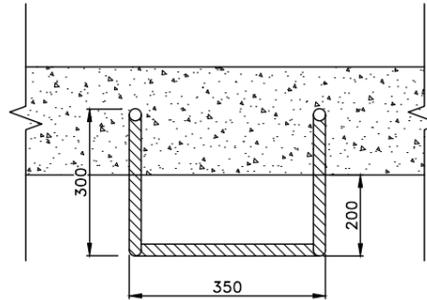


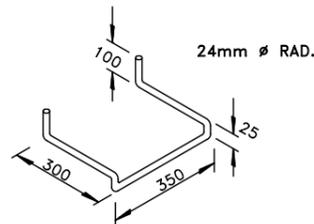
STEP IRON PLACEMENT DIAGRAM

NOT TO SCALE



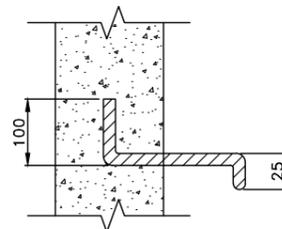
STEP IRON TOP VIEW DETAIL

NOT TO SCALE



STEP IRON 3D DIAGRAM

NOT TO SCALE



STEP IRON ELEVATION DETAIL

NOT TO SCALE

NOTE
ANY CONSTRUCTION WITHIN THE PUBLIC DOMAIN REQUIRES COUNCIL APPROVAL. NON-APPROVED WORKS AND STRUCTURES MAY BE REQUIRED TO BE REMOVED AND THE EXISTING REINSTATED AT THE CONTRACTORS OR DEVELOPERS COST.

NOTES

- THE WORKS SHALL COMPLY WITH THE CURRENT AND RELEVANT AUSTRALIAN STANDARDS AND TNSW TECHNICAL DIRECTIONS AND GUIDELINES, UNLESS INSTRUCTED OTHERWISE BY THE COUNCIL DELEGATE.
- CONTRACTOR TO OBTAIN & LOCATE ALL SERVICES PRIOR TO WORKS COMMENCING. UTILITY SERVICE COVERS ARE TO BE ADJUSTED TO SUIT DESIGN FINISHED SURFACE LEVELS. UTILITY COVERS TO BE CLASS D OR EQUIVALENT, OR AS SPECIFIED BY UTILITY ASSET OWNER.
- ANY WORKS WITHIN THE VICINITY OF AN AUSGRID ASSET TO COMPLY TO RELEVANT AUSGRID STANDARDS AND SAFETY PROTOCOLS. FOR EXCAVATION WORKS NEAR AUSGRID POLES, REFER TO THE LATEST REVISION OF AUSGRID STANDARD DRAWING 256262. CONCRETE TO BE OF 32MPa COMPRESSIVE STRENGTH AT 28 DAYS.
- MINIMUM PIT DIMENSIONS TO BE:
 - 600 x 600 FOR DEPTHS <800mm
 - 900 x 600 FOR DEPTHS >800mm AND <1800mm
 - 900 x 900 FOR DEPTHS >1800mm
- FOR PITS GREATER THAN 900mm IN LENGTH OR 1200mm IN WIDTH SEPARATE DESIGN IS REQUIRED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m AT 300 CENTERS.
 - FIRST RUNG PLACED MAXIMUM 1.5m FROM INVERT OF PIT.
 - LAST RUNG PLACED MAXIMUM 600mm FROM PAVEMENT SURFACE.
 - STEP IRONS SHOULD ONLY BE USED WHERE THE VERTICAL WALL HEIGHT DOES NOT EXCEED 6m.
 - STEP IRONS SHALL BE LOCATED:
 - DIRECTLY ON A WALL WITHOUT PIPE OPENINGS.
 - DESIRABLY ON ONE OF THE LONG SIDES OF THE PIT.
 - DIRECTLY BELOW THE OPENING OF THE COVER.
 - STEP IRONS SHALL BE OF MATERIAL GIVING EQUIVALENT PERFORMANCE TO 24mm DIAMETER SOLID LOW-CARBON STEEL AND SHALL HAVE A TREAD DEPTH OF NOT LESS THAN 24mm.
 - ALL BENDS TO BE FORMED AROUND 12MM PIN.
 - STEP IRONS SHALL HAVE SHARP EDGES ROUNDED AND HOT DIP GALVANISED AFTER FABRICATION.
 - MATERIAL FOR STEP IRONS SHALL BE STRUCTURAL GRADE 250, OR APPROVED EQUIVALENT TO AS1204.
- FOR PIT DEPTHS BETWEEN 1.5m AND 3.0m DEPTH, PROVIDE N12 @ 250C/C EACHWAY AT 40 COVER TO INSIDE FACE WALLS AND BASE. PROVIDE 400 LAP AT CORNERS. FOR PIT DEPTHS GREATER THAN 3.0m, SEPARATE DESIGN IS REQUIRED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- WHERE EXTENDED CHAMBER WIDTH EXCEEDS 1.2m, ROOF REINFORCEMENT TO BE DESIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- INTERNAL PIT WIDTH SHALL BE INCREASED FOR PIPES AT AN ANGLE.
- ALL REINFORCEMENT TO BE HOT DIP GALVANISED TO AS4671 WITH MINIMUM 50 COVER.
- INSPECTIONS ARE REQUIRED AT THE FOLLOWING STAGES AND AS OTHERWISE DIRECTED BY THE COUNCIL DELEGATE. DO NOT CONTINUE UNTIL APPROVAL RECEIVED FROM COUNCIL DELEGATE.

CONCRETE WORKS

 - FORMWORK AND REINFORCEMENT SET.
 - CONCRETE FORMED AND CURED.
- MATCH NEW PAVEMENT NEATLY AND FLUSH WITH EXISTING.
- CONTRACTOR TO SUPPLY AND LAY TURF TO AREA AFFECTED BY PROPOSED WORKS OR AS DIRECTED BY THE COUNCIL DELEGATE.
 - THE SPECIES OF TURF TO BE "SOFT LEAF SHADEMASTER BUFFALO" UNLESS DIRECTED OTHERWISE
 - THE TURF SHOULD BE PLACED ON A MINIMUM 100mm DEEP LAYER OF IMPORTED TURF UNDERLAY TOPSOIL
 - SUBSOIL SHOULD BE CULTIVATED TO A MINIMUM DEPTH OF 100mm
 - IRRIGATE THE TURF TWICE A WEEK FOR 12 WEEKS
- FOR TURFING NOTES REFER TO WAVERLEY COUNCIL STANDARD DRAWING R18.
- ANY DISRUPTION TO EXISTING NATURE STRIPS OR PLANTED BEDS WITHIN COUNCIL LAND TO BE REINSTATED AS PER EXISTING. SEEK APPROVAL FROM COUNCIL DELEGATE FOR CHANGES TO PLANT SPECIES. EDGING OR PAVING TO NATURE STRIPS REQUIRES APPROVAL FROM THE COUNCIL DELEGATE.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

														CIVIL DESIGN, MAJOR PROJECTS Level 1, 87-89 Oxford Street, Bondi Junction, NSW, 2022 PO Box 9, Bondi Junction NSW 1355 Tel. (02) 9083 8000 Email: info@waverley.nsw.gov.au Web: www.waverley.nsw.gov.au		APPROVED: DATE SIGNED:		Project Name: STANDARD DRAWING - DRAINAGE - D8		PROJ No: WC STD DRW																							
														SCALE AS SHOWN @ A3: PLAN: LONG-SECTION VERT: - CROSS-SECTION VERT: -		Drawing Title: STEP IRON DETAILS		TRIM No: -																									
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