D

6/304

STD IPWEA ACCESS CHAMBER
2100mm DIA WITH CLASS D LID

1/LOT 302

STD IPWEA ACCESS CHAMBER 1800mm DIA
WITH CONVERTOR SLAB AND 900x900 FI
WITH GALV. GRATE CI. D

OUT/LOT 302

1500mm DIA OUTLET HEADWALL
INSTALL GALV WELDED MESH HANDRAIL
REFER LOCAL AUTHORITY STD DWG

DESIGN OF STORMWATER DRAINAGE PIPEWORK

THE FOLLOWING DESIGN CRITERIA HAVE BEEN USED FOR THE DESIGN AND SPECIFICATION OF THE STORMWATER DRAINAGE PIPEWORK.

- (i) SUPPORT TYPE: HS2
- (ii) CONSTRUCTION: VIBRATORY RAMMER
- (iii) EQUIPMENT LOADING: (UP TO 75kg)
- (iv) MINIMUM COMPACTED COVER OVER PIPE: 300mm

— PROVIDE BRIDGING SLAB UNDER STORMWATER PIPE. REFER TO DWG. 5941 ENG CW3 401

SHAFT / PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE PIT BASE (OR EQUIVALENT) TO SUIT SPECIFIED DIAMETER OF SHAFT UP TO 1200 DIA.

ALTERNATELY (OR EXCEEDING 1200 DIA) PROVIDE 250mm THICK CAST IN-SITU REINFORCED CONCRETE BASE, 2 LAYERS SLB2 MESH ON 50MM THICK BLINDING CONCRETE

CONVERTER SLAB TABLE

SHAFT	OFFSET
1200	475
1350	550
1500	625
1800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR SHAFTS 1200ø, 1500ø, 1800ø

PIPE / BOX SIZE (mm)

TYPE / CLASS

PIPE / BOX GRADE (%)

PIPE / BOX SLOPE (I in X)

PIPE / BOX FLOW (cumecs) (39% AEP)

CAPACITY FLOW (cumecs)

PIPE / BOX FLOW VELOCITY (m/s)

CAPACITY FLOW VELOCITY (m/s)

DATUM RL

2.000

HGL ELEVATION (39% AEP)

14.241

DEPTH TO INVERT

2.571

INVERT LEVEL OF DRAIN

13.701

FINISHED SURFACE LEVEL

16.272

SETOUT COORDINATES

2914.150 E

CHAINAGES

221.830

95.524

SMD 4525
CH. 305.793 IL 12.731
SMD 4525
CH. 306.500 IL 12.731

EXISTING SEWER 4525
CH. 327.525 IL 8.033

PROVIDE BRIDGING
SLAB REFER TO DWG.
5941 ENG CW3 401

CLR 2.590

39%
AEP
HGL

39%
AEP
HGL

39%
AEP
HGL

39%
AEP
HGL

ENSURE MIN. 200mm
COVER TO RCP.
LOCALISED CONCRETING
MAY BE REQUIRED

SMD 4900
CH. 79.939 IL 11.213

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM:
RL:

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Drawing Title:

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 5 OF 6

Rev	Date	Description	DRN	CHK
F	17/03/26	LONG SECTIONS UPDATED	JH	MG
E	11/04/25	LONG SECTIONS UPDATED	JH	MG
D	11/12/24	LONG SECTIONS UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	NOTE AMENDED	JH	MG
B	06/11/23	SECTION UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:



PROJECT NORTH POINT

Project No:	5941
Designed:	JH
Drafted:	ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	5941 ENG CW3 514
Revision	F

LINE310

LINELot 301a LINELot 301b LINELot 302

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STRUCTURE NAME	1/LOT 303		1/303
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1500mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE Cl. D	STD IPWEA GULLY BARRIER KERB ON GRADE LINTEL (S) 2.4m L.L.L. HINGED BIKESAFE GALV. GRATE Cl.D	STD IPWEA ACCESS CHAMBER 1500mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE Cl. D

DESIGN OF STORMWATER DRAINAGE PIPEWORK

THE FOLLOWING DESIGN CRITERIA HAVE BEEN USED FOR THE DESIGN AND SPECIFICATION OF THE STORMWATER DRAINAGE PIPEWORK.

- (i) SUPPORT TYPE: HS2
(ii) CONSTRUCTION: VIBRATORY RAMMER
(iii) EQUIPMENT LOADING: (UP TO 75kg)
(iv) MINIMUM COMPACTED COVER OVER PIPE: 300mm

PROVIDE BRIDGING SLAB UNDER STORMWATER PIPE. REFER TO DWG. 5941 ENG CW3 401

SHAFT / PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE PIT BASE (OR EQUIVALENT) TO SUIT SPECIFIED DIAMETER OF SHAFT UP TO 1200 DIA.

ALTERNATELY (OR EXCEEDING 1200 DIA) PROVIDE 250mm THICK CAST IN-SITU REINFORCED CONCRETE BASE, 2 LAYERS SLB2 MESH ON 50MM THICK BLINDING CONCRETE

CONVERTER SLAB TABLE

SHAFT	OFFSET
1200	475
1350	550
1500	625
1800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR SHAFTS 1200ø, 1500ø, 1800ø

PIPE / BOX SIZE (mm)

TYPE / CLASS

PIPE / BOX GRADE (%)

PIPE / BOX SLOPE (1 in X)

PIPE / BOX FLOW (cumecs) (39% AEP)

CAPACITY FLOW (cumecs)

PIPE / BOX FLOW VELOCITY (m/s)

CAPACITY FLOW VELOCITY (m/s)

DATUM RL

HGL ELEVATION (39% AEP)

DEPTH TO INVERT

INVERT LEVEL OF DRAIN

FINISHED SURFACE LEVEL

SETOUT COORDINATES

CHAINAGES

EXISTING SURFACE

DESIGN SURFACE

39% AEP HGL

39% AEP HGL

15.810
15.407
15.379
15.401
15.241

1.705
1.309
1.412

14.858
14.840
14.737

16.563
16.149

2832.918 E
6472.147 N
2840.211 E
6479.078 N

0.000
10.061
10.061

13.793
13.244

1.241
0.375
0.375

12.930
12.900
12.900

14.171
13.275

2916.463 E
5993.285 N
2918.188 E
5992.274 N

0.000
2.000
2.000

LINE Lot 303 LINE Lot 503

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 6 OF 6

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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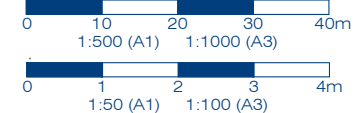
Drawing Title:

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 6 OF 6

F	17/03/26	LONG SECTIONS UPDATED	JH	MG
E	11/04/25	LONG SECTIONS UPDATED	JH	MG
D	11/12/24	LONG SECTIONS UPDATED	JH	MG
C	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	NOTE AMENDED	JH	MG
B	06/11/23	SECTION UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
A1 UNREDUCED
A3 REDUCED

Scale:



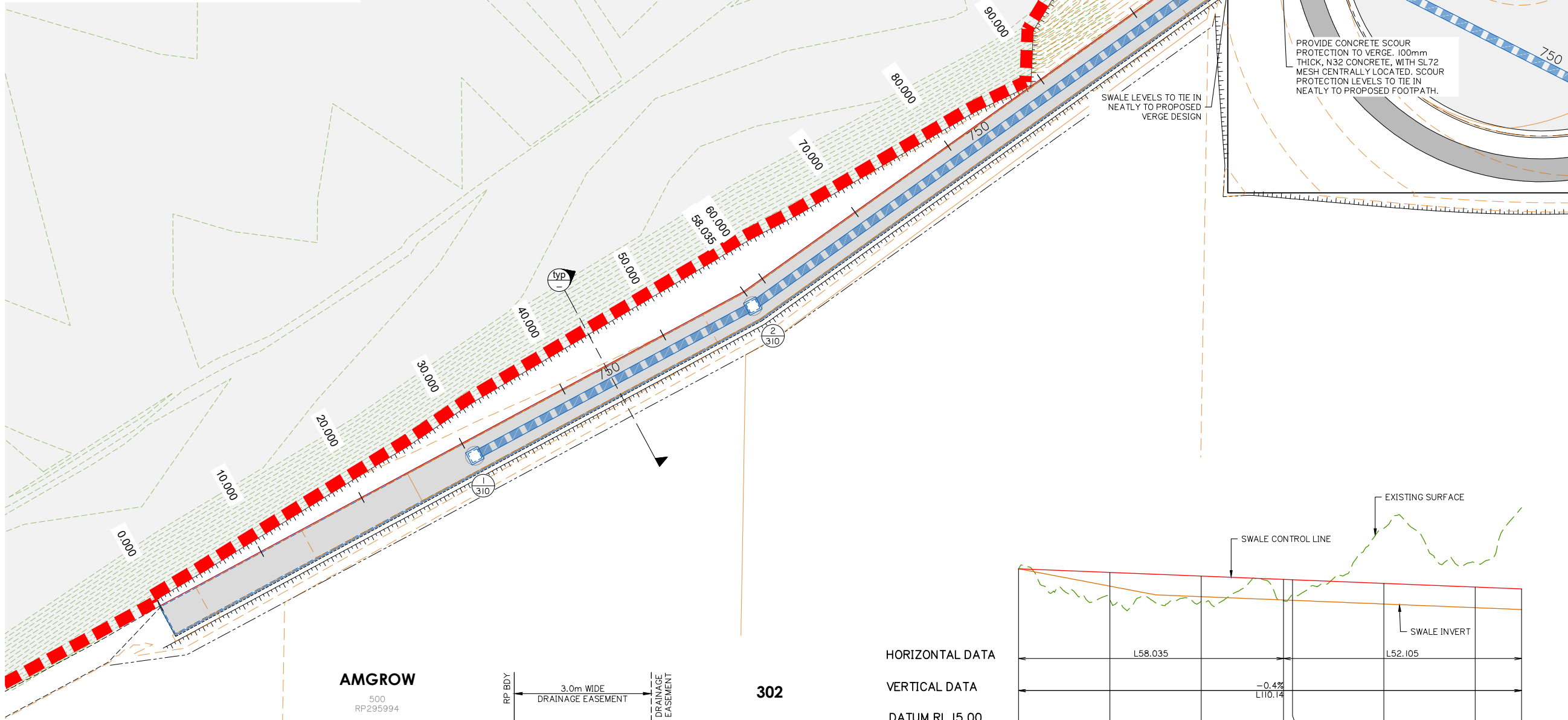
PROJECT NORTH POINT

Project No.	5941
Designed: JH	Drafted: ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 515	F

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SWALE CL SETOUT TABLE

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	2678.027	6260.605	18.467	70°55'32.00"
	10.000	2687.478	6263.873	18.426	70°55'32.00"
	20.000	2696.929	6267.141	18.386	70°55'32.00"
	30.000	2706.380	6270.409	18.346	70°55'32.00"
	40.000	2715.831	6273.677	18.306	70°55'32.00"
IP 2	50.000	2725.282	6276.945	18.266	70°55'32.00"
	58.035	2732.876	6279.571	18.233	
	60.000	2734.637	6280.443	18.226	63°40'02.00"
	70.000	2743.599	6284.878	18.185	63°40'02.00"
	80.000	2752.562	6289.314	18.145	63°40'02.00"
IP 3	90.000	2761.524	6293.750	18.105	63°40'02.00"
	100.000	2770.486	6298.186	18.065	63°40'02.00"
	110.000	2779.449	6302.622	18.025	63°40'02.00"
	110.140	2779.574	6302.684	18.024	63°40'02.00"



HORIZONTAL DATA

VERTICAL DATA

DATUM RL 15.00

CHAINAGE	CONTROL LINE FINISHED LEVEL	SWALE INVERT	EXISTING SURFACE LEVEL	CONTROL LINE CHAINAGES
0.000	18.467	18.467	18.467	
20.000		18.086	17.787	
40.000		17.856	17.753	
58.035		17.783	17.765	
60.000		17.716	17.694	
80.000		17.695	19.353	
100.000		17.615	18.587	
110.140		17.574	19.802	

SWALE – LONGITUDINAL SECTION

A1 HORZ SCALE 1:500
A1 VERT SCALE 1:50

SWALE LAYOUT AND DETAILS PLAN



planning | environment | landscape | engineering | survey
T: 3607 3333 | F: 3287 5481 | www.gassman.com.au
Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM
RL:

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Drawing Title:

SWALE LAYOUT AND
DETAILS PLAN

Rev	Date	Description	JH	MG
C	11/04/25	SWALE UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale: 0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

28/09/2023

Drawing No:

Revision

5941 ENG CW3 560

C

Client:



Project: **VANTAGE YATALA
STAGE 3**

Site Address:

**LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207**

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
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Drawing Title:

OPERATIONAL PHASE BIO RETENTION BASIN 1 LAYOUT PLAN

Rev	Date	Description	DRN	CHK
D	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
D	08/02/24	FOREBAY DETAILS ADDED	JH	MG
C	08/01/24	NOTES ADDED	JH	MG
B	06/11/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:
0 4 8 12 16m
1:200 (A1) 1:400 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

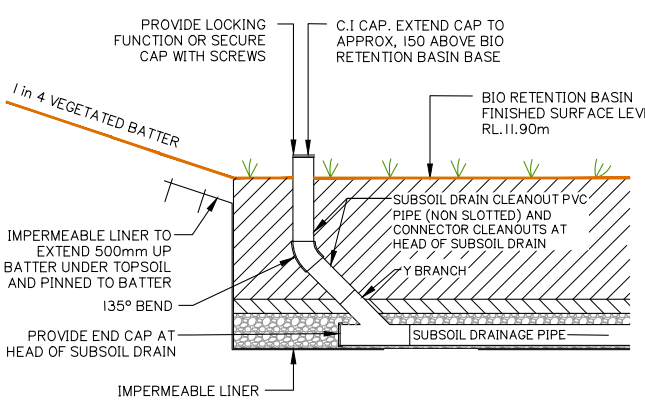
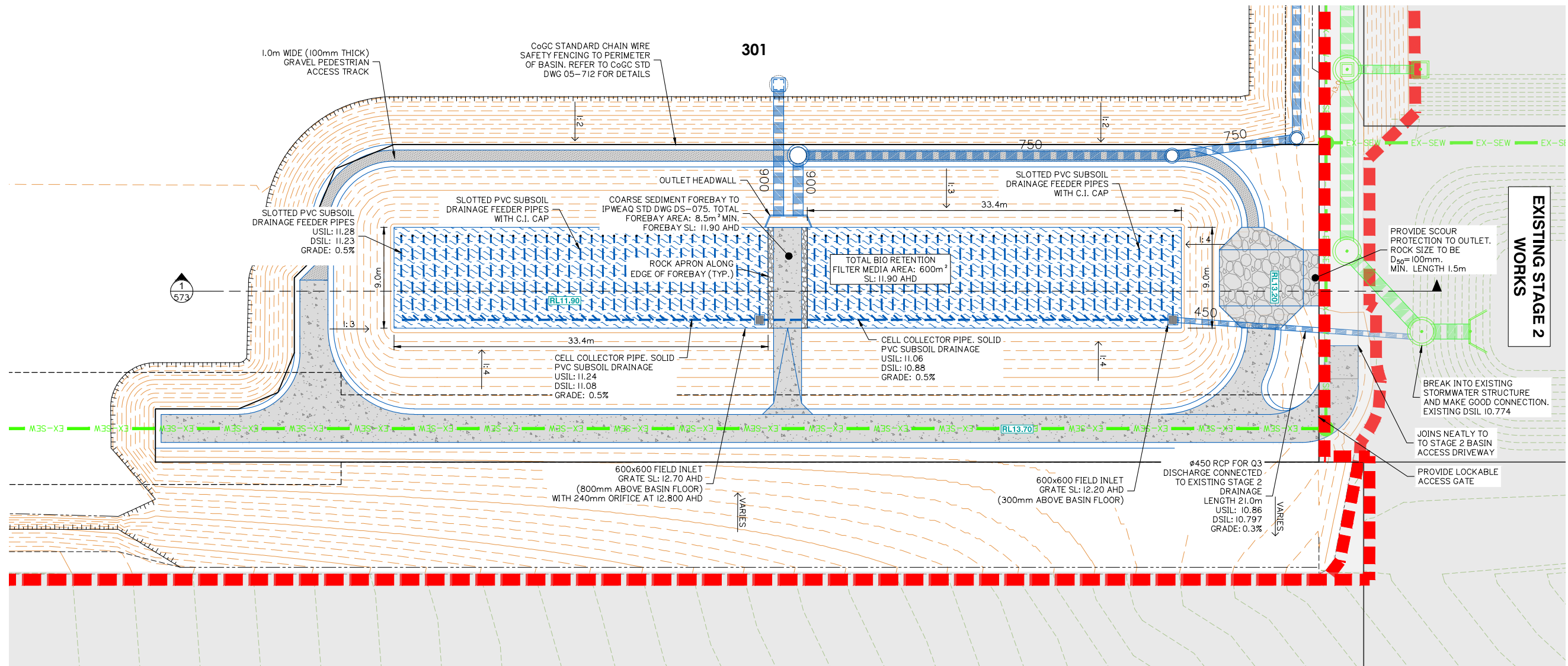
28/09/2023

Drawing No:

Revision

5941 ENG CW3 570

D



WATER SURFACE LEVEL TABLE

EVENT (ARI)	LEVEL (AHD)
Q1	12.871
Q2	12.984
Q5	13.099
Q10	13.148
Q20	13.260
Q50	13.341
Q100	13.388

**BIO RETENTION I – COARSE SEDIMENT
FOREBAY SIZING GUIDE CALCULATIONS**

$V_s = A_c \times R \times L_o \times F = 2.525 \text{ m}^3$

$R = 1 - \left[1 + \frac{1}{n} \times \frac{V_s}{0.7 A_c} \right]^{-n}$

$0.8 = 1 - \left[1 + \frac{0.10}{0.5 \times 0.30 / A} \right]^{-0.5}$ $A_f = 36 \text{ m}^2$

$D_s = \frac{V_s}{A_f} = \frac{2.5248}{36.00} = 0.070 \text{ m}$

OPTIMIZATION OF MINIMUM FOREBAY SIZE:

$D_s = 0.3 \text{ m}$ $A_f = \frac{2.5248 \text{ m}^3}{0.3} = 8.419 \text{ m}^2$

CALCULATED FOR 1 FOREBAY AT 8.419m².

$V_s = 2.5248 \text{ m}^3$ (Works Above)

$A_c = 5.263 \text{ ha}$ (Refer Catchment Plans)

UNMITIGATED POST-DEVELOPMENT FLOW
 $Q = 0.3 \text{ m}^3/\text{s}$ (3 month ARI)

$V_s = 0.1 \text{ m/s}$ (Recommended for 1mm Particle)

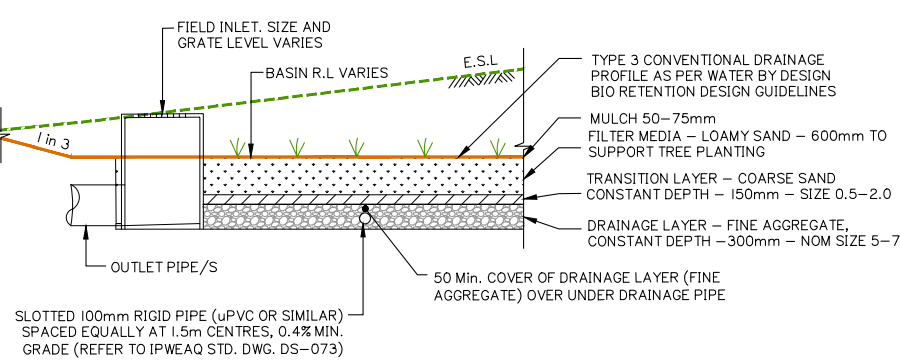
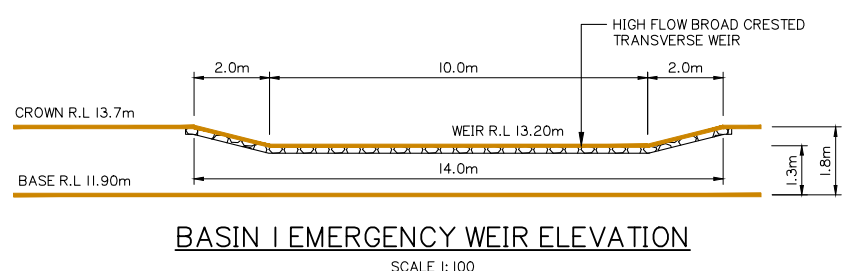
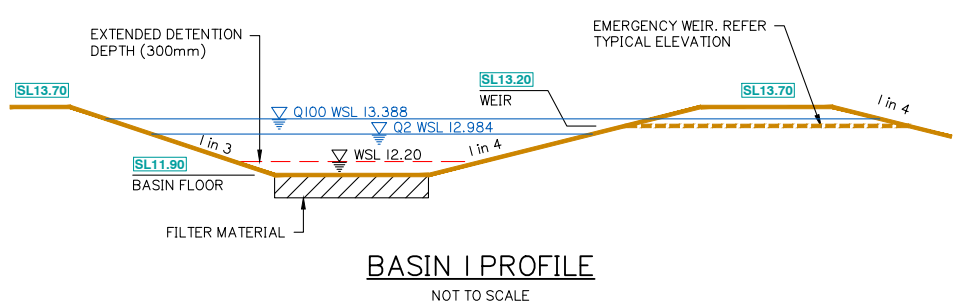
$R = 0.8$ (Recommended 80% Capture)

$L_o = 0.6$ (From Healthy Waterways Guide)

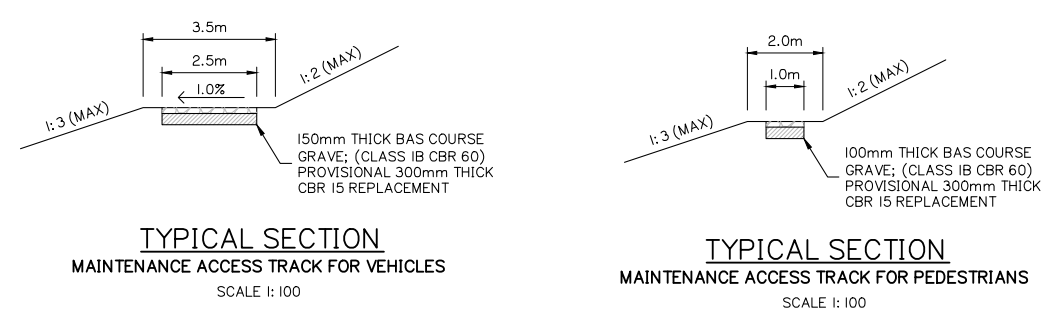
$n = 0.5$ (Recommended Turbulence)

$F_c = 1.0$ (Frequency of Clean Out / Yr)

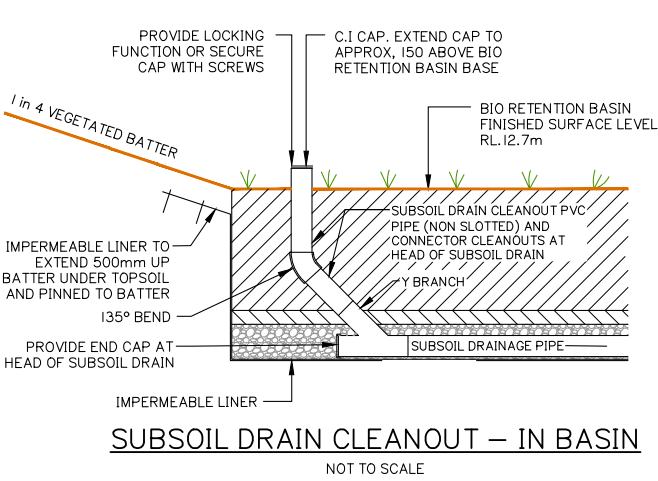
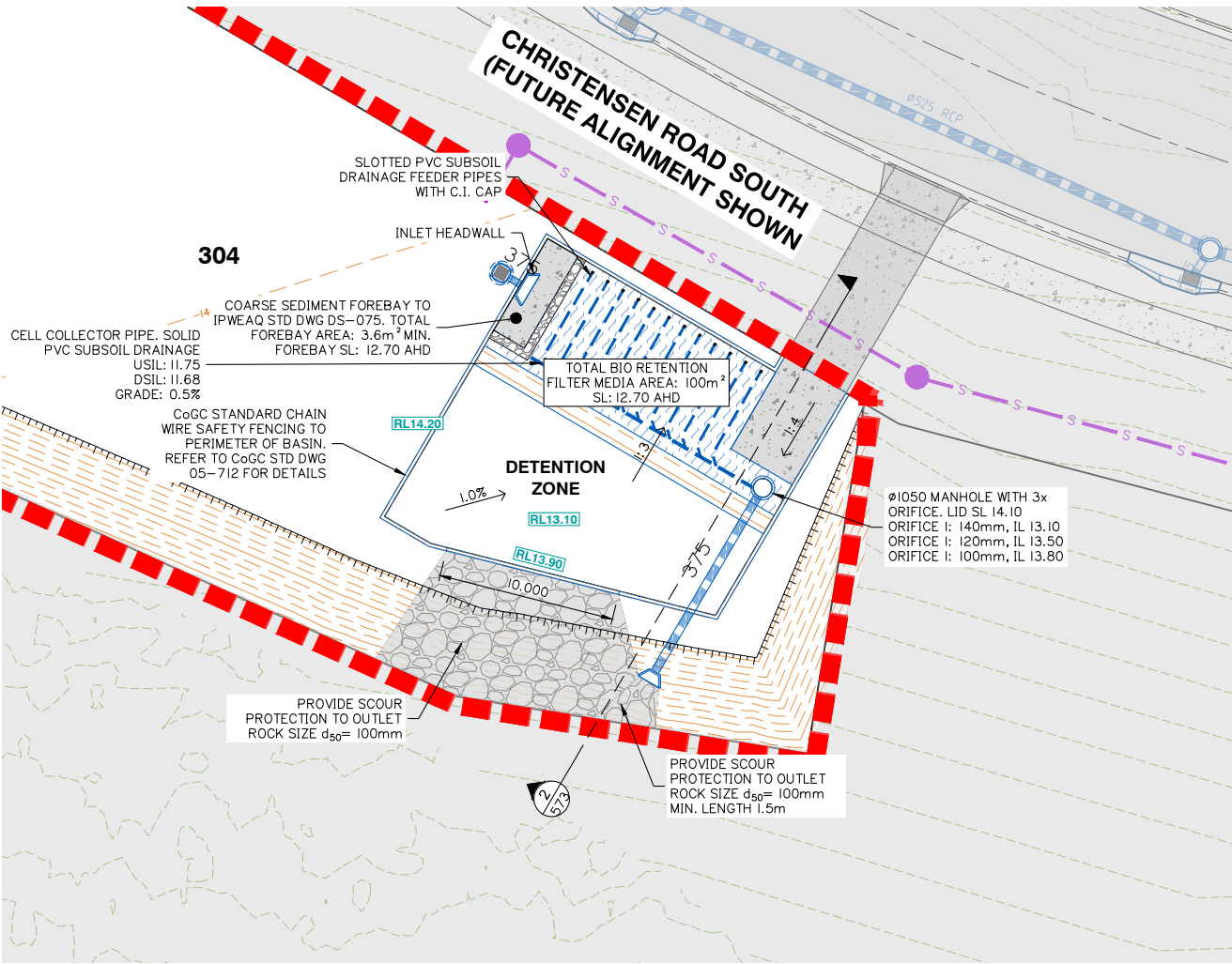
REFER TO BIO RETENTION TECHNICAL
DESIGN GUIDELINES FOR FURTHER
INFORMATION



NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004
2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003



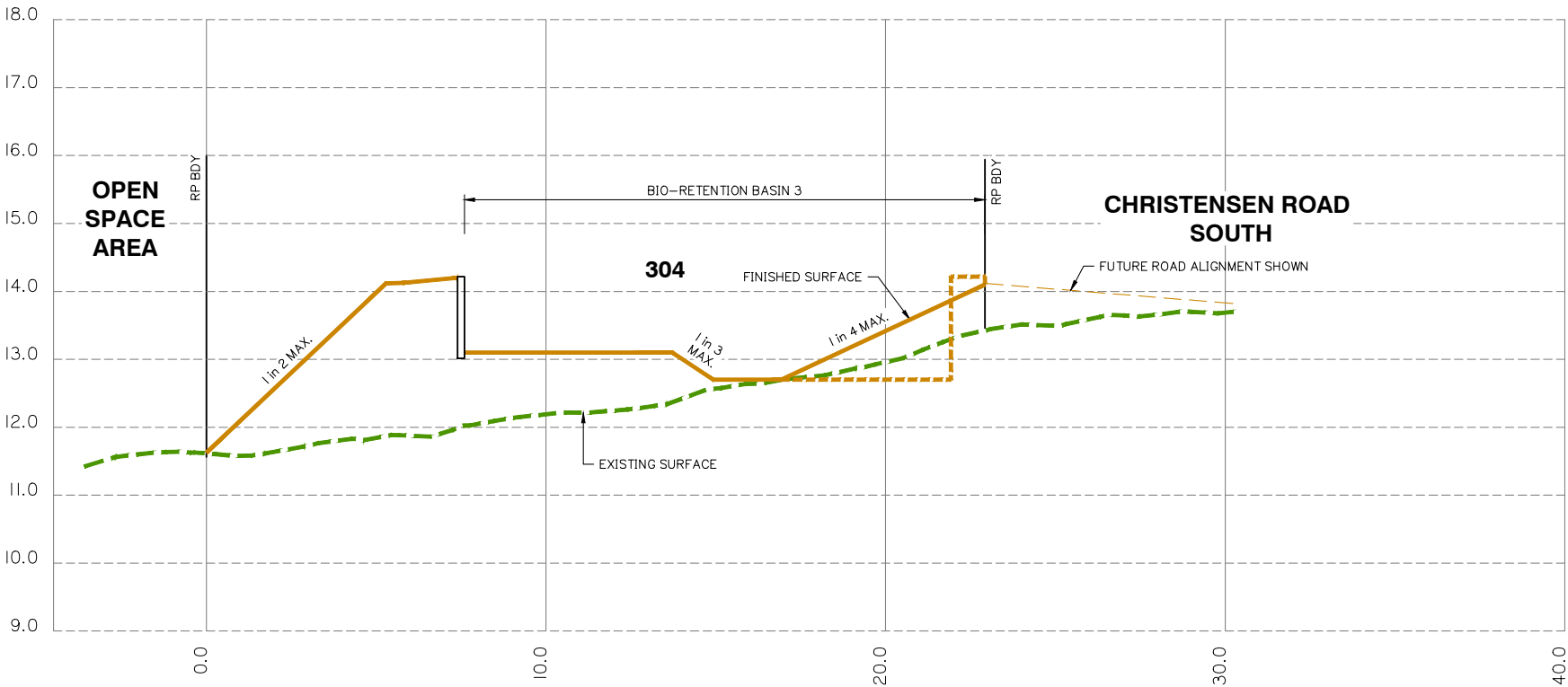
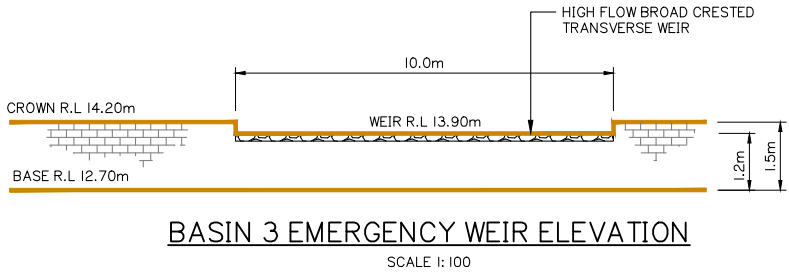
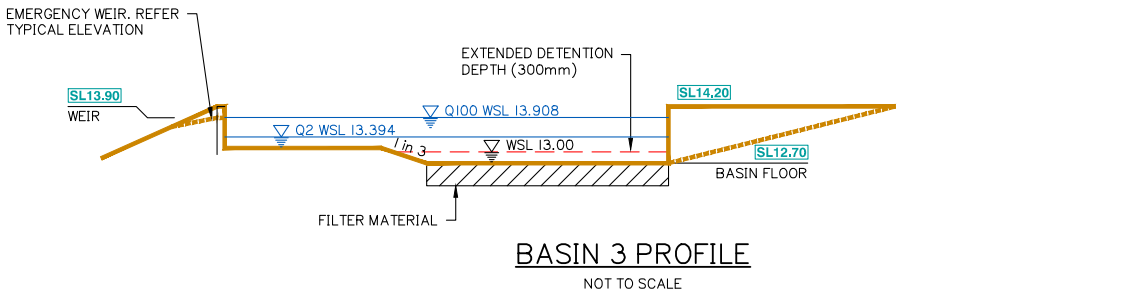
OPERATIONAL PHASE BIO RETENTION BASIN 1 LAYOUT PLAN



WATER SURFACE LEVEL TABLE

EVENT (ARI)	LEVEL (AHD)
Q1	13.296
Q2	13.394
Q5	13.521
Q10	13.625
Q20	13.731
Q50	13.837
Q100	13.908

NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004
2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003
3. REFER TO DWG 570 FOR TYPICAL FILTER MEDIA DETAILS



BIO RETENTION 3 – COARSE SEDIMENT FOREBAY SIZING GUIDE CALCULATIONS

$V_s = A_c \times R \times L_o \times F = 0.3595 \text{ m}^3$

$R = 1 - \left[1 + \frac{1}{n} \times \frac{V_s}{0.7 A_r} \right]^{-n}$

$0.8 = 1 - \left[1 + \frac{0.10}{0.5 \times 0.30 A_r} \right]^{-0.5}$ $A_f = 4.8 \text{ m}^2$

$D_s = \frac{V_s}{A_r} = \frac{2.5248}{36.00} = 0.075 \text{ m}$

OPTIMIZATION OF MINIMUM FOREBAY SIZE:

$D_s = 0.2 \text{ m}$ $A_f = \frac{0.3595 \text{ m}^3}{0.2} = 3.595 \text{ m}^2$

CALCULATED FOR 1 FOREBAY AT 3.6m².

$V_s = 0.3595 \text{ m}^3$ (Workings Above)
 $A_c = 0.749 \text{ ha}$ (Refer Catchment Plans)
UNMITIGATED POST-DEVELOPMENT FLOW
 $Q = 0.04 \text{ m}^3/\text{s}$ (3 month ARI)
 $V_s = 0.1 \text{ m/s}$ (Recommended for Imm Particle)
 $R = 0.8$ (Recommended 80% Capture)
 $L_o = 0.6$ (From Healthy Waterways Guide)
 $n = 0.5$ (Recommended Turbulence)
 $F_c = 1.0$ (Frequency of Clean Out / Yr)

REFER TO BIO RETENTION TECHNICAL DESIGN GUIDELINES FOR FURTHER INFORMATION

OPERATIONAL PHASE BIO RETENTION BASIN 3 LAYOUT PLAN

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR
CONSTRUCTION

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Drawing Title:

OPERATIONAL PHASE
BIO RETENTION BASIN 3
LAYOUT PLAN

Rev	Date	Description	JH	MG
E	21/03/25	SEWER LINE UPDATED	JH	MG
D	18/02/24	ISSUED FOR CONSTRUCTION	JH	MG
D	08/02/24	FOREBAY DETAILS ADDED	JH	MG
C	08/01/24	NOTES ADDED	JH	MG
B	06/11/23	DESIGN UPDATED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

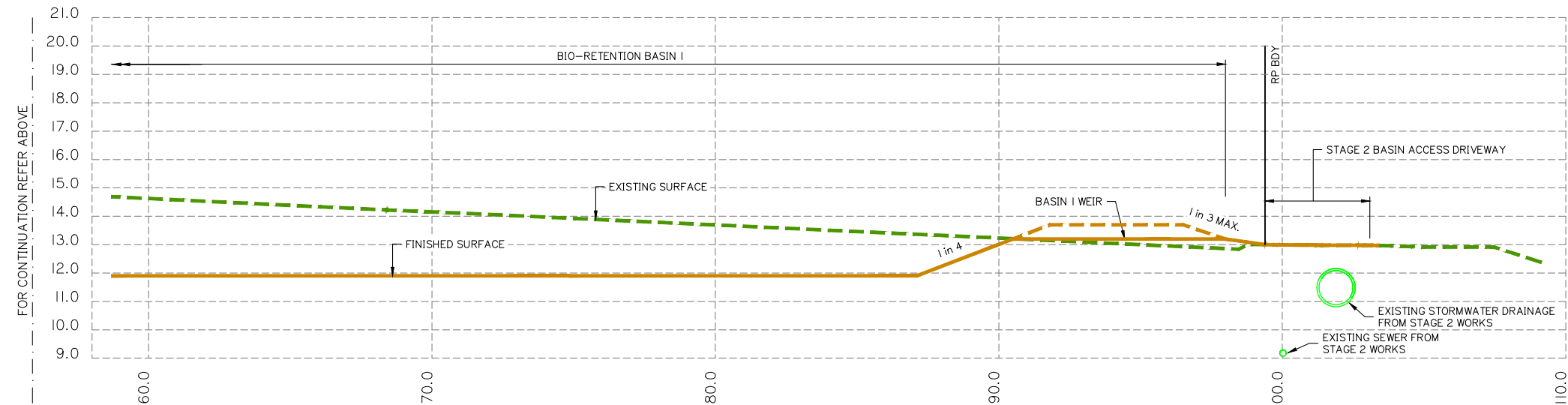
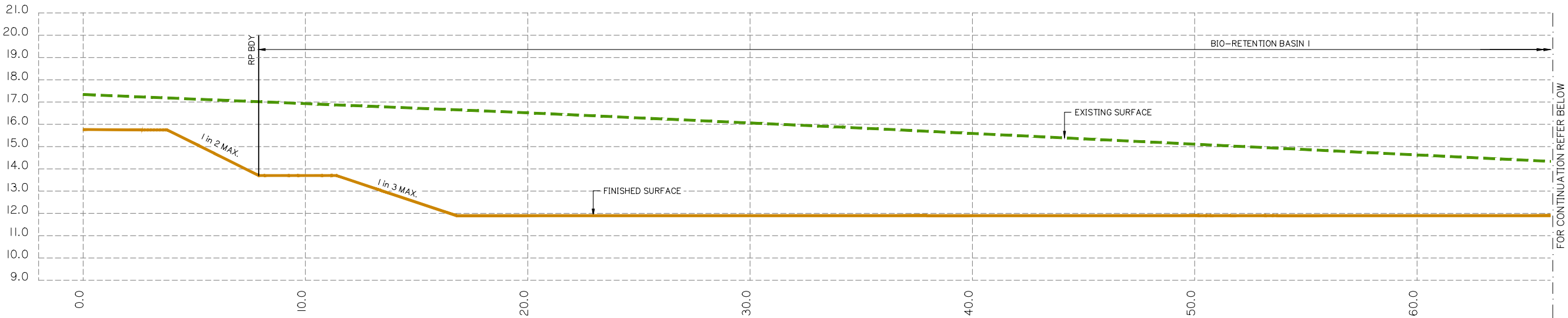
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED A3 REDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 4 8 12 16m
1:200 (A1) 1:400 (A3)

PROJECT NORTH POINT



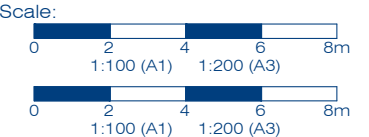
Project No. 5941	Revision
Designed: JH	Drafted: JH
Approved: MG	
RPEQ 16939	
Signed:	
Date: 28/09/2023	
Drawing No: 5941 ENG CW3 572	Revision E



SECTION I
SCALE:
1:100 HORIZ.
1:100 VERT.

A	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	JH	MG
			DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED



PROJECT NORTH POINT

Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No. 5941 ENG CW3 573	Revision A

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM:
RL:

ISSUED FOR
CONSTRUCTION

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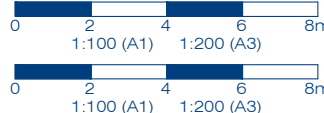
Drawing Title:

BIO RETENTION BASIN
SECTIONS
SHEET 2 OF 2

D	13/08/25	SECTION UPDATED	JH	MG	
C	11/12/24	SECTION UPDATED	JH	MG	
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG	
B	06/11/23	SECTION UPDATED	ML	MG	
A	25/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE. A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:



PROJECT NORTH POINT

Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

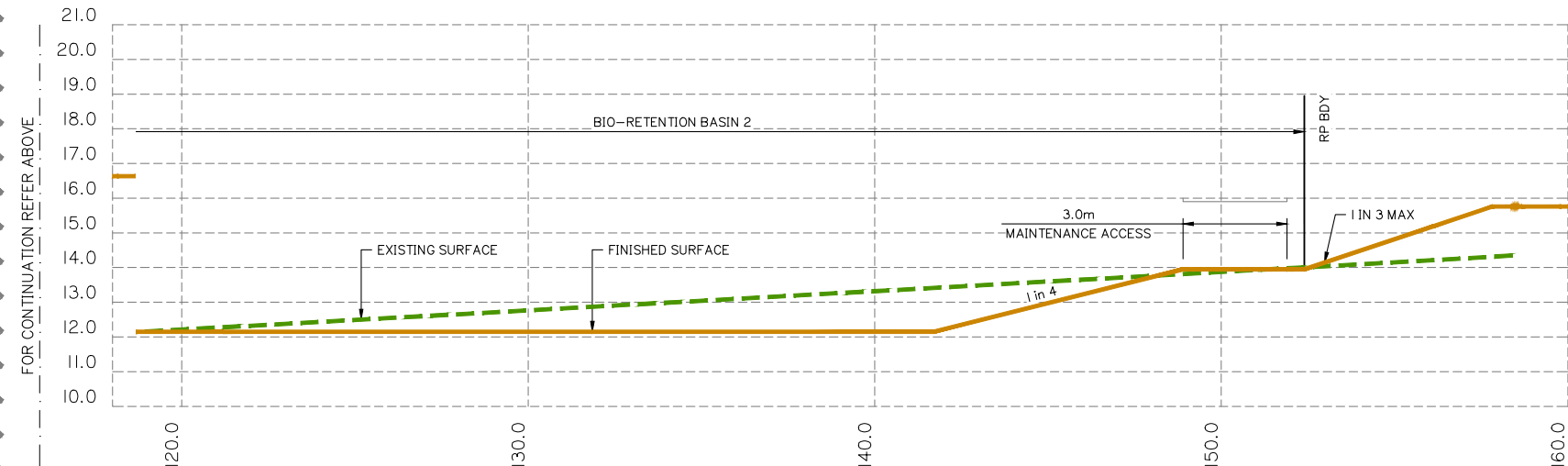
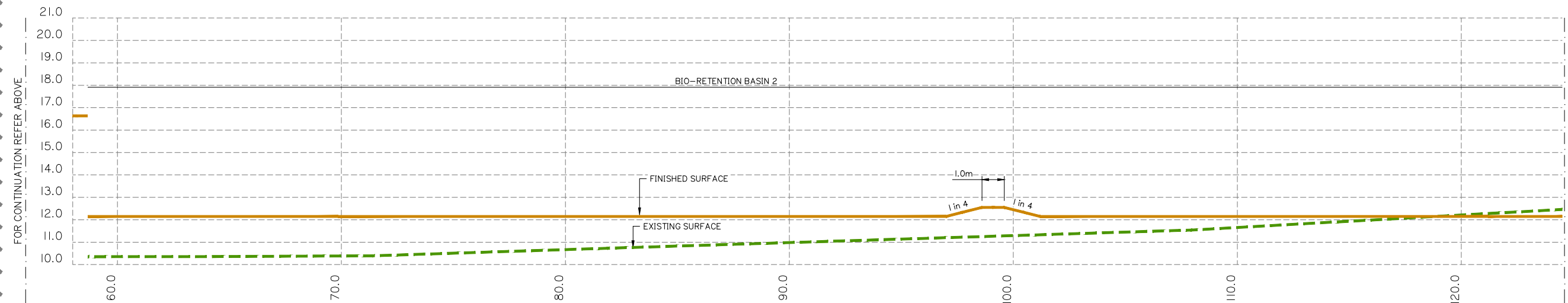
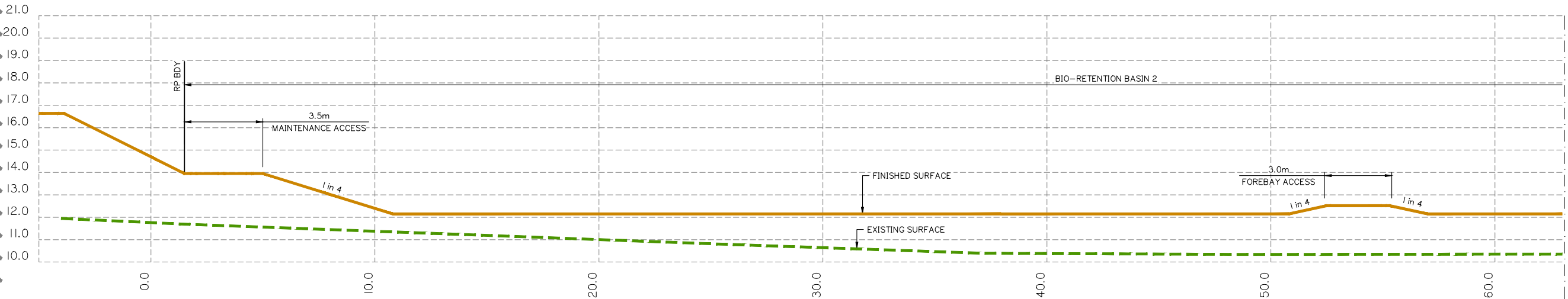
28/09/2023

Drawing No:

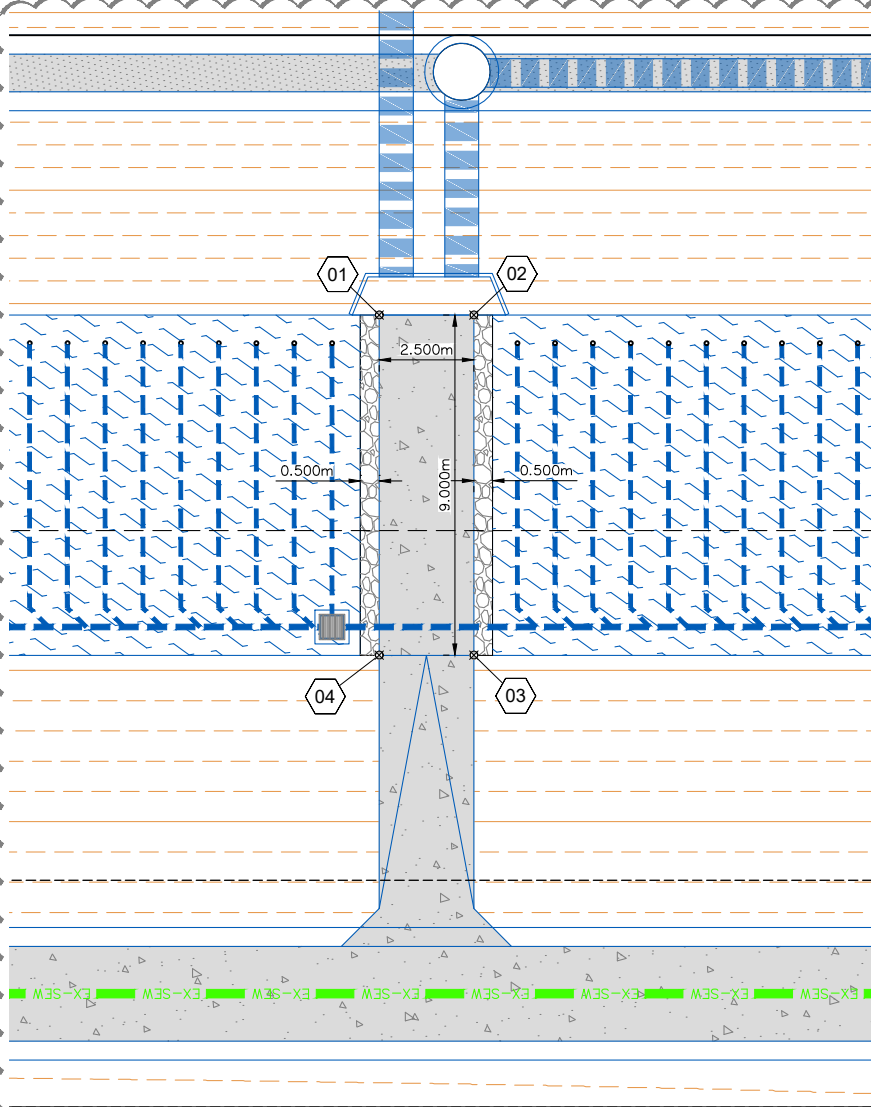
5941 ENG CW3 574

Revision

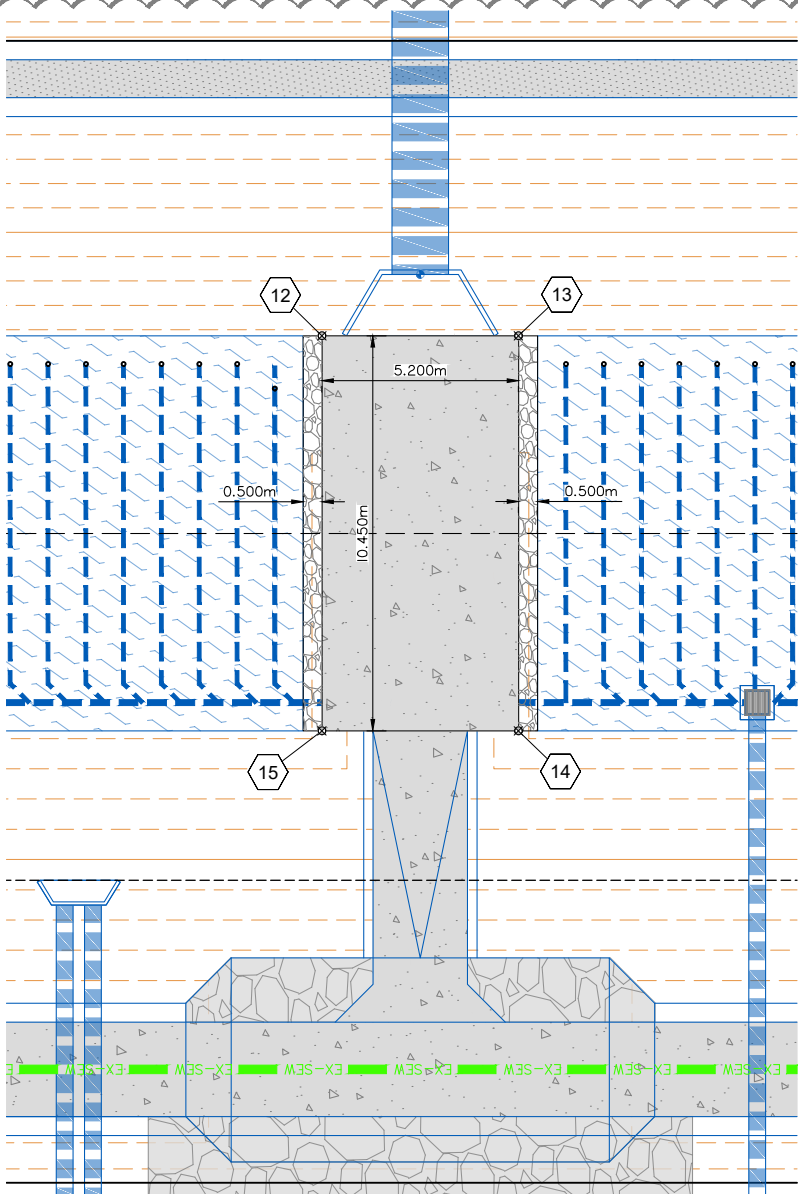
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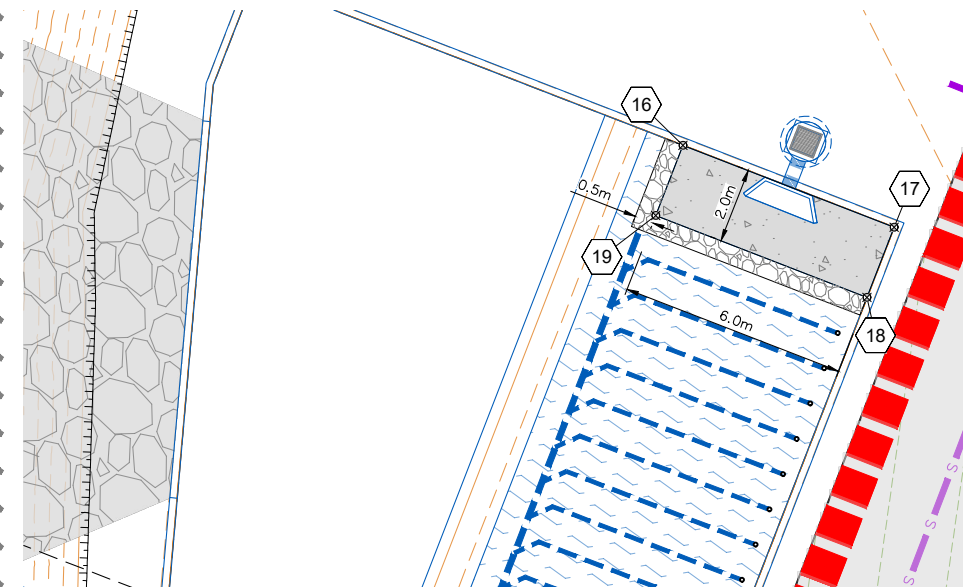
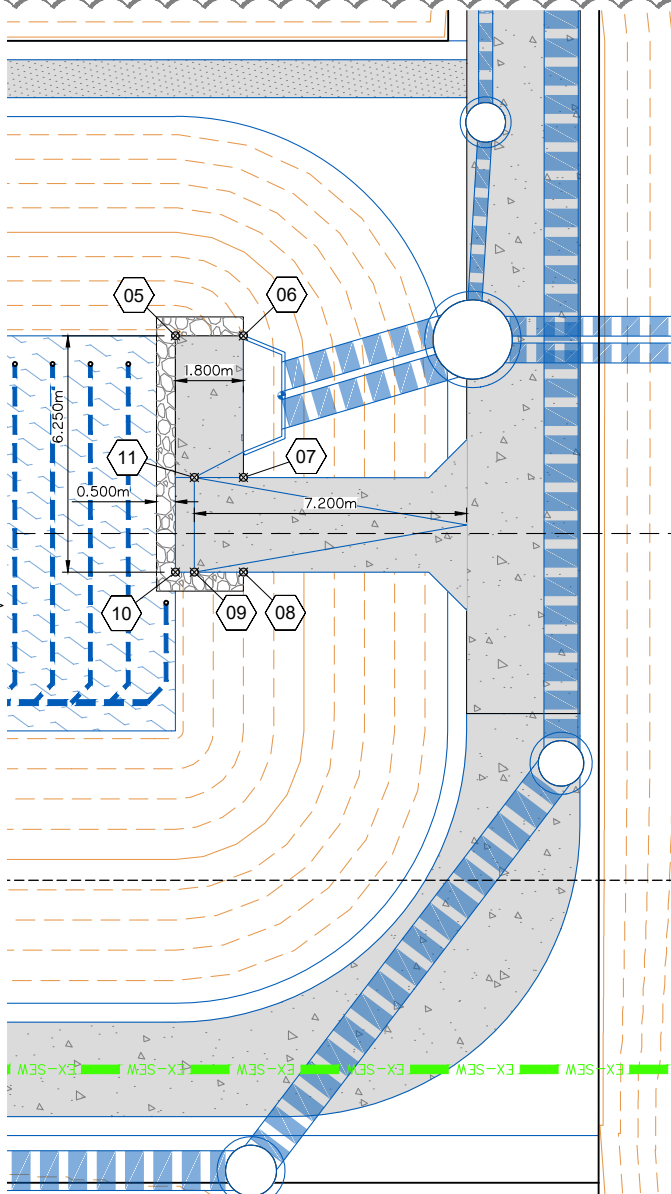
SECTION 2
SCALE:
1: 100 HORIZ.
1: 100 VERT.



BASIN 1 FOREBAY SETOUT PLAN
SCALE 1: 100



BASIN 2 FOREBAY SETOUT PLAN
SCALE 1: 100



BASIN 3 FOREBAY SETOUT PLAN
SCALE 1: 100

FOREBAY SETOUT TABLE			
POINT	EASTING	NORTHING	LEVEL (AHD)
01	3030.675	6445.598	11.900
02	3031.075	6448.066	11.900
03	3039.959	6446.627	11.900
04	3039.559	6444.159	11.900
05	2995.647	6238.362	12.150
06	2995.935	6240.138	12.150
07	2999.637	6239.538	12.480
08	3002.105	6239.137	12.480
09	3001.897	6237.855	12.150
10	3001.816	6237.361	12.150
11	2999.429	6238.256	12.150
12	2981.276	6149.618	12.150
13	2982.108	6154.751	12.150
14	2992.423	6153.080	12.150
15	2991.592	6147.947	12.150
16	2916.039	5990.062	12.700
17	2919.072	5995.228	12.700
18	2920.788	5994.221	12.700
19	2917.758	5989.054	12.700

BIO RETENTION BASIN FOREBAY SETOUT PLAN

Rev	Date	Description	DRN	CHK
D	13/08/25	SETOUT UPDATED	JH	MG
C	11/12/24	SWD & BASIN 2 UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

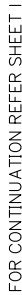
DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 4 8 12 16m
1:200 (A1) 1:400 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved: MG	
RPEQ 16939	
Signed:	
Date: 28/09/2023	
Drawing No: 5941 ENG CW3 575	Revision D



301

FOR CONTINUATION REFER SHEET 3

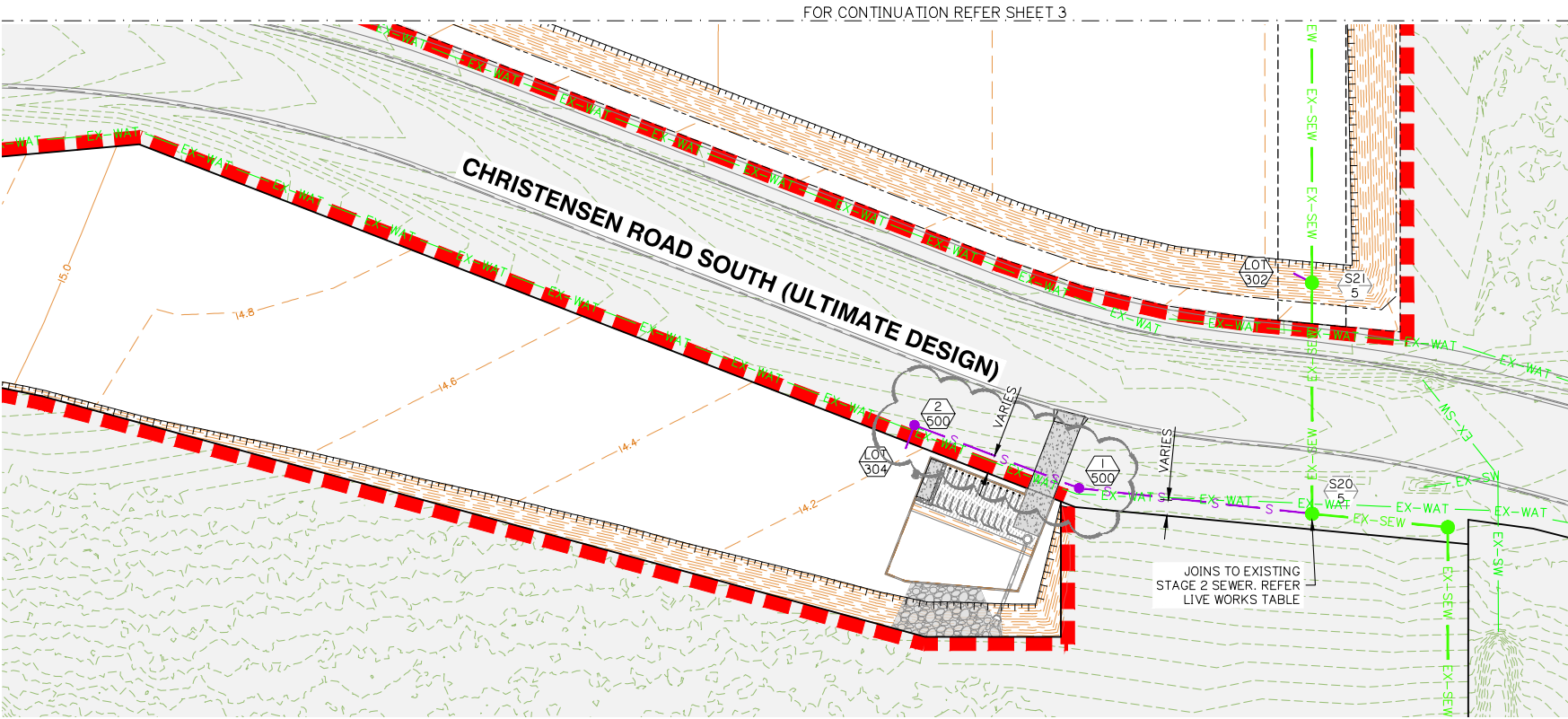
NEW 150Ø PROPERTY CONNECTION
TO BE INSTALLED AS PART OF
STAGE 3 CIVIL WORKS. REFER TO
LIVE WORKS TABLE FOR DETAILS

902

RP209307

NOT TO SCALE

A



WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

MANHOLE COVERS AND SURROUNDS:

INSTALL ALL SEWER MAINTENANCE STRUCTURE CLASS D TRAFFICABLE LIDS WITH COMPOSITE LIDS (NON-CORROSIVE) AND FRAMES IN ACCORDANCE WITH SEWERAGE STANDARD DRAWING SEQ-SEW-1308-I, 9, 10, 11.

INTERNAL CORROSION COATING TO BE APPLIED TO ALL MAINTENANCE HOLES AS PER CLAUSE 7.6.2 OF SEQ D&C CODE VERSION 2 (JULY 2019)

NOTE:

CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

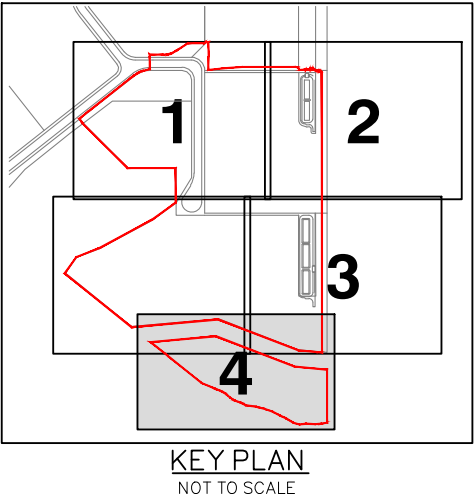
SEWER STRUCTURE LEGEND

- SEWER MAINTENANCE HOLE TYPE P3-1050ø (U.N.O)
- TYPE C-1500ø AS NOTED

SEWER STRUCTURE SETOUT TABLE		
STRUCTURE No.	EASTING	NORTHING
LOT 303	2831.516	6466.543
2/300	2835.773	6466.014
1/300	2853.935	6463.066
EX S3/7	2863.615	6522.690
LOT 302	3017.358	6267.792
EX S24/5	3019.779	6266.019
LOT 301	2976.189	6013.561
EX S20/5	2976.609	6014.788
LOT 304	2915.561	5997.286
2/500	2917.432	6000.476
1/500	2939.879	5987.418
EX S20/5	2973.470	6073.440

LIVE WORKS SCHEDULE – SEWER

No	DESCRIPTION	DIA SEWER	MH No.	MH/MS TYPE	COVER TYPE	LOT No.	FSL	ESL	IL	DEPTH TO INVERT
1(A)	CONTRACTOR TO BREAK INTO EXISTING STRUCTURE S3/7, COMPLETE BENCHING AND LAY LINE 300 INCLUDING 150ø LOT 303 HOUSE CONNECTION	DN150	S3/7	P3	D/C	–	15.931	15.931	11.955	3.976
2(A)	CONTRACTOR TO BREAK INTO EXISTING STRUCTURE S24/5, AND INSTALL 150ø LOT 301 HOUSE CONNECTION	DN150	S24/5	C	D/C	301	15.690	15.690	11.820	3.870
3(A)	CONTRACTOR TO BREAK INTO EXISTING STRUCTURE S21/5, AND INSTALL 150ø LOT 302 HOUSE CONNECTION	DN150	S21/5	C	D/C	302	16.565	16.565	11.720	4.845
4(A)	CONTRACTOR TO BREAK INTO EXISTING STRUCTURE S20/5, COMPLETE BENCHING AND LAY LINE 500 INCLUDING 150ø LOT 503 HOUSE CONNECTION	DN150	S20/5	P3	D/C	–	13.264	13.264	7.036	6.228



Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian: PSM:
RL:

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Drawing Title:

SEWER RETICULATION
LAYOUT PLAN
SHEET 4 OF 4

Rev	Date	Description	DRN	CHK
C	21/03/25	SEWER LINE UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	LABEL UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE:
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

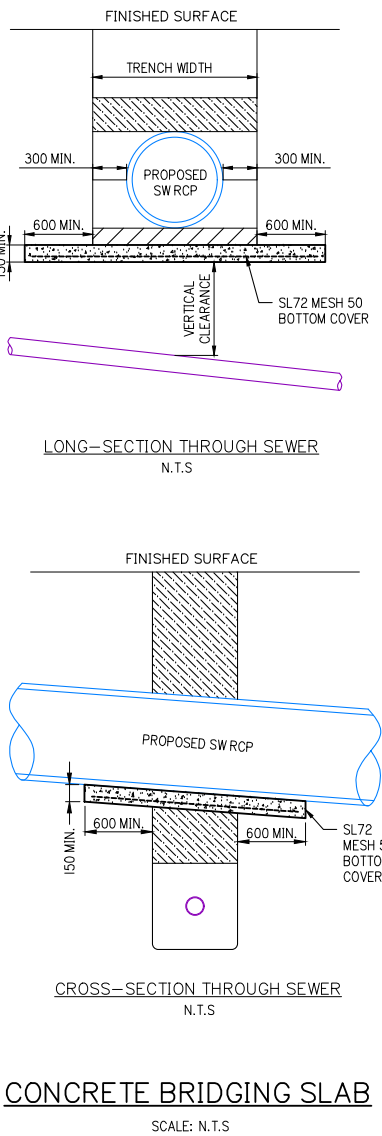
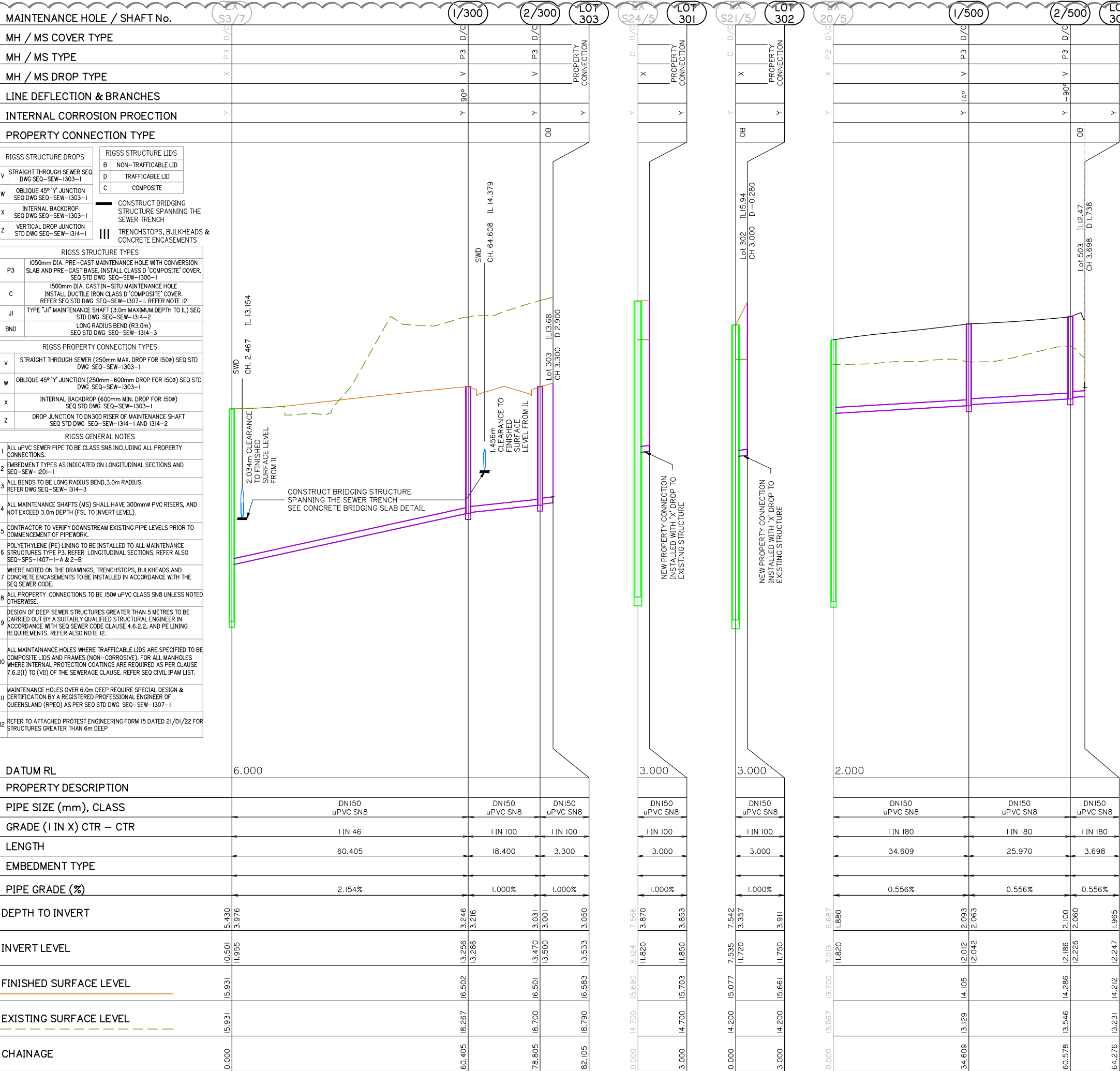
0 10 20 30 40m

1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No. 5941 ENG CW3 613	Revision C





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planning | environment | landscape | engineering | survey

T: 3807 3333 | F: 3287 5481 | www.gassman.com.au

Gold Coast | 78 Business Street, Yatala QLD | PO Box 362, Beenleigh 4207

Client:



FRASERS
PROPERTY

FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504

Plan: SP329485

Local Authority: CITY OF GOLD COAST

Level Datum: AHD

Meridian: PSM:

RL:

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Drawing Title:

SEWER RETICULATION
LONGITUDINAL SECTIONS

Rev	Date	Description	DRN	CHK
D	11/04/25	LONG SECTION UPDATED	JH	MG
C	21/03/25	LONG SECTION UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	06/11/23	LABEL UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

0 1 2 3 4m
1:50 (A1) 1:100 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: ML

Approved: MG

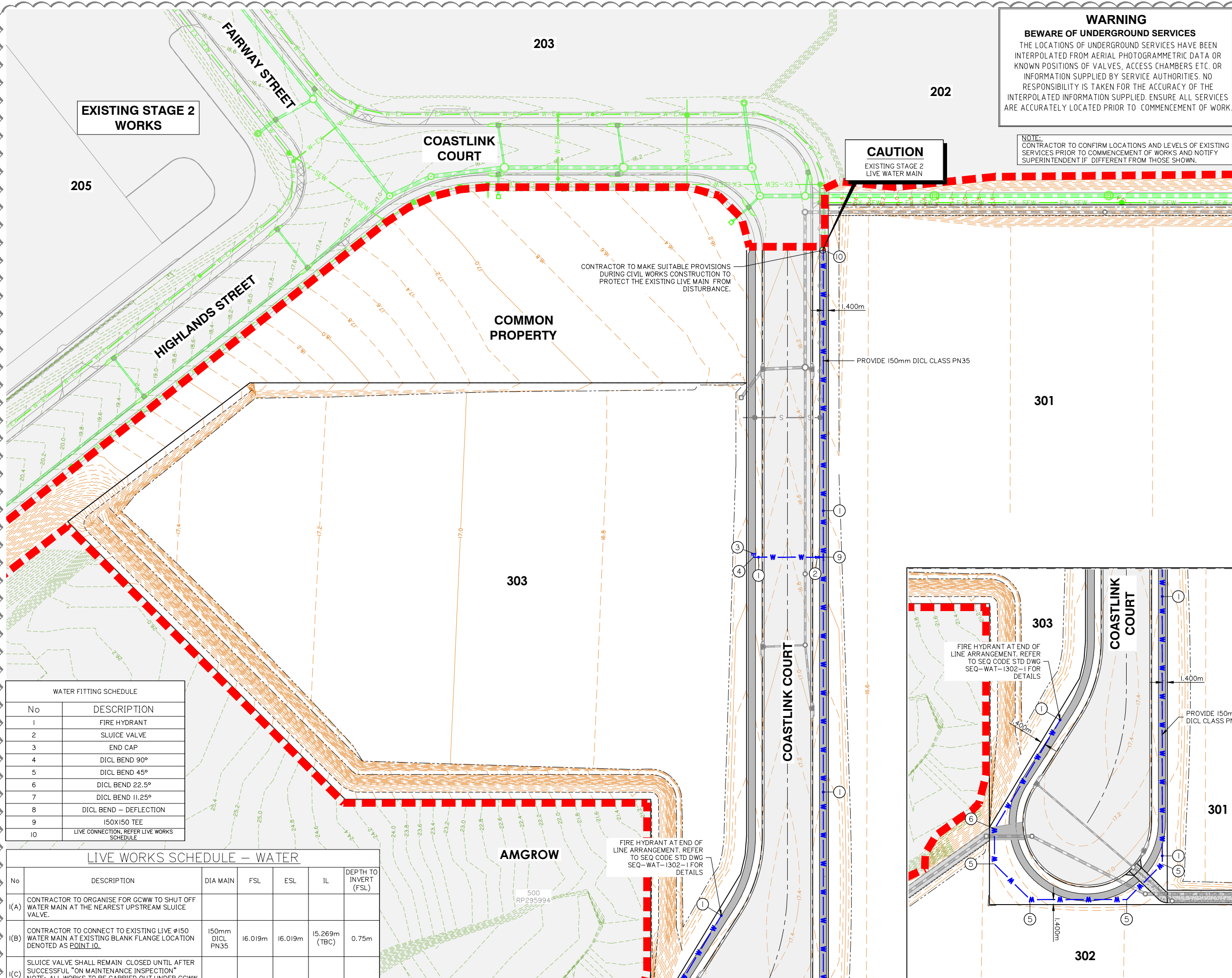
RPEQ: 16939

Signed: 

Date: 28/09/2023

Drawing No: 5941 ENG CW3 630

Revision: D



EXISTING STAGE 2 WORKS

COASTLINK COURT

CAUTION
EXISTING STAGE 2
LIVE WATER MAIN

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

CONTRACTOR TO MAKE SUITABLE PROVISIONS DURING CIVIL WORKS CONSTRUCTION TO PROTECT THE EXISTING LIVE MAIN FROM DISTURBANCE.

COMMON PROPERTY

PROVIDE 150mm DICL CLASS PN35

301

303

COASTLINK COURT

COASTLINK COURT

301

302

FIRE HYDRANT AT END OF LINE ARRANGEMENT. REFER TO SEQ CODE STD DWG SEQ-WAT-1302-1 FOR DETAILS

FIRE HYDRANT AT END OF LINE ARRANGEMENT. REFER TO SEQ CODE STD DWG SEQ-WAT-1302-1 FOR DETAILS

PROVIDE 150mm DICL CLASS PN35

FOR CONTINUATION REFER INSET

INSET
SCALE 1:500

WATER FITTING SCHEDULE	
No	DESCRIPTION
1	FIRE HYDRANT
2	SLUICE VALVE
3	END CAP
4	DICL BEND 90°
5	DICL BEND 45°
6	DICL BEND 22.5°
7	DICL BEND 11.25°
8	DICL BEND - DEFLECTION
9	ISOX150 TEE
10	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE

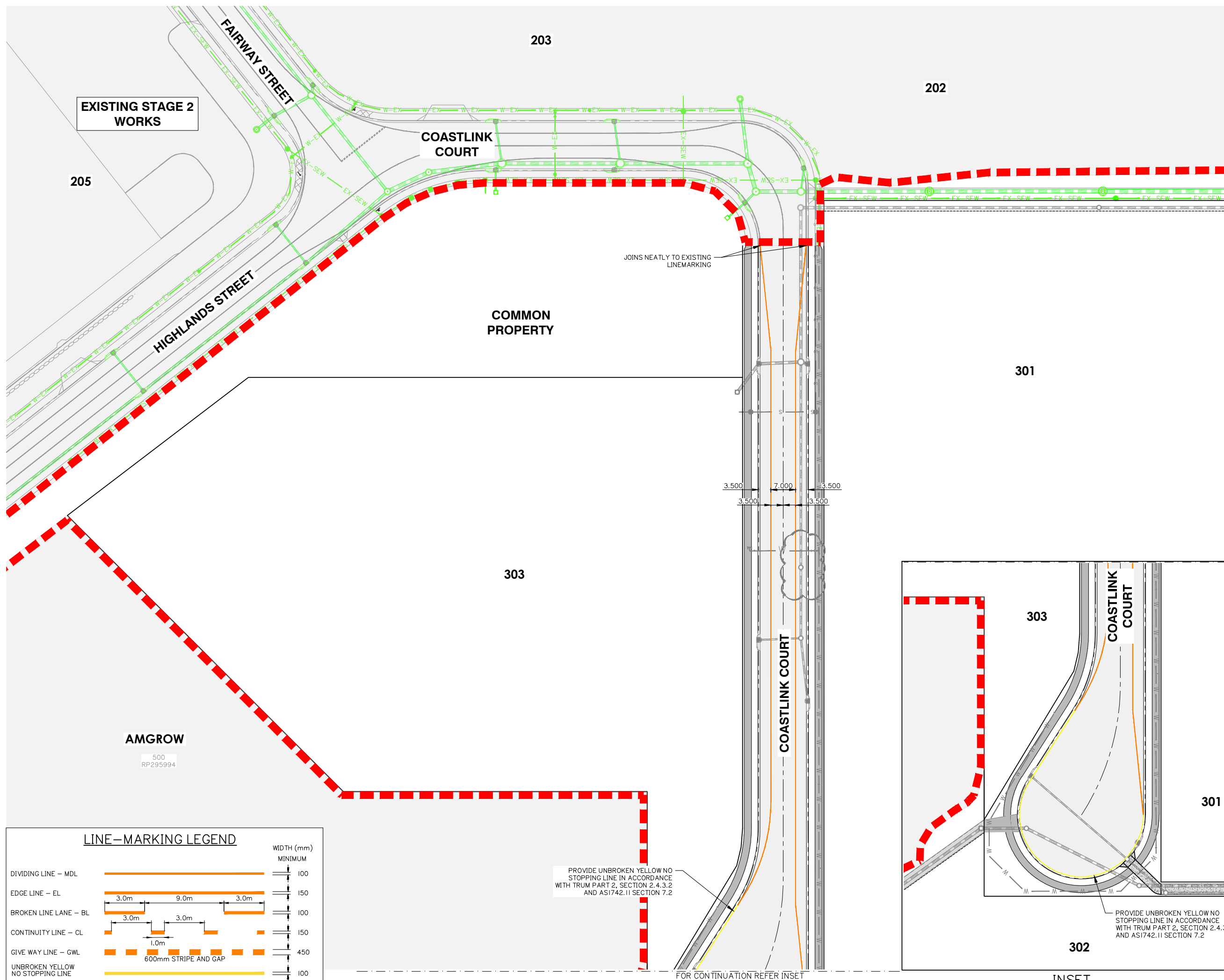
LIVE WORKS SCHEDULE – WATER						
No	DESCRIPTION	DIA MAIN	FSL	ESL	IL	DEPTH TO INVERT (FSL)
I(A)	CONTRACTOR TO ORGANISE FOR GCWW TO SHUT OFF WATER MAIN AT THE NEAREST UPSTREAM SLUICE VALVE.					
I(B)	CONTRACTOR TO CONNECT TO EXISTING LIVE Ø150 WATER MAIN AT EXISTING BLANK FLANGE LOCATION DENOTED AS POINT 10.	150mm DICL PN35	16.019m	16.019m	15.269m (TBC)	0.75m
I(C)	SLUICE VALVE SHALL REMAIN CLOSED UNTIL AFTER SUCCESSFUL "ON MAINTENANCE INSPECTION" NOTE: ALL WORKS TO BE CARRIED OUT UNDER GCWW SUPERVISION AND AT DEVELOPER'S EXPENSE.					

WATER RETICULATION LAYOUT PLAN

Rev	Date	Description	DRN	CHK
F	11/04/25	SWD MANHOLE ADDED	JH	MG
E	11/04/25	LONG SECTION UPDATED	JH	MG
D	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
C	11/11/24	LAYOUT UPDATED	JH	MG
B	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE: A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED

Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)



Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329485
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

SIGNS AND LINEMARKING LAYOUT PLAN

G	11/04/25	SWD MANHOLE ADDED	JH	MG
E	05/03/25	STORMWATER LAYOUT UPDATED	JH	MG
E	11/12/24	LONG SECTIONS UPDATED	JH	MG
	19/02/24	ISSUED FOR CONSTRUCTION	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
	06/11/23	LEGEND UPDATED	ML	MG
	25/05/23	ORIGINAL ISSUE	JH	MG
v	Date	Description	DRN	CHK

MEASUREMENTS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CONDUIT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

scale:



0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

rafted: JH

Improved:

AG

PEQ

6939

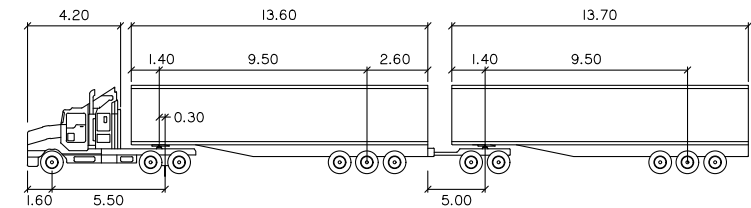
igned:

[Signature]

ate:

Drawing No:
5941 ENG CW3 810

G



	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 23.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SCALE NOT TO SCALE

