AMENDMENT (AGREEMENT NO. 94-A313A) TO THE CONSERVATION EASEMENT GRANT (AGREEMENT NO. 94-A313) BY AND BETWEEN THE CITY OF BOULDER CITY AND THE COUNTY OF CLARK, NEVADA ALSO KNOWN AS THE BOULDER CITY CONSERVATION EASEMENT

This Amendment is made this 3 rd day of _August_, 2010, by and between the City of Boulder City, Nevada ("CITY") and the County of Clark, Nevada ("COUNTY").

## RECITALS:

WHEREAS, the CITY and COUNTY executed an agreement, the Conservation Easement Grant, that created a conservation easement known as the Boulder City Conservation Easement ("Easement") on July 18, 1995, to provide for, among other things, habitat preservation for the Desert Tortoise and other species within the Eldorado Valley; and

WHEREAS, the CITY and COUNTY desire to amend the Conservation Easement Grant to clarify meaning and more properly address the management of the Easement; and

NOW, THEREFORE, the CITY and COUNTY agree to amend the Conservation Easement Grant as follows:

1. Page 3, Section 4. PROHIBTED USES, subsection (a) - delete in its entirety and replace with the following:
"All motorized vehicle activity, including all competitive and organized events, except on designated roads and trails, which designated roads and events have been approved by the Service in cooperation and consultation with Grantee or any Committee or entity formed or established by Grantee in connection with any Habitat Conservation Plan to benefit the Desert tortoise."
2. Page, 4, Section 5. LAW ENFORCEMENT, subsection (c) - delete in its entirety and replace with the following:
"Grantee shall provide for peace officers with authority to patrol the Property on a regular basis and enforce applicable ordinances, resolutions, orders or regulations. In addition, Grantor shall provide for peace officers with authority to patrol the Property on a regular basis and enforce applicable ordinances, resolutions, orders or regulations to cover events permitted under subsection 4(a)."
3. Page 5, Section 6. RESERVED RIGHTS, subsection (a)(4) - delete in its entirety and replace with the following:
"Parking and camping in designated areas approved by the Service in consultation with the Grantee."
4. Page 5, Section 6. RESERVED RIGHTS, subsection (b)(1) - delete in its entirety and replace with the following:
"Grantor may discharge treated effluent from its existing waste water treatment plant or any expansion thereof onto that limited portion of the Property set forth in Exhibit B, attached hereto and by this reference made a part hereof."
5. Page 5, Section 6. RESERVED RIGHTS, subsection (b)(2) - delete in its entirety and replace with the following:
"Grantor may construct or cause to be constructed electrical, water, sewer, gas, drainage and other utilities to support the maintenance and operation of power generating facilities at those sites known as the Energy Zone described in Exhibit C, attached hereto and by this reference made a part hereof. To the greatest extent practicable, Grantor shall use existing rights of way and roads and use Best Practices described in Exhibit D, attached hereto and by this reference made a part hereof, to all construction, maintenance and operational activities."
6. Page 5 Section 6. RESERVED RIGHTS - add a new subsection (b)(3) to read as follows:
"Grantor may permit construction of utility transmission lines within the easement to connect transmission lines between two federal utility corridors or from a federal utility corridor to one of the three existing electrical substations described in the Eldorado Valley Transfer Act deed from the Colorado River Commission to Grantor dated July 9, 1995 ("deed"). Grantor may also permit modifications to all those rights of way listed in the deed. To the greatest extent practicable, Grantor shall require the use of existing rights of way and roads for such purposes, use the smallest length and width of disturbance, and require the use of Best Practices described in Exhibit D to all construction, maintenance and operation of those utility transmission lines."
7. Page 8, Section 9. COSTS AND LIABILITIES - delete the title and its contents in their entirety and replace with the following:

## "Reserved"

8. Page 9, Section 13. NOTICES - delete in its entirety and replace with the following:
"Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor: City of Boulder City 401 California Street<br>P.O. Box 61350<br>Boulder City, NV 89006-1350<br>Attn: City Manager<br>To Grantee: Clark County<br>500 S. Grand Central Parkway<br>Las Vegas, NV 89155<br>Attn: County Manager<br>cc: HCP Plan Administrator<br>To Service: United States Fish and Wildlife Service<br>1340 Financial Blvd., Suite 234<br>Reno, Nevada 89502<br>Attn: Field Supervisor

or to such other address as either party from time to time shall designate by written notice to the other."
9. Exhibit B, referenced on Page 5, Section 6. RESERVED RIGHTS, subsection (b)(2) - delete in its entirety and replace with "EXHIBIT B - Limit of Boulder City Wastewater Treatment Plant - Treated Effluent Discharge Area," a copy of which is attached to this Amendment.
10. Add a new exhibit entitled "Exhibit C - Energy Zone Map," a copy of which is attached to this Amendment.
11. Add a new exhibit entitled "Exhibit D - BEST PRACTICES TO BE USED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF INFRASTRUCTURE TO PASS THROUGH AND WITHIN THE EASEMENT," a copy of which is attached to this Amendment.

Except as expressly modified in this Amendment, all other provisions of the Conservation Easement Grant, dated July 18, 1995, shall remain in full force and effect as set forth therein.

IN WITNESS WHEREOF, the CITY and COUNTY have caused this Amendment to become effective on the effective date of the Boulder City ordinance approving this Amendment or the date the Clark County Board of Commissioners approves, authorizes, and executes this Amendment, whichever date occurs last..

## CITY OF BOULDER CITY, NEVADA



Attest: Lorene Grum, City Clerk


Approved as to form: David Olsen, City Attorney


By: Rory Reid, Chairman, Board of County Commissioners


Date:


Attest: Diana Alba, County Clerk


Approved as to form:


## EXHIBIT "C"

Energy Zone Map


## EXHIBIT D

## BEST PRACTICES TO BE USED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF INFRASTRUCTURE TO PASS THROUGH AND WITHIN THE EASEMENT

The sections below describe the requirements for minimization and restoration on the BCCE, an explanation of the categories of disturbance that may be permitted on the BCCE, the parameters of success for restoration activities, and best practices for restoration. These best practices shall be used as part of the evaluation of BCCE special use permit requests.

## Goal

The goal for activities that may temporarily or permanently disturb the BCCE is to minimize impacts to the greatest extent practicable. For those areas that are disturbed, the goal for restoration on the BCCE is to restore $100 \%$ of the structure and function of areas that have been disturbed.

## Standards

In general, minimizing the aerial extent (aka footprint) of disturbed areas for all three categories of disturbance is strongly recommended. In those instances where disturbance is not avoided, restoration shall be required. The objective of restoration is the replacement of $100 \%$ of the cover and structure of living and dead native shrubs and perennial grasses. Dead vegetation provides shelter for wildlife and vertical structure (known as "vertical mulch") that traps and shelters seeds of native species, thus allowing for increased germination rates compared to sites with less overall cover. Restoration will be considered successful when plant cover, density, and species richness of native perennial shrubs and grasses is equal to or $100 \%$ of the pre-disturbance values for these measurements, or where pre-disturbance values are not available, equal to or $100 \%$ of those values in undisturbed reference areas to be selected by the County.

## Site Release / Bond

A bond of sufficient size to fund restoration of the entire area permitted for disturbance shall be posted by the project proponent. Additionally, a fee shall be paid to County to fund long term monitoring of restoration success. Upon City and County review of and acceptance of a project completion report, the City will release $90 \%$ of the total bond amount. The project completion report shall document all reclamation activities and include pre and post construction photopoint, qualitative and quantitative monitoring data described above. One year after project completion an additional review of restoration task success will be conducted by City and County to determine if any portion of the remaining $10 \%$ of the bond is needed for additional remediation, or if any portion of the remaining $10 \%$ can be released to the project proponent.

## Categories of Disturbance

Three categories of disturbance are described below: D-1, Overland Drive and Crush; D-2, Clear and Cut; and D-3, Clear and Cut with Soil Removal. Category D-2, Clear and Cut is strongly discouraged and existing access roads shall instead be used to access work areas.
Each category is described in more detail below.
D-1. Overland Drive and Crush.
Disturbance caused by accessing a site without significantly modifying the landscape. Vegetation is crushed but not cropped. Soil is compacted, but no surface soil is removed. Examples include utility line tensioning and pulling areas, tower pad sites, overland access to fiber optic meter sites, salvaged soil or rocks stockpiling areas, and spur roads to electrical distribution line structures. Even though vegetation may be damaged and even destroyed, the surface soil and seed bank remains in place. Some crushed vegetation will likely resprout after disturbance ceases. These activities would result in minimal to moderate disturbance.

D-2. Clear and Cut.
Disturbance caused by accessing the project site, but having to clear all vegetation in order to improve or provide suitable access for other equipment. All vegetation is removed, soils are compacted, but no surface soil is removed. Examples include temporary access roads where the road is improved for access and could include some examples from D-1 above. Clear and cut activities would result in moderate disturbance.

D-3. Clear and Cut with Soil Removal.
Disturbance caused by removing all vegetation in the impact zone, the soils are compacted and the surface soil is displaced and (for projects requiring underground installation) the subsurface soils also are displaced. These activities result in heavy disturbance. Examples include pipelines, buried fiber optic lines, access roads that require grading and filling.

## D-1 Overland Drive and Crush Restoration Requirements

## Maintenance of transmission lines /Temporary use areas

Disturbance caused by accessing a site without significantly modifying the landscape. Vegetation is crushed but not cropped. Soil is compacted, but no surface soil is removed. Examples include utility line pulling and tension areas, tower pad sites, overland access to fiber optic meter sites, and spur roads to
towers. Even though vegetation may be damaged and even destroyed, the surface soil and seed bank remains in place. Some crushed vegetation will likely resprout after disturbance ceases. General restoration actions include:

## Pre-construction:

1 Conduct pre-construction monitoring
2 Seed collection
3 Cactus, yucca and agave salvage and temporarily relocate outside of disturbance area and within the ROW

Post-construction:
1 Earthworks: selectively decompact terrain, if required by County, or erase tracks
2 Replace salvaged cactus, yucca and agave within areas unlikely to be redisturbed within the ROW
3 Reseed
$4 \quad$ Install restoration signs
5 Monitor

## D-2 Clear and Cut Restoration Requirements

## Access Roads

Disturbance is caused by removing or cropping all vegetation in the impact zone, the soils are compacted and the surface soil may be displaced. This type of disturbance is caused by creation of new or expanded temporary access roads, and is strongly discouraged. This type of disturbance causes moderate disturbances. Existing access roads shall instead be used to access work areas.

## Pre-construction:

1 Conduct pre-construction monitoring
2 Seed collection
3 Cactus, yucca and agave salvage and temporarily relocate outside of disturbance area and within ROW
4 Scrape and separate to the side of disturbance surface vegetation (i.e. vertical mulch), surface rocks, and surface soil. In other words, three passes are required - one to collect the vertical mulch and a second pass to collect surface rocks, and a third to collect the surface layer of soil.

Post-construction:

1 Earthworks: Replace surface soil, decompact terrain, recontour, replace vertical mulch and rocks
2 Process, remove, or color caliche
3 Replant cactus, yucca and agave within areas unlikely to be redisturbed within the ROW
4 Reseed
5 Application of County-approved simulated landscape patina colorant to rocks and/or newly exposed caliche to camouflage the restoration area
6 Installation of restoration signs
7 Monitor

## D-3 Clear and Cut with Soil Removal

## Underground Utilities

Disturbance is caused by removing all vegetation in the impact zone, the soils are compacted and the surface soil is displaced, and for project requiring underground installation the subsurface soils are displaced as well. These activities result in heavy disturbance. Examples include pipelines, buried fiber optic lines, and access roads that require grading and filling.

## Pre-construction:

1 Conduct pre-construction monitoring
2 Seed collection
3 Cactus, yucca and agave salvage and temporarily relocate outside of disturbance area and within ROW
4 Scrape and separate to the side of disturbance surface vegetation (i.e. vertical mulch) and surface rocks, surface soil, and subsurface soil. In other words, three to four passes are required - one to collect the vertical mulch, a second to collect surface rocks, and a third and possible fourth pass to collect each layer of soil depending on depth of disturbance.

## Post-construction:

1 Earthworks: Replace soils (in proper order), decompact terrain, recontour, replace vertical mulch and rocks
2 Process, remove, or color caliche
3 Replant cactus, yucca and agave within areas unlikely to be redisturbed within the ROW
4 Reseed
5 Application of County-approved simulated landscape patina colorant to rocks and/or newly exposed caliche to camouflage the restoration area

## 6 Installation of restoration signs <br> 7 Monitor

## Detailed Descriptions of Restoration Requirements

The restoration plan shall be divided into four sections: 1) Survey and Planning Activities, 2) Pre-construction Actions, 3) Post-construction Actions, 4)
Monitoring. These sections shall describe sequential actions for a project, and each is described in more detail below.

## Survey and Planning Activities

The following is a description of survey and planning activities required of proponents prior to the start of pre-construction actions. This includes 1) project area survey, 2) identification of disturbance levels, 3) seed collection, 4) special status plant inventories, 5) determination of restoration actions, and 6) report to City and County.

1. Project Area Survey. All aspects of the project shall be surveyed including but not limited to permanent facility locations, permanent access roads, temporary use areas, stockpiling areas, pulling and tensioning sites, tower locations, spur roads, and temporary access roads. Surveys shall be recorded as GPS point features and delivered to the City and the County as ArcView shapefiles or ArcInfo export files. Baseline pre-construction qualitative and quantitative monitoring of vegetation shall be performed by the project proponent to document the pre-construction conditions.
2. Identification of Disturbance Levels. Disturbance levels will be identified for each portion of the project area, and depicted on a map at a scale of no greater than 1:2,400.
3. Seed Collection. An appropriate seed mix for the project area shall be developed and approved by the City and the County as part of the project application process. If the project area includes more than one habitat type, the restoration plan may be divided into 2 or more zones with different seed mixes required for each zone. Seed collection activities may occur when seeds are available. Seed collection may be conducted on public lands (not on the BCCE) or acquired through an approved seed company and be conducted by an approved/qualified seed company. Only mature seed shall be collected. Pounds of seed will be calculated based upon approved seed mixture and seeding rate.

If collecting seed, no more than 50 percent of seed shall be collected from any one population. After collection, the seeds shall be cleaned, tested for pounds live seed, certified weed free, and stored. All seeds shall be stored dry in a dry insect/rodent proof container that is labeled with location and date of collection and collectors name. A summary of seed collected or procured shall be provided.
4. Special Status Plant Inventories. If requested by County, special status plant inventory surveys consisting of transect lines that cover $100 \%$ of potential habitat shall be conducted. Transect lines walked and encountered plant individuals shall be recorded as GPS point features and delivered to the City and the County as ArcView shapefiles or ArcInfo export files). A summary of findings shall be provided.
5. Determination of Restoration Actions. Determination of proposed restoration activities shall be provided. Restoration actions shall be depicted on maps at the same scale as those provided for disturbance levels.
6. Report to City and County. A report shall be provided to and approved by the City and the County prior to the start of pre-construction activities that includes all information identified above.

## Pre-construction Actions

The following is a description of restoration actions that shall be performed prior to the construction of the project. This includes 1) pre-construction monitoring; 2) salvage of cactus, yucca and agave; 3) salvage of vertical mulch and surface rocks; and 4) salvage of surface and subsurface soils.

1. Pre-construction Monitoring. The project proponent shall conduct monitoring as described below to establish the baseline conditions in the area to be disturbed. The photos, field data sheets, data tables and summary information shall be reported and provided to County prior to the start of salvage activities, with the exception of cactus, yucca and agave flagging.
2. Salvage of Cactus, Yucca and Agave: The project applicant shall identify on site with flagging tape all cacti, yucca and agave that are present within the construction area and will mark the north orientation for all cacti. During survey all yucca clusters shall be counted as separate plants. This flagging and survey may be conducted during pre-construction monitoring. A list describing quantity and species will forwarded to the City and the County upon completion of task.

Project proponent shall obtain any necessary permits to handle cactus, yucca and agave from the Nevada Division of Forestry. All cacti, yucca, and agave under 8 feet ( 2.4384 m ) in height will be salvaged, except for cylindropuntia cacti (aka cholla), including Opuntia echinocarpa, 0 . acanthocarpa, and O. ramosissima over 3 feet ( 0.9144 m ) tall. Any individuals over the heights noted above are not required to be salvaged and will instead become a part of the salvaged "vertical mulch". All live
cactus to be salvaged will be tagged in such a way to note the north-facing side of each individual prior to removal from the soil.

Salvaged live cactus, yucca and agave shall be removed with no less than 2 inches ( 5.08 cm ) of the root structure intact. Salvaged live material shall be shaded until moved to the temporary storage area, stored on site within the right of way, and heeled-in (temporarily planted) to a depth of no more than original depth of soil cover, with all cactus heeled-in with their original north-south orientation. All salvaged live material shall be irrigated once after heeling-in.
3. Salvage of Vertical Mulch and Surface Rocks. After completion of cactus, yucca and agave salvage and storage, remaining live and dead above ground vegetation materials shall be removed and stored within ROW for future restoration use as vertical mulch. Other perennial native vegetation is not salvaged live due to low rates of success compared with other restoration methods and higher costs associated with live salvage, as described in S. R. Abella and A.C. Newton's 2009 publication in the Arid Environments and Wind Erosion journal.

Rocks no larger than 12 inches ( 30.48 cm ) in diameter, gravel and cobble on the surface shall be removed and stored in small piles or windrows within the ROW for later replacement in area of salvage. Larger rocks and boulders that must be removed for construction should also be salvaged. Under no circumstances shall cactus, yucca or agave be buried by the salvaged rock or vertical mulch piles.
4. Salvage of Surface and Subsurface Soils. The top 4 inches ( 10.16 cm ) of soil shall be scraped and stored in uncompacted piles no more than 4 feet $(1.2192 \mathrm{~m}$ ) high within the ROW. The salvaged top soil shall not be mixed with deeper soils, as this decreases the viability of seeds found in the topsoil, as described in S. J. Scoles-Sciulla and L. A. DeFalco's 2009 publication in the Arid Land Research and Management journal.

To the extent practical, root crowns and roots of perennial vegetation shall be left in place to assist recovery of the area post-construction. Subsurface soils that must be removed for construction purposes shall also be salvaged and stored in piles separate from the salvaged top soil within the ROW. Under no circumstances shall cactus, yucca or agave be buried by the salvaged soil piles.

## Post construction activities

The following is a description of the actions that may take place after the end of construction. This includes 1) earthworks, 2) decompact terrain and recontour drainage, 3) process, remove, or color caliche, 4) erase equipment tracks, 5)
replace vertical mulch and surface rocks, 6) replant cactus, yucca and agave 7) reseed, 8) install restoration signs and 9) post-construction monitoring.

1. Earthworks. Replace salvaged soils in proper order, mixing each layer slightly with the top 1 inch ( 2.54 cm ) of the lower layer. Once all soils are replaced, rake or harrow to create microtopographic features that will greatly enhance restoration success as described in Abella and Newton's above 2009 publication.
2. Decompact Terrain and Recontour Drainage. Decompact soils by ripping and/or harrowing soils in areas that were impacted and/or compacted by the project, unless that compaction is part of the approved project design. Recontour soils to restore natural drainage patterns, or recontour to conform to approved project design.
3. Process, Remove, or Color Caliche. Any cut rocks or newly exposed caliche shall be recolored with a County-approved permanent, non-toxic, landscape colorant, such as Permeon ©.
4. Erase Equipment Tracks. Remove tracks made by equipment by manual raking or other means that will not compact the soils. Rake or harrow as above to create microtopographic features that greatly enhance restoration success as described in the above 2009 publication by Abella and Newton.
5. Replace Vertical Mulch and Surface Rocks. Replace surface rocks by partially burying any large boulders or rocks and placing salvaged cobble and gravel to mimic surrounding, undisturbed areas. This camouflages site and reduces likelihood of vandalism or illegal vehicular use that might jeopardize restoration success. Position vertical mulch to mimic the density and vertical structure of vegetation prior to construction, burying each dead shrub or cactus partially to reduce loss to wind.
6. Replant Cactus, Yucca and Agave. Salvaged cactus, yucca and agave shall be replanted in restored areas not likely to be redisturbed in the next 10 years. Cactus will be replanted so that marked North indicator again faces north. All salvaged cactus, yucca and agave will be planted to mimic the pre-construction distribution of each species, and in densities similar to pre-construction density.
7. Reseed. During the months of September - December, the Countyapproved, certified weed-free seed mix shall be applied to the entire prescribed disturbed area at a rate of no less than 125 live seeds per square yard (150 live seeds per square meter). If different zones were prescribed by the County, seed mixes shall only be used in the
appropriate zones. Seeded areas should be raked or dragged to cover the seeds with approximately 1 inch $(2.54 \mathrm{~cm})$ of surface soil material.
8. Install Restoration Signs. Where restoration areas abut or intersect permanent utility roads or other roads that are designated "open" by the land manager, or other public roads, signs shall be posted within the project ROW, oriented so the sign surface is visible to those roads, and shall identify the area as a restoration area that should not be disturbed. The sign shall also identify the project proponent. If the restoration is adjacent and parallel to such a road described above, signs shall be posted every 500 feet ( 152.4 m ). Signs shall be maintained by project proponent for a period of 5 years after restoration project is declared complete by County and City.
9. Post-construction Monitoring. As further described below, the project proponent is responsible for a monitoring event post construction, and the first year of monitoring after project completion has been accepted by the City and County. Project proponent is also responsible for funding the 5 years of post-restoration monitoring that will be conducted by County to determine the effectiveness of restoration techniques.
10. 

## Monitoring

The following are the types of monitoring required before construction, during the construction and restoration activities, and after restoration activities have been completed.

Baseline pre-construction monitoring. Baseline pre-construction qualitative and quantitative monitoring shall be performed by the project proponent to document the pre-construction conditions.

Post-construction monitoring. A minimum of 6 years of post-construction qualitative and quantitative monitoring will take place for each project. Project proponent shall conduct year one of six, and shall provide funds to the City and County for County to conduct monitoring in years two through six.

## Compliance monitoring

Compliance monitoring by the City and/or the County may take place throughout the term of the project. The goal of compliance monitoring is to determine if the activity (including minimization and restoration actions) is progressing as approved by the City and the County.

## Qualitative monitoring

The goal of qualitative monitoring is to document site conditions and evaluate the need for remediation to ensure that sites are progressing toward the success standard. Photo points will be established to document the pre-construction and post-construction restoration state of the vegetation and soil in each year of
monitoring (a total of at least 7 years of photos.) Photo monitoring methods are described in a technical report produced for the US Forest Service by F. Hall in 2002. The title of the technical report is General Technical Report PNW-GTR526 and it is available here: http://www.fs.fed.us/pnw/pubs/gtr526/

## Quantitative monitoring

Special Status Plant Species Monitoring, if requested by County, will be conducted using transects that cover 100\% of potential habitat. Inventory efforts must be recorded as GPS line features and all species status species encountered must be recorded as GPS point features and delivered to the City and the County as ArcView shapefiles or ArcInfo export files.

Weed Species Richness is measured by counting the number of weed (nonnative) plant species present within a sample unit. A list of all non-native plant species observed during the project will also be provided.

Native Plant Species Richness is measured by counting the number of native plant species present within a sample unit. A list of native plant species encountered within the sample units or observed during the project will be provided.

Native Perennial and Grasses Cover is measured by estimating the percentage of ground covered by living and dead native perennial and native grass species within a sampling unit

Native Perennial and Grasses Density is measured by counting the number of individuals of each native species within a sampling unit and dividing by the area of that sampling unit.

