



STORMWATER TRUNK INFRASTRUCTURE,

SEDIMENT BASINS, WETLANDS AND PONDS DESIGN ISSUED FOR REF

215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556



Project Number: 304000968

DESCRIPTION DRAWING No. 304000968-100-C1001 **COVER SHEET** 304000968-100-C1002 DRAWING LIST 304000968-100-C1003 GENERAL NOTES AND LEGEND SHEET 1 304000968-100-C1004 GENERAL NOTES AND LEGEND SHEET 2 EXISTING SITE SURVEY PLAN 304000968-100-C1011 DEMOLITION AND TREE REMOVAL PLAN 304000968-100-C1021 304000968-100-C1031 GENERAL ARRANGEMENT PLAN SEDIMENT & EROSION CONTROL PLAN SHEET 1 304000968-100-C1101 304000968-100-C1102 SEDIMENT & EROSION CONTROL PLAN SHEET 2 304000968-100-C1103 SEDIMENT & EROSION CONTROL PLAN SHEET 3 SEDIMENT & EROSION CONTROL PLAN SHEET 4 304000968-100-C1104 SEDIMENT & EROSION CONTROL DETAILS 304000968-100-C1131 CUT AND FILL PLAN 304000968-100-C1141 SITEWORKS PLAN SHEET 1 304000968-100-C1301 304000968-100-C1302 SITEWORKS PLAN SHEET 2 SITEWORKS PLAN SHEET 3 304000968-100-C1303 SITEWORKS PLAN SHEET 4 304000968-100-C1304 MOORE GULLY LONGITUDINAL SECTIONS SHEET 1 304000968-100-C1351 304000968-100-C1352 MOORE GULLY LONGITUDINAL SECTIONS SHEET 2 MOORE GULLY CROSS SECTIONS SHEET 1 304000968-100-C1401 304000968-100-C1402 MOORE GULLY CROSS SECTIONS SHEET 2 304000968-100-C1403 MOORE GULLY CROSS SECTIONS SHEET 3 304000968-100-C1404 MOORE GULLY CROSS SECTIONS SHEET 4 304000968-100-C1405 MOORE GULLY CROSS SECTIONS SHEET 5 304000968-100-C1406 MOORE GULLY CROSS SECTIONS SHEET 6 304000968-100-C1407 MOORE GULLY CROSS SECTIONS SHEET 7 304000968-100-C1408 MOORE GULLY CROSS SECTIONS SHEET 8 304000968-100-C1409 MOORE GULLY CROSS SECTIONS SHEET 9 304000968-100-C1410 MOORE GULLY CROSS SECTIONS SHEET 10 304000968-100-C1411 MOORE GULLY CROSS SECTIONS SHEET 11 304000968-100-C1412 MOORE GULLY CROSS SECTIONS SHEET 12 304000968-100-C1413 MOORE GULLY CROSS SECTIONS SHEET 13 304000968-100-C1414 MOORE GULLY CROSS SECTIONS SHEET 14 304000968-100-C1415 MOORE GULLY CROSS SECTIONS SHEET 15 304000968-100-C1416 MOORE GULLY CROSS SECTIONS SHEET 16 304000968-100-C1901 SITE SECTION SETOUT PLAN SHEET 1 SITE SECTION SETOUT PLAN SHEET 2 304000968-100-C1902 SITE SECTION SETOUT PLAN SHEET 3 304000968-100-C1903 SITE SECTIONS SHEET 1 304000968-100-C1912 SITE SECTIONS SHEET 2 304000968-100-C1913 304000968-100-C1914 SITE SECTIONS SHEET 3 SITE SECTIONS SHEET 4 304000968-100-C1915 SITE SECTIONS SHEET 5 304000968-100-C1916 SITE SECTIONS SHEET 6 304000968-100-C1917 304000968-100-C1918 SITE SECTIONS SHEET 7 SITE SECTIONS SHEET 8 304000968-100-C1919 SITE SECTIONS SHEET 9 304000968-100-C1920 SITE SECTIONS SHEET 10 304000968-100-C1921 304000968-100-C1922 SITE SECTIONS SHEET 11 304000968-100-C1923 SITE SECTIONS SHEET 12 304000968-100-C1924 SITE SECTIONS SHEET 13 304000968-100-C1925 SITE SECTIONS SHEET 14 304000968-100-C1926 SITE SECTIONS SHEET 15 304000968-100-C1927 SITE SECTIONS SHEET 16 SITE SECTIONS SHEET 17 304000968-100-C1928 SITE SECTIONS SHEET 18 304000968-100-C1929 SITE SECTIONS SHEET 19 304000968-100-C1930 304000968-100-C2201 TYPICAL DETAILS SHEET 1 TYPICAL DETAILS SHEET 2 304000968-100-C2202 304000968-100-C2203 TYPICAL DETAILS SHEET 3 304000968-100-C2204 TYPICAL DETAILS SHEET 4 304000968-100-C2205 TYPICAL DETAILS SHEET 5 304000968-100-C2206 TYPICAL STORMWATER CONNECTION DETAILS SPILLWAY DETAIL 304000968-100-C2207 304000968-100-C2208 CHANNEL TYPICAL CROSS SECTIONS

SCHEDULE OF DRAWINGS

Notes PL 2024.11.21
PL 2024.02.02
RO 2023.12.20
PL 2023.09.29 4 ISSUED FOR REF 3 ISSUED FOR REF - 50% DESIGN 2 ISSUED FOR REF - 50% DESIGN 1 ISSUED FOR 50% DESIGN Issued/Revision By Appd YYYY.MM.DD

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STORMWATER CATCHMENT PLAN

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Client/Project Logo

Western Parkland City

NSW GOVERNMENT

Client/Project **BRADFIELD CITY**

> STORMWATER TRUNK INFRASTRUCTURE, SEDIMENT BASINS, WETLANDS AND PONDS DESIGN

YL RO 2023.09.29 2023.09.29 BW RPEQ # YYYY.MM.DD Dwn. Dsgn. Chkd. YYYY.MM.DD

Title DRAWING LIST

215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556

Project No. Scale 304000968 N.T.S. A1 Drawing No. Revision 304000968-100-C1002

- THE CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORKS WITHIN ADJACENT LANDS WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
- ALL NEW WORKS SHALL HAVE A SMOOTH JUNCTION WITH EXISTING CONDITIONS.
- LOCATION OF SERVICES ARE APPROXIMATE ONLY AND ALL SERVICES MUST BE LOCATED IN LINE AND LEVEL BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- PRIOR TO COMMENCEMENT OF WORK A SERVICES CHECK SHALL BE CARRIED OUT WITH "BEFORE YOU DIG. AUSTRALIA".
- CONTRACTOR IS TO CLEAR SITE BY REMOVING ALL SURPLUS SOIL, RUBBISH, FENCES, OUTHOUSES, CAR BODIES, DEBRIS, ETC. ALL WASTE MATERIAL TO BE DISPOSED OF IN A LEGAL MANNER
- ALL SITE REGRADING AREAS ARE TO BE GRADED TO THE SATISFACTION OF THE ENGINEER.
- FILL MATERIAL TO BE APPROVED BY THE QUALIFIED GEOTECHNICAL ENGINEER.
- SURPLUS EXCAVATED MATERIAL TO BE PLACED WHERE DIRECTED BY THE ENGINEER OR REMOVED FROM SITE IN A LEGAL MANNER. ADHERING TO THE TRANSPORT MANAGEMENT PLAN FOR THE CONSTRUCTION OF PROJECT L1.1
- DRAINAGE LINES ON HIGH SIDE TO BE BACKFILLED WITH SHARP SAND AND HAVE 3m OF AGRICULTURAL LINE WRAPPED IN APPROVED FILTER FABRIC DISCHARGING INTO DOWNSTREAM PITS OR AS DIRECTED BY THE ENGINEER.
- ALL PITS DEEPER THAN 1.2m TO HAVE STEP IRONS, IN ACCORDANCE WITH WESTERN SYSTEMS POWER POOL (WSPP) STANDARD DRAWINGS SD-S09.
- ALL CONCRETE TO HAVE A MINIMUM STRENGTH GRADE OF N25 UNLESS NOTED OTHERWISE.
- CLEAR COVER OF REINFORCEMENT IS 65mm UNLESS NOTED OTHERWISE.
- A MINIMUM 50mm APPROVED GRANULAR BEDDING TO BE PROVIDED UNDER ALL CONCRETE UNLESS NOTED OTHERWISE.
- BEDDING OF STORMWATER PIPES TO BE MINIMUM HS3 STANDARD UNLESS NOTED OTHERWISE.
- NO TREES IN THE ENV AND ENZ ARE TO BE FELLED, LOPPED OR REMOVED WITHOUT PRIOR APPROVAL. THIS INCLUDES DAMAGE TO TREE ROOT SYSTEMS.
- ALL DISTURBED TURFED AREAS AND BATTERS TO BE TOPSOILED AND TURFED OR STABILISED WITH SPRAY GRASS AS DIRECTED BY THE ENGINEER.
- ALL DIMENSIONS ARE IN METRES (m) UNLESS NOTED OTHERWISE
- MEASUREMENTS SHALL BE TAKEN FROM THE DIMENSIONS SHOWN AND ARE NOT TO BE SCALED FROM THE DRAWINGS.
- ANY DAMAGE TO PUBLIC ROADWAYS AS A RESULT OF THE WORKS IS TO BE REPAIRED TO THE SATISFACTION OF COUNCIL'S MANAGER MAINTENANCE SERVICES.
- EXISTING SERVICES SHALL BE ADEQUATELY PROTECTED DURING CONSTRUCTION TO RELEVANT AUTHORITY'S REQUIREMENTS
- SEDIMENT AND EROSION CONTROL MEASURES TO BE IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH WESTERN SYDNEY ENGINEERING DESIGN
- CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY A SUITABLY QUALIFIED PERSON FOR APPROVAL TO SYDNEY WATER A MINIMUM OF 2 WEEKS PRIOR TO COMMENCING WORKS. ALL TRAFFIC CONTROL PLANS SHALL BE APPROVED BY SYDNEY WATER BEFORE BEING IMPLEMENTED.
- TRAFFIC CONTROL SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED TRAFFIC MANAGEMENT PLAN AND BY SUITABLY TRAINED AND ACCREDITED STAFF.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH AND SAFETY ACT REQUIREMENTS.
- CONTRACTOR SHALL ENSURE THAT ALL EXCAVATIONS AND ADJOINING STRUCTURES ARE MAINTAINED IN A SAFE AND STABLE CONDITION AT ALL TIMES AND PROVIDE SHORING OR SUPPORTS AS REQUIRED. FOR EXCAVATIONS DEEPER THAN 1.5m SEEK GEOTECHNICAL ADVICE.
- CONTRACTOR TO ASSESS MANUAL HANDLING REQUIREMENTS AND COMPLY WITH APPLICABLE STATUTORY REQUIREMENTS AND MANUFACTURERS SPECIFICATIONS AND DIRECTIONS.
- ALL WORKS TO COMPLY WITH THE REVIEW OF ENVIRONMENTAL FACTORS (REF).

ENVIRONMENTAL MANAGEMENT NOTES

GENERAL

- CONTRACTOR TO PREPARE A CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP) TO ADDRESS ALL ENVIRONMENTAL ISSUES AND MITIGATION MEASURES IDENTIFIED IN THE PROJECT REF AND STATUTORY OBLIGATIONS.
- CONTRACTOR TO INDUCT ALL STAFF AND SUB-CONTRACTORS IN RELATION TO ENVIRONMENTAL MANAGEMENT OBLIGATIONS AND ISSUES

CONTAMINATED SOIL MANAGEMENT

 ANY CONTAMINATED SOIL AND/OR ASBESTOS WASTE MUST BE REMOVED FROM SITE AND DISPOSED OF TO AN APPROPRIATELY LICENSED FACILITY.

REMEDIATION OF KNOWN CONTAMINATED AREAS MUST BE UNDERTAKEN PRIOR TO

- THE COMMENCEMENT OF THE PROPOSED WORKS.
- IDENTIFIED CONTAMINATION MUST BE MANAGED IN ACCORDANCE WITH THE CONTAMINATED LAND MANAGEMENT ACT 1997 AND RELEVANT GUIDELINES.
- THE VOLUME OF POTENTIALLY CONTAMINATED SOILS LIKELY TO BE DISTURBED. DURING THE WORKS MUST BE REDUCED THROUGH CAREFUL PLANNING AND DESIGN MEASURES SUCH AS AVOIDANCE OF KNOWN GROSS CONTAMINATION.
- EXCAVATIONS AND STOCKPILES MUST BE MONITORED DURING THE WORKS FOR EVIDENCE OF POTENTIAL CONTAMINATION; IF SUSPECTED CONTAMINATION IS IDENTIFIED. WORKS MUST CEASE AND APPROPRIATE SPECIALIST ADVICE OBTAINED.
- AN ASBESTOS REGISTER MUST BE PREPARED FOR THE PROPOSED ACTIVITY
- ANY ASBESTOS REMOVAL OR HANDLING MUST BE UNDERTAKEN IN ACCORDANCE WITH THE CODE OF PRACTICE FOR THE SAFE REMOVAL OF ASBESTOS (NATIONAL OCCUPATIONAL HEALTH AND SAFETY COMMISSION, 2005)
- SECURE SITE TO LIMIT POTENTIAL CONTAMINATION.

MANAGEMENT OF VISUAL IMPACTS

- ALL WORKS EQUIPMENT AND MATERIALS MUST BE CONTAINED WITHIN THE DESIGNATED BOUNDARIES OF THE WORK SITE OR WORKS COMPOUND.
- THE SPREADING OF STOCKPILES, WASTE AND VEHICLE PARKING ACCESS IS TO BE MINIMISED.
- ON COMPLETION OF THE WORKS, ALL VEHICLES, CONSTRUCTION EQUIPMENT, MATERIALS AND REFUSE RELATING TO THE WORKS MUST BE REMOVED FROM THE WORK SITE AND ANY ADJACENT AFFECTED AREAS.
- ALL WASTE GENERATED DURING THE COURSE OF THE WORKS MUST BE REUSED OR REMOVED FROM THE WORKS AREAS AS SOON AS PRACTICAL AND DISPOSED OF IN ACCORDANCE WITH ANY WASTE GENERATION GUIDELINES PRODUCED.
- LANDSCAPING WORKS TO COMMENCE AS SOON AS PRACTICAL AFTER CONSTRUCTION AND BE MAINTAINED IN ACCORDANCE WITH SYDNEY WATER STANDARD POLICIES AND PROCEDURES.
- SURROUNDING RESIDENCES AND BUSINESSES MUST BE GIVEN REASONABLE NOTICE OF THE INTENTION TO CARRY OUT WORKS.

HERITAGE MANAGEMENT

- ALL CONTRACTORS UNDERTAKING EARTHWORKS ON SITE SHOULD BE BRIEFED ON THE PROTECTION OF ABORIGINAL HERITAGE OBJECTS UNDER THE NATIONAL PARKS AND WILDLIFE ACT 1974 AND THE PENALTIES FOR DAMAGE TO THESE ITEMS.
- IN THE EVENT OF ANY UNEXPECTED FIND OF ABORIGINAL OR EUROPEAN ARCHAEOLOGICAL RELICS OR SITES, STOP WORK AND CONTACT AN ARCHAEOLOGIST FOR ASSESSMENT. IF NECESSARY, NOTIFY THE OFFICE OF ENVIRONMENT AND HERITAGE AND OBTAIN ANY NECESSARY APPROVALS TO CONTINUE WORK.

MANAGEMENT OF OIL AND CHEMICALS

- A OIL SPILL MANAGEMENT PLAN MUST BE PREPARED AS PART OF THE CEMP TO PROTECT THE RECEIVING WATERS. IT WILL OUTLINE MEASURES TO MINIMISE THE POSSIBILITY OF OIL LEAVING THE SITE IN THE EVENT OF A SPILL AND IDENTIFY SUITABLE SPILL KITS AND LOCATIONS.
- ALL STAFF MUST BE TRAINED IN SPILL RESPONSE PROCEDURE AND ALL SPILLS MUST BE CLEANED UP IMMEDIATELY
- ANY OIL HANDLING WORKS, SUCH AS OIL FILLING AND DRAINING, MUST BE CARRIED **OUT WITHIN A BUNDED AREA**
- ALL CHEMICALS, FUELS AND OILS MUST BE STORED IN SUITABLE BUNDED AREAS WITH THE CAPACITY OF THE BUND AT LEAST 120 PER CENT OF THE VOLUME OF THE • LARGEST CONTAINER STORED WITHIN THE BUNDED AREA.
- EQUIPMENT MUST NOT BE USED IF THERE ARE ANY SIGNS OF FUEL, OIL OR HYDRAULIC LEAKS. LEAKS MUST BE REPAIRED IMMEDIATELY OR THE EQUIPMENT MUST BE REMOVED FROM SITE AND REPLACED.
- ALL CHEMICALS KEPT ON SITE MUST BE RECORDED ON A REGISTER.
- NO EQUIPMENT, MACHINERY OR WORKS VEHICLES TO BE WASHED ON-SITE
- ALL STORAGE AND HANDLING OF CHEMICALS AND FUELS ON-SITE MUST BE KEPT IN ACCORDANCE WITH THE RELEVANT LEGISLATIVE AND REGULATORY REQUIREMENTS.
- USE OF CHEMICALS ON SITE TO BE MINIMISED

BIODIVERSITY MANAGEMENT

- WHEREVER POSSIBLE, CLEARING OF NATIVE VEGETATION SHOULD BE CONFINED TO THE SMALLEST AREA REQUIRED FOR THE WORKS.
- WHEREVER POSSIBLE, MATURE CANOPY TREES ALONG THE ROADS, BORDERING AND OUTSIDE THE DEVELOPMENT FOOTPRINT SHOULD BE RETAINED AND PROTECTED DURING CONSTRUCTION WORKS.
- THE CEMP MUST CLEARLY IDENTIFY ANY AREAS OF SIGNIFICANCE THAT MUST NOT BE DISTURBED.
- THE CEMP MUST CLEARLY DOCUMENT THE LOCATION AND FULL EXTENT OF ANY LOPPING, TRIMMING, CLEARING OR OTHER VEGETATION DISTURBANCE REQUIRED FOR THE WORKS.
- MATERIALS, PLANT, EQUIPMENT AND STOCKPILES MUST BE PLACED IN A MANNER THAT MINIMISES THE RISK OF DAMAGE TO SURROUNDING VEGETATION.
- WORK VEHICLE ACCESS, WHERE PRACTICAL, MUST BE RESTRICTED TO DESIGNATED WORK AREAS AND NOMINATED ACCESS TRACKS/ROADWAYS.
- IF ANY DAMAGE OCCURS TO VEGETATION OUTSIDE OF THE NOMINATED WORK AREA, COUNCIL'S ENVIRONMENTAL PLANNING OFFICERS OR REPRESENTATIVES MUST BE NOTIFIED SO THAT APPROPRIATE REMEDIATION STRATEGIES CAN BE DEVELOPED AND IMPLEMENTED.
- IF IT IS PERCEIVED THAT SIGNIFICANT IMPACTS ARE OCCURRING TO NATIVE ANIMALS IN THE VICINITY OF THE WORK AREA. WORKS MUST CEASE AND COUNCIL'S ENVIRONMENTAL OFFICERS OR REPRESENTATIVES SHALL BE CONTACTED FOR ADVICE.
- NATIVE ANIMALS FOUND ON SITE MUST BE ALLOWED TO LEAVE THE SITE WITHOUT UNDUE DURESS OR HARASSMENT.
- SHEDS AND OTHER BUILDINGS MUST BE INSPECTED FOR ROOSTING MICROBATS PRIOR TO REMOVAL.

EMISSIONS AND WASTE MANAGEMENT

- WASTE STREAMS MUST BE SORTED TO MAXIMISE THE REUSE/RECYCLING POTENTIAL AND TO MINIMISE DISPOSAL VOLUMES AND COSTS. SUITABLE ON SITE MATERIALS SUCH AS SOILS AND VEGETATION SHALL BE USED IN PREFERENCE TO IMPORTED SOILS AND MULCH.
- A SUFFICIENT NUMBER OF SUITABLE AND LABELLED RECEPTACLES FOR GENERATED WASTE, HAZARDOUS WASTE AND RECYCLABLE MATERIALS MUST BE PROVIDED FOR WASTE DISPOSAL ON SITE.
- ALL WASTES MUST BE SECURELY STORED TO ENSURE THAT ANY POLLUTANTS ARE PREVENTED FROM ESCAPING.
- ALL BINS AND CONTAINERS ARE TO BE CLEANED AS REQUIRED TO AVOID
- CONTRACTORS MUST REMOVE ALL OF THEIR WASTE FROM THE WORK SITE.
- WASTE SHALL BE DISPOSED OF TO AN APPROPRIATELY LICENSED WASTE FACILITY WITH SUPPORTING WASTE CLASSIFICATION DOCUMENTATION.
- ALL WORK AREAS AND STOCKPILES MUST BE CLOSELY MONITORED FOR DUST GENERATION.
- IN THE EVENT OF DUST GENERATION, APPROPRIATE DUST SUPPRESSION MEASURES (E.G. WATERING, COVERING EXPOSED AREAS/STOCKPILES ETC.) SHALL BE IMPLEMENTED.
- WHERE WATERING IS USED TO SUPPRESS DUST, APPROPRIATE NON-POTABLE WATER SOURCES MUST BE USED WHERE AT ALL POSSIBLE.
- WHERE WATERING IS USED TO SUPPRESS DUST IT MUST NOT BE EXCESSIVE TO CAUSE RUNOFF.
- ALL LOADS OF EXCAVATED MATERIAL, SOIL, FILL AND OTHER ERODIBLE MATTER THAT IS TRANSPORTED TO OR FROM THE WORK SITE, MUST BE KEPT COVERED AT ALL TIMES DURING TRANSPORTATION
- TRANSPORT OF EXCAVATED MATERIAL OFF SITE MUST FOLLOW THE TRANSPORT MANAGEMENT PLAN WHICH IS AFFIXED TO THE REF.
- NO MATTER OF ANY KIND IS TO BE BURNT
- WORK VEHICLES/MACHINERY MUST NOT BE LEFT RUNNING OR IDLING WHEN NOT IN
- ALL PLANT TO BE KEPT IN GOOD REPAIR TO MINIMISE NOISE EMISSIONS.
- OPERATE PLANT IN A QUIET AND EFFICIENT MANNER.
- NOISY PLANT AND EQUIPMENT MUST BE POSITIONED AND ORIENTED SO AS TO MINIMISE IMPACTS.
- FIT STATIONARY AND MOBILE EQUIPMENT WITH RESIDENTIAL TYPE SILENCERS
- ANY NOISE COMPLAINTS MUST BE ADDRESSED IMMEDIATELY IN ACCORDANCE WITH COUNCIL'S RELEVANT CODES AND POLICIES.
- SURROUNDING RESIDENCES AND BUSINESSES MUST BE GIVEN REASONABLE NOTICE OF THE INTENTION TO CARRY OUT WORKS.
- A PROCEDURE TO RECEIVE, RESPOND TO AND MONITOR COMPLAINTS ABOUT AIR QUALITY AND OTHER ENVIRONMENTAL ISSUES MUST BE IN PLACE.
- REFER TO SOIL AND WATER MANAGEMENT PLAN FOR DETAILS OF CONSTRUCTION STAGING AND CONTROL MEASURES.

SURVEY NOTES

- THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN SUPPLIED BY WESTERN PARKLAND CITY AUTHORITY (WPCA). THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. STANTEC DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.
- SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT WPCA. ORIGIN OF LEVELS: UNKNOWN.

Client/Project

ALL LEVELS ARE TO AHD. ALL CHAINAGES & DIMENSIONS ARE IN METRES U.N.O.

EARTHWORKS NOTES

- ORIGIN OF LEVELS: REFER SURVEY NOTES.
- STRIP TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
- EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS 1% DRY TO 2% WET

SUITABLE COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:

LOCATION	(AS 1289 E 5.1.1.)
EARTH EMBANKMENTS UNDER ROADS AND	98%
CARPARKS LANDSCAPED AREAS UNLESS NOTE	100% D OTHERWISE 95%

- FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX
- BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER, TO DETECT THEN REMOVE SOFT SPOTS. COMPACTED AREAS TO BE CHECKED AND APPROVED BY THE GITA (GEOTECHNICAL INSPECTION AND TESTING AUTHORITY).
- FREQUENCY OF COMPACTION TESTING SHALL BE:
 - ONE TEST PER LAYER PER 1000m²; OR ONE TEST PER 200m² DISTRIBUTED EVENLY THROUGHOUT THE FULL DEPTH AND AREA; OR
- 3 TESTS PER LOT WHERE A LOT IS A SPECIFIC MATERIAL TYPE OR DAYS FILL WHICHEVER REQUIRES MORE TESTS
- FILLING AND COMPACTION TO BE IN ACCORDANCE WITH GEOTECHNICAL
- REPORT PREPARED BY DOUGLAS PARTNER DOCUMENT NUMBERS: 222630.00.R.003.REV2 STAGE 2 CIVIL AND STORMWATER INFRASTRUCTURE
- 222630.00.R.004.REV2 SALINITY INVESTIGATION 222630.00.R.006.REV0
- ALL FILL PLACEMENT SHOULD BE UNDERTAKEN UNDER LEVEL 1 INSPECTION AND TESTING AS DESCRIBED IN AS3798-2007
- NO FILLING SHALL TAKE PLACE TO EXPOSED SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF THE SUPERVISING ENGINEER AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.
- BULK EARTHWORKS TO BE BE WITHIN (+50,-50mm) OF DESIGN LEVELS SHOWN ON THESE DRAWINGS.

STORMWATER DRAINAGE NOTES

STORMWATER DESIGN CRITERIA: ANNUAL EXCEEDANCE PROBABILITY (AEP):: 5% AEP MAJOR STORM CRITERIA 50% AEP MINOR STORM CRITERIA

- PIPES 300 DIA. AND LARGER TO BE STEEL REINFORCED CONCRETE CLASS '4' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS U.N.O.
- EQUIVALENT STRENGTH FRC PIPES MAY NOT BE USED.
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND AS/NZS 3500 3.2.
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.

CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES

GRATES AND COVERS SHALL CONFORM TO AS 3996.

SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.

• AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS. ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.

Notes 4 ISSUED FOR REF BASIN SCHEDULE ADDED 2024.02.0 2 ISSUED FOR REF - 50% DESIGN 1 ISSUED FOR 50% DESIGN Issued/Revision By Appd YYYY,MM,D

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Client/Project Logo

Western Parkland City

BRADFIELD CITY STORMWATER TRUNK INFRASTRUCTURE.

215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556

SEDIMENT BASINS, WETLANDS AND PONDS DESIGN

GENERAL NOTES AND LEGEND

Project No. Scale 304000968 N.T.S. A1 Revision Drawing No.

304000968-100-C1003

YL RO 2023.09.29 2023.09.29 BW RPEQ # YYYY.MM.DD Dwn. Dsgn. Chkd. YYYY.MM.DD

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EXISTING UNDERGROUND SERVICES NOTES

- THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE STANTEC CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
- CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.
- CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS. CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

EXISTING DAM & BASINS NOTES

- 1. FLOCCULATE WATER AS REQUIRED TO ENSURE WATER QUALITY MEETS COUNCIL REQUIREMENTS.
- 2. DEWATER THE BASIN
- 3. REMOVE VEGETATION AND TOPSOIL FROM AROUND THE BASIN AS PART OF THE STRIPPING OPERATION.
- 4. REMOVE EXISTING BASIN WALL AND STOCKPILE THE WALL MATERIAL FOR REUSE.
- 5. STRIP SILT, ORGANIC CLAY AND ANY OTHER UNSUITABLE MATERIAL AND PLACE ON STOCKPILE FOR REUSE ON SITE.
- 6. STRIP WATER AFFECTED RESIDUAL SOIL TO A STABLE, VERY STIFF BASE TO ALLOW PROOF ROLLING AND COMMENCEMENT OF FILLING OPERATION.
- CARRY OUT FILLING OPERATION AS PER SPECIFICATION.
- 8. THE BASIN SIDES SHALL BE BENCHED TO MAINTAIN A HEIGHT OF 600mm TO ALLOW THE FILL TO BECOME 'KEYED' INTO THE EXISTING BATTERS.
- 9. THE SLOPE OF ANY BURIED BATTER SHOULD NOT BE LESS THAN 1m VERTICAL TO 2m HORIZONTAL.

CONCRETE NOTES

- WORKMANSHIP AND MATERIALS: TO CONFORM WITH THE REQUIREMENTS OF A.S. 3600. FORMWORK TO BE IN ACCORDANCE WITH A.S. 3610 AND COUNCIL'S CIVIL WORKS SPECIFICATION.
- CONCRETE STRENGTH OF STORMWATER PITS AND OUTLET STRUCTURES TO BE GRADE N40, A.S. 3600 (40 MPa) THROUGHOUT UNLESS NOTED OTHERWISE.
- CONCRETE BLINDING LAYER STRENGTH TO BE GRADE 15, A.S. 3600 (15 MPA)THROUGHOUT UNLESS NOTED OTHERWISE.
- INSPECTION: CONCRETE SHALL NOT BE PLACED UNTIL THE COMPLETED FALSEWORK, FORMWORK AND REINFORCEMENT FIXING HAVE BEEN INSPECTED AND APPROVED BY PRINCIPAL'S REPRESENTATIVE.
- PLACING: ALL CONCRETE SHALL BE MECHANICALLY VIBRATED. VIBRATORS SHALL NOT BE USED TO SPREAD CONCRETE.
- EXPANSION JOINTS: JOINTS SHALL BE TOOL FINISHED UNLESS OTHERWISE SHOWN.
- CRACK CONTROL JOINTS: JOINTS SHALL BE TOOL FINISHED AT 4m INTERVALS (30mm DEEP) BETWEEN EXPANSION JOINTS U.N.O.
- STRUCTURAL JOINT BONDING: EXISTING CONCRETE IS TO BE THOROUGHLY SCABBLED AND CLEANED AT ALL INTERFACES WITH NEW WORK TO OBTAIN A SOUND SURFACE. SURFACE IS TO BE PREPARED WITH AN APPROVED WET TO DRY EXPOXY BINDER PRIOR TO PLACING NEW CONCRETE.
- CONCRETE QUALITY: ALL CEMENT TO BE TYPE SL, SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972, EXCEPT THAT THE MAXIMUM SHRINKAGE OF THE CEMENT IN THE MORTAR TEST SAMPLE IN ACCORDANCE WITH AS2350 SHALL BE LESS THAN 600 MICROSTRAIN.

ELEMENT	STRENGTH GRADE	SLUMP (mm)	MAXIMUM AGGREG. SIZE (mm)	MINIMUM CEMENT CONTENT (kg/cu.m)					
ALL	40	80	20						
U.N.O IN CO	U.N.O IN COUNCIL STANDARDS								

- PROJECT ASSESSMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.
- NO ADMIXTURES OTHER THAN LOW RANGE WRA SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
- FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC. REFER TO ARCHITECT'S DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.
- NO HOLES, CHASES, BLOCKOUTS, DUCTS OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
- THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS.
- CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED (REFER MANUFACTURERS SPECIFICATION). POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.
- REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.
- CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE THIRD OF THE SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. CONDUITS AND PIPES SHALL NOT BE PLACED WITHIN THE COVER TO REINFORCEMENT.

TELSTRA - DUTY OF CARE NOTE

- TELSTRA'S PLANS SHOW ONLY THE PRESENCE OF CABLES AND PLANT. THEY ONLY SHOW THEIR POSITION RELATIVE TO ROAD BOUNDARIES, PROPERTY FENCES ETC. AT THE TIME OF INSTALLATION AND TELSTRA DOES NOT WARRANT OR HOLD OUT THAT SUCH PLANS ARE ACCURATE THEREAFTER DUE TO CHANGES THAT MAY OCCUR OVER TIME. DO NOT ASSUME DEPTH OR ALIGNMENT OF CABLES OR PLANT AS THESE VARY SIGNIFICANTLY. THE CONTRACTOR HAS A DUTY OF CARE WHEN EXCAVATING NEAR TELSTRA CABLES AND PLANT.
- BEFORE USING MACHINE EXCAVATORS TELSTRA PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG POTHOLING TO IDENTIFY IT'S LOCATION TELSTRA WILL SEEK COMPENSATION FOR DAMAGES CAUSED TO IT'S PROPERTY AND LOSSES CAUSED TO TELSTRA AND IT'S CUSTOMERS.

BASINS SCHEDULE	
BASINS NAME	AREA (m²)
SEDIMENT BASIN A	798
SEDIMENT BASIN B	608
SEDIMENT BASIN C	667
WETLAND A	1,178
WETLAND B	990
WETLAND C	877
BIORETENTION BASIN A	2,464
BIORETENTION BASIN B	1,973
BIORETENTION BASIN C	1,891
POND A	5,615
POND B	7,217

- AREA MEASUREMENT TAKEN AT NWL (NATURAL WATER LEVEL) FOR SEDIMENT BASINS, WETLANDS AND PONDS.
- AREA MEASUREMENT TAKEN AT BIO-FILTER BASE LEVEL FOR BIO-RETENTION BASINS.

Notes PL 2024.11.21 PL 2024.02.02 RO 2023.12.20 PL 2023.09.29 4 ISSUED FOR REF 3 BASIN SCHEDULE ADDED 2 ISSUED FOR REF - 50% DESIGN 1 ISSUED FOR 50% DESIGN Issued/Revision Appd YYYY.MM.DD

Issue Status

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304000968-100-C1003-1004

Notes

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Client/Project Logo

Client/Project **BRADFIELD CITY**

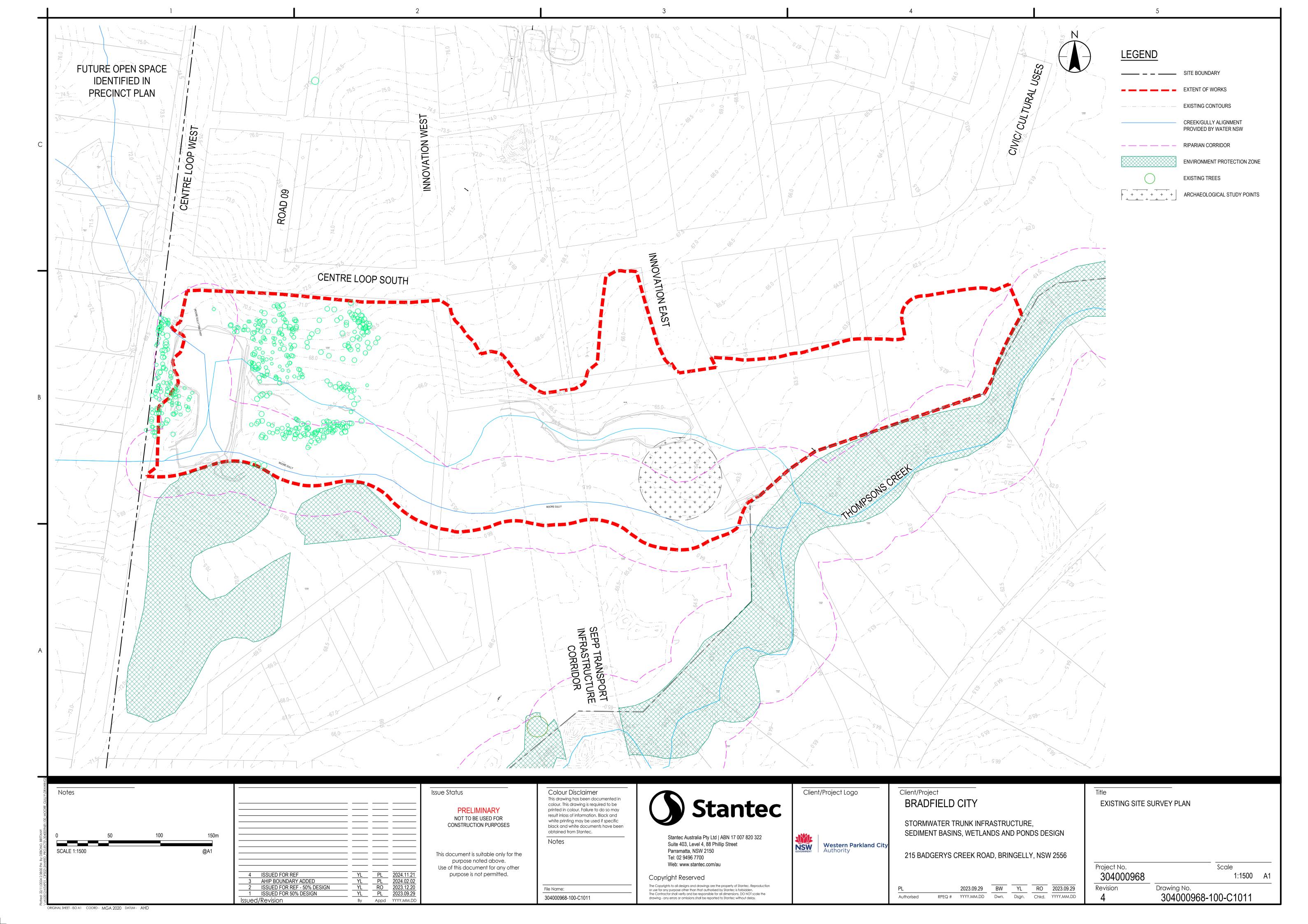
STORMWATER TRUNK INFRASTRUCTURE, SEDIMENT BASINS, WETLANDS AND PONDS DESIGN

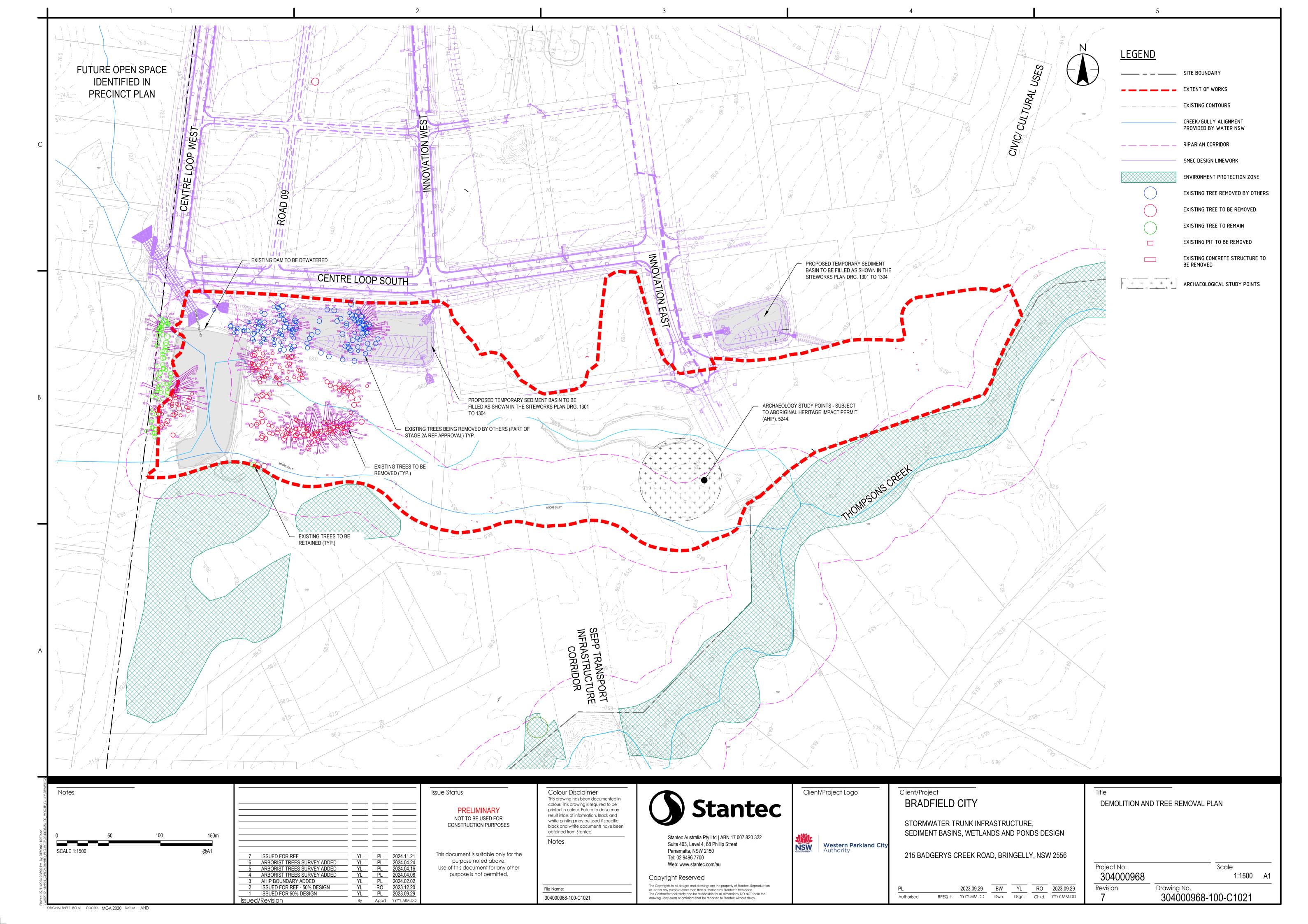
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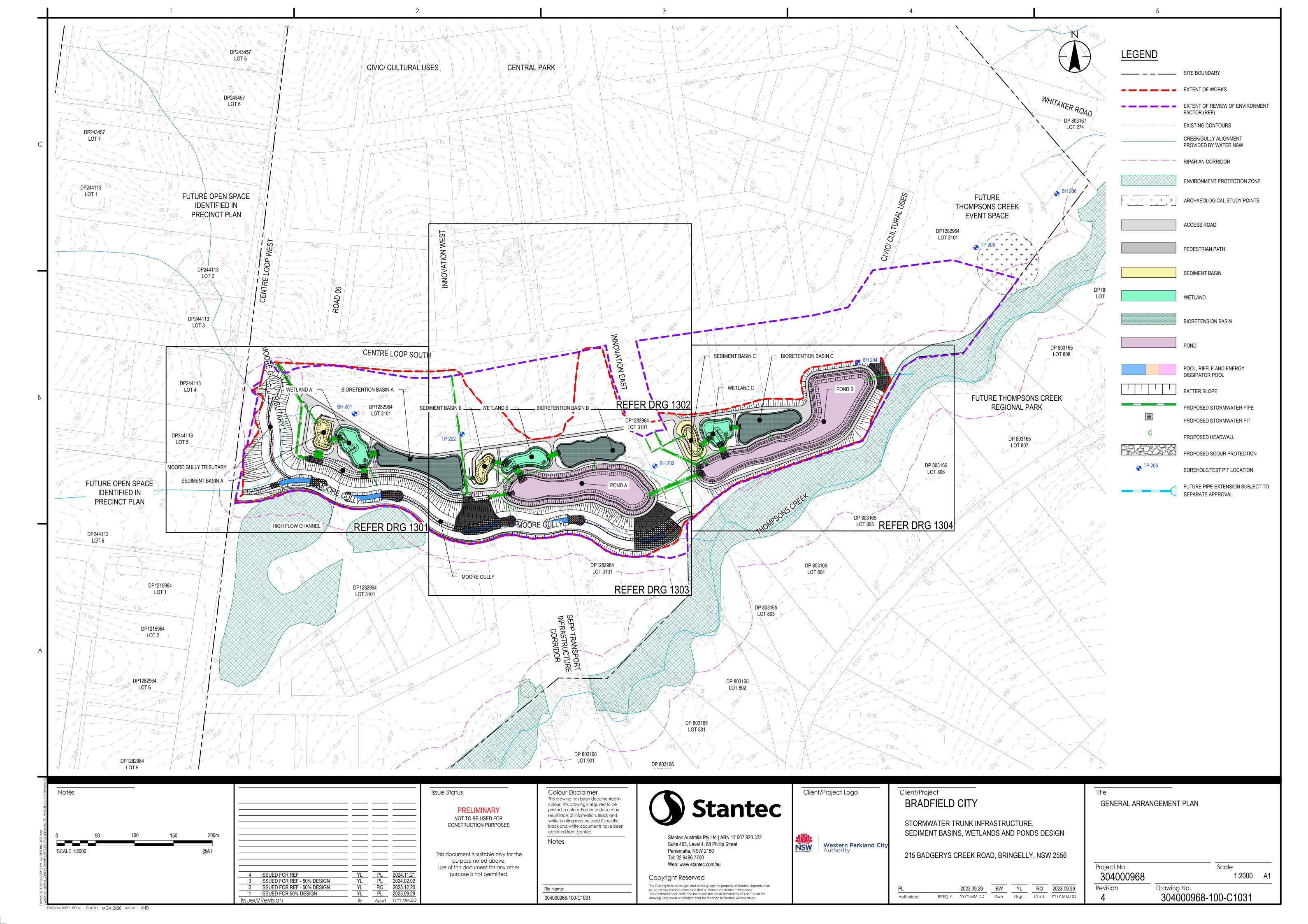
BW YL RO 2023.09.29 2023.09.29 RPEQ # YYYY.MM.DD Dwn. Dsgn. Chkd. YYYY.MM.DD

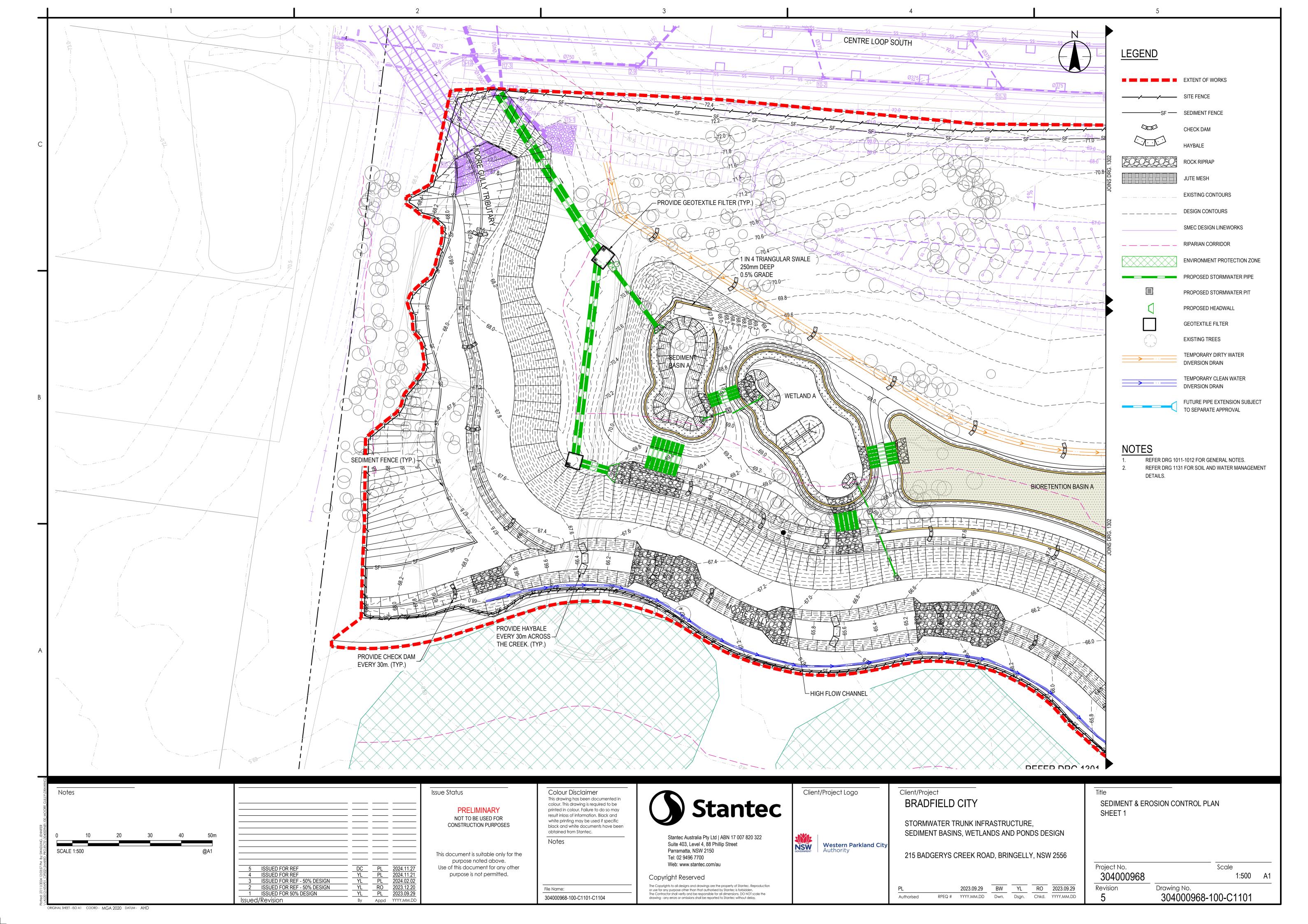
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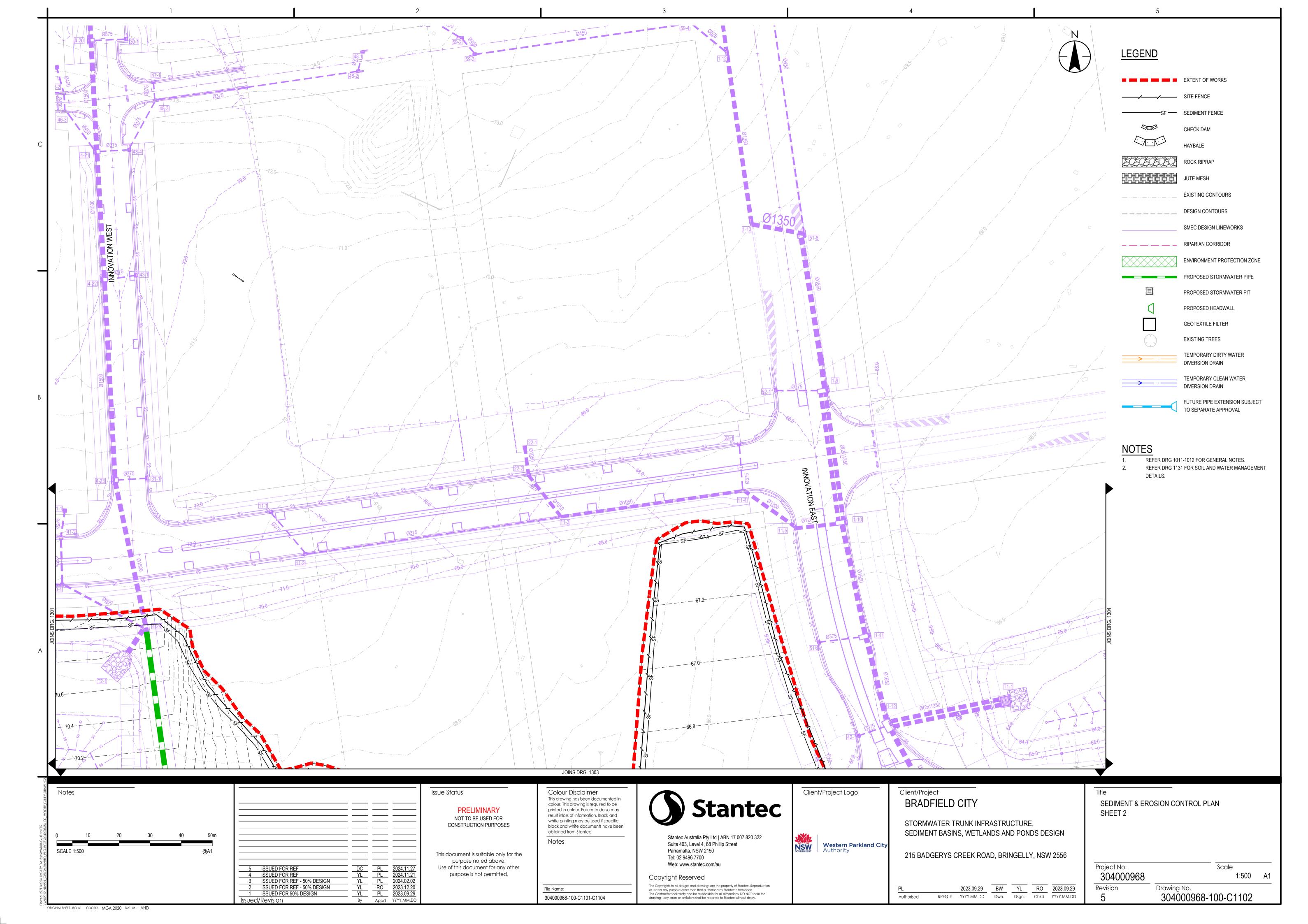
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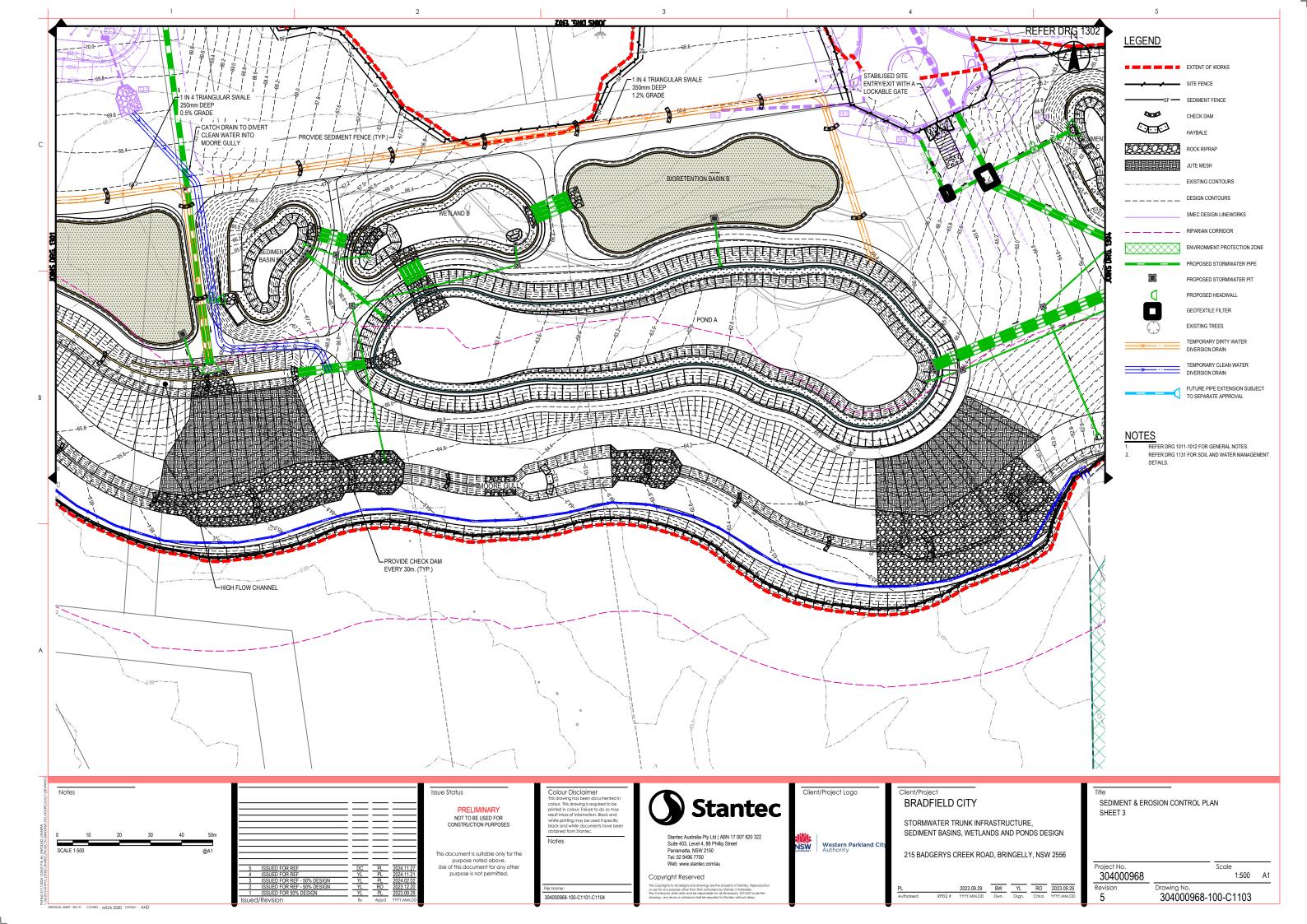


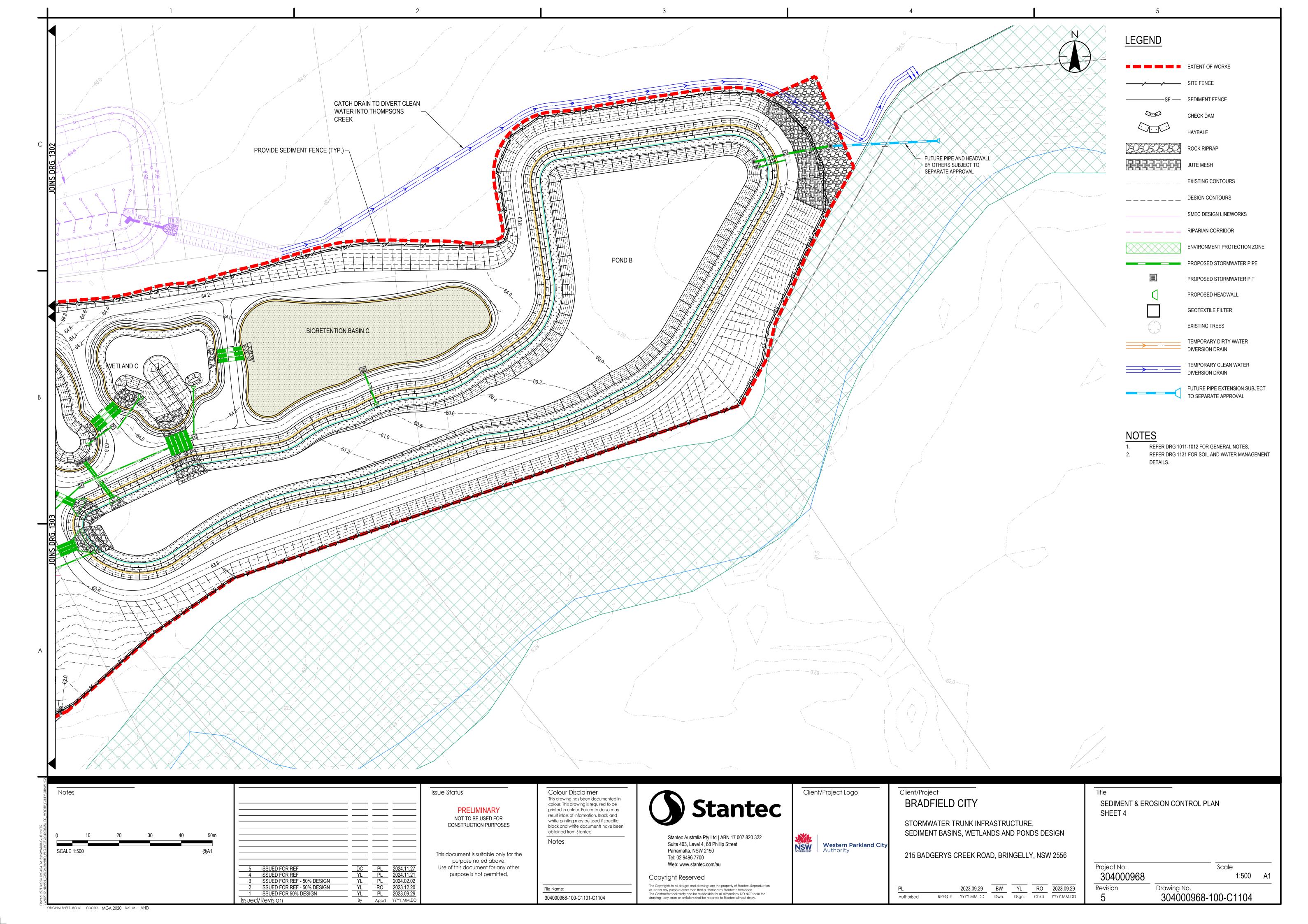


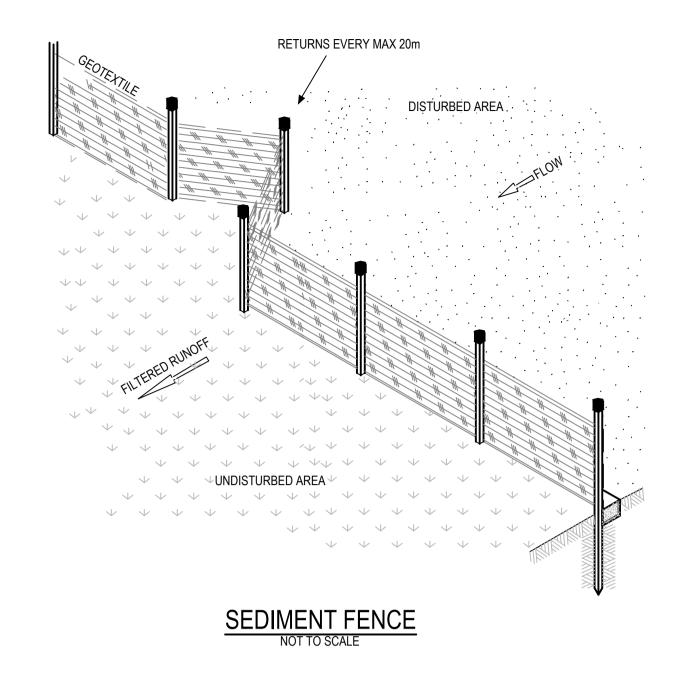


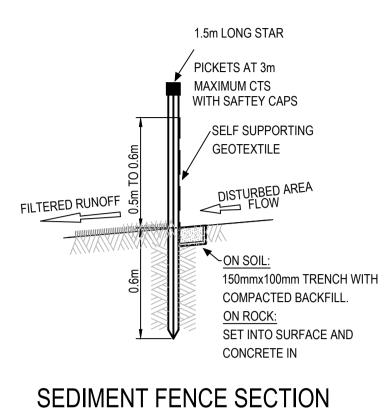


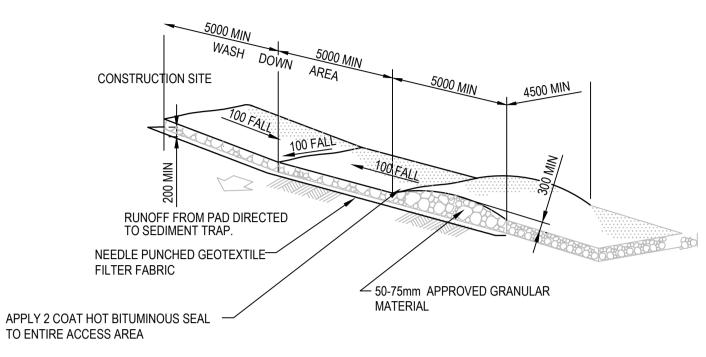




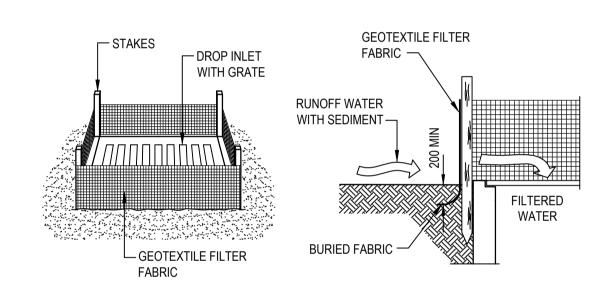




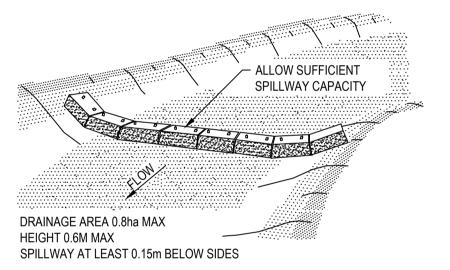




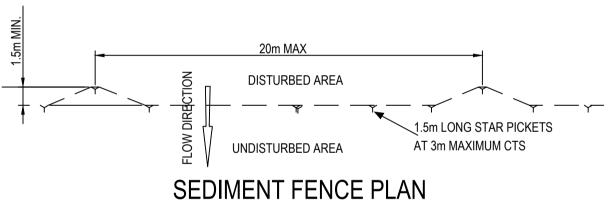
STABILISED SITE ENTRY/EXIT WITH WHEEL WASH



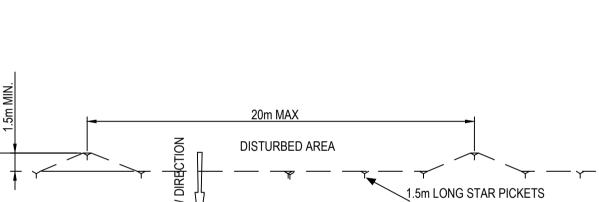
GEOTEXTILE FILTER PIT SURROUND NOT TO SCALE



CHECK DAM - STRAW BALE NOT TO SCALE



NOT TO SCALE

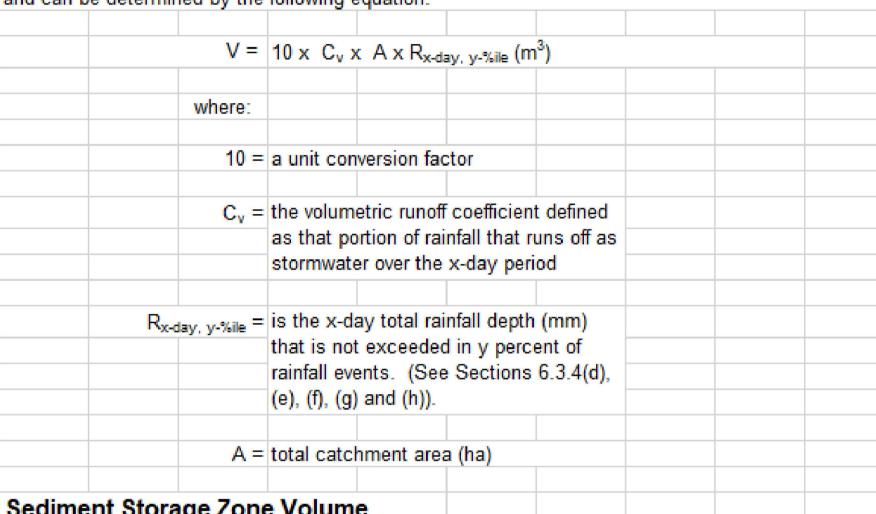




Basin volume = settling zone volume + sediment storage zone volume

Settling Zone Volume

The settling zone volume for Type F and Type D soils is calculated to provide capacity to contain all runoff expected from up to the y-percentile rainfall event. The volume of the basin's settling zone (V) can be determined as a function of the basin's surface area and depth to allow for particles to settle and can be determined by the following equation:



Sediment Storage Zone Volume

In the detailed calculation on Soil Loss Classes 1 to 4 lands, the sediment storage zone can be taken as 50 percent of the settling zone capacity. Alternately designers can design the zone to store the 2-month soil loss as calculated by the RUSLE (Section 6.3.4(i)(ii)). However, on Soil Loss Classes 5, 6 and 7 lands, the zone must contain the 2-month soil loss as calculated by the RUSLE (Section 6.3.4(i)(iii).

Place an '	"X" in the I	box below	to show th	ne sedimen	it storage :	zone desig	ın paramet	ters used h	iere:
		50% of se	ttling zone	e capacity,					
	Х	2 months	soil loss o	calculated	by RUSLE				

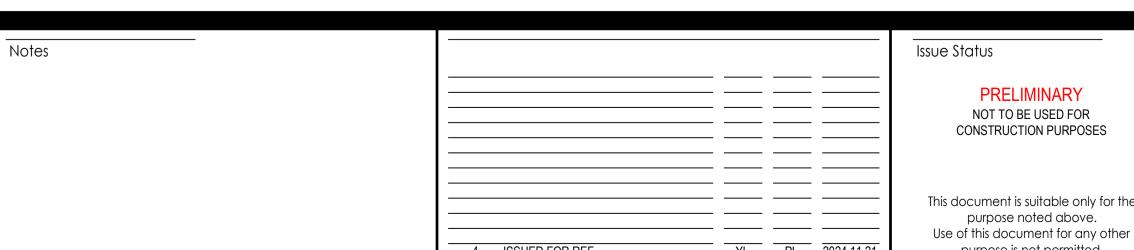
Total Rasin Volume

TOTAL D	asiii vui	uiiie						
Site	C _v	R _{x-day, y-%ile}	Total catchment area (ha)	Settling zone volume (m³)	Sediment storage volume (m³)	Total basin volume (m³)		
Pond A	0.63	27.4	6.07	1047.8034	47	1094.8034		
Pond B	0.63	27.4	4.55	785.421	47	832.421		

EARTH BANK	CHANNEL GRADE LESS THAN CHANNEL OF FOR 6m MIN
SILLAY	DIVERSION OR PERIMETER BANK
NW.	MIN STABLE DISPOSAL AREA

LEVEL SPREADER

NOT TO SCALE



3 ISSUED FOR REF - 50% DESIGN

2 ISSUED FOR REF - 50% DESIGN 1 ISSUED FOR 50% DESIGN

Issued/Revision

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Notes

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Client/Project Logo

Western Parkland City Authority

Client/Project **BRADFIELD CITY** STORMWATER TRUNK INFRASTRUCTURE,

SEDIMENT BASINS, WETLANDS AND PONDS DESIGN

215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556

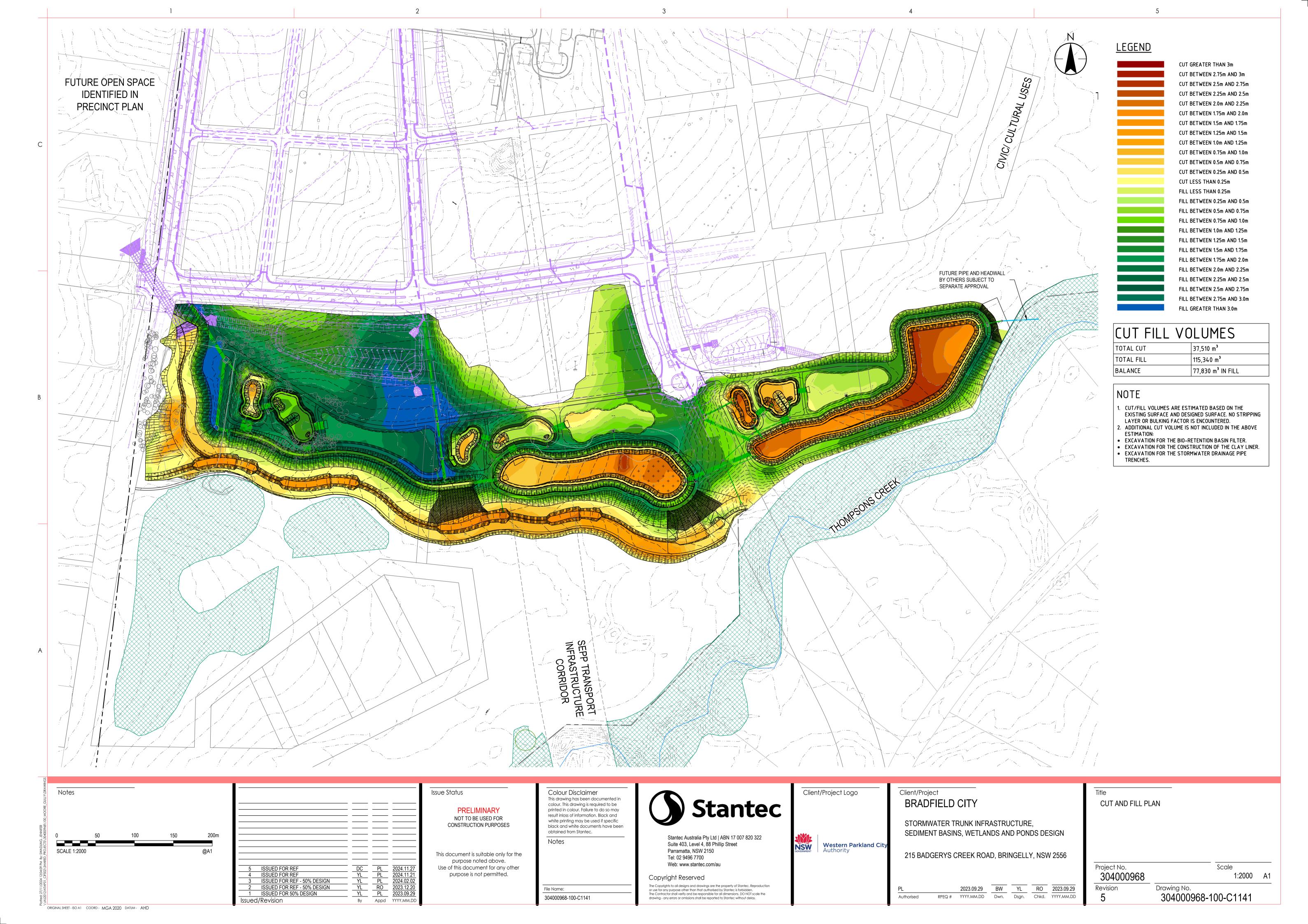
2023.09.29 BW RPEQ # YYYY.MM.DD Dwn. Dsgn. Chkd. YYYY.MM.DD

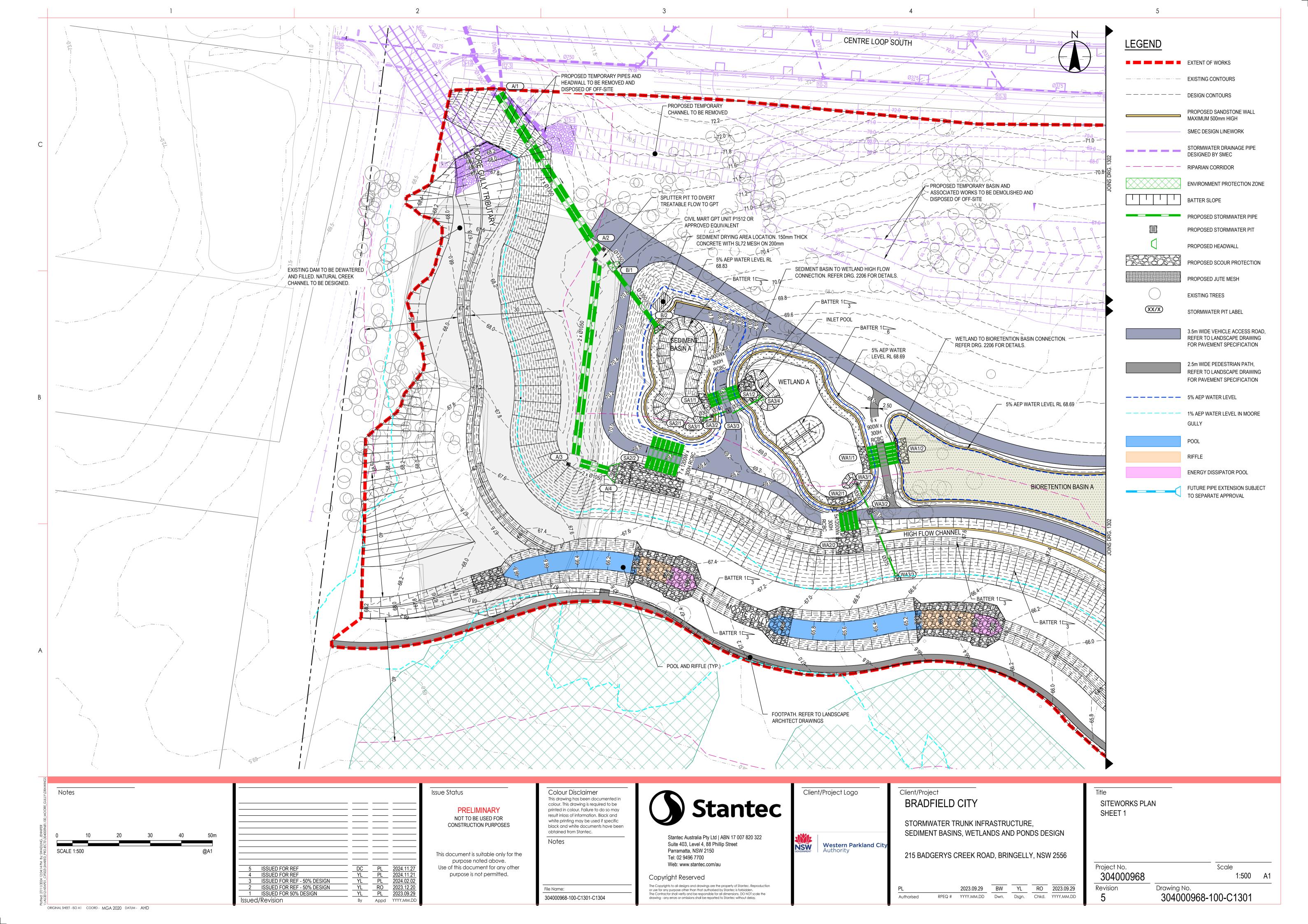
Scale Project No. 304000968 N.T.S. A1 Revision Drawing No.

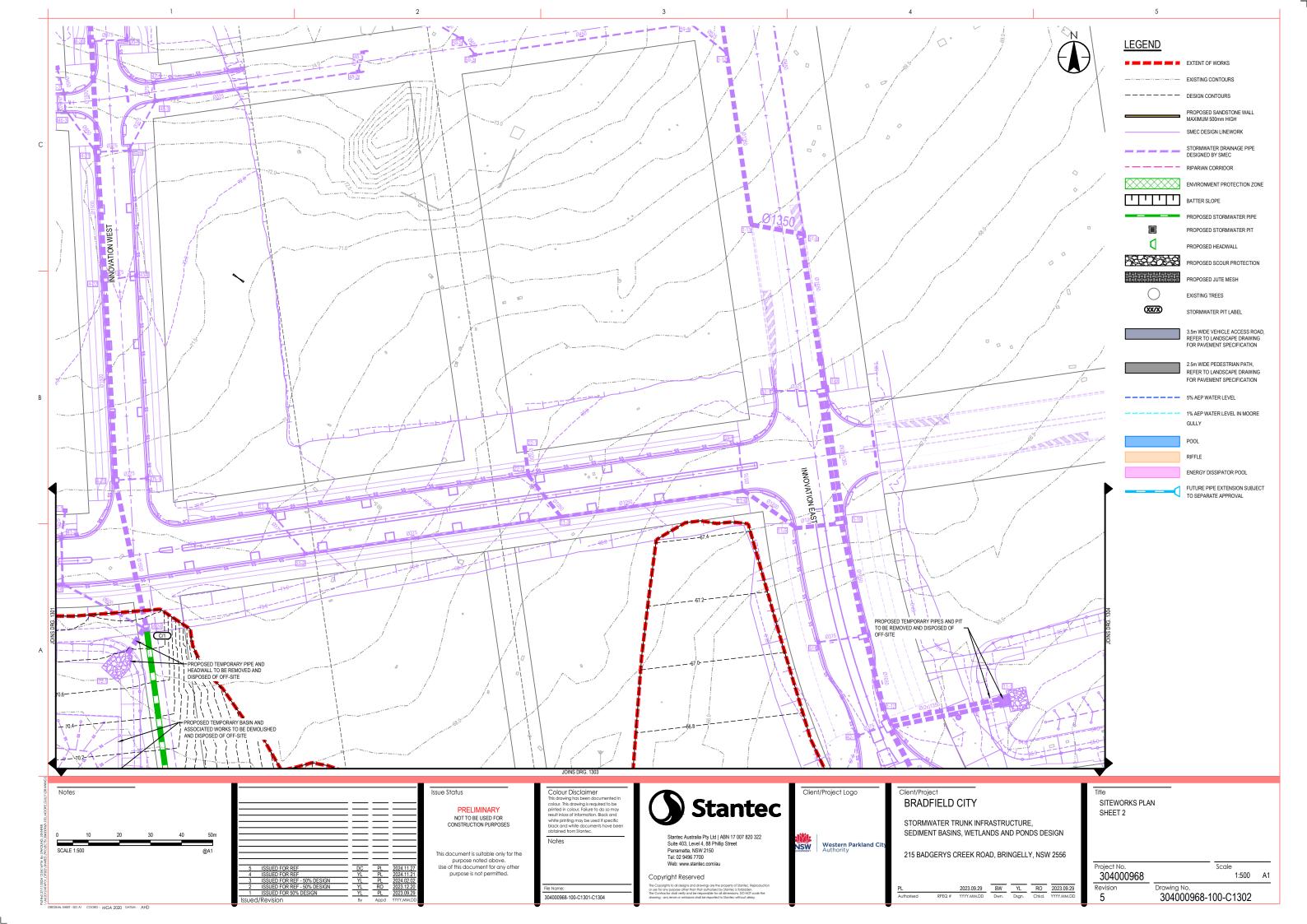
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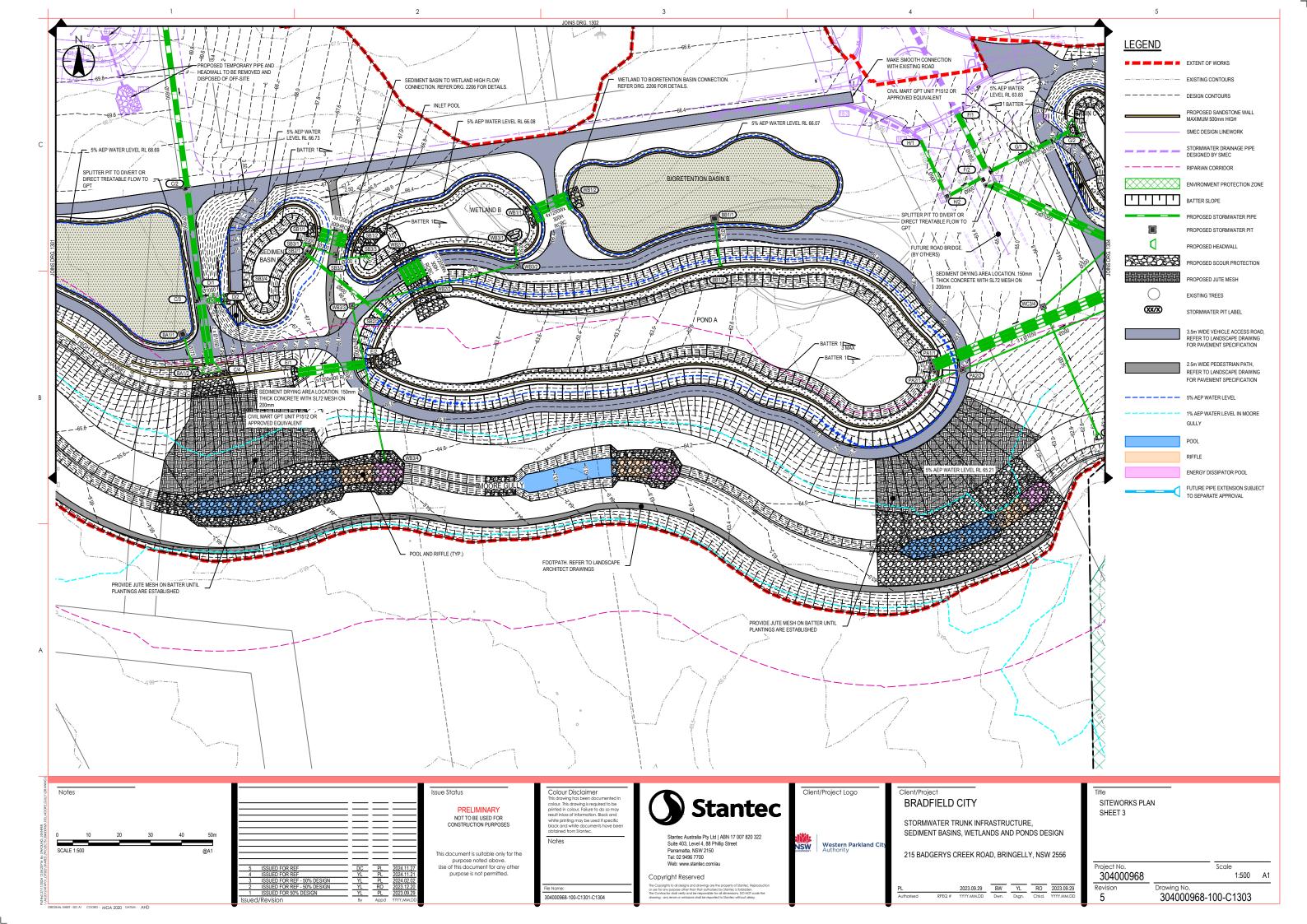
SEDIMENT & EROSION CONTROL

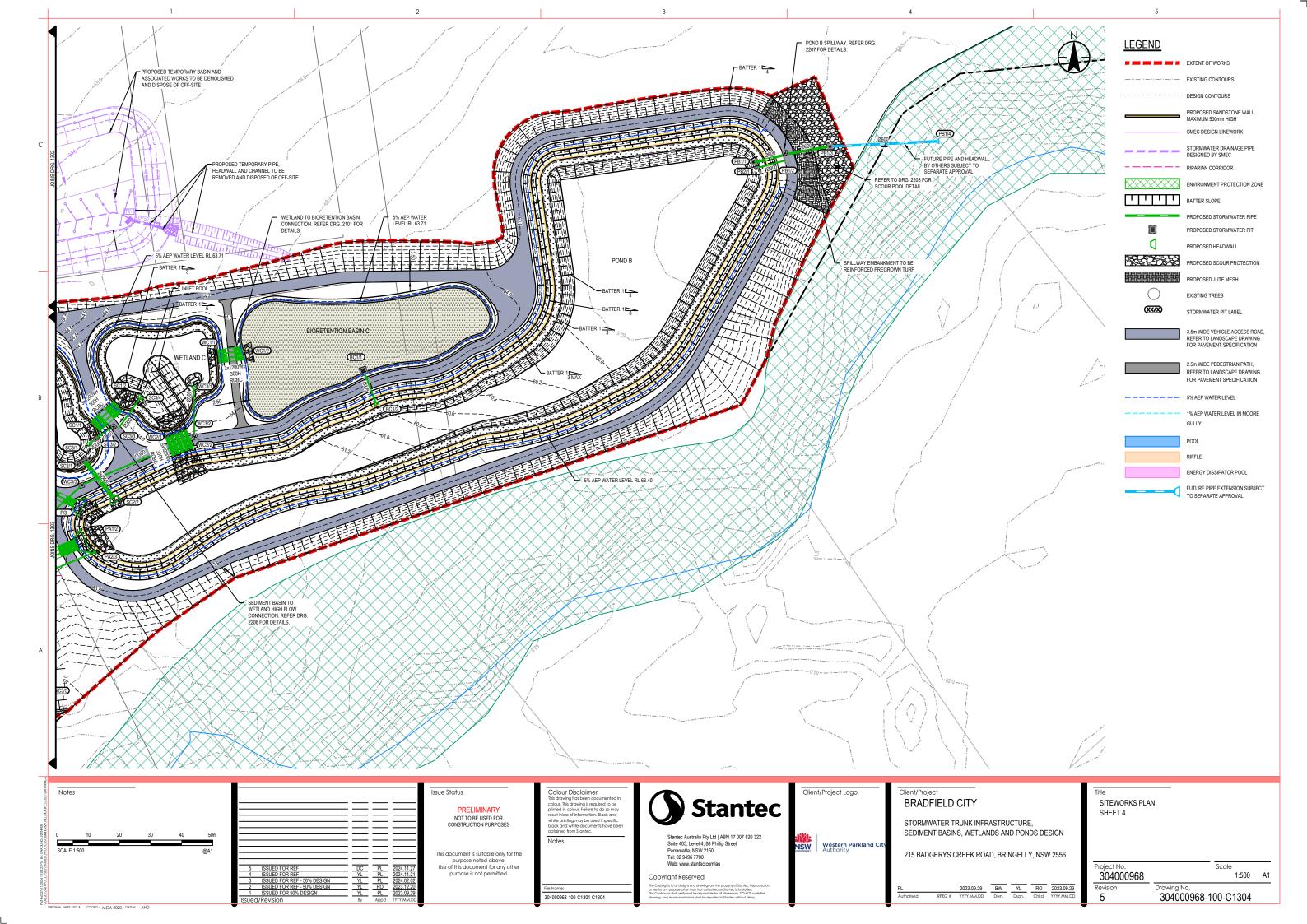
DETAILS







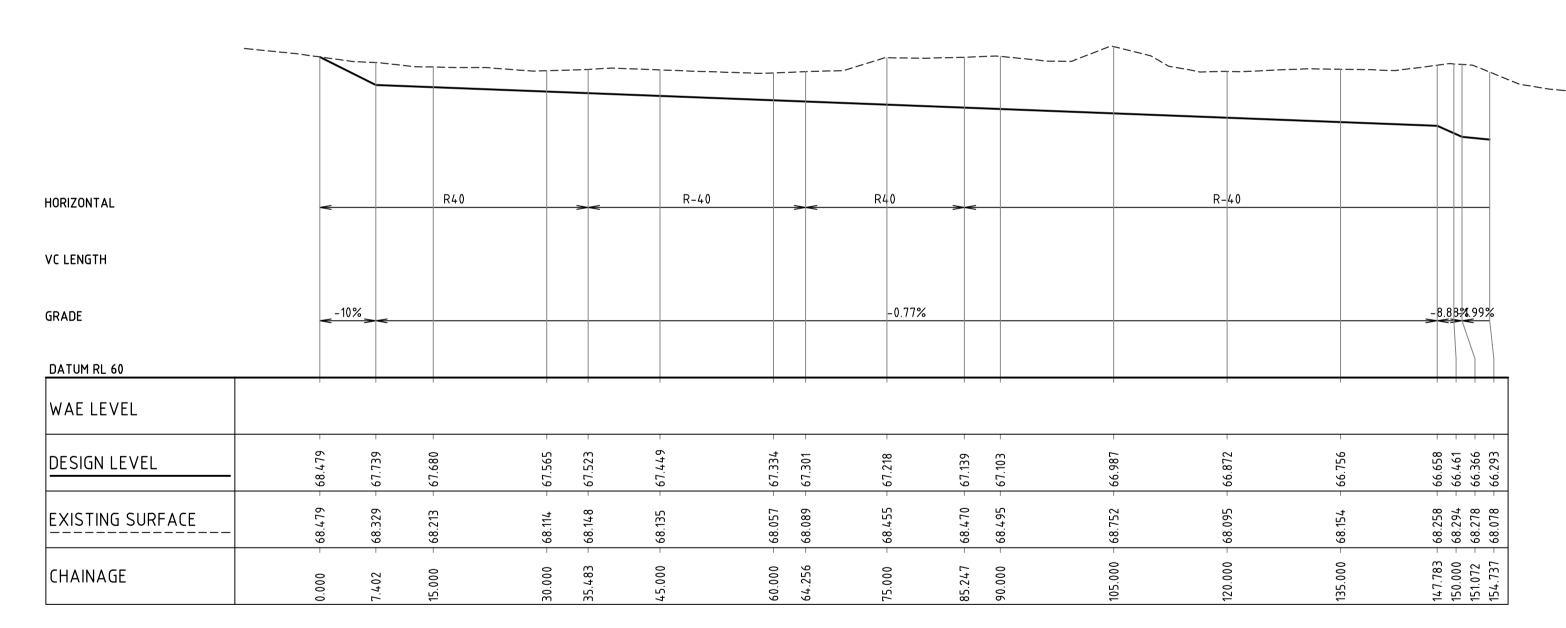




R75.2 R-44.8 R105.2 R-44.8 HORIZONTAL VC LENGTH -0.71% -4.66% 0% _18.04%_ GRADE DATUM RL 59 WAE LEVEL DESIGN LEVEL EXISTING SURFACE CHAINAGE

HIGH FLOW CHANNEL LONGITUDINAL SECTION

1:500 HORI. 1:100 VERT.



MOORE GULLY TRIBUTARY LONGITUDINAL SECTION

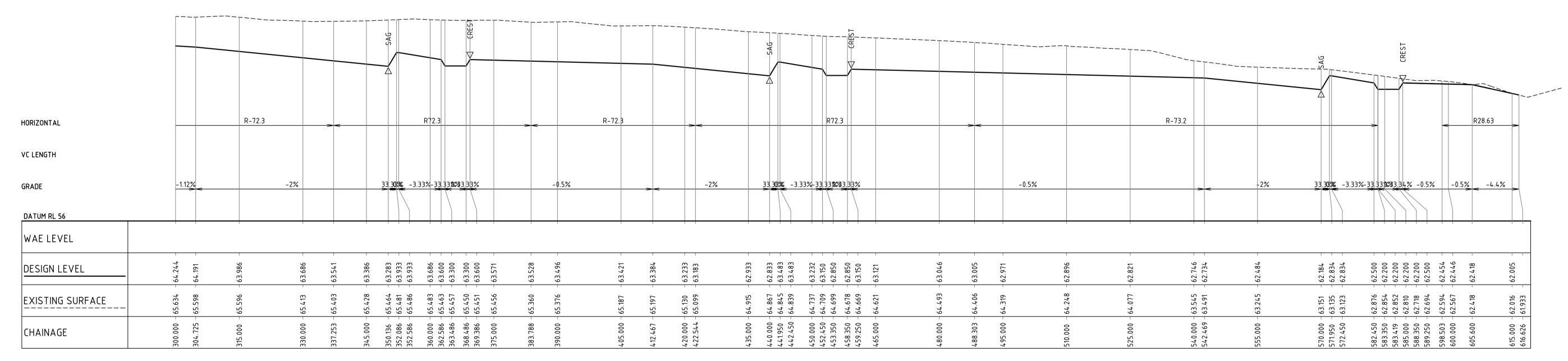
1:500 HORI. 1:100 VERT.



R-72.3 R-72.3 R72.3 R-72.3 HORIZONTAL VC LENGTH -2% -3.33% -<u>33.33</u>**%**3<u>3.33</u>% 33.30% -3.33%-33.33%%33.33%0.77% GRADE DATUM RL 58 WAE LEVEL DESIGN LEVEL EXISTING SURFACE 89.254 90.000 91.204 91.704 101.704 105.000 107.604 116.277 116.277 CHAINAGE

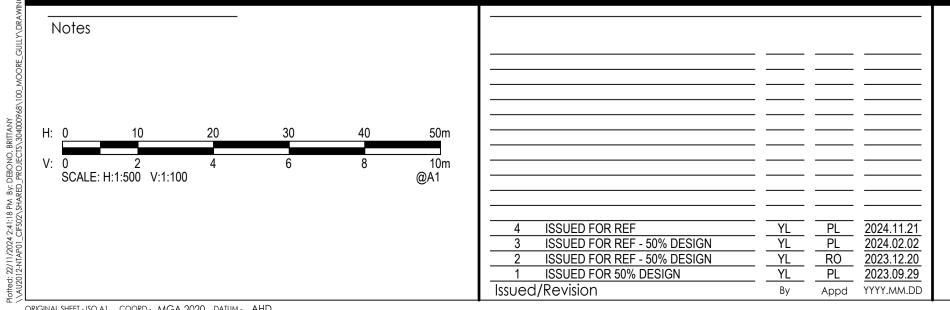
MOORE GULLY LONGITUDINAL SECTION

1:500 HORI. 1:100 VERT.



MOORE GULLY LONGITUDINAL SECTION

1:500 HORI. 1:100 VERT.



Issue Status

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Western Parkland City Authority

Client/Project **BRADFIELD CITY**

STORMWATER TRUNK INFRASTRUCTURE, SEDIMENT BASINS, WETLANDS AND PONDS DESIGN

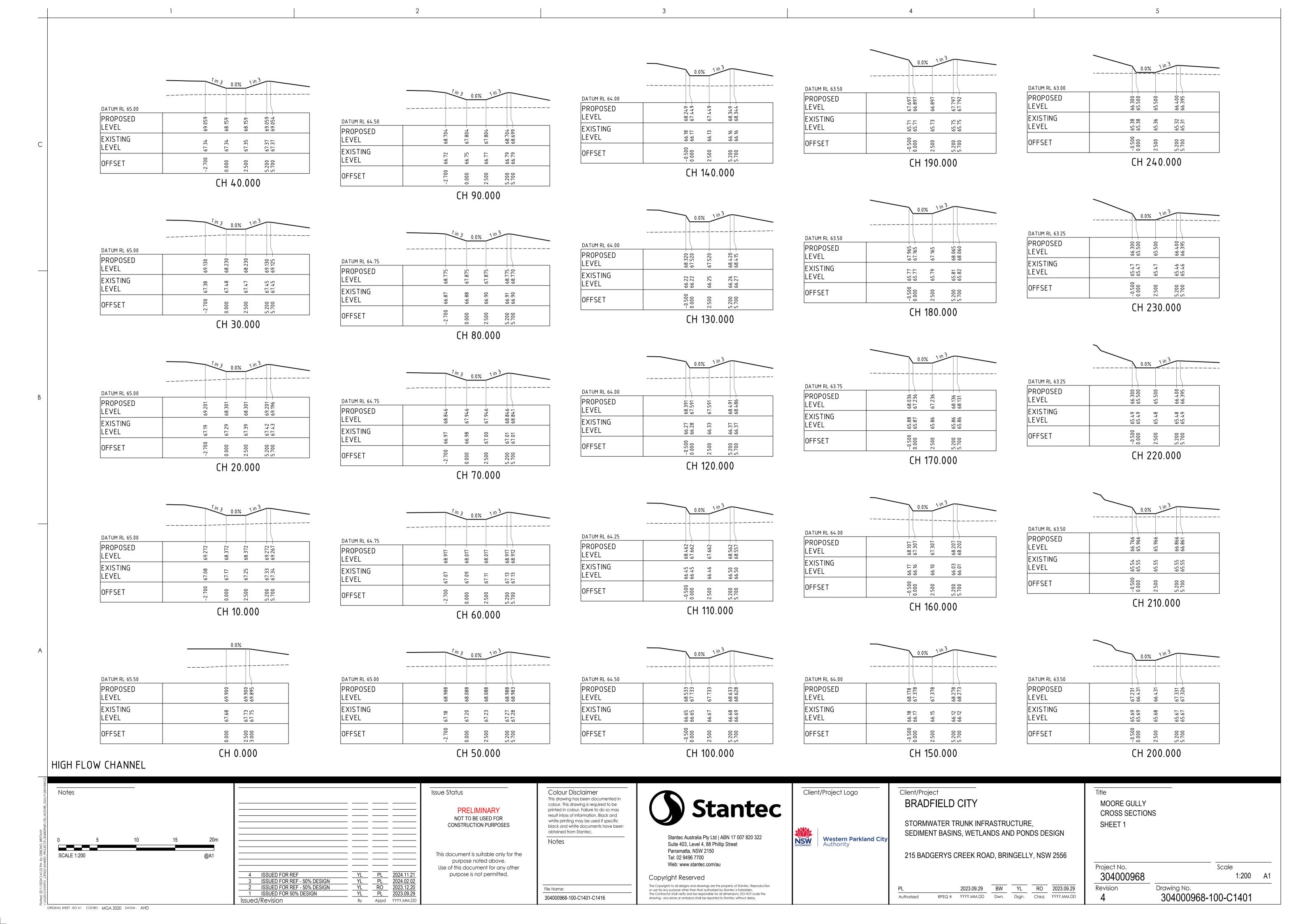
215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556

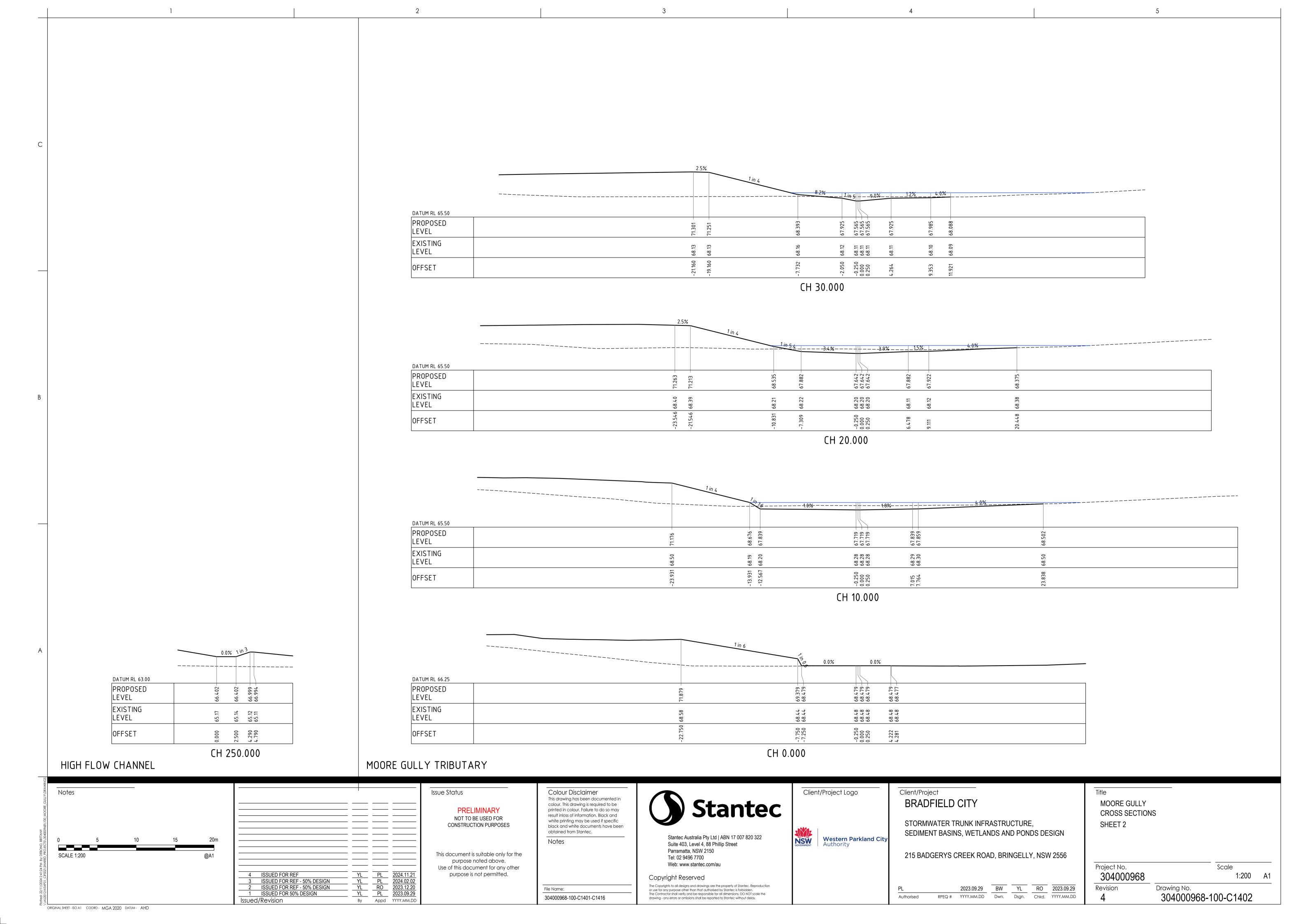
PL		2023.09.29	BW	YL	RO	2023.09.29
Authorised	RPEQ #	YYYY.MM.DD	Dwn.	Dsgn.	Chkd.	YYYY.MM.DI

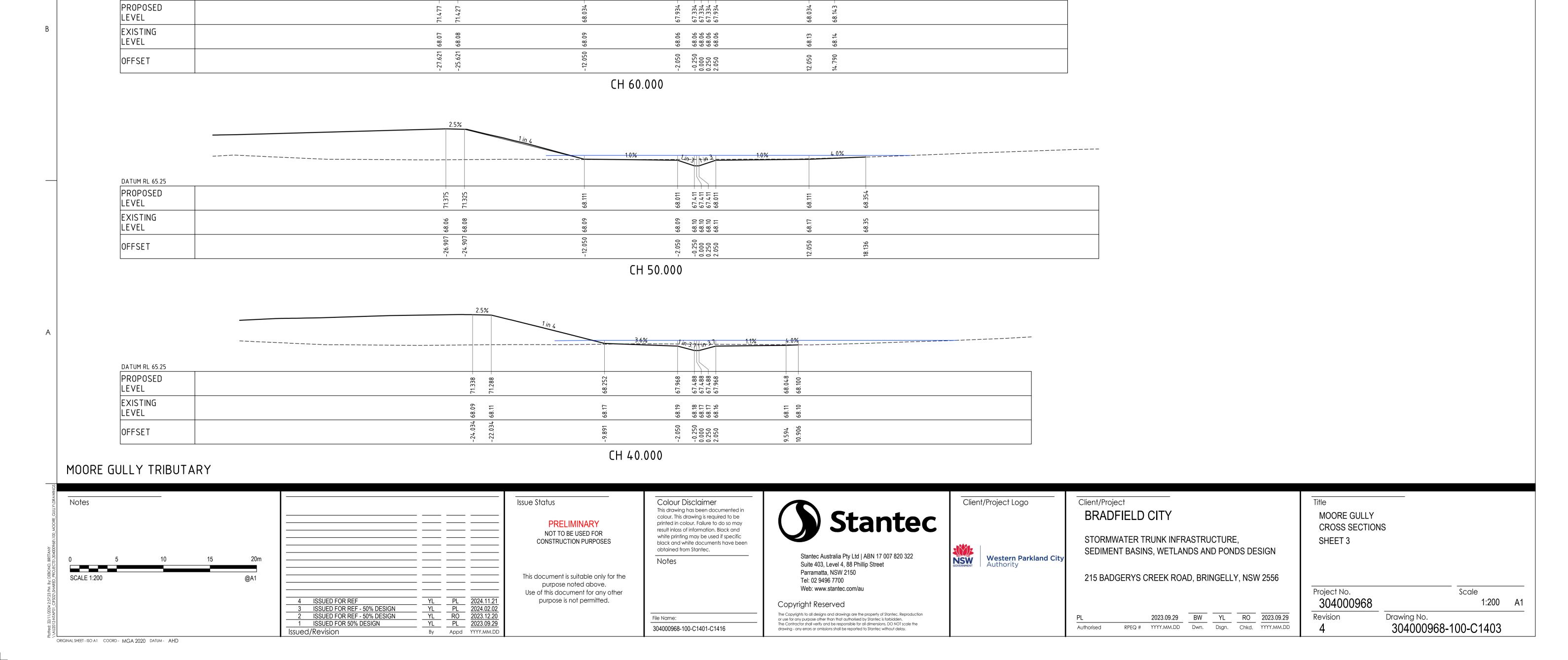
Title **MOORE GULLY** LONGITUDINAL SECTIONS

						Project No. 304000968	Scale AS SHOWN A1
	2023.09.29	BW	YL	RO	2023.09.29	Revision	Drawing No.
#	YYYY.MM.DD	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD	4	304000968-100-C1352

SHEET 2







67.857 – 67.257 – 67.257 – 67.857 –

68.16 68.16 68.16 68.17 68.17

-2.050 -0.250 0.000 0.250 2.050

CH 70.000

PROPOSED

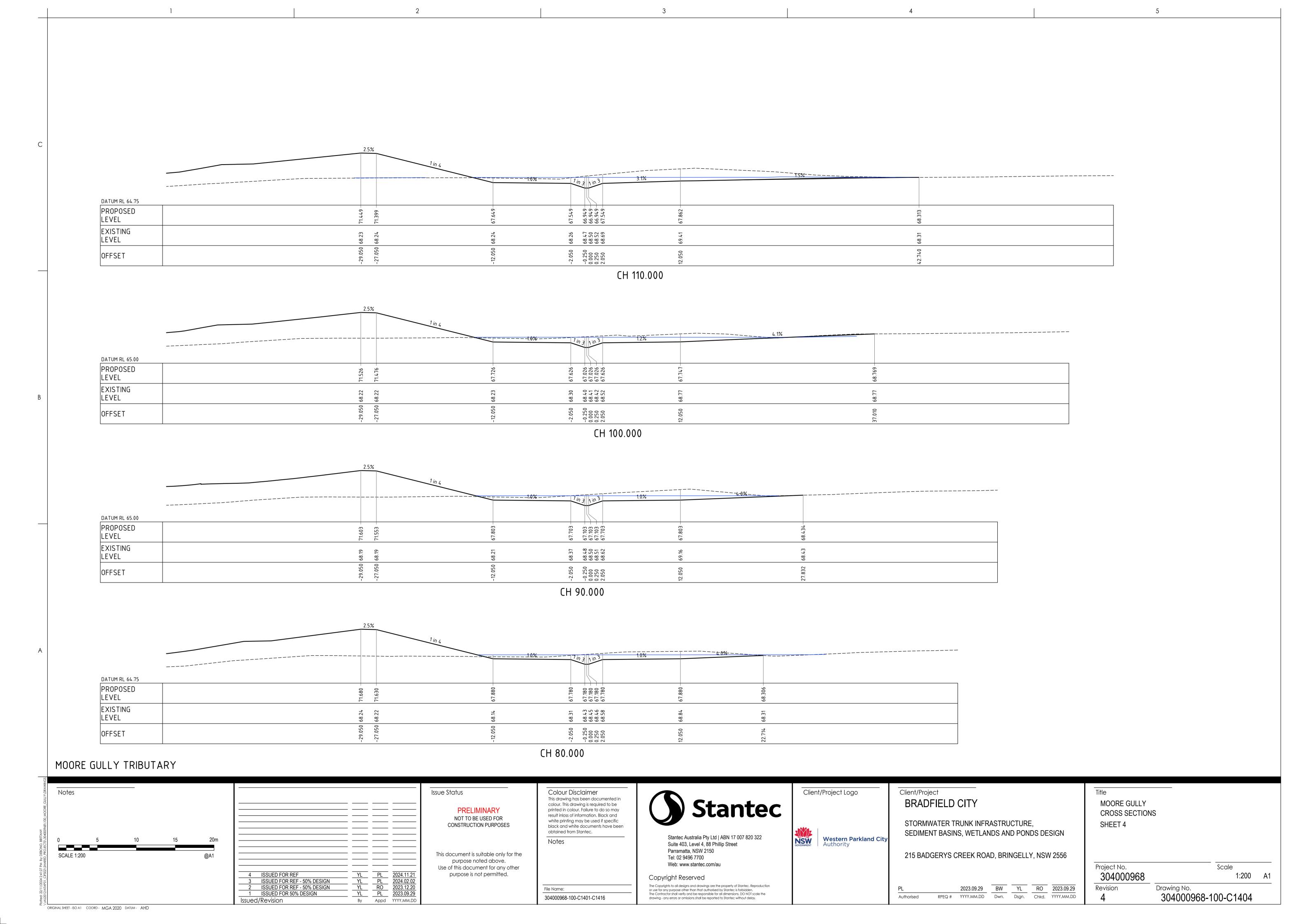
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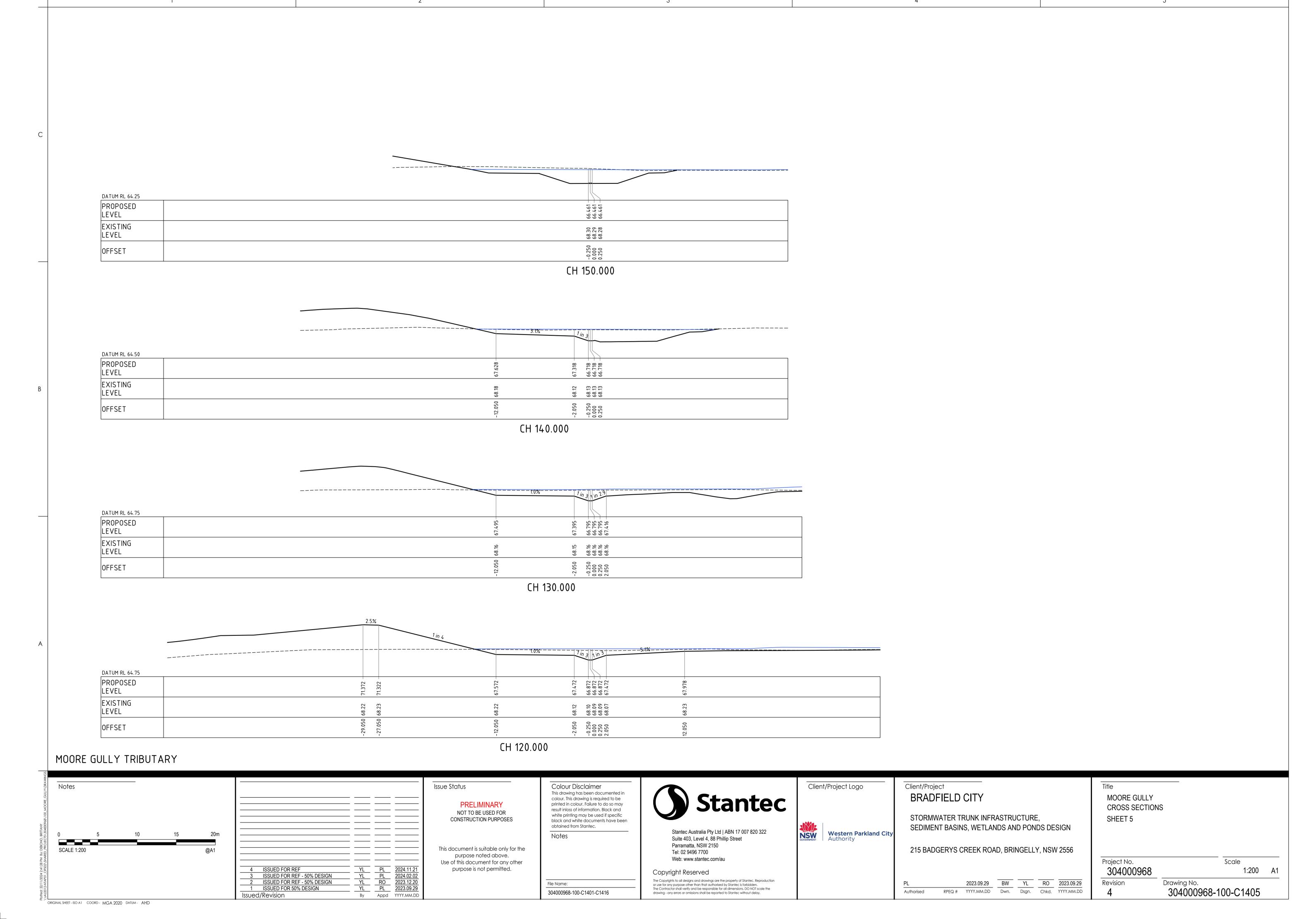
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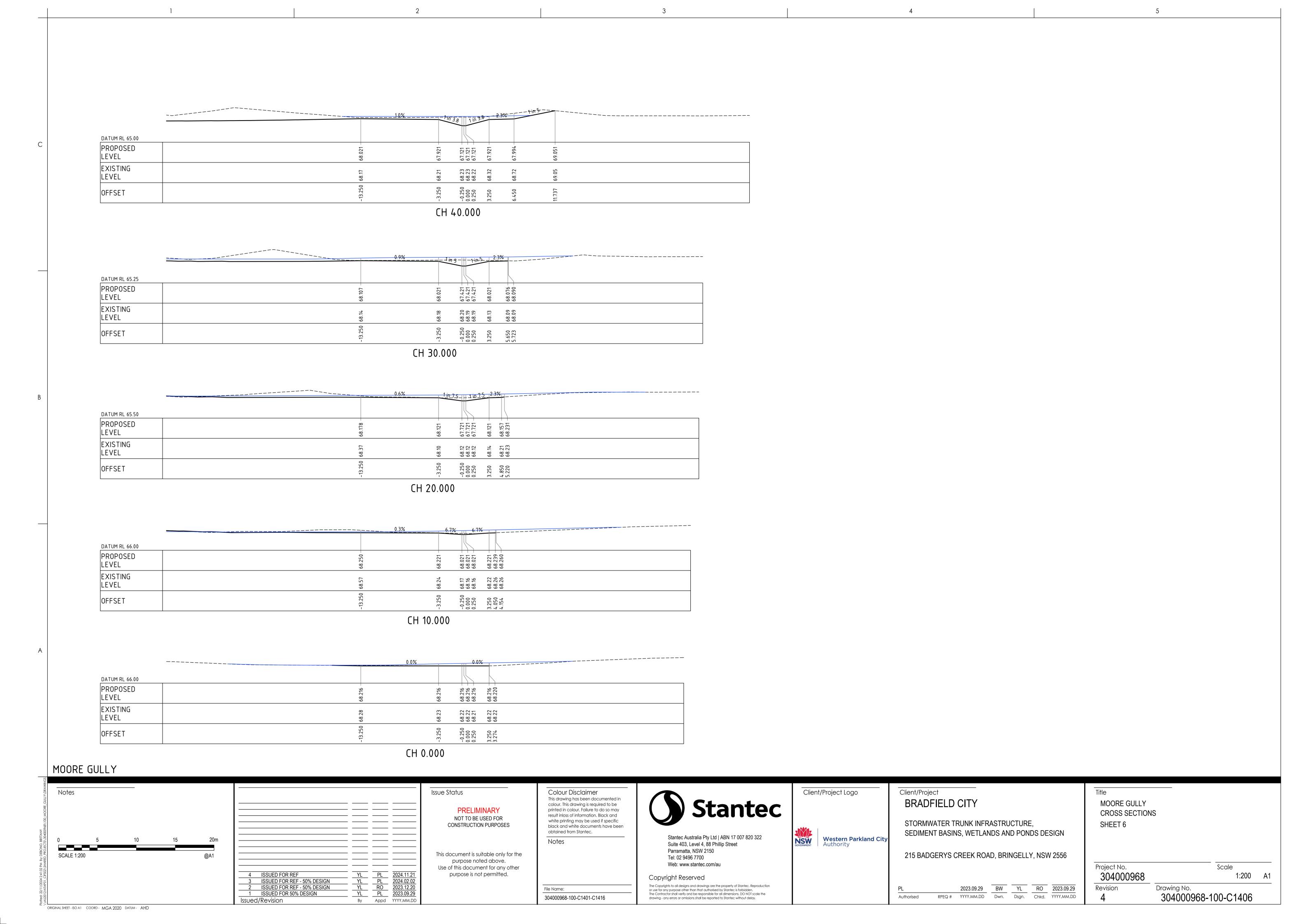
OFFSET

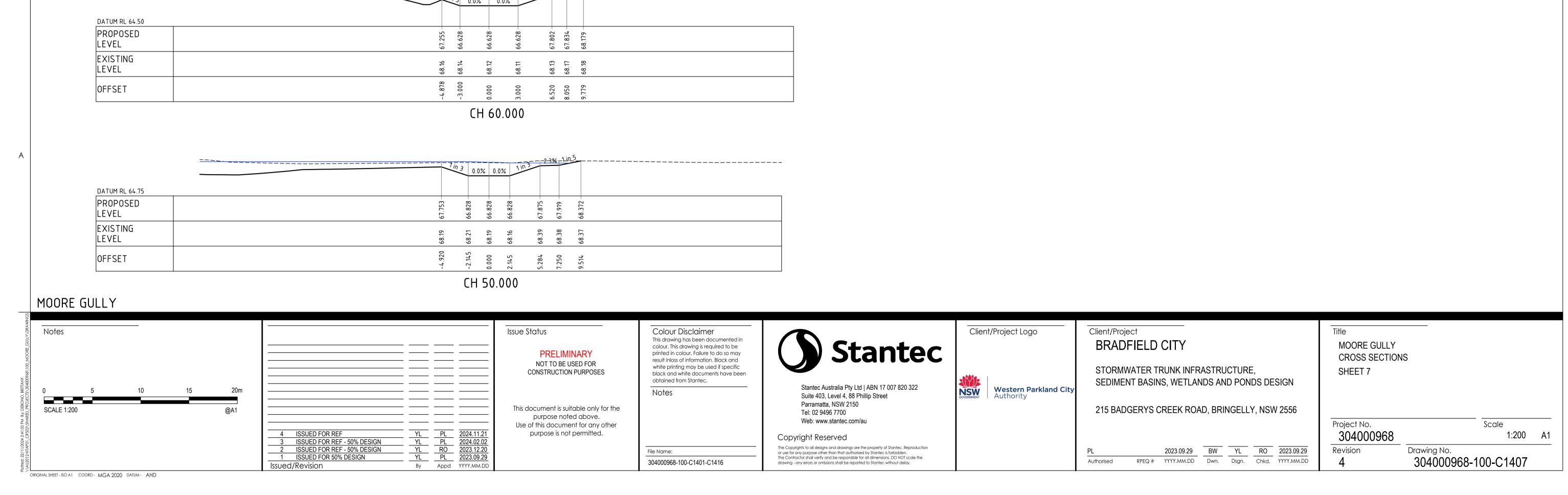
DATUM RL 65.25

EXISTING









1 in 3 0.0% 0.0%

2.1% 1 in ⁵ ______

CH 70.000

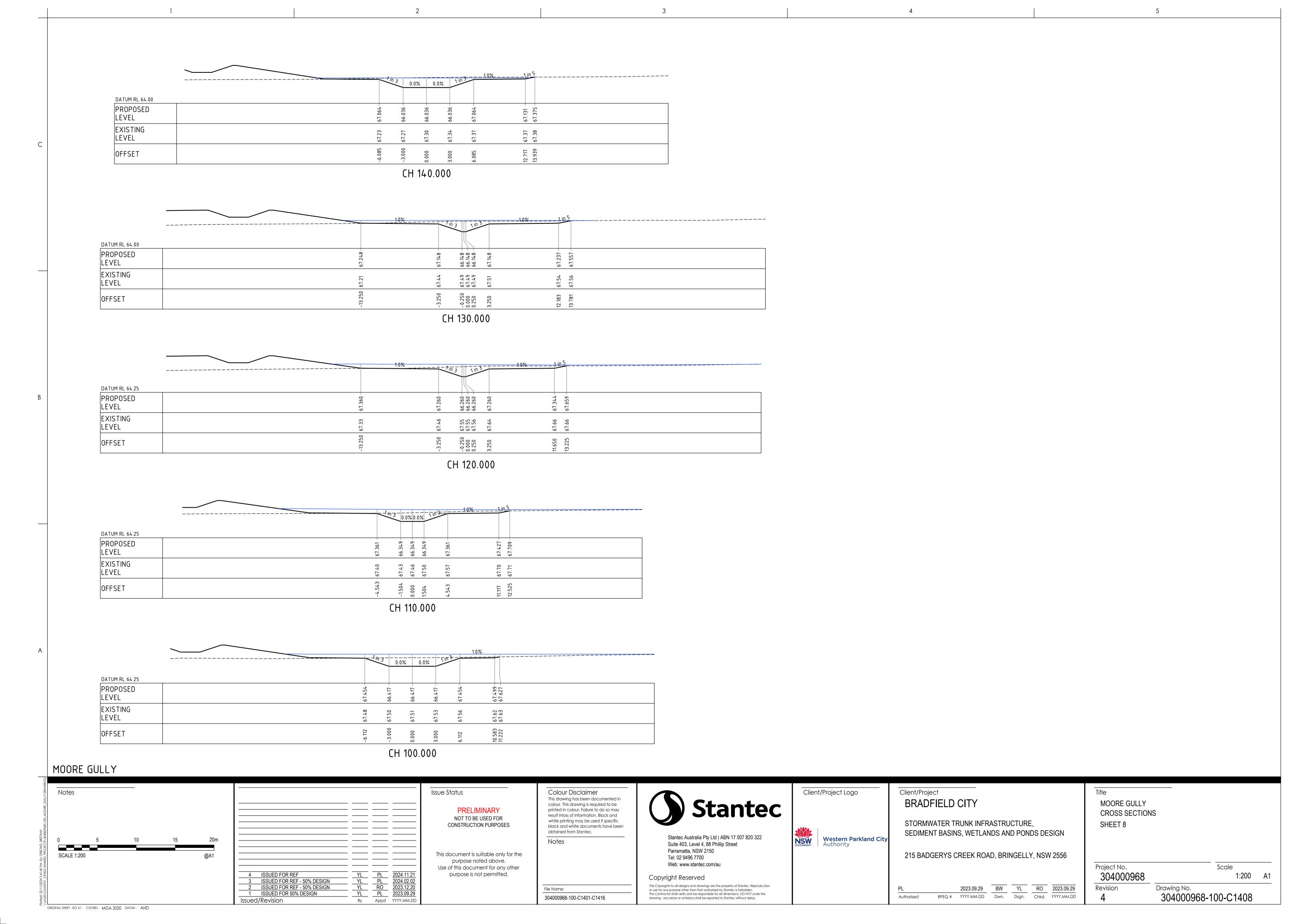
DATUM RL 64.25 PROPOSED LEVEL EXISTING LEVEL OFFSET

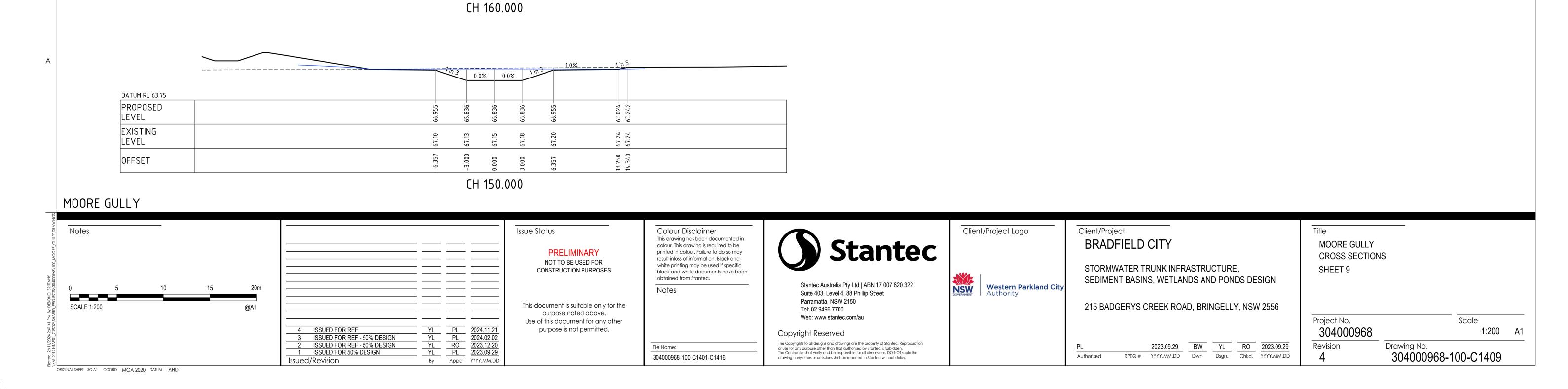
CH 80.000

	1.0%
	7 in 3 0.0% 1 in 3
DATUM RL 64.00	
PROPOSED LEVEL	67.619 - 66.228 - 66.228 - 67.619 - 67.619 - 67.812 - 67.812 -
EXISTING LEVEL	67.87 67.82 67.83 67.83 67.83
OFFSET	-3.000 -3.000 3.000 9.517 10.367
-	

CH 90.000

	1.0%
	1/1/7-3 - 0.0% 0.0% 1/in 3
DATUM RL 64.25	
PROPOSED LEVEL	66.292 - 66.292 - 66.292 - 67.537 - 67.537 - 67.537 - 67.537 - 67.580 - 67.6
EXISTING LEVEL	67.50 67.58 67.58 67.68 67.68
OFFSET	-6.736 -3.000 3.000 10.595





____10%______

66.688 -

66.74 66.74

- 008.99 - 658.99

66.86 66.86

13.250 13.54*7*

66.912 67.072

13.250 14.051

÷----

CH 190.000

0.0% 0.0%

CH 180.000

0.0% 0.0%

CH 170.000

0.0% 0.0%

PROPOSED LEVEL

EXISTING LEVEL

OFFSET

PROPOSED

LEVEL

LEVEL

OFFSET

PROPOSED

LEVEL

LEVEL

OFFSET

PROPOSED

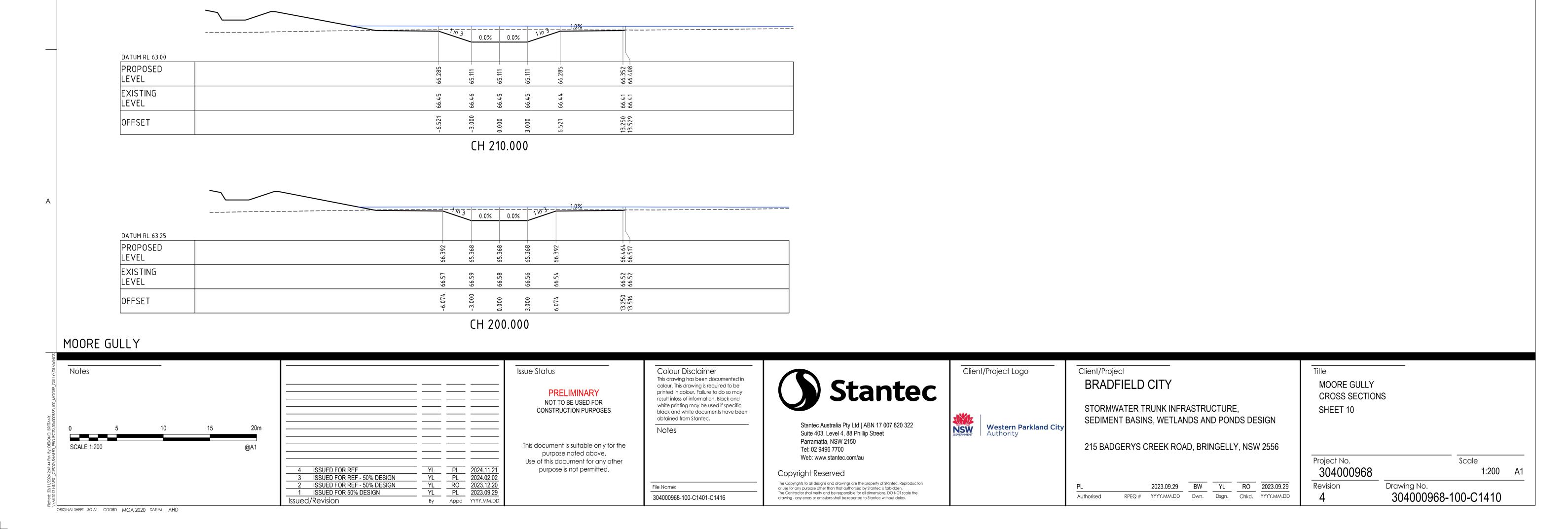
LEVEL

EXISTING LEVEL

OFFSET

EXISTING

EXISTING



65.028 -65.028 -65.028 -

66.11 66.11 66.12 66.14

65.140 65.140 65.140

66.29 66.30 66.30

CH 220.000

CH 230.000

66.

66.21 66.21

13.250 13.660

66.240

66.30 66.30

13.250 13.564

PROPOSED

LEVEL

LEVEL

OFFSET

PROPOSED

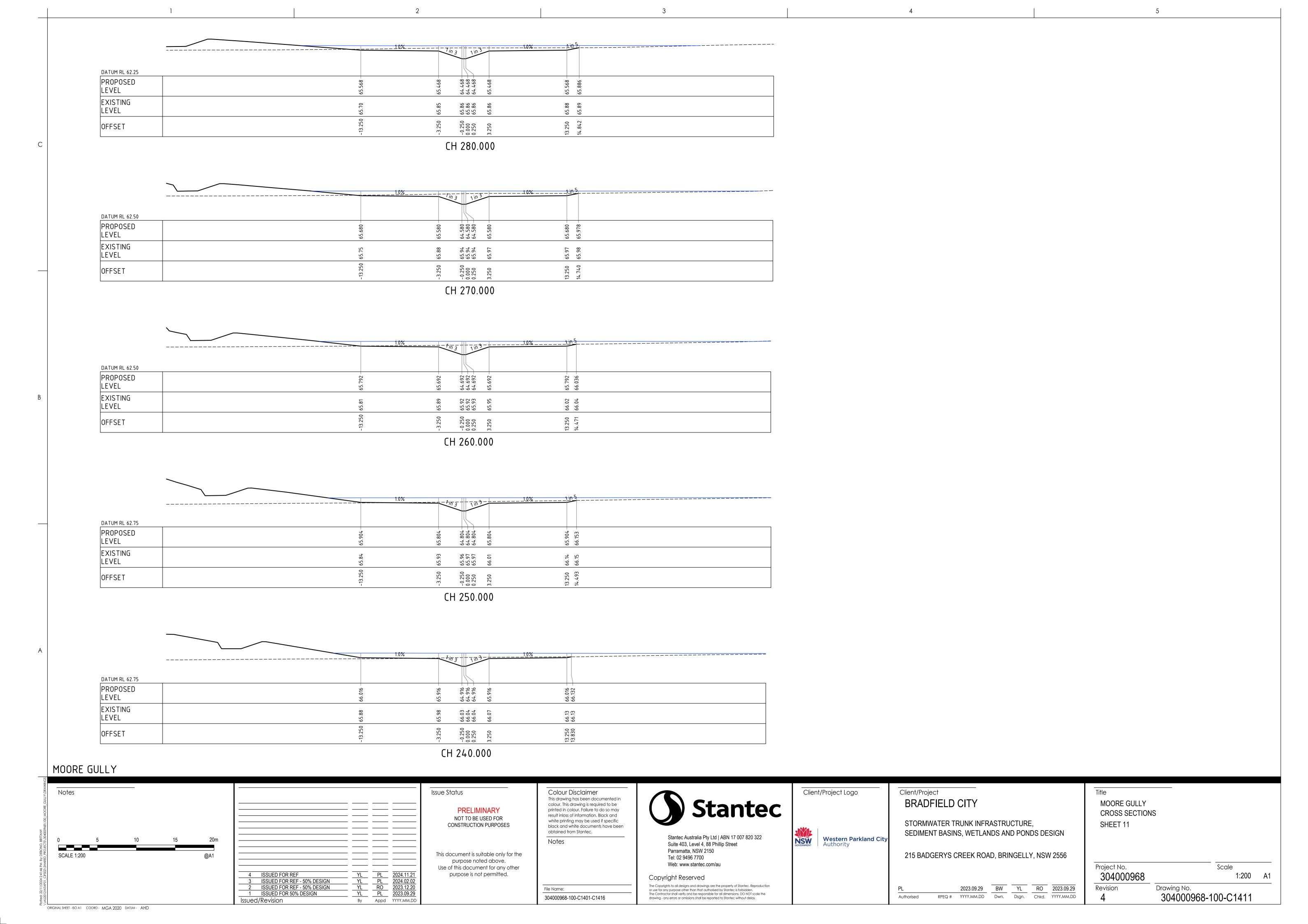
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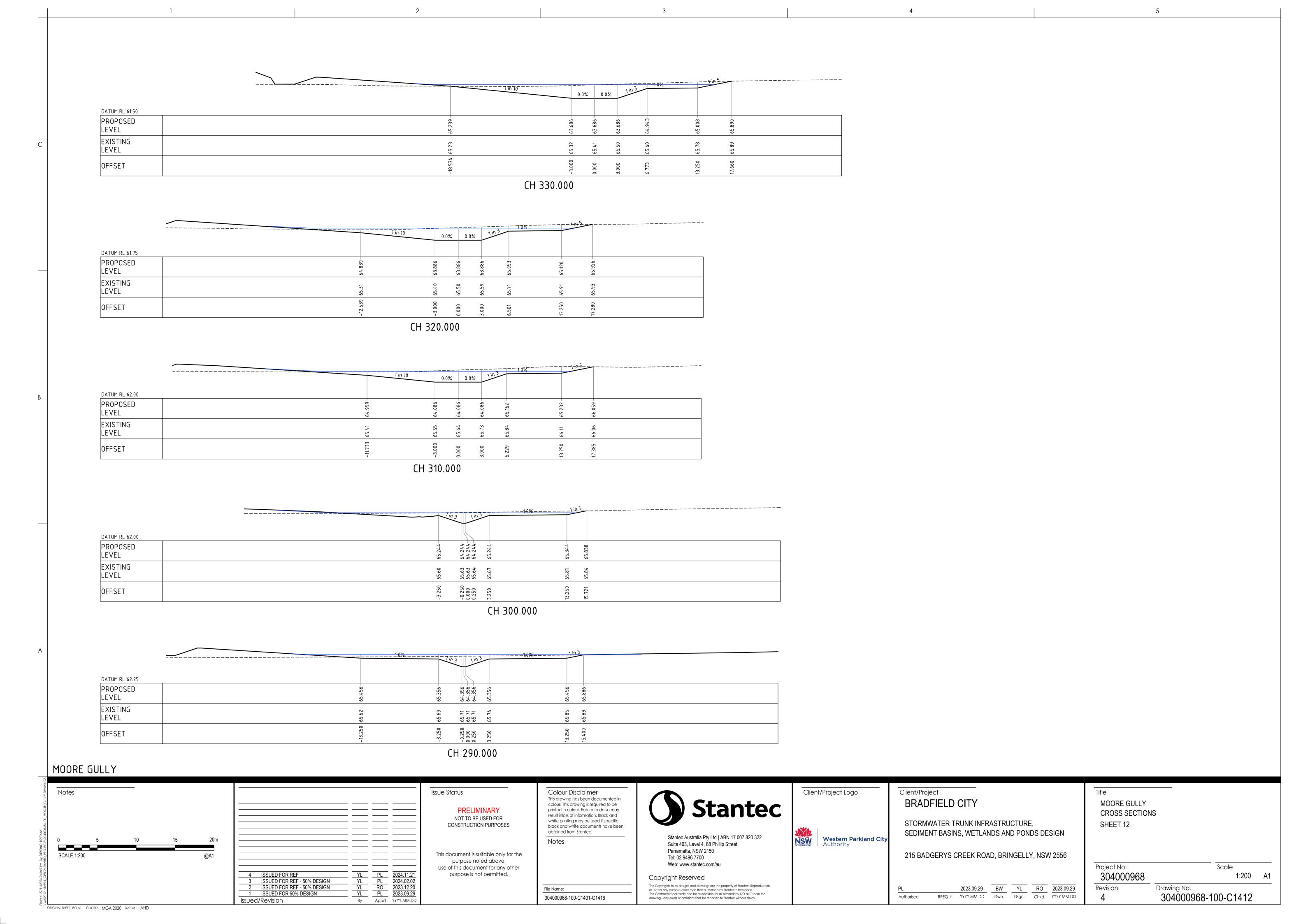
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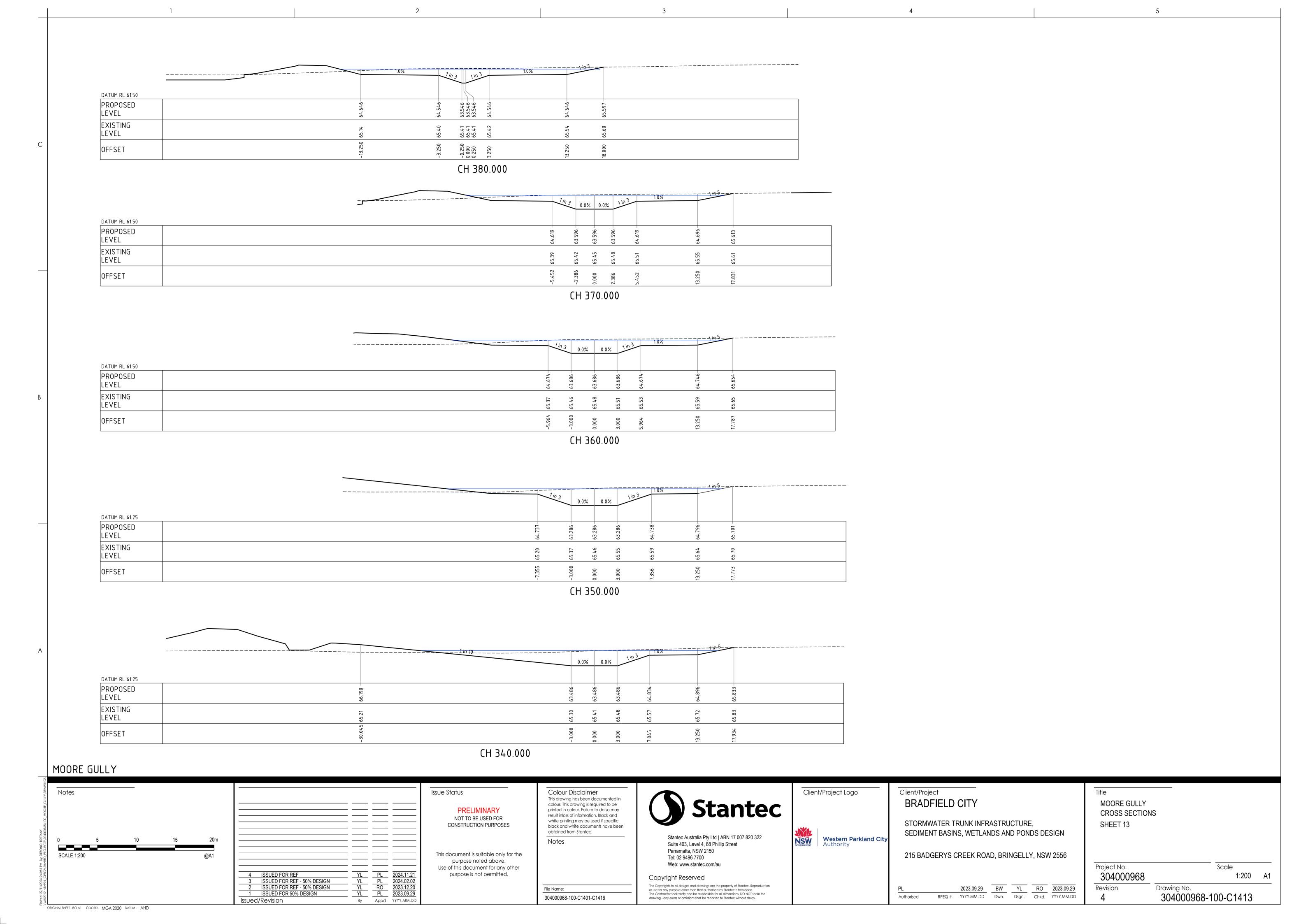
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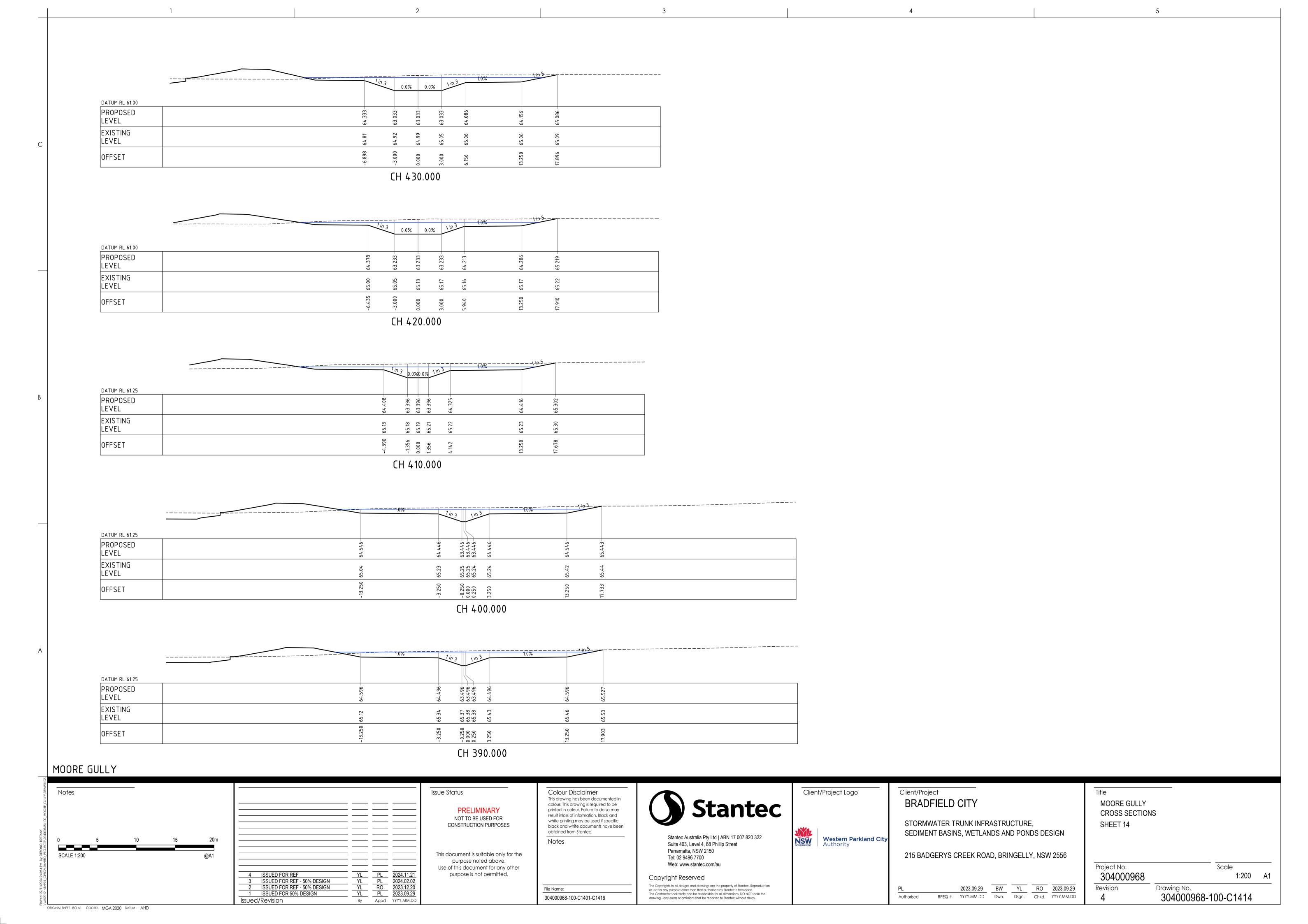
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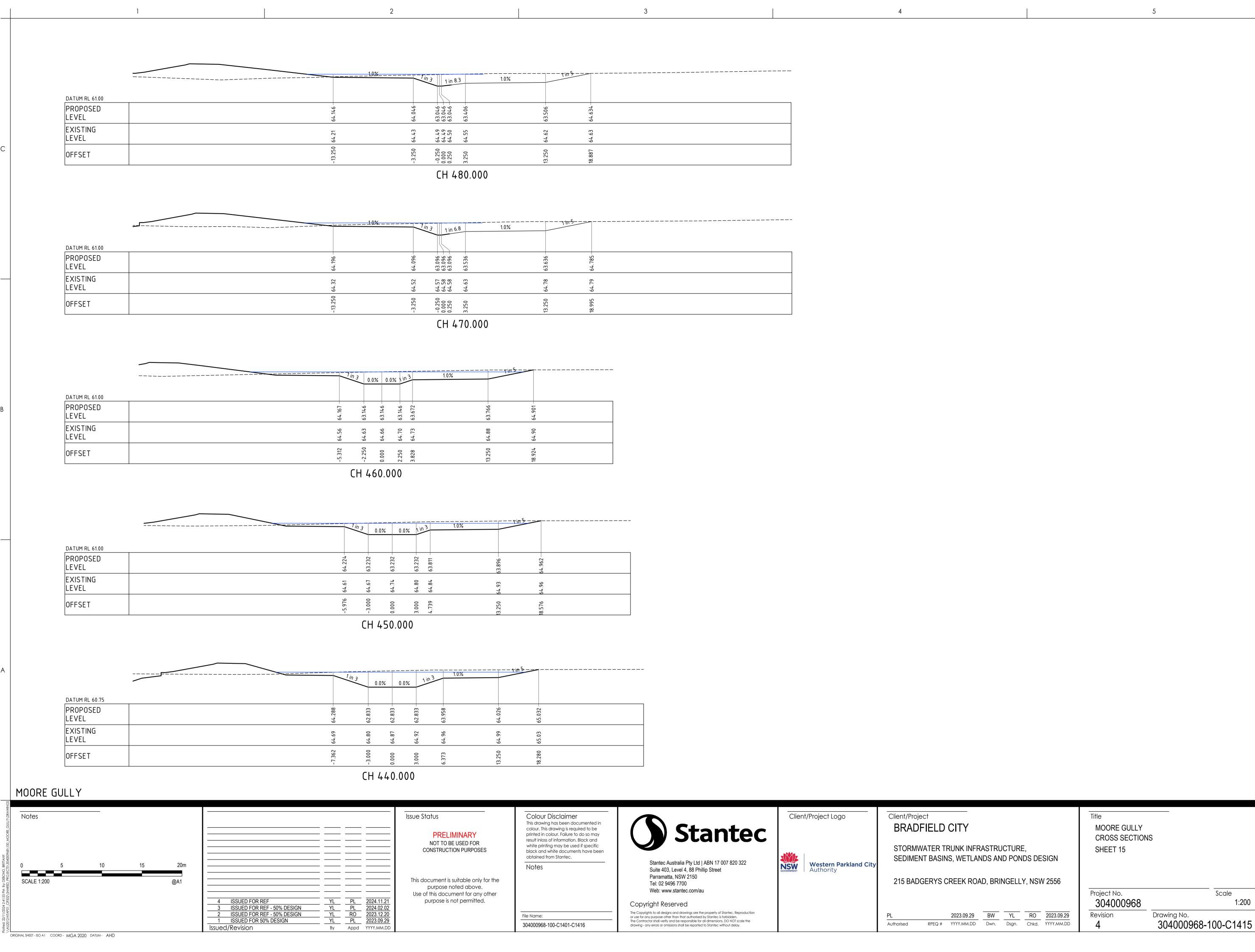
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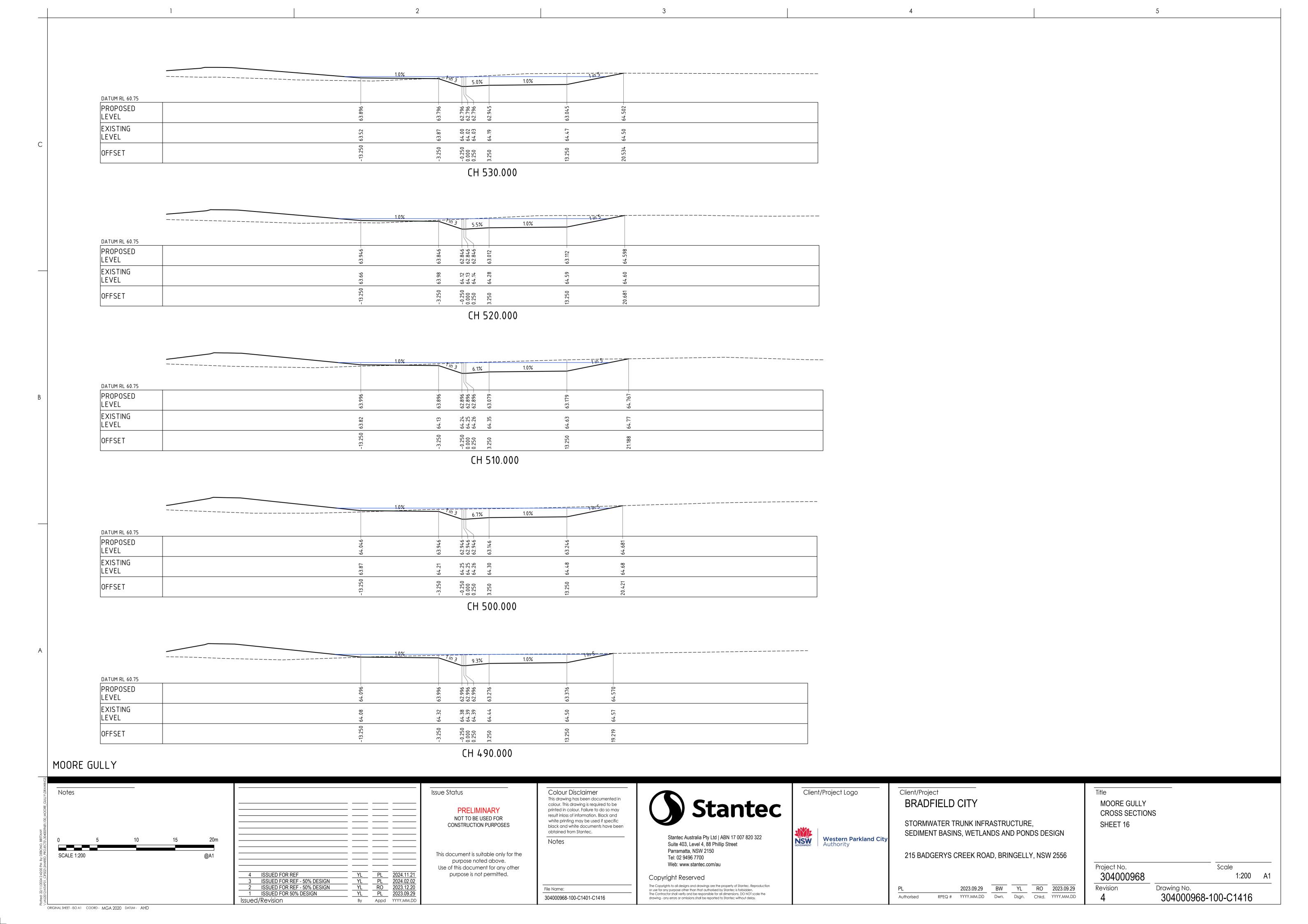


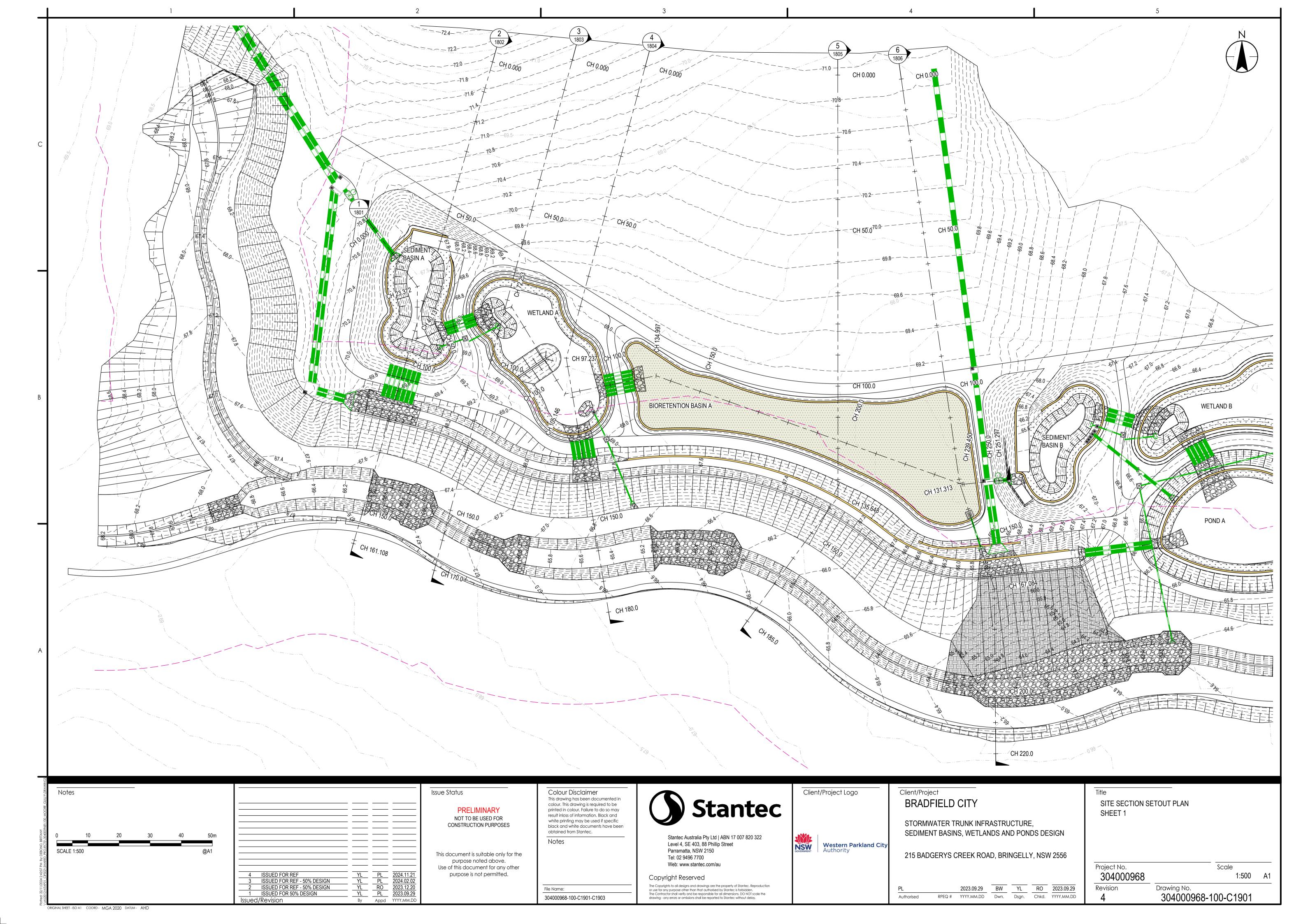


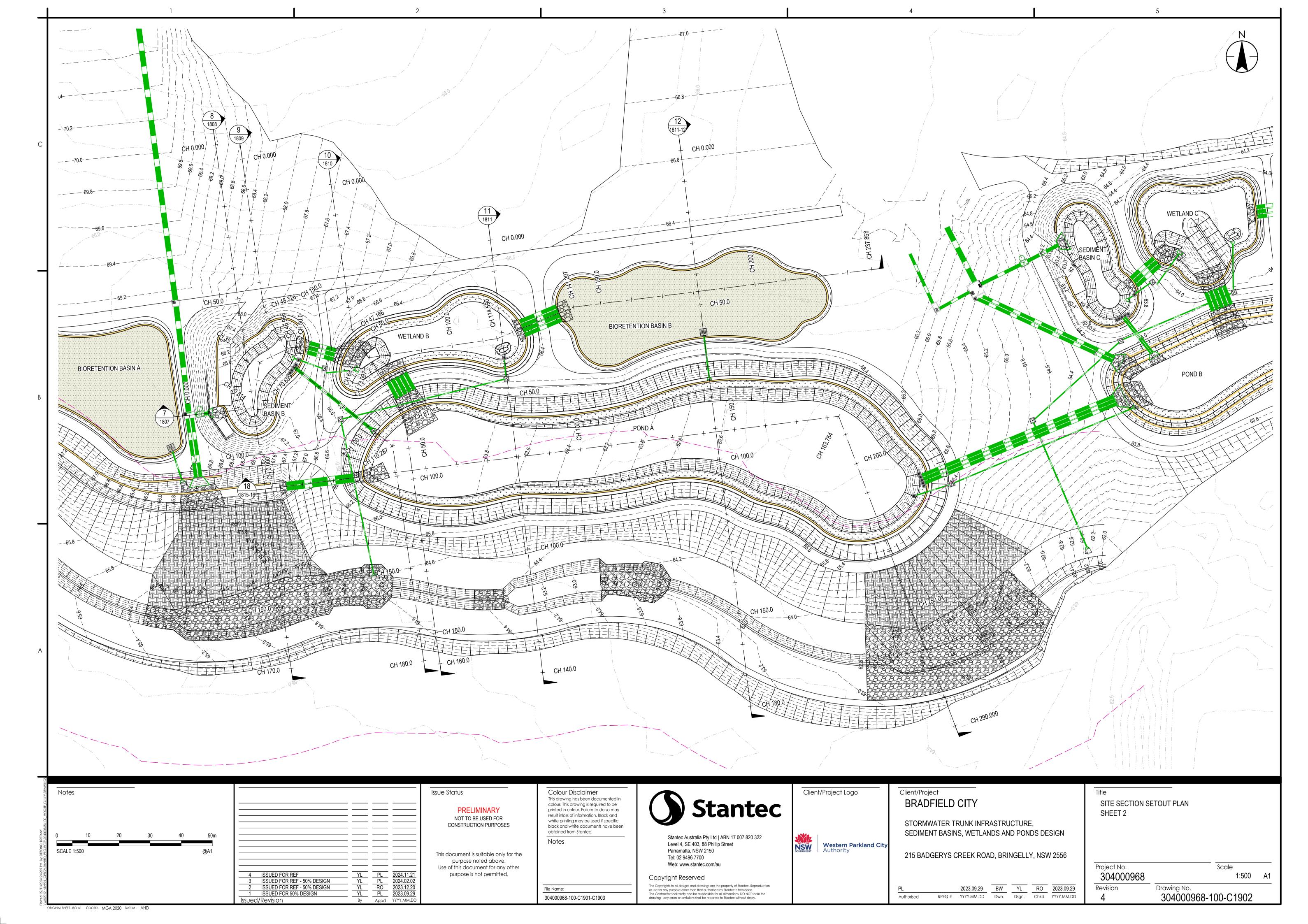


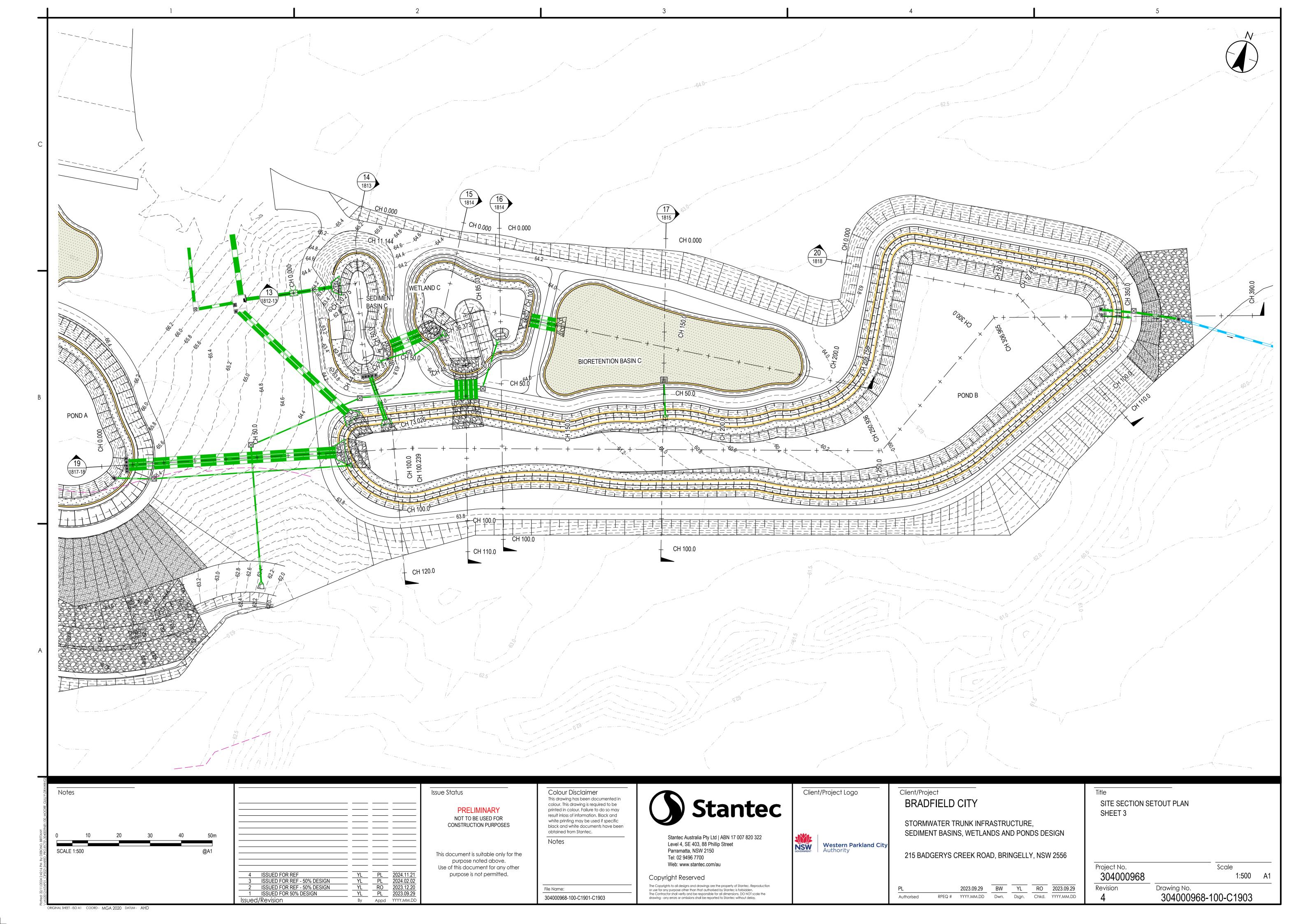
Scale

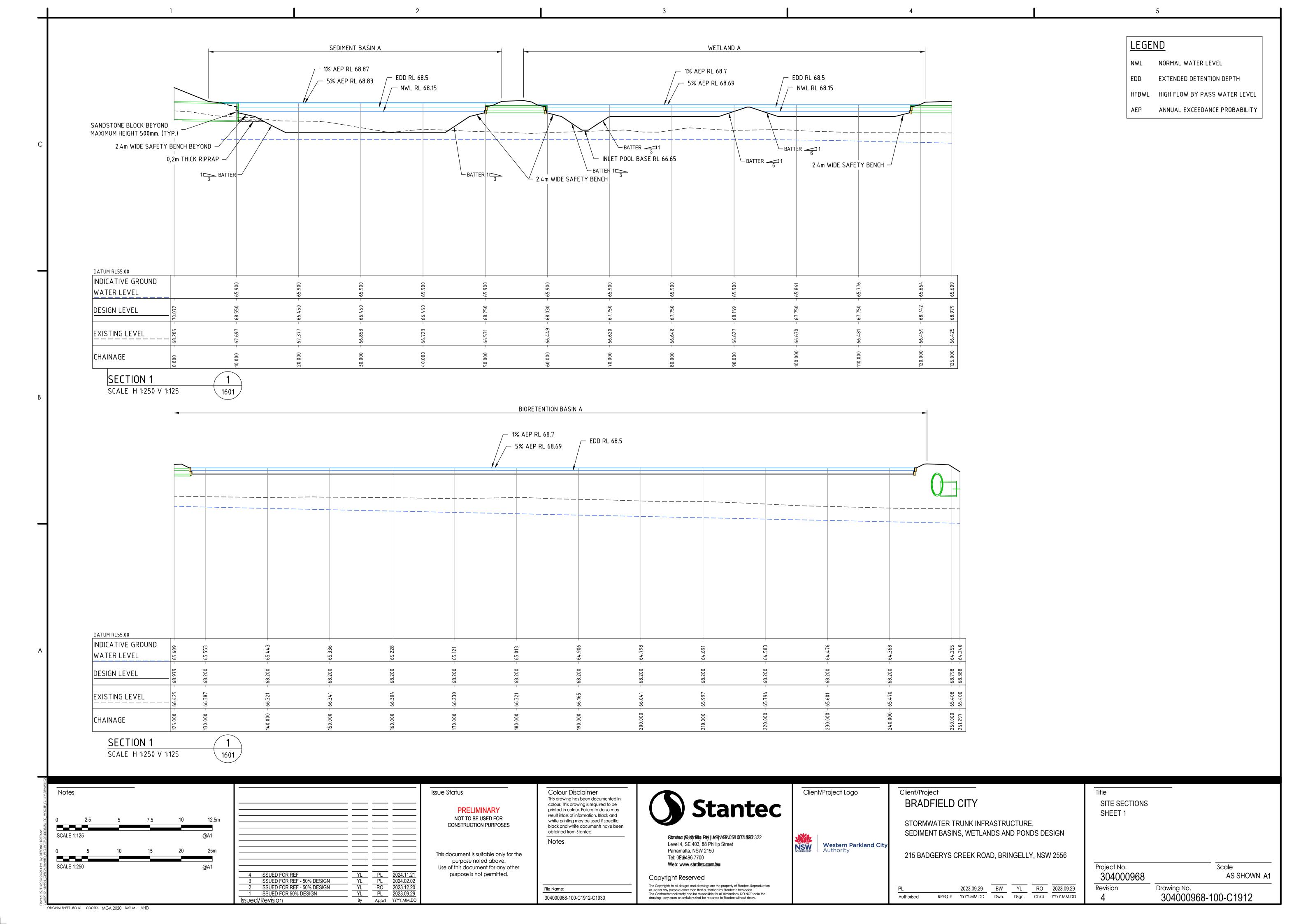
1:200 A1

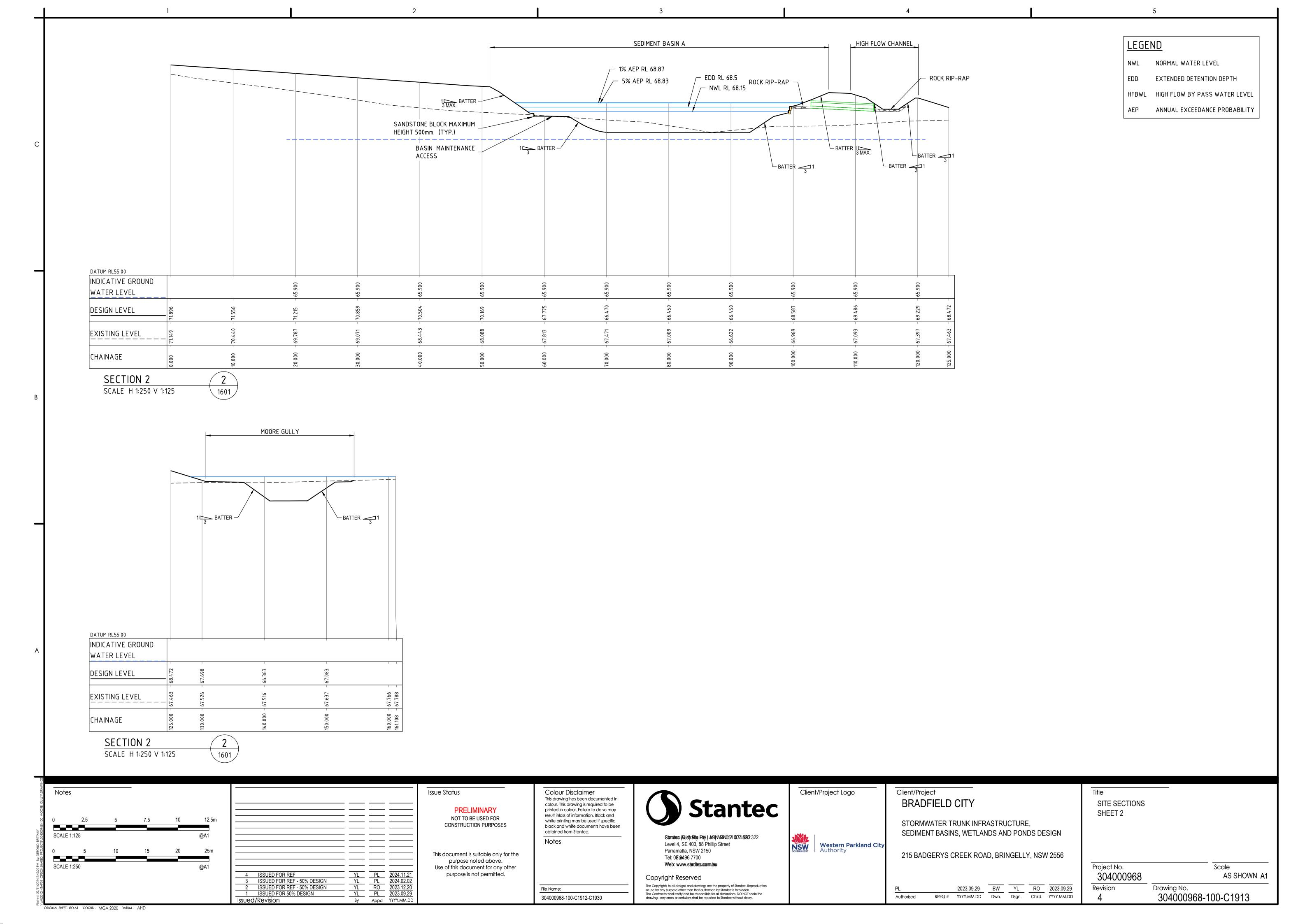


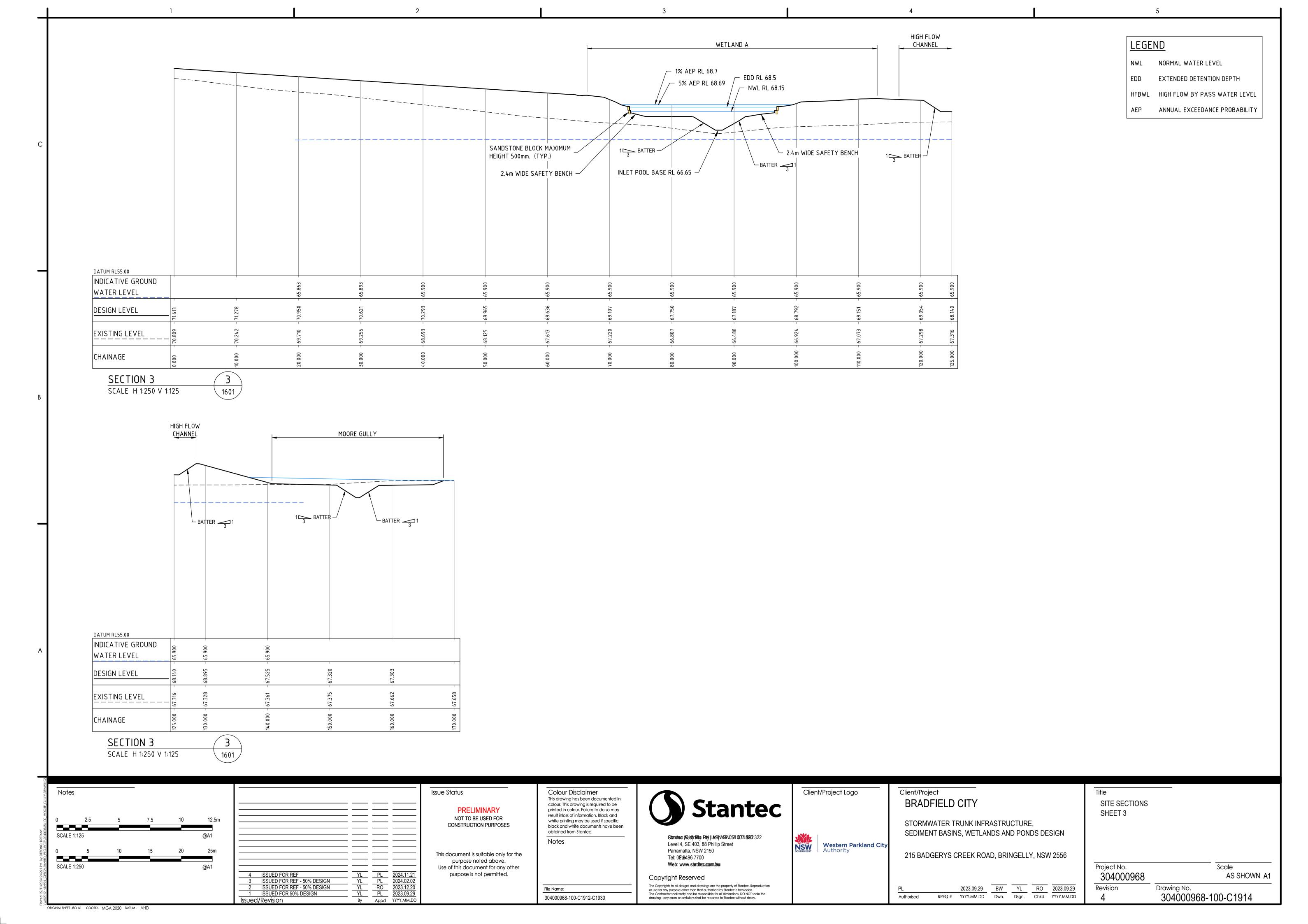


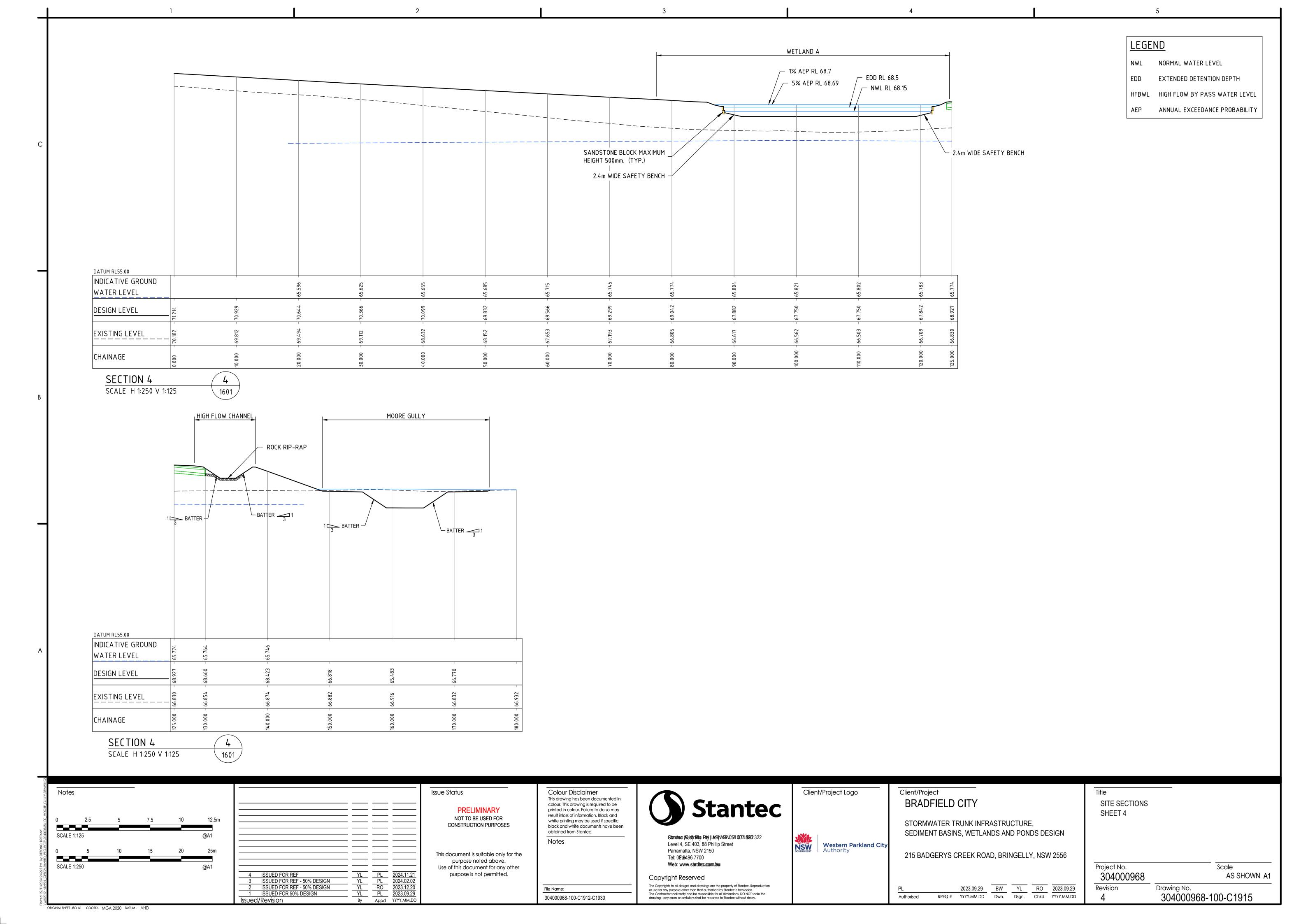


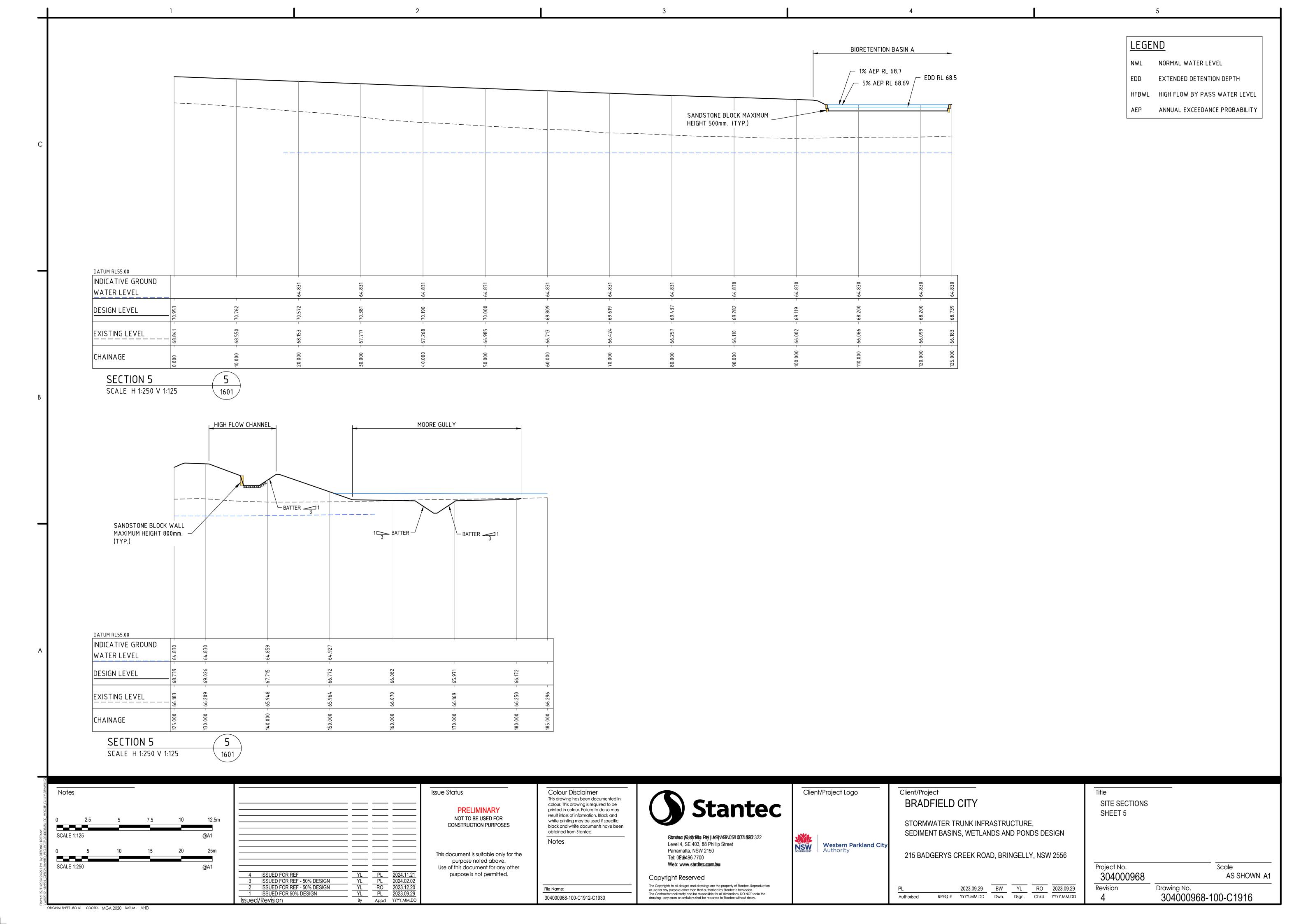


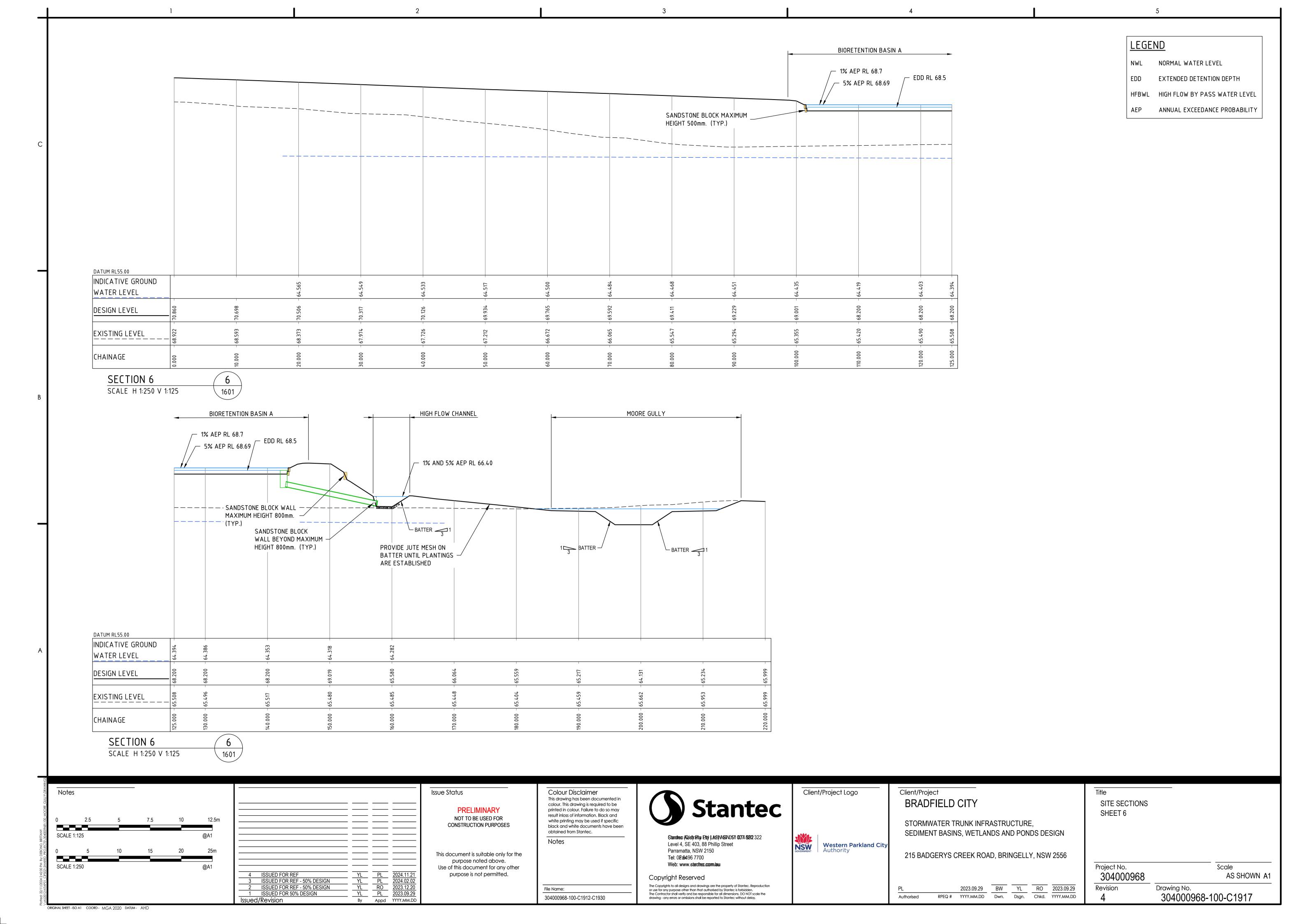


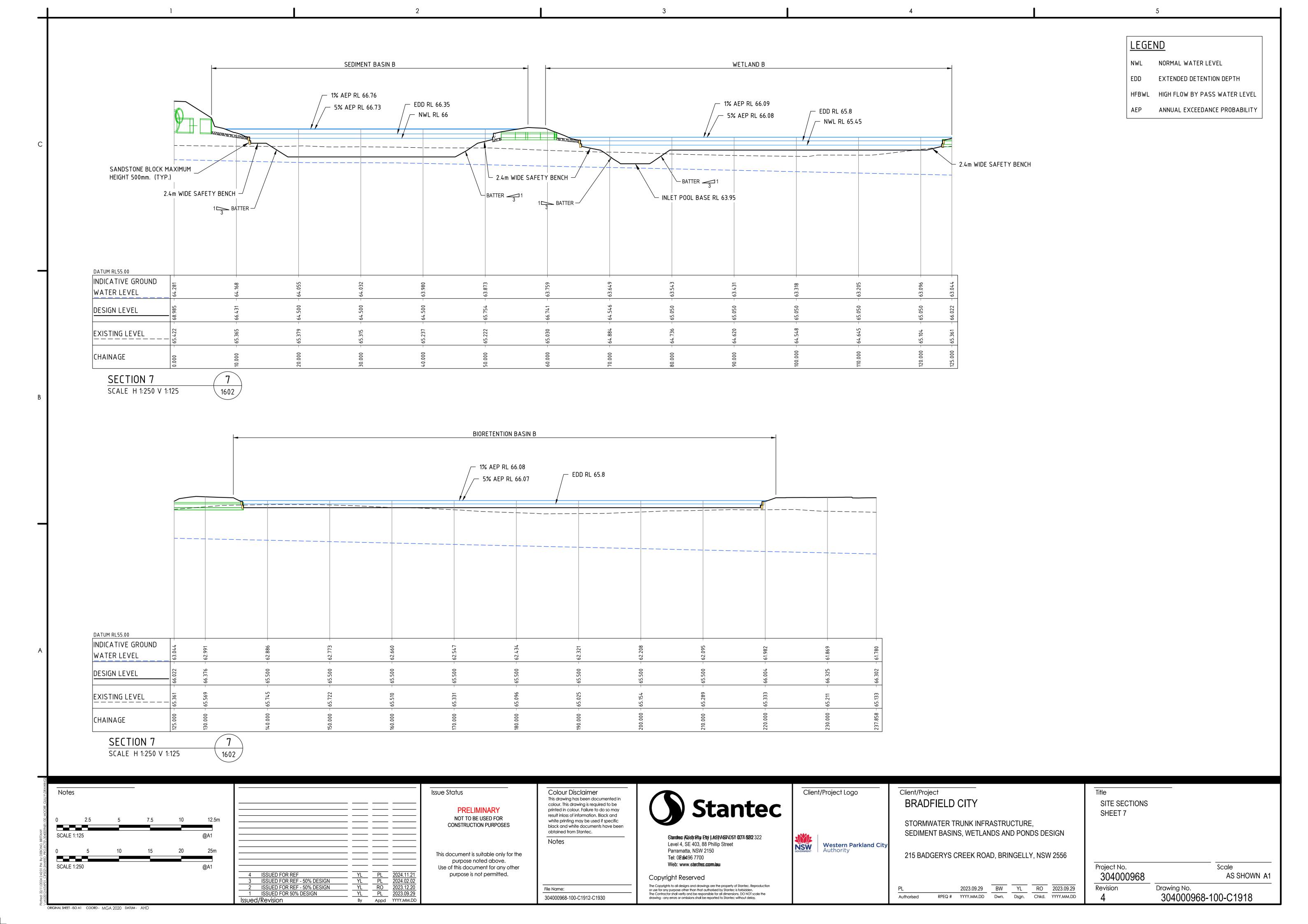


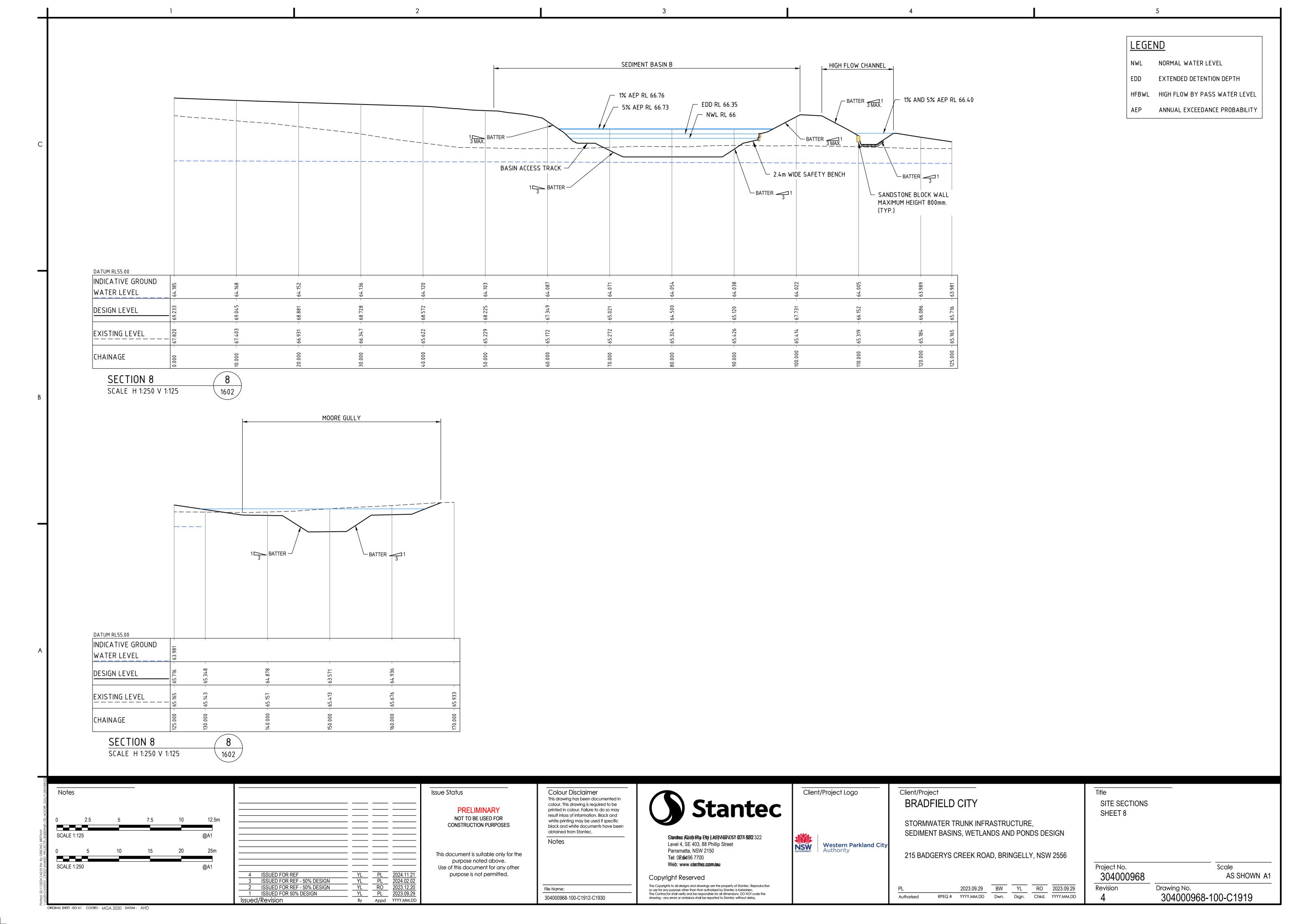


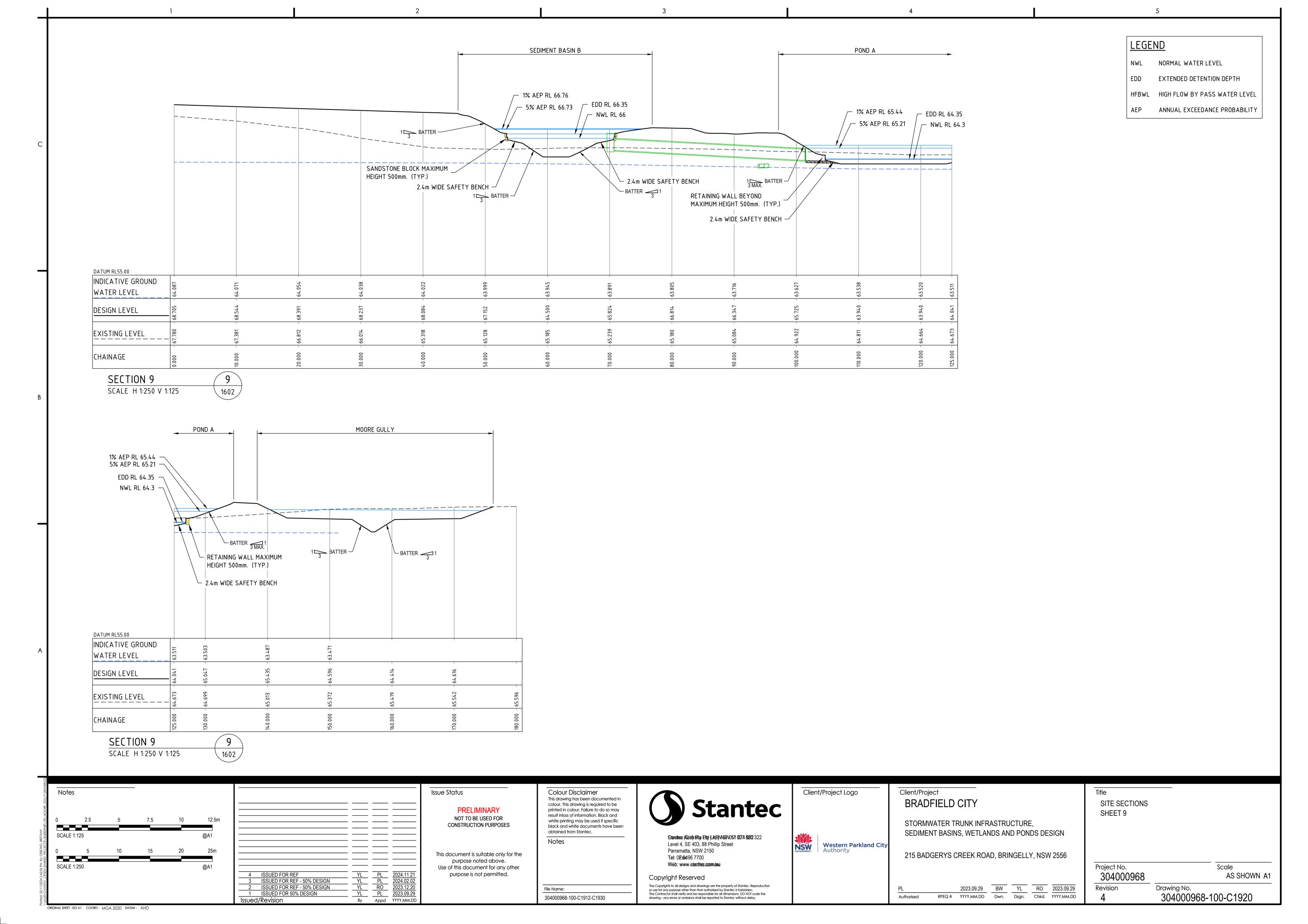


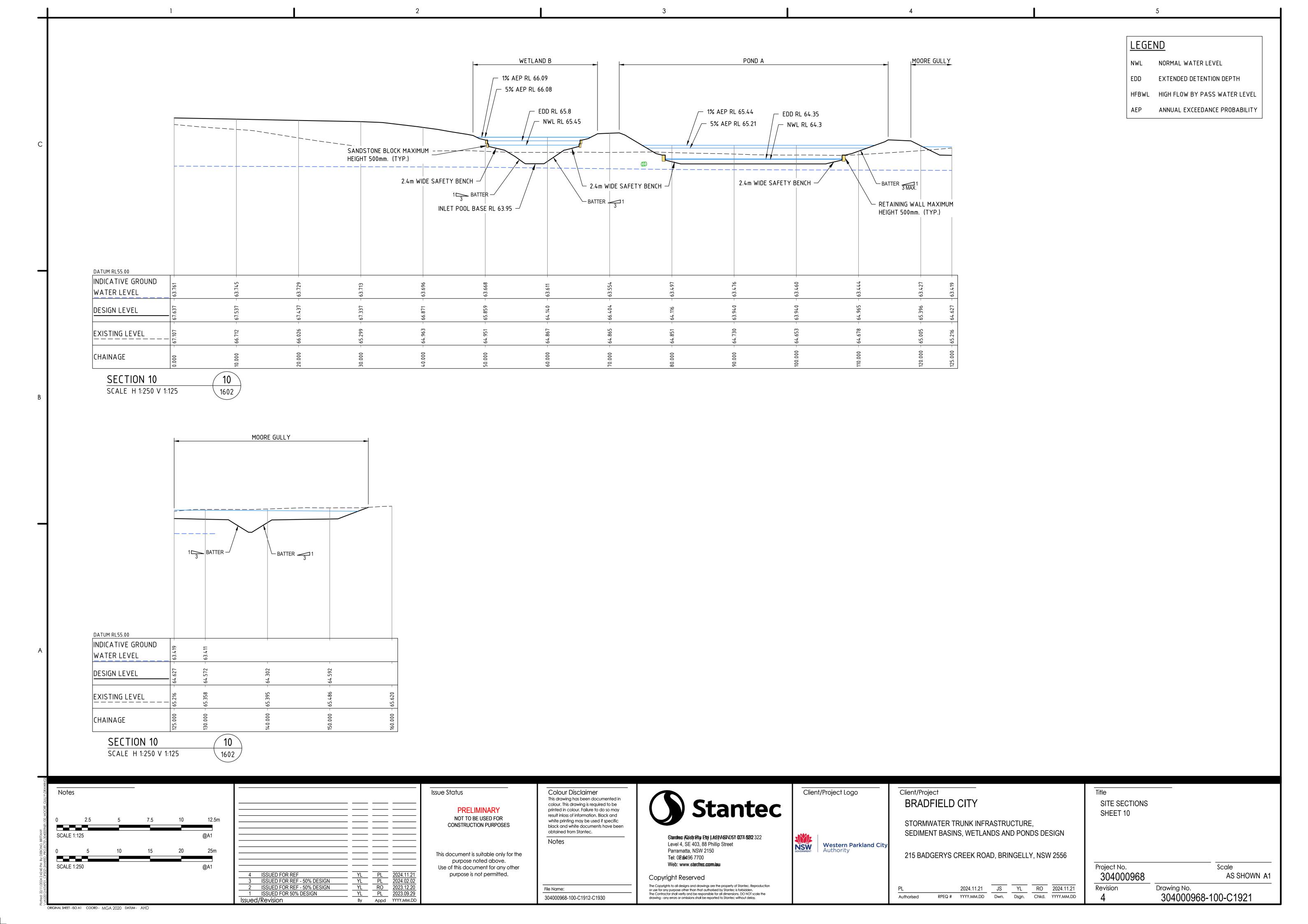


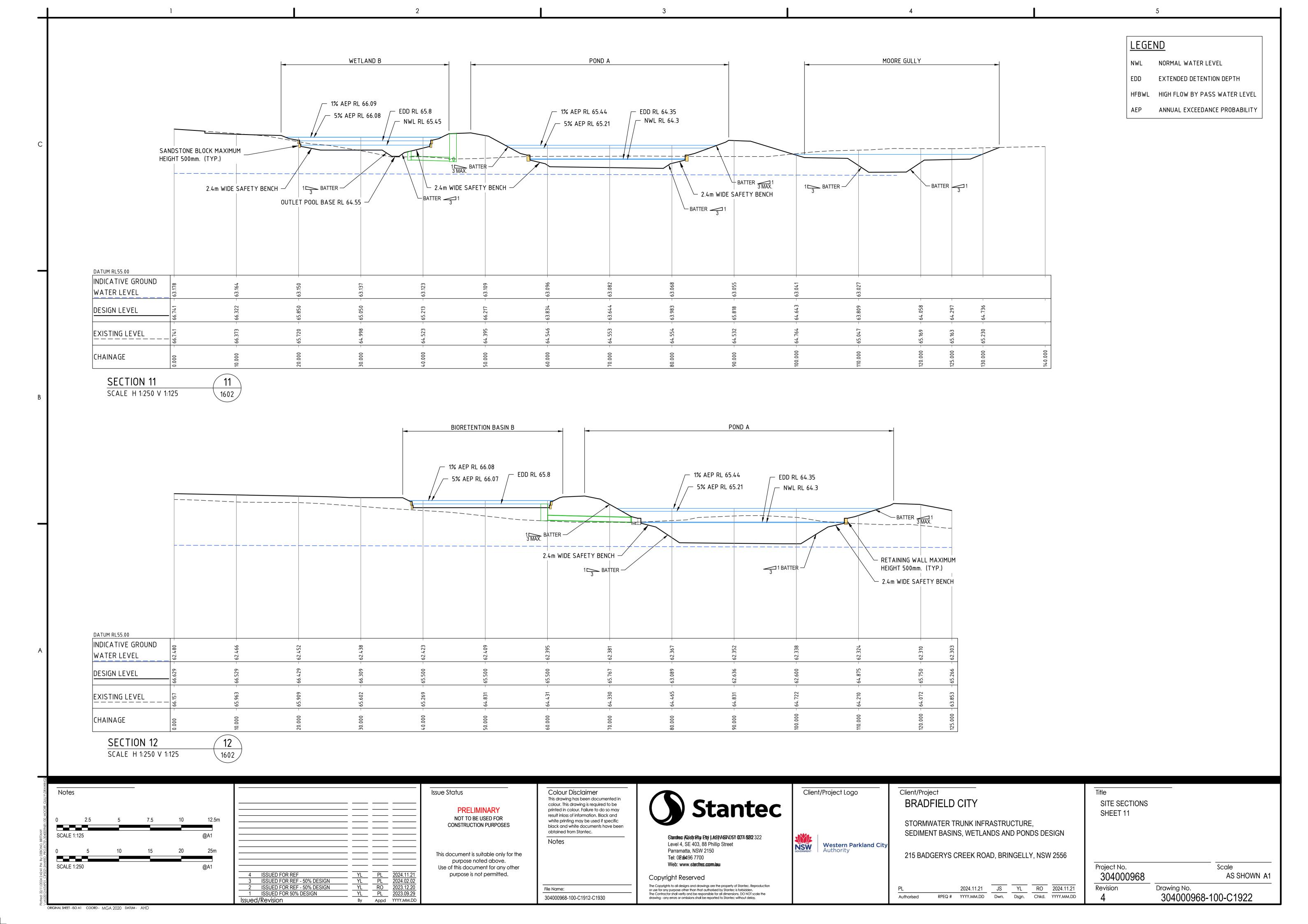


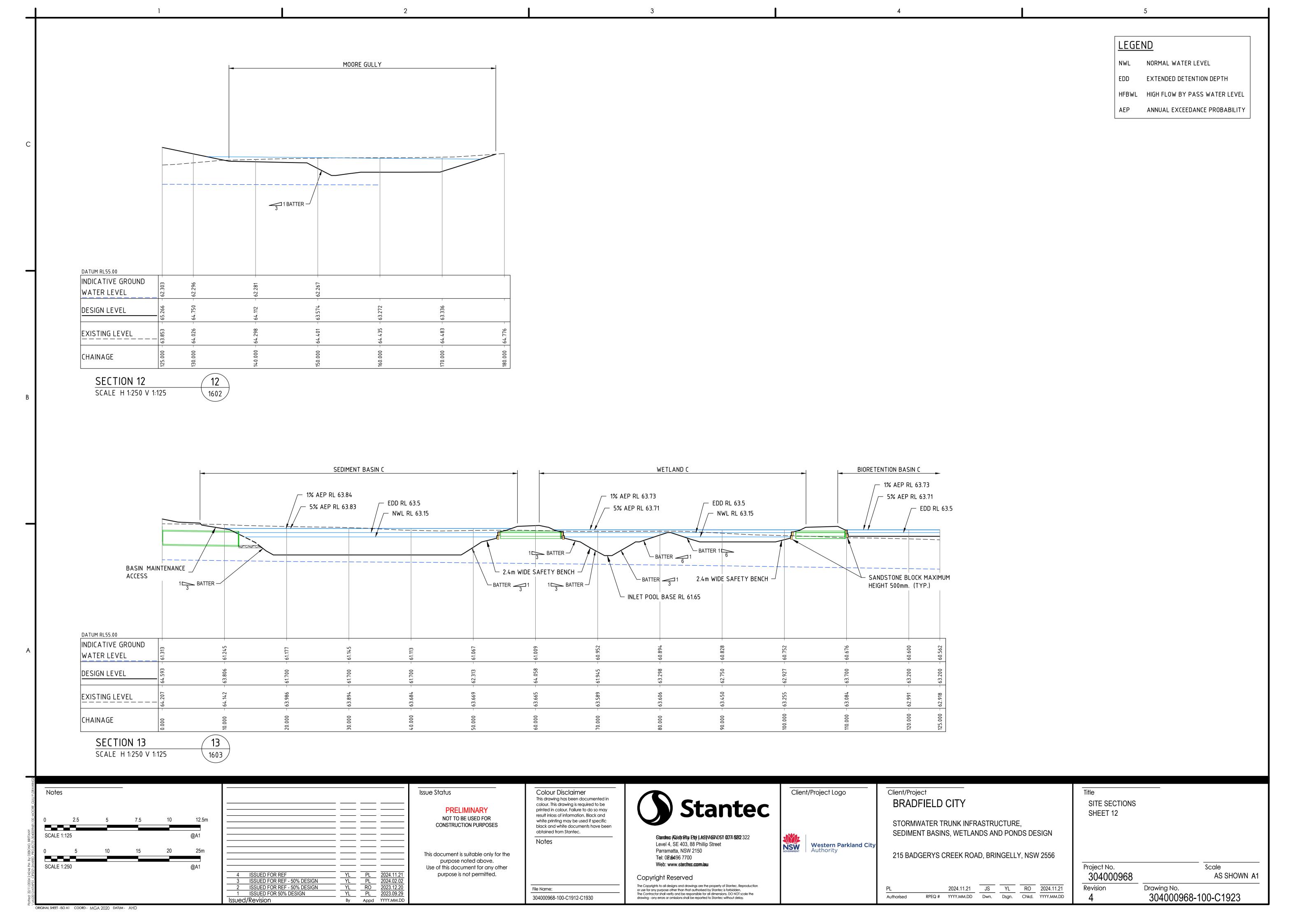


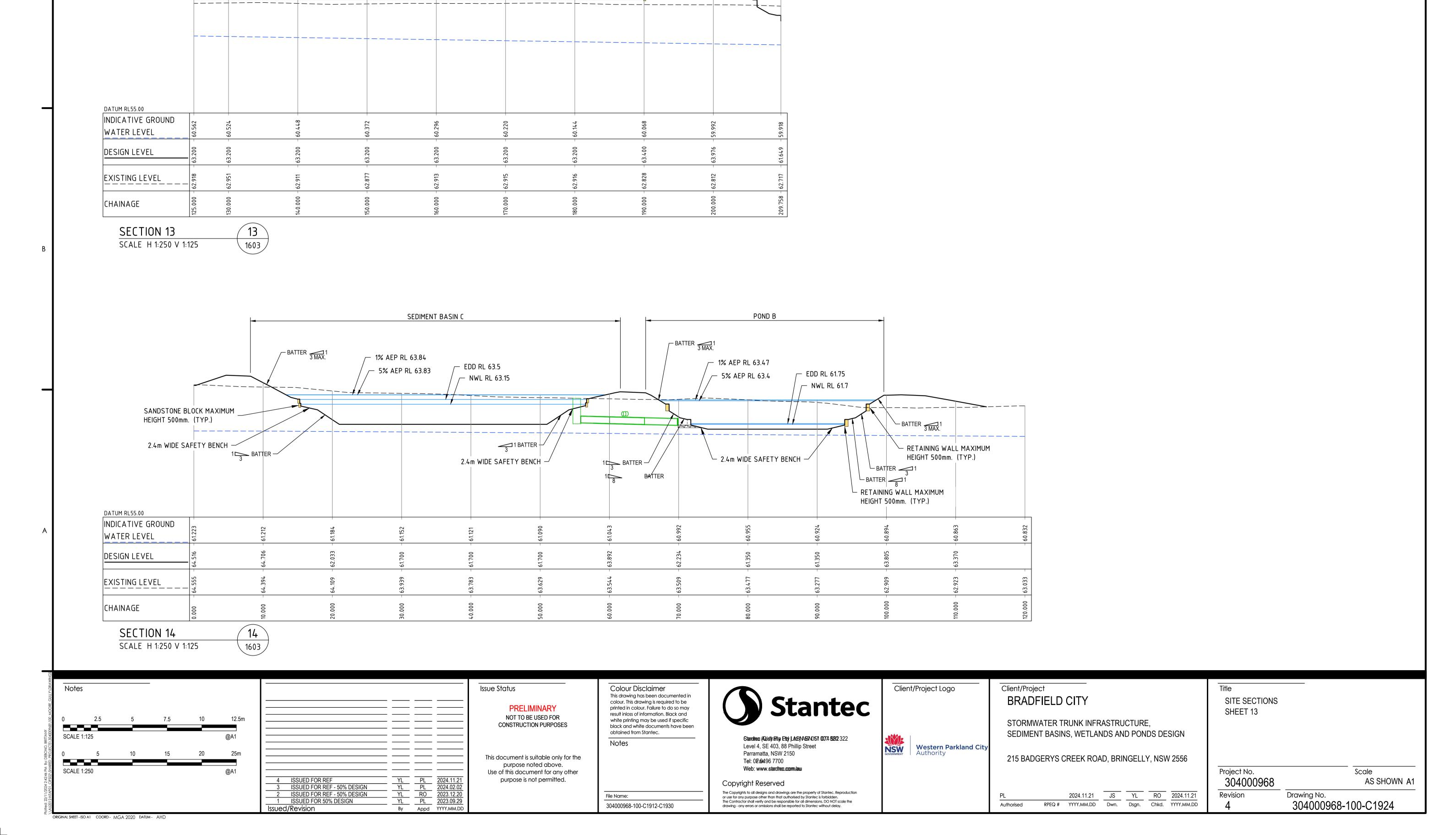












POND B

─ 1% AEP RL 63.47

__ 5% AEP RL 63.4

BIORETENTION BASIN C

─ EDD RL 63.5

1% AEP RL 63.73

__ 5% AEP RL 63.71

LEGEND

NWL NORMAL WATER LEVEL

EXTENDED DETENTION DEPTH

ANNUAL EXCEEDANCE PROBABILITY

HFBWL HIGH FLOW BY PASS WATER LEVEL

NWL NORMAL WATER LEVEL EXTENDED DETENTION DEPTH WETLAND C POND B HFBWL HIGH FLOW BY PASS WATER LEVEL ANNUAL EXCEEDANCE PROBABILITY - 0,2m THICK RIPRAP - 1% AEP RL 63.73 - 1% AEP RL 63.47 – EDD RL 63.5 - 5% AEP RL 63.71 __ 5% AEP RL 63.4 — EDD RL 61.75 /- NWL RL 63.15 __ NWL RL 61.7 ► BATTER 3 MAX. SANDSTONE BLOCK MAXIMUM HEIGHT 500mm. (TYP.) $1 \longrightarrow BATTER -$ ─BATTER 🚤 1 0,2m THICK RIPRAP -1 → BATTER → 2.4m WIDE SAFETY BENCH — ├─ BATTER 🚤 1 ─ BATTER — 1 16 INLET POOL BASE RL 61.65 - RETAINING WALL MAXIMUM HEIGHT 500mm. (TYP.) 2.4m WIDE SAFETY BENCH $-\!\!\!\!/$ 2.4m WIDE SAFETY BENCH DATUM RL55.00 INDICATIVE GROUND WATER LEVEL DESIGN LEVEL EXISTING LEVEL CHAINAGE SECTION 15 **15** SCALE H 1:250 V 1:125 POND B WETLAND C 1% AEP RL 63.73 — 1% AEP RL 63.47 - EDD RL 63.5 - 5% AEP RL 63.71 EDD RL 61.75 ─ 5% AEP RL 63.4 - NWL RL 63.15 __ NWL RL 61.7 BATTER BATTER 3 MAX. 1 3 MAX. 2.4m WIDE SAFETY BENCH \sim OUTLET POOL BASE RL 62.25 ─ BATTER — 1 BATTER - RETAINING WALL MAXIMUM 2.4m WIDE SAFETY BENCH ightarrowHEIGHT 500mm. (TYP.) 2.4m WIDE SAFETY BENCH DATUM RL55.00 INDICATIVE GROUND WATER LEVEL DESIGN LEVEL EXISTING LEVEL CHAINAGE **16** SECTION 16 SCALE H 1:250 V 1:125 (1603 Client/Project Logo Client/Project Issue Status Colour Disclaimer This drawing has been documented in Stantec **BRADFIELD CITY** SITE SECTIONS colour. This drawing is required to be **PRELIMINARY** printed in colour. Failure to do so may SHEET 14 result inloss of information. Black and NOT TO BE USED FOR 12.5m white printing may be used if specific STORMWATER TRUNK INFRASTRUCTURE, CONSTRUCTION PURPOSES black and white documents have been obtained from Stantec. SEDIMENT BASINS, WETLANDS AND PONDS DESIGN Standtrecc (AQUISI) r Ettig Ettig | LACB| N A 557N 0 571 00074 50292 322 Notes Level 4, SE 403, 88 Phillip Street **Western Parkland City** Authority Parramatta, NSW 2150 This document is suitable only for the 215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556 Tel: 0222496 7700

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By Appd YYYY.MM.DD

File Name:

304000968-100-C1912-C1930

Notes

SCALE 1:125

SCALE 1:250

ORIGINAL SHEET - ISO A1 COORD - MGA 2020 DATUM - AHD

4 ISSUED FOR REF

Issued/Revision

3 ISSUED FOR REF - 50% DESIGN
2 ISSUED FOR REF - 50% DESIGN
1 ISSUED FOR 50% DESIGN

LEGEND

Project No.

Revision

2024.11.21 JS YL RO 2024.11.21

RPEQ # YYYY.MM.DD Dwn. Dsgn. Chkd. YYYY.MM.DD

304000968

Drawing No.

Scale

304000968-100-C1925

AS SHOWN A1

EXTENDED DETENTION DEPTH HFBWL HIGH FLOW BY PASS WATER LEVEL POND B BIORETENTION BASIN C ANNUAL EXCEEDANCE PROBABILITY ─ 1% AEP RL 63.73 √ 1% AEP RL 63.47 __ EDD RL 63.5 √ 5% AEP RL 63.71 __ 5% AEP RL 63.4 — EDD RL 61.75 ─ NWL RL 61.7 BATTER 3 MAX. SANDSTONE BLOCK MAXIMUM HEIGHT 500mm. (TYP.) 1 MAX. ► BATTER — 1 ► BATTER — 1 15 ─ RETAINING WALL MAXIMUM HEIGHT 500mm. (TYP.) 2.4m WIDE SAFETY BENCH 4 2.4m WIDE SAFETY BENCH 1 → BATTER → BATTER ____1 DATUM RL55.00 INDICATIVE GROUND WATER LEVEL DESIGN LEVEL EXISTING LEVEL CHAINAGE **17** SECTION 17 SCALE H 1:250 V 1:125 (1603) POND A 1% AEP RL 65.44 __ EDD RL 64.35 _ 5% AEP RL 65.21 __ NWL RL 64.3 15.000 CO 2.4m WIDE SAFETY BENCH -DATUM RL55.00 INDICATIVE GROUND WATER LEVEL DESIGN LEVEL EXISTING LEVEL CHAINAGE **SECTION 18 _18** SCALE H 1:250 V 1:125 (1603 / Client/Project Logo Client/Project Notes Issue Status Colour Disclaimer Title This drawing has been documented in Stantec **BRADFIELD CITY** SITE SECTIONS colour. This drawing is required to be **PRELIMINARY** printed in colour. Failure to do so may SHEET 15 result inloss of information. Black and NOT TO BE USED FOR 12.5m white printing may be used if specific STORMWATER TRUNK INFRASTRUCTURE, CONSTRUCTION PURPOSES black and white documents have been obtained from Stantec. SEDIMENT BASINS, WETLANDS AND PONDS DESIGN SCALE 1:125 Standineco (AQUell) r Etito; | LACE | NASEN 057 | 0074 8022 322 Notes Level 4, SE 403, 88 Phillip Street **Western Parkland City** Authority Parramatta, NSW 2150 This document is suitable only for the 215 BADGERYS CREEK ROAD, BRINGELLY, NSW 2556 Tel: 0222496 7700 purpose noted above. Web: www.standtecc.ccomm/aau SCALE 1:250 Project No. Scale Use of this document for any other 304000968 purpose is not permitted. 4 ISSUED FOR REF AS SHOWN A1 Copyright Reserved 3 ISSUED FOR REF - 50% DESIGN
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LEGEND

NWL NORMAL WATER LEVEL

EDD EXTENDED DETENTION DEPTH

