# SCOPES OF WORK

For vendors to qualify for any fire fuels reduction service, proposing vendors must provide evidence of the required employee knowledge and skills through experience (attach resumes and/or CV), as well as a detailed description of services in the scope of work being proposed upon. A minimum of three (3) years’ experience in each of the scopes of work being proposed is preferred.

Work is to be performed in a professional manner, with due diligence paid to protecting private property and ensuring a safe working environment for crew members. Equipment and crew must be fully compliant with State and local employer safety and fire prevention codes and ordinances. On-site crew supervision is required to ensure crew safety, as well as an industry accepted level of production. Routine inspections will be conducted to determine quality of work, production levels, and compliance with site protection requirements. Any slash or high stumps that are left will constitute an incomplete job and payment will not be approved until complete.

## FOREST MANAGEMENT HAND CREW SERVICES SPECIFICATIONS

### Vendor(s) who qualify will provide skilled hand crew services to complete forest management-related work, including but not limited to:

#### Fuels reduction.

#### Tree thinning.

#### Wildlife habitat improvement; and

#### Erosion control.

### Crews will be provided with written prescriptions that contain specifications and other pertinent information for each project.

### Travel to the worksite may require driving on narrow, winding, native surface roads for long distances. During the summer months, frequent encounters with hikers, mountain bikers, and horseback riders should be expected.

### Crews must be able to work in difficult terrain that may include steep, rocky slopes, and areas of dense trees with large, unstable snags, poor footing, and exposure to adverse weather. In addition, some work may be required in urban environments and may contain such hazards as structures, trees, power lines, and vehicles; and

### Work includes lifting rounds of wood and segments of logs, limb wood, and brush.

### Tree felling services will include the operation of chainsaws to complete felling, liming, lopping, bucking, and brushing activities according to written prescriptions. Specifications identified below may be modified based on a specific prescription or scope of work.

#### Tree fellers must be able to directionally fell trees away from residual trees or objects to be protected.

#### A tree to be cut larger than six (6) inches in diameter may be marked with paint (color to be determined between awarded vendor and State’s designee). Trees that are less than six (6) inches in diameter may be designated by description.

#### Trees typically range in size from one (1) inch to twenty-four (24) inches DBH but may include larger trees.

#### Cut trees in areas not designated for firewood sales must be limbed on all sides, bucked into four (4) foot lengths and stacked for burning, depending on the prescription unless specified differently in a scope of work.

#### In areas designated for firewood sales, cut trees larger than eight (8) inches in diameter must be limbed on all sides, bucked into four (4) foot lengths, and stacked for removal by individuals purchasing firewood permits unless specified differently in a scope of work.

#### Borax will be applied to all freshly cut green evergreen tree stumps larger than ten (10) inches in diameter to prevent the spread of root disease unless specified differently in a scope of work.

#### Maximum stump height is six (6) inches above high ground level unless specified differently in a scope of work.

#### Trees that are less than six (6) inches must be cut flush with the ground unless specified differently in a scope of work; and

#### Typical brush species are primarily ceanothus, manzanita, oak, and chinkapin, and are mostly three (3) to six (6) feet high. Designation for brush removal is generally by description (e.g., remove fifty (50) percent of the brush) to reduce fuel continuity.

### Disposal of cut material will be accomplished by hand piling for burning, chipping, scattering, and/or removal from site, as designated by the project manager or through a scope of work. All piles must be located so that live trees are not scorched during the burning process. Pile locations will be decided by the awarded vendor and the State’s designee. Accurate recordation for hours of use and biomass produced is required.

### Erosion control services that may be requested include routine light maintenance on roads and trails that can be done by hand, such as digging, trenching and/or removing sedimentation from drainage structures installed along park roads and trails. Other erosion control may include tilling, application of fertilizer, seeding, mulching, irrigation, and the application and establishment of erosion control materials (i.e., geotextile fabric).

### Cost items shall be provided by the vendor to accomplish specific forestry-related tasks using the units below ***during the bidding process***.

#### Service Associated with Scope

|  |  |
| --- | --- |
| Service Associated with Scope | Cost Unit |
| A. Tree cutting (felling, liming, bucking) | Acre |
| B. Burn pile stacking | Acre |
| C. Pile burning | Acre |
| D. Brushing | Acre |
| E. Chipping | Hourly |
| F. Fire line construction | LF |
| G. Mobilization | Mile |

All other work and materials necessary to complete work (e.g., generator fuel) will be considered incidental and included in the payment of cost items.

## LARGE TREE REMOVAL SERVICES SPECIFICATIONS

### Awarded vendor will provide large tree removal on an as needed basis.

### Equipment used must be able to operate on uneven, rocky ground.

### Equipment used must be able to selectively remove individual trees.

### Equipment used must be able to operate near homes and other structures.

### Tree stumps shall be cut to a height of six (6) inches or what is deemed to be appropriate based on-site limitations (to be determined by State’s designee and awarded vendor), and then treated with a borax solution. If the entire tree is not specified for removal, then logs remaining on the lot must be bucked as necessary to ensure that each log or log segment is completely on the ground.

### All felled trees must be limbed, and the slash must be removed from the property, or chipped, blown and scattered on the property as directed by the State’s designee. Wood chips left on the parcel must not exceed two (2) inches in depth.

### If project specifications include that the awarded vendor remove materials for commercial purposes, then the awarded vendor may be expected to reduce or negotiate their fees. Vendors must indicate in their response whether they will remove materials for commercial purposes, and if so, define their process and fee schedule, along with their willingness to negotiate when appropriate.

### Upon receipt of a work order, the awarded vendor shall have all work completed within thirty (30) days.

### The awarded vendor’s activities upon any Government, State, or private property shall be confined to spaces, areas, roads, and locations as directed by the State’s designee; and

### The awarded vendor will work only on normal workdays, Monday through Friday, and between the hours of 8:00 a.m. and 5:00 p.m. After hours work and work on Saturdays, Sundays, and State holidays will not be permitted unless the awarded vendor obtains written approval from the State’s designee.

### Services will be provided by the vendor to accomplish large tree removal using the units below:

#### Class A: Any tree that can be laid down with a clear path on said property. (e.g., A 200’ tree or a 30’ tree regardless of the height and diameter, if the tree has a clear path to fall and can be easily topped and limbed. This job would require one (1) or more people).

#### Class B: Any tree needing to be climbed, trimmed, topped and pieced out. (This job requires one (1) climber/faller and one (1) or more ground person); and

#### Class C: Mechanical involvement required. (e.g., Crane job – 100’ crane. This job would require two (2) or more people).

### Appropriate signage meeting State Highway and local county jurisdiction’s requirements must be provided by the awarded vendor.

## FORESTRY EQUIPMENT SPECIFICATION

### Vendors must indicate in their response the manufacturer and model of available equipment, the capabilities of the equipment, and the operator/crews available to man the equipment.

### Equipment to be utilized on fuels management and/or forest health and/or habitat enhancement projects that may include, but is not necessarily limited to:

#### Tree shears

#### Brush masticators and mowers – light, medium, and heavy duty

#### Feller bunchers

#### Forwarders

#### Cut to length operators.

#### Heavy cranes

#### Wheeled skidders

#### Tracked skidders.

#### Tub grinders

#### Chippers

#### Bulldozers

#### Lawson Aerator

### Awarded vendor will be required to supply operator(s), equipment transport, and if applicable, water for fire suppression/dust abatement.

### General project specifications (project specific specifications will be described in a scope of work prior to commencement of each project and may deviate from the specifications listed below):

#### All vegetation and slash identified for treatment shall be cut at a maximum of six (6) inches above the normal plane of ground (measured at stump height on uphill side).

#### No slash and other vegetative debris shall be more than twelve (12) inches deep as measured from the ground level unless specified differently in a scope of work.

#### No damage to crop trees as a result of contract operations is permitted.

#### All cut vegetation shall be kept within unit boundaries.

#### Any cut vegetation falling into ditches, roads, road banks, trails or adjacent units shall be removed by the end of the workday.

#### No masticated or cut material shall lean against or be suspended by leave trees.

#### Vegetation that is within two (2) feet vertical or horizontal of any obstacle such as large rocks or fences will not require treatment; and

#### All boles or pieces up to ten (10) inches in diameter shall be masticated.

### Specifications for cut material (slash):

#### Fifty (50) percent shall be less than or equal to six (6) inches in length.

#### Forty (40) percent shall be less than or equal to two (2) feet in length; and

#### No more than ten (10) percent shall be equal to two (2) to four (4) feet in length. No slash shall exceed four (4) feet.

### Chaining

#### D8 or larger tractors; The contractor will be responsible for furnishing 2 dozers capable of pulling an anchor chain assembly which is approximately 180-200 feet in overall length and weighs an estimated 22,000 to 28,500 pounds and capable of mountain seed dribblers. The dozers must be furnished with skilled and experienced operators and the necessary support. The work environment will consist of varied terrain and topographic features including hills, draws in a mountainous setting.

#### Government or using Agency will supply anchor chain, pigtail chains, swivels, clevices, and associated pins, seed dribblers and repair parts for all of the above. Generally, contractors will be required to pick up and transport chain from a BLM office location to the identified work site.

##### Ely or smooth

#### One (1) way vs two (2) way chaining; Type of chaining required will be identified in the scope of work but will generally consist of either a one-way chaining or 2-way chaining.

## GROUND APPLICATION OF PESTICIDE APPLICATION SPECIFICATION

### Vendor must be compliant with **NRS 555**.

### License issued by the Nevada Department of Agriculture in the appropriate pesticide category(s) prior to submitting a proposal. Questions regarding this requirement should be addressed to the Nevada Department of Agriculture at (775) 688-1180. Any response submitted by a non-licensed vendor, or vendor that has “applied for” a license, will not be accepted until license is issued. A copy of the license or the license number must be submitted in response.

### Records, application documentation and labels must be available on site.

### Awarded vendors must have the ability to take spot weather to determine temperature, wind speed, and relative humidity.

### Spot, whole tree, and broadcast treatments may be required in some cases.

### Application equipment that is carried by hand, on ATVs, as a slide in unit on a truck, or purpose-built spray equipment on specialized vehicles may be required.

### Application equipment must be cleaned daily and must be easily operable and easily metered.

### To prevent drift, spraying operations will be halted when sustained wind speed is greater than or equal to eight (8) mph, or when the State’s designee determines that there is the potential for drift off the project site.

### Routine inspections will be done by a qualified State designee.

### Mixing tanks must be equipped with portable containment systems and clean-up materials/tools.

### Metering equipment and replacement spray nozzles must be available on the project site.

### The awarded vendor(s) for Pesticide Application will be required to carry Pollution Liability and Pollution Legal Liability Insurance. (See Attachment E of this document for minimum requirements).

### If preventative tree spraying is done, tank pressures need to be at least 400 pounds per square inch (psi) in order to reach the tops of some trees.

### Government or using Agency may or may not supply chemicals and adjuvants (including indicator dye). Government or using Agency provided provisions will be identified in a scope of work.

### Vendor may supply chemical if needed; and

### Or the chemical may be supplied by the Agency.

## SEED DRILLS/APPLICATION SPECIFICATION

### Vendors must indicate in their response the manufacturer and model of all the equipment that will be used, transport and operators.

### **Agricultural Seed Drills** – Designed to place seed into prepared seedbeds. These drills must have multi-species capabilities that allow for the sowing of both grains and legumes and then side dressing each seed row with granular or liquid fertilizer. Agricultural seed drills must be precisely metered so that seeding rates can be calibrated for a variety of seed sizes and types. This type of drill will be used with a tractor equipped with a three-point hitch. Due to the complexity and delicacy of this type of drill, use on rough or rocky ground is not acceptable.

### **No-Till Drills** – Designed to place seed into untilled seed beds in agricultural and pastoral areas. In addition, no-till drills can be used in areas where native vegetation is primarily grasses, perennial and annual forbs and the occasional sub-shrub. This type of drill will be used to place multiple seed species and fertilizer. It must be capable of being used in slightly rougher terrain and somewhat rockier soils than an agricultural drill and will be used on slopes up to four (4) to five (5) percent. Hydraulic controls must be used for this type of drill and must be set up with a three-point hitch for operation.

### **Rangeland Drills** – Designed for drilling seed on wildland sites with a variety of soil types. Minimal ground preparation is required where grasses, forbs and small shrubs are common. Plowing, crushing, or chaining and/or burning may be used as a pre-treatment on sites with mature brush and/or small trees with Government or State designee approval.

###### Vendors may provide drills and carts.

###### Agencies may provide drills and carts.

###### Vendors must be able to calibrate drill equipment prior to the project whether provided by the vendor or the agency.

###### Contractor shall keep a written log with daily entries indicating the date, time, and number of bags utilized in each set of drills. This log shall always be kept current and shall be available for inspection by the State or Government at the work site during all working hours.

###### Contractor shall furnish at the worksite all equipment, labor, supplies, and materials required to complete the work within the specified performance time. The Contractor shall service and maintain equipment, including State/Government-Furnished equipment, as necessary to maintain satisfactory progress on the work. The Contractor shall be responsible for all the State/Government-Furnished equipment as long as it is in his/her custody and shall protect equipment and spare parts from loss or damage due to theft or any other cause. Worn or broken parts that are replaced by the Contractor shall be presented for inspection by the Project Inspector.

###### The Contractor must furnish and be proficient in the use of, a hand-help GPS unit capable of uploading shapefiles. It will be the responsibility of the Contractor to ensure that all treatment activities occur within the designated treatment boundaries by utilizing a GPS unit. The contractor may flag the boundaries of the treatment units at their discretion; however, the contractor will be responsible for the removal of all flagging prior to demobilizing; and

###### The Contractor shall properly dispose of all empty seed bags, tags, strings, pallets, or any other associated trash.

## HAULING SERVICES SPECIFICATION

### Awarded vendor will drop off container on project site (roll on, roll off system);

### Container must be capable of holding woody biomass (chipped or unchipped; but not in the same container).

### Available container volumes should be ten (10), twenty (20), and thirty (30) cubic yards, or volume specified by State’s designee; and

### The containers will be hauled by the awarded vendor from project sites to landfills, power plants, or biomass recycling centers on specially constructed heavy trucks.

### Awarded vendor may be requested to remove previously cut fuel wood from a project site. Vendors should include in their response a minimum bid per cord that will be paid to the State Agency awarding the project to remove fuel wood or other by-products for commercial sale and a listing of available equipment necessary to complete this task.

## GROUND SEEDERS/SPREADER SPECIFICATIONS

### Hand and electric broadcast seeders, to consist of a hopper to contain a given volume of seed, a seed propeller that distributes seed over an area in front of the seeder, and a metering lever that provides the ability to control the rate/amount/pounds per unit volume.

### Metering must be done by determining a set area (usually a square foot frame with square inches marked), adjusting the equipment metering levers to the prescribed seeding rate provided by the State’s designee’s resource plan, walking and cranking with a manual seeder, or by driving the electric seeder over the set area at the average speed the operator will be traveling, then counting the number of seeds found within the set area. The seeder can then be adjusted up or down to the prescribed seeding rate.

### Hand seeders will be carried by a field worker and cranked at a steady rate, following determination of actual seeding rate and adjustment to the prescribed rate.

### Electric seeders will be mounted on a vehicle and driven at a set speed and setting, again following a determination of actual seeding rate and adjustment to the prescribed rate.

### Vendors may supply seeds if needed.

### Or the seed may be supplied by the Agency.

### Weed free testing; and

### Germination tests for all seeds.

### Whether the vendor or agency supplies the seeds, all seed will be tested to ensure that current government standards (federal/state) for noxious weeds and germination are met.

### When required by the State designee’s resource plan, soil disturbances will be completed, to put the broadcast seed in closer contact with the soil. On small sites, this will be accomplished by raking and on larger sites by use of a harrow, tine drag, or a chain link drag pulled by an ATV or similar vehicle.

### In some cases, the awarded vendor will be required to broadcast seed over snow, to allow the seed to gradually carry down through the snowpack and eventually deposit on the soil surface with a source of moisture.

### Awarded vendor(s) must be able to calibrate equipment to meet the prescribed seeding rate.

### The awarded vendor(s) must have labor available to hand rake small areas and equipment such as rakes, harrows and drags in order to put seed in good contact with the soil.

### Awarded vendors must have a certified tree climber if requested. Vendors must indicate in their response if they have ISA certification for Tree Worker or Arborist and detail any experience in this area. This requirement is dependent on the specific project and the area.

## SHRUB AND TREE PLANTING SPECIFICATIONS

### May include bare root and containerized plants.

### Survival rates will be monitored, documented, and reported to the contracting agency per the scope of work.

## CONTROLLED FIRE SPECIFICATION

### Crews to apply controlled fire to natural vegetation under specified conditions and after precautionary actions have been taken to ensure that the fire is confined to a predetermined area, in compliance with NRS 527.

### Awarded vendor must be able to write a controlled fire plan. The plan must be prepared by a person qualified to oversee a controlled fire, be approved by the State Forester prior to implementation, and contain at least:

#### A description and map of the area to be burned.

#### A list of personnel and equipment necessary to commence and control fire.

#### A description of the meteorological factors that must be present before commencing a controlled fire, including surface wind speed and direction, transport wind speed and direction, minimum mixing height, minimum relative humidity, maximum temperature, and fine fuel moisture.

#### A description of considerations related to common behavioral patterns of fires in the area to be burned, including various burning techniques, the anticipated length of the flame and the anticipated speed of the fire; and

#### The signature of the person who prepared the plan.

### Before signing the written plan, the person qualified to oversee the fire must evaluate and approve the anticipated impact of the fire on surrounding areas which are sensitive to smoke (NRS 527.128).

### A direct supervisor, who is qualified to oversee such fires and crews, must remain on site for the duration of the fire.

### Vendors must indicate in their response whether their personnel are NWCG qualified for prescribed fire positions and must provide documentation to show qualifications with their response.

## ROAD CONSTRUCTION/MAINTENANCE/REHABILITATION SPECIFICATION

### Vendors must indicate in their response the manufacturer and model of available equipment necessary to complete this work, the capabilities of the equipment, and the operator/crews available to man the equipment as they pertain to the specifications of this scope of work.

### Road construction activities may include, but are not necessarily limited to:

#### Road blazing.

#### Grading.

#### Backhoe/Track Hoe work.

#### Rock removal.

#### Tree removal.

#### Cut and fill work.

#### Skid trail construction.

#### Installation of drainage structures such as, but not limited to:

##### Culverts, bar ditches

##### Rolling dips

##### Trench drains

##### Tile drains

##### Erosion control barriers and structures

##### Temporary drainage crossings

##### Existing road and skid trail maintenance; and

##### Skid road rehabilitation following project conclusion.

### Vendors must have familiarity with drainage fabrics and geotextiles. Vendors must include in their response detailed experience in comparable projects.

## PROJECT PLANNING OR PROJECT MANAGEMENT

### Vendors will complete vegetation management, fuel reduction, and other project implementation plans that may consider historical, present, and desired future conditions of any, but not limited to the following:

#### Fire occurrence and impacts.

#### Fuel loading.

#### Vegetation condition and biodiversity.

#### Soil condition and health.

#### Invasive species.

#### Riparian and wetlands.

#### Rangeland uses and values.

#### Recreation.

#### Water quantity and quality.

#### Wildlife species and habitats.

#### Archeological resources.

#### Climate impacts and carbon cycling.

#### Special status species (threatened, endangered, sensitive, etc.); and

#### National Environmental Policy Management Act or other public land planning and authorization processes.

### Vendors performing project planning functions may be required to include accurate and current costs and budgets for planned tasks.

### Vendors will be requested to perform project implementation management for fuel reduction, vegetation management and other projects while using any, but not limited to the following:

#### Task planning, Gant chart, and RACI chart or matrix use.

#### Project kickoff processes and procedures.

#### Roles and responsibilities assignment.

#### Permitting, permissions, clearances, and authorizations.

#### Procurement, Coordinating and scheduling resources for implementation.

#### Production monitoring, feedback, and evaluation.

#### Safety hazard analysis and monitoring.

#### Monitoring and reporting deliverable attainment.

#### Budget and expense tracking; and

#### Project closeout.

### Vendors must indicate their experience and qualifications with the following processes and approaches as necessary and required to complete project plans and/or project management:

### Prescription and application of best management practices, including, but not limited to the following:

#### Fuel reduction in various fuel types and quantities.

#### Vegetation health and vigor.

#### Water quality.

#### Wildlife habitat function.

#### Soil stabilization.

#### Weed control.

#### Revegetation.

#### Integrated Pest Management.

#### Riparian Proper Functioning Condition.

#### Vegetation protection measures.

#### Use management practices.

#### GIS analysis and mapping.

#### GPS tracking.

#### Electronic and/or web-based report production.

#### Project planning in natural environments in Nevada; and

#### Project management for implemented projects managed in natural environments in Nevada.

## RISK ASSESSMENTS AND PROTECTION PLANNING

### Vendors will complete assessments and provide reports with findings for various types of including, but not limited to:

#### Wildfire risk assessment.

#### Community hazard assessment.

#### Hazardous fuel assessment; and

#### Home ignition zone (HIZ) inspections.

### Vendors will write protection plans and provide copies for various types including, but not limited to:

#### Wildfire pre-suppression plans.

#### Community wildfire protection plans.

#### Wildfire mitigation plans.

#### Evacuation plans.

#### Fire prevention plans; and

#### Emergency notification plans

### Vendors must indicate their experience with the following processes and approaches as necessary and required to complete assessments, protection plans and comparable projects:

#### Facilitating Public meetings.

#### Consensus building; collaboration.

#### Partnership creation and/or enhancement.

#### Public information and/or media notification and coordination.

#### GIS analysis and mapping; and

#### Electronic and/or web-based report production

### Vendors must have a familiarity with and use as requested, but not limited to the following references and guidelines:

#### Home Ignition Zone (HIZ) (National Fire Protection Association).

#### Firewise USA®.

#### Ready, Set, Go! (IAFC).

#### Healthy Forests Restoration Act of 2003 standards for Community Wildfire Protection Planning.

#### Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities (2004).

#### Community Guide to Preparing and Implementing a Community Wildfire Protection Plan (2008); and

#### Other state and nationally accepted standards and guidelines for risk assessments and wildfire protection planning.

## TARGETED GRAZING

### Vendors will supply livestock to achieve objectives obtained through vegetation and fuel reduction or alteration including, but not limited to:

#### Fuel load reduction.

#### Invasive plant species management.

#### Wildlife habitat improvement; and

#### Native and/or desired species restoration and maintenance.

### Livestock supplied by Vendors will be used to achieve land management objectives these and other physical actions:

#### Consuming vegetation and fuel; and

#### Trampling vegetation and fuel

### Vendors will use the livestock they supply to take action to reduce or alter vegetation and fuel characteristics according to a specific prescription that contains the following and possibly greater details and specifications:

#### Duration of treatment.

#### Timing of treatment.

#### Intensity of treatment.

#### Location of treatment.

#### Targeted fuel and/or vegetation; and

#### Defined results and outcomes.

### Vendors will indicate which specific target vegetation and fuel types, class and/or species their livestock are capable of consuming or trampling to meet objectives, including, but not limited to:

#### Fuels.

#### One-hour fuels are less than 0.25 inch in diameter (also dormant grasses).

#### Ten-hour fuels are 0.25 inch to 1 inch in diameter (also leaf litter and pine needles).

#### One hundred-hour fuels are 1 inch to 3 inches in diameter.

#### One thousand-hour fuels are 3 inches to 8 inches in diameter.

#### Individual species; and

##### Vegetation Class

##### Grass and/or grass like

##### Forbs

##### Shrubs

##### Trees

### Vendors will provide a description of the livestock they possess and can supply for vegetation and fuel management projects.

#### Species

#### Breed

#### Quantities

#### Sex

#### Age class

### Vendors will provide a description of the livestock management techniques and resources they can and may use on targeted grazing project, including, but not limited to:

#### Herders and/or Riders.

#### Supplemental feeding and/or salting.

#### Fencing and/or corrals.

#### Herding animals; and

#### Periodic monitoring and/or 24-hour onsite management.

### Vendors must indicate their experience completing targeted grazing, indicating specific reference to each of the subsections of this scope of work.

## SURVEYS, MONITORING, PERMITTING AND MITIGATION FOR NATURAL AND CULTURAL RESOURCES

### Vendors will provide surveys, monitoring, permitting, and mitigation strategies for a natural and cultural resources including, but not limited to:

#### Historic and prehistoric cultural resources.

#### Invasive and weedy species.

#### Special status species (threatened, endangered, sensitive, rare and others);

#### Wildlife populations and habitats; and

#### Critical water resources and watersheds.

### Vendors will provide vegetation and ecological site surveys and monitoring, including, but not limited to:

#### Coordinating with State of Nevada staff to develop survey and monitoring goals and objectives.

#### Developing project specific survey methodology for evaluating and documenting vegetation and ecological site status including identifying and describing vegetative communities, basic soil and geologic characteristics, describing site disturbances, identifying and quantifying invasive and/or noxious weeds, and identifying mapping rare and sensitive species.

#### Developing methodology that is statistically rigorous using modern and defensible sampling techniques.

#### Using geospatial tools and models for site selection, methods development, etc.

#### Hiring, coordinating, and managing field crews to implement surveys.

#### Ensuring that survey staff have sufficient knowledge and experience to accurately identify vegetation, soils, geology, and other natural resource attributes in Nevada ecosystems; and

#### Providing reports in various electronic formats that describe all requested surveyed and monitored items, their locations, conditions, quantities, and other attributes.

### Vendors will develop vegetation and ecological site permitting, mitigation and data management, including, but not limited to:

#### Provide Clean Water Act Sections 401, 402, and 404 permitting assistance, stormwater pollution prevention plans (SWPPPs).

#### Develop site-specific best management practices (BMPs).

#### Ensuring that environmental compliance and permitting needs are known and met.

#### Collecting and maintaining geospatial data such as survey tracklogs, point occurrences, and area polygons.

#### Developing, populating, and maintaining geospatial databases; and

#### Developing data management and delivery plans

### Vendors will plan and perform surveys and inventories for weedy plants (including invasive, noxious, and non-native species). Vendors must:

#### Be familiar with noxious and invasive weeds found in Nevada, be able to accurately distinguish weedy species from native vegetation and have enough knowledge to identify incipient populations of weedy species not yet established in Nevada.

#### Coordinate with State of Nevada staff to develop survey and monitoring goals and objectives.

#### Hire, coordinate, and manage field crews to implement surveys.

#### Prepare reports on noxious and invasive species found onsite; and

#### Prepare invasive species management plans and agency-specific herbicide use permits, with suggested treatment methods for noxious and invasive species found onsite including outcomes and timelines expected with suggested treatment methods. Collect, manage, and deliver geospatial data such as point occurrences, survey tracklogs, and area polygons.

### Vendors will plan and implement surveys to meet state and federal laws and regulations related to the preservation of cultural resources in Nevada.

#### Vendors should have an expert level understanding of the compliance and consultation needs to meet State of Nevada statutes and Federal laws and regulations for the preservation of historic, archaeological, and cultural resources.

### Vendors may be requested to do some or all the following:

#### Coordinate with State of Nevada staff to develop survey and monitoring goals and objectives.

#### Develop project specific survey methodology for cultural clearance surveys.

#### Develop methodology that is statistically rigorous using modern and defensible industry standard sampling protocol.

#### Hire, coordinate, and manage field crews to implement surveys.

#### Ensure that survey staff have sufficient knowledge and experience to identify accurately and properly, record, and document archaeological resources and historic properties.

##### Ensure permitting needs are known and met.

##### Collect and maintain geospatial data such as survey tracklogs, point occurrences, and area polygons; and

##### Prepare and submit reports sufficient to meet the Nevada State Historic Preservation Office requirements for Section 106 and Section 110 consultation and compliance.