

CIVIL OPERATIONAL WORKS

VANTAGE YATALA - STAGE 3



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T: 3807 3333 | F:3287 5461 | www.gassman.com.au
Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

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5941 ENG CW3 900	B	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

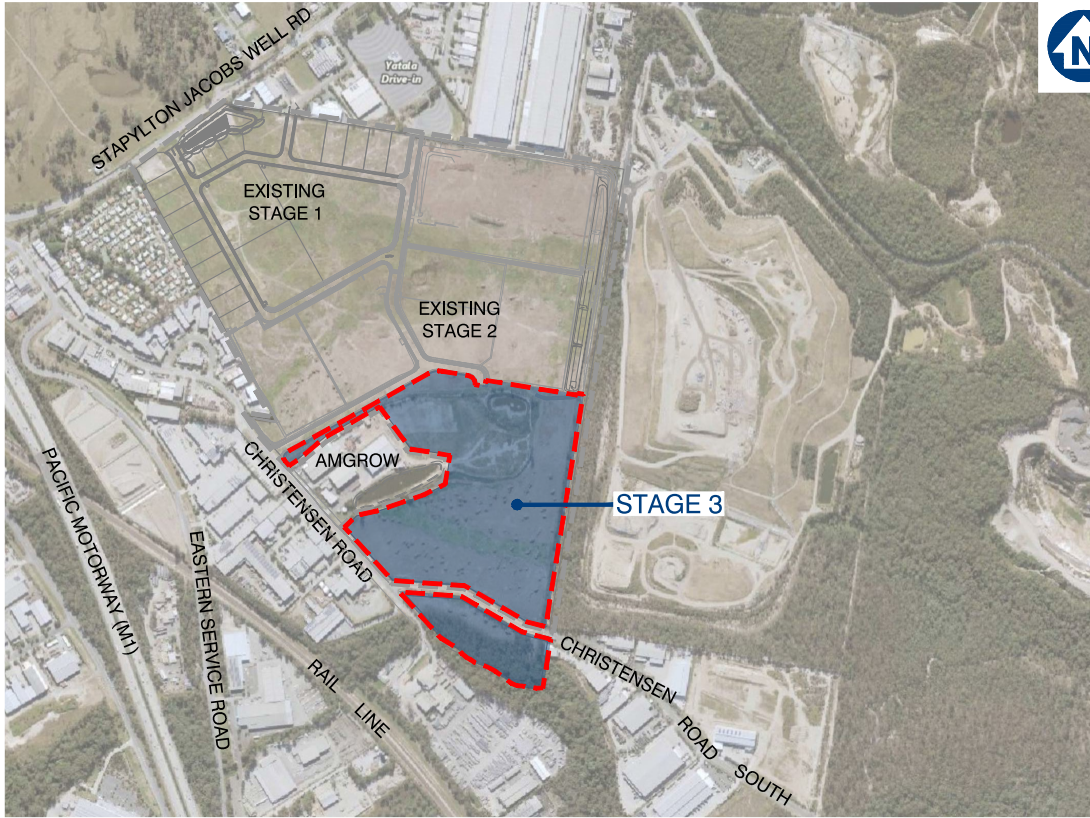
PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

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 APPROVAL

DWG NO.5941 ENG CW3 001 - E

FEBRUARY 2024

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.

1. **PRECEDENCE**
EARTHWORKS SPECIFICATION PREPARED BY PROJECT GEOTECHNICAL ENGINEER TO TAKE PRECEDENCE OVER STANDARD COUNCIL EARTHWORKS NOTES.
2. **TOPSOIL STRIPPING**
TOPSOIL SHALL BE STRIPPED PREPARED BY PROJECT GEOTECHNICAL ENGINEER TO TAKE PRECEDENCE OVER STANDARD COUNCIL EARTHWORKS NOTES.
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.

9. DAMS AND PONDS
WHERE POSSIBLE, WATER FROM DAMS AND PONDS SHALL BE MAINTAINED AND UTILISED FOR CONSTRUCTION PURPOSES AND DUST SUPPRESSION. DAMS AND PONDS NOT TO BE RETAINED SHALL BE DEWATERED, CLEARED OF ANY FOREIGN MATTER AND ORGANIC MATERIAL WITH THIS MATERIAL TO BE REMOVED OFF SITE.
9. RETAINING STRUCTURES
THE DESIGN AND STRUCTURAL CERTIFICATION OF RETAINING STRUCTURES SHALL BE UNDERTAKEN BY THE CONTRACTOR'S STRUCTURAL ENGINEER (RPEQ) IN CONSULTATION WITH THE PROJECT'S CIVIL ENGINEER AND LANDSCAPE CONSULTANT. THE CONTRACTOR IS RESPONSIBLE FOR THE SUBMISSION AND APPROVAL COORDINATION OF THE ASSOCIATED DRAWINGS AND CERTIFICATION TO GCCC. A COPY OF THIS SUBMISSION IS TO BE PROVIDED TO THE SUPERINTENDENT.
10. TOPSOIL REPLACEMENT
ALL BATTERS AND ALLOTMENT CUT & FILL AREAS SHALL BE TOP SOILED FROM ONSITE STOCKPILES. IF DIRECTED BY THE SUPERINTENDENT THE TOPSOIL SHALL BE SCREENED PRIOR TO PLACING. THE CONTRACTOR SHALL ALLOW IN THEIR RATE FOR SCREENING AND THE DISPOSAL OF REJECT MATERIAL TO TIP OFFSITE INCLUDING ALL FEES. THE CONTRACTOR MUST ENSURE THAT THE STRIPPING SHALL BE UNDERTAKEN IN SUCH A MANNER AS TO AVOID CONTAMINATION BY OVER CUTTING. IF TOPSOIL IS CONTAMINATED BY OVER CUTTING AND DETERMINED NOT SUITABLE FOR REUSE BY THE SUPERINTENDENT, THE CONTRACTOR SHALL BEAR THE COST OF REMOVAL FROM SITE OF ALL CONTAMINATED TOPSOIL AND THE COST TO SUPPLY AND IMPORT SUITABLE TOPSOIL FOR RE-SPREADING.
11. GRASSING / SEEDING
ALL CUT & FILL AREAS AND DISTURBED AREAS SHALL BE GRASSED OR SEEDDED TO THE SATISFACTION OF THE SUPERINTENDENT.
12. STOCKPILES
ALL MATERIAL/SPOIL ARISING FROM WORKS ON SITE SHALL BE COMPACTED TO AN APPROPRIATE STANDARD WITHIN THE FILL AREAS OF FUTURE STAGES AS NOMINATED BY THE SUPERINTENDENT. THE CONTRACTOR IS NOT TO CREATE STOCKPILES OF SURPLUS MATERIALS UNLESS WRITTEN AUTHORIZATION IS RECEIVED FROM THE SUPERINTENDENT.

- 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 SEED, 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.

- a. ERECT SITE SIGNAGE, CONSTRUCT ENTRY AND EXIT POINT AS INDICATED CONTRACTOR 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 BALANCE 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 EARTH 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.
12. BASIN CONSTRUCTION

PRIOR TO COMMENCING CONSTRUCTION OF THE DETENTION BASIN THE DIVERSION OF SURFACE WATER FROM THE PROPOSED WORK AREAS, USING MEASURES SUCH AS OPEN DRAINS/SUMPS, ARE REQUIRED TO AID IN SITE DE-WATERING.

BASIN TO CONTINUE ACTING AS SEDIMENT BASIN UNTIL 85% OF CATCHMENT CONSTRUCTION IS COMPLETE.

THE CLAY FILLING FOR THE BASIN WALLS SHALL BE PLACED IN HORIZONTAL LAYERS OF 200mm THICKNESS AND COMPACTED TO DENSITY RATIO WITHIN THE RANGE 98%–102% STANDARD COMPACTION (AS I289.5.1.1). PLACEMENT MOISTURE CONTENT SHOULD BE WITHIN THE RANGE OMC –1% TO OMC –2% (WHERE OMC = OPTIMUM MOISTURE CONTENT FOR STANDARD COMPACTION). CONTRACTOR TO PROVIDE SAFETY FENCING TO BASIN DURING CONSTRUCTION AND APPROPRIATE SIGNAGE (PERMANENT OR TEMPORARY).



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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: GENERAL NOTES SHEET 1 OF 2																																																																			
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HES BASIN GENERAL NOTES

AUTO DOSER

1. PROVIDED AS EITHER 'FLOC BOX' OR 'FOD-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 EMERSION CLASS 2(i), 3, 4 OR 5 AND FREE OF ROOTS, WOODY VEGETATION, ROCKS AND OTHER UNSUITABLE MATERIAL. SOIL WITH EMERSION 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.
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.

CUT-OFF TRENCH

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.
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:



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:

GENERAL NOTES
SHEET 2 OF 2

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
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Scale:

NOT APPLICABLE

PROJECT NORTH POINT

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

Drawing No: 5941 ENG CW3 003	Revision: A
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PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Date: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

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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LEGEND

Rev	Date	Description	JH	MG
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DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE, CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED

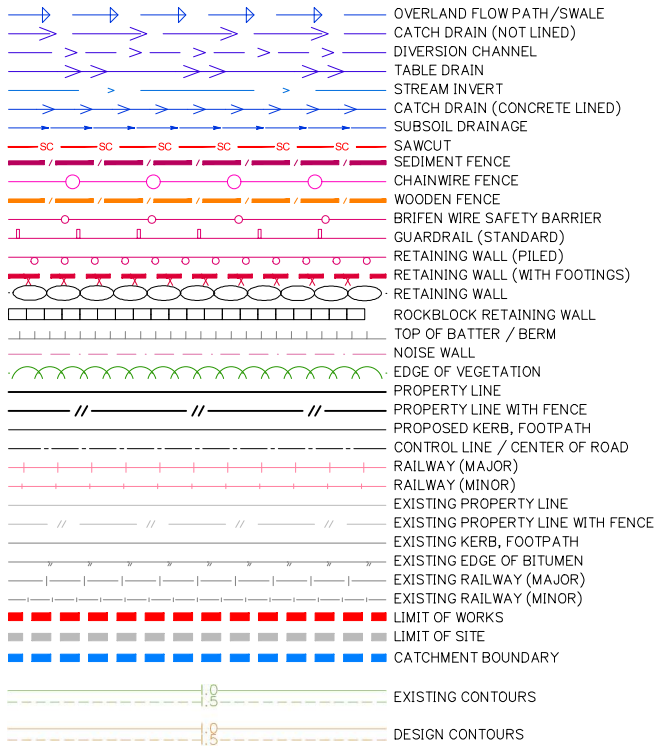
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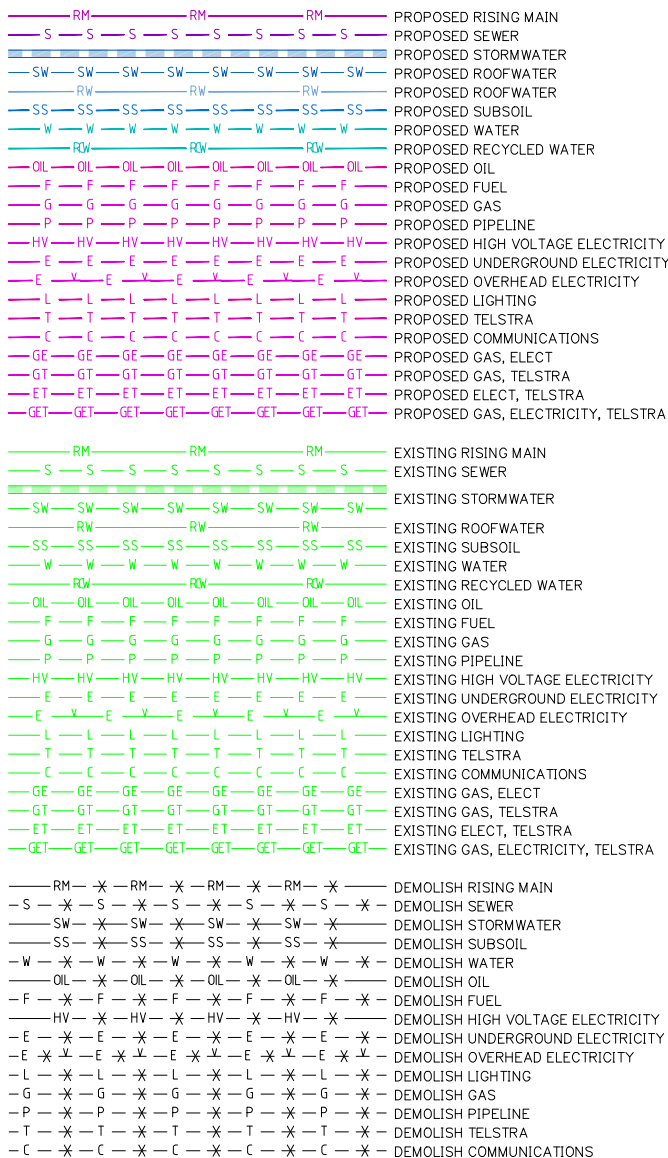
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Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 004	A

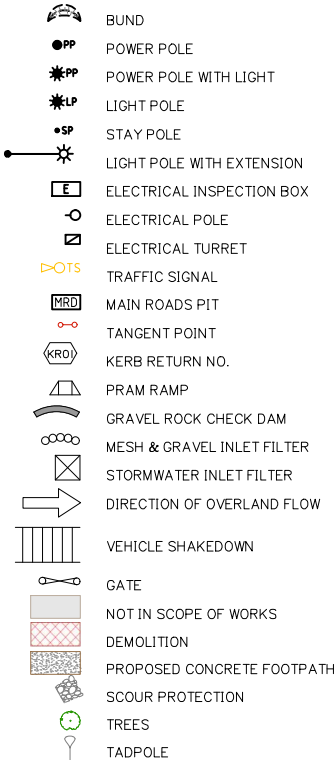
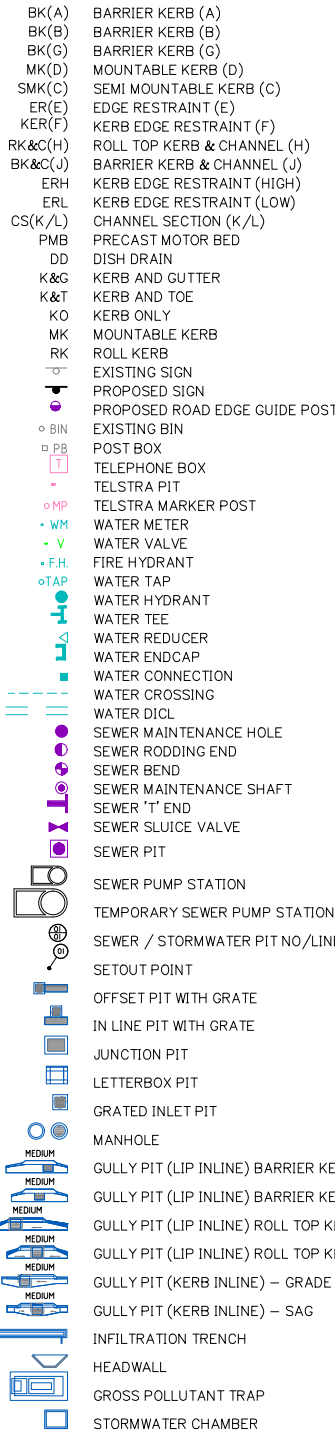
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SERVICES LEGEND



SYMBOLS



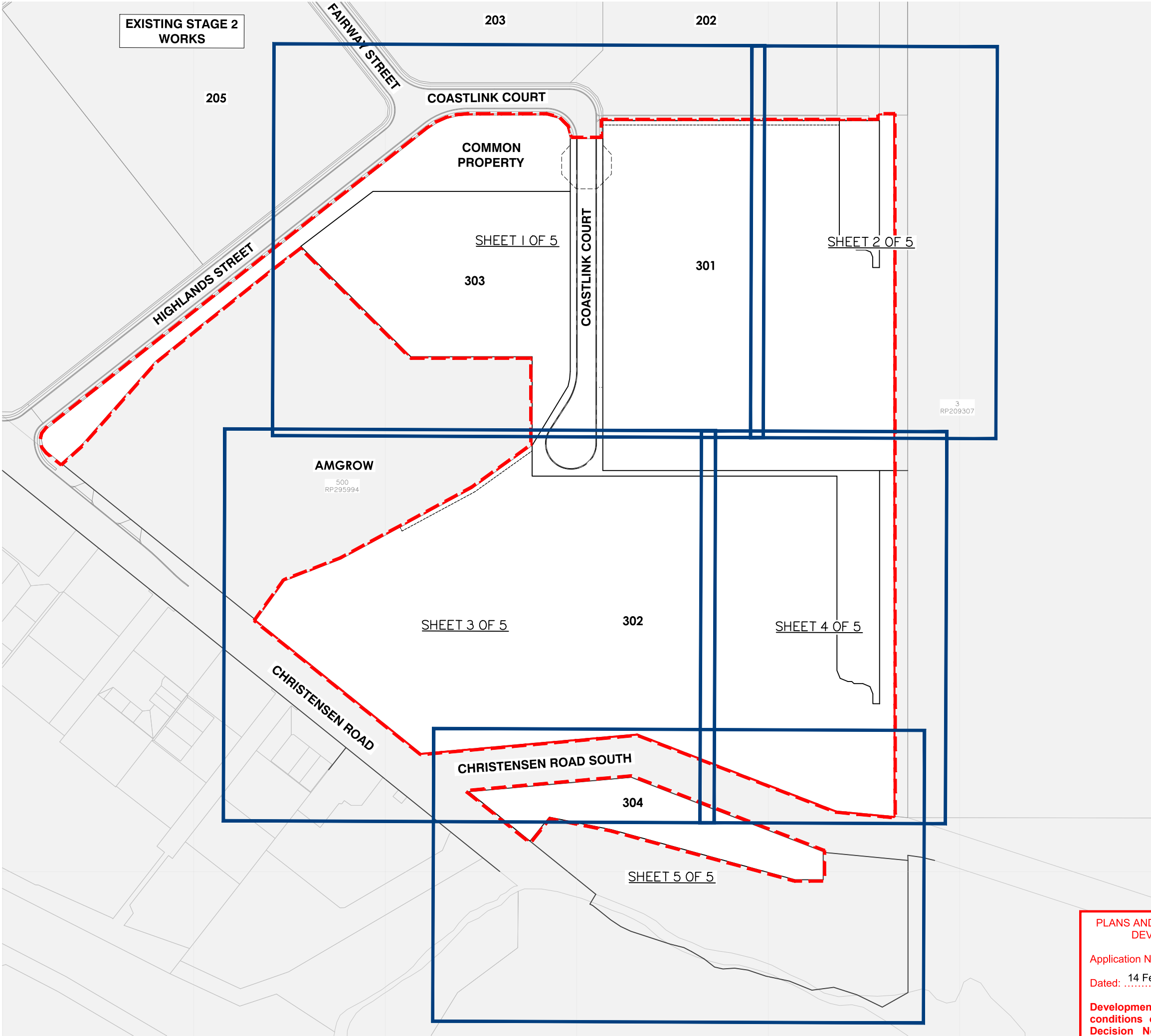
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Application No.: OPW/2023/1136

Dated: 14 February 2024

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KEY LAYOUT PLAN

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Application No: OPW/2023/1136

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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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KEY LAYOUT PLAN

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
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A1 UNREDUCED
A3 REDUCED

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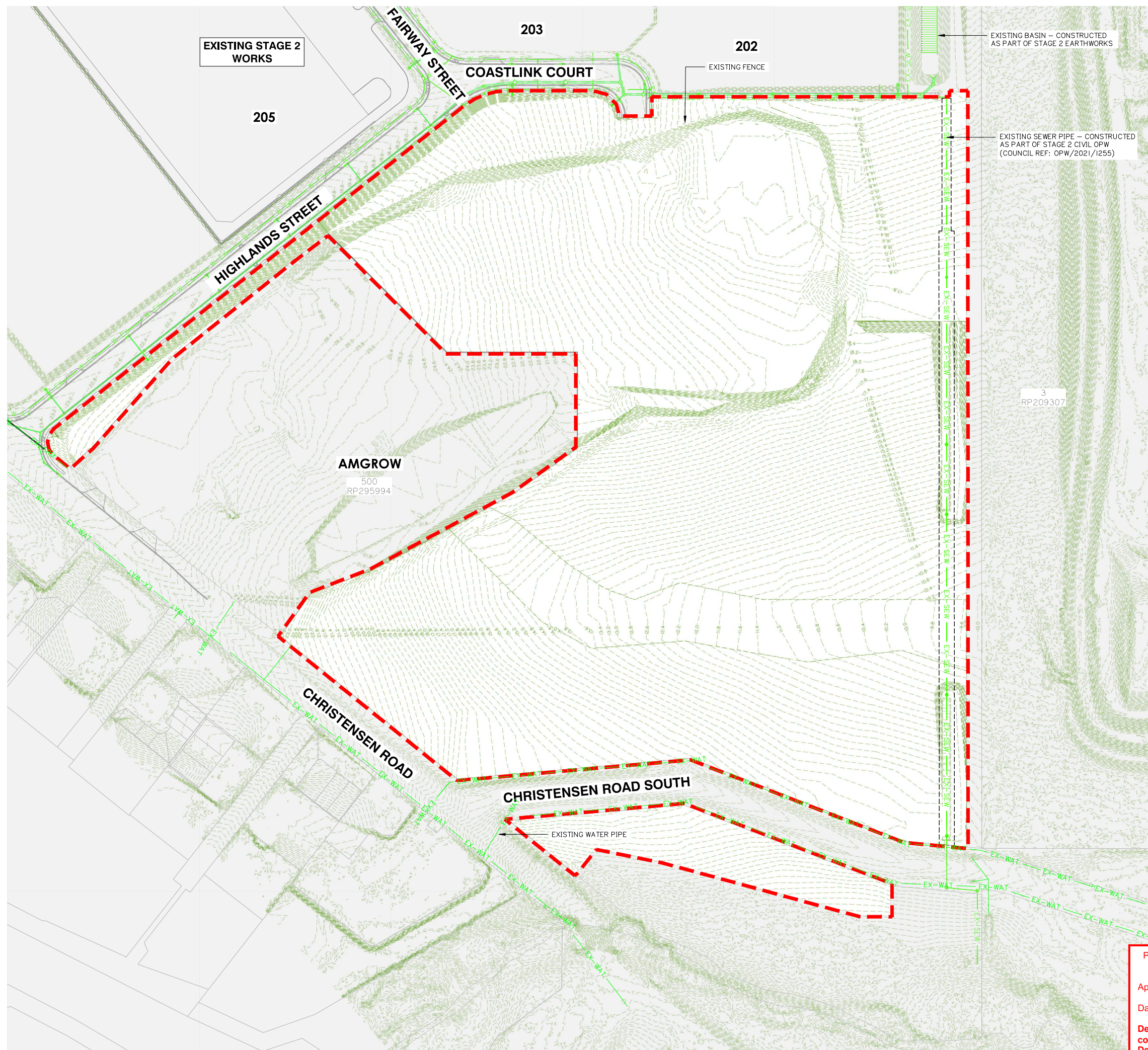
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PROJECT NORTH POINT



Project No.	5941
Designed:	JH
Drafted:	JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	5941 ENG CW3 005
Revision	B



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Application No: OPW/2023/1136

Dated: 14 February 2024

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FPI QUEENSLAND
PTY. LTD.

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VANTAGE YATALA STAGE 3

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DRIVE, STAPYLTON
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Drawing Title:

EXISTING SURFACE LAYOUT PLAN

[illegible]

B	21/12/23	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:



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1:1250 (A1) 1:2500 (A3)

PROJECT NORTH POINT



Project No. 594

Designed: JH	Drafted: ML
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Approved:	MG
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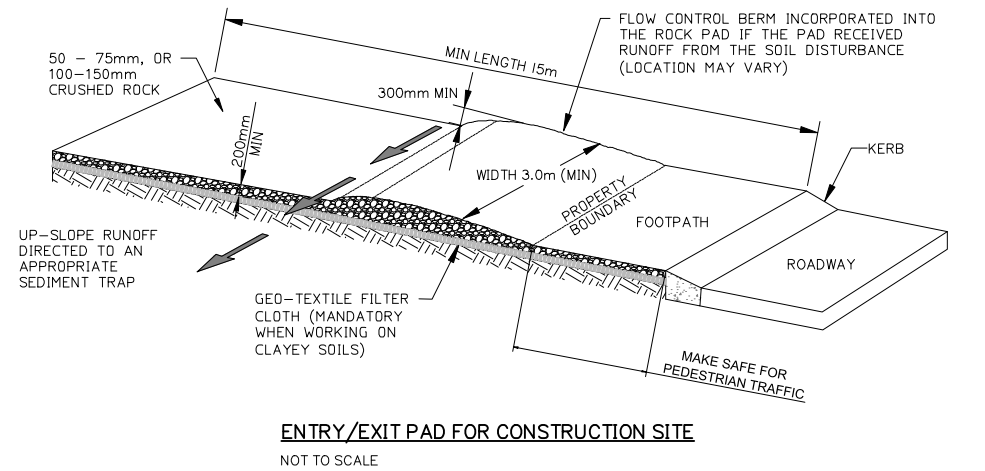
RPEQ	16939
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Signed: 

Date:	28/09/2023
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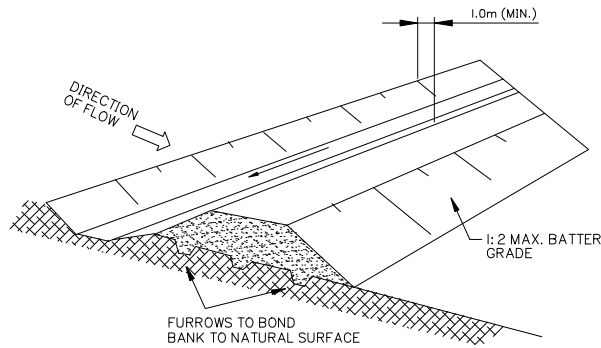
Drawing No:	Revision
5941 ENG CW3 010	B

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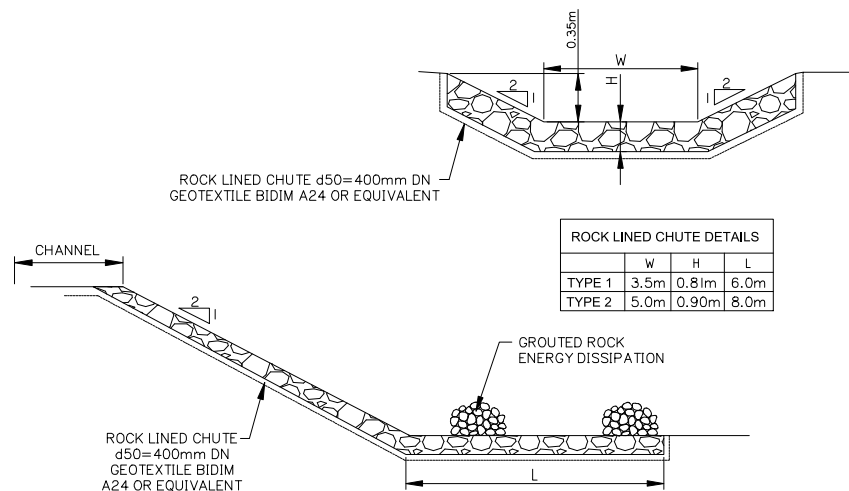
ENTRY/EXIT PAD FOR CONSTRUCTION SITE

NOT TO SCALE



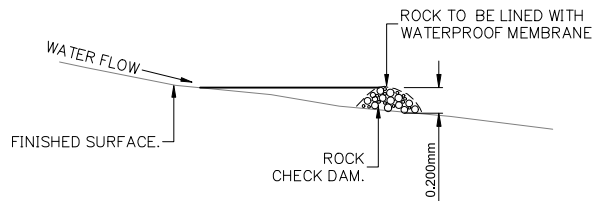
DIVERSION DRAIN

NOT TO SCALE



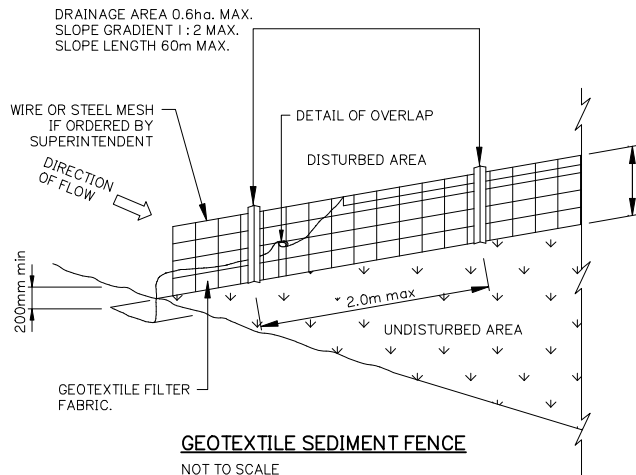
ROCK LINED CHUTE

NOT TO SCALE



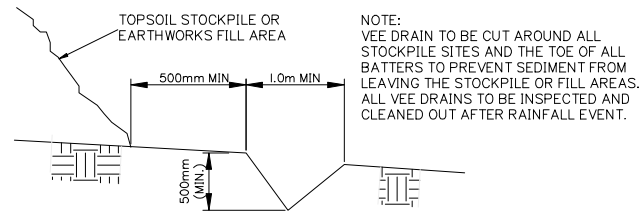
CUT OFF DRAIN END DETAIL

N.T.S.



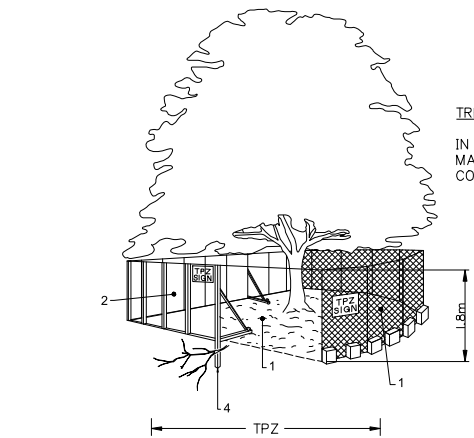
GEOTEXTILE SEDIMENT FENCE

NOT TO SCALE



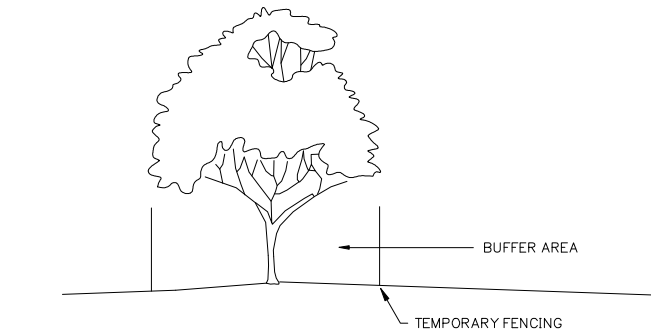
TYPICAL SECTION VEE DRAIN

NOT TO SCALE



TREE PROTECTION

IN ACCORDANCE WITH VEGETATION MANAGEMENT PLAN AND RELEVANT CONDITIONS OF APPROVAL



FENCING AS PER AS: 4970

1. CHAIN WIRE MESH PANELS WITH SHADE CLOTH (IF REQUIRED) ATTACHED, HELD IN PLACE WITH CONCRETE FEET.
2. ALTERNATIVE PLYWOOD OR WOODEN PALING FENCE PANELS. THIS FENCING MATERIAL ALSO PREVENTS BUILDING MATERIALS OR SOIL ENTERING THE TPZ.
3. MULCH INSTALLATION ACROSS SURFACE OF TPZ (AT THE DISCRETION OF THE PROJECT ARBORIST.) NO EXCAVATION, CONSTRUCTION ACTIVITY, GRADE CHANGES, SURFACE TREATMENT OR STORAGE OF MATERIALS OF ANY KIND IS PERMITTED WITHIN THE TPZ.
4. BRACING IS PERMITTED WITHIN THE TPZ. INSTALLATION OF SUPPORTS SHOULD AVOID DAMAGING ROOTS.
5. THE CONSTRUCTION CONTRACTOR IS NOT TO UNDERTAKE ANY PRUNING OF TREES. TREE MANAGEMENT IS TO BE UNDERTAKEN BY A SUITABLY QUALIFIED ARBORIST.
6. NO STOCKPILE/S ARE PERMITTED WITHIN THE ZONE OF ANY RETAINED VEGETATION WITHOUT SUPERVISION AND AUTHORIZATION OF THE SUPERVISING ARBORIST.
7. NO CLEARING OF PROTECTED SIZE VEGETATION IS TO OCCUR WITHOUT APPROVAL FROM LOGAN CITY COUNCIL.

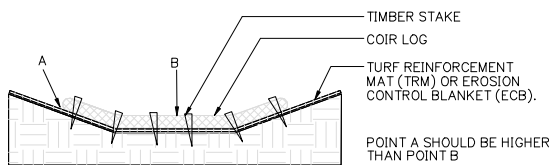
DETERMINING THE TPZ

THE RADIUS OF THE TPZ IS CALCULATED FOR EACH TREE BY MULTIPLYING ITS DBH X 12 = TRUNK DIAMETER MEASURED AT 1.4M ABOVE GROUND. RADIUS IS MEASURED FROM THE CENTRE OF THE STEM AT GROUND LEVEL.

A TPZ SHOULD NOT BE LESS THAN 2M NOR GREATER THAN 15M (EXCEPT WHERE CROWN PROTECTION IS REQUIRED). THE TPZ OF PALMS, OTHER MONOCOTS, CYCADS AND TREE FERNS SHOULD NOT BE LESS THAN 1M OUTSIDE THE CROWN PROJECTION.

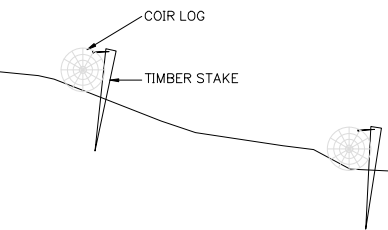
PROTECTIVE FENCING

NOT TO SCALE



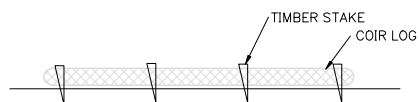
PROPER PLACEMENT OF COIR LOG IN DRAINAGE PATH

NOT TO SCALE



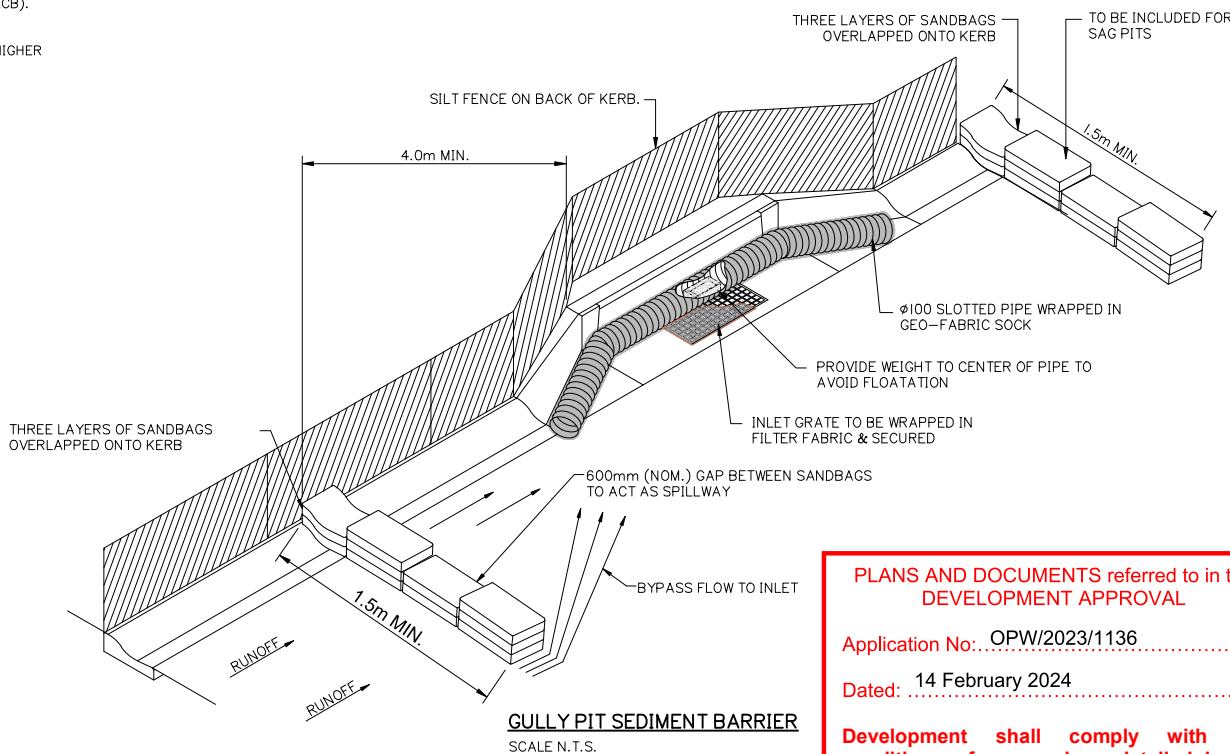
COIR LOG AND TIMBER STAKES STABILISING SLOPE

NOT TO SCALE



PROPER PLACEMENT OF COIR LOG IN SLOPE

NOT TO SCALE



GULLY PIT SEDIMENT BARRIER

SCALE N.T.S.

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

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 APPROVAL

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Drawing Title:

SEDIMENT AND EROSION
CONTROL NOTES
AND DETAILS

Rev	Date	Description	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

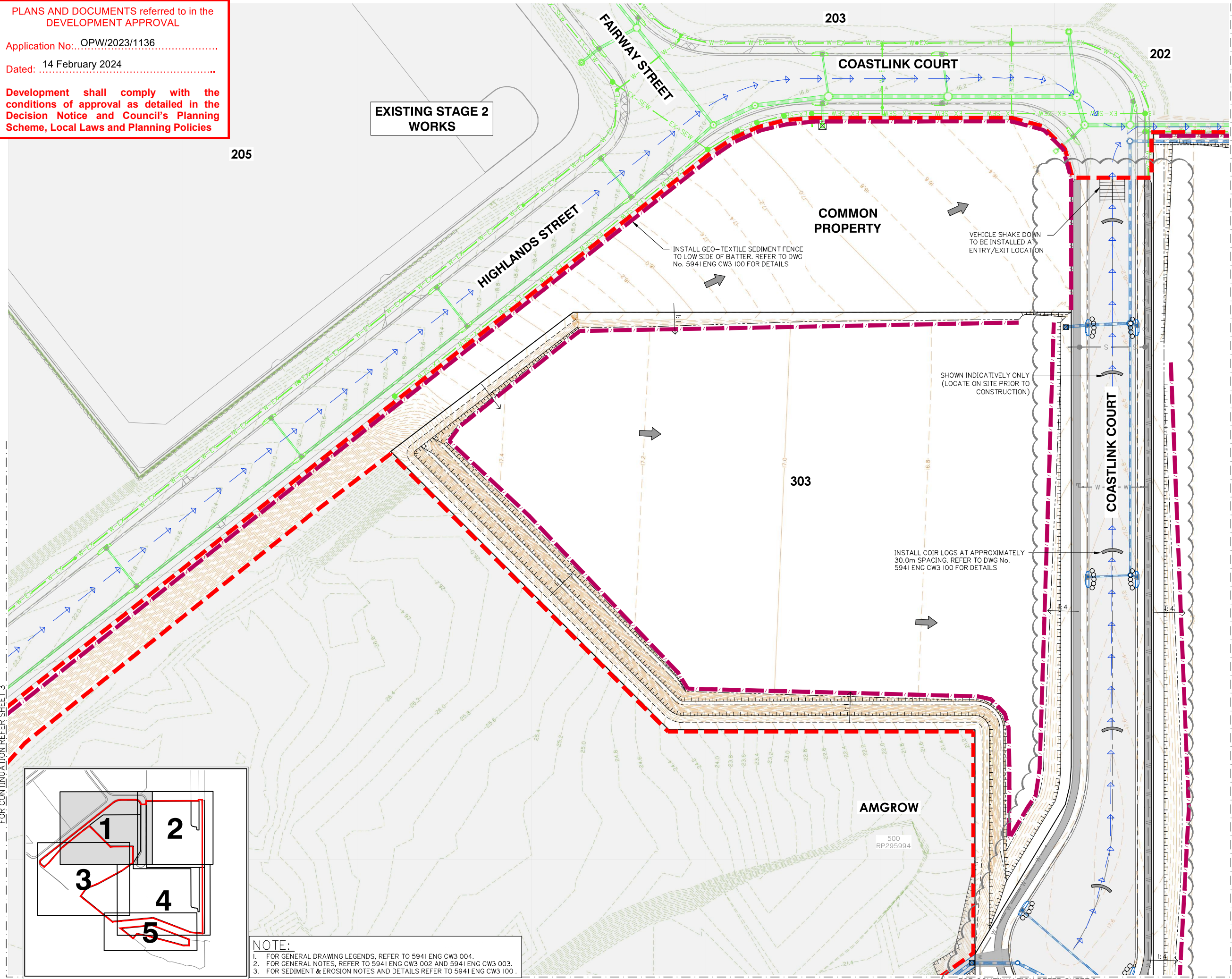
Project No:	5941	Revision	
Designed:	JH	Drafted:	JH
Approved:			MG
RPEQ			16939
Signed:			
Date:			28/09/2023
Drawing No:	5941 ENG CW3 100	Revision	A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



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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GENERAL NOTES.

Drawing Title:

SEDIMENT AND EROSION
CONTROL PLAN
SHEET 1 OF 5

Rev	Date	Description	JH	MG	ML	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG		
B	21/12/23	DESIGN UPDATED	JH	MG		
A	25/05/23	ORIGINAL ISSUE	JH	MG		
Rev	Date	Description	JH	MG	ML	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:

[Signature]

Date:

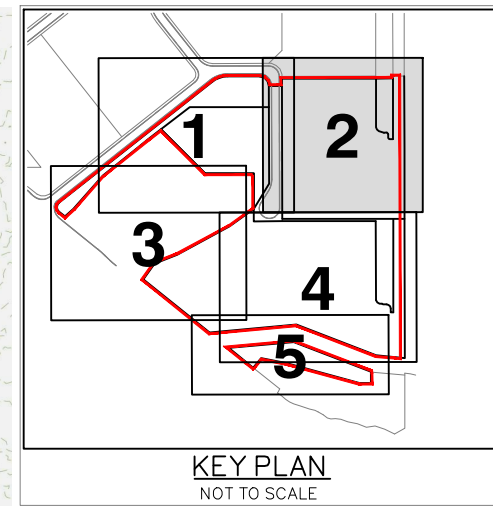
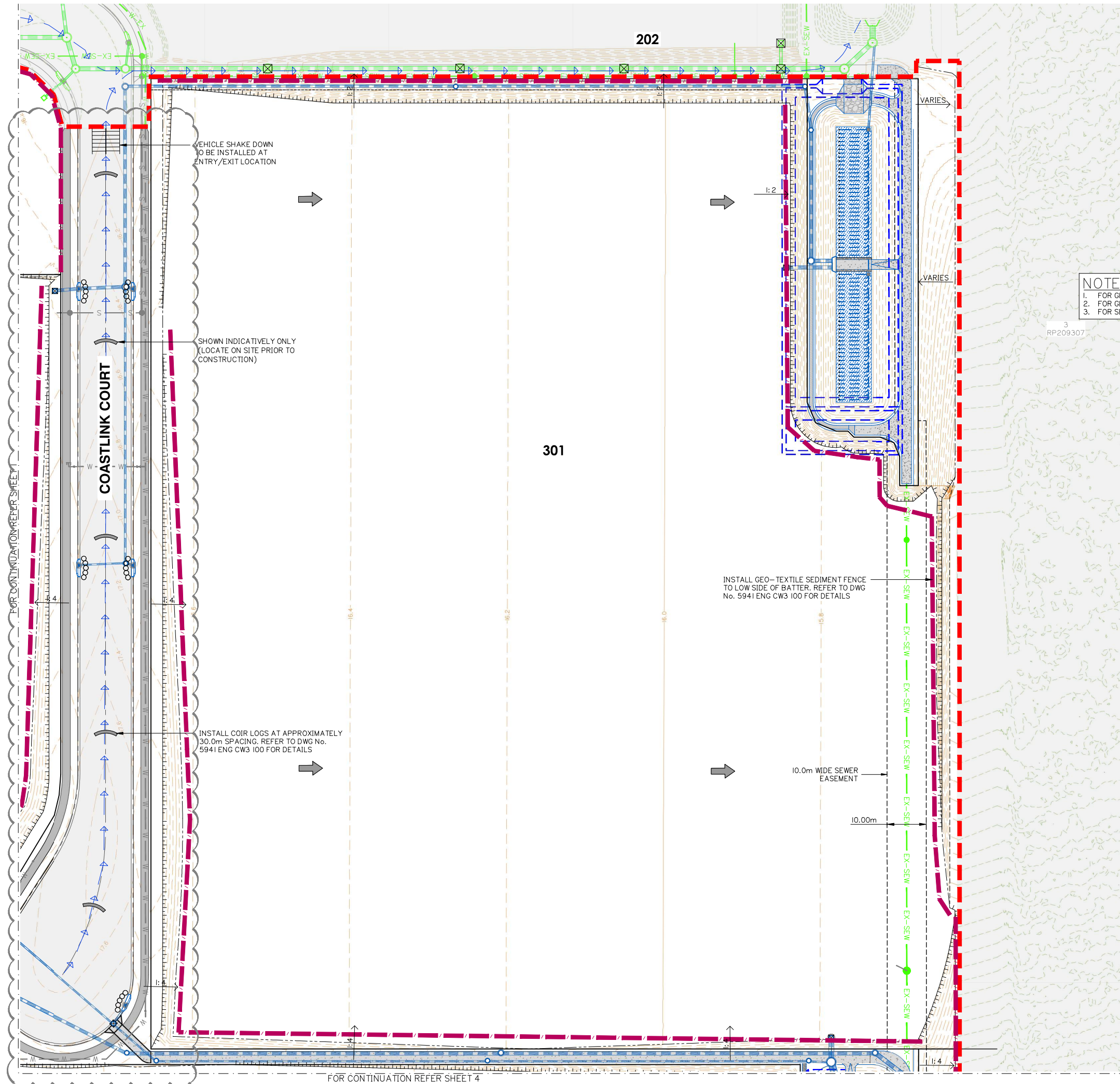
28/09/2023

Drawing No:

5941 ENG CW3 110

Revision

C



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.

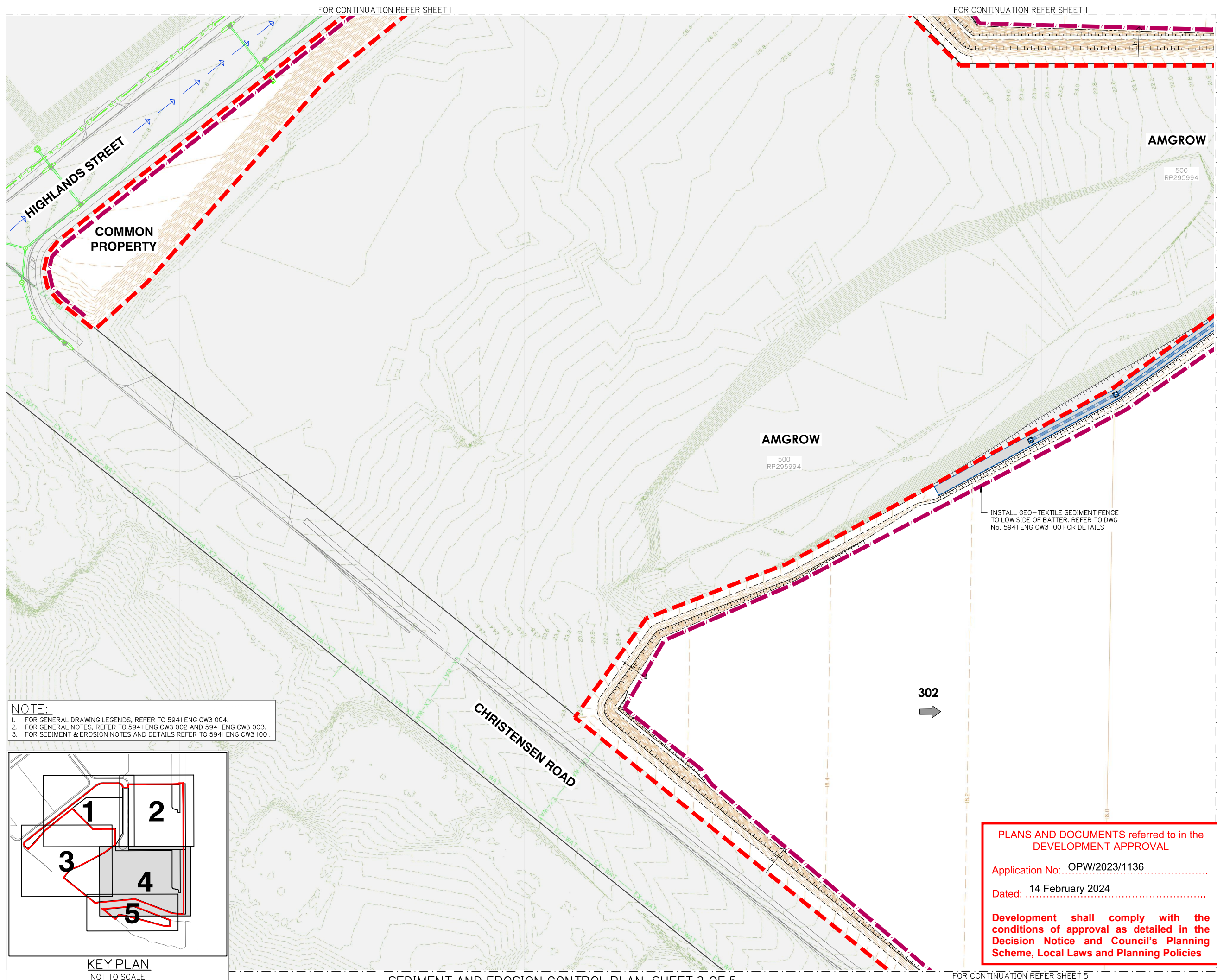
Rev	Date	Description	JH	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	21/12/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED A3 REDUCED
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: ML
Approved: MG	
RPEQ 16939	
Signed:	
Date: 28/09/2023	
Drawing No: 5941 ENG CW3 111	Revision: C

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No.: OPW/2023/1136
Dated: 14 February 2024
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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:

SEDIMENT AND EROSION
CONTROL PLAN
SHEET 3 OF 5

[illegible]

B	21/12/23	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:

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

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: ML

Approved:

MG

RPEQ

6939

Signed:

M. H. Khan

Date:

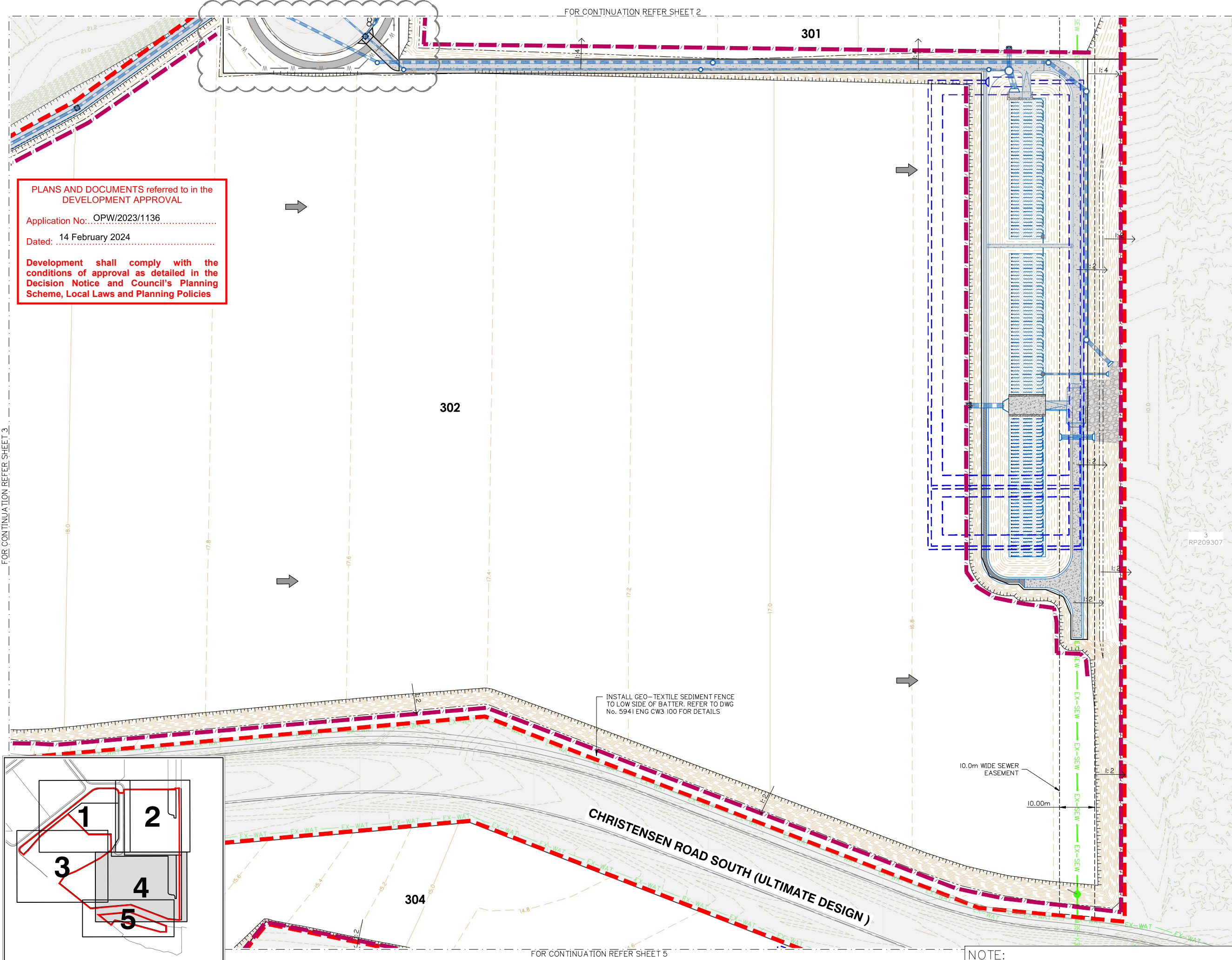
28/09/2023

Drawing No:

television

5941 ENG CW3 112

B



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:

SEDIMENT AND EROSION
CONTROL PLAN
SHEET 4 OF 5

Rev	Date	Description	JH	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
Rev	Date	Description	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)

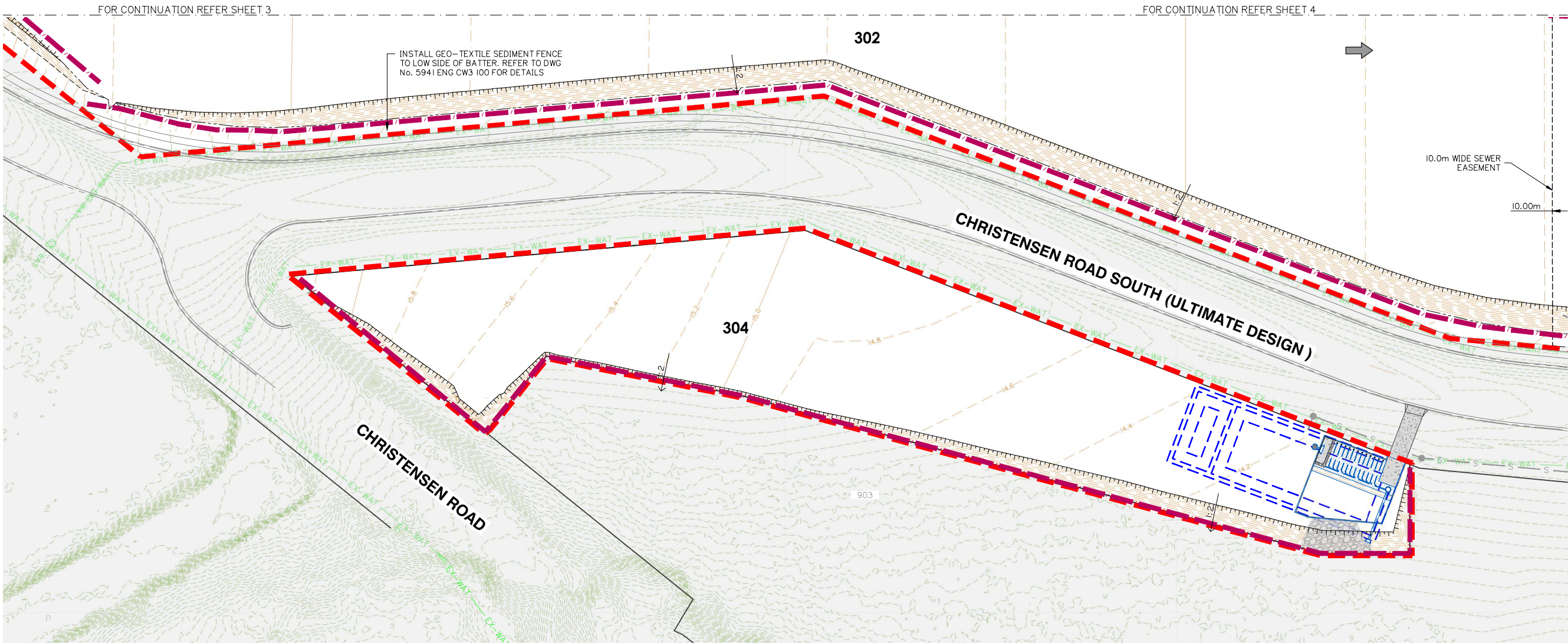
PROJECT NORTH POINT

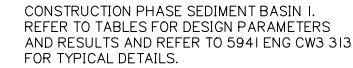


Project No. 5941	
Designed: JH	Drafted: ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023

Drawing No: 5941 ENG CW3 113

Revision: C





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.

		SPILLWAY									
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	tc	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m ³ /s)	(m)	(m)	(m)	(m)
No. 1	> 12 MONTHS	1: 20	0.80	0.84	20.00	34.40	0.46	0.50	0.80	13.50	14.45

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:

CONSTRUCTION PHASE
SEDIMENT BASIN 1
LAYOUT

[illegible]

A	25/05/23	ORIGINAL ISSUE	JH	MG
ev	Date	Description	DRN	CHK

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

Scale:



0 2.5 5.0 7.5 10 12.5m

1:250 (A1) 1:500 (A3)

PROJECT NORTH POINT



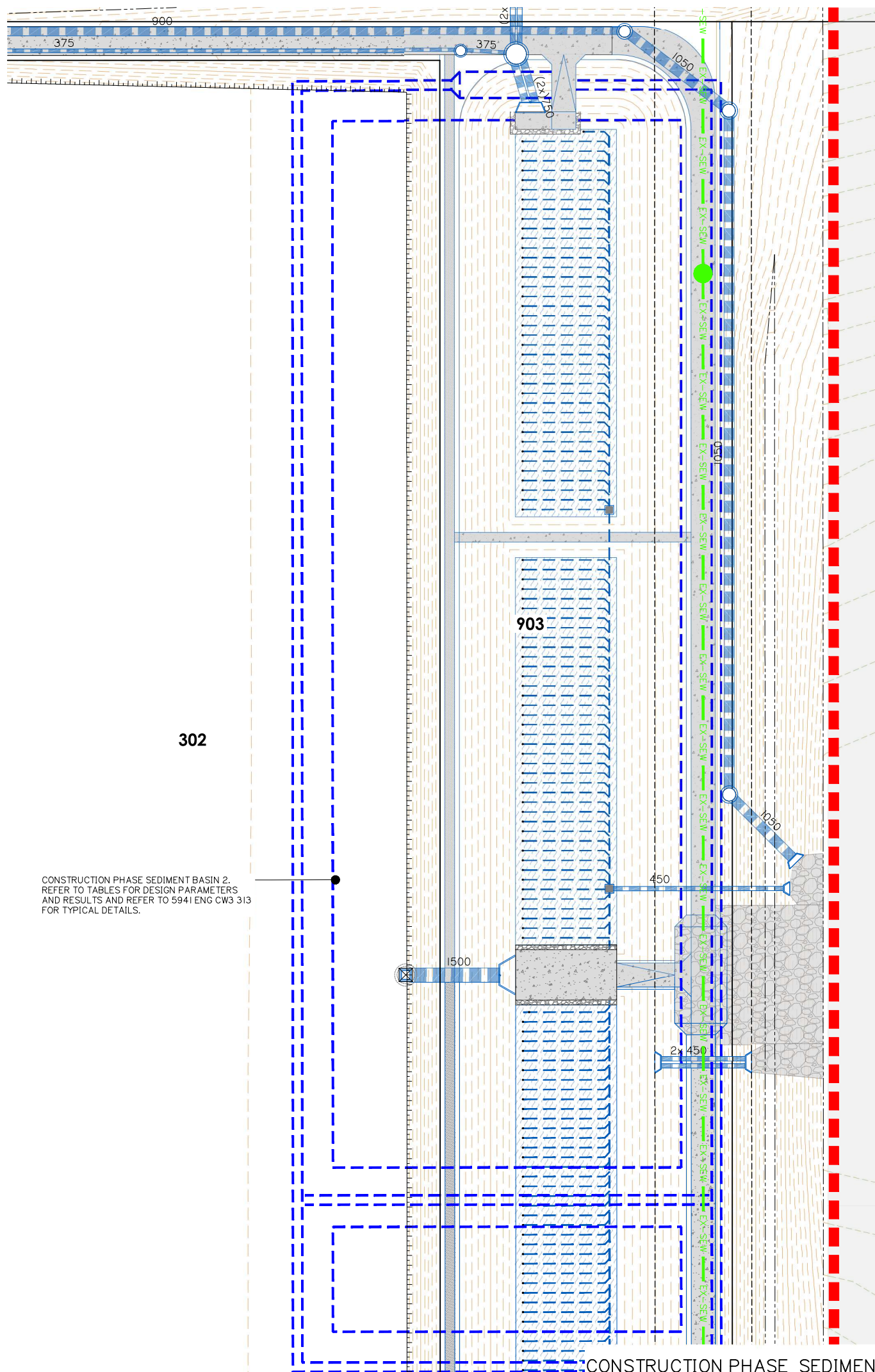
Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
PEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 310	A

**PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL**

Application No: OPW/2023/1136

Dated: 14 February 2024

**Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies**



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 DECAN T RATE	SELECTED LOW – FLOW DECAN T RATE (Q_A)	MIN SETTLING ZONE VOLUME (Min V_s)	MIN SETTLING 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)	(m ³)	(m ²)	
No. 2	11.01	I	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)	(m ³ /s)		(m)	(m)	(m)
No. 2	> 12 MONTHS	1: 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 (m ³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m ³)	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	16.20	16.95	16.40

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.

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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

B	06/11/23	DESIGN UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
ev	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:

M. Kelly

Date:

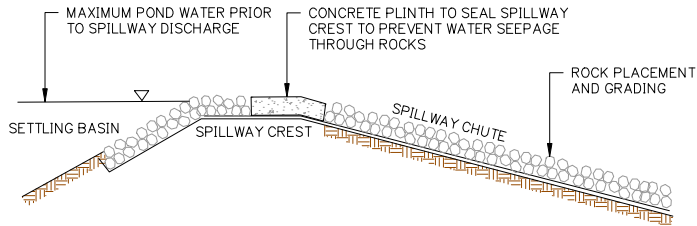
28/09/2023

Drawing No:

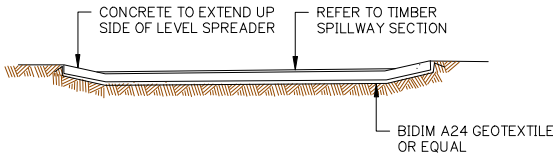
Revision

5941 ENG CW3 311

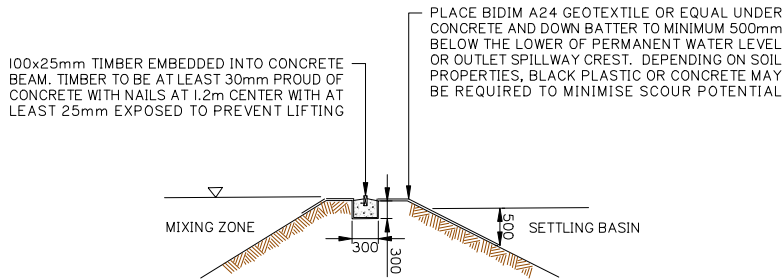
B



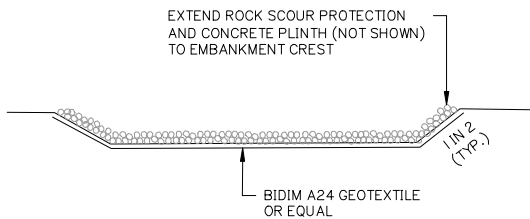
OUTLET SPILLWAY DETAILS
TYPICAL CROSS SECTION
NOT TO SCALE



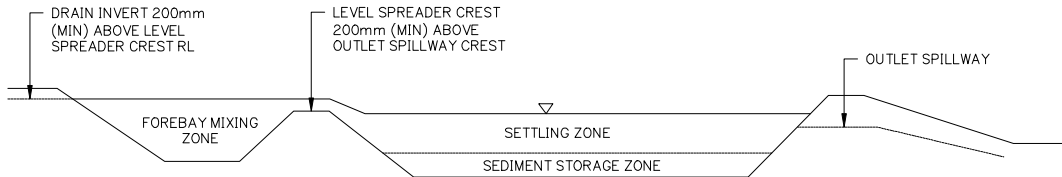
LEVEL SPREADER DETAILS
TYPICAL LONG SECTION
NOT TO SCALE



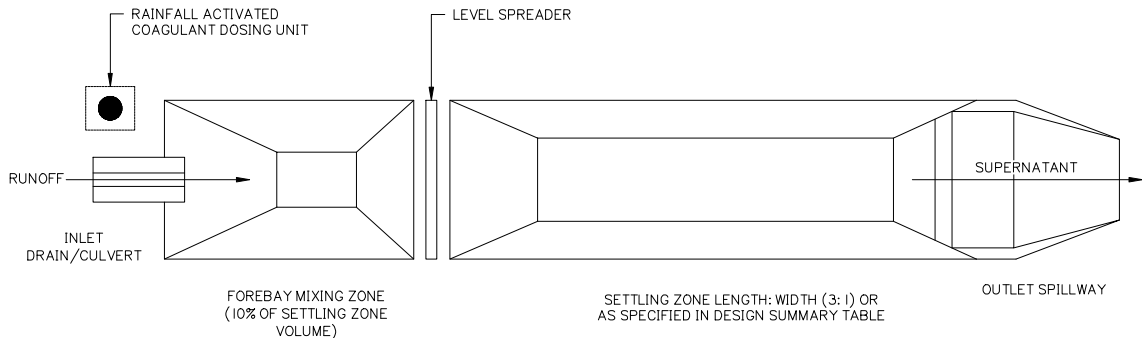
LEVEL SPREADER DETAILS
TYPICAL CROSS SECTION
NOT TO SCALE



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:



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
TYPICAL SECTIONS

Rev	Date	Description	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:

NOT APPLICABLE

PROJECT NORTH POINT



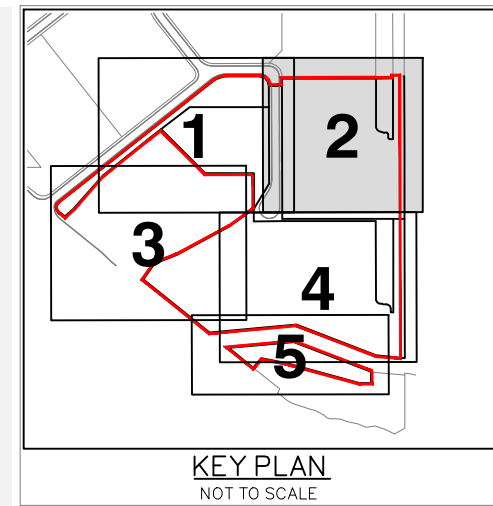
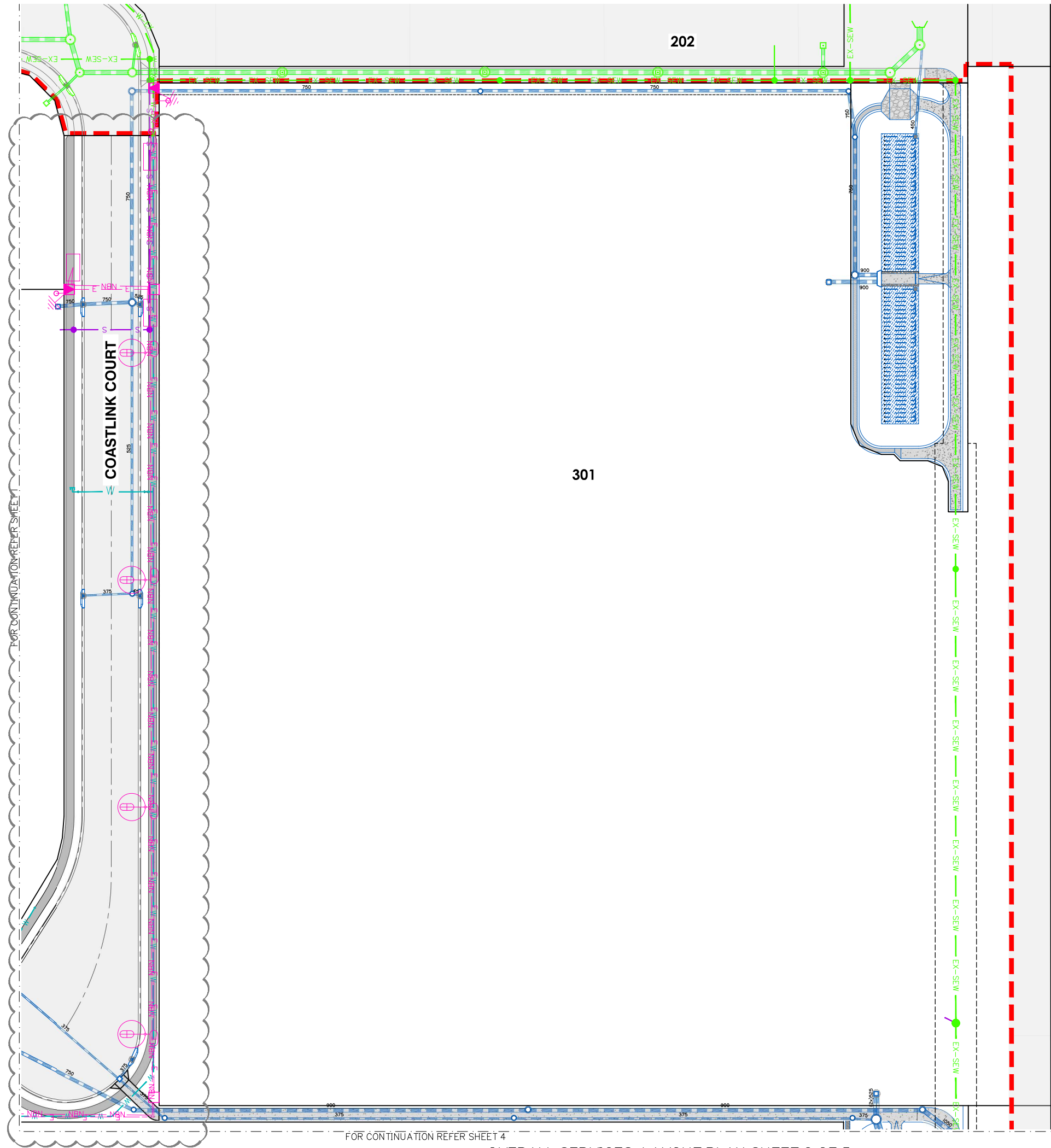
Project No.	5841
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No:	Revision
5941 ENG CW3 313	A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2023/1136

Dated: 14 February 2024

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Decision Notice and Council's Planning
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WARNING
BEWARE OF UNDERGROUND SERVICES
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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

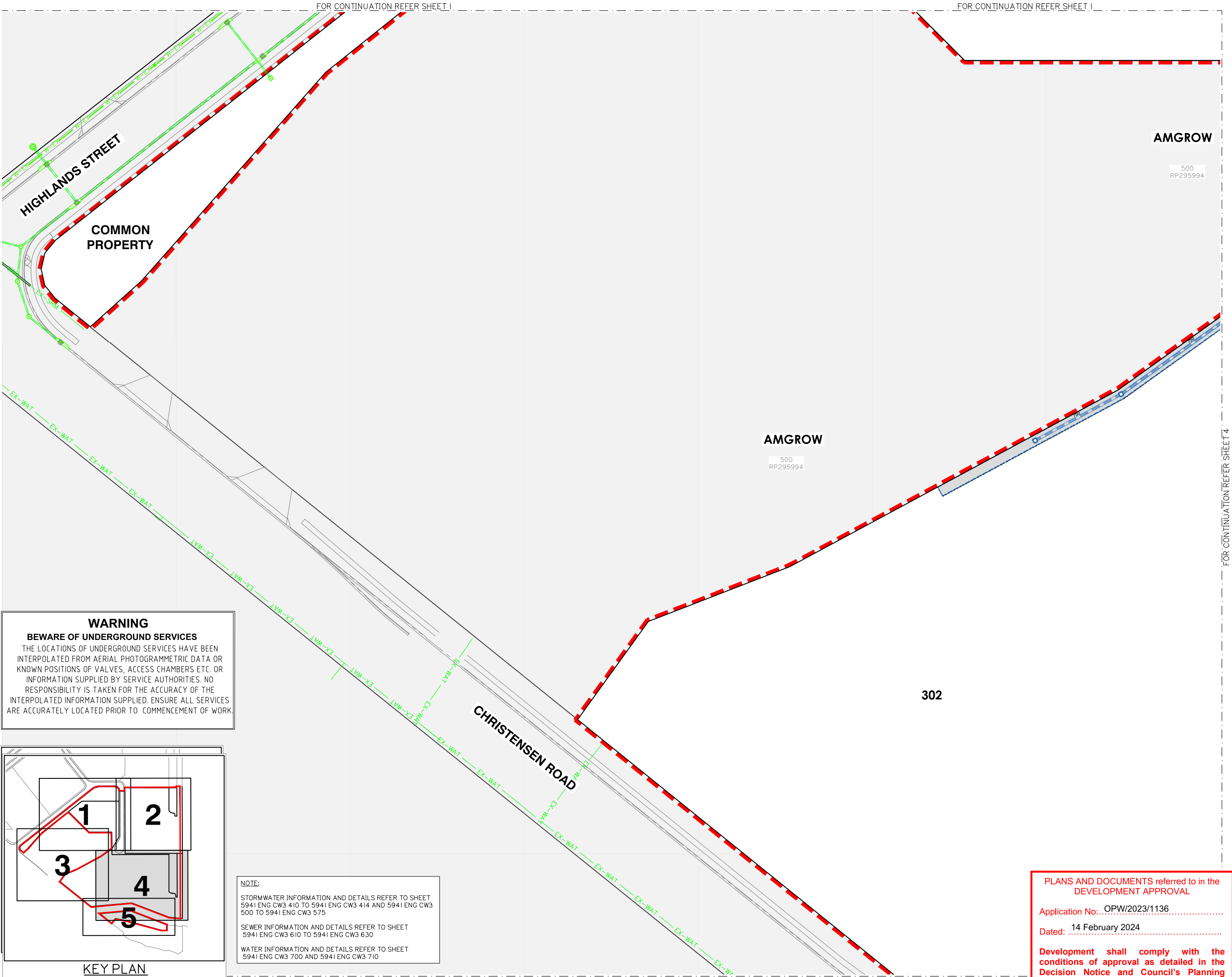
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RP209307

Rev	Date	Description	JH	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

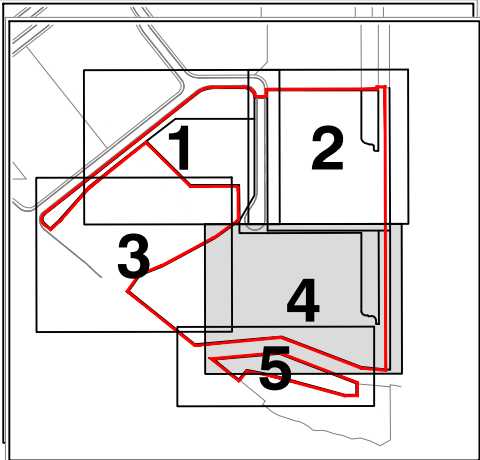
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE, CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED
Scale:
0 10 20 30 40m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT			
Project No.	5941	Designed:	JH
Drafted:	JH	Approved:	MG
RPEQ	16939	Signed:	
Date:	28/09/2023	Drawing No:	5941 ENG CW3 381
Revision	C		

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No.: OPW/2023/1136
Dated: 14 February 2024
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



WARNING
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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

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No... OPW/2023/1136
Dated: 14 February 2024
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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perspectives
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planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast | 75 Business Street, Yatala QLD | PO Box 362, Beerleigh 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:

**OVERALL SERVICES
LAYOUT PLAN
SHEET 3 OF 5**

Rev	Date	Description	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:

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

PROJECT NORTH POINT



Project No. 5941

Designed: JH Drafted: JH

Approved: MG

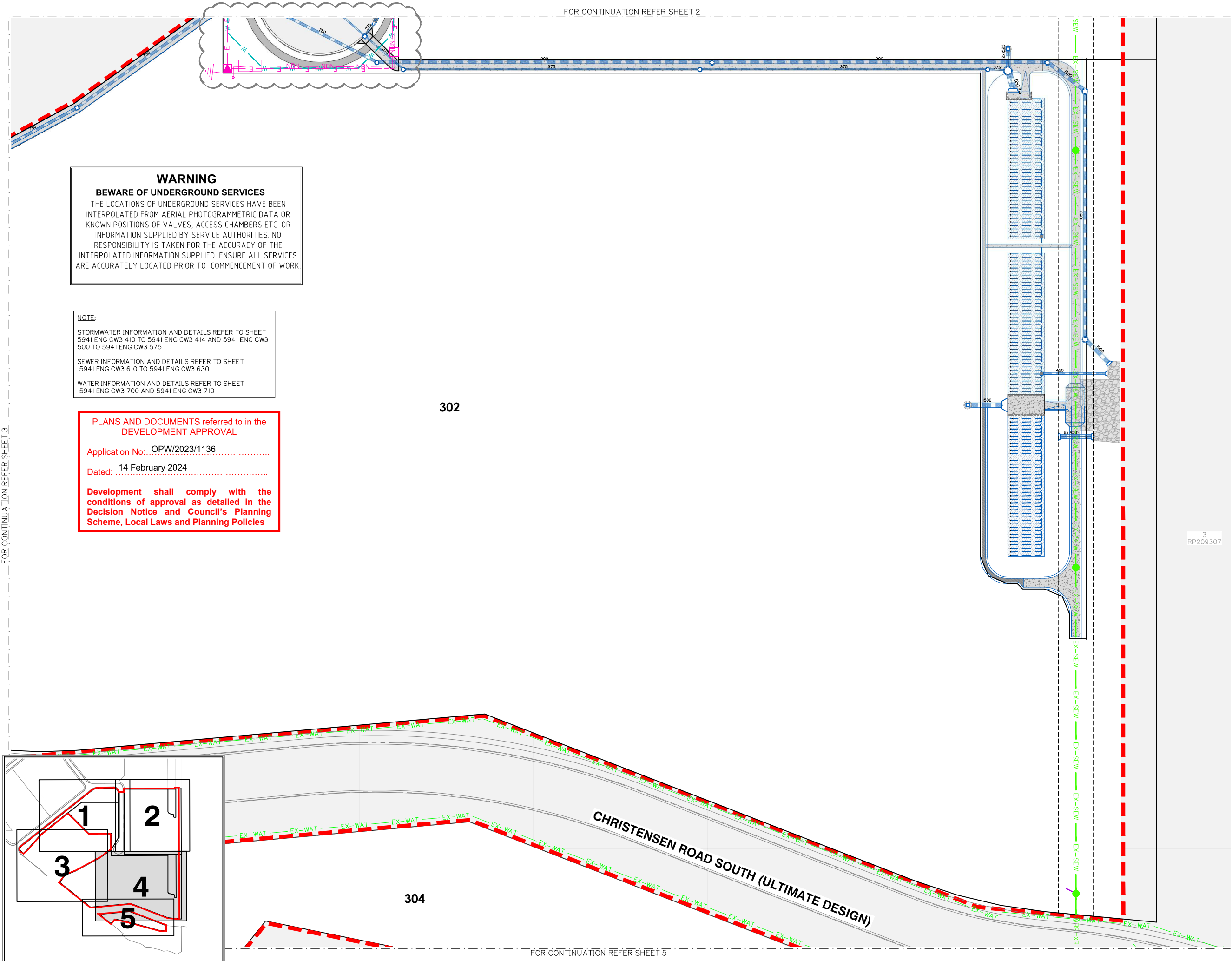
RPEQ 16939

Signed: 

Date: 28/09/2023

Drawing No: 5941 ENG CW3 382 Revision: A

g:\Projects\5941\engineering\Acad\civil works stage 3\Current\5941 ENG CW3 382.dwg



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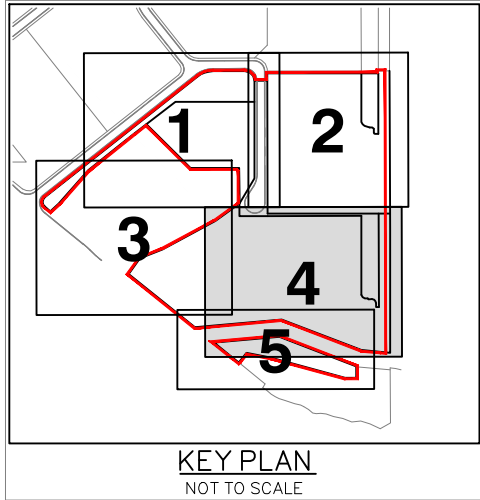
NOTE:
STORMWATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 410 TO 5941 ENG CW3 414 AND 5941 ENG CW3 500 TO 5941 ENG CW3 575
SEWER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 610 TO 5941 ENG CW3 630
WATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG CW3 700 AND 5941 ENG CW3 710

PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL**
Application No: OPW/2023/1136
Dated: 14 February 2024
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

FOR CONTINUATION REFER SHEET 3

FOR CONTINUATION REFER SHEET 2

FOR CONTINUATION REFER SHEET 5





est 1985
planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast | 75 Business Street, Yatala QLD | PO Box 362, Beerleigh 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 APPROVAL

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Drawing Title:

OVERALL SERVICES
LAYOUT PLAN
SHEET 4 OF 5

C	08/02/24	FOOTPATH AMENDED	JH	MG
B	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, 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

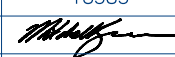


Project No. 5941

Designed: JH
Drafted: JH

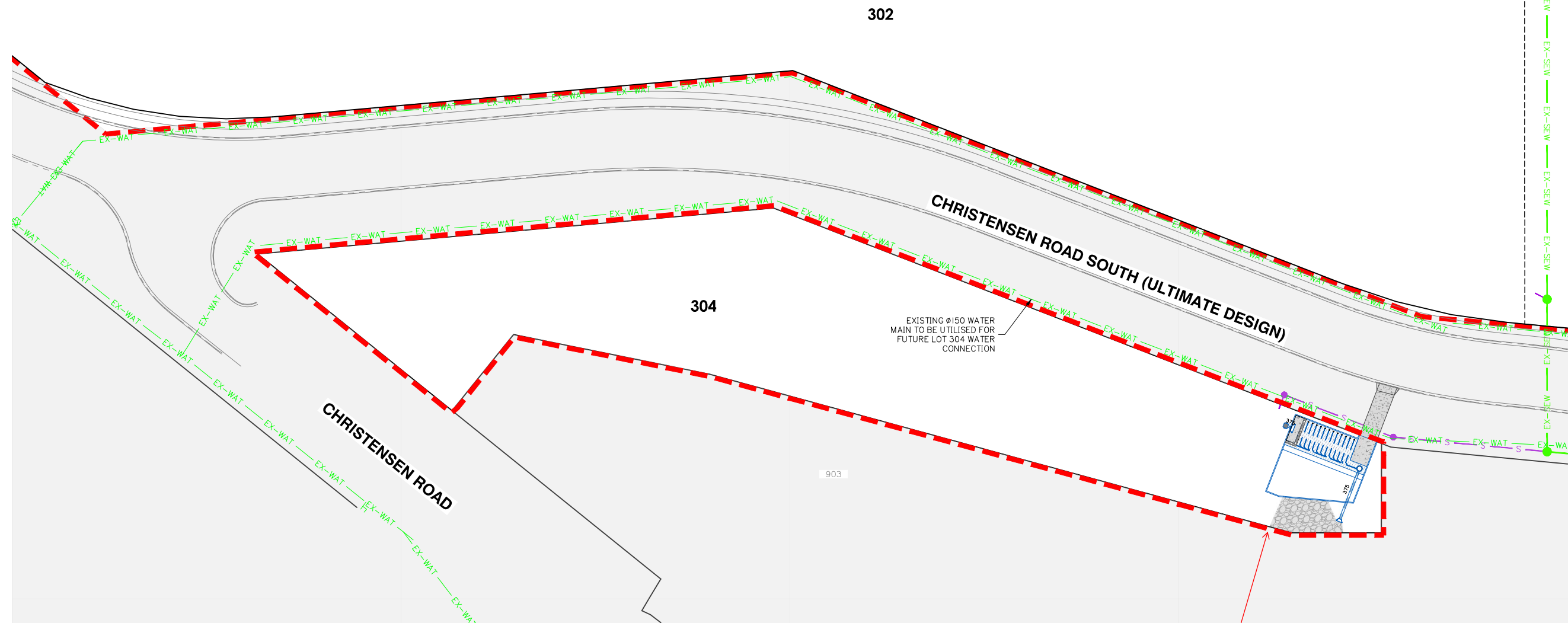
Approved: MG

RPEQ 16939

Signed: 
Date: 28/09/2023

Drawing No: 5941 ENG CW3 383
Revision: C

g:\Projects\5941\engineering\Acadocivil works stage 3\Current\5941 ENG CW3 380.dwg



Basin 3 is private
and does not form
part of this approval.

WARNING**BEWARE OF UNDERGROUND SERVICES**

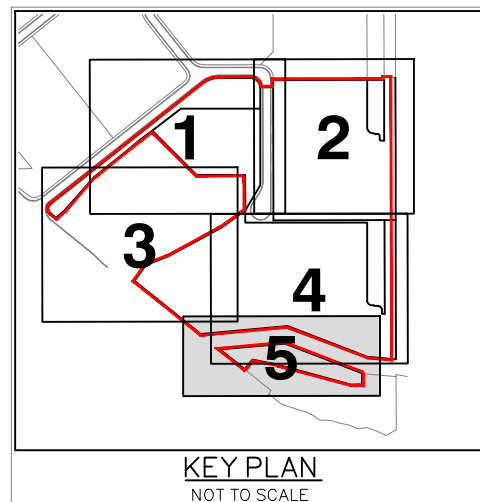
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE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

NOTE:

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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



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 APPROVAL

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Drawing Title:

OVERALL SERVICES
LAYOUT PLAN
SHEET 5 OF 5

B	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, 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

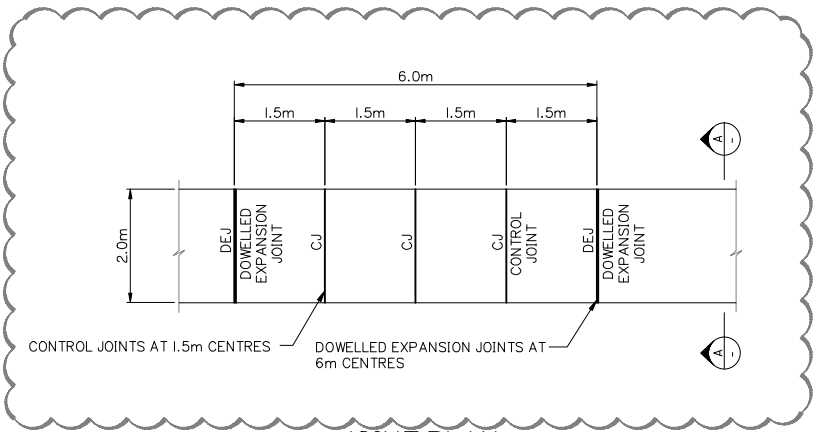
Project No. 5941	
Designed: JH	Drafted: JH
Approved: MG	
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No: 5941 ENG CW3 384	Revision: B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

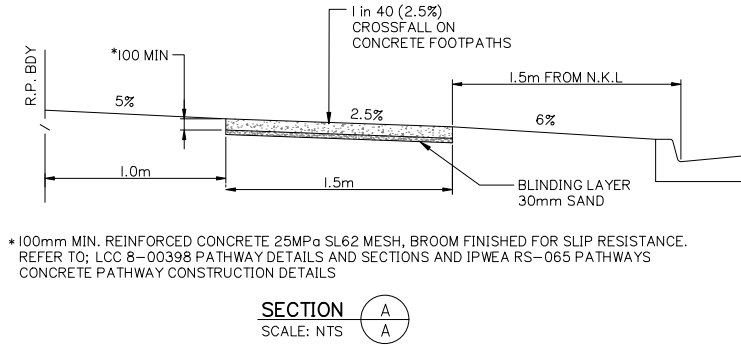
Application No.: OPW/2023/1136

Dated: 14 February 2024

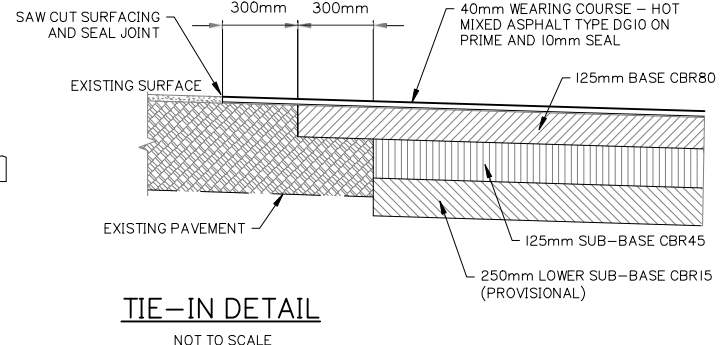
Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



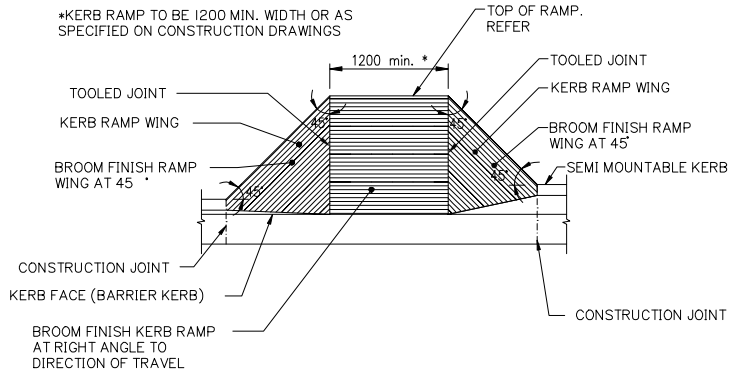
JOINT PLAN
SCALE: N.T.S.



1.5m CONCRETE FOOTPATH DETAIL

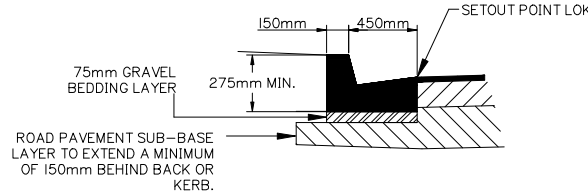


NOTE: PAVEMENT PROFILE INDICATIVE ONLY. SUBJECT TO IN-SITU CBR TESTING AND PAVEMENT DESIGN & APPROVAL BY COUNCIL



TYPICAL COMPLIANT KERB RAMP DETAIL
NOT TO SCALE

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



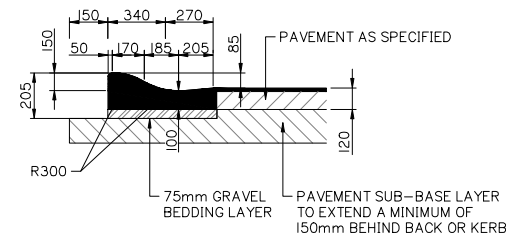
**BARRIER KERB AND CHANNEL
(TYPE B1 IPWEAQ)**

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

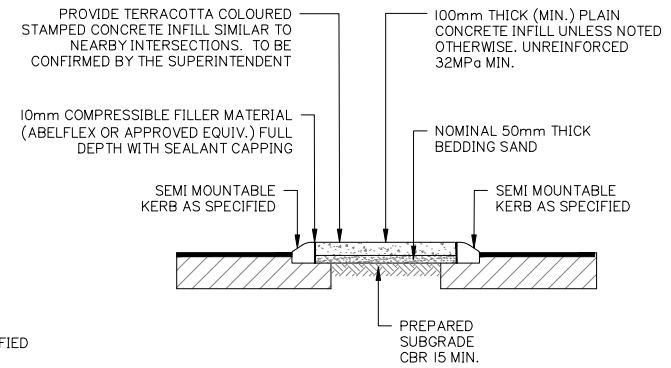
Application No.: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

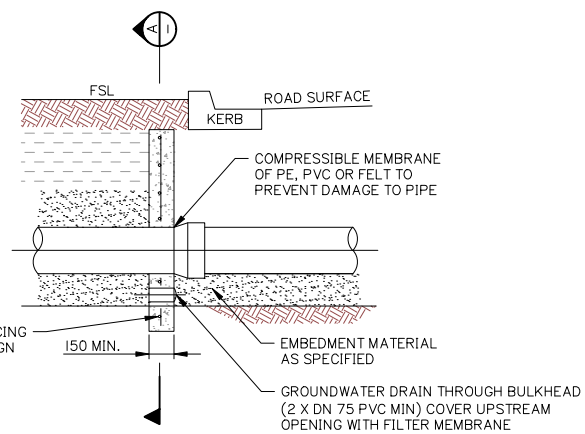


**MOUNTABLE KERB
(TYPE M3 IPWEAQ)**



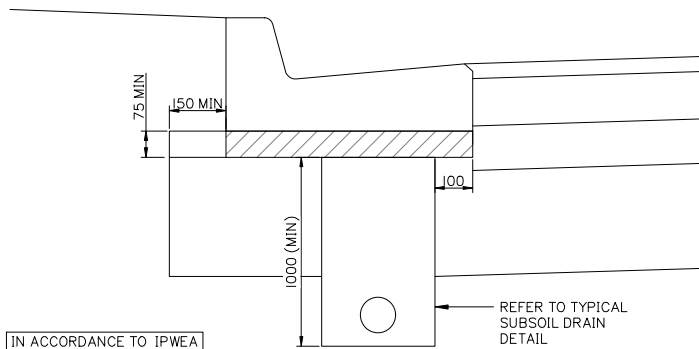
MEDIAN ISLAND INFILL

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

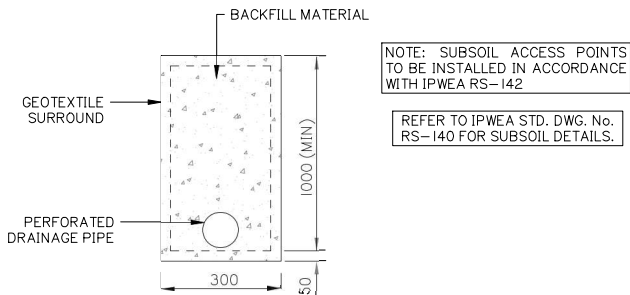


TYPICAL ROAD CROSSING BULKHEAD

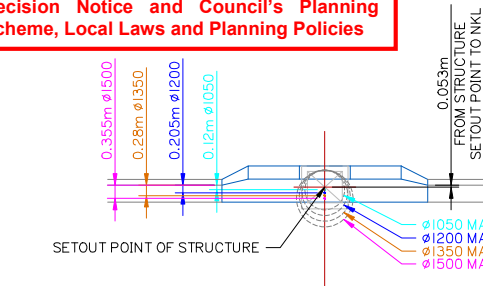
N.T.S.



TYPICAL SUBSOIL DRAIN
SCALE: N.T.S.

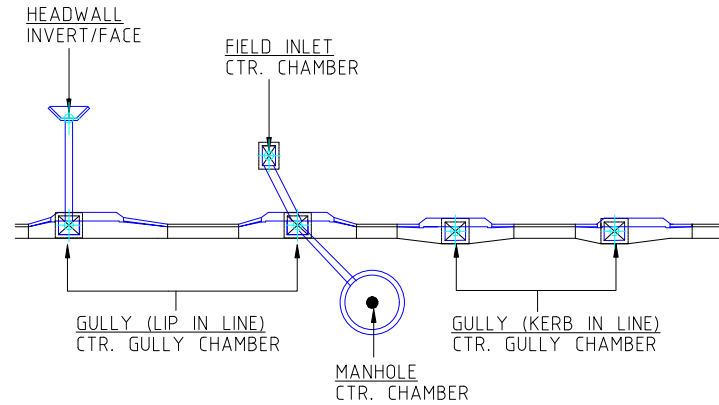


TYPICAL SUBSOIL DRAIN
SCALE: N.T.S.



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.

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 AND
DRAINAGE TYPICAL
DETAILS SHEET 1 OF 3

Rev	Date	Description	JH	MG
B	08/02/24	DETAIL AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	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. 5841

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

[Signature]

Date:

28/09/2023

Drawing No:

Revision

5941 ENG CW3 400

B

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 AND
DRAINAGE TYPICAL
DETAILS SHEET 3 OF 3

B	08/02/24	DETAIL AMENDED	JH	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

Scale:

NOT TO SCALE

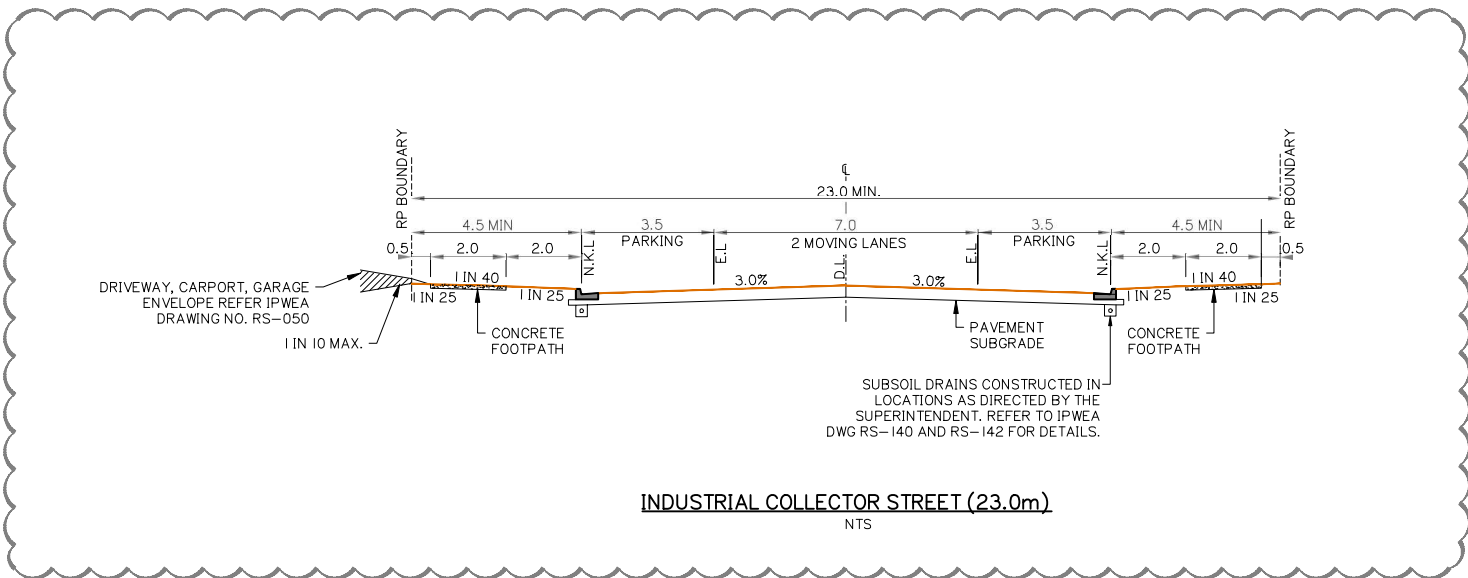
PROJECT NORTH POINT



Project No. 5841

Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023

Drawing No:	Revision
5941 ENG CW3 402	B



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

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 AND
DRAINAGE LAYOUT
PLAN SHEET 1 OF 5

B	08/02/24	FOOTPATH AMENDED	JH	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 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:

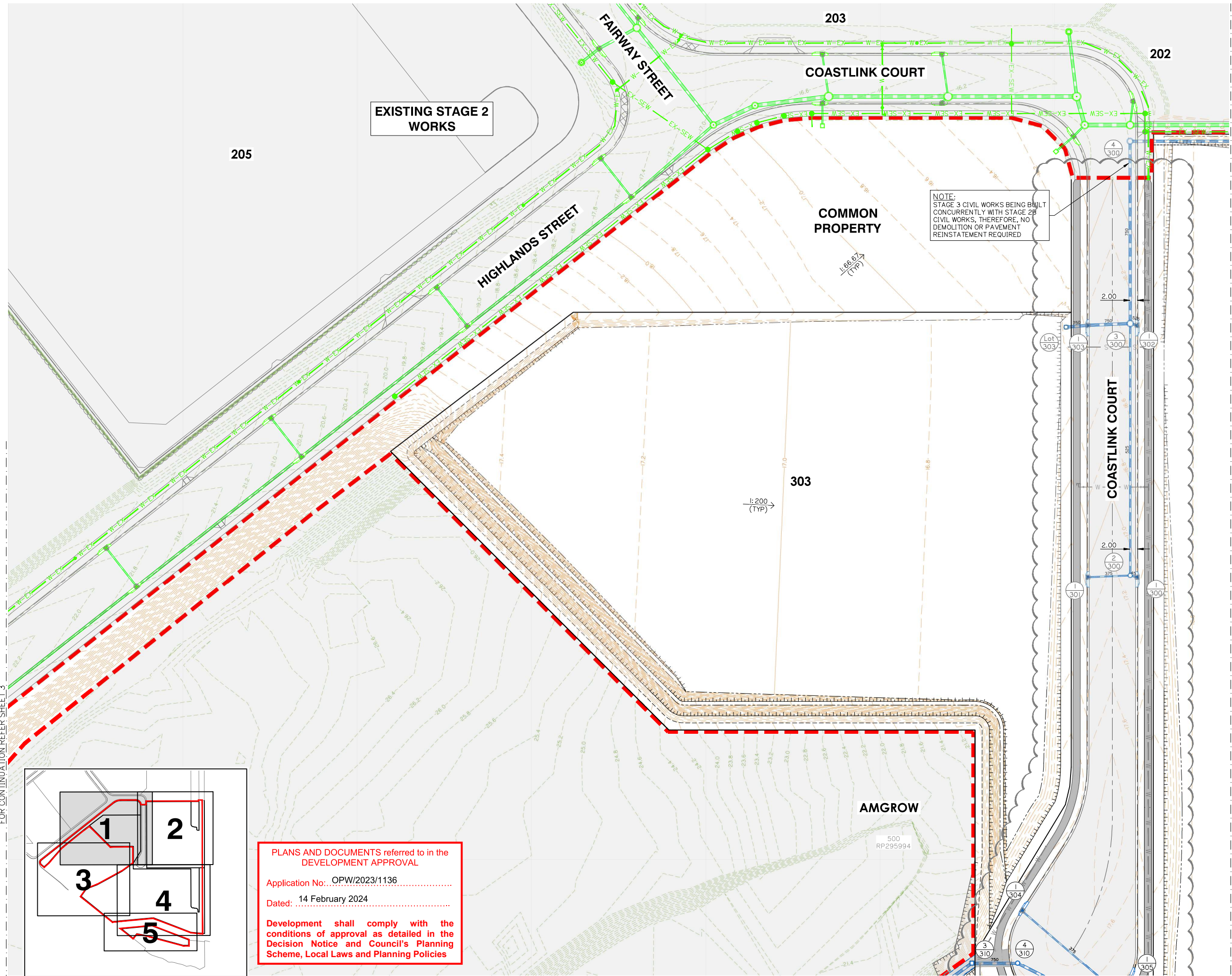
28/09/2023

Drawing No:

5941 ENG CW3 410

Revision

B



FOR CONTINUATION REFER SHEET 3

FOR CONTINUATION REFER SHEET 2

FOR CONTINUATION REFER SHEET 3

KEY PLAN
NOT TO SCALE

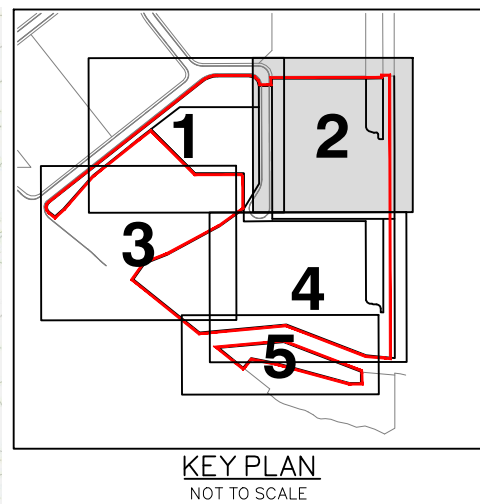
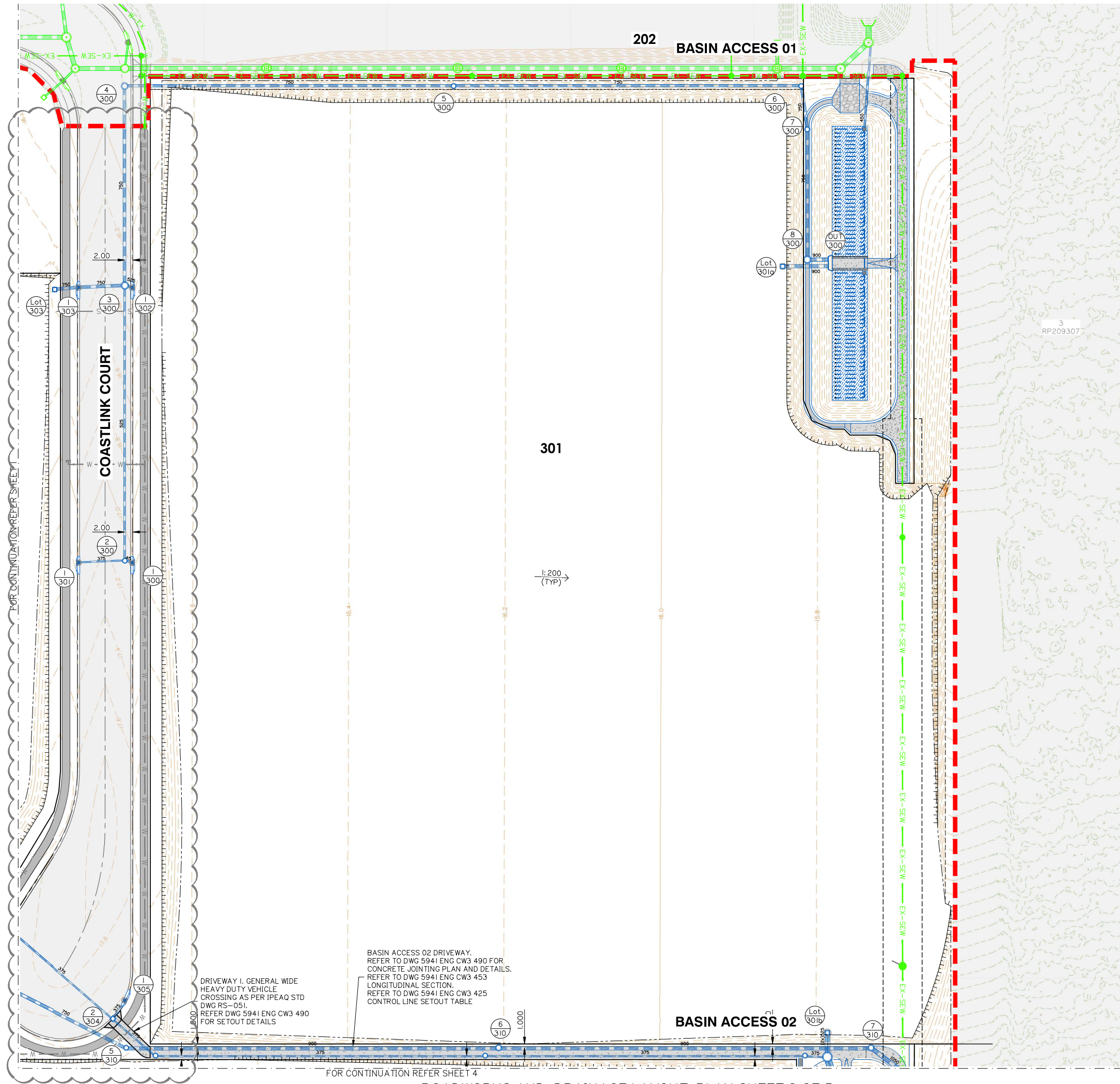
ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 1 OF 5

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



Rev	Date	Description	JH	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, CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED

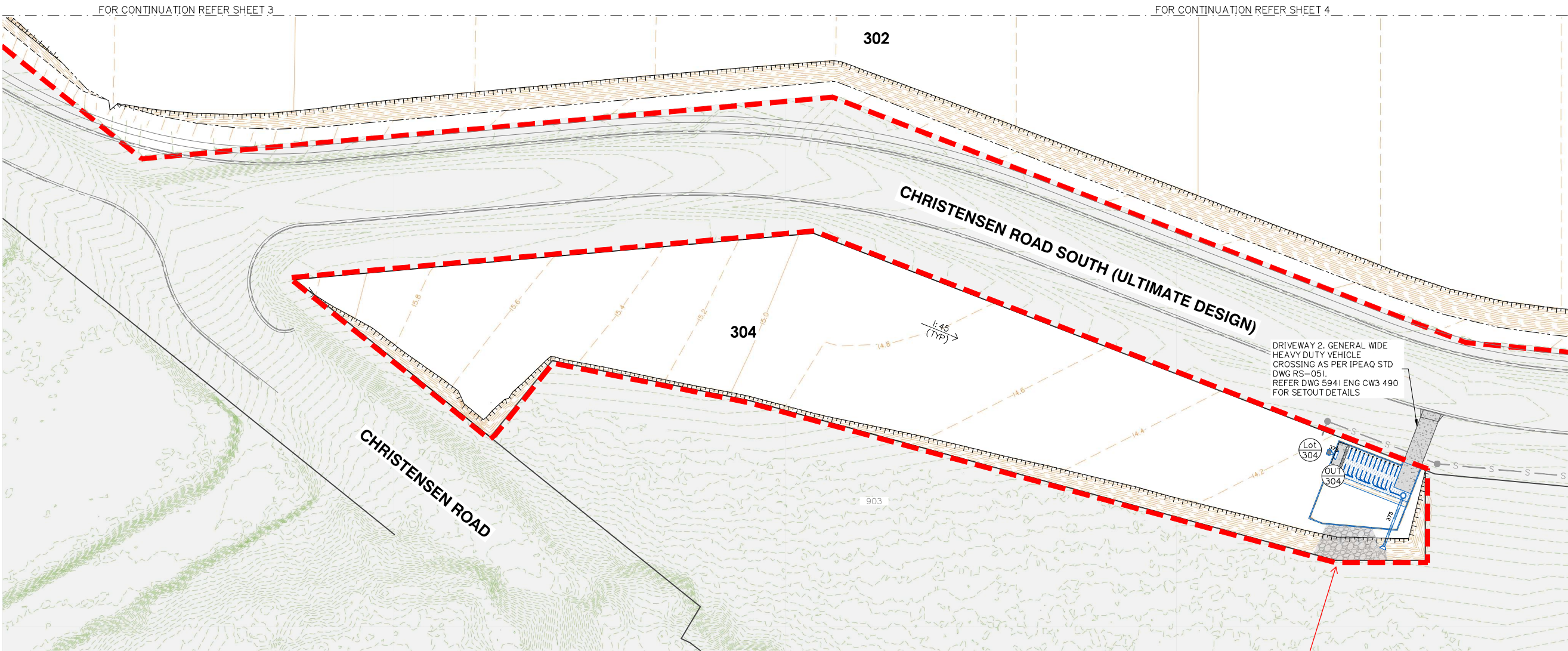
Scale:
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1:500 (A1) 1:1000 (A3)

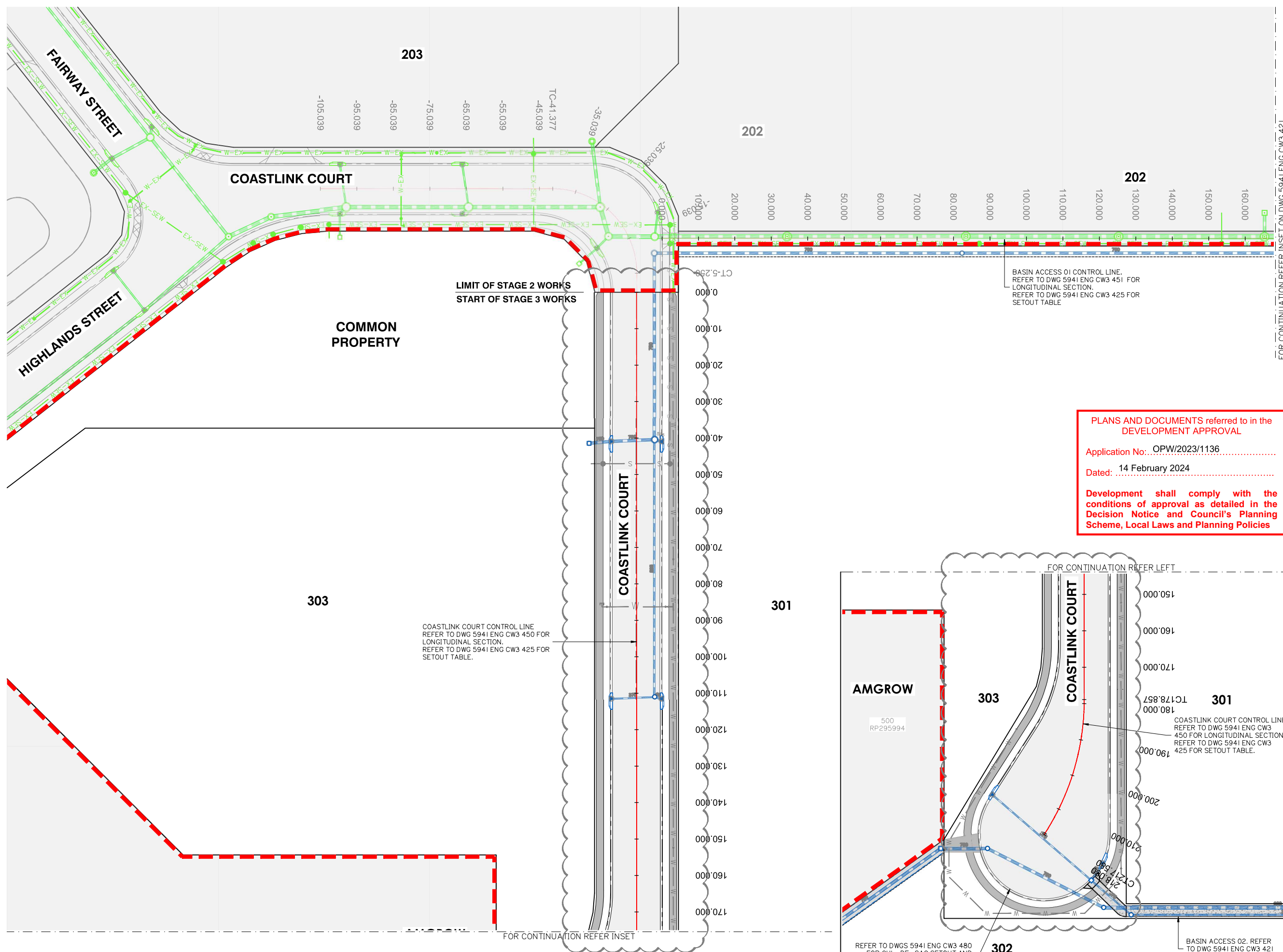
PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved: MG	
RPEQ 16939	
Signed: [Signature]	
Date: 28/09/2023	
Drawing No: 5941 ENG CW3 411	Revision: C

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No.: OPW/2023/1136
Dated: 14 February 2024
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies





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:

CONTROL LINE
LAYOUT PLAN
SHEET 1 OF 2

[illegible]

B	08/02/24	FOOTPATH AMENDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
ev	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

Drafted: JH

Approved:

RPEQ

16939

Signed:

Date:

Drawing No:	Revision
-------------	----------

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"				
	-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	15.937		R = 23.000	36.127	89°59'51.40"	STAGE 2
	-20.000	2850.922	6530.460	15.929	152°28'26.45"				
	-10.000	2853.501	6520.880	15.940	177°23'06.80"				
CT	-5.250	2853.228	6516.146	15.964	189°13'06.95"				
	0.000	2852.387	6510.964	16.004					
IP 3	10.000	2850.785	6501.093	16.112	189°13'09.83"				
	20.000	2849.183	6491.222	16.224	189°13'09.83"				
	30.000	2847.581	6481.352	16.336	189°13'09.83"				
	40.000	2845.978	6471.481	16.449	189°13'09.83"				
	50.000	2844.376	6461.610	16.561	189°13'09.83"				
	60.000	2842.774	6451.739	16.673	189°13'09.83"				
	70.000	2841.172	6441.868	16.785	189°13'09.83"				
	80.000	2839.570	6431.997	16.897	189°13'09.83"				
	90.000	2837.968	6422.127	17.010	189°13'09.83"				
	100.000	2836.365	6412.256	17.122	189°13'09.83"				
STAGE 3	110.000	2834.763	6402.385	17.234	189°13'09.83"				STAGE 3
	120.000	2833.161	6392.514	17.346	189°13'09.83"				
	130.000	2831.559	6382.643	17.458	189°13'09.83"				
	140.000	2829.957	6372.773	17.570	189°13'09.83"				
	150.000	2828.355	6362.902	17.683	189°13'09.83"				
	160.000	2826.753	6353.031	17.791	189°13'09.83"				
	170.000	2825.150	6343.160	17.865	189°13'09.83"				
	TC	178.857	2823.731	6334.417	17.895	189°13'09.83"			
	180.000	2823.539	6333.291	17.896	190°10'55.43"				
	190.000	2821.055	6323.613	17.884	198°36'28.49"				
IP 4	198.219	2820.543	6314.772	17.842		R = 68.000	38.722	32°37'36.22"	STAGE 3
	200.000	2817.180	6314.405	17.831	207°02'01.55"				
	210.000	2811.997	6305.863	17.771	215°27'34.61"				
CT	217.580	2807.266	6299.947	17.726	221°50'46.05"				STAGE 3
IP 5	218.080	2806.932	6299.574	17.723	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"				
STAGE 3	100.000	2960.367	6508.376	13.330	99°13'15.46"				STAGE 3
	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"				
	190.000	3049.204	6493.955	13.141	99°13'15.46"				
TC	191.142	3050.331	6493.772	13.195	99°13'15.46"				STAGE 3
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"				
IP 3	300.000	3039.667	6388.834	13.700	189°11'54.27"				STAGE 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	17.114	143°15'26.80"			
	10.000	2823.682	6277.137	17.642	143°15'26.80"			
TC	11.163	2824.378	6276.205	17.688	143°15'26.80"			
IP 2	12.123	2824.982	6275.395	17.727		R = -2.500	1.921	44°02'05.33"
	CT	13.084	2825.980	6275.233	17.754	99°13'21.47"		
STAGE 3	20.000	2832.807	6274.125	17.639	99°13'21.47"			
	30.000	2842.678	6272.522	17.472	99°13'21.47"			
	40.000	2852.548	6270.919	17.306	99°13'21.47"			
	50.000	2862.419	6269.316	17.140	99°13'21.47"			
	60.000	2872.290	6267.714	16.973	99°13'21.47"			
	70.000	2882.160	6266.111	16.807	99°13'21.47"			
	80.000	2892.031	6264.508	16.641	99°13'21.47"			
	90.000	2901.902	6262.906	16.475	99°13'21.47"			
	100.000	2911.773	6261.303	16.308	99°13'21.47"			
	110.000	2921.643	6259.700	16.142	99°13'21.47"			
STAGE 3	120.000	2931.514	6258.097	15.976	99°13'21.47"			
	130.000	2941.385	6256.495	15.809	99°13'21.47"			
	140.000	2951.256	6254.892	15.643	99°13'21.47"			
	150.000	2961.126	6253.289	15.477	99°13'21.47"			
	160.000	2970.997	6251.687	15.310	99°13'21.47"			
	170.000	2980.868	6250.084	15.144	99°13'21.47"			
	180.000	2990.739	6248.481	15.000	99°13'21.47"			
	190.000	3000.609	6246.878	15.000	99°13'21.47"			
	TC	196.917	3007.437	6245.770	15.000	99°13'21.47"		
	200.000	3010.336	6244.766	15.000	118°57'37.43"	R = 8.950	14.055	89°58'32.80"
STAGE 3	IP 3	203.944	3016.267	6244.336	15.000			
	210.000	3014.940	6236.471	15.000	182°58'40.90"			
	CT	210.972	3014.837	6235.505	15.000	189°11'54.26"		
	220.000	3013.394	6226.593	15.000	189°11'54.26"			
	230.000	3011.795	6216.721	15.000	189°11'54.26"			
	240.000	3010.197	6206.850	15.000	189°11'54.26"			
	250.000	3008.598	6196.978	15.000	189°11'54.26"			
	260.000	3007.000	6187.107	15.000	189°11'54.26"			
	270.000	3005.401	6177.236	15.000	189°11'54.26"			
	280.000	3003.803	6167.364	15.000	189°11'54.26"			
STAGE 3	290.000	3002.204	6157.493	15.000	189°11'54.26"			
	300.000	3000.606	6147.621	14.700	189°11'54.26"			
	310.000	2999.007	6137.750	15.000	189°11'54.26"			
	320.000	2997.409	6127.879	15.000	189°11'54.26"			
	330.000	2995.810	6118.007	15.000	189°11'54.26"			
	340.000	2994.211	6108.136	15.000	189°11'54.26"			
	350.000	2992.613	6098.264	15.000	189°11'54.26"			
	360.000	2991.014	6088.393	15.000	189°11'54.26"			
	IP 4	364.619	2990.276	6083.833	15.000	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"

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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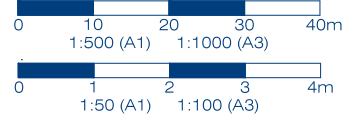
Drawing Title:

BASIN ACCESS 01
LONGITUDINAL SECTION

B	08/01/24	NOTES ADDED	JH	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	JH	MG
			DRN	CHK

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

Scale:



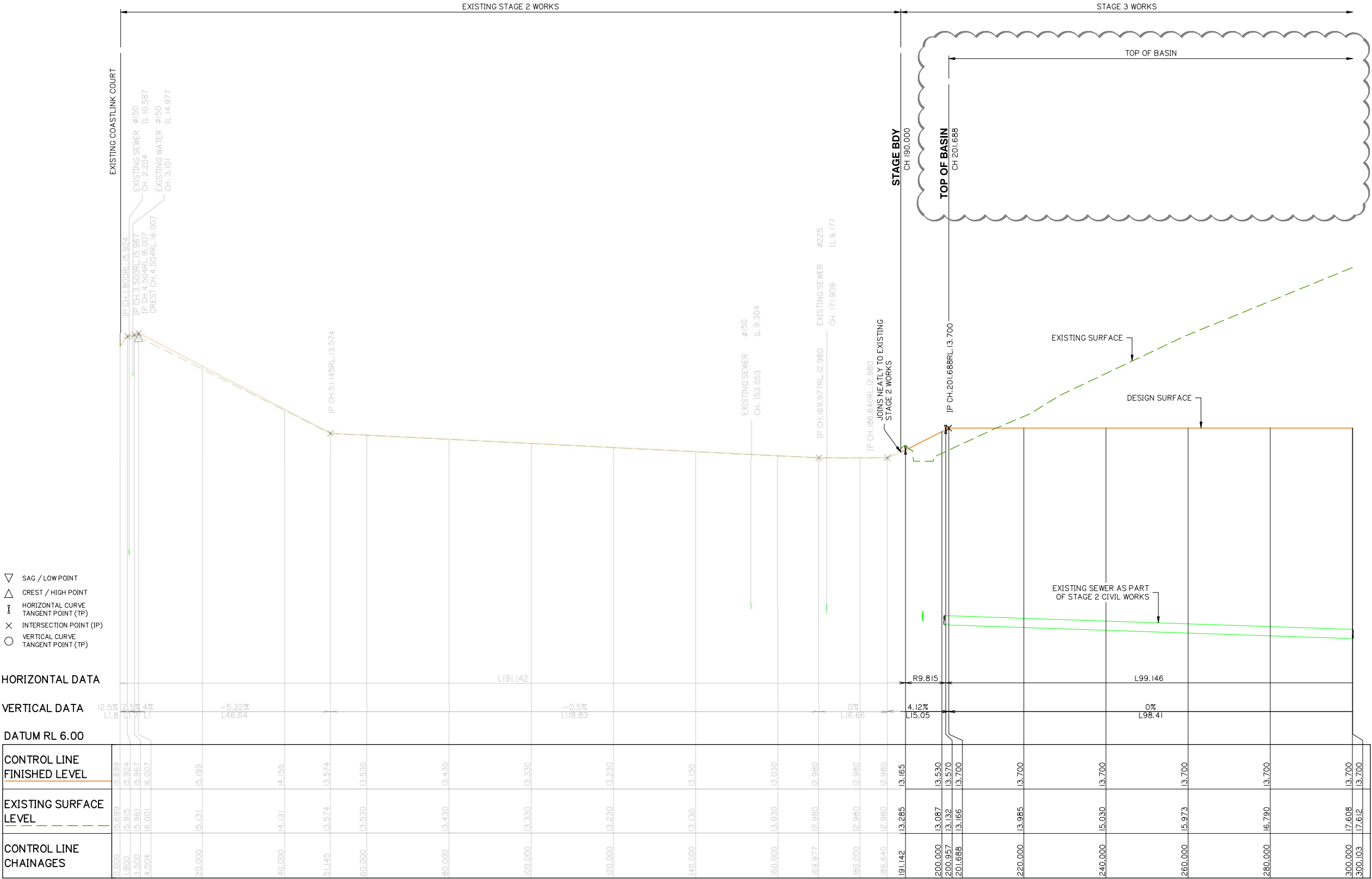
PROJECT NORTH POINT



Project No. 5841

Designed: JH	Drafted: ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023

Drawing No:	Revision
5941 ENG CW3 451	B



BASIN ACCESS 01 – LONGITUDINAL SECTION

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

BASIN ACCESS 01 LONGITUDINAL SECTION

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

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 APPROVAL

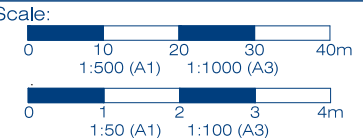
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Drawing Title:

BASIN ACCESS 01a
LONGITUDINAL SECTION

B	08/01/24	NOTES ADDED	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



PROJECT NORTH POINT



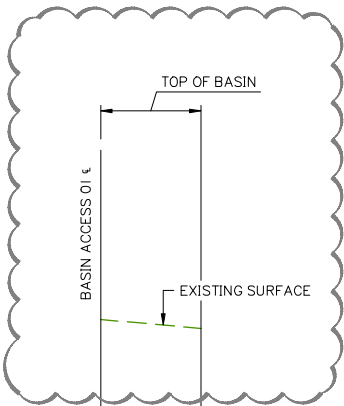
Project No. 5941	
Designed: JH	Drafted: ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No: 5941 ENG CW3 452	Revision: B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



- ▽ SAG / LOW POINT
- △ CREST / HIGH POINT
- I HORIZONTAL CURVE TANGENT POINT (TP)
- × INTERSECTION POINT (IP)
- VERTICAL CURVE TANGENT POINT (TP)

HORIZONTAL DATA

VERTICAL DATA

DATUM RL 6.00

CONTROL LINE FINISHED LEVEL	13.700	13.700
EXISTING SURFACE LEVEL	17.054	16.936
CONTROL LINE CHAINAGES	-0.000	13.250

BASIN ACCESS 01a – LONGITUDINAL SECTION

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

BASIN ACCESS 01a LONGITUDINAL SECTION

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 APPROVAL

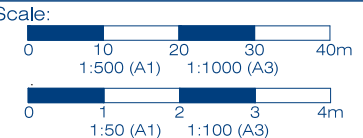
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Drawing Title:

BASIN ACCESS 02 AND 02a
LONGITUDINAL SECTIONS

C	08/01/24	NOTES ADDED	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
CULVERT AND PIPE SIZES IN MILLIMETRES A3 REDUCED



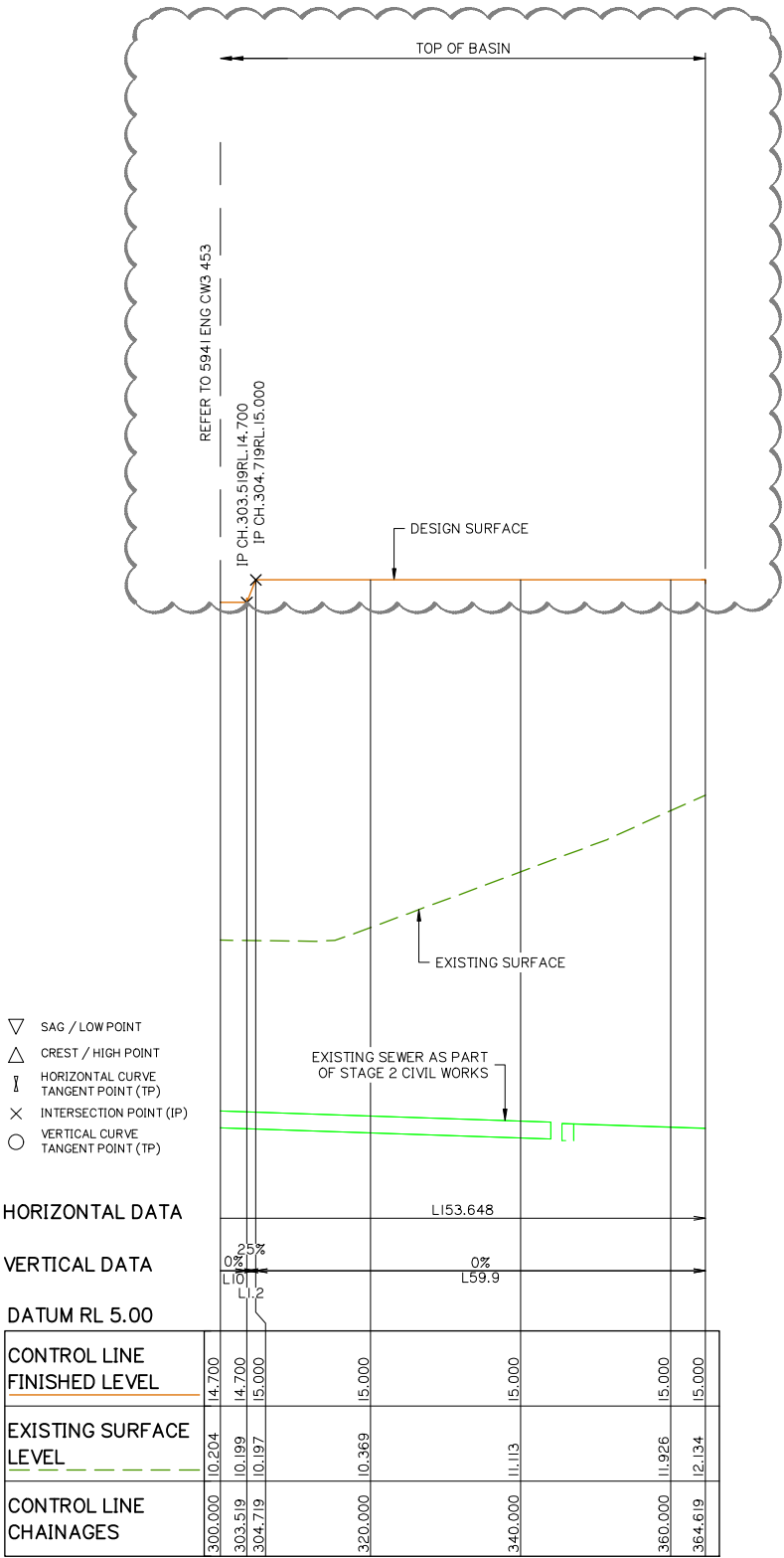
PROJECT NORTH POINT



Project No. 5941

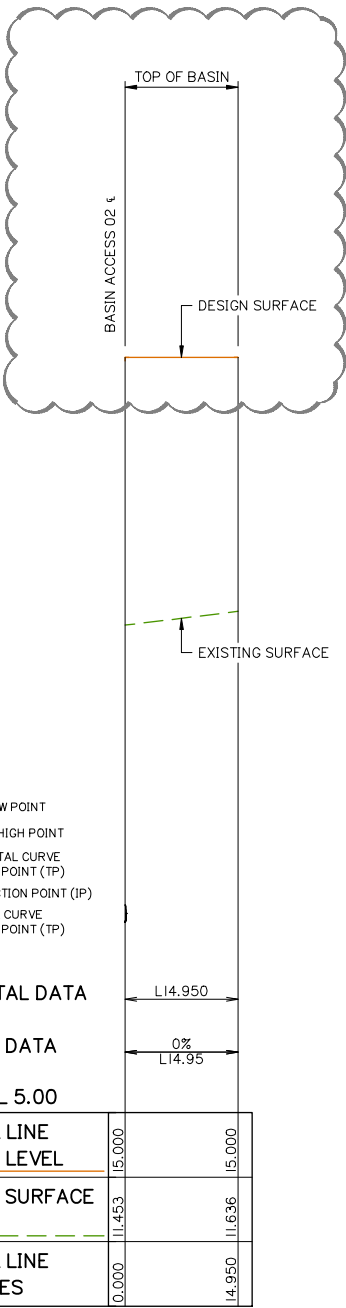
Designed: JH	Drafted: ML
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023

Drawing No: 5941 ENG CW3 454
Revision: C



BASIN ACCESS 02 – LONGITUDINAL SECTION

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



Basin Access 02a – LONGITUDINAL SECTION

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

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

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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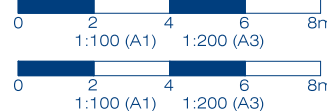
ROADWORKS CROSS
SECTIONS SHEET 2 OF 5

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:



PROJECT NORTH POINT



Project No: 5941

Designed: JH

Drafted: ML

Approved:

MG

RPEQ

16939

Signed:

Date:

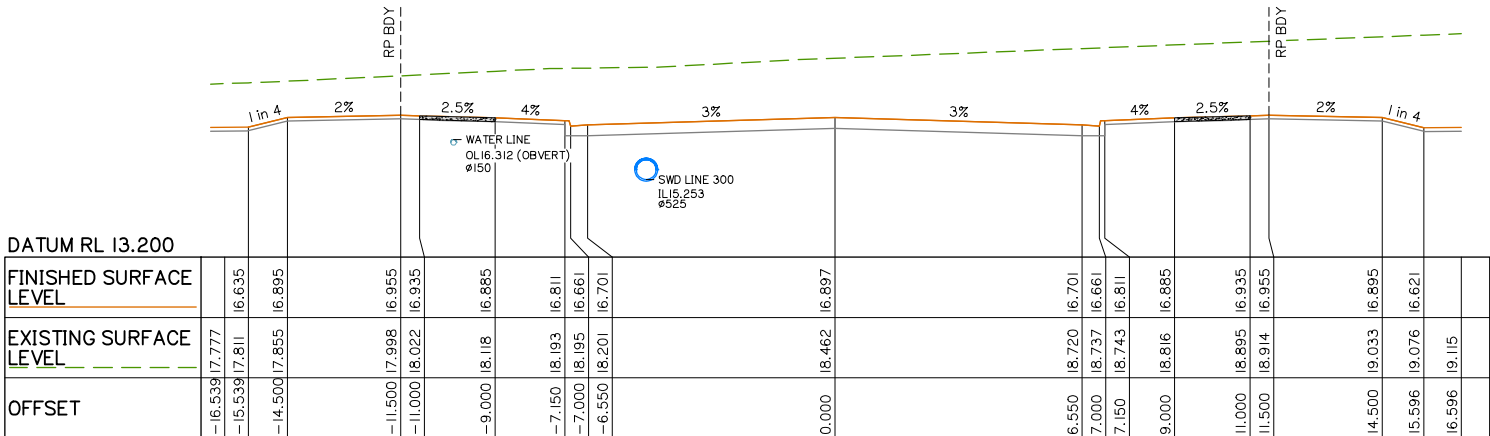
28/09/2023

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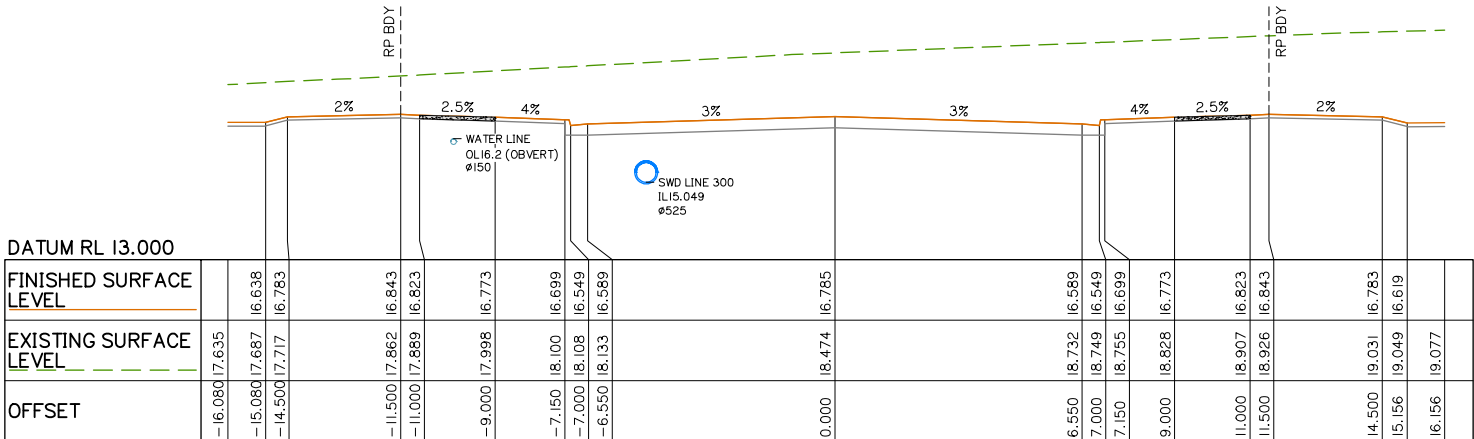
Revision

5941 ENG CW3 471

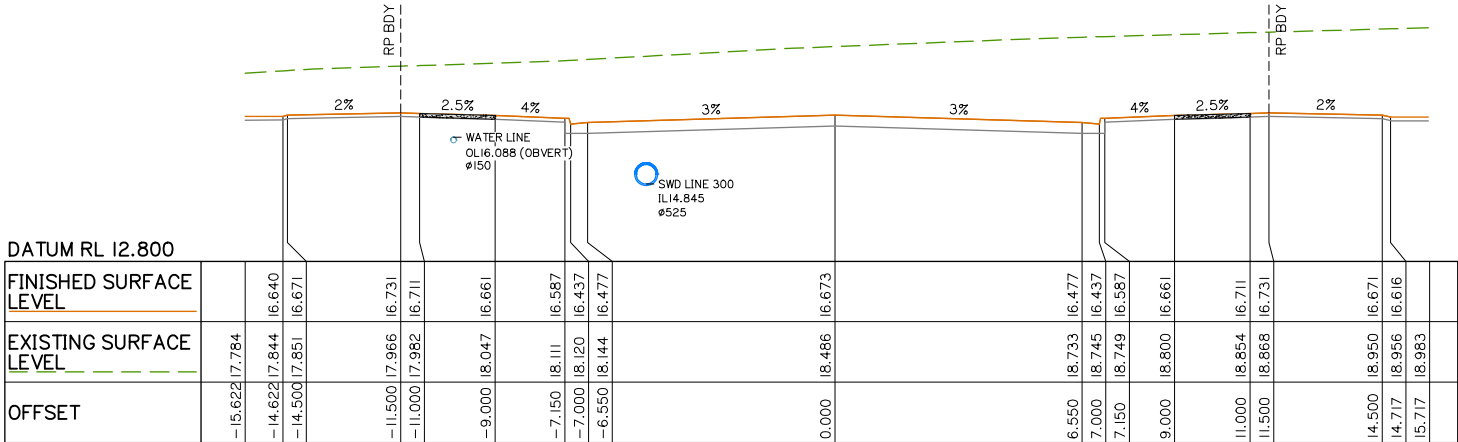
C



CH 80.000



CH 70.000



CH 60.000

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

VANTAGE YATALA STAGE 3

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
QLD, 4207

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

ROADWORKS CROSS
SECTIONS SHEET 3 OF 5

ROADWORKS CROSS
SECTIONS SHEET 3 OF 5

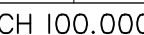
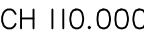
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:

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



5941 ENG CW3 472 C



development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

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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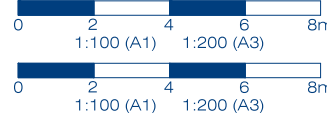
ROADWORKS CROSS
SECTIONS SHEET 4 OF 5

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:



PROJECT NORTH POINT



Project No: 5941

Designed: JH
Drafted: ML

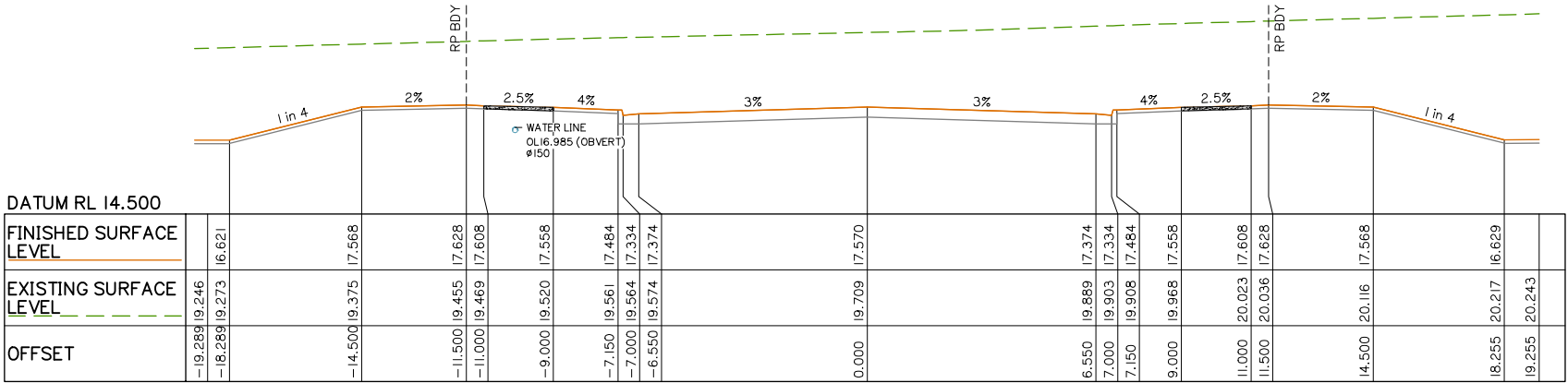
Approved: MG

RPEQ: 16939

Signed:

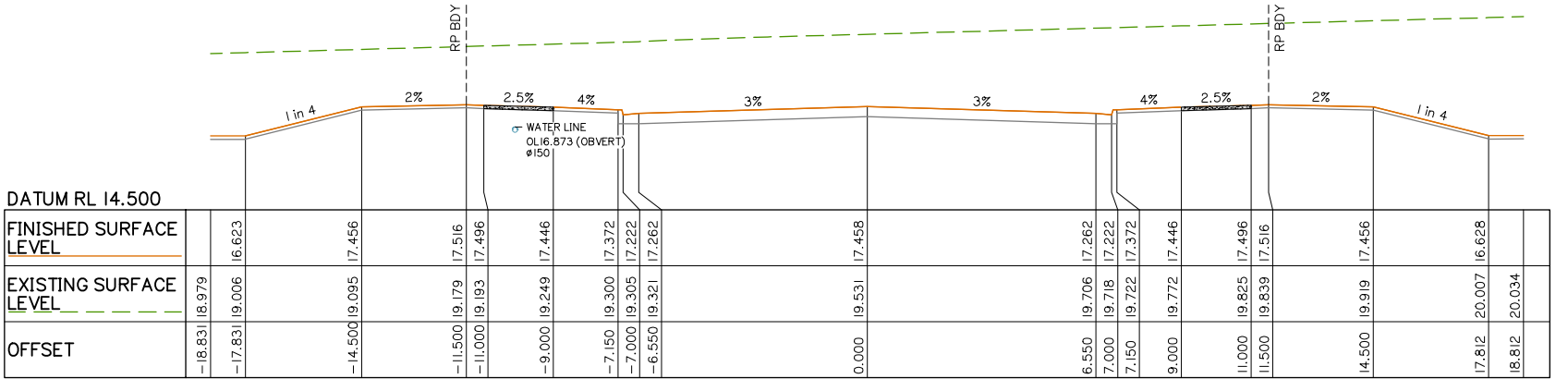
Date: 28/09/2023

Drawing No: 5941 ENG CW3 473
Revision: C



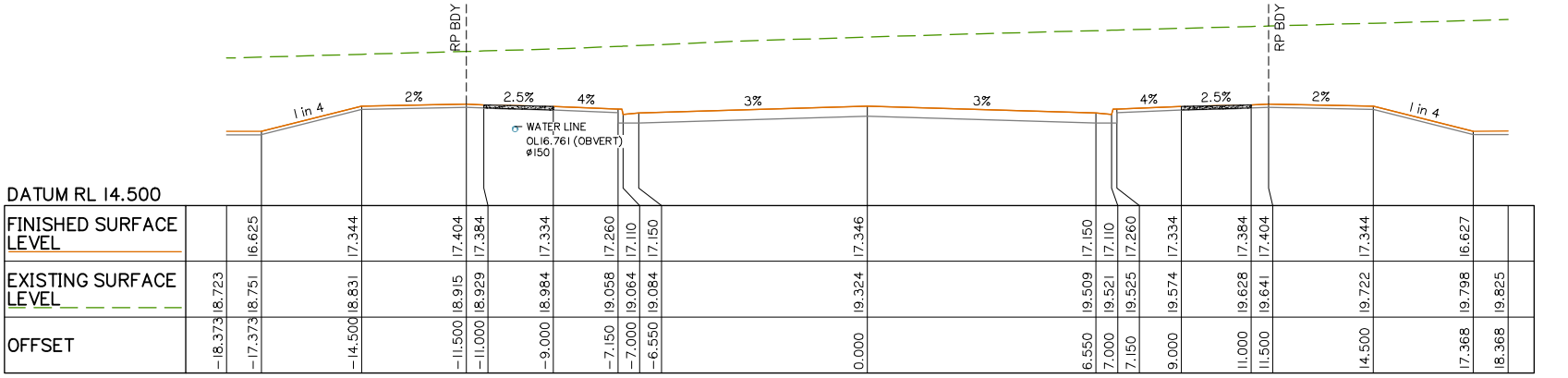
DATUM RL 14.500	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
	16.621	18.289	-19.289
	17.568	19.375	-14.500
	17.628	19.455	-11.500
	17.608	19.469	-11.000
	17.558	19.520	-9.000
	17.484	19.561	-7.150
	17.334	19.564	-7.000
	17.374	19.574	-6.550
	17.570	19.709	0.000
	17.374	19.889	6.550
	17.334	19.903	7.000
	17.484	19.908	7.150
	17.558	19.968	9.000
	17.608	20.023	11.000
	17.628	20.036	11.500
	17.568	20.116	14.500
	16.629	20.217	18.255
		20.243	19.255

CH 140.000



DATUM RL 14.500	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
	16.623	18.979	-18.831
	17.456	19.006	-17.831
	17.456	19.095	-14.500
	17.516	19.179	-11.500
	17.496	19.193	-11.000
	17.446	19.249	-9.000
	17.372	19.300	-7.150
	17.222	19.305	-7.000
	17.262	19.321	-6.550
	17.458	19.531	0.000
	17.262	19.706	6.550
	17.222	19.718	7.000
	17.372	19.722	7.150
	17.446	19.772	9.000
	17.496	19.825	11.000
	17.516	19.839	11.500
	17.456	19.919	14.500
	16.628	20.007	17.812
		20.034	18.812

CH 130.000



DATUM RL 14.500	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	OFFSET
	16.625	18.723	-18.373
	17.344	18.751	-17.373
	17.344	18.831	-14.500
	17.404	18.915	-11.500
	17.384	18.929	-11.000
	17.334	18.984	-9.000
	17.260	19.058	-7.150
	17.110	19.064	-7.000
	17.150	19.084	-6.550
	17.346	19.324	0.000
	17.150	19.509	6.550
	17.260	19.521	7.000
	17.384	19.525	7.150
	17.334	19.574	9.000
	17.384	19.628	11.000
	17.404	19.641	11.500
	17.344	19.722	14.500
	16.627	19.798	17.368
		19.825	18.368

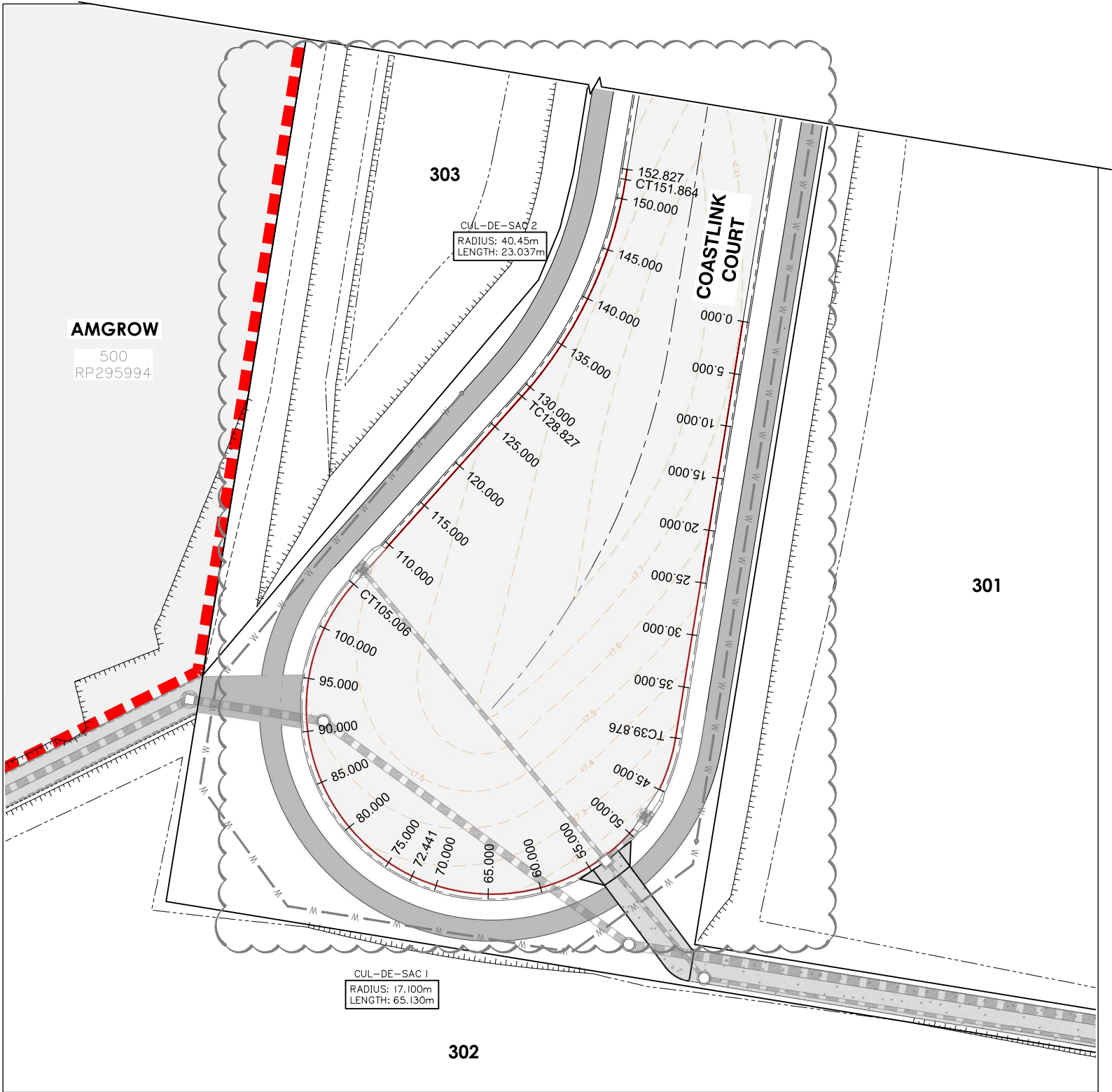
CH 120.000

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

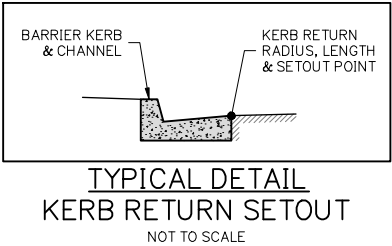
Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
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Scheme, Local Laws and Planning Policies



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	17.693	189°13'09.48"			
	5.000	2829.843	6331.187	17.691	189°13'09.48"			
	10.000	2829.042	6326.252	17.674	189°13'09.48"			
	15.000	2828.241	6321.317	17.642	189°13'09.48"			
	20.000	2827.440	6316.381	17.595	189°13'09.48"			
	25.000	2826.638	6311.446	17.533	189°13'09.48"			
	30.000	2825.837	6306.510	17.456	189°13'09.48"			
	35.000	2825.036	6301.575	17.364	189°13'09.48"			
	39.876	2824.255	6296.762	17.273	189°13'09.48"			
	40.000	2824.235	6296.640	17.271	189°37'32.32"			
IP 2	45.000	2822.713	6291.895	17.201	205°56'57.22"			
	50.000	2819.918	6287.769	17.162	222°16'22.12"			
	55.000	2816.077	6284.595	17.156	238°35'47.02"			
	56.158	2820.502	6273.641	17.159		R = 17.550	32.565	106°18'56.26"
	60.000	2811.498	6282.628	17.180	254°55'11.93"			
	65.000	2806.551	6282.028	17.214	271°14'36.83"			
	70.000	2801.635	6282.843	17.247	287°34'01.73"			
	72.441	2799.367	6283.738	17.263	295°32'05.73"			
	75.000	2797.146	6285.006	17.280	303°53'26.63"			
	80.000	2793.446	6288.344	17.313	320°12'51.54"			
IP 3	85.000	2790.833	6292.587	17.347	336°32'16.44"			
	88.723	2778.231	6293.835	17.372		R = 17.550	32.565	106°18'56.26"
	90.000	2789.518	6297.393	17.380	352°51'41.34"			
	95.000	2789.607	6302.375	17.413	9°11'06.24"			
	100.000	2791.093	6307.132	17.447	25°30'31.14"			
	105.000	2793.855	6311.279	17.480	41°49'56.05"			
	105.006	2793.859	6311.283	17.480	41°51'01.99"			
	110.000	2797.191	6315.004	17.513	41°51'01.99"			
	115.000	2800.527	6318.728	17.547	41°51'01.99"			
	120.000	2803.863	6322.452	17.580	41°51'01.99"			
IP 4	125.000	2807.199	6326.177	17.613	41°51'01.99"			
	128.827	2809.753	6329.027	17.639	41°51'01.99"			
	130.000	2810.522	6329.913	17.646	40°11'20.30"			
	135.000	2813.505	6333.922	17.669	33°06'24.03"			
	140.000	2815.970	6338.268	17.677	26°01'27.77"			
	140.346	2817.652	6337.847	17.677		R = -40.450	23.037	32°37'52.52"
	145.000	2817.881	6342.885	17.669	18°56'31.50"			
	150.000	2819.208	6347.702	17.647	11°51'35.23"			
	151.864	2819.549	6349.535	17.635	9°13'09.48"			
	152.827	2819.704	6350.486	17.628	9°13'09.48"			



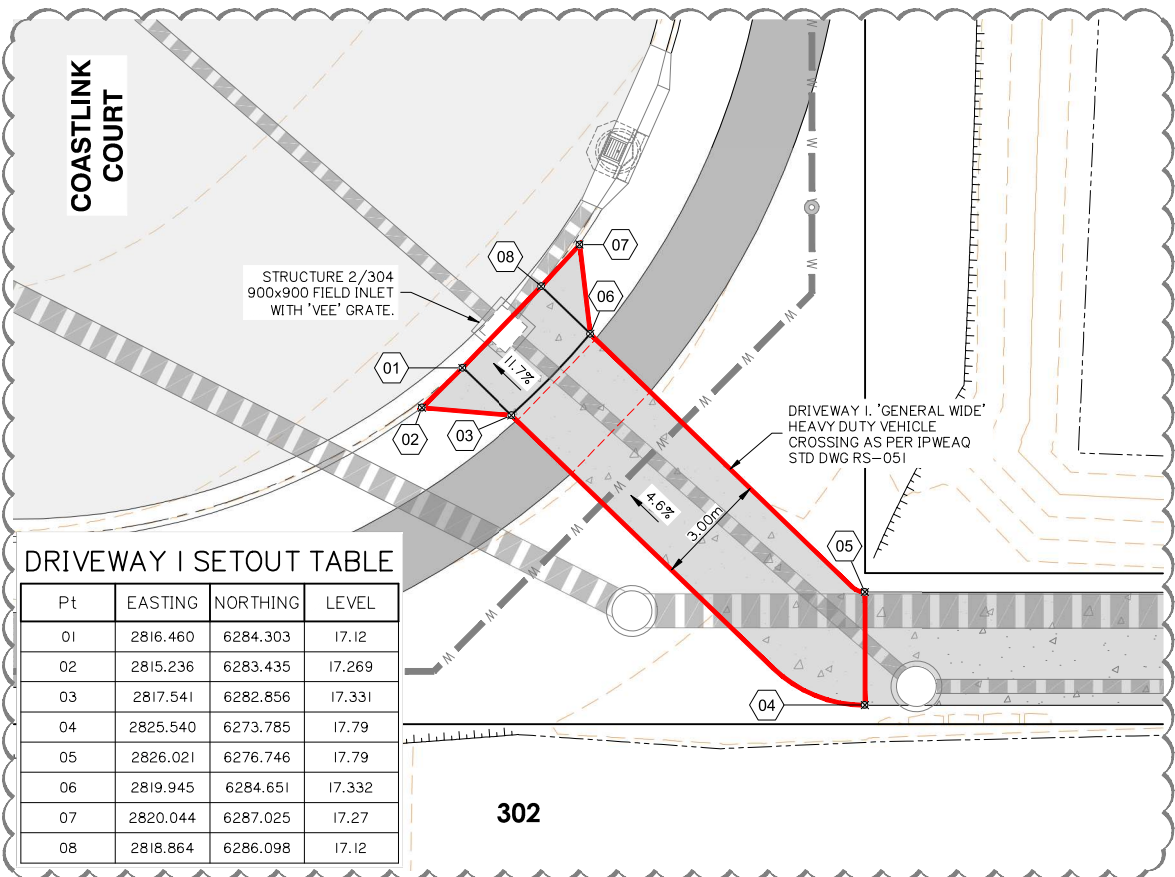
PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

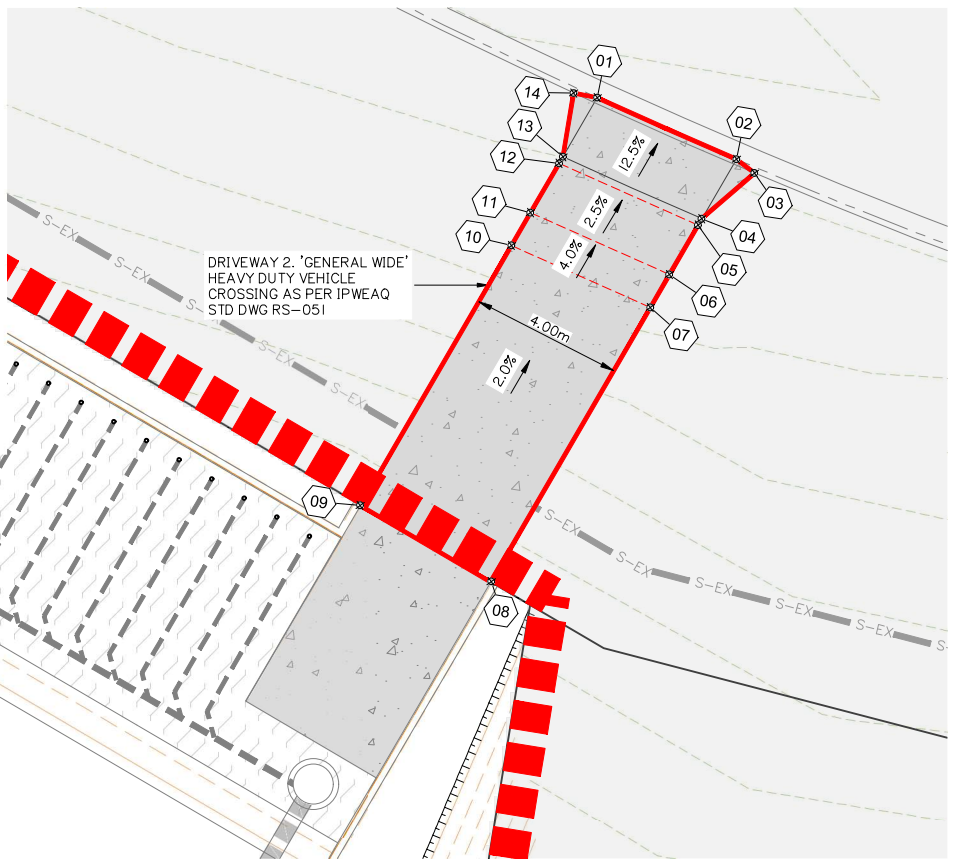




DRIVEWAY 1 SETOUT TABLE			
Pt	EASTING	NORTHING	LEVEL
01	2816.460	6284.303	17.12
02	2815.236	6283.435	17.269
03	2817.541	6282.856	17.331
04	2825.540	6273.785	17.79
05	2826.021	6276.746	17.79
06	2819.945	6284.651	17.332
07	2820.044	6287.025	17.27
08	2818.864	6286.098	17.12

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



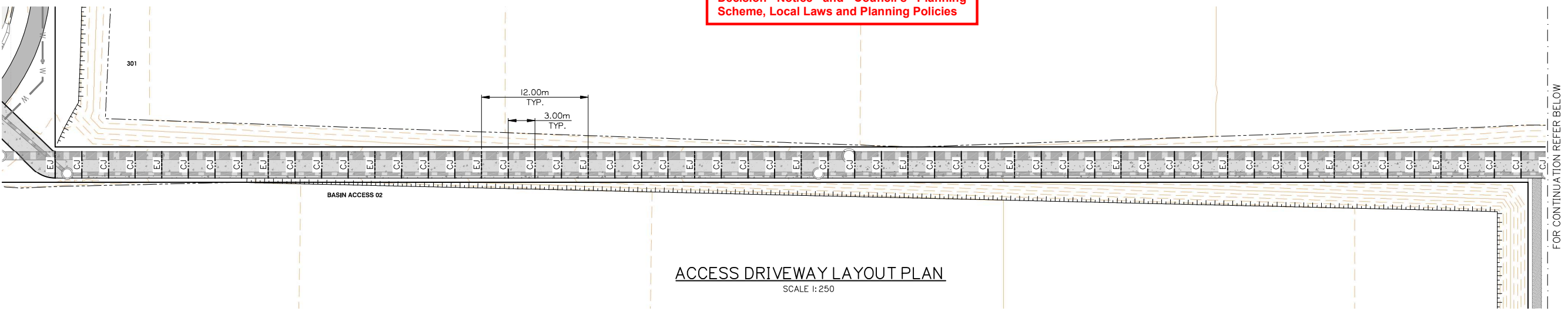
DRIVEWAY 2 SETOUT PLAN
SCALE 1:100

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

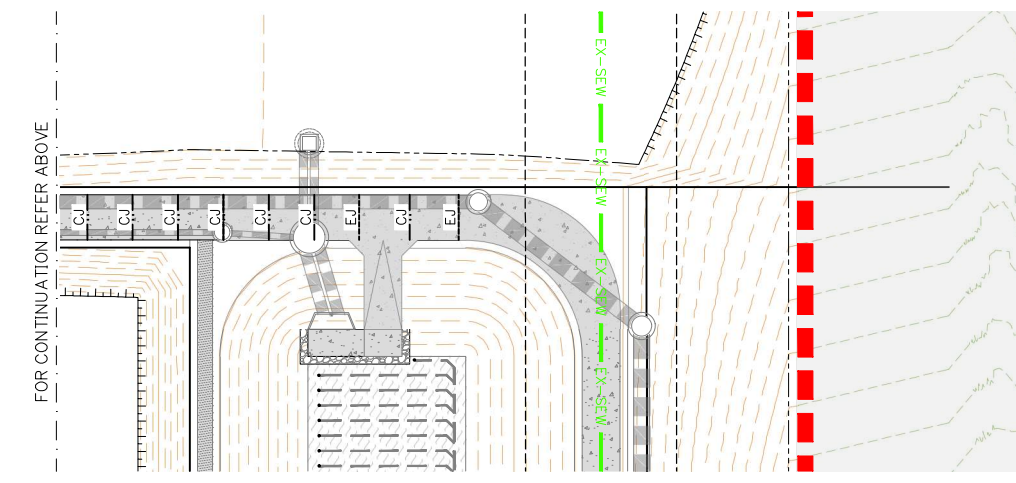
Application No: OPW/2023/1136

Dated: 14 February 2024

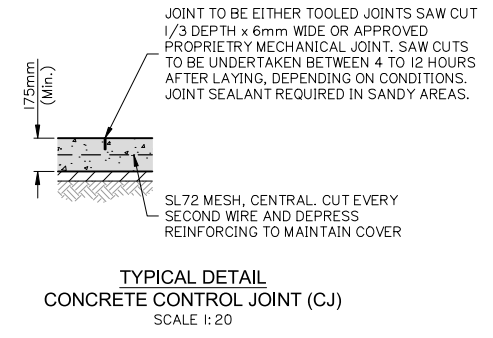
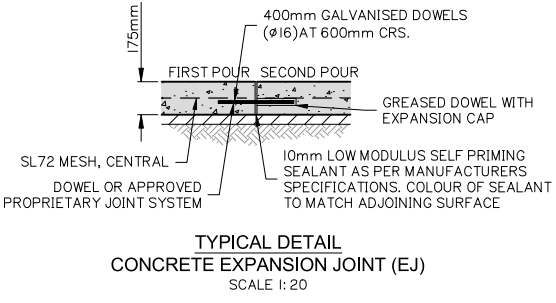
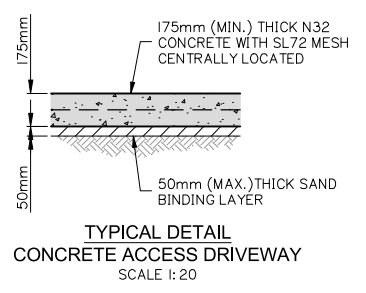
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ACCESS DRIVEWAY LAYOUT PLAN
SCALE 1:250



ACCESS DRIVEWAY LAYOUT PLAN
SCALE 1:250

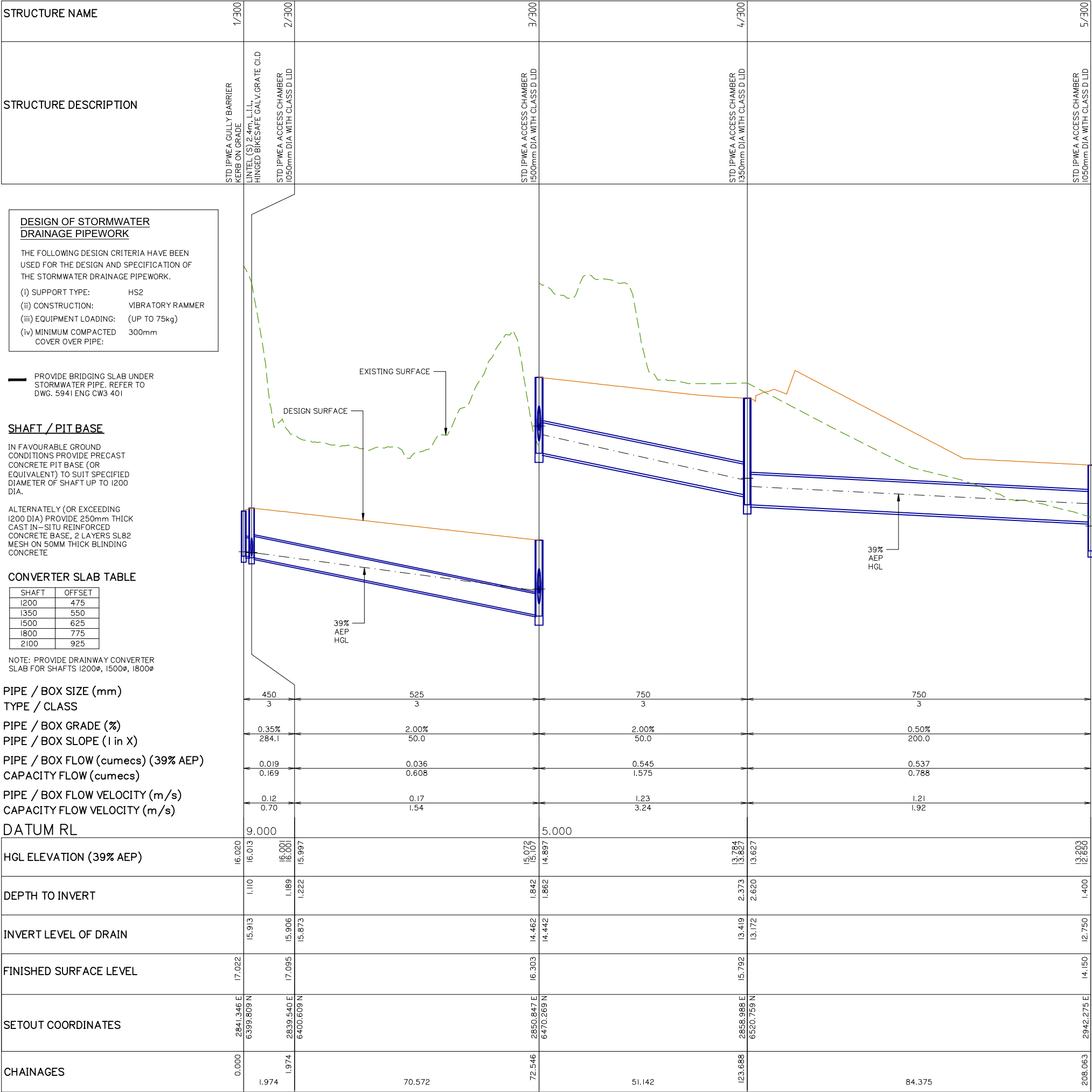


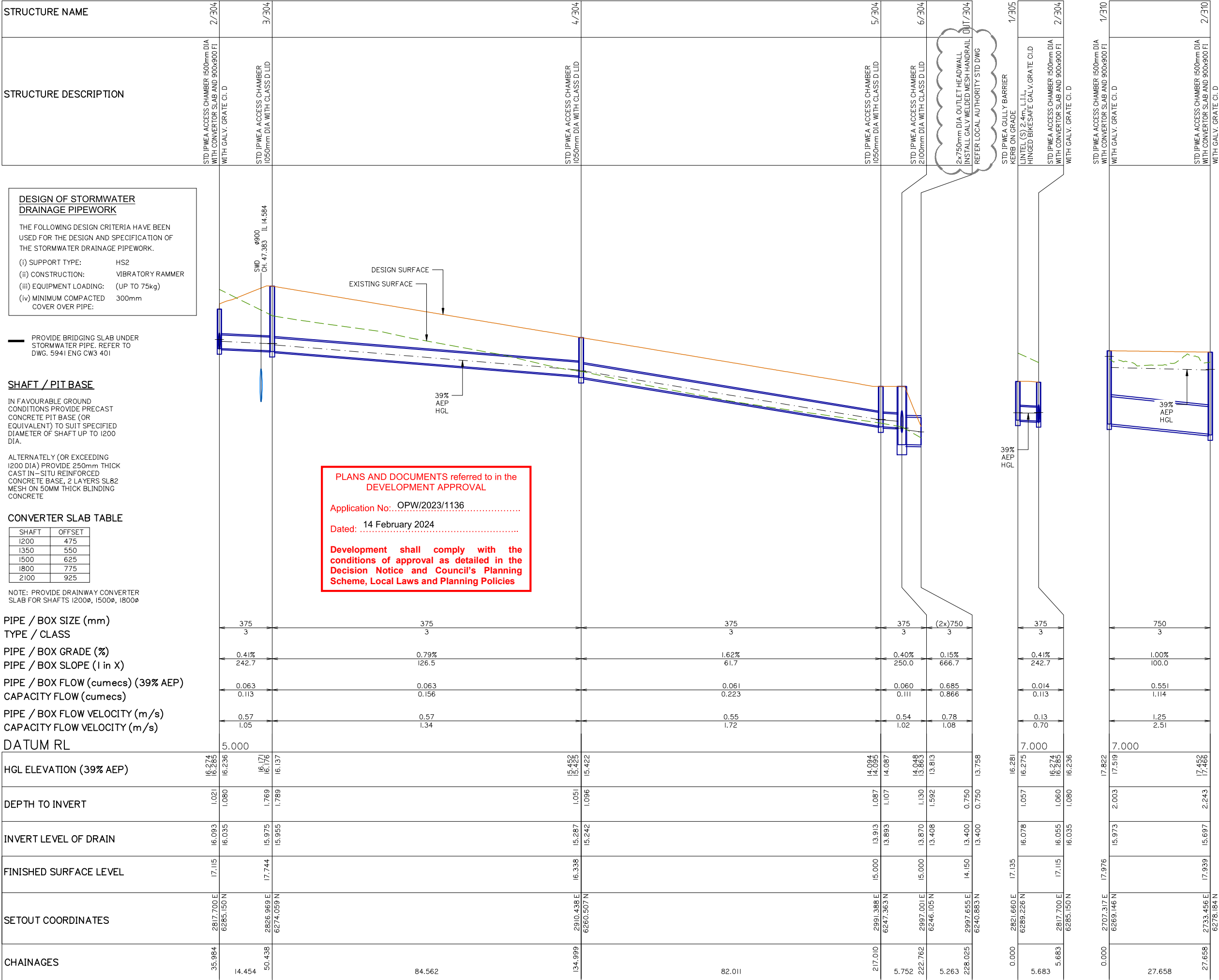
VEHICLE CROSSING AND ACCESS DRIVEWAY LAYOUT PLAN

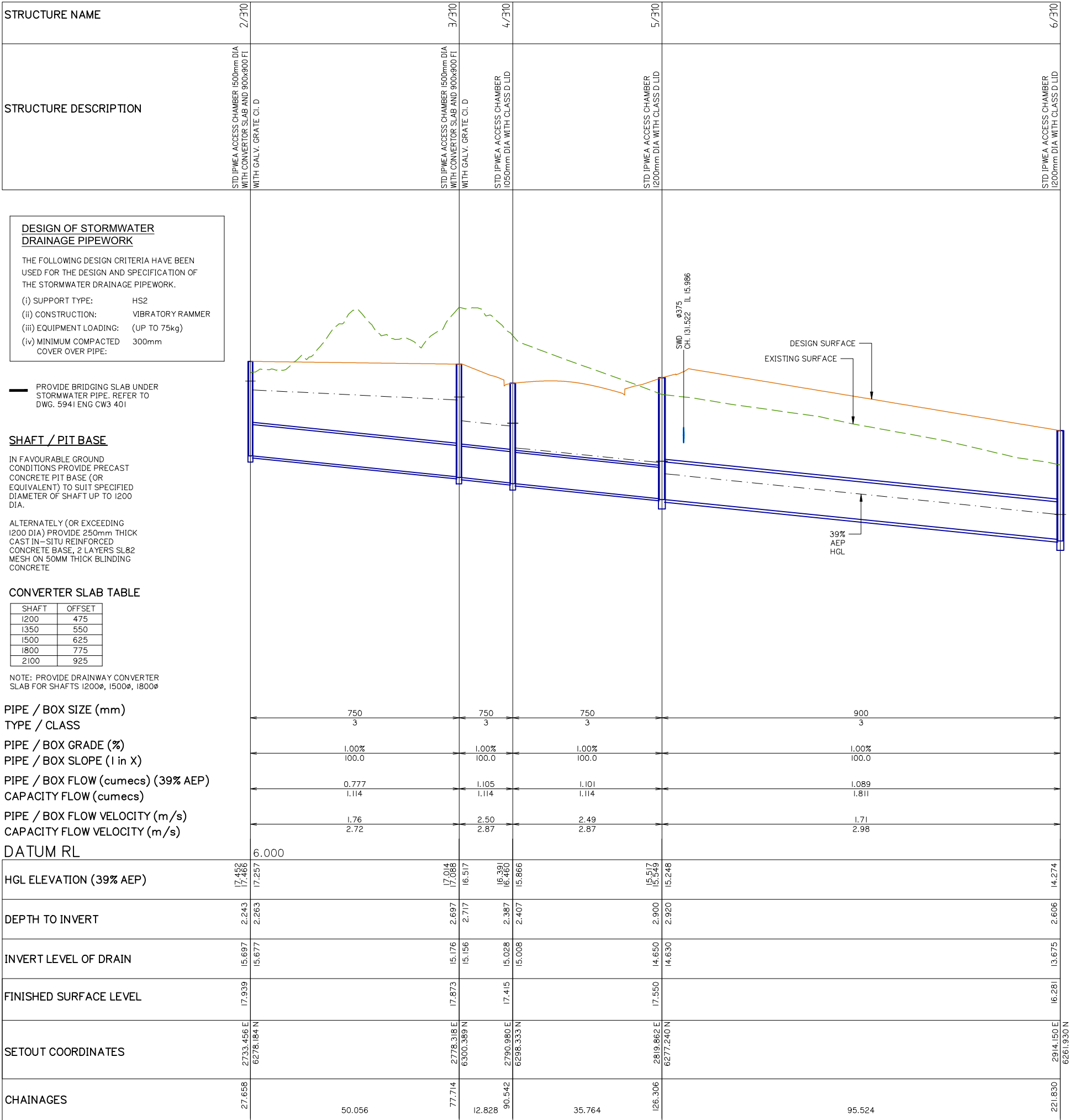
Rev	Date	Description	DRN	CHK
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	LAYOUT UPDATED	ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	MG

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

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







STRUCTURE NAME	6/310
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1200mm DIA WITH CLASS D LID

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 SL82 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)

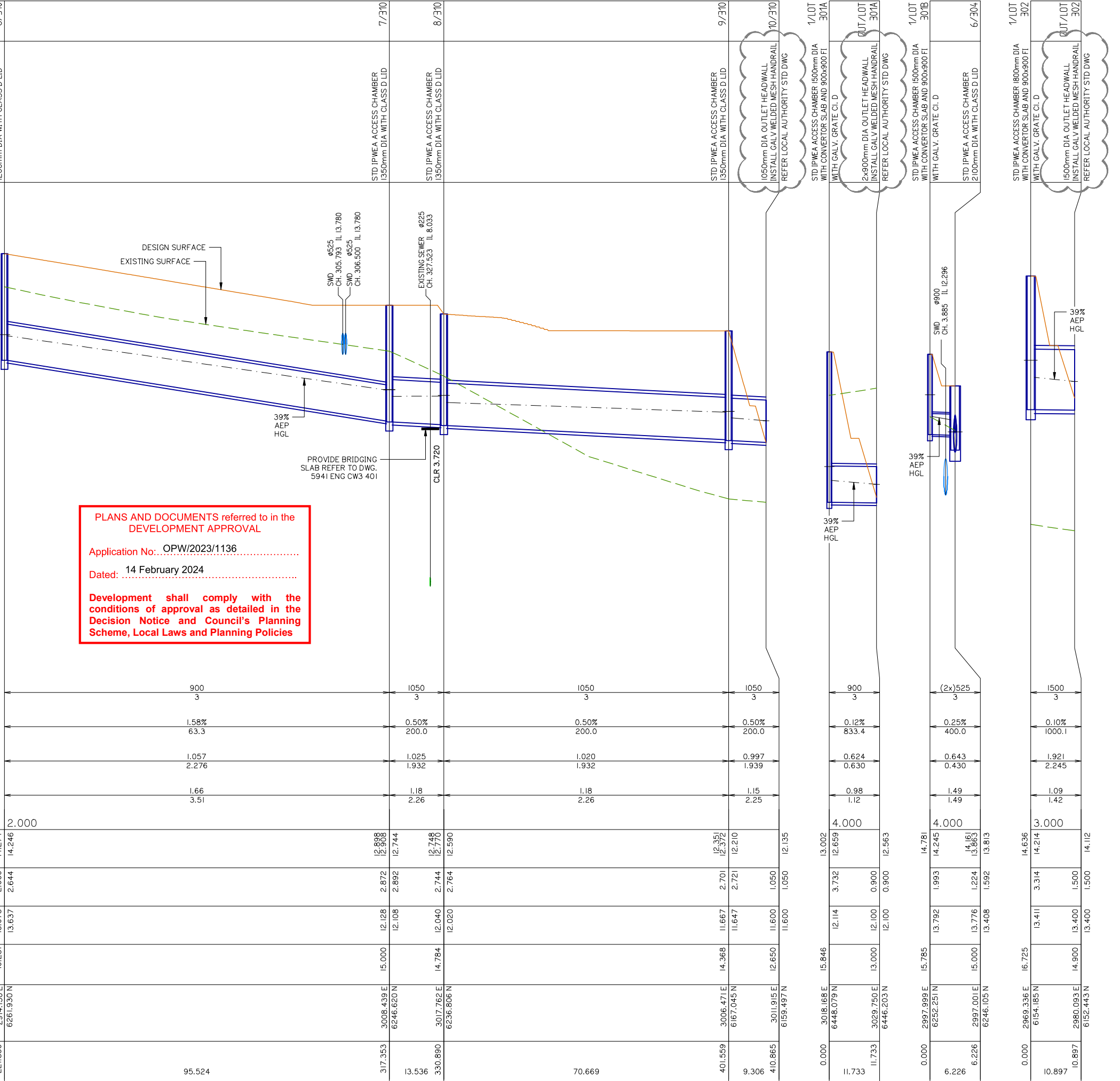
DEPTH TO INVERT

INVERT LEVEL OF DRAIN

FINISHED SURFACE LEVEL

SETOUT COORDINATES

CHAINAGES



LINE 310

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 5 OF 6

LINE Lot 301a LINE Lot 301b LINE Lot 302

ISSUED FOR APPROVAL

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THIS DRAWING IS INTENDED TO BE PRINTED IN COLOUR. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES.

Drawing Title:
**STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 5 OF 6**

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

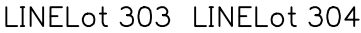
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED A3 REDUCED

Scale:
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 514
Revision: C



**PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL**

Application No: OPW/2023/1136

Dated: 14 February 2024

**Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies**



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development
perspectives

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planning | environment | landscape | engineering | survey
T: 9007 9393 | F: 9087 5461 | www.gassman.com.au
Gok's Coast | 70 Business Street, Yaffle QLD | PO Box 392, Beerleigh 4207

Client:

development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies.

Drawing No:	Revision
5941 ENG CW3 550	B

STORMWATER DRAINAGE CALCULATION TABLE SHEET 2 OF 2

**LANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL**

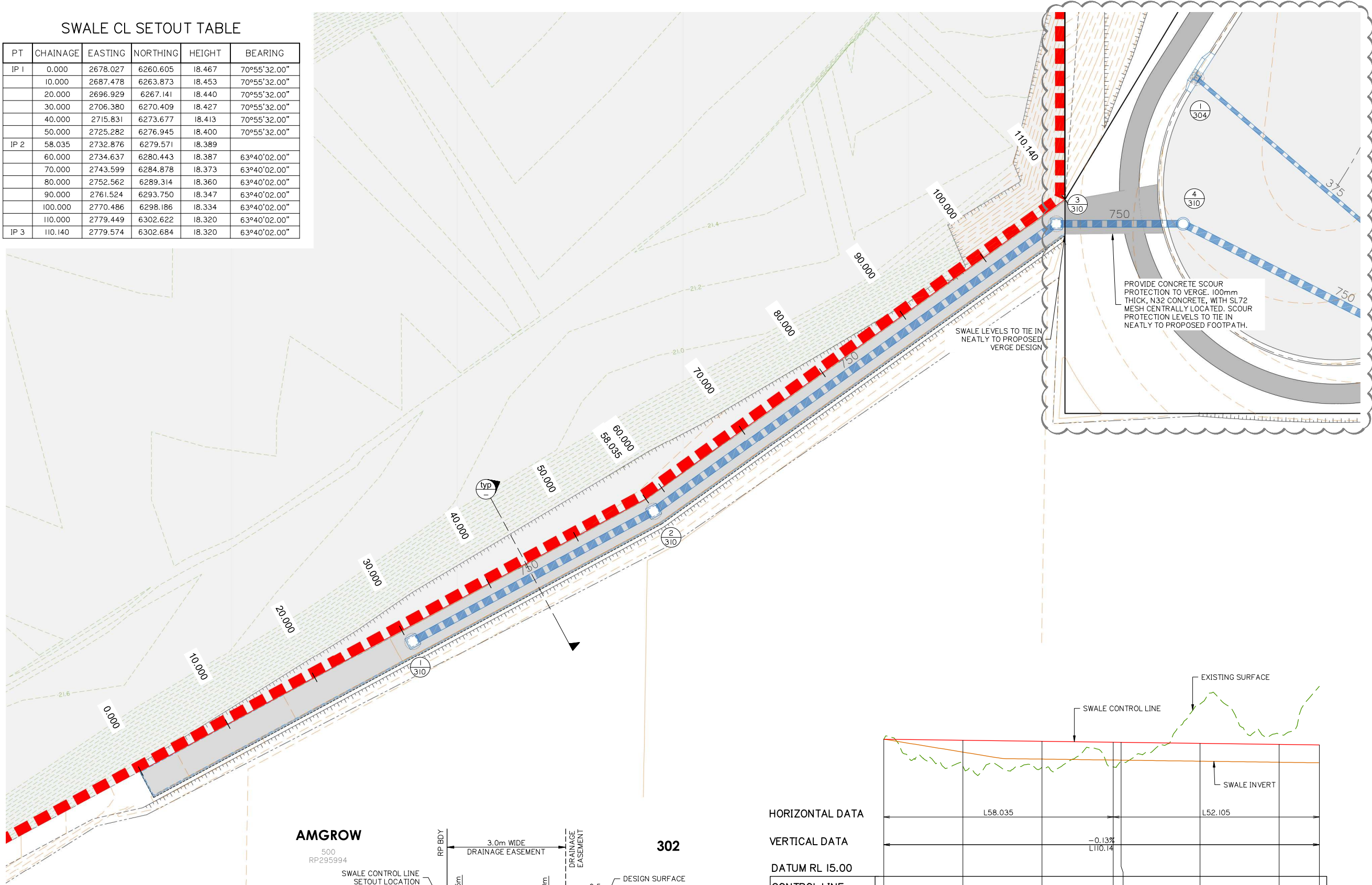
Application No.: OPW/2023/1136

dated: 14 February 2024

**Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies**

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	18.453	70°55'32.00"
	20.000	2696.929	6267.141	18.440	70°55'32.00"
	30.000	2706.380	6270.409	18.427	70°55'32.00"
	40.000	2715.831	6273.677	18.413	70°55'32.00"
IP 2	50.000	2725.282	6276.945	18.400	70°55'32.00"
	58.035	2732.876	6279.571	18.389	
	60.000	2734.637	6280.443	18.387	63°40'02.00"
	70.000	2743.599	6284.878	18.373	63°40'02.00"
	80.000	2752.562	6289.314	18.360	63°40'02.00"
IP 3	90.000	2761.524	6293.750	18.347	63°40'02.00"
	100.000	2770.486	6298.186	18.334	63°40'02.00"
	110.000	2779.449	6302.622	18.320	63°40'02.00"
	110.140	2779.574	6302.684	18.320	63°40'02.00"



AMGROW

500
RP295994

SWALE CONTROL LINE
SETOUT LOCATION

FALL

LOCALISED MINOR FILL IN
AMGROW SITE TO ENSURE
NO PONDING BEHIND
SWALE

STORMWATER
LINE 310

CONCRETE SWALE

EXISTING SURFACE

302

RP BODY

0.45m

3.0m WIDE
DRAINAGE EASEMENT

0.60m

0.5m

DESIGN SURFACE

1 in 4

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

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Scheme, Local Laws and Planning Policies

HORIZONTAL DATA

VERTICAL DATA

DATUM RL 15.00

CONTROL LINE FINISHED LEVEL	18.467	18.440	18.413	18.389	18.367	18.360	18.334	18.320
SWALE INVERT	18.467	18.140	17.963	17.939	17.937	17.910	17.884	17.870
EXISTING SURFACE LEVEL	18.467	17.787	17.753	17.765	17.894	19.353	18.587	19.802
CONTROL LINE CHAINAGES	0.000	20.000	40.000	58.035	60.000	80.000	100.000	110.140

SWALE – LONGITUDINAL SECTION

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

Rev	Date	Description	JH	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)

PROJECT NORTH POINT

Project No: 5841

Designed: JH
Drafted: JH

Approved: MG

RPEQ: 16939
Signed: [Signature]
Date: 28/09/2023

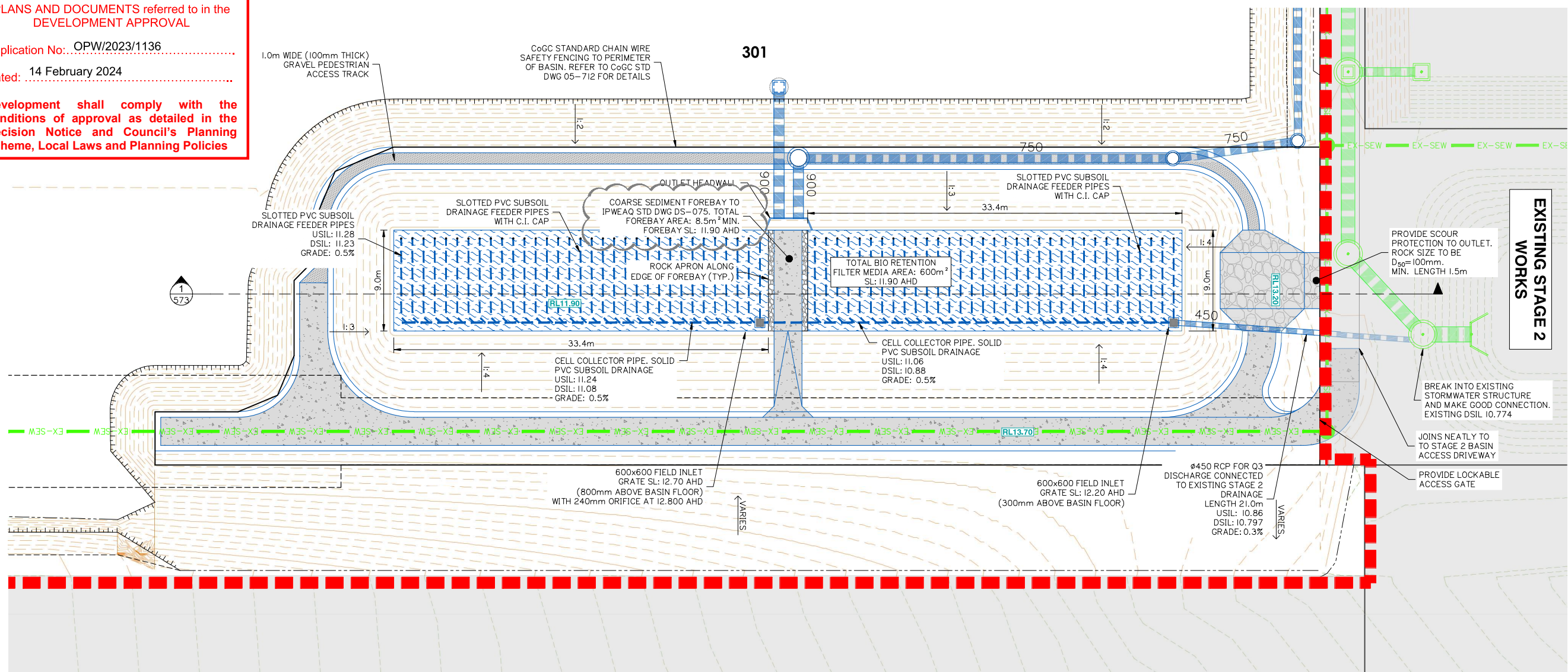
Drawing No: 5941 ENG CW3 560
Revision: B

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

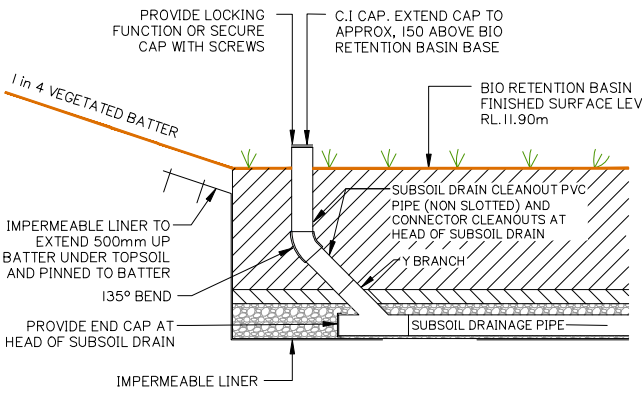
Application No: OPW/2023/1136

Dated: 14 February 2024

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EXISTING STAGE 2 WORKS



SUBSOIL DRAIN CLEANOUT – IN BASIN
NOT TO SCALE

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

$$V_s = A_c \times R \times L_o \times F = 2.525 \text{ m}^3$$
$$R = 1 - \left[1 + \frac{1}{n} \times \frac{V_s}{0.7 A_c} \right]^{-n}$$
$$0.8 = 1 - \left[1 + \frac{0.10}{0.5 \times 0.30 / A_c} \right]^{-0.5} \quad A_f = 36 \text{ m}^2$$
$$D_s = \frac{V_s}{A_f} = \frac{2.5248}{36.00} = 0.070 \text{ m}$$

OPTIMIZATION OF MINIMUM FOREBAY SIZE:

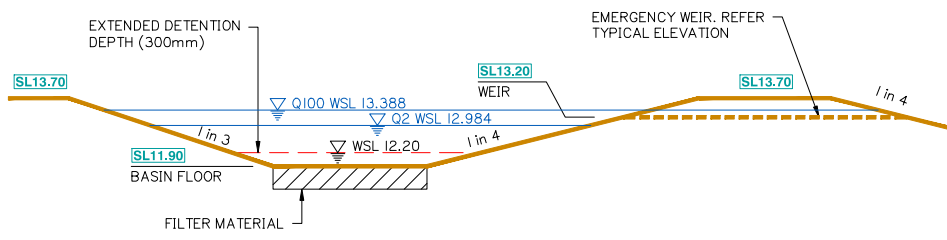
$$D_s = 0.3 \text{ m} \quad A_f = \frac{2.5248 \text{ m}^3}{0.3} = 8.419 \text{ m}^2$$

CALCULATED FOR 1 FOREBAY AT 8.419m².

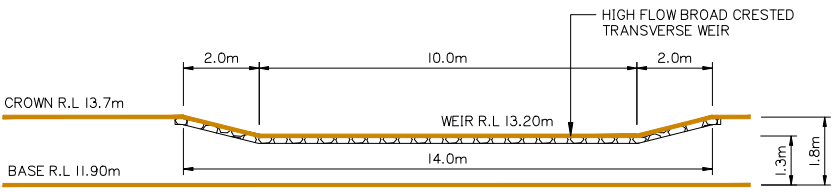
$$V_s = 2.5248 \text{ m}^3 \text{ (Works Above)}$$
$$A_c = 5.263 \text{ ha (Refer Catchment Plans)}$$

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

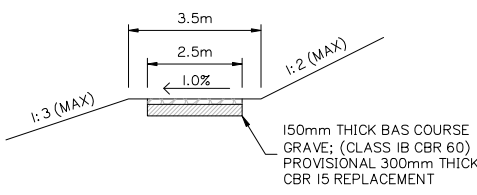
NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004
2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003



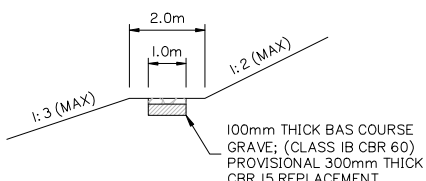
BASIN I PROFILE
NOT TO SCALE



BASIN I EMERGENCY WEIR ELEVATION
SCALE 1:100



TYPICAL SECTION
MAINTENANCE ACCESS TRACK FOR VEHICLES
SCALE 1:100



TYPICAL SECTION
MAINTENANCE ACCESS TRACK FOR PEDESTRIANS
SCALE 1:100

TYPICAL BIO-RETENTION BASIN DETAIL
N.T.S

OPERATIONAL PHASE BIO RETENTION BASIN I 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 APPROVAL

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Drawing Title:

OPERATIONAL PHASE
BIO RETENTION BASIN 1
LAYOUT PLAN

Rev	Date	Description	DRN	CHK
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. CULVERT AND PIPE SIZES IN MILLIMETRES

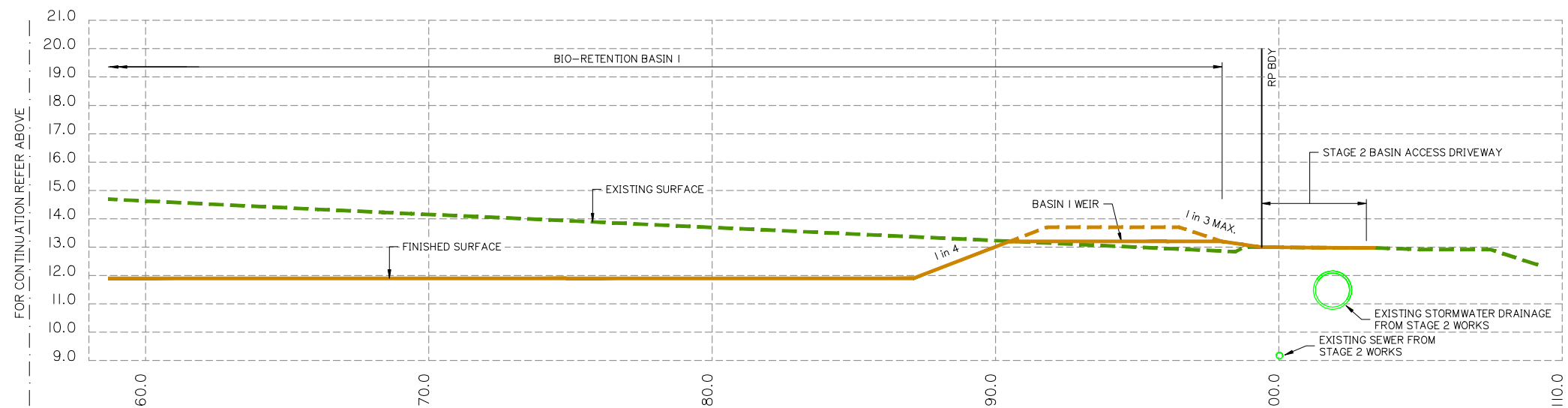
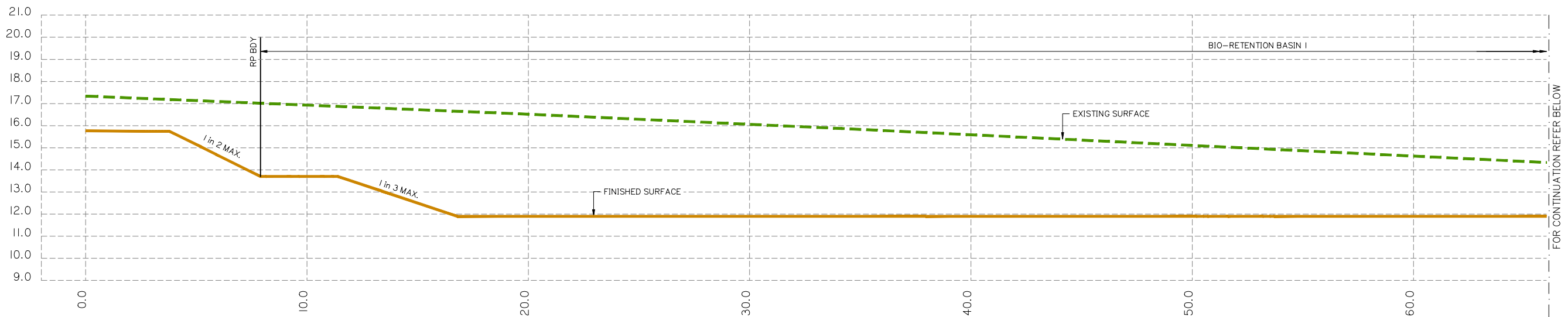
A1 UNREDUCED
A3 REDUCED

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: [Signature]	
Date: 28/09/2023	
Drawing No: 5941 ENG CW3 570	Revision: D



SECTION

SCALE:
I: 100 HORIZ.
I: 100 VERT.

570

BIO RETENTION BASIN SECTIONS SHEET 1 OF 2



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:

BIO RETENTION BASIN
SECTIONS
SHEET 1 OF 2

[illegible]

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 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: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	28/09/2023
Drawing No: Revision	
5941 ENG CW3 573 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:

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Drawing Title:

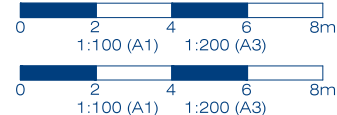
BIO RETENTION BASIN
SECTIONS
SHEET 2 OF 2

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

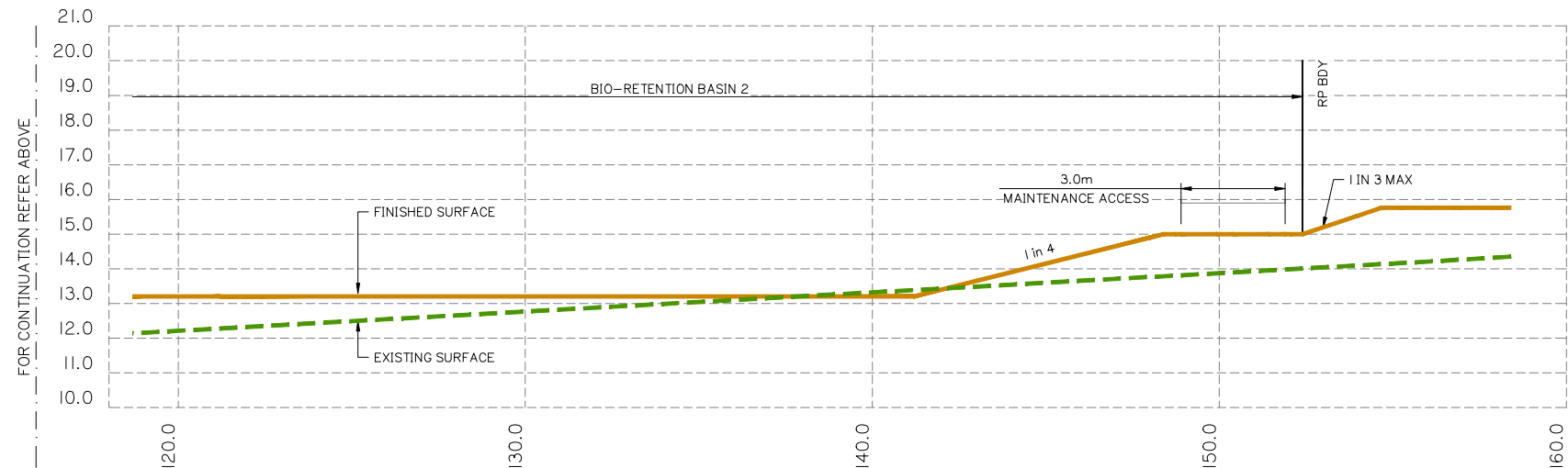
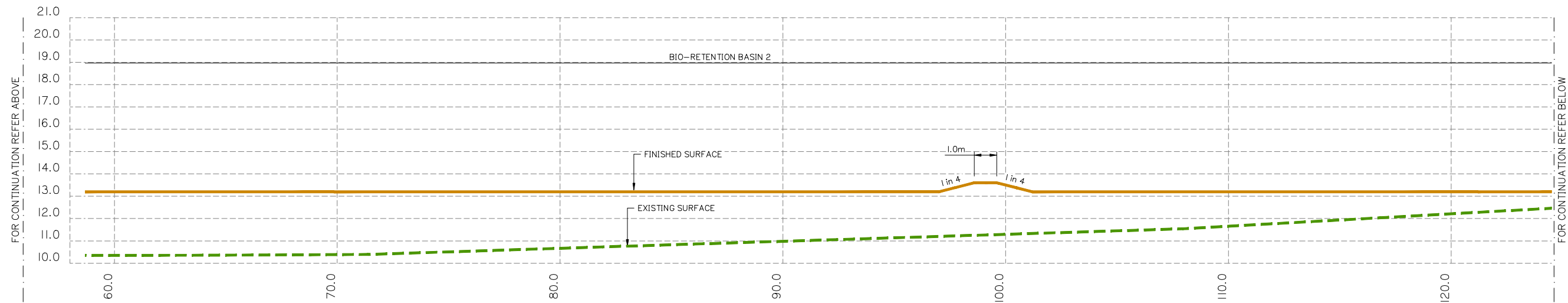
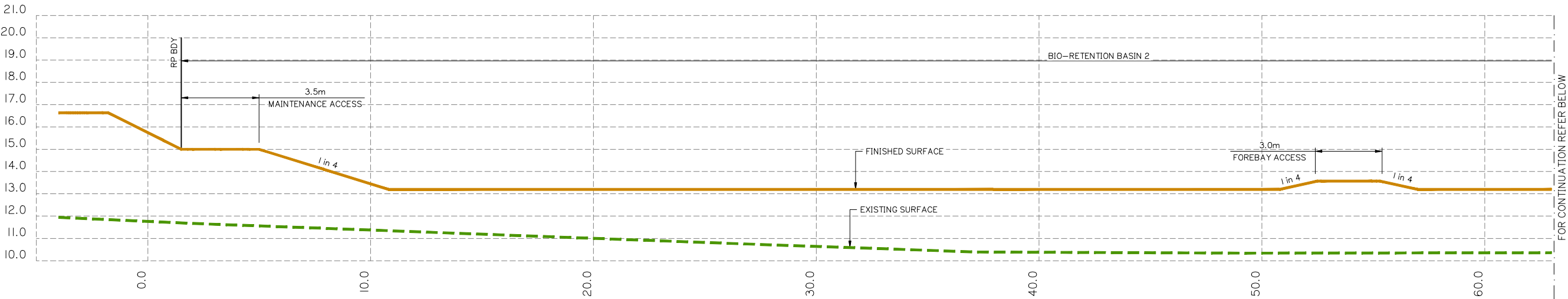
A1 UNREDUCED
A3 REDUCED

Scale:



PROJECT NORTH POINT

Project No:	5941	Revision	
Designed:	JH	Drafted:	JH
Approved:			MG
RPEQ			16939
Signed:			
Date:			28/09/2023
Drawing No:	5941 ENG CW3 574		



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

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



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:

BIO RETENTION BASIN
FOREBAY SETOUT PLAN

[illegible]

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,	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 575 B	

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	13.200
06	2995.935	6240.138	13.200
07	3002.105	6239.137	13.200
08	3001.816	6237.361	13.200
09	2981.276	6149.618	13.200
10	2982.108	6154.751	13.200
11	2992.423	6153.080	13.200
12	2991.592	6147.947	13.200
13	2916.039	5990.062	12.700
14	2919.072	5995.228	12.700
15	2920.788	5994.221	12.700
16	2917.758	5989.054	12.700

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

BIO RETENTION BASIN FOREBAY SETOUT PLAN



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 3 OF 4[illegible]

A	25/05/23	ORIGINAL ISSUE	JH	MG
ev	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:

RPEQ

Signed:

Date:

Drawing No:

television

11

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

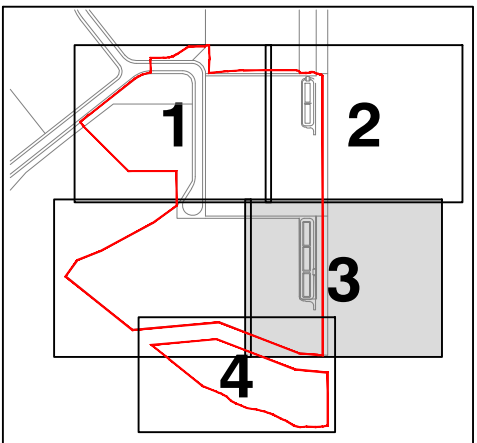
- SEWER MAINTENANCE HOLE
TYPE P3-1050Ø (U.N.O)
TYPE C-1500Ø AS NOTED

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 S21/5	2978.609	6011.788
LOT 304	2915.561	5997.286
2/500	2917.230	6000.133
1/500	2939.751	5986.751
EX S20/5	2973.170	2973.170

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



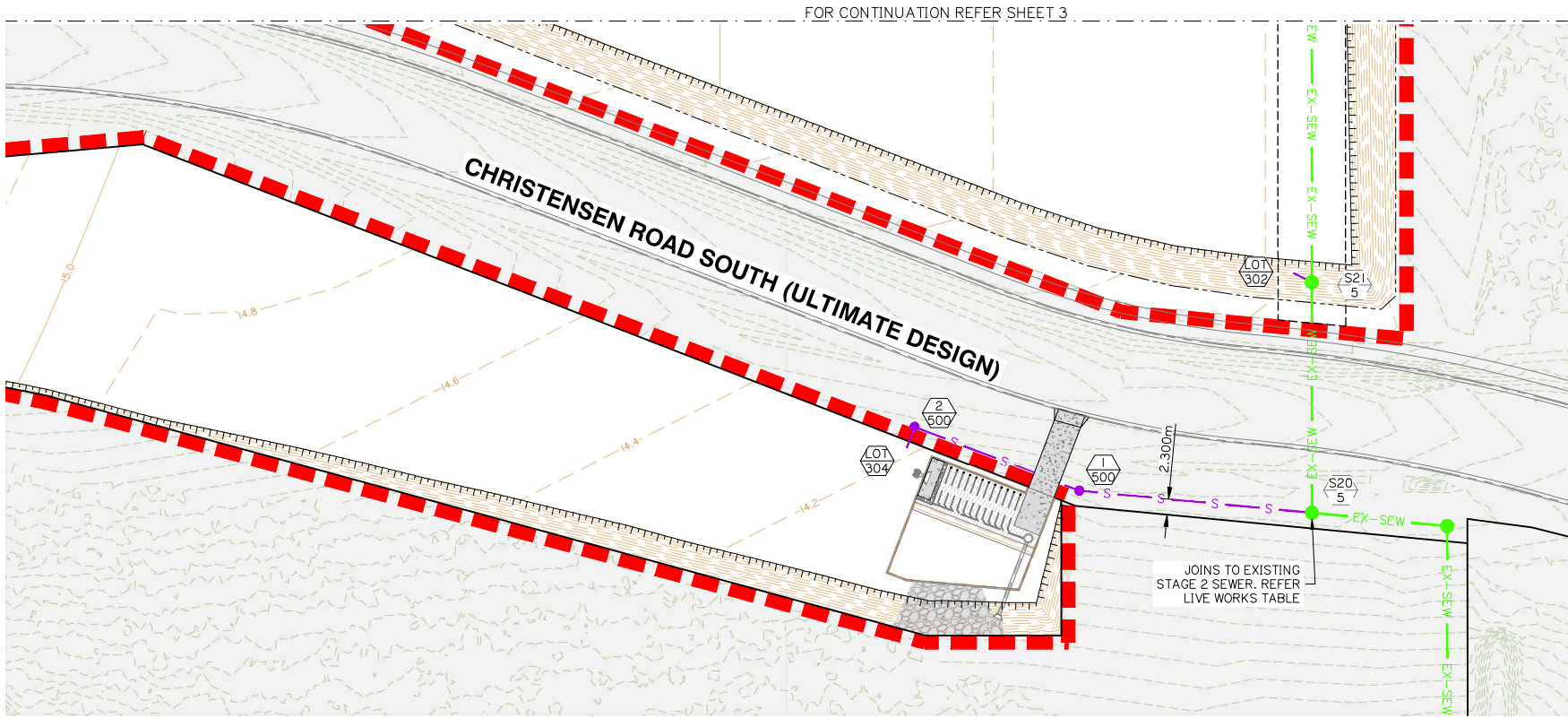
KEY PLAN
NOT TO SCALE

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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 P3-1050# (U.N.O)
- TYPE C-1500# 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 S21/5	2978.609	6011.788
LOT 304	2915.561	5997.286
2/500	2917.230	6000.133
1/500	2939.751	5986.751
EX S20/5	2973.170	2973.170

LIVE WORKS SCHEDULE – SEWER

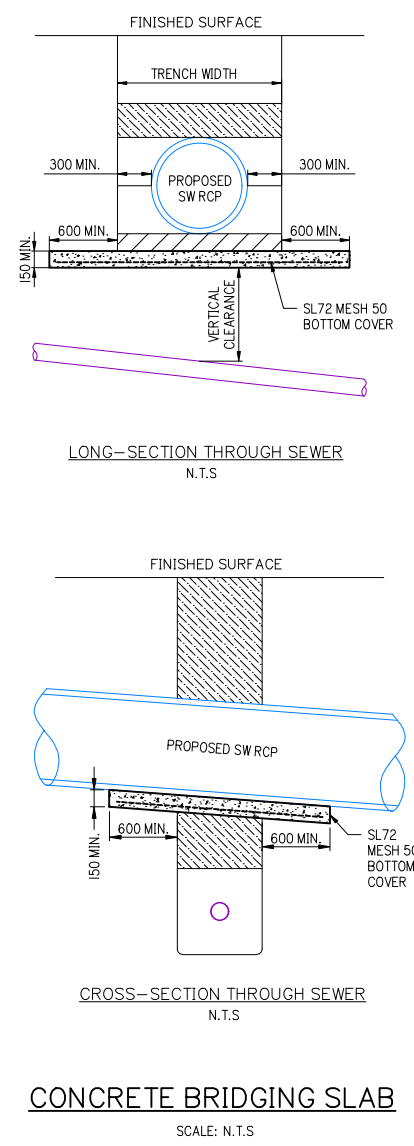
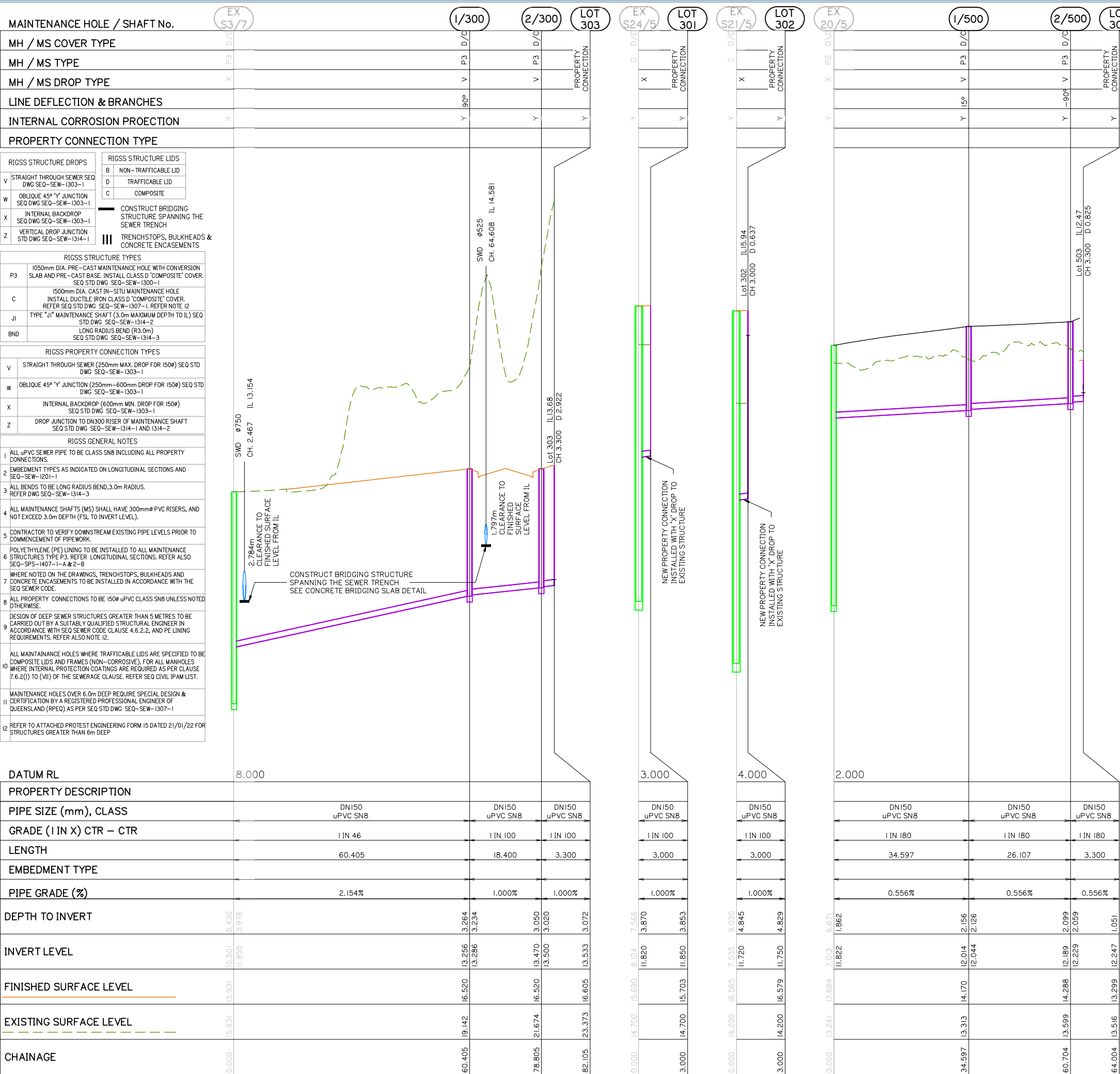
No	DESCRIPTION	DIA SEWER	MH No.	MH/MS TYPE	COVER TYPE	LOT No.	FSL	ESL	IL	DEPTH TO INVERT
1(A)	CONTRACTOR TO BREAK INTO EXISTING STRUCTURE S3/7, COMPLETE BENCHING AND LAY LINE 300 INCLUDING 150# LOT 303 HOUSE CONNECTION	DN150	S3/7	P3	D/C	–	15.931	15.931	11.955	3.976
2(A)	CONTRACTOR TO BREAK INTO EXISTING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

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2023/1136

Dated: 14 February 2024

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

gassman
development perspectives
est 1985
planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast | 78 Business Street, Yatala QLD | PO Box 362, Beerleigh 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	JH	ML	MG
B	06/11/23	LABEL UPDATED		ML	MG
A	25/05/23	ORIGINAL ISSUE	JH	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. 5841

Designed: JH
Drafted: ML

Approved: MG

RPEQ: 16939

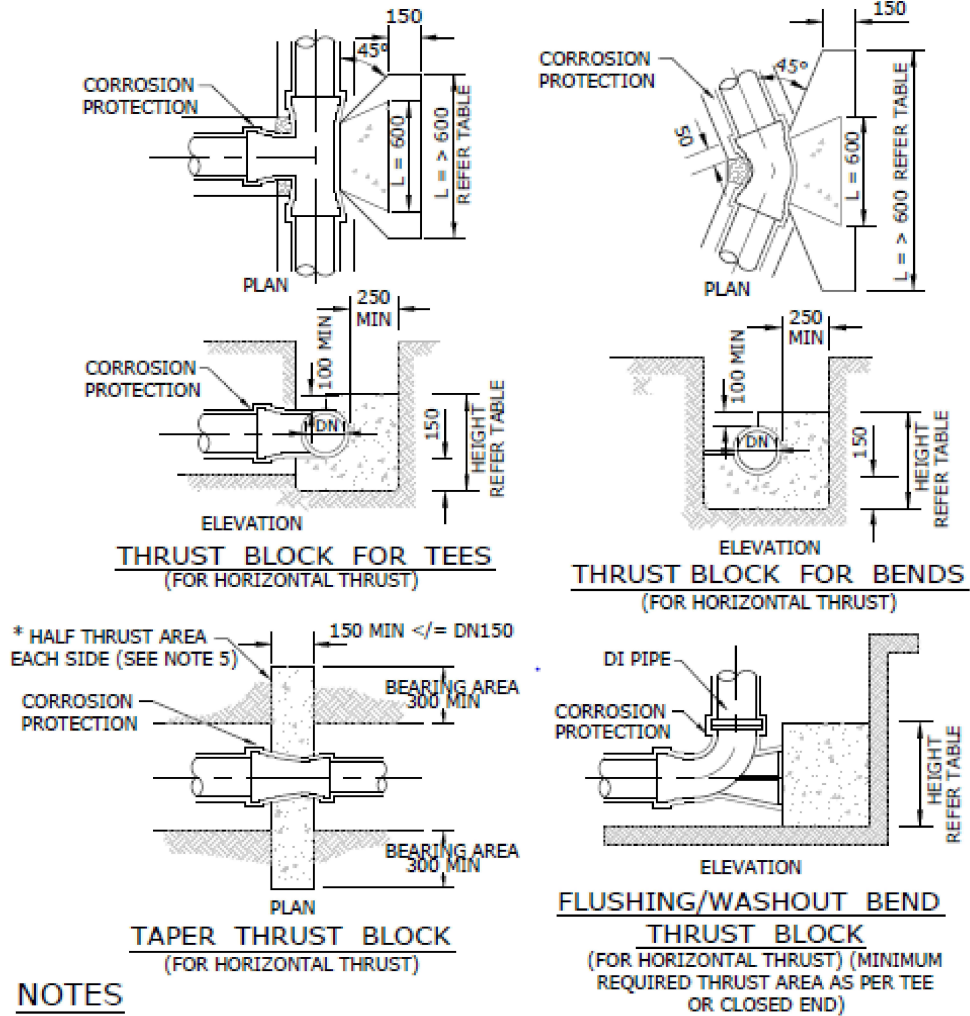
Signed: *[Signature]*

Date: 28/09/2023

Drawing No: 5941 ENG CW3 630
Revision: B

THRUST BLOCK LENGTH							
PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 kPa.	VERY STIFF CLAY SANDY LOAM 100kPa.	SAND & GRAVEL HARDCLAY 150kPa.	SAND & GRAVEL CEMENTED WITH CLAY 200kPa.
100	90° BEND	19.8	400	1000	●	●	●
	60° BEND	14.0		700	●	●	●
	45° BEND	10.7		●	●	●	●
	22.5° BEND	5.5		●	●	●	●
	11.25° BEND	2.7		●	●	●	●
	TEE OR CLOSED END	14.0		700	●	●	●
150	90° BEND	41.7	450	1860	930	●	●
	60° BEND	29.5		1320	660	●	●
	45° BEND	22.6		1000	●	●	●
	22.5° BEND	11.5		●	●	●	●
	11.25° BEND	5.8		●	●	●	●
	TEE OR CLOSED END	29.5		1300	660	●	●
200	90° BEND	71.7	550	*	1300	870	650
	60° BEND	50.7		1850	920	●	●
	45° BEND	38.8		1410	700	●	●
	22.5° BEND	19.8		720	●	●	●
	11.25° BEND	9.9		●	●	●	●
	TEE OR CLOSED END	50.7		1850	920	●	●
225	90° BEND	89.4	600	*	1500	1000	750
	60° BEND	63.2		2110	1060	700	●
	45° BEND	48.4		1620	810	●	●
	22.5° BEND	24.6		830	●	●	●
	11.25° BEND	12.4		●	●	●	●
	TEE OR CLOSED END	63.2		210	1060	700	●
250	90° BEND	109.0	650	*	1700	1120	840
	60° BEND	77.1		2400	1200	800	●
	45° BEND	59.0		1820	910	●	●
	22.5° BEND	30.1		930	●	●	●
	11.25° BEND	15.1		●	●	●	●
	TEE OR CLOSED END	77.1		2400	1200	800	●
300	90° BEND	158.6	700	*	2270	1510	1140
	60° BEND	112.2		*	1600	1070	800
	45° BEND	85.9		2453	1230	820	●
	22.5° BEND	43.8		1250	630	●	●
	11.25° BEND	22.0		630	●	●	●
	TEE OR CLOSED END	112.2		*	1600	1070	800

THRUST BLOCK LENGTH							
PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 kPa.	VERY STIFF CLAY SANDY LOAM 100kPa.	SAND & GRAVEL HARDCLAY 150kPa.	SAND & GRAVEL CEMENTED WITH CLAY 200kPa.
375	90° BEND	241.9	800	*	*	2220	1510
	60° BEND	171.0		*	2140	1430	1070
	45° BEND	130.9		*	1640	1090	820
	22.5° BEND	66.7		1670	840	●	●
	11.25° BEND	33.5		840	●	●	●
	TEE OR CLOSED END	171.0		*	2140	1430	1070
450	90° BEND	342.6	900	*	*	2540	1900
	60° BEND	242.3		*	2690	1800	1350
	45° BEND	185.4		*	2060	1375	1030
	22.5° BEND	94.5		2100	1050	700	●
	11.25° BEND	47.5		1060	●	●	●
	TEE OR CLOSED END	242.3		*	2690	1800	1350
500	90° BEND	418	1000	*	*	2790	2090
	60° BEND	295.6		*	*	1970	1480
	45° BEND	226.2		*	2260	1510	1130
	22.5° BEND	115.3		2310	1150	770	●
	11.25° BEND	58.0		1160	●	●	●
	TEE OR CLOSED END	295.5		*	*	1970	1480
600	90° BEND	593	1100	*	*	*	2700
	60° BEND	419		*	*	2540	1910
	45° BEND	320		*	2920	1950	1460
	22.5° BEND	164		2980	1490	990	750
	11.25° BEND	82.2		1500	750	●	●
	TEE OR CLOSED END	419		*	*	2540	1910
750	90° BEND	909	1300	*	*	*	2920
	60° BEND	643		*	*	*	2480
	45° BEND	492		*	*	2530	1890
	22.5° BEND	251		*	1930	1290	970
	11.25° BEND	126.1		1940	970	650	●
	TEE OR CLOSED END	643		*	*	*	2480
900 (0960 MSCL)	90° BEND	1,228	1500	*	*	*	3420
	60° BEND	868		*	*	*	2900
	45° BEND	664		*	*	2960	2220
	22.5° BEND	339		*	2260	1510	1130
	11.25° BEND	170		2270	1140	760	●
	TEE OR CLOSED END	868		*	*	*	3300



NOTES

- ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
- CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL. SOIL CLASSIFICATIONS USED ON THIS DRAWING ARE EXPLAINED IN SEQ-WAT-1200-1. DO NOT USE STANDARD THRUST BLOCKS AS SPECIFIED IN THIS DRAWING IN SOILS WITH < 50kPa BEARING CAPACITY EG;
 - VERY SOFT, SOFT OR FIRM CLAY.
 - LOOSE CLEAN SAND,
 - UNCOMPACTED FILL OR REFUSE.A GEOTECHNICAL ASSESSMENT AND INDIVIDUAL DESIGN IS REQUIRED FOR THESE SOILS.
- THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES OR BE LOCATED OUTSIDE THE WATER MAIN ALLOCATION WITHOUT WATER AGENCY APPROVAL.
- ALL CONCRETE GRADE N20. TABLE OF DIMENSIONS BASED ON REQUIRED TEST PRESSURE OF 1200kPa AND ACTUAL DI CL PIPE DIAMETERS.
- THE MINIMUM THRUST AREA FOR TAPER THRUST BLOCKS TO BE EQUAL TO THE DIFFERENCE BETWEEN THE THRUST AREAS FOR TEES OR CLOSED ENDS OF EQUIVALENT DIAMETER TO THOSE EACH SIDE OF TAPER. THE DETAIL SHOWN IS FOR < OR = DN150 MAINS. FOR LARGER MAINS, THE TAPER THRUST BLOCK SHALL BE REINFORCED AND OF A SIZE AS SHOWN IN SEQ-WAT-1206-1.
- FOR DOWNWARD VERTICAL THRUST, THE ALLOWABLE BEARING PRESSURES FOR VARIOUS SOILS MAY BE TAKEN AS TWICE THAT FOR HORIZONTAL THRUST SHOWN.
- WHEN POURING CONCRETE AGAINST FITTINGS PLACE A MEMBRANE OF POLYETHYLENE, PVC OR FELT BETWEEN THE FITTING AND CONCRETE TO PREVENT DAMAGE TO THE FITTING. PIPE JOINTS TO BE CLEAR OF CONCRETE.
- CONCRETE THRUST BLOCK ANCHORS FOR VALVES TO BE AS DETAILED ON SEQ-WAT-1206-1.

[IN ACCORDANCE WITH SEQ-WAT-1205-1]

THRUST BLOCK DIMENSIONS - 1200kPa

- INDICATES BLOCK LENGTH OF 600
- * = SPECIAL 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

CONTRACTOR TO ENSURE MINIMUM 0.75m COVER OVER WATER MAINS IN INDUSTRIALS AREAS AS PER SEQ CODE STD. DWG. SEQ-WAT-1200-2

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

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 APPROVAL

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THIS DRAWING IS INTENDED TO BE PRINTED IN COLOUR. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES.

Drawing Title:

WATER RETICULATION
NOTES AND DETAILS

A	25/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

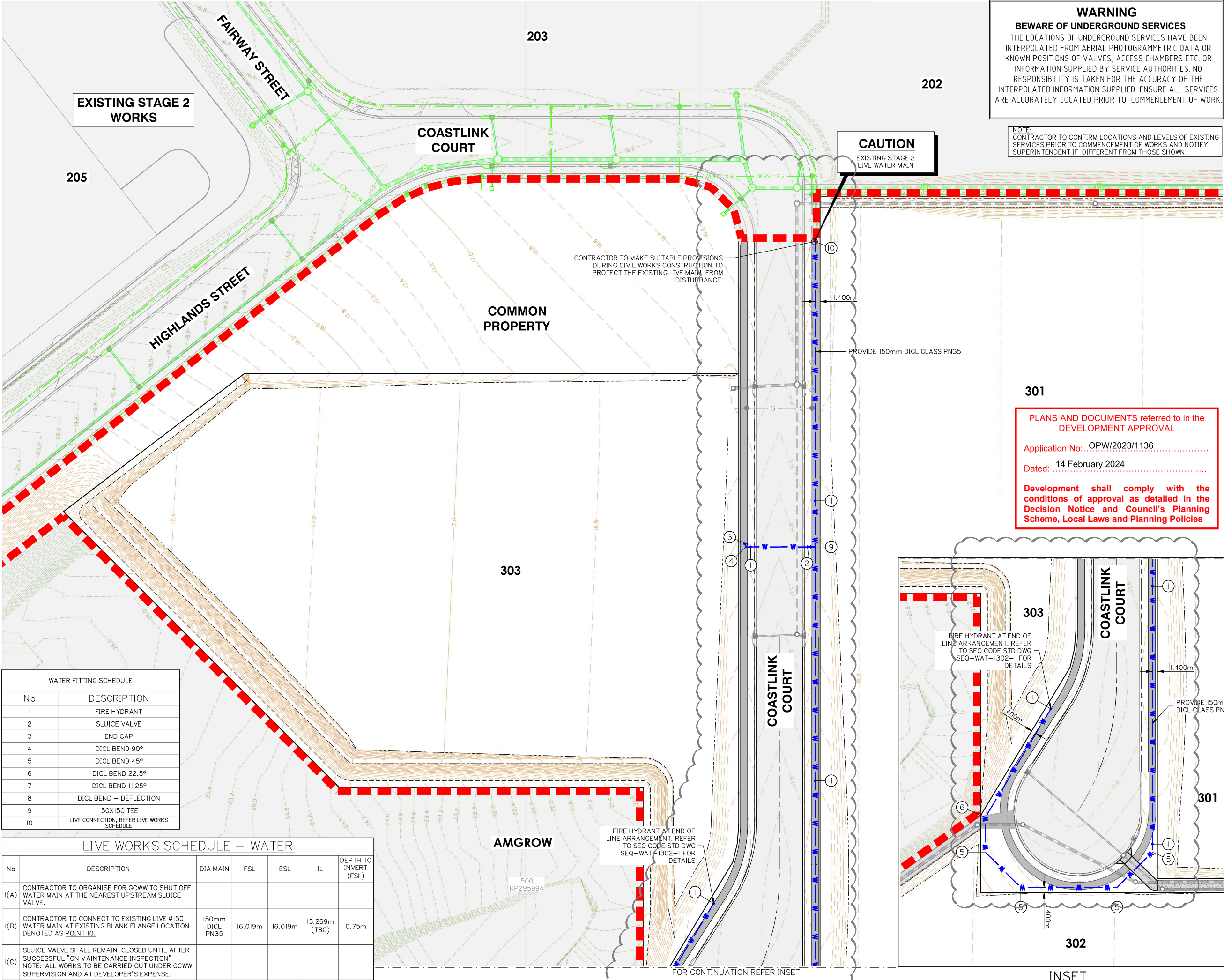
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. A1 UNREDUCED A3 REDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:

PROJECT NORTH POINT

Project No.	5841
Designed:	JH
Drafted:	JH
Approved:	MG
RPEQ:	16939
Signed:	
Date:	28/09/2023
Drawing No:	5941 ENG CW3 700
Revision:	A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL
Application No.: OPW/2023/1136
Dated: 14 February 2024
Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



Client:



FPI QUEENSLAND
PTY. LTD.

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAPYLTON
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GENERAL NOTES.

Drawing Title:

SIGNS AND LINEMARKING
LAYOUT PLAN

Rev	Date	Description	JH	MG
C	08/02/24	FOOTPATH AMENDED	JH	MG
B	06/11/23	LEGEND 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. 5841

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

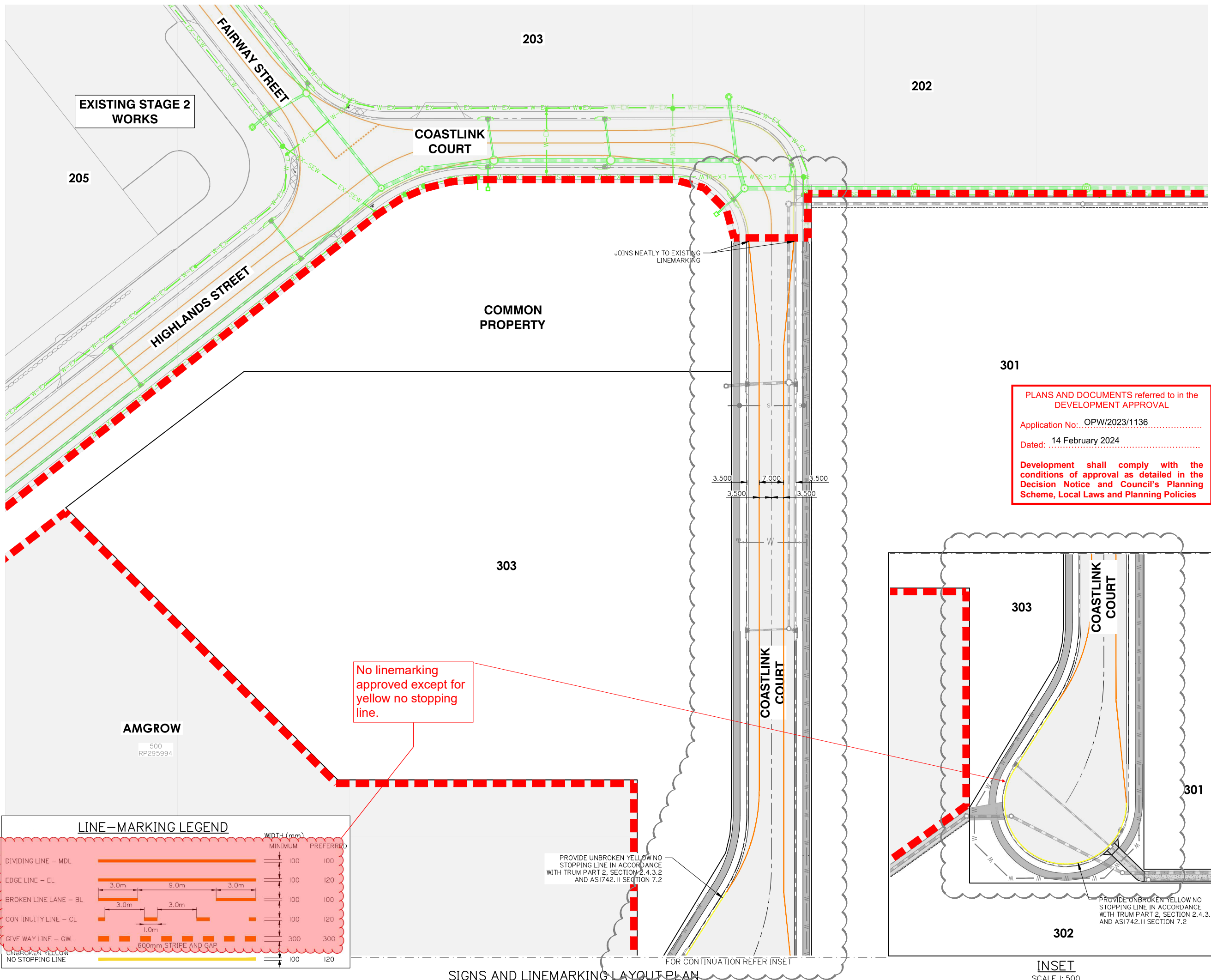
28/09/2023

Drawing No:

Revision

5941 ENG CW3 810

C



Our reference: OPW/2023/1136

Decision notice— approval (with conditions)

(Given under section 63(2) of the *Planning Act 2016*)

Date of decision notice: 16 February 2024

Applicant details

Applicant name: Fpi Queensland Pty Ltd
Applicant contact details: C/- Gassman Development Perspectives
PO BOX 392
BEENLEIGH QLD 4207

Application details

Application number: OPW/2023/1136
Approval sought: Development permit for Operational work
Details of proposed development: Operational work for Infrastructure (roadwork, stormwater, sewer and water reticulation)

Location details

Street address: Lot 504 Homestead Drive, Stapylton Qld 4207
Real property description: BAL Lot 504 SP329485, PT1 Lot 504 SP329485

Decision

Date of decision: 14 February 2024
Decision details: Under Delegated Authority, the Supervisor of Operational Works has resolved to approve the development application in full with conditions.

Referral agency(s) for the application

Not applicable – no part of the application required referral.

Details of the approval

Development approval: Operational work for Infrastructure (roadwork, stormwater, sewer and water reticulation)

Conditions

The conditions that have been imposed by Council, as Assessment manager, are enclosed.

Currency period for the approval (section 85 of the *Planning Act 2016*)

In accordance with section 85 of the *Planning Act 2016*, this approval has a currency period of two years.

Approved plans and drawings

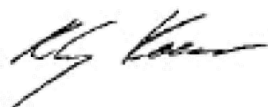
Approved plans and drawings are attached and are identified in the conditions imposed by Council as the Assessment manager.

Appeal rights

Applicant	You have appeal rights in relation to this decision. An appeal may be made against, as applicable: • the refusal of part of the development application; or • a provision of the development approval; or • if a development permit was applied for, the decision to give a preliminary approval. An appeal must be started within 20 business days after this notice is given to you. An appeal may be made to the Planning and Environment Court or, for certain matters which are identified in section 1(2) of Schedule 1 of the <i>Planning Act 2016</i>, to a development tribunal. An appeal is started by lodging a notice of appeal with the registrar of the Planning and Environment Court or a development tribunal, as applicable. The notice of appeal must be in the approved form, succinctly state the grounds of the appeal and be accompanied by the required fee. An appellant to the Planning and Environment Court must give a copy of the notice of appeal, within 10 business days after the appeal is started, to the persons identified in section 230(3) of the <i>Planning Act 2016</i>. A person who is appealing to the Planning and Environment Court must comply with the rules of the court that apply to the appeal. An extract of Chapter 6, Part 1 and Schedule 1 of the <i>Planning Act 2016</i> is attached to this notice, which sets out further information about the appeal rights.
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For further information please contact Craig Morse, Civil Engineer on p: 07 5582 8866 or via email mail@goldcoast.qld.gov.au who will be pleased to assist.

AUTHORISED BY



Antony Kocsmar

Supervisor Operational Works

For the Chief Executive Officer

Council of the City of Gold Coast

Enc:

Conditions imposed by Council as Assessment manager

Attach:

Stamped approved plans and drawings

Appeal rights extracts

Conditions imposed by Council as Assessment manager

General					
1	Timing All conditions of this development approval must be complied with at no cost to Council at all times unless otherwise stated in another condition.				
2	Approved drawings Undertake and maintain the development generally in accordance with the following drawings including as amended in red by the Council:				
	Operational Works				
	Drawing Title	Author	Date	Drawing No.	Ver
	Drawing Index and Locality Plan	Gassman	February 2024	5941 ENG CW3 001	E
	General Notes Sheet 1 of 2	Gassman	25/05/23	5941 ENG CW3 002	A
	General Notes Sheet 2 of 2	Gassman	25/05/23	5941 ENG CW3 003	A
	Legend	Gassman	25/05/23	5941 ENG CW3 004	A
	Key Layout Plan	Gassman	06/11/23	5941 ENG CW3 005	B
	Existing Surface Layout Plan	Gassman	21/12/23	5941 ENG CW3 010	B
	Sediment And Erosion Control Notes and Details	Gassman	25/05/23	5941 ENG CW3 100	A
	Sediment And Erosion Control Plan Sheet 1 of 5	Gassman	08/02/24	5941 ENG CW3 110	C
	Sediment And Erosion Control Plan Sheet 2 of 5	Gassman	08/02/24	5941 ENG CW3 111	C
	Sediment And Erosion Control Plan Sheet 3 of 5	Gassman	21/12/23	5941 ENG CW3 112	B
	Sediment And Erosion Control Plan Sheet 4 of 5	Gassman	08/02/24	5941 ENG CW3 113	C
	Sediment And Erosion Control Plan Sheet 5 of 5	Gassman	21/12/23	5941 ENG CW3 114	B
	Construction Phase Sediment Basin 1 Layout	Gassman	25/05/23	5941 ENG CW3 310	A
	Construction Phase Sediment Basin 2 Layout	Gassman	06/11/23	5941 ENG CW3 311	B
	Construction Phase Sediment Basin Typical Sections	Gassman	25/05/23	5941 ENG CW3 313	A
	Overall Services Layout Plan Sheet 1 of 5	Gassman	08/02/24	5941 ENG CW3 380	B
	Overall Services Layout Plan Sheet 2 of 5	Gassman	08/02/24	5941 ENG CW3 381	C

	Overall Services Layout Plan Sheet 3 of 5	Gassman	25/05/23	5941 ENG CW3 382	A
	Overall Services Layout Plan Sheet 4 of 5	Gassman	08/02/24	5941 ENG CW3 383	C
	Overall Services Layout Plan Sheet 5 of 5	Gassman	06/11/23	5941 ENG CW3 384	B
	Roadworks and Drainage Typical Details Sheet 1 of 3	Gassman	08/02/24	5941 ENG CW3 400	B
	Roadworks and Drainage Typical Details Sheet 2 of 3	Gassman	25/05/23	5941 ENG CW3 401	A
	Roadworks and Drainage Typical Details Sheet 3 of 3	Gassman	28/02/24	5941 ENG CW3 402	B
	Roadworks and Drainage Layout Plan Sheet 1 of 5	Gassman	08/02/24	5941 ENG CW3 410	B
	Roadworks and Drainage Layout Plan Sheet 2 of 5	Gassman	08/02/24	5941 ENG CW3 411	C
	Roadworks and Drainage Layout Plan Sheet 3 of 5	Gassman	25/05/23	5941 ENG CW3 412	A
	Roadworks and Drainage Layout Plan Sheet 4 of 5	Gassman	08/02/24	5941 ENG CW3 413	C
	Roadworks and Drainage Layout Plan Sheet 5 of 5	Gassman	06/11/23	5941 ENG CW3 414	B
	Control Line Layout Plan Sheet 1 of 2	Gassman	08/02/24	5941 ENG CW3 420	B
	Control Line Layout Plan Sheet 2 of 2	Gassman	08/02/24	5941 ENG CW3 421	B
	Control Line Setout Tables	Gassman	06/11/23	5941 ENG CW3 425	B
	Coastlink Court Longitudinal Section	Gassman	25/05/23	5941 ENG CW3 450	A
	Basin Access 01 Longitudinal Section	Gassman	08/01/24	5941 ENG CW3 451	B
	Basin Access 01a Longitudinal Section	Gassman	08/01/24	5941 ENG CW3 452	B
	Basin Access 02 Longitudinal Section	Gassman	08/01/24	5941 ENG CW3 453	C
	Basin Access 02 and 02a Longitudinal Sections	Gassman	08/01/24	5941 ENG CW3 454	C
	Roadworks Cross Sections Sheet 1 of 5	Gassman	08/02/24	5941 ENG CW3 470	C
	Roadworks Cross Sections Sheet 2 of 5	Gassman	08/02/24	5941 ENG CW3 471	C
	Roadworks Cross Sections Sheet 3 of 5	Gassman	08/02/24	5941 ENG CW3 472	C
	Roadworks Cross Sections Sheet 4 of 5	Gassman	08/02/24	5941 ENG CW3 473	C

	Roadworks Cross Sections Sheet 5 of 5	Gassman	08/02/24	5941 ENG CW3 474	C
	Cul-De-Sac Plan and Setout Table	Gassman	08/02/24	5941 ENG CW3 480	B
	Cul-De-Sac Longitudinal Section	Gassman	25/05/23	5941 ENG CW3 481	A
	Vehicle Crossing and Access Driveway Layout Plan	Gassman	08/02/24	5941 ENG CW3 490	C
	Stormwater Drainage Catchment Plan	Gassman	08/02/24	5941 ENG CW3 500	C
	Stormwater Drainage Longitudinal Sections Sheet 1 of 6	Gassman	06/11/23	5941 ENG CW3 510	B
	Stormwater Drainage Longitudinal Sections Sheet 2 of 6	Gassman	08/02/24	5941 ENG CW3 511	C
	Stormwater Drainage Longitudinal Sections Sheet 3 of 6	Gassman	08/02/24	5941 ENG CW3 512	C
	Stormwater Drainage Longitudinal Sections Sheet 4 of 6	Gassman	06/11/23	5941 ENG CW3 513	B
	Stormwater Drainage Longitudinal Sections Sheet 5 of 6	Gassman	08/02/24	5941 ENG CW3 514	C
	Stormwater Drainage Longitudinal Sections Sheet 6 of 6	Gassman	08/02/24	5941 ENG CW3 515	C
	Stormwater Drainage Calculation Table Sheet 1 of 2	Gassman	06/11/23	5941 ENG CW3 550	B
	Stormwater Drainage Calculation Table Sheet 2 of 2	Gassman	06/11/23	5941 ENG CW3 551	B
	Swale Layout and Details Plan	Gassman	08/02/24	5941 ENG CW3 560	B
	Operational Phase Bio Retention Basin 1 Layout Plan	Gassman	08/02/24	5941 ENG CW3 570	D
	Operational Phase Bio Retention Basin 2 Layout Plan	Gassman	08/02/24	5941 ENG CW3 571	D
	Bio Retention Basin Sections Sheet 1 of 2	Gassman	25/05/23	5941 ENG CW3 573	A
	Bio Retention Basin Sections Sheet 2 of 2	Gassman	06/11/23	5941 ENG CW3 574	B
	Bio Retention Basin Forebay Setout Plan	Gassman	06/11/23	5941 ENG CW3 575	B
	Sewer Reticulation Layout Plan Sheet 1 of 4	Gassman	08/02/24	5941 ENG CW3 610	B
	Sewer Reticulation Layout Plan Sheet 2 of 4	Gassman	25/05/23	5941 ENG CW3 611	A
	Sewer Reticulation Layout Plan Sheet 3 of 4	Gassman	25/05/23	5941 ENG CW3 612	A
	Sewer Reticulation Layout Plan Sheet 4 of 4	Gassman	06/11/23	5941 ENG CW3 613	B

	Sewer Reticulation Longitudinal Sections	Gassman	06/11/23	5941 ENG CW3 630	B
	Water Reticulation Notes and Details	Gassman	25/05/23	5941 ENG CW3 700	A
	Water Reticulation Layout Plan	Gassman	08/02/24	5941 ENG CW3 710	B
	Signs And Linemarking Notes and Details	Gassman	25/05/23	5941 ENG CW3 800	A
	Signs And Linemarking Layout Plan	Gassman	08/02/24	5941 ENG CW3 810	C
The conditions of this approval are to be read in conjunction with the attached stamped approved drawings. Where a conflict occurs between the conditions of this approval and the stamped approved drawings, the conditions of this approval shall take precedence.					
3	When the approval lapses if works is not completed This approval will lapse if the works is not completed by 14 February 2027, in accordance with section 88 of the Planning Act 2016.				
Property					
4	Requirement to register easements – Sewerage a Register the following easements in favour of Council for the purpose stated below in accordance with the WSAA Gravity Sewerage Code of Australia – SEQ Edition. i “Sewerage” easement over all proposed gravity sewerage infrastructure within the development site b The terms of the easement must include: i Standard terms document 707918364 must be referenced on Form 9 – easement document ii Easement plans and associated documents (i.e.: Form 9 – easement document and general consent form 18) must be fully completed and signed by the owner of the burdened land (and any mortgagees, if necessary) and benefitting land before they are submitted to council for endorsement. c Registration of the easement must occur at the same time as registering the survey plan or prior to commencement of use whichever is the sooner. d Ensure sewer infrastructure is positioned in the centre of the easement. e This condition attaches to the land the subject of the development approval and binds the owner(s) of the land and the owners’ successors in title (even after the time when the easement is required to be registered). Therefore, if this condition is not complied with at the time required by this condition, the owner(s) of the land and the owners’ successors in title continue to be obligated to register the easement in accordance with this condition and must do so within 40 business days of becoming aware of the non-compliance with this condition.				

Engineering	
5	Rectification of Council's infrastructure - a Rectify any damage caused to Council infrastructure (including roads, kerb & channelling, service pits, footpaths and water and sewer reticulation networks) prior to an 'on maintenance' inspection, at no cost to Council. - b Maintain the rectified Council infrastructure at no cost to Council until the asset is accepted "off maintenance" by the City in accordance with the procedures in City Planning Policy SC6.12 – Land development guidelines, sections 7 Procedures, 8.5 As-constructed requirements, 9 Specifications and 10 Standard drawings.
6	Footpaths - a Construct and maintain the footpath identified in the approved drawings condition at no cost to Council until the asset is accepted "off maintenance" by the City in accordance with the procedures in City Planning Policy SC6.12 – Land development guidelines, sections 2 Transport network standards, 7 Procedures, 8.5 As-constructed requirements, 9 Specifications and 10 Standard drawings. - b Ensure that there is a minimum 300mm circumferential separation between any footpath and the outer edge of existing/new power poles. Fill the space with compacted cold-mix asphalt to a minimum depth of 50mm.
7	Roadworks Construct and maintain the roadworks identified in the approved drawings condition at no cost to Council until the asset is accepted "off maintenance" by the City in accordance with the procedures in City Planning Policy SC6.12 – Land development guidelines, sections 2 Transport network standards, 7 Procedures, 8.5 As-constructed requirements, 9 Specifications & 10 Standard drawings.
Stormwater Drainage	
8	Overland flow paths and hydraulic alterations - a Leave unaltered the overland flow paths on the site, such that the characteristics of existing overland flows on other properties remain uninhibited and unchanged. - b The development must not: - i Increase peak flow rates downstream from the site - ii Increase flood levels external to the site - iii Increase duration of inundation external to the site that could cause loss or damage
9	Stormwater drainage / Legal point of discharge Construct and maintain the stormwater drainage system identified in the approved drawings condition at no cost to Council until the asset is accepted "off maintenance" by the City in accordance with the procedures in City Planning Policy SC6.12 – Land development guidelines, sections 4 Stormwater drainage and water sensitive urban design standards, 7 Procedures, 8.5 As-constructed requirements, 9 Specifications and 10 Standard drawings.

Sewer and Water Works																								
10	Sewer reticulation Construct and maintain the sewer reticulation system identified in the approved drawings condition at no cost to Council until the asset is accepted “off maintenance” by the City in accordance with the procedures in City Plan Policy SC6.12 – Land development guidelines, and include in particular: - i The sizing of the sewer reticulation system must be in accordance with the WSAA Sewerage Code of Australia – SEQ Service Providers Edition - ii Remove / seal / cap redundant sewer property services. <i>Note:</i> An “Application Work on the City’s infrastructure” form is required for the above works. The development’s sewerage connection must be completed and approved by Council prior to an application for a Pre-start meeting for the approved water connection.																							
11	Water reticulation Construct and maintain the water reticulation system identified in the approved drawings condition at no cost to Council until the asset is accepted “off maintenance” by the City in accordance with the procedures in City Plan Policy SC6.12 – Land development guidelines, and include in particular: - i Conduits are required to be installed to service the proposed development via trenchless technology (open cutting of the road is not permitted) to connect to Council’s potable water supply network. - ii Remove redundant water meters / connections. A connection application is required for these works. - iii Water meters must be in accordance with the Metering Technical Specifications and the Water and Sewerage Connections Policy. - iv The maintenance period for these works is twelve (12) months. The maintenance bond requirements to be followed as per the Land Development Guidelines. <i>Notes:</i> An “Application Work on the City’s infrastructure” form is required for the above works. The development’s sewerage connection must be completed and approved by Council prior to an application for a Pre-start meeting for the approved water connection.																							
Construction Management																								
12	Certification of works Provide Council with certificates prepared by qualified experts from the disciplines listed below, confirming as follows:																							
<table><tr><th colspan="5">Operational Works</th></tr><tr><th>Certified document</th><th>Certification date</th><th>Plan/ Drawing</th><th>Expert discipline</th><th>Requesting Council Section</th></tr><tr><td>Appendix A Certification from the Land Development Guidelines</td><td>Upon practical completion of works.</td><td>N/A</td><td>Registered Professional Engineer Queensland (RPEQ)</td><td>Contributed Assets</td></tr><tr><td colspan="5">The certification is to confirm:</td></tr></table>					Operational Works					Certified document	Certification date	Plan/ Drawing	Expert discipline	Requesting Council Section	Appendix A Certification from the Land Development Guidelines	Upon practical completion of works.	N/A	Registered Professional Engineer Queensland (RPEQ)	Contributed Assets	The certification is to confirm:				
Operational Works																								
Certified document	Certification date	Plan/ Drawing	Expert discipline	Requesting Council Section																				
Appendix A Certification from the Land Development Guidelines	Upon practical completion of works.	N/A	Registered Professional Engineer Queensland (RPEQ)	Contributed Assets																				
The certification is to confirm:																								

- All works have been undertaken generally in accordance with the approval.

Operational Works

Certified document	Certification date	Plan/ Drawing	Expert discipline	Requesting Council Section
Certification for non-standard access chambers.	Upon practical completion of works.	N/A	Registered Professional Engineer Queensland (RPEQ)	Contributed Assets

The certification is to confirm:

- Project design has been undertaken for access chambers that:
 - Exceed 3m in depth.
 - Exposure classification is greater than B1.
 - Water table is above the base level.
- Access Chambers have been constructed in accordance with the certified design.

Water and Waste

Certified document	Certification date	Plan/ Drawing	Expert discipline	Requesting Council Section
Requirements of Council Water and Sewerage acceptance testing guideline	connect to existing mains and the use of the connection		Registered Professional Engineer of Queensland (RPEQ)	Water and Waste
A Survey Plan with the required easements shown on the listed plan over the on-lot water arrangement / sewer	Prior to commence of the use		Registered Surveyor	Development Compliance Section

The certification is to confirm:

- Constructed works comply with necessary standards and confirm level and location details.
- Installed components meet specifications and standards for materials and design and installation specifications and acceptance testing requirements.
- Easements are correctly located over the infrastructure and meet the requirements specified in the SEQ Water Supply and Sewerage Design and Construction Code for sewerage infrastructure.

13	Supervision of works During construction of any works the following professionals must be appointed to supervise the below described actions: <table border="1" data-bbox="319 241 1449 510"> <tr> <th colspan="2" data-bbox="319 241 1449 293">All works approved by this permit</th></tr> <tr> <th data-bbox="319 293 703 405">Expertise required of the suitably qualified professional</th><th data-bbox="703 293 1449 405">Actions to be overseen by the professional</th></tr> <tr> <td data-bbox="319 405 703 510">Registered Professional Engineer of Queensland (RPEQ)</td><td data-bbox="703 405 1449 510">All supply, installation, construction, testing and commissioning of works</td></tr> </table>	All works approved by this permit		Expertise required of the suitably qualified professional	Actions to be overseen by the professional	Registered Professional Engineer of Queensland (RPEQ)	All supply, installation, construction, testing and commissioning of works
All works approved by this permit							
Expertise required of the suitably qualified professional	Actions to be overseen by the professional						
Registered Professional Engineer of Queensland (RPEQ)	All supply, installation, construction, testing and commissioning of works						
14	Availability of approved plans, drawings and reports Retain a copy of this decision notice and stamped approved plans, drawings and reports on site at all times during construction. Any contractors undertaking approved work (including tree removal or relocations) must be directly provided with a copy of these conditions and instructed as to the need to comply with them.						
15	Transport of soil/fill/excavated material During the transportation of soil and other fill/excavated material: - a All trucks hauling soil, or fill/excavated material must have their loads secure and covered. - b Any spillage that falls from the trucks or their wheels must be collected and removed from the site and streets along which the trucks travel on a daily basis. - c Prior to vehicles exiting the site, measures must be taken to remove the soil from the wheels of the vehicles to prevent soil and mud being deposited on public roads.						
16	Erosion and sediment control a. Implement the erosion, sediment and dust control measures identified in the approved drawings at no cost to Council. b. Undertake works generally in accordance with the operational works approval and include in particular: i. Sediment controls must be maintained and amended as necessary to ensure that the measures implemented conform to the Construction Phase stormwater management design objectives of the State Planning Policy 2017 (Appendix 2 Table A). ii. Erosion, sediment and dust control measures must be implemented in accordance with the approved plan / drawings and the Best Practice Erosion & Sediment Control (IECA Australasia, November 2008). iii. Sediment control structures (e.g. sediment fence) must be placed at the base of all materials imported on-site to mitigate any sediment runoff. iv. A perimeter bund and/or diversion drain must be constructed around the disturbed area to prevent any outside clean stormwater from mixing with polluted / contaminated stormwater. v. All polluted / contaminated water from the site, including dewatering discharge, must be treated to achieve the water quality objectives in Table 8.2.1 of the Queensland Water Quality Guidelines (DERM, September 2009) prior to discharging from the site. - c Inspections for erosion and sediment control measures are to occur in accordance with the compliance procedures in City Planning Policy SC6.12 – Land development guidelines, Section 4.5.17.1.2 – Compliance.						

17

Pre-start inspection

Arrange a pre-start inspection prior to the commencement of works to complete the requirements identified in SC.6.12 City Plan Policy – Land development guidelines for the following:

Purpose	Council contact
Review and discuss this Operational works – infrastructure approval.	Contributed Assets (07) 5582 9034
Prior to requesting a Pre-start meeting, provide “for construction issue design drawings”, including amendments, following potholing undertaken as part of the preliminary site works. All design changes must be included in the drawing set. <i>Note:</i> <i>Changes made to the drawings may necessitate the submission of a Minor or Other Change development application, in accordance with the Planning Act 2016.</i>	inspections@goldcoast.qld.gov.au

Copies of applicable material including this decision notice and stamped approved plans, drawings and reports are to be available for the meeting and kept on site during construction.

18

Hold point inspection

Arrange a hold point inspection to complete the requirements identified in SC.6.12 City Plan Policy – Land development guidelines/Landscape work code of the City Plan for the following:

Purpose	Hold Point	Council contact
Confirm works have been undertaken in accordance with the operational works approval and associated hold point requirements identified in SC6.12 City Plan Policy – Land development guidelines	As indicated in SC6.12 City Plan Policy – Land development guidelines	Contributed Assets (07) 5582 9034

Copies of applicable material including this decision notice and stamped approved plans, drawings and reports are to be available for the meeting and kept on site during construction.

19

On maintenance

Arrange an on maintenance meeting to complete the requirements identified in SC.6.12 City Plan Policy – Land development guidelines for the following:

Purpose	Hold Point	Council contact
Confirm completion of works have been undertaken in accordance with this approval	Prior to commencement of the on maintenance period	Contributed Assets 07 5582 9034

Copies of applicable material including this decision notice and stamped approved plans, drawings and reports are to be available for the meeting and kept on site during construction.

20

Off maintenance

Arrange an off maintenance meeting to complete the requirements identified in SC.6.12 City Plan Policy – Land development guidelines for the following:

Purpose	Hold Point	Council contact
Confirmation works have been undertaken in accordance with the Operational works, Works for infrastructure approval	Prior to Asset handover / conclusion of on maintenance period	Contributed Assets (07) 5582 9034

Copies of applicable material including this decision notice and stamped approved plans, drawings and reports are to be available for the meeting and kept on site during construction.

Advice Notes

A

Consistency with other related approvals

The assessment and approval of the operational work the subject of this permit, has been attended to having regard to the conditions of COM/2023/82 dated 22 December 2023. Should any change to any of these approvals be sought and achieved, consideration by the applicant should also be had to the consequences on the related approvals (and the potential need to make subsequent changes to these related approvals).

B

Further development permits / compliance permits

Further development permits and/or compliance permits from Council are required to facilitate the development of the approved works identified in this decision notice. These include:

Water and Waste
Connections / disconnections: Application to work on the City's Infrastructure
Temporary Road Closure and Works Zone Permit Application

A copy of this decision notice and accompanying stamped drawings / plans must be submitted with any subsequent application identified above.

C

Pavement designs

Any pavement designs shown on the approved plans are considered 'indicative only'. Pavement designs are to be submitted to and approved by Contributed Assets in accordance with the Land Development Guidelines.

D

Works in properties other than the development land

Where development works or works required to service the development require access, works or otherwise on land that is not part of the development approval, the applicant is solely responsible for obtaining consent and providing such with the "Application to work on City's infrastructure".

Council will not become involved in any disputes arising from attempts to obtain neighbouring landowners' consent and assumes no responsibility for any impacts this has on the development. Council shall not be held responsible for any delays, complications or otherwise related to obtaining consent from neighbouring landowners as this is a civil matter to be resolved between the relevant parties.

E

Development infrastructure

Development infrastructure required to be provided in implementing this development approval is non-trunk development infrastructure unless otherwise stated in a condition of the approval

F	Council water and sewer mains to be protected during site works The developer is responsible at all times for ensuring that Council's water and sewerage infrastructure is protected during construction activities on site. This may require physical protection measures to be put in place during works such as deliveries, moving heavy equipment into and out of the site, or when doing works in close proximity to water and sewer assets. Where Council water and sewer infrastructure is damaged during construction, Council will undertake immediate repairs and any costs associated with these repairs will be charged to the landowner, principal contractor or other relevant party. If further, more permanent repairs are required, such as replacement of water and sewer mains, the landowner, principal contractor or other relevant party will first be given an opportunity to complete these works (other approvals may be required), or Council will undertake these works and pass the costs on to the landowner, principal contractor or other relevant party.
G	Connections and disconnections Any connection / disconnection to the existing water and sewerage networks will be at the applicant's cost. Prior to the connection / disconnection taking place, the applicant must obtain written approval from Water and Waste. Refer to Water and Sewerage Connections Policy, available on Council's website http://www.cityofgoldcoast.com.au
H	No open trenching of the road pavement for water connections across / in roadways Conduits must be installed to service the proposed development via trenchless technology the road (open cutting of the road is not permitted) to connect to Council's potable water supply network. In certain circumstances approval of open trenching of the road may be allowed, subject to Council approval. Refer to Water and Sewerage Connections Policy, available on Council's website http://www.cityofgoldcoast.com.au
I	Connections to, alteration or realignment of Council infrastructure Where development works require the connection to, alteration, removal or realignment of Council infrastructure or impact on other public utility infrastructure (e.g. telecommunications, electricity and gas), the applicant must obtain the necessary approvals from the relevant public utility authority prior to works commencing. Connection to, alteration, removal or realignment of Council infrastructure includes (but is not limited to) fire hydrants, water service meters, sewer maintenance hole covers, stormwater drainage infrastructure, reinstatement of maintenance hole covers, stormwater drainage infrastructure, crossovers, footpaths, road pavement, kerb and channel, kerb ramps, medians, traffic islands, road furniture, signage and line-marking.
J	Design, Constructability and Minor change applications The application has been approved based on the information provided by the consultant. Water and Waste are not liable for any design or constructability issues experienced on-site. All necessary steps must be taken prior to construction to validate the information in the designs, including locating services. Should any changes be required to the design to ensure it can be constructed in compliance with relevant engineering standards; a Minor Change application (Section 78 of the <i>Planning Act 2016</i>) must be submitted and approved by Council prior to lodging a request for a Pre-Start meeting.
K	Compliance with conditions Once this development approval takes effect, the conditions attach to the land and are applicable in perpetuity. It is a development offence to contravene a development approval, including any of its conditions.

L	Development infrastructure Development infrastructure required to be provided in implementing this development approval is non-trunk development infrastructure unless otherwise stated in a condition of the approval.
M	Indigenous cultural heritage legislation and duty of care requirement The <i>Aboriginal Cultural Heritage Act 2003</i> ('ACHA') is administered by the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs (DATSIMA). The ACHA establishes a duty of care to take all reasonable and practicable measures to ensure any activity does not harm Aboriginal cultural heritage. This duty of care: - a Is not negated by the issuing of this development approval; - b Applies on all land and water, including freehold land; - c Lies with the person or entity conducting an activity; and - d If breached, is subject to criminal offence penalties. Those proposing an activity involving surface disturbance beyond that which has already occurred at the proposed site must observe this duty of care. Details of how to fulfil this duty of care are outlined in the duty of care guidelines gazetted with the ACHA. The applicant should contact DATSIMA's Cultural Heritage Coordination Unit on 07 3405 3050 for further information on the responsibilities of developers under the ACHA.
N	Encroachment of works If any operational works, the subject of this approval encroaches on adjoining land, a letter from the adjoining owner must be submitted to Council consenting to the carrying out of these works.
O	Applicant responsibilities The applicant is responsible for securing all necessary approvals and tenure, providing statutory notifications and complying with all relevant laws. Nothing in this decision notice alleviates the need for the applicant to comply with all relevant local, State and Commonwealth laws and to ensure appropriate tenure arrangements have been made where the use of/reliance upon land other than that owned by the applicant is involved. Without limiting this obligation, the applicant is responsible for: - a Obtaining all other/further necessary approvals, licences, permits, resource entitlements etc. by whatever name called required by law before the development the subject of this approval can be lawfully commenced and to carry out the activity for its duration; - b Providing any notifications required by law (by way of example only, to notify the administering authority pursuant to the <i>Environment Protection Act 1994</i> of environmental harm being caused/threatened by the activity, and upon becoming aware the premises is being used for a 'notifiable activity'); - c Securing tenure/permission from the relevant owner to use private or public land not owned by the applicant (including for access required by conditions of approval); - d Ensuring the correct siting of structures on the land. An identification survey demonstrating correct siting and setbacks of structures may be requested of the applicant to ensure compliance with this decision notice and applicable codes; - e Providing Council with proof of payment of the Portable Long Service Leave building construction levy (or proof of appropriate exemption) where the value of the Operational Works exceed \$150,000. Acceptable proof of payment is a Q.Leave –Notification and Payment Form approved by the Authority. Proof of payment must be provided before Council can issue a development permit for the Operational works. This is a requirement of section 77(1) of the Building and Construction Industry (Portable Long Service Leave) Act 1991; and - f Making payment of any outstanding Council rates and charges applicable to the development site prior to the lodgement of subdivision plans. - g Obtaining any necessary local government/state approvals where works require the

	installation of temporary ground anchoring into adjacent Road Reserves. Where ground anchoring is proposed into an adjacent private property, approval from the relevant property owners(s) is required
P	Water usage The use of potable water is not permitted in activities associated with road and pavement construction, the compaction of fill material or dust suppression. The use of recycled water is encouraged, especially where other alternative sources do not exist. Where recycled water is proposed to be used, contact the Water & Waste Recycled Water Management Team. More information is available for viewing on Council's website http://www.goldcoast.qld.gov.au/environment/recycled-water-for-industry-7900.html
Q	Fire ant control Northern suburbs of the Gold Coast are within Fire Ant Biosecurity zone 2 and must remain vigilant for the presence of fire ants. Under the Biosecurity Act 2014 individuals and organisations whose activities involve the movement or storage of fire ant carriers have a general biosecurity obligation to take all reasonable steps to ensure they do not spread fire ants. Movement of a fire ant carrier from within the fire ant biosecurity zone may need a biosecurity instrument permit. More information is available on the Department of Agriculture and Fisheries website www.daf.qld.gov.au/plants/weeds-pest-animals-ants/invasive-ants/fire-ants.