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# PHASE I ENVIRONMENTAL SITE ASSESSMENT

**Pahrnagat Middle/High School  
Multi-Use Building  
262 Weeping Willow Avenue  
Alamo  
Lincoln County  
Nevada**

| Soil and Groundwater Remediation

| Regulatory Compliance

| Environmental Audits

| Hydrogeology

| Hazmat Response

***Prepared for:***

***Lincoln County School District  
PO Box 118 (1191 Edwards)  
Panaca, NV 89042***

***On behalf of:  
Rural Desert Southwest Brownfields Coalition***

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## EXECUTIVE SUMMARY

*The subject property is known as the Pahranaagat Middle/High School Multi-Use Building and is located within the Pahranaagat Middle/High School campus in the Town of Alamo, Lincoln County, Nevada. The school is addressed at 262 Weeping Willow Avenue and is comprised of one parcel of land that is listed with Lincoln County, Nevada as Assessor's Parcel Number (APN) 004-101-01. McGinley and Associates, Inc. (MGA) has performed a Phase I Environmental Site Assessment (ESA) of this property at the request of Lincoln County on behalf of the Rural Desert Southwest Brownfields Coalition to determine recognized environmental conditions (RECs) in connection with the subject property.*

*The subject property consists of a portion of one parcel of land which totals 7.49 acres in area. The property is currently developed with a building approximately 90 feet by 30 feet in size. The building was originally used as a military barracks at Nellis Air Force Base in Las Vegas, Nevada. The building is a wood framed structure covered with what appears to be exterior transite siding. The interior of the building is split into five main areas. The northernmost portion of the building is connected to the main middle school building and has been renovated as a shower and locker room. The other remaining rooms include a sporting equipment storage room, a weight lifting equipment room, a maintenance equipment storage room, and a landscaping equipment storage room. Common cleaning chemicals were observed in the maintenance storage area and appeared to be stored properly. Chemical storage lockers were observed in the landscaping equipment storage room and it appears that small volumes of gasoline, oil, and common landscaping fertilizers and pesticides are stored in this area. The interior portions of the building are showing signs of age and the exterior paint and transite siding appear to be flaking and friable. According to school district personnel, future renovations are planned to be performed on the building.*

*Access to the property is gained via Weeping Willow Avenue to the north and/or S. Main Street to the west. The subject property lies within the interior of the school campus and is surrounded by school buildings to the north, east, and west. To the south is a gravel-surfaced parking area with a maintenance yard and two above ground storage tanks containing diesel and gasoline, respectively, beyond.*

*The subject property is located within the Pahranaagat Valley region of southeastern Nevada at an elevation of approximately 3,460 feet above mean sea level. Average minimum and maximum annual temperatures for Alamo, Nevada during the period from 1921 to 1962 are approximately 37.9 and 75.5 degrees Fahrenheit, respectively, while total annual precipitation averages about 6.27 inches. The subsurface geology of the subject property has been mapped as Quaternary-age deposits consisting of older alluvium. Surficial soils at the subject site have been mapped as Geer silt loam. The soil unit is described as well drained with moderately high to high hydraulic conductivity of saturated soil and high available water capacity.*

*No streams, ponds, or wetlands were observed on the subject property. However, the property is located within a 100-year flood zone described as Zone AE. The closest major surface water body to the subject property is Pahranaagat Valley Creek which is located approximately 900 feet to the east. The creek flows to the south towards the Upper Pahranaagat Lake. Groundwater conditions on the subject property have not been positively ascertained. However, depth to groundwater in the area of the subject property is estimated to be approximately 10 to 20 feet below ground surface (bgs). Groundwater flow direction is likely toward the east. No wells were observed on the subject property at the time of the site visit and a search of the State of Nevada Division of Water Resources (NDWR) database did not indicate any wells on the property.*

*Reconnaissance of the publicly accessible, easily visible portions of those properties located immediately adjacent to the subject property did not reveal site conditions that serve as a recognized environmental condition to the subject property.*

*A historical assessment indicates that the building was acquired through donation by the United States*

*Air Force and transported from Nellis Air Force Base to its existing location during the 1960's. Upon its delivery, the building was placed on footings and a stem wall. It appears that the school itself was first constructed in 1921 when the Pahrnagat High School was established. More recent renovations to the building took place within the last 20 years. The renovations connected the northern portion of the building to the middle school building in order to provide a shower/locker room for students.*

*A regulatory review was performed to search for regulatory sites located within a one-mile radius of the subject property. The subject property was not identified in the search as a regulatory site. In addition, the regulatory review did not locate sites within a one-mile radius of the property. However, MGA reviewed sites which EDR was not able to map and which are referred to as orphan sites. A review of these sites appears to indicate that the Pahrnagat Valley High School and Middle School are listed as regulatory sites. The high school is listed as a state hazardous waste site (SHWS) and a facility index system/facility registry system (FINDS) site. The middle school is listed as a FINDS site. Based on a review of the report, these sites do not appear to serve as recognized environmental conditions to the subject property at this time. Information regarding the remaining orphan sites was reviewed. Based on the information provided, each are at locations that are considered likely to be hydrologically downgradient from, or cross gradient to, the subject property, have had no reported releases, have had no reported violations of hazardous waste regulations, and/or have received regulatory closure. For this reason, the sites are considered unlikely to cause, or to have caused in the past, environmental impact to the subject property.*

*Identification and sampling for the presence of mold, asbestos, lead-based paint, and radon gas were beyond the Scope of Work for this Phase I ESA. However, given the age of the onsite structure and prior assessments performed on a similar building donated by the Air Force to the Lincoln County School District, MGA is of the opinion that the risk of asbestos and lead-based paint within building materials is a recognized environmental condition for the subject property.*

*Upon conclusion of our Phase I ESA, and based on the information reviewed, this assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:*

- Based on the age of the structure and information from prior assessments performed on a similar building donated by the Air Force to the Lincoln County School District, it is likely that asbestos containing materials and lead-based paint were utilized during original construction of the building.*

*Therefore, MGA is of the opinion that further environmental investigations are warranted on the subject property at this time. MGA recommends that an asbestos and lead-based paint survey be performed on the structure located on the subject property that is proposed to be renovated by the school.*

# 1. INTRODUCTION

## 1.1 Purpose

This report presents the findings of a Phase I Environmental Site Assessment (ESA) performed on a portion of one parcel of land located in the Town of Alamo, Lincoln County, Nevada. McGinley and Associates, Inc. (MGA) conducted this investigation for the purpose of identifying *recognized environmental conditions* (RECs) on the property and/or nearby properties in accordance with the 2005 American Society of Testing and Materials (ASTM) standards for the performance of Phase I Environmental Site Assessments (ASTM E 1527-05), as well as the standards established by the U.S. Environmental Protection Agency (EPA) in 2006 for conducting All Appropriate Inquiry (AAI).

## 1.2 Conditions of Contract

MGA performed this work for Lincoln County on behalf of the Rural Desert Southwest Brownfields Coalition pursuant to Work Order No: BFCAMGA3 executed April 18, 2012.

## 1.3 User Responsibilities

In accordance with ASTM E 1527-05, the user of this Phase I ESA is required to provide information to help identify the possibility of RECs. In order to obtain this information, a questionnaire was provided to a representative of the Lincoln County School District. A copy of the completed questionnaire is provided in Appendix A.

## 1.4 Scope of Work

The scope of work performed and procedures utilized included the following tasks:

- **Environmental setting review** to determine potential pathways for the migration of contaminants onto, or off of, the subject property;
- **Site reconnaissance** of the subject property and observation of adjacent properties and vicinity by a qualified person under the direct supervision of an MGA Certified Environmental Manager;
- **Review of site history/land use** through historic aerial photographs, a historic topographic map, local jurisdiction records, and a personal interview;
- **Review of regulatory agency records** to identify and assess any listings of regulatory permits, registrations, or enforcement actions at the subject site or proximal sites, through both a commercial database search and agency inquiries; and,
- **Preparation of this report** that describes all work performed and presents a discussion of the results.

## 2. SITE CHARACTERISTICS

### 2.1 Site Location

The property investigated for this Phase I Environmental Site Assessment consists of a portion of one parcel of land, which is located in the Town of Alamo, Lincoln County, Nevada within the Pahranaagat Valley (Figure 1). It is listed as Lincoln County Assessor's Parcel number 004-101-01 and is located within Section 08, Township 07 South, Range 61 East of the Mount Diablo Base and Meridian (MDB&M). A copy of the Assessor's Map that depicts the subject property is provided herein as Appendix B.

### 2.2 Site Description and Current Usage

The subject property is currently developed with a building approximately 90 feet by 30 feet in size. The building was originally used as a military barracks at Nellis Air Force Base in Las Vegas, Nevada. The building is a wood framed structure covered with what appears to be exterior transite siding. The interior of the building is split into five main areas. The northernmost portion of the building is connected to the main middle school building and has been renovated as a shower and locker room. The other remaining rooms include a sporting equipment storage room, a weight lifting equipment room, a maintenance equipment storage room, and a landscaping equipment storage room. Common cleaning chemicals were observed in the maintenance storage area and appeared to be stored properly. Chemical storage lockers were observed in the landscaping equipment storage room and it appears that small volumes of gasoline, oil, and common landscaping fertilizers and pesticides are stored in this area. The interior portions of the building are showing signs of age and the exterior paint and transite siding appear to be flaking and friable. According to school district personnel, future renovations are planned to be performed on the building. Access to the property is gained via Weeping Willow Avenue to the north and/or S. Main Street to the west. The layout of the subject property is illustrated in Figure 2.

Utilities supplied to the subject property include power (Alamo Power District) and water/sewer (Alamo Sewer & Water General Improvement District).

### 2.3 Adjacent Properties

The subject property is bordered by the following:

|        |  |
|--------|--|
| North: | School building.   |
| South: | Gravel-surfaced parking lot with two ASTs and a maintenance yard beyond. |
| East:  | School building.   |
| West:  | School building.   |

### **3. ENVIRONMENTAL SETTING**

#### **3.1 Regional Physiographic Setting**

The subject property is located within the Pahrnagat Valley region of southeastern Nevada at an elevation of approximately 3,460 feet above mean sea level. Average minimum and maximum annual temperatures for Alamo, Nevada during the period from 1921 to 1962 are approximately 37.9 and 75.5 degrees Fahrenheit, respectively, while total annual precipitation averages about 6.27 inches (Western Regional Climate Center (WRCC), 2012).

#### **3.2 Geologic Conditions**

The subsurface geology of the subject property has been mapped as Quaternary-age deposits consisting of older alluvium (Tschanz and Pampeyan, 1963). Surficial soils at the subject site have been mapped as Geer silt loam. The soil unit is described as well drained with moderately high to high hydraulic conductivity of saturated soil and high available water capacity (Natural Resources Conservation Service, 2012).

#### **3.3 Surface Water Conditions**

No streams, ponds, or wetlands were observed on the subject property. The closest major surface water body to the subject property is Pahrnagat Valley Creek which is located approximately 900 feet to the east. The creek flows to the south towards the Upper Pahrnagat Lake. Runoff from the site during storm events will travel overland towards the east and south. According to the Federal Emergency Management Agency (FEMA), the property is located within a 100-year flood zone described as Zone AE.

#### **3.4 Groundwater Conditions**

Groundwater conditions on the subject property have not been positively ascertained. However, based upon a review of well logs for the area, as provided on-line by the Nevada Division of Water Resources (NDWR), depth to groundwater in the area of the subject property is estimated to be approximately 10 to 20 feet below ground surface (bgs). Groundwater flow direction is likely toward the east. No wells were observed on the subject property at the time of the site visit and a search of the State of Nevada Division of Water Resources (NDWR) database did not indicate any wells on the property.



## 4. SITE RECONNAISSANCE

### 4.1 Methodology

For the purpose of assessing current site conditions, a visit to the subject property and surrounding areas was conducted on May 30, 2012 under warm and sunny conditions. During the site visit, observations were made to identify *recognized environmental conditions (RECs)*. As defined by ASTM E 1527-05, a *recognized environmental condition* is the presence, or likely presence, of any hazardous substances or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term REC is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of enforcement action if brought to the attention of appropriate governmental agencies. Photographs taken during the site reconnaissance are provided in Appendix C.

### 4.2 Site Description

The subject property exists on a portion of one parcel of land (APN 004-101-01) that is currently developed with the Pahrnagat Middle School and High School. The subject property consists entirely of the multi-use building that is utilized by the schools.

The building is approximately 2,700 square feet in size and is split into five distinct portions including a shower/locker room, sports equipment storage room, weightlifting equipment room, maintenance equipment storage room, and landscaping equipment storage room. The flooring observed in the rooms consist of 9x9 floor tiles, carpeting, and 12x12 floor tiles. The exterior of the building appears to be covered with transite siding. Window sills and other painted wood surfaces were observed to be flaking. Chemical storage was observed in the maintenance equipment storage room and landscaping equipment storage room. The chemicals appeared to be stored properly and in general, housekeeping practices at the property appeared to be in good order.

### 4.3 Surrounding Properties

The subject property is completely surrounded by the campus of the Pahrnagat Middle/High School facility. The maintenance yard to the south and beyond the gravel-surfaced parking lot contains two double-walled above ground storage tanks (ASTs) which provide diesel and gasoline to school buses and maintenance vehicles. There were no stains or indications of past spills observed near the ASTs at the time of the site visit. Reconnaissance of the publicly accessible portions of those properties located immediately adjacent to the subject property revealed no RECs.

### 4.4 Observations During Reconnaissance

An MGA representative visited the subject site on May 30, 2012. The entire site was walked and observed for RECs. The following is a list of some of the items of interest that were looked for during the site visit. If the item was not discovered, it will be noted as "Not Observed". If the item was observed during the site visit, it will be noted as "**Observed**" and a short description of the observation will follow.

- Staining or discoloration of soil and/or pavement Not Observed

|  |              |
|--|--------------|
| • Wastewater systems, septic systems, sumps, and/or seeps.               | Not Observed |
| • Wells  | Not Observed |
| • Patched areas of asphalt or concrete                                   | Not Observed |
| • Standing surface water, ponds, farm tanks, etc...                      | Not Observed |
| • Railroad spurs   | Not Observed |
| • UST systems / vent pipes   | Not Observed |
| • Aboveground Storage Tanks  | Not Observed |
| • Suspect PCB containing equipment                                       | Not Observed |
| • Paint booths, spray rigs, etc.   | Not Observed |
| • Unorthodox heating and ventilation systems                             | Not Observed |
| • Emergency generators   | Not Observed |
| • Unusual odors  | Not Observed |
| • Dumping, disturbed soils, direct burial activity                       | Not Observed |
| • Floor drains   | Not Observed |
| • Air emissions  | Not Observed |
| • Industrial or manufacturing activities                                 | Not Observed |
| • Distressed, discolored or stained vegetation                           | Not Observed |
| • Oil or gas well exploration or refinery activities                     | Not Observed |
| • Surface water contamination  | Not Observed |
| • Farm waste, feed lot spoils, or manure stockpile                       | Not Observed |
| • Prolonged use, misapplication or storage of pesticides                 | Not Observed |
| • Discharges, or run-off of potential contaminants from off-site sources | Not Observed |

- Basements and/or subsurface vaults

Not Observed

#### **4.5 PCB Sources**

No transformers, capacitors, or other potential poly-chlorinated biphenyl (PCB) sources were observed on the subject property at the time of the site visit.

## 5. SITE HISTORY AND LAND USE

A historical assessment of the subject property was performed through a search and review of city street directories, historic aerial photographs, Sanborn fire insurance maps, historic topographic maps, county records, and interviews. The purpose of the historical assessment was to identify *historical recognized environmental conditions (HRECs)* associated with the property. As defined in ASTM E 1527-05, a *historical recognized environmental condition* is one that, in the past, would have been considered a *recognized environmental condition*, but which may or may not be considered as such currently. A summary of our historical assessment is presented below.

### 5.1 City Street Directories

City directory listings for the subject property and surrounding properties as published by the R.L. Polk Company, were not reasonably available for review prior to the date of the report.

### 5.2 Historic Aerial Photograph Review

Historic aerial photographs were provided by EDR covering the area of the subject property for the years 1967, 1977, 1981, 1983, 1994, 1999, and 2006. A current aerial photograph was observed online utilizing various websites. Aerial photographs for years other than these dates were not reviewed.

Each of the aerial photographs reviewed were taken at a relatively high altitude and a few are not particularly clear. The subject property appears as a building in the photos which are clear. No potential RECs were noted in any of the historical aerial photographs reviewed. A copy of the aerial photograph report reviewed is provided in Appendix D.

### 5.3 Sanborn Fire Insurance Maps

Sanborn fire insurance maps were not published for the area surrounding the subject property. A certified report of those findings is included in Appendix E.

### 5.4 Historic Topographic Maps

Historic topographic maps were provided by EDR covering the area of the subject property for the years 1945 and 1969. Topographic maps for years other than these dates were not reviewed. The earliest map reviewed (1945) appears to show the subject property in an area developed with several structures. However, it is not clear if the subject property itself is shown as a structure. 1969 map displays the school. A review of these maps do not appear to indicate potential environmental issues associated with the subject property or upgradient sources. A copy of the historic topographic map report is provided in Appendix E.

### 5.5 Lincoln County Assessor's Office

According to the Lincoln County, Nevada Assessor's Office, the subject property is listed as a portion of parcel number 004-101-01. The parcel is approximately 7.5 acres in area and is currently owned by the Lincoln County School District. The school is listed as having an original construction year of 1965 and consisting of four non-dwelling units. No other owners are listed. No other information was provided.

### 5.6 Personal Interviews

#### 5.6.1 Ken Back, Pahranaagat Middle/High School Maintenance Supervisor

At the time of the site reconnaissance, the maintenance supervisor for the school provided a site tour and was interviewed with regard to site history and known or suspected environmental issues

associated with the subject property. The supervisor was able to provide some historical information regarding the past use of the property. Mr. Back indicated that the building was slated for renovations in the near future and due to the assessments performed on a similar Panaca school building donated by the Air Force, he was anticipating requirements for abatement prior to those renovations. Mr. Back was not aware of any other environmental issues associated with the structure.

## 6. REGULATORY AGENCY REVIEW

A regulatory agency review was conducted through both a commercial database search (Environmental Data Resources, Inc. (EDR)) and agency inquiries. The purpose of this regulatory agency review was to ascertain if regulatory actions have been imposed on the subject property, or on properties within the radius guidelines established by the 2005 ASTM Standards for Environmental Site Assessments.

### 6.1 Environmental Data Resources (EDR) Radius Map Report

At the request of MGA, EDR performed a review of federal, state, and local environmental databases. A copy of the EDR report is included herein as Appendix F. Included within the report are summaries of the regulatory databases reviewed, a listing of sites identified within the search radius, detailed data on the identified sites, and maps showing the locations of facilities reported to have had regulatory action. MGA reviewed and evaluated all of the sites in the EDR report.

The EDR database search was conducted using a 1-mile search radius starting from the subject property. The subject property was not identified in the search as a regulatory site. In addition, the regulatory review did not locate sites within a one-mile radius of the property. However, MGA reviewed sites which EDR was not able to map and which are referred to as orphan sites. A review of these sites appears to indicate that the Pahranaagat Valley High School and Middle School are listed as regulatory sites. The high school is listed as a state hazardous waste site (SHWS) and a facility index system/facility registry system (FINDS) site. The middle school is listed as a FINDS site. Based on a review of the report, these sites do not appear to serve as recognized environmental conditions to the subject property at this time.

Information regarding the remaining orphan sites was reviewed. MGA reviewed all of these sites and has determined that each are located far from the subject property, are at locations that are considered likely to be hydrologically downgradient from, or cross gradient to, the subject property, have had no reported releases, have had no reported violations of hazardous waste regulations, and/or have received regulatory closure. For this reason, the unmapped sites are considered unlikely to cause, or to have caused in the past, environmental impact to the subject property. Additional environmental records searched or considered proprietary by EDR found no other sites within the search distance.

### 6.2 Nevada Division of Environmental Protection

Based on the EDR regulatory search report and site reconnaissance, no regulatory files were requested to be reviewed at NDEP.

## 7. POTENTIAL ENVIRONMENTAL HAZARDS

A review of site-specific, potential environmental hazards was conducted for the purpose of identifying environmental issues not subject to regulatory enforcement action, but which may nevertheless be considered a *Business Environmental Risk* to the user of this Phase I ESA.

### 7.1 Asbestos and Lead-Based Paint

Asbestos containing material (ACM) has been identified as a potential health hazard, particularly when that material is friable and becomes damaged. Identification and sampling for the presence of ACM are beyond the Scope of Work (as outlined in Section 1.4 of this Report) for this Phase I ESA. However, given the age of the on-site structure and previous assessments performed on similar structures donated by the Air Force to the Lincoln County School District, MGA is of the opinion that asbestos containing materials are likely to be found within building materials utilized in the on-site structures. MGA recommends that a qualified inspector be contacted to provide an asbestos assessment on the on-site structures prior to future renovation.

In addition, due to the age of the structures located on the subject property, there is a potential that paint utilized for the structures may contain lead. Therefore, MGA recommends that a qualified inspector be contacted to provide a lead-based paint survey on the on-site structures prior to future renovation.

### 7.2 Radon

Radon gas is a colorless, toxic gas derived from the radioactive decay of uranium and other minerals, which are often found within bedrock and unconsolidated sediments. Radon gas can enter homes and other structures through floor cracks and other openings that are in direct contact with the underlying geologic materials. Sampling for the presence of radon gas is beyond the Scope of Work (as outlined in Section 1.4 of this Report) for this Phase I ESA. However, MGA has reviewed the U.S. Environmental Protection Agency (EPA) published report of radon zones for the State of Nevada (EPA, 1993). According to the report, Alamo is identified as having an average radon level of 1.3 pCi/L. The U.S. EPA recommended action level for radon gas is 4 pCi/L.

Based on the information reviewed, MGA is of the opinion that the risk of radon gas accumulation is not likely an environmental concern at the subject property at this time. However, should the user of this Phase I ESA wish to gain confidence with regard to the risk of radon gas, it is recommended that the on-site structure be tested.

### 7.3 Mold

Molds are naturally occurring organisms that live and reproduce on moist surfaces. Within the interior of a structure, the presence of mold can lead to asthma, allergic reactions, and respiratory problems. Identification and sampling for the presence of mold are beyond the Scope of Work (as outlined in Section 1.4 of this Report) for this Phase I ESA. Should the user of this Phase I ESA wish to gain confidence with regard to the risk of mold contamination within the building, it is recommended that the on-site structure be tested by a mold consultant.

## 8. SUMMARY AND CONCLUSIONS

McGinley and Associates, Inc. (MGA) has performed this Phase I Environmental Site Assessment in accordance with the scope and limitations of ASTM Practice E 1527 – 05 for the subject property located on the Pahranaagat Middle/High School campus at 262 Weeping Willow Avenue, Alamo, Nevada. A summary of our environmental conclusions is presented below.

### 8.1 Subject Property Concerns

#### 8.1.1 Recognized Environmental Conditions

One *Recognized environmental condition* was noted for the subject property and is as follows:

- *Based on the age of the structure and information from prior assessments performed on a similar building donated by the Air Force to the Lincoln County School District, it is likely that asbestos containing materials and lead-based paint were utilized during original construction of the building.*

#### 8.1.2 Historical Recognized Environmental Conditions

No *historical recognized environmental conditions (HREC)* were noted for the subject property.

### 8.2 Surrounding Property Concerns

No *recognized environmental conditions* were noted on the publicly accessible portions of those properties located immediately adjacent to the subject site.

### 8.3 Conclusions

McGinley & Associates, Inc. (MGA) has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 of the Pahranaagat Middle/High School Multi-Use Building located on the school campus at 262 Weeping Willow Avenue, Las Vegas, Nevada. Any exceptions to, or deletions from, this practice are described in Section 9 of this report.

Upon conclusion of our Phase I ESA, and based on the information reviewed, this assessment has revealed no evidence of *recognized environmental conditions* in connection with the property except for the following:

- *Based on the age of the structure and information from prior assessments performed on a similar building donated by the Air Force to the Lincoln County School District, it is likely that asbestos containing materials and lead-based paint were utilized during original construction of the building.*

Therefore, MGA is of the opinion that further environmental investigations are warranted on the subject property at this time. MGA recommends that an asbestos and lead-based paint survey be performed on the structure located on the subject property that is proposed to be renovated by the school.



## 9. LIMITATIONS

### 9.1 General

The conclusions and recommendations presented above are based upon the agreed scope of work outlined in the above report. McGinley and Associates, Inc. makes no warranties or guarantees as to the accuracy or completeness of information obtained from others. It is possible that information exists beyond the scope of this investigation. Additional information, which is not available to McGinley and Associates, Inc. at the time of writing the Report, may result in a modification of the conclusions and recommendations presented. The services performed by McGinley and Associates, Inc. have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. This report is not a legal opinion, but may under certain circumstances be prepared at the direction of counsel, may be in anticipation of litigation, and may be classified as an attorney-client communication or as an attorney work product.

This report has been prepared for the sole use of the addressee of this report, and cannot be released without consent from McGinley & Associates Inc. If a third party relies on the information provided in this report, McGinley and Associates, Inc. accepts no responsibility for damages suffered by the third party as a result of reliance of information contained in this report, and that nothing contained in this report shall create a contractual relationship or cause the third party to bring suit against McGinley & Associates, Inc.

### 9.2 Data Gaps

Several data gaps were identified during the course of performance of this Phase I ESA. The data gaps are as follows:

- Aerial photographs prior to 1967 were not available for review.
- Sanborn Maps were not published for McGill, Nevada.
- City Directory listings were not reasonably available for review.

Although these data gaps exist, other historical evidence was available to provide information detailing the history of the property. Therefore, MGA is of the opinion that, should this data become available, the conclusions drawn herein would be unlikely to change.

## 10. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We certify that, to the best of our knowledge and belief, we meet the definition of Environmental Professionals, as defined in ASTM E 1527-05. We have specific qualifications based on education, training, and experience to assess a property of this nature, history, and setting. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Resumes of the environmental professionals utilized in performance of this Phase I ESA are attached in Appendix G.

Respectfully Submitted:

**McGinley and Associates, Inc.**



Brett Bottenberg, C.E.M. #1690, Exp. Date 10/7/13  
Project Manager

### **Reviewed by:**

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.



Joseph M. McGinley, C.E.M. #1036, Exp. Date 11/12  
Principal

## 11. REFERENCES

ASTM, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E 1527-05.

Environmental Data Resources, May 31, 2012. *Aerial Photo Decade Package*, Inquiry Number: 3332771.5.

Environmental Data Resources, May 29, 2012. *Certified Sanborn Map Report*, Inquiry Number: 3332771.3.

Environmental Data Resources, May 30, 2012. *Historical Topographic Map Report*, Inquiry Number: 3332771.4.

Environmental Data Resources, May 29, 2012. *Radius Map Report with GeoCheck*, Inquiry Number: 3332771.2s.

Federal Emergency Management Agency (FEMA), November 16, 2011. *Lincoln County Unincorporated & Incorporated Area, Flood Insurance Rate Map (FIRM) 32017C3556D*.

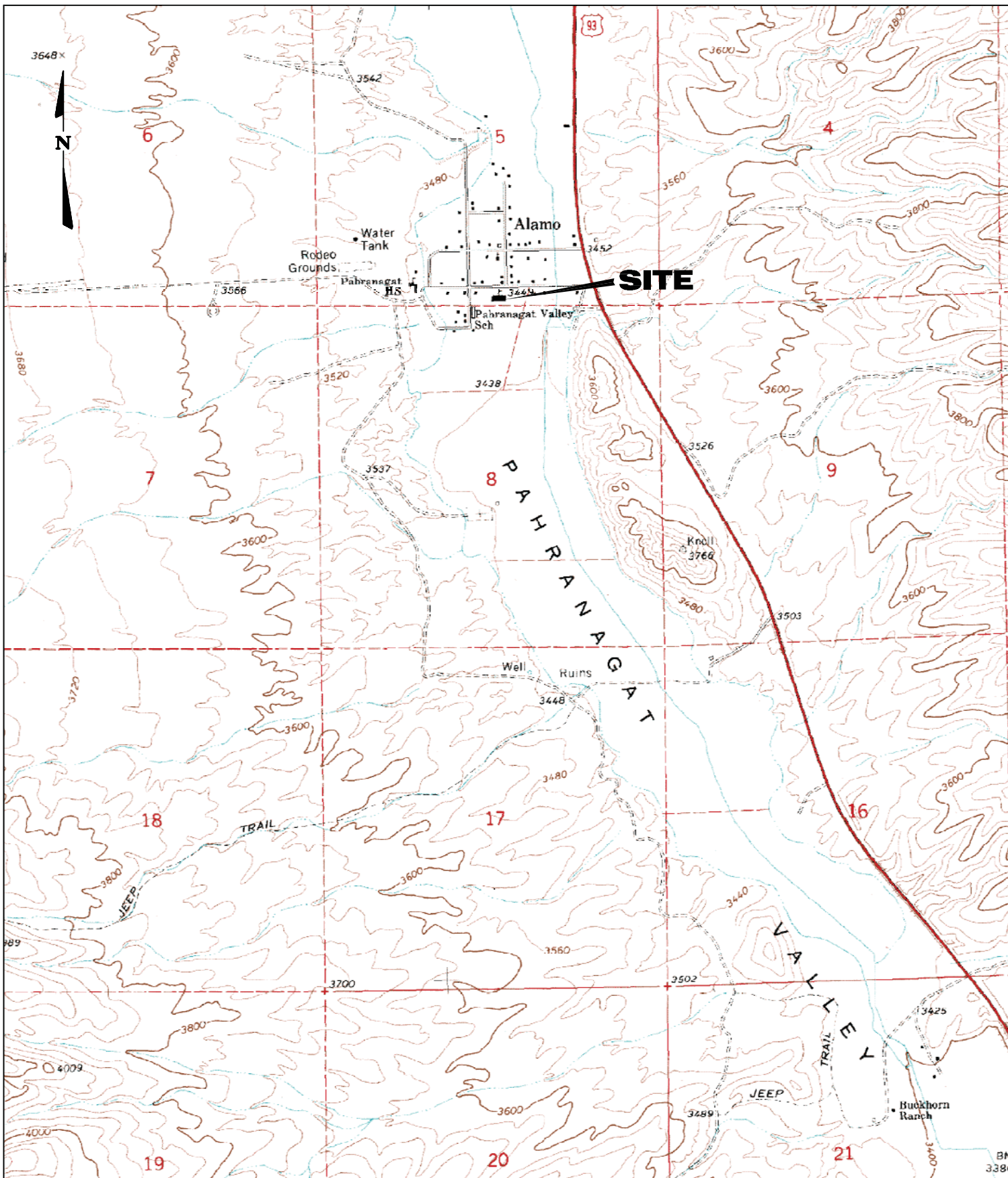
Lincoln County Assessor's Office.

Nevada Division of Water Resources (on-line), <http://water.nv.gov>, Well log database.

Natural Resources Conservation Service. *Soil Survey Area: Pahrnagat-Penoyer Area, Parts of Lincoln and Nye Counties. Survey Area Data: Version 6, April 6, 2012*. United States Department of Agriculture.

Tschanz, C.M. and E.H. Pampeyan, 1963, *Nevada Bureau of Mines, Geologic Map of Lincoln County, Nevada*.

Western Regional Climate Center (WRCC), 2012. Desert Research Institute Website.



**SITE**

**FIGURE 1**  
**PROJECT LOCATION MAP**  
 -SHOWING-  
**PAHRANAGAT MIDDLE/HIGH SCHOOL**  
**MULTI-USE BUILDING**  
**262 WEEPING WILLOW AVENUE**  
**ALAMO, NV**

| REVISIONS REFERENCE | DESIGNED |             |    | RC   |
|---------------------|----------|-------------|----|------|
|                     | No.      | DESCRIPTION | BY | DATE |
| ▲                   |          |             |    |      |
| ▲                   |          |             |    |      |
| ▲                   |          |             |    |      |
| ▲                   |          |             |    |      |

**McGinley & Associates**

|                 |          |
|-----------------|----------|
| SCALE: AS SHOWN | REVISION |
| JOB NO. PRO     | ▲        |



# **APPENDIX A**

## **User Questionnaires**

---

## USER QUESTIONNAIRE

**Property Address:** 262 Weeping Willow Ave., Alamo, NV (APN: 004-101-01)  
Pahrnagut Middle/High School Multi-Use Building

In order to qualify for one of the *Landowner Liability Protection (LLP's)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

**(1.) Environmental Cleanup liens that are filed or recorded against the site (40 CFR 312.25).**

Are you aware of any environmental cleanup liens against the *property* that are filled or recorded under federal, tribal, state, or local law?

NO

**(2.) Activity and land use limitations (AUL's) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).**

Are you aware of any AUL's, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under the federal, tribal, state, or local law?

NO

**(3.) Specialized Knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**

As the *user* of this ESA do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and the processes used by this type of business?

NO

**(4.) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).**

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

N/A

Initials:

K. B.

# USER QUESTIONNAIRE

**Property Address:** 262 Weeping Willow Ave., Alamo, NV (APN: 004-101-01)  
Pahrnagat Middle/High School Multi-Use Building

**(5.) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).**

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

(a.) Do you know the past uses of the property?

Storage, classrooms

(b.) Do you know of specific chemicals that are present or once were present at the property?

NO

(c.) Do you know of spills or other chemical releases that have taken place at the property?

NO

(d.) Do you know of any environmental cleanups that have taken place at the property?

NO

**(6.) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).**

As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

NO

Ken Back  
Signature & Title Maintenance

6-5-12  
Date

Initials: KB



# **APPENDIX B**

## **Assessor's Map and Parcel Information**

---

Portions of the SE 1/4 and SW 1/4 of  
Section 5, T 7 S, R 61 E, M. D. B. & M.

Portions of the SE 1/4 and SW 1/4 of  
Section 5, T 7 S, R 61 E, M. D. B. & M.

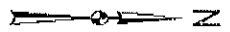
04-10

06 82.5'

1st SOUTH AVE.

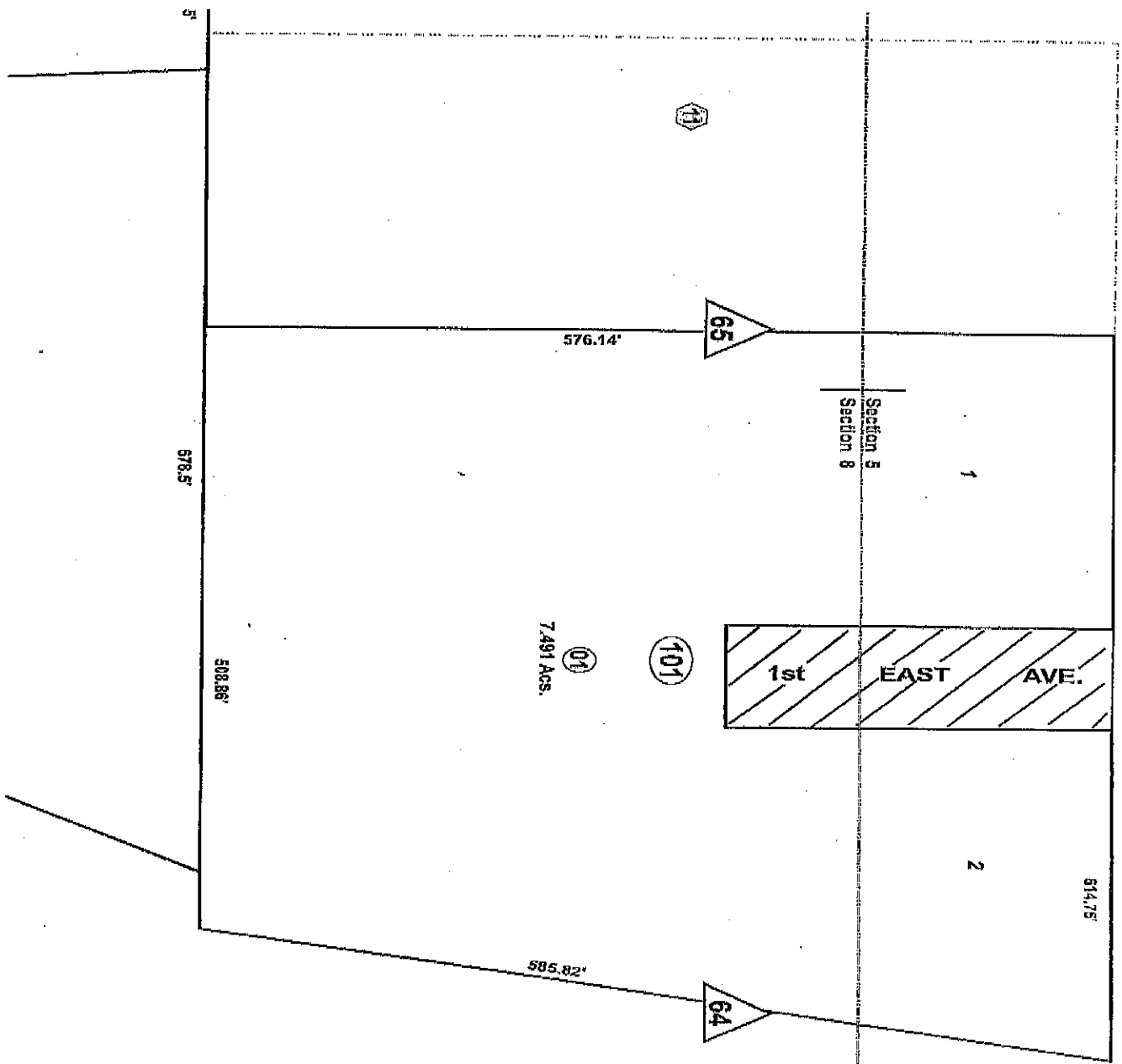
07

1 inch = 0.02 miles



NOTE: This plat is for assessment use only  
and does not represent a survey.  
No liability is assumed as to the  
accuracy of the data delineated  
hereon.  
NEVADA TAX COMMISSION

LG/ASSR / JUN / 10 / MJF  
LCA / DD / 81  
LCA / RES / 79



Parcel Number **004-101-01**  
Last Updated **12/07/10** By **ASSESSOR**  
Ownership (F6=All Owners F7=Documents F8=Correspondence History)

Legal Owner..... **LINCOLN COUNTY SCHOOL DISTRICT** Force Assmt Notice.... -  
Assessed Owner..... **LINCOLN COUNTY SCHOOL DISTRICT** Force Ag Message... -  
Mail Address..... **BOARD OF TRUSTEES** Force Label..... -  
City, State..... **PANACA, NV** Zip... **89042-0000** Force Card/Aff (C/A).. -  
Vesting Doc #, Date. \_\_\_\_\_ Yr, Bk, Pg **00 000 000** Corr Rq'd -  
Map Document #s..... \_\_\_\_\_  
Description (F11=Additional Locations)

|   | #                                      | Dir | Street or Other Description | Unit #(s)            |
|---|--|-----|-----------------------------|----------------------|
| Property Location...                              | <b>262</b>                             |     | <b>WEeping WILLOW AVE</b>   |                      |
| Subdivision.....                                  |  |     | Block... <b>65</b>          | Lot... <b>1</b>      |
| Town.....   | <b>ALAMO</b>                           |     | Parcel Map ID..             |                      |
| Property Name.....                                | <b>R61E, T7S, S8, BEG AT NW CORNER</b> |     |                             | Confidential.. -     |
| Remarks.....                                      |  |     |                             |                      |
| Parcel # Containing Descriptive/Document Data.... |  |     |                             | Land Use: <b>400</b> |
| Size  |  |     |                             |                      |

Total Acres... **7.490** Square Feet.... **0**  
Ag Acres..... **.000** W/R Acres..... **.000**

**F3=Save & Exit F5=Addr Hist F10=Othr Func F12=Cancel F14=Imprv/Apprsl Data**  
**F15=Legal Description F16=Misc Notes F17=Factoring History F20=Tax Years**  
**F21=Personal Property F22=Ag Land F23=Exemptions F24=Livestock Counts**

| Improvements        |   |                   |   |                         |                |
|---------------------|---|-------------------|---|-------------------------|----------------|
| Sngl-Fam Detached.  | 0 | Non-Dwell Units.. | 4 | Sq Ft Garage.           | 0 Att/Det      |
| Sngl-Fam Attached.  | 0 | MH Hookups....    | 0 | # Edrms..               | 0 #Baths.. .00 |
| Multi-Fam Units.... | 0 | Wells.....        | 0 | # of Stories.....       | .0             |
| Mobile Homes.....   | 0 | Septic Tanks..... | 0 | Sq Ft Basement.....     | 0              |
| Tot Dwell Units:    | 0 | SqFt Bldgs        | 0 | Sq Ft Fin Basement..... | 0              |

Use/Appraisal Data

Current Land Use Code.: 400 (To change, go to Tax Year Data screen)

Zoning Code(s).....

Special Ownership..... Special Prop..... Class.....

Re-appraisal Group..... 02 Factoring Group... 04 Developer Discount. \_\_\_\_\_

Re-appraisal Year..... 2011 Orig Constr Year.. 1965 Weighted Year..... 0

User-defined Fields: 1st Set (F11=Show 2nd set of fields)

F3=Save & Exit    F10=Other Functions    F12=Cancel    F13=Ownership/Description  
 F15=Legal Description    F16=Misc Notes    F17=Factoring History    F20=Tax Years  
 F21=Personal Property    F22=Ag Land    F23=Exemptions    F24=Livestock Counts

| Tax Year Data (F2=Shift Activ Col F5=Taxable Values F6=View 2 F8=Hist) |         |         |           |           |
|--|---------|---------|-----------|-----------|
| Assessed Values  | 2013-14 | 2012-13 | 2011-12   | 2010-11   |
| Land   | 18,022  | 18,022  | 21,285    | 21,285    |
| Improvements   | 222,131 | 222,131 | 1,453,855 | 1,483,526 |
| Pers Prop (F21)  | 0       | 6,782   | 6,782     | 6,990     |
| Ag Lands (F22)   | 0       | 0       | 0         | 0         |
| Exemptions (F23)   | 240,153 | 246,935 | 1,481,922 | 1,511,801 |
| Net Assessed Value   | 0       | 0       | 0         | 0         |
| Increased (New) Values   |         |         |           |           |
| Land   | 0       | 0       | 0         | 0         |
| Improvements   | 0       | 0       | 0         | 0         |
| Personal Property  | 0       | 0       | 0         | 0         |
| District   | 4.0     | 4.0     | 4.0       | 4.0       |
| Tax Rate & Cap %   |         |         | 3.4199    | 3.4199    |
| Exempt Code  | 05      | 05      | 05        | 05        |
| Exclusion Code(s)  |         |         |           |           |
| Summary Parcel #   | - -     | - -     | - -       | - -       |
| Tax Service Code   |         |         |           |           |
| Land Use Code (F4)   | 400     | 400     | 400       | 400       |

F3=Save & Exit F10=Other Func F11=Earlier Yrs F12=Cancel F13=Ownership/Desc  
 F14=Imprv/Appraisal Data F15=Legal Descrip F16=Notes F17=Factoring Hist  
 F21=Personal Property F22=Ag Land F23=Exemptions F24=Livestock Counts

| Improvements |       |                  |      |          |            |          | (FS=Position to) |    |
|--------------|-------|------------------|------|----------|------------|----------|------------------|----|
| Ln           | Grp # | Description      | Year | Cnt/Size | Total Cost | Apprs Dt | RCNLD            |    |
| 01           | 1 001 | MIDDLE SCHOOL    | 1965 | 6,072    | 727,607    | 4/09/12  | 203,730          | ** |
| 02           | 1 002 | OLD GYM          | 1965 | 16,424   | 1,237,713  | 4/09/12  | 346,560          | ** |
| 03           | 1 003 | TECH/ART BLDG    | 1975 | 3,040    | 311,539    | 4/09/12  | 133,962          | ** |
| 04           | 1 004 | SHOP BLDG        | 1975 | 5,760    | 138,240    | 4/09/12  | 59,443           | ** |
| 05           | 1 005 | CFW              | 1975 | 342      | 1,819      | 9/19/11  | 782              |    |
| 06           | 1 006 | CFW              | 1980 | 4,524    | 21,670     | 9/19/11  | 10,943           |    |
| 07           | 1 007 | BREEZEWAY        | 1980 | 990      | 10,148     | 9/19/11  | 5,125            |    |
| 08           | 1 008 | CHAIN LINK FENCE | 1980 | 328      | 2,591      | 9/19/11  | 1,308            |    |
| 09           | 1 009 | CHAIN LINK FENCE | 1980 | 264      | 1,449      | 9/19/11  | 732              |    |

Totals for this Parcel: 2,452,776 762,585

Total New this Year (Pink lines): 0

<--View or Update This Line

F9=Scan >/< > F10=Other F12=Exit F13=Basic F17=Fact F22=Ag Land Bottom Page F/B

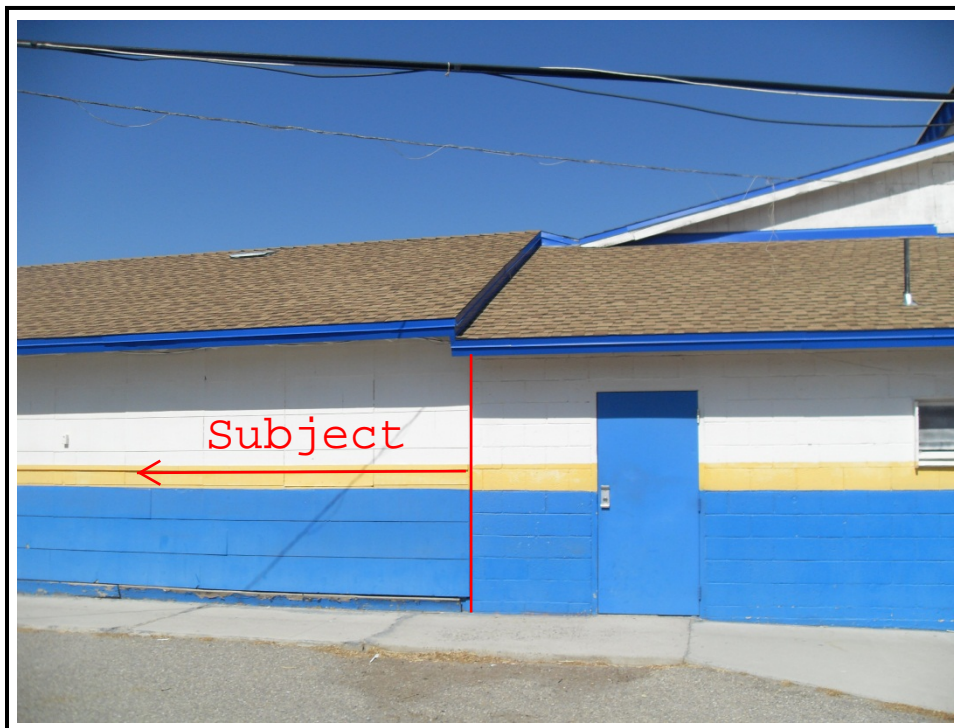
# **APPENDIX C**

---

## **Site Photographs**



**Photograph 1:**  
View of subject property looking north



**Photograph 2:**  
Northern edge of site looking west





**Photograph 3:**  
Southern edge of site looking west



**Photograph 4:**  
Eastern edge of site looking south



**Photograph 5:**  
Western edge of site looking north



**Photograph 6:**  
Adjacent property to the north – middle school building



**Photograph 7:**  
Adjacent property to the south – parking lot



**Photograph 8:**  
Adjacent property to the east – school building



**Photograph 9:**  
Adjacent property to the west – school building



**Photograph 10:**  
Adjacent property to the west – high school facility



**Photograph 11:**  
View of sports equipment storage room



**Photograph 12:**  
View of original ceiling above drop down in sports equipment storage room



**Photograph 13:**  
View of weight room



**Photograph 14:**  
View of insulated ceiling tile above drop down in weight room



**Photograph 15:**  
**View of entrance hallway to maintenance storage room**



**Photograph 16:**  
**View of maintenance storage room**



**Photograph 17:**  
**View of tiles in maintenance storage room**



**Photograph 18:**  
**View of various tile styles in maintenance storage room**





**Photograph 19:**  
**View of landscape equipment room**



**Photograph 20:**  
**View of chemical storage in landscape equipment room**



**Photograph 21:**  
**View of shower room attached to subject property**



**Photograph 22:**  
**View of exterior transite siding and flaking paint**



**Photograph 23:**  
View of flaking exterior window sills



**Photograph 24:**  
View of above ground fuel tanks located to the south

# **APPENDIX D**

## **Historic Aerial Photographs**

---



**Pahrnagat Valley Middle School Multi-Use Building**

262 Weeping Willow Ave.

Alamo, NV 89001

Inquiry Number: 3332771.5

May 31, 2012

## The EDR Aerial Photo Decade Package

# EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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**Date EDR Searched Historical Sources:**

Aerial Photography May 31, 2012

**Target Property:**

262 Weeping Willow Ave.

Alamo, NV 89001

| <u>Year</u> | <u>Scale</u>                       | <u>Details</u>   | <u>Source</u> |
|-------------|------------------------------------|--|---------------|
| 1967        | Aerial Photograph. Scale: 1"=750'  | Panel #: 37115-C2, Alamo, NV;/Flight Date: October 22, 1967                          | EDR           |
| 1977        | Aerial Photograph. Scale: 1"=1000' | Panel #: 37115-C2, Alamo, NV;/Flight Date: October 15, 1977                          | EDR           |
| 1981        | Aerial Photograph. Scale: 1"=1000' | Panel #: 37115-C2, Alamo, NV;/Flight Date: June 20, 1981                             | EDR           |
| 1983        | Aerial Photograph. Scale: 1"=1000' | Panel #: 37115-C2, Alamo, NV;/Flight Date: June 19, 1983                             | EDR           |
| 1994        | Aerial Photograph. Scale: 1"=750'  | Panel #: 37115-C2, Alamo, NV;/Flight Date: May 22, 1994                              | EDR           |
| 1999        | Aerial Photograph. Scale: 1"=500'  | Panel #: 37115-C2, Alamo, NV;/Composite DOQQ - acquisition dates: September 24, 1999 | EDR           |
| 2006        | Aerial Photograph. Scale: 1"=500'  | Panel #: 37115-C2, Alamo, NV;/Flight Year: 2006                                      | EDR           |



Subject Property

INQUIRY #: 3332771.5

YEAR: 1967

| = 750'







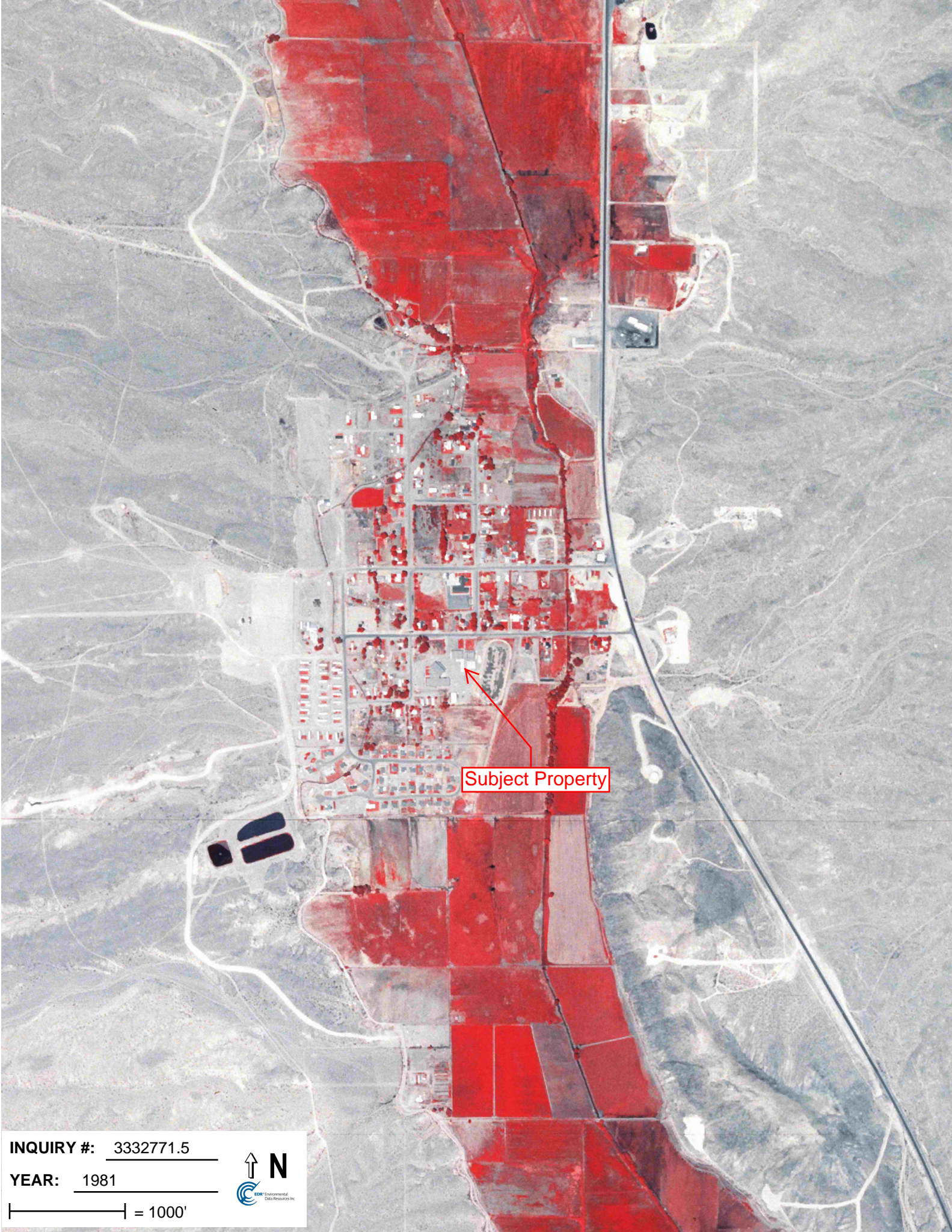
Subject Property

INQUIRY #: 3332771.5

YEAR: 1977

| = 1000'





Subject Property

INQUIRY #: 3332771.5

YEAR: 1981

| = 1000'





Subject Property

INQUIRY #: 3332771.5

YEAR: 1983

| = 1000'





Subject Property

INQUIRY #: 3332771.5

YEAR: 1994

| = 750'





Subject Property

INQUIRY #: 3332771.5

YEAR: 1999

| = 500'





Subject Property

INQUIRY #: 3332771.5

YEAR: 2006

| = 500'



# **APPENDIX E**

## **Sanborn Maps and Historic Topographic Maps**

---



**Pahrnagat Valley Middle School Multi-Use Building**

262 Weeping Willow Ave.

Alamo, NV 89001

Inquiry Number: 3332771.3

May 29, 2012



**Certified Sanborn® Map Report**



# Certified Sanborn® Map Report

5/29/12

**Site Name:**

Pahranagat Valley Middle  
262 Weeping Willow Ave.  
Alamo, NV 89001

**Client Name:**

McGinley Associates  
815 Maestro Drive  
Reno, NV 89511



EDR Inquiry # 3332771.3

Contact: Brett Bottenberg

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by McGinley Associates were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

## Certified Sanborn Results:

**Site Name:** Pahranagat Valley Middle School Multi-Use  
**Address:** 262 Weeping Willow Ave.  
**City, State, Zip:** Alamo, NV 89001  
**Cross Street:**  
**P.O. #** NA  
**Project:** LVBEC003  
**Certification #** 74A7-4016-B69B



Sanborn® Library search results  
Certification # 74A7-4016-B69B

## UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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**Pahranagat Valley Middle School Multi-Use Building**

262 Weeping Willow Ave.

Alamo, NV 89001

Inquiry Number: 3332771.4

May 30, 2012

# EDR Historical Topographic Map Report

# EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

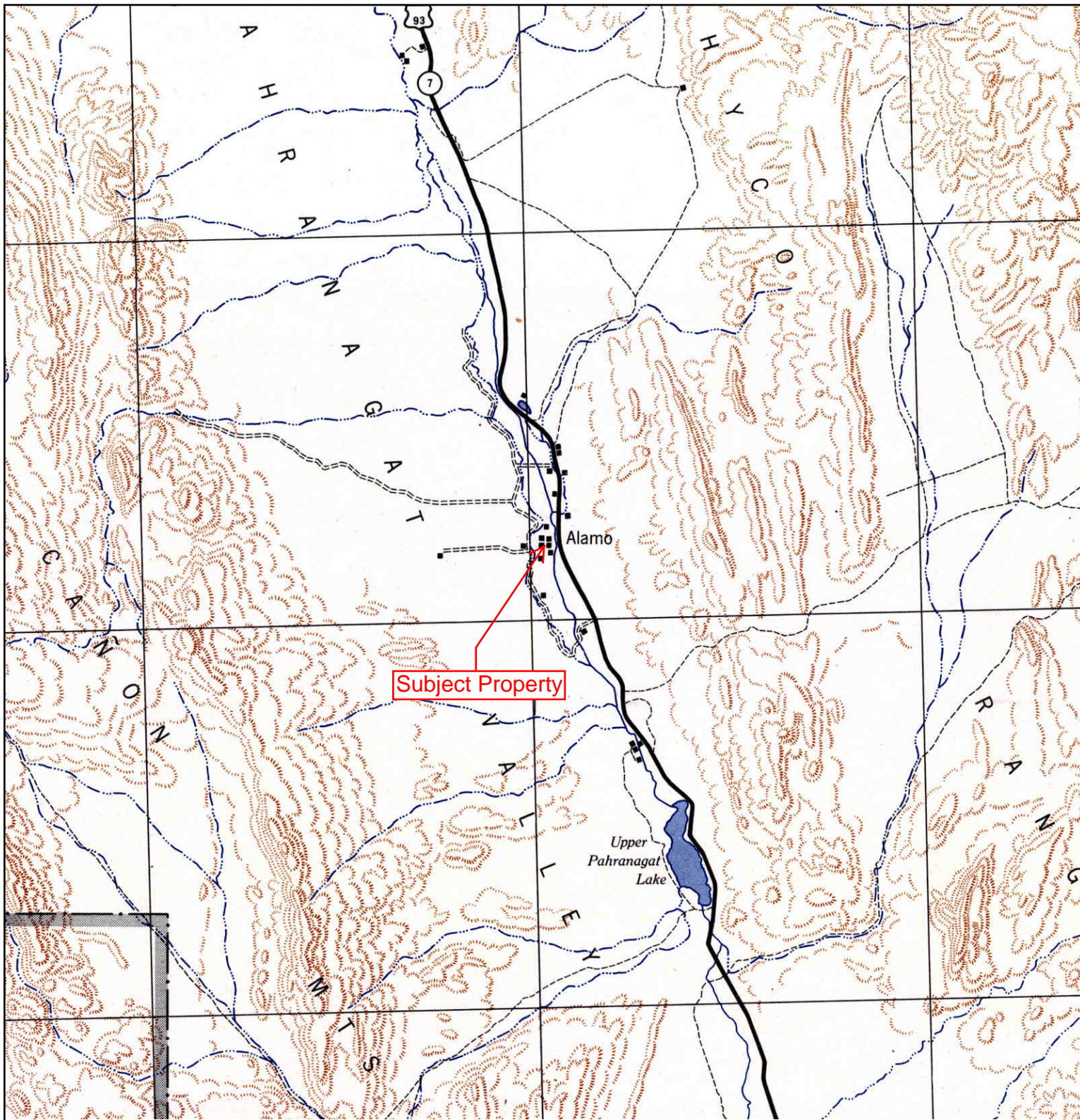
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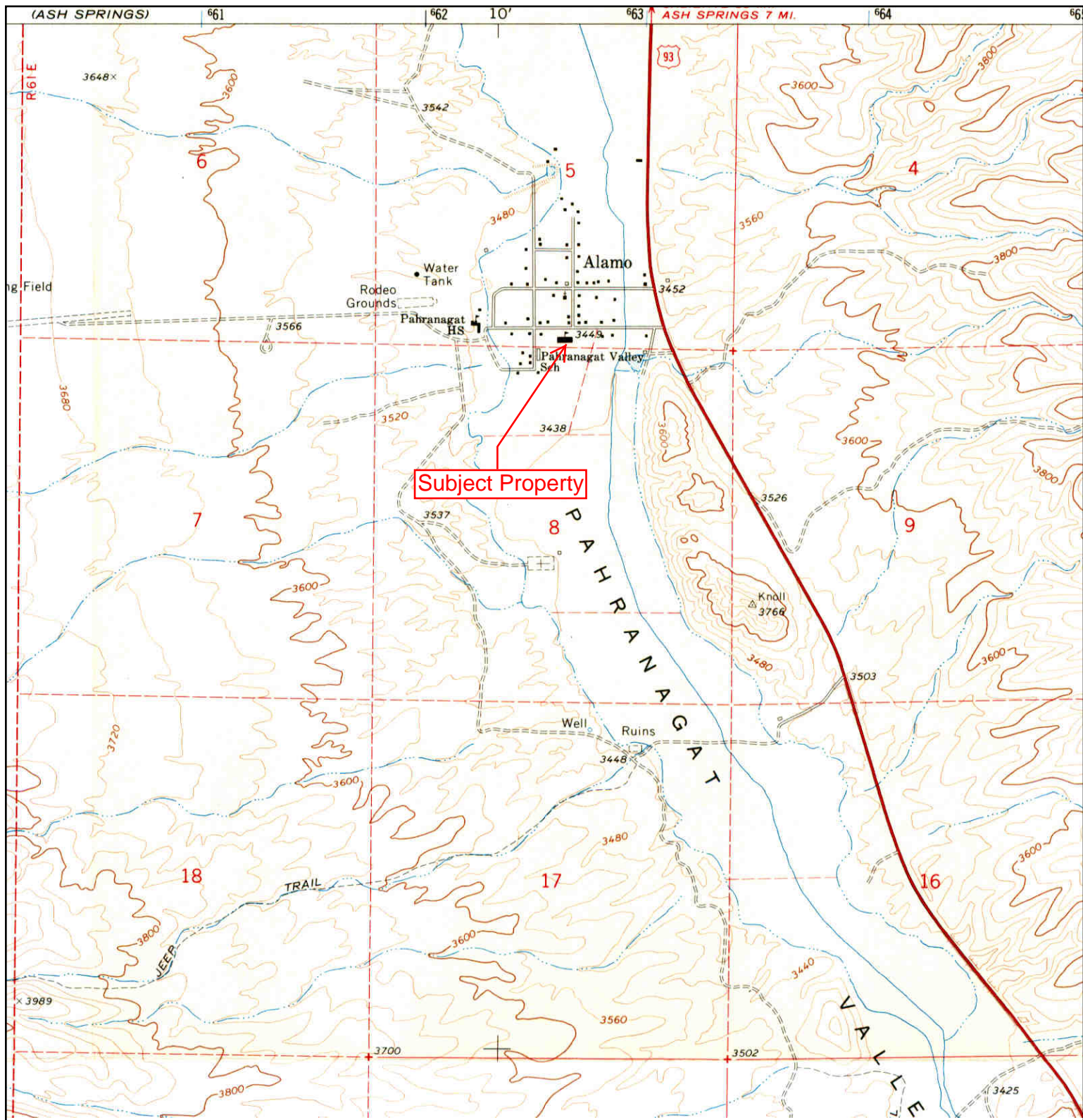
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# Historical Topographic Map



|  |                        |  |                                    |
|--|------------------------|--|------------------------------------|
|  | <b>TARGET QUAD</b>     | <b>SITE NAME:</b> Pahranagat Valley Middle School Multi-Use Building | <b>CLIENT:</b> McGinley Associates |
|  | <b>NAME:</b> ALAMO     | <b>ADDRESS:</b> 262 Weeping Willow Ave.<br>Alamo, NV 89001           | <b>CONTACT:</b> Brett Bottenberg   |
|  | <b>MAP YEAR:</b> 1945  | <b>LAT/LONG:</b> 37.3618 / -115.1642                                 | <b>INQUIRY#:</b> 3332771.4         |
|  | <b>SERIES:</b> 30      |  | <b>RESEARCH DATE:</b> 05/30/2012   |
|  | <b>SCALE:</b> 1:125000 |  |                                    |

# Historical Topographic Map



|  |                    |   |                                    |
|--|--------------------|---|------------------------------------|
|  | <b>TARGET QUAD</b> | <b>SITE NAME:</b> Pahranaagat Valley Middle School Multi-Use Building | <b>CLIENT:</b> McGinley Associates |
|  | NAME: ALAMO        | ADDRESS: 262 Weeping Willow Ave.                                      | <b>CONTACT:</b> Brett Bottenberg   |
|  | MAP YEAR: 1969     | ALAMO, NV 89001   | <b>INQUIRY#:</b> 3332771.4         |
|  | SERIES: 7.5        | <b>LAT/LONG:</b> 37.3618 / -115.1642                                  | <b>RESEARCH DATE:</b> 05/30/2012   |
|  | SCALE: 1:24000     |   |                                    |

# **APPENDIX F**

## **EDR Radius Map Report**

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**Pahrnagat Valley Middle School Multi-Use Building**

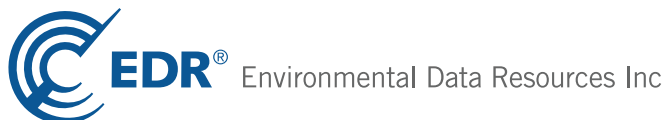
262 Weeping Willow Ave.

Alamo, NV 89001

Inquiry Number: 3332771.2s

May 29, 2012

## EDR Summary Radius Map Report



440 Wheelers Farms Road  
Milford, CT 06461  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

262 WEEPING WILLOW AVE.  
ALAMO, NV 89001

#### COORDINATES

Latitude (North): 37.3618000 - 37° 21' 42.48"  
Longitude (West): 115.1642000 - 115° 9' 51.12"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 662576.5  
UTM Y (Meters): 4136386.0  
Elevation: 3457 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: TP  
Source: USGS 7.5 min quad index

Target Property: N  
Source: USGS 7.5 min quad index

### AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year: 2010  
Source: USDA

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

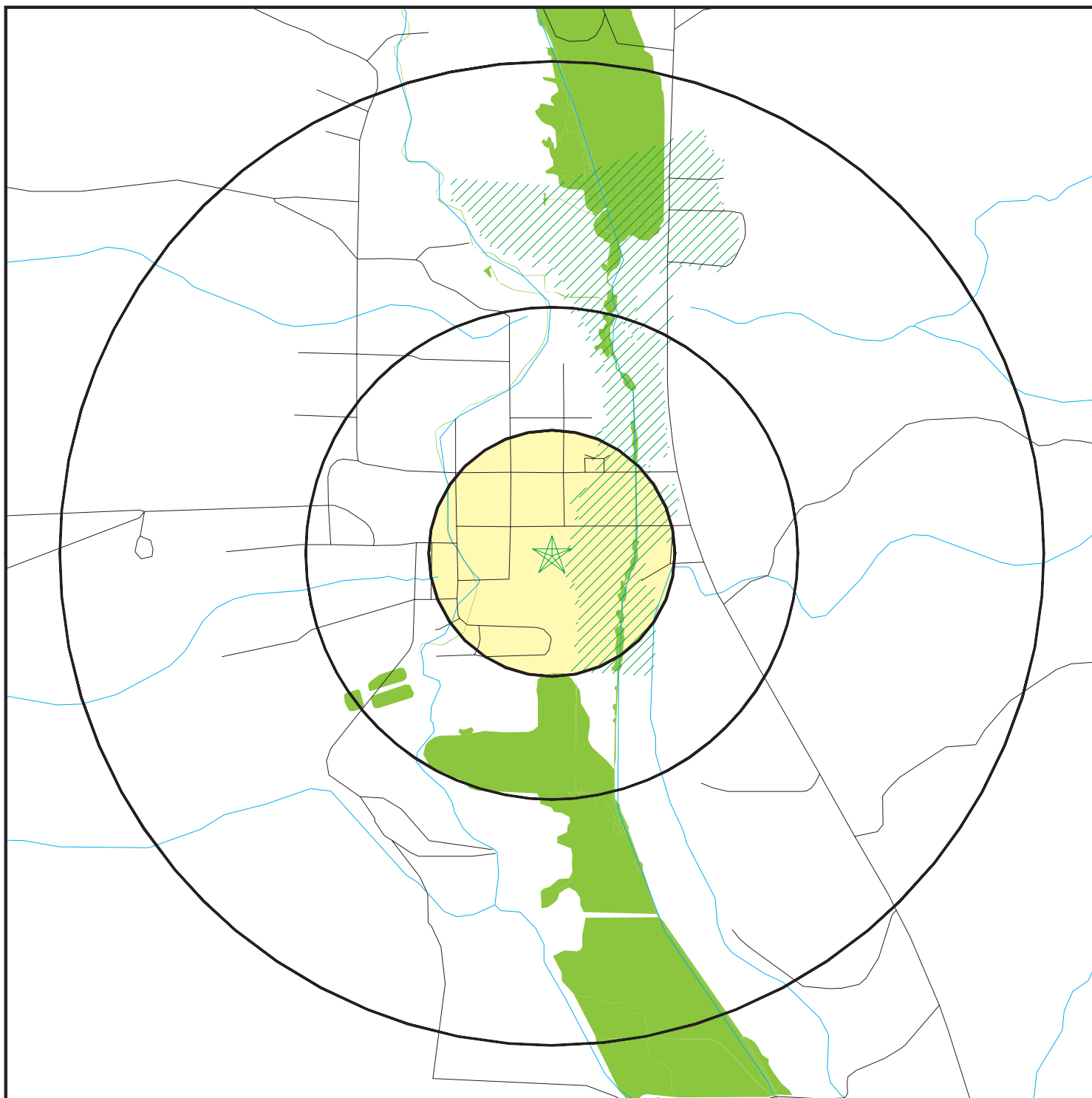
Unmappable (orphan) sites are not considered in the foregoing analysis.

Count: 15 records.

ORPHAN SUMMARY

| City           | EDR ID     | Site Name                          | Site Address                  | Zip   | Database(s)        |
|----------------|------------|------------------------------------|-------------------------------|-------|--------------------|
| ALAMO          | 1011303802 | PAHRANAGAT VALLEY MIDDLE SCHOOL    | 74 EAST 1ST SOUTH             | 89001 | FINDS              |
| ALAMO          | S103875715 | NEVADA DEPARTMENT OF TRANSPORTATIO | ALAMO MAINTENENCE STA         |       | SHWS               |
| ALAMO          | U004161049 | MUNK BROTHERS                      | 110 BROADWAY                  | 89001 | UST                |
| ALAMO          | S103875714 | PAHRANAGAT VALLEY HIGH SCHOOL      | MAINTENANCE YARD              |       | SHWS               |
| ALAMO          | 1009704905 | PAHRANAGAT VALLEY ELEMENTARY SCHOO | NOT GIVEN                     | 89001 | FINDS              |
| ALAMO          | 1009770846 | PAHRANAGAT VALLEY HIGH SCHOOL      | NOT GIVEN                     | 89001 | FINDS              |
| ALAMO          | S108249999 | ALAMO SERVICE STATION              | 10 USHY 93 N                  | 89001 | SHWS               |
| ALAMO          | U004161336 | NDOT-ALAMO STATION-CLOSED          | USHY 95                       | 89001 | UST                |
| ALAMO          | U004161364 | ALAMO SINCLAIR                     | 10 USHY 93 N                  | 89001 | UST                |
| ALAMO          | U004161367 | SAME AS 7-000067                   | USHY 93                       | 89001 | UST                |
| ALAMO          | U004161366 | SAME AS 7-000149                   | USHY 93                       | 89001 | UST                |
| ALAMO          | U004161397 | ALAMO AUTO & TRUCK STOP - CLOSED   | USHY 93                       | 89001 | UST                |
| ALAMO          | U004161404 | ALAMO TRUCK STOP                   | USHY 93                       | 89001 | LUST, UST          |
| LINCOLN COUNTY | S108250359 | TWO SCOTTS TRUCKING                | U.S. HIGHWAY 93 @ MILE MARKER |       | SHWS               |
| TEMPIUTE       | 1000336404 | UNION CARBIDE CORPORATION          | STAR ROUTE                    | 89001 | RCRA-NonGen, FINDS |

# OVERVIEW MAP - 3332771.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- ▲ Oil & Gas pipelines from USGS
- ▨ 100-year flood zone
- ▩ 500-year flood zone
- National Wetland Inventory

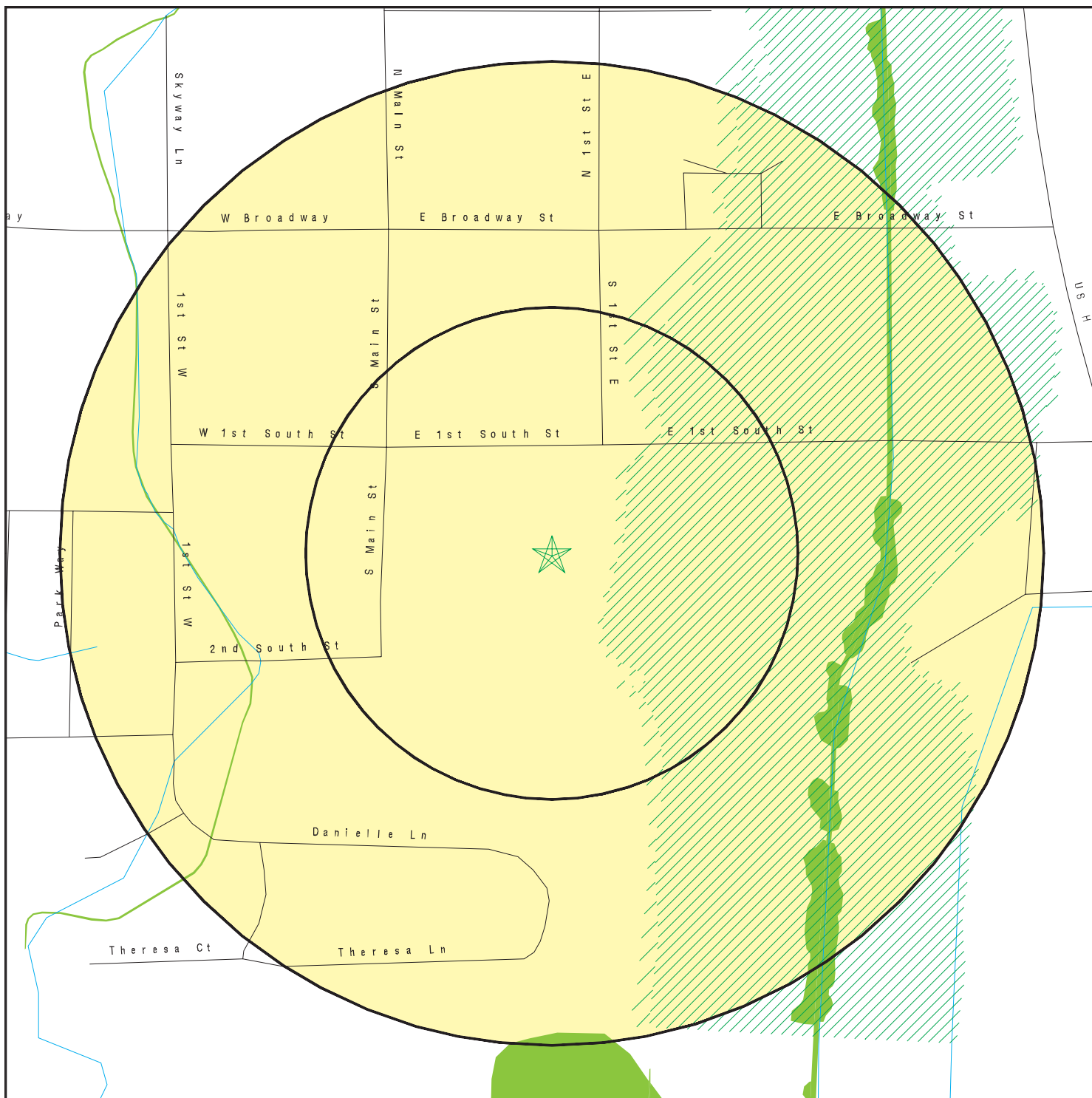


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pahrnagat Valley Middle School Multi-Use Building  
 ADDRESS: 262 Weeping Willow Ave.  
 Alamo NV 89001  
 LAT/LONG: 37.3618 / 115.1642

CLIENT: McGinley Associates  
 CONTACT: Brett Bottenberg  
 INQUIRY #: 3332771.2s  
 DATE: May 29, 2012 7:58 pm

# DETAIL MAP - 3332771.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚙ Manufactured Gas Plants
- ⚠ Sensitive Receptors
- 🚧 National Priority List Sites
- 🏠 Dept. Defense Sites

- 0 1/16 1/8 1/4 Miles
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pahrnagat Valley Middle School Multi-Use Building  
 ADDRESS: 262 Weeping Willow Ave.  
 Alamo NV 89001  
 LAT/LONG: 37.3618 / 115.1642

CLIENT: McGinley Associates  
 CONTACT: Brett Bottenberg  
 INQUIRY #: 3332771.2s  
 DATE: May 29, 2012 8:00 pm

## MAP FINDINGS SUMMARY

| Database   | Search<br>Distance<br>(Miles) | Target<br>Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total<br>Plotted |
|--|-------------------------------|--------------------|-------|-----------|-----------|---------|-----|------------------|
| <b>STANDARD ENVIRONMENTAL RECORDS</b>  |                               |                    |       |           |           |         |     |                  |
| <b><i>Federal NPL site list</i></b>  |                               |                    |       |           |           |         |     |                  |
| NPL  | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| Proposed NPL   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| NPL LIENS  | TP                            |                    | NR    | NR        | NR        | NR      | NR  | 0                |
| <b><i>Federal Delisted NPL site list</i></b>                                       |                               |                    |       |           |           |         |     |                  |
| Delisted NPL   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| <b><i>Federal CERCLIS list</i></b>   |                               |                    |       |           |           |         |     |                  |
| CERCLIS  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| FEDERAL FACILITY   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| <b><i>Federal CERCLIS NFRAP site List</i></b>                                      |                               |                    |       |           |           |         |     |                  |
| CERC-NFRAP   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Federal RCRA CORRACTS facilities list</i></b>                                |                               |                    |       |           |           |         |     |                  |
| CORRACTS   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| <b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>                        |                               |                    |       |           |           |         |     |                  |
| RCRA-TSDF  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Federal RCRA generators list</i></b>   |                               |                    |       |           |           |         |     |                  |
| RCRA-LQG   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| RCRA-SQG   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| RCRA-CESQG   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| <b><i>Federal institutional controls /<br/>engineering controls registries</i></b> |                               |                    |       |           |           |         |     |                  |
| US ENG CONTROLS  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| US INST CONTROL  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Federal ERNS list</i></b>  |                               |                    |       |           |           |         |     |                  |
| ERNS   | TP                            |                    | NR    | NR        | NR        | NR      | NR  | 0                |
| <b><i>State- and tribal - equivalent CERCLIS</i></b>                               |                               |                    |       |           |           |         |     |                  |
| SHWS   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| <b><i>State and tribal landfill and/or<br/>solid waste disposal site lists</i></b> |                               |                    |       |           |           |         |     |                  |
| SWF/LF   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>State and tribal leaking storage tank lists</i></b>                          |                               |                    |       |           |           |         |     |                  |
| LUST   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| INDIAN LUST  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>State and tribal registered storage tank lists</i></b>                       |                               |                    |       |           |           |         |     |                  |
| UST  | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |

## MAP FINDINGS SUMMARY

| Database  | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|-------------------------|-----------------|-------|-----------|-----------|---------|-----|---------------|
| AST   | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| INDIAN UST  | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| FEMA UST  | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| <b>State and tribal voluntary cleanup sites</b>             |                         |                 |       |           |           |         |     |               |
| VCP   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| INDIAN VCP  | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| <b>State and tribal Brownfields sites</b>                   |                         |                 |       |           |           |         |     |               |
| BROWNFIELDS   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| <b>ADDITIONAL ENVIRONMENTAL RECORDS</b>                     |                         |                 |       |           |           |         |     |               |
| <b>Local Brownfield lists</b>                               |                         |                 |       |           |           |         |     |               |
| US BROWNFIELDS  | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| <b>Local Lists of Landfill / Solid Waste Disposal Sites</b> |                         |                 |       |           |           |         |     |               |
| DEBRIS REGION 9   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| ODI   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| SWRCY   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| INDIAN ODI  | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| <b>Local Lists of Hazardous waste / Contaminated Sites</b>  |                         |                 |       |           |           |         |     |               |
| US CDL  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| US HIST CDL   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| <b>Local Land Records</b>                                   |                         |                 |       |           |           |         |     |               |
| LIENS 2   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| LUCIS   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| <b>Records of Emergency Release Reports</b>                 |                         |                 |       |           |           |         |     |               |
| HMIRS   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| <b>Other Ascertainable Records</b>                          |                         |                 |       |           |           |         |     |               |
| RCRA-NonGen   | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| DOT OPS   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| DOD   | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| FUDS  | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| CONSENT   | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| ROD   | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| UMTRA   | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| MINES   | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| TRIS  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| TSCA  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| FTTS  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| HIST FTTS   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| SSTS  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| ICIS  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |

## MAP FINDINGS SUMMARY

| Database               | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|------------------------|-------------------------|-----------------|-------|-----------|-----------|---------|-----|---------------|
| PADS                   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| MLTS                   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| RADINFO                | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| FINDS                  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| RAATS                  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| NPDES                  | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| AIRS                   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| HMRI                   | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| INDIAN RESERV          | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| SCRD DRYCLEANERS       | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| COAL ASH EPA           | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| PCB TRANSFORMER        | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| EPA WATCH LIST         | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| COAL ASH               | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| FINANCIAL ASSURANCE    | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| 2020 CORRECTIVE ACTION | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| COAL ASH DOE           | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |

### EDR PROPRIETARY RECORDS

#### *EDR Proprietary Records*

|                         |       |  |   |   |   |   |    |   |
|-------------------------|-------|--|---|---|---|---|----|---|
| Manufactured Gas Plants | 1.000 |  | 0 | 0 | 0 | 0 | NR | 0 |
|-------------------------|-------|--|---|---|---|---|----|---|

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

NO SITES FOUND



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym                | Full Name  | Government Agency                             | Gov Date   | Arvl. Date | Active Date |
|----|------------------------|--|---|------------|------------|-------------|
| NV | AIRS                   | Permitted Airs Facility Listing                              | Division of Environmental Protection          | 03/31/2011 | 03/31/2011 | 05/13/2011  |
| NV | AST                    | Aboveground Storage Tank List                                | Department of Conservation and Natural Resour | 01/10/2000 | 01/11/2000 | 02/16/2000  |
| NV | BROWNFIELDS            | Project Tracking Database                                    | Division of Environmental Protection          | 01/19/2012 | 03/28/2012 | 05/01/2012  |
| NV | COAL ASH               | Coal Ash Disposal Sites                                      | Division of Environmental Protection          | 03/16/2011 | 03/18/2011 | 05/06/2011  |
| NV | FINANCIAL ASSURANCE    | Financial Assurance Information Listing                      | Department of Environmental Protection        | 12/28/2010 | 12/29/2010 | 02/02/2011  |
| NV | FINANCIAL ASSURANCE 2  | Financial Assurance Information                              | Division of Environmental Protection          | 01/25/2012 | 01/31/2012 | 02/07/2012  |
| NV | HMRI                   | Hazardous Materials Repository Information Data              | State Emergency Response Commission           | 08/05/2008 | 08/05/2008 | 08/13/2008  |
| NV | LUST                   | Sites Database   | Department of Conservation and Natural Resour | 01/19/2012 | 03/28/2012 | 05/01/2012  |
| NV | NPDES                  | Permitted Facility Listing                                   | Department of Environmental Protection        | 04/13/2012 | 04/16/2012 | 05/01/2012  |
| NV | SHWS                   | Sites Database   | Department of Conservation and Natural Resour | 01/19/2012 | 03/28/2012 | 05/01/2012  |
| NV | SWF/LF                 | Landfill List  | Department of Conservation and Natural Resour | 01/17/2012 | 03/07/2012 | 03/26/2012  |
| NV | SWRCY                  | Recycling Information Listing                                | Department of Environmental Protection        | 02/16/2012 | 02/24/2012 | 03/26/2012  |
| NV | UST                    | Underground Storage Tank List                                | Department of Conservation and Natural Resour | 01/19/2012 | 03/28/2012 | 05/01/2012  |
| NV | VCP                    | Voluntary Cleanup Program Sites                              | Department of Conservation & Natural Resource | 08/16/2011 | 09/27/2011 | 10/12/2011  |
| US | 2020 CORRECTIVE ACTION | 2020 Corrective Action Program List                          | Environmental Protection Agency               | 11/11/2011 | 05/18/2012 | 05/25/2012  |
| US | BRS                    | Biennial Reporting System                                    | EPA/NTIS                                      | 12/31/2009 | 03/01/2011 | 05/02/2011  |
| US | CERCLIS                | Comprehensive Environmental Response, Compensation, and Liab | EPA   | 12/27/2011 | 02/27/2012 | 03/12/2012  |
| US | CERCLIS-NFRAP          | CERCLIS No Further Remedial Action Planned                   | EPA   | 12/28/2011 | 02/27/2012 | 03/12/2012  |
| US | COAL ASH DOE           | Sleam-Electric Plan Operation Data                           | Department of Energy                          | 12/31/2005 | 08/07/2009 | 10/22/2009  |
| US | COAL ASH EPA           | Coal Combustion Residues Surface Impoundments List           | Environmental Protection Agency               | 08/17/2010 | 01/03/2011 | 03/21/2011  |
| US | CONSENT                | Superfund (CERCLA) Consent Decrees                           | Department of Justice, Consent Decree Library | 12/01/2011 | 01/25/2012 | 03/01/2012  |
| US | CORRACTS               | Corrective Action Report                                     | EPA   | 08/19/2011 | 08/31/2011 | 01/10/2012  |
| US | DEBRIS REGION 9        | Torres Martinez Reservation Illegal Dump Site Locations      | EPA, Region 9                                 | 01/12/2009 | 05/07/2009 | 09/21/2009  |
| US | DELISTED NPL           | National Priority List Deletions                             | EPA   | 03/30/2012 | 04/05/2012 | 05/15/2012  |
| US | DOD                    | Department of Defense Sites                                  | USGS  | 12/31/2005 | 11/10/2006 | 01/11/2007  |
| US | DOT OPS                | Incident and Accident Data                                   | Department of Transporation, Office of Pipeli | 07/29/2011 | 08/09/2011 | 11/11/2011  |
| US | EPA WATCH LIST         | EPA WATCH LIST   | Environmental Protection Agency               | 12/31/2011 | 02/17/2012 | 03/01/2012  |
| US | ERNS                   | Emergency Response Notification System                       | National Response Center, United States Coast | 10/03/2011 | 10/04/2011 | 11/11/2011  |
| US | FEDERAL FACILITY       | Federal Facility Site Information listing                    | Environmental Protection Agency               | 12/10/2010 | 01/11/2011 | 02/16/2011  |
| US | FEDLAND                | Federal and Indian Lands                                     | U.S. Geological Survey                        | 12/31/2005 | 02/06/2006 | 01/11/2007  |
| US | FEMA UST               | Underground Storage Tank Listing                             | FEMA  | 01/01/2010 | 02/16/2010 | 04/12/2010  |
| US | FINDS                  | Facility Index System/Facility Registry System               | EPA   | 10/23/2011 | 12/13/2011 | 03/01/2012  |
| US | FTTS                   | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu | EPA/Office of Prevention, Pesticides and Toxi | 04/09/2009 | 04/16/2009 | 05/11/2009  |
| US | FTTS INSP              | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu | EPA   | 04/09/2009 | 04/16/2009 | 05/11/2009  |
| US | FUDS                   | Formerly Used Defense Sites                                  | U.S. Army Corps of Engineers                  | 12/31/2009 | 08/12/2010 | 12/02/2010  |
| US | HIST FTTS              | FIFRA/TSCA Tracking System Administrative Case Listing       | Environmental Protection Agency               | 10/19/2006 | 03/01/2007 | 04/10/2007  |
| US | HIST FTTS INSP         | FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis | Environmental Protection Agency               | 10/19/2006 | 03/01/2007 | 04/10/2007  |
| US | HMIRS                  | Hazardous Materials Information Reporting System             | U.S. Department of Transportation             | 10/04/2011 | 10/04/2011 | 11/11/2011  |
| US | ICIS                   | Integrated Compliance Information System                     | Environmental Protection Agency               | 07/20/2011 | 11/10/2011 | 01/10/2012  |
| US | INDIAN LUST R1         | Leaking Underground Storage Tanks on Indian Land             | EPA Region 1                                  | 10/01/2011 | 11/01/2011 | 11/11/2011  |
| US | INDIAN LUST R10        | Leaking Underground Storage Tanks on Indian Land             | EPA Region 10                                 | 02/01/2012 | 02/02/2012 | 05/15/2012  |
| US | INDIAN LUST R4         | Leaking Underground Storage Tanks on Indian Land             | EPA Region 4                                  | 12/14/2011 | 12/15/2011 | 01/10/2012  |
| US | INDIAN LUST R6         | Leaking Underground Storage Tanks on Indian Land             | EPA Region 6                                  | 09/12/2011 | 09/13/2011 | 11/11/2011  |
| US | INDIAN LUST R7         | Leaking Underground Storage Tanks on Indian Land             | EPA Region 7                                  | 02/07/2012 | 02/17/2012 | 05/15/2012  |
| US | INDIAN LUST R8         | Leaking Underground Storage Tanks on Indian Land             | EPA Region 8                                  | 08/18/2011 | 08/19/2011 | 09/13/2011  |
| US | INDIAN LUST R9         | Leaking Underground Storage Tanks on Indian Land             | Environmental Protection Agency               | 02/14/2012 | 02/17/2012 | 05/15/2012  |
| US | INDIAN ODI             | Report on the Status of Open Dumps on Indian Lands           | Environmental Protection Agency               | 12/31/1998 | 12/03/2007 | 01/24/2008  |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym                 | Full Name  | Government Agency                             | Gov Date   | Arvl. Date | Active Date |
|----|-------------------------|--|---|------------|------------|-------------|
| US | INDIAN RESERV           | Indian Reservations                                    | USGS  | 12/31/2005 | 12/08/2006 | 01/11/2007  |
| US | INDIAN UST R1           | Underground Storage Tanks on Indian Land               | EPA, Region 1                                 | 10/01/2011 | 11/01/2011 | 11/11/2011  |
| US | INDIAN UST R10          | Underground Storage Tanks on Indian Land               | EPA Region 10                                 | 02/01/2012 | 02/02/2012 | 05/15/2012  |
| US | INDIAN UST R4           | Underground Storage Tanks on Indian Land               | EPA Region 4                                  | 12/14/2011 | 12/15/2011 | 01/10/2012  |
| US | INDIAN UST R5           | Underground Storage Tanks on Indian Land               | EPA Region 5                                  | 02/28/2012 | 02/29/2012 | 05/15/2012  |
| US | INDIAN UST R6           | Underground Storage Tanks on Indian Land               | EPA Region 6                                  | 05/10/2011 | 05/11/2011 | 06/14/2011  |
| US | INDIAN UST R7           | Underground Storage Tanks on Indian Land               | EPA Region 7                                  | 02/07/2012 | 02/17/2012 | 05/15/2012  |
| US | INDIAN UST R8           | Underground Storage Tanks on Indian Land               | EPA Region 8                                  | 08/18/2011 | 08/19/2011 | 09/13/2011  |
| US | INDIAN UST R9           | Underground Storage Tanks on Indian Land               | EPA Region 9                                  | 11/28/2011 | 11/29/2011 | 01/10/2012  |
| US | INDIAN VCP R1           | Voluntary Cleanup Priority Listing                     | EPA, Region 1                                 | 02/17/2012 | 04/03/2012 | 05/15/2012  |
| US | INDIAN VCP R7           | Voluntary Cleanup Priority Lisitng                     | EPA, Region 7                                 | 03/20/2008 | 04/22/2008 | 05/19/2008  |
| US | LIENS 2                 | CERCLA Lien Information                                | Environmental Protection Agency               | 09/09/2011 | 09/16/2011 | 09/29/2011  |
| US | LUCIS                   | Land Use Control Information System                    | Department of the Navy                        | 12/09/2005 | 12/11/2006 | 01/11/2007  |
| US | MINES                   | Mines Master Index File                                | Department of Labor, Mine Safety and Health A | 08/18/2011 | 09/08/2011 | 09/29/2011  |
| US | MLTS                    | Material Licensing Tracking System                     | Nuclear Regulatory Commission                 | 06/21/2011 | 07/15/2011 | 09/13/2011  |
| US | Manufactured Gas Plants | EDR Proprietary Manufactured Gas Plants                | EDR, Inc.                                     |            |            |             |
| US | NPL                     | National Priority List                                 | EPA   | 05/08/2012 | 05/10/2012 | 05/15/2012  |
| US | NPL LIENS               | Federal Superfund Liens                                | EPA   | 10/15/1991 | 02/02/1994 | 03/30/1994  |
| US | ODI                     | Open Dump Inventory                                    | Environmental Protection Agency               | 06/30/1985 | 08/09/2004 | 09/17/2004  |
| US | PADS                    | PCB Activity Database System                           | EPA   | 11/01/2010 | 11/10/2010 | 02/16/2011  |
| US | PCB TRANSFORMER         | PCB Transformer Registration Database                  | Environmental Protection Agency               | 02/01/2011 | 10/19/2011 | 01/10/2012  |
| US | Proposed NPL            | Proposed National Priority List Sites                  | EPA   | 03/30/2012 | 04/05/2012 | 05/15/2012  |
| US | RAATS                   | RCRA Administrative Action Tracking System             | EPA   | 04/17/1995 | 07/03/1995 | 08/07/1995  |
| US | RADINFO                 | Radiation Information Database                         | Environmental Protection Agency               | 01/10/2012 | 01/12/2012 | 03/01/2012  |
| US | RCRA-CESQG              | RCRA - Conditionally Exempt Small Quantity Generators  | Environmental Protection Agency               | 03/15/2012 | 04/04/2012 | 05/15/2012  |
| US | RCRA-LQG                | RCRA - Large Quantity Generators                       | Environmental Protection Agency               | 03/15/2012 | 04/04/2012 | 05/15/2012  |
| US | RCRA-NonGen             | RCRA - Non Generators                                  | Environmental Protection Agency               | 03/15/2012 | 04/04/2012 | 05/15/2012  |
| US | RCRA-SQG                | RCRA - Small Quantity Generators                       | Environmental Protection Agency               | 03/15/2012 | 04/04/2012 | 05/15/2012  |
| US | RCRA-TSDF               | RCRA - Treatment, Storage and Disposal                 | Environmental Protection Agency               | 03/15/2012 | 04/04/2012 | 05/15/2012  |
| US | ROD                     | Records Of Decision                                    | EPA   | 09/28/2011 | 12/14/2011 | 01/10/2012  |
| US | SCRD DRYCLEANERS        | State Coalition for Remediation of Drycleaners Listing | Environmental Protection Agency               | 03/07/2011 | 03/09/2011 | 05/02/2011  |
| US | SSTS                    | Section 7 Tracking Systems                             | EPA   | 12/31/2009 | 12/10/2010 | 02/25/2011  |
| US | TRIS                    | Toxic Chemical Release Inventory System                | EPA   | 12/31/2009 | 09/01/2011 | 01/10/2012  |
| US | TSCA                    | Toxic Substances Control Act                           | EPA   | 12/31/2006 | 09/29/2010 | 12/02/2010  |
| US | UMTRA                   | Uranium Mill Tailings Sites                            | Department of Energy                          | 09/14/2010 | 10/07/2011 | 03/01/2012  |
| US | US BROWNFIELDS          | A Listing of Brownfields Sites                         | Environmental Protection Agency               | 06/27/2011 | 06/27/2011 | 09/13/2011  |
| US | US CDL                  | Clandestine Drug Labs                                  | Drug Enforcement Administration               | 10/07/2011 | 12/09/2011 | 01/10/2012  |
| US | US ENG CONTROLS         | Engineering Controls Sites List                        | Environmental Protection Agency               | 12/30/2011 | 12/30/2011 | 01/10/2012  |
| US | US HIST CDL             | National Clandestine Laboratory Register               | Drug Enforcement Administration               | 09/01/2007 | 11/19/2008 | 03/30/2009  |
| US | US INST CONTROL         | Sites with Institutional Controls                      | Environmental Protection Agency               | 12/30/2011 | 12/30/2011 | 01/10/2012  |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| <u>St</u> | <u>Acronym</u>            | <u>Full Name</u>                                      | <u>Government Agency</u>                      | <u>Gov Date</u> | <u>Arvl. Date</u> | <u>Active Date</u> |
|-----------|---------------------------|---|---|-----------------|-------------------|--------------------|
| CT        | CT MANIFEST               | Hazardous Waste Manifest Data                         | Department of Energy & Environmental Protecti | 02/20/2012      | 02/20/2012        | 03/15/2012         |
| NY        | NY MANIFEST               | Facility and Manifest Data                            | Department of Environmental Conservation      | 01/10/2012      | 02/09/2012        | 03/09/2012         |
| US        | Oil/Gas Pipelines         | GeoData Digital Line Graphs from 1:100,000-Scale Maps | USGS  |                 |                   |                    |
| US        | Electric Power Lines      | Electric Power Transmission Line Data                 | Rextag Strategies Corp.                       |                 |                   |                    |
| US        | AHA Hospitals             | Sensitive Receptor: AHA Hospitals                     | American Hospital Association, Inc.           |                 |                   |                    |
| US        | Medical Centers           | Sensitive Receptor: Medical Centers                   | Centers for Medicare & Medicaid Services      |                 |                   |                    |
| US        | Nursing Homes             | Sensitive Receptor: Nursing Homes                     | National Institutes of Health                 |                 |                   |                    |
| US        | Public Schools            | Sensitive Receptor: Public Schools                    | National Center for Education Statistics      |                 |                   |                    |
| US        | Private Schools           | Sensitive Receptor: Private Schools                   | National Center for Education Statistics      |                 |                   |                    |
| NV        | Daycare Centers           | Sensitive Receptor: Child Care Facility List          | Department of Human Resources                 |                 |                   |                    |
| US        | Flood Zones               | 100-year and 500-year flood zones                     | Emergency Management Agency (FEMA)            |                 |                   |                    |
| US        | NWI                       | National Wetlands Inventory                           | U.S. Fish and Wildlife Service                |                 |                   |                    |
| US        | USGS 7.5' Topographic Map | Scanned Digital USGS 7.5' Topographic Map (DRG)       | USGS  |                 |                   |                    |

### STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

PAHRANAGAT VALLEY MIDDLE SCHOOL MULTI-USE BUILDING  
262 WEEPING WILLOW AVE.  
ALAMO, NV 89001

### TARGET PROPERTY COORDINATES

|                               |                           |
|-------------------------------|---------------------------|
| Latitude (North):             | 37.3618 - 37° 21' 42.48"  |
| Longitude (West):             | 115.1642 - 115° 9' 51.12" |
| Universal Tranverse Mercator: | Zone 11                   |
| UTM X (Meters):               | 662576.5                  |
| UTM Y (Meters):               | 4136386.0                 |
| Elevation:                    | 3457 ft. above sea level  |

### USGS TOPOGRAPHIC MAP

|                       |                          |
|-----------------------|--------------------------|
| Target Property Map:  | 37115-C2 ALAMO, NV       |
| Most Recent Revision: | 1980                     |
| North Map:            | 37115-D2 ASH SPRINGS, NV |
| Most Recent Revision: | 1980                     |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

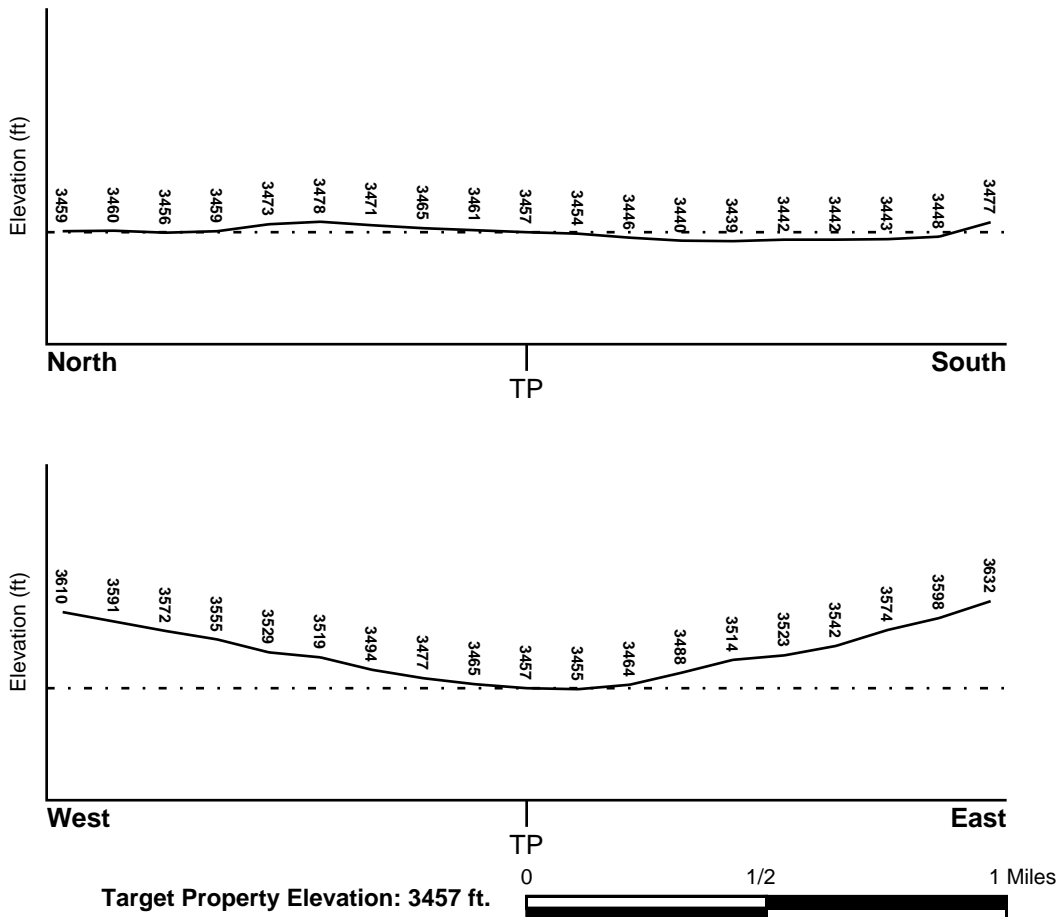
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

Target Property County  
LINCOLN, NV

FEMA Flood  
Electronic Data  
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 32017C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

## **NATIONAL WETLAND INVENTORY**

NWI Quad at Target Property  
ALAMO

NWI Electronic  
Data Coverage  
YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius: 1.25 miles  
Status: Not found

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| <u>MAP ID</u> | <u>LOCATION FROM TP</u> | <u>GENERAL DIRECTION GROUNDWATER FLOW</u> |
|---------------|-------------------------|---|
| Not Reported  |                         |   |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

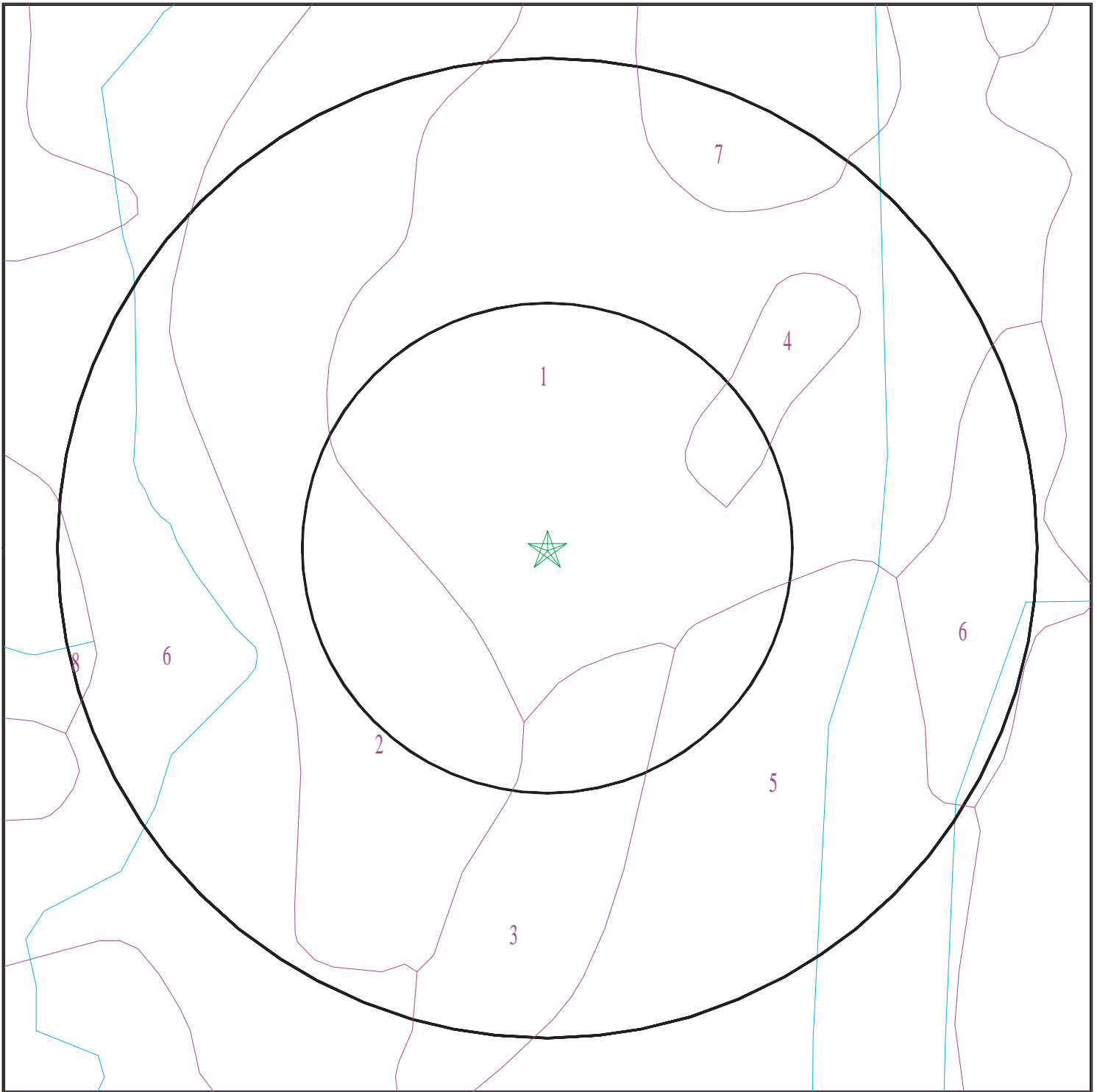
Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

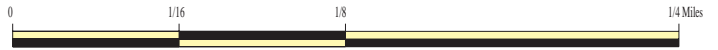
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 3332771.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Pahrnagat Valley Middle School Multi-Use Building  
ADDRESS: 262 Weeping Willow Ave.  
Alamo NV 89001  
LAT/LONG: 37.3618 / 115.1642

CLIENT: McGinley Associates  
CONTACT: Brett Bottenberg  
INQUIRY #: 3332771.2s  
DATE: May 29, 2012 8:00 pm



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: Geer

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                                    |   |   |  |                    |
|------------------------|-----------|-----------|------------------------------------|---|---|--|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class                 | Classification  |   | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                                    | AASHTO Group  | Unified Soil  |  |                    |
| 1                      | 0 inches  | 14 inches | silt loam                          | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.<br>COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 9 Min: 7.9    |
| 2                      | 14 inches | 59 inches | sr to fine sandy loam to silt loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.<br>COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 9 Min: 7.9    |
| 3                      | 59 inches | 72 inches | gravelly silt loam                 | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.<br>COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 9 Min: 7.9    |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 2

Soil Component Name: Seaman

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |   |   |  |  |                    |
|------------------------|----------|-----------|---|---|--|--|--------------------|
| Layer                  | Boundary |           | Soil Texture Class                                  | Classification  |  | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper    | Lower     |   | AASHTO Group  | Unified Soil   |  |                    |
| 1                      | 0 inches | 3 inches  | sandy loam  | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14                           | Max: 9 Min: 7.9    |
| 2                      | 3 inches | 59 inches | sr to fine sandy loam to gravelly coarse sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14                           | Max: 9 Min: 7.9    |

### Soil Map ID: 3

Soil Component Name: Seaman

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 137 inches

| Soil Layer Information |          |           |                                     |   |  |  |                      |
|------------------------|----------|-----------|-------------------------------------|---|--|--|----------------------|
| Layer                  | Boundary |           | Soil Texture Class                  | Classification  |  | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH)   |
|                        | Upper    | Lower     |                                     | AASHTO Group  | Unified Soil   |  |                      |
| 1                      | 0 inches | 9 inches  | sandy loam                          | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14                           | Max: 9.6<br>Min: 7.9 |
| 2                      | 9 inches | 59 inches | sr to fine sandy loam to loamy sand | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14                           | Max: 9.6<br>Min: 7.9 |

**Soil Map ID: 4**

Soil Component Name: Pahrnagat

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                                    |  |   |  |                    |
|------------------------|-----------|-----------|------------------------------------|--|---|--|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class                 | Classification   |   | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                                    | AASHTO Group   | Unified Soil  |  |                    |
| 1                      | 0 inches  | 11 inches | silt loam                          | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 4<br>Min: 1.4                           | Max: 9 Min:<br>7.9 |
| 2                      | 11 inches | 59 inches | sr to silt loam to silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 4<br>Min: 1.4                           | Max: 9 Min:<br>7.9 |

**Soil Map ID: 5**

Soil Component Name: Pahrnagat

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

| Soil Layer Information |          |           |                    |  |   |  |                    |
|------------------------|----------|-----------|--------------------|--|---|--|--------------------|
| Layer                  | Boundary |           | Soil Texture Class | Classification   |   | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper    | Lower     |                    | AASHTO Group   | Unified Soil  |  |                    |
| 1                      | 0 inches | 14 inches | silt loam          | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 4<br>Min: 1.4                           | Max: 9 Min:<br>7.9 |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                                    |  |   |   |                    |
|------------------------|-----------|-----------|------------------------------------|--|---|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class                 | Classification   |   | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                                    | AASHTO Group   | Unified Soil  |   |                    |
| 2                      | 14 inches | 59 inches | sr to silt loam to silty clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 4<br>Min: 1.4                              | Max: 9 Min:<br>7.9 |

**Soil Map ID: 6**

Soil Component Name: Maynard Lake

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |                     |   |  |   |                    |
|------------------------|----------|-----------|---------------------|---|--|---|--------------------|
| Layer                  | Boundary |           | Soil Texture Class  | Classification  |  | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper    | Lower     |                     | AASHTO Group  | Unified Soil   |   |                    |
| 1                      | 0 inches | 3 inches  | gravelly loamy sand | Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42                             | Max: 9 Min:<br>7.9 |
| 2                      | 3 inches | 59 inches | loamy sand          | Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 141<br>Min: 42                             | Max: 9 Min:<br>7.9 |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 7**

Soil Component Name: Geer

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                                    |   |  |  |                    |
|------------------------|-----------|-----------|------------------------------------|---|--|--|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class                 | Classification  |  | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                                    | AASHTO Group  | Unified Soil   |  |                    |
| 1                      | 0 inches  | 14 inches | fine sandy loam                    | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 9 Min: 7.9    |
| 2                      | 14 inches | 59 inches | sr to fine sandy loam to silt loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 9 Min: 7.9    |
| 3                      | 59 inches | 72 inches | gravelly silt loam                 | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 9 Min: 7.9    |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 8**

Soil Component Name: Arizo

Soil Surface Texture: stony loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |  |   |   |   |                    |
|------------------------|----------|-----------|--|---|---|---|--------------------|
| Layer                  | Boundary |           | Soil Texture Class   | Classification  |   | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper    | Lower     |  | AASHTO Group  | Unified Soil  |   |                    |
| 1                      | 0 inches | 5 inches  | stony loamy sand   | Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand. | COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.<br>COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel. | Max: 705<br>Min: 141                            | Max: 9 Min: 7.9    |
| 2                      | 5 inches | 59 inches | sr to very cobbly coarse sand to extremely gravelly loamy sand | Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand. | COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.<br>COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel. | Max: 705<br>Min: 141                            | Max: 9 Min: 7.9    |

**LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## WELL SEARCH DISTANCE INFORMATION

| <u>DATABASE</u>  | <u>SEARCH DISTANCE (miles)</u> |
|------------------|--------------------------------|
| Federal USGS     | 1.000                          |
| Federal FRDS PWS | Nearest PWS within 1 mile      |
| State Database   | 1.000                          |

## **FEDERAL USGS WELL INFORMATION**

| <u>MAP ID</u> | <u>WELL ID</u> | <u>LOCATION FROM TP</u> |
|---------------|----------------|-------------------------|
| 5             | USGS3100321    | 1/4 - 1/2 Mile West     |
| B6            | USGS3100322    | 1/4 - 1/2 Mile WNW      |
| B8            | USGS3100325    | 1/4 - 1/2 Mile WNW      |
| C9            | USGS3100319    | 1/4 - 1/2 Mile SE       |
| B10           | USGS3100323    | 1/4 - 1/2 Mile WNW      |
| B11           | USGS3100324    | 1/4 - 1/2 Mile WNW      |
| 12            | USGS3100326    | 1/4 - 1/2 Mile ENE      |
| 20            | USGS3100320    | 1/4 - 1/2 Mile East     |
| 26            | USGS3100318    | 1/2 - 1 Mile South      |
| 36            | USGS3100328    | 1/2 - 1 Mile NNW        |
| 37            | USGS3100327    | 1/2 - 1 Mile NNE        |

## **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

| <u>MAP ID</u> | <u>WELL ID</u> | <u>LOCATION FROM TP</u> |
|---------------|----------------|-------------------------|
| 2             | NV0000077      | 1/8 - 1/4 Mile North    |

Note: PWS System location is not always the same as well location.

## **STATE DATABASE WELL INFORMATION**

| <u>MAP ID</u> | <u>WELL ID</u>  | <u>LOCATION FROM TP</u> |
|---------------|-----------------|-------------------------|
| 1             | NV4000000044614 | 1/8 - 1/4 Mile WSW      |
| A3            | NV4000000044617 | 1/8 - 1/4 Mile NW       |
| A4            | NV4000000044618 | 1/8 - 1/4 Mile NW       |
| C7            | NV4000000044611 | 1/4 - 1/2 Mile SE       |
| D13           | NV4000000044612 | 1/4 - 1/2 Mile West     |
| D14           | NV4000000044613 | 1/4 - 1/2 Mile West     |
| 15            | NV4000000044619 | 1/4 - 1/2 Mile ENE      |
| E16           | NV4000000044616 | 1/4 - 1/2 Mile WNW      |
| E17           | NV4000000044615 | 1/4 - 1/2 Mile WNW      |
| 18            | NV4000000044610 | 1/4 - 1/2 Mile South    |
| 19            | NV4000000044620 | 1/4 - 1/2 Mile NNW      |
| 21            | NV4000000044606 | 1/2 - 1 Mile South      |
| 22            | NV4000000044621 | 1/2 - 1 Mile NE         |
| F23           | NV4000000044603 | 1/2 - 1 Mile SSW        |
| F24           | NV4000000044604 | 1/2 - 1 Mile SSW        |

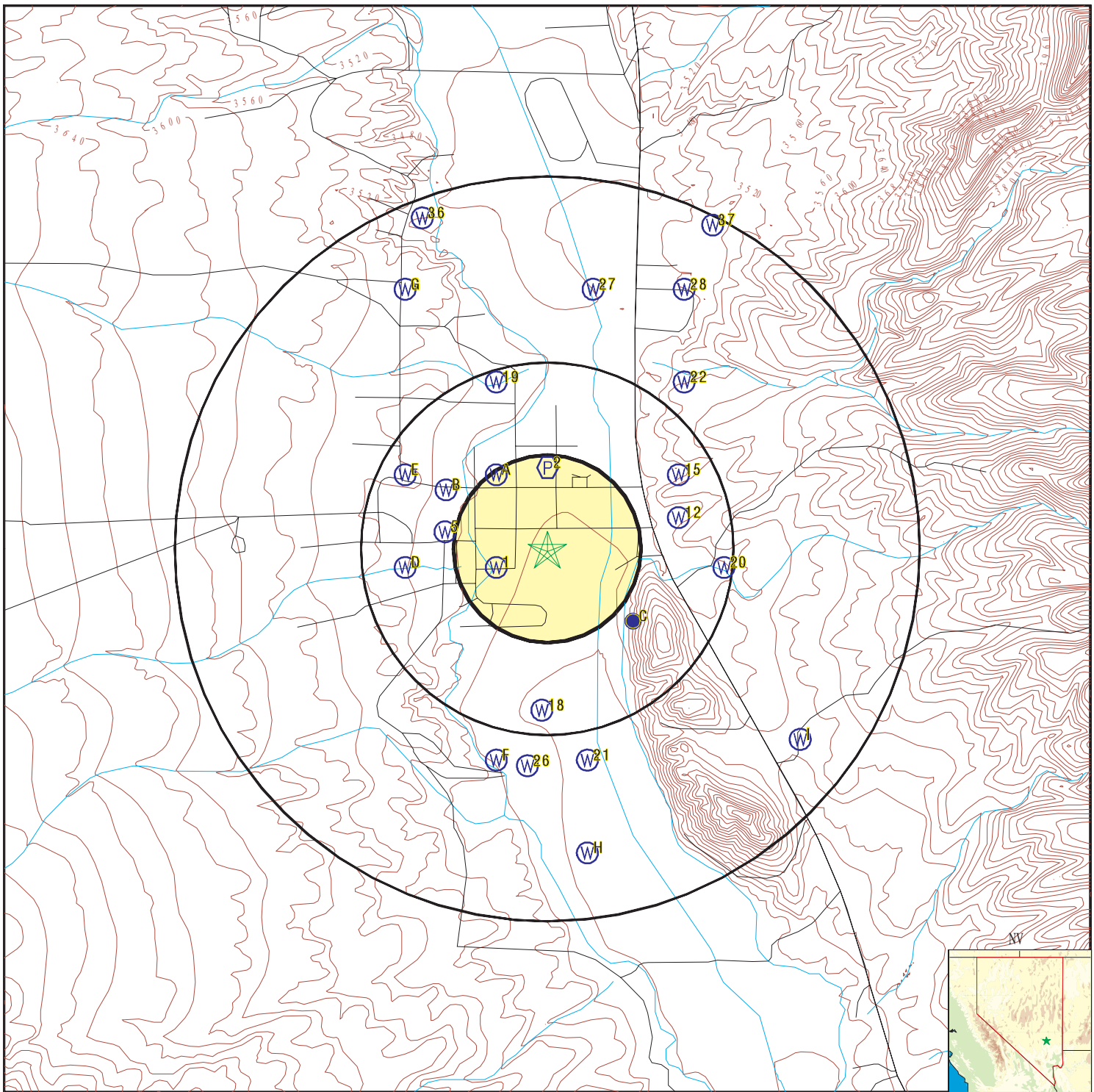


## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### STATE DATABASE WELL INFORMATION

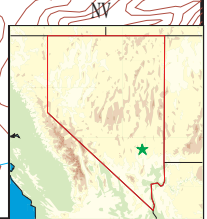
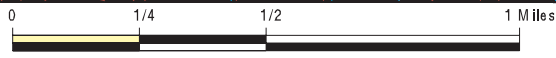
| <u>MAP ID</u> | <u>WELL ID</u>  | <u>LOCATION<br/>FROM TP</u> |
|---------------|-----------------|-----------------------------|
| F25           | NV4000000044605 | 1/2 - 1 Mile SSW            |
| 27            | NV4000000044628 | 1/2 - 1 Mile North          |
| 28            | NV4000000044629 | 1/2 - 1 Mile NNE            |
| G29           | NV4000000044626 | 1/2 - 1 Mile NNW            |
| G30           | NV4000000044627 | 1/2 - 1 Mile NNW            |
| H31           | NV4000000044601 | 1/2 - 1 Mile South          |
| H32           | NV4000000044602 | 1/2 - 1 Mile South          |
| I33           | NV4000000044607 | 1/2 - 1 Mile SE             |
| I34           | NV4000000044608 | 1/2 - 1 Mile SE             |
| I35           | NV4000000044609 | 1/2 - 1 Mile SE             |

# PHYSICAL SETTING SOURCE MAP - 3332771.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data



SITE NAME: Pahrnagat Valley Middle School Multi-Use Building  
 ADDRESS: 262 Weeping Willow Ave.  
 Alamo NV 89001  
 LAT/LONG: 37.3618 / 115.1642

CLIENT: McGinley Associates  
 CONTACT: Brett Bottenberg  
 INQUIRY #: 3332771.2s  
 DATE: May 29, 2012 8:00 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID | Direction | Distance   | Elevation | Database | EDR ID Number   |
|--------|-----------|--|-----------|----------|-----------------|
| 1      | WSW       | 1/8 - 1/4 Mile                                   | Higher    | NV WELLS | NV4000000044614 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 2      | North     | 1/8 - 1/4 Mile                                   | Higher    | FRDS PWS | NV0000077       |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| A3     | NW        | 1/8 - 1/4 Mile                                   | Higher    | NV WELLS | NV4000000044617 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| A4     | NW        | 1/8 - 1/4 Mile                                   | Higher    | NV WELLS | NV4000000044618 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 5      | West      | 1/4 - 1/2 Mile                                   | Higher    | FED USGS | USGS3100321     |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| B6     | WNW       | 1/4 - 1/2 Mile                                   | Higher    | FED USGS | USGS3100322     |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| C7     | SE        | 1/4 - 1/2 Mile                                   | Higher    | NV WELLS | NV4000000044611 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| B8     | WNW       | 1/4 - 1/2 Mile                                   | Higher    | FED USGS | USGS3100325     |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID<br>Direction<br>Distance<br>Elevation |  | Database | EDR ID Number   |
|--|--|----------|-----------------|
| C9<br>SE<br>1/4 - 1/2 Mile<br>Higher         | <a href="#">Click here for full text details</a> | FED USGS | USGS3100319     |
| B10<br>WNW<br>1/4 - 1/2 Mile<br>Higher       | <a href="#">Click here for full text details</a> | FED USGS | USGS3100323     |
| B11<br>WNW<br>1/4 - 1/2 Mile<br>Higher       | <a href="#">Click here for full text details</a> | FED USGS | USGS3100324     |
| 12<br>ENE<br>1/4 - 1/2 Mile<br>Higher        | <a href="#">Click here for full text details</a> | FED USGS | USGS3100326     |
| D13<br>West<br>1/4 - 1/2 Mile<br>Higher      | <a href="#">Click here for full text details</a> | NV WELLS | NV4000000044612 |
| D14<br>West<br>1/4 - 1/2 Mile<br>Higher      | <a href="#">Click here for full text details</a> | NV WELLS | NV4000000044613 |
| 15<br>ENE<br>1/4 - 1/2 Mile<br>Higher        | <a href="#">Click here for full text details</a> | NV WELLS | NV4000000044619 |
| E16<br>WNW<br>1/4 - 1/2 Mile<br>Higher       | <a href="#">Click here for full text details</a> | NV WELLS | NV4000000044616 |
| E17<br>WNW<br>1/4 - 1/2 Mile<br>Higher       | <a href="#">Click here for full text details</a> | NV WELLS | NV4000000044615 |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID | Direction | Distance   | Elevation | Database | EDR ID Number   |
|--------|-----------|--|-----------|----------|-----------------|
| 18     | South     | 1/4 - 1/2 Mile                                   | Lower     | NV WELLS | NV4000000044610 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 19     | NNW       | 1/4 - 1/2 Mile                                   | Higher    | NV WELLS | NV4000000044620 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 20     | East      | 1/4 - 1/2 Mile                                   | Higher    | FED USGS | USGS3100320     |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 21     | South     | 1/2 - 1 Mile                                     | Lower     | NV WELLS | NV4000000044606 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 22     | NE        | 1/2 - 1 Mile                                     | Higher    | NV WELLS | NV4000000044621 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| F23    | SSW       | 1/2 - 1 Mile                                     | Lower     | NV WELLS | NV4000000044603 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| F24    | SSW       | 1/2 - 1 Mile                                     | Lower     | NV WELLS | NV4000000044604 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| F25    | SSW       | 1/2 - 1 Mile                                     | Lower     | NV WELLS | NV4000000044605 |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |
| 26     | South     | 1/2 - 1 Mile                                     | Lower     | FED USGS | USGS3100318     |
|        |           | <a href="#">Click here for full text details</a> |           |          |                 |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| Map ID | Direction | Distance     | Elevation  | Database | EDR ID Number   |
|--------|-----------|--------------|--|----------|-----------------|
| 27     | North     | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044628 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| 28     | NNE       | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044629 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| G29    | NNW       | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044626 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| G30    | NNW       | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044627 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| H31    | South     | 1/2 - 1 Mile | Lower  | NV WELLS | NV4000000044601 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| H32    | South     | 1/2 - 1 Mile | Lower  | NV WELLS | NV4000000044602 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| I33    | SE        | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044607 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| I34    | SE        | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044608 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |
| I35    | SE        | 1/2 - 1 Mile | Higher   | NV WELLS | NV4000000044609 |
|        |           |              | <a href="#">Click here for full text details</a> |          |                 |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database

EDR ID Number

36  
NNW  
1/2 - 1 Mile  
Higher

[Click here for full text details](#)

FED USGS

USGS3100328

37  
NNE  
1/2 - 1 Mile  
Higher

[Click here for full text details](#)

FED USGS

USGS3100327

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: NV Radon

### Radon Test Results

| # Tests | # < 4 pCi/L | # > 4 pCi/L | % > 4 pCi/L | Average | Max |
|---------|-------------|-------------|-------------|---------|-----|
| 1       | 1           | 0           | 0           | 1.3     | 1.3 |

Federal EPA Radon Zone for LINCOLN County: 1

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level  $\geq$  2 pCi/L and  $\leq$  4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for Zip Code: 89001

Number of sites tested: 21

| Area                    | Average Activity | % <4 pCi/L   | % 4-20 pCi/L | % >20 pCi/L  |
|-------------------------|------------------|--------------|--------------|--------------|
| Living Area - 1st Floor | 0.771 pCi/L      | 95%          | 5%           | 0%           |
| Living Area - 2nd Floor | Not Reported     | Not Reported | Not Reported | Not Reported |
| Basement                | 5.167 pCi/L      | 33%          | 67%          | 0%           |



# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Nevada Well Log Database

Source: Dept of Conservation and Natural Resources, Division of Water Resources

Telephone: 775-687-4380

## OTHER STATE DATABASE INFORMATION

#### Oil and Gas Well Database

Source: Nevada Bureau of Mines and Geology

Telephone: 775-784-6691

Oil and gas well location in the state of Nevada.

### RADON

#### State Database: NV Radon

Source: State Health Division

Telephone: 775-687-7531

Radon Test Results By Zip Code

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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# APPENDIX G

## Resumes

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## Brett C. Bottenberg, M.S., C.E.M

### Project Engineer

#### Professional Experience

Mr. Bottenberg is an Environmental Scientist and Engineer with more than 11 years of professional experience in conducting Phase I and II Environmental Site Assessments (ESAs), National Environmental Policy Act (NEPA) reviews, Spill Prevention, Control, and Countermeasure (SPCC) Plans, Bioremediation Plans, Brownfields Assessments/Project Management, complex laboratory analyses, and analytical data review. Applied experience includes conducting over 400 Phase I ESAs, Phase II ESAs, SPCC Plans and NEPA reviews throughout Nevada, California, Utah, and Arizona. Mr. Bottenberg's diverse background provides project management experience in both the regulatory and construction industries. Further, Mr. Bottenberg has valuable knowledge pertaining to contaminant transport, chemical interactions, and remediation systems.

#### Project Experience

##### *Bioremediation Plan*

- **Confidential Oil Production Client, Nevada** – Project Manager responsible for design and implementation of a bioremediation plan to treat soils contaminated with crude oil at an oil production facility in rural Nevada.

##### *Spill Prevention, Control, and Countermeasure Plans*

- **Various Confidential Corporate Clients, Nevada and California** – Project Manager responsible for authoring SPCC Plans for oil production facilities, bulk oil plants, and industrial/commercial facilities containing above ground oil storage greater than 1,320 gallons in order to comply with 40 CFR 112 regulations.

##### *Phase I / II Environmental Site Assessments and NEPA Review Projects*

- **Confidential Corporate Client, numerous sites within Nevada and Utah** – Project Manager responsible for providing Phase I Environmental Site Assessments and NEPA Reviews for cellular co-location and new construction projects throughout the State of Nevada. Responsible for communication with State Historic Preservation Office (SHPO) and Native American Cultural Groups in order to comply with Section 106 of the National Historic Preservation Act, Federal Communications Commission (FCC) regulations 47 CFR 1.1301-19 and the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (PA).
- **Confidential Corporate Clients, numerous sites within Nevada** – Project Manager responsible for providing due diligence expertise within the banking, construction, and real estate industries. Managed and authored over 350 Phase I Environmental Site Assessments and Transaction Screen Assessments for various companies located in Las Vegas and throughout the western states.
- **Confidential Corporate Client, Las Vegas, NV** – Project manager responsible for sampling for lead based paint within Section 8 apartment housing in downtown Las Vegas.
- **Confidential Public Client, Las Vegas, NV** – Project manager responsible for Phase I and Phase II Environmental Site Assessments performed on various properties throughout Las Vegas, Nevada.

### *Brownfields Projects*

- **State of Nevada Brownfields Projects** – Project manager responsible for community outreach, local government assistance, and conducting assessments on blighted properties that are proposed to be renovated and/or developed by cities, towns, counties, or non-federal government agencies within the State of Nevada.

### *Laboratory Analysis and Data Review Projects*

- **Silver State Analytical Laboratory, Las Vegas, NV** – Co-founder of a large environmental laboratory in Las Vegas, NV. Provided expert knowledge of laboratory analysis, including the use of gas chromatography, gas chromatography mass spectrometry, titrations, colorimetric analysis, and atomic absorption. Responsible for regulatory documentation related to State of Nevada certification.
- **Nevada Federal Public Defenders Office, Las Vegas, NV** – Helped provide expert analysis of chain of custody, sampling protocol, and laboratory data for a case involving the prosecution of the owners of a small metals plating business in Las Vegas, NV. Was able to provide valuable information to the Public Defender in their successful defense.
- **Washington State University, Pullman, WA** – Research Assistant responsible for design and implementation of laboratory projects studying the effectiveness of chemical oxidation for remediation of common soil and groundwater contaminants, including benzene, toluene, perchloroethylene, and carbon tetrachloride. Designed complex soil-water systems with successful results that enabled eventual grant awards for further research in these areas.
- **Washington State University, Pullman, WA** – Researcher responsible for design of specific laboratory systems to study Fenton's Reagent and its role in the enhanced desorption and transformation of chloroaliphatic compounds within modified Fenton's reactions. Determined that vigorous reactions of soluble iron and hydrogen peroxide can not only oxidize organic compounds, but also induce desorption of those compounds from organic material with subsequent oxidation and/or reduction.

## **Education**

M.S., Environmental Engineering, Washington State University, 1997.

B.S., Civil Engineering, Washington State University, 1995.

## **Certifications and Registrations**

Nevada Certified Environmental Manager, EM#1690.

Engineer in Training, EIT#20066.

OSHA Hazwoper 40 Hour Certification.

OSHA Hazwoper 8 Hour Refresher.

Adult First Aid/CPR/AED Certification.

## **Affiliations**

Commercial Real Estate Development Association (NAIOP).

Nevada Professional Facilities Managers Association (NPFMA).

## Joseph M. McGinley, P.E., P.G., C.E.M.

### Principal

### Professional Experience

Mr. McGinley is a Professional Engineer (NV), Professional Geologist (CA) and Certified Environmental Manager (NV) with more than 28 years of service to long standing and new clients alike. He has developed experience through a wide range of project types, environmental conditions, and multiple regulatory agency liaisons. Mr. McGinley has a strong background in site characterization, corrective action plan development and in the design and implementation of remedial systems. He is acutely familiar with federal, State and local environmental regulations and has developed a familiar relationship with the administrators of those agencies throughout the West.

### Selected Project Experience

#### *Phase I Environmental Site Assessments*

- Project Principal responsible for the completion of over 400 Phase I ESAs in Nevada, California, Arizona, Oregon and Utah. Projects performed for various lending institutions, developers, governmental agencies, private property owners, non-profit organizations, and others. The Phase I ESAs are prepared in accordance with the American Society for Testing & Materials (ASTM) standard E1527-05 and the All Appropriate Inquires (AAI) as promulgated in the USEPA ruling 40 CFR part 312.

#### *Select Environmental Site Assessment and Remediation Projects – Chlorinated Solvents and other CoCs*

- **Boeing/Rocketdyne Former Nevada Field Laboratory, Reno NV** – Project Principal responsible for providing system design and performing the remediation of chlorinated solvents and perchlorate at three sites of this former rocket engine test facility.
- **BMI Complex and Common Areas, and Las Vegas Wash, Henderson, NV** – Project Principal responsible for administering and directing the technical review team services for third-party review of the assessment and remediation of broad suites of contaminants in soil, groundwater, and surface water.
- **Harrah's Hotel and Casino, Reno, NV** – Project Principal responsible for the design and oversight of installation of two air stripping units to remove PCE from groundwater as part of perpetual de-watering activities. Each stripping unit was designed to be capable of treating 500 gallons per minute and was permitted to discharge via a NPDES permit to an adjacent surface water body.
- **Big Tree Cleaners, Tahoe City, CA** – Project Manager responsible for services including: permitting; regulatory liaison; corrective action plan preparation (chlorinated solvent (PCE) contamination); remedial system design, installation, monitoring and reporting.
- **Reno Old Town Mall, Reno, NV** – Project Principal responsible for providing services including: groundwater monitoring; corrective action plan preparation; remedial system design and regulatory liaison for this PCE release site.



## Qualifications Resume

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- **State of Nevada Division of Environmental Protection, Downtown Reno Ground Water Characterization Project, Reno, NV** – Project Manager responsible for the assessment and characterization of a PCE plume in downtown Reno, Nevada which impacts a potable water supply.

### *Select Environmental Site Assessment and Remediation Projects – Petroleum Products*

- **University of Nevada, Reno, NV** – Project Manager responsible for the closure of the former Dodd/Beal fire fighting academy located in Stead, Nevada. Performed site characterization and assessment of the 57 acre parcel followed by the completion of a human health risk assessment to establish Site Specific Target Level (SSTL) for soil remediation. Remedial technologies utilized at this site included air sparging, monitor natural attenuation, bioremediation and vacuum extraction.
- **Berry Hinckley Industries, various sites, CA and NV** – Project Principal responsible for the assessment, remediation and state petroleum fund reimbursement procurement at several petroleum product sites.. Services included site assessments, remedial design, and remediation system operation and optimization.
- **Gold Ranch Casino, Verdi, NV** – Project Principal responsible for services including: site assessment, free petroleum product (NAPL) removal, groundwater remediation design and system operations.
- **State of Nevada Division of Environmental Protection (NDEP)** – Project Manager for the administration of the Federal LUST TRUST program for the State of Nevada.
- **Cruse Properties, Truckee, CA** – Project Principal responsible for the assessment and remediation activities performed at two former retail gasoline sites.
- **Squaw Valley Ski Resort, Squaw Valley, CA** – Project Principal responsible for the oversight of UST removal activities; site assessments; permitting; corrective action plan preparation; remedial system design, installation, monitoring and reporting.
- **Former Allied Washoe Bulk Plants, various sites, CA and NV** – Project Principal responsible for providing assessment and remediation services for three bulk fuel distribution facilities. Services provided included: contaminated soil excavation; dewatering activities; permitting; regulatory liaison; corrective action plan preparation; remedial system design, installation, monitoring and reporting.
- **Elko County School District property, Elko, NV** – Project Principal responsible for providing services including: contaminated soil excavation; site assessment permitting; regulatory liaison,; corrective action plan preparation and reporting.
- **Carson Valley Oil Bulk Plant** – Project Principal responsible for site assessment and remediation services following a kerosene release at this operating bulk fuel plant. Services performed included site assessment; corrective action plan preparation; remedial system design, installation, monitoring and reporting.





## Qualifications Resume

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- **Winnemucca Farms, Winnemucca, NV** – Project Principal responsible for providing services including: site assessment; vadose zone monitoring; groundwater flow and contaminant transport modeling performed at an operational potato processing plant.
- **State of Nevada Division of Environmental Protection** – Project Manager for the administration of the Federal Environmental Mitigation and Assessment program (EMAR), State of Nevada.
- **Cutler Property, Susanville, CA** – Project Principal responsible for providing services including: site assessment; corrective action plan preparation; and remedial system design for this former gasoline service station.
- **State of Nevada Division of Environmental Protection, various sites, Sparks, NV** – Project Manager responsible for providing third party review of ground water remediation of petroleum hydrocarbons and chlorinated solvents at the Sparks tank farm and Helms Pit for NDEP and the Washoe County Health District.
- **University of Nevada, Reno, various sites, NV** – Project Manager responsible for the oversight of the removal of 20 USTs; and providing site assessments and remediation system design/installation/operation for these sites, as applicable.
- **Western Energetix Corporation, various sites, CA and NV** – Project Manager responsible for providing services relating to LUST site assessment and remediation activities performed at 15 facilities in Nevada and California. Remedial technologies employed included bioremediation, air sparging, vacuum extraction and ground water pump and treat.
- **First Interstate Bank, Reno, NV** – Project Manager responsible for providing services including the assessment and monitoring of PCE and TCE at this proposed commercial development site.
- **ARCO Products, various sites, NV** – Project Manager **responsible for providing** site assessments and remedial designs for 12 facilities in northern Nevada.
- **Texaco USA, Inc., various sites, NV** – Project Manager responsible for providing services related to site Assessments and remedial designs for five facilities located in Nevada. Remedial technologies employed included groundwater pump and treat, air sparging, vacuum extraction.
- **Nevada Thermal Service, various sites, NV** – Project Manager **provided** review of California Title 22 – Hazardous Waste Classification of soils imported to the State of Nevada for over 100 sites.
- **Sierra Pacific Power Company, Elko, NV** – Project Manager providing remedial design utilizing bioventing following UST removal at this facility.
- **Regional Transportation Company, Reno, NV** – Project Manager responsible for oversight of UST removal, upgrade activities, site assessment and remedial actions.
- **City of Sparks, Nevada** – Project Manager responsible for the oversight of the removal of 18 USTs, site assessment activities and remedial actions.
- **Dermody Properties, various sites, NV** – Project Manager responsible for the oversight of UST removal at 10 facilities, site assessment and remedial actions.



## Qualifications Resume

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- **Silver State Trucking, Sparks, NV** – Project Manager responsible for the design and permitting of free phase (NAPL) petroleum product removal system and groundwater pump and treat system at this truck stop.
- **Time Oil Property, Fallon, NV** – Project Principal responsible for providing services related to a UST petroleum product release at this operating facility including environmental site assessment, regulatory liaison, corrective action plan preparation, remedial system design and report preparation.
- **Buggy Bath Car Wash, Reno, NV** – Project Manager responsible for the design of an *in-situ* vacuum extraction system, groundwater pump and treat and air sparging system at this operating facility in Reno, NV.

### *Select Brownfields Projects*

- **State of Nevada, Brownfields Contract, NV** – Project Principal responsible for the implementation of the State of Nevada's Brownfields Grant throughout the State of Nevada. Services included development and review of applications for governmental and municipal clients; development of project documents including Phase I and II ESAs, human health risk assessment, health and safety plans, etc.; and acquiring regulatory closure for these sites.

### *Select Expert and Material Witness Projects*

- University of Nevada System v Clark Sullivan Constructors, et al
- Nevada Division of Environmental Protection and Dermody Properties vs. Sparks Fuel and Solvent site consortium
- Kelly v State Farm, et al
- Time Oil v Fredrickson Trucking, et al
- NDEP v Hagar
- Fallon Lawsuit (Leukemia cluster)

## Education

M.S., Civil Engineering, University of Colorado, Boulder, 1983.

B.S., Geological Engineering, University of Nevada, Reno, 1980.

## Certifications and Registrations

Professional Engineer, Nevada, GEO #7472.

Professional Geologist, California, PG #7409.

Certified Environmental Manager, Nevada, CEM #1036.

OSHA, 29 CFR 1910 40–Hour, Hazardous Waste Operations and Emergency Response (HAZWOPER).

MSHA Part 46, New Miner Training.