

Appendix A

South Dakota Shooting Sport Complex Master Plan

SOUTH DAKOTA SHOOTING SPORT COMPLEX



PROJECT SUMMARY

PROJECT DESCRIPTION

The Game, Fish and Parks South Dakota Shooting Sport Complex aims to be the premier firearms range complex in the region. Four hundred acres of rolling topography, solitude and natural beauty offer the perfect site for sporting enthusiasts within minutes from several surrounding communities.

Organized in two separate areas (north and south), the complex offers a wider variety of options for all levels from hunters and recreational shooters to law enforcement training spaces. Designed with safety in mind, the range complex will offer people and families a world class opportunity to participate in multiple shooting sports. There is plenty of room for beginners and experts to shoot side by side with facilities for education, outreach, and organized shooting competitions. The Master Plan is presented in phases for development based on funding availability and indicating potential for future growth based on the growing needs of the sporting population.

This Master Plan is a celebration of the outdoor heritage of western South Dakota and an invitation to what lies ahead for the recruitment, retention and reactivation of shooting sports in the region.

PROJECT GOALS

- » To provide a safe designated place for people to go.
- » To create one complex that provides all amenities.
- » To layout the range so that it is well organized and flows nicely.
- » To build a range that supports the R3 Efforts: To recruit, retain, reactivate outdoor enthusiasts.
- » To build a community partnership project.
- » To design a complex that feels convenient, safe, and easy to use - just a few minutes from surrounding communities.



"GROWING UP IN SOUTH DAKOTA, SHOOTING SPORTS WERE A BIG PART OF HOW I WAS RAISED. OUR RESIDENTS AND OUR VISITORS SHOULD HAVE ACCESS TO QUALITY SHOOTING RANGES WHERE THEY CAN LEARN SAFE AND RESPONSIBLE USE OF FIREARMS. THIS NEW PUBLIC RANGE IS JUST MINUTES FROM RAPID CITY AND WILL OFFER THE FINEST OUTDOOR SHOOTING RANGE EVER CONSTRUCTED BY GAME, FISH AND PARKS. THIS WILL PROVIDE OPPORTUNITIES SO THAT GENERATIONS TO COME CAN LEARN TO LOVE SHOOTING SPORTS JUST AS I DID."

GOVERNOR KRISTI NOEM

WHY DOES SOUTH DAKOTA GAME, FISH AND PARKS CARE ABOUT SHOOTING SPORTS AND SHOOTING RANGES IN SOUTH DAKOTA?

The SD Game, Fish and Parks (GFP) has a history of promoting safe and accessible shooting sports opportunities for residents and visitors to SD. We have a commitment to providing shooting range opportunities on public lands and a shooting range grant program to assist with maintenance and development of private ranges in exchange for public access to those ranges. Currently GFP operates eighteen shooting ranges across SD.

In the late 1930s, an existing excise tax on firearms and ammunition was redirected to state fish and wildlife agencies for wildlife species restoration. What became known as the Pittman-Robertson (PR) Federal Aid in Wildlife Restoration

Act has provided over \$12 billion to states since it was put in place. While the bulk of the funding is used for wildlife management, PR funds have also been used by states to build and maintain shooting ranges. Now, with the Target Practice and Marksmanship Training Support Act signed into law in 2019, states have even more flexibility to use these funds to construct and enhance public shooting ranges. Recreational shooters are a key constituency helping to pay into the PR funding program. GFP recognizes that recreational shooters pay a large portion of excise taxes on their guns and ammunition that put funds into the PR program.

55%

Approximately 55% of South Dakota voters own a firearm.

In 2007, PR apportionments were approximately \$267 million and in 2015 increased to \$808 million almost entirely due to non-hunting recreational shooters.

Southwick Associates estimates that there are

approximately **159,400 shooting sports participants** in

South Dakota that spend an average of **1,336,200 days** of shooting annually. This activity is estimated to support

846 jobs with salaries and wages totaling **\$27 million** in South Dakota.

Shooting sports in South Dakota generate an estimated...

\$55 MILLION	\$6 MILLION	\$4 MILLION
in retail sales	in federal taxes annually	in state and local taxes

Support for the second amendment, recreational shooting and acceptance of firearms in the public is a key factor in keeping our hunting heritage alive now and in the future. efforts.

POTENTIAL IMPACT

The total economic impact of the firearm and ammunition industry in the United States increased from \$19.1 billion in 2008 to \$63.5 billion in 2019, a 232 percent increase, while the total number of full-time equivalent jobs rose from approximately 166,000 to over 342,330, a 106 percent increase in that period, according to a report released by the National Shooting Sports Foundation®, the industry's trade association.

Southwick Associates' reports that Federal Aid in Wildlife Restoration excise taxes are generated by hunting related and non-hunting related activities. Non-hunting activities are generally comprised of recreational shooting, home and self-defense, firearms collecting and non-law enforcement or military work-related purchases. As of 2020, firearms represented 59.9% of all U.S. consumer sales obligated to pay into the Wildlife Restoration program. The other sources are ammunition (33.9% of taxable sales) and archery products (6.2%). Of U.S. retail firearms sales, 22.0% can be assigned to hunting purposes, and the remainder (78.0%) to non-hunting purposes. Of U.S. retail ammunition sales, 32.3% can be assigned to hunting purposes, and the remainder (67.7%) to non-hunting purposes.

The statewide average of shooting sport participants in South Dakota is 5.55% of the total population. One of the goals of the South Dakota Shooting Sports Complex is to recruit and reactivate shooting sport participants in Meade and Pennington Counties and surrounding areas to increase the percentage of shooting sport participants. With this increase we could expect approximately 865 more shooters in Pennington County and 300 more in Meade County.

Shooting sport participants spend between \$100 and \$250 per month or \$1,200 - \$3,000 per year on shooting equipment, ammo, guns, etc. These numbers are considered to be low due to the current demand for and availability and prices of shooting sport products. Increasing the number of shooting sport participants in Meade and Pennington Counties would generate an estimated increase of \$503,570 in Meade County and \$1,038,000 - \$2,595,000 in Pennington County of additional money spent on shooting sports annually. Elevate Rapid City estimates that the proposed shooting sports complex will generate an additional \$2.7 million in sales at sporting goods stores in the Meade/Pennington area annually. The shooting sports complex locally will support 55 new jobs with \$1.8 million in additional payroll. They estimated an additional \$376,000 in tax payments.

The South Dakota Shooting Sports Complex will host a number of local and national shooting competitions and events which will generate significant positive economic impact to the area. As an example, Southwick Associates reported that the 2015 SSSF National Championship at the World Shooting and Recreational Complex in Sparta, Ill. contributed \$15,797,787 to the Illinois GDP, generated \$3,960,917 in tax revenues, and supported 245 jobs in the state.

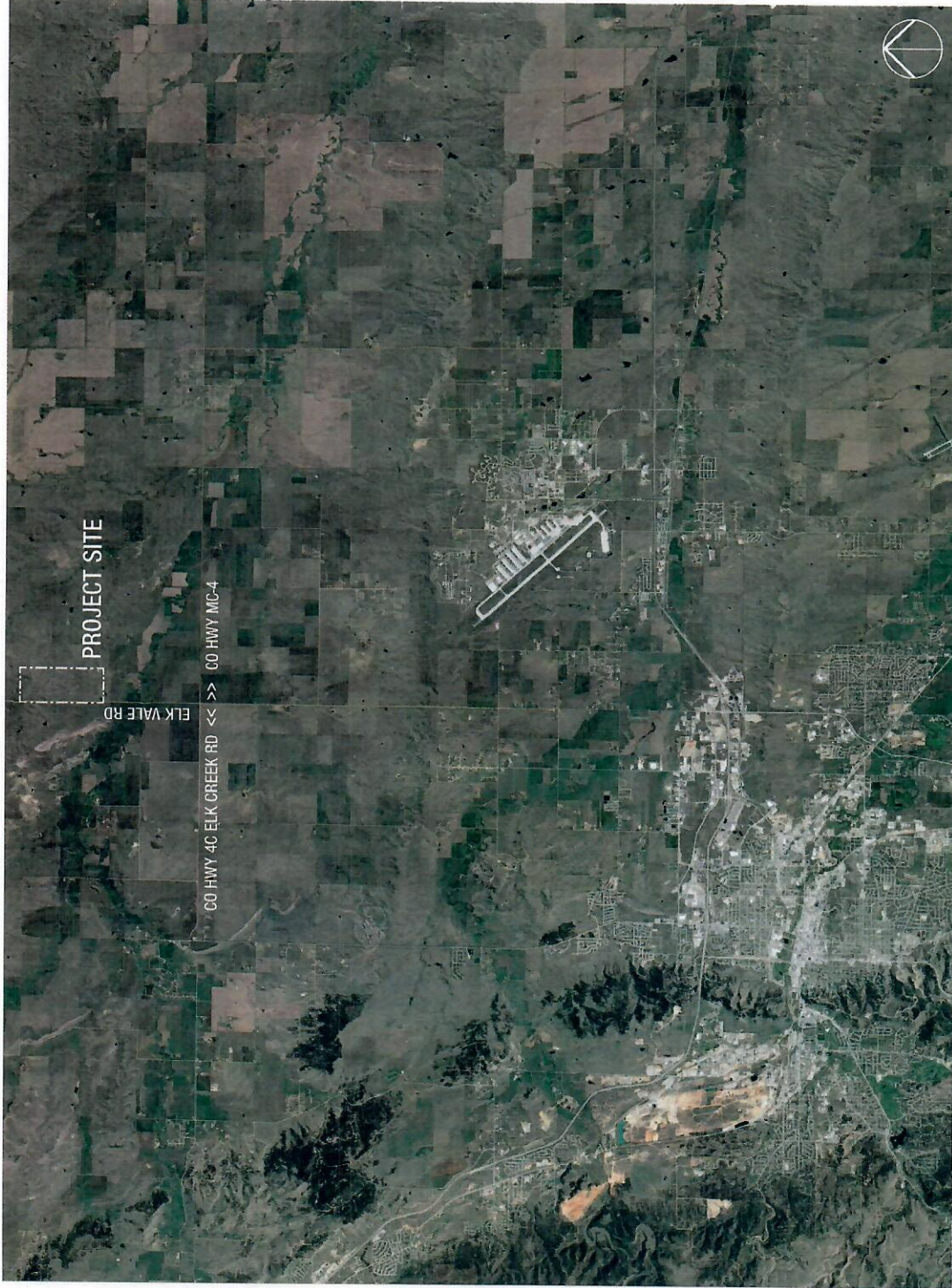
PROJECT PROGRAM



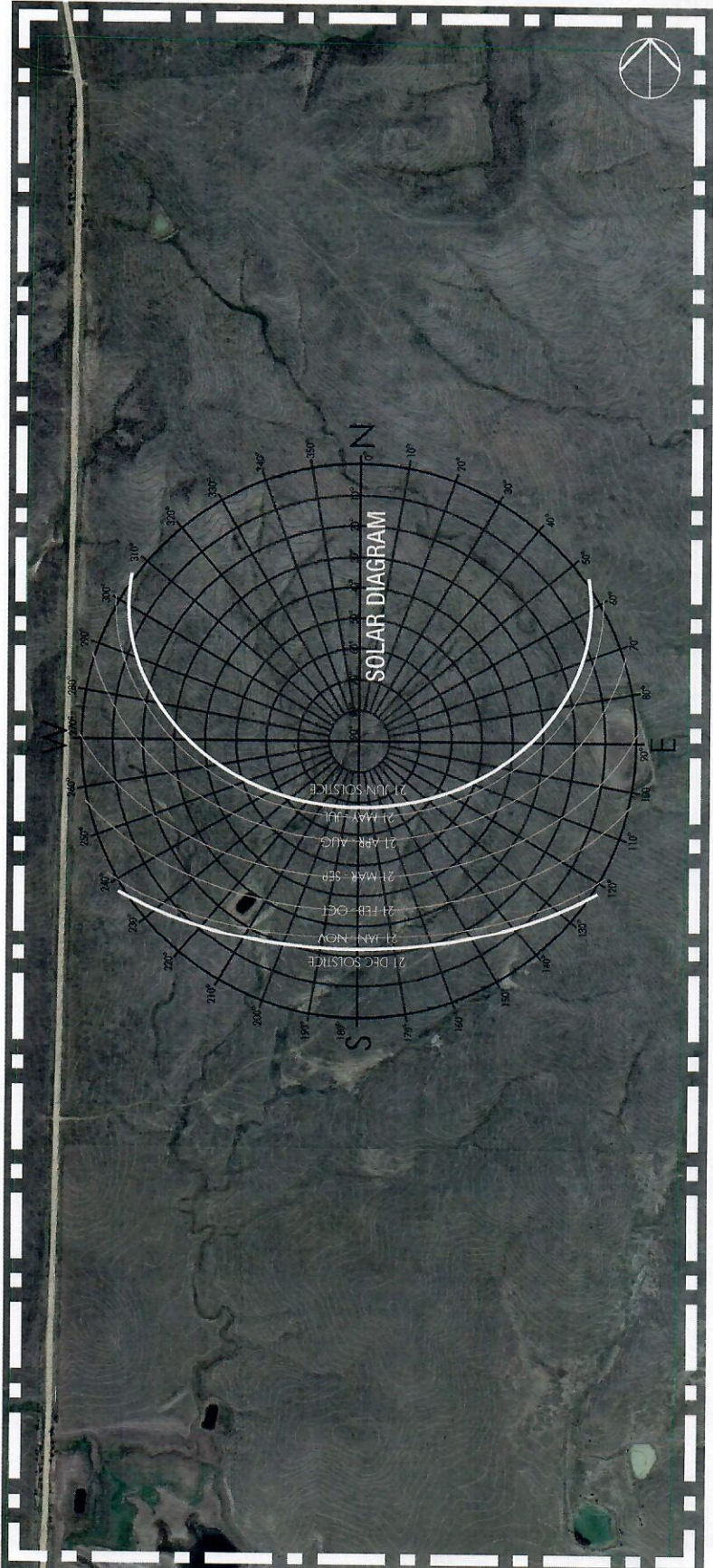
SD Shooting Sport Complex PROJECT PROGRAM

BUILDING FACILITY NET AREAS:							Area / Activity	Qty	Lanes	Dimension	Requirements	Equipment	Adjacencies	NOTES:
SOUTH END														
							Hunter Ed Building	1		60' x 110'	Overhead door into storage (for driving equipment in / out)		Good visual control of area from office window	Potential of using the space for air rifles. Will have a mezzanine, office space, bathrooms (single use - two), multiuse space for shooting lanes, classes, meetings, storage for equipment and targets.
							50-yard Bay	5	5 lanes per bay	18 yds x 50 yds per bay	Side and back berms	Two bays with shooting benches for 22.		
							100-yard Bay	6	10 lanes per bay	36 yds x 100 yds per bay	Side and back berms	muzzleloader, etc.		
							200-300 yard Shooting Area	1	40 shooting positions	43,000-yard area		Shooting benches		
							Stationary Shotgun Clay Target Area	10 stations	1 lane per station	10' x 10' shooting pad and 900' fallout range	Shooting window mounted to shooting area	Metal targets and shooting benches		
LONG RANGE														
							Long Range	1	20 lanes per bay	72 yds x 1,200 yds per bay	Longest target range set to 1,200-yds	Mounted clay bird throwers		
NORTH END														
							Action Bay	11	-	30 yds x 50 yds per bay	Each action bay to have a shelter and electrical power			
							Action Bay	3	-	30 yds x 75 yds per bay	Each action bay to have a shelter and electrical power			
							Action Bay	3	-	30 yds x 100 yds per bay	Each action bay to have a shelter and electrical power			
							Versatile Training Area	1	-	50 yds x 300 yds	Gravel path around the action area. Includes berming on all sides			
							Sporting Clays	12 stations	1 lane per station	10' x 10' shooting pad and 900' fallout range	Shooting window mounted to shooting area	Mounted clay bird throwers		

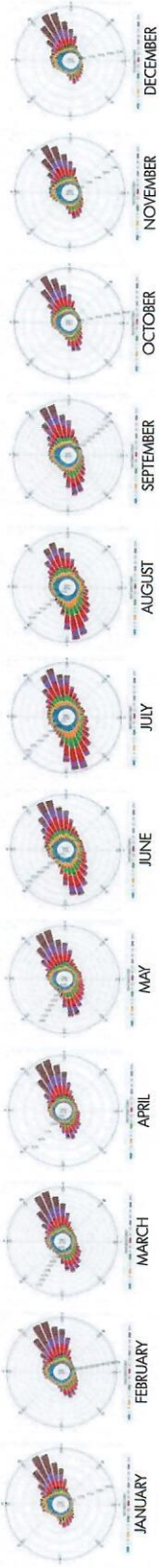
EXISTING SITE | SITE LOCATION



EXISTING SITE | SITE ANALYSIS



WIND ROSES



CASE STUDIES

CMP TALLADEGA MARKSMANSHIP PARK

CIVILIAN MARKSMANSHIP PROGRAM | TALLADEGA, AL

CMP is a national organization dedicated to training and educating U.S. citizens in responsibility uses of firearms and air rifles through gun safety training, marksmanship training and competitions.

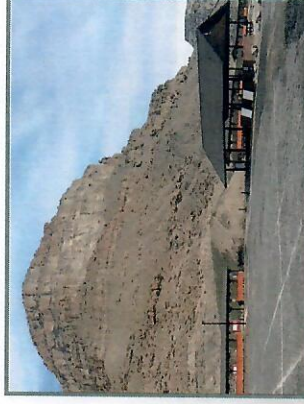


CAMEO SHOOTING AND EDUCATION COMPLEX

CAMEO SHOOTING AND EDUCATION COMPLEX | PALISADE, CO

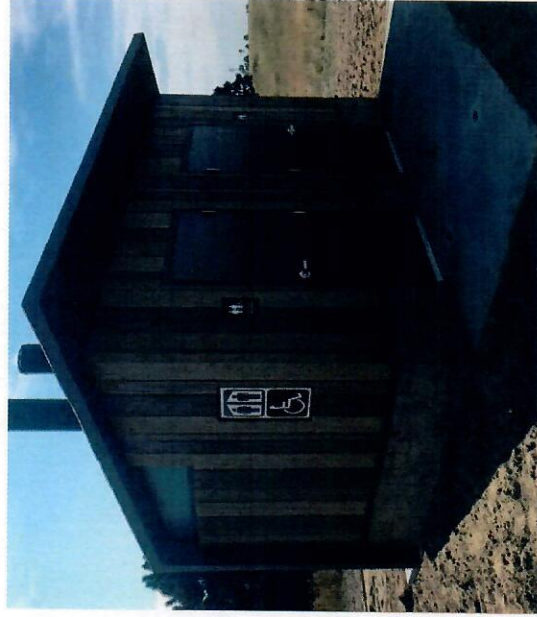
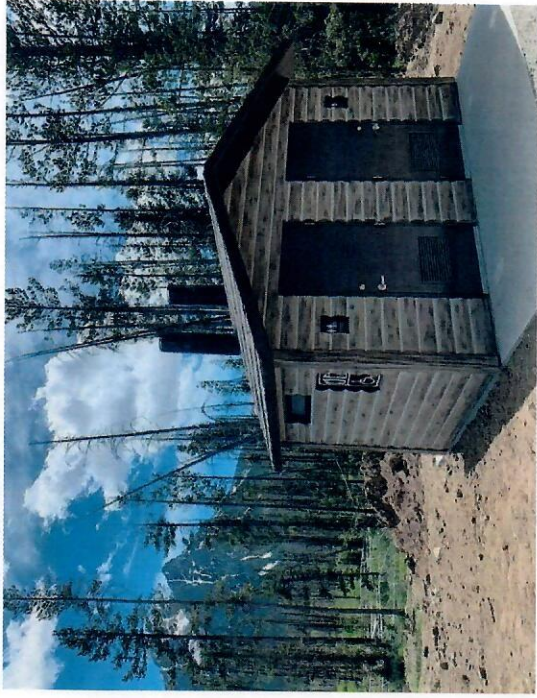
Thoughtfully designed by competitive shooters seeking to build a world-class shooting environment, the Cameo Shooting and Education Complex is a top destination for people from all over the world to participate in organized shooting competition.

The Complex serves as an educational and training facility, where kids can learn about the safe use of firearms and law enforcement can sharpen their skills.



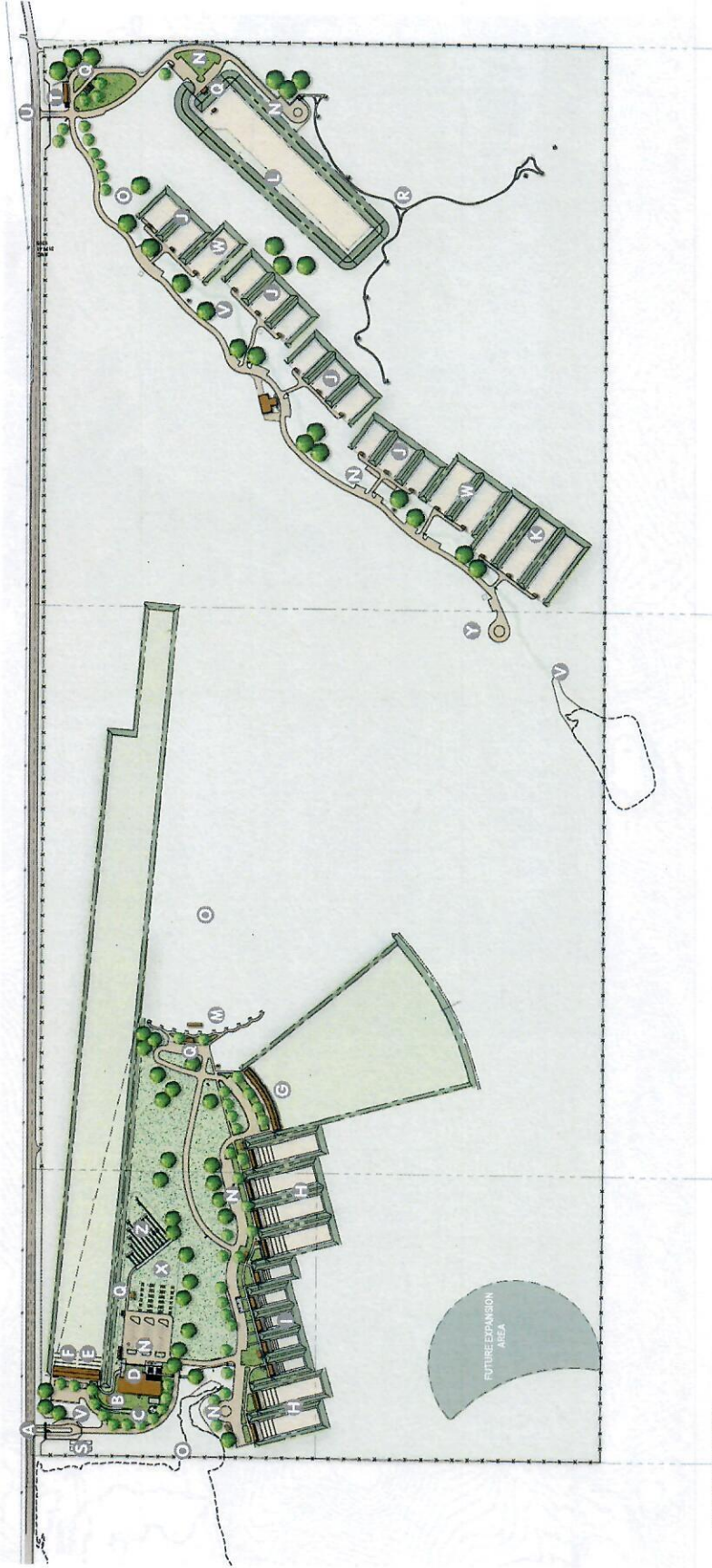
CASE STUDIES

SITE SUPPORT BUILDINGS



MASTER PLAN

OVERALL SITE

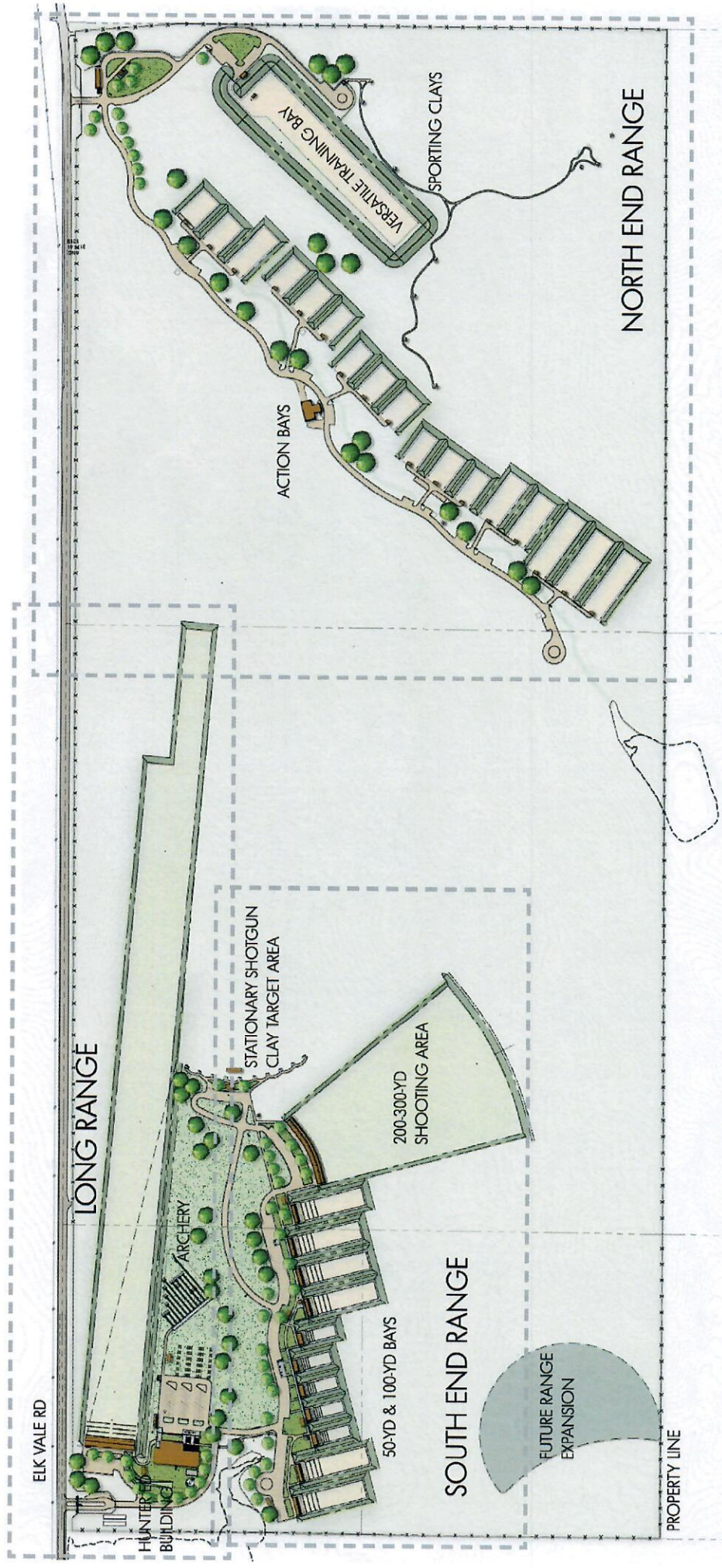


- MASTER PLAN LEGEND**
- A. SOUTH ENTRY WITH TURNAROUND
 - B. HUNTER EDUCATION BUILDING
 - C. ENTRY PATIO
 - D. PATIO
 - E. 1,200 YARD BAY
 - F. 1,000 YARD BAY
 - G. 200/300 YARD BAY
 - H. 100 YARD BAY
 - I. 50 YARD BAY
 - J. 50 YARD ACTION BAY
 - K. 100 YARD ACTION BAY
 - L. 50 X 300 YARD ACTION LAW ENFORCEMENT BAY
 - M. STATIONARY CLAY SHOOTING
 - N. PARKING
 - O. DRAINAGE AREA
 - Q. HAIL SHELTER
 - R. SPORTING CLAYS
 - S. SEPTIC AREA
 - T. STORAGE SHEDS
 - U. NORTH SECURED ENTRY
 - V. SWALE
 - W. 75 YARD ACTION BAY
 - X. MULTI-USE LAWN
 - Y. TURNAROUND
 - Z. 20 LANE ARCHERY RANGE



MASTER PLAN

PHASING PLAN



SOUTH END RANGE



The Complex's South End Range is intended to be open to the general public. A visible entrance feature will welcome guests to the Complex and provide navigation for visitors on the different areas to be accessed. Adequate wayfinding will be incorporated into the design for ease of navigation. The range provides a wide variety of areas to cater to the varied interest of hunters and recreational shooters.

SPECIFICATIONS

- 50-yard Bays
 - » Five (5) bays with five (5) lanes each
- 100-yard Bays
 - » Six (6) bays with ten (10) lanes each
 - » 200/300-yard Shooting Area
 - » Forty (40) shooting positions
- Stationary Shotgun Clay Target Area
 - » Ten (10) shooting positions with mounted clay bird throwers

LOGISTICS

- Parking lot with approx 100 stalls
- Parking area convenient from each bay
- Storage space
- Vault toilets located throughout

SHOOTING BAY AMENITIES

- Gravel surfacing
- Shade shelter outside action line

LONG RANGE



The Long Range will share an entrance to the South End Range and will operate concurrent from other areas. This area provides the maximum shooting lengths that the site allows. The range is rotated 5° from the road in order to avoid visual distractions along the road. This area is accessible to experienced shooters. The Hunter Ed Building will provide space for a staff office with good visibility of the range for when staff is present. A Central Green space can accommodate various uses including overflow parking, but also space for outdoor events.

SPECIFICATIONS

Long Range

- One (1) bay with twenty (20) lanes
- Two (2) shooting positions each lane
- F Class Position at 600-yards

Hunter Education Building

- Flexible use building
- Twelve (12) air rifle or archery lanes

LOGISTICS

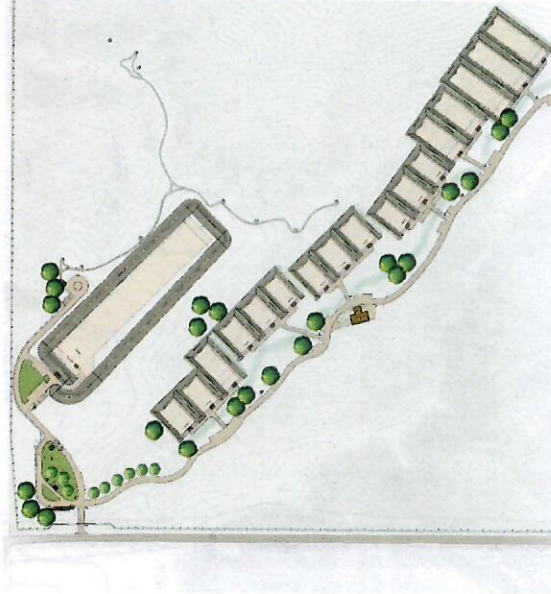
- Parking lot with approx 100 stalls
- Parking area convenient from each bay
- Storage space

SHOOTING BAY AMENITIES

- Gravel surfacing
- Shade shelter outside action line



NORTH END RANGE



The Complex's North End Range is located in the highest point of the site, the area with the most challenging topography, lending itself nicely to the Sporting Clays area. The North End Range will have controlled access and the entrance will not be prominently noticeable from the road. Adequate way-finding will be incorporated into the design for ease of navigation. The range provides a variety of areas to cater to the varied interest of the experienced shooters, shooting clubs and law enforcement groups.

SPECIFICATIONS

Action Bays

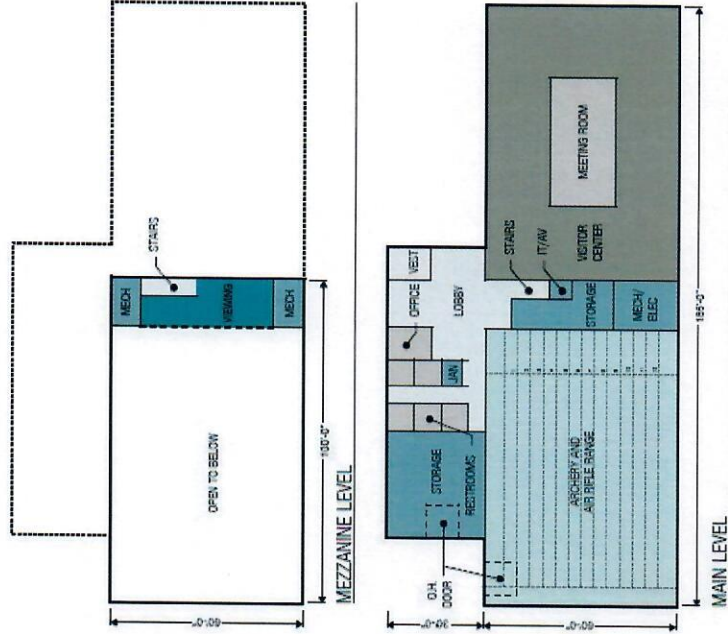
- » Eleven (11) 50-yard bays
- » Three (3) 75-yard bays
- » Three (3) 100-yard bays
- Versatile Training Bay
- Sporting Clays (Shotguns)
- Twelve (12) shooting positions with mounted clay bird throwers

LOGISTICS

- Parking area convenient from each bay
- Area for placement of storage sheds
- Vault toilets located throughout



HUNTER ED BUILDING



SPECIFICATIONS

Dimensions: 60' x 110'

POTENTIAL USES

- Hunter Education Classes
- Large / Small Meeting Capacity
- Staff Office
- Storage with direct exterior access
- Air Rifle or Archery lanes with twelve (12) shooting lanes at 20-yds

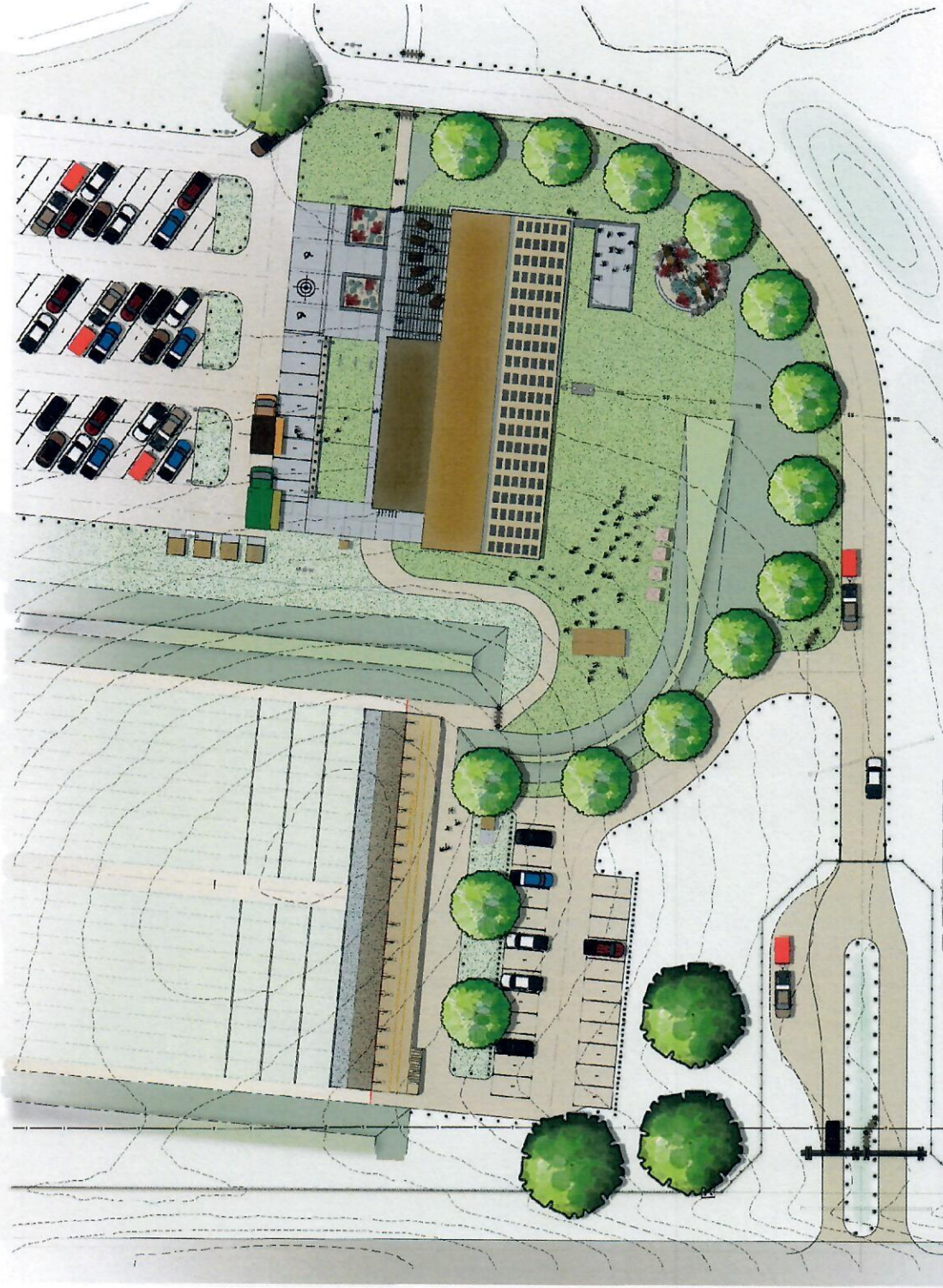
USERS

- Education staff and students
- Youth Groups
- Shooting sport groups

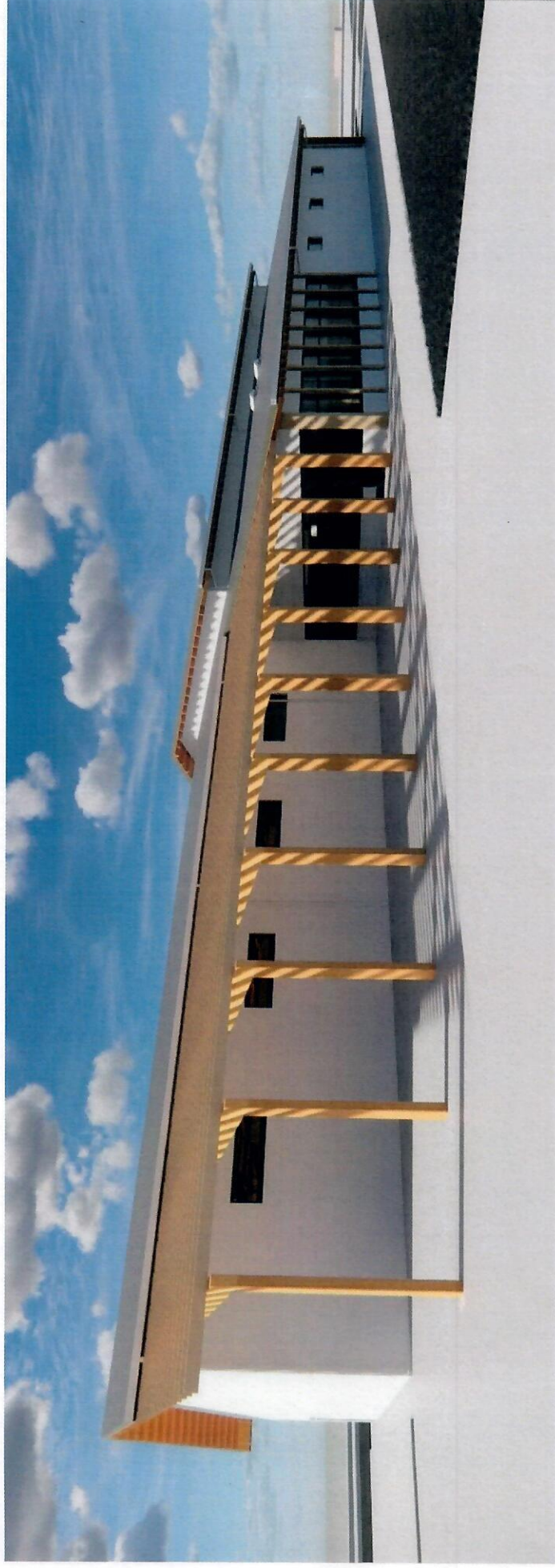
AMENITIES

- Power
- Water
- Technology
- Views of South Range

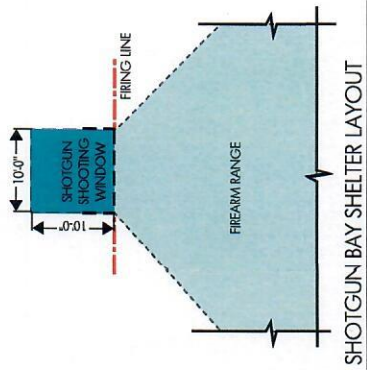
HUNTER ED BUILDING AND PLAZA



HUNTER ED BUILDING 3D RENDERING



TYPICAL RANGE SHELTERS



SHOTGUN BAY SHELTER LAYOUT



TYPICAL LAYOUTS

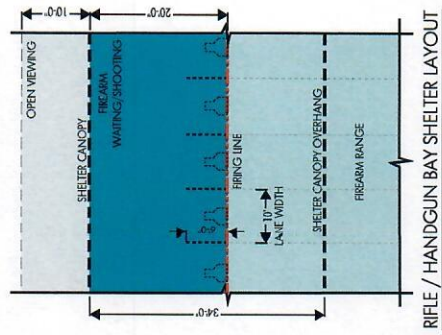
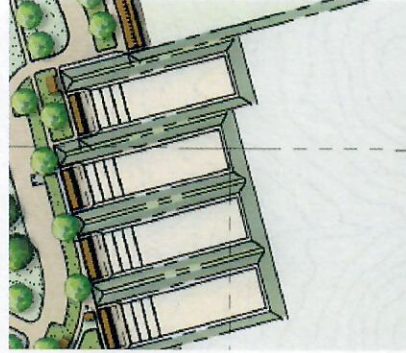
50 YARD RANGE

LOCATION	South End Range
SPECIFICATIONS	Five (5) bays with five (5) lanes each Two (2) of the lanes with benches Storage shelf / table at shooting lanes
DIMENSIONS	Lane: 10' wide Side Boundary: 8' wide First Target Line: 25 yards Second Target Line: 50 yards Back Berm: 52 yards
TARGETS	Paper Targets on Target Backer
BERM HEIGHT	Sides: 12' minimum design height End: 20' minimum design height
Primary Weapons:	Pistols, muzzle loaders, and possibly rifles for sighting in
Age Range:	Users of all ages
Experience Level:	Novice to Experienced
Potential associated use:	Possibly some competition shooting and club days for local gun clubs.



100 YARD RANGE

LOCATION	South End Range
SPECIFICATIONS	Six (6) bays with ten (10) lanes each All lanes with benches - ambidextrous
DIMENSIONS	Lane: 10' wide Side Boundary: 8' wide First Target Line: 50 yards Second Target Line: 75 yards Third Target Line: 100 yards Back Berm: 106 yards
TARGETS	Paper Targets on Target Backer
BERM HEIGHT	Sides: 12' minimum design height End: 20' minimum design height
Primary Weapons:	Rifles
Age Range:	Users of all ages
Experience Level:	Novice to Experienced
Potential associated use:	Possibly some competition shooting and club days for local gun clubs.



RIFLE / HANDGUN BAY SHELTER LAYOUT



TYPICAL LAYOUTS

200-300 YARD RANGE

LOCATION

South End Range

SPECIFICATIONS

Forty (40) shooting positions
All lanes with benches - ambidextrous

DIMENSIONS

Lane: 10' wide
Side Boundary: 8' wide
First Target Line: 100 yards, then at each 25 yard line after
Back Berm: 306 yards

TARGETS

Steel Targets

BERM HEIGHT

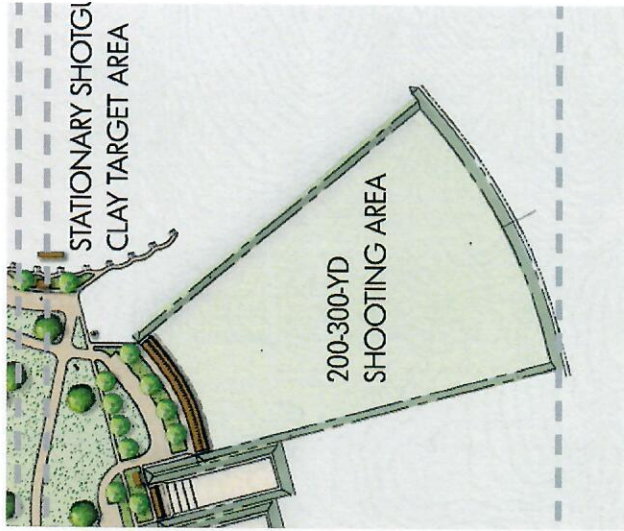
Sides: 12' minimum design height
End: 20' minimum design height

Primary Weapons: Rifles

Age Range: Teenager and older

Experience Level: Novice to Experienced

Potential associated use: Used for long range shooting matches and precision rifle competitions.



1,000 AND 1,200 YARD RANGE

LOCATION

Long Range

SPECIFICATIONS

One (1) bay with twenty (20) shooting positions
All lanes with benches - ambidextrous

DIMENSIONS

Lane: 10' wide
Side Boundary: 8' wide
First Target Line: 300 yards, then at each 100 yard line after
Back Berm: 1,200 yards

TARGETS

Steel Targets

BERM HEIGHT

Sides: 12' minimum design height
End: 20' minimum design height

Primary Weapons: Rifles

Age Range: Teenager and older

Experience Level: Experienced

Potential associated use: Open to the public. Used for long range shooting matches and precision rifle competitions.



TYPICAL LAYOUTS

STATIONARY SHOTGUN CLAY TARGET AREA

LOCATION

South End Range

SPECIFICATIONS

Ten (10) shooting locations
Clay bird throwers bolted down

DIMENSIONS

10' x 10' concrete pad
Shooting frame
900' fall out area

TARGETS

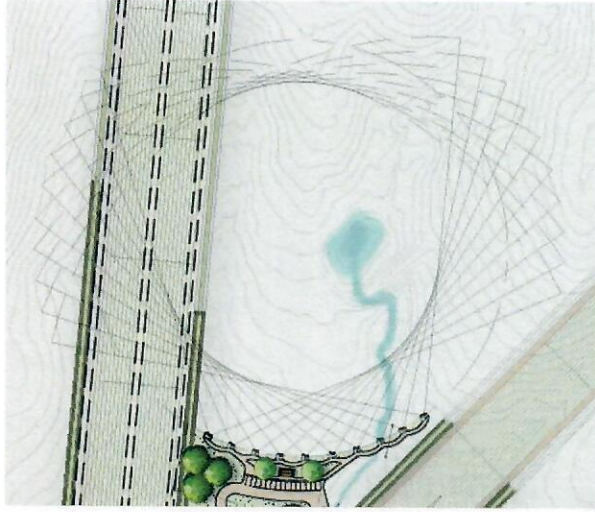
Clay birds

Primary Weapons: Shotguns with non-toxic ammo

Age Range: Users of all ages

Experience Level: Novice to Experienced

Potential associated use: Used by local clubs for contests.



ACTION BAYS

LOCATION

North End Range

SPECIFICATIONS

Eleven (11) bays - 50 yard length
Three (3) bays - 75 yard length
Three (3) bays - 100 yard length

DIMENSIONS

Bay: 30 yards wide
Side Boundary: 8' wide
Targets: By user group
Back Berm: 56 yards, 81 yards, 106 yards depending on bay length

TARGETS

By user group

BERM HEIGHT

Sides: 12' minimum design height
End: 20' minimum design height

Primary Weapons: Multiple Weapons

Age Range: Teenager and older

Experience Level: Experienced - Limited public access to range

Potential Associated Use: Primarily used by shooting groups.



TYPICAL LAYOUTS

VERSATILE TRAINING BAY

LOCATION

North End Range

SPECIFICATIONS

One (1) bay - 50 yards by 300 yards

DIMENSIONS

Bay: 300 yards wide

Side Boundary: 8" wide

Back Berm: 56 yards

TARGETS

By user group

BERM HEIGHT

Sides: 12" minimum design height

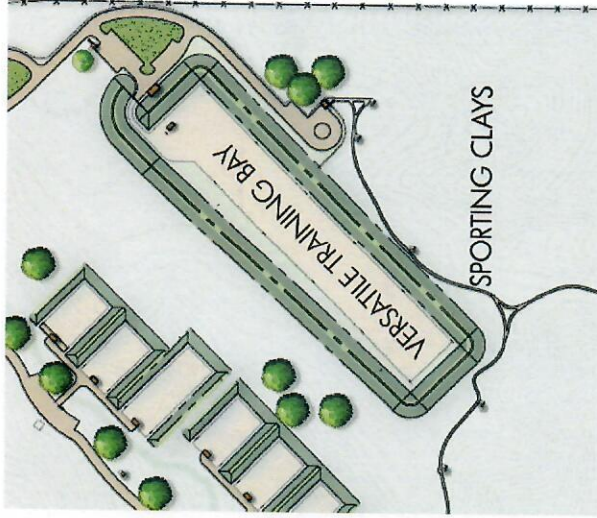
End: 20" minimum design height

Primary Weapons: Multiple Weapons

Age Range: Teenager and older

Experience Level: Experienced / Professional - Limited public access to range

Potential Associated Use: Multiple use area for competition matches, shooting clubs, archery, general public use and law enforcement training and qualifying area. Used by local police, sheriff, federal agencies and GFP IE.



SPORTING CLAYS

LOCATION

North End Range

SPECIFICATIONS

Twelve (12) shooting locations

DIMENSIONS

10' x 10' concrete pad

Shooting frame

900' fall out area

TARGETS

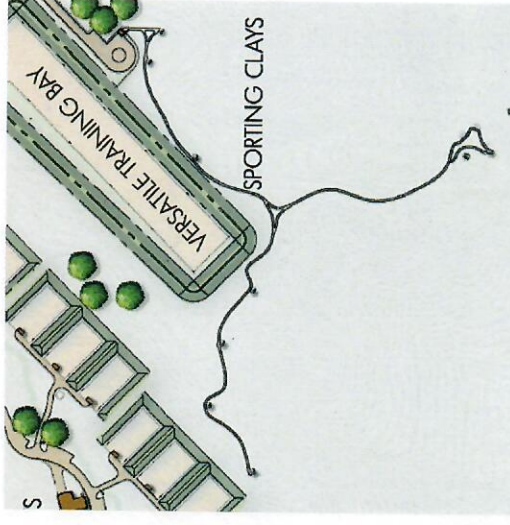
Clay birds

Primary Weapons: Shotguns

Age Range: Users of all ages

Experience Level: Novice to experienced - Limited public access to range

Potential Associated Use: Used by local clubs for contests and limited public access.



**WE SERVE AND CONNECT PEOPLE AND FAMILIES TO THE
OUTDOORS THROUGH EFFECTIVE MANAGEMENT OF OUR STATE'S
PARKS, FISHERIES AND WILDLIFE RESOURCES.**



Appendix B

**Consultation with the State Historic Preservation
Office**



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

November 15, 2021

Jenna Carlson Dietmeier, Review and Compliance Coordinator
State Historic Preservation Center
Cultural Heritage Center
900 Governor's Drive
Pierre, SD 57501

Re: Rapid City Shooting Range Development

Dear Ms. Carlson Dietmeier:

The South Dakota Department of Game, Fish & Parks (GFP) plans to develop a shooting complex north of Rapid City, SD in Meade County. This project will be funded by utilizing Pittman-Robertson grant funding from the United States Fish and Wildlife Service's Wildlife Restoration Program.

The Rapid City Shooting Range will be located approximately 11 miles north of Rapid City, SD on Elk Vale Road/Meade County Highway 13. The construction area will be located on 400 acres of prairie land and is described legally as W ½ Section 34, Township 4N, and Range 8E and NW ¼ Section 03, Township 3N, and Range 8E in Meade County, SD. A map of the location is enclosed.

The development being proposed will include three different areas, Long-Range, South End Range, and North End Range, all located within within the legal description of the land described above.

The Long-Range will consist of a single bay that will be approximately 100' wide that will have targets scattered throughout the range ranging from 300 yards to 1,200 yards. This area will also consist of a 60'x110' Hunter Education Building, gravel parking lot to accommodate approximately 100 parking stalls, gravel access roads to the parking lot, hunter education building and shooting bay, shade shelters outside of the shooting bay, and a leveled area for a central green area.

To construct the Long-Range area, the area will be leveled and graded, and all the excess dirt will be utilized to build minimum 12' tall side berms and a minimum 20' tall end berm of the long-range shooting bay. Concrete footers and base will be poured on top of gravel to complete the foundation of the Hunter Education Building and four to eight inches of gravel will be placed and compacted to complete the parking area and access roads. The shade shelter outside of the shooting will have 10'x10'x4" concrete pads poured, and the shelter attached to the top of the concrete.



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

The South End Range will consist of six 50 yard bays that are approximately 50' wide, six 100 yard bays that are approximately 100' wide, one 200/300 yard shooting area approximately 400' feet wide, ten spot stationary clay target area, gravel access roads and small parking lots by each bay and shooting area, concrete sidewalks and pads at each shooting bays and a 10 stands clay target area, and 13'6"x9'6"x56" concrete vault toilets at each end of the shooting areas.

To construct the South End Range, the areas will be leveled and graded, and all the excess dirt will be utilized to build minimum 12' tall side berms and minimum 20' tall end berms for each bay and the 200/300 yard shooting area. To complete the clay target shooting area, the area will be leveled and the excess dirt will be utilized to fill in a manmade dugout. 10'x10'x4" concrete pads will be poured and stationary clay target throwers will be placed on top of the pads utilizing lag bolts. To install the concrete vault toilets, we will need to excavate holes that are approximately 13'6"x9'6"x56".

Approximately 4" of gravel will placed at the bottom of the holes and a concrete vault will placed inside of the hole and a concrete house will be placed on top of the vault.

The excess dirt will be utilized to back fill the hole or utilized in the berm building.

Approximately 4" to 8" of gravel will be placed and compacted to form roads and parking areas for vehicles by each bay. 48"x4" concrete sidewalks and pads will be built to make the shooting areas ADA compliant.

The North End Range will consist of a leveled area for storage sheds, eleven 50 yard action bays that are approximately 90' wide, three 75 yard bays approximately 90' wide and three 100 yard bays approximately 90' wide, one versatile training bay that will be 300 yards long by 50 yards wide, a twelve spot sporting clays area, gravel roads attaching the areas with gravel parking spots by each area, and concrete vault toilets located throughout the North End Range.

To construct the North End Range, the area will be leveled and graded, and all the excess dirt will be utilized to build minimum 12' tall side berms and minimum 20' tall end berms at all the bays. To construct the sporting clays area, a gravel 48"x4" walking trail will be constructed to 12 shooting locations that have a 10'x10'x4' concrete pad with an attached clay thrower. Approximately 4" to 8" of gravel will be placed and compacted to form roads and parking areas for vehicles by each of the bays and a parking area for the sporting clays. To install the concrete vault toilets, we will need to excavate holes that are approximately 13'6"x9'6"x56". Approximately 4" of gravel will placed at the bottom of the holes and a concrete vault will placed inside of the hole and a concrete house will be placed on top of the vault. The excess dirt will be utilized to back fill the hole or utilized in the berm building. Approximately 4" to 8" of gravel will also be placed and compacted in a level area so storage sheds maybe moved in and placed.

Sewer, water and electrical utilities will also be trenched into the area. Sewer, water, and electrical will need to go into the Hunter Education building in the Long-Range area



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

of the shooting complex and electrical will be trenched to all shooting bays and areas for possible expansion of lights and cameras.

The gravel will be obtained from an offsite source which is an existing permitted commercial pit. This project will be advertised and bid through a competitive bidding process as required by South Dakota Law.

A search of the SDARMS Database was completed. The SDARMS Database did not produce any archaeological findings in the vicinity. South Dakota GFP contacted ARC to complete a Class I record search. That search did not find any archaeological sites, cultural resources surveys, or structures documented. A Class III intensive cultural resources survey was conducted by ARC. The investigation conducted by ARC resulted in five new archaeological sites. New site 39MD1025 is an American Indian stone cairn site which is eligible for NRHP. There were four other sites, 39MD1026, 39MD1027, 39MD1028, and 39MD1029 that were concluded to be isolated finds and are recommended Not Eligible for NRHP listing. With the current construction plans of the shooting complex, site 39MD1025 will not be disturbed. As a result of the current survey and SHPO concurs with the eligibility recommendations, ARC investigators recommend a Section 106 Finding of No Historical Properties Affected.

Given the above information, we recommend a determination of "No Historic Properties Affected". However, we will await your written concurrence or alternate recommendations.

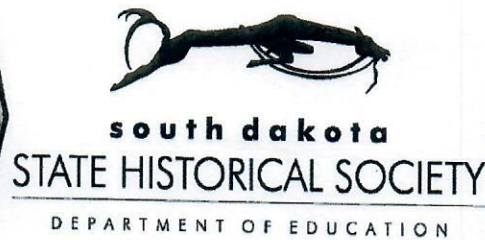
Thank you for your review and assistance with this request.

Please contact me at 605-773-4675 if you have any questions.

Sincerely,

Graham Larson
Grant and Loan Specialist

Enclosures: Project Location Map, A Class III Intensive Cultural Resources Survey for South Dakota Game, Fish and Parks Rapid City Firearms Range Complex, Meade County, South Dakota



November 18, 2021

Mr. Graham Larson
Department of Game, Fish and Parks
Foss Building
523 East Capitol Avenue
Pierre, SD 57501



SECTION 106 PROJECT CONSULTATION

Project: 211117001F – Rapid City Shooting Range Development – T4N, R8E, Sec 34; T3N, R8E, Sec 3

Location: Meade County
(USFWS/GFP)

Dear Mr. Larson:

Thank you for the opportunity to comment on the above referenced project pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended), and the agreement titled *Programmatic Agreement By and Among the Department of Interior, the United States Fish and Wildlife Service, the Advisory Council on Historic Preservation, South Dakota Department of Game, Fish and Parks, and the South Dakota State Historic Preservation Officer regarding United States Fish and Wildlife Service Habitat Restoration Programs, Endangered Species Act Grant Program (and Other Small Grant Programs Administered by the United States Fish and Wildlife Service)*. The South Dakota Office of the State Historic Preservation Officer (SHPO) concurs with your determination regarding the effect of the proposed undertakings on the non-renewable cultural resources of South Dakota.

On November 17, 2021, we received your letter dated November 15, 2021, and the report titled "A Class III Intensive Cultural Resources Survey for the South Dakota Game, Fish, and Parks Rapid City Firearms Range Complex, Meade County, South Dakota" by Matthew D. Busch of the Archaeological Research Center (CIS No. 3902). Mr. Busch's report indicates that five archaeological sites were recorded during the survey efforts of the proposed shooting range property. Based upon the information provided, 39MD1025 should be considered Eligible for listing in the National Register of Historic Places. Additionally, 39MD1026, 39MD1027, 39MD1028, and 39MD1029 should be considered Not Eligible for listing in the National Register of Historic Places.

Therefore, SHPO concurs with your determination of "No Historic Properties Affected" for the proposed undertaking, provided the following stipulations are met: 1) Eligible site 39MD1025 is avoided by all project activities, as indicated in your letter and in Mr. Busch's report. 2) Future

development or construction at the shooting range, even that without federal funding, should avoid impacts to 39MD1025 and its immediate surrounding, as such future impacts to the site could be an adverse effect to the site which is reasonably foreseeable and later in time from the proposed current federal undertaking, as described in 36 C.F.R. § 800.5(a)(1). 3) All necessary gravel for the undertaking should come from an existing, commercial source, as indicated in your letter.

Changes in the location of project activities, such as the need to obtain any additional fill material necessary for the undertaking, or changes in the nature of project activities, such as construction activities being altered to be in close proximity to 39MD1025, will require the submission of additional documentation pursuant to 36 C.F.R. § 800.4 and 36 C.F.R. § 800.11.

If historic properties are discovered or unanticipated effects on historic properties are found after the agency official has completed the Section 106 process, the agency official shall avoid, minimize or mitigate the adverse effects to such properties and notify the SHPO and Indian tribes that might attach religious and cultural significance to the affected property within 48 hours of the discovery, pursuant to 36 C.F.R. § 800.13.

Concurrence of the SHPO does not relieve the federal agency official from consulting with other appropriate parties, as described in 36 C.F.R. § 800.2(c).

Should you require additional information, please contact Jenna Carlson Dietmeier at Jenna.CarlsonDietmeier@state.sd.us or at (605)773-8370. Your concern for the cultural heritage of our state is greatly appreciated.

Sincerely,

Ted M. Spencer
State Historic Preservation Officer



Jenna Carlson Dietmeier
Review and Compliance Coordinator

CC: Jane Watts - Archaeological Research Center, Rapid City
Brian Huot - Archaeological Research Center, Rapid City
Cassie Vogt - Archaeological Research Center, Rapid City
David Williams - Archaeological Research Center, Rapid City

Appendix C
DANR Environmental Review Correspondence



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

October 18, 2021

Baylee Hoff
DANR Inspection, Compliance and Remediation
523 E Capitol Ave
Pierre, SD 57501

Re: Rapid City Shooting Range Development

Dear Ms. Hoff,

South Dakota Game, Fish and Parks is planning on constructing a shooting range on 400 acres of property approximately ten miles north of Rapid City, SD in Meade County, SD. The development of the range will consist of six 18x50 yard shooting bays, six 36x100 yard shooting bays, one 43,000 square yard shooting area, ten 10x10 feet stationary clay target areas, one 72x1200 yard shooting bay, parking area for 100 vehicles, 60'x110' multipurpose building, eleven 30x50 yard action bays, three 30x75 yard action bays, three 30x100 yard action bays, twelve 10x10 feet sporting clay positions, ten vault toilets, gravel roads to connect all shooting areas, one 50x300 yard versatile training bay, and steel shade canopies at every shooting bay. Please see attached drawings for more specific dimensions of all the various bays and shooting area. I have also attached topo maps of the north end of the property and the southern end of the property.

Please call me at 605.773.4675 or email at graham.larson@state.sd.us if you have any questions.

Sincerely,

Graham Larson
Grant and Loan Specialist
Division of Wildlife

Enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

November 15, 2021

Graham Larson
SD Game, Fish, and Parks
523 East Capitol Avenue
Pierre, SD 57501

Subject: Environmental Review- Rapid City Shooting Range

Dear Mr. Larson:

The South Dakota Department of Agriculture and Natural Resources (DANR) has reviewed the above-referenced project for potential impacts to natural resources. Based on the information submitted in your e-mail dated October 18, 2021, DANR has the following comments and permitting requirements.

Tanks and Spills

There have been numerous petroleum and other chemical releases throughout the state. However, a review of our records indicates no known releases have occurred within the project area. A review of our records for registered storage tanks also shows no known tanks within the project area. Please be aware that while we make efforts to provide and maintain accurate data, the location information provided to us is occasionally inaccurate or incomplete. Additional information about registered tanks and reported releases in South Dakota may be obtained at the following website <https://apps.sd.gov/NR42InteractiveMap#>

Since no registered tanks or known spills were found in the project area, it is unlikely that you will discover contaminated material. However, if contamination is discovered or occurs during construction, it must immediately be reported to DANR at 605-773-3296. Any contaminated soil should be segregated from clean soil and sampled to determine disposal requirements. Any material to be placed in a location where it will be in contact with contaminated soil or ground water should be evaluated to determine if it is compatible with the contaminant. If you have any questions, please contact Baylee Hoff at baylee.hoff@state.sd.us or (605) 773-3296.

Solid and Hazardous Waste

Some solid waste may be generated during this project. Any solid waste generated that will not be reused in some beneficial manner must be disposed or managed at a

permitted solid waste facility. Regional landfills able to accept all solid waste generated are listed on our website: <https://apps.sd.gov/NR60SolidWaste/main.html#>. Only Regional landfills are permitted to accept all wastes generated. If you have any questions, please contact Waste Management at 605-773-3153.

It is not expected that any hazardous wastes sites will be encountered within the vicinity of your project area. However, if road construction is planned for areas within a city or town, the contractor should contact this Department prior to construction. Should any hazardous waste be generated during the implementation of this project, the generator must abide by all applicable hazardous waste regulations. To determine whether your project may generate hazardous waste, visit: <https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses>. If you have any questions please contact Anthony Wagner at 605-773-3153, or anthony.wagner@state.sd.us.

Demolition or renovation of a building structure may be subject to the South Dakota asbestos requirements. If demolition or renovation is part of this construction project, or if the scope of the project changes to include demolition or renovation, please contact Anthony Wagner at 605-773-3153, or anthony.wagner@state.sd.us.

Air Quality

Based on the information provided, it appears this project will have minor impacts to air quality in South Dakota. This impact would be through source and fugitive emissions. In many cases, an air quality permit is required to operate equipment with point source emissions. A permit application can be obtained from the Air Quality or Minerals and Mining Program. Fugitive emissions, although not covered under State air quality regulations, are a common source of public concern and may be subject to local or county ordinances. Please contact your local officials to discuss requirements regarding fugitive emissions.

For further air quality information, please contact Anthony Lueck, Air Quality Program, telephone number 605-773-3151.

Drinking Water

Based on the information provided, this project will not have adverse environmental effects to drinking water in this area. Should the parameters of your project change, please reach out to Mark Mayer at 605-773-6039 or Mark.Mayer@state.sd.us.

Surface Water

The Surface Water Quality Program (SWQ) has reviewed your request for comments letter. Based on the information provided, SWQ has the following comments:

1. At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water

Discharges Associated with Construction Activities. Contact the Department of Agriculture and Natural Resources for additional information or guidance at 1-800-SDSTORM (1-800-737-8676) or

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/default.aspx>.

Additionally, the shooting range facility should be designed with permanent measures to ensure that all storm water is contained and does not run off site or run to waters of the state.

2. A Surface Water Discharge permit may be required if any construction dewatering should occur as a result of this project. Please contact this office for more information.
3. Impacts to tributaries, creeks, wetlands, and lakes should be avoided by this project. These waterbodies are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that water quality standards are not violated.

The design of the shooting range facility should be such that shooting is not purposefully directed over or near any waters of the state. This includes shooting using non-toxic ammunition above or near ponds or drainages.

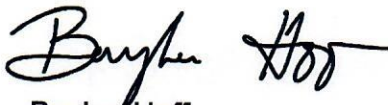
4. The discharge of pollutants from any source, including indiscriminate use of fill material, may not cause destruction or impairment except where authorized under Section 404 of the Federal Water Pollution Control Act. Please contact the United States Army Corps of Engineers for more information 605-224-8531.

Groundwater

Based on the information provided, this project is unlikely to have adverse effects on ground water quality provided recommended design criteria and best management practices are followed. Should the parameters of your project change, please reach out to Matt Hicks at 605-773-5337 or Matt.Hicks@state.sd.us.

Thank you for providing DANR the opportunity to comment on this project. If you have any questions regarding the information provided, please contact me at 605-773-3296.

Sincerely,



Baylee Hoff
Environmental Scientist
SD DANR- Environmental Assessment Contact
Phone: (605) 773-3296
Email: Baylee.Hoff@state.sd.us

Cc: Eric Pearson, Meade County EM, Sturgis, SD

Larson, Graham

From: Minerich, Shannon
Sent: Tuesday, November 23, 2021 6:29 AM
To: Larson, Graham
Subject: shooting range project

Hi Graham – I reached out to our industrial permitting stormwater folks on the potential need for an Industrial Permit and subsequent possible detention ponds. Their response is that an Industrial permit is not required (but of course you can if you want to!) and that they never really specify that someone needs a retention pond. Therefore, like I mentioned in the meeting, SD DANR is not recommending GFP build retention ponds for the shooting range project – but to use BMPs to keep lead out of any water, and any of that water from getting to waters of the state. Hope this helps! Thanks.
Shannopn

Appendix D

**Consultation with South Dakota GFP on
Threatened and Endangered Species**



Environmental Review Report

Project Information

Report Generation Date: 4/6/2021 09:22:56 AM
Project ID: 2021-04-06-067
Project Title: Rapid City Shooting Range
User Project Number(s):
Project Type: Parks and Recreation Areas, Recreation area development and maintenance
Project Activities: Rifle and archery ranges
County(s): Meade
Township/Range/Section(s): 003N008E3; 004N008E34
Watershed(s) HUC8: None
Latitude/Longitude: 44.262196 / -103.145715

Contact Information

Organization: South Dakota Department of Game, Fish and Parks
Contact Name: Graham Larson
Contact Phone: 605-773-4675
Contact Email: graham.larson@state.sd.us
Contact Address: 523 E Capitol Pierre SD 57501
Submitted On Behalf Of:

Project Description

We are looking to develop a rifle, pistol, and shotgun shooting range on this piece of property. It will have multiple bays for rifle and pistol shooting from 25 yards to 200 yards. We will also have an area for shooting up to 1,000 yards. This place will also be including multiple shooting bays for competition shooting and LE training. We do not have a final design as of yet but each bay will have approximately 10-20 foot dirt berms built to contain bullets. The 1,000 yard part of the range will use natural berms in the hill sides to contain bullets.



Introduction

The vision of South Dakota Department of Game, Fish and Parks (SDGFP) is to conserve our state's outdoor heritage to enhance the quality of life for current and future generations. SDGFP has a state-wide mission to manage wildlife and the habitats upon which they depend for their ecological values and enjoyment by the citizens of South Dakota and visiting publics. SDGFP strives to prevent or minimize unnecessary damage to species and their habitats by offering possible mitigation measures or alternative project actions.

Disclaimer

The information provided in this report can only be used as a site clearance letter if no conflicts with sensitive wildlife resources were detected. This information provides an indication of whether or not public or protected lands and sensitive resources are known or likely to be located near the proposed project's location. The information generated in this report does not replace Endangered Species Act consultation obligations with the U.S. Fish and Wildlife Service (USFWS) for federal listed species.

A majority of the sensitive species records in the report originate from the South Dakota Natural Heritage Database (SDNHD). The SDNHD tracks species at risk and certain unique habitats. These species may be monitored because they are rare, indicative of a vulnerable habitat type, or are legally designated as state or federal threatened or endangered species. Rare species are those that are declining and restricted to limited habitat, peripheral to a jurisdiction, isolated or disjunct due to geographic or climatic factors or classified as such due to lack of survey data. A list of monitored species can be found at <https://gfp.sd.gov/natural-heritage-program/>. Many places in South Dakota have not been surveyed for rare or protected species and habitats and the absence of a species from a proposed project area does not preclude its presence. **Accuracy of species lists, report information and project recommendations should be verified after 90 days.**

No environmental conflicts were detected by South Dakota Game, Fish and Parks for your proposed project. This report is considered final, and can serve as documentation for environmental clearance from South Dakota Game, Fish and Parks. This report does not replace coordination with the US Fish and Wildlife Service for Endangered Species Act compliance.



Project Type Recommendations

Revegetation

- Disturbance to native vegetation should be kept to a minimum.
- Any disturbed area should be revegetated using native seed sources.
 - The Natural Resources Conservation Service Plant Materials Center in Bismarck, ND may serve as a good source of information on native plantings (<http://plant-materials.nrcs.usda.gov/ndpmc/>).
- Develop a long-term plan for preventing the introduction or establishment of non-native/invasive flora (plants) within the development and identify the financial means to do so for the duration of the project.

A bald eagle nest was located near the proposed project. South Dakota Game, Fish and Parks recommends a 0.5 mile buffer from active bald eagle nests during the nesting season (February - August).

Legal Obligations

South Dakota Endangered and Threatened Species Law

This state law (Chapter 34A-8) defines nongame, threatened and endangered species and wildlife and describes the relevant authorities of the Game, Fish and Parks Secretary and Commission. The SDGFP Commission may list, delist or change the status of state threatened or endangered species. The Secretary shall conduct investigations to address information needs on population, distribution, habitat needs, limiting factors and other data gaps to ensure these species are managed in perpetuity. Take of state threatened or endangered species is prohibited except for certain, authorized purposes or to protect life or property. This state law also prohibits the reintroduction of a species on the federal list of threatened or endangered species that is considered extirpated from the state, unless authorized by the South Dakota Legislature. More information about obtaining a state endangered take authorization is available here:

<https://gfp.sd.gov/forms/endangeredspecies/>

Aquatic Invasive Species

South Dakota Administrative Rule 41:10:04:02 forbids the possession and transport of aquatic invasive species (AIS). Any construction vehicles, vessels, or equipment that will come into contact with surface waters in South Dakota that have previously been used outside of the state or in and AIS positive water within South Dakota must be thoroughly power washed with hot water (>140°F) and completely dried for a minimum of 7 days prior to use. All attached dirt, mud debris and vegetation must be removed and all compartments and tanks capable of holding standing water shall be drained and dry. This applies, but is not limited to, all equipment, pumps, lines, hoses and holding tanks. The list of AIS positive waters is available



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

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at <http://sdleastwanted.com/maps/default.aspx> or by calling 605-223-7706.

Federal Laws

The following federal laws contribute to the conservation and management of fish and wildlife resources in the United States: Endangered Species Act, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Clean Water Act, and the Fish and Wildlife Coordination Act. The National Environmental Policy Act (NEPA) requires compliance with these statutes and regulations.

Contact Information

U.S. Fish and Wildlife Service, Ecological Services Field Office 420 S. Garfield Ave, Suite 400
Pierre, South Dakota 57501 605-224-8693

U.S. Army Corp of Engineers, South Dakota Regulatory Office 28563 Powerhouse Road
Pierre, South Dakota 57501 605-224-8531

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). Under this federal act, “take of eagles, their parts, nests or eggs is prohibited unless a permit is issued for certain purposes and under certain circumstances as long as the authorized take is compatible with the preservation of eagles. Disturbance resulting in injury, decreased productivity, or nest abandonment by substantially interfering with normal breeding, feeding or sheltering behavior is also considered take. This report does not replace consultation with the USFWS regarding the protection of bald and golden eagles. Eagle nests are protected under this law, whether active or inactive.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S. C. 703-712) provides international protection to migratory bird species included in treaties among the United States, Great Britain, Mexico and Japan. This federal act prohibits the taking, killing, possession and transportation (among other actions) of migratory birds, their eggs, parts, and nests, unless specifically permitted by regulations. This act has no provisions for allowing unauthorized take. Effective steps can be taken to avoid take of migratory birds. Work closely with the USFWS to identify protective measures to avoid migratory bird take. A list of migratory bird species protected under this act can be found at 50 CFR 10.13. Introduced bird species are not protected under this Act. This report does not replace consultation with the USFWS regarding the protection of migratory bird species.

Endangered Species Act

The Endangered Species Act (16 U.S.C. 1531–1544) provides protections for native plant and



animal species that are in danger of becoming extinct. Under Section 9, it is unlawful for the “take” of a listed species. This is defined as “... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct”. However, a permit may be issued for take that is the result of an otherwise legal activity. Please contact the USFWS to determine if a permit is needed.

The USFWS is in charge of the protection of listed species and their critical habitat. Similarly, other federal agencies are also directed to conserve listed species and ensure their actions do not jeopardize a listed species existence or destroy or adversely modify critical habitat. As such, under Section 7, federal agencies should consult with the USFWS to ensure compliance with this Act. This report does not replace consultation with the USFWS regarding listed species.

Clean Water Act

The intent of the Clean Water Act (33 U.S.C. 1251 et seq.) is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”. SDGFP has concerns for any impacts to wetlands, streams and riparian habitats from development. We recommend that proper planning take place to first and foremost avoid impacts to wetlands, streams, and associated riparian corridors. If dredge or fill materials will be placed into waterways or wetlands, the U.S. Army Corps of Engineers Regulatory Office should be contacted to determine if a 404 permit is needed.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (15 U.S.C. 661-667e) provides habitat protection by requiring a federal agency to consult with the USFWS and SDGFP (i.e. the state fish and wildlife agency) whenever an agency is proposing to control or modify a stream or other body of water. The intent of this consultation is to conserve wildlife resources by preventing habitat loss or damage. If control or modification of a water body is proposed, please begin consultation with the USFWS and SDGFP.

Table 1. Special Status Species Documented within 800 Meters of Project Vicinity

Scientific Name	Common Name	Taxonomic Group	Federal Status*	State Status*	Global Rank*	State Rank*	SGCN	Last Obs Date
Fundulus sciadicus	Plains Topminnow	Fish			G4	S3		

To update this text, see Admin - Report Texts - Static - project-report-footnote-table-1

No Protected Lands were detected within the project vicinity.

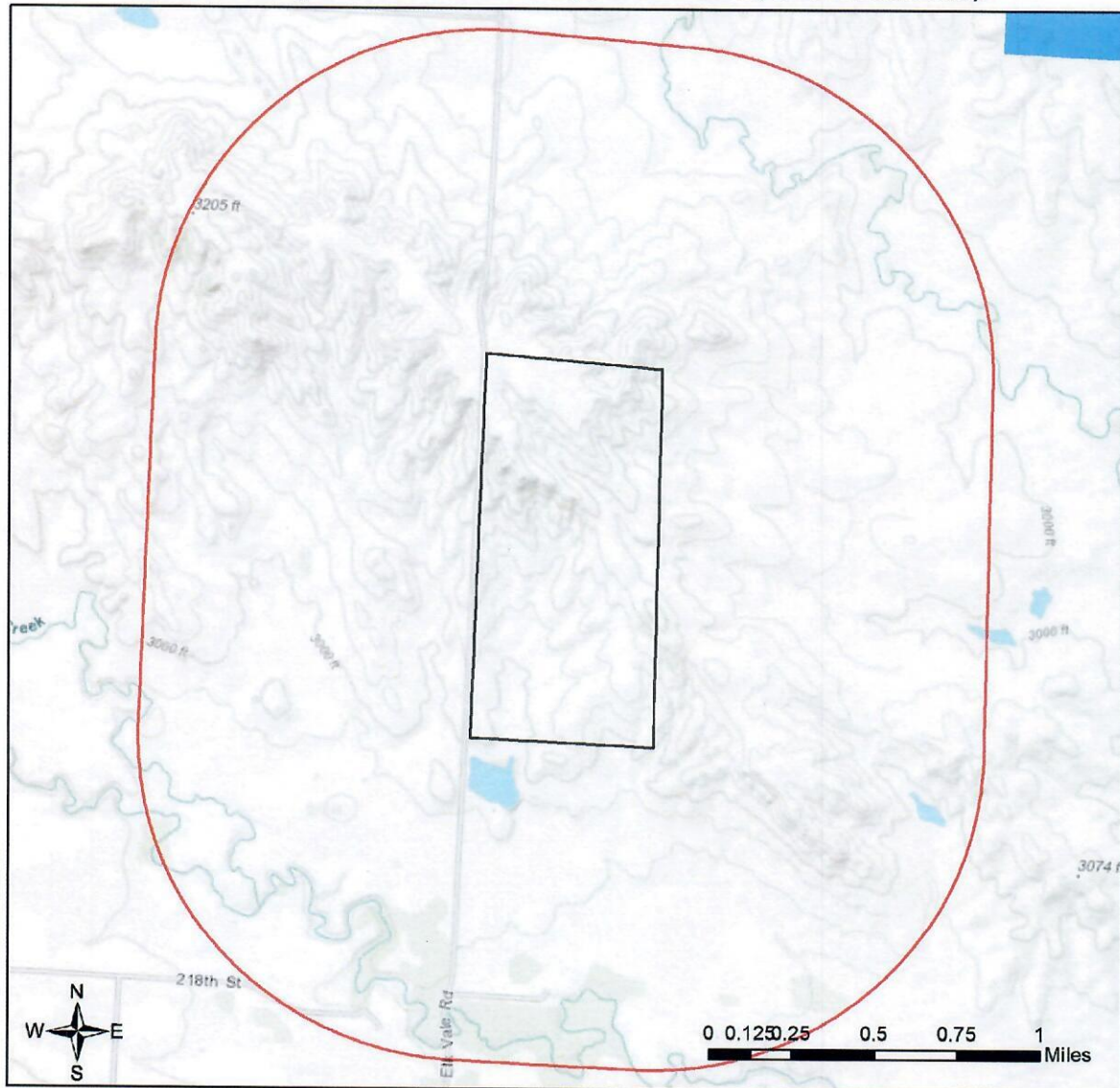


SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

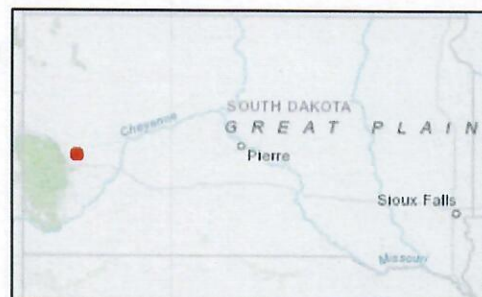
523 EAST CAPITOL AVENUE | PIERRE, SD 57501

Rapid City Shooting Range

Topo Basemap with Land Ownership, Tribal Lands, and Locator Map



- | | |
|------------------------------|---------------------------|
| Project Boundary | National Grassland |
| Buffered Project Boundary | Bureau of Land Management |
| Game Production Areas | Bureau of Reclamation |
| SD Parks and Rec Areas | Corps of Engineers |
| School and Public Lands | National Park Service |
| The Nature Conservancy Lands | USFWS Wildlife Refuge |
| Federal Lands | Waterfowl Production Area |
| National Forest | |



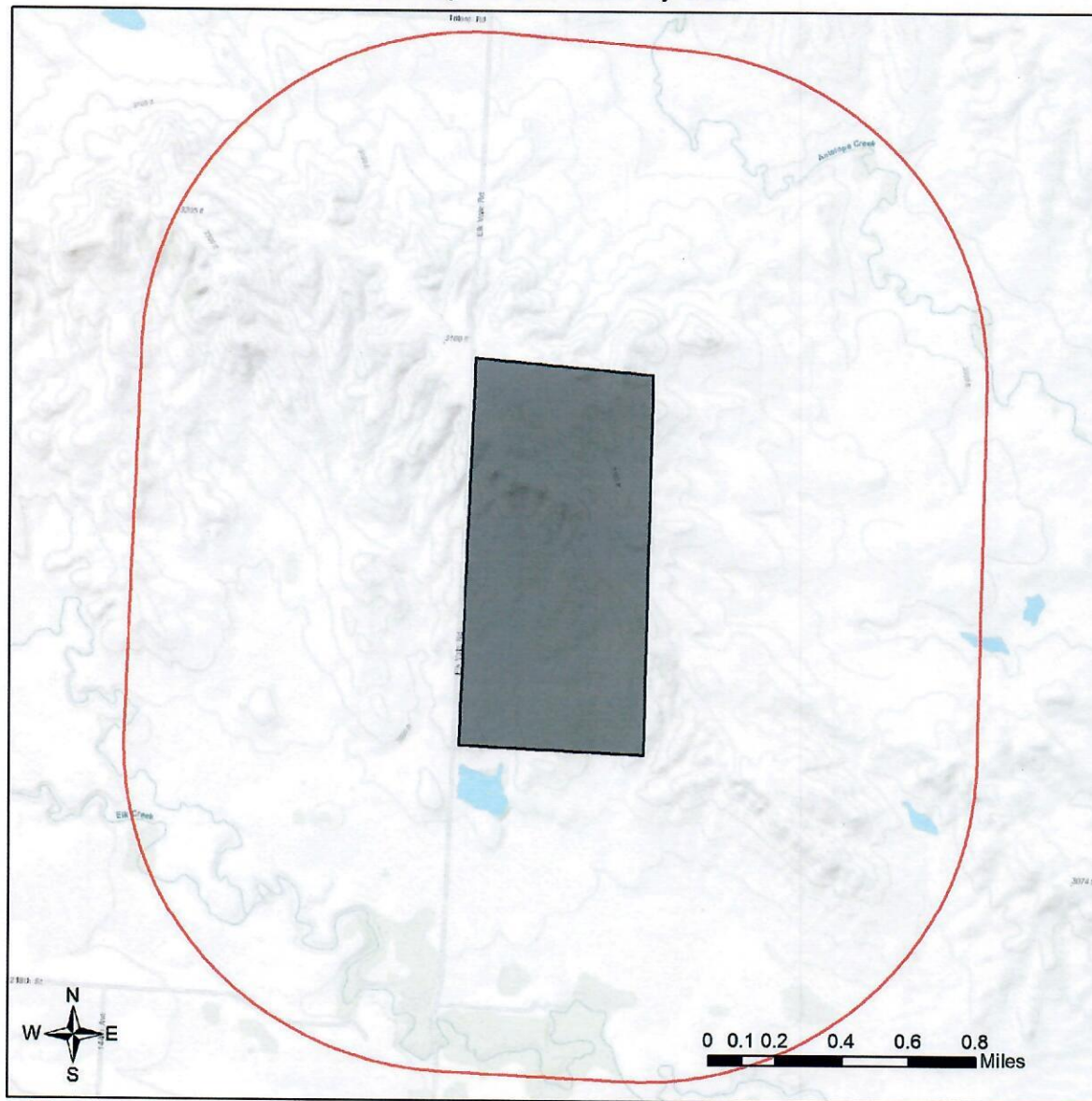
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

Rapid City Shooting Range Web Map As Submitted By User



- ☐ Project Boundary
- ☐ Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

April 12, 2021

Graham Larson
South Dakota Game, Fish and Parks
523 East Capitol Ave
Pierre, SD 57501

RE: Rapid City Shooting Range
Construction of a New Shooting Range
Pennington County, South Dakota

Dear Graham,

The Department of Game, Fish and Parks has reviewed the above project involving the construction of a new shooting range north of Rapid City in Pennington County, South Dakota.

We have conducted a search of the SD Natural Heritage Database for the above referenced project. This database monitors species at risk, specifically those species that are legally designated as threatened, endangered or rare. We did not find any occurrences of endangered, rare or threatened species in the immediate project area.

Based on the information provided, there is no anticipated significant impact to fish and wildlife resources.

If you have any questions, please feel free to contact me at 605-773-6208.

Sincerely,

Hilary Morey
Environmental Review Senior Biologist
523 East Capitol Avenue
Pierre, SD 57501
hilary.morey@state.sd.us



Appendix E
Army Corps of Engineers Correspondence



FMG ENGINEERING

3700 Sturgis Road, Rapid City, SD 57702 • fmgengineering.com • 605-342-4105

November 30, 2021

Jeffrey L. Breckenridge, P.E.
Regulatory Project Manager
U.S. Army Corps of Engineers
South Dakota Regulatory Office
(Via Email to: Jeff.L.Breckenridge@usace.army.mil)

RE **Preliminary Wetland Information**
GF&P Rapid City Firearms Range Complex
Mead County, SD

Dear Jeff:

The South Dakota Game, Fish & Parks (GF&P) is proposing to construct a new firearms shooting range complex on about 400 acres of land off Elk Vale Road, 11-miles north of Interstate 90. More specifically, the site is comprised of the NW ¼ & SW ¼ of Section 34 – T4N, R8E, Government Lot 3 and 4 of Section 3 – T3N, R8E, BHM, Meade County, SD.

The land is currently owned by the SD Park & Wildlife Foundation, 523 East Capitol Ave, Pierre SD, 57501. It is our understanding that the property will be transferred to the State of South Dakota, Game, Fish & Parks in the near future.

We have not had a chance to schedule a pre-submittal meeting or site visit with you for this project. Nevertheless; a Jurisdictional Determination for the project is requested for the site.

Figure 1 shows the existing resources as mapped by the National Wetland Inventory and the drainages for which Jurisdictional Determination are requested. Figure 2 shows the corresponding tributary description segments that are described below.

No development is proposed in or around the other drainages or tributaries shown in Figure 1.

The below described items were evaluated by FMG staff field observation on November 16, 2021 along with a desktop review of aerial imagery, NRCS soil data, and National Wetland Inventory data. See Figure 2 for the location of each item.

Tributary 1

Tributary 1 is an ephemeral stream that drains from north to south.

The drainage area upstream of the point that Tributary 1 drains into the stock dam on the south property line is about 224 acres in size. The upstream basin is undeveloped range land. Soils in the immediate area of the mouth of the stock dam are silty clay loam. The remaining upstream basin soils are clay. Based on an NRCS Curve Number of 89 (*HSG D soil with poor grass cover*), runoff from typical day to day precipitation events would be zero. Calculations indicate that there would be no runoff for a 24-hour storm up to about 0.40" in depth and therefore the day to day water budget available to support wetlands is low. Flows to the entire Tributary 1 are judged to be infrequent, of low volume, and of short duration.



Tributary 1 - Segment 1 (T1S1)

Segment 1 is related to the stock pond at the south end of the Tributary 1. Please note that the JD is only requested for that portion of the stock pond that is located on the project site. This would be the “thumb” of the pond and any portion of the high water pool that may extend onto the subject property.

It is assumed the USACE will declare the area to be Jurisdictional up to the overflow elevation of the pond even though a review of aerial photos indicates the pool elevation varies frequently. Hydrophytic vegetation limits are judged to equal the overflow elevation of the pond. Water rarely reaches the high water level and no hydrophytic vegetation was observed beyond the high water mark.

Tributary 1 - Segment 2 (T1S2)

Portions of Segment 1 have an observable “bed and bank” drainage path. There are no areas of hydrophytic vegetation observed outside of the “bed and bank” drainage path. Top width of the “bed and bank” varies and is estimated at about 10’ average width.

The NRCS Websoil survey indicates that soils in Segment 2 are Partially Hydric (1-25%).

Tributary 1 - Segment 3 (T1S3)

Segment 3 is characteristic of an upland swale but does contain isolated erosional features areas.

No “Bed and bank” channels were observed in Segment 3. No hydrophytic vegetation was observed in Segment 3.

The NRCS Websoil survey indicates that soils in Segment 3 are Non-Hydric.

Unidentified Stock Pond

There is a small stock pond located within the drainage basin of Tributary 1. The dam is disconnected from the tributary. There are no adjacent wetlands related to this pond.

Tributary 2

Tributary 2 is an ephemeral stream that drains from northwest to southeast into a stock dam.

The drainage area upstream of the point that Tributary 2 drains into the stock dam on the east property line is about 90 acres in size. There is also a very small stock dam near the head of the tributary that only has a contributory area of 6 acres. The upstream basin is undeveloped range land. Soils in the upstream basin are clay. Based on an NRCS Curve Number of 89 (*HSG D soil with poor grass cover*), runoff from typical day to day precipitation events would be zero. Calculations indicate that there would be no runoff for a 24-hour storm up to about 0.40” in depth and therefore the day to day water budget available to support wetlands is low. Flows to the entire Tributary 2 are judged to be infrequent, of low volume, and of short duration.



Tributary 2 - Segment 1 (T2S1)

Segment 1 is related to the stock pond at the southeast end of the Tributary 2. Please note that the JD is only requested for that portion of the stock pond that is located on the project site.

It is assumed the USACE will declare the area to be Jurisdictional up to the overflow elevation of the pond even though a review of aerial photos indicates the pool elevation varies frequently. Hydrophytic vegetation limits are judged to equal the overflow elevation of the pond. Water rarely reaches the high water level and no hydrophytic vegetation was observed beyond the high water mark.

Tributary 2 - Segment 2 (T2S2)

Portions of Segment 2 have an observable "bed and bank" drainage path. There are no areas of hydrophytic vegetation observed outside of the "bed and bank" drainage path. Top width of the "bed and bank" varies and is estimated at about 10' average width.

The NRCS Websoil survey indicates that soils in Segment 2 are Non-Hydric.

Tributary 2 - Segment 3 (T2S3)

Segment 3 is characteristic of an upland swale but does contain isolated erosional features areas. There is also a small manmade stock pond close to the upper limit of the basin.

No "Bed and bank" channels were observed in Segment 3. No hydrophytic vegetation was observed in Segment 3 drainage path.

Hydrophytic Vegetation was observed within the small manmade stock pond. There were no wetlands or hydrophytic vegetation observed adjacent to this small pond area.

The NRCS Websoil survey indicates that soils in Segment 3 are Non-Hydric.

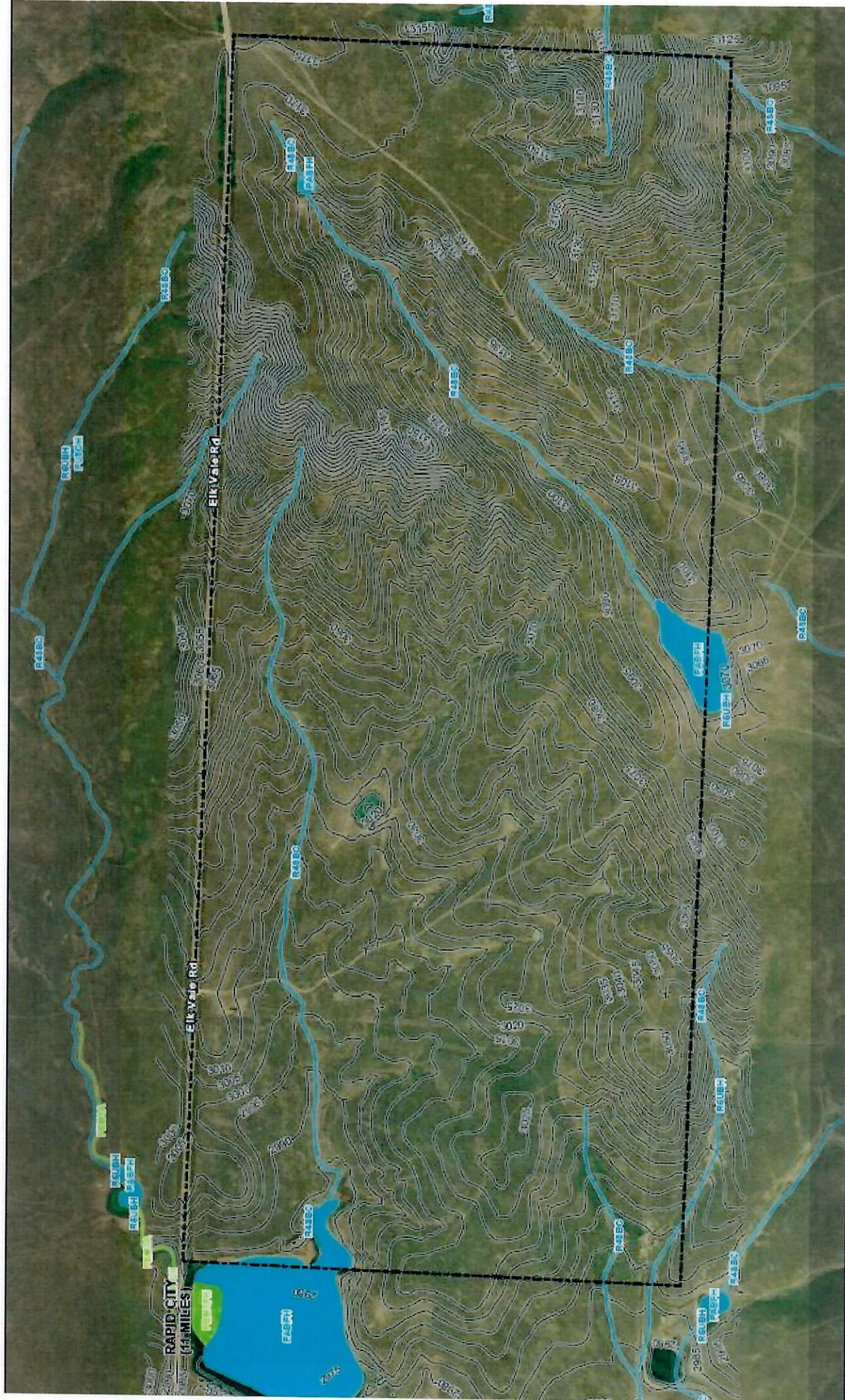
Please let me know if you need further information. We would be happy to schedule a meeting or site visit at your convenience.

Sincerely,
FMG Engineering

Jason Pettyjohn P.E.

Attachments

CC JLG Architecture
GF&P
File 211065



LEGEND

--- PARCEL BOUNDARY / SITE LIMITS

WETLAND TYPE

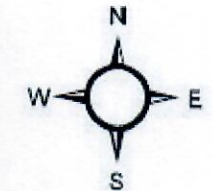
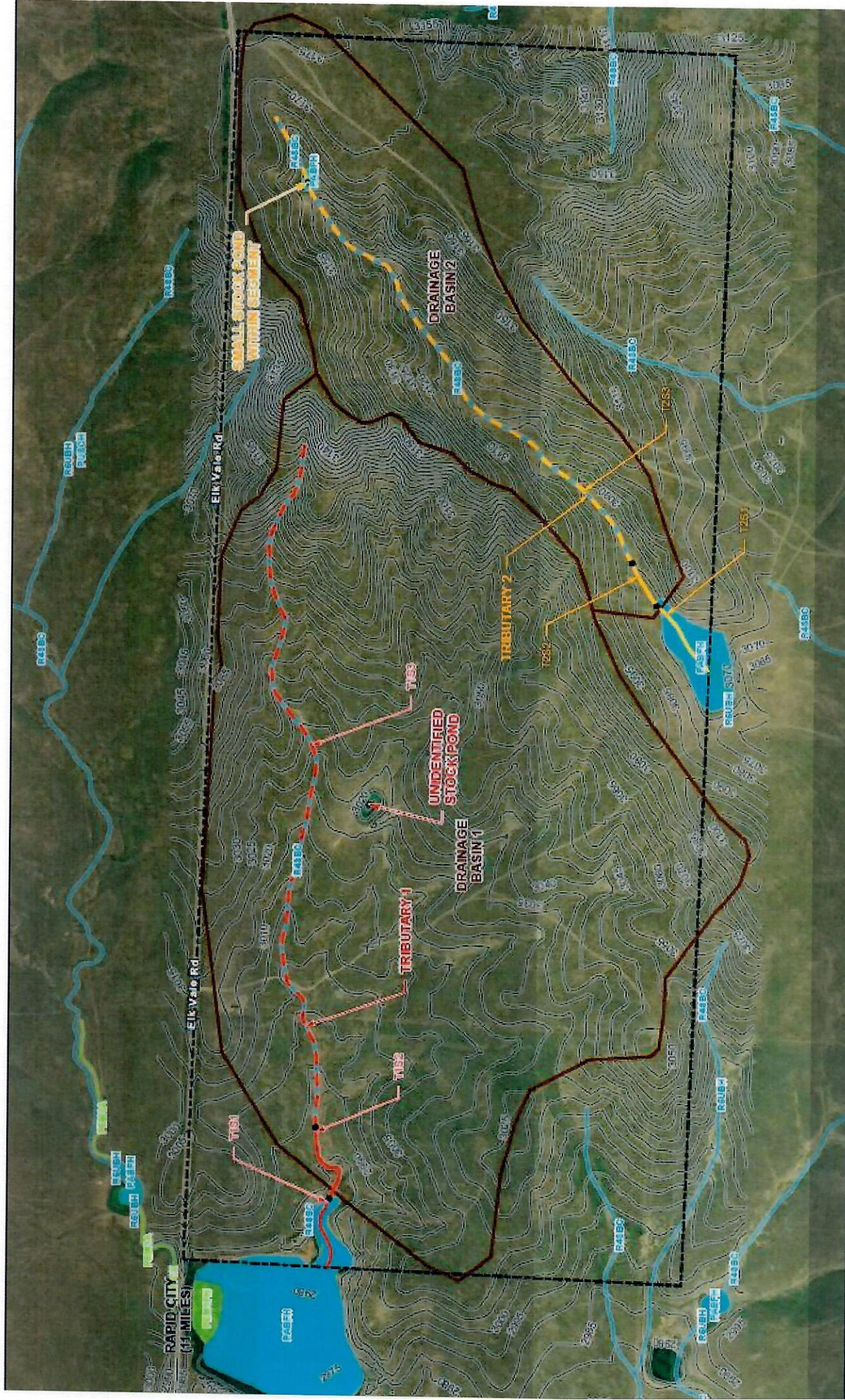
- FRESHWATER EMERGENT WETLAND
- FRESHWATER FORESTED SHRUB WETLAND
- FRESHWATER POND
- LAKE
- RIVERINE

Scale

1 inch = 0.1 miles



**RAPID CITY FIREARMS RANGE
COMPLEX**



- LEGEND**
- PARCEL BOUNDARY / SITE LIMITS
 - - - S1 STREAM (ASSUMED JURISDICTIONAL)
 - - - S2 STREAM (ASSUMED NOT JURISDICTIONAL)
 - - - S3 STREAM (ASSUMED NOT JURISDICTIONAL)
 - DRAINAGE BASIN BOUNDARY

RAPID CITY FIREARMS RANGE COMPLEX

4 & SW 1/4 OF SECTION 34 - T4N, R8E, GOVERNMENT LOT 3

AND

1 OF SECTION 3 - T3N, R8E, BHM, MEADE COUNTY, SD



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
SOUTH DAKOTA REGULATORY OFFICE
28563 POWERHOUSE ROAD, ROOM 118
PIERRE, SOUTH DAKOTA 57501-6174

January 26, 2022

South Dakota Regulatory Office
28563 Powerhouse Road, Room 118
Pierre, South Dakota 57501

South Dakota Game, Fish & Parks
Attn: John Kanta
4130 Adventure Trail
Rapid City, South Dakota 57702

Dear Mr. Kanta:

Reference is made to the information received January 13, 2022, concerning Section 404 of the Clean Water Act permit requirements. The review area is located in the west half of Section 34, Township 4 North, Range 8 East, Meade County, South Dakota.

Based on the information provided and a site visit conducted, we have determined that there are no waters of the United States (i.e. jurisdictional waters) located within the review area. Therefore, activities within the review area are not subject to Department of the Army regulatory authorities and no permit pursuant to Section 404 of the Clean Water Act is required from the Corps of Engineers.

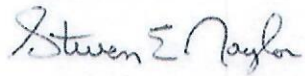
An approved jurisdictional determination (JD) has been completed for your project. This JD is valid for 5 years from the date of this letter. The JD is enclosed and also may be viewed at our website. The link to the website is shown below. The JD will be available on the website within 30 days. If you are not in agreement with the JD, you may request an administrative appeal under Corps of Engineers regulations found at 33 C.F.R. 331. Enclosed you will find a Notification of Administrative Appeal Options and Process and Request for Appeal form (RFA). Should you decide to submit an RFA form, it must be received by the Corps of Engineers Northwestern Division Office within 60 days from the date of this correspondence (by March 27, 2022). It is not necessary to submit a RFA if you do not object to the JD.

You can obtain additional information about the Regulatory Program from our website:

<http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/SouthDakota.aspx>

If you have any questions, please feel free to contact this office at the above Regulatory Office address, or telephone Jeff Breckenridge at (605) 222-5098 and reference action ID NWO-2022-00097-PIE.

Sincerely,

A handwritten signature in dark ink, appearing to read "Steven E. Naylor". The signature is fluid and cursive, with the first name "Steven" and last name "Naylor" clearly legible.

Steven E. Naylor
Regulatory Program Manager,
South Dakota

Enclosures

cc:
FMG Engineering (Hines)



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
SOUTH DAKOTA REGULATORY OFFICE
28563 POWERHOUSE ROAD
PIERRE, SD 57501

March 24, 2022

SUBJECT: Nationwide Permit Verification, NWO-2022-00097-PIE, SD GF&P Rapid City Firearms Range Complex

South Dakota Game, Fish & Parks
Attn: Kevin Robling
523 East Capitol Avenue
Pierre, South Dakota 57501

Dear Mr. Robling:

This letter is in response to your March 11, 2022 Pre-construction Notification (PCN), requesting Department of the Army (DA) Nationwide Permit (NWP) verification for the above-referenced project. The project site is located at Latitude 44.2543°, Longitude -103.1481°; Section 3, Township 3 North, Range 8 East, Meade County, South Dakota.

For the above-referenced project you propose to permanently discharge fill material into 0.030-acre of wetlands in order to construct an access road.

The U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged and fill material into waters of the United States under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). The Corps' regulations are published in the *Code of Federal Regulations* at 33 CFR parts 320 through 332. NWPs are defined in the *Federal Register* published on December 27, 2021 (86 FR 73522). Based on a review of the information you furnished and available to us, we have determined the above referenced work requires DA authorization under Section 404 of the CWA.

Based upon the information you provided, we hereby verify that the work described above is authorized by NWP 14 – Linear Transportation Projects. Please note that deviations from the original plans and specifications of your project could require additional authorization from this office. This NWP and associated Regional and General Conditions are enclosed and can be accessed on our website at: <https://www.nwo.usace.army.mil/Missions/Regulatory-Program/South-Dakota/>. Failure to comply with the General and Regional Conditions of this NWP, or the project-specific special conditions of this authorization, may result in the suspension or revocation of your authorization and you may be subject to appropriate enforcement action. You shall comply with all terms and conditions associated with this NWP.

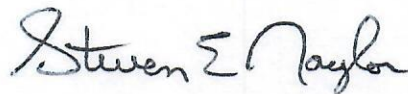
Unless this NWP is suspended, modified, or revoked, it is valid until **March 14, 2026**. It is incumbent upon you to remain informed of changes to this NWP. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization as per 33 CFR 330.6(b). Any project specific conditions listed in this letter continue to remain in effect after the NWP verification expires unless the district engineer removes those conditions.

To assist in your compliance with NWP General Condition 30, enclosed is a "Compliance Certification" form, which shall be signed and returned within 30 days of completion of the project, including any required mitigation. Your signature on this form certifies that you have completed the work in accordance with the terms and conditions of the NWP. Activities completed under the authorization of an NWP which was in effect at the time the activity was completed continue to be authorized by that NWP.

Authorizations under this NWP does not relieve permittees from obtaining permits or other authorizations from any required federal, state, or local agency.

If you have any questions, please contact Jeff Breckenridge via email at jeff.l.breckenridge@usace.army.mil, by mail at the address above, or by phone at (605) 222-5098.

Sincerely,



Steven E. Naylor
Regulatory Program Manager,
South Dakota

2 Enclosures

1. NWP Fact Sheet with Regional and General Conditions
2. Compliance Certification

cc:

FMG Engineering (Hinds)

COMPLIANCE CERTIFICATION

Corps File Number: NWO-2022-00097-PIE
Permit Type: Nationwide Permit 14
Name of Permittee: South Dakota Game, Fish & Parks, Kevin Robling
County: Meade County
Date of Issuance: March 24, 2022
Corps Project Manager: Jeff Breckenridge

Within 30 days of completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following:

SDRegulatoryMailbox@usace.army.mil

OR

U.S. Army Corps of Engineers, Omaha District
South Dakota Regulatory Office
28563 Powerhouse Road
Pierre, SD 57501

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the conditions of this permit, you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Appendix F

FEMA National Flood Hazard Layer FIRMette

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

0.2% Annual Chance Flood Hazard. Area of 1% annual chance flood with average depth less than one foot or with draining areas of less than one square mile (Zone 1)

Future Conditions 1% Annual Chance Flood Hazard (Zone X)
Area with Reduced Flood Risk due to Levee. See Notes, Zone X
Area with Flood Risk due to Levee (Zone D)

OTHER AREAS OF FLOOD HAZARD

- NO SCREEN
- Area of Minimal Flood Hazard (Zone X)
- Effective LOMRS
- Area of Undetermined Flood Hazard (Zone D)

OTHER AREAS GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/7/2022 at 3:36 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effect. Map images for unmapped and unmapped areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

103°13'13"W 44°15'39"N

NEADE COUNTY
460054

T4N R8E S33

T4N R8E S34

T3N R8E S4

T3N R8E S3

Zone D

46093G1575F

9/16/2011

Not Printed



National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE)
Zone A, V, AE, AO, AH, VE, AR
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

0.2% Annual Chance Flood Hazard. Area of 1% annual chance flood with average depth less than one foot or with draining areas of less than one square mile (Zone 1)
Future Conditions 1% Annual Chance Flood Hazard (Zone X)
Area with Reduced Flood Risk due to Levee. See Notes. (Zone X)
Area with Flood Risk due to Levee (Zone B)

OTHER AREAS

NO SCREEN Area of Minimal Flood Hazard (Zone X)
Effective LOMRS
Area of Undetermined Flood Hazard (Zone X)

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

OTHER FEATURES

Cross Sections with 1% Annual Chance Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature

MAP PANELS

☐ Digital Data Available
☐ No Digital Data Available
☒ Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/7/2022 at 3:38 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRMette panel number, and FIRMette effect. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



103°8'38" W 44°15'28" N

MEADE COUNTY
460054

TAN R8E S33

TAN R8E S34



4609361575F
9/16/2011
Not Printed

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE)
Zone A, V, AE, AH, VE, AR
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway

0.2% Annual Chance Flood Hazard. Area of 1% annual chance flood with average depth less than one foot or with draining areas of less than one square mile (Zone X).

Future Conditions 1% Annual Chance Flood Hazard (Zone X).

Area with Reduced Flood Risk due to Levee. See Notes, Zone X.

OTHER AREAS OF FLOOD HAZARD

Area with Flood Risk due to Levee (Zone D).

OTHER AREAS

NO SCREEN Area of Minimal Flood Hazard (Zone X)
Effective LOMRS
Area of Undetermined Flood Hazard (Zone X)

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

202 Cross Sections with 1% Annual Chance Water Surface Elevation
17.5 Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature

MAP PANELS

Digital Data Available
No Digital Data Available
Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/7/2022 at 3:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



103°9'11"W 44°15'11"N

MEADE COUNTY
460054

T4N R8E S33

T4N R8E S34



46093C1575F
9/16/2011
Not Printed

National Flood Hazard Layer FIRMette

103°16'W 44°16'30"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE)
Zone AE, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway

0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with draining areas of less than one square mile (Zone 1)

Future Conditions 1% Annual Chance Flood Hazard (Zone X)

Area with Reduced Flood Risk due to Levee. See Notes, Zone X

Area with Flood Risk due to Levee (Zone D)

OTHER AREAS OF FLOOD HAZARD

NO SCREEN Area of Minimal Flood Hazard (Zone X)
Effective LOMRS

OTHER AREAS

GENERAL STRUCTURES
Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

20.2 Cross Sections with 1% Annual Chance

17.5 Water Surface Elevation

Coastal Transect
Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

☐ Digital Data Available
☐ No Digital Data Available
☒ Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/7/2022 at 3:40 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, FIRM panel number, and FIRM effect. Map images for unmapped and unmapped areas (---) not be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet

103°16'W 44°16'30"N

MEADE COUNTY
460054

Zone D

46093C15/5F
9/16/2011
Not Printed

T4N R8E S28

T4N R8E S27

T4N R8E S33

T4N R8E S34

Appendix G

**Public Meetings List and GFP's Response to Public
Comments**

Public Meetings

This is the list of public meetings that have been held thus far:

January 21, 2021	Meet with SD Parks and Wildlife Foundation
February 3, 2021	Meet with surrounding landowner
March 17, 2021	Meet with local industry partner
March 23, 2021	Meet with local law enforcement
March 4, 2021	Meet with local stakeholders
March 5, 2021	SD Game, Fish and Parks commission meeting
May 14, 2021	Meet with local stakeholders
May 26, 2021	Stakeholder Group meeting
July 8, 2021	Stakeholder Group meeting
July 12, 2021	Meet with surrounding landowner
July 13, 2021	All staff information meeting
July 19, 2021	Meet with local law enforcement
July 27, 2021	Present to Meade County Commission
August 2, 2021	Meet with Elevate Rapid City
August 3, 2021	Stakeholder Group meeting
August 11, 2021	Meet with SD Youth Hunting Adventures group
September 1, 2021	SD Game, Fish and Parks commission meeting
September 1, 2021	Stakeholder Group meeting
September 1, 2021	Legislator tour on site
September 20, 2021	Meet with local industry partner
October 8, 2021	SD Game, Fish and Parks commission meeting
October 21, 2021	Meet with local industry partner
October 28, 2021	Stakeholder Group meeting
November 4, 2021	SD Game, Fish and Parks commission meeting
November 9, 2021	Meet with Elevate Rapid City
December 9, 2021	SD Game, Fish and Parks commission meeting
December 9, 2021	Stakeholder Group meeting
December 21, 2021	Present to Meade County Commission
January 3, 2022	Area landowner meeting
January 4, 2022	Meet with Back Hills Sportsman Club

Response to Public Comment

Key Issues

Key issues are those directly or indirectly caused by implementing the proposed action. Key issues were summarized as concerns with lead contamination, noise impacts to neighbors from the shooting range, road maintenance, and concerns of fire danger.

Other concerns which were removed from further discussion were those identified as;

Outside the scope of the proposed action, already decided by law, regulation, or other higher-level decision, not relevant to the decision to be made, conjectural and not supported by scientific fact or factual evidence, or the comment was general in nature.

Issue #1: Concerns regarding lead contamination.

The concern is that lead from the shooting range will leach from the proposed earthen berms and shooting areas and will contaminate soil and water resources. The SDGFP will follow the EPA's Best Management Practices (BMPs) as stated in the Environmental Assessment (EA). In the design of the range, the BMPs that will be implemented will be utilizing clay-based soils that are naturally present at the shooting range site to act as a barrier to control the mobility of soluble lead. The side and end berms of each shooting bay will also control the flow of surface water so lead particles will remain within each shooting bay. SDGFP will also routinely implement lead recycling/recovery activities such as raking and screening. SDGFP will hire a professional lead recycler to come in and clean the shooting areas and bays as often as needed and depending on the amount of use at the range. All lead recovered will be disposed of properly at a lead recycler and it will be documented when each occurrence of lead mitigation will take place. SDGFP will also implement engineered runoff controls to slow the speed of surface water runoff. This will effectively filter any residual lead material out of the water after it has drained from the shooting bays. The engineered runoff controls will include small dams and dikes, levelled shooting bays and areas, and swales to lengthen the runoff area to further let lead settle out within the footprint of the shooting range. This range will also utilize vegetation as another control to slow the speed of surface water runoff. SDGFP is committed to keeping all lead contamination within the property boundaries of the range. As referenced in the Interstate Technology and Regulatory Council's Environmental Management at Operating Outdoor Small Arms Firing Ranges document, vegetative controls; "reduce the eroding impact of heavy rain on the soil surface, slows down the flow of surplus water over its surface, binds the soil more tightly through the root systems, and filters out lead particles or other constituents of concern from runoff water." In a study conducted by EA Engineering, Science and Technology, Inc. "Lead Mobility At Shooting Ranges", in summary stated "metallic lead is slowly oxidized to forms that dissolve and becomes slightly mobile in the environment. The rates at which metallic lead will oxidize and migrate to the water column is therefore very slow. Complete corrosion of bullets and shot through oxidation and dissolution may take as much as 100-300 years or longer." Currently SDGFP operates and maintains seven firearms shooting facilities across South Dakota and has partnered with numerous third-party entities to implement BMP's for lead mitigation. SDGFP is well versed in implementing BMP's to prevent spent shot and lead from leaching into soils and water resources.

Issue #2: Impacts of noise created by the shooting range from a single concentrated point.

The concern is that the shooting range facility would produce a constant and continuous sound of gunshot in the area impacting nearby residences. SDGFP has designed the range with noise mitigation techniques including orientation of the shooting range, 10-20 feet tall earthen berms on three sides of each shooting bay, terrain (the majority of the usage of the range will happen in a basin that is lower in elevation oriented towards a ridgeline of more than 100 feet of positive elevation change), and overhead structures over the line of fire. In addition, vegetation and noise reducing material will be applied where necessary to dampen noise leaving the range. SDGFP does not anticipate shooting at the complex all day on every day of the week and will implement hours of operation to ensure that shooting

does not occur at less-than-ideal times. Preliminary noise tests with currently no noise mitigation developed at the site, conducted by SDGFP with a sound receiver set up at 0.86 miles to the south of the southernmost proposed shooting bay with an 11 MPH wind from the north, concluded that shots were barely audible and did not register any difference with the sound receiver over ambient noises. During the same day in the same conditions with a sound receiver set up at approximately 1.5 miles north of the northern most proposed shooting bay, the shots were not audible, and the sound receiver did not pick up any difference from ambient noises. SDGFP will continue to do noise testing and will adjust noise mitigation strategies as needed. Concerning wildlife and potential noise, there are very few studies on the impacts of sound to wildlife from shooting ranges. One study on the federally endangered Red-Cockaded Woodpeckers (Doresky et al 2001) stated "Surprisingly, we found no significant differences in noise or vibration levels between treatments and controls. There also were no significant differences between treatment and control sites with regard to the numbers of eggs, nestlings, adults, return rates of adults feeding young, or masses of nestlings and adults." In a case study at the Cameo Shooting and Education Complex in Colorado, a resident herd of bighorn sheep that frequented the area prior to the range being constructed, still frequent the shooting complex and show no signs of impacts to their behaviors. Beyond this, SDGFP has not observed any negative impacts to wildlife at other firearm ranges operated across South Dakota. There have been no documented sightings of Whooping Cranes or other threatened or endangered species in the proposed shooting range vicinity or several miles around the property. SDGFP encourages all sightings of Whooping Cranes to be reported so that they may be documented. If there is a verified sighting of a Whooping Crane or other threatened and endangered species, all actions at the proposed shooting complex will stop until the Whooping Crane or other threatened and endangered species have moved out of the area.

Issue #3: Concerns of road maintenance due to increased traffic on existing Elk Vale Road and surrounding roads.

The concern is that the increased traffic will cause damage to the existing Elk Vale Road, the road leading to the proposed shooting range. SDGFP is currently in discussion with Meade County on a maintenance plan and SDGFP will help pay for the maintenance of Elk Vale Road leading up to the proposed shooting range. A traffic count on Elk Vale Road is currently being conducted as a control number and another traffic count will occur after the proposed shooting range is complete to get a count of the traffic increase to the shooting range and SDGFP will pay for a portion of maintenance and repair of the road due to the increased amount of traffic on the road.

Issue #4: Concerns of fire danger

The concern is that with a firearms range comes in increased risk of fire danger to neighbors. SDGFP plans to develop and maintain a fire line around the property. SDGFP will not allow rifles or pistols that are 50 caliber or larger, no automatic weapons, no exploding targets and all armor piercing, explosive, tracer or incendiary ammunition will be prohibited at the shooting range. SDGFP will also provide fire suppression equipment including but not limited to; fire extinguishers, ATVs/UTVs equipped with water tanks and spray nozzles, a SDGFP owned fire truck, and a pressure tank or large water cistern to ensure water pressure to help refill fire suppression equipment. During very high wildfire risk times, SDGFP will close the range due to the inherent risks of wildfire. Natural grasses will be mowed to heights that reduce its volatility and vegetative and earthen fire barriers will be placed in strategic locations to help stop a wildfire. Properly maintained impact areas where bullets impact the berms will also substantially

decrease the likelihood of wildfires. Areas around steel "gong" targets will be areas of no vegetation for possible sparks to land and create a fire.

Other Concerns

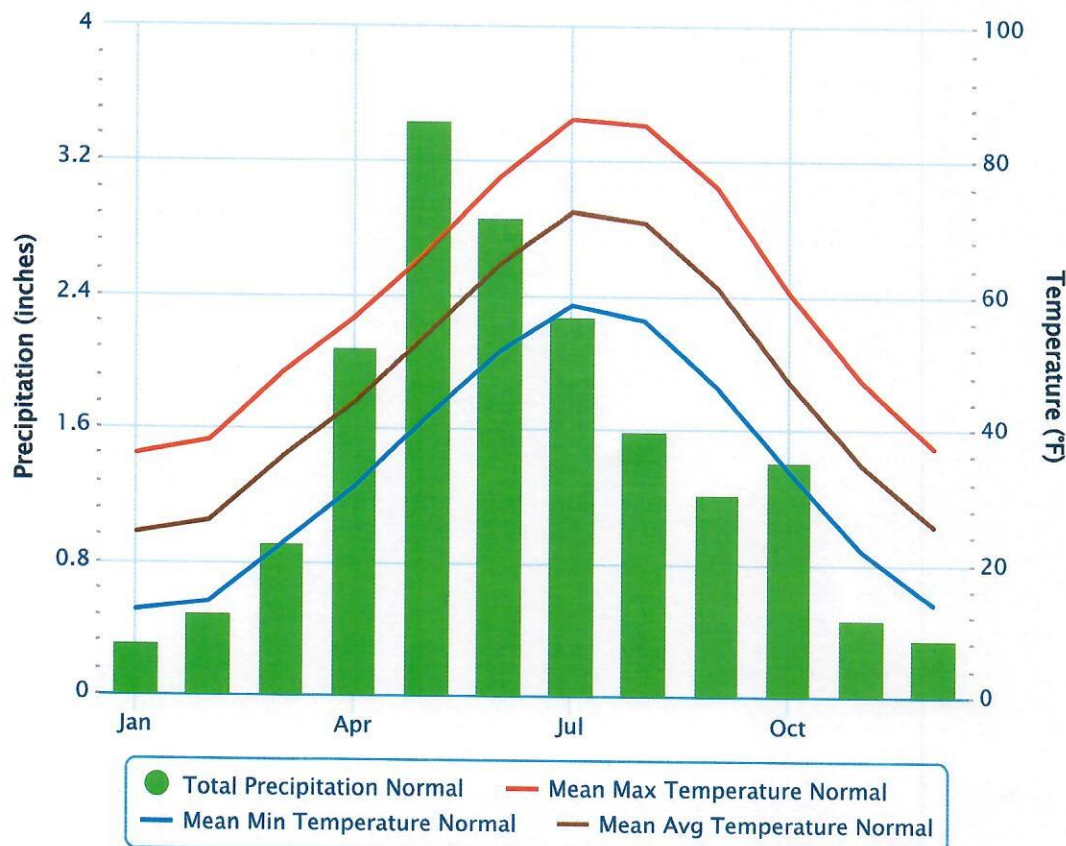
- **Drop in property value.** This was not considered a key issue due to no current data or information to support that there will be a drop in property value.
- **Smell from vault toilets.** This was not considered a key issue as with properly maintained vault toilets the smell disperses through a vent pipe and is dispersed in the fresh air in a relative short distance. The vault toilets will be pumped and recharged regularly which will significantly reduce the smell in the immediate area of the vault toilets. The smell from vault toilets will dissipate in the fresh air long before the smell will reach outside of the property boundaries. GFP operates numerous vault toilets on other GFP properties including parks, campgrounds and lake access areas, and are well versed in proper care and maintenance of these type of facilities to reduce or eliminate negative impacts to the immediate area around the vault toilet.

Negative effect on fish. As stated in the EA, the property does not sustain habitat conducive for a permanent fish population. Attached are aerial photos from Google Earth of the area from various years showing little to no water on or in the immediate vicinity of the planned shooting range property. While stocking fish during wet times may provide fish and fishing opportunities for a limited time in these areas, it will not provide for sustainable fish populations. There will be no effect to fish that may be present now in the surrounding area and SDGFP will follow the EPA BMPs to ensure no negative impacts to fisheries for this project

Appendix H

**NOAA National Weather Service Normal
Precipitation, Mean High Temperatures, Mean Low
Temperatures, Mean Average Temperatures**

Monthly Climate Normals (1991–2020) – Rapid City Area, SD (ThreadEx)



Powered by ACIS

Month	Total Precipitation Normal (inches)	Mean Max Temperature Normal (°F)	Mean Min Temperature Normal (°F)	Mean Avg Temperature Normal (°F)
January	0.31	36.0	12.7	24.3
February	0.50	38.1	14.0	26.1
March	0.91	48.2	22.6	35.4
April	2.08	56.6	31.2	43.9
May	3.45	66.5	41.7	54.1
June	2.87	77.6	51.6	64.6
July	2.28	86.4	58.5	72.4
August	1.59	85.4	56.2	70.8
September	1.22	76.1	46.4	61.3
October	1.41	60.4	33.7	47.1
November	0.47	47.3	21.9	34.6
December	0.35	37.2	13.9	25.6
Annual	17.44	59.7	33.7	46.7