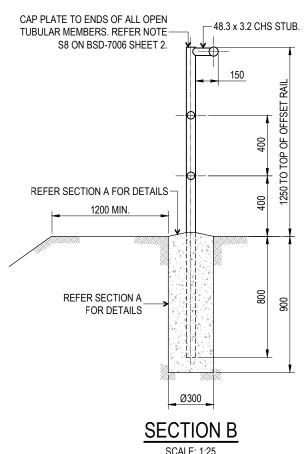


(NOT TO BE USED WHERE FALL HEIGHT IS 1.0m OR GREATER)

### **ELEVATION TYPE B**

COALE: 4:0



# NOTES:

 REFER DRAWING BSD-7006 SHEET 2 FOR DRAWING NOTES AND STANDARD DETAILS

MEMBER SCHEDULE - TYPE A	
ELEMENT	MEMBER
POSTS	88.9 x 5.0 CHS
TOP RAIL	100 x 50 x 4.0 RHS
MID RAIL	48.3 x 3.2 CHS
BOTTOM RAIL	48.3 x 3.2 CHS
OFFSET RAIL	60.3 x 3.6 CHS

MEMBER SCHEDULE - TYPE B	
ELEMENT	MEMBER
POSTS	60.3 x 5.4 CHS
TOP RAIL	N/A
MID RAIL	48.3 x 3.2 CHS
BOTTOM RAIL	48.3 x 3.2 CHS
OFFSET RAIL	60.3 x 3.6 CHS

#### ATTENTION:

- BICYCLE FRIENDLY TUBULAR HANDRAILS TO BE USED ONLY IN SITUATIONS CLEAR OF LONGITUDINAL VEHICLE IMPACT SO AS TO AVOID A POTENTIAL SPEARING HAZARD TO MOTORISTS. THESE HANDRAILS ARE INTENDED AS A BIKE BARRIER AND ARE NOT TO BE USED IN SITUATIONS WHERE MOTOR VEHICLES/ CROWDS/ PEOPLE UNDER PANIC CONDITIONS REQUIRE RESTRAINT.
- PROJECT ENGINEER (RPEQ) TO CARRY OUT AN ASSESSMENT IN ACCORDANCE WITH THE RELEVANT STANDARDS TO DETERMINE WHICH BARRIER TYPE IS TO BE USED.
- BICYCLE FRIENDLY TUBULAR HANDRAILS ON THIS BSD HAVE NOT BEEN DESIGNED FOR FLOOD LOADING. IF HANDRAILS ARE REQUIRED TO RESIST FLOOD LOADING, THE PROJECT ENGINEER (RPEQ) WILL NEED TO ASSESS THE SUITABILITY OF THE BSD FOR USE AND MODIFY THE DESIGN AS REQUIRED.
- THIS BSD IS NOT FOR USE IN A MARINE ENVIRONMENT OR ENVIRONMENTS WITH A CORROSIVITY CATEGORY OF C4 OR GREATER IN ACCORDANCE WITH AS2312.1

THE PURPOSE OF THIS STANDARD DRAWING IS TO PROVIDE TYPICAL DETAILS THAT SUPPORT THE DESIRED OUTCOMES OF THE BRISBANE CITY PLAN 2014 AND ASSOCIATED PLANNING SCHEME POLICIES. THE FITNESS FOR PURPOSE OF THIS STANDARD DRAWING FOR A SPECIFIC PROJECT SHOULD BE ASSESSED AND ACCEPTED BY AN APPROPRIATELY QUALIFIED DESIGNER AND/OR REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ).



REFER BSD-7006 SHEET 2

TERMINATION DETAIL.

FOR OFFSET RAIL

1200 MIN.

TYPE B

END ELEVATION

#### BRISBANE CITY COUNCIL STANDARD DRAWING

BICYCLE FRIENDLY FENCE GALVANISED TUBULAR HANDRAIL SHEET 1 OF 2 PUBLISH DATE

DEC 2023

SCALE

NOT TO SCALE

DRAWING NUMBER

DS.D. 7006

BSD-7006
ORIGINAL SIZE REVISION D

#### **DESIGN LOADS:**

STATIC LOADING:

 $0.75 {\rm kN/m}$  TO TOP RAIL OR OFFSET RAIL (SIMULTANEOUSLY TRANSVERSE AND VERTICAL) AS PER AS5100.2.

0.6kN TO INFILL (TRANSVERSE) AS PER AS5100.2.

#### **GENERAL NOTES:**

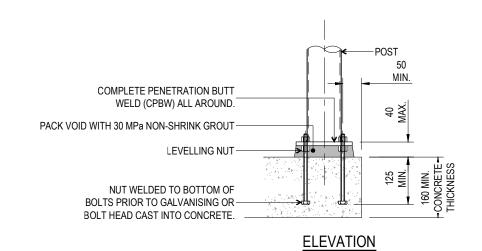
- ALL WORKMANSHIP AND MATERIAL SHALL COMPLY WITH THE APPROPRIATE
   AUSTRALIAN STANDARDS THAT ARE CURRENT AT THE TIME OF CONSTRUCTION.
- 2. VERIFY LOCATIONS OF ALL SERVICES PRIOR TO COMMENCING WORK.
- 3. SAFETY PRECAUTIONS SHALL BE TAKEN TO AVOID INJURY TO PEOPLE DURING CONSTRUCTION. THE UNATTENDED HOLES SHALL BE COVERED OR FENCED OFF AT ALL TIMES.
- 4. FOOTINGS HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY OF SOIL IS 100KPa AND MINIMUM Cu = 50kPa FOR COHESIVE SOIL SAND. THE ACTUAL SOIL CONDITION IS TO BE ASSESSED BY A GEOTECHNICAL ENGINEER (RPEQ) AND IF FOUND TO BE OF WEAKER STRENGTH OR OF DIFFERENT TYPE TO THE ONE ASSUMED, A STRUCTURAL ENGINEER IS TO BE CONSULTED FOR A PROJECT SPECIFIC FOOTING DESIGN.
- 5. BASE PLATE SUPPORTING SLAB/STRUCTURE SHALL BE CHECKED BY A RPEQ FOR STRUCTURAL ADEQUACY.
- 6. ALL CONCRETE TO BE GRADE N25 MINIMUM.
- 7. DDA COMPLIANCE AS PER AS1428.1:

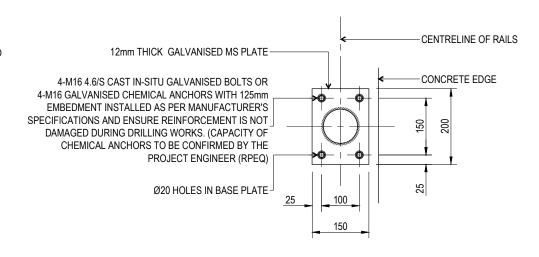
USE OF THIS STANDARD DRAWING IS LIMITED FOR STRUCTURES ON LONGITUDINAL GRADE OF 1:20 OR LESSER. NECESSARY DDA COMPLIANCE REQUIREMENTS ARE TO BE ASSESSED AND COMPLIED BY THE PROJECT ENGINEER (RPEQ.) FOR EACH PROJECT

ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

#### STEEL NOTES:

- S1. CIRCULAR HOLLOW STEEL SECTIONS SHALL BE IN ACCORDANCE WITH AS/NZS1163 GRADE C250L0 AND RECTANGULAR HOLLOW STEEL SECTIONS SHALL BE IN ACCORDANCE WITH AS/NZS1163 GRADE C350LO.
- S2. ALL STEELWORK TO BE HOT DIPPED GALVANISED IN ACCORDANCE WITH AS/NZS4680.
- S3. ALL POSTS TO BE VERTICAL.
- S4. ALL HORIZONTAL RAILS TO BE ROLLED TO MATCH SHAPE OF PATH/WALL IF RADIUS IS LESS THAN 20m.
- S5. MINIMUM LENGTH OF RAILS TO BE 2 SPANS LONG TO MINIMISE NEED FOR JOINTS AT EVERY POST.
- S6. ALL WELDS TO BE 4mm THICK C.F.W. (CONTINUOUS FILLET WELD) TO AS1554.1 U.N.O.
- S7. ALL WELDS TO BE MADE USING ELECTRODES WITH A NOMINAL TENSILE STRENGTH OF 490MPa (OR BETTER) TO AS/NZS1554. GRIND ALL CORNERS OF WELDS SMOOTH.
- S8. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH 5mm THICK PLATES AND C.F.W. (U.N.O.).
- S9. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS4680.
- S10. EXPANSION JOINT SHALL BE PROVIDED IF THE LENGTH OF HANDRAIL EXCEEDS 20.0m OR TO MEET PROJECT REQUIREMENT. MINIMUM LENGTH OF CONTINUOUS RAIL TO BE TWO SPANS.
- S11. PROTECTIVE COATING TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC. TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- S12. THE ONLY SITE WELDING ALLOWED IS AT THE EXPANSION JOINTS. TREATMENT OF THE SITE WELD IS TO BE MADE GOOD AS PER NOTE 13.
- S13. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH AN ORGANIC EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS3750.9. PAINT TO BE APPLIED TO THE REPAIR AREAS IN TWO COATS. EACH COAT SHALL HAVE A MINIMUM DRY FILM THICKNESS OF 50 MICRON AND SHALL BE APPLIED AS PER THE MANUFACTURER'S SPECIFICATIONS.

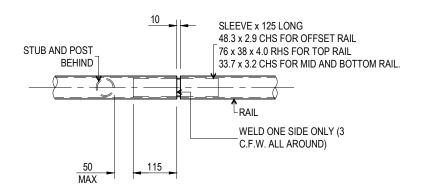




**PLAN** 

# **BASE PLATE DETAIL**

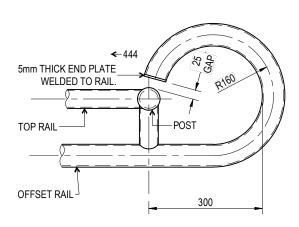
SCALE: 1:10



NOTE:
SPACING OF EJ'S TO SUIT FABRICATION, TRANSPORTATION AND
INSTALLATION REQUIREMENTS. MINIMUM LENGTH OF CONTINUOUS
RAIL TO BE TWO SPANS.

# RAIL EXPANSION JOINT AT 20.0m MAX. CTS. (FOR CONTINUOUS HANDRAIL LENGTHS)

SCALE: 1:10



## OFFSET RAIL TERMINATION DETAIL

SCALE: 1:10

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#### BRISBANE CITY COUNCIL STANDARD DRAWING

BICYCLE FRIENDLY FENCE GALVANISED TUBULAR HANDRAIL SHEET 2 OF 2

	PUBLISH DATE		
		DEC 2023	
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	DRAWING NUME	BER	

BSD-7006
ORIGINAL SIZE REVISION

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