No
 REVISION
 BY
 DATE
 AUTH

 0.
 ISSUED
 TENCO
 10/2018

## NOTES:

- 1. BASEBALL BATTING CAGES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH AS1725.1-2010
- 2. BASEBALL BATTING CAGES SHALL INCLUDE HEAVY DUTY CHAIN LINK FABRIC TO SIDES AND ROOF AREA PLUS EXTRA HEAVY DUTY FABRIC TO REAR END FACES (BATTING END).
- 3. WIDTH OF ENCLOSURES SHALL BE 5000mm MINIMUM.
- 4. INTERNAL CHAIN LINK FABRIC SHALL BE INSTALLED TO ALL INTERNAL FACES. DIVIDING WALLS NEED ONLY BE CLAD IN FABRIC ON ONE SIDE.
- 5. THE INTERNAL BATTING LANE SHALL BE FORMED 17000mm x 4500mm x 3600mm HIGH USING RETRACTABLE BLACK UV STABILISED PE NETTING (40mm SQUARE MESH x 45 PLY).
- 6. NETTING IS TO BE RETRACTABLE VIA HAND DRIVEN WINCH. REFER TO PLANS FOR WINCH FIXING LOCATIONS.

## **GENERAL:**

- 1. INDIVIDUAL LANES TO BE POURED IN A CONTINUOUS MANNER.
- 2. INSTALL FENCE POSTS PRIOR TO POURING CONCRETE.
- 3. CONCRETE SURFACE SHALL BE FLUSH WITH ADJACENT GRASS SURFACE.
- 4. FLOOR SHALL BE PROVIDED LEVEL.
- 5. BOTTOM RAIL TO HAVE MAXIMUM 25mm CLEARANCE ABOVE FINISHED CONCRETE SURFACE.
- SYNTHETIC TURF TO CITY OF WANNEROO SPECIFICATIONS. THE APPROVED SELECTION SHALL COVER ENTIRE NET AND CONCRETE RUN UP AREA.
- 7. LOCAL MODIFICATIONS MAY BE REQUIRED TO SATISFY LOCAL CONDITIONS.

## MATERIALS:

- CHAIN LINK FENCING FABRIC, SINGLE-STRANDED FENCING WIRE AND TIE WIRE SHALL COMPLY, IN A RESPECTS. WITH AS2423.
- POSTS, STAYS, RAILS AND BRACING RAILS SHALL COMPLY WITH AS/NZS 1163 STRENGTH GRADE 250MPA.
- 3. GALVANIZED (ZINC) COATING ON THE STEEL TUBES SHALL COMPLY WITH AS/NZS 4792 WITH A COATING CLASS OF HDG 300 OR EQUIVALENT SERVICE LIFE.
- 4. ALL PROPRIETARY CLAMPS, PIPE FITTINGS, HINGES, FASTENERS, CATCHES AND ANY OTHER PARTS SHALL BE MANUFACTURED FROM PLAIN CARBON STEEL, SUITABLE FOR HOT-DIP GALVANIZING COMPLYING WITH AS/NZS 4680
- CONCRETE SHALL BE MINIMUM 25MPa FOR POST FOUNDATIONS, 32MPa FOR REINFORCED CONCRETE SLAB ON GROUND.
- 6. POWDER COATING SHALL COMPLY TO THE REQUIREMENTS OF AS 4506.

### MEMBER SCHEDULE:

- FENCE POSTS SHALL BE AS SPECIFIED IN AS1725.1-2010, AS SHOWN IN THE DRAWINGS PROVIDED AND AS SPECIFIED IN THE MEMBER SCHEDULE ON DRAWING TS 30-17-0.
- 2. FENCE POSTS SHALL HAVE ALL EXPOSED TOPS TIGHTLY FITTED WITH GALVANISED STEEL CAPS.
- 3. PIPE RAILS SUPPORTING CHAIN LINK FABRIC SHALL BE WITHOUT JOINTS.
- 4. CHAIN LINK FABRIC SHALL BE 50mm PITCH WITH 3.15mm WIRE HEAVY DUTY FABRIC. FOR REAR END FENCES (BATTING END), CHAIN LINK FABRIC SHALL BE 40mm PITCH X 3.15mm WIRE EXTRA HEAVY DUTY FABRIC, RATINGS AS DEFINED BY AS2423.
- 5. PREFERRED SELVEDGE FOR NET ENCLOSURES SHALL BE KNUCKED-KNUCKLED (KK), KNUCKLED AT BOTH TOP AND BOTTOM OF FABRIC.
- 6. CHAIN LINK FABRIC SHALL BE EXTRUDED PLASTIC COATED WIRE, PVC (POLYVINYL CHLORIDE) AND SHALL COMPLY WITH AS2423 WITH BASE METALLIC COATING NOT LESS THAN WO2Z. COLOUR TO BE BLACK N61 TO AS2700S. THE PLASTIC SHALL BE UV-STABLE.
- 7. FABRIC SELECTION:

- 1	FABRIC HEIGHT mm	PITCH or MESH SIZE mm	WIRE DIAMETER mm	WIRE COATING DESIGNATION & IDENTIFYING CODE	SELVEDGE — TOP AND BOTTOM EDGE OF FABRIC	FABRIC SERVICE DUTY		
ſ	(FABRIC	HEIGHT) x 40 or 50 x 3.15/W02Z/SG-PVC/KK HEAVY DUTY (CHAIN LINK FABRIC)						
	3000	50	3.15	W02Z/SG-PVC	KK (KNUCKLED- KNUCKLED)	HEAVY DUTY		
	3000	40	3.15	W02Z/SG-PVC	KK (KNUCKLED- KNUCKLED)	EXTRA HEAVY DUTY		

- 8. SUPPORT CABLES SHALL BE EXTRUDED PLASTIC COATED HELICOIL CABLE WIRE (SINGLE-STRAND 4mm DIAMETER CORE METALLIC-COATED BASE WIRE PLUS PLASTIC COATING TO PROVIDE 5.20mm COATED OUTSIDE DIAMETER WIRE HELIX SPIRALLED, OR, EXTRUDED PLASTIC COATED TWIN-TWISTED CABLE WIRE (TWIN-STRAND 3.15mm DIAMETER CORE METALLIC-COATED BASE WIRE PLUS PLASTIC COATING TO PROVIDE 3.95mm COATED OUTSIDE DIAMETER WIRE, BOTH WIRES TWISTED TOGETHER BETWEEN POSTS. NOTE; FUSE-BONDED POLYMER COATED CABLES MAY BE INTERCHANGED. REFER AS1725.4-2010
- LACING WIRE SHALL BE 2.0mm DIAMETER AND OF THE SAME COATING QUALITY AS SELECTED FOR THE CHAIN LINK FARRIC
- 10.TIE WIRE TO POSTS SHALL BE 2.0mm DIAMETER AND OF THE SAME COATING QUALITY AS SELECTED FOR THE CHAIN LINK FABRIC. TIE WIRE BETWEEN CHAIN LINK FABRIC AND CABLES POSTS SHALL BE 1.57mm DIAMETER CORE WIRE.
- 11.POWDERCOATING APPLICATION OVER GALVANISED STEEL TUBES AND FITTINGS SHALL BE A THERMOSETTING POLYMER RESIN SYSTEM, APPLIED ELECTROSTATICALLY AND OVER CURED. UNLESS OTHERWISE INDICATED, DRY FILM THICKNESS (DFT) SHALL BE 60-100 MICROMETERS

#### INSTALLATIO

- 1. POST SPACINGS SHALL BE EQUALLY SPACED AT 2500mm MAXIMUM SPACINGS.
- PIPE RAILS SHALL BE SECURELY CONNECTED TO POSTS WITH GALVANISED BOLTED SPLIT CLAMP—ON TYPE FITTINGS BY PROPRIETARY MANUFACTURER TO MANUFACTURER'S RECOMMENDATIONS.
- 3. ENDS OF CABLE WIRES SHALL BE FIRMLY SECURED TO ALL TERMINAL POSTS. EACH CABLE WIRE SHALL BE WRAPPED AROUND THE TERMINAL POST TWICE WITH THE END NEATLY CUT OFF FLUSH WITH CABLE WIRE.
- 4. CHAIN LINK FABRIC TO BE PLACED ON THE INSIDE OF POSTS FOR SAFETY PURPSES. THE CHAIN LINK FABRIC SHALL BE INSTALLED TO BOTH FACES OF ALL INTERNAL DIVIDING FENCES, STRAINED TAUT BETWEEN 1,0 AND 1,2KN AND SECURED TO EACH SUPPORT CABLE, POSTS, MID RAILS WITH TIE—WIRES, EXCEPT AT THE END POST. AT THE END AND CORNER POSTS, THE CHAIN LINK FABRIC SHALL BE FULLY LACED THROUGH EACH DIAMOND TO THE END POSTS, INTERNAL CORNER POSTS, EXTERNAL PIPE RAILS WHERE PROVIDED.
- 5. TOP AND BOTTOM RAILS SHALL BE FULLY LACED THROUGH EACH DIAMOND WITH 2.0mm WIRE, TO EACH RAIL AT SELVEGE EDGE.
- 6. THERE SHALL BE A MIMIMUM OF 4 TIES PER POST TO SECURE CHAIN LINK FABRIC TO POSTS, WITH EACH TIE LOCATED CENTRALLY BETWEEN CABLES. TIES TO SECURE CHAIN LINK FABRIC TO INTERNAL ROOF RAILS SHALL BE AT 320mm MAXIMUM SPACINGS (EVERY 4TH DIAMOND).
- 7. ALL GALVANISED THREADED BOLTS AND NUTS USED FOR ATTACHMENT OF FITTINGS SHALL BE SIZED CORRECTLY TO SUIT THE PROPRIETARY CLAMP—ON FITTINGS AND SECURELY TIGHTENED WITH NUTS FITTED OUTSIDE OF THE FENCE.
- PROVIDE ALL P1 COLUMNS WITH WELDED LUG AT HEIGHT 3700mm FOR NETTING FIXING. ORIENTATE LUG INWARDS TOWARDS BATTING LANE.
- 9. DRILL AND EPOXY BASE FIXING LUGS AT 2500mm SPACINGS, 250mm FROM ALL P1 COLUMNS.

## INTERNAL NETTING

- EACH BATTING LANE IS TO BE PROVIDED WITH 17000mm X 4500mm X 2600mm HIGH INTENRAL NET.
- 2. THE NET SHALL BE UV STABILISED PE NETTING.
- 3. NETTING SHALL INCLUDE SIDES, ROOF AND ENDS.
- 4. NETTING TO BE 40mm SQUARE MESH x 45 PLY OR SIMILAR APPROVED EQUIVALENT.
- 5. PROVIDE 7mm HAND STITCHED ROPE BORDER TO ALL EDGES.
- 6. PROVIDE LEAD CORE ROPE TO BASE OF ALL NETS.
- INSTALL BAFFLE SCREEN NETS TO BATTERS END ON OUTSIDE OF CAGES FOR ADDITIONAL SAFETY IN THE EVENT THE NETTING AND CHAIN MESH BECOME DAMAGED.
- INTERNAL NETTING IS TO BE FIXED TO THE COLUMN FIXING POINTS PROVIDED AT HEIGHT 3700mm AND TO BASE FIXING POINTS PROVIDED AT 2500mm CENTRES.

## OPERATION

1. INTERNAL NETTING IS TO BE RETRACTABLE WITH HAND DRIVEN WINCH.

## **ACCESSORIES**

- PROVIDE PROPRIETARY 2.0m X 2.0m SQUARE BATTING SCREEN, 50X25mm GALVANISED STEEL FRAME WITH DOUBLE LAYERED NETTING.
- PROVIDE PROPRIETARY 2.0m X 2.0m L-SHAPED PITCHER SCREEN, 50X25mm GALVANISED STEEL FRAME WITH DOUBLE LAYERED NETTING.

\* INDICATES SIGNATURES ON ORIGINAL ISSUE OF DRAWING

		ONOTIVE 1330E OF DIVINITO.				
datum: N/A	grid: N/A	surveyor: N/A	DESIGNED: TENCO ENGINEERS	CHECKED:  * P. WILLIAMS 13/11/2018		
scale: 2.0 1:200		.0 6.0 8.0 ETRES	DRAWN: TENCO ENGINEERS 10/2018	COORDINATOR DESIGN  APPROVED:		
DESIGN ARCHIVE:			DESIGN CHECKED: * C. TENN// DESIGNER 22/10/2018	* L. NICHOLSON 13/11/2018 MANAGER INFRASTRUCTURE CAPITAL WORKS APPROVED:		
DRAWING ARCHIVE:			STANDARDS/DOCUMENT CONTROL: PROJECTS TECHNICAL SUPPORT OFFICER	* H. SINGH 13/11/2018		

# SPORTING FACILITIES

BASEBALL CAGE SINGLE AND DOUBLE NOTES

STANDARD SHEET 2 OF 2

CITY OF WANNEROO TECHNICAL SERVICES



**INFRASTRUCTURE SERVICES** 

FILE No.

DRAWING No

SHEET

REVISI

ORIGINAL DRG.SIZE

**A3** 

 $\mathbf{A}$