

NZDA-BOP 300m Range Design Statement

Updated: 10/11/2022

1. DESIGN STANDARDS

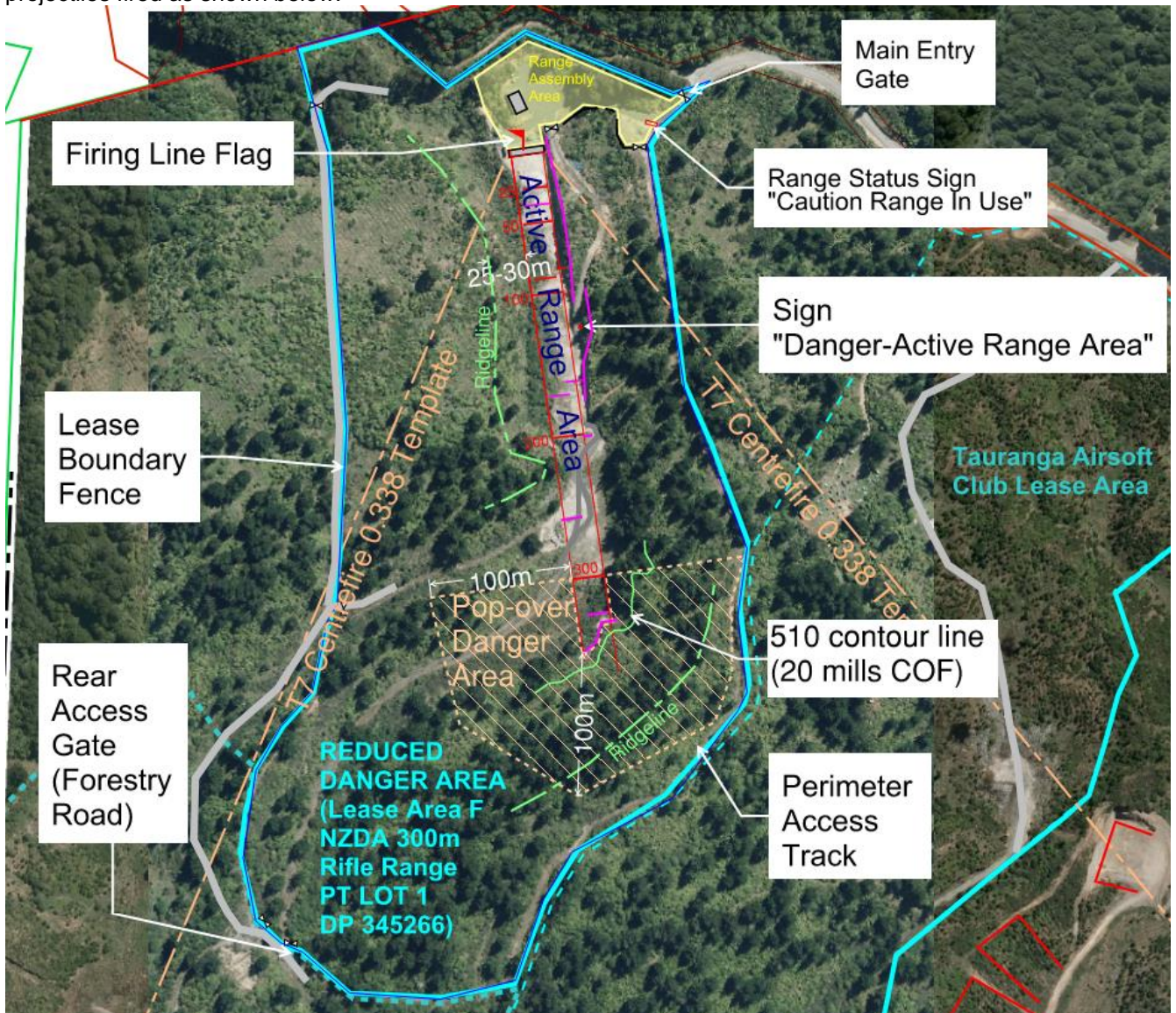
The following reference documents have been used for the design of this range:

Organisation/Publisher	Document Title	Version/Date
New Zealand Deerstalkers Association	Manual of Range Design, Construction and Inspection Guidelines	2000
Royal Canadian Mounted Police	Canadian Range Construction and Design Guidelines	Sept 1999
NZ Police	Shooting Range Manual	V1.1 June 2022
Defence Safety Authority	DSA 03.OME Part 3 Volume 2 - Defence Code of Practice (DCOP) and Guidance Notes for Ranges	V1.0 May 2020

2. FIREARM AND CARTRIDGE RESTRICTIONS

2.1 Ammunition Danger Area

This range has been designed for the NZ Police Shooting Range Manual T7 Centrefire Rifle 0.338 Inch Ammunition Danger Area Template with a Reduced Danger Area (RDA) that relies on a combination of topographic features, man-made features (range floor baffles) and strict control of the shooter and firearm to capture all projectiles fired as shown below:



The reduces danger area is contained within the boundary of the NZDA Lease Area F, which also contains a pop-over danger area from the ridgeline immediately behind the 300m target line to the south-eastern lease boundary.

2.2 Cartridge and Projectile Restrictions

The NZ police shooting range manual appendix 4 provides a list of ammunition danger area templates in which the notes section provides guidance of some commercial cartridges and projectile combinations that are included within each of the ammunition danger area templates, however there is no guidance on included cartridges or projectiles for the T7 0.338 inch template.

The Canadian Range Construction and Design Guideline appendix E - Template Table of Equivalents has therefore been used to provide the following cross reference table of danger area templates and included cartridges:

NZ Police Templates		Canadian Design Manual	
Template	Suitable Firearms	Template Group	Included Cartridges
T1	Rimfire rifles and pistols		No direct equivalent
T2	Centrefire pistols up to .50 cal		No direct equivalent
T3	Muzzle loading and percussion rifles		No direct equivalent
T4	Centrefire rifles up to .223 inch/5.56mm (<=55g projectile)	.223 Remington	.223 rem, 7.62x39, .22 hornet, .222 rem, .22-250, .25-20, .223 Rem Mag, .25-35, .30 Rem, .256 Win, .303 savage, .50-90, .32 Win, .32-20, .35 Rem, .44-40, .38-55, .444, .38-40, .44, .30 M1, .375 Win, 0.348 Win, .45-70, .361, .458 Win, .356 Win, 6mm, 22 sav HP, .30-40, .25 Rem
T5	Centrefire rifles up to .223 inch/5.56mm (<=69g projectiles)		
T6	Centrefire rifles up to 8mm (.308/7.62mm)	.308 Winchester	.308 Win, 6.5x61, .30-36, 7x57, 7mm-08m 7x57R, 6.5x55, 6.5x50, 6.5x54, 6.5x52, 6.5x57, 6.5x53R, .250 sav, 6.5x58R, .257 Rob, 307 Win, .303, 8mm mouser, .350 Rem, .270 Win, .300 Sav, .258 Win
T7	Centrefire rifles .338 inch	.338 Lapua Mag	.338 Lapua mag, .300 H & H mag, 7mm RMm .338 Win Mag, .300 Win Mag, .340 Weatherby Mag, .300 Weatherby Mag, .358 Norma Mag, .308 Norma Mag, .350 Rem Mag, .375 H & H mag, .378 Weatherby Mag
T8	Centrefire rifles .50 inch	.50 Browning	.50 Browning

Therefore, the range of cartridges listed in the Canadian design manual .338 Lapua Magnum template ground are approved for use on this range, subject to not exceeding a maximum muzzle energy of 7000 joules (5163 ft-lbf) that has been set to manage damage to the bullet catchers and backstops.

There is an advisory note in section A.2.3.5 of the RSO that provides a range of projectile weights, velocities and energy to determining if a firearm may exceed these restrictions.

Tracer, incendiary and projectiles with a core of steel or hardened material or depleted uranium and those with a discarding jacket/sabot are to be prohibited.

3. CONE OF FIRE

The initial design of this range prepared in 2011 provided for the following variable Cones of Fire (CoF) depend on the shooting position:

Previous Cones of Fire		
Allowable Shooting Position	Cone of Fire	Max Target Range
Standing offhand	40 milliradians (Radius of 4.0m at 100m target)	100m
Kneeling/sitting	20 milliradians (Radius of 4.0m at 200m target)	200m
Prone and bench shooting	15 milliradians (Radius of 4.5m at 300m target 3.0m @ 200m, 1.5m @ 100m)	300m

When the range was re-certification in 2014 the standing offhand position's CoF was revised to 30 mils.

With this 2022 revision of the Range Standing Orders, the CoF has been revised to be in accordance with the new NZ Police Shooting Range Design Manual for a centrefire rifles, plus an additional tighter CoF has been included for precision benchrest style events as shown below:

Allowable Shooting Position	Cone of Fire
Offhand, kneeling, seated, prone and bench	20 milliradians (2m radius at 100m target) (4m radius at 200m target) (6m radius at 300m target)
Precision benchrest shooting with front and rear supports (Controlled by Restricted Operating Procedures in the annex) Group & score shooting with wind flags at designated positions	6 milliradians at 100m (0.6m radius) 3 milliradians at 200m (0.6m radius) 6 milliradians at 300m (0.9m radius)
Group & score shooting with individual shooter wind flags, <u>without</u> a moving target backer system	1.5 milliradians at 100m (0.15m radius) 1.125 milliradians at 200m (0.225m radius) 1.125 milliradians at 300m (0.337 radius)
Group & score shooting with individual shooter wind flags, <u>with</u> a moving target backer system	1.5 milliradians at 100m (0.15m radius) 0.75 milliradians at 200m (0.15m radius)

4. RANGE FLOOR BAFFLES

The target lines at 25m, 50m, 100m, 200m and 300m plus intermediate range floor cross baffles at 35m, 75m, 175m and 260m are positioned in alignment from the prone position to the top/bottom of subsequent target lines to prevent any projectile fired from within the CoF from striking the range floor that could result in a ricochet.

5. TARGET LINES

Permanent target lines have been constructed at 25, 50, 100, 200 and 300m. The target lines have a vertical face and level soft timber crest board to prevent ricochet.

Target lines are aligned down the range so a line of sight from the prone shooting position projects from the top of the that each successive target line crest board to the bottom of the next target board, which presents a vertical barrier shielding the range floor from bullet strike.

6. BULLET CATCHERS

Two staggered rows of 200 litre plastic drums filled with shredded rubber are located immediately in front of the target lines as bullet catchers.

7. TARGET BACKERS

Ply target backers have been constructed in front of the bullet catchers on all target lines to control the location of target.

8. BACKSTOP

The hill immediately behind the 300 m target line acts as the backstop for all target lines.

This hill has sufficient height to capture all projectiles fired within the CoF as shown on the safety template long section.

The hillside face behind the 300m target line has been benched out to provide vertical faces.

The backstop height does not have to allow for ricochet from ground floor strike as the target lines and cross baffles prevent any potential for ground floor strike.

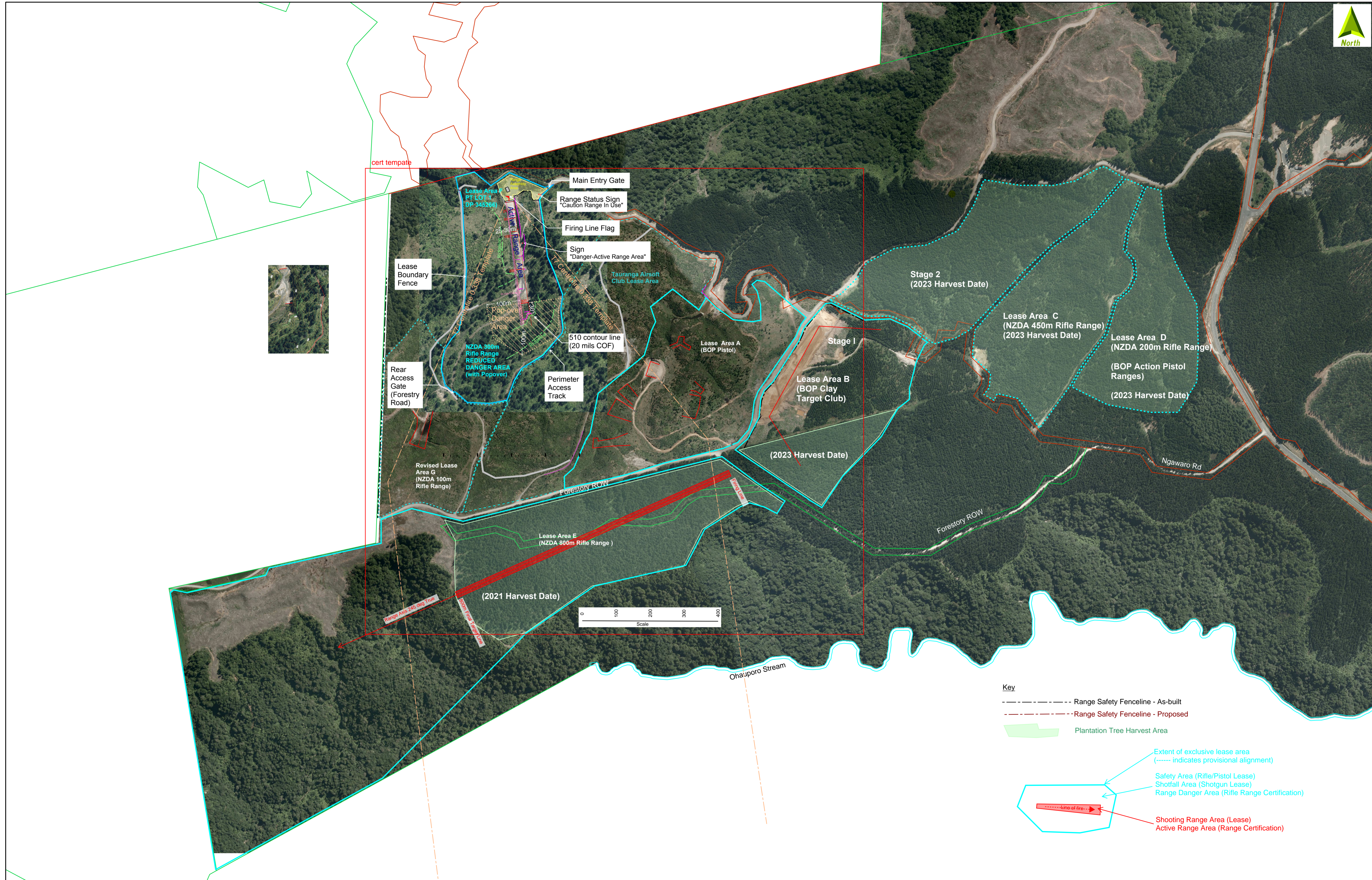
9. POPOVER DANGER AREA

There is a popover danger area between the backstop region of the hill and the extent of the reduced danger area (lease boundary) of at least 100m.

10. CONTROL OF SHOOTER

The following aspects for control of the shooter are required for the ranges reduced danger area.

1. All shooters shall complete a range induction before they can shoot on the range
2. The use of empty chamber indicator (ECI) is mandatory, and these must be always in the chamber until the Range Officer instructs that they may be removed for firing.
3. The rifle must be pointing downrange at the target before being loaded
4. All targets must be located on the target line backers.
5. All shots should be falling on or near the target on the target backing board. If for any reason shots are not landing on the target backer board, both the firearms sight-in zero and the shooters competence must be assessed before further shooting.
6. The firearm must be in a safe state before changing shooting positions



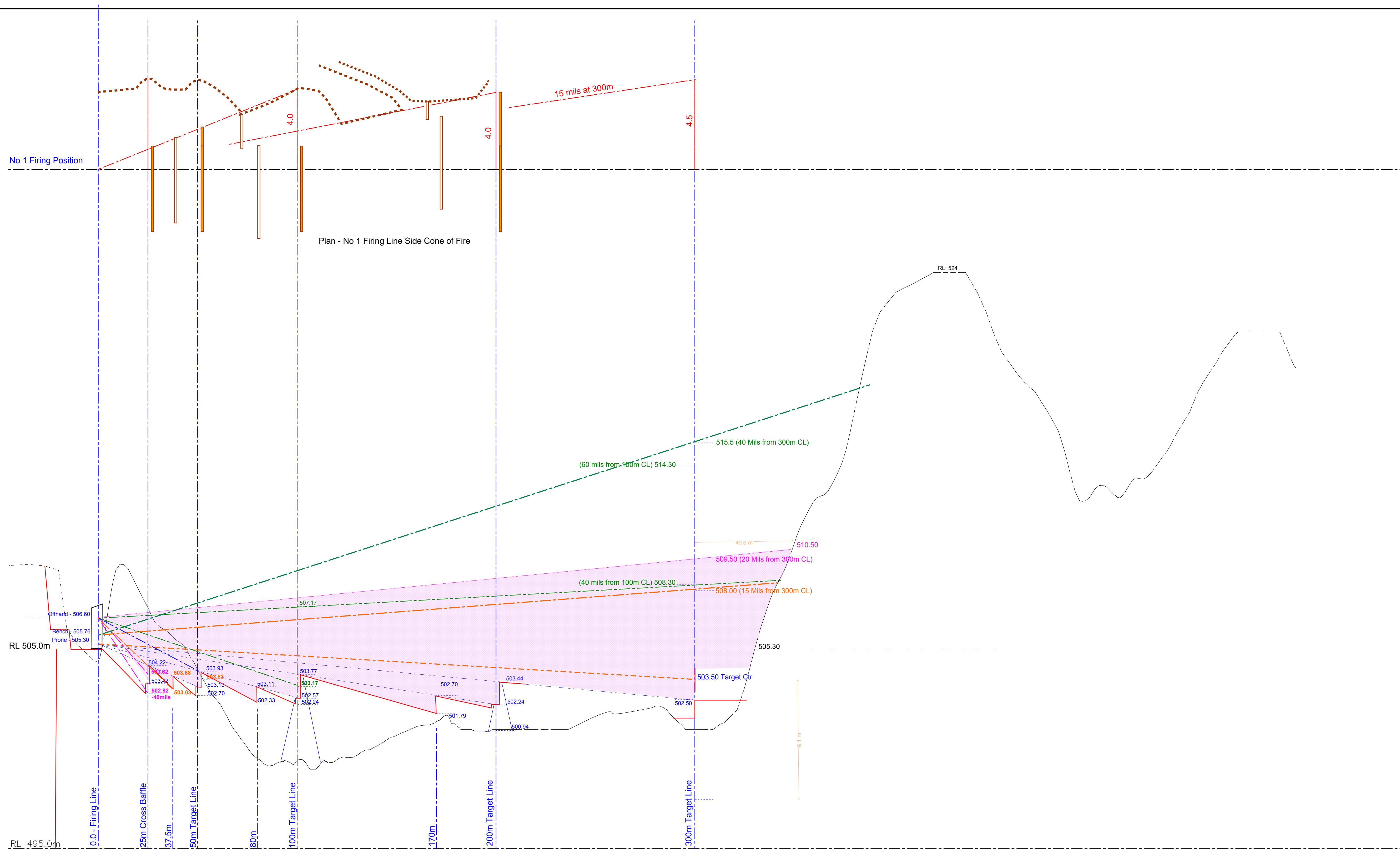
Key

- Range Safety Fenceline - As-built
- Range Safety Fenceline - Proposed
- Plantation Tree Harvest Area
- Extent of exclusive lease area (----- indicates provisional alignment)
- Safety Area (Rifle/Pistol Lease)
- Shotfall Area (Shotgun Lease)
- Range Danger Area (Rifle Range Certification)
- Shooting Range Area (Lease)
- Active Range Area (Range Certification)

<p>Project: NZDA BOP Branch TECT Park 300 m Rifle Range</p> <p>Title: Ammunition Danger Area Template</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Rev</th> <th style="width: 10%;">Date</th> <th style="width: 80%;">Status</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>11/11/2022</td> <td></td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Rev	Date	Status	-	11/11/2022										
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-	11/11/2022															

Job Ref: 4955	
Scale: 1:5000 @ A1	
Dwg No.: 4955-DWG-01-01	





SECTION A
 SCALE 1:1000 H
 1:100 V

Project: NZDA BOP Branch TECT Park 300 m Rifle Range

Title: Ammunition Danger Area Template

Rev	Date	Status
-	11/11/2022	

Job Ref: 4955
 Scale: as shown
 Dwg No.: 4955-DWG-01-02





RANGE SAFETY CERTIFICATE

Name of Range: NZDA-BOP TECT Park 300 Metre Rifle Range.

Location: TECT All Terrain Park, SH36, Ngawaro, approximately 29kms from Tauranga and 27kms from Rotorua. North West end of Ngawaro Rd. Firing Point NZTM E1874757 N5795271. 300 Metre Target Line NZTM E1874817 N5794991.

Type of Range: 300 Metre Outdoor Limited Danger Area Range with Ground Baffles.

Number of Ranges: One.

Type of Targets permitted: NZDA approved Soft Targets.

Name of User Organisation: Tauranga Branch of the NZDA.

1. I certify that I am a NZDA and New Zealand Police approved range inspecting officer.
2. I certify that on the **18th February 2021** I inspected the above range and that the range conformed in all respects to the conditions of ballistic safety for a 300 metre Outdoor Limited Danger Area Range as prescribed in **Pistol NZ Range Manual (A Guide to planning & construction of a shooting range, Edition June 2018)**.
3. I declare this range safe for use subject to compliance with the:
 - a. Range standing orders dated, **3rd May 2019** issued by and approved by the Club President of Tauranga Branch NZDA.
4. This certificate expires on 17th February 2026 at 2359hours.
5. This certificate is rendered null and void:
 - a. Immediately any range structure falls below the minimum acceptable specification;
 - b. Immediately when the applied "Limited Danger Area Template" has been compromised due to structural changes, ricochet or back-splash from hard targets or target frames;
 - c. Immediately any activity that is not authorised by range standing orders, or any other lawful authority, is conducted; and
 - d. Immediately on the occurrence of any serious harm accident.


 P I Miles
 Range Inspecting Officer.
 NZDA

**NZDA-BOP TECT Park 300m Rifle Range
Range Standing Orders**



Permitted firearms for this range

All types of rimfire and centrefire rifles that a licensed firearm holder is legally allowed to own and use subject to their specific endorsements.

Type	Allowed	Restrictions
Bolt		✓ maximum muzzle energy of 7000 joules (5163 ft-lbf).
Lever		✓ This limit generally covers most cartridges up to and including 338 Lapua.
Pump		✓ Refer to RSO A.3.3.5 advisory note for further guidance
Break open Falling block Rolling Bloc		✓
Semi-Auto		✓ Rimfire - no restrictions Centrefire - only with endorsement
Shotgun		✓ Solid lead slugs only 100m max range
Pistol		✗ NOT PERMITTED

Restrictions and Conditions of Use

- ✦ ALL shooters MUST read and comply with the Range Standing Orders.
- ✦ Record name in the register
- ✦ More than 1 shooter, someone must be designated the RO
- ✦ More than 6 shooters must be controlled by non shooting NRO
- ✦ Empty chamber indicator flags are MANDATORY.
- ✦ A round can only be fully chambered when the rifle is pointing at the target.
- ✦ Offhand shooting limited to 100m, Kneeling and seated limited to 200m
- ✦ All firearms MUST be in the racks before ANYONE goes downrange
- ✦ All persons to take a tag when going downrange
- ✦ Range Status Sign to be set (Active/Safe) before going downrange
- ✦ Visitors shooting MUST be supervised by NRO
- ✦ Hearing Protection is MANDATORY
- ✦ All rifles with an unknown sight zero MUST be checked by shooting them first at 25m before shooting at 100m or more.
- ✦ If you hear a ricochet, YOU MUST STOP SHOOTING IMMEDIATELY

Permitted targets for this range

- ✦ Paper target
- ✦ Targets MUST be fixed on the 25, 50, 100, 200 or 300m target backers
- ✦ Steel silhouette target RESTRICTED to 22 RF under control of NRO

Warning Signage

- ✦ Fold down sign at main gate
- ✦ Flag at entrance to firing line

NZDA-BOP 300m Range Officer Cue Card

1.0 PRE-SHOOT CONSIDERATIONS

Consider grouping similar rifle configurations together (left hand, semi-auto, muzzle breaks). Break open rifles need special attention on handling. Has everyone **read** the **Range Standing Orders**?

2.0 DESCRIBE EVENT

e.g 5 shots, 2 non scoring sighters etc - time limit

Reminder about MISFIRES, HANG FIRES AND MALFUNCTIONS.. Keep rifle pointing downrange at target. DO NOT open bolt, Signal RO

3.0 TARGET CHANGING (PEOPLE DOWNRANGE)

Check downrange tags back on board and no one downrange before commencing range commands

4.0 RANGE COMMANDS

Command Additional advice given by RO	Comment
RANGE IS NOW IN USE	Nobody may be forward of the firing line after this command is given by the RO
SHOOTERS TO THE LINE	Call shooters to firing line
MAKE READY Fit hearing protection, make sight adjustments, insert bolts, fill magazines, Remove empty chamber indicators	Get into shooting position. Include removing safety indicator here rather than at PREPARE TO FIRE
ANYONE <u>NOT</u> READY?	If on this command a shooter is not ready, they must call, "not ready". The RO will call "NOT READY CALLED" and wait 30 seconds, and then call "are you ready?" again
PREPARE TO FIRE Shoulder the rifle, acquire the target, chamber a round	
COMMENCE FIRING	Shooters may start shooting
TIME WARNINGS Give 1 minute, 30 second time warnings as required by each match	
CEASE FIRE	The shooter will cease fire if not finished and take the firearm off aim
UNLOAD AND SHOW CLEAR	The shooter to unload the firearm, unload or remove the magazine, insert empty chamber indicator and allow the Range Officer to inspect the chamber and magazines.
FIREARMS ARE CLEAR Remove firearms from the line	The shooter should not leave the firearm or the firing line until the firearm has been checked and cleared by the Range Officer. All firearms should then be removed from the firing line. NB it is acceptable to leave removable magazines loaded on the firing line between matches
RANGE IS NOW SAFE Shooters can go downrange Take a tag	Nobody may move forward from the firing line before the Range Officer gives this command. Once this command is given, competitors and officials may move forward to score etc

Shooter Induction Cue Card

1.0 BASIC INDUCTION (NON RANGE TICKET HOLDERS)

1.1 Range Restrictions

No Danger Area Range, relies on topographic, man-made features and control of the shooter and rifle to capture all projectiles fired. Control of shooter and rifle is **CRITICAL**

No military tracer or incendiary projectiles, Max 7000 joules energy. 250g at 3050 fps, 300g at 2800fps

Prone/Bench position at any range, kneeling/seated restricted to 200m max. Offhand restricted to 100m max

1.2 Range Rules

Range Standing Orders – blue folder LHS by door, Range Standing Orders – copy on RHS by door, Also on website

Safety Indicators mandatory, RO instruct when can remove

RO will instruct when shooter can chamber round.

Only chamber round when rifle on shoulder pointed at target

Semi-autos/break open actions ok to load at hip with RO approval

Be conscious of where barrel pointing at all times

(rifles with bipods and front rests...rifle pointing upwards)

No steel silhouettes

All rifles off the firing line before anyone goes downrange (use racks)

Range commands

1.3 Other Points

Use target change tags when downrange

No handling firearms on firing line when people downrange

First aid kit in locker, Hearing protection

Misfires and hang-fires...keep pointing at target, signal RO, count to 10

2.0 ADVANCED INDUCTION (RANGE TICKET HOLDERS)

2.1 Entry and Access

Entry by main gate only - keep it locked after entering unless supervised at organised events

Set the Status Sign and raise flag

Three distinct access areas: Assembly, Active Range Area, Range Danger Area

2.2 Other Points

Record attendance in Range Register

Must use target backers, not to use own target boards

Rifle security when downrange alone

2.3 Individual Member Use of Range

Must elect a Range Officer to control shooting

1-6 shooters- Range Officer can participate, Over 6, non-participating NRO must control shooters

Visitors shooting must be controlled by NRO

Command
Additional advice given by RO
RANGE IS NOW IN USE
SHOOTERS TO THE LINE
MAKE READY Fit hearing protection, make sight adjustments, insert bolts, fill magazines, Remove empty chamber indicators
ANYONE <u>NOT</u> READY?
PREPARE TO FIRE Shoulder the rifle, acquire the target, chamber a round
COMMENCE FIRING
TIME WARNINGS Give 1 minute, 30 second time warnings as required by each match
CEASE FIRE
UNLOAD AND SHOW CLEAR
FIREARMS ARE CLEAR Remove firearms from the line
RANGE IS NOW SAFE Shooters can go downrange Take a tag

TECT All Terrain Park Emergency Procedures

IN THE EVENT OF FIRE	IN THE EVENT OF ACCIDENT
<p>DIAL 111 IF IN CELLPHONE RANGE</p> <p>NOTIFY PARK RANGER (OFFICE, CELLPHONE OR R/T)</p> <p>REPORT WHAT IS BURNING, SIZE OF FIRE AND LOCATION</p> <p>AVAILABLE TRAINED RESOURCES</p> <p>STAY IN CONTACT WITH PARK RANGER</p> <p>MOVE TO NEAREST EVACUATION SITE</p> <p>REMAIN CALM, GATHER ALL PERSONNEL, PAY ATTENTION TO ANY SUSPICIOUS ACTIVITY</p> <p>FOLLOW ANY INSTRUCTIONS FROM PARK RANGER</p>	<p>DIAL 111 IF IN CELLPHONE RANGE</p> <p>NOTIFY PARK RANGER (OFFICE, CELLPHONE OR R/T)</p> <p>REPORT TYPE OF INJURIES AND HOW MANY INVOLVED</p> <p>AVAILABLE RESOURCES, NURSE OR DOCTOR ON SITE.</p> <p>HAVE YOU REQUESTED AMBULANCE</p> <p>MOVE YOURSELF OR PATIENT IF POSSIBLE!! TO NEAREST EVACUATION SITE</p> <p>REMAIN CALM AND STAY IN CONTACT WITH PARK RANGER</p> <p>DO NOT MENTION NAMES OF INJURED PARTIES ON R/T</p>

Key contacts and locations

First Aid on site:

Park Ranger Station – 07 9298720

Park Ranger Cellphone – 027 5400052

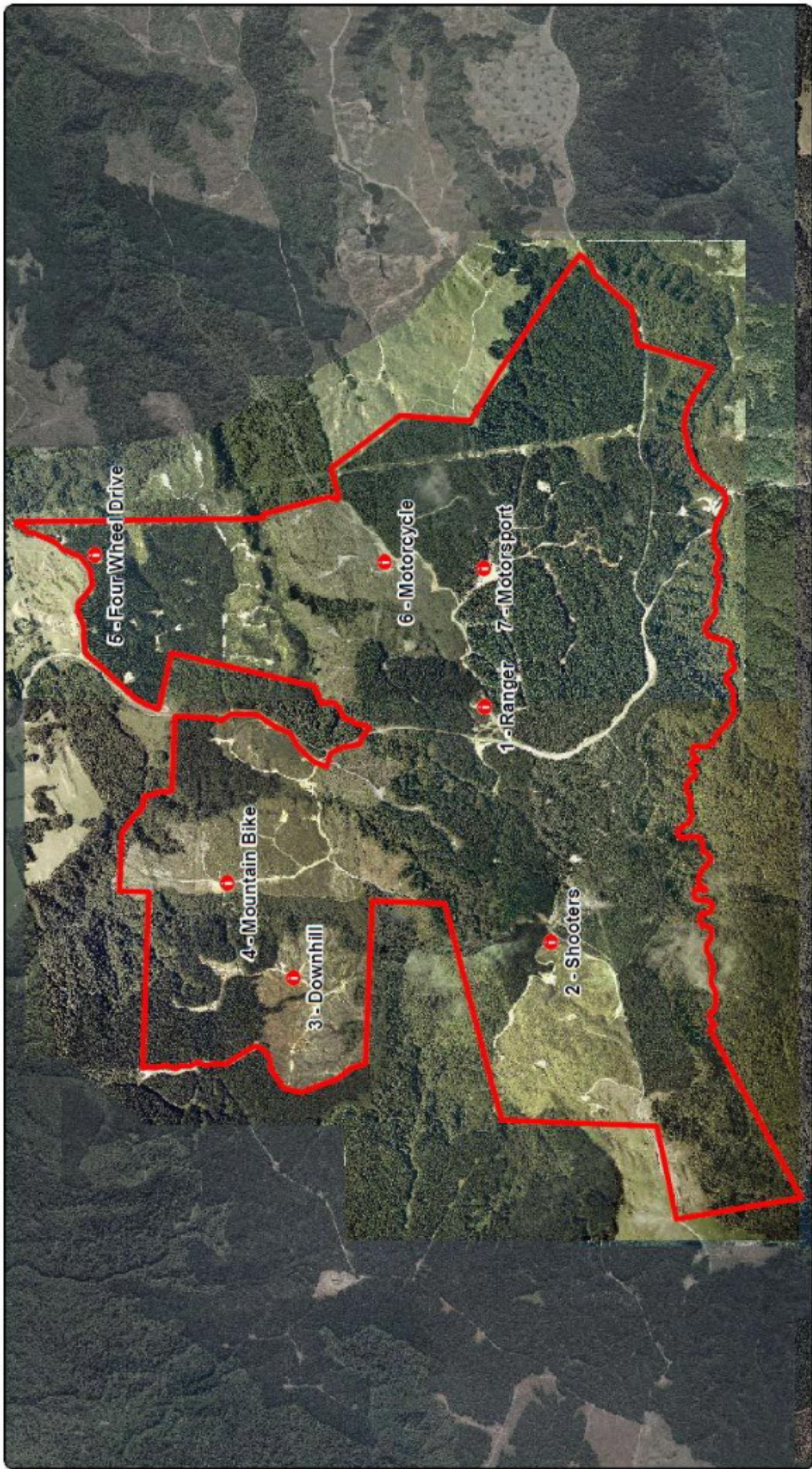
Emergency Numbers:

Police/Fire/Ambulance - 111

Greerton Police Station Number - 5783460

Greerton Fire Services - 5411357

Tauranga Fire Services - 5787099



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 Archeological data supplied by NZ Archeological Assoc./Dept. of Conservation. Data copied as at Jan 2010.

Email: gis@westernbay.govt.nz
 Date: 14 Oct 2010
 Operator: Brett Steele
 Map: E:\Shape\BMS\MYD\ATPevacuation.mxd



Assembly Points for Evacuation TECT All Terrain Park



Public Range Day Notice

1 REGISTRATION

All shooters on arrival must register their attendance at the registration desk (Admin Building)

2 FIREARMS LICENCE

All shooters shall first produce their firearms licence at the registration desk. It shall be:

- the legitimate, original copy for the person presenting it.
- be valid and not expired.
- have the relevant endorsements on it for the types of firearms presented.
- Photo copy's on phones NOT acceptable.

Any person who cannot produce their firearms licence and meet the above mentioned conditions will not be allowed to shoot unsupervised on the range.

Advisory note:

If a person arrives at the range with no firearms licence but has firearms, how are we to know that this person hasn't stolen them, obtained them illegally, or has had their licence revoked. We are unwilling to put our club members at risk by supervising someone who may be in illegal possession of a firearm, so Range Officers will not supervise a shooter who is in possession of a firearm, but cannot present a valid firearms licence. It is not acceptable for another person to vouch for your possession of a firearms licence without you directly being able to present it.

3 UN-LICENCED SHOOTERS

No matter how old you are, if you do not have a firearms licence but want to use a firearm, you may do so only under the immediate supervision of someone who has a firearms licence. In other words, the person with the licence must be with the shooter, and close enough to take control of the firearm if necessary. To meet this requirement the supervisor cannot be using a firearm at the same time.

Unlicensed shooters will be required to wear a blue vest for easy identification.

Every licensed firearms holder who will be supervising an unlicensed shooter shall make themselves known to a Range Officer when approaching the firing line.

4 JUNIOR SHOOTERS

There are no range fees for Junior shooters.

Junior shooters are shooters who are under 18 years old as at the end of February each year.

Juniors who are on an NZDABOP Family membership, where the Senior member is an Authorised Range User, are covered under the Seniors range ticket.

Juniors who hold an NZDABOP Junior membership can shoot for free and do not need to be an Authorised Range User.

Non-Members who turn up with children under the age of 18 years shall only pay the shooting fee for the adult. The under 18 years old can shoot free.

..... REMEMBER junior shooters need to be under immediate supervision, so the **adult can't shoot at the same time.**

5 FIREARMS SAFETY, INSPECTION AND HANDLING

All firearms **MUST** have a safety indicator in the chamber at all times except when the Range officer allows the shooter onto the firing point and gives permission to remove the safety indicator.

This means all firearms should have a safety indicator in the chamber when you bring it out of your vehicle! NB You can buy empty chamber indicators at the registration desk.

All shooters must bring their firearms to the registration desk for inspection before taking them down to the firing line building.

All firearms in the firing line building should be in the racks, until instructed by the Range officer to bring them up to the firing line.

6 TARGET CONTENT

NZDA is a hunting organisation, and wishes to promote safe and socially accepted shooting practices. The use of targets that contain a human silhouette as the aiming point are therefore discouraged unless they are appropriate for the style of shooting being undertaken e.g military/service matches. The Chief Range Officer on duty has sole discretion on what targets are acceptable.

7 INDUCTIONS

All shooters shall complete a range induction before they can shoot on the range. Even if you have previously received an induction on another public day, you will still need to go through the induction process again.

Advisory note:

Firearms should have arrived in a bag or case with bolt & magazine out and ECI's in for bolt-action firearms, other type's should have been made inoperable, bolts and ammo should be in other carry bags.

Refer to new police regulations (have copy on hand)

That firearms appear to be in good working order

8 RANGE FEES

Fees and charges for public days are as follows:

Type	Fee
Day Range Fee	\$25 for member of another branch of NZDA \$25 for TECT Card Holder \$50 all other adult shooters Youths under 18 free
Targets	NZDA Target - 100m \$2.00 200m \$4.00 Wallaby \$2.50 22 target \$2.00
Empty Chamber Indicators	\$4.00
Ear Plugs	\$2.00

Public Day NRO Guidelines

1 STANDARD FORMS

There are the following standard forms to be used on the public open days that are contained in the following spreadsheet
 _Shared - Documents\Range\300m\Policy and Procedure\RSO\NZDA-Range Standing Orders-3.1-Public Day Forms.xls

- CRO Checksheet

NZDA 300m RANGE - CHIEF RANGE OFFICER CHECK SHEET											
Date:			Event:								
CRO briefing with volunteers to allocate tasks and responsibilities:											
Volunteers names <----- circle one or more for each member ----->											
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INCIDENT INVESTIGATION FORM			
Particulars of Incident			
Time	Location	Date Reported	
The Injured Person			
Name:	Age:	Home address:	
Type of Injury <input type="checkbox"/> Strain/Sprain <input type="checkbox"/> Fracture <input type="checkbox"/> Laceration/Cut <input type="checkbox"/> Foreign body <input type="checkbox"/> Burn <input type="checkbox"/> involving firearm <input type="checkbox"/> Other (Specify).....			
Remarks:			
The Incident			
Description (describe what happened, draw diagram if necessary)			
Analysis (What was cause of the incident?)			
How bad could it have been?		What is chance of it happening again?	
<input type="checkbox"/> Very Serious <input type="checkbox"/> Serious <input type="checkbox"/> Minor		<input type="checkbox"/> Rarely <input type="checkbox"/> Occasional <input type="checkbox"/> Often	
Prevention			
What action has or will be taken to prevent a reoccurrence?		By whom	Do by
Treatment and Investigation of Incident			
Treatment given	Name of person giving first aid	Dr/hospital	
Incident investigated by	Date	DDI advised Yes / No	Date

This form is used by the Chief RO to record the various roles for the day and to record any incidents.

- Range induction Record Sheet

NZDA 300m Range - Range Induction Record sheet		
Date:	Inducted By:	
Range Induction Requirements		
The induction is provided to ensure the shooter is familiar with the safety and operational requirements of this range.		
All shooters are required to complete a range induction before they can shoot on the range.		
Shooter who do not hold a current range ticket will be required to repeat the induction on any subsequent days they shoot on this range. Please note these inductions DO NOT count towards the inductions required for range ticket holders		
Induction Acknowledgement		
By signing this form, the shooter acknowledges they have received the induction and understand their obligations to comply with the Range Standing Orders and any other requirements outlined in the induction		
Shooters Name	Signature	
1		
2		
3		
4		
5		
6		
7		

- Shooter Register

NZDA - PUBLIC RANGE DAY SHOOTERS REGISTER					
1) NZDA membership does not entitle members to shoot at the range. They MUST hold a current Range Ticket to shoot without paying the casual shooter fee.				Date:	
				Comments	
3) Casual shooters MUST receive an official induction, and MUST initial the separate Range Induction Record Sheet as proof they have received the induction					
NAME OF SHOOTER	FIREARM LIC.	RANGE TICKET Member No:	CASUAL USER FEE (\$15.00)	TARGETS \$2.00/100m \$4.00/200m Safety Ind \$2.00	COMMENTS
1					
2					
3					
4					
5					
6					
7					
8					

And the cash reconcillation

NZDA - BOP BRANCH - RANGE OPEN DAY / BRANCH SHOOT		Date:
Cash Reconcillation		
Cash Float at start of day		\$
Cash Recorded		
Casual User Fees	\$	
Target Sales	\$	
	subtotal cash recorded:	\$
	Total of cash recorded:	\$
Total Cash Counted At End of Day		\$
	Reconcillation Error:	\$
Banking		
Total of cash recorded:		\$
Less cash retained for float		\$
Balance to be banked		\$
Recorded by: _____	Signature: _____	

2 REGISTRATION

All shooter’s firearms licences need to be sighted and verified as current. The licence details SHOULD NOT be recorded on the remigration form. There is a tick column provided to confirm it has been sighted and is current.

Unlicensed shooters should be issued with a blue vest for identification.

Target sales need to be recorded and reconciled at the end of day

Cash float should be in the office desk draw...

At end of day total cash sales and money in cashbox, and complete the reconciliation form.

Remove float and leave it in the office draw for next public day

One of the rosters NRO’s needs to bank the days cash into the clubs bank account and send a scanned copy of the registration cash reconciliation sheet to the Treasurer.

3 INSPECTING FIREARMS

Usually, the NRO rostered to do inductions will be inspections firearms as part of the induction process.

Firearms should have arrived in a bag or case with bolt & magazine out and ECI’s in for bolt-action firearms, other type’s should have been made inoperable, bolts and ammo should be in other carry bags. Remind them of their responsibilities under the new Firearms Regulations. Have copy of the Reference Guide - NZDA Branches and Members on Arms Amendment Regulations 2021

Keep an eye out for old military firearms and quey condition of ammo

If they look/sound/feel like an inexperienced shooter with a new rifle, quiz them about whether the firearm has been sighted in and if not, explain they will need to sight in at 25m first. Tell them to ask one of the NRO’s down on the firing line to help them out.

Check and reinforce requirement for empty chamber indicators in all firearms

4 INDUCTIONS

All shooters shall complete a range induction before they can shoot on the range. Even if you have previously received an induction on another public day, you will still need to go through the induction process again.

Advisory note:

Firearms should have arrived in a bag or case with bolt & magazine out and ECI's in for bolt-action firearms, other type's should have been made inoperable, bolts and ammo should be in other carry bags.

Refer to new police regulations (have copy on hand)

That firearms appear to be in good working order

5 TARGETS

The use of 22 rimfire silhouettes not recommended in public days as it is difficult to control all shooters.

Restrictive Operating Procedure

300m Rifle Range - Centrefire Benchrest Matches

Group & Score Shooting with Wind Flags at Designated Positions

1.0 PURPOSE

This Restricted Operating Procedure (ROP) is to allow the use of wind flags down range in the active range area as suitable for the Group and Score target shooting.

2.0 REDUCED CONE OF FIRE

The primary safety elements of this ROP are:

- A reduced Cone Of Fire (COF) for benchrest shooting of 6 milliradians at 100m (0.6m radius), 3 milliradians at 200m (0.6m radius) and 3 milliradians at 300m (0.9m radius).
- All shooting shall be conducted off the benches.
- The mandatory use of front and rear supports under all rifles.
- All rifles must be scoped.
- All wind flags shall be of a lightweight, ricochet resistant design.
- All wind flags shall be placed well out of the reduced COF allowance.
- A 100m COF check to ensure shooters are on target before proceeding to shoot at 200m or 300m.

This ROP is based on the current range design with firing line positions at 1.6m centres and the target line positions at 1.2m centres. The ROP shall be reviewed if the range design is altered.

This Restricted Operating Procedure (ROP) cannot be deviated from. If the ROP cannot be complied with then the range must revert to its standard operating mode as described in the Range Standing Orders (RSO's) and the matter shall be referred to the Range Committee for review.

This ROP can only be implemented by an experienced benchrest shooters who have been approved by the Range Committee to do so and he or she must be on duty and providing supervision for the entire duration that this ROP is in force.

3.0 SHOOTING POSITIONS

This ROP will utilise the entire firing line. While the ROP is in force all shooting must comply with the ROP.

4.0 PROCEDURE

1. The COF restrictions for benchrest shooting apply as above.
2. All shooting shall be conducted off the benches.
3. Front and rear rests shall be used for all rifles.
4. All rifles shall be scoped.

5. The benches must be placed between and including positions 4 to 12 (9 benches).
6. Shooting positions 1, 2, 3 and 13, 14, 15 will be closed. No shooting is permitted from these positions while the ROP is in force.
7. A 100m COF check shall be done by the range officers after shooting the 100m targets is complete. This is to ensure that all shooters are getting their bullets on target before proceeding on to shoot at 200m or 300m. Shooters with no bullets on their target shall be designated as DID NOT QUALIFY (DNQ) and not be allowed to continue to shoot.
8. Wind flags shall only be placed at the down range positions shown on the diagram on page 3. They must be either attached to the target backer structure or be placed on top of the dirt retaining wall close to the crest board. Sand bags can be used to weight the feet of tripod stands down. There are only 6 designated flag positions.
9. Shooters cannot put out their own personal wind flags.
10. Wind flag construction shall be ricochet resistant i.e. lightweight and made of soft materials such as wood, aluminium or plastic.
11. Wind flags can only be placed at the shooting distance just prior to the shooting taking place, and only in the order listed below. This is to ensure no flags are inside the COF due to range construction angles.

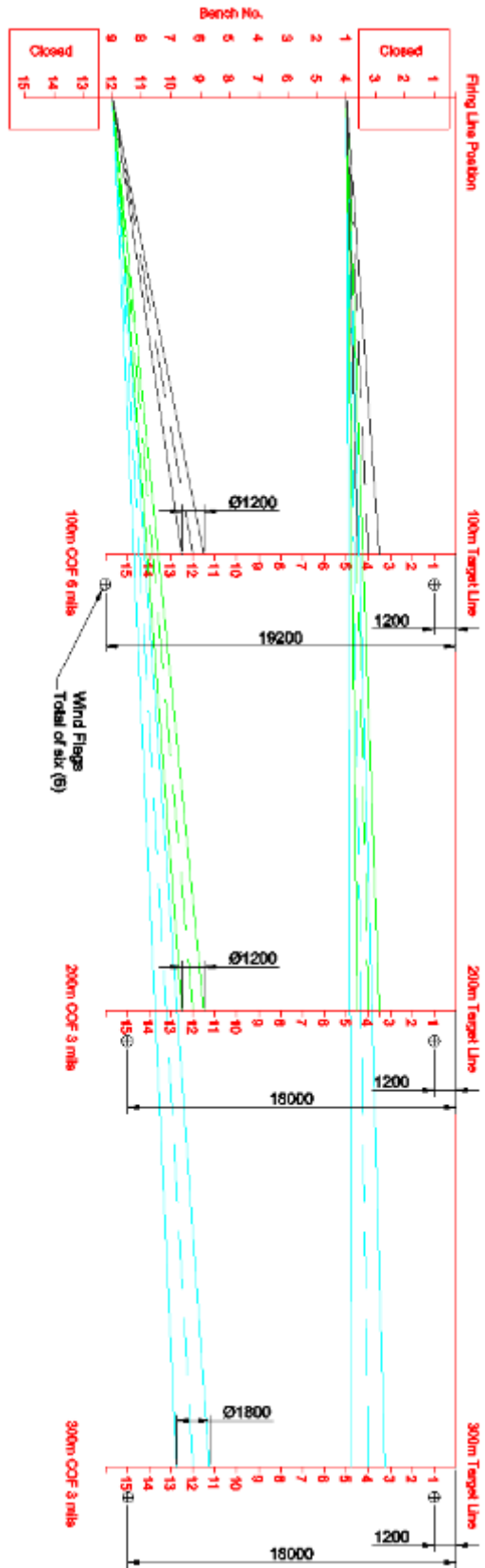
Shooting at 100m,
flags at 100m only.

Shooting at 200m,
flags at 100m and 200m only.

Shooting at 300m,
flags at 100m, 200m and 300m.

12. If a wind flag is hit by a bullet then shooting shall be suspended while it is determined which shooter hit the flag and why. Corrective action must be undertaken before shooting re-commences.

See flag position diagram on page the next page:



300m Rifle Range - Centrefire Benchrest Matches

Group & Score Shooting with Individual Shooter Wind Flags, and No Moving Target Backer System

1.0 PURPOSE

This Restricted Operating Procedure (ROP) is to allow the use of individual shooter wind flags down range in the active range area as suitable for centrefire benchrest matches shooting at the following targets:

1. World Benchrest Shooting Federation WBSF100, WBSF200 and WBSF300 group targets.
2. IBS Hunter #1, Hunter #2 and Hunter #3 score targets.

Note: WBSF, IBS and NBRSA targets for the same disciplines are all interchangeable.

2.0 REDUCED CONE OF FIRE

The primary safety elements of this ROP are:

- A reduced Cone Of Fire (COF) for precision benchrest shooting of 1.50 milliradians at 100m (150mm radius), 1.125 milliradians at 200m (225mm radius) and 1.125 milliradians at 300m (337.5mm radius).
- All shooting shall be conducted off the benches.
- Mandatory use of front and rear supports under all rifles.
- All rifles must have dial up/target turret type scopes.
- All wind flags shall be of a lightweight, ricochet resistant design.
- All wind flags shall be placed outside of the reduced COF allowance.
- An initial 100m sight-in match is required to ensure shooters are on target and can demonstrate the required amount of precision.

While the ROP is in force all shooting must comply with the ROP rules below.

3.0 SHOOTING POSITIONS

This ROP may utilise all shooting positions from 1 to 10 depending on the number of benches being shot off and the distance being shot.

Other shooters not participating in the event and shooting under the standard RSO 20 milliradian COF limit, will also be able to shoot from designated positions if following the guidelines below.

4.0 PROCEDURE

Bench Qty.	Bench Position No.	Shooting Positions Closed at These Target Distances		
		100m	200m	300m
1	1	2	2, 3, 4	2, 3, 4, 5, 6
2	1, 2	3	3, 4, 5	3, 4, 5, 6, 7
3	1, 2, 3	4	4, 5, 6	4, 5, 6, 7, 8
4	1, 2, 3, 4	5	5, 6, 7	5, 6, 7, 8, 9
5	1, 2, 3, 4, 5	6	6, 7, 8	6, 7, 8, 9, 10

Table 1 – Also refer to the diagrams at the end of the document.

1. A maximum of 5 benches may be utilised. The bench positions are on the left hand end of the firing line due to the range topography i.e. encroachment of gully's across the range floor affects wind flag positioning.
2. All shooting involving wind flags shall only take place from the benches noted as Bench Position No. in Table 1.
3. As per Table 1, some positions will be closed while this ROP is in force. No shooting is permitted from these positions while this ROP is in force.
4. Other shooters using the range under the standard RSO 20 milliradian COF can also shoot while this ROP is in effect from the positions not used by benchrest shooting and not closed at per Table 1. **Note**, as benchrest shooting increases in distance, more positions will close.
5. For shooting positions 1, 2, 3, 4 and 5 shooting benchrest the following applies:
 - a. The COF restrictions for precision benchrest shooting apply as above.
 - b. All shooting must be conducted off the benches.
 - c. Front and rear rests must be used for all rifles.
 - d. All rifles must have dial up/target turret type scopes.
6. To ensure shooters are on target and can demonstrate the required amount of precision, at the beginning of the event all shooters shall complete an initial 100m sight-in match unless they have been pre-approved by the match director. This match shall have a further reduced COF of 0.5 milliradians at 100m (50mm radius/100mm diameter).
7. **Wind flags shall not be placed downrange until the 100m sight-in match is completed.**
8. The sight-in match targets shall be A4 in size and have a central bullseye aiming point with a 100mm diameter ring.
9. A minimum of one (1) round shall be fired for a sight-in match.
10. The range officer shall check the sight-in targets at the end of the sight-in match and all shooters must be able to demonstrate they can retain their shots inside or touching the 100mm ring. **Note**, the sight-in match can be shot for practice or late comers at any time without wind flags on any other shooting position open under the 20 milliradian COF.
11. For RSO compliance this ROP overrides the World Benchrest Shooting Federation (WBSF) rule which stipulates, "*wind flags on the range must be no higher than level with the bench tops and the bottom of the target card, and retained within the competitors shooting lanes.*"

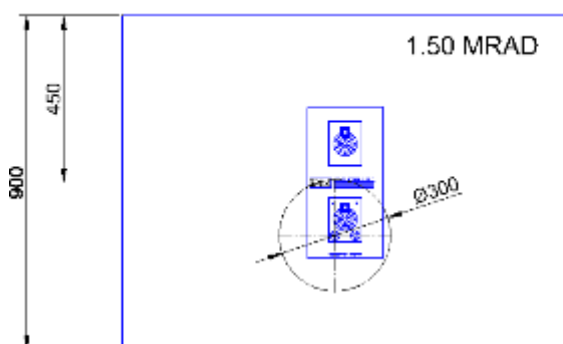
Under this ROP on this range, all wind flags must be no higher than a line of sight between the

benchtops and the bottom of the target backer board at all distances.

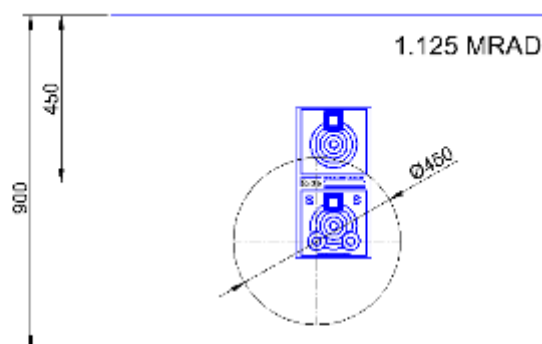
12. All wind flags must be retained within the shooters lane.
13. Wind flag construction shall be ricochet resistant i.e. lightweight and made of soft materials such as wood, aluminium or plastic.
14. Wind flags may be on tripods or spiked into the ground and the feet can be weighted down with sand bags.
15. There shall be no wind flags placed out further than the distance being shot.
16. Prior to commencing shooting the Range Officer will check all wind flags comply with the wind flag rules. If they do not, then the Range Officer will lay the non-complying flags down and they will remain down until the end of the match.
17. If a wind flag is hit by a bullet then shooting shall be suspended while it is determined which shooter hit the flag and why.

All targets for Group and Score shall be mounted to the target backer boards as shown below.

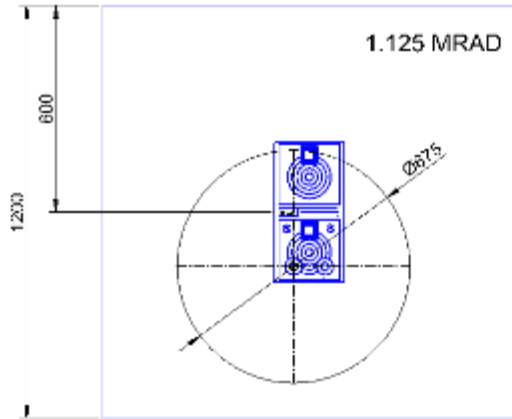
5.0 GROUP TARGET MOUNTING POSITIONS



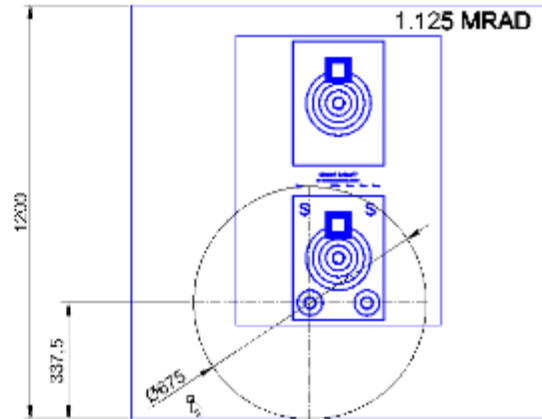
100 Metres
Group Target
WBSF100 target centred on board



200 Metres
Group Target
WBSF200 target centred on board



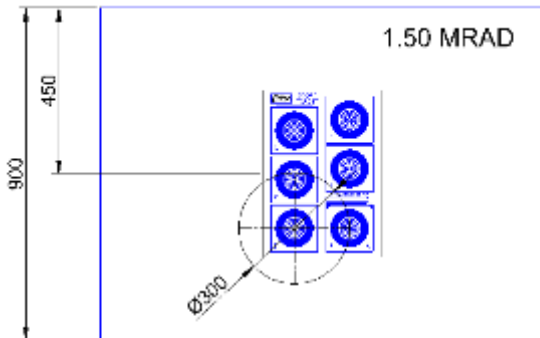
300 Metres
 Group Target
 WBSF200 target centred on board



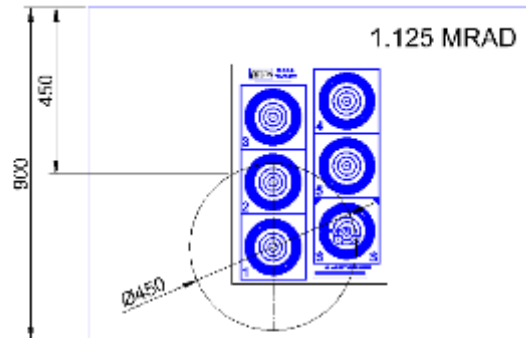
300 Metres
 Group Target
 WBSF300 target

Note, WBSF BR300 target is mounted 338mm up from the bottom of the target board at 300m. All other targets are centred on the target boards.

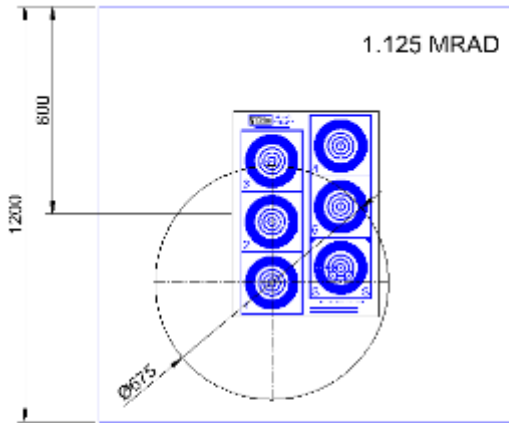
6.0 SCORE TARGET MOUNTING POSITIONS



100 Metres
 Score Target
 IBS Hunter #1 centred on board

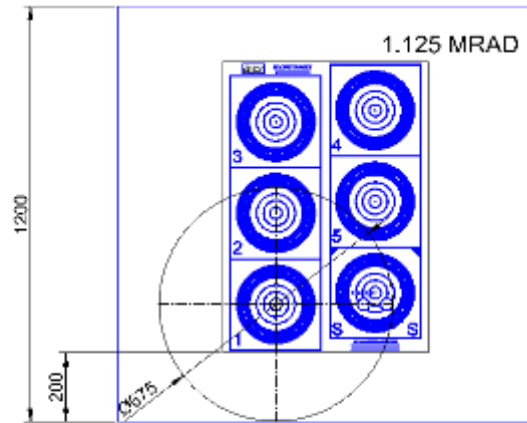


200 Metres
 Score Target
 IBS Hunter #2 centred on board



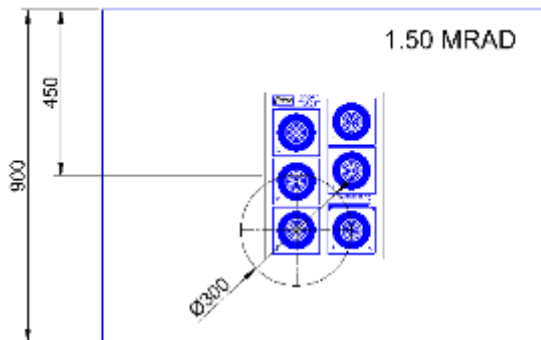
300 Metres

Score Target
 IBS Hunter #2 centred on board



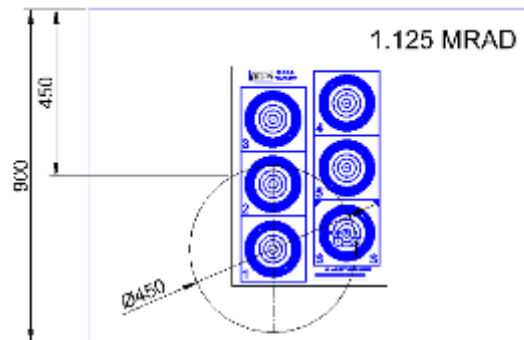
300 Metres

Score Target
 IBS Hunter #3



100 Metres

Score Target
 IBS Hunter #1 centred on board



200 Metres

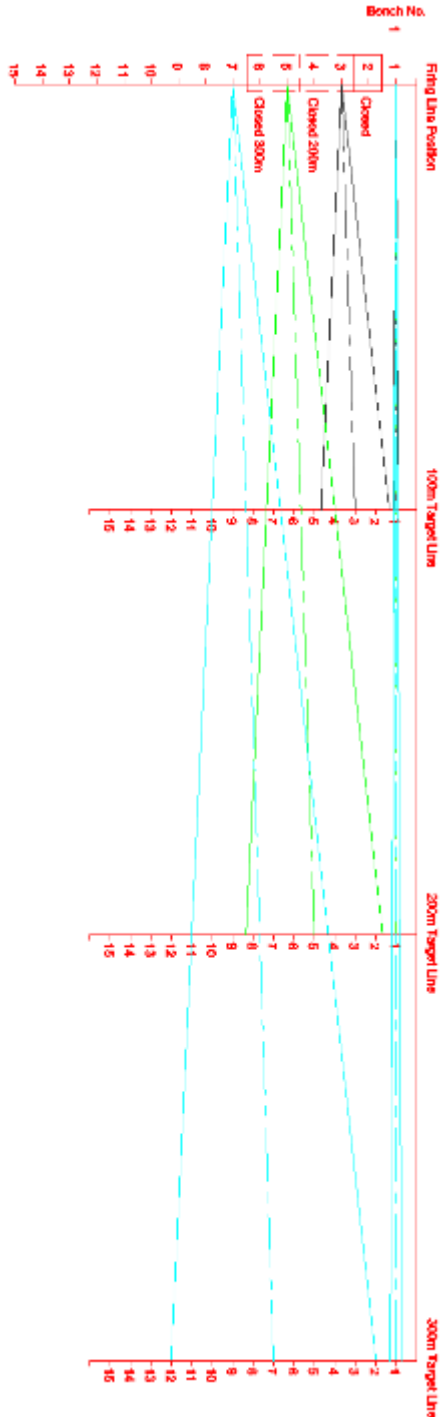
Score Target
 IBS Hunter #2 centred on board

Note, IBS Hunter #3 target is mounted 200mm up from the bottom of the target board at 300m. All other targets are centred on the target boards.

COF Diagram - 1x Benchrest Shooting Positions

Benchrest shooters on position 1 with 100m 1.50 milliradian, 200m 1.125 milliradian, 300m 1.125 milliradian COF.

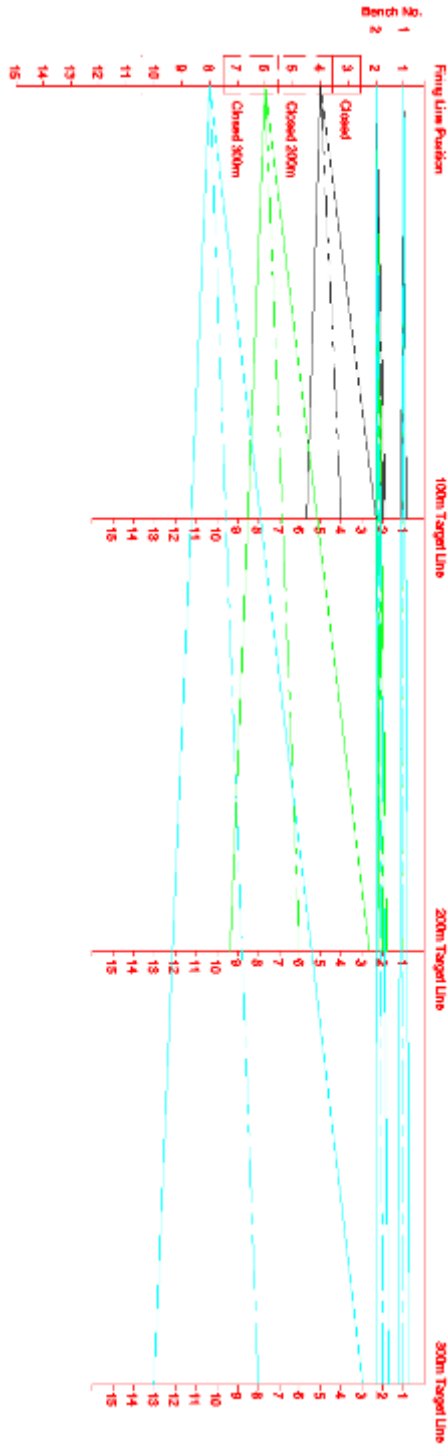
Other shooters with 20 milliradian COF shown on the right.



COF Diagram - 2x Benchrest Shooting Positions

Benchrest shooters on position 1 & 2 with 100m 1.50 milliradian, 200m 1.125 milliradian, 300m 1.125 milliradian COF.

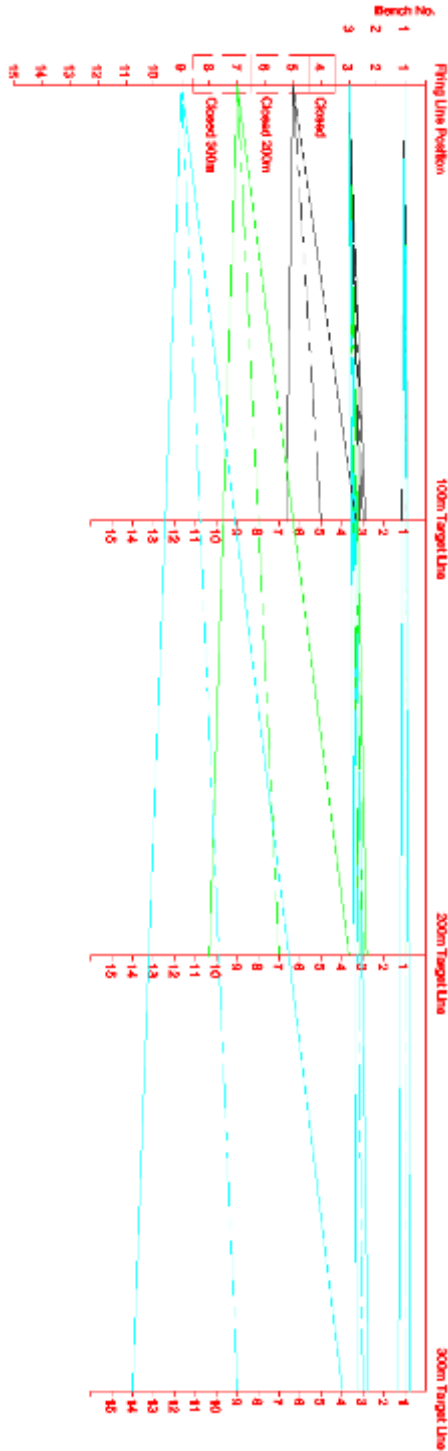
Other shooters with 20 milliradian COF shown on the right.



COF Diagram - 3x Benchrest Shooting Positions

Benchrest shooters on position 1, 2 & 3 with 100m 1.50 milliradian, 200m 1.125 milliradian, 300m 1.125 milliradian COF.

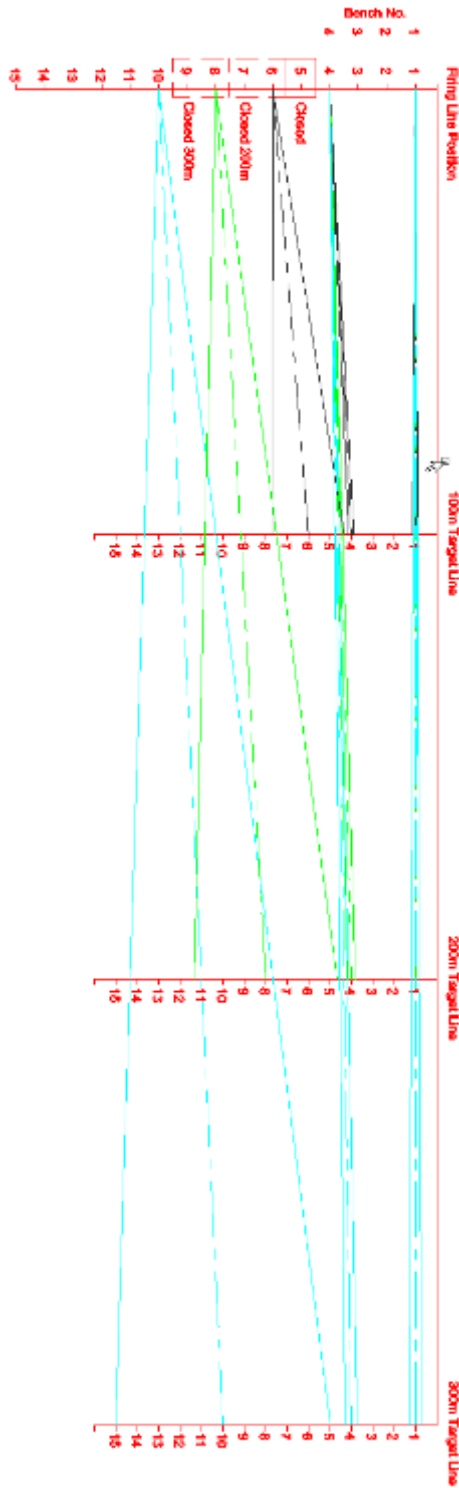
Other shooters with 20 milliradian COF shown on the right.



COF Diagram - 4x Benchrest Shooting Positions

Benchrest shooters on position 1, 2, 3 & 4 with 100m 1.50 milliradian, 200m 1.125 milliradian, 300m 1.125 milliradian COF.

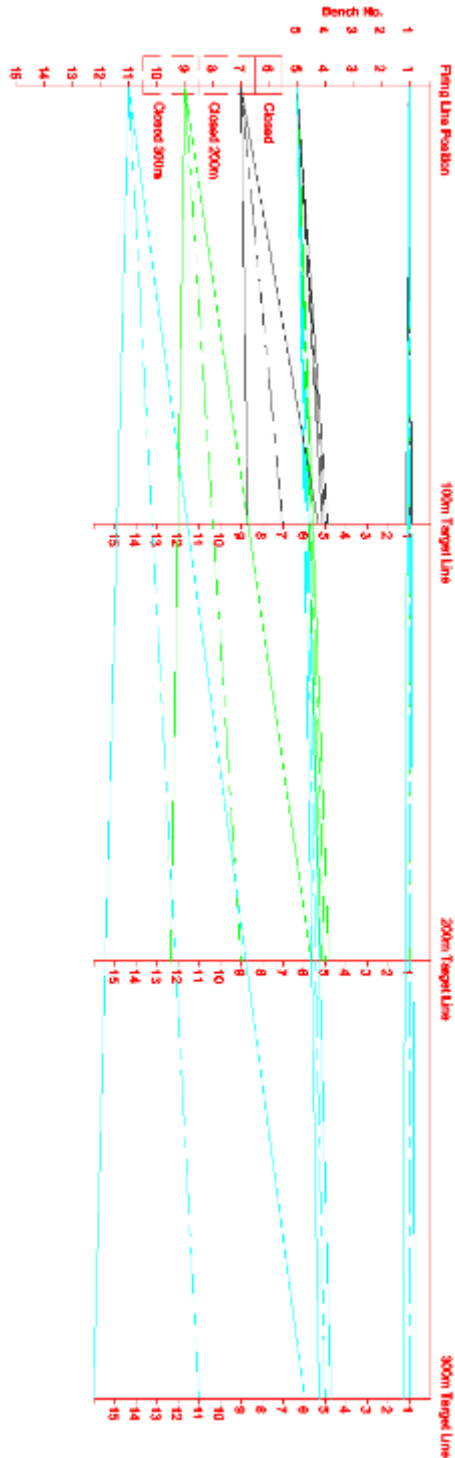
Other shooters with 20 milliradian COF shown on the right.



COF Diagram - 5x Benchrest Shooting Positions

Benchrest shooters on position 1, 2, 3, 4 & 5 with 100m 1.50 milliradian, 200m 1.125 milliradian, 300m 1.125 milliradian COF.

Other shooters with 20 milliradian COF shown on the right.



300m Rifle Range - Centrefire Benchrest Matches

Group Shooting with Individual Shooter Wind Flags and the Moving Target Backer System at 100m & 200m

1.0 PURPOSE

This Restricted Operating Procedure (ROP) is to allow the use of **individual shooter wind flags** in combination with a **moving target backer system (MTBS)** down range in the active range area as suitable for centrefire benchrest matches shooting at World Benchrest Shooting Federation WBSF100 and WBSF200 group targets at 100m and 200m.

Note: WBSF, IBS and NBRSA targets for the same discipline are all interchangeable.

2.0 REDUCED CONE OF FIRE

The primary safety elements of this ROP are:

- A reduced Cone Of Fire (COF) for precision benchrest shooting of 1.50 milliradians at 100m (150mm radius) and 0.75 milliradians at 200m (150mm radius).
- All shooting shall be conducted off the benches.
- Mandatory use of front and rear supports under all rifles.
- All rifles must have dial up/target turret type scopes.
- All wind flags shall be of a lightweight, ricochet resistant design.
- All wind flags shall be placed outside of the reduced COF allowance.
- Components of the MTBS inside the shooters COF shall be of similar construction to the target backer board.
- The heavy mass components of the MTBS shall be placed outside of the reduced COF.
- An initial 100m sight-in match is required to ensure shooters are on target and can demonstrate the required amount of precision.

This ROP may utilise all shooting positions from 1 to 10 depending on the number of benches being shot off and the distance being shot.

Other shooters not participating in the event and shooting under the standard RSO 20 milliradian COF limit, will also be able to shoot from designated positions if following the guidelines below.

While the ROP is in force all shooting must comply with the ROP rules below.

This ROP is based on the current range design with firing line positions at 1.6m centres and the target line positions at 1.2m centres. The ROP shall be reviewed if the range design is altered.

This Restricted Operating Procedure (ROP) cannot be deviated from. If the ROP cannot be complied with then the range must revert to its standard operating mode as described in the Range Standing Orders (RSO's) and the matter shall be referred to the Range Committee for review.

This ROP can only be implemented by a experienced benchrest shooters who have been approved by the Range Committee to do so and he or she must be on duty and providing supervision for the entire duration that this ROP is in force.

3.0 SHOOTING POSITIONS

This ROP will utilise the entire firing line. While the ROP is in force all shooting must comply with the ROP.

4.0 PROCEDURE

Bench Qty.	Bench Position No.	Shooting Positions Closed at These Target Distances	
		100m	200m
2	2, 3	1, 4, 5	1, 4, 5, 6, 7
3	2, 3, 4	1, 5, 6	1, 5, 6, 7, 8
4	2, 3, 4, 5	1, 6, 7	1, 6, 7, 8, 9
5	2, 3, 4, 5, 6	1, 7, 8	1, 7, 8, 9, 10

Table 1 – Also refer to the diagrams at the end of the document.

1. Use of the MTBS shall be restricted to 100m and 200m only.
2. A maximum of 5 benches may be utilised. The bench positions are on the left hand end of the firing line due to the range topography i.e. encroachment of gully's across the range floor affects wind flag positioning.
3. All shooting involving wind flags and/or the MTBS shall only take place from the benches noted as Bench Position No. in Table 1.
4. As per Table 1, some positions will be closed while this ROP is in force. No shooting is permitted from these positions while this ROP is in force.
5. Other shooters using the range under the standard RSO 20 milliradian COF can also shoot while this ROP is in effect from the positions not used by benchrest shooting and not closed at per Table 1.
Note, as benchrest shooting increases in distance, more positions will close.
6. For shooting positions 2, 3, 4, 5 and 6 shooting benchrest the following applies:
 - a. The COF restrictions for precision benchrest shooting apply as above.
 - b. All shooting must be conducted off the benches.
 - c. Front and rear rests must be used for all rifles.
 - d. All rifles must have dial up/target turret type scopes.
7. To ensure shooters are on target and can demonstrate the required amount of precision, at the beginning of the event all shooters shall complete an initial 100m sight-in match. This match shall have a further reduced COF of 0.5 milliradians at 100m (50mm radius/100mm diameter).
8. **Neither wind flags or the moving target backer system shall be placed downrange until the 100m sight-in match is completed.**

9. The sight-in match targets shall be A4 in size and have a central bullseye aiming point with a 100mm diameter ring.
10. A minimum of one (1) round shall be fired for a sight-in match.
11. The range officer shall check the sight-in targets at the end of the sight-in match and all shooters must be able to demonstrate they can retain their shots inside or touching the 100mm ring. **Note**, the sight-in match can be shot for practice or late comers at any time without wind flags on any other shooting position open under the 20 milliradian COF.
12. For RSO compliance this ROP overrides the World Benchrest Shooting Federation (WBSF) rule which stipulates, *“wind flags on the range must be no higher than level with the bench tops and the bottom of the target card, and retained within the competitors shooting lanes.”*

Under this ROP on this range, all wind flags must be no higher than a line of sight between the benchtops and a horizontal line 75mm below the bottom of the 610mm deep MTBS face boards at all distances.

13. With the exception of clause 14, wind flags must be retained within the shooters lane.
14. Wind flags may also be placed in the lanes for the closed positions immediately to the left and right of the benchrests positions in use. These would be the same lanes that the moving target backer motor and counterweight assemblies would be in. All other wind flag rules will apply to these wind flags.
15. Wind flag construction shall be ricochet resistant i.e. lightweight and made of soft materials such as wood, aluminium or plastic.
16. Wind flags may be on tripods or spiked into the ground, and the feet can be weighted down with sand bags.
17. There shall be no wind flags placed out further than the distance being shot.
18. Prior to commencing shooting the Range Officer will check all wind flags comply with the wind flag rules. If they do not, then the Range Officer will lay the non-complying flags down and they will remain down until the end of the match.
19. If a wind flag is hit by a bullet then shooting shall be suspended while it is determined which shooter hit the flag and why. Corrective action must be undertaken before shooting re-commences.
20. The MTBS motor assembly shall be mounted to the target backer line centred under position 1.
21. The battery for the MTBS motor assembly shall sit directly under it where it can be seen at all times. Due to fire risk, it shall not be placed out of sight between the target backer board and the bullet

catching drums.

22. The MTBS counterweight assembly shall be mounted to the target backer line directly under the centre of the closed position next to the last benchrest position in use i.e. 3 benchrests positions in use, then the counterweight assembly will be mounted in the centre of position 5.

23. The target frames for the MTBS shall be mounted to the target backer line centred under the benchrest positions in use. They shall be mounted flush with the top of the target backer board. See figures 1, 2 and 3.

The target frame assemblies for the MTBS shall be ricochet resistant i.e. lightweight and made of soft materials such as wood, aluminium or plastic,

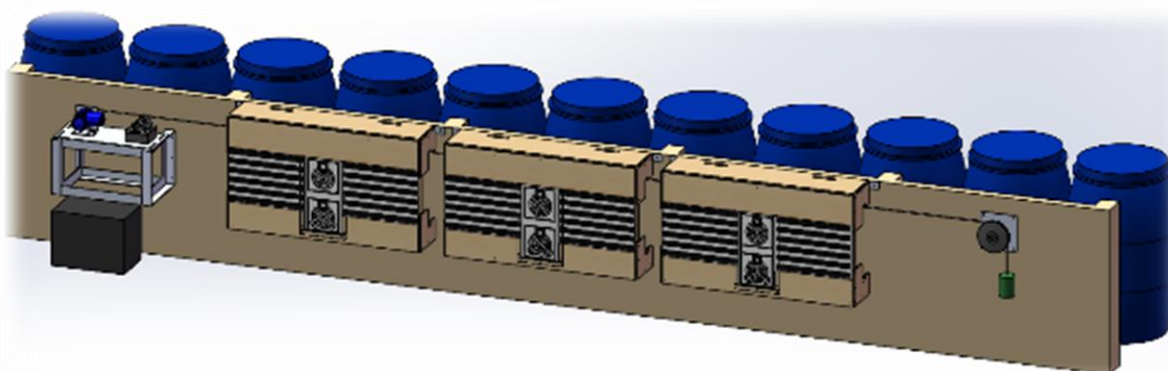
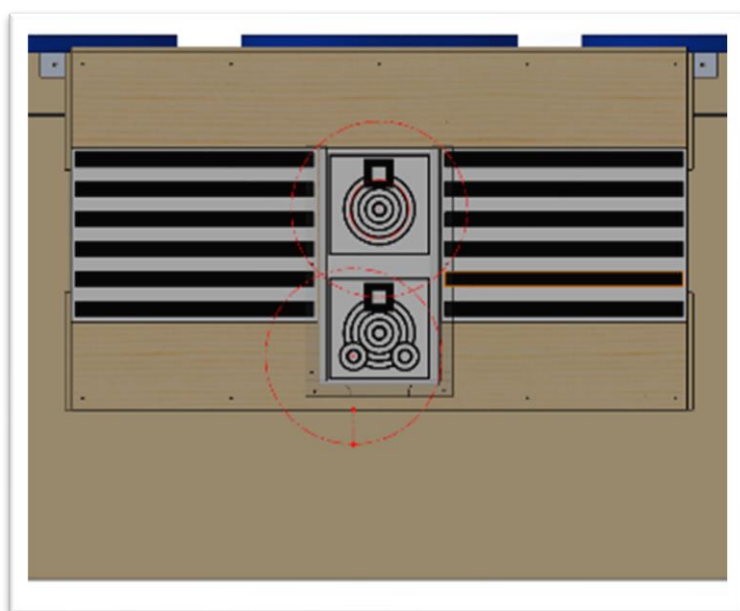


Figure 1 – MTBS frames mounted on the target line

- MTBS for Group targets, showing a 3 target setup in positions 2, 3 and 4.
- The motor assembly and battery are under the centre of position 1.
- The counterweight assembly is under the centre of position 5.

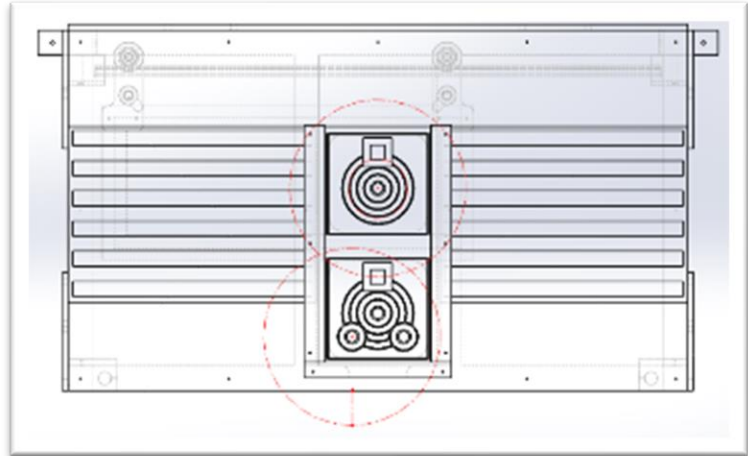


**Figure 2
Group Target COF for 100m and
200m (in red)**

- 150mm radius/300mm dia COF at both distances.
- Smaller 100mm dia sight-in circle also shown for reference on top target box.

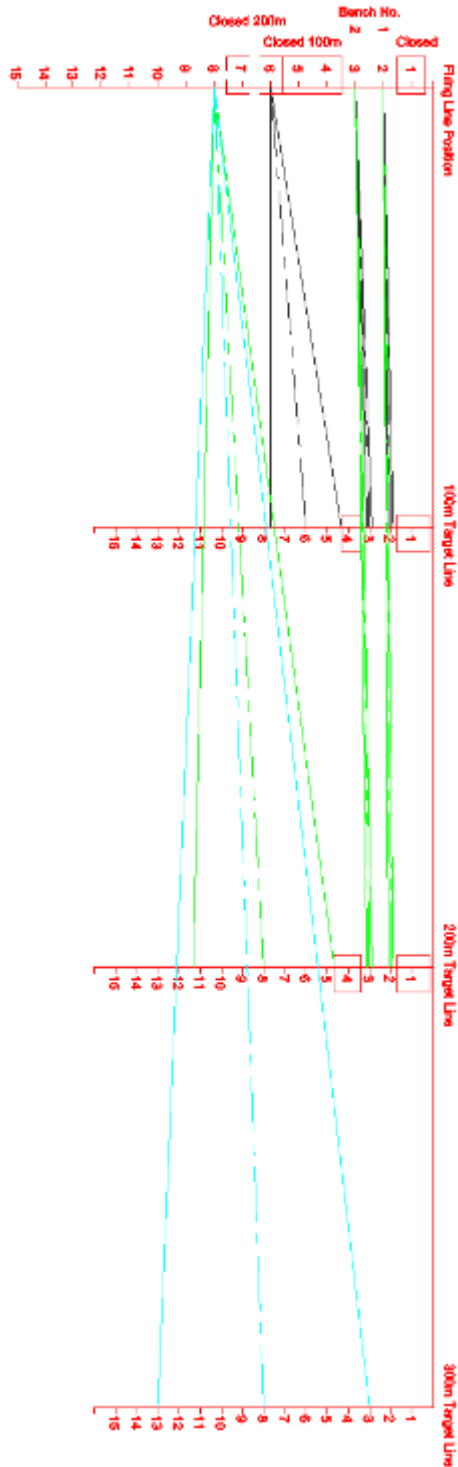
Figure 2
Group Target COF for 100m and 200m (in red)

- 150mm radius/300mm dia COF at both distances.
- Smaller 100mm dia sight-in circle also shown for reference on top target box.



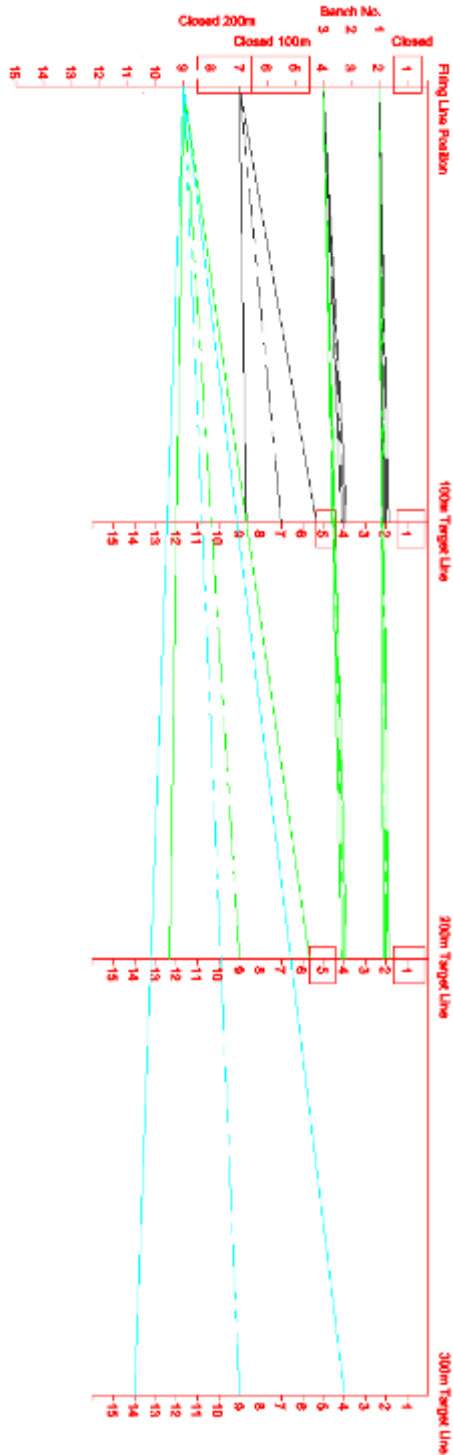
COF Diagram - 2x Benchrest Shooting Positions

Benchrest shooters on positions 2 & 3 with 100m 1.50 milliradian & 200m 0.75 milliradian COF.
Other shooters with 20 milliradian COF shown on the right.



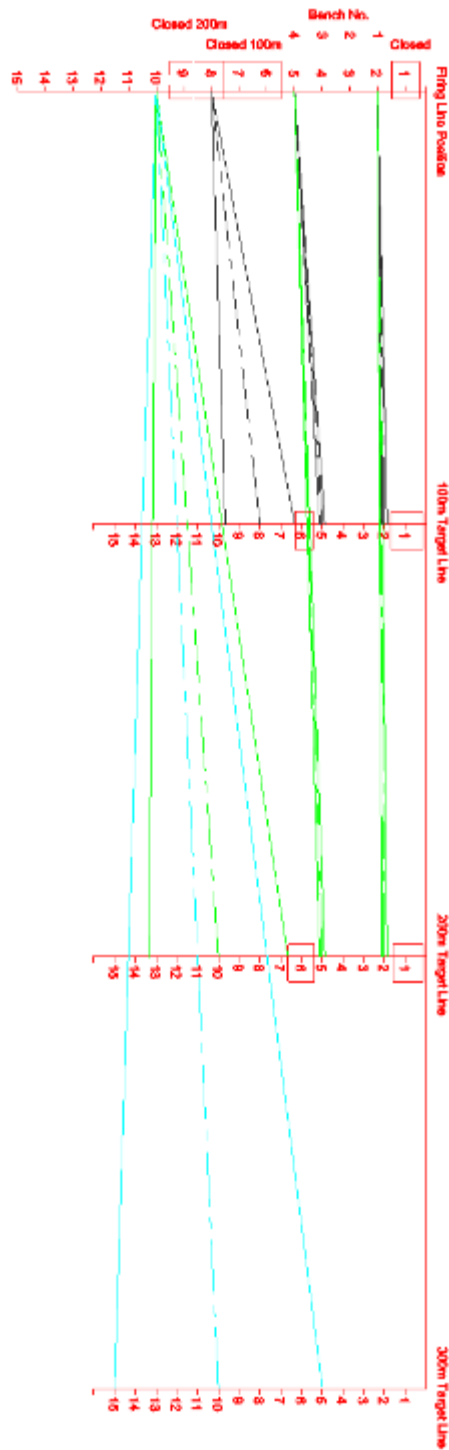
COF Diagram - 3x Benchrest Shooting Positions

Benchrest shooters on positions 2, 3 & 4 with 100m 1.50 milliradian & 200m 0.75 milliradian COF.
Other shooters with 20 milliradian COF shown on the right.



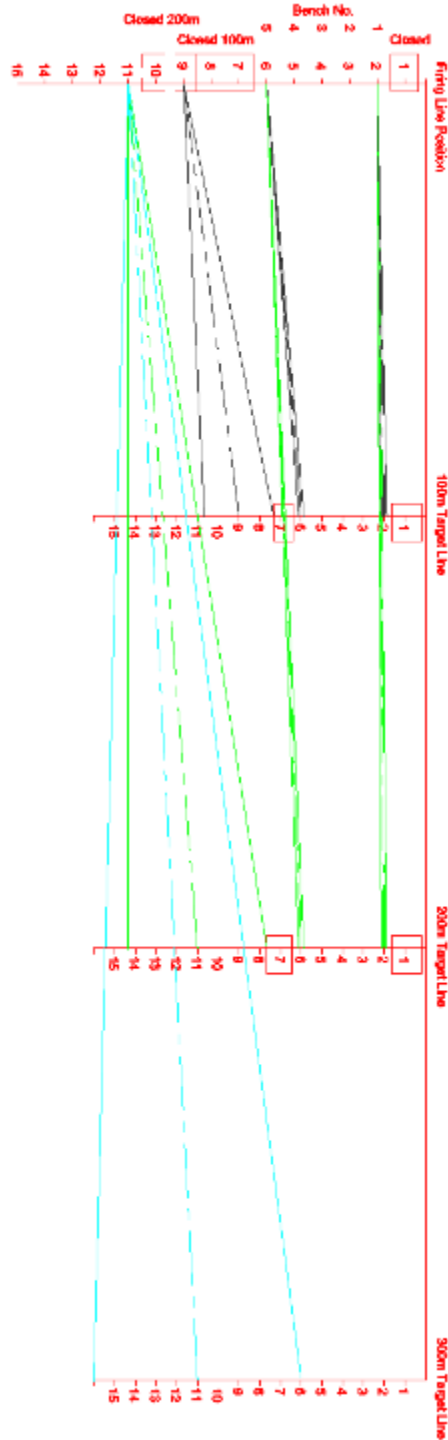
COF Diagram - 4x Benchrest Shooting Positions

Benchrest shooters on positions 2, 3, 4 & 5 with 100m 1.50 milliradian & 200m 0.75 milliradian COF. Other shooters with 20 milliradian COF shown on the right.



COF Diagram - 5x Benchrest Shooting Positions

Benchrest shooters on positions 2, 3, 4, 5 & 6 with 100m 1.50 milliradian & 200m 0.75 milliradian COF. Other shooters with 20 milliradian COF shown on the right.



Restrictive Operating Procedure

22 Rimfire Silhouette Shooting Setup

1.0 PURPOSE

This Restricted Operating Procedure (ROP) is to allow the use of 22 rimfire steel silhouette targets to be used in the active range area

2.0 POSITION AND FIXING

There are two options for positioning the silhouettes:

1. Using the timber surrounds that are stored on the west end of the firing line. These timber surrounds have hangers on them so they can be hung over the top of the target backers.
2. Alternatively, silhouettes may be located on a timber rail within 200mm of the target backer positioned below the middle of the target backer.

3.0 COPPER JACKETED RIMFIRE AMMUNITION

17 HMR and WSM rimfire ammunition **CANNOT** be used with the silhouettes.

Restrictive Operating Procedure

Electronic Targeting and Camera Systems Setup

1.0 PURPOSE

This Restricted Operating Procedure (ROP) is to allow the use of electronic target and camera systems to be used in the active range area.

2.0 APPROVAL TO USE

3.0 POSITION AND FIXING

DRAFT

NZDA 300m RANGE - CHIEF RANGE OFFICER CHECK SHEET

Date:	Event: Public Range Day										
CRO briefing with volunteers to allocate tasks and responsibilities:											
Volunteers names	<----- circle one or more for each member ----->										
1	CRO	RO1	RO2	Reg	Ind	Crowd	FirstAid	Emergency Comms	Scene/site security	Incident recording	
2	CRO	RO1	RO2	Reg	Ind	Crowd	FirstAid	Emergency Comms	Scene/site security	Incident recording	
3	CRO	RO1	RO2	Reg	Ind	Crowd	FirstAid	Emergency Comms	Scene/site security	Incident recording	
4	CRO	RO1	RO2	Reg	Ind	Crowd	FirstAid	Emergency Comms	Scene/site security	Incident recording	
5	CRO	RO1	RO2	Reg	Ind	Crowd	FirstAid	Emergency Comms	Scene/site security	Incident recording	
6	CRO	RO1	RO2	Reg	Ind	Crowd	FirstAid	Emergency Comms	Scene/site security	Incident recording	

INCIDENT INVESTIGATION FORM

Particulars of Incident			
Time	Location	Date Reported	
The Injured Person			
Name:	Age:	Home address:	
Type of Injury <input type="checkbox"/> Strain/Sprain <input type="checkbox"/> Fracture <input type="checkbox"/> Laceration/Cut <input type="checkbox"/> Foreign body <input type="checkbox"/> Burn <input type="checkbox"/> involving firearm <input type="checkbox"/> Other (Specify).....			
Remarks:			
The Incident			
Description (describe what happened, draw diagram if necessary)			
Analysis (What was cause of the incident?)			
How bad could it have been? <input type="checkbox"/> Very Serious <input type="checkbox"/> Serious <input type="checkbox"/> Minor		What is chance of it happening again? <input type="checkbox"/> Rarely <input type="checkbox"/> Often	
Prevention			
What action has or will be taken to prevent a reoccurrence?	By whom	Do by	Done (tick)
Treatment and Investigating of Incident			
Treatment given	Name of person giving first aid	Dr/hospital	
Incident investigated by	Date	DOL advised Yes / No	Date

NZDA - PUBLIC RANGE DAY SHOOTERS REGISTER

- 1) NZDA membership does not entitle members to shoot at the range. They MUST hold a current Range Ticket to shoot without paying the casual shooter fee.
- 2) We no longer issue a Range ticket, so the access tag is evidence that they are an authorised range user
- 3) Casual shooters MUST receive an official induction, and MUST initial the separate Range Induction Record Sheet as proof they have received the induction

Date:

Comments:

NAME OF SHOOTER	SIGHTED CURRENT FIREARM LIC. (Y)	RANGE TICKET Member No:	CASUAL USER FEE (\$25.00)	TARGETS, ECI, EARPLUGS (\$)	COMMENTS
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

NZDA - PUBLIC RANGE DAY SHOOTERS REGISTER

NAME OF SHOOTER	SIGHTED CURRENT FIREARM LIC. (Y)	RANGE TICKET Member No:	CASUAL USER FEE (\$25.00)	TARGETS, ECI, EARPLUGS (\$)	COMMENTS
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
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55					
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57					
58					
59					
60					

NZDA - BOP BRANCH - RANGE OPEN DAY / BRANCH SHOOT - DATE: _____

Cash Reconciliation

NZDA - PUBLIC RANGE DAY SHOOTERS REGISTER

1) Cash counted at end of day
less start float

Total Cash Received:

2) Fees Recorded

From casual user fees

--

From targets

--

From ECI

--

From Donations

--

Total Fees Recorded:

Reconciliation Balance: Total Cash - Total Fees:

Recorded by: _____

NZDA 300m Range - Range Induction Record sheet

Date:	Inducted By:
--------------	---------------------

Range Induction Requirements

The induction is provided to ensure the shooter is familiar with the safety and operational requirements of this range.

All shooters are required to complete a range induction before they can shoot on the range.

Shooters who do not hold a current range ticket will be required to repeat the induction on any subsequent days they shoot on this range.

Induction Acknowledgement

By signing this form, the shooter acknowledges they have a current firearms licence, and have received the induction and understand their obligations to comply with the Range Standing Orders and any other requirements outlined in the induction

Shooters Name	Signature
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	

NZDA 300m Range - Range Induction Record sheet

Date:	Inducted By:
--------------	---------------------

Range Induction Requirements

The induction is provided to ensure the shooter is familiar with the safety and operational requirements of this range.

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Induction Acknowledgement

By signing this form, the shooter acknowledges they have a current firearms licence, and have received the induction and understand their obligations to comply with the Range Standing Orders and any other requirements outlined in the induction

Shooters Name	Signature
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	

**NZDA-BOP TECT Park 300m Rifle Range
Range Standing Orders - Annex**

Hazard Identification Register

Hazard	Significant		Practicable to eliminate		Practicable to isolate		All practicable steps to minimise		Controls required (including existing)	Person responsible	Date to be completed by	Completed (date/initials)
	Yes	No	Yes	No	Yes	No	Yes	No				
General												
Entry into Range Danger and Active Range areaa while shooting occurring	X		X		X		X		Range status sign, firing line flag, warning signage. Internal access gates locked. Range Standing Orders	Range Officer, all shooters	Ongoing	
Accidental discharge of firearm	X		X		X		X		Range Standing Orders and in use of empty chamber indicators when not on firing line.	Range Officer, all shooters	Ongoing	
Lead contaminants	X			X	X		X		Wear protective clothing when handling the 200 l plastic drums (bullet traps)	Range Manager	Ongoing	

Form of register or notification of circumstances of accident or serious harm

Required for section 25(1), (1A), (1B), and (3)(b) of the Health and Safety in Employment Act 1992
For non-injury accident, complete questions 1, 2, 3, 9, 10, 11, 14 and 15 as applicable

1 Particulars of employer, self-employed person or principal:
(business name, postal address and telephone number)

2 The person reporting is:

- an employer a principal a self-employed person

3 Location of place of work:

(shop, shed, unit nos., floor, building, street nos. and names, locality/suburb, or details of vehicle, ship or aircraft)

4 Personal data of injured person:

Name

--

Residential address

Date of birth

--

 Sex (M/F)

--

5 Occupation or job title of injured person:

(employees and self-employed persons only)

--

6 The injured person is:

- an employee a contractor (self-employed person)
 self other

7 Period of employment of injured person:

- (employees only)*
- 1st week 1st month 1-6 months
 6 months-1 year 1-5 years Over 5 years
 non-employee

8 Treatment of injury:

- None First aid only
 Doctor but no hospitalisation Hospitalisation

9 Time and date of accident/ serious harm:

Time

--

 am/pm

Date

--

 Shift Day Afternoon Night

Hours worked since arrival at work
(employees and self-employed persons only)

--

10 Mechanism of accident/ serious harm:

- fall, trip or slip hitting objects with part of the body
 sound or pressure being hit by moving objects
 body stressing heat, radiation or energy
 biological factors chemicals or other substances
 mental stress

11 Agency of accident/ serious harm:

- machinery or (mainly) fixed plant
 mobile plant or transport
 powered equipment, tool, or appliance
 non-powered handtool, appliance, or equipment
 chemical or chemical product
 material or substance
 environmental exposure (e.g. dust, gas)
 animal, human or biological agency (other than bacteria or virus)
 bacteria or virus

12 Body part:

- head neck trunk
 upper limb lower limb multiple locations
 systemic internal organs

13 Nature of injury or disease:

- fatal
(specify all)
- | | |
|--|---|
| <input type="checkbox"/> fracture of spine | <input type="checkbox"/> puncture wound |
| <input type="checkbox"/> other fracture | <input type="checkbox"/> poisoning or toxic effects |
| <input type="checkbox"/> dislocation | <input type="checkbox"/> multiple injuries |
| <input type="checkbox"/> sprain or strain | <input type="checkbox"/> damage to artificial aid |
| <input type="checkbox"/> head injury | <input type="checkbox"/> disease, nervous system |
| <input type="checkbox"/> internal injury of trunk | <input type="checkbox"/> disease, musculoskeletal system |
| <input type="checkbox"/> amputation, including eye | <input type="checkbox"/> disease, skin |
| <input type="checkbox"/> open wound | <input type="checkbox"/> disease, digestive system |
| <input type="checkbox"/> superficial injury | <input type="checkbox"/> disease, infectious or parasitic |
| <input type="checkbox"/> bruising or crushing | <input type="checkbox"/> disease, respiratory system |
| <input type="checkbox"/> foreign body | <input type="checkbox"/> disease, circulatory system |
| <input type="checkbox"/> burns | <input type="checkbox"/> tumour (malignant or benign) |
| <input type="checkbox"/> nerves or spinal chord | <input type="checkbox"/> mental disorder |

14 Where and how did the accident/serious harm happen?

(If not enough room attach separate sheet or sheets.)

15 If notification is from an employer:

- (a) Has an investigation been carried out? yes no
(b) Was a significant hazard involved? yes no

Signature and date _____ / ____ / ____

Name and position
(capitals)

**NZDA-BOP TECT Park 300m Rifle Range
Range Standing Orders -Annex**

Incident Register

Date	Time	Reported By	Investigated By	Location	Affected Parties	The Incident	Analysis	How Bad Coult It Have Been	Chance of Happening Again	Prevention	Separate File note
7/9/14	11:15 am	Baden Prentis	Grant Hammond, NZDA BOP Range Manager	Airsoft lease area immediately behind NZDA lease boundary fence to south of 300m target lines	Tauranga Airsoft Club. Tauranga Pistol Club NZDA BOP Branch	Possible stray bullet overhead	Investigated and discussed with all parties. Not able to confirm if it was a bullet.	Very serious	infrequent	Reinforcement of all clubs range stnding orders	Yes

Range Safety Incident Investigation Report

1 INVESTIGATOR

Investigated By:	
Position:	
Phone No	
Email	
Date of Issue	

2 PARTICULARS OF INCIDENT

Date of Incident:	
Time of Incident:	
Location	

3 AFFECTED PARTIES

(Describe who reported the incident, and who was involved in the incident, and who the incident was reported to)

4 THE INCIDENT

(Describe what happened)

5 ANALYSIS

(What were the causes of the incident?)

5.1 INVESTIGATION

5.2 CAUSE

(What were the causes of the incident?)

5.3 SERIOUSNESS

(how bad could it have been, What are the chances of it happening again)

6 PREVENTION

(What action has or will be taken to prevent a recurrence?)

7 CONCLUSION

Signature

Name:

Position: