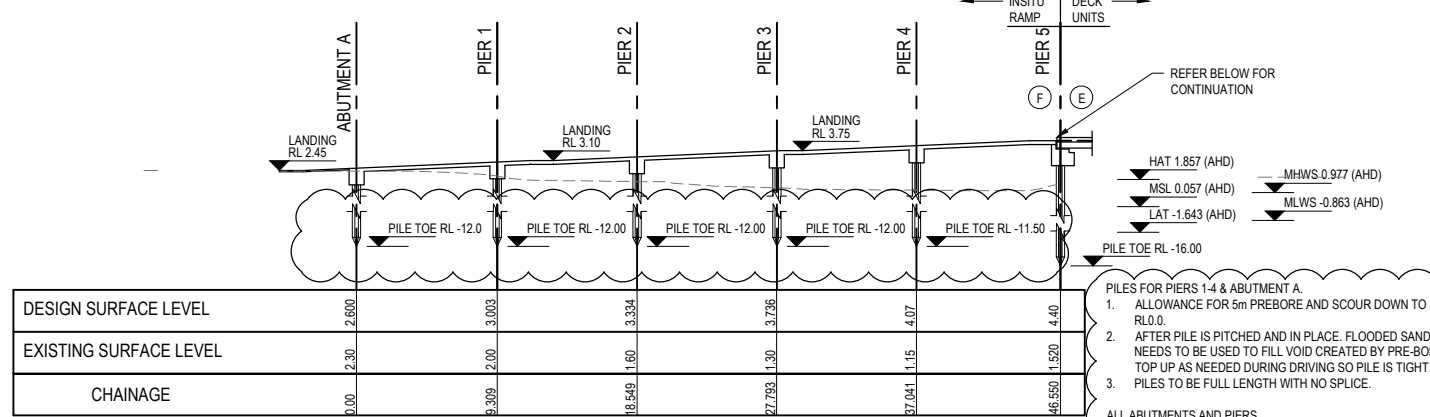


SETOUT POINTS		
POINT	EASTING	NORTHING
1	366156.441	8137099.262
2	366154.537	8137094.524
3	366152.605	8137085.437
4	366152.719	8137076.212
5	366154.853	8137067.237
6	366158.903	8137058.949
7	366164.860	8137051.563
8	366175.287	8137041.152
9	366185.902	8137030.553
10	366196.517	8137019.955
11	366207.132	8137009.356
12	366217.746	8136998.758
13	366228.361	8136988.159
14	366238.976	8136977.561
15	366249.403	8136967.150
16	366253.387	8136963.172

**GENERAL NOTES**

- READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS AND SPECIFICATIONS, AND WITH SUCH OTHER WRITTEN INSTRUCTIONS ISSUED. IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS, THEN NOTES THEN SPECIFICATION.
- CARRY OUT WORK IN A SAFE MANNER IN ACCORDANCE WITH APPLICABLE STATUTORY REGULATIONS, BY-LAWS OR RULES. CONTRACTOR IS RESPONSIBLE FOR OCCUPATIONAL HEALTH AND SAFETY OF SITE PERSONAL AND GENERAL PUBLIC IN ACCORDANCE WITH LEGISLATIVE REQUIREMENTS, INDUSTRIAL AGREEMENTS AND ACCEPTED INDUSTRY PRACTICE.
- REFER TO GEOTECHNICAL INVESTIGATION REPORT No. 90849.00 PREPARED BY DOUGLAS PARTNERS DATED NOVEMBER 2019 AND REPORT No G15-077-001R REV1 PREPARED BY ETS DATED JUNE 2019. NOTIFY SUPERINTENDENT IF CONDITIONS ENCOUNTERED DIFFER FROM THOSE DESCRIBED IN THE REPORTS AND SEEK DIRECTIONS.
- LEVELS DATUM - AHD  
ORIGIN OF LEVELS: 109688 (RL 3.358)  
MERIDIAN: MGA94 (PLANE COORDS)
- NO FILLING TO BE PLACED ABOVE SOFFIT OF ABUTMENT HEADSTOCKS UNTIL AT LEAST TWO (2) DAYS AFTER ERECTION OF ALL SPANS AND GROUTING OF HOLD DOWN BOLTS.
- LEVELS ARE CALCULATED ALLOWING FOR BITUMINOUS CONCRETE DECK WEARING SURFACE ON ROADWAY AT ABUTMENTS AND PIERS TO BE 80mm THICK AT DOWNSTREAM KERB AND 50mm THICK MID SPAN AT KERBS. THE THICKNESS OF DWS AT ANY POINT MUST NOT BE LESS THAN 50mm THICK. AN ALLOWANCE OF 30mm HAS BEEN ASSUMED FOR THE UPWARD DEFLECTION (HOG) OF THE PSC UNITS IN CALCULATING LEVELS.
- REINFORCING STEEL TO BE AUSTRALIAN MADE GRADE 500N TO AS 1302.
- ALL BOLTS AND NUTS TO BE HOT DIP GALVANISED TO AS 1214 UNO. ALL WASHERS TO BE HOT DIP GALVANISED TO AS1650 UNO. ANY GALVANISED ELEMENT IN CONTACT WITH CEMENTITIOUS MATERIAL TO BE PASSIVATED IN 0.2% SODIUM DICHROMATE SOLUTION.
- CONCRETE CLASS SHALL BE CLASS S40/20 (80mm SLUMP) UNO.
- SPACING OF REINFORCEMENT IN HEADSTOCKS MAYBE ALTERED SLIGHTLY IF NECESSARY TO CLEAR HOLD DOWN BOLTS.
- ALL EXPOSED EDGES TO HAVE 25x25 CHAMFERS UNLESS SHOWN OTHERWISE.
- A DATE PLATE IS TO BE CAST INTO THE TOP OF THE LEFT HAND SIDE WALL AT ABUTMENT A SIMILAR TO DTMR STANDARD DATE PLATE DRAWING 1063. CONFIRM DATE PLATE WITH CLIENT.
- A BRASS BENCH MARK IS TO BE CAST INTO THE TOP OF THE LEFT HAND WINGWALL AT ABUTMENT B.
- LOADINGS IN ACCORDANCE WITH:  
(a) DESIGN LIVE LOAD IS IN ACCORDANCE WITH AS5100 - 5kPa.  
(b) PILE TIP LEVELS SHOWN ARE CONTRACT LEVELS AND ARE SUBJECT TO VARIANCE AS DIRECTED BY THE SUPERINTENDENT.  
(c) DESIGN MAXIMUM STREAM VELOCITY - 3.29m/s
- BRIDGE IS DESIGNED AS SUBMERGED WITH MIN 1.2m DEPTH MAT
- PILE ULTIMATE LOAD:  
550 OCT PILE ABUTMENT A & B - 420 kN (700 kN GEOTECHNICAL LOAD)  
550 OCT PILE PIERS 1, 2 & 3 - 430 kN (710 kN GEOTECHNICAL LOAD)  
550 OCT PILE PIERS 4 - 390 kN (650 kN GEOTECHNICAL LOAD)  
550 OCT PILE PIERS 5-12 - 575 kN (960 kN GEOTECHNICAL LOAD)
- MINIMUM PILE EMBEDMENT RL-11.0 ABUT A TO PIER 3. RL-10.5 PIER 4. RL-15.0 FOR PIERS 5 TO 12. RL-11.5 ABUT B.
- ALL EXISTING SERVICES AND UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE OPERATIONS OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF SERVICES DAMAGED DURING CONSTRUCTION. CONTRACTOR TO LOCATE ALL SERVICES ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS. CONTRACTOR SHALL VERIFY ALL SETOUT DETAILS AND DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF SITE WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- SPOIL MATERIAL TO BE USED ON SITE AS DIRECTED BY SUPERINTENDENT.
- GRADE EVENLY BETWEEN LEVELS SHOWN

**GENERAL ARRANGEMENT PLAN**  
SCALE 1:250



**APPROACH RAMP - ELEVATION**  
SCALE 1:250

- LEGEND:**
- (E) DENOTES EXPANSION BEARING
  - (F) DENOTES FIXED BEARING
  - (2) DENOTES SETOUT POINT
  - RL DENOTES DESIGN LEVELS
  - BH1 DENOTES BOREHOLE LOCATION

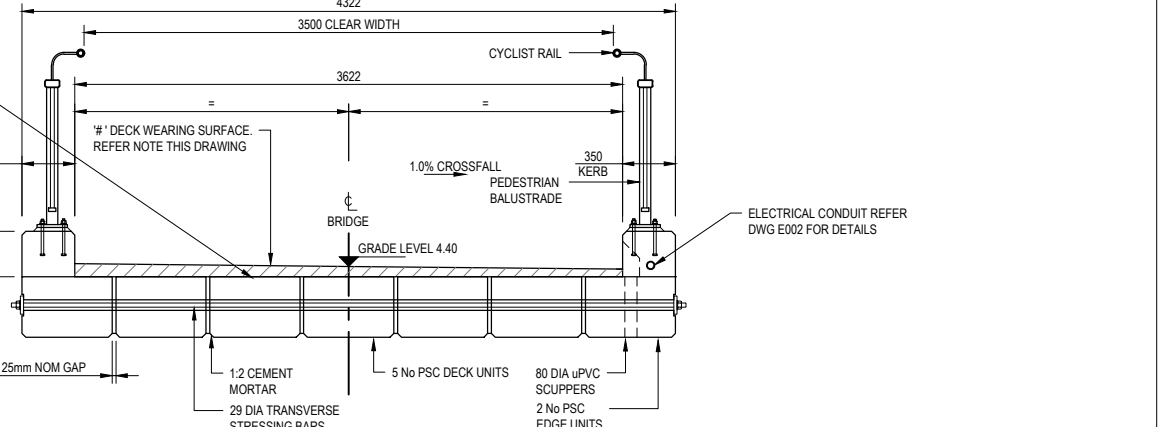
NOTE: CONTRACTOR TO SECURE TOE PIECE OF PILE TO ENSURE PILE DOES NOT PENETRATE BELOW SPLICE LOCATION DURING PILE PITCHING/ DRIVING OPERATIONS. PROVIDE STAINLESS STEEL INSERTS TO RESTRAIN PILE FOR SPLICING OPERATION. CONTRACTOR TO ADVISE ON S.S. INSERTS DETAILS. LOCATE BELOW FORMED HOLE LOCATION.

- PILES FOR PIERS 1-4 & ABUTMENT A
- ALLOWANCE FOR 5m PREBORE AND SCOUR DOWN TO RL 0.0
  - AFTER PILE IS PITCHED AND IN PLACE. FLOODED SAND NEEDS TO BE USED TO FILL VOID CREATED BY PRE-BORE. TOP UP AS NEEDED DURING DRIVING SO PILE IS TIGHT.
  - PILES TO BE FULL LENGTH WITH NO SPLICE.
- ALL ABUTMENTS AND PIERS
- UNDERTAKE PDA/CAPWAP TESTING FOR 25% OF ALL PIERS AT ORIGINAL DRIVE AND AT A MINIMUM OF 3 DAYS AFTER ORIGINAL DRIVE IF PILE DID NOT ACHIEVE CAPACITY AT ORIGINAL DRIVE.

PROVIDE SAMPRIME PRIMER, S03B(AUSROADS S35E) WATERPROOFING (IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS) TO TOP OF REINFORCED CONCRETE DECK PRIOR TO CONSTRUCTION OF DECK WEARING SURFACE.

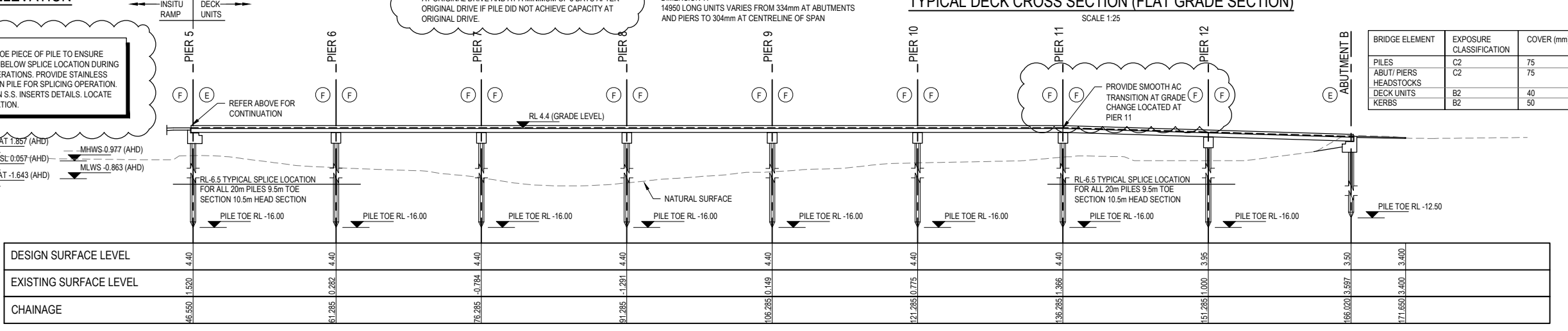
ALLOWANCE TO BE MADE FOR THE UPWARD DEFLECTION (HOG) OF THE PSC UNITS IN THE DECK WEARING SURFACE 50mm MINIMUM THICKNESS REQUIRED. ASPHALT ACTION WITH C320 BINDER (MRTS30) IN 50mm LAYERS.

DIMENSION 'X' 14950 LONG UNITS VARIES FROM 334mm AT ABUTMENTS AND PIERS TO 304mm AT CENTRELINE OF SPAN



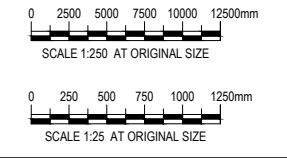
**TYPICAL DECK CROSS SECTION (FLAT GRADE SECTION)**  
SCALE 1:25

BRIDGE ELEMENT	EXPOSURE CLASSIFICATION	COVER (mm)
PILES	C2	75
ABUT/ PIERS HEADSTOCKS	C2	75
DECK UNITS	B2	40
KERBS	B2	50



**ELEVATION**  
SCALE 1:250

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
2	REVISED AS CLOUDED		WRC	MI*	AA*	04.09.20
1	REVISED AS CLOUDED		WRC	MI*	AA*	02.09.20
0	APPROVED ISSUE		WRC	MI*	AA*	13.03.20



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**DO NOT SCALE**

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Drawn	Designer	Client
W.CLARKE	A.AHILADELLIS	CAIRNS REGIONAL COUNCIL
Drafting Check	Design Check	Project
M.ISENBERT*	M.ISENBERT*	BARR CREEK PEDESTRIAN BRIDGE
Approved (Project Director)	Date	Title
A.AHILADELLIS*	13.03.20	BRIDGE WORKS
Scale	AS SHOWN	Original Size
		A1

**CAIRNS REGIONAL COUNCIL**  
**BARR CREEK PEDESTRIAN BRIDGE**  
**BRIDGE WORKS**  
**GENERAL ARRANGEMENT PLAN**

Drawing No: **42-21109-S001** Rev: **2**