

Master Plan for the
Regional Shooting Facility

Washoe County Regional Parks

And Open Space



July 26 2011

Master Plan for the Regional Shooting Facility

Palomino Valley, Washoe County, Nevada

Prepared for: Washoe County Regional Parks and Open Space

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July 2011

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Project Introduction and Background

Introduction

Washoe County, through its Regional Parks and Open Space Department (Department), owns and operates a 530-acre Regional Shooting Facility (Facility), located on Pyramid Highway, about 25 miles north of Interstate 80 in Palomino Valley, Nevada. It opened in 1982 and provides shooting and training for the general public, shooting clubs, military, and law enforcement personnel.

The original Master Plan for the Facility was prepared in 1978 with initial construction in 1980. This 2011 Master Plan update is to provide a guide for future development of the Facility and recommend improvements to the existing uses. Funding for the Master Plan update came from Ruby Pipeline mitigation, a natural gas pipeline located between Wyoming and Oregon, with 53 miles of the route located in northern Washoe County.

Funding for initial construction and improvements throughout the years came from a variety of sources, including the National Rifle Association, Nevada Division of Wildlife Hunter Education Funds, McCulloch Properties, Washoe County general funds, Washoe County Infrastructure Preservation funds, and Heritage Conservation and Recreation Services. In 2010, the Washoe County Regional Shooting Facility Operations Manual (Manual) for the Facility was adopted by the Board of Washoe County Commissioners. The intent of this Master Plan update is to build on the policies of that Manual, while concentrating on the future physical development of the site.

The Facility is adjacent to Bureau of Land Management (BLM) public lands to the north, private residentially zoned lands to the south and west and occupies a portion of Mullen Creek, with range targets extending up the Virginia Range to the north. Firearms instructors use the Facility for various certification programs and numerous user groups are active in supporting range operations and development. The Department employs one part-time Rangemaster, who manages the daily operations. Existing facilities and ranges are shown in Figures 1(a) and 1(b), and include the following components:

- 1) Modular building for classroom space
- 2) Main office building, shop and restrooms
- 3) Modular building for the International Practical Shooting Confederation (IPSC) range
- 4) Storage building and tower for the Practical Pistol Competition (PPC) range
- 5) Public Range for both pistol and rifles, with Rangemaster office and parking lot
- 6) High power rifle 1000 yd. range
- 7) 500 meter silhouette range
- 8) PPC range east and west
- 9) IPSC range – 12 bays

10) Small bore range – 100 yd.

11) Storage areas (County, shooting clubs and law enforcement)

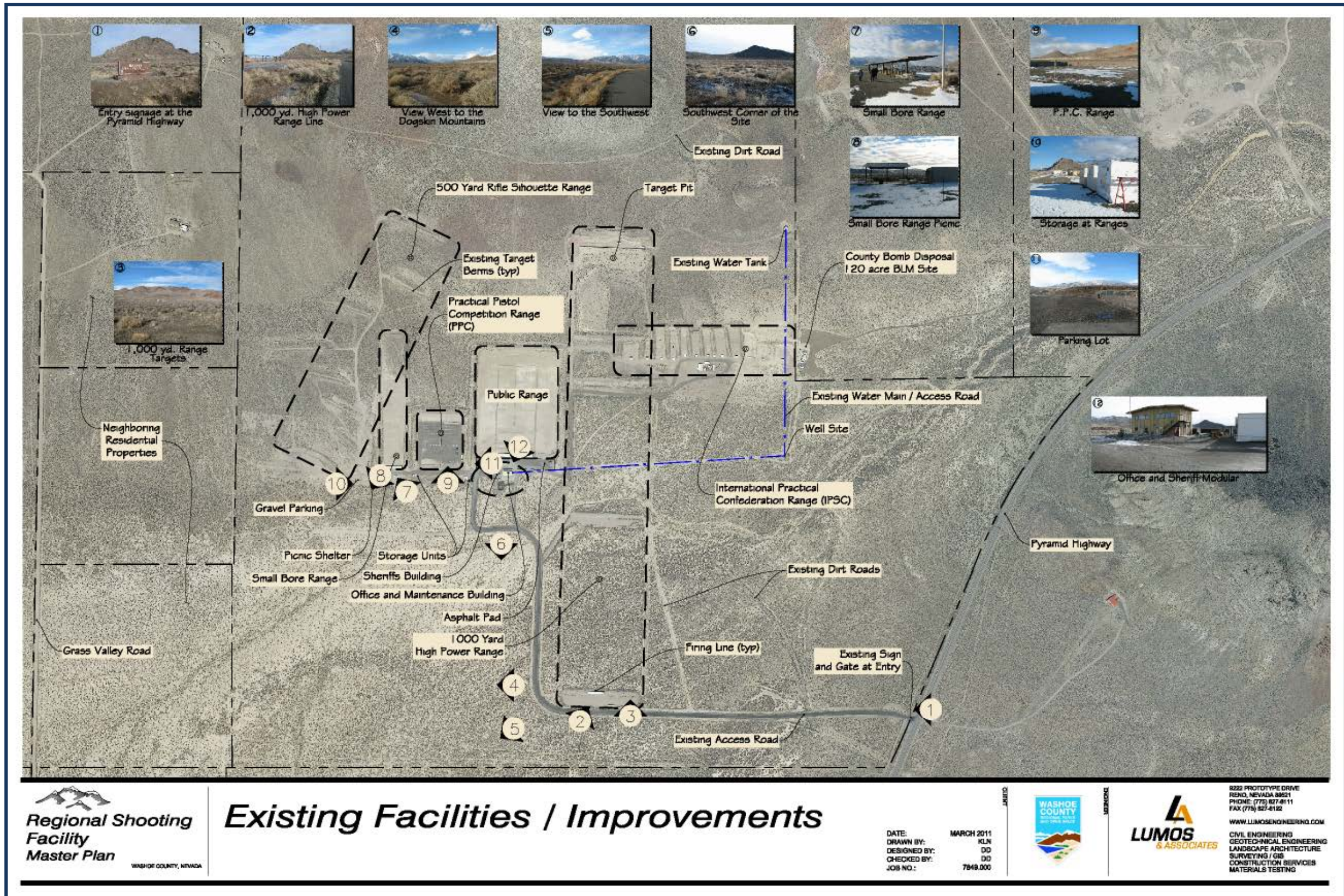


Figure 1(a) Existing Facilities and Improvements

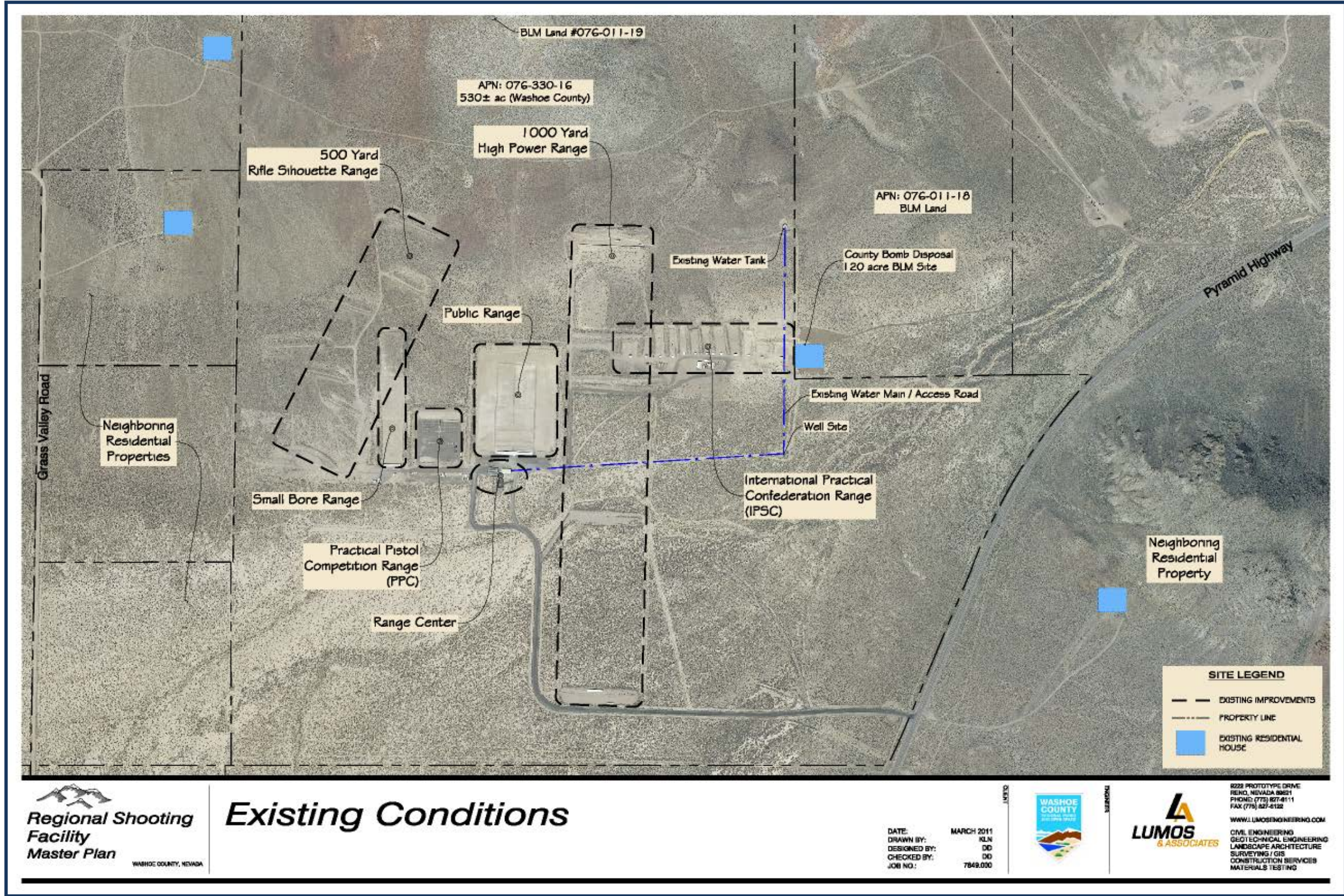


Figure 1(b) Existing Conditions

Project Goals

As part of the Master Plan update, various stakeholders (representatives from the general public, user groups, and adjacent neighbors) and Department representatives were consulted, either on an individual basis or through public meetings and surveys. The Department identified a number of goals for the Facility, and these goals were verified during the public meetings. These goals include:

- 1) Provide a safe environment for the public
- 2) Provide access to ranges for law enforcement and military training
- 3) Establish program and facility improvements compliant with national standards (National Rifle Association and National Recreation and Park Association)
- 4) Improve facility aesthetics including clean up, consolidation and screening maintenance and storage areas
- 5) Provide ADA access to facilities to accommodate users of all abilities
- 6) Provide classroom and range area for proper gun safety training
- 7) Provide for long term expansion of the Facility – roadways, utilities, gates, fencing, warning signs, and non-overlapping ranges to improve safety
- 8) Construct berming and firing line shelters for sound control and safety
- 9) Plant trees for shade, comfort and wind control
- 10) Provide amenities that will attract users and tournaments from a regional area, increasing potential local tourism

Site Analysis

A site analysis was performed to identify opportunities and constraints for expanding and/or modifying the Facility. Figure 2 illustrates the site analysis and surrounding land uses for the project site. The analysis is important, especially in relocating or adding new facilities, because the users have specific requirements that must be addressed and factored into any improvement plans. As shown on in Figure 2, there are two existing houses to the west of the range and one to the east across Pyramid Highway. The adjacent property owners were actively involved in the planning process through correspondence and public meetings and were supportive of the Master Plan's goals of safety and aesthetic improvements, as well as noise mitigation.

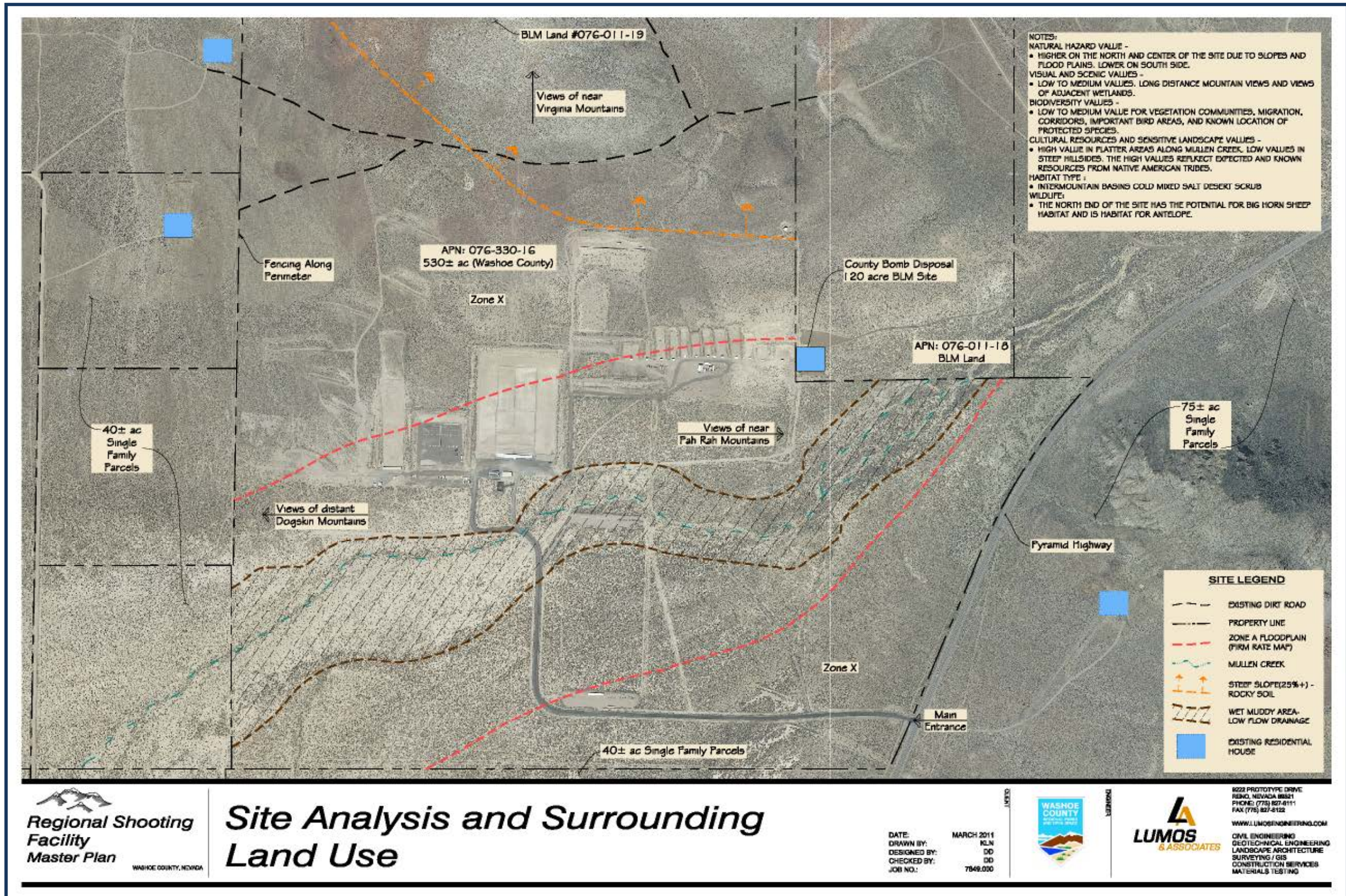


Figure 2 Site Analysis

Soils – Soils shown in Figure 3 are extremely varied throughout the 530-acre site. In the bottom of the valley adjacent to Mullen Creek, silty soils drain very slowly and the area remains muddy for much of the winter months between snowstorms. Soils upslope of the existing ranges are very rocky and will require a great deal of excavation for proposed improvements, including roads and target pits. Further east, soils are sandy, making them difficult for construction of berms. Soil suitability for landscaping is fair, with high pH and salinity. Proposed trees will require careful selection and will be shown on a separate planting plan to be prepared at a later date.

Slopes – Slope limits and categories are shown in Figure 4. The majority of the existing and proposed development occurs on slopes ranging from 0-5%, with the northern portions of the 500 meter silhouette and 1000 yd range in the 6-10% slope category. To the north are steeper slopes above 25% that act as a natural backstop for bullets. The areas not developed in the south portion of the site are 0-5% slopes, which are suitable for development.

Infrastructure – The existing access road and loop from Pyramid Highway to the central core of the Facility is constructed of asphalt grindings with a slurry seal, which is in very poor condition and is deteriorating in numerous locations. The road also has a low area for Mullen Creek to overflow the roadway during flood events. The existing well site is shown in Figure 1, with a water line up to the tank and a return flow line from the water tank to the office and maintenance building. This line serves the restrooms as well. Power to the site is below grade from Pyramid Highway.

Hydrology – Figure 2 also illustrates the hydrology of the site, including Mullen Creek and the associated Zone A -100 year flood plain. The lower area along the creek is very muddy during snow melt in the spring and large rain events. The creek is not well defined and is braided, especially at the east end of the property. Zone A also includes most of the developed ranges, but since much of it was filled with soil, it stays fairly dry. Natural Hazards mapping, prepared by the Department in 2007, indicates a high value in the south portions of the site, due to slope and low value on the south side of the site. Values were assigned to the features shown on the Natural Hazards map by the County to help weight decisions on land management in the County, with higher values indicating a greater risk to flooding and soil erosion. Generally, the new improvements in the Master Plan are proposed outside of the flood plain, or should be elevated with fill to remain dry and useable a greater portion of the year. Fill to accommodate future improvements should also consider potential impacts to adjacent properties during flood events. Since Mullen Creek runs north to Pyramid Lake and associated community wells, it is very important that the creek remain free of brass and lead shot. Some of the firing lines are within the 100 year flood plain of the creek, but the target lines are well outside the flood plain.

Cultural Resources – Resources have a high value in the flatter portions of the site along Mullen Creek, where known or expected Native American resources exist. Steeper areas of the site have a low value, indicating the chances of finding cultural resources in these areas are minimal. The firing lines in the 1000 yard range, roadway access over the creek, the IPSC range expansion, and the clay shooting sports area could have an impact on cultural resources, and would likely require an environmental study before improvements are added. To date, an environmental assessment has only been prepared for the area of the 120 acre parcel to the east of the shooting range. The firing lines in the 1000 yard range, roadway access over the creek, the IPSC range expansion and the clay shooting sports area could have an impact on cultural resources and would be part of the required environmental study before improvements are added.

Vegetation – The habitat is intermountain basin cold mixed salt desert scrub, including sagebrush and saltbush.

Wildlife – The north side of the site has the potential for bighorn sheep and antelope habitat. Other animals will include raptors, jackrabbits and coyote that will likely visit the site during the night and times the range is closed. It is not likely that bighorn sheep will inhabit the range, given the amount of shooting activity. Extending the ranges to the north will have some impact to wildlife and should be identified in an environmental study with the other constraints.

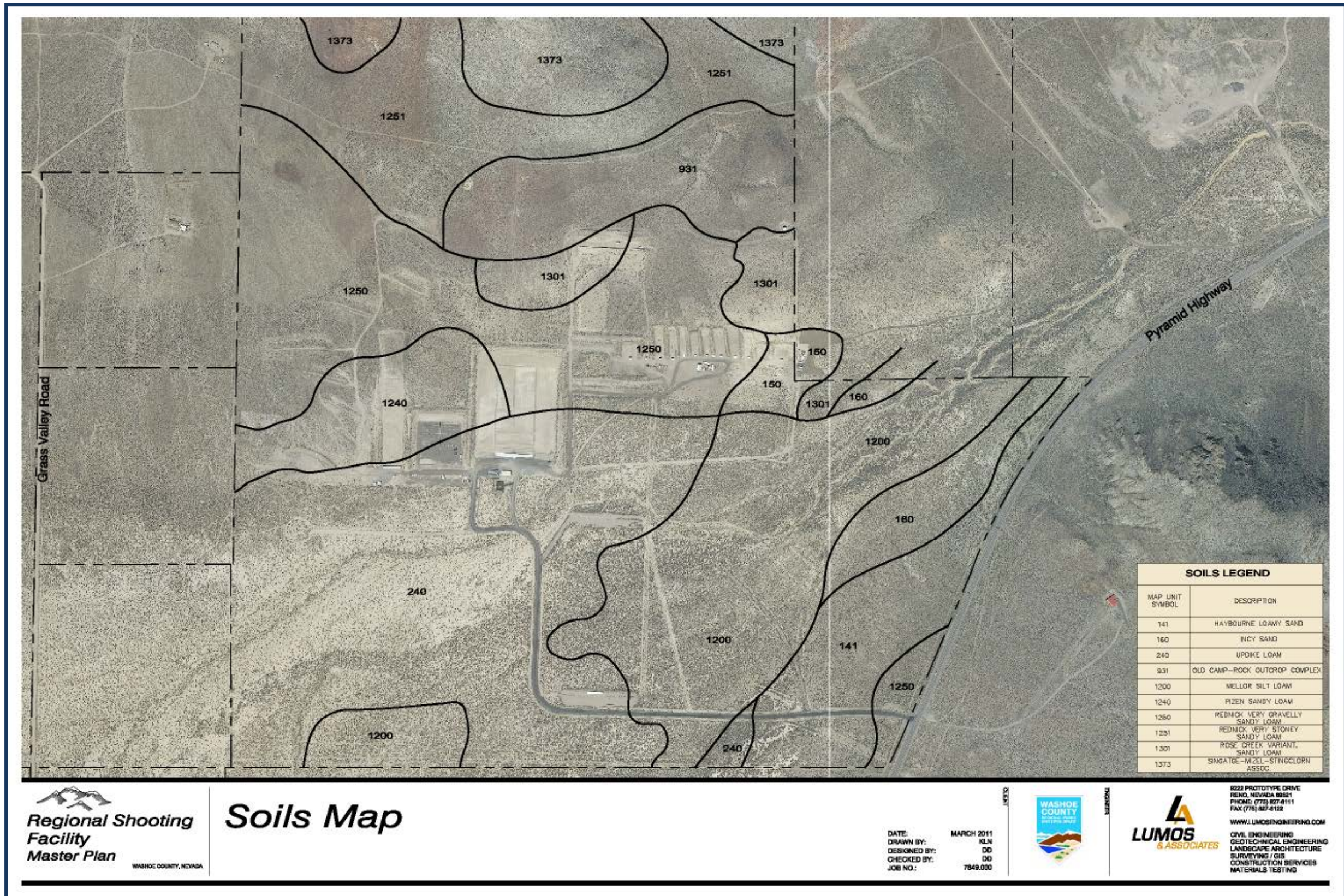


Figure 3 Soils

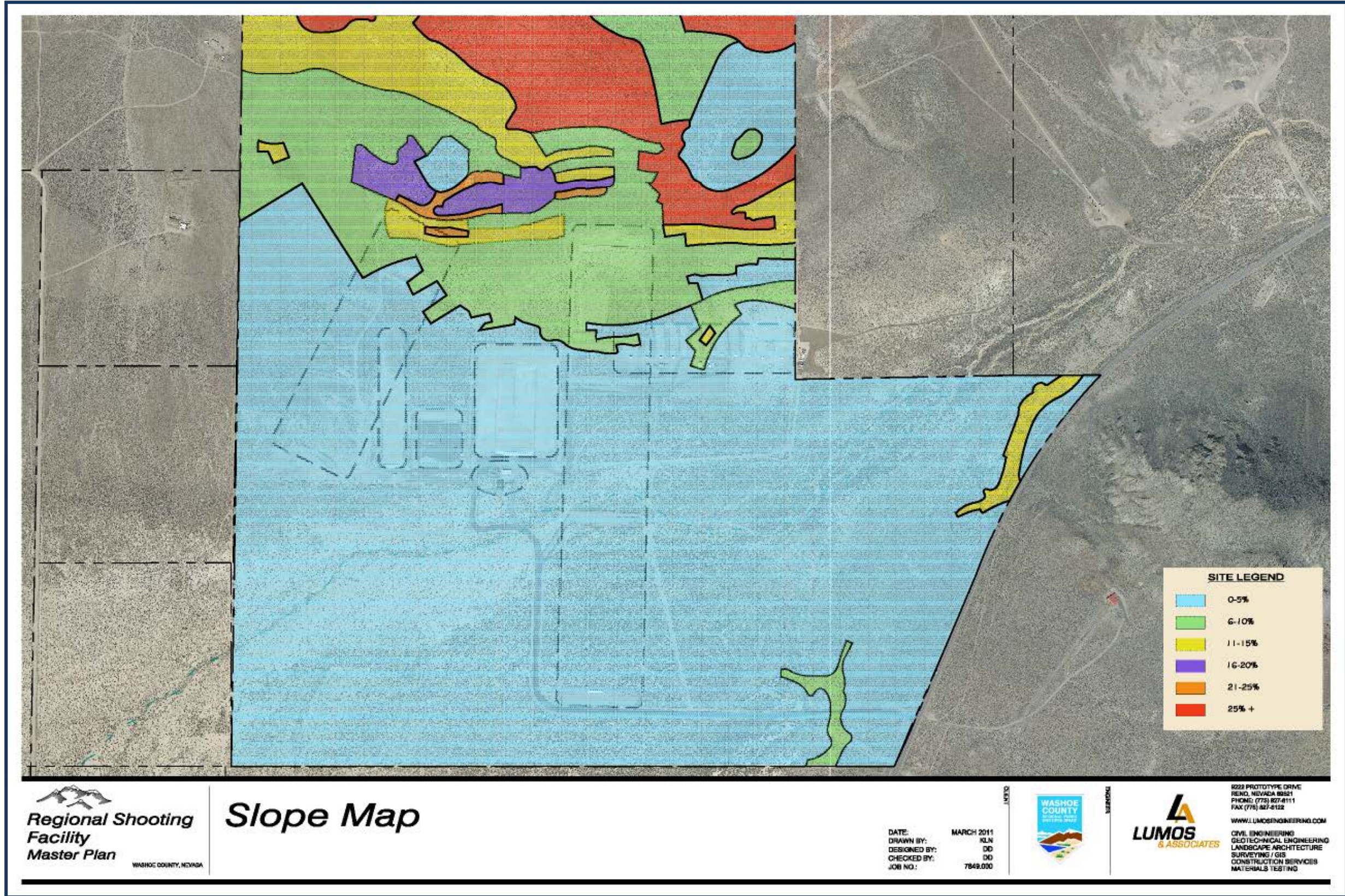


Figure 4 Slopes

Range Improvement Guidelines

These guidelines were used in the development of the Master Plan and developed in compliance with national guidelines and standards recommended by the National Rifle Association (NRA). Specific standards can be found in the NRA Range Source Book for design refinement at future stages in development.¹

Range Layout

1. Individual ranges at the Facility should be oriented to the north or slightly to the northeast to avoid firing into the sun.
2. Firing into upward sloping land with a natural backstop of mountains is recommended. The terrain should be high enough to capture rounds fired at up to a maximum 15 degrees muzzle elevation, (height of the muzzle when being fired).
3. Areas between targets and firing lines should be free of rocks due to ricochet issues.
4. Pistol ranges should have firing lines with a depth of 6-10 feet and rifle ranges up to 20 foot deep. The firing line width for pistols is 9 feet and for rifles 15 feet on center, minimum.
5. For ranges with multiple firing lines, hard surfaced firing lines located downrange should be screened to avoid ricochets.
6. On open ranges, a single target line and multiple firing lines is preferable.
7. The preferred slope of the impact berm face is 1 to 1 or steeper to absorb bullets, at least 50 yards behind the target area.
8. The main backstop berm should be free of rock and debris down to a depth of 18"-24" to avoid ricochets. The suggested height is 20 feet but could be eliminated in mountainous areas, such as the north side of this Facility.
9. The suggested side berm height is 8 feet – wood or concrete walls can also be used instead of dirt as appropriate.
10. New design should allow for removal and replacement of the first three feet of dirt on backstop berms for lead and brass removal.

Range Control Standards

1. Signs should establish rules and regulations for each range. Information should include proper gun handling, hours of operation, rules and range limitations, and check-in procedures. Signs should be posted on a sign board at the range site. Warning signs at the overall perimeter should be visible for anyone entering the range on foot or in a vehicle on a dirt road, at regular intervals along the fence line. Signage and fencing should be checked on a regular basis to make sure they have not been removed or vandalized.

¹ Sources: NRA Range Source Book, U.S. Department of Energy Range Design Criteria, and Design Criteria for Shooting Ranges by C. Vargas and Associates

2. Bulletin boards with notices and updates should be located near the entrance and updated regularly.
3. Range caution signs are typically 12" x 16", posted at 100 foot intervals around the range facility, with both English and Spanish languages. The NRA encourages an attorney participate in the sign content.
4. Safety devices include red warning flags to warn of someone down range. Flags made of red cotton bunting should be at each end of the firing line and at the target line, with a pole height of 25-50 feet per NRA standards. A wind sock should also be added to give the shooters wind direction and strength for sighting.
5. Gun racks within each range is an added safety feature.

Current Range Issues

The majority of the Facility is safe and convenient, but several range conflicts still exist.² These conflicts include overlaps of the IPSC and 1000 yd range, new protective berming required between the 1000 yd range and public range, and overlaps at the small bore and 500 meter silhouette range. These conflicts are un-safe and require shooters on the 1000 yard range to stop firing while IPSC range shooters cross over the 1000 yard range for vehicular access. User groups supported proposals to modify and upgrade the existing facility for safety and function as a priority before additional ranges are to be added.

Users requested specific improvements to the various ranges, as outlined below.

Public Range – This range is used by the majority of shooters who frequent the Facility. Desired improvements include:

1. Berming the range from the 1000 yd firing line access road and target pit.
2. Building higher berms on the west side for protection from crosswinds.
3. Providing additional bench rests and shooting lanes.
4. Separating rifle and pistol shooting.
5. Adding nets between pistol bench rests for shell casings.
6. Providing wind protection.
7. Using acoustical spray foam on the underside of the metal overheads to reduce noise levels.
8. Providing target and gun racks.
9. Adding ADA bench rests.

Related amenities desired were nearby vending machines for snacks, rest area with benches away from the range due to noise, better signage with range rules and a small retail area that

² Source: Washoe County Regional Shooting Facilities Operations Manual 2010.

stocks items such as hearing and eye protection, targets and ammunition. Within the Rangemaster office, a computer is needed for staff to communicate scheduling and other critical operational issues. Currently, without a computer, scheduling is done over the phone and takes the Rangemaster away from his duties of observing the firing line. Since hours of use for the public range was a major concern for many of the public range users, this Master Plan recommends the addition of a second Rangemaster after the proposed expansion of the public range. In the interim, it is recommended that the Rangemaster be given extra hours to cover additional days, especially during the summer and fall, including weekends. Trained volunteers could work over the lunch hour, during breaks and at times the Rangemaster needs to leave the range, so that the range does not have to shut down as it does with its current operation.



1000 yd Range – This range includes firing lines at 200, 300, 600 and 1000 yards, a large target pit, some parking and access roads between the firing lines and the target pit. User groups requested: 1) Additional firing lines at 500, 800 and 900 yards, with vehicular access to each target area, 2) A restroom at both the firing line and within the target pit, and 3) Additional parking at the target pit.



International Practical Shooting Confederation Range (IPSC) – A series of 12 bays with berming between each make up this range. Additional bays were desired, between 15 and 18 for pistol competitions. This is the only “dynamic” type range at the Facility where shooters walk through the bay and fire at targets that are not fixed in place. The firing angle can be up to 180 degrees, so berming is required on three sides of each bay. A separate access to the range was desired, especially one that does not traverse through another range to improve safety.

500 meter Silhouette Range – This range includes a raised firing line for prone shooting at raised berms with metal gongs shaped like various animals. A reconfiguration in the direction of this range will require the relocation of both firing line and target berms. Additionally, a berm to the west will be needed to protect existing homes to the west. There is a desire to increase the range length from 500 meters to 1000 meters – this will require road access up the mountain to new target areas. Gravel over the firing line is desired to reduce the amount of mud and blowing dust the shooters encounter.

Small Bore Range – Included in this range is a covered firing line, picnic shelter and storage. A restroom was desired in this area on the west side of the facility. Additional berming between this range and the 500 meter range will be needed.



Practical Pistol Competition Range - It was agreed that this range is underutilized and should be eliminated to expand one of the other more popular ranges. The existing storage shed and observation tower should be dismantled and discarded.

Master Plan Description

Approval of the Master Plan by the Washoe County Open Space and Regional Parks Commission and Citizen’s Advisory Board was given with conditions. Figures 5 and 6 represent initial and future plan phases. The Master Plan emphasizes the re-orientation and improvement of existing ranges, rather than moving entire ranges to new locations, which would be cost prohibitive. The additional plans: Alternatives A and B, that were the basis of the final Master Plan are included in Appendix B.

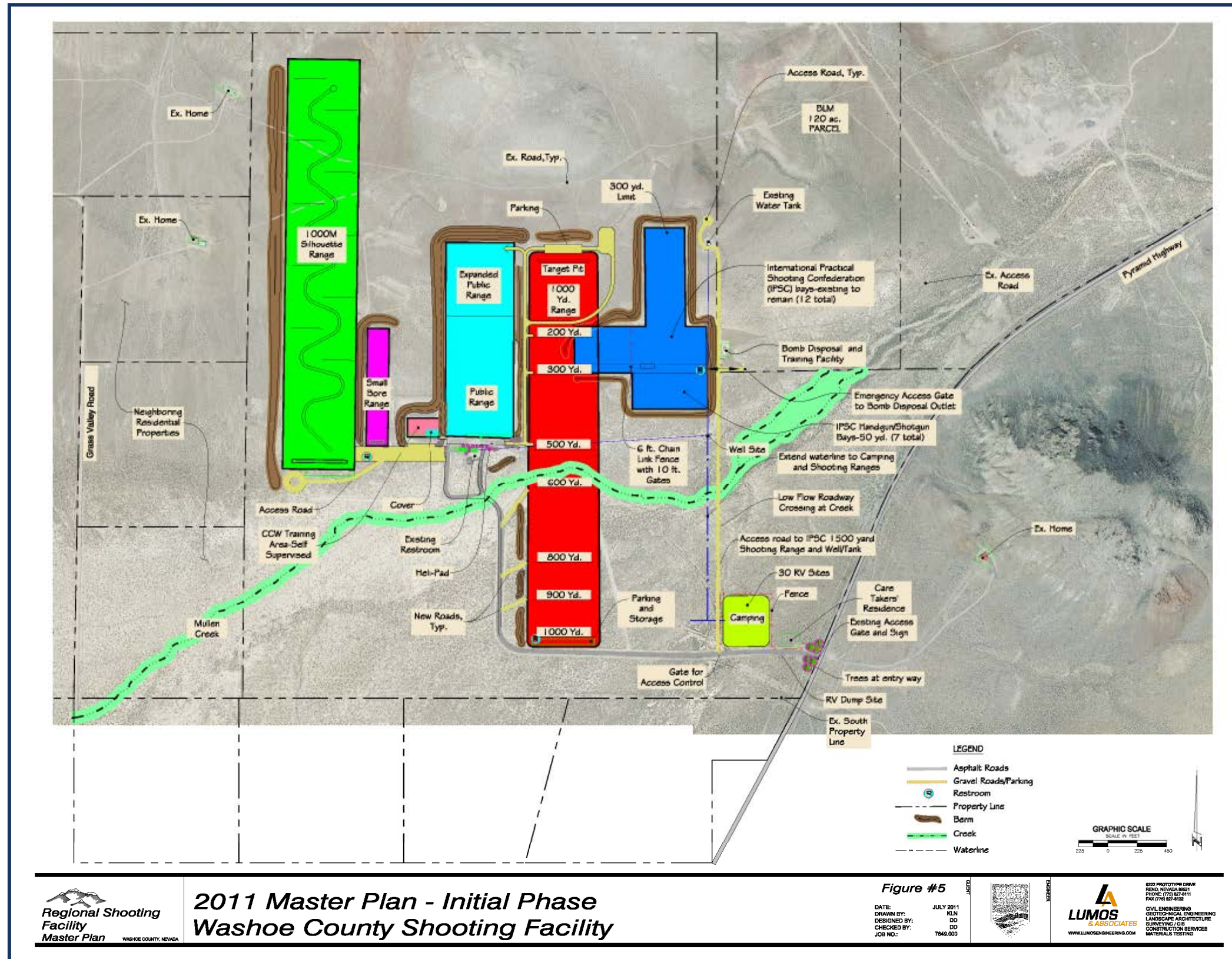


Figure 5 Initial Phase

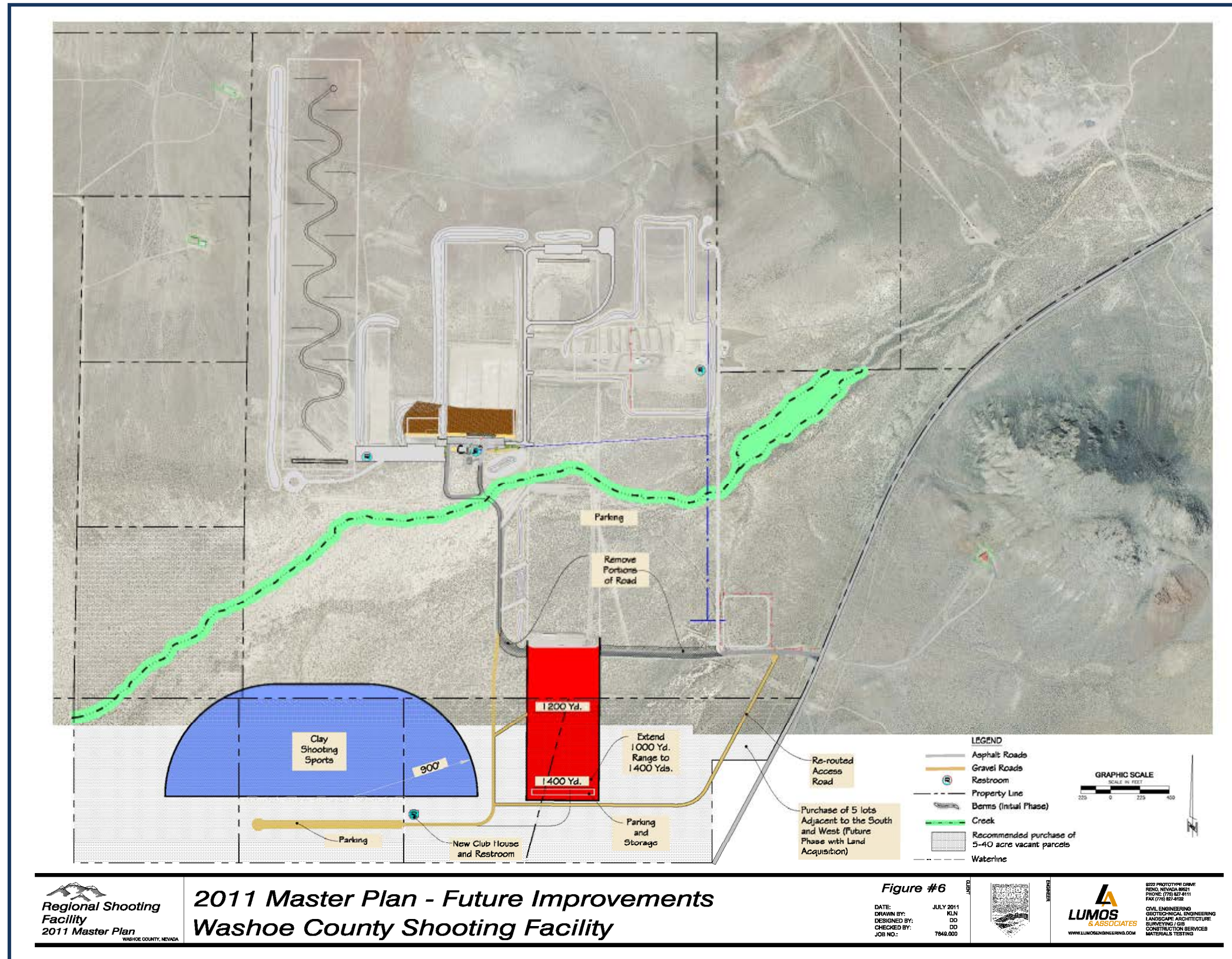


Figure 6 Future Improvements

The Ranges

The new clay shooting sports range is shown on portions of five 40-acre adjacent parcels to the west and south sides of the existing property limits. This increases the open space buffer to the Facility, while keeping the range away from Mullen Creek, and the adjacent flood plain.

Berming along the outer edges of the range is proposed so that the lead shot can be mined and re-cycled. Moving the range to the southeast also provides about a one-half mile buffer between the clay shooting sports range and the small bore range to the north. A parking area with club house and restroom is proposed south of the range. The 1000 yard range expansion to 1400 yards could be built concurrently and would require both the restroom and existing overhead to be moved to the new firing line area. The bench rests would stay in place with the expansion.

The existing 500 meter silhouette range was enlarged, bermed and re-oriented to reduce conflicts. The silhouette and small bore ranges are shown with their own parking and storage areas, with a turn-around at the west end of the gravel access road. A vault restroom is proposed between the two and an access road to the target pits to the north facilitates target set up and changing areas.

The existing public range is expanded to the west into the former PPC range specifically for Concealed and Carry Weapons classes and more pistol shooting lanes. The existing berm was kept as a separation between the two ranges, so that target changes can occur independently. The core area adjacent to this range is shown in Figure 7. Improvements to the Rangemaster's office, addition of a pro shop, paved parking lot, new signage and accessible walkways are proposed. Additional classroom space for firearm safety will be located in the existing modular unit.

Additional firing lines are shown for the existing 1000 yard range at 500, 800 and 900 yards. These lines will be gravel covered, with bench rests but no overhead cover. Additional berming is proposed both east and west of the range for safety. A reconfigured road alignment is proposed to eliminate conflicts with other ranges. Additional road access to the new firing lines is recommended off the existing access road.

Amenities

Range amenities relate to user safety and comfort, along with Facility security. Camping is proposed for 30 RV sites adjacent to the Pyramid Highway, with a second gate to secure the shooting facility and fencing to keep the area contained. A sewage dump station is proposed across the main road on the way out to the highway. A caretaker's residence could be occupied by the Rangemaster, independent contractor, or a volunteer host for security. Trees are proposed for the main entry and core area for shade and limited wind control, which will be shown on a separate set of construction documents with irrigation plans at a later date. A

helipad for emergency evacuation could be located either in the paved parking lot or to the area just south of the modular building in the core area. The pad and surrounding areas should be paved for gurney access.

Natural Resource Protection and Site Clean Up

Lead Recovery

The berming shown on the Master Plan to the back of the target lines is for controlling ricochets and to allow the County to periodically remove the lead through sifting the top 2- 3 feet of soil. The lead can be re-cycled, which makes it a non-waste product, and the dirt installed/ re-compacted on the back berm. Because the on-site dirt pH is so high (8.2 to 8.8), it is less susceptible to lead solubility and migration into the water table. Timing on lead removal is based on the number of shooters using the range and type of fire arms being used. Currently, the County is sifting the lead from back berms where installed. Again, the target berms for both pistol and rifle ranges are outside of the Mullen Creek flood plain.

Mullen Creek Protection/Restoration

Figure 2 illustrates the limits of the creek and associated 100 year flood plain. Since Mullen Creek runs north to Pyramid Lake and associated community wells, it is very important that the creek remain free of brass and metal shot. Some of the firing lines, both existing and proposed, are within the 100 year flood plain of the creek, but the target lines are well outside of the flood plain. Continually cleaning up brass and other metals along the firing lines should be the responsibility of the shooting groups using the ranges.

There is one road crossing and water line extension through the creek channel. It is recommended that the road be designed as a low flow crossing, so that water can flow over the top of it during storms, similar to the existing main access road. This section of the gravel road would be asphalt or concrete, so it is not washed out. The existing culvert below the existing roadway was problematic, in that it clogged with silt during seasonal high water. Erosion control in the graded areas adjacent to the roadway is required per current County standards. No other improvements are shown within the creek channel on the Master Plan, however, all improvements both within and outside of the 100 year channel will require erosion control revegetation per County standards.

Future improvements should limit stream crossings and keep target lines well outside of the flood plain unless they are bermed or adequately buffered. Passive, non shooting uses such as archery could be located along the creek channel in the future but would only be useable during the summer months due to the wet and muddy conditions in this area.

Site Monitoring and Remediation

Site monitoring should include regular inspections by the County Environmental Health Services under the Land Development Program, to monitor the groundwater for any contaminants that could be originating from the shooting facility. If any contaminants are found remediation

measures should be coordinated with the Nevada Department of Environmental Protection and recommendations followed to eliminate the contamination source. Funding for this effort is recommended to be secured in advance so that remediation, if ever required, can take place quickly before any additional contamination occurs.

Phasing Plan

Recommended phasing is related to the safety of the Facility, potential funding sources, and dollar amounts estimated for construction. It is likely that funding will come from grants, not the Washoe County general fund, due to the current economic conditions. Grants for shooting facilities are available from a variety of sources, including the National Rifle Association, Nevada Wildlife Commission, Nevada Department of Wildlife Hunter Education Program, Nevada Division of Environmental Protection, the United States Environmental Protection Agency, among others. The following phasing plan is based on user comments and perceived immediate needs. Phase improvements could occur at the same time as funding allows, or at any time if done by a combination of private donations or endowments, and volunteer labor.

Phase 1 – Improvements within the existing public range

1. Addition of racks for guns and targets. Provide netting between pistol bench rests. Include appropriate signage.
2. Addition of accessible bench rests compliant with ADA. Add paved accessible spaces and signage for parking, with an accessible route to the firing lines.
3. Add sound acoustical foam on the underside of metal overheads.
4. Construct berming at the southeast corner to protect shooters from the 1000 yard range behind the public range; and a berm to the northeast side of the range to protect vehicles on the 1000 yard range from public range shooters.
5. Provide additional concrete pads, bench rests and overheads to both ends.
6. Expand the Rangemaster office and construct the pro shop.
7. Improve the overall parking lot to asphalt, with striping.

Accessibility to the front door of the modular building via the existing ramp is required by law and should occur immediately, along with an accessible parking area. This building will be used for future CAB meetings that will include the general public.

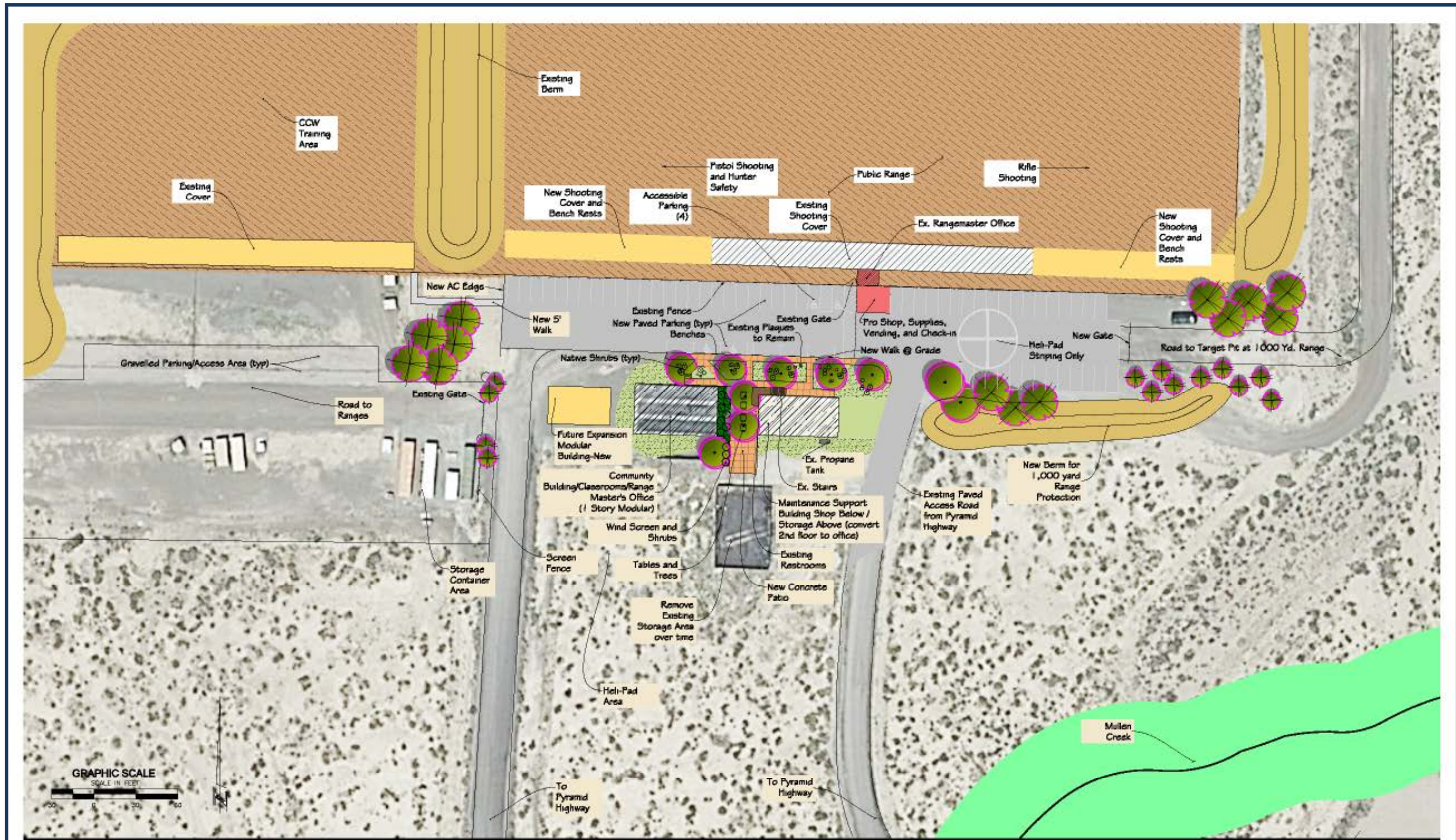
Phase 2 – Improvements to the existing core area buildings

1. Continue using the upper portion of the maintenance and storage building for storing miscellaneous items. Improvements to the shop facility on the first floor would include the elimination of the office and expansion of the shop functions. At the community building/classroom/Rangemaster's office modular (former sheriff's facility) add a

permanent office for the Rangemaster in an accessible area. The existing room divider is adequate for use in dividing the space into two smaller classrooms for instruction.

2. Addition of concrete walks, break patio with tables and associated landscaped areas.

Proposed improvements to the core area are shown on Figure 7.




Regional Shooting Facility
 Master Plan 2011
WASHOE COUNTY, NEVADA

Core Area Enlargement

Washoe County Regional Shooting Facility

Figure #7
 DATE: JUNE 2011
 DRAWN BY: KLN
 DESIGNED BY: DD
 CHECKED BY: DD
 JOB NO.: 7849.000



8222 PROTOTYPE DRIVE
 RENO, NEVADA 89521
 PHONE: (775) 827-8111
 FAX: (775) 827-4122
 WWW.LUMOSENGINEERING.COM
 CIVIL ENGINEERING
 GEOTECHNICAL ENGINEERING
 LANDSCAPE ARCHITECTURE
 SURVEYING / GIS
 CONSTRUCTION SERVICES
 MATERIALS TESTING

Figure 7 Core Area

Phase 3 – IPSC Range

1. Keep the existing range in place and modify with additional back berming as required for protection from the 1000 yard range. Add fencing separation between bays as required. Add a separate access road on the east side of the 1000 yd. range.

Phase 4 – Small Bore and Silhouette Range modifications

1. Modify the 1000 meter silhouette range alignment and firing line. Construct the required berming and add gravel parking and storage. Construct all weather access roads made from base or grindings to the target lines. Add parking and storage areas with aggregate base or grindings and power and water. Include a restroom for both facilities.
2. Expand the public range pistol shooting range and training area west into the former PPC range area, with berming as required for targets and at the range perimeter.
3. Add a turn-around at the west end for emergency vehicles.

Phase 5 – 1000 yard Range modifications

1. Provide additional parking behind the target pit, with a loop road through the pit and over to the west access road.
2. Provide parking and storage behind the 1000 yard firing line. Bring in water and power to this firing line.
3. Add a canopy cover to both sides of the 1000 yard firing line.
4. Add additional firing lines with bench rests at 500, 800 and 900 yard marks, without canopies. Construct berming along the west side of the range, with access roads to each firing line. Include a restroom at this range.

Phase 6 – Campground and Rangemaster/Caretaker Residence

1. Add the paved campground, gate, fencing, and RV dump site near the front entry.
2. Construct a Rangemaster/caretaker residence near the front entry.

Phase 7 - Sport Shooting Range

1. Purchase Five – 40 acre adjacent parcels to the west and the south (by Washoe County).
2. Construct the new facility, including parking, clubhouse, access road, parking, paving and trap houses.
3. This new range would not be pursued as an option if there was already an existing sport shooting facility in the Reno-Sparks vicinity.
4. An option to the land purchase could be a small “throw your own pigeon” area, an informal range with an access road and small gravel parking lot. This range could limit

shot size to fit within the existing boundary of the shooting facility, in the southwest corner.

Preliminary Cost Estimate

This preliminary cost estimate is based on the approved Master Plan and represents the approximate cost of improvements in 2011 dollars. Prices are based on prevailing wage rates from independent contractors.

Public Range (Phase 1)

1. Extend cover to both sides – LS. - \$100,000
2. Concrete pad – 2,800 sf @ \$5.50/sf - \$15,400
3. Bench rests, including accessible tables – LS. - \$21,000
4. Gun and target racks – LS. - \$5,000
5. Soundproofing the existing cover – LS. - \$4,000
6. Netting at stations – LS. - \$2,000
7. Berming at sides and back – 17,500 cy @ \$5/cy - \$87,500
8. Upgrade Rangemaster’s office – LS. - \$20,000
9. Pro Shop and snack area – LS. – \$37,500
10. Concrete – walks and ramps – 1,900 sf @ \$5.50/sf - \$10,450

Subtotal Phase 1- \$302,850

Core Area (Phase 2)

1. Paving parking lot with asphalt and aggregate base – 27,000 sf @\$2.80/sf - \$75,600
2. Signage – LS. - \$3,000

Subtotal Phase 2- \$78,600

IPSC Range (Phase 3)

1. Parking lot and storage area – graded with gravel - 19,500 sf @ \$1.60/sf - \$31,200
2. Restroom and water line from tank main – LS. - \$37,000
3. Fencing between bays with gates for range separation – LS - \$4,500
4. Additional access road from the main road along the east side of the 1000 yd. range – graded gravel – 30,000 sf. @\$1.60/sf - \$48,000
5. Enlarge bays to the north of the existing facility, with berming – 75,000cy cut to fill @ \$5/cy- \$375,000
6. Additional bays south of existing bays, with berming – 48,000cy cut to fill @ \$5/cy - \$240,000
7. Additional shelters – 7@ \$5,000 ea. - \$35,000

Subtotal Phase 3- \$ \$770,000

Small Bore and Silhouette Range (Phase 4)

Silhouette Range - realignment of range

1. Berming at targets – 8,000 cy @ \$5/cy - \$40,000
2. Access road to targets – graded dirt - 30,000 sf. @ \$1/sf - \$30,000
3. New firing line – graded with gravel – 3,800 sf @ \$1.60 - \$6,080
4. Gravel parking lot – fill of 380 cy @ \$5/sf - \$1,900
5. Gravel parking lot – gravel surface – 16,875 sf @ \$.60 – \$10,125
6. Gravel covered storage area – 2,400sf @ \$.60 - \$1,440
7. Berming at west side of range – 92,000 cy @ \$5/cy - \$460,000
8. Water line extension – 1,250 lf @ \$10/lf - \$12,500

Subtotal - \$562,045

Small Bore Range –range improvements, re-use of existing picnic facility

1. Berming – 9,200 cy @ \$5/cy - \$46,000
2. Access road to targets –graded with gravel – 8,000 sf @ \$1.60/sf - \$12,800

Subtotal - \$58,800

Subtotal Phase 4 - \$620,845

1,000 Yard High Power Range (Phase 5)

1. New firing line fill and grading – 8,600 cy @ \$5/cy - \$43,000
2. New firing lines – gravel surface – 8,100 sf @ .60 - \$4,860
3. Road to target pit - graded dirt – 12,000 sf @ \$1/sf - \$12,000
4. Enlarged parking lot at target pit – graded with gravel - 15,000 sf @ \$1.60 - \$24,000
5. Berming at east and north side of range – 9,722 cy @ \$5/cy - \$48,610
6. Parking lot and storage area – gravel - \$19,500 sf @ \$.60 - \$11,700
7. Cover both sides of 1000 yd. range – LS. - \$75,000
8. Additional bench rests – LS. - \$15,000

Subtotal Phase 5 – \$234,170

Overall Site Area (Phase 6)

1. Trees per grant – 100 @\$100 ea - \$10,000
2. Camping – paved area – 22,500 sf @ \$2.80/sf - \$63,000
3. Wire fencing – 1,500 lf @ \$8/lf - \$12,000
4. Water Line extension – 200 lf @ \$10/lf - \$2,000
5. RV dump - LS. - \$7500
6. Additional gate - \$3,500
7. Rangemaster/caretaker residence (modular) - \$75,000

Subtotal Phase 6- \$173,000

Shooting Sports Range (option if adjacent land is purchased to the west and south, and private developer can be found) (Phase 7) – does not include land costs

1. Parking lot, road, benches, concrete pads, grading and structures – LS. - \$425,000
2. Enlarge 1000 yd range to 1400 yards – cover re-location, firing line with benches, restroom, utilities, parking/storage, berming and miscellaneous roads – LS. – \$210,000
3. New paved entry road alignment – 105,000sf. @ \$2.80/sf – \$294,000

Subtotal Phase 7- \$929,000

Total Costs

Total Phases 1-6 (not including shooting sports range) - \$3,108,465

15% contingency – \$466,270

Total –\$3,574,735

Project Meeting and Survey Summary

As part of the Master Plan update, public meetings, user group meetings, and surveys were conducted. The minutes for the meetings are included in the Appendix A, and the following is a summary of the public outreach conducted during the Master Plan process.

Public Meeting Summary

1. Kick-off meeting with Department personnel to outline the project scope, available mapping, and overall schedule on 11-23-10.
2. On-Site meeting with Department personnel to discuss the master planning objectives on 1-31-11. Discussion centered primarily on range conflicts, storage containers, berming requirements, PPC range and the core area.
3. Ad Hoc Committee Meeting with representatives from the user groups and Department personnel to present the site analysis and user needs for the individual ranges on 2-17-11. Discussion focused on range modifications and re-locations, and new range additions. The bomb disposal area was considered a conflict in its current location. Hunter safety classes and separate bays were desired. Additional road access to targets and associated berming were desired. Support facilities should include a ranger house, RV camping area, storage units, toilets and water/power to serve the Facility.
4. Meeting with adjacent property owners and Department personnel to listen to homeowners' concerns on 3-1-11. The main concern from the one resident in attendance was regarding the bomb disposal and training facility, in relation to loud explosions and dust clouds. The Department was to follow up with the consolidated bomb squad to find out why the explosions were sufficient to break windows.

5. Meeting with the general public and Department personnel to present four plan alternatives A-D on 3-31-11. The alternatives were posted on the County website for comments prior to the meeting. Comments included much discussion related to the individual range specifications to make them safe and useable to the shooting groups. There was interest in bringing the plan to the wildlife commission for funding. A tactical shooting range was desired, but the PPC range was omitted due to lack of use. After discussion and comments alternate A was selected, with taller berming – see Figure 8.
6. Warm Springs Citizen Advisory Board Meeting on 5-2-11 to present the plan alternatives and recommend alternative A1, with revisions based on the on-going public survey comments – see Figure 9. After much discussion and questions/answers the motion was made and approved for the revised plan, with conditions as noted.
7. Washoe County Open Space and Regional Parks Commission meeting on 6-7-11 to present the plan. Approval was given to proceed with the plan to the Washoe County Board of County Commissioners.

Public Survey Summary

The public online survey was active during the entire Master Plan update, and the comments offered were incorporated into the Master Plan to the greatest extent possible. Also, at the public meetings, written surveys with return envelopes were handed out for comments. The following is a brief overview of the 141 survey responses. The complete survey results are included in Appendix A.

1. 90% of the respondents were users of the Facility, and about the same percentage used the public range portion.
2. Almost 90% of the respondents felt the Facility was good or excellent in terms of safety.
3. Hours of use were the greatest concern respondents had.
4. Acquiring additional land for the range was important to 80% of the respondents
5. A shooting sports (shotgun) range development was favored by about 80% of the respondents.
6. The addition of target archery was not favored.
7. Camping areas were desired by about 64% of the respondents.

APPENDIX

A. MEETING SUMMARY

Site Meeting – Washoe County Regional Shooting Facility

1-3-11

#7849.000

Attendees: Al Rogers, Jen Budge, Doug Mullens

Discussion Points:

- 1) Delineate Handicap parking and signage – need post mounted signs and striping – 2 existing spaces , which is adequate for up to 50 parking spaces per ADA standards. One of the rules and regulation signs on the fence to be moved to the front gate on the highway. The entry gate to have a rolling motorized gate on the south side of the opening to replace the existing gate. Entry to be by key card or key pad. The facility is open 4 days a week to the public, with law enforcement and military groups able to use it at any time.
- 2) The entry road in is asphalt, in good condition and elevated above the flood plain at the center of the site.
- 3) The office and maintenance building needs exterior upgrades- picnic tables, shelter, trees near public shooting facility. Nearby, but not too close to range due to noise. Keep landscape areas very low maintenance. There is domestic water to the building that we could use for a drip system to water trees.
- 4) Office and maintenance building under- utilized. Second floor would work best for classroom space – good visibility to range with windows. Interior wall could come out ; non- bearing, for larger classroom space (Doug has the plans). Hunter safety and youth safety course focus should be the emphasis of the training, and have potential grants available for funding. Another use is the rental to CCW instructors. Current use is storage. The room needs ADA access for public use – elevator or lift internally? First floor space could still be used as a shop, office and some storage/construction of targets. HVAC upstairs, and restrooms downstairs on the outside. There is a potential for adding storage space to the outside of the building on the south side away from the existing propane tank. There is need for additional vending machines behind an enclosure – something the rangemaster can open in the morning.
- 5) The modular building to the west of the office is used by the County Sheriff and City of Reno Police for training – not open to the public. The picnic tables outside in the gravel are in the full sun, but protected from west winds by the modular. Outside to the south there is a partial fence screen and storage material that should be cleaned and repaired, or removed. The County uses a fenced and gated area adjacent for the storage of materials, including scrap barrels, that could be cleaned out.
- 6) The PPC range is functional, with adequate berming. The observation tower is in serious need of repair for stairs, railing, door, etc. to make it safe to use by law enforcement. Next to this is a modular storage / office building. The gravel base on this range may be an issue for shooting but does keep the mud in check for access to the various concrete shooting positions. Storage for the west ranges is on the south end and consists of a variety of metal storage units. The County would like the units marked for group ownership and consolidated into certain areas rather than scattered. The units could also have a letter or number on them that corresponds to the agency

- name that current stores material in them, so that individuals would not be able to identify agency storage. The target cable is broken often, with replacement by the County Sheriff, unless the damage can be directly attributed to a specific group – this has been a problem in the past.
- 7) The small bore range has a cover and concrete pad with concrete tables for shooting. It also has a picnic table and trash cans in back of the firing line. To the south of this range there are additional tables and a shade structure for picnic. In talking to the rangemaster on a previous site visit he said the public range could use tables and gun racks for storage behind the firing line. The NRA manual has requirements – the issue is that the various gun clubs may have differing ideas on how they want the ranges set up.
 - 8) The last range to the west is the silhouette range. It is slanted to the northeast to keep shooting away from the existing house to the west, although this arrangement creates a problem for the small bore range to the east. Changing targets at the end of the silhouette range puts shooters in the firing line of the small bore range. The berming could be constructed higher, or the range re-aligned to the north, with berming added to the west. Other than dirt mounds there are few improvements here.
 - 9) The 1000 yard range has a good cover and concrete pad, with a removable access gate for truck access. There is potential camping areas to the south of the main roadway for competition shooting. All of the canopies on the site could use soundproofing below the metal roof decking, or a replacement. The metal reflects noise that could be absorbed. This range conflicts with the IPSC range in terms of space, especially the bays to the west. The 1000 yard range has a concrete wall and pulleys for the targets, and would be expensive to move. A berm extension is needed along the west side of this range to the northeast side of the public range, since road access to the IPSC range exposes cars to the public range fire. The IPSC range bays on the west side could be re-located with little cost using the same dirt material. There is a modular office and some storage operated by Western Nevada Pistol League that could also be moved at a reasonable cost. The county would like possible use of the modular for classes. Access to this range is through the 1000 yd. range, so this is another conflict. Because of this problem the 1000 yd. range and IPSC bays cannot be scheduled for use at the same time. The plan should consider moving some or all of these bays to the southeast, possibly off the main road.
 - 10) The bomb disposal 120 acre site is to the east of the IPSC range, with improvements on the far southwest corner and independent access from the Pyramid Highway. Expansion of the range onto this site would be possible with an amendment to the lease from the BLM and possibly some environmental assessment work.
 - 11) Other expansion areas on the site include the land to the south of the main access and the area south of the office. This area could be used for trap and skeet, also archery, since it does not take up a great deal of room. The flood plain should be kept open and protected in this area.
 - 12) There is water on the east side of the site from the tank on the hill. The well /pump for the tank is to the south near the drainage. The piping route follows the existing dirt roadway.

Submitted by Dale Doerr, Lumos and Associates

Shooting Range Facility Meeting Notes - 1/27/11

7840.000

Meeting at Washoe County Parks – Al Rogers, Jen Budge

Points of Discussion

- 1) We could use a signage plan for the perimeter to control traffic onto the site. Look at existing fencing, or lack of. Recommend fencing if required. Check road ingress/egress areas off the County site and BLM. Since the roads are much higher than the range increasing berm height is likely not practical.
- 2) Check road proximity to the shooting range with NRA standards, if any.
- 3) The Sheriff modular building will be turned over to the County for use – potentially classroom. We should add the HC parking here and have an accessible route to the public range. Could recommend paving the center parking area for maintenance and plowing/snow melt.
- 4) The PPC range can be improved, starting with demo of the two structures at the center. It could be used for instruction and certification.
- 5) Look at the storage areas to see if we can group together and screen them.
- 6) Recommend tree locations at the ends of the public range and around the parking area.
- 7) Archery range is likely a lower priority, trap and skeet likely a higher priority – to be verified with user groups. County already has a archery facility in Lemmon Valley.
- 8) IPSC range – find out how many bays they really need. We may be able to just cut off the existing bays in the 1000 yd. range and berm heavily to make it useable at the same time as the 1000 yd. range. Re-location to the entry road area may be problematic, unless the bomb disposal site was moved to the east. They will want a water extension, which could be shared with the 1000 yd. range.
- 9) A trap and skeet area near the entry makes sense, since the shot do not go far – 700 ft. clear.
- 10) Keeping the 1000 yd range in place is preferable.
- 11) Camping is a needed use – there is some limited camping already for the 1000 yd. range.
- 12) Look at potentially paving the road to the private ranges on the west end, with a turn-around for fire.
- 13) Check with neighbors on the 500yd. range revision to straighten into a north-south direction. Keep the PPC range in the same location. Look at berm extensions on all of the ranges for safety.
- 14) First meeting date about 2 weeks out with the advisory committee to start, followed by meetings with the neighbor groups.

Dale Doerr, Lumos and Associates



REGIONAL SHOOTING FACILITY MASTER PLAN UPDATE
Neighborhood Meeting – March 1, 2011 Meeting Minutes

In attendance: Scott Edmonds-resident, Jen Budge/Al Rogers-Washoe County Regional Parks and Open Space, Dale Doerr-Lumos and Associates

Overview: Washoe County is looking for input in the master planning design process to guide future development and modifications of the existing facility. The overall goal is to make the site a safe, educational, convenient and enjoyable county facility.

Bomb squad detonation was a concern for Scott Edmonds, a resident located across Pyramid. Mr. Edmonds made the following observations related to the 120-acre portion of the facility:

- At least one-two times/month (except winter) multiple blasts occur during the day. Large “mushroom clouds” are visible with debris crossing Pyramid and in one instance broke a window on his home.
- During summer/fall, there are late night trainings (around 2:00am) with helicopters, machine guns, grenades etc. Previously this occurred about 30-40 days/year, now about 10-20 days/year. This activity disturbs him, his neighbors and animals.
- Mr. Edmonds has concern that a military operation/training is occurring in a residential area, “It feels like an earthquake when the bombs go off-it disturbs animals and residents.”
- The training activity occurring is very intensive and not consistent with the surrounding zoning of residential. No longer an appropriate location for this activity.
- Mr. Edmonds suggested having the addition of selling ammunition, food and supplies at the RSF, then he might use the facility more and that would be a benefit to users.
- Mr. Edmonds supported efforts to improve aesthetics of facility, including adding landscaping. He has had success with pines and poplars on his neighboring property.
- Mr. Edmonds has observed abundant OHV use on BLM parcel in particular and had concerns for the safety of those users, since the property is not adequately fenced.

- There is currently no neighborhood notification in advance for bomb disposal/detonation. This would at least prepare neighbors in advance.
- Mr. Edmonds was in support of improvements to RSF and the idea of adding trap/skeet and realigning the ranges. Not in support of the late night activities at the 120-acre parcel.
- Mr. Edmonds questioned whether the current use is consistent with the original proposal to BLM?
- Mr. Edmonds expressed concern for the significant impacts of the Bomb site on air quality, visual/noise concerns to area residents.

Public Meeting Minutes – Homeowners Group

3/1/11 #7849.000

About 30 adjacent property owners were contacted for the meeting and one showed up – Scott Edwards from the east side of the Pyramid Highway.

We explained the site, alternatives being discussed and the public meeting process. Scott was surprised that he was the only person there.

General comments:

- 1) Scott was ok with revisions of the range uses within the County Shooting Facility – those were not a problem with him. He did not like the 2-6am tactical Sheriff Swat team helicopter exercises with flash grenades, which were occurring 30-40 days/yr. Last year it was about 10 days per year.
- 2) His main concern was the bomb detonation facility, which is shared by the cities and county. There are blasts about once per month, with 3-7 blasts in the same day, sometimes together. The latest was a large (600ft) mushroom cloud detonation during the day, which is disruptive to his animals and friend's children. He has also had a broken window from the blasts.

Regional Shooting Facility Master Plan Update

Public Meeting Notes

March 31, 2011 –Rancho San Rafael Ranch House – 6:00-9:00pm

In Attendance: Al Rogers, Jen Budge- Washoe County – Dale Doerr, Lumos and Associates.

General Public in attendance- William Atkins, John Glatthar, Kevin Vania, Roger Edwards, Vernon McCarty, Zack Walker, Scott and Cindy Kurucak, Gary Schoen, Dave Roberts, Ken Rosenstock, Ballard Larsen, Gerald Lent, Wayne Fitch, Scott Edmunds, Jed Spangler, Greg Nauman (WCSO/private), Roger Pelham, Ed Lapellisa, LJ Leovre, Tom Dunn, Andy Mink [32-actual head count-listed above were those that signed in]

- Al Rogers welcomed the group and spoke about the Project purpose, goals, status and funding.
- Dale Doerr reviewed the public input process to date. He also reviewed comments from neighbors and user groups, so public members were aware of their wants and needs of the facility. He reviewed each concept plan and requested public feedback on alternatives.
- Review of survey results to date and encouraged participants to fill one out.

Public comments:

- Silhouette Range: Is 500 meters, not yards. Sequential berms need to accommodate additional height [3 dimensional concerns] 20-30 ft. high berms needed. Uphill shooting is better for this range. Currently there is a scheduling problem, CCW and instructors just want cover and shade, so they could use PPC range. Range angled “true north” for light is best.
- Target archery is not an interest to add at the RSF
- If trap/skeet is introduced, non-toxic is unrealistic due to cost. Non-toxic doubles cost for participation.
- Berms aren’t the only option for protection. Shot walls can be modified for protection and could be used to protect creek. Shot walls should only be used for shotgun ranges.
- On IPSC range, not all shots are fired from line. If a baffle system is used, needs to be high to accommodate this.
- Group desire to have multiple range use at the same time-lots of scheduling issues for current set up.
- Concept A- would need adequate berming to work.
- Interest in switching small bore and Silhouette Range.

- If Silhouette Range was straightened, it would be very expensive to provide adequate berming to protect the houses to the west.
- 18 bays at IPSC range would allow for multiple groups to use IPSC at the same time
- NRA has standards for bays, not just width, but length. 30-60-100, 50yds. Desired, 100-200 yds. Would be for 3-gun matches and long shots
- Move the break area behind buildings, not right behind public range to address noise
- There is a spray on application that can adhere to metal, no need for wood-wood is high maintenance in this climate-to help with acoustics and noise levels
- Add small break areas at each range –too far to central area from the farther ranges. Large break area is still a great idea for tournaments etc.
- Currently there isn't any real info. on the website about each range, especially their individual schedules of use-group would like to see that happen
- Clark County facility has good examples especially for hunters, more options, longer ranges
- Bring this plan to the wildlife commission. The public needs to be more involved, especially hunters. "cultivate the interest=promotion of the facility"
- Rest/break area isn't viable as shown. Especially if another range master is introduced. Mud issue and aesthetics is a higher priority for improvements.
- July-October there is a huge wait for public range-need more parking (paved), with benches to accommodate.
- Trees near the public range and the general public parking area are needed-where people are when not shooting-shade would be beneficial here
- Pines in this area are good in the summer, but not in the winter, as they would create too much shade in the colder months. Deciduous trees would be best behind the firing line at public range
- Any baffling proposed need to have substantial anchors due to extremely high winds.
- Don't propose any use before 8am-due to the noise issue
- Concept B- Concern over long term and moving everything-not realistic-minor changes would be easier over time and more cost effective-concern about funds for this option
- Group expressed interest for tactical shooting ranges
- There needs to be adequate access to all firing lines and target areas
- Concept B- Move Silhouette Range and Small bore to the east
- PPC Range doesn't need to be available for tournaments, just a standard range option, targets and numbers don't need to be relocated
- Group would like the goal to be for each IPSC range to be reserveable
- Improve existing ranges before pursuing trap/skeet
- A "throw your own pigeons" type area would be great. These would only be self thrown, not a formal area
- Currently, the property is underutilized due to user conflicts. 1000 yd. range and IPSC are taking up all the use, conflicts with availability, as these are the most popular
- When 1000yd. range is being used, everything else, including IPSC isn't available for use
- Concept B-Silhouette range is too close to neighbors and Pyramid Highway
- IPSC – move 5 bays south below butler building-stacking- could berms accommodate safety issue
- Eliminate PPC-have a general range to accommodate a variety of general use instead

- Expand the public range-there are really long waits for use and this is a high priority. Difficult when you drive all that way and cant get on the range, or have to wait 1-2 hours after the long drive-takes up ½ a day
- Keep all ranges on the master plan
- Small bore used for CCW-they use this for the cover. If cover was available at the other ranges, the 300 yard range wouldn't even be needed.
- Need additional gongs
- Concept C-IPSC too close to adjacent properties
- Priorities-Public Range and IPSC-where there is the most use. Also, provide a plan so as many ranges can operate at the same time-concurrent use will maximize use and revenue
- 1000 yard will be difficult to move and expensive
- Concept A-Angle IPSC northeast toward Bomb Disposal and Training area
- 100 yard bay at IPSC is desired
- Check with RTC regarding future expansion of Pyramid Highway, so we don't plan use that would interfere with transportation planning
- Angling IPSC Northeast seems like a safety issue with Pyramid Hwy. and the neighbors.

Warm Springs Citizen Advisory Board Meeting

May 2, 2011; 6:30pm – Spanish Springs Library – Lazy 5 Regional Park

Regional Parks & Open Space Meeting Notes (*not official CAB notes*)

Item 11B. Regional Shooting Facility Master Plan Update. *Warm Springs CAB will recommend a preferred alternative to the Washoe County Open Space and Regional Park Commission for future consideration.*

Public Comments: (*staff comments, answers to be provided in official minutes*)

- Concern about water availability by adding 100 trees.
- Citizens would at minimum like noticing prior to bomb disposal/detonation activities.
- Sometimes there are 50-60 cars at the public range, especially in the fall prior to hunting season. Need additional paved parking.
- Bomb Disposal. 5000 yard crater around detonation-24/7 access is needed for the bomb squad emergencies. Not in a good location. The quarry would be a more appropriate location for bomb disposal activities.
- There is a need for range expansion. Congested areas are being increased and it would be difficult to relocate facility.
- Concern about tree types and species not surviving with the soils and climate in Warm Springs.
- Concern about bomb disposal contamination-lead and debris impacts to the environment.
- EPA grants for clean up should be explored. Used as a “recycling resource” and potential profits/revenue stream for range.
- Post the draft concepts at the range for public review and comment.
- Questions about prioritizing the facility development and a phasing plan- road improvements should be first to avoid crossing firing lines.
- If the RFP is successful for the range and the facility is contracted out-who does the public call with complaints if there is no County employee or County range master on site?
- Tactical Range? This range would accommodate up to 50 caliber single shot uses. There would be flexibility on firing points and target positions.
- Questions about berms-concern about height and noise mitigation with berms.
- Noise is the greatest concern with the facility. Need to not just add berms, but fencing.
- Question on warning lights-only should be used when a range/facility is in operation.
- Facility should be moved to Winnemucca Ranch or Bidel Flats-not a good location currently.
- Noise isn't that bad-you can't hear the shots at the property boundary.
- Concerns about hours of operation-helicopters, machine guns and crazy hours for bomb disposal activities and military training activities. Not consistent with residential neighborhood use.
- What is the financial subsidy of the facility. Currently loses \$40k-\$50k/year with all expenses, utilities etc. factored in.
- Concern about investing /expanding the facility as it is only busy in the fall before hunting season. Not a need for County to spend money for this in this economy-not a priority.
- Do not plan for trap shooting. Plan for general shooting sports and clays

- Concern for trap location as shown-with no protection if a rifle or other use occurs at trap area-prefer trap on east side of range-trap location at southwest corner is dangerous.
- CAB members not comfortable making a recommendation.
- Concern about orientation.
- Plant the trees in Gerlach, not here at the shooting facility.
- Support shown for additional berming.
- Eliminate trees from plan, use for berms or noise suppression
- Bomb disposal should be moved north
- Support for option A-1
- Appropriate cover and berm design will help noise if done properly

MOTION-APPROVED:

THE WARM SPRINGS CAB RECOMMENDS TO THE WASHOE COUNTY REGIONAL PARKS AND OPEN SPACE COMMISSION: OPTION A-1 WITH SHOOTING SPORTS LOCATION TO BE RETHOUGHT; OMIT TREES AND ALL LIVE LANDSCAPING TO BE TRANSFERRED ELSEWHERE OR COMPLETE OTHER IMPROVEMENTS; FOCUS ON NOISE MITIGATION AROUND RANGE AND RELOCATE BOMB DISPOSAL AREA

WARM SPRINGS CITIZEN ADVISORY BOARD



MEMORANDUM

TO: Al Rogers, Assistant Director, Parks and Open Space
FROM: Allayne Donnelly-Everett, Recording Secretary
DATE: June 3, 2011
SUBJECT: Regional Shooting Range Master Plan

The following is a portion of the draft minutes of the regular meeting of the Warm Springs Citizen Advisory Board held May 2, 2011.

Regional Shooting Facility Master Plan Update – Al Rodgers, Assistant Director, Washoe County Regional Parks and Open Space presented information on the Regional Shooting Facility Master Plan process to date. Dale Doerr, Lumos and Associates present conceptual plans for public review and comment. Mr. Doerr reported that they received approximately 100 responses to a survey. Jennifer Budge, Regional Parks and Open Space was available to present information and hear comments from the community. Contact Ms. Budge at: jbudge@washoecounty.us or 775.823.5313.

MOTION: Hugh Ezzell moved to recommend adoption of Plan A1 as presented tonight, that the locations of the recreation shooting portions of the facility be worked out between the Parks Department and the designer and the users groups, a strong recommendation that trees be omitted and any live landscape be omitted from the design and transferred elsewhere in the county where necessary, and for this design and in the future changes or modifications of the Master Plan that actuation be made toward noise mitigation and lowering of noise impact to the public around the shooting range and that if possible, the bomb disposal area be relocated if feasible according to who ever uses it. Jeff Wiggins seconded the motion. The motion carried unanimously.

Comments and Concerns

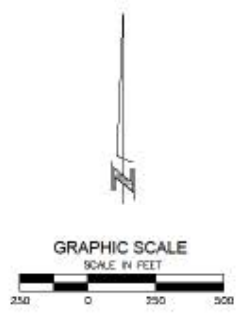
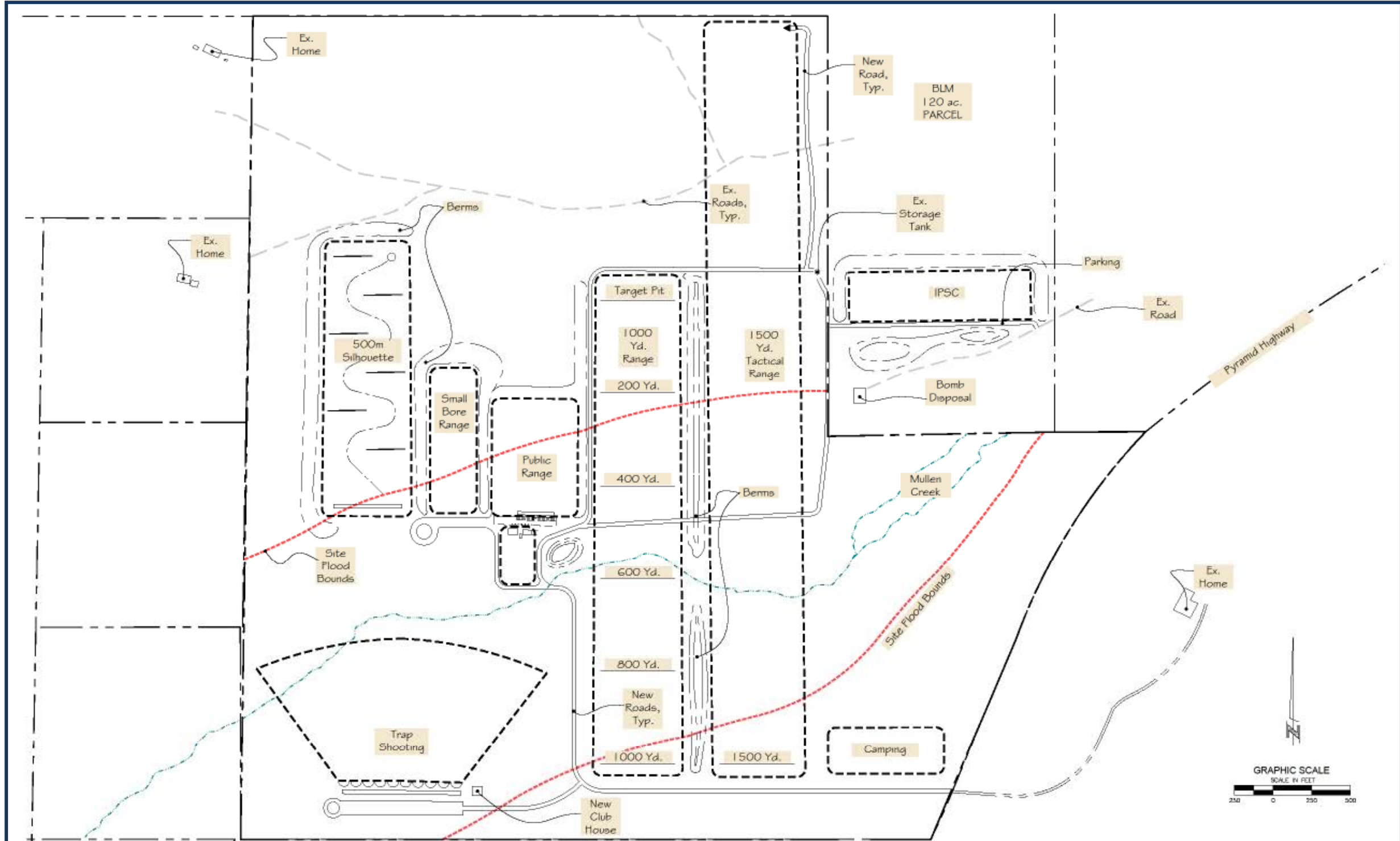
- In response to questions raised, Ms. Budge reported on the comments that have been made by adjacent property owners. One of the concerns is related to negative impacts from noise. Ms. Budge reported that she had talked with every resident adjacent to the facility.
- Sharon Spencer asked that citizens can be noticed in advance of bomb disposal activity by the Consolidated Bomb Squad. Ms. Budge stated that she would pass the request on to the Consolidated Bomb Squad.
- Concerns were raised regarding the amount of water that would be used to irrigate the landscape at the facility and it was suggested that funds be used for stationary overhead shade and berms to reduce noise impacts.
- In consideration of the dry conditions at the facility site, support was stated for installing zero landscape and noise controls.
- Ms. Budge stated that there were approximately 100 trees removed for the Ruby Pipeline project and Ruby Pipeline would be providing funds for trees and landscape at this facility.
- Joe Melcher, Palomino Valley Gun Club stated that they are happy with the proposed master plan and stated that trees can provide some reduction of the noise. Mr. Melcher stated that substantial numbers of parking would be supported. Mr. Melcher stated that there is a natural rock quarry north

of the facility that would be an acceptable alternative for bomb disposal. Mr. Melcher stated support for making this plan work and provide an accessible location for urban and suburban shooters.

- Sharon Spencer asked that the applicant address drought conditions with regard to landscape options. Ms. Spencer also asked that contamination from lead and from the bomb disposal site be addressed.
- Ms. Budge stated that they are seeking specific funding for cleanup of contaminants.
- Mr. Melcher discussed issues of removal of contaminants and lead recycling.
- Mr. Doerr was asked to post the alternative plans at the shooting range. Concerns were raised regarding possible accidents on-site.
- In response to questions raised, Mr. Rodgers stated that they will put out a request for proposal for private management of the site.
- (Unidentified speaker) stated that he has conducted studies that show that trees do not substantially reduce noise impacts and some explosives could react in unexpected ways.
- Safety precautions were urged regarding multiple activities going on at the same time.
- Gary Schmidt stated that a potential relocation of the shooting facility would be the Winnemucca Ranch. Mr. Schmidt stated that there is an area north of Gerlach where there is plenty of water to support landscape.
- In response to questions raised, Mr. Rodgers stated that the purveyor/vendor would be responsible for day to day management of the facility.
- Mr. Doerr stated that the height of the berms would be determined as the master plan moves forward.
- Hugh Ezzell stated that negative impacts from noise and lighting are his main issues. Mr. Ezzell stated that alternate locations could be at Bedell Flats or off of Red Rock Road.
- Bill Sill stated that he utilizes the shooting range and stated that the noise levels are very low.
- Mr. Rodgers stated that due to current budget loses, the Regional Parks and Open Space department has not been able to manage the shooting range site but they will manage the site to the best of their ability.
- Mr. Doerr stated that costs have not been determined. Ms. Budge stated that they will be submitting requests for proposals for funding.
- Questions were raised that with the current economy, should the funds be spent on the shooting facility? Concerns were also stated that funds could be spent on other existing facilities.
- In response to questions raised, Mr. Rodgers stated that income to costs ratio is a losing proposition.
- Ms. Budget stated that the Master Plan could be initiated when funding is made available. Ms. Budge also stated that there are possibilities for acquisition of adjacent land in the future.
- Concerns were raised that there are some sites where shooting would be hazardous for shooters on other ranges.

c: Robert Larkin, Commissioner
Robert White, Chair.
Jennifer Budge, Park Planner
Bob Webb, Planning Manager
Sheri Ingley, Program Assistant
Lorrie Adams, County Liaison

B. ALTERNATIVES A and B



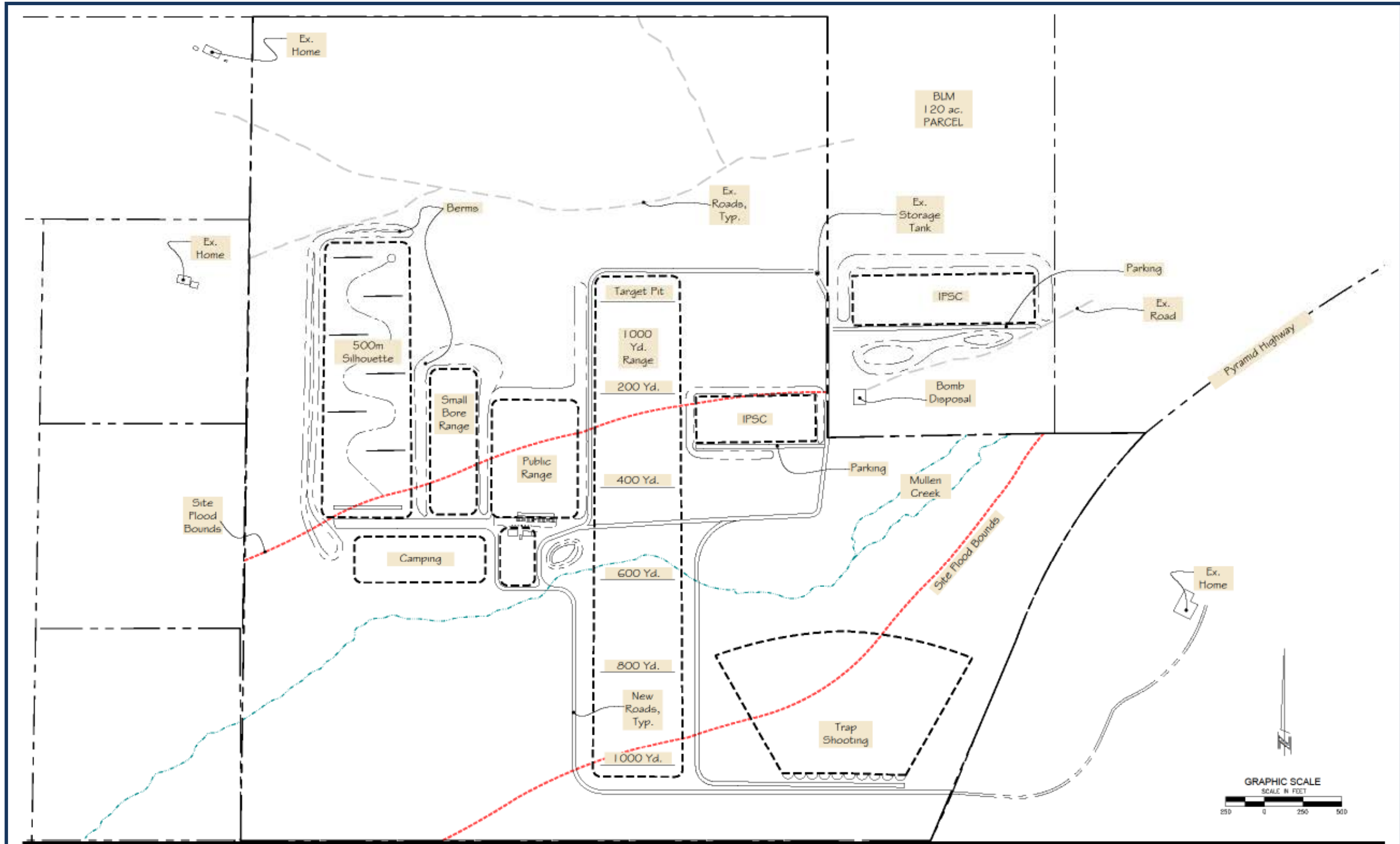
Regional Shooting Facility Master Plan
WASHOE COUNTY, NEVADA

Revised Alternate A Washoe Co. Shooting Range

DATE: APRIL 2011
 DRAWN BY: JMK
 DESIGNED BY: DD
 CHECKED BY: DD
 JOB NO.: 7849.000

LUMOS & ASSOCIATES
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 GEOTECHNICAL ENGINEERING
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Regional Shooting Facility Master Plan
WASHOE COUNTY, NEVADA

Revised Alternate B Washoe Co. Shooting Range

DATE: APRIL 2011
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C. SOIL AND WATER TESTING RESULTS

D. WATER RIGHTS ESTIMATE FOR PROPOSED TREES

Prepared by: Dale Doerr, RLA

LANDSCAPE WATER USE CALCULATIONS
Project Name: Regional Shooting Facility
 Date: 06/14/11

Drip System:

assumption:
 1 gallon per hour emitters -
 (1/1 gal. plant; 2/5 gal. plant; 3/15 gal. plant; 4/24" box plant)

<u>no.of plants</u>	0	1 gal shrubs (x1)
	0	5 gal shrubs (x2)
	0	Evergreen trees (x3)
	100	2" Cal. trees (x4)
=	400	drip emitters @ 1 gph
x	4	hours (4 hours per day)
=	1600	gallons per day
x	64	waterings (twice/week x 32 weeks)
=	102400	gallons per year
/	325851	gallons per acre foot
=	0.314	acre feet per year

Lawn/Spray System

New Turf Area	0	Area (SF)
x	2	Inches per Week
x	32	Weeks per year
=	0	acre feet per year
Existing Turf Area	0	Area (SF)
x	2	Inches per Week
x	32	Weeks per year
/	0	acre feet per year
Total	0	acre feet per year

E. SACRAMENTO VALLEY SHOOTING FACILITY



Firing Line Cover



Shotgun Rack



Shooting Sports Rack,
Fencing and House



Pistol Range with
Net Separation



Gun Rack