

SITE ADDRESS / PROPERTY ID
23 STEVENS STREET
YANDINA, QLD, 4561
CLIENT
AURA
PROPERTY

PROJECT & PHASE
1 INTO 2 LOTS URBAN SUBDIVISION
OPPERATIONAL WORKS - CIVIL

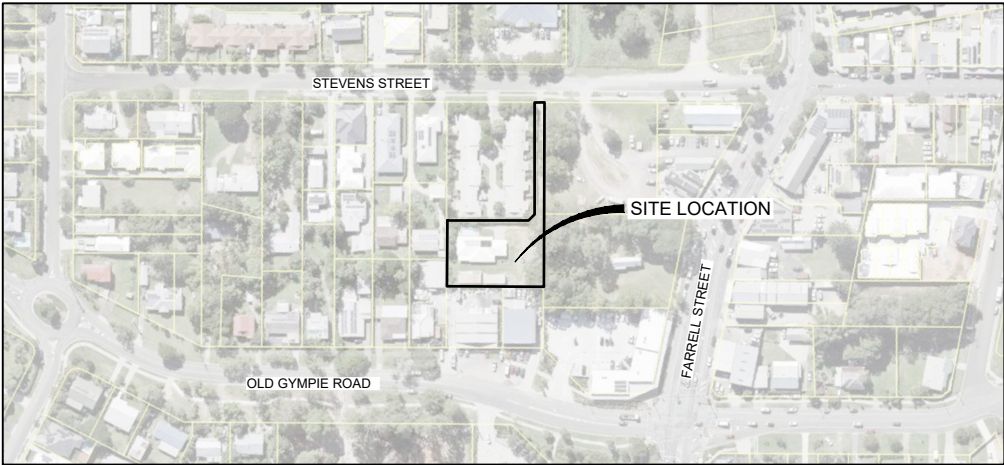


IMAGE (SCC MYMAPS)

LOCALITY PLAN
SCALE N.T.S

SURVEY DATA
SURVEYED BY SONTA DATED 13/10/23.
PLAN REFERENCE 13036 - DET1 REV_A

RP DESCRIPTION
LOT 1 SP186007
SITE AREA = 2108m²



ARCOS

Engineering

Built on

Collaboration.

STRUCTURAL | GEOTECHNICAL | CIVIL

DRAWING INDEX		
DRAWING No.	REV	DRAWING TITLE
230633-OPW-C-001	B	COVER SHEET, LOCALITY & DRAWING INDEX
230633-OPW-C-011	B	GENERAL NOTES & DETAILS
230633-OPW-C-101	B	EXISTING FEATURES PLAN
230633-OPW-C-201	B	EARTHWORKS, EROSION & SEDIMENT PLAN
230633-OPW-C-301	B	DEVELOPMENT SITE PLAN
230633-OPW-C-321	B	SITE SECTIONS & TYPICAL DETAILS
230633-OPW-C-371	B	CONCRETE JOINTING PLAN
230633-OPW-C-372	B	CONCRETE JOINTING DETAILS
230633-OPW-C-501	B	SEWER & WATER NOTES
230633-OPW-C-502	A	SEWER & WATER PLAN
230633-OPW-C-541	A	SEWER LONGITUDINAL SECTION

COUNCIL PERMIT No. PHASE OPW - 24/0426

Project No.	Status	Drawing No.	Rev No.
230633	FOR APPROVAL	OPW-C-001	B

SUNSHINE COAST REGIONAL COUNCIL

APPROVED

OPW24/042625 FEB 2025

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTATION, LOCAL AUTHORITY SPECIFICATIONS (OR ARCOS GROUP SPECIFICATIONS IF SUPPLIED) AND/OR POINT OF CONFLICT IS TO BE IDENTIFIED BY THE CONTRACTOR AND WILL BE RESOLVED BY THE SUPERINTENDENT.
2. THE DEVELOPER IS TO NOMINATE THE SUPERINTENDENT AND/OR THE SUPERVISING RPEQ FOR THE WORKS AND NOTIFY ALL RELEVANT PARTIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. DIMENSIONS IN METRES U.N.O. DO NOT SCALE FROM DRAWINGS. USE PRINTED DIMENSIONS ONLY AND IF IN DOUBT ASK SUPERINTENDENT FOR CLARIFICATION.
4. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH COUNCIL APPROVAL CONDITIONS, DEVELOPMENT GUIDELINES, ASSOCIATED STANDARD DRAWINGS AND SPECIFICATIONS U.N.O.
5. EXISTING SERVICES AND STRUCTURES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE CONTRACTORS RESPONSIBILITY TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK. DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT.
6. ON COMPLETION OF SERVICES INSTALLATION, ALL AREAS SHALL BE RESTORED TO ORIGINAL LEVEL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AREAS, GRASSED AREAS AND ROAD PAVEMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO COUNCILS INFRASTRUCTURE. SUCH REPAIR OR REINSTATEMENT TO BE CARRIED OUT IMMEDIATELY TO THE SATISFACTION OF LOCAL COUNCIL.
8. THE CONTRACTOR SHALL PROVIDE ALL MANAGEMENT PLANS, INCLUDING TRAFFIC MANAGEMENT PLAN, ENVIRONMENTAL MANAGEMENT PLAN AND WORKPLACE HEALTH AND SAFETY PLAN FOR REVIEW AND APPROVAL OF PRINCIPAL AND SUPERINTENDENT, PRIOR TO CONSTRUCTION.
9. ALL MATERIALS SPECIFIED ARE TO BE UTILISED, UNLESS WRITTEN APPROVAL FROM THE SUPERINTENDENT, SUPERVISING RPEQ OR APPROVATORY AUTHORITY.
10. THE CONTRACTOR IS TO UNDERTAKE ALL WORKS IN ACCORDANCE WITH ALL WORKPLACE HEALTH AND SAFETY REQUIREMENTS.
11. WHERE ANY EXCAVATION OR CONSTRUCTION WORKS ARE IN CLOSE PROXIMITY TO NEIGHBOURING LOT BOUNDARIES OR INFRASTRUCTURE, THE CONTRACTOR IS TO ALLOW IN SCOPE OF WORKS TO PROVIDE ALL MEASURES NECESSARY TO ENSURE THE INTEGRITY OF EXISTING BOUNDARIES AND INFRASTRUCTURE. THIS MAY INCLUDE THE USE OF LOW VIBRATION EQUIPMENT, TRENCH SHORING ETC AS REQUIRED.
12. THE CONTRACTOR SHALL NOTIFY ALL RELEVANT AUTHORITIES AND ENSURE REQUIRED CONDITIONS HAVE BEEN MET PRIOR TO COMMENCEMENT. THE CONTRACTOR SHALL NOTIFY ARCOS GROUP PRIOR TO COMMENCING WORKS AND RECEIVE WRITTEN CONFIRMATION THAT THE WORKS CAN COMMENCE.
13. THE CONTRACTOR SHALL PROVIDE AS CONSTRUCTED DRAWINGS FOR ALL CONSTRUCTED WORKS IN ACCORDANCE WITH COUNCIL REQUIREMENTS UNLESS OTHERWISE ADVISED BY ARCOS GROUP.
14. THE FOLLOWING HOLD POINT INSPECTIONS WILL BE REQUIRED;
 - CONSTRUCTION PRE-START MEETING
 - SET OUT
 - DEMOLITION
 - SUBGRADE PROOF-ROLLS
 - PRE-SEAL PROOF-ROLLS
 - CONCRETE PRE-POURS
 - FINAL INSPECTION
15. THE CONSTRUCTION PRE-START MEETING IS AN OPPORTUNITY FOR ALL PARTIES TO DISCUSS CRITICAL ISSUES, SUCH AS:
 - KEY OBJECTIVES OF THE EROSION AND SEDIMENT CONTROL PLAN;
 - REQUIRED WATER QUALITY OBJECTIVES;
 - PERFORMANCE MONITORING AND INSPECTION PROCEDURES;
 - IDENTIFICATION OF THE RESPONSIBLE SITE OFFICERS;
 - IDENTIFICATION OF CRITICAL ENVIRONMENTAL CONCERNS;
 - REPORTING PROCEDURES FOR NON-COMPLIANCE ACTIVITIES AND EVENTS.

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL ENVIRONMENTAL PROTECTION MEASURES BEING IMPLEMENTED ON SITE PRIOR AND DURING CONSTRUCTION.
2. NO VEGETATION BEYOND THE EXTENT OF EARTHWORKS OR THAT SHOWN ON THE PLANS IS TO BE UNDERTAKEN WITHOUT PRIOR CONSENT FROM THE SUPERINTENDENT.
3. ALL VEGETATION BEING RETAINED ON SITE MUST BE IDENTIFIED AND PROTECTED FROM DAMAGE.
4. EROSION AND SEDIMENT CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE IMPLEMENTED PRIOR TO CONSTRUCTION COMMENCING AND DURING CONSTRUCTION.
5. ALL DISTURBED AREAS SHALL BE LEFT IN A STABLE CONDITION. THIS WILL INVOLVE SEEDING OR TURFING WITH APPROPRIATE GRASS SPECIES. ANY DISTURBED SLOPES SHALL BE COVERED WITH A SUITABLE FORM OF EROSION CONTROL.
6. PIPELINES ADJACENT TO SIGNIFICANT TREES MUST BE INSTALLED BY BORING OR DIRECTIONAL DRILLING UNLESS OTHERWISE AGREED WITH THE SUPERINTENDENT.
7. TOPSOIL AND SUBSOIL MUST BE STOCKPILED SEPARATELY AND NOT LOCATED UNDER TREE CANOPIES.
8. ALL STOCKPILES MUST HAVE APPROPRIATE SEDIMENT CONTROLS IN ACCORDANCE WITH THE ENVIRONMENTAL MANAGEMENT PLAN.
9. NO SOIL CAN BE STOCKPILED WITHIN 5M OF ANY CREEK OR WATER COURSE.
10. ANY SOIL DISTURBED ON SITE IS TO BE REUSED ON SITE. ANY UNSUITABLE MATERIAL NOT REUSED MUST BE DISPOSED OF AT A REGULATED WASTE DISPOSAL FACILITY.

1. RETAINING WALLS LESS THAN 1m IN HEIGHT TO BE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. ALL WALLS OVER 1m IN HEIGHT, SUBJECT TO LOADING OR ADJACENT EXISTING STRUCTURES TO BE DESIGNED BY STRUCTURAL RPEQ AND REFERENCE IS MADE TO OTHERS.
2. SUPPORTED MATERIAL IS TO BE NATURAL INSITU SOIL OR WELL COMPACTED FILL, CAPABLE OF STANDING UNSUPPORTED DURING CONSTRUCTION OF THE WALL.
3. FILL MATERIAL BEHIND WALL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 200mm DEPTH COMPACTED TO 95% MDD (AS1289) AND TO EXTEND A MINIMUM OF 2m BEYOND THE FRONT FACE OF WALL BEFORE BEING TRIMMED BACK ENSURING SLOPE COMPACTION.
4. 20mm SCREENINGS BACKFILL MATERIAL IS TO BE GRANULAR, FREE DRAINING AND IN A MEDIUM DENSE CONDITION.
5. FOUNDATION TO BE CHECKED BY AN EXPERIENCED GEOTECHNICAL ENGINEER TO CONFIRM BEARING CAPACITY PRIOR TO PLACEMENT OF BLINDING LAYER/FIRST LAYER OF ROCK WALL.
6. ALL ROCK TO BE SOUND AND NOT DISPOSED TO DETRIMENTAL WEATHERING.
7. EROSION AND SEEPAGE SHALL BE CONTROLLED TO ELIMINATE CONCENTRATED FLOWS OVER OR THROUGH THE COMPLETED WORK.
8. AG DRAIN TO DISCHARGE TO CONNECT TO STORMWATER AT MAX 30m CENTRES OR DIRECTED TO LAWFUL DISCHARGE TO PREVENT OVERFLOW AND EROSION OF TOLERABLE EIGHT.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF ALL TEMPORARY WORKS INCLUDING PROPPING AND BRACING. WHERE NECESSARY THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A STRUCTURAL ENGINEER TO DESIGN AND CERTIFY TEMPORARY WORKS. TEMPORARY PROPPING DURING BACKFILLING PROCEDURES MAY BE REQUIRED.
10. THIS DESIGN DOES NOT CONSIDER GLOBAL STABILITY AND IT IS THE RESPONSIBLE OF THE CONTRACTOR TO PROVIDE STABILITY REPORT AND MEASURES AGAINST SITE SLIPPAGE.

1. A DILAPIDATION REPORT IS REQUIRED BY MAIN CONTRACTOR TO EXISTING STRUCTURES AND ASSET WHICH ARE SENSITIVE TO VIBRATION OR SETTLEMENT
2. EXISTING STRUCTURES SHOULD BE ASSESSED TO ENSURE THESE ARE NOT SUBJECT TO SETTLEMENT OR VIBRATIONS.
3. VIBRATION MONITORING SHOULD BE INSTALLED PRIOR TO ANY EXCAVATION WORKS.
4. VIBRATION MONITORING EQUIPMENT SHOULD BE NOMINATED DURING CONSTRUCTION AND RELAYED TO THE RELEVANT STAKEHOLDERS.
5. CONSTRUCTION AND TEMPORARY STABILITY SHOULD BE ASSESSED PRIOR TO EXCAVATION

1. COMPACT THE EXPOSED SUBGRADE OR LOOSE TOP LEVEL MATERIAL TO A MINIMUM 100% STANDARD MAXIMUM DRY DENSITY (MDD) TO A51289. ANY 'SOFT SPOTS' IDENTIFIED BY THE PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH A COMPACTED IMPORTED GENERAL FILL MATERIAL TO THE ABOVE COMPACTION REQUIREMENTS.
2. ALL EXPOSED SUBGRADE AREAS SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm COMPACTED THICKNESS.
3. GEOTECHNICAL INVESTIGATIONS REQUIRED IN ORDER TO DETERMINE SUBGRADE PROPERTIES & PREPARATION DETAILS. CONTRACTOR TO UNDERTAKE 4-DAY SOAKED CBR ON EXISTING SUBGRADE AND RESULTS TO BE A MINIMUM OF 5%. TESTING TO BE PROVIDED TO SUPERVISING ENGINEER PRIOR TO PROOF ROLL.
4. LEVELS SHOWN ARE FINISHED SURFACE LEVELS INCLUSIVE OF TOPSOIL LAYER OR BUILDING SLAB THICKNESS.
5. FINISHED SURFACES TO ALL DISTURBED AREAS ARE TO BE TREATED IN ACCORDANCE WITH LANDSCAPE DRAWINGS AND/OR TYPICAL SECTIONS.
6. CONTRACTOR TO OBTAIN ROADWORKS AND FOOTPATH PERMITS FOR ANY PROPOSED WORKS EXTERNAL TO THE SITE BOUNDARY.
7. SUBSOIL DRAINAGE UNDER KERBS TO BE IN ACCORDANCE WITH IPWEA STD DRG RS-140.
8. ALL TEMPORARY AND FINAL BATTER SLOPES ARE TO BE INSPECTED BY AN APPROVED GEOTECHNICAL ENGINEER.

1. ALL EXCAVATION AND FILLING SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS3798 AND IN ACCORDANCE WITH THE CURRENT LOCAL AUTHORITY AND ARCOS SPECIFICATIONS.
2. ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND FULLY OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
3. THE CONTRACTOR SHALL REMOVE ALL STRUCTURES, DEBRIS AND FENCES FROM THE SITE TO THE SATISFACTION OF THE SUPERINTENDENT.
4. EXISTING SURFACE IS TO BE CLEAR OF ORGANIC MATERIAL PRIOR TO THE START OF FILLING.
5. FILL IS TO BE OF GOOD QUALITY AND FREE OF UNSUITABLE MATERIAL.
6. FILL TO BE PLACED IN MAXIMUM 200mm LIFTS, UNLESS APPROVED OTHERWISE BY A SUITABLY QUALIFIED CONSULTANT, AND COMPACTED TO SPECIFICATION.
7. NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION. SIMILARLY, THE FINISHED SURFACE LEVELS MAY BE ADJUSTED BY THE WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION AFTER AMENDED DRAWINGS HAVE BEEN APPROVED BY COUNCIL.
8. ALL AREAS SUBJECT TO EARTHWORKS ARE TO BE FREE DRAINING WITH A MINIMUM SLOPE OF 1:100 (1%).
9. ALL DRAINAGE STRUCTURES ARE TO BE PRESERVED FROM THE EFFECTS OF STRUCTURAL LOADING GENERATED BY THE EARTHWORKS.
10. ANY AREA DISTURBED OUTSIDE OF THE WORKS AREA SHOWN SHALL BE REHABILITATED TO A MINIMUM OF THE PRE-CONSTRUCTION CONDITIONS, AT THE CONTRACTORS EXPENSE.
11. EARTHWORKS BATTERS ARE TO BE TREATED AS FOLLOWS:
 - 1:4 OR FLATTER TO BE GRASS SEEDED U.N.O
 - STEEPER THAN 1:4 TO BE MULCHED & PLANTED IN ACCORDANCE WITH THE LANDSCAPE PLANS
13. TREE REMOVAL WORKS TO BE UNDERTAKEN BY A SUITABLY QUALIFIED AND INSURED CONTRACTOR. TIMBER IS TO BE REMOVED, REUSED OR RECYCLES IN AN APPROPRIATE AND A SUSTAINABLE MANNER WHERE POSSIBLE.

1. ALL STORMWATER DRAINAGE HAS BEEN DESIGNED AND IS TO BE CONSTRUCTED IN ACCORDANCE WITH AS3500, LOCAL COUNCIL AUTHORITY REQUIREMENTS, IPWEA AND QUDM.
2. EXCAVATION, BEDDING AND BACKFILLING OF STORMWATER DRAINAGE PIPES TO BE IN ACCORDANCE WITH IPWEA STD DRG DS-030.
3. ALL MANHOLES TO BE MIN 1050mm DIAMETER IN ACCORDANCE WITH IPWEA STD DRG DS-010.
4. ALL GRATES & MANHOLE COVERS LOCATED WITHIN ROADWAY TO BE SOLID DUCTILE CAST IRON CLASS 'D', AND WHERE NOT LOCATED WITHIN ROADWAY TO BE CLASS 'B' U.N.O, IN ACCORDANCE WITH IPWEA STD DRG DS-019 & DS-020.
5. ALL GULLY PITS TO BE LIP IN LIL (L.I.L) U.N.O IN ACCORDANCE WITH IPWEA STD DRG DS-063.
6. ALL FIELD INLETS TO BE IN ACCORDANCE WITH IPWEA STD DRG DS-050.
7. ALL REINFORCED CONCRETE PIPES ARE TO BE INSTALLED USING TYPE 'HS2' SUPPORT U.N.O AS DEFINED IN AS3725 - LOADS ON BURIED CONCRETE PIPES. IF ALTERNATIVE BEDDING METHODS ARE TO BE USED THE PIPE CLASS MUST BE REVISED.
8. ALL PIPES ABOVE 3000 RCP TO BE RRJ CLASS 3 U.N.O. PIPES 3000 AND BELOW TO BE UPVC U.N.O. HDPE/PP MAY BE USED AS AN RCP ALTERNATIVE FOR INTERNAL AND COUNCIL STORMWATER WHERE APPROVED BY THE SUPERVISING ENGINEER AND COUNCIL WHERE REQUIRED.
9. STORMWATER PIPE CLASSES HAVE BEEN DESIGNED FOR SERVICE LOADS ONLY, THE CONTRACTOR SHALL ASSESS ANTICIPATED CONSTRUCTION LOADS AND UPGRADE THE PIPE CLASSES, IF NECESSARY, IN ACCORDANCE WITH AS3725, AT THE CONTRACTORS COST.
10. UNLESS DIRECTED OTHERWISE STORMWATER STRUCTURES INCLUDING HEADWALLS ARE TO HAVE AG-PIPE DRAINAGE STUBS (WITH END CAP) TO DEWATER DRAINAGE TRENCH.
11. THE CONTRACTOR IS TO CONSIDER CONSTRUCTION LOADING ON EXISTING AND NEW STORMWATER PIPES AND STRUCTURES.
12. ALL PIPE PENETRATIONS WILL BE NEATLY MORTARED ON THE INSIDE FACE OF MANHOLES/PITS.
13. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL TRENCH EXCAVATION AND CONSTRUCTION IS IN ACCORDANCE WITH CURRENT CONSTRUCTION SAFETY ACT AND WORKPLACE HEALTH AND SAFETY LEGISLATION.
14. THE CONTRACTOR IS TO TAKE ALL POSSIBLE MEASURES TO ENSURE PROPER COMPACTION TO BACKFILLING OF TRENCHES AND STRUCTURES.
15. THE CONTRACTOR SHALL DEMONSTRATE NO DAMAGE TO EXISTING STORMWATER INFRASTRUCTURE HAS OCCURRED DURING THE CONSTRUCTION OF THESE WORKS.
16. UPON COMPLETION, ALL STORMWATER DRAINAGE INFRASTRUCTURE WILL BE CLEAR OF DEBRIS AND OTHER BLOCKAGES. THE CONTRACTOR IS TO PROVIDE A CCTV SURVEY OF ALL NEWLY CONSTRUCTED STORMWATER ASSETS FOR APPROVAL BY THE ENGINEER AND/OR LOCAL AUTHORITY.
17. ALL DEFECTS IDENTIFIED BY THE CCTV SURVEY WILL BE REPAIRED TO A SATISFACTORY STANDARD BY THE CONTRACTOR. PAYMENT FOR THESE REPAIRS WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. UNLESS IT CAN BE DEMONSTRATED THAT THE IDENTIFIED DAMAGE WAS PRE-EXISTING AND THE RESPONSIBILITY OF OTHER PARTIES.
18. RESIDENTIAL DRAINAGE CONNECTIONS TO KERB AND CHANNEL IN ACCORDANCE WITH IPWEA STD DRG RS-081.

- AS 3600 - "SAA CONCRETE STRUCTURES CODE".

IN ADDITION TO THE ABOVE CODE THE FOLLOWING AUSTRALIAN STANDARD SPECIFICATIONS AND CODES OR THEIR LATEST REVISION SHALL APPLY:

- AS1012 PARTS 1-19- METHODS FOR THE TESTING OF CONCRETE (METRIC UNITS)
- AS3583.1,2,3,8 - METHODS OF TEST FOR SUPPLEMENTARY CEMENTITIOUS MATERIALS FOR USE WITH PORTLAND CEMENT
- AS3582.1 - SUPPLEMENTARY CEMENTITIOUS MATERIALS FOR USE WITH PORTLAND CEMENT- FLY ASH
- AS1141 - METHODS FOR SAMPLING AND TESTING AGGREGATES
- AS1302 - STEEL REINFORCING BARS FOR CONCRETE
- AS1303 - HARD DRAWN STEEL REINFORCING WIRE FOR CONCRETE
- AS1304 - HARD DRAWN STEEL WIRE REINFORCING FABRIC FOR CONCRETE
- AS3972 - PORTLAND AND BLENDED CEMENTS
- AS1379 - READY-MIXED CONCRETE (METRIC UNITS)
- AS2758 - CONCRETE AGGREGATES
- AS1478, AS1479 - CODE OF PRACTICE FOR USE OF CHEMICAL ADMIXTURES IN CONCRETE
- AS3610 - FORMWORK FOR CONCRETE

1. ALL CONCRETE IS TO BE SUPPLIED BY A LICENSED READY MIXED CONCRETE MANUFACTURER. NO ON SITE BATCHING IS ACCEPTABLE.
2. MANUFACTURERS MUST HAVE AN APPROVED AND CERTIFIED QUALITY ASSURANCE PROGRAM IN PLACE AND BE APPROVED BY THE ENGINEER PRIOR TO SUPPLY OF ANY CONCRETE.
3. ALL MATERIALS, STORAGE, BATCHING, ETC TO CONFORM TO THE REQUIREMENTS OF THE RELEVANT AUSTRALIAN STANDARDS.
4. ALL CONCRETE TO BE NORMAL-CLASS IN ACCORDANCE WITH AS3600 UNLESS NOTED OTHERWISE.
5. ALL CONCRETE SHALL HAVE A SHRINKAGE STRAIN NOT EXCEEDING 600 MICROSTRAIN.
6. ALL CONCRETE IS SPECIFIED BY 28 DAY COMPRESSIVE STRENGTH U.N.O.
7. ALL REINFORCEMENT TO BE SUPPLIED BY A REGISTERED MANUFACTURER WITH AN APPROVED AND CERTIFIED QUALITY
8. ASSURANCE PROGRAM IN PLACE. ALL REINFORCEMENT IS TO COMPLY WITH THE REQUIREMENTS OF AS1302, AS1303 AND AS1304 AS APPLICABLE.
9. ALL REINFORCEMENT IS TO BE DELIVERED TO SITE FREE FROM OIL, GREASE OR OTHER SURFACE COATINGS WHICH MAY IMPAIR BOND TO CONCRETE.
10. ALL REINFORCEMENT TO BE 500 MPA MINIMUM YIELD U.N.O.

1. ALL CONCRETE OTHER THAN CAST AGAINST GROUND, SHALL BE PLACED AGAINST TIMBER, PLYWOOD OR STEEL FORMS.
2. ALL FORMWORK SHALL COMPLY WITH THE REQUIREMENTS OF AS1509 AND AS1510.
3. REFER ARCHITECT'S DRAWINGS FOR REQUIRED FORMWORK CLASS WHERE APPLICABLE. CLASS B FORMWORK SHALL BE ADOPTED U.N.O.
4. ALL TEMPORARY FORMWORK, FALSEWORK, PROPPING, BRACING, TO BE DESIGNED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER (RPEQ) PRIOR TO ERECTION.
5. ALL REINFORCEMENT TO BE SUPPORTED OFF FORMS WITH PLASTIC OR PLASTIC TIPPED WIRE CHAIRS TO PROVIDE THE SPECIFIED COVER. ALL CONCRETE CAST AGAINST GROUND TO BE UNDERLAIN BY WATERPROOF MEMBRANE.

1. ALL CONCRETE IS TO BE TRANSPORTED TO SITE IN AGITATOR TRUCKS. CONCRETE NOT PLACED WITHIN ONE HOUR AFTER BATCHING MAY BE REJECTED AT THE ENGINEER'S DISCRETION

1. CONCRETE TO BE PLACED IN FORMS BY HORIZONTAL 'CHUTING' NO MORE THAN 3m³. CONCRETE PUMPING OR KIBBLING, UNDER NO CIRCUMSTANCES SHALL CONCRETE BE INDUCED TO FLOW HORIZONTALLY BY USE OF VIBRATORS.
2. ALL CONCRETE SHALL BE PLACED CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS AS DETAILED, IN SUCH A MANNER AS TO AVOID 'COLD JOINTS'. CONSTRUCTION JOINTS SHALL BE LOCATED AS DETAILED ON DRAWINGS OR AS INSTRUCTED IN WRITING BY THE ENGINEER.
3. ALL CONCRETE IS TO BE COMPACTED UPON PLACEMENT USING 50MM DIAMETER VIBRATORS.
4. SLABS AND BEAMS ARE TO HAVE A FILM OF APPROVED ALPHATIC ALCOHOL APPLIED TO THE SURFACE, DIRECTLY AFTER SCREEDING, PRIOR TO FLOATING, REGARDLESS OF WEATHER CONDITIONS.
5. ADDITIONAL PROTECTIVE MEASURES SUCH AS CHILLED MIX WATER, SHADING PLACEMENT AREAS, WIND BREAKS, ETC. MAY BE REQUIRED BY THE ENGINEER IF PLACING CONCRETE DURING UNUSUALLY HOT, DRY OR WINDY CONDITIONS.
6. ALL CONCRETE SLABS SHALL BE STEEL TROWEL FINISHED U.N.O.
7. BROOM FINISHING, WHERE SPECIFIED, SHALL BE CARRIED OUT AFTER STEEL TROWEL FINISHING.
8. ALL CONCRETE TO BE ORDERED AND PLACED AT 80MM SLUMP U.N.O.
9. NO WATER TO BE ADDED ON SITE UNLESS APPROVED BY THE ENGINEER.

1. ALL CONCRETE TESTING IS TO BE CARRIED OUT BY A NATA REGISTERED LABORATORY, IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF AS1012.
2. THE FOLLOWING TESTING SCHEDULE IS TO BE ADOPTED IN ADDITION TO THE REQUIREMENTS OF THE MANUFACTURER'S QUALITY ASSURANCE PROGRAM:
 - A MINIMUM OF ONE TEST (3 CYLINDERS) TO BE TAKEN FROM EACH ELEMENT CAST ON ANY GIVEN DAY (EG. COLUMNS, FOOTINGS, ETC)
 - A MINIMUM OF ONE TEST (3 CYLINDERS) TO BE TAKEN FROM EACH CONCRETE STRENGTH GRADE CAST ON ANY GIVEN DAY.
 - A MINIMUM OF ONE TEST (3 CYLINDERS) TO BE TAKEN FROM EACH 50M³ OR PART THEREOF CAST ON A GIVEN DAY FOR EACH STRENGTH GRADE.
3. ALL SAMPLES ARE TO BE TAKEN FROM THE AGITATOR, ON SITE. IF WATER IS ADDED ON SITE, WITH THE ENGINEER'S PERMISSION, SAMPLES FOR TESTING SHALL BE TAKEN AFTER THE ADDITION OF WATER.

1. ALL CONCRETE IS TO BE CURED BY AN APPROVED METHOD FOR A MINIMUM OF 28 DAYS AFTER FINISHING. CURING METHOD IS TO BE APPROVED BY THE ENGINEER PRIOR TO CONCRETE PLACEMENT AND SHALL GENERALLY CONSIST OF ONE OR A COMBINATION OF THE FOLLOWING METHODS:

- CONTINUOUS WATER PONDING.
- COMPLETE ENCASEMENT IN A WATERPROOF FILM (EG. POLYTHENE).
- APPLICATION OF AN APPROVED CURING COMPOUND.



PRIOR TO COMMENCEMENT OF NEW WORK THE CONTRACTOR SHALL CONFIRM LOCATIONS, LEVELS AND DETAILS OF EXISTING CONNECTION POINTS AND SERVICE CROSSINGS BY POT HOLING. IF A VARIATION OCCURS CONTACT THE ENGINEER PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL CONTACT THE RELEVANT AUTHORITIES AND ARRANGE FOR RELOCATION AND / OR PROTECTION OF EXISTING SERVICES AS REQUIRED TO SUIT SURROUNDING NEW WORK, CONSTRUCTION LOADINGS AND TO SUIT FINAL FINISHED SURFACE LEVELS AND GRADES.

DESIGN FINISHED SURFACE LEVELS OF STRUCTURES ARE FOR THE CONTRACTOR'S GUIDANCE ONLY. ACTUAL FINISHED LEVELS SHALL BE SET OUT AS DIRECTED ON-SITE IN KEEPING WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL AUTHORITY AND ACTUAL FINISHED GROUND LEVELS.

RETAINING WALL UNDER 1m HIGH TO
MANUFACTURES SPECIFICATIONS FOR DETAILS.
RETAINING WALL GREATER THAN 1m HIGH, DESIGN
AND CERTIFICATION TO BE PROVIDED BY OTHERS

PATTERNED AND CCS OF THE SAME VARIETY, PATTERN TO BE EITHER TIMBER OR STONE, COLOUR TO BE EITHER RAILWAY SLEEPER, BROWN OR SANDSTONE.
SUPPORT POSTS TO BE PAINTED IN ACCORDANCE WITH AS 2312, DEVELOPMENT WORKS PLANNING SCHEME POLICY (PSP) AND TO MATCH COLOUR OF SLEEPER.

DESIGN CERTIFICATION (FORM 15) SHALL BE PROVIDED TO CERTIFYING ENGINEER, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, FOLLOWING THE APPOINTMENT OF A D&C SUB-CONTRACTOR.

INSPECTION CERTIFICATION (FORM 12) SHALL BE PROVIDED TO COUNCIL FOLLOWING SUPERVISED CONSTRUCTION OF THE PROPOSED RETAINING WALLS.

DIMENSIONS ARE **INDICATIVE ONLY**. THE CONTRACTOR IS TO ENGAGE A CONSULTANT FOR SITE SPECIFIC DESIGN & CONSTRUCTION SPECIFICATIONS, DETAIL DRAWINGS & DESIGN CERTIFICATION.

WALLS ADJACENT EXISTING PROPERTIES ARE TO BE DESIGNED TO ACCOMMODATE EXISTING STRUCTURES, SLOPES AND DISTURBANCE ZONES OF SERVICES AND EASEMENTS CONSIDER ACCESS DESIGN VEHICLE REQUIREMENTS.

APPROVED

OPW24/0426 **25 FEB 2025**

[illegible]

EXISTING LEGEND

- SUBJECT PROPERTY BOUNDARY
- 4.00 MAJOR CONTOUR
- MINOR CONTOUR
- s SEWER MAIN
- w WATER MAIN
- t U/G TELECOMMS
- o/h O/H ELECTRICITY
- sw STORMWATER
- /-/- FENCE
- TO BE REMOVED

NOTES:

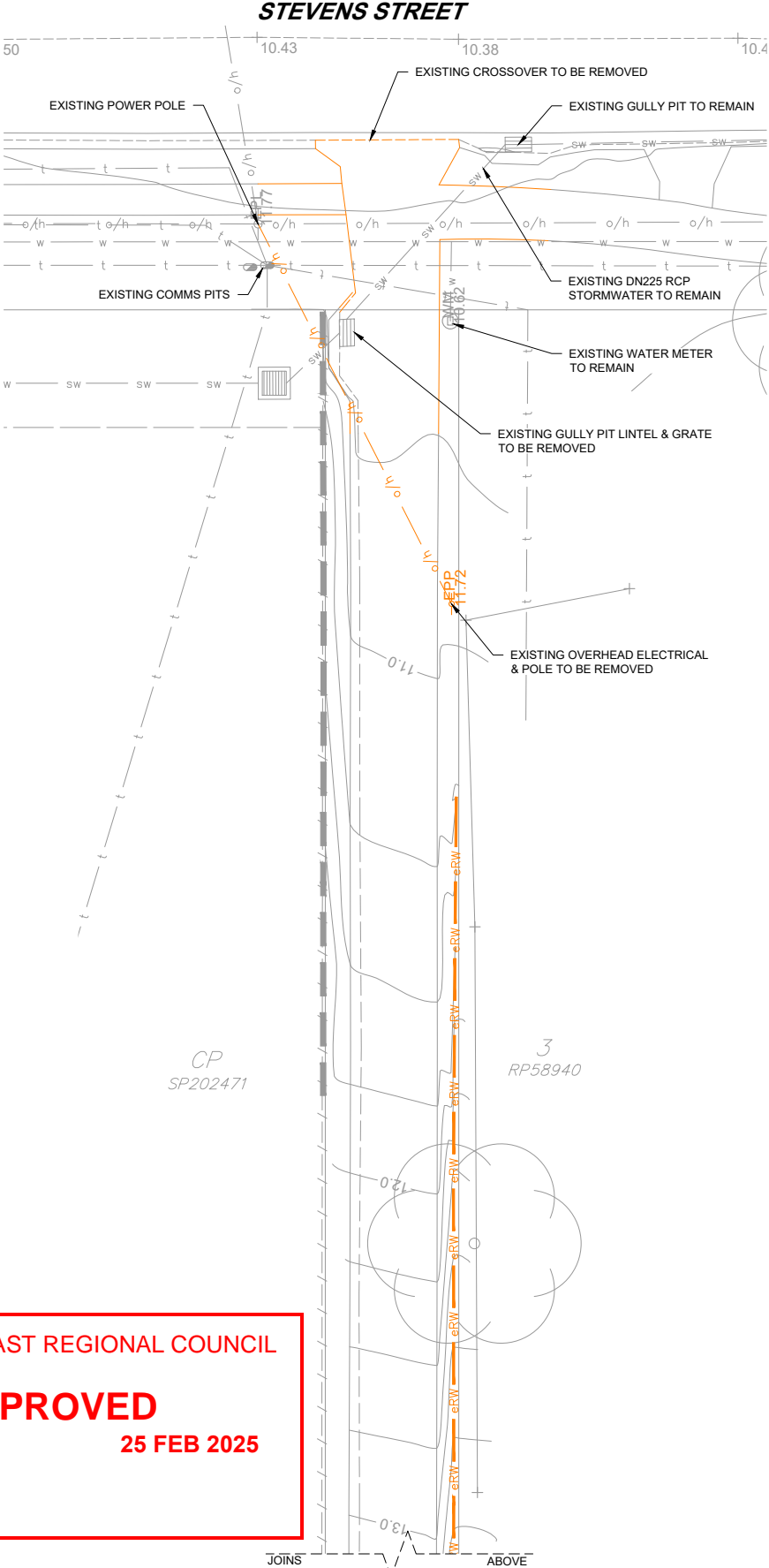
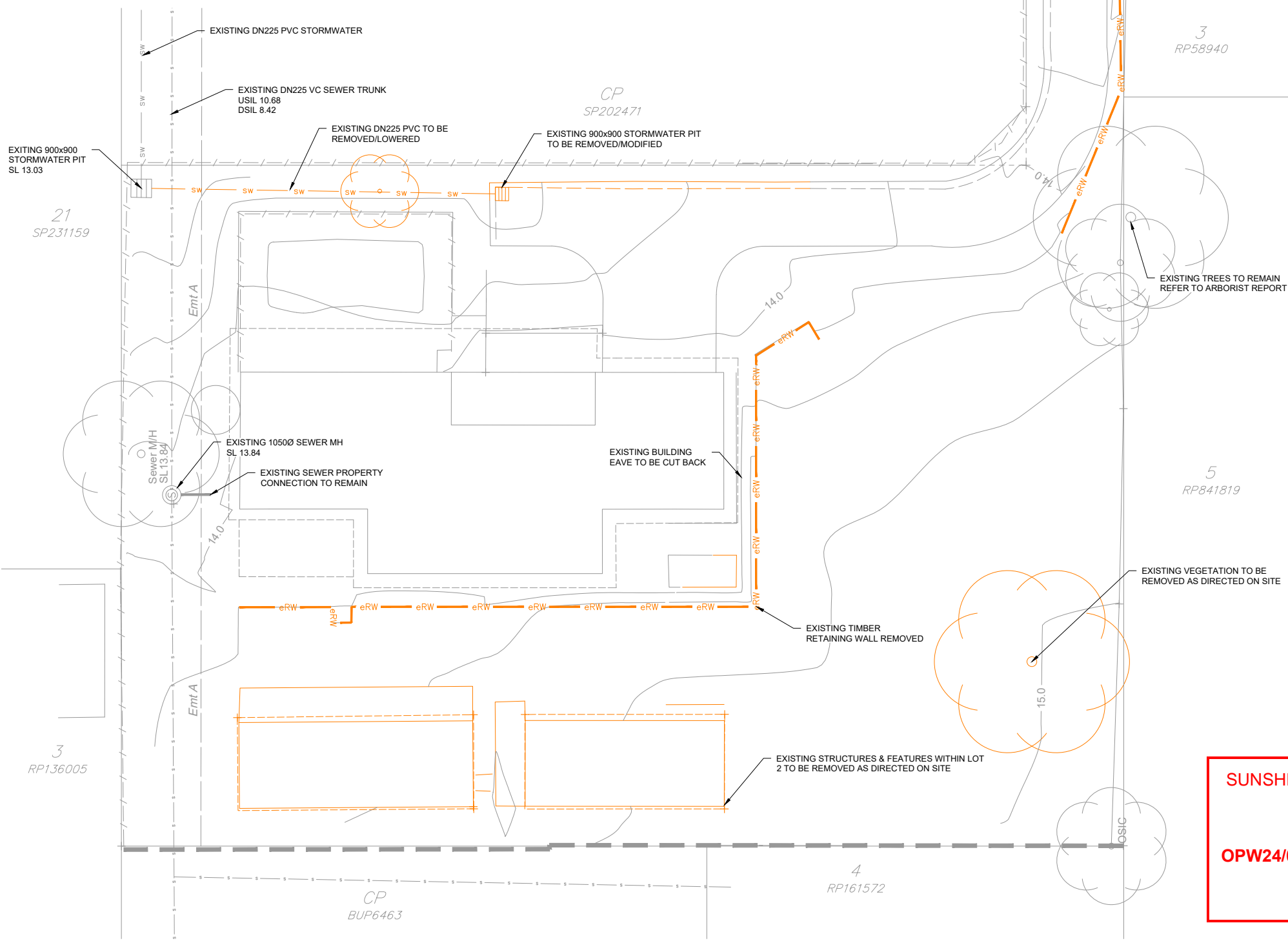
1. FOR GENERAL NOTES REFER DRG C-011.

DEMOLITION

DEMOLISH OR RELOCATE OFF SITE ALL EXISTING BUILDINGS AND/OR STRUCTURES ON SITE AND DISCONNECT AND WHERE REQUIRED CAP ALL ASSOCIATED SERVICES IN ACCORDANCE WITH A PLUMBING AND DRAINAGE APPLICATION PRIOR TO DEMOLITION COMMENCING.

CLEARING

THE CONTRACTOR SHALL REMOVE ALL EXISTING VEGETATION WITHIN THE SITE IN ACCORDANCE WITH THE APPROVED TREE RETENTION PLAN IF SPECIFIED.



SUNSHINE COAST REGIONAL COUNCIL
APPROVED
OPW24/0426 25 FEB 2025

				<div>North Point</div> <div></div>		<div>Scale</div> <div></div>		<div>Horiz. Datum LOCAL</div> <div>Vert. Datum AHD</div> <div>RL Datum</div>		<div>Client</div> <div>AURA PROPERTY</div>		<div>Consultant</div> <div></div> <div>ARCOS</div>		<div>Project</div> <div>1 INTO 2 LOTS URBAN SUBDIVISION OPPERATIONAL WORKS - CIVIL 23 STEVENS STREET YANDINA, QLD, 4561</div>		<div>Drawn JCL</div> <div>Design JCL</div> <div>Check AK</div>		<div>Drawing</div> <div>EXISTING FEATURES PLAN</div>		<div>Project No.</div> <div>230633</div>		<div>Drawing No.</div> <div>OPW-C-101</div>		<div>Rev No.</div> <div>B</div>	
<div>B COUNCIL UPDATES</div> <div>30.01.25</div> <div>LS</div>				<div>A FOR APPROVAL</div> <div>24.09.24</div> <div>LS</div>								<div>Approved</div> <div>LACHLAN SWANN</div> <div>RPEQ 21223</div>		<div>Approved Date</div> <div>24.09.24</div>		<div>Signed</div> <div></div>		<div>Status</div> <div>FOR APPROVAL</div>		<div>Sheet Size</div> <div>A1</div>					

EXISTING LEGEND

- SUBJECT PROPERTY BOUNDARY
EXISTING CONCRETE DRIVEWAY
4.00 MAJOR CONTOUR 1.0m INTERVAL
MINOR CONTOUR 0.250 INTERVAL
SEWER MAIN
WATER MAIN
U/G TELECOMMS
O/H ELECTRICITY
STORMWATER
FENCE
eRW TIMBER RETAINING WALL
CONCRETE RETAINING WALL
SURFACE LEVEL
X 20.000

PROPOSED LEGEND

- CUT
FILL
50.00 MAJOR CONTOUR 0.50m INTERVAL
MINOR CONTOUR 0.10m INTERVAL
FLOW DIRECTION
SEDIMENT FENCE
LANDSCAPE WALL
RETAINING WALL
DESIGN SURFACE LEVEL
INLET PROTECTION
X 20.000

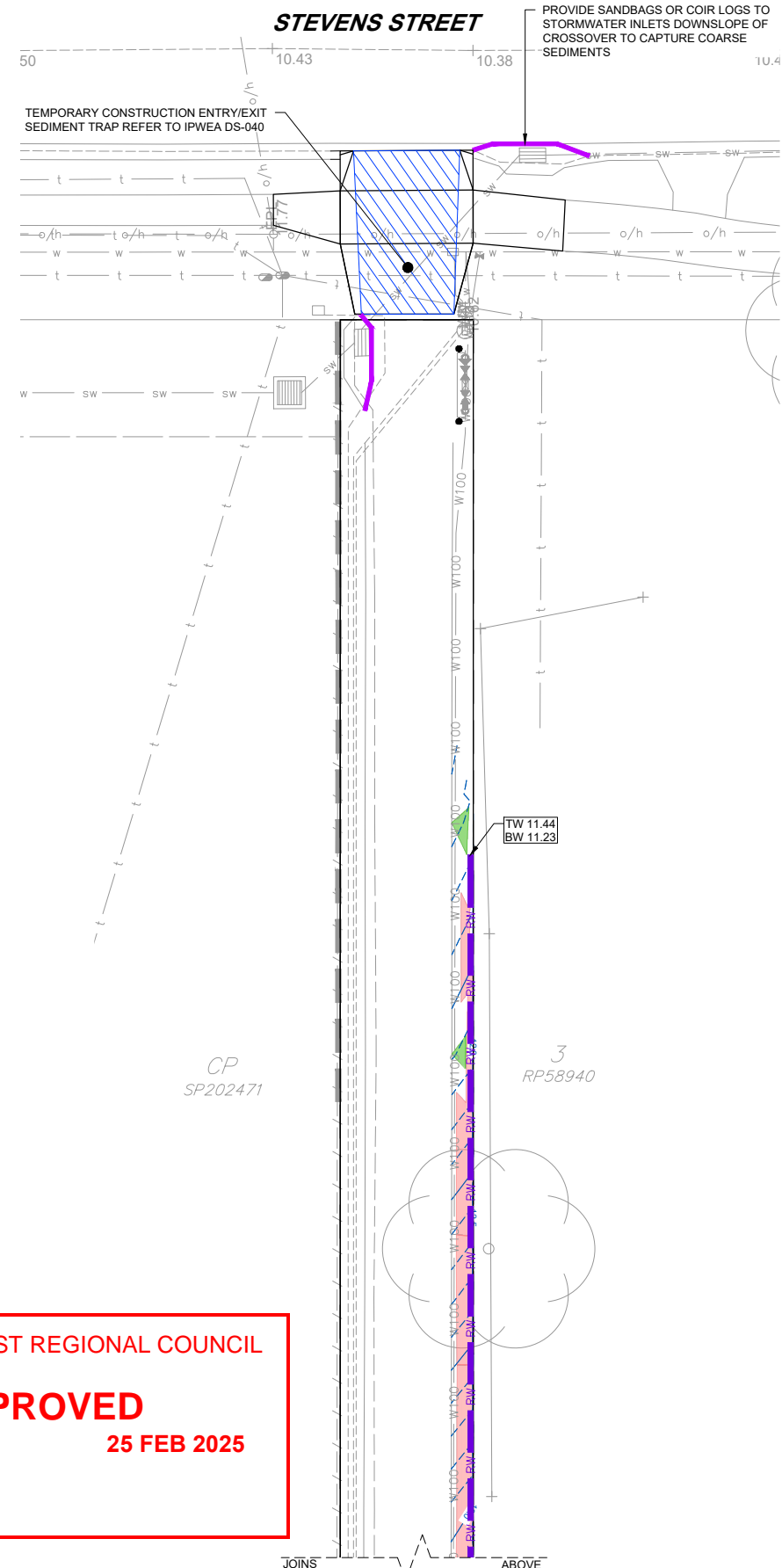
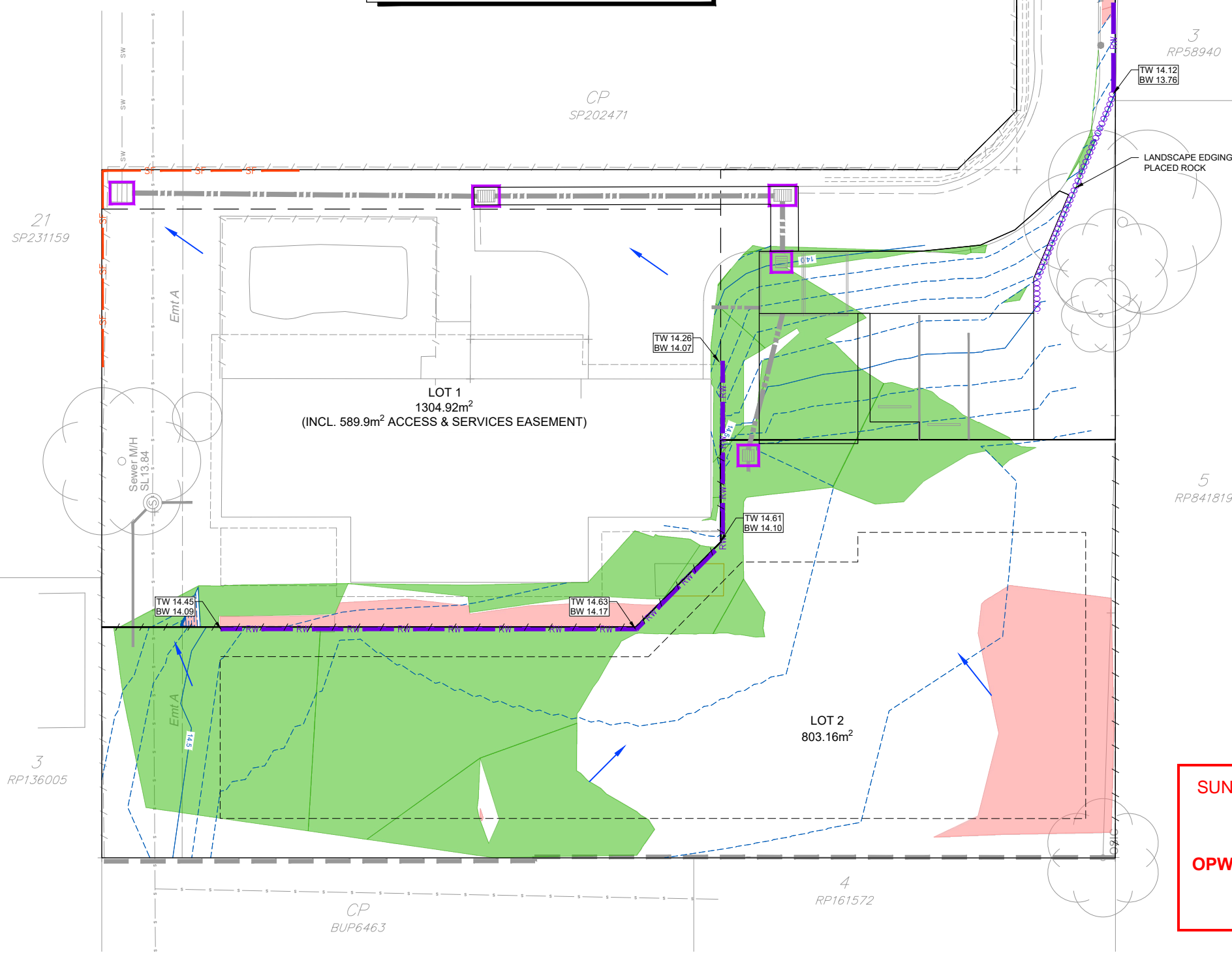
EARTHWORKS QUANTITIES

TOP SOIL STRIP: 156m³
EARTHWORKS CUT: -96m³
EARTHWORKS FILL: 54m³
BALANCE: -42m³

- NOTES:
1. ALL VOLUMES INDICATED ARE SOLID VOLUMES.
2. ASSUMED TOP SOIL STRIP 150mm THICK.
3. EARTHWORKS QUANTITIES BASED ON COMPARISON BETWEEN DESIGN/SUBGRADE SURFACE AND STRIP SURFACE.

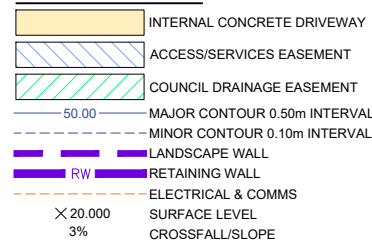
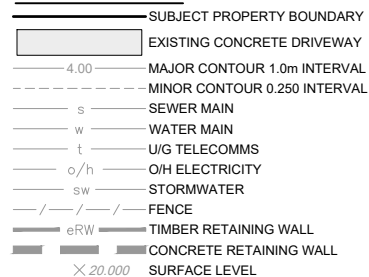
- NOTES:
1. FOR GENERAL & EARTHWORKS NOTES REFER DRG C-011.
2. FOR EROSION & SEDIMENT CONTROL NOTES & DETAILS REFER DRG C-231.
3. RETAINING WALLS TO BE DESIGNED BY OTHERS/STRUCTURAL ENGINEER.

THE EROSION & SEDIMENT CONTROL PLAN IS A CONCEPT PLAN DEMONSTRATING AN APPROACH TO EROSION & SEDIMENTATION CONTROL FOR THE SITE. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE AN EROSION & SEDIMENT CONTROL DESIGN AND A COMPLETED DESIGN CERTIFICATE PRIOR TO COMMENCEMENT OF WORK. CERTIFICATION MUST BE UNDERTAKEN BY A SUITABLY QUALIFIED, EXPERIENCED PROFESSIONAL.

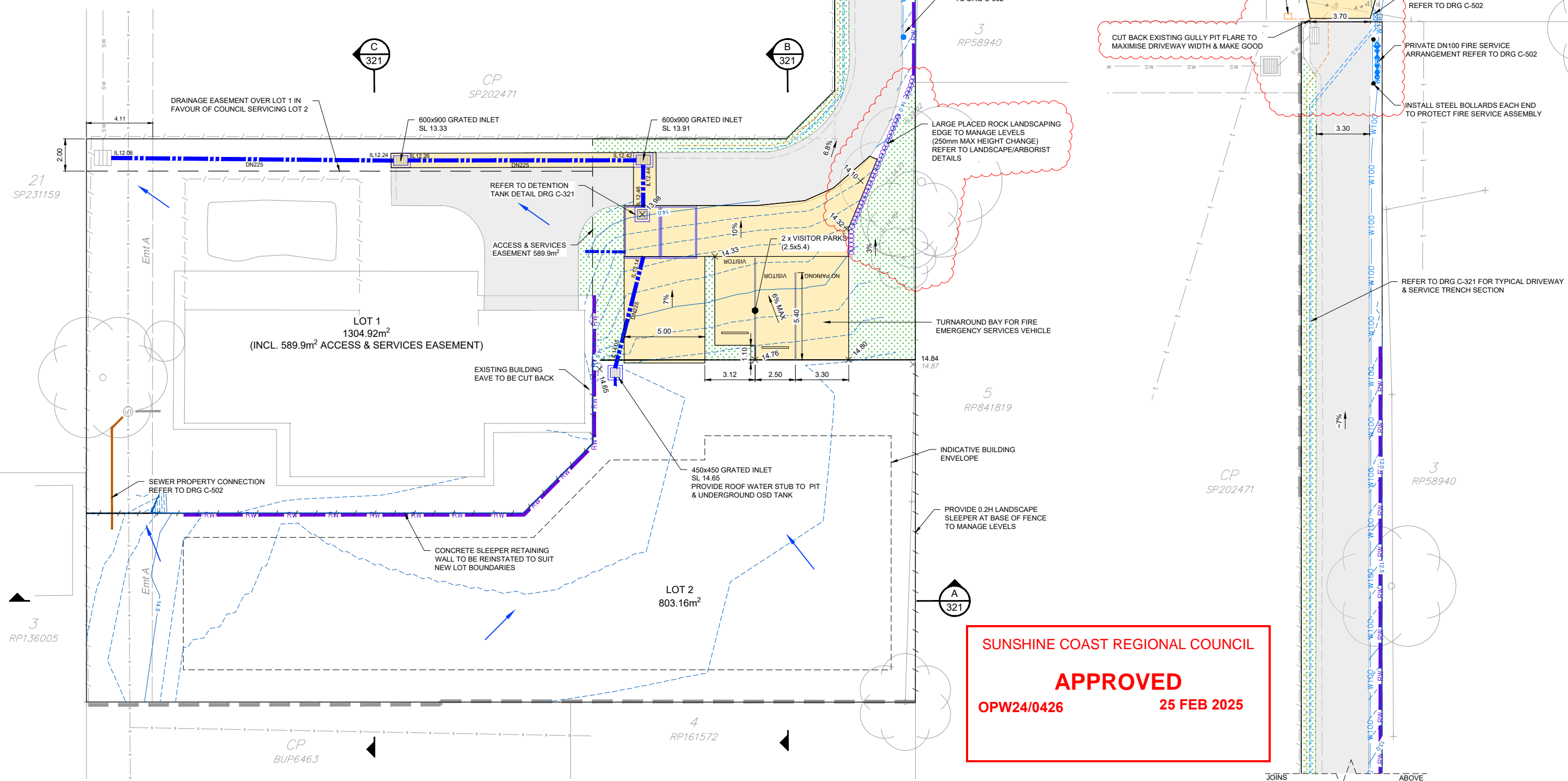


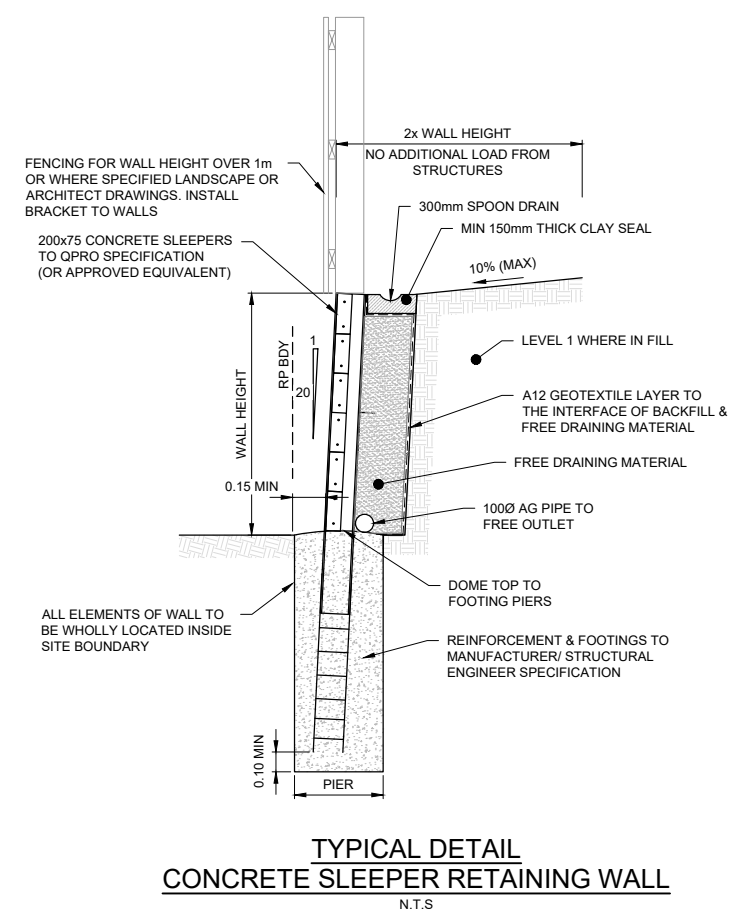
SUNSHINE COAST REGIONAL COUNCIL
APPROVED
OPW24/0426 25 FEB 2025

North Point N			Scale 0m 3.125 6.25 A1 1:125		Horiz. Datum LOCAL	Client AURA PROPERTY	Consultant ARCOS	Project 1 INTO 2 LOTS URBAN SUBDIVISION OPERATIONAL WORKS - CIVIL 23 STEVENS STREET YANDINA, QLD, 4561	Drawn JCL Design JCL Check AK	Drawing EARTHWORKS, EROSION & SEDIMENT PLAN	Project No. 230633	Drawing No. OPW-C-201	Rev No. B
B COUNCIL UPDATES A FOR APPROVAL			30.01.25 24.09.24	LS LS	Vert. Datum AHD				Approved LACHLAN SWANN RPEQ 2123	Approved Date 24.09.24	Signed 	Status FOR APPROVAL	Sheet Size A1
Revision Description			Date	Approved	RL Datum								



1. FOR GENERAL NOTES REFER DRG C-011.
2. INSTALL ATLAN STORMSACKS (OR APPROVED EQUIVALENT) TO ALL GRATED INLET PITS WITHIN SUBJECT SITE

[illegible]



SUNSHINE COAST REGIONAL COUNCIL

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OPW24/0426

25 FEB 2025

NOTES:
1. FOR GENERAL, EARTHWORKS & RETAINING WALL NOTES REFER DRG C-011.

[illegible]