

GENERAL

1.

BUS INFRASTRUCTURE SHALL TAKE INTO ACCOUNT PLANNING AND DESIGN PRINCIPLES AS OUTLINED IN NSW GOVERNMENT STATE TRANSIT BUS INFRASTRUCTURE GUIDE.
2.

ALL WORKMANSHIP, TESTING, MATERIALS AND SUPERVISION ARE TO BE IN ACCORDANCE WITH THESE SPECIFICATIONS, THE WORK HEALTH AND SAFETY ACT 2011 AND CURRENT RELEVANT AUSTRALIAN STANDARDS.
3.

THESE DRAWINGS ARE NOT SELF-CONTAINED AND SHALL BE READ IN CONJUNCTION WITH COUNCIL’S INFRASTRUCTURE SPECIFICATIONS.
4.

NOTES ON ANY DRAWING APPLY TO ALL DRAWINGS IN THE SET UNLESS OTHERWISE NOTED.
5.

THE BUILDER SHALL PROVIDE CERTIFICATION ON ANY DESIGN AND CONSTRUCT COMPONENT BY A CHARTERED PROFESSIONAL ENGINEER (NPER).
6.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL SERVICES IN THE VICINITY OF THE WORKS. ANY SERVICES SHOWN ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL SERVICES PRIOR TO COMMENCING AND SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED TO SERVICES, AS WELL AS ANY LOSS INCURRED AS A RESULT OF THE DAMAGE TO ANY SERVICE.
7.

THE STRUCTURAL COMPONENTS DETAILED ON THESE STRUCTURAL DRAWINGS ARE JOB SPECIFIC AND HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND BUILDING CODE OF AUSTRALIA FOR THE FOLLOWING FIRE RATINGS, WIND LOADS, FLOOR USAGE AND EARTHQUAKE LOADS.

WIND LOADS:

- IMPORTANCE LEVEL

= 1

•

REGION

= A2

•

ANNUAL PROBABILITY OF EXCEDENCE

= 1:100

•

REGIONAL WIND SPEED V

= 41 m/s

•

TERRAIN CATEGORY

= 2

•

TERRAIN MULTIPLIER M_z ,cat

= 0.91

•

WIND DIRECTION MULTIPLIER M_d

= 1.0

•

SHIELDING MULTIPLIER M_s

= 1.0

•

TOPOGRAPHIC MULTIPLIER M_t

= 1.0

•

SITE WIND SPEED

= 37.4 m/s

FOUNDATIONS

8.

ASSUMED ALLOWABLE BEARING CAPACITY:

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SLABS ON GROUND

= 100 kPa.
9.

THE SLAB AND FOOTINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS 2870 FOR CLASS M SITE. ENSURE STABILITY OF ADJACENT BUILDINGS AND PATHS IS MAINTAINED DURING ALL STAGES OF CONSTRUCTION.
10.

DO NOT ALLOW EXCAVATED MATERIAL TO BE STOCKPILED WITHIN 1500mm OF FOOTING TRENCHES OR PITS. NO EARTH OR DETRITUS IS TO FALL INTO THE FOOTING TRENCHES BEFORE OR DURING CONCRETE PLACEMENT.
11.

THE BASE OF ALL EXCAVATIONS SHALL BE FREE OF WATER AND CLEANED OF LOOSE MATERIAL OR DEBRIS PRIOR TO PLACEMENT OF CONCRETE.

CONCRETE AND REINFORCEMENT

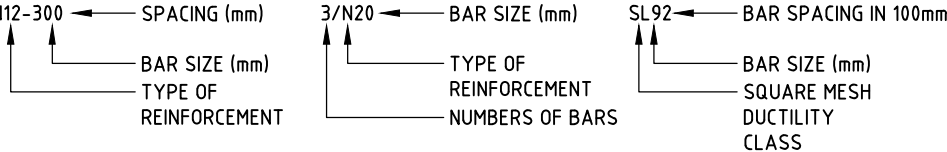
12.

CARRY OUT ALL CONCRETE WORK IN ACCORDANCE WITH AS 3600 AND COUNCIL’S INFRASTRUCTURE SPECIFICATION 0319 AUXILIARY CONCRETE WORKS
13.

PLACE CONCRETE CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON PLAN. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. ANY REVISIONS OR ADDITIONS TO CONSTRUCTION JOINTS SHOWN ON PLAN REQUIRE REQUIRE COUNCIL APPROVAL.
14.

ALL REINFORCING BARS SHALL BE GRADE D500N TO AS/NZS 4671 AND ALL MESH SHALL BE GRADE 500L TO AS/NZS 4671. UNLESS OTHERWISE NOTED CLASS L REINFORCEMENT SHALL NOT BE USED.

REINFORCEMENT LABELS:



15.

REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, AND NOT NECESSARILY IN TRUE PROJECTION. BARS SHOWN ARE INDICATIVE ONLY AND LENGTHS MAY VARY. BEAM ELEVATIONS TAKE PRECEDENCE OVER SECTIONS. SLAB PLANS TAKE PRECEDENCE OVER SECTIONS. REFER TO SECTIONS FOR EXTRA BARS THAT MAY BE REQUIRED.
16.

USE ONLY PLASTIC OR CONCRETE CHAIRS AT EXTERNAL SURFACES.
17.

SPICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS. LAPS SHALL NOT BE LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR AND IN ACCORDANCE WITH AS 3600.
18.

LAPS IN MESH SHALL BE IN ACCORDANCE WITH AS 3600.
19.

THE TWO OUTERMOST TRANSVERSE WIRES OF ONE SHEET OF MESH MUST OVERLAP THE TWO OUTERMOST TRANSVERSE WIRES OF SHEET BEING LAPPED, AS SHOWN BELOW:



20.

PROVIDE 2-N12 TRIMMER BARS 2000MM LONG TIED TO UNDERSIDE OF FABRIC AT ALL RE-ENTRANT CORNERS.
21.

WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
22.

AT EXTERNALLY EXPOSED SURFACES NO METALLIC ITEMS INCLUDING FORM BOLTS, FORM SPACERS, METALLIC BAR CHAIRS AND TIE-WIRE ARE TO BE PLACED IN THE COVER ZONE.
23.

ALL REINFORCEMENT, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION AND INSPECTED BY COUNCIL’S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
24.

HOLD DOWN BOLTS SHALL BE HOT-DIP GALVANISED.
25.

THE CONSTRUCTION OF THE BUS SHELTER SHOULD BE OF A MODULAR DESIGN, ALLOWING FOR EASY ASSEMBLY, MAINTENANCE AND SECTIONAL REPAIRS.
26.

MATERIALS ARE TO BE DURABLE, LONG LASTING AND SUITABLE IN A RANGE OF ENVIRONMENTAL CONDITIONS (I.E. COASTAL ZONES ETC). IT IS EXPECTED THAT THE BUS SHELTER SHOULD HAVE A DESIGN LIFE OF 20 YEARS.
27.

THE BUS SHELTER MUST BE DESIGNED AND BUILT TO:

•

BE ‘DISABILITY DISCRIMINATION ACT 1992’ (DDA) COMPLIANT

•

‘DISABILITY STANDARDS FOR ACCESSIBLE PUBLIC TRANSPORT’ REQUIREMENTS (DSAPT)

•

THE REQUIREMENTS OF AS1428 DESIGN FOR ACCESS AND MOBILITY
28.

SHELTERS ARE TO BE OF A GENERALLY CONSISTENT FORM, COMPRISING OF:

•

ROOF DESIGN – SKILLION ROOF WITH OVERHANG FOR WEATHER PROTECTION AND OPTIONS TO INSTALL GUTTERING AND FUTURE LIGHTING.

•

REAR PANEL – TO PROVIDE A BALANCE OF WEATHER PROTECTION AND AIR CIRCULATION WITH OPTIONS TO APPLY COUNCIL BRANDING.

•

APPROACH PANEL – TO PROVIDE STRUCTURAL INTEGRITY LINE OF SIGHT VISIBILITY BETWEEN PASSENGER AND BUS DRIVER AND FOR THE DISPLAY OF COUNCIL LOGO.

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DEPARTURE PANEL – TO PROVIDE STRUCTURAL INTEGRITY AND FOR THE ABILITY TO INSTALL A 1200MM X 1800MM ADVERTISING PANEL.

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SEATING – ATTACHED ROBUST SEAT (VANDAL RESISTANT ALUMINUM BENCH OR SIMILAR).

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FEET – ADJUSTABLE FOR SLOPING SLABS.

BUS SHELTER – DESIGN CONSIDERATIONS

29.

FIXTURES AND FITTING ARE TO BE CORROSION RESISTANT FOR HIGH SALT ENVIRONMENT (I.E. 316 STAINLESS STEEL).
30.

PANELS MADE FROM MATERIALS THAT ALLOWS AIR FLOW AND INHIBITS GRAFFITI AND OTHER VANDALISM.
31.

BUS SHELTER SHOULD BE OF OPEN DESIGN TO DISCOURAGE VANDALISM AND ANTI-SOCIAL BEHAVIOUR WITHIN THE BUS SHELTER.
32.

WATER RUN OF FROM ROOF TO BE ABLE TO BE TIED INTO EXISTING NETWORK OR DISPOSED OF SUCH THAT IT DOES NOT CREATE A HAZARD OR NUISANCE TO NEIGHBOURING PROPERTIES, PEDESTRIANS OR ROAD USERS.
33.

BUS SHELTER TO BE POWDER COATED FINISHED IN COLORBOND● MONUMENT.

34.

PSC LOGO TO BE INCORPORATED INTO THE FINISHED SHELTER DESIGN.
35.

A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE INSTALLATION INCLUSIVE OF A CONSTRUCTION, INSPECTION AND MAINTENANCE SCHEDULE.
36.

BUS SHELTER DESIGN SHALL FIT WITHIN THE PARAMETERS OF THE BUS SHELTER SLAB.
37.

THE BUS SHELTER DESIGN SHALL INCORPORATE SIGHT LINES INTO AND OUT OF SHELTER, BOTH IN TERMS OF CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED) SAFETY CONSIDERATIONS AND VISUAL CONTACT BETWEEN BUS DRIVERS AND PASSENGERS

ACKNOWLEDGEMENT:
PORT STEPHENS COUNCIL ACKNOWLEDGES THE ASSISTANCE OF THE CITY OF NEWCASTLE IN THE DEVELOPMENT OF THIS DRAWING.

SR PCG – STANDARDS REVIEW PROJECT CONTROL GROUP
ASM – ASSET SECTION MANAGER

Date	Amendment	Rev	By	Approved
01.07.26	NOTES AMENDED	1	SR PCG	ASM
20.06.24	ISSUED FOR CONSTRUCTION	0	SR PCG	ASM



Project:	STANDARD DETAILS
EDRMS No:	PSC2016-01993-005
Drawing Title:	BUS STOP / SHELTER SHEET 3 OF 5

APPROVED	Revision:
	1
	Date:
	17.06.26
SHEET No:	
BS-102	
Sheet Size: A3	