

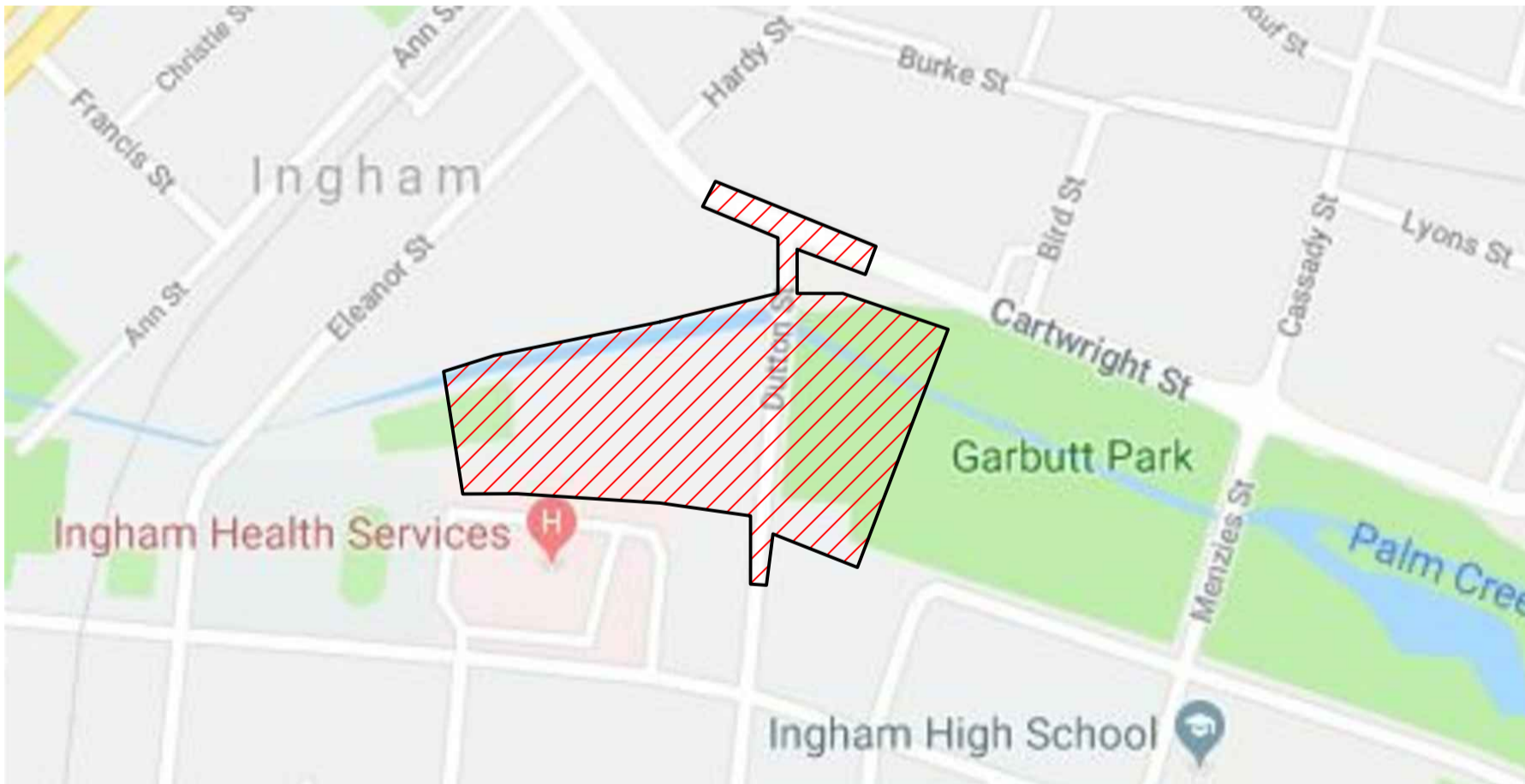


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HINCHINBROOK SHIRE COUNCIL

PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM



LOCALITY PLAN
NOT TO SCALE

| SCHEDULE OF DRAWINGS | | |
|----------------------|--|------|
| DRAWING No. | DESCRIPTION | REV. |
| 9671-134-CI-1000 | COVER, DRAWING INDEX AND LOCALITY PLAN | A |
| 9671-134-CI-1001 | GENERAL NOTES | A |
| 9671-134-CI-1002 | SAFETY IN DESIGN MATRIX | A |
| 9671-134-CI-1003 | EXISTING FEATURES AND SURVEY CONTROL PLAN SHEET 1 OF 2 | A |
| 9671-134-CI-1004 | EXISTING FEATURES AND SURVEY CONTROL PLAN SHEET 2 OF 2 | A |
| 9671-134-CI-1005 | CONTROL LINE GEOMETRY LAYOUT PLAN SHEET 1 OF 2 | A |
| 9671-134-CI-1006 | CONTROL LINE GEOMETRY LAYOUT PLAN SHEET 2 OF 2 | A |
| 9671-134-CI-1007 | CONTROL LINE GEOMETRY AND SETOUT TABLES | A |
| 9671-134-CI-1008 | EARTHWORKS GRADING LAYOUT PLAN SHEET 1 OF 2 | A |
| 9671-134-CI-1009 | EARTHWORKS GRADING LAYOUT PLAN SHEET 2 OF 2 | A |
| 9671-134-CI-1010 | EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 1 OF 2 | A |
| 9671-134-CI-1011 | EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 2 OF 2 | A |
| 9671-134-CI-1012 | EROSION AND SEDIMENT CONTROL DETAILS | A |
| 9671-134-CI-1013 | ROADWORKS AND DRAINAGE LAYOUT PLAN | A |
| 9671-134-CI-1014 | ROADWORKS LONGITUDINAL AND TYPE SECTIONS DUTTON STREET | A |
| 9671-134-CI-1015 | ROADWORKS CROSS SECTIONS DUTTON STREET SHEET 1 OF 2 | A |
| 9671-134-CI-1016 | ROADWORKS CROSS SECTIONS DUTTON STREET SHEET 2 OF 2 | A |
| 9671-134-CI-1017 | MISCELLANEOUS DETAILS AND CONCRETE NOTES | A |
| 9671-134-CI-1018 | INTERSECTION DETAILS | A |
| 9671-134-CI-1019 | PATHWAY LONGITUDINAL SECTIONS AND LAYOUT PLAN | A |
| 9671-134-CI-1020 | CULVERT SCHEDULE AND LAYOUT PLAN | A |
| 9671-134-CI-1021 | DRIVEWAY ACCESS LAYOUT PLAN AND DETAILS | A |
| 9671-134-CI-1022 | WATER AND SEWERAGE LAYOUT PLAN AND DETAILS | A |
| 9671-134-CI-1023 | CULVERT GUARDRAIL DETAILS SHEET 1 OF 2 | A |
| 9671-134-CI-1024 | CULVERT GUARDRAIL DETAILS SHEET 2 OF 2 | A |
| 9671-134-CI-1025 | BASE SLAB AND ABUTMENT | A |

- G1. IF IN DOUBT ASK;
- G2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL INFORMATION ISSUED BY THE SUPERINTENDENT DURING THE COURSE OF THE CONTRACT;
- G3. ALL LEVELS ARE TO AHD;
- G4. ALL DIMENSIONS WITHIN THIS DRAWING SET ARE IN METRES UNLESS SHOWN OTHERWISE;
- G5. DRAWINGS SHALL NOT BE SCALED;
- G6. ALL DIMENSIONS RELEVANT TO SETTING OUT, SURFACE LEVELS AND INVERT LEVELS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT;
- G7. THE CONTRACTOR SHALL ENSURE THAT ALL WORKS ARE MAINTAINED IN A SAFE AND STABLE CONDITION AND THAT ADEQUATE PROTECTION AGAINST EROSION AND SILTATION IS IN PLACE;
- G8. WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS AND THE REQUIREMENTS OF HINCHINBROOK SHIRE COUNCIL;
- G9. GRADE EVENLY BETWEEN LEVELS SHOWN EXCEPT WHERE LEVELS INDICATE VERTICAL CURVES;
- G10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION PROTECTION AND SEDIMENT CONTROL FOR THE WORKS AS SPECIFIED AND TO THE SATISFACTION OF HINCHINBROOK SHIRE COUNCIL;
- G11. THE CONTRACTOR IS TO INSPECT THE SITE AND MAKE THEIR OWN ASSESSMENT OF THE GROUND CONDITIONS. NO VARIATION WILL BE APPROVED FOR INCORRECT ASSUMPTION ON THE PART OF THE CONTRACTOR AS TO DIFFERING GROUND CONDITIONS TO THOSE SHOWN IN THE CONTRACT DOCUMENTS;
- G12. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING SERVICES WITH THE RELEVANT AUTHORITIES BEFORE COMMENCING CONSTRUCTION AND TAKE ALL MEASURES TO PROTECT THESE SERVICES DURING CONSTRUCTION OF THE WORKS. ANY COSTS ASSOCIATED WITH REPAIRING DAMAGE TO EXISTING SERVICES SHALL BE PAID FOR BY THE CONTRACTOR;
- G13. THE CONTRACTOR'S TRAFFIC MANAGEMENT PLAN (TMP) AND EROSION AND SEDIMENT CONTROL PLAN (ESCP) SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF WORKS;
- G14. ALL MATERIALS SHALL BE TRANSPORTED ONLY ON ROUTES APPROVED BY COUNCIL AND THE SUPERINTENDENT;
- G15. LEVELS FOR CONNECTION TO EXISTING WORKS MAY BE VARIED WHERE NECESSARY ON SITE TO ACHIEVE A SATISFACTORY SMOOTH FINISH TO THE EXISTING WORKS. THE SUPERINTENDENT SHALL BE NOTIFIED OF ANY LEVEL VARIATION TO THAT SHOWN ON THE DRAWINGS PRIOR TO CONSTRUCTION;
- G16. THE CONTRACTOR SHALL ENSURE THAT THE SITE IS FREE DRAINING AT ALL TIMES. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ALL WORKS AND SURFACES FOR THE DURATION OF THE CONTRACT, AND WILL BE REQUIRED TO UNDERTAKE REMEDIAL WORKS TO ANY WORKS OR SURFACES DAMAGED DURING CONSTRUCTION AS DEEMED NECESSARY BY THE SUPERINTENDENT;
- G17. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING DRAINAGE SYSTEM IN THE VICINITY OF THE SITE AND ENSURING NO MATERIAL FROM THE SITE ENTERS THIS SYSTEM;
- G18. METHOD OF DISPOSAL OF ALL WASTE MATERIALS SHALL BE NOTIFIED TO THE SUPERINTENDENT PRIOR TO DISPOSAL AND / OR REMOVAL FROM SITE;
- G19. ALL DEBRIS, RUBBISH AND UNSUITABLE MATERIAL IS TO BE REMOVED AND DISPOSED OF OFF SITE;
- G20. ON COMPLETION OF THE WORKS THE CONTRACTOR SHALL CLEAN UP THE SITE TO THE SATISFACTION OF THE SUPERINTENDENT;

W1 CONTRACTOR SHALL ADVISE HINCHINBROOK SHIRE COUNCIL PRIOR TO UNDERTAKING ANY
SEWERAGE AND WATER RELATED WORK.
W2 COMPLY WITH FNQROC - STANDARD DRAWINGS.
W3 CONNECTION TO EXISTING MAINS TO BE CARRIED OUT BY COUNCIL AT THE
CONTRACTOR'S EXPENSE.
W4 BEDDING AND SURROUND TO PIPES AND FITTINGS SHALL BE IN ACCORDANCE WITH FNQROC STANDARD
DRAWING S2016

- E1. DRY DENSITY RATIO AS REFERRED TO IN THESE NOTES IS THE RATIO DETERMINED IN ACCORDANCE WITH AS1289.5.4.1 OF COMPACTED DRY DENSITY IN ACCORDANCE WITH AS1289.5.3.1 OR AS1289.5.8.1 TO THE STANDARD MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289.5.1.11 (STANDARD COMPACTION);
- E2. STRIP ALL VEGETABLE MATTER, TOPSOIL AND OTHER UNSUITABLE MATERIAL FROM AREAS TO BE EXCAVATED OR FILLED. STOCKPILE SUITABLE TOPSOIL MATERIAL IN APPROVED LOCATIONS FOR SUBSEQUENT RE-USE.;
- E3. EXCAVATE AS REQUIRED AND DEPOSIT EXCAVATED MATERIAL AS NECESSARY. COMPACT SURFACES EXPOSED BY STRIPPING OR EXCAVATION TO 98% DRY DENSITY RATIO TO A DEPTH OF AT LEAST 250mm, SHOULD ANY SOFT OR UNSUITABLE MATERIAL BE IDENTIFIED SEEK THE ADVICE OF THE SUPERINTENDENT;
- E4. COMPACT FILL TO 98% DRY DENSITY RATIO IN LAYERS OF THICKNESS APPROPRIATE TO THE COMPACTION PLANT EMPLOYED BUT NOT EXCEEDING 200mm. PROVIDE COMPACTION RESULTS IN ACCORDANCE WITH AS.3798 PRIOR TO COUNCIL ACCEPTANCE INSPECTION;
- E5. ALL MATERIALS WITHIN 300mm BELOW ROAD PAVEMENT/SUBGRADE INTERFACE SHALL BE COMPACTED TO 98% DRY DENSITY RATIO.
- E6. SUBGRADE TO ALL CULVERT BASE SLABS TO ACHIEVE A MINIMUM OF 150kPa BEARING CAPACITY. TO BE CONFIRMED BY THE CONTRACTORS GEOTECHNICAL REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE.

- R1. PAVEMENT DESIGN IS BASED ON AN ASSUMED SUBGRADE CBR OF 10 AND IS SUBJECT TO REVISION ON THE BASIS OF CONFIRMATORY CBR TESTS OF THE SUBGRADE AT TIME OF CONSTRUCTION. THE CONTRACTOR SHALL CAUSE TO BE PROVIDED TO THE SUPERINTENDENT AS SOON AS POSSIBLE 1 No. CONFIRMATORY SUBGRADE SOAKED CBR TESTING LOCATIONS TO BE AGREED WITH THE SUPERINTENDANT;
- R2. EXCAVATE OR FILL AS NECESSARY TO PAVEMENT/SUBGRADE INTERFACE AS DESCRIBED IN THE SPECIFICATION AND EARTHWORKS NOTES;
- R3. PRIOR TO PLACING ROAD PAVEMENT MATERIAL THE SUBGRADE SHALL BE TESTED AND PROOF ROLLED IN THE PRESENCE OF THE SUPERINTENDENT AND COUNCIL'S INSPECTING OFFICER.
- R4. PAVEMENT DESIGN SHALL BE AS SHOWN ON DRAWINGS;
- R5. SUBBASE MATERIAL SHALL BE TYPE 2 SUBTYPE 2.3, UNBOUND PAVEMENT MATERIAL WITH GRADING B, C OR D AND MINIMUM SOAKED CBR OF 45 AT 98% DRY DENSITY RATIO AND OTHER QUALITIES AS SPECIFIED, COMPACTED TO 100% DRY DENSITY RATIO. SUBBASE MATERIAL SHALL EXTEND UNDER THE KERB AND CHANNEL TO 200mm PAST THE BACK OF THE KERB AND CHANNEL.;
- R6. BASE COURSE MATERIAL SHALL BE TYPE 2 SUBTYPE 2.1, UNBOUND PAVEMENT MATERIAL WITH GRADING B OR C AND MINIMUM SOAKED CBR OF 80 AT 98% DRY DENSITY RATIO AND OTHER QUALITIES AS SPECIFIED, COMPACTED TO 100% DRY DENSITY RATIO;
- R7. PRIME AND SEAL WITH 30mm MINIMUM THICK LAYER OF DENSE GRADED (DG10) ASPHALTIC CONCRETE AS SPECIFIED.;
- R8. GUARDRAIL TO BE OF THREE BEAM TYPE AND INSTALLED IN ACCORDANCE WITH DTMR STANDARD DRG's 1474, 1477, 1482 AND 1490 AS APPROPRIATE.
- R9. NEATLY JOIN NEW ROADWORKS TO EXISTING WORKS. CUT EXISTING PAVEMENT TO PROVIDE NEAT JOINT AS NECESSARY.

S1 CONTRACTOR SHALL ADVISE HINCHINBROOK SHIRE COUNCIL PRIOR TO UNDERTAKING ANY
SEWERAGE AND WATER RELATED WORK.
S2 COMPLY WITH FNQROC - STANDARD DRAWINGS.
S3 CONNECTION TO EXISTING MAINS TO BE CARRIED OUT BY COUNCIL AT THE
CONTRACTOR'S EXPENSE.
S4 BEDDING AND SURROUND TO PIPES AND FITTINGS SHALL BE IN ACCORDANCE WITH FNQROC STANDARD
DRAWING S2016

- D1. CULVERT BASE SLAB, HEADWALLS, WINGWALLS AND APRON TO BE CONSTRUCTED IN ACCORDANCE WITH DTMR STANDARD DRAWING 1250;
- D2. INSTALLATION AND BACKFILLING OF CULVERTS TO BE IN ACCORDANCE WITH DTMR STANDARD DRAWING 1250 AND 1359;
- D3. GEOFABRIC AND RENO-MATRESSES (AS SPECIFIED) ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
- D4. STORMWATER PIPES TO BE INSTALLED TO HS2 TRENCH STANDARDS IN ACCORDANCE WITH DTMR STANDARD DRG. 1359.
- D7. CULVERT SETOUT IS BASED ON CROWN UNIT EXTERNAL DIMENSIONS DETAILED IN THE FOLLOWING TABLE. THE CONTRACTOR IS TO CONFIRM UNIT DIMENSIONS AND SETOUT PRIOR TO CONSTRUCTION OF THE BASE SLAB.

| ADOPTED CULVERT DIMENSIONS | | |
|----------------------------|---------------------------------|--------------------------------|
| CULVERT SIZE | OVERALL EXTERNAL HEIGHT (mm) | OVERALL EXTERNAL WIDTH (mm) |
| 3600x900 | 1160 | 3948 |
| 3600x1200 | 1400 | 3900 |
| 3600x1500 | 1700 | 3900 |
| 3600x1800 | 2000 | 3900 |
| 3600x2100 | 2300 | 3924 |
| 3600x2400 | 2600 | 3924 |
| 3600x3000 | 3200 | 3948 |


- EC1. EROSION CONTROL MEASURES SHALL BE CARRIED OUT AS PER PLAN AND/OR AS DIRECTED BY THE SUPERINTENDENT.
- EC2. THE CONTRACTOR SHALL MAKE THEMSELVES AWARE OF ALL THEIR REQUIREMENTS AND RESPONSIBILITIES UNDER THE ENVIRONMENT PROTECTION ACT.
- EC3. ALL DISTURBED AREAS SHALL BE TOPSOILED WHERE PRACTICAL AFTER EARTHWORKS ARE COMPLETED AND HYDROMULCHED OR AS DIRECTED BY THE SUPERINTENDENT.
- EC4. ALL CUT & FILL AREAS SHALL HAVE SURFACE ROUGHENING GROVES 25mm DEEP SPACED 250mm APART CUT ALONG THE CONTOURS.
- EC5. ALL AREAS THAT DON'T REQUIRE CUT OR FILL SHALL BE LEFT UNDISTURBED.
- EC6. ALL EROSION & SEDIMENT CONTROLS SHALL BE MAINTAINED TO THE SATISFACTION OF THE SUPERINTENDENT UNTIL THE END OF THE MAINTENANCE PERIOD.
- EC7. CONSTRUCT SILT FENCE MINIMUM 2.0m OFFSET FROM THE TOE OF BATTER.
- EC8. EXTENT OF WORKS MAY BE VARIED BY SUPERINTENDENT TO SUIT SITE CONDITIONS.
- EC9. RENO MATRESSES TO BE INSTALLED AND FILLED TO MANUFACTURER SPECIFICATIONS.

TELECOMMUNICATIONS SERVICE PROVIDERS

SERVICE LOCATIONS

It is the responsibility of the Foreman to contact the relevant service authorities to ascertain the exact location of services prior to construction.


ENERGY SERVICE PROVIDERS




AGL



origin



ERCON
ENERGY



energenx

NOTE: SERVICE LOCATIONS ARE APPROXIMATE ONLY FROM PROVIDERS PLANS. LOCATIONS ARE TO BE CONFIRMED PRIOR TO START OF CONSTRUCTION. PHONE DBYD SERVICE LOCATIONS ON **1100** FOR DETAILS.



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SAFETY IN CONSTRUCTION

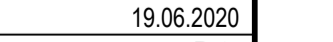
CONSTRUCTION ACTIVITY CAN BE HAZARDOUS. POTENTIAL SAFETY HAZARDS CONSIDERED BY THE DESIGNERS TO HAVE A HIGHER RISK THAN NORMAL CONSTRUCTION ACTIVITY ARE IDENTIFIED WITH APPROPRIATE NOTES ON THESE DRAWINGS. IT SHOULD BE NOTED THAT DESIGNERS HAVE A LOWER UNDERSTANDING OF THE RISKS INVOLVED IN CONSTRUCTION COMPARED WITH THAT OF A COMPETENT CONTRACTOR. IT IS THEREFORE ESSENTIAL THAT AN ADEQUATE SAFETY PLAN FOR THE WORKS IS PREPARED BY THE CONTRACTOR. SAFETY PLANS ARE TO BE PREPARED IN COMPLIANCE WITH THE STATUTORY REQUIREMENTS. THE DESIGNERS MAY NOT BE AWARE OF ALL SAFETY RISKS AND HAZARDS INVOLVED IN THIS PROJECT AND THE ABSENCE OF COMMENT DOES NOT IMPLY THAT THERE ARE ONLY LOW LEVEL RISKS OF HAZARDS INVOLVED IN THE PROJECT. APPROPRIATE WORK METHOD STATEMENTS ARE TO BE PREPARED FOR ANY HIGH RISK ACTIVITY BY THE CONTRACTOR. THE DESIGNERS ARE AVAILABLE TO BE CONSULTED WHEN REQUIRED CONCERNING THEIR AREA OF CONTROL WITH REGARD TO SAFETY PLANS.

| | | | | | |
|------|------------|----------------------------|------|--------|-------|
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| | | | | | |
| | | | | | |
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |
| Rev. | Date | Description | Des. | Verif. | Appd. |

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| | | | | | | | |
|---|--------------------|---|------------------------------------|--|--|------|-------------------|
| Drawn M. CRANE | Date 19.06.2020 | Client HINCHINBROOK SHIRE COUNCIL | | | | | |
| Checked B. MELITA | Date 19.06.2020 | Project PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM | Status FOR CONSTRUCTION | | | | |
| Designed M. CRANE | Date 19.06.2020 | | | | | | |
| Verified B. MELITA | Date 19.06.2020 | | Datum AHD | | | GRID | Scale AS SHOWN |
| Approved | RPEQ. 5700 | Title GENERAL NOTES | Drawing Number 9671-134-CI-1001 | | | | Revision A |
|  | | | | | | | |
| M. MONTGOMERIE | Date 31.08.2021 | | | | | | |

| RISK ASSESSMENT LEGEND | | |
|------------------------|------------|--------------|
| | DATE | ACTIONED BY: |
| INITIAL RISK ANALYSIS | 17.04.2020 | MC/BM |
| FINAL RISK ANALYSIS | | |

[illegible]

DATE PLOTTED: 24 September 2021 11:24 AM BY: LACHLAN LANDY

LEGEND

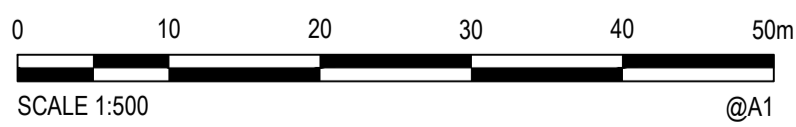
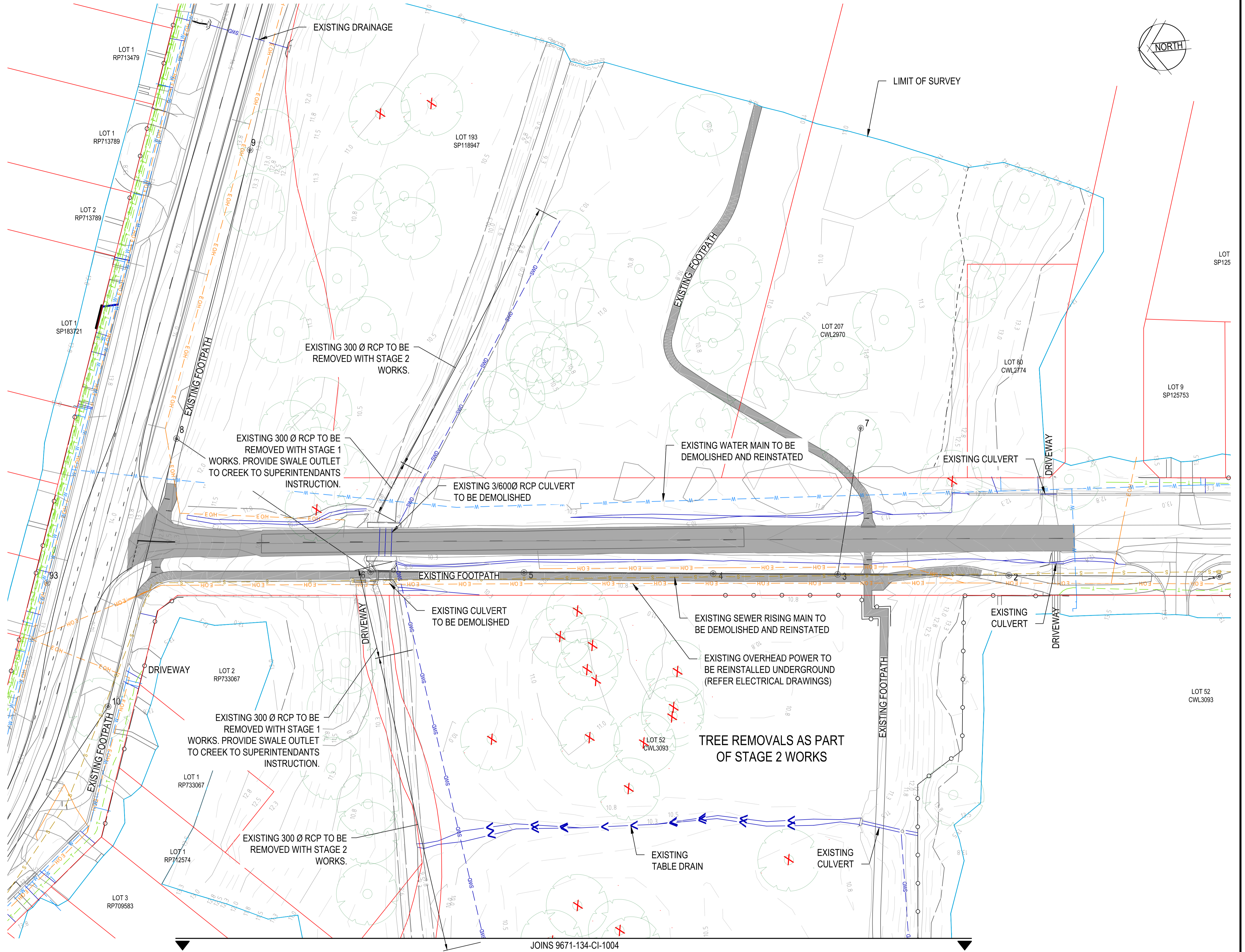
- 10.0 EXISTING CONTOURS
- PROPERTY BOUNDARY
- W EXISTING WATERMAIN
- EXISTING WATER VALVE
- EXISTING WATER HYDRANT
- S EXISTING SEWER
- SWD EXISTING STORMWATER
- RWD EXISTING ROOFWATER
- EXISTING TABLE DRAIN
- T EXISTING TELECOMMUNICATION
- E EXISTING UNDERGROUND ELECTRICAL
- EOH EXISTING OVERHEAD ELECTRICAL
- PP EXISTING POWER POLE
- EXISTING FENCE
- EXISTING VEGETATION
- EXISTING VEGETATION TO BE REMOVED
- EXISTING SIGNAGE
- SURVEY STATION MARK
- EXISTING FOOTPATH TO BE RECONSTRUCTED
- EXISTING ROAD TO BE RECONSTRUCTED

SURVEY SETOUT

| STN | EASTING | NORTHING | ELEVATION | DESCRIPTION |
|------|-------------|--------------|-----------|----------------------|
| 1 | 411975.3540 | 7937437.1440 | 13.294 | Screw in Conc. Path |
| 2 | 411980.6690 | 7937490.9570 | 12.879 | Screw in Conc. Path |
| 3 | 411984.9890 | 7937534.7020 | 10.938 | Screw in Conc. Path |
| 4 | 411988.1300 | 7937566.4980 | 10.770 | Screw in Conc. Path |
| 5 | 411992.9060 | 7937614.8520 | 10.426 | Screw in Conc. Path |
| 6 | 411996.7790 | 7937654.0710 | 10.075 | Screw in Conc. Path |
| 7 | 412021.8450 | 7937525.3340 | 11.362 | Peg |
| 8 | 412035.4190 | 7937700.5050 | 13.150 | Nail in Bitumen Path |
| 9 | 412107.4970 | 7937674.8230 | 13.636 | Nail in Bitumen Path |
| 10 | 411968.5370 | 7937724.3550 | 13.712 | Nail in Bitumen Path |
| 11 | 411902.2200 | 7937778.3020 | 13.426 | Nail in Bitumen |
| 93 | 412001.6050 | 7937737.0070 | 13.598 | PM8392 |
| 100 | 411990.2090 | 7937359.6020 | 12.646 | PM8399 |
| 172 | 411845.6760 | 7937836.2830 | 13.268 | PM16450 |
| 1948 | 411947.1430 | 7937756.3830 | 13.456 | PM1948 |

SURVEY INFORMATION

COUNCIL: HINCHINBROOK SHIRE COUNCIL
LOCALITY: INGHAM
COORDINATE POINT OF ORIGIN: PM8399, ING100,
E 411990.209 N 7937359.602 - MGA-94 ZONE 55
AZIMUTH DATUM: MGA-94
LEVEL DATUM: PM8399, ING100, RL= 12.646 AHD
DERIVED.



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| Drawn | M. CRANE | Date | 19.06.2020 |
| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M. CRANE | Date | 19.06.2020 |
| Verified | B. MELITA | Date | 19.06.2020 |
| Approved | M. MONTGOMERIE | Date | 31.08.2021 |

Client HINCHINBROOK SHIRE COUNCIL
Project PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM

Title EXISTING FEATURES AND SURVEY CONTROL PLAN
SHEET 1 OF 2

Status FOR CONSTRUCTION

| Datum | GRID | Scale | Size |
|----------------|------------------|----------|------------|
| AHD | | AS SHOWN | A1 |
| Drawing Number | 9671-134-CI-1003 | | Revision A |

| Rev. | Date | Description | Des. | Verif. | Appd. |
|------|------------|----------------------------|------|--------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
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XREFs: XR-9671134-CI-SUR-MRK; XR-9671134-CI-DESIGN; XR-9671134-CI-SURVEY; XR-9671134-CI-CONT-EX
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\9671\9671-134 - HSC Palm Creek Bridge\3 - Design\Drawings\9671-134-CI-1003-1004.dwg

LEGEND

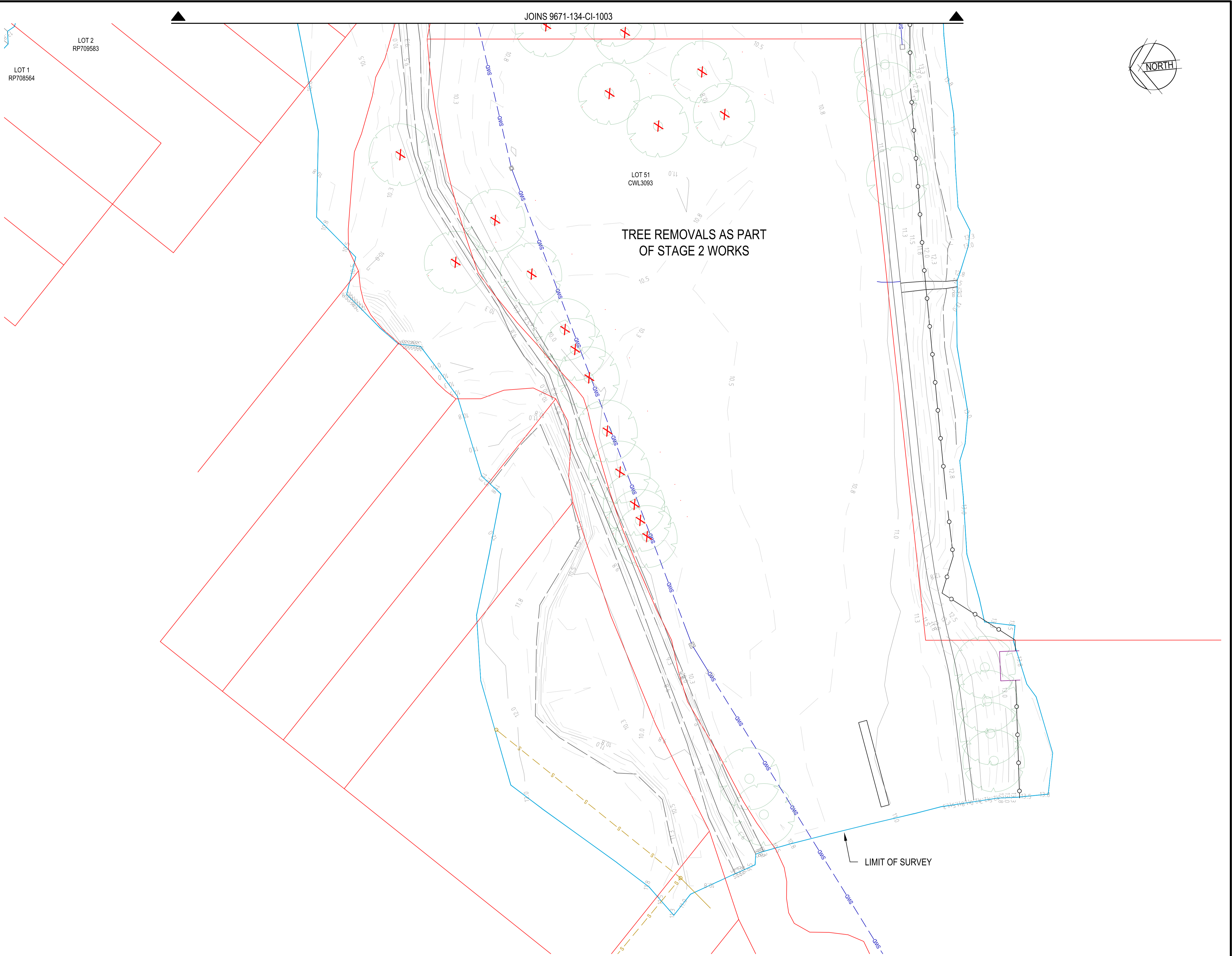
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| 100 | 411990.2090 | 7937359.6020 | 12.646 | PM8399 |
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| 1948 | 411947.1430 | 7937756.3830 | 13.456 | PM1948 |

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LOCALITY: INGHAM
COORDINATE POINT OF ORIGIN: PM8399, ING100,
E 411990.209 N 7937359.602 - MGA-94 ZONE 55
AZIMUTH DATUM: MGA-94
LEVEL DATUM: PM8399, ING100, RL= 12.646 AHD
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|----------|----------------|------|------------|
| Drawn | M. CRANE | Date | 19.06.2020 |
| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M. CRANE | Date | 19.06.2020 |
| Verified | B. MELITA | Date | 19.06.2020 |
| Approved | M. MONTGOMERIE | Date | 31.08.2021 |

Client **HINCHINBROOK SHIRE COUNCIL**
Project **PALM CREEK CULVERT CROSSING**
DUTTON STREET, INGHAM
Title **EXISTING FEATURES AND SURVEY CONTROL PLAN**
SHEET 2 OF 2

| | | | | |
|----------------|-------------------------|------|-------|----------|
| Status | FOR CONSTRUCTION | | | |
| Datum | AHD | GRID | Scale | AS SHOWN |
| Drawing Number | 9671-134-CI-1004 | | | Revision |
| | | | | A |


| Rev. | Date | Description | Des. | Verif. | Appd. |
|------|------------|----------------------------|------|--------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |



0 10 20 30 40 50m

SCALE 1:500 @A1



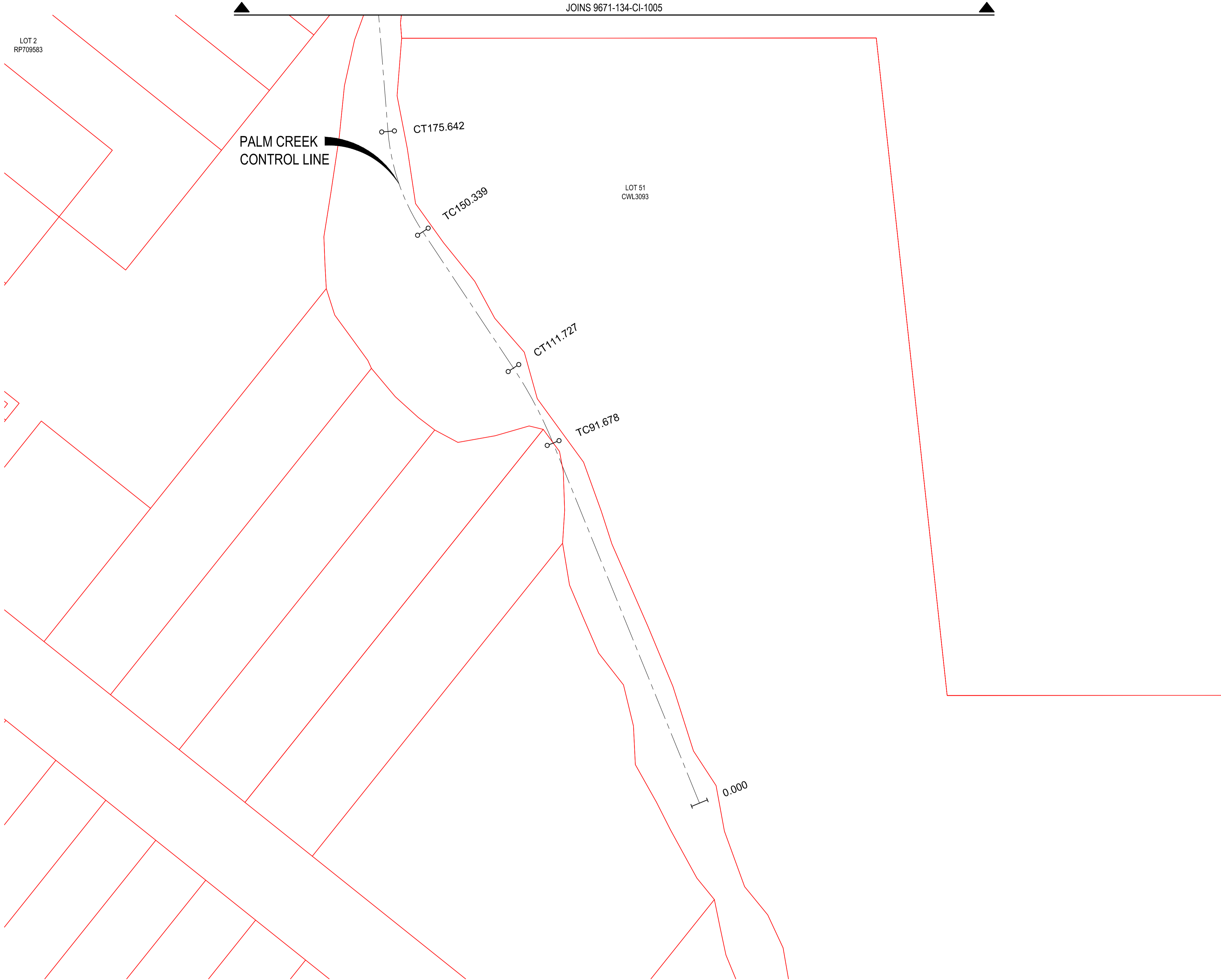
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| Drawn | Date |
| M. CRANE | 19.06.2020 |
| Checked | Date |
| B. MELITA | 19.06.2020 |
| Designed | Date |
| M. CRANE | 19.06.2020 |
| Verified | Date |
| B. MELITA | 19.06.2020 |
| Approved | RPEQ. 5700 |
|  | Date |
| M. MONTGOMERIE | 31.08.2021 |

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| Status | FOR CONSTRUCTION |
|--------|------------------|

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|------------------------------------|------|-------------------|---------------|
| Datum AHD | GRID | Scale AS SHOWN | Size A1 |
| Drawing Number 9671-134-CI-1005 | | | Revision A |

DATE PLOTTED: 24 September 2021 11:25 AM BY: LACHLAN LANDY

XREFs: XR-9671134-CI-SURVEY; XR-9671134-CI-DSN-ROAD; XR-9671134-CI-DOB; XR-9671134-CI-CL_CH
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\9671\9671-134 - HSC Palm Creek Bridge3 - Project Delivery\Design\Drawings\9671-134-CI-1005-1006.dwg



LAYOUT PLAN
SCALE 1:500

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| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |
| Rev. | Date | Description | Des. | Verif. | Appd. |

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| Drawn | M.CRANE | Date | 19.06.2020 |
| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M.CRANE | Date | 19.06.2020 |
| Verified | B.MELITA | Date | 19.06.2020 |
| Approved | M.MONTGOMERIE | Date | 31.08.2021 |

| | |
|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | CONTROL LINE GEOMETRY LAYOUT PLAN SHEET 2 OF 2 |

| | | | | | |
|------------------|--|------|----------|------------------|----|
| Status | | | | FOR CONSTRUCTION | |
| Datum | | GRID | Scale | Size | |
| AHD | | | AS SHOWN | | A1 |
| Drawing Number | | | | Revision | |
| 9671-134-CI-1006 | | | | A | |

DATE PLOTTED: 24 September 2021 11:25 AM BY: LACHLAN LANDY

| DUTTON STREET HORIZONTAL POINTS | | | | | | | | |
|---------------------------------|----------|------------|-------------|--------|---------------|--------------|----------|-------------|
| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH | DEFL.ANGLE |
| IP 1 | 0.000 | 412012.190 | 7937722.009 | 14.035 | 190°5'106.92" | | | |
| TC | 7.524 | 412010.774 | 7937714.619 | 13.585 | 190°5'106.92" | | | |
| IP 2 | 17.721 | 412008.852 | 7937704.596 | 12.799 | | R = -200.000 | 20.393 | 5°50'32.29" |
| CT | 27.918 | 412007.961 | 7937694.429 | 12.759 | 185°00'34.63" | | | |
| IP 3 | 276.150 | 411986.285 | 7937447.145 | 13.267 | 185°00'34.63" | | | |

| DRIVEWAY HORIZONTAL POINTS | | | | | |
|----------------------------|----------|------------|-------------|--------|---------------|
| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING |
| IP 1 | 0.000 | 412006.819 | 7937681.397 | 12.759 | 275°00'34.63" |
| IP 2 | 20.000 | 411986.895 | 7937683.144 | 12.796 | 275°00'34.63" |

| PALM CREEK HORIZONTAL POINTS | | | | | | | | |
|------------------------------|----------|------------|-------------|--------|---------------|--------------|----------|--------------|
| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH | DEFL.ANGLE |
| IP 1 | 0.000 | 411711.581 | 7937593.978 | 9.214 | 73°10'30.17" | | | |
| TC | 91.678 | 411799.335 | 7937620.514 | 9.207 | 73°10'30.17" | | | |
| IP 2 | 101.702 | 411808.963 | 7937623.426 | 9.207 | | R = -100.000 | 20.049 | 11°29'14.37" |
| CT | 111.727 | 411817.818 | 7937628.196 | 9.206 | 61°41'15.80" | | | |
| TC | 150.339 | 411851.811 | 7937646.509 | 9.203 | 61°41'15.80" | | | |
| IP 3 | 162.991 | 411863.193 | 7937652.641 | 9.202 | | R = 50.000 | 25.304 | 28°59'44.49" |
| CT | 175.642 | 411876.121 | 7937652.487 | 9.201 | 90°41'00.29" | | | |
| TC | 244.787 | 411945.260 | 7937651.662 | 9.202 | 90°41'00.29" | | | |
| IP 4 | 258.001 | 411958.479 | 7937651.504 | 9.202 | | R = 350.000 | 26.427 | 4°19'34.34" |
| CT | 271.214 | 411971.649 | 7937650.350 | 9.203 | 95°00'34.63" | | | |
| TC | 312.289 | 412012.566 | 7937646.763 | 9.109 | 95°00'34.63" | | | |
| IP 5 | 328.298 | 412029.083 | 7937645.315 | 9.072 | | R = 50.000 | 32.019 | 36°41'29.13" |
| CC | 344.308 | 412041.462 | 7937634.285 | 9.036 | 131°42'03.76" | | | |
| IP 6 | 360.281 | 412053.491 | 7937623.568 | 9.000 | | R = -100.000 | 31.945 | 18°18'12.25" |
| CT | 376.253 | 412068.276 | 7937617.171 | 8.964 | 113°23'51.51" | | | |
| IP 7 | 439.216 | 412126.061 | 7937592.168 | 8.822 | 113°23'51.51" | | | |

| PATHWAY PART 1 HORIZONTAL POINTS | | | | | | | | |
|----------------------------------|----------|------------|-------------|--------|---------------|------------|----------|--------------|
| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH | DEFL.ANGLE |
| IP 1 | 0.000 | 411979.388 | 7937719.692 | 13.506 | 109°02'14.45" | | | |
| TC | 15.118 | 411993.679 | 7937714.761 | 13.051 | 109°02'14.45" | | | |
| IP 2 | 20.644 | 411999.482 | 7937712.759 | 12.759 | | R = 10.200 | 11.051 | 62°04'39.77" |
| CT | 26.169 | 412000.430 | 7937706.694 | 12.331 | 171°06'54.22" | | | |
| TC | 32.350 | 412001.384 | 7937700.587 | 12.057 | 171°06'54.22" | | | |
| IP 3 | 34.290 | 412001.686 | 7937698.661 | 12.113 | | R = 16.000 | 3.880 | 13°53'40.41" |
| CT | 36.231 | 412001.515 | 7937696.719 | 12.170 | 185°00'34.63" | | | |
| IP 4 | 49.511 | 412000.356 | 7937683.490 | 12.563 | 185°00'34.63" | | | |

| PATHWAY PART 2 HORIZONTAL POINTS | | | | | | | | |
|----------------------------------|----------|------------|-------------|--------|---------------|-------------|----------|--------------|
| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH | DEFL.ANGLE |
| IP 1 | 0.000 | 411984.466 | 7937504.927 | 12.295 | 287°08'25.37" | | | |
| TC | 6.635 | 411978.126 | 7937506.883 | 11.973 | 287°08'25.37" | | | |
| IP 2 | 11.393 | 411972.719 | 7937508.550 | 11.539 | | R = 7.000 | 9.517 | 77°53'56.14" |
| CT | 16.152 | 411973.216 | 7937514.187 | 11.127 | 5°02'21.51" | | | |
| TC | 125.984 | 411982.864 | 7937623.594 | 9.869 | 5°02'21.51" | | | |
| IP 3 | 131.480 | 411983.478 | 7937630.563 | 9.841 | | R = 7.000 | 10.992 | 89°58'13.78" |
| CT | 136.976 | 411990.448 | 7937629.952 | 9.813 | 95°00'35.28" | | | |
| TC | 160.633 | 412014.015 | 7937627.886 | 9.699 | 95°00'35.28" | | | |
| IP 4 | 172.560 | 412027.539 | 7937626.701 | 9.869 | | R = 20.000 | 23.854 | 68°20'11.15" |
| CT | 184.487 | 412031.430 | 7937613.695 | 10.165 | 163°20'46.43" | | | |
| TC | 210.300 | 412038.827 | 7937588.964 | 10.715 | 163°20'46.43" | | | |
| IP 5 | 223.700 | 412042.945 | 7937575.199 | 10.795 | | R = -30.000 | 26.799 | 51°10'59.63" |
| CT | 237.100 | 412056.252 | 7937569.779 | 10.821 | 112°09'46.81" | | | |
| IP 6 | 241.037 | 412059.898 | 7937568.293 | | 112°09'46.81" | | | |

| PATHWAY PART 3 HORIZONTAL POINTS | | | | | | | | |
|----------------------------------|----------|------------|-------------|--------|--------------|-------------|----------|--------------|
| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH | DEFL.ANGLE |
| IP 1 | 0.000 | 411982.255 | 7937497.757 | 12.366 | 17°08'25.09" | | | |
| TC | 13.060 | 411986.104 | 7937510.237 | 12.459 | 17°08'25.09" | | | |
| IP 2 | 16.236 | 411987.043 | 7937513.283 | 12.552 | | R = -30.000 | 6.352 | 12°07'50.53" |
| CT | 19.412 | 411987.321 | 7937516.459 | 12.621 | 5°00'34.56" | | | |
| IP 3 | 22.487 | 411987.590 | 7937519.522 | | 5°00'34.56" | | | |

| PATHWAY PART 4 HORIZONTAL POINTS | | | | |
|----------------------------------|----------|------------|-------------|---------------|
| PT | CHAINAGE | EASTING | NORTHING | BEARING |
| IP 1 | 0.000 | 411974.052 | 7937523.664 | 276°13'03.69" |
| IP 2 | 16.212 | 411957.935 | 7937525.420 | 276°13'03.69" |

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| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | | JJ | BM MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | | MC | BM MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | | MC | BM MB |
| Rev. | Date | Description | | Des. | Verif. Appd. |

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Web: www.cardno.com.au

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|---------------------------|----------------------------------|
| Drawn M.CRANE | Date 19.06.2020 |
| Checked B. MELITA | Date 19.06.2020 |
| Designed M.CRANE | Date 19.06.2020 |
| Verified B.MELITA | Date 19.06.2020 |
| Approved M.MONTGOMERIE | RPEQ: 5700 Date 31.08.2021 |

Client HINCHINBROOK SHIRE COUNCIL

Project PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM

Title CONTROL LINE GEOMETRY AND SETOUT TABLES

Status FOR CONSTRUCTION

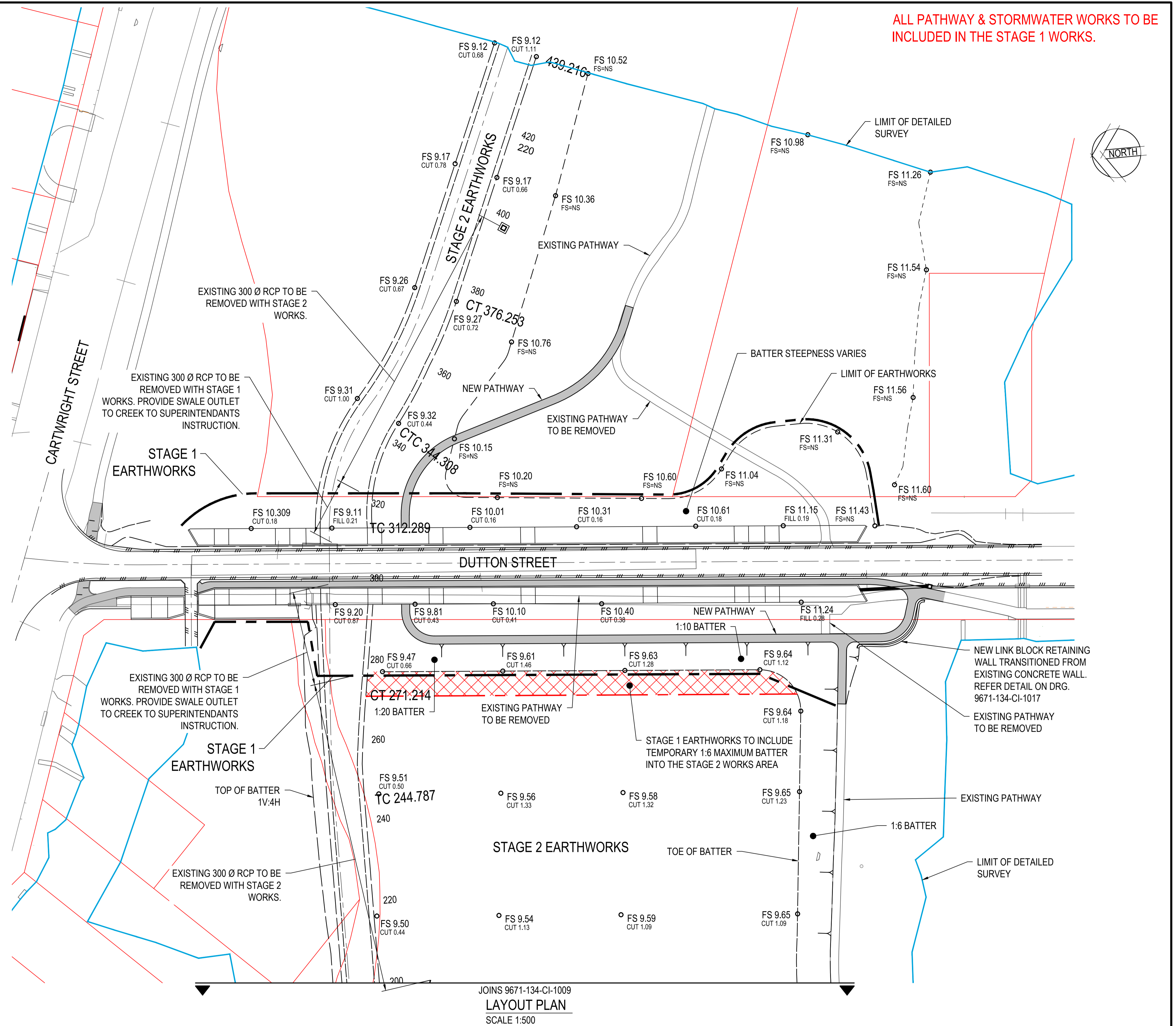
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| Datum AHD | GRID | Scale AS SHOWN | Size A1 |
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| Drawing Number 9671-134-CI-1007 | Revision A |
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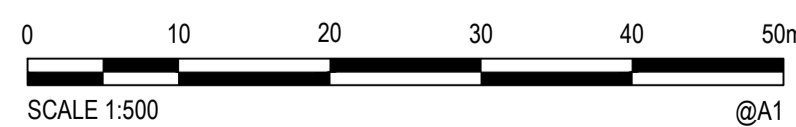
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CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\9671\9671-134- HSC Palm Creek Bridge3_Project Delivery\Design\CAD\MC WFH Drawings\Drawings\9671-134-CI-1007.dwg



| PALM CREEK INVERT GRADING DATA | | |
|--------------------------------|--------------|---|
| CHAINAGE | INVERT LEVEL | GRADE (%) |
| 0.0 | 9.268 | <div><div></div><div>-0.022%</div><div></div></div> |
| 20 | 9.264 | |
| 40 | 9.260 | |
| 60 | 9.255 | |
| 80 | 9.251 | |
| 91.678 | 9.248 | |
| 100 | 9.247 | |
| 111.727 | 9.244 | |
| 120 | 9.242 | |
| 140 | 9.238 | |
| 150.339 | 9.236 | |
| 160 | 9.234 | |
| 175.642 | 9.230 | |
| 180 | 9.229 | |
| 200 | 9.225 | |
| 220 | 9.220 | |
| 240 | 9.216 | |
| 244.787 | 9.215 | |
| 260 | 9.212 | |
| 271.214 | 9.209 | |
| 280 | 9.207 | |
| 312.289 | 9.109 | |
| 320 | 9.091 | |
| 340 | 9.046 | |
| 344.308 | 9.036 | |
| 360 | 9.001 | |
| 376.253 | 8.964 | |
| 380 | 8.956 | |
| 400 | 8.911 | |
| 420 | 8.865 | |
| 439.216 | 8.822 | <div><div></div><div>-0.226%</div><div></div></div> |



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| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB | |
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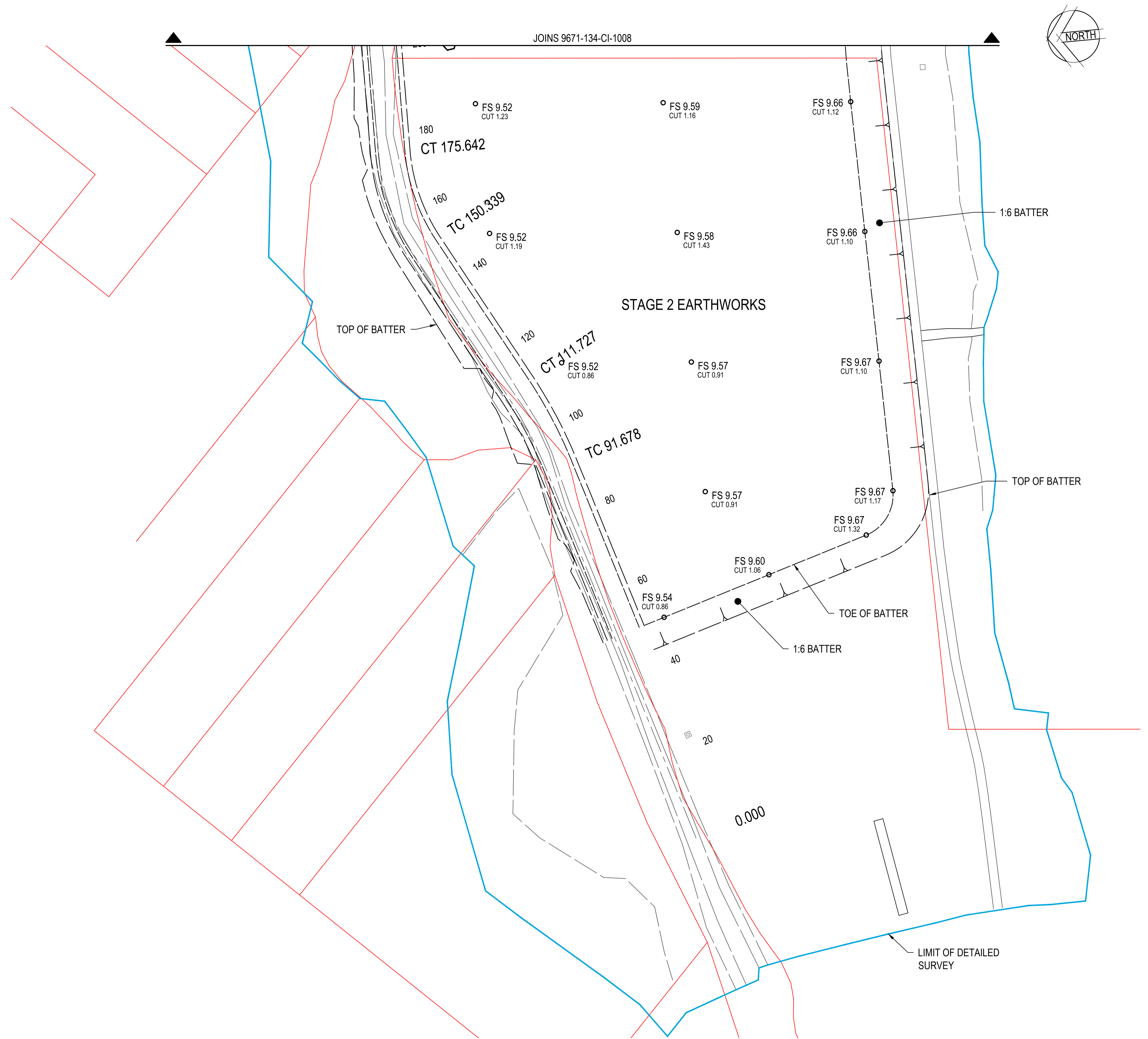


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|----------------|------------|
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| M. CRANE | 19.06.2020 |
| Checked | Date |
| B. MELITA | 19.06.2020 |
| Designed | Date |
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| Verified | Date |
| B. MELITA | 19.06.2020 |
| Approved | RPEQ. 5700 |
| M. MONTGOMERIE | 31.08.2021 |

| | |
|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | EARTHWORKS GRADING LAYOUT PLAN SHEET 1 OF 2 |

| | | | |
|------------------|------|----------|----------|
| Status | | | |
| FOR CONSTRUCTION | | | |
| Date | GRID | Scale | Size |
| AHD | | AS SHOWN | A1 |
| Drawing Number | | | Revision |
| 9671-134-CI-1008 | | | A |

| CHAINAGE | INVERT LEVEL | GRADE (%) |
|----------|--------------|---|
| 0.0 | 9.268 | <div><div></div><div>-0.022%</div><div></div></div> |
| 20 | 9.264 | |
| 40 | 9.260 | |
| 60 | 9.255 | |
| 80 | 9.251 | |
| 91.678 | 9.248 | |
| 100 | 9.247 | |
| 111.727 | 9.244 | |
| 120 | 9.242 | |
| 140 | 9.238 | |
| 150.339 | 9.236 | |
| 160 | 9.234 | |
| 175.642 | 9.230 | |
| 180 | 9.229 | |
| 200 | 9.225 | |
| 220 | 9.220 | |
| 240 | 9.216 | |
| 244.787 | 9.215 | |
| 260 | 9.212 | |
| 271.214 | 9.209 | |
| 280 | 9.207 | |
| 312.289 | 9.109 | <div><div></div><div>CULVERT</div><div></div></div> <div><div></div><div>-0.226%</div><div></div></div> |
| 320 | 9.091 | |
| 340 | 9.046 | |
| 344.308 | 9.036 | |
| 360 | 9.001 | |
| 376.253 | 8.964 | |
| 380 | 8.956 | |
| 400 | 8.911 | |
| 420 | 8.865 | |
| 439.216 | 8.822 | |



LAYOUT PLAN
SCALE 1:500

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| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB | |
| Rev. | Date | Description | Des. | Verif. | Appd. | |

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| Checked | Date |
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| Verified | Date |
| B. MELITA | 19.06.2020 |
| Approved | RPEQ. 5700 |
| M. MONTGOMERIE | 31.08.2021 |

| | |
|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | EARTHWORKS GRADING LAYOUT PLAN SHEET 2 OF 2 |

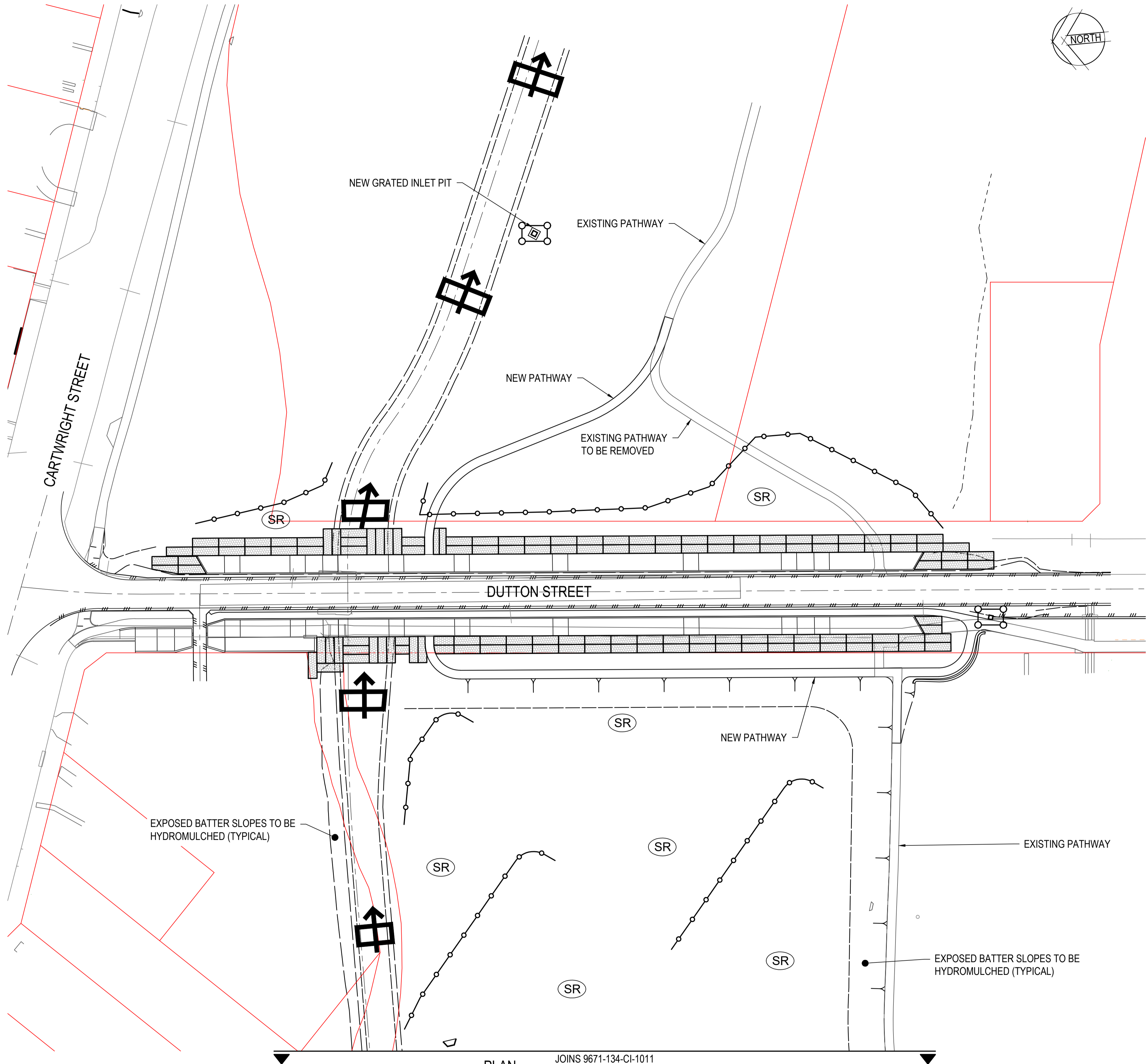
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| Status | | | | FOR CONSTRUCTION | | | |
| Datum AHD | | GRID | | Scale AS SHOWN | | Size A1 | |
| Drawing Number 9671-134-CI-1009 | | | | | | Revision A | |

LEGEND

- SEDIMENT FENCE
- FLOW PATH
- SEDIMENT TRAP
- (SR) SURFACE ROUGHENING
- ROCK FILTER DAM
- ROCK FILLED RENO MATRESSES (6.0x2.0x0.23) ON GEOFABRIC INSTALLED TO MANUFACTURE SPECIFICATIONS (TYPICAL)

MAINTENANCE PERIOD

- SEDIMENT BARRIERS TO REMAIN IN PLACE UNTIL THE END OF THE MAINTENANCE PERIOD OR UNTIL DISTURBED AREAS ARE STABILISED.
- SEDIMENT BARRIERS AND STORMWATER SYSTEM ARE TO BE INSPECTED WEEKLY OR FOLLOWING RAINFALL EVENTS. SEDIMENT IS TO BE CLEARED FROM STRUCTURES AND ROADS AND CORRECTIVE ACTION TAKEN TO ADDRESS ANY SYSTEM FAILURES.
- REVEGETATION MAINTENANCE IS TO BE CONTINUED TO ESTABLISH AND MAINTAIN 70% GROUND COVER IN TREATED AREAS.



PLAN
SCALE 1:500
JOINS 9671-134-CI-1011



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Web: www.cardno.com.au

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| Drawn | M. CRANE | Date | 19.06.2020 |
| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M. CRANE | Date | 19.06.2020 |
| Verified | B. MELITA | Date | 19.06.2020 |
| Approved | M. MONTGOMERIE | Date | 31.08.2021 |

| | |
|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 1 OF 2 |



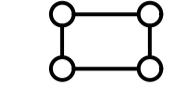

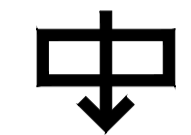
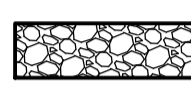
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| Status | | | | FOR CONSTRUCTION | |
| Datum | GRID | Scale | Size | | |
| AHD | | AS SHOWN | A1 | | |
| Drawing Number | | | | Revision | |
| 9671-134-CI-1010 | | | | A | |

| Rev. | Date | Description | Des. | Verf. | Appd. |
|------|------------|----------------------------|------|-------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |

DATE PLOTTED: 24 September 2021 11:25 AM BY: LACHLAN LINDY

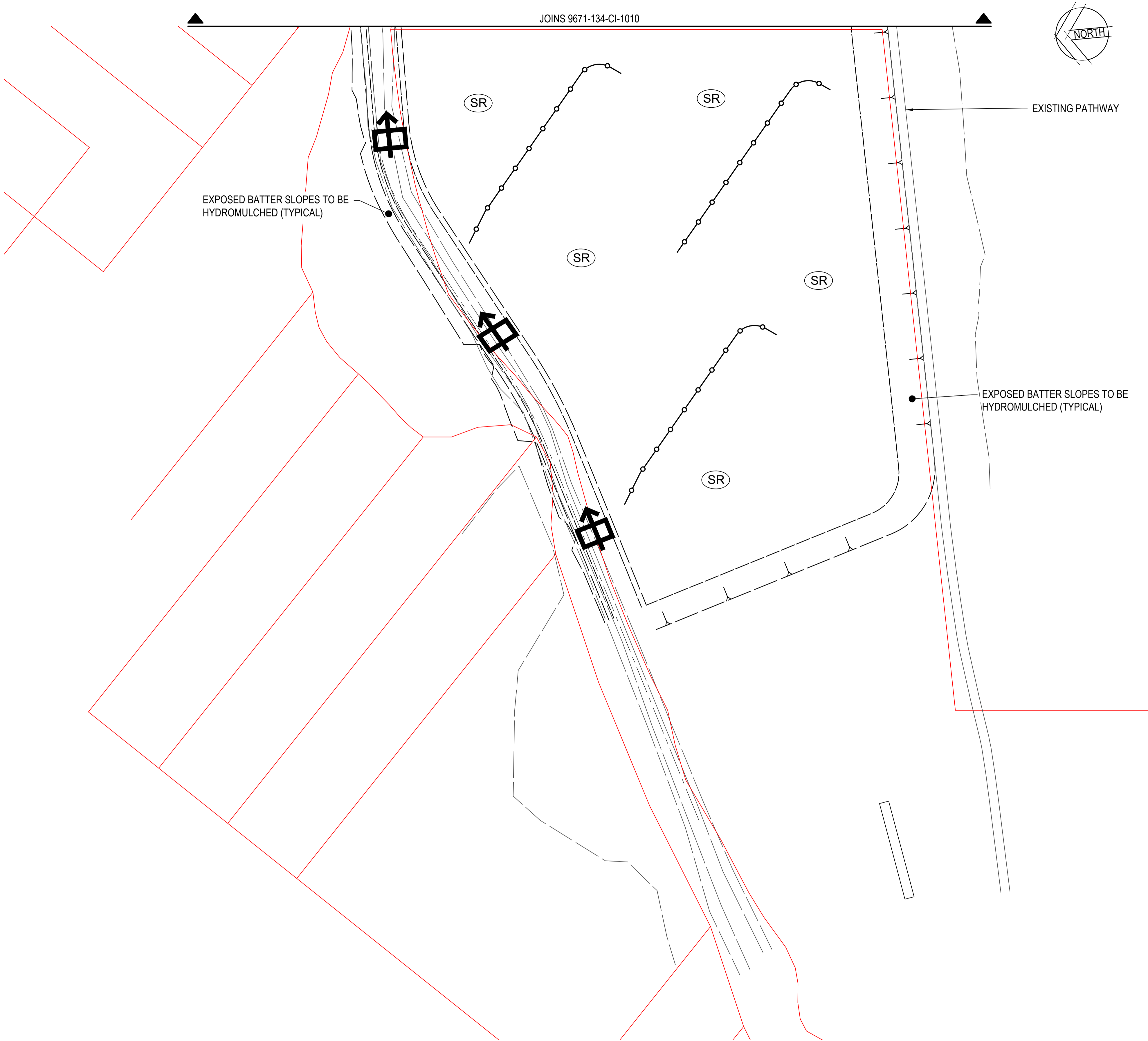
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LEGEND

-  SEDIMENT FENCE
-  FLOW PATH
-  SEDIMENT TRAP
-  SURFACE ROUGHENING
-  ROCK FILTER DAM
-  ROCK FILLED RENO MATTRESSES
(6.0x2.0x0.23) ON GEOFABRIC
INSTALLED TO MANUFACTURE
SPECIFICATIONS (TYPICAL)

MAINTENANCE PERIOD

- SEDIMENT BARRIERS TO REMAIN IN PLACE UNTIL THE END OF THE MAINTENANCE PERIOD OR UNTIL DISTURBED AREAS ARE STABILISED.
- SEDIMENT BARRIERS AND STORMWATER SYSTEM ARE TO BE INSPECTED WEEKLY OR FOLLOWING RAINFALL EVENTS. SEDIMENT IS TO BE CLEARED FROM STRUCTURES AND ROADS AND CORRECTIVE ACTION TAKEN TO ADDRESS ANY SYSTEM FAILURES.
- REVEGETATION MAINTENANCE IS TO BE CONTINUED TO ESTABLISH AND MAINTAIN 70% GROUND COVER IN TREATED AREAS.



PLAN
SCALE 1:500

| Rev. | Date | Description | Des. | Verif. | Appd. |
|------|------------|----------------------------|------|--------|-------|
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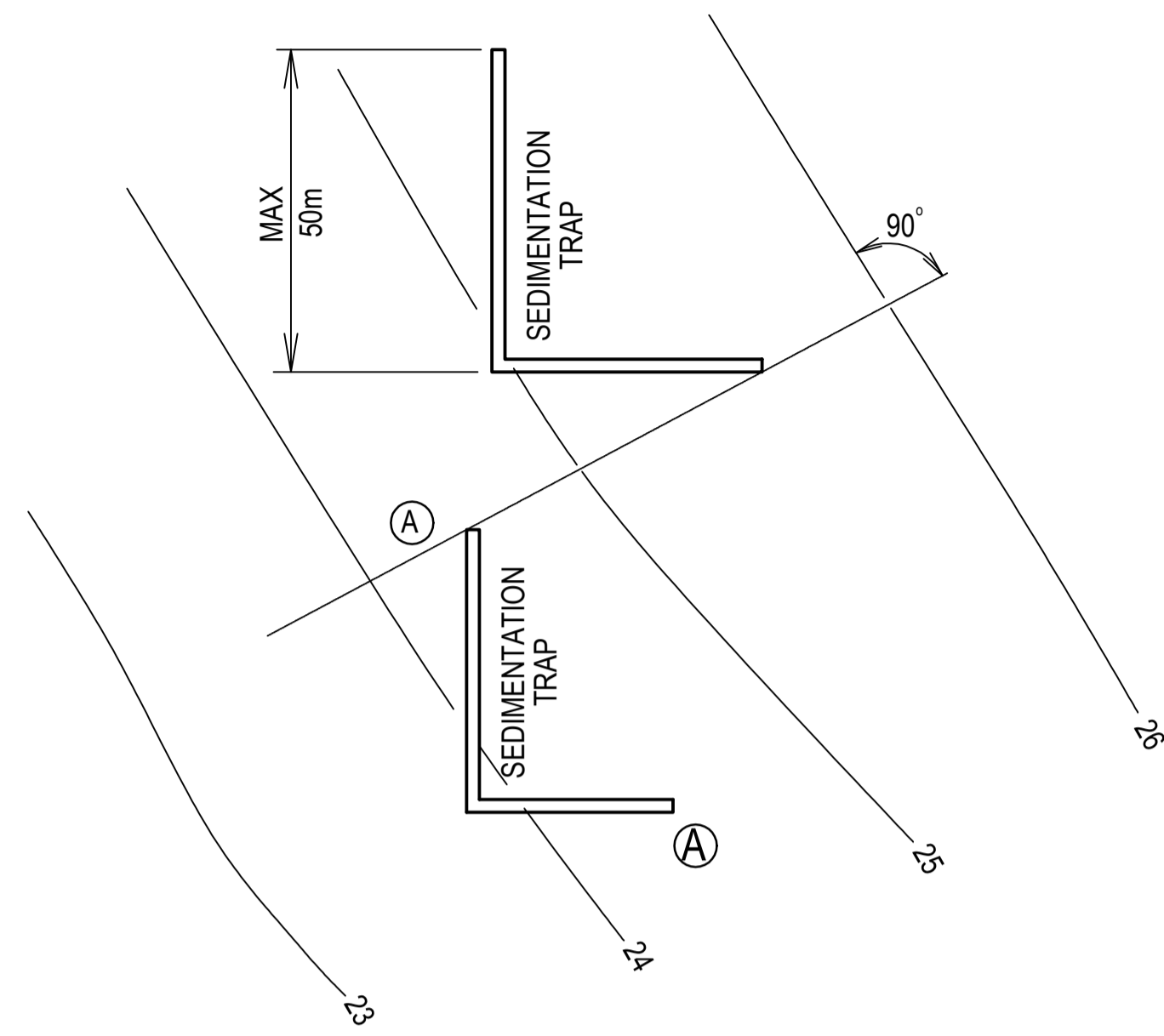
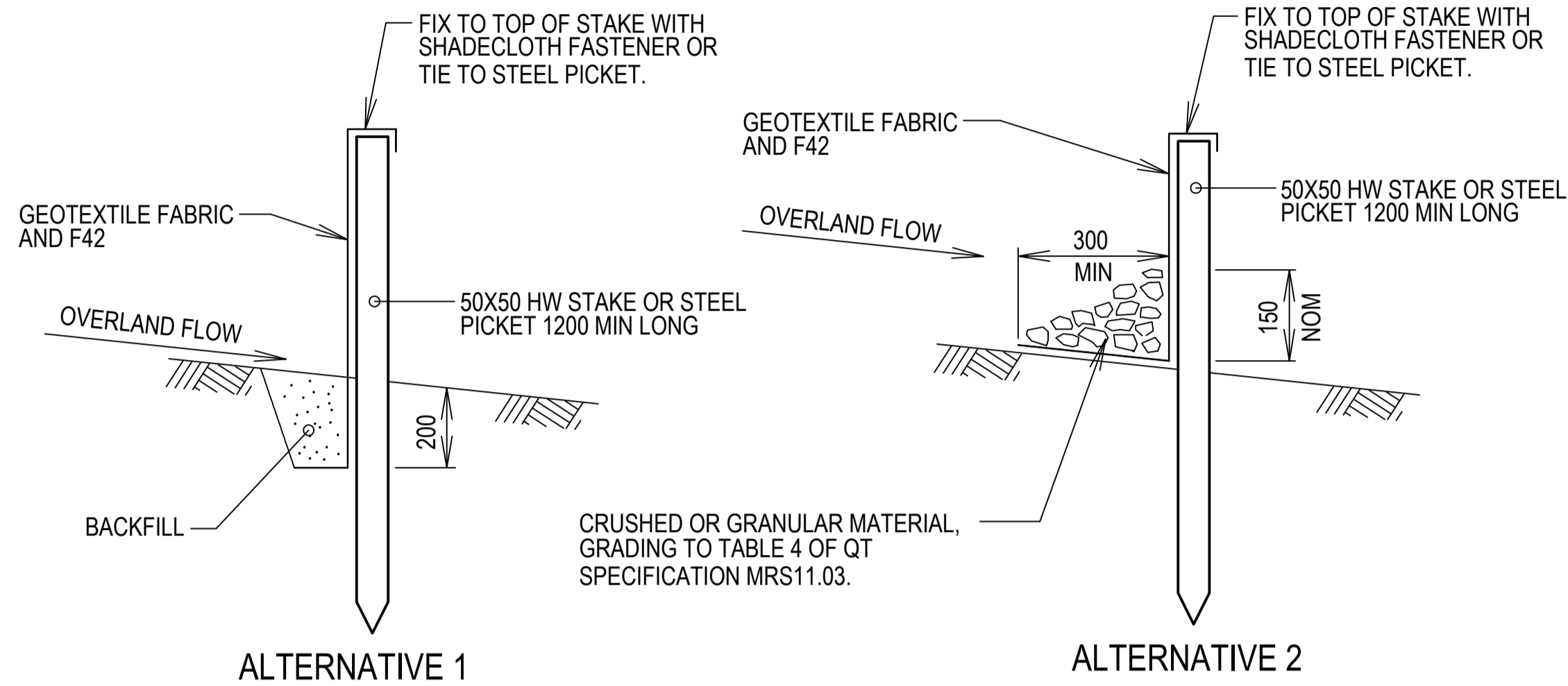


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|----------|---------------|------|------------|
| Drawn | M.CRANE | Date | 19.06.2020 |
| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M.CRANE | Date | 19.06.2020 |
| Verified | B.MELITA | Date | 19.06.2020 |
| Approved | M.MONTGOMERIE | Date | 31.08.2021 |

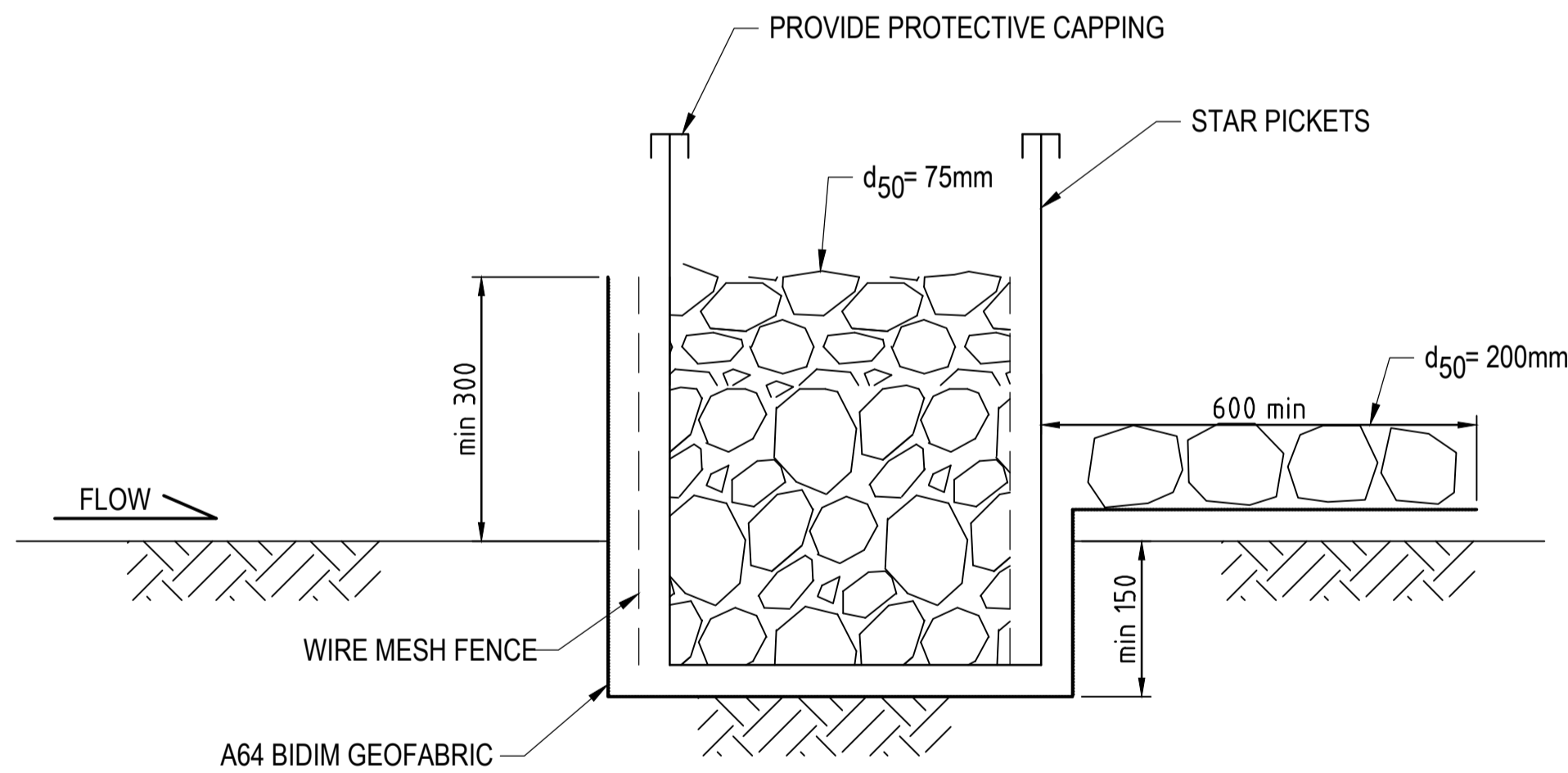
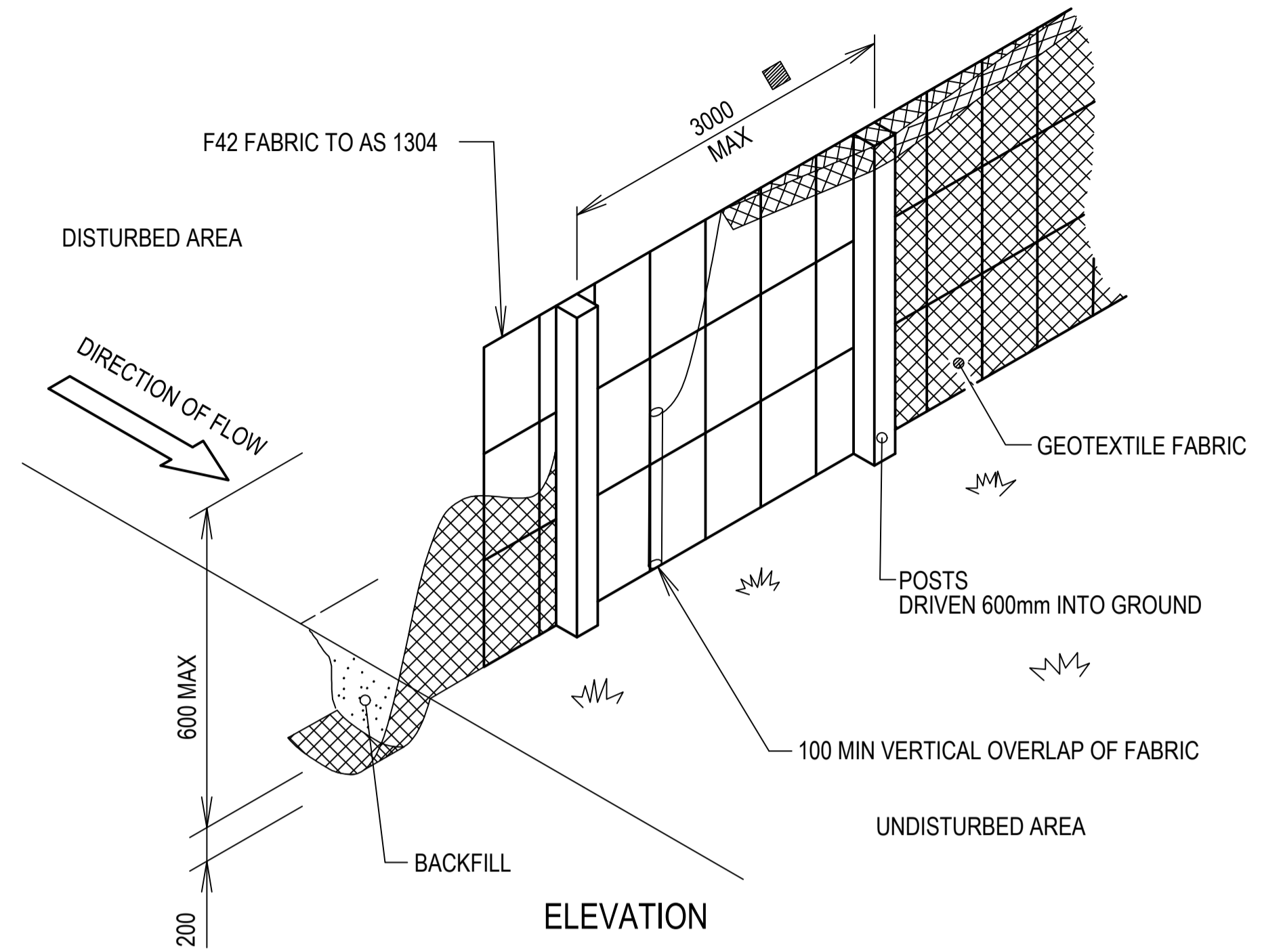
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|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 2 OF 2 |

| | | | | | |
|------------------|------|----------|------|------------------|--|
| Status | | | | FOR CONSTRUCTION | |
| Datum | GRID | Scale | Size | | |
| AHD | | AS SHOWN | A1 | | |
| Drawing Number | | | | Revision | |
| 9671-134-CI-1011 | | | | A | |



TYPICAL LAYOUT ACROSS GRADE
POINTS A AT SAME ELEVATION

SEDIMENT FENCE



TYPICAL ROCK CHECK DAM SECTION
NOT TO SCALE

NOTES

1. GENERAL
 - (A) TEMPORARY DRAINAGE CONTROL. FLOW SHOULD BE DIVERTED AROUND THE WORK SITE WHERE POSSIBLE.
 - (B) ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AND BE OPERATIONAL BEFORE COMMENCING UP-SLOPE EARTHWORKS.
 - (C) ALL CONTROL MEASURES TO BE INSPECTED AT LEAST WEEKLY AND AFTER SIGNIFICANT RUNOFF PRODUCING STORMS.
 - (D) CONTROL MEASURES MAY BE REMOVED WHEN ON-SITE EROSION IS CONTROLLED AND 70% PERMANENT SOIL COVERAGE IS OBTAINED OVER ALL UPSTREAM DISTURBED LAND.
 - (E) IN AREAS WHERE RUNOFF TURBIDITY IS TO BE CONTROLLED, EXPOSED SURFACES TO BE EITHER MULCHED, COVERED WITH EROSION CONTROL BLANKETS OR TURFED IF EARTHWORKS ARE EXPECTED TO BE DELAYED FOR MORE THAN 14 DAYS.
2. SEDIMENT FENCE
 - (A) NORMALLY LOCATED ALONG THE CONTOUR WITH A MAXIMUM CATCHMENT AREA 0.6 ha PER 100m LENGTH OF FENCE.
 - (B) WOVEN FABRICS ARE PREFERRED, I.E. OPERATIONAL PERIOD LESS THAN 6 MONTHS OR ON SITES WHERE SIGNIFICANT SEDIMENT RUNOFF IS NOT EXPECTED.
 - (C) WHERE FENCES NEED TO BE LOCATED ACROSS THE CONTOUR THE LAYOUT SHALL CONFORM TO 'TYPICAL LAYOUT ACROSS GRADE'.
 - (D) FENCES ARE REQUIRED 2m MIN FROM TOE OF CUT OR FILL BATTERS, WHERE NOT PRACTICAL ONE FENCE CAN BE AT THE TOE WITH A SECOND FENCE 1m MIN AWAY. FENCE SHOULD NOT BE LOCATED PARALLEL WITH TOE IF CONCENTRATION OF FLOW WILL OCCUR BEHIND THE FENCE.
3. TEMP CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP.
 - (A) ADJACENT STORMWATER RUNOFF TO BE DIVERTED AWAY FROM ENTRY/EXIT.
 - (B) WHEEL - WASH OR SPRAY UNIT MAY BE REQUIRED DURING WET WEATHER.
4. SAFETY ISSUES MUST BE CONSIDERED AT ALL TIMES, INCORPORATE TRAFFIC CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT.
5. ALL DIMENSIONS IN MILLIMETRES UNLESS INDICATED OTHERWISE.

| Rev. | Date | Description | Des. | Verif. | Appd. |
|------|------------|----------------------------|------|--------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |

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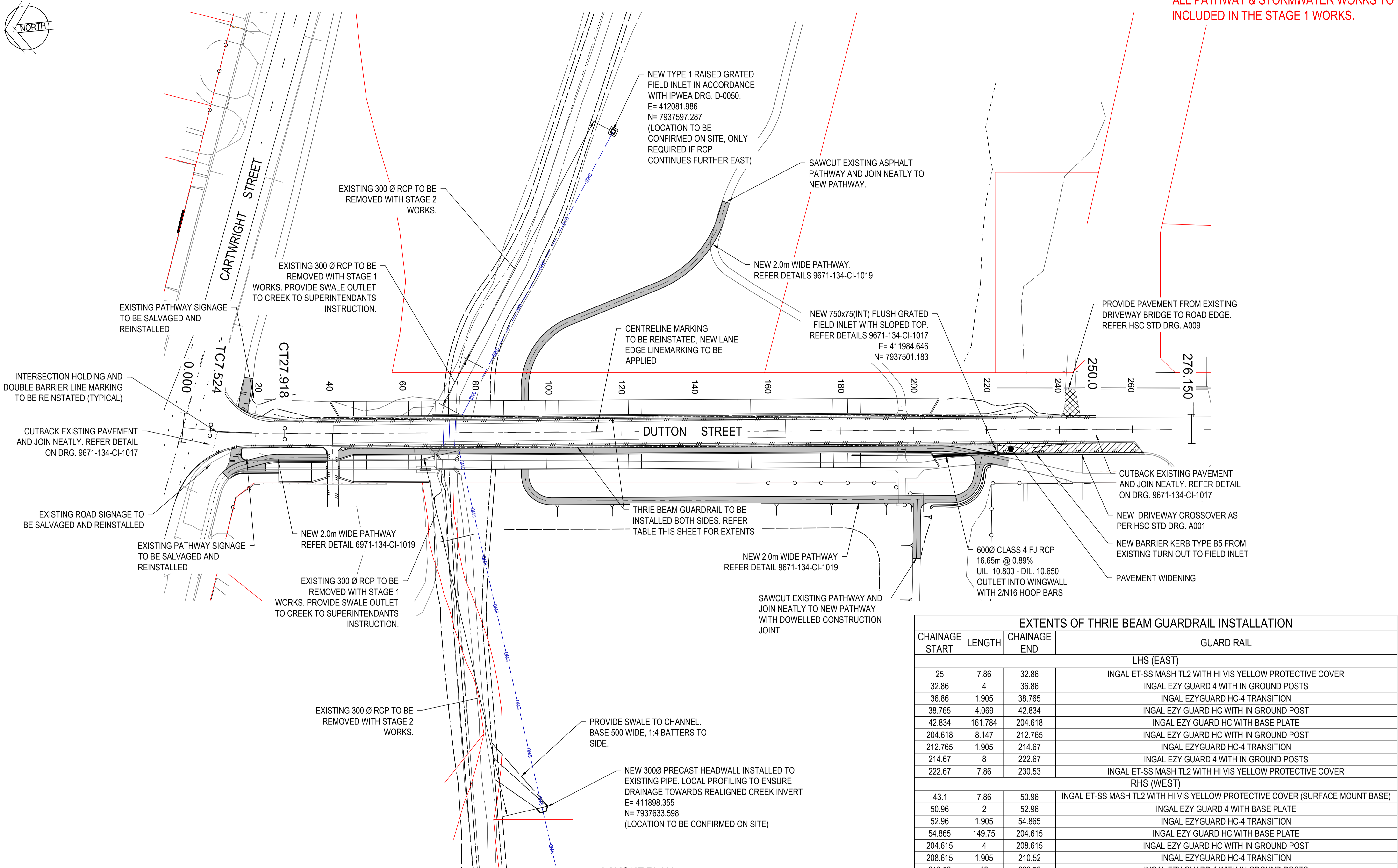
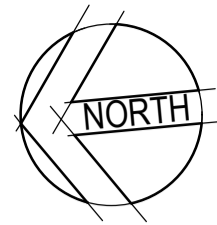


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|----------|----------------|------|------------|
| Drawn | M. CRANE | Date | 19.06.2020 |
| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M. CRANE | Date | 19.06.2020 |
| Verified | B. MELITA | Date | 19.06.2020 |
| Approved | M. MONTGOMERIE | Date | 31.08.2021 |

| | |
|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | EROSION AND SEDIMENT CONTROL DETAILS |

| | | | | | | |
|------------------|--|------|----------|------|------------------|--|
| Status | | | | | FOR CONSTRUCTION | |
| Datum | | GRID | Scale | Size | A1 | |
| AHD | | | AS SHOWN | | | |
| Drawing Number | | | | | Revision | |
| 9671-134-CI-1012 | | | | | A | |



ALL PATHWAY & STORMWATER WORKS TO BE INCLUDED IN THE STAGE 1 WORKS.

LAYOUT PLAN
SCALE 1:500

| EXTENTS OF THRIE BEAM GUARDRAIL INSTALLATION | | | |
|--|---------|--------------|---|
| CHAINAGE START | LENGTH | CHAINAGE END | GUARD RAIL |
| LHS (EAST) | | | |
| 25 | 7.86 | 32.86 | INGAL ET-SS MASH TL2 WITH HI VIS YELLOW PROTECTIVE COVER |
| 32.86 | 4 | 36.86 | INGAL EZY GUARD 4 WITH IN GROUND POSTS |
| 36.86 | 1.905 | 38.765 | INGAL EZY GUARD HC-4 TRANSITION |
| 38.765 | 4.069 | 42.834 | INGAL EZY GUARD HC WITH IN GROUND POST |
| 42.834 | 161.784 | 204.618 | INGAL EZY GUARD HC WITH BASE PLATE |
| 204.618 | 8.147 | 212.765 | INGAL EZY GUARD HC WITH IN GROUND POST |
| 212.765 | 1.905 | 214.67 | INGAL EZY GUARD HC-4 TRANSITION |
| 214.67 | 8 | 222.67 | INGAL EZY GUARD 4 WITH IN GROUND POSTS |
| 222.67 | 7.86 | 230.53 | INGAL ET-SS MASH TL2 WITH HI VIS YELLOW PROTECTIVE COVER |
| RHS (WEST) | | | |
| 43.1 | 7.86 | 50.96 | INGAL ET-SS MASH TL2 WITH HI VIS YELLOW PROTECTIVE COVER (SURFACE MOUNT BASE) |
| 50.96 | 2 | 52.96 | INGAL EZY GUARD 4 WITH BASE PLATE |
| 52.96 | 1.905 | 54.865 | INGAL EZY GUARD HC-4 TRANSITION |
| 54.865 | 149.75 | 204.615 | INGAL EZY GUARD HC WITH BASE PLATE |
| 204.615 | 4 | 208.615 | INGAL EZY GUARD HC WITH IN GROUND POST |
| 208.615 | 1.905 | 210.52 | INGAL EZY GUARD HC-4 TRANSITION |
| 210.52 | 12 | 222.52 | INGAL EZY GUARD 4 WITH IN GROUND POSTS |
| 222.52 | 7.86 | 230.38 | INGAL ET-SS MASH TL2 WITH HI VIS YELLOW PROTECTIVE COVER |

| Rev. | Date | Description | Des. | Verif. | Appd. |
|------|------------|----------------------------|------|--------|-------|
| B | 23.09.2021 | GUARD RAIL CHANGES | JJ | MM | BM |
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | MM | BM |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |



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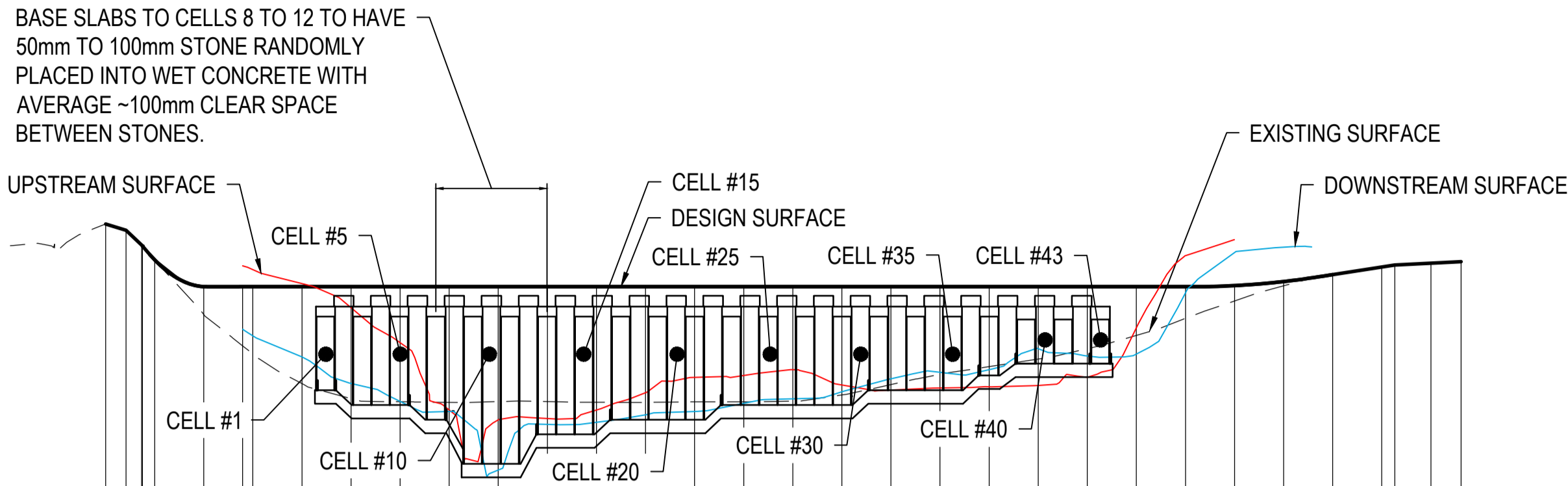
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|----------------------------|--------------------|
| Drawn M. CRANE | Date 19.06.2020 |
| Checked B. MELITA | Date 19.06.2020 |
| Designed M. CRANE | Date 19.06.2020 |
| Verified B. MELITA | Date 19.06.2020 |
| Approved M. MONTGOMERIE | Date 31.08.2021 |

Client **HINCHINBROOK SHIRE COUNCIL**
Project **PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM**
Title **ROADWORKS AND DRAINAGE LAYOUT PLAN**

| | | | | |
|---|----------------------|------|-------------------|------------|
| Status FOR CONSTRUCTION | Datum AHD | GRID | Scale AS SHOWN | Size A1 |
| Drawing Number 9671-134-CI-1013 | Revision B | | | |

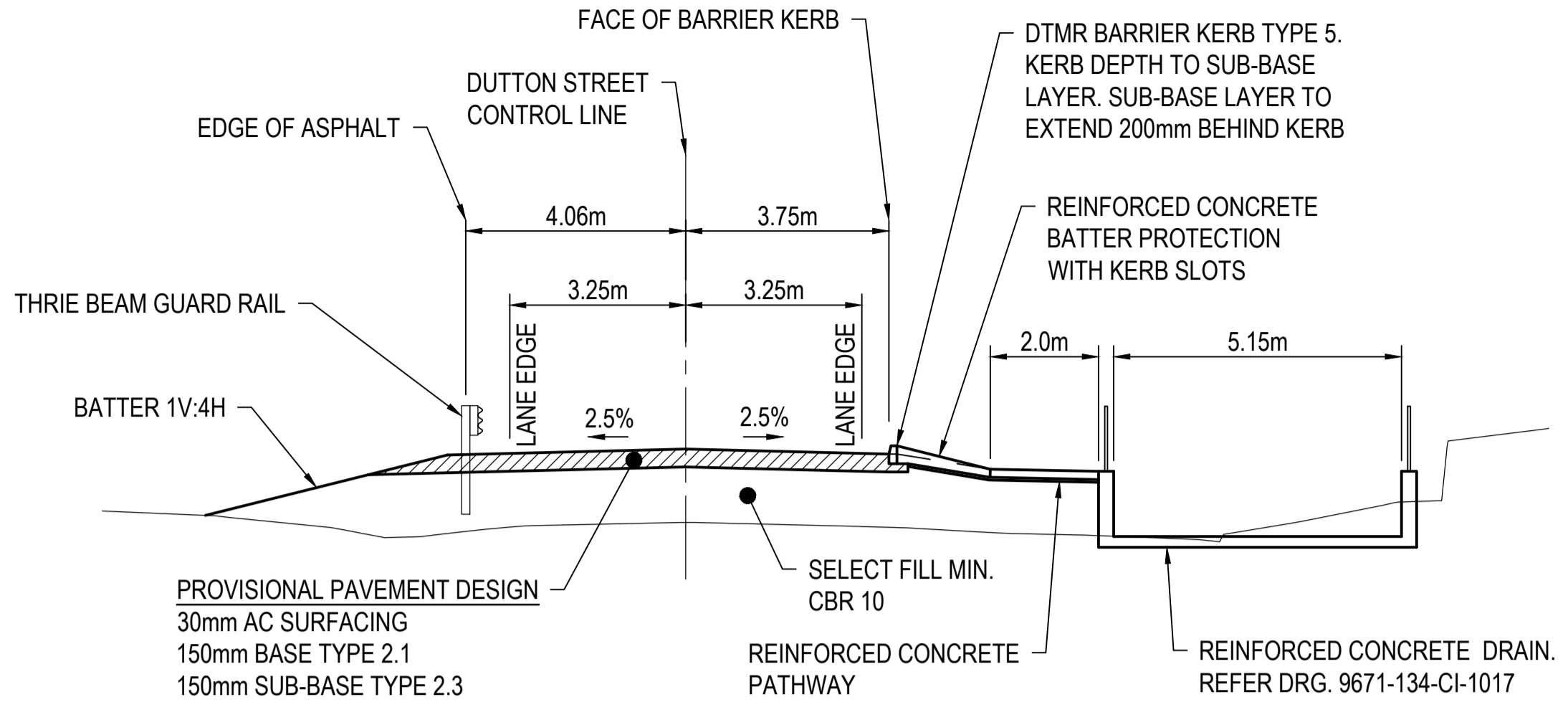
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REFER TO DWG 9671-134-CI-1025 FOR
ADDITIONAL STRUCTURAL DETAILS.



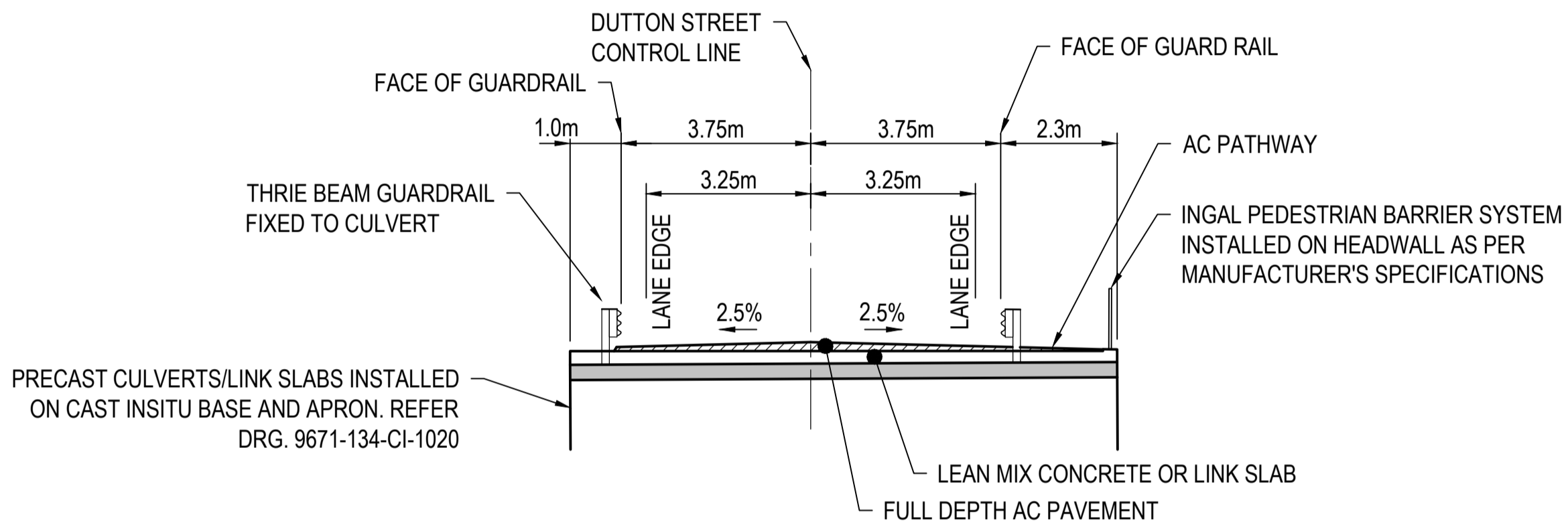
VERT. CURVE LENGTH (m)
VERT. CURVE RADIUS (m)
VERT. GEOMETRY GRADE (%)
VERT. GEOMETRY LENGTH(m)
DATUM RL 0.000

| HORZ. CURVE LENGTH (m) HORZ. CURVE RADIUS (m) | | | | | | | | | | | | | | | | | | | |
|--|------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|----------|
| VOLUMES | CUT | | | | | | | | | | | | | | | | | | |
| | FILL | | | | | | | | | | | | | | | | | | |
| LHS DESIGN LEVELS EDGE OF SHOULDER | | | EXISTING | 13.329 | 13.101 | 12.644 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | EXISTING |
| RHS DESIGN LEVELS EDGE OF SHOULDER | | | EXISTING | 13.329 | 13.101 | 12.644 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | 12.665 | EXISTING |
| EXISTING SURFACE LEVELS ROAD CENTRELINE | | 14.035 | 13.907 | 13.608 | 13.585 | 13.300 | 12.194 | 11.556 | 11.391 | 10.786 | 10.480 | 10.418 | 10.404 | 10.421 | 10.421 | 10.407 | 10.404 | 10.416 | 10.414 |
| CUT / FILL DEPTH TO EXISTING SURFACE | | -0.000 | -0.000 | 0.000 | 0.005 | 0.567 | 1.203 | 1.368 | 1.973 | 1.279 | 2.341 | 2.355 | 2.355 | 2.343 | 2.345 | 2.329 | 2.203 | 0.646 | 0.312 |
| DESIGN LEVELS ROAD CENTRELINE | | 14.035 | 13.907 | 13.608 | 13.585 | 13.306 | 12.761 | 12.759 | 12.759 | 12.759 | 12.759 | 12.759 | 12.759 | 12.759 | 12.759 | 12.759 | 12.759 | 12.781 | 12.864 |
| CONTROL LINE CHAINAGE ROAD CENTRELINE | | 0.000 | 4.162 | 7.323 | 7.524 | 10.000 | 20.000 | 27.918 | 30.000 | 40.000 | 50.000 | 60.000 | 70.000 | 80.000 | 90.000 | 100.000 | 110.000 | 120.000 | 130.000 |

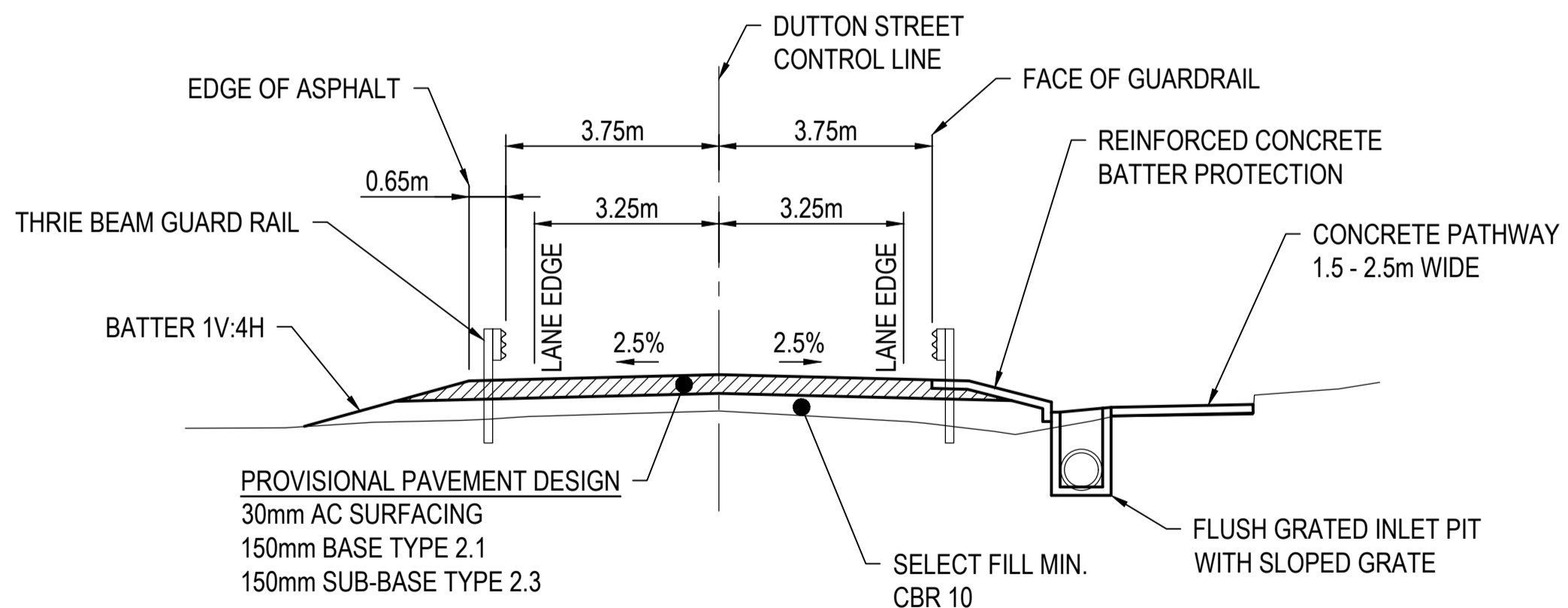
ROADWORKS LONGITUDINAL SECTION - DUTTON STREET
SCALE H=1:1000 ; V=1:100



TYPICAL SECTION - DUTTON STREET CH 0.0 - 42.50
SCALE 1:100

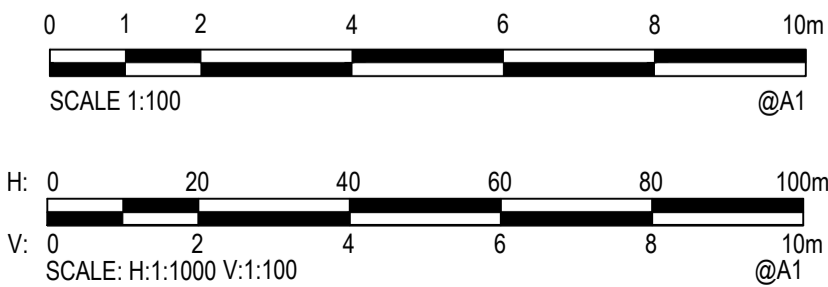


TYPICAL SECTION - DUTTON STREET CH 42.50 - 205.16
SCALE 1:100



TYPICAL SECTION - DUTTON STREET CH 205.16 - 250.00
SCALE 1:100

| Rev. | Date | Description | Des. | Verif. | Appd. |
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| B | 23.09.2021 | GUARD RAIL CHANGES | JJ | MM | BM |
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | MM | BM |
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| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |



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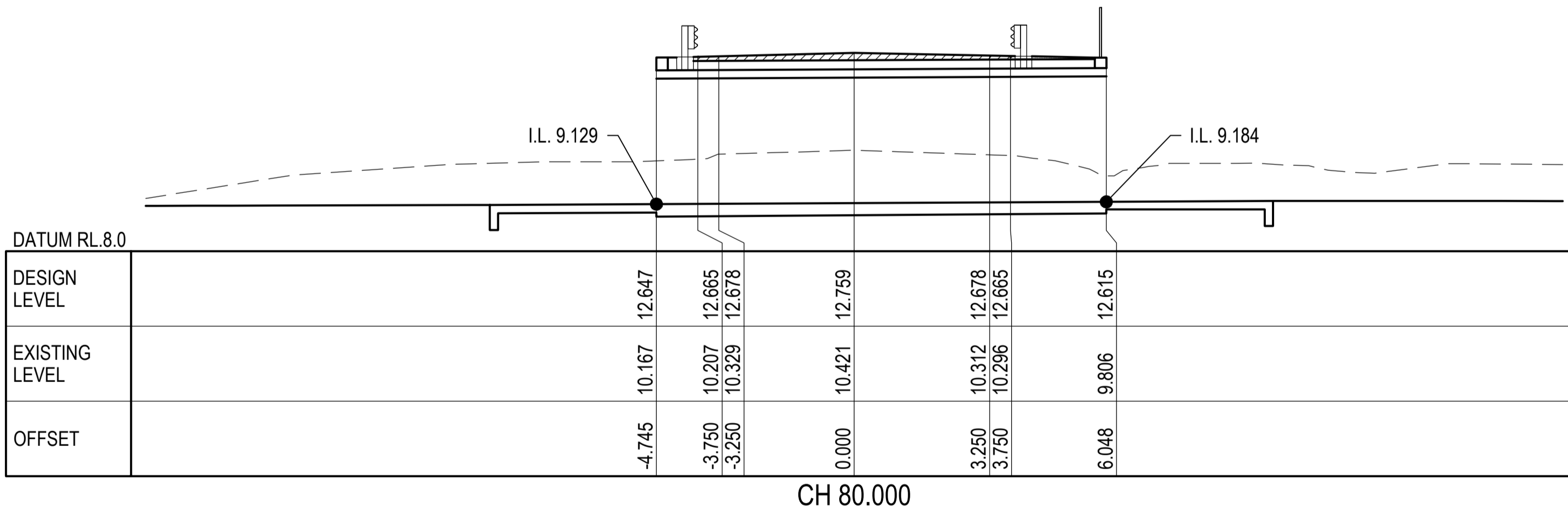
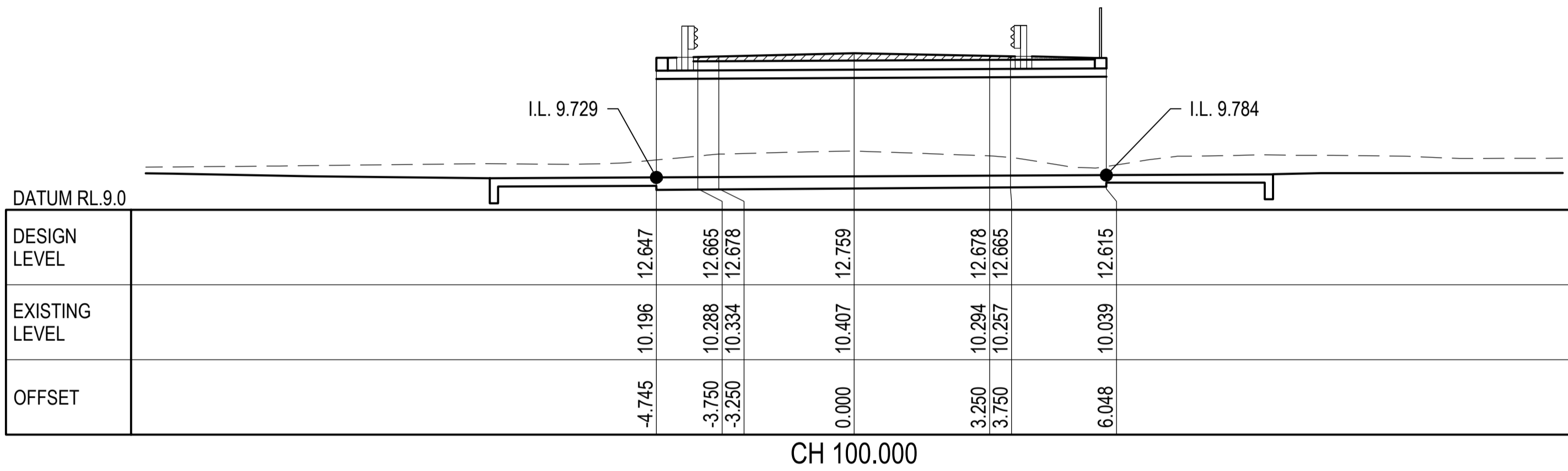
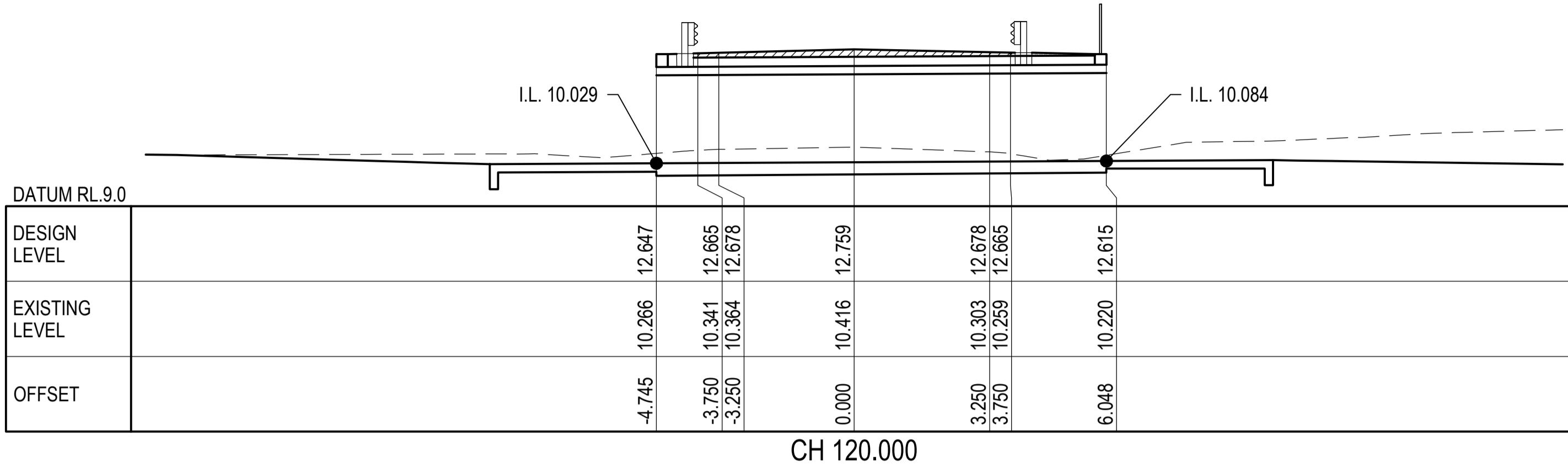
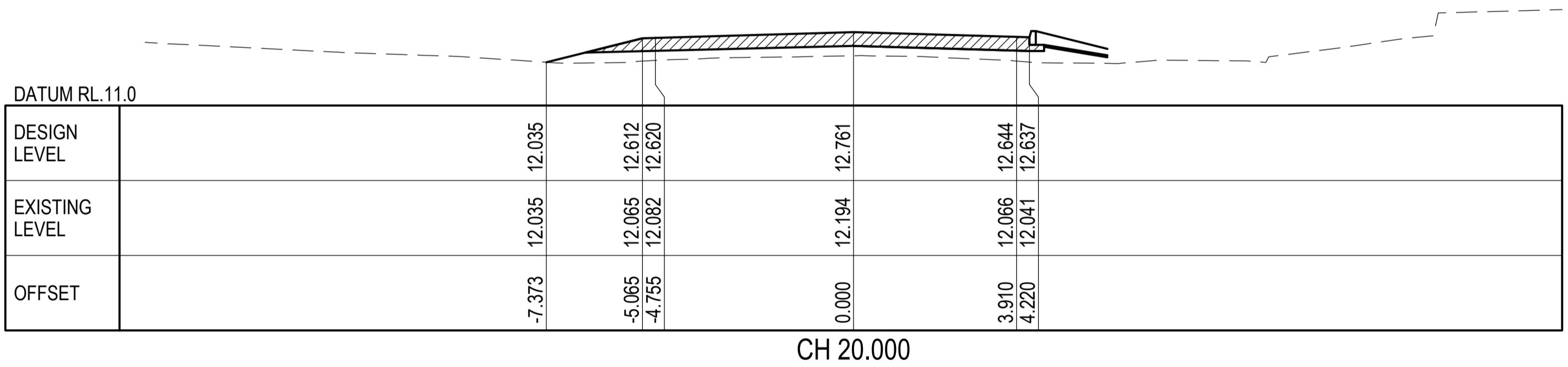
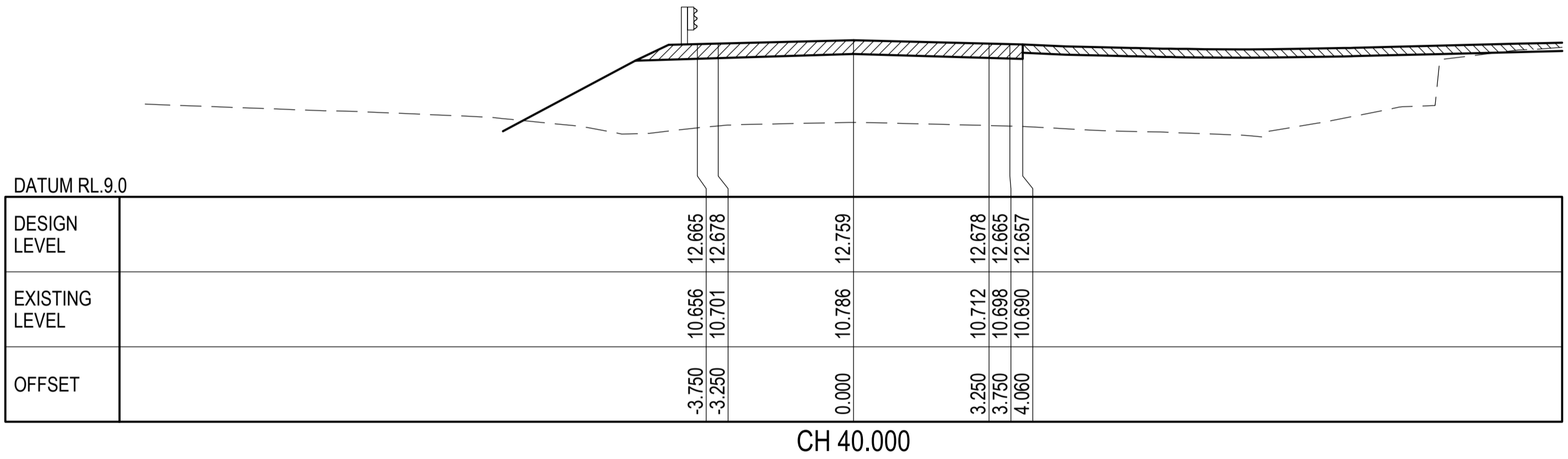
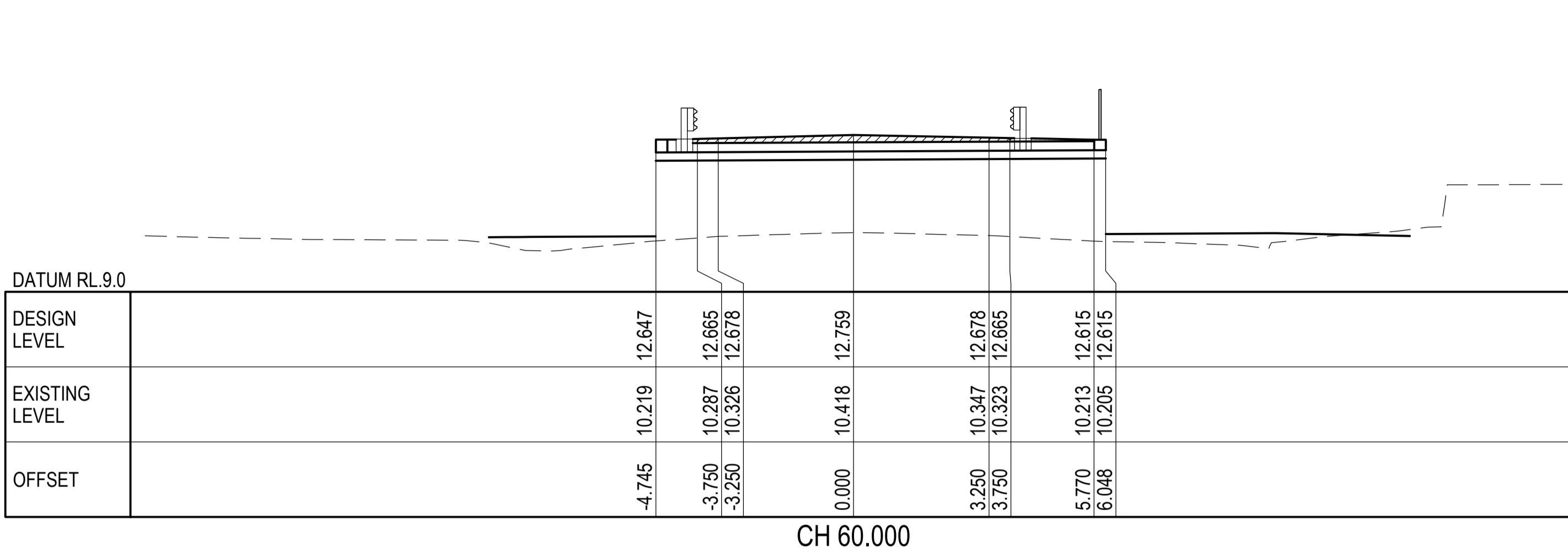
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| Drawn M. CRANE 19.06.2020 | Date 19.06.2020 | Client HINCHINBROOK SHIRE COUNCIL |
| Checked B. MELITA 19.06.2020 | Date 19.06.2020 | Project PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Designed M. CRANE 19.06.2020 | Date 19.06.2020 | Title ROADWORKS LONGITUDINAL AND TYPE SECTIONS DUTTON STREET |
| Verified B. MELITA 19.06.2020 | Date 19.06.2020 | Status FOR CONSTRUCTION |
| Approved M. MONTGOMERIE 31.08.2021 | Date 31.08.2021 | Datum AHD |
| | | Grid |
| | | Scale AS SHOWN |
| | | Size A1 |
| | | Drawing Number 9671-134-CI-1014 |
| | | Revision B |

DATE PLOTTED: 24 September 2021 11:19 AM BY: LACHLAN LINDY

XREF's Legend:
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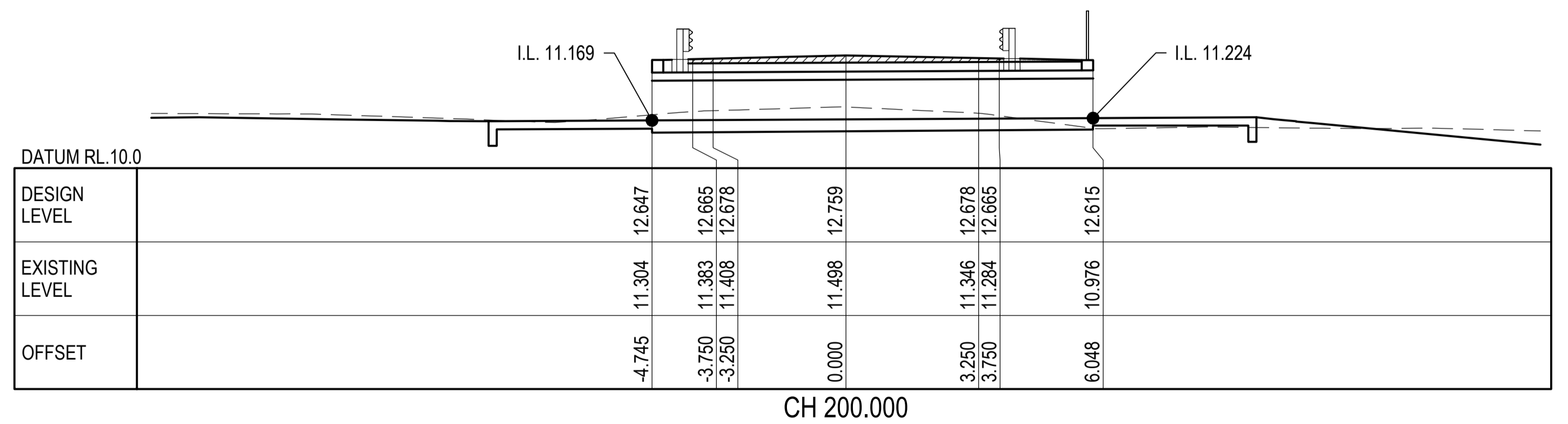
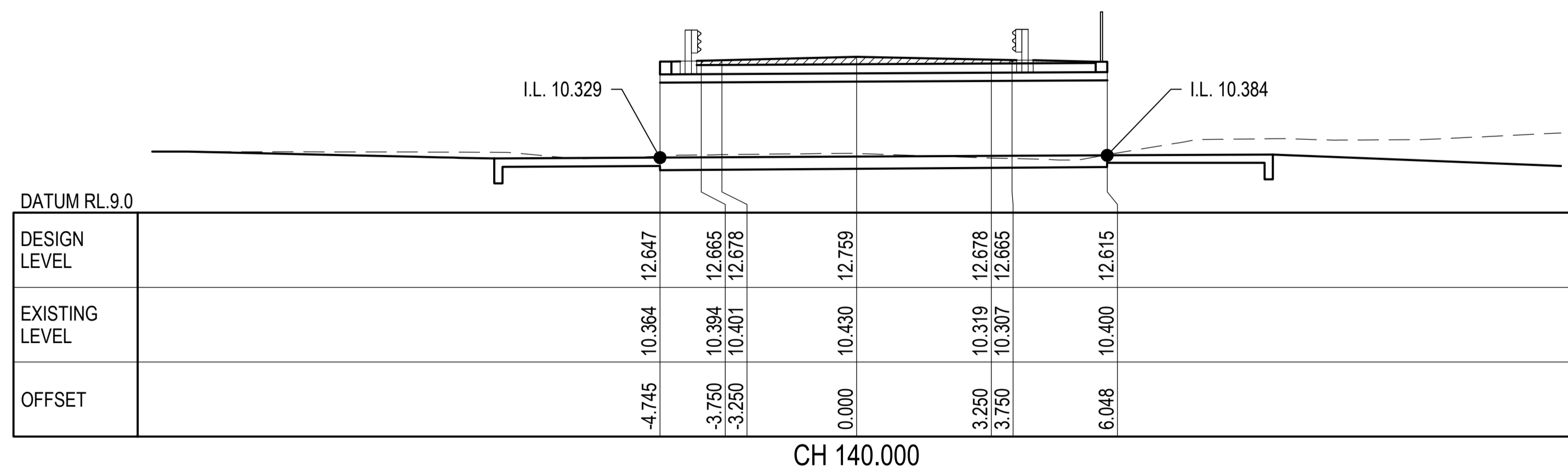


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| Checked | B. MELITA | Date | 19.06.2020 |
| Designed | M.CRANE | Date | 19.06.2020 |
| Verified | B.MELITA | Date | 19.06.2020 |
| Approved | M.MONTGOMERIE | Date | 31.08.2021 |

| | |
|---------|---|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | ROADWORKS CROSS SECTIONS DUTTON STREET SHEET 1 OF 2 |

| | | | |
|------------------------------------|------|-------------------|------|
| Status | | FOR CONSTRUCTION | |
| Datum AHD | GRID | Scale AS SHOWN | Size |
| Drawing Number 9671-134-CI-1015 | | | |

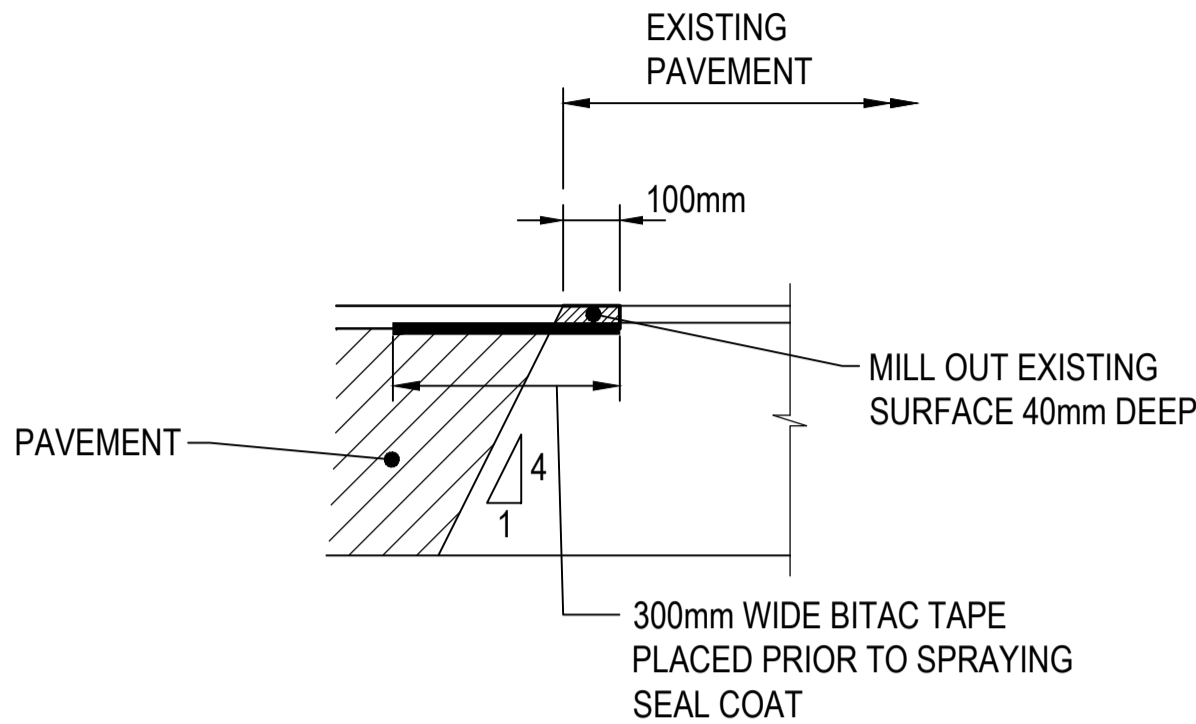


| B | 23.09.2021 | GUARD RAIL CHANGES | JJ | MM | BM | |
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| Rev. | Date | Description | Des. | Verif. | Appd. | |

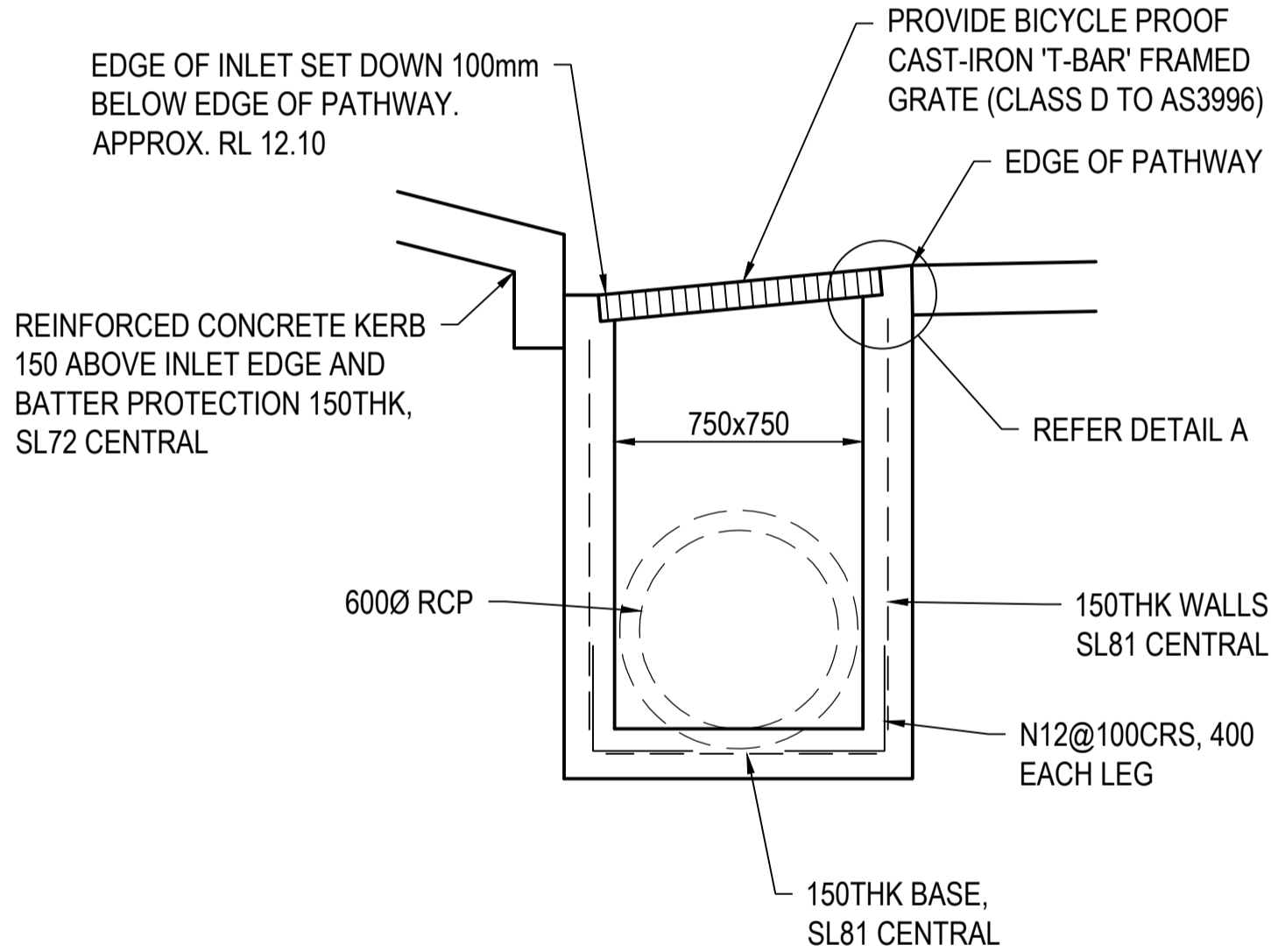
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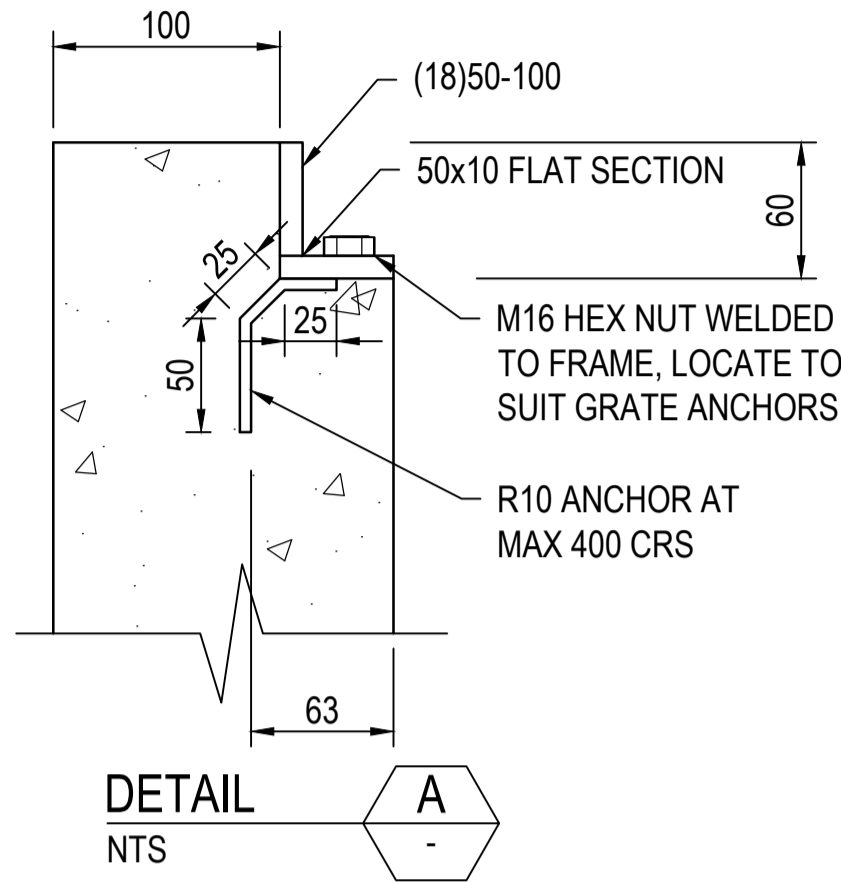
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| Drawn | Date | Client | HINCHINBROOK SHIRE COUNCIL | | | | | |
| M. CRANE | 19.06.2020 | Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM | | Status | FOR CONSTRUCTION | | |
| Checked | Date | | | | | | | |
| B. MELITA | 19.06.2020 | Title | ROADWORKS CROSS SECTIONS DUTTON STREET SHEET 2 OF 2 | | Datum | GRID | Scale | Size |
| Designed | Date | | | | AHD | AS SHOWN | A1 | |
| M. CRANE | 19.06.2020 | Approved | RPEQ 5700 | | Drawing Number | Revision | | |
| Verified | Date | | | | 9671-134-CI-1016 | B | | |
| B. MELITA | 19.06.2020 | M. MONTGOMERIE | 31.08.2021 | | | | | |
| Approved | Date | | | | | | | |



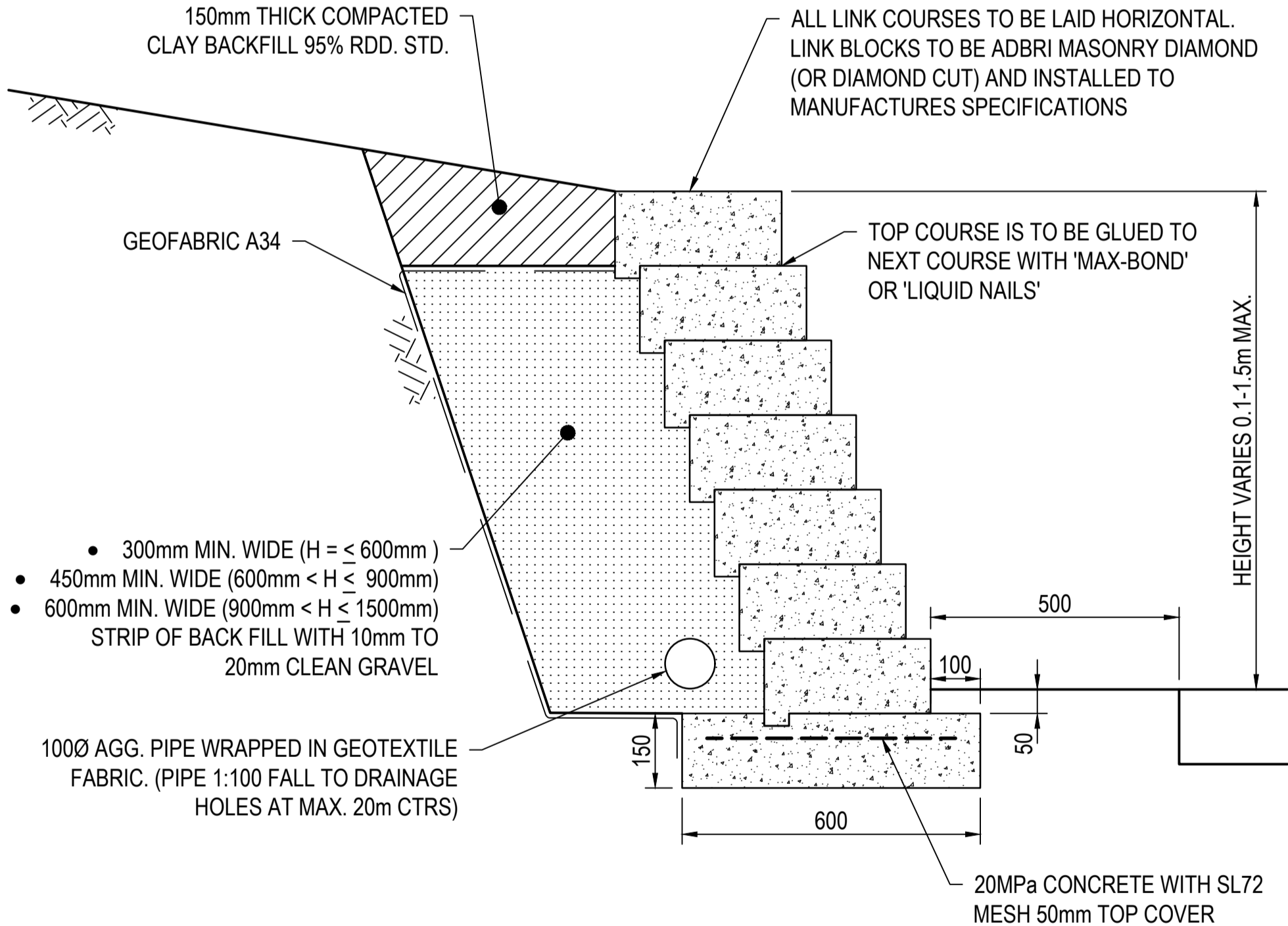
EXISTING PAVEMENT CONNECTION DETAIL
NOT TO SCALE



TYPICAL FLUSH GRATED FIELD INLET DETAIL
NOT TO SCALE



TYPICAL LINK WALL SECTION
SCALE 1:100



SERVICE LOADS

| | |
|------------------------------------|---------|
| SURCHARGE LOAD | 5 KPa |
| DESIGN FOUNDATION BEARING CAPACITY | 100 KPa |

FORMWORK

- CF1 THE DESIGN, CONSTRUCTION AND PERFORMANCE OF THE FORMWORK AND FALSEWORK IS THE RESPONSIBILITY OF THE BUILDER. INSTALLATION OF STEEL FORMWORK SHALL BE STRICTLY IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- CF2 DESIGN AND CONSTRUCTION AND STRIPPING TIMES SHALL COMPLY WITH AS 3610 AND AS 3600 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- CF3 DURING CONSTRUCTION, SUPPORT PROPPING SHALL BE PROVIDED WHERE LOADS FROM STACKED MATERIALS, FORMWORK AND OTHER SUPPORTED SLABS INDUCE LOADS IN A SLAB OR BEAM WHICH EXCEED THE DESIGN LOAD FOR STRENGTH OR SERVICEABILITY AT THAT AGE ONCE THE NOMINATED 28 DAY STRENGTH HAS BEEN ATTAINED, THESE LOADS SHALL NOT EXCEED THE DESIGN SUPERIMPOSED LOADS SET OUT IN THE GENERAL NOTES.
- CF4 THE FORMWORK SHALL BE DESIGNED TO RELY ON NO RESTRAINT OR SUPPORT FROM THE PERMANENT STRUCTURE WITHOUT PRIOR APPROVAL FROM THE PROJECT DESIGN ENGINEER.
- CF5 FORMWORK SHALL BE DESIGNED TO ACCOMMODATE MOVEMENTS AND LOAD RE DISTRIBUTION DUE TO POST-TENSIONING.
- CF6 WHERE NECESSARY SPECIAL REQUIREMENTS FOR SEQUENCE OF CONCRETE PLACEMENT AND STRIPPING ARE SET OUT ON DRAWINGS.
- CF7 DESIGN INFORMATION CONCERNING THE FOUNDATION FORMWORK SHALL BE DETERMINED FROM THE CONDITIONS EXISTING ON SITE AT THE TIME OF CONSTRUCTION. REFER ALSO TO THE GEOTECHNICAL REPORT WHERE AVAILABLE.

CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, AS 1379 & AS 3610 CURRENT EDITIONS WITH AMENDMENTS,

| NUMBER OF TRUCKS | NUMBER OF SAMPLES |
|-------------------------------|-------------------|
| 1 | 1 |
| 2 - 10 | 2 |
| 11 - 20 | 3 |
| FOR EACH ADDITIONAL 10 TRUCKS | 1 EACH |

- EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE SPECIFICATION:
CONCRETE GRADE N40.
MAX. AGGREGATE SIZE 20mm.
3. FOOTING CONCRETE GRADE N32.
4. COVER TO REINFORCEMENT = 50mm
5. FOOTING DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 100 KPa.
6. WINGWALLS AND HEADWALLS DESIGNED FOR 5 KPa SURCHARGE.
7. CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
8. 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 SPECIFICATIONS). POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.
9. CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING.
10. REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

STEEL NOTES

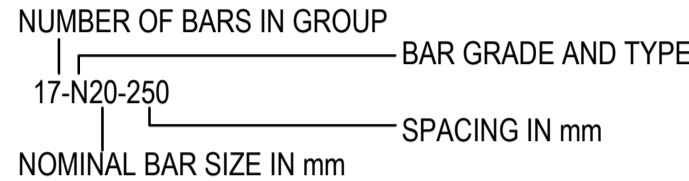
1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100, AS 1554. U.N.O.
2. ALL HOT ROLLED PLATES TO BE GRADE 250 IN ACCORDANCE WITH AS 3678. U.N.O.
3. BOLTS TO BE M20 GRADE 8.8/S TO AS 1252 U.N.O.
4. WELDING TO BE CARRIED OUT IN ACCORDANCE WITH AS 1554 & BE 6mm CFW SP U.N.O.
5. ALL STEELWORK, BOLTS & PLATES TO BE HOT DIP GALVANISED TO AS 4680

CONCRETE NOTES

REINFORCEMENT

- R1 ALL REINFORCING BARS SHALL BE GRADE D500N TO AS 4671 UNLESS NOTED OTHERWISE. IT SHALL BE CUT AND BENT IN ACCORDANCE WITH AS3600. ACCEPTABLE MANUFACTURERS AND PROCESSORS OF STEEL REINFORCEMENT MUST HOLD A VALID CERTIFICATE OF APPROVAL, ISSUED BY THE AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING STEELS (ACRS), OR TO SUCH AN EQUIVALENT CERTIFICATION SYSTEM AS MAY BE APPROVED IN WRITING BY THE SPECIFIER. EVIDENCE OF COMPLIANCE WITH THIS CLAUSE MUST BE OBTAINED WHEN CONTRACT BIDS ARE RECEIVED. ALL MESH SHALL BE GRADE 500L TO AS4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.

REINFORCEMENT NOTATION SHALL BE AS FOLLOWS IN THE FOLLOWING



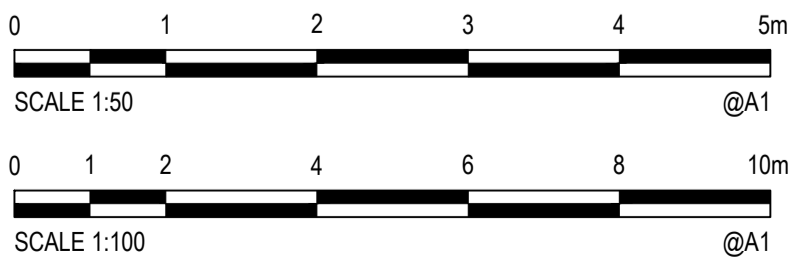
THE FIGURES FOLLOWING THE FABRIC SYMBOLS RL, SL, L, TM IS THE REFERENCE NUMBER FOR FABRIC TO AS 4671.

- R2 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
- R3 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR, AS SHOWN IN THE TABLE BELOW U.N.O.

| LAP SCHEDULE | | | |
|--------------|--------|----------|--------|
| BAR DIA. | LENGTH | BAR DIA. | LENGTH |
| R6 | 300 | N24 | 1000 |
| R10 | 400 | N28 | 1400 |
| N12 | 500 | N32 | 1800 |
| N16 | 600 | N36 | 2200 |
| N20 | 800 | | |

- R4 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER. WHERE APPROVED, WELDING MUST COMPLY WITH AS1554.3 STANDARD STEEL WELDING, PART 3 : WELDING OF REINFORCING STEEL. NO WELDING IS ALLOWED WITHIN 120mm OF BENDS.
- R5 WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-300 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400 mm UNLESS NOTED.
- R6 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS. PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR CONCRETE CHAIRS.
- R7 SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE RPN1 OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA. REINFORCEMENT SHALL NOT BE REBENT WITHOUT APPROVAL OF THE SUPERINTENDENT.
- R8 THE ENGINEER SHALL BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED FROM THE STRUCTURAL ENGINEER.

| Rev | Date | Description | Des. | Verif. | Appd. |
|-----|------------|----------------------------|------|--------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |
| 2 | 01.09.2020 | FOR CONSTRUCTION | MC | BM | MB |
| 1 | 19.06.2020 | ISSUED FOR CLIENT APPROVAL | MC | BM | MB |



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| | |
|----------------------|--------------------|
| Drawn M.CRANE | Date 19.06.2020 |
| Checked B.MELITA | Date 19.06.2020 |
| Designed M.CRANE | Date 19.06.2020 |
| Verified B.MELITA | Date 19.06.2020 |
| Approved B.MELITA | Date 31.08.2021 |

| | |
|---|---|
| Client HINCHINBROOK SHIRE COUNCIL | Project PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title MISCELLANEOUS DETAILS AND CONCRETE NOTES | |

| | | | | |
|------------------------------------|---------------|------|-------------------|------------|
| Status FOR CONSTRUCTION | Datum AHD | GRID | Scale AS SHOWN | Size A1 |
| Drawing Number 9671-134-CI-1017 | Revision A | | | |



0 1 2 4 6 8 10m

SCALE 1:100 @A1

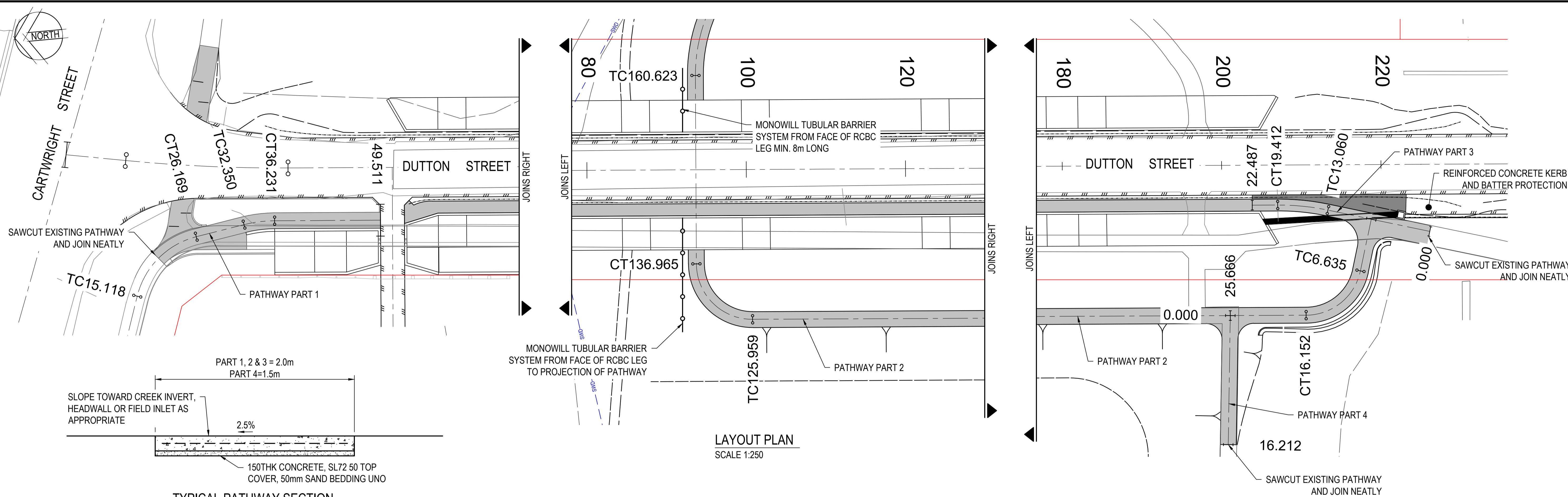
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| | |
|----------------|------------|
| Drawn | Date |
| M. CRANE | 19.06.2020 |
| Checked | Date |
| B. MELITA | 19.06.2020 |
| Designed | Date |
| M. CRANE | 19.06.2020 |
| Verified | Date |
| B. MELITA | 19.06.2020 |
| Approved | RPEQ. 5700 |
| M. MONTGOMERIE | 31.08.2021 |

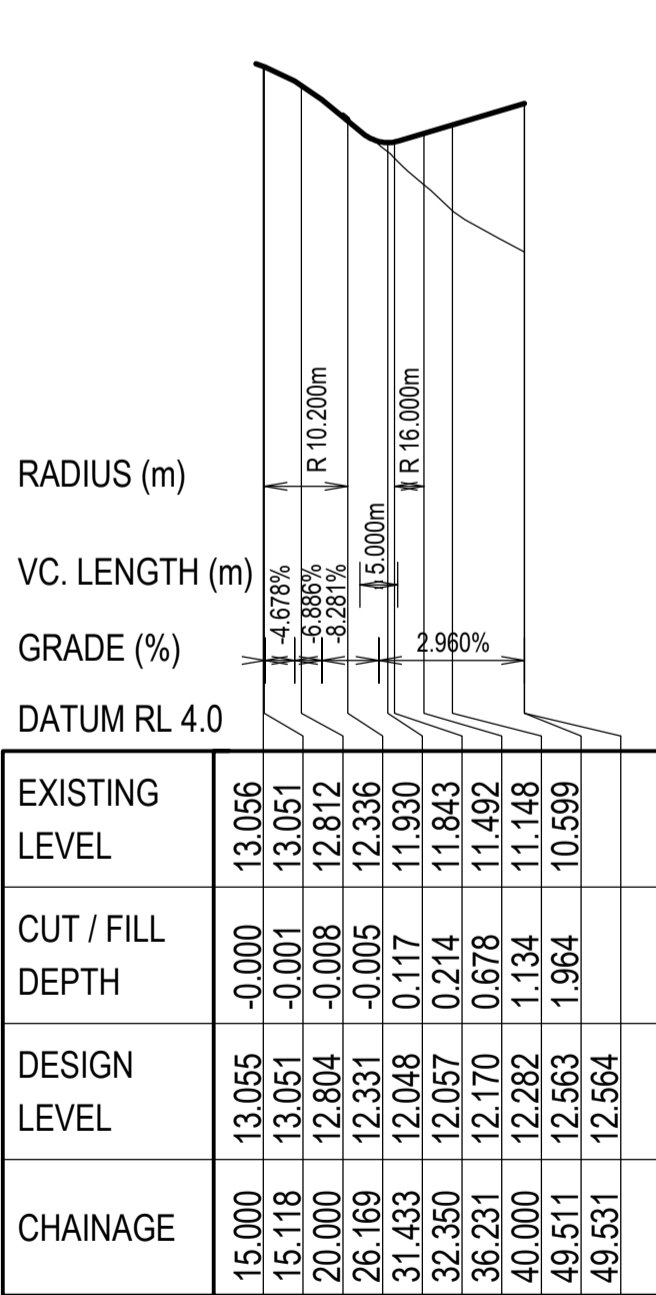
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|---------|--|
| Client | HINCHINBROOK SHIRE COUNCIL |
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title | INTERSECTION DETAILS |

| | | | | | |
|------------------|------|------------------|--|------|----------|
| Status | | FOR CONSTRUCTION | | | |
| Datum | GRID | Scale | | Size | |
| AHD | | AS SHOWN | | A1 | |
| Drawing Number | | | | | Revision |
| 9671-134-CI-1018 | | | | | A |

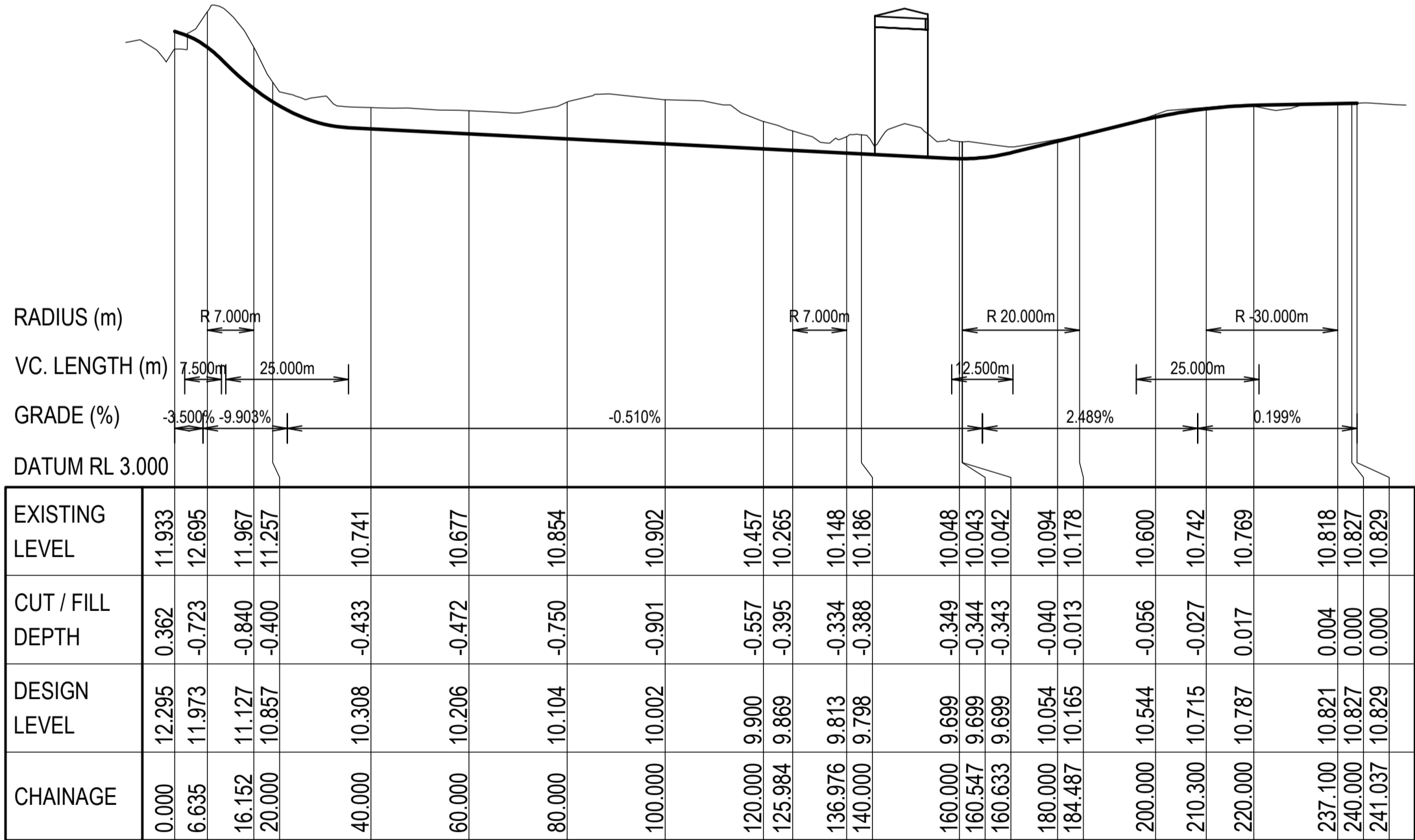


TYPICAL PATHWAY SECTION
SCALE 1:20

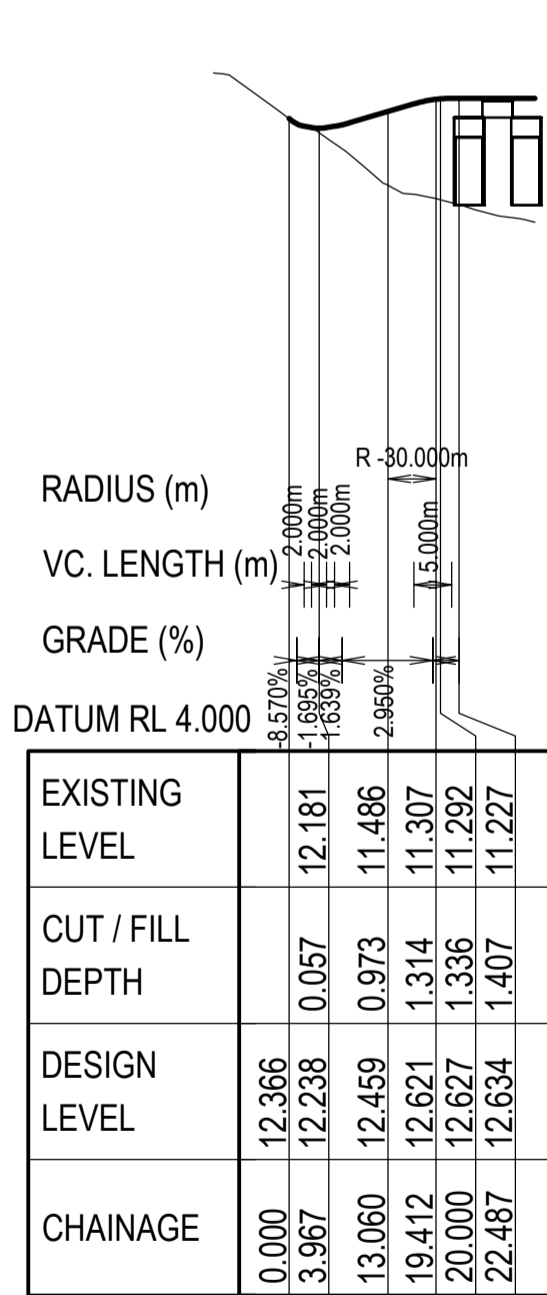
PATHWAY JOINTING (REFER FNRQC STANDARD DRG. S1035)
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KEY CONSTRUCTION JOINT = MAX. 6.0m SPACING
EXPANSION JOINT = MAX. 12.0m SPACING



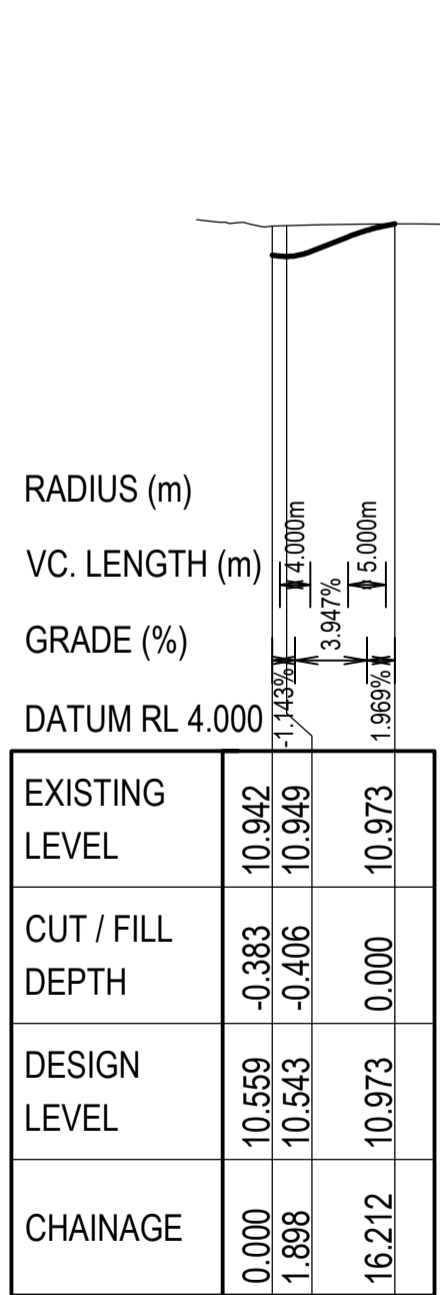
PART 1
PATHWAY LONGITUDINAL SECTION
SCALE H=1:1000 ; V=1:100



PART 2
PATHWAY LONGITUDINAL SECTION
SCALE H=1:1000 ; V=1:100

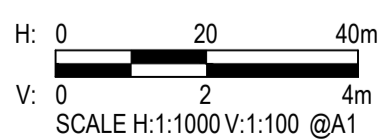
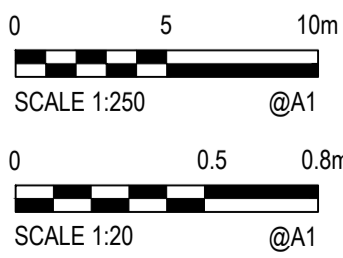


PART 3
PATHWAY LONGITUDINAL SECTION
SCALE H=1:1000 ; V=1:100



PART 4
PATHWAY LONGITUDINAL SECTION
SCALE H=1:1000 ; V=1:100

| Rev. | Date | Description | Des. | Verif. | Appd. |
|------|------------|-------------------------|------|--------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | BM | MB |



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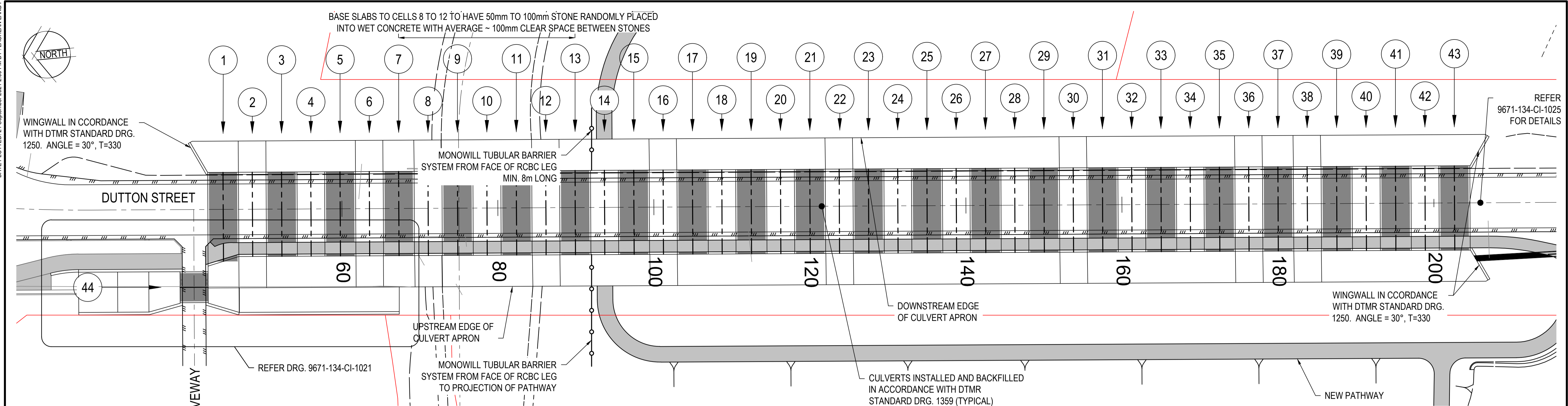
| | |
|---------------------------|--------------------|
| Drawn J.JONES | Date 31.08.2021 |
| Checked B.MELITA | Date 31.08.2021 |
| Designed J.JONES | Date 31.08.2021 |
| Verified B.MELITA | Date 31.08.2021 |
| Approved M.MONTGOMERIE | Date 31.08.2021 |

| | |
|--|---|
| Client HINCHINBROOK SHIRE COUNCIL | Project PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Title PATHWAY LONGITUDINAL SECTIONS AND LAYOUT PLAN | Drawing Number 9671-134-CI-1019 |

| | | | | |
|----------------------------|--------------|------|-------------------|------------|
| Status FOR CONSTRUCTION | Datum AHD | GRID | Scale AS SHOWN | Size A1 |
| Revision A | | | | |

DATE PLOTTED: 24 September 2021 2:09 PM BY: LACHLAN LINDY

XREFs: XR-9671134-CI-DESIGN-XR-9671134-CI-SURVEY
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\9671\9671-134 - HSC Palm Creek Bridge\3. Project Delivery\Design\CAD\CIMC WFH Drawings\Drawings\9671-134-CI-1020.dwg

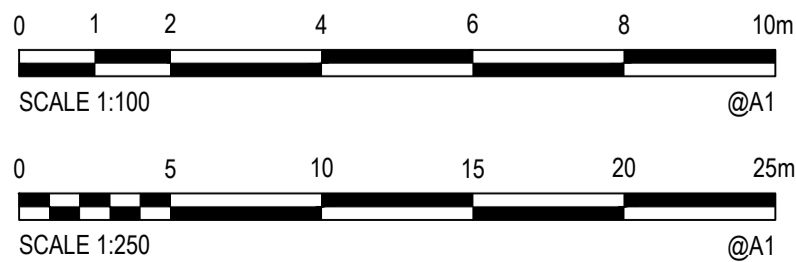


SUBGRADE TO ALL CULVERT BASE SLABS TO ACHIEVE A MINIMUM OF 150kPa BEARING CAPACITY. TO BE CONFIRMED BY THE CONTRACTOR'S GEOTECHNICAL REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE. CULVERT COMPONENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH DTMR STANDARD DRAWINGS AND SPECIFICATIONS UNLESS VARIED OTHERWISE ON THESE DRAWINGS.

CULVERT LAYOUT PLAN
SCALE 1:250

SCHEDULE OF CULVERT DATA

| CULVERT No. | CULVERT SIZE | CHAINAGE SETOUT | U/S CULVERT INVERT LEVEL | D/S CULVERT INVERT LEVEL | CULVERT LENGTH AND GRADE | U/S APRON INVERT LEVEL | D/S APRON INVERT LEVEL | BASE SLAB NB |
|-------------|----------------|-----------------|--------------------------|--------------------------|--------------------------|------------------------|------------------------|--------------|
| 1 | 3600x1500 RCBC | 44.784 | 10.684 | 10.629 | 12.00m @ 0.50% | N/A | 10.609 | NORTH SIDE |
| 2 | 3600 LINK SLAB | 48.534 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | NORTH SIDE |
| 3 | 3600x1800 RCBC | 52.284 | 10.384 | 10.329 | 10.80m @ 0.51% | 10.404 | 10.309 | N/A |
| 4 | 3600 LINK SLAB | 56.034 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 5 | 3600x1800 RCBC | 59.784 | 10.384 | 10.329 | 10.80m @ 0.51% | 10.404 | 10.309 | N/A |
| 6 | 3600 LINK SLAB | 63.534 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | NORTH SIDE |
| 7 | 3600x2100 RCBC | 67.296 | 10.084 | 10.029 | 10.80m @ 0.51% | 10.104 | 10.009 | N/A |
| 8 | 3600 LINK SLAB | 71.058 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | NORTH SIDE |
| 9 | 3600x3000 RCBC | 74.832 | 9.184 | 9.129 | 10.80m @ 0.51% | 9.204 | 9.109 | N/A |
| 10 | 3600 LINK SLAB | 78.606 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 11 | 3600x3000 RCBC | 82.380 | 9.184 | 9.129 | 10.80m @ 0.51% | 9.204 | 9.109 | N/A |
| 12 | 3600 LINK SLAB | 86.154 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 13 | 3600x2400 RCBC | 89.916 | 9.784 | 9.729 | 10.80m @ 0.51% | 9.804 | 9.709 | N/A |
| 14 | 3600 LINK SLAB | 93.678 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 15 | 3600x2400 RCBC | 97.440 | 9.784 | 9.729 | 10.80m @ 0.51% | 9.804 | 9.709 | N/A |
| 16 | 3600 LINK SLAB | 101.202 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 17 | 3600x2100 RCBC | 104.964 | 10.084 | 10.029 | 10.80m @ 0.51% | 10.104 | 10.009 | N/A |
| 18 | 3600 LINK SLAB | 108.726 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 19 | 3600x2100 RCBC | 112.488 | 10.084 | 10.029 | 10.80m @ 0.51% | 10.104 | 10.009 | N/A |
| 20 | 3600 LINK SLAB | 116.250 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 21 | 3600x2100 RCBC | 120.012 | 10.084 | 10.029 | 10.80m @ 0.51% | 10.104 | 10.009 | N/A |
| 22 | 3600 LINK SLAB | 123.774 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 23 | 3600x1800 RCBC | 127.524 | 10.384 | 10.329 | 10.80m @ 0.51% | 10.404 | 10.309 | N/A |
| 24 | 3600 LINK SLAB | 131.274 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 25 | 3600x1800 RCBC | 135.024 | 10.384 | 10.329 | 10.80m @ 0.51% | 10.404 | 10.309 | N/A |
| 26 | 3600 LINK SLAB | 138.774 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 27 | 3600x1800 RCBC | 142.524 | 10.384 | 10.329 | 10.80m @ 0.51% | 10.404 | 10.309 | N/A |
| 28 | 3600 LINK SLAB | 146.274 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 29 | 3600x1800 RCBC | 150.024 | 10.384 | 10.329 | 10.80m @ 0.51% | 10.404 | 10.309 | N/A |
| 30 | 3600 LINK SLAB | 153.774 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 31 | 3600x1500 RCBC | 157.524 | 10.684 | 10.629 | 10.80m @ 0.51% | 10.704 | 10.609 | N/A |
| 32 | 3600 LINK SLAB | 161.274 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 33 | 3600x1500 RCBC | 165.024 | 10.684 | 10.629 | 10.80m @ 0.51% | 10.704 | 10.609 | N/A |
| 34 | 3600 LINK SLAB | 168.774 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 35 | 3600x1500 RCBC | 172.524 | 10.684 | 10.629 | 10.80m @ 0.51% | 10.704 | 10.609 | N/A |
| 36 | 3600 LINK SLAB | 176.274 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 37 | 3600x1200 RCBC | 180.024 | 10.984 | 10.929 | 10.80m @ 0.51% | 11.004 | 10.909 | N/A |
| 38 | 3600 LINK SLAB | 183.774 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 39 | 3600x900 RCBC | 187.548 | 11.224 | 11.169 | 10.80m @ 0.51% | 11.244 | 11.149 | N/A |
| 40 | 3600 LINK SLAB | 191.322 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | N/A |
| 41 | 3600x900 RCBC | 195.096 | 11.224 | 11.169 | 10.80m @ 0.51% | 11.244 | 11.149 | N/A |
| 42 | 3600 LINK SLAB | 198.870 | N/A | N/A | 10.80m @ 0.51% | N/A | N/A | SOUTH SIDE |
| 43 | 3600x900 RCBC | 202.644 | 11.224 | 11.169 | 10.80m @ 0.51% | 11.244 | 11.149 | SOUTH SIDE |
| 44 | 3600x1800 RCBC | 9.950 | 10.300 | 10.265 | 3.60m @ 0.97% | 10.600 | 10.200 | BOTH SIDES |



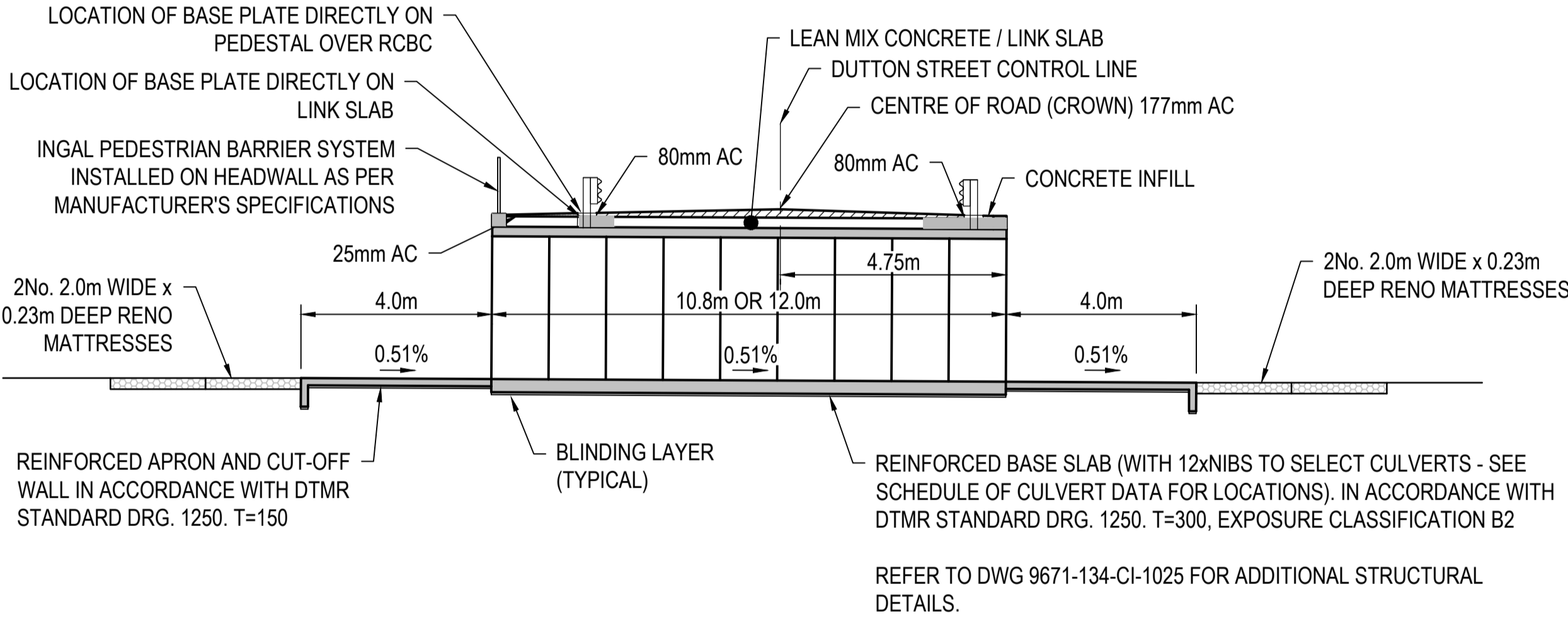
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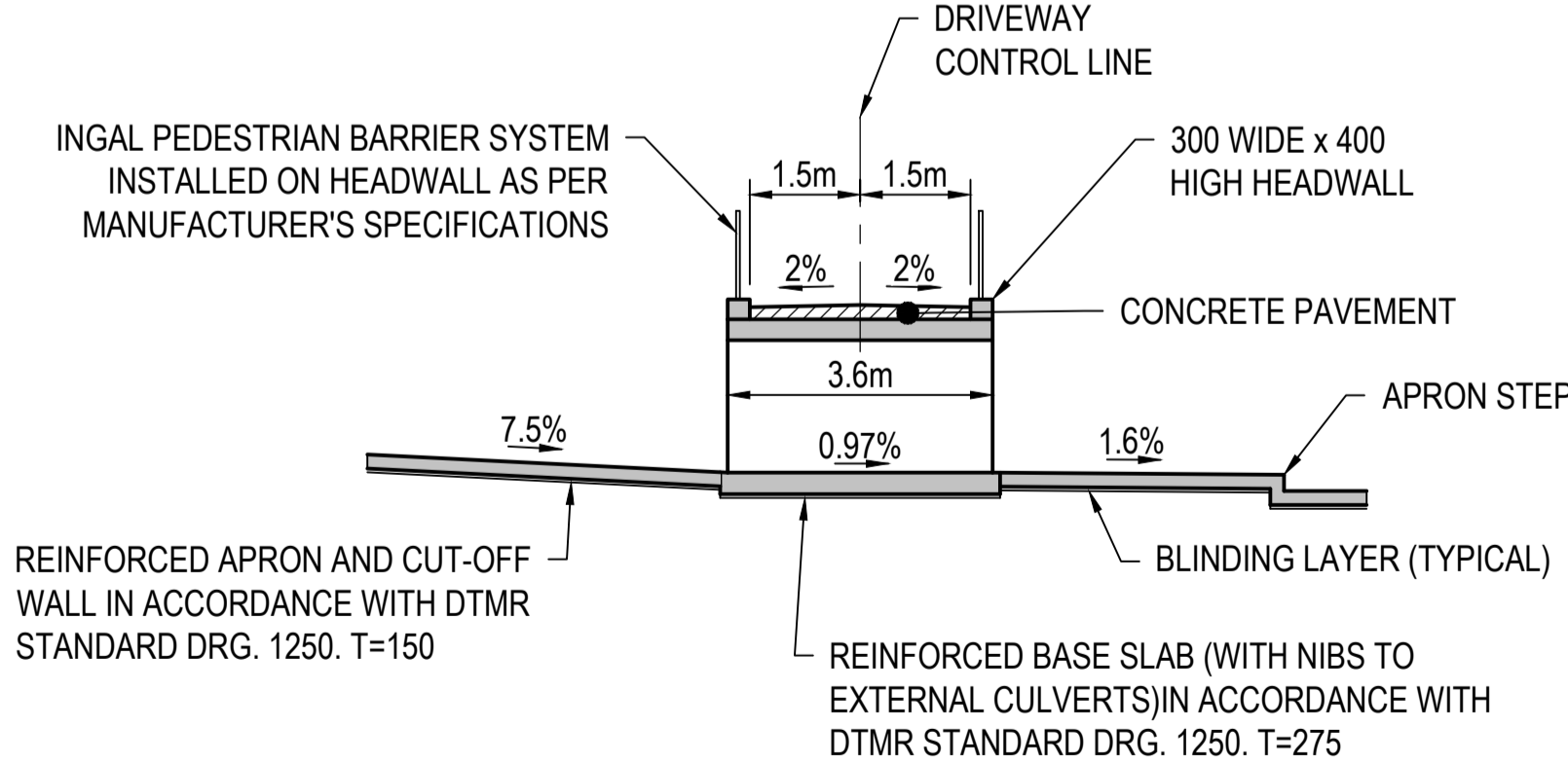
Drawn J.JONES 31.08.2021
Checked B.MELITA 31.08.2021
Designed J.JONES 31.08.2021
Verified B.MELITA 31.08.2021
Approved M.MONTGOMERIE 31.08.2021

Date 31.08.2021
Client HINCHINBROOK SHIRE COUNCIL
Project PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM
Title CULVERT SCHEDULE AND LAYOUT PLAN
Date 31.08.2021

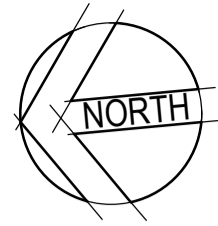
Status FOR CONSTRUCTION
Datum AHD
Scale AS SHOWN
Size A1
Drawing Number 9671-134-CI-1020
Revision B



TYPICAL SECTION - DUTTON STREET CULVERTS
SCALE 1:100



TYPICAL SECTION - DRIVEWAY CULVERT
SCALE 1:100



ABBREVIATIONS
BL= BASE LEVEL
TL= TOP WALL LEVEL
PL=PATH/PAVEMENT LEVEL
KL=KERB LIP LEVEL
KI=KERB INVERT LEVEL
KT=KERB TOP LEVEL

SAWCUT EXISTING PATHWAY
AND JOIN NEATLY

SAWCUT EXISTING KERB
AND TRANSITION TO TYPE 7
PROFILE OVER 1.0m

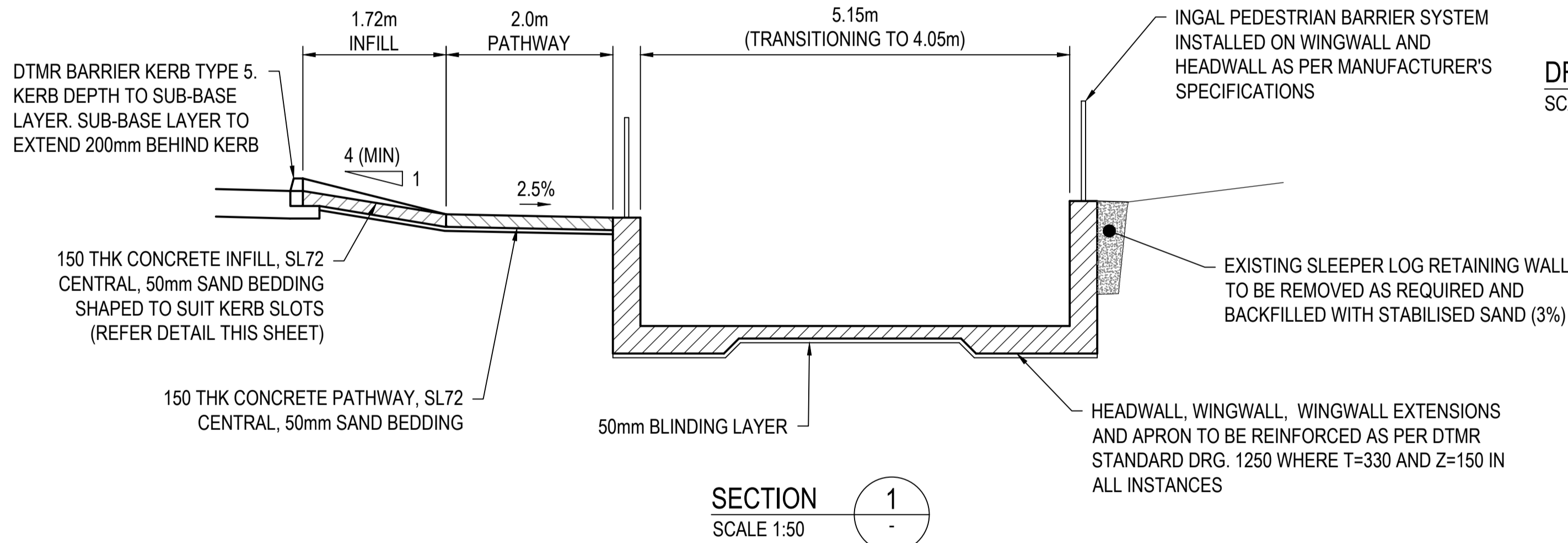
KERB SLOT TO BARRIER
KERB CH.25.00

KERB SLOT TO BARRIER
KERB CH.25.00

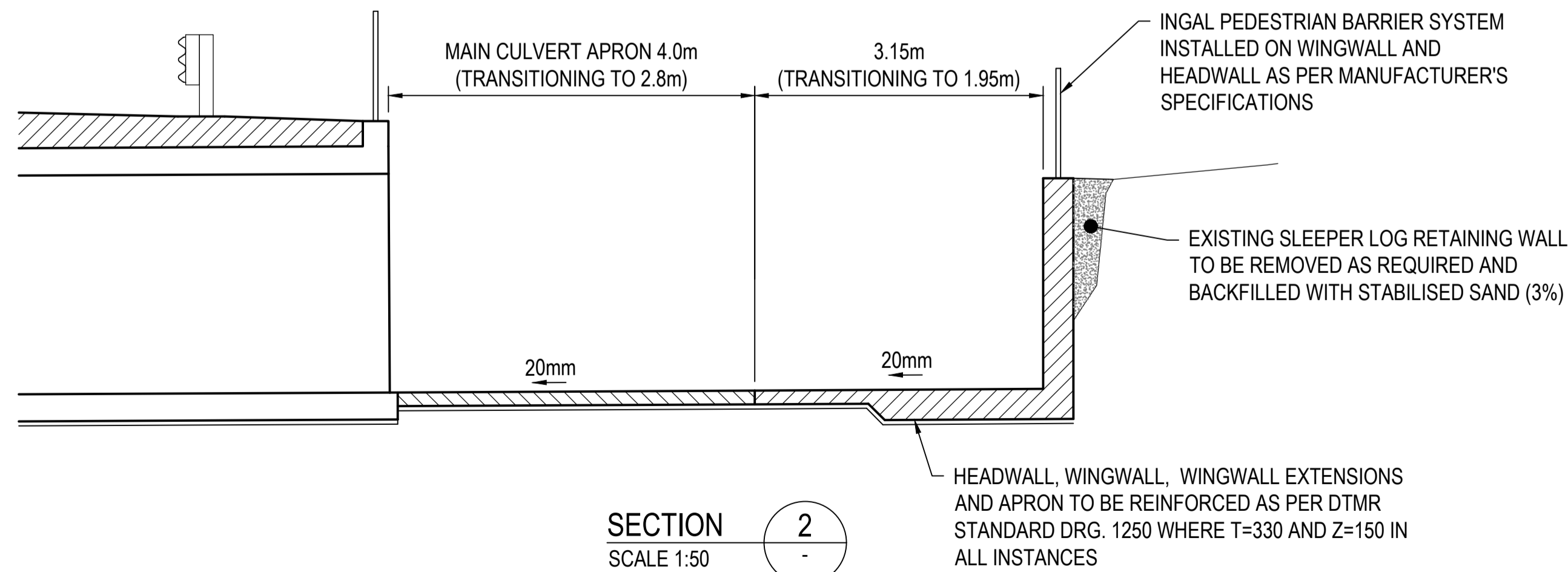
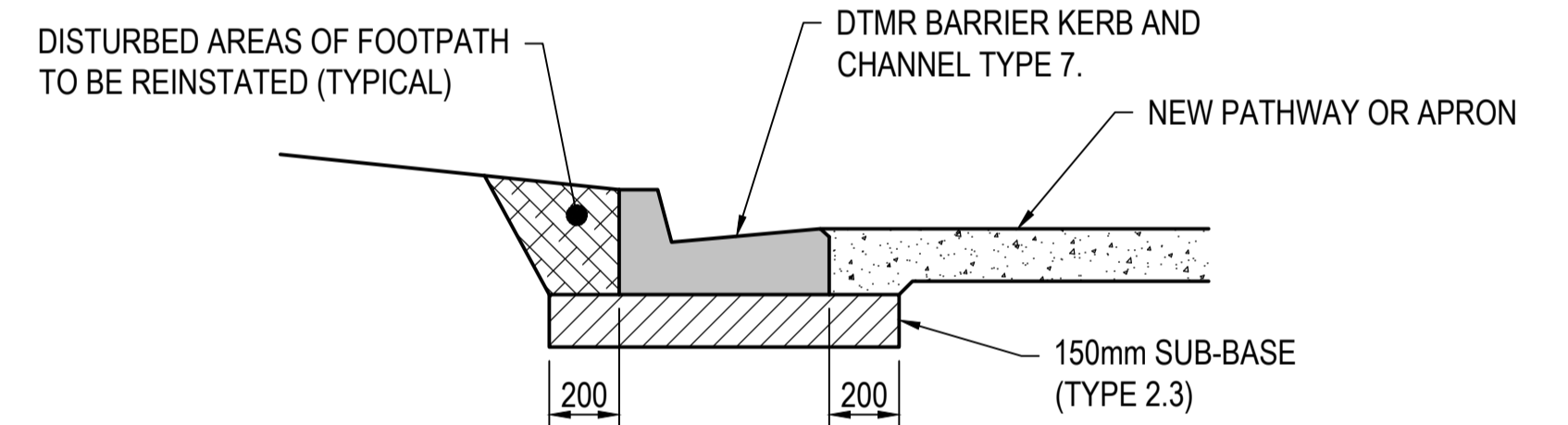
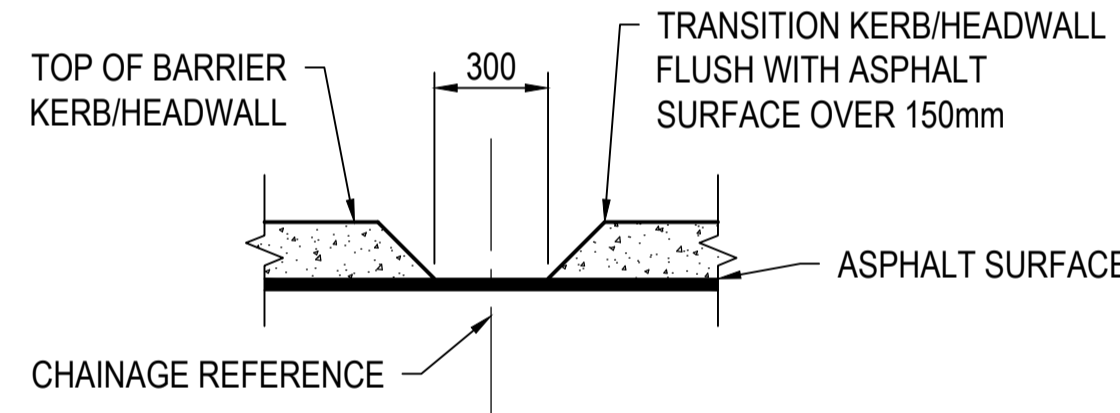
DUTTON STREET

*KERB SLOTS TO HEADWALL
BOTH SIDES CH.9.25

END CHAINAGE OF DRIVEWAY
TO BE CONFIRMED ON SITE



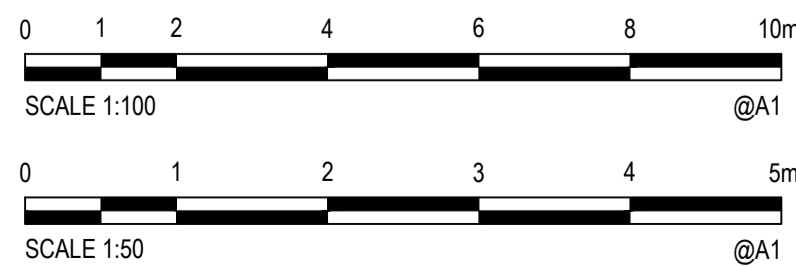
DRIVEWAY CULVERT LAYOUT PLAN
SCALE 1:100



INGAL PEDESTRIAN BARRIER SYSTEM
INSTALLED ON WINGWALL AND
HEADWALL AS PER MANUFACTURER'S
SPECIFICATIONS

PRECAST CULVERTS INSTALLED
ON CAST INSITU BASE AND APRON.
REFER DRG. 9671-134-CI-1020

TYPICAL SECTION - DRIVEWAY CH 4.75 - 20.00
SCALE 1:50



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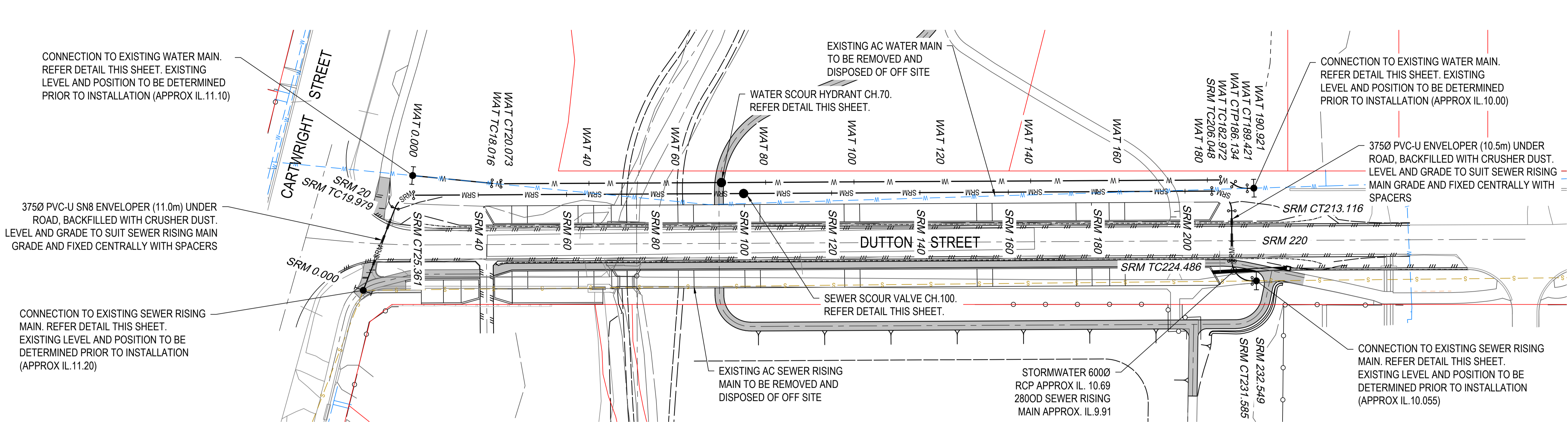
Drawn J.JONES 31.08.2021
Checked B.MELITA 31.08.2021
Designed J.JONES 31.08.2021
Verified B.MELITA 31.08.2021
Approved B.MELITA 31.08.2021
RPEQ 24432

Client HINCHINBROOK SHIRE COUNCIL
Project PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM
Title DRIVEWAY ACCESS LAYOUT PLAN AND DETAILS

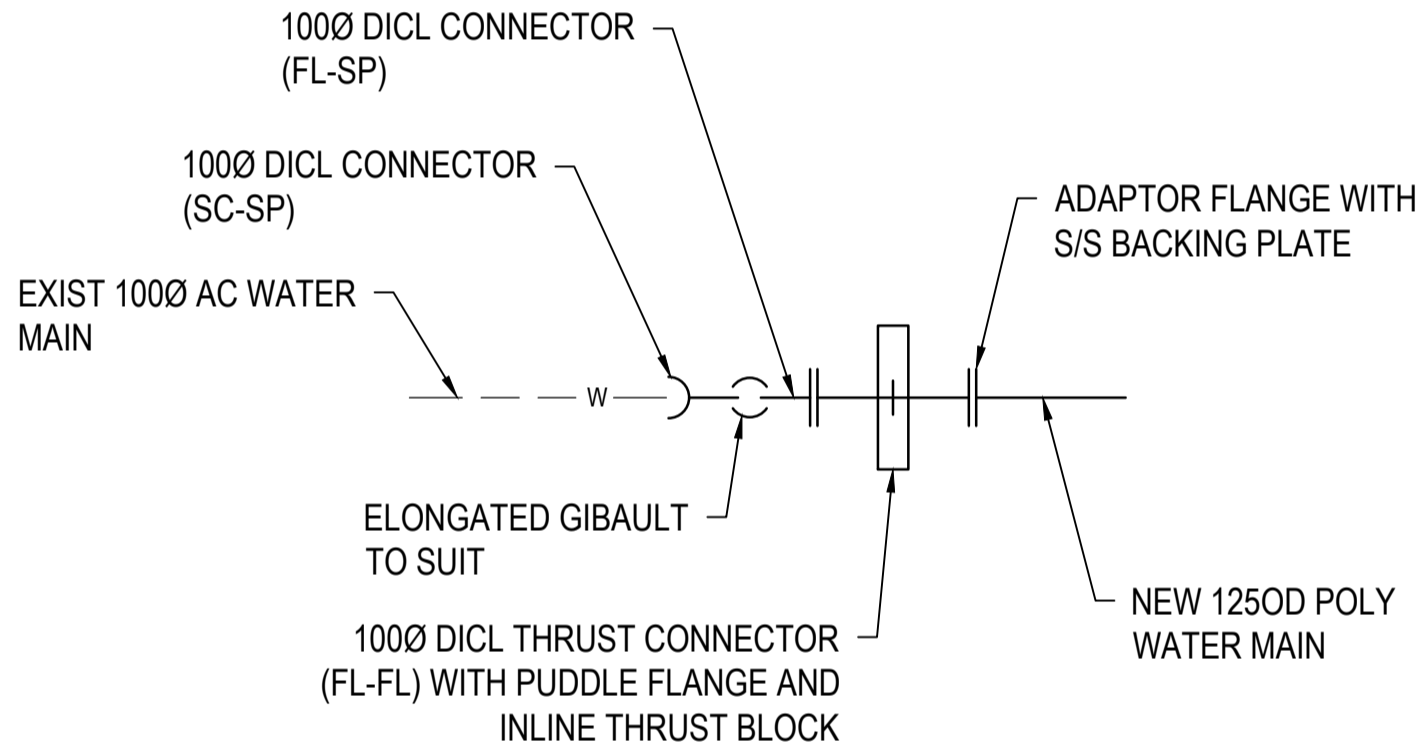
Status **FOR CONSTRUCTION**
Datum AHD GRID Scale AS SHOWN Size A1
Drawing Number 9671-134-CI-1021 Revision B

DATE PLOTTED: 24 September 2021 11:27 AM BY: LACHLAN LANDY

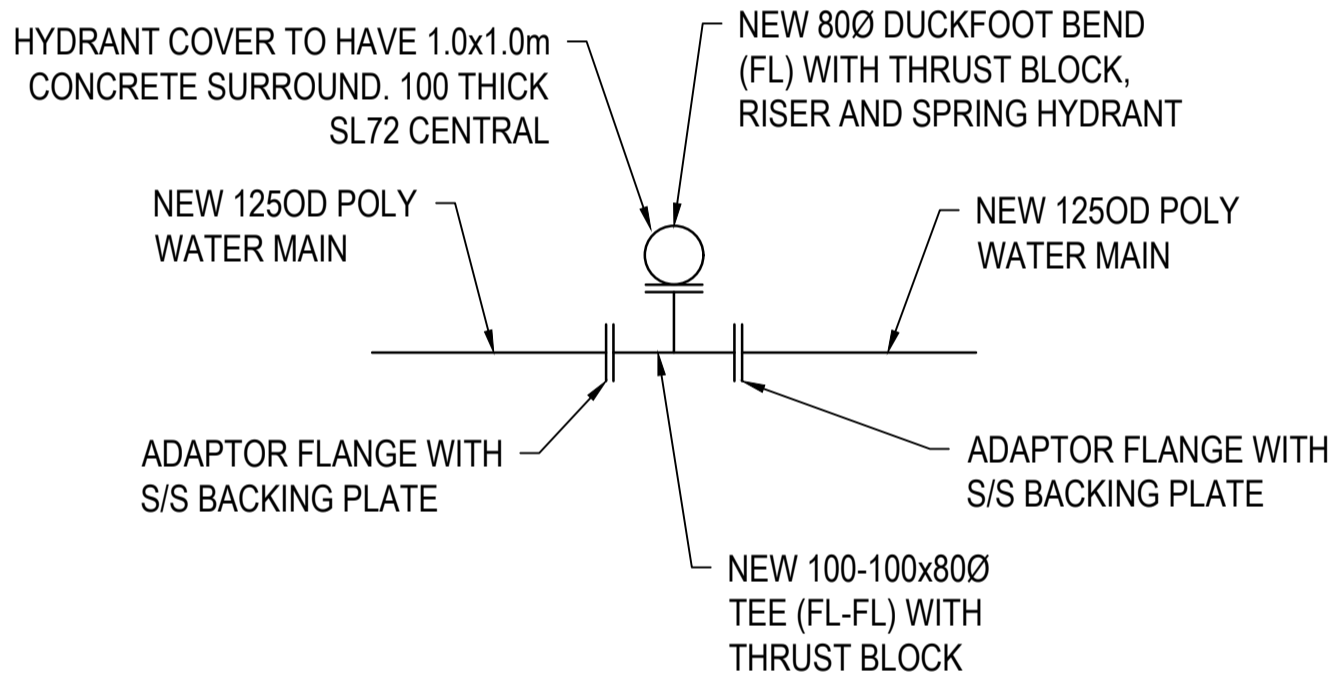
XREF's: XR-9671134-CI-DESIGN-XR-9671134-CI-SURVEY
CAD File: S:\PROJECTS\TOWNSVILLE OFFICE\9600\9671\9671-134- CI-1022.dwg
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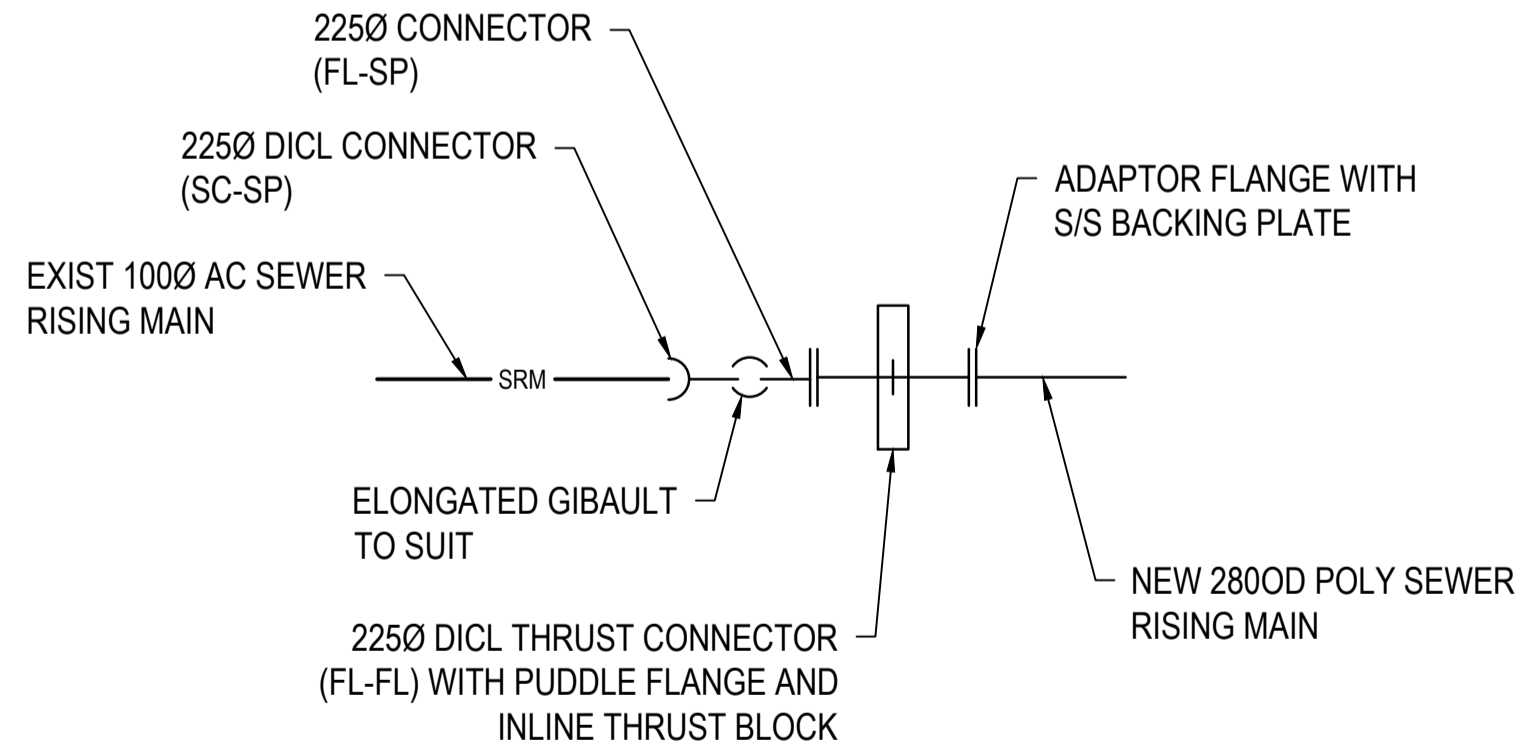
LAYOUT PLAN
SCALE 1:500



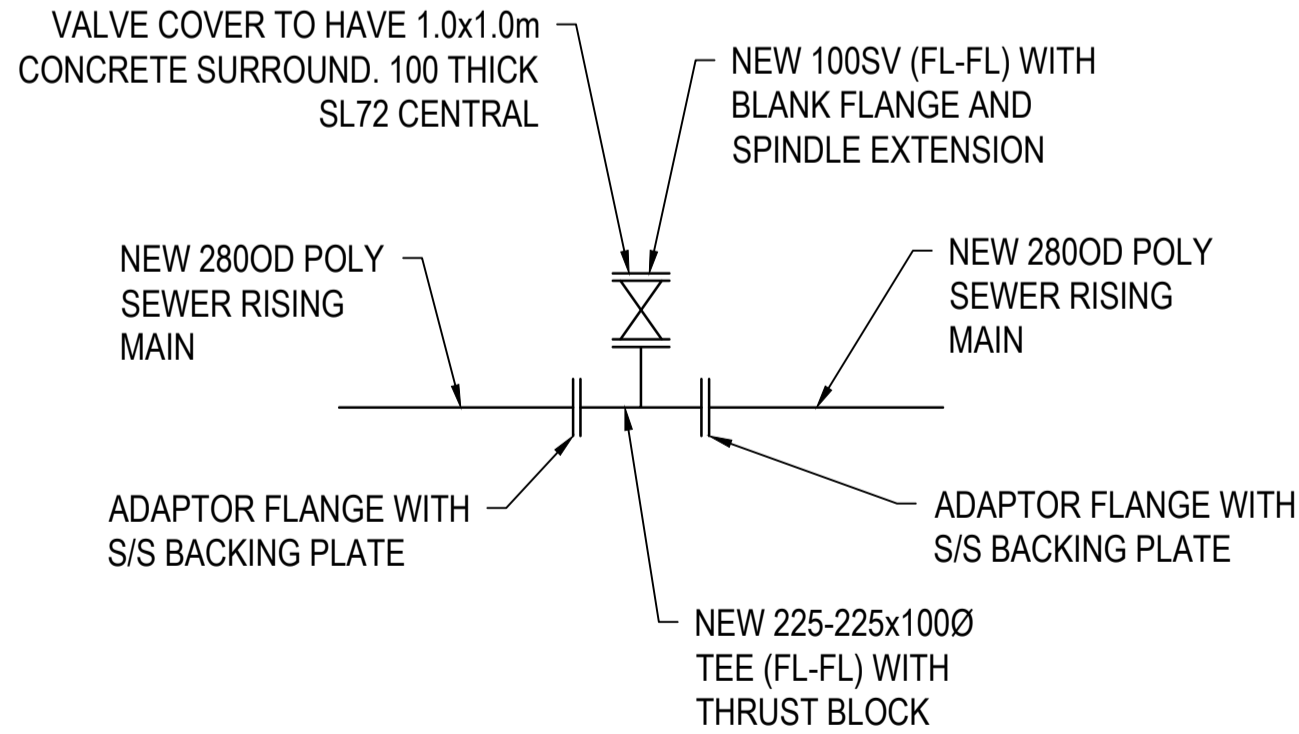
TYPICAL DETAIL - WATER MAIN CONNECTION
NOT TO SCALE



WATER MAIN SCOUR HYDRANT DETAIL
NOT TO SCALE



TYPICAL DETAIL - SEWER RISING MAIN CONNECTION
NOT TO SCALE



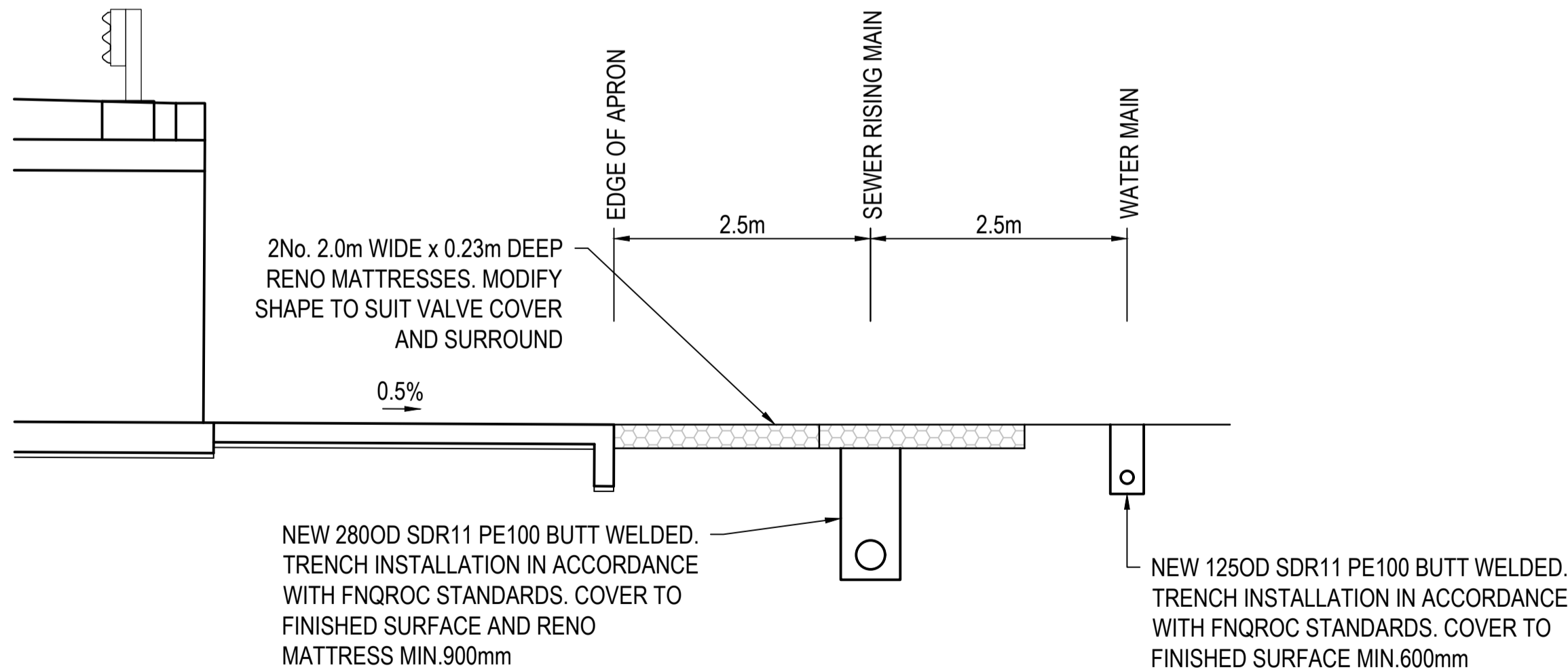
SEWER RISING MAIN SCOUR VALVE DETAIL
NOT TO SCALE

| WATER MAIN SETOUT DETAILS | | | | |
|---------------------------|------------|-------------|----------|----------|
| CHAINAGE | EASTING | NORTHING | DEP. RAD | DEP. LEN |
| 0.000 | 412023.916 | 7937696.598 | | 18.016 |
| 18.016 | 412020.509 | 7937678.907 | -20.000 | 2.057 |
| 20.073 | 412020.225 | 7937676.871 | | 162.899 |
| 182.972 | 412006.000 | 7937514.595 | 5.000 | 3.162 |
| 186.134 | 412004.778 | 7937511.735 | -5.000 | 3.286 |
| 189.421 | 412003.548 | 7937508.751 | | 1.500 |
| 190.921 | 412003.454 | 7937507.254 | | |

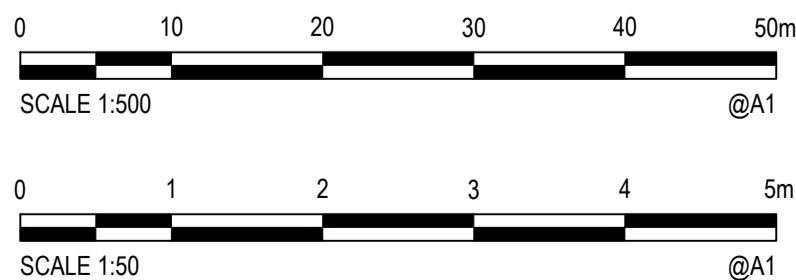
| WATER MAIN LEVEL DETAILS | | |
|--------------------------|-----------|---------|
| CHAINAGE | HEIGHT | GRADE |
| 0.000 | Ex.11.100 | -16.00% |
| 15.000 | 8.700 | -1.40% |
| 40.000 | 8.350 | -0.50% |
| 70.000 | 8.200 | 0.50% |
| 140.000 | 8.550 | 1.50% |
| 180.000 | 9.150 | 7.80% |
| 190.921 | Ex.10.000 | 7.80% |

| SEWER RISING MAIN SETOUT DETAILS | | | | |
|----------------------------------|------------|-------------|----------|----------|
| CHAINAGE | EASTING | NORTHING | DEP. RAD | DEP. LEN |
| 0.000 | 411999.103 | 7937710.131 | | 19.979 |
| 19.979 | 412016.986 | 7937701.223 | 4.500 | 5.382 |
| 25.361 | 412019.462 | 7937696.802 | | 180.687 |
| 206.048 | 412003.684 | 7937516.805 | 4.500 | 7.069 |
| 213.116 | 411998.808 | 7937512.715 | | 11.369 |
| 224.486 | 411987.483 | 7937513.708 | -4.500 | 7.099 |
| 231.585 | 411982.604 | 7937509.588 | | 0.964 |
| 232.549 | 411982.527 | 7937508.627 | | |

| SEWER RISING MAIN LEVEL DETAILS | | |
|---------------------------------|-----------|--------|
| CHAINAGE | HEIGHT | GRADE |
| 0.000 | Ex.11.200 | -3.00% |
| 20.000 | 10.600 | -8.50% |
| 40.000 | 8.900 | -3.00% |
| 60.000 | 8.300 | -1.00% |
| 100.000 | 7.900 | 0.50% |
| 160.000 | 8.200 | 2.50% |
| 232.549 | Ex.10.055 | 2.60% |



TYPICAL WATER / SEWER RISING MAIN ARRANGEMENT
SCALE 1:50



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Drawn J.JONES
Checked B.MELITA
Designed J.JONES
Verified B.MELITA
Approved M.MONTGOMERIE

Date 31.08.2021
Date 31.08.2021
Date 31.08.2021
Date 31.08.2021
Date 31.08.2021

Client HINCHINBROOK SHIRE COUNCIL

Project PALM CREEK CULVERT CROSSING
DUTTON STREET, INGHAM

Title WATER AND SEWERAGE LAYOUT PLAN AND DETAILS

Status FOR CONSTRUCTION

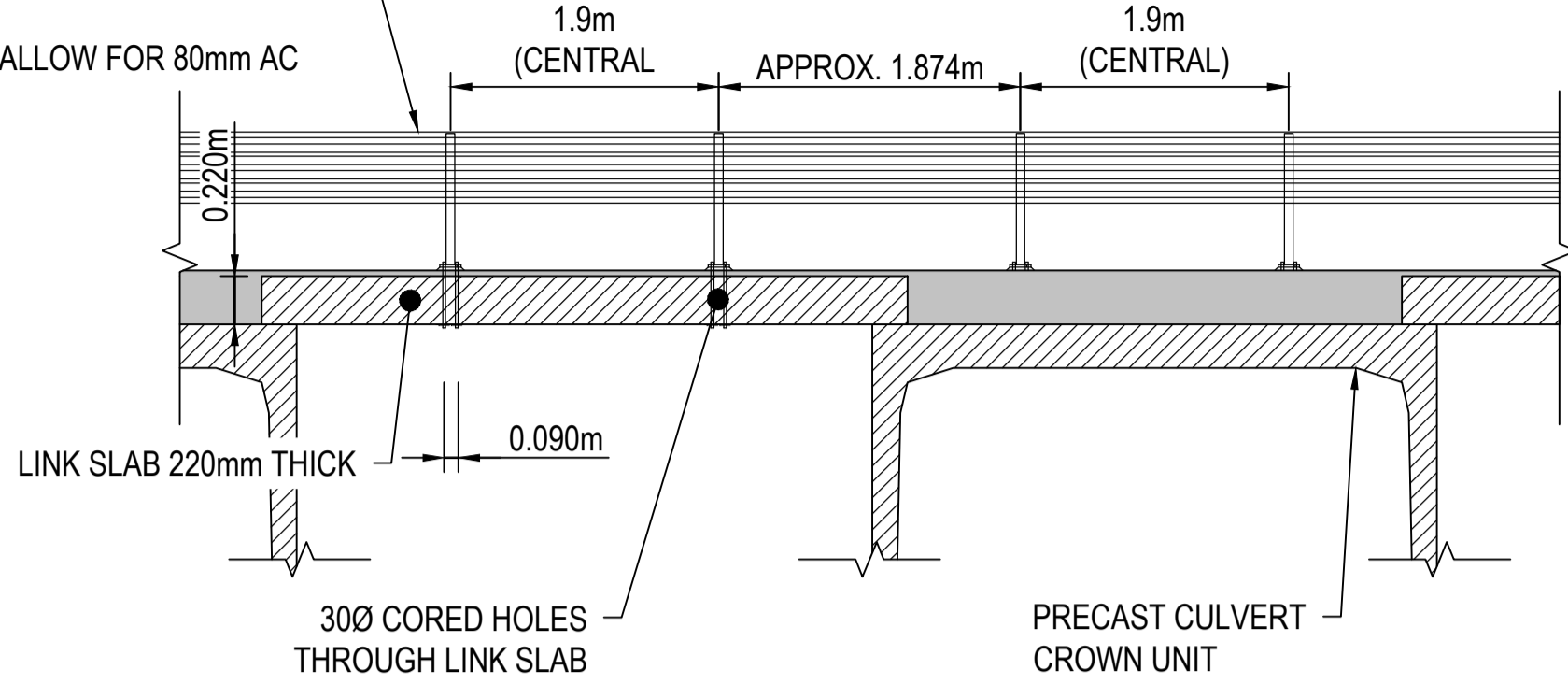
Datum AHD
GRID
Scale AS SHOWN
Size A1

Drawing Number 9671-134-CI-1022

Revision A

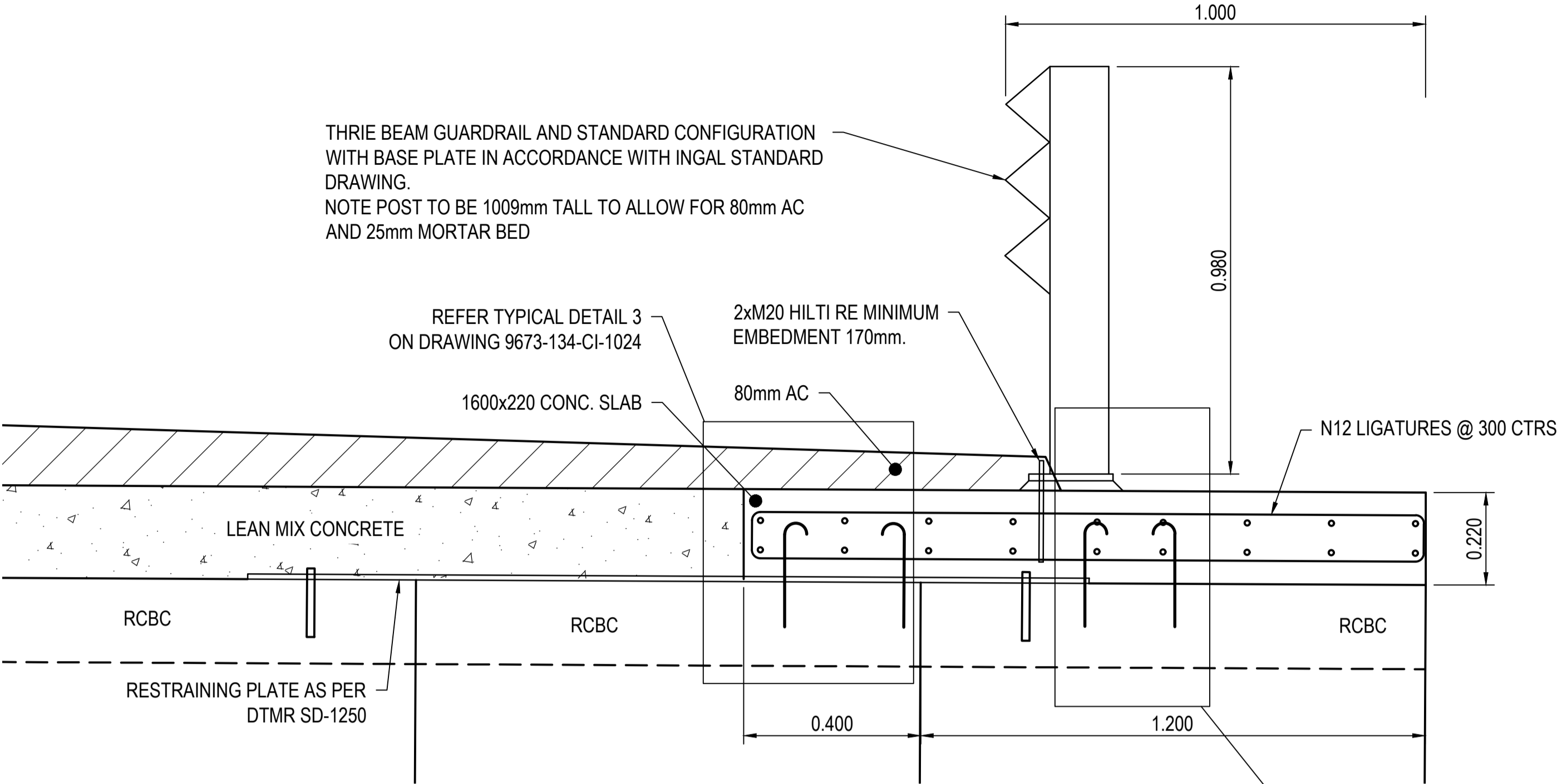
DATE PLOTTED: 24 September 2021 3:58 PM BY: LACHLAN LINDY

THRIE BEAM GUARDRAIL AND STANDARD CONFIGURATION WITH BASE PLATE IN ACCORDANCE WITH INGAL STANDARD DRAWING.
NOTE POST TO BE 1009mm TALL TO ALLOW FOR 80mm AC AND 25mm MORTAR BED



TYPICAL SECTION - DUTTON STREET CULVERTS
SCALE 1:50

THRIE BEAM GUARDRAIL AND STANDARD CONFIGURATION WITH BASE PLATE IN ACCORDANCE WITH INGAL STANDARD DRAWING.
NOTE POST TO BE 1009mm TALL TO ALLOW FOR 80mm AC AND 25mm MORTAR BED



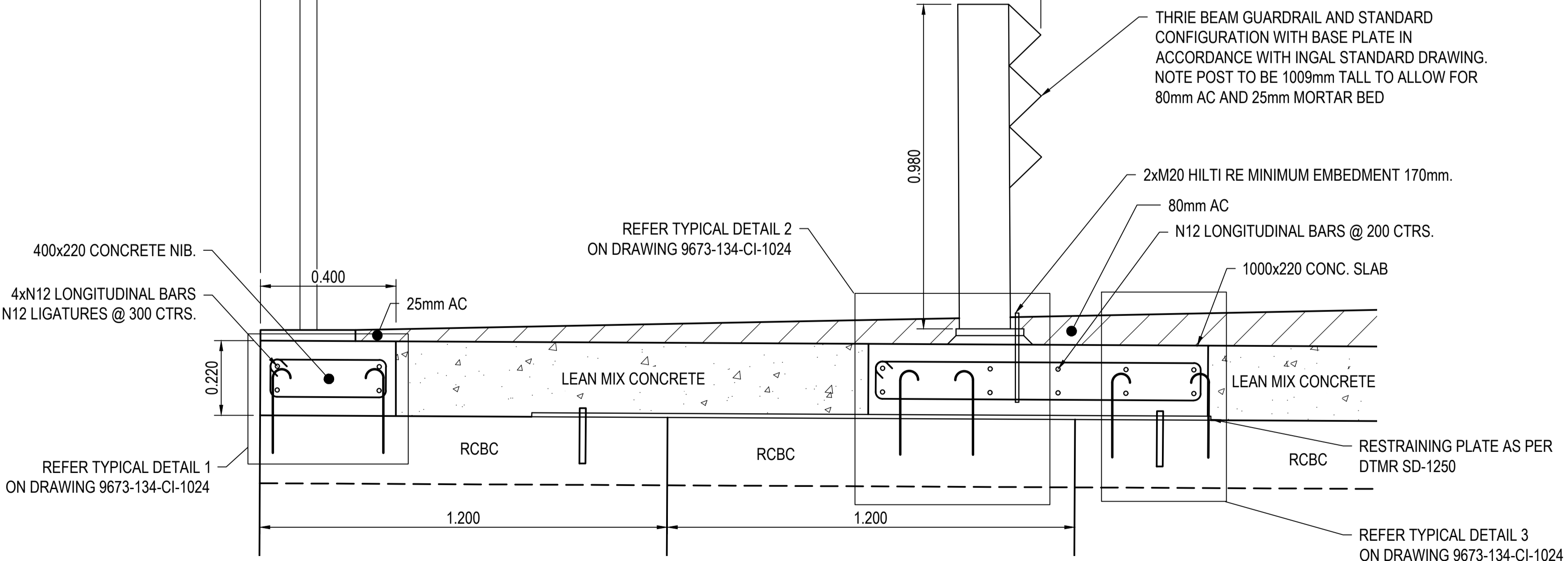
DETAIL A1 & A2 (DOWNSTREAM)
SCALE 1:15m

GUARD RAIL CONNECTION OVER RCBC DOWNSTREAM SIDE

TYPICAL SECTION - DUTTON STREET CULVERTS
SCALE 1:50m

INGAL PEDESTRIAN BARRIER SYSTEM INSTALLED ON HEADWALL AS PER MANUFACTURER'S SPECIFICATIONS

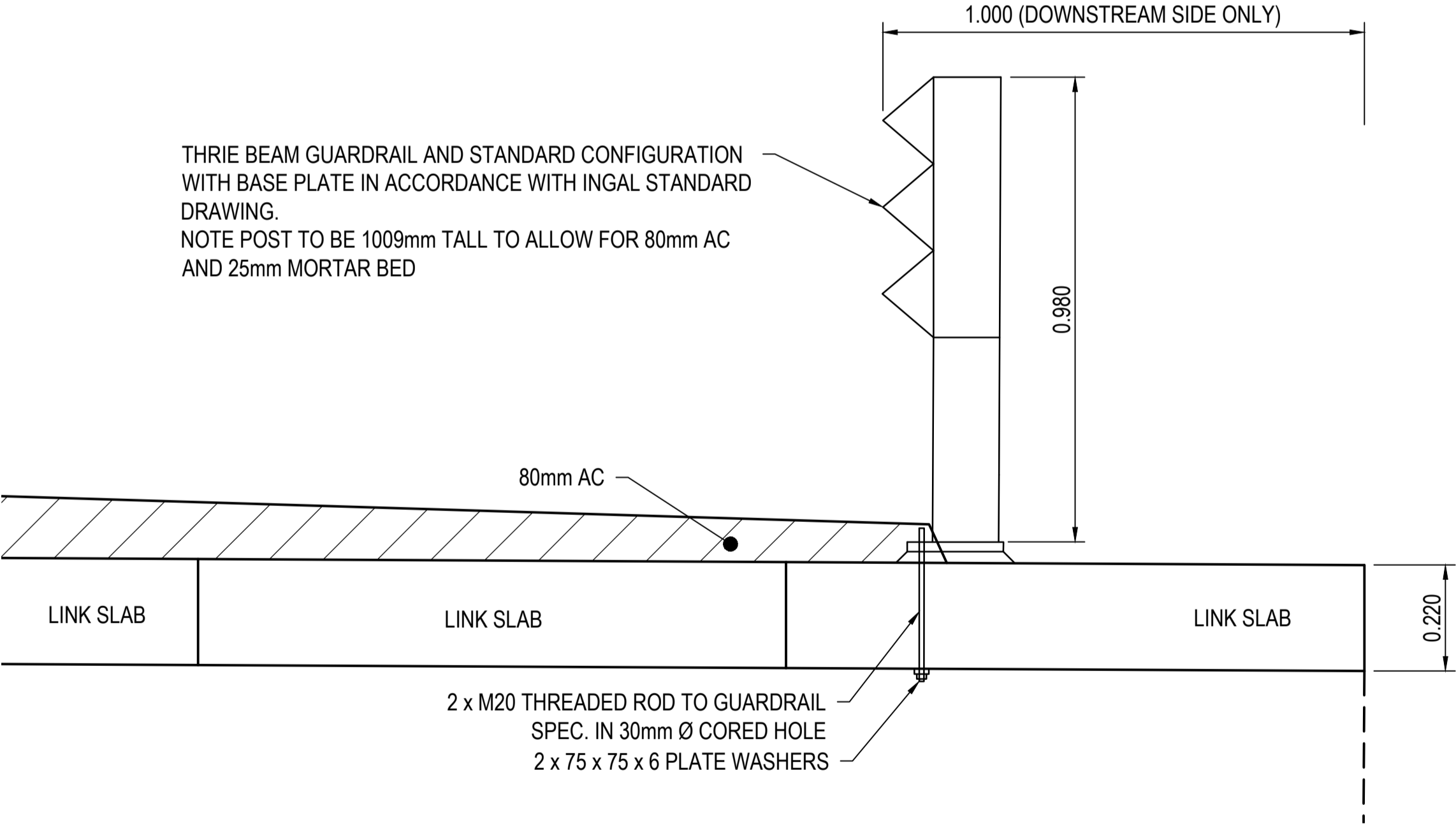
2.300 FOOTPATH ZONE



DETAIL B (UPSTREAM)
SCALE 1:10m

GUARD RAIL CONNECTION OVER RCBC UPSTREAM SIDE

THRIE BEAM GUARDRAIL AND STANDARD CONFIGURATION WITH BASE PLATE IN ACCORDANCE WITH INGAL STANDARD DRAWING.
NOTE POST TO BE 1009mm TALL TO ALLOW FOR 80mm AC AND 25mm MORTAR BED

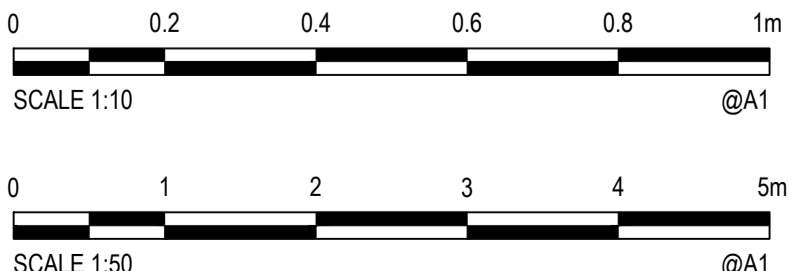


DETAIL A2
SCALE 1:10m

GUARD RAIL CONNECTION LINK SLAB DOWNSTREAM SIDE
UP STREAM SIDE SIMILAR

CAUTION: CULVERT SETOUT, GUARDRAIL DETAILS ETC. BASED ON CULVERT AND LINK SLAB DIMENSIONS PROVIDED BY HUMES TOWNSVILLE FOR METRIC MOULDS. OTHER UNITS WILL REQUIRE RE-ASSESSMENT OF DETAILS AND SETOUT.

| Rev. | Date | Description | Des. | Verf. | Appd. |
|------|------------|-------------------------|------|-------|-------|
| B | 23.09.2021 | GUARD RAIL CHANGES | JJ | MM | BM |
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | MM | BM |



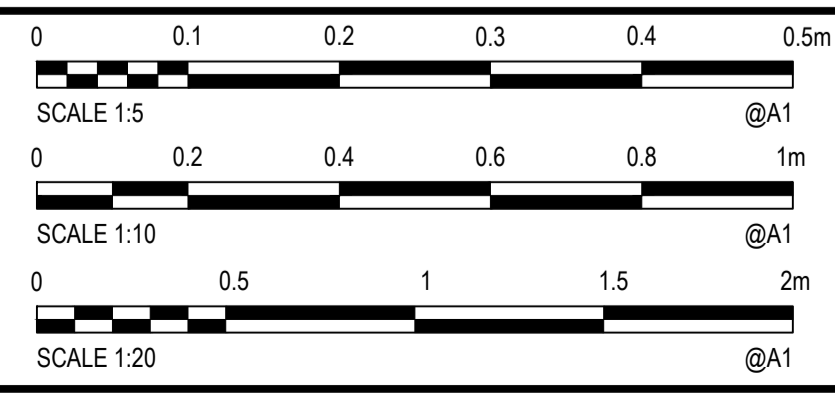
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| Drawn J.JONES 31.08.2021 | Date 31.08.2021 | Client HINCHINBROOK SHIRE COUNCIL |
| Checked B.MELITA 31.08.2021 | Date 31.08.2021 | Project PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
| Designed J.JONES 31.08.2021 | Date 31.08.2021 | Status FOR CONSTRUCTION |
| Verified B.MELITA 31.08.2021 | Date 31.08.2021 | Datum AHD |
| Approved B.MELITA 31.08.2021 | Date 31.08.2021 | Grid Scale AS SHOWN |
| | | Size A1 |
| | | Drawing Number 9671-134-CI-1023 |
| | | Revision B |




| B | 23.09.2021 | GUARD RAIL CHANGES | JJ | MM | BM |
|------|------------|-------------------------|------|--------|-------|
| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | MM | BM |
| Rev. | Date | Description | Des. | Verif. | Appd. |



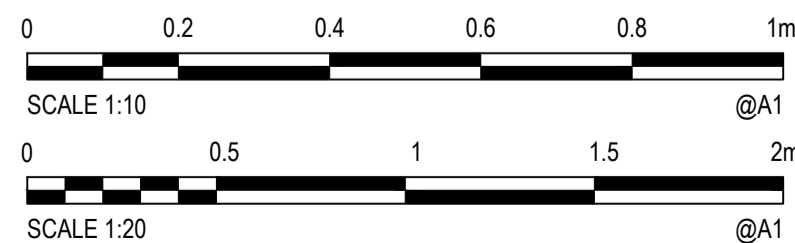
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| Drawn J.JONES | Date 31.08.2021 | Client HINCHINBROOK SHIRE COUNCIL | | | | |
| Checked B. MELITA | Date 31.08.2021 | Project PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM | Status FOR CONSTRUCTION | | | |
| Designed J.JONES | Date 31.08.2021 | | | | | |
| Verified B.MELITA | Date 31.08.2021 | Title CULVERT GUARDRAIL DETAILS SHEET 2 OF 2 | Date AHD | GRID | Scale AS SHOWN | Size A1 |
| Approved  B.MELITA | RPEQ 24432 Date 31.08.2021 | | Drawing Number 9671-134-CI-1024 | | | Revision B |




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|------|------------|-------------------------|------|--------|-------|
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| A | 02.09.2021 | ISSUED FOR CONSTRUCTION | JJ | MM | BM |
| Rev. | Date | Description | Des. | Verif. | Appd. |



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| Drawn | Date |
| J.JONES | 31.08.2021 |
| Checked | Date |
| B. MELITA | 31.08.2021 |
| Designed | Date |
| J.JONES | 31.08.2021 |
| Verified | Date |
| B.MELITA | 31.08.2021 |
| Approved | RPEQ. 24432 |
|  | Date |
| B.MELITA | 31.08.2021 |

| | |
|---------|--|
| Project | PALM CREEK CULVERT CROSSING DUTTON STREET, INGHAM |
|---------|--|

| | |
|-------|------------------------|
| Title | BASE SLAB AND ABUTMENT |
|-------|------------------------|

| | | | |
|-------------------------|------|----------|----------|
| Status | | | |
| FOR CONSTRUCTION | | | |
| Datum | GRID | Scale | Size |
| AHD | | AS SHOWN | A1 |
| Drawing Number | | | Revision |
| 9671-134-CI-1025 | | | A |