

Appendix B9 Hazardous Materials



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Subject	Hazardous Materials, Arlington Avenue Bridges Project, Washoe County, Nevada
Attention	Judy Tortelli / Regional Transportation Commission (RTC)
From	Dana Ragusa / Jacobs Engineering Group Inc. (Jacobs)
Date	October 26, 2020
Copies to	Jim Clarke / Jacobs Ken Greene / Jacobs

1. Introduction

This technical memorandum documents the hazardous materials assessment conducted for the Arlington Avenue Bridges Project, Washoe County.

Hazardous materials could be encountered during construction. Therefore, it is important to identify properties that may contain contamination prior to right-of-way acquisition and construction. Hazardous materials are defined as any waste product that is considered flammable, corrosive, reactive, or toxic. Hazardous materials can be found in various forms and can originate from a variety of sources. Examples of potential sites that may contain hazardous waste include, but are not limited to, landfills, service stations, industrial areas, railroad corridors, and mine sites.

2. Project Description

The Regional Transportation Commission (RTC) of Washoe County is conducting a feasibility and alternatives analysis to determine options for the rehabilitation or replacement of the two Arlington Avenue Bridges (Project) located across the Truckee River in downtown Reno, Nevada. The Project is located between Island Avenue and West First Street and includes the area of Wingfield Park. See Attachment A.

The Arlington Avenue bridges have served the community of Reno and provided access to Wingfield Park for nearly a century. The park, the Truckee River, and the surrounding area have evolved over that time, and the Arlington Avenue bridges have been widened, repaired, and modified in ways that met the needs of the community at the time. However, the bridges are showing signs of wear resulting from the variety of modifications made, their age, and the repeated exposure to flood events.

In 2009, the City of Reno completed the TRAction Visioning Project which served as a component of the Truckee River Flood Management Project's (TRFMP) master plan to provide improved safety along the Truckee River Corridor. The TRAction Project was partially a result of the 1997 and 2005 flood events and focused on looking for the best solutions for improved flood protection in downtown Reno. The two Arlington Avenue Bridges were analyzed as part of the TRAction Project.

The TRAction Visioning Report suggested that the Arlington Avenue Bridges be replaced so they can better meet the flood conveyance needs, but the Report cautioned that the reconstruction of the structures would be complicated by the need to ensure pedestrian access. Two bridge options were considered as part of the TRAction Report; replacement with two new structures using a slightly higher deck elevation to keep flood waters in the channel; and replacement with a single structure spanning over the river and Wingfield Park allowing pedestrians to pass under the bridge. Constraints and impacts associated with these two alternatives were not developed in great detail.

This Project aims to pick up where the TRAction Report ended by evaluating options to ensure continued public safety, to meet the needs of the community, and to provide additional flood conveyance for the Truckee River.

3. Initial Site Assessment

An assessment was performed to screen the subject property and surrounding area for sites with known or suspected recognized environmental conditions (RECs). RECs are the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.

The assessment included a site reconnaissance, a review of regulatory database records, and review of available historic information.

Right-of-way acquisitions are anticipated at the following properties:

1. North of Island, east and west of Arlington, and south of 1st (Wingfield Park)
2. SE corner of Arlington/First (City parcel)
3. SE corner of Arlington/Island (Frisch House property)
4. SW corner of Arlington/Island (Barbara Bennett Park)

The vacant lot north of Court, east of Arlington, and south of Island would be used as a staging area during construction.

3.1 Records Review

Historic topographic maps of the subject property and surrounding area dated 1891, 1950, 1960, 1974, and 1980 were reviewed for this Project (see Attachment B). Railroads, major roadways, and development within the City of Reno were depicted on the 1891 topographic maps. The 1950 maps depict a significant increase in roadways and development.

According to the Nevada Bureau of Mines and Geology, there are no oil and gas wells located on the subject property or within one mile of the surrounding area.

The Nevada Department of Environmental Protection (NDEP) maintains regulatory records for registered sites. The NDEP on-line mapping was used to identify any potential RECs within ¼ mile of the subject property in the City of Reno. The following summarizes only those sites considered potential RECs that may or may not pose a risk to the proposed Project. The other listed sites fall in databases associated with permitting, air emissions, generators, storage tanks, etc. and are not discussed further since there have been no reported releases or violations and are not considered RECs.

- **City of Reno Redevelopment Agency:** this site is located at West 2nd Street and Stevenson Street, less than ¼ mile northwest from the proposed improvements. This facility is listed in the Brownfields database. An investigation was conducted in May 2006 and closed in June 2006. Contamination at the site was unknown.
- **Mills Lane Justice Center:** this site is located at 1 South Sierra Street, less than ¼ mile northwest from the proposed improvements. This facility is listed in the non-lust (non-leaking underground storage tank) database. A spill of total petroleum hydrocarbons (TPH) was reported in August 2004 and the event was closed in July 2018.
- **Granite Construction Company:** This site is located at Arlington Avenue and Third Street, approximately ¼ mile north from the proposed improvements. This facility is listed in the non-lust database. A confirmed release was reported in 2004. Coordination was conducted with the NDEP and Washoe County Health District (WCHD) regarding the status of this site. Neither agency had records for this release.

- **CAI Investments Inc.:** This site is located at 291 Court Street, south of the proposed improvements on a site anticipated to be used as the construction staging area. This facility is listed in the non-lust database. A confirmed release was reported in April 2020. Impacted soil was discovered during removal of the heating oil underground storage tank (UST) on site. Soil samples were collected and are being analyzed for the presence of volatile organic compounds (VOCs) and Polynuclear Aromatic Hydrocarbons (PNAs).
- **Winner's Corner Store #27:** This site is located at 350 S Arlington Avenue, approximately 900 feet south from the proposed improvements. This facility is located in the LUST database. A confirmed release was reported in December 1989. An UST used to store gasoline was released to the soil. This event was closed in February 1998.

3.2 Site Reconnaissance

A site reconnaissance was conducted in April 2019 to review the listed sites and any other sites that could be associated with RECs. The following summarizes the results of the site reconnaissance. The results of the listed sites reviewed during the site reconnaissance are discussed above in Section 3.1, Records Review.

None of the properties anticipated to be acquired and no additional sites identified within the Project area are associated with RECs that would pose a risk to the proposed Project.

4. Findings/Conclusions

Four properties are anticipated to have property acquisitions as a result of the proposed improvements. In addition, one vacant lot is anticipated to be used as a staging area during construction. The proposed improvements would involve minimal excavation. This initial site assessment revealed evidence of one REC associated with the staging area that could pose a risk to the proposed Project. Section 3.1 summarizes the findings of the records review and the CAI Investment property where a release was reported. Impacted soil on this site is currently being tested for the potential presence of hazardous materials.

5. Recommendations

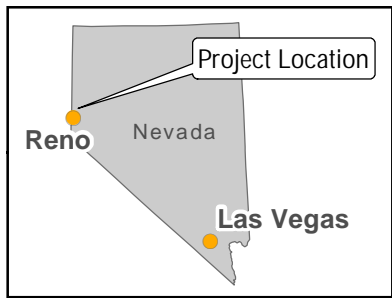
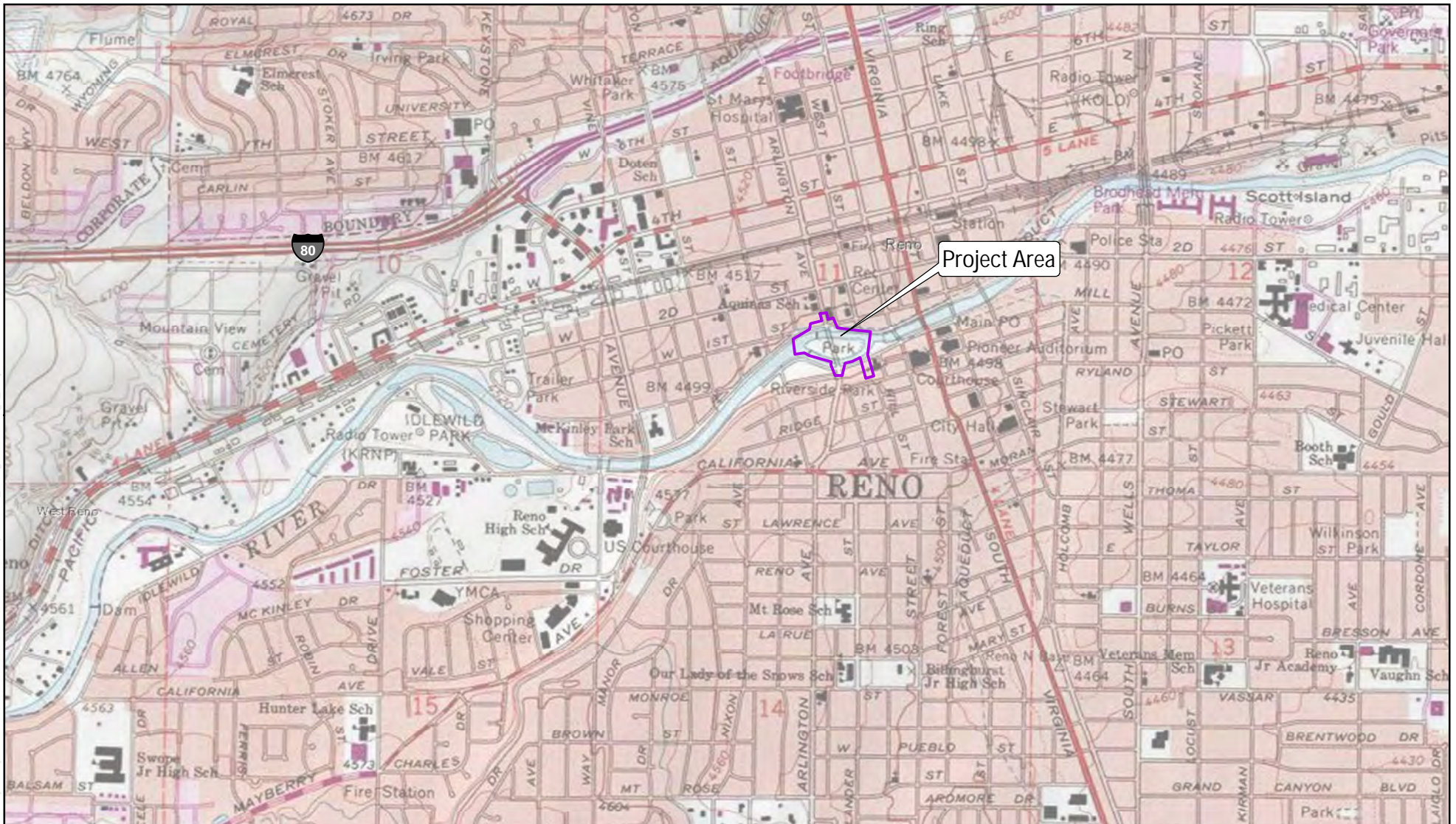
One REC site was observed that could pose a risk to the proposed Project. Construction personnel should be trained to recognize signs of possible contamination in soil such as odors and staining.

The adjacent buildings and structures were not inspected for the possible presence of asbestos containing material (ACMs) or lead containing paint (LCP) since full property acquisitions are not anticipated for this proposed Project. However, the Arlington Avenue Bridge structure would be demolished as a result of the proposed Project. There could be potential utility conflicts as a result of the proposed improvements. Owners of subsurface utilities should be contacted in areas where excavation is to be conducted in order to assess whether any of the utilities are contained in Transite™ asbestos pipe. It is recommended that inspections for ACMs and LBP be conducted on structures, utilities, and guard rail that would be moved or impacted as a result of the proposed Project that may require special handling, and possibly lead paint and/or asbestos abatement in accordance with Nevada Department of Transportation 2014 Standard Specifications for Road and Bridge Construction.

Attachment A

Figures

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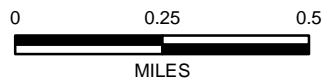


LEGEND

— Project Footprint - CAD 7/8/2019

BASE MAP SOURCE:

Service Layer Credits: Copyright: © 2013 National Geographic Society, i-cubed Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community



Arlington Avenue Bridge

Washoe County Nevada

FIGURE 1

Project Location

DATE: 7/10/2019

JACOBS

W:\PROJECTS\110\1101107\2019\1101107242000_Arlington_Ave_Bridge_Feasibility_Study\44000_ENCR_DWG\2019_07\1101107242000_Arlington_Ave_Bridge_Feasibility_Study\MapFiles\00_Arlington_Ave_Bridge_Detailed\1101107242000_Arlington_Ave_Bridge_Detailed.mxd

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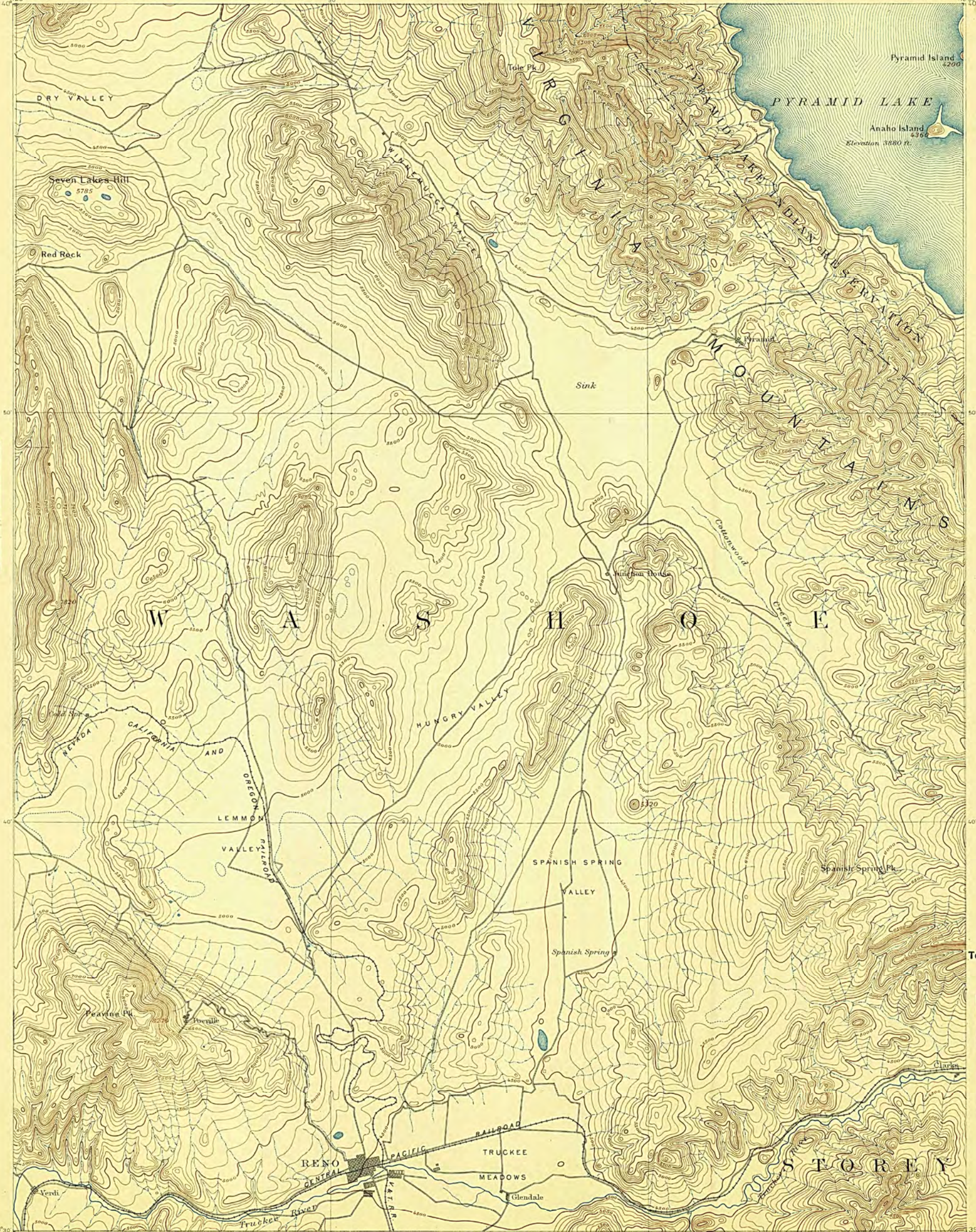
Attachment B Figures

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U. S. G. S.
FILE COPY
Ed. Div. Topographic Maps.

U.S. GEOLOGICAL SURVEY
J. W. POWELL, DIRECTOR.

NEVADA
RENO SHEET



U. S. G. S.
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Ed. Div. Topographic Maps.

USGS
Historical File
Topographic Division

U. S. G. S.
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Ed. Div. Topographic Maps.

A.H. Thompson, Geographer
E.M. Douglas, Topographer in charge
Triangulation by H.E. Offensender
Topography by R.H. Chapman, and P.V.S. Bartlett
Surveyed in 1882, 90.

U. S. G. S.
FILE COPY
Ed. Div. Topographic Maps.

Scale 1:24,000
Contour Interval 100 feet

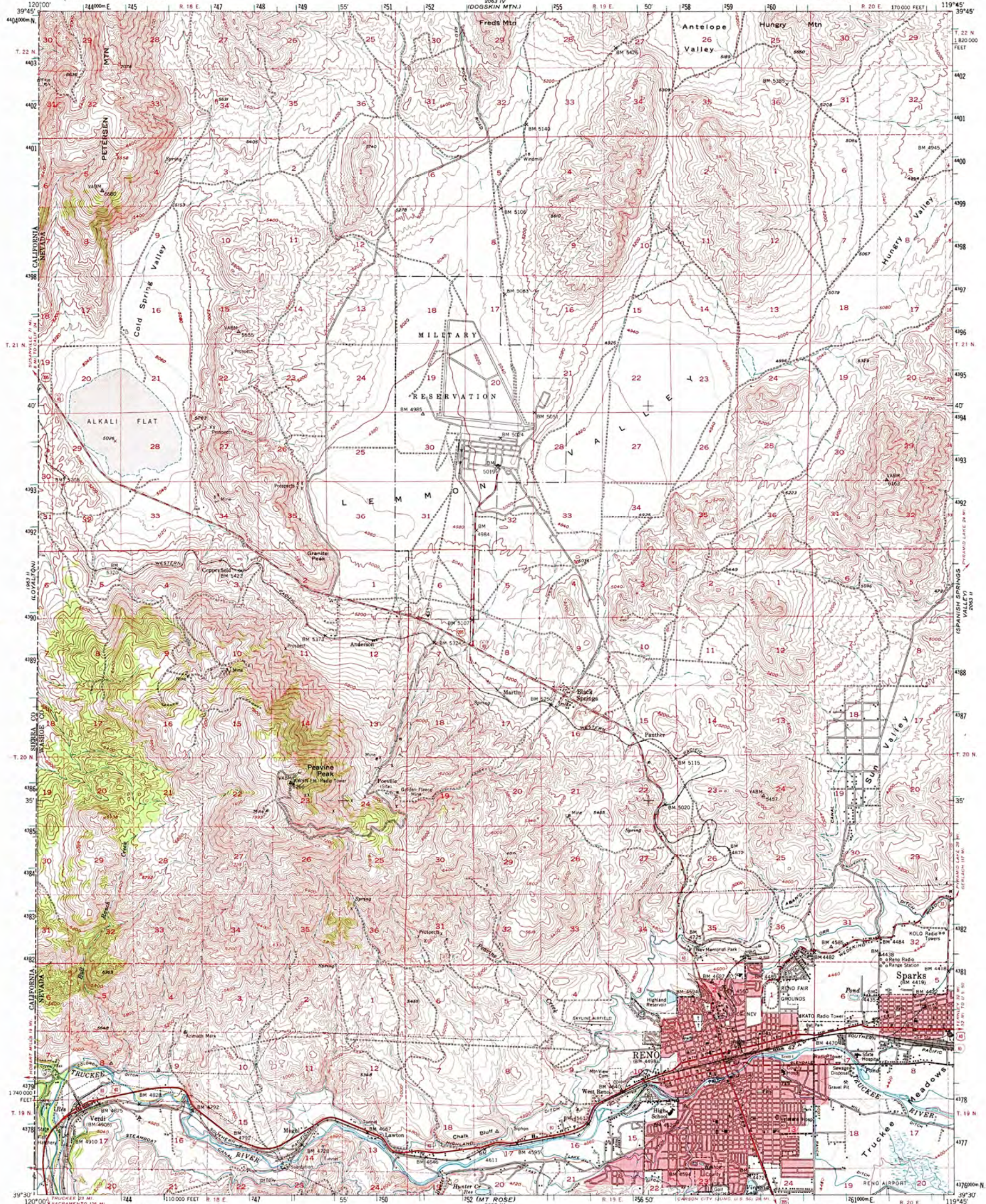
Edition of Nov. 1891.

250

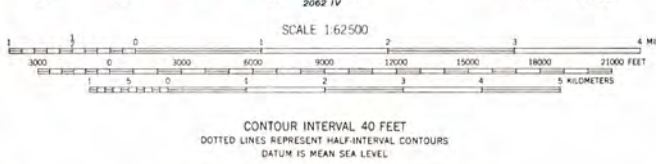
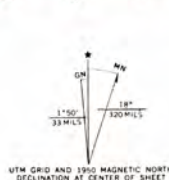
Reno, Nev.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

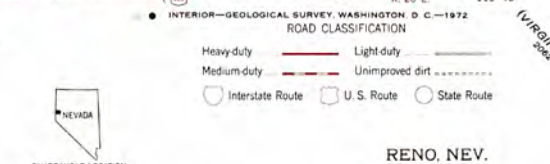
RENO QUADRANGLE
NEVADA-WASHOE CO.
15 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography from aerial photographs by multiplex methods
Aerial photographs taken 1946. Field check 1950
Polyconic projection. 1927 North American datum
10,000-foot grid based on Nevada coordinate system,
west zone
Red tint indicates area in which only
landmark buildings are shown
Dashed land lines indicate approximate location
Unchecked elevations are shown in brown
1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



RENO, NEV.
N3930-W11945/15
1950
AMS 2063 III—SERIES V796



Prepared by the Army Map Service (HVS), Corps of Engineers, U. S. Army, Washington, D. C. Compiled in 1957 by photogrammetric methods and from United States Quadrangles, 1:50,000 and 1:62,500. USGS and CE, 1948-57. Planimetric detail revised by photogrammetric methods. Horizontal and vertical control by USCGS, USGS and CE. Photography field annotated 1957.

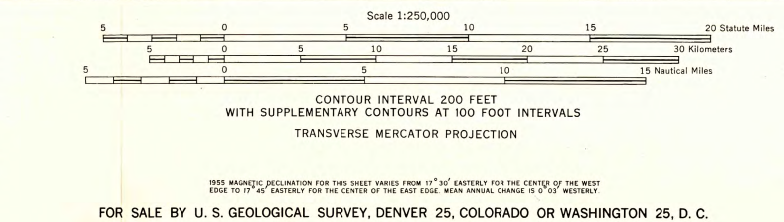
100,000-foot grid based on Nevada coordinate system, west zone
 18,000-meter Universal Transverse Mercator grid ticks.
 zone 11, shown in blue

LEGEND

ROAD DATA 1957
 Figures in red denote approximate distances in miles between stars

POPULATED PLACES	ROADS	RAILROADS	BOUNDARIES	LANDMARKS
Over 500,000	Hard surface, heavy duty	Standard gauge	National	School, Church, Other
100,000 to 500,000	More than two lanes wide	Narrow gauge	State	Horizontal control point, Windmill
25,000 to 100,000	Two lanes wide, Federal route marker	Double or multiple	County	Spot elevation in feet
5,000 to 25,000	Hard surface, medium duty	Single track	Parish or reservation	Marsh or swamp
1,000 to 5,000	More than two lanes wide	Double or multiple		Intermittent or dry stream
500 to 1,000	Two lanes wide, State route marker	Single track		Power line
Less than 1,000	Improved light duty	Double or multiple		
	Unimproved dirt	Single track		
	Trail	Double or multiple		

Landplane airport
 Landing area
 Seaplane airport
 Dry lake
 Woods/bushwood



LOCATION DIAGRAM FOR NJ 11-1

NK 108	NK 109	NK 110	NK 111	NK 112
NK 109	NK 110	NK 111	NK 112	NK 113
NK 110	NK 111	NK 112	NK 113	NK 114
NK 111	NK 112	NK 113	NK 114	NK 115
NK 112	NK 113	NK 114	NK 115	NK 116
NK 113	NK 114	NK 115	NK 116	NK 117
NK 114	NK 115	NK 116	NK 117	NK 118
NK 115	NK 116	NK 117	NK 118	NK 119

RELIABILITY DIAGRAM

SECTIONIZED TOWNSHIP

6	9	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

TOWNSHIP OR RANGE LINE
 LAND GRANT BOUNDARY

RENO, NEVADA; CALIFORNIA

USGS
 Historical File
 Topographic Division

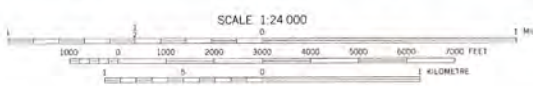
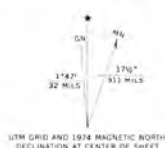
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OCT 21 1958

3015



Produced and published by the Geological Survey
Orthophotograph prepared from 1:80,000-scale
aerial photographs taken July 3, 1974
Projection and 10,000-foot grid ticks: Nevada
coordinate system, west zone (transverse Mercator)
1000-metre Universal Transverse Mercator grid,
zone 11. 1927 North American datum
Photomage transformed by scanning techniques
which may produce double or mismatched images;
use the mean of image positions for map point



PRINCIPAL NUMBERED HIGHWAYS
○ Interstate Route □ U. S. Route ○ State Route

This quadrangle area also covered by
1:24,000-scale topographic map

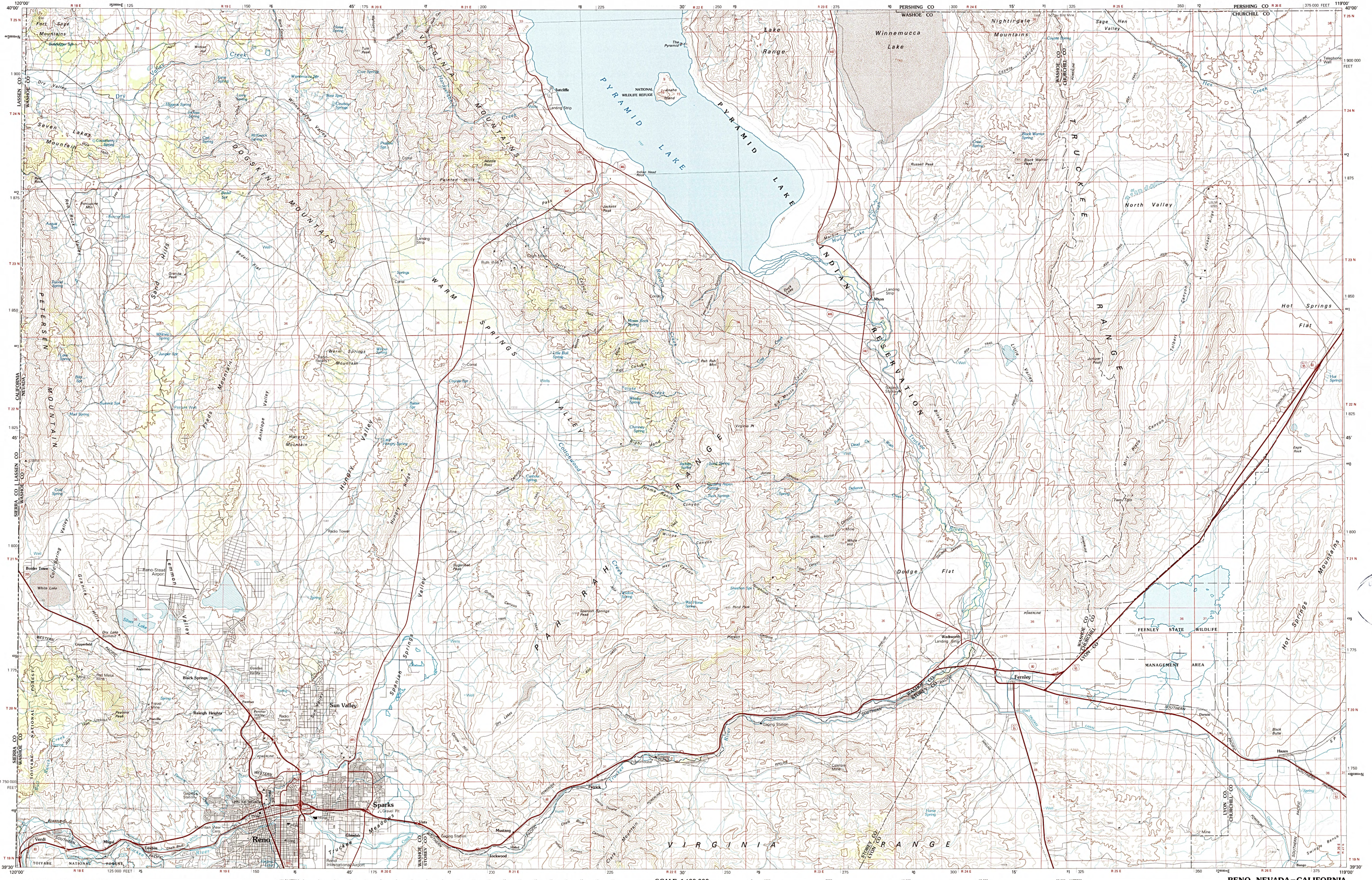
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

RENO, NEV.
N3930-W11945/7.5
1974

AMS 2065 III SE-SERIES V096

USGS
Historical File
Topographic Division

RETURN TO
USGS 3130 H STREET, NW
WASHINGTON, DC 20540
JUL 19 1976



1:100 000-scale metric topographic map of **Reno** NEVADA-CALIFORNIA



30 X 60 MINUTE QUADRANGLE SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



GEOLOGICAL SURVEY

1980

Produced by the United States Geological Survey in cooperation with State of Nevada
 Compiled from USGS 1:24 000, 1:25 000, and 1:62 500-scale topographic maps dated 1957-1979 and maps in progress. Planimetry revised from aerial photographs taken 1974 and other source data. Revised information not field checked. May edited 1980.
 Projection and 10 000-meter grid, zone 11, Universal Transverse Mercator
 25 000-foot grid ticks based on Nevada coordinate system, west zone, 1927 North American Datum
 To place on the predicted North American Datum 1983 move the projection lines 13 meters north and 86 meters east. There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 50 METERS
 WITH SUPPLEMENTARY CONTOURS AT 10-METER INTERVALS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6851
7	22.9659
8	26.2468
9	29.5276
10	32.8085

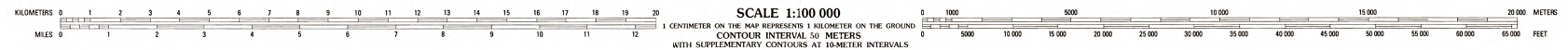
To convert meters to feet multiply by 3.2808
 To convert feet to meters multiply by 0.3048

CONVERSION TABLE	DECLINATION DIAGRAM	ADJOINING MAPS
		1 Susanville
		2 Kunaia Peak
		3 Lovelock
		4 Portola
		5 Carson Sink
		6 Truckee
		7 Carson City
		8 Fallon

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 U.S. GEOLOGICAL SURVEY
 APR 09 1980
 REC'D FILE COPY

Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light duty road, principal street, hard or improved surface
- Other road or street, trail
- Route marker: Interstate, U. S. State
- Railroad: standard gage, narrow gage
- Bridge: covered, underpass
- Tunnel: road, railroad
- Built up area: locality, elevation
- Airport: landing field, landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U. S. public lands survey: range, township, section
- Range township, section line, pre-1900
- Power transmission line: pipeline
- Dam: dam with lock
- Cemetery: building
- Windmill; water well; spring
- Mine shaft: old or new; mine, quarry; gravel pit
- Campground; picnic area; U. S. location monument
- Ruin; cliff dwelling
- Distorted surface: strip mine, lava, sand
- Contours: index, intermediate, supplementary
- Bathymetric contours: index, intermediate
- Stream lake: perennial, intermittent
- Rapids, large and small; falls, large and small
- Area to be submerged; marsh, swamp
- Land subject to controlled inundation; woodland
- Sand; moraine
- Other: vineyard



RENO, NEVADA-CALIFORNIA
 N3930-W11900/30X60
 1980

A pamphlet describing topographic maps is available on request.