

CA 0982



US Army Corps
of Engineers
HUNTSVILLE ENGINEERING
AND SUPPORT CENTER

FINAL



Defense Environmental Restoration Program
for
Formerly Used Defense Sites
Ordnance and Explosives

ARCHIVES SEARCH REPORT

FINDINGS

**TURLOCK REHABILITATION
CENTER**

TURLOCK, STANISLAUS COUNTY, CALIFORNIA

PROJECT NO. J09CA098201

SEPTEMBER 1997

70
181-004
787
1997

Prepared by
US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

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RESTORATION INFORMATION MANAGEMENT SYSTEMM
FORMERLY USED DEFENSE SITES (FUDS)

Final DATE: SEPTEMBER 1997

TAG Review Date: 27 July 2005

1. **SITE NAME:** Turlock Rehabilitation Center

SITE NUMBER: J09CA098200

LOCATION:

City: Turlock
County: Stanislaus
State: California

PROJECT NUMBER: J09CA098201

CATEGORY: MMRP

INPR RAC: 2

ASR RAC: 5

TAG RAC: 5

2. **POC's:**

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Phone: 918-420-8867

3. **SITE DESCRIPTION:**

a. The Turlock Rehabilitation Center is located within Turlock, CA and consisted of 131.41 acres. The area is flat,

developed, and can be divided up into 3 major areas: a concrete pipe manufacturer, the Stanislaus County Fairgrounds, and a residential area.

b. There was no MEC discovered during the site survey.

4. SITE HISTORY:

a. Prior to the arrival, of the military, the area was used for farming. Turlock was originally the site for a National Guard Armory (1940). In 1942, the Ninth Service Command activated a Disciplinary Camp in 1942. In 1943, all Detention and Rehabilitation Centers were re-designated Rehabilitation Centers. The primary mission of Turlock was to house Japanese-American evacuees. Improvements to the site included barracks, mess halls, stables, latrines, miscellaneous military buildings, and a small arms range.

b. From 1943-44, the property was acquired by declaration of taking, easement and leasing. The site was declared surplus on 1 January 1946. The Federal Farm Mortgage Corporation assumed the fee acres and easements and all the leases were terminated. The National Guard used the site until approximately 1964.

5. PROJECT DESCRIPTION:

Size, Acres:	Approximately 131.41
Former Use:	Internment Camp
Present Use:	Pipe Manufacture, Fairground Residential
Future Use:	Same as above
OE Presence:	
Confirmed:	None
Potential:	None
ASR Recommends:	RAC 5
HNC Safety:	RAC N/A

6. CURRENT STATUS: The Archives Search Report (ASR) for Turlock Rehabilitation Center was completed by the U.S. Army Corps of Engineers, St. Louis District, in September 1997 and finalized in April 1999.

7. STRATEGY: (NDAI)

8. **ISSUES AND CONCERNS:** The Huntsville Center Technical Advisory Group met and evaluated this ASR on 27 July 2005. The consensus was a score of RAC 5. The following issues were addressed:

a. The several reported incidents of 81mm practice mortars being retrieved from this site should be addressed with the National Guard. ~~Statements by the author and interviewees~~ provide no indication whether or not these rounds had "live" or expended ignition cartridges. Nor were a total number of incidents identified (only 1991, 1994, and the word "several" were used). If "live" practice mortars were found, a case could be made to increase this site to a RAC 4.

b. There are known Federally-and State-listed species occurring in the site area. An on-site inspection by appropriate State and Federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities.

c. Based on the investigation of historical records reviewed, the results of the site survey and interviews, there is no evidence indicating that chemical warfare material was trained with, stored, or disposed of at Turlock Rehabilitation Center.

9. **SCHEDULE SUMMARY:**

	Original	Schedule	Actual	Original	Schedule	Actual
Phase	Start	Start	Start	Complete	Complete	Complete

10. **FUNDING/BUDGET SUMMARY:**

Year	Phase	Exec FOA	In-House Required	Contract Required	Funds Obligated
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1.0 INTRODUCTION

1.1 Authority

In 1986, Congress established the Defense Environmental Restoration Program at 10 U.S.C. 2701 et.seq. This program directed the Secretary of Defense to "carry out a program of environmental restoration at facilities under the jurisdiction of the Secretary."

In March, 1990, the EPA issued a revised National Contingency Plan. Under 40 C.F.R. 300.120, EPA designated DoD to be the removal response authority for incidents involving DoD military weapons and munitions under the jurisdiction, custody and control of DoD.

Since the beginning of this program, the U.S. Army Corps of Engineers has been the agency responsible for environmental restoration at Formerly-Used Defense Sites (FUDS). Since 1990, the U.S. Army Engineering and Support Center, Huntsville, has been the Mandatory Center of Expertise and Design Center for Ordnance and Explosives.

1.2 Subject

The former Turlock Rehabilitation Center is located in Turlock, California in Stanislaus County (see Plate 1). According to the INPR, during 1943 and 1944, the United States acquired 19.27 acres fee by means of a declaration of taking. During the same time period, the United States obtained leases over 111.81 acres and easements over 0.33 acre. Although no real estate documents were found during research for this ASR suggesting a different acquisition time frame, one document indicates the Rehabilitation Center was activated on 14 September 1942.

The site was used as an internment camp. Numerous barracks were constructed along with administrative buildings. The only ordnance related activity on the site during the period of DoD control was a small arms range in the southwest portion of the site.

The site was declared surplus on 1 January 1946. Accountability for the 19.27 fee acres and 0.33 acre easements was assumed by the Federal Farm Mortgage Corporation. The leases over 111.81 acres were terminated.

The INPR for this project reported a "bomb" being found on the site. The bomb turned out to be a practice mortar. Several practice mortars have been removed from the site. We were not able to determine the source of these practice mortars, but we were able to confirm the National Guard used the site for several years after DoD

disposed of the site. According to the National Guard commander and a full time National Guard technician, only small arms training occurred on the site.

Most of the site (central portion) is now the Stanislaus County Fairgrounds. The northernmost portion of the site is owned by a concrete pipe manufacturer. The southernmost portion of the site is residential.

1.3 Purpose

This Archives Search Report (ASR) compiles information obtained through historical research at various archives and records-holding facilities, air photo review, interviews with persons associated with the site, and a site inspection. All efforts were directed at determining the possible use or disposal of ordnance on the site.

1.4 Scope

This ASR focused primarily on the potential for small arms ammunition and practice mortars to still be present on the site.

This report presents site history, description and characterization of the immediate surrounding area, real estate ownership information, and evaluation of potential ordnance presence.

2.0 PREVIOUS INVESTIGATIONS

2.1 Corps of Engineers Documents

An Inventory Project Report (INPR) was prepared in March 1992 by the U.S. Army Corps of Engineers, Sacramento District.

2.2 Other Documents

No other investigations were found.

3.0 SITE DESCRIPTION

3.1 Land usage

3.1.1 Location

The former Turlock Rehabilitation Center is located in Turlock, California in Stanislaus County.

3.1.2 Past Use

Prior to DoD acquisition, the site was irrigated farm land. DoD used the site as a rehabilitation center. After DoD finished using the site, it was used by the National Guard until approximately 1964.

3.1.3 Present Use

Most of the site (central portion) is now the Stanislaus County Fairgrounds. The northernmost portion of the site is owned by a concrete pipe manufacturer. The southernmost portion of the site is residential.

3.2 Climatic Data

Based on the climatological data at Stockton, California, the site enjoys slightly cooler summer days than communities in the upper San Joaquin and Sacramento Valleys. The summer climate is characterized by warm, dry days and relatively cool nights with clear skies and no rainfall. Winter brings mild temperatures and relatively light rains with frequent heavy fogs. The annual rainfall averages about 14 inches, with 90 percent of the precipitation falling from November through April. Thunderstorms are infrequent, occurring on three or four days a year. Snow is practically unknown in the area. In summer, temperatures exceeding 100 degrees can be expected on about 15 days. During these hot afternoons the air is extremely dry, with relative humidities running generally less than 20 percent. Even on these hot days, temperatures will fall into the low 60s at night. In winter the nighttime temperature on clear nights will fall to or slightly below freezing, and will rise in the afternoon into the low 50s. In the autumn and early winter, clear still nights give rise to the formation of dense fogs, which normally settle in during the night and burn off sometime during the day. In December and January, the so-called fog season, under stagnant atmospheric conditions the fog may last for as long as four or five weeks, with only brief and temporary periods of clearing.

3.3 Geology and Soils

3.3.1 Geology and Physiology

Turlock is located in the San Joaquin Subregion of the Valley of California Section of the Pacific Border Province. The Valley of California is a major northwest trending, southerly tilting, structural trough, asymmetrical in form with a steep western flank and a more gently inclined eastern flank. The northern third is known as the Sacramento Valley, the southern two-thirds is the San Joaquin Valley (Thornbury 1965). Roughly six miles of sediments have filled the San Joaquin Valley and range in age from Jurassic to Holocene and include marine and continental rocks and deposits. This trough has probably existed since the Jurassic, when the Sierra Nevada and Klamath Mountains were uplifted. During the Cretaceous and through much of the Cenozoic, this trough extended westward over the site of the present Coast Ranges and may have received sediment from the Sierra Nevada on the east. The trough existed in this form until the late Pliocene when development of the Coast Ranges cut off the sea (Thornbury 1965).

From the western flank of the trough to just east of the site, the following outcrops appear: (a) Cretaceous age marine rocks of the Moreno and Panoche Formations crop out; these formations are composed mostly of sandstone, siltstone, shale and some limestone and are more than 20,000 feet thick; (b) Eocene to Miocene age Kreyenhagen, Etchegoin, and Temblor Formations of marine sand, clay, silt, sandstone, shale, mudstone, and siltstone; (c) Miocene and Pliocene age continental deposits equivalent to the Etchegoin Formation, approximately 1,200 feet thick; (d) the site area is located on continental rocks and deposits of informal units of younger alluvium of Holocene age, older alluvium of Pleistocene and Holocene age, the Tulare Formation of Pliocene and Pleistocene age. In total, these formations form the major aquifer of the valley; can be up to 15,000 feet in thickness; (e) Flood basin deposits of the San Joaquin Valley; clays, silt, and some sand, may include part of the Modesto Formation; 100 feet thick, Pleistocene in age; and (f) Recent windblown sand and dune sands of 140 feet thickness lie east of the site area.

3.3.2 Soils

The site is underlain by aeolian sands, which lie above granitic alluvium, both of Recent age. The soils are coarse-textured soils developed from sand reworked from the granitic alluvium by wind. They are characteristically light brownish-gray or pale brown sand or silty clayey sand. The subsoil may be underlain by a layer of compact silty clay that is somewhat cemented with lime in the upper part. In depressions on nearly level areas, there is slow permeability, no erosion hazard, but the soils can become highly compacted if worked when wet. On slight hills, the soils are very rapidly permeable and have a moderate wind erosion rating (Arkley 1964).

A portion of the soil on the site has been altered from its original profile by the excavating and building in and around Turlock. These urbanized soils will differ slightly in their characteristics.

There is little or no hazard of frost action in the soils of the Turlock site.

3.4 Hydrology

3.4.1 Ground Water

The site is underlain by the Central Valley aquifer system. The Central Valley is one of the most important agricultural areas in the world. More than seven million acres are currently (1995) under irrigation. During 1985, crop irrigation accounted for 96 percent of the surface water and 89 percent of the ground water withdrawn in the Central Valley.

The Central Valley aquifer system is formed primarily of sand and gravel with significant amounts of silt and clay, all of which have been eroded mainly from older rocks at the boundaries of the valley. Locally, volcanic rocks and dune deposits are part of the aquifer system. Specific geologic formations can be related to specific aquifers only with difficulty because so many of them are lithologically similar, and cannot be distinguished easily in the subsurface.

Groundwater flows to the west under the site.

3.4.2 Surface Water

Runoff from the site flows into the Tuolumne River and the Merced River. Near Livingston, the Merced River has a drainage area of 1, 259 square miles and a maximum flow of 11,100 cfs which occurred on February 12, 1938. Near Modesto, the Tuolumne River has drainage area of 1,884 square miles and a maximum flow of 57,000 cfs which occurred on December 9, 1950.

3.5 Ecology

The information provided for this site was compiled from the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game Natural Diversity Data Base (NDDB).

The following Federally endangered, threatened, or candidate species occur in the vicinity of the Turlock Rehabilitation Center: Conservancy fairy shrimp (*Branchinecta conservatio*), endangered; longhorn fairy shrimp (*Branchinecta longiantenna*), endangered; vernal pool fairy shrimp (*Branchinecta lynchi*), threatened; valley

elderberry longhorn beetle (*Desmocerus californicus dimorphus*), threatened; vernal pool tadpole shrimp (*Lepidurus packardii*), endangered; California tiger salamander (*Ambystoma californiense*), candidate; California red-legged frog (*Rana aurora draytonii*), threatened; giant garter snake (*Thamnophis gigas*), threatened; delta smelt (*Hypomesus transpacificus*), threatened; Central Valley steelhead (*Onchorhynchus mykiss*), proposed endangered; Sacramento splittail (*Pogonichthys macrolepidotus*), proposed threatened; Fresno kangaroo rat (*Dipodomys nitratooides exilis*) endangered; San Joaquin Valley woodrat (*Neotoma fuscipes riparia*), candidate; riparian brush rabbit (*Sylvilagus bachmani riparius*), candidate; San Joaquin kit fox (*Vulpes macrotis mutica*), endangered; Aleutian Canada goose (*Branta canadensis leucopareia*), threatened; mountain plover (*Charadrius montanus*), candidate; American peregrine falcon (*Falco peregrinus anatum*), endangered; bald eagle (*Haliaeetus leucocephalus*), threatened; fleshy owl's-clover (*Castilleja campestris* ssp. *succulenta*), threatened; Hoover's spurge (*Chamaesyce hooveri*), threatened; Colusa grass (*Neostapfia colusana*), threatened; San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), threatened; hairy Orcutt grass (*Orcuttia pilosa*), endangered; Hartweg's golden sunburst (*Pseudobahia bahiifolia*), proposed endangered; and Greene's tuctoria (*Tuctoria greenei*), endangered.

The NDDDB contains one state-listed species record for the vicinity around the Turlock Rehabilitation Center: the state-endangered, San Joaquin Valley Orcutt grass.

No additional information on the occurrence of rare or endangered species or natural communities is known at this time. This does not mean that other state or federally-listed species may not be present within the areas of interest. An on site inspection by appropriate state and federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities if remedial action is recommended as part of the final ASR.

3.6 Demographics

3.6.1 Center of Activity

The site is located in the city of Turlock in Stanislaus County, California.

3.6.2 Population Density

CITY/COUNTY	CITY: Turlock	COUNTY: Stanislaus
AREA (sq. mi.)	11.5	1,495
POPULATION	42,198	370,522
POP DENSITY	3,669.4	247.8

3.6.3 Types of Businesses and Industry

The number of business establishments in Stanislaus County can be broken down by type as follows: manufacturing 5.3%; agriculture 2.1%; trade 31.5%; services and financial 43%; and other 16.6%. Of the people in the county employed by businesses, approximately 1.5% are unclassified. Foregoing percentages are at mid-March 1992.

3.6.4 Types of Housing

Housing in the city of Turlock is comprised of both single family and multi-family dwellings. The median value of 6,733 specified owner-occupied housing units is \$123,300.

3.6.5 New Development in the Area

New development in the area is both commercial and residential.

3.6.6 Typical Cross-Section of the Population

Approximately 82.5% of the population in the city of Turlock is White; 1.2% Black; .9% American Indian, Eskimo or Aleut; 4.4% Asian or Pacific Islander; and 11% other races. The percent of the total population (of any race) that is of Hispanic origin is 21%. The part of the population under the age of 18 is 29.3%, and the part over the age of 65 is 12.5%. The median age is 30.2.

4.0 HISTORICAL ORDNANCE USAGE

4.1 Historical Site Summary

4.1.1 General History

Previous to the arrival of the military, farmers grew alfalfa, beans, grapes etc. on the site (Turlock Rehabilitation Center n.d.). The National Guard dedicated an Armory on the Fairgrounds at Turlock, California in November 1940 (Gardner 1997). The Headquarters, Ninth Service Command also used the Fairgrounds by activating the Disciplinary Camp at Turlock, California on September 14, 1942. On February 16, 1943 all Detention and Rehabilitation Centers were redesignated as Rehabilitation Centers (Rehabilitation Center 1945). The War Department received and detained Japanese-American evacuees during World War Two. Improvements to the site included barracks, mess halls, stables, latrines, and military buildings (Robinson 1946; Inventory n.d.).

The Ninth Service Command placed the Rehabilitation Center, Turlock, California in the category of surplus January 1, 1946 (Wolfe 1945). The Turlock Rehabilitation Center was assigned for disposal to the Farm Credit Administration on May 10, 1946 (Williams 1946). The Farm Credit Administration took possession of 19.27 acres on June 6, 1946 (Faulkner 1946).

4.1.2 Conventional Ordnance Activities

The only record of conventional ordnance activity during the period of DoD ownership is a drawing that shows a target range in the southwest portion of the site.

4.1.3 Chemical Warfare Materials

We found no documents indicating the use or storage of Chemical Warfare Material at Turlock Rehabilitation Center.

4.2 Review of Historical Records

**Washington National Records Center
4205 Suitland Road
Suitland, MD 20409
POC: Velevia Chance
(301) 457-7010**

Record Group 77 (Records of the Chief of Engineers)
Accession A52-259
Box 98 One file on Turlock CWS Plant.
Accession A53-325
Box 70 No information on Turlock.

**National Archives (I)
8th & Pennsylvania
Washington, DC 20408
POC: Mitch Yockelson
(202) 501-5671**

Record Group 156 (Records of the Chief of Ordnance)
Entry 41
Box 7 Ninth Corps Area.
Entry 44
Box 2 Ninth Corps Area.

Record Group 210 (Records of the War Relocation Authority)
After reviewing the finding aids, the research team did not request boxes.

Record Group 394 (Records of the US Army Continental Commands, 1920-42)
Entry 296
Box 2 Document designating Turlock Disciplinary Barracks, Ninth Service Command, to Fort William Henry Harrison, October 1942.
Entry 299
Boxes 4 - 5 Presidio of San Francisco to Fort Yellowstone. No Turlock information.

**National Archives (II)
8601 Adelphi Road
College Park, MD 20740
POC: Ken Schlessinger
(301) 713-7250**

Record Group 77 (Records of the Chief of Engineers)

Entry 1011 Formerly classified subject Files 1940-45

Box 790 Ninth Service Command. No information for Turlock.

Box 792 Ninth Service Command. No information for Turlock.

Record Group 107 (Records of the Secretary of War, 1791-1947)

Establishment of Airfields & Air Bases 1940-45.

Box 203 California. Nothing for Turlock.

Record Group 121 (Records of the Public Building Service)

Entry 81 Real Property 1946-50.

Box 1 One file on Turlock CWS Plant. No information for the
Rehabilitation Center.

Record Group 160 (Records of the Army Service Forces)

Entry 27

Box 48 Document stating Turlock Disciplinary Camp not be placed in
category of surplus, December 1944.

Box 50 Ninth Service Command.

Box 51 Ninth Service Command.

Box 52 Disposal document on Turlock Rehabilitation Center, April 1946.

Record Group 269 (Records of the General Services Administration)

Real Property Disposal Case Files 1945-53.

Box 60 Tri-City Army Airfield thru Tygart Valley Project. Surplus
information for Turlock.

Record Group 337 (Records of the Army Ground Forces)

Entry 55 Adjutant General Correspondence, 1942-48.

Boxes 1122 - 1123 Information and maps on many sites. Nothing for
Turlock.

Record Group 338 (Records of the US Army Commands 1942 -)

Fourth US Army; General Correspondence 1940-46.

Box 21 San Francisco and Los Angeles.

Box 264 Facilities Control Files.

Ninth Service Command

Box 24 West Coast sites 1939. Nothing for Turlock.

Box 27 Repair of utilities.

Posts, Camps, & Stations.

Box 9 No pertinent information.

Western Defense Command.

Box 4 Radio Broadcasts - National Student Relocation Council.

Box 17 Cities and Towns List.

Box 20 Central Correspondence 1942-46

Box 53 Relocation centers.

Box 54 Relocation centers.

Box 62 Document on the disposal of garbage at Turlock Assembly Center, August 1942.

Record Group 407 (Records of the Adjutant General's Office 1917 -)

AGO Central Files, Cross Indexes. 1940-45.

Box 119 General information on Turlock.

Military Posts and Reservations 1940-45.

Box 4476 Fort Tilden thru Camp Upton. No information for Turlock.

Projects; State & Counties

Box 1046 Alaska thru Texas

**US Army Center of Military History
1099 14th Street, N.W.
Washington, DC 20005-3402
POC: Dr. Robert Wright
(202) 761-5416**

Information card on Turlock Rehabilitation Center.

**National Archives - Pacific Sierra Region
1000 Commodore Drive
San Bruno, CA 94066
POC: Bill Green
(415) 876-9009**

Record Group 121 (Records of the Public Building Service)

Accession 85-001 Real Property Disposal Project 1945-51.

Boxes 8 thru 11 Copied building lists, disposal letters and maps.

Record Group 270 (Records of the War Assets Administration)

Real Property Disposal Case Files 1946-49.

Box 139 Copied one map of Turlock Bomb Loading Plant.

Box 140 Maps.

Record Group 338 (Records of the US Army Commands)

Records of the Assembly Centers 1942-46.

Microfilm Turlock, general information only.

**National Archives
Pacific Alaska Region - Seattle
6125 Sand Point Way, NE
Seattle, WA 98115
POC: Steven Ourada
(206) 526-6501**

There are no records for Turlock, California at this facility.

**Seattle Federal Records Center
6125 Sand Point Way, NE
Seattle, WA 98115
POC: Susan Karren
(206) 526-6507**

The research team viewed several SF-135s and found no pertinent information.

**U.S. Army Military History Institute
Reference Branch
22 Ashburn Drive
Carlisle Barracks
Carlisle, PA 17013
POC: Louise Arnold-Friend
(717) 245-3601**

The research team carefully viewed the appropriate data base and found no pertinent information.

**Chemical Biological Defense Agency Historical Office
Aberdeen Proving Ground
Edgewood, MD 21010
POC: Dr. Jeffrey Smart
(410) 671-4430**

The research team carefully viewed the appropriate data base and found no pertinent information.

**St Louis Public Library
1301 Olive Street
St Louis, MO 63103
POC: Reference Desk
(314) 241-2288**

Books:

Behind the Barbed Wire. The Imprisonment of Japanese Americans During World War II by Daniel S Davis.

And Justice For All. An Oral History of the Japanese American Detention Camps by John Tateishi.

American and Japanese Relocation in World War II; Fact, Fiction & Fallacy by Lillian Baker.

4.3 Summary of Interviews

4.3.1 Mr. Randy Smith and Mr. Randy Dacker, Stanislaus County Fairgrounds Maintenance Dept.

Randy Smith was our point of contact to make arrangements for our site inspection. We met with he and Randy Dacker during the site visit.

Mr. Smith and Mr. Dacker have worked at the fairgrounds for five and six years respectively. They told us about a piece of ordnance found near the off track betting facility located on the fairgrounds property. After they showed us the location of the round, it became obvious they were not talking about the piece of ordnance reported in the INPR. They said the round was found during grading activities around the off track betting facility in 1994. They said Mr. Terry Mann had specific knowledge of the round.

Mr. Mann described the round and said we should contact Lynn Buechler of the Modesto County bomb squad. Mr. Mann has knowledge of the site since 1957 and said he heard the site had been used for mortar training.

Randy Smith suggested we contact Mr. Howard Norton. Mr. Norton retired recently after working at the fairgrounds for 20 years.

4.3.2 Mr. Howard Norton, Stanislaus County Fairgrounds Maintenance Dept.

Mr. Norton retired recently after 22 years at the fairgrounds.

I told him that Randy Smith suggested we call him but he said we really needed to talk with Cliff McBeath. He said Mr. McBeath was maintenance supervisor until he retired 10 years ago. Mr. McBeath was on the site when the Rehabilitation Center buildings were demolished and they supposedly found buried ammunition bunkers (made of concrete).

4.3.3 Mr. Cliff McBeath, Stanislaus County Fairgrounds Maintenance Supervisor

Mr. McBeath retired in 1982 after 29 years at the fairgrounds as the maintenance supervisor.

We called Mr. McBeath at the suggestion of Mr. Howard Norton.

Mr. McBeath confirmed that he was working at the site when the original Rehabilitation Center buildings were demolished. He does not remember any concrete bunkers being excavated.

He said a shell was found on the site prior to his beginning work there in 1952.

I told him we were frustrated knowing there have been practice mortar rounds found on the site but have not found the source.

I asked if he knew of anyone else with knowledge of the site and he said most were deceased. He said there were a couple of people that he could talk to and would call back if he found any new information.

Mr. McBeath called back and apologized for not remembering that the National Guard trained on the site from about 1950 until about 1964. He could not remember exactly what the training consisted of but he remembers them being there on weekends and pretty much using the whole area.

4.3.4 Mr. Dick Wilkey, Turlock Irrigation District

The Turlock Irrigation District owns a one acre parcel near the site of the small arms range. I called Mr. Wilkey to get permission to inspect the site and to see if he has information about the entire project area. He has lived in the area his whole life (50 years).

He said they have never found ordnance on the property. I then asked if he was aware of any landfills on the site and he said no. I told him about the bomb found buried on the fairgrounds property and he said he had no idea how it got there. He said he knew some old timers and would talk with them and let me know if they were of help.

4.3.5 Sgt. Darrell Freitas, Stanislaus County Sheriff's Dept.

Sgt. Freitas has been with the sheriff's dept for about 10 years and is a member of the bomb squad.

Sgt. Freitas was involved with the 1991 and 1994 incidents of rounds being found on the Turlock Rehabilitation Center property. My first call to him was on 1 July to see if he had pictures or perhaps the actual round found on the site. He did not have one of the original rounds, but he said he had a cleaned up round just like the ones taken from the site. We were in Turlock at the time and he said he would bring the round to our hotel. The round was a practice 81mm mortar. Sgt. Freitas had spoken with Lynn Buechler (a fellow member of the bomb squad) earlier in the evening. Mr. Buechler said they have been taking the same kind of round off the fairgrounds property for the past 20 years.

Sgt. Freitas said he would talk with other bomb techs and asked me to call him back on 8 or 9 July. He spoke with Lt. Voortman who has been with the sheriff's dept for 20 years and a bomb tech since 1987. He said the practice 81mm rounds are the only ordnance reported on the site.

4.3.6 Mr. Bill McClusky, Retired National Guard Technician

Mr. McClusky was a full time technician for the National Guard at Turlock from 1950-1984. He said the National Guard rented the site from the State and remembers the site being used for small arms training (blank ammunition). He said practice grenades and practice mortars were not used. He said the National Guard used the site until 1963. He suggested we call Col. George Gardner. Col. Gardner was commander for several years and is writing a history of National Guard activities at Turlock.

4.3.7 Mr. George Gardner, retired National Guard Commander

Mr. Gardner was the National Guard commander during the 1950's. He is writing a history of the National Guard activities at Turlock and said he would send us a copy. He told of firing .22 cal. rifles in the basement of a building at Turlock.

4.4 Air Photo Interpretation and Map Analysis

4.4.1 Photographic Analysis

Government and contractor personnel conducted an aerial photography search to find available imagery which covers the site. Generally, the search was limited to imagery with less than 1:24,000 scale and provided stereo viewing, but acquired others as needed. Photographic analysis and land use interpretation were performed using the following photographic sources:

<u>Photography Date</u>	<u>Approximate Scale</u>	<u>Source</u>	<u>Frame Identifiers(s)</u>
09 Aug 1937	1:20,000	ASCS	ABE-26-92 thru 98 ABE-27-12 thru 19
29 Apr 1946	1:20,000	EROS	GS-CO 15-112 thru 116
06 Mar 1950	1:20,000	ASCS	ABE-6-G-14 thru 17 ABE-6-G-28 thru 31
25 Apr 1957	1:20,000	ASCS	ABE-7T-21 thru 24
03 Jul 1958	1:30,000	EROS	GS-VRU-1-18 thru 19
16 Jun 1963	1:20,000	ASCS	ABE-2DD-113 thru 116
14 Jul 1982	1:20,000	EROS	AB 251 thru 254
09 May 1993	1:40,000	NAPP	6350-107 thru 109

Photos were referenced to the following USGS 1:24,000 topographic line maps:

Denair, California 1963 edition (photorevised 1987)
Turlock, California 1961 edition (photorevised 1987)

The 1937 photography was analyzed. No OE related activities appear on these photos. There are no large buildings or major construction work. The area appears to be mainly farmland.

The 1946 photography was analyzed. The site contains many warehouse-styled buildings that were not seen before. According to the General Layout Plan dated July 1945 there is a target range located in the southwest portion of the site. A possible target range (with target butts) is visible. The range is approximately 200 feet long, and runs in an east west direction. No other OE items were seen.

The 1950 photography shows that most of the warehouse buildings have been razed, mainly the middle section of the site. The target range area still shows the target butts, but does not appear to have been used for a period of time. A rectangular feature approximately 150' long located approximately 1500 feet due north is seen. Photo analysis cannot determine what this feature is. No other OE related items were seen.

The 1957 and 1958 photography shows seven highly reflective rectangular features. They appear to be new warehouses. The unidentified rectangular feature seen in the 1950 photography is no longer apparent. Construction of new buildings appears in this area. There were no new ground disturbances seen.

The 1963 photography shows no changes from 1957 and 1958 photography.

The 1982 and 1993 photography shows no new changes in the site area.

4.4.2 Map Analysis

Map analysis was performed on the following U.S. Geological Survey 1:24,000 topographic line maps:

Denair, California 1963 edition (photorevised 1987)
Turlock, California 1961 edition (photorevised 1987)

Both USGS quadrangles show planimetric and topographic features. Hard and soft surface roads. Many buildings and dense infrastructure. The site itself lies on flat terrain. Vegetation cover is sparse throughout the two quads.

5.0 REAL ESTATE

5.1 Confirmed DoD Ownership

According to the INPR, during 1943 and 1944, the United States acquired 19.27 acres fee by means of a declaration of taking. During the same time period, the United States obtained leases over 111.81 acres and easements over 0.33 acre. Although no real estate documents were found during research for this ASR suggesting a different acquisition time frame, one document indicates the rehabilitation was activated on 14 September 1942.

The site was used as an internment camp. Numerous barracks were constructed along with administrative buildings. The only ordnance related activity on the site during the period of DoD control was a small arms range in the southwest portion of the site.

The site was declared surplus on 1 January 1946. Accountability for the 19.27 fee acres and 0.33 acre easements was assumed by the Federal Farm Mortgage Corporation. The leases over 111.81 acres were terminated.

5.2 Potential DoD Ownership

No areas of potential DoD use or ownership were found.

5.3 Significant Past Ownership other than DoD

According to National Guard personnel, the site was used by the National Guard after DoD disposal. The National Guard used the site until approximately 1964.

5.4 Present Ownership

Most of the site (central portion) is now the Stanislaus County Fairgrounds. The northernmost portion of the site is owned by a concrete pipe manufacturer. The southernmost portion of the site is residential.

6.0 SITE INSPECTION

6.1 General

This site inspection was performed on 1 July 1997. The area inspected is shown on Plate 3.

Corps of Engineers Participants:

Ted Moore	Project Manager
Randy Fraser	UXO Specialist and Safety Officer
Jim Luebbert	Historian

Other Participants:

Randy Smith	Stanislaus County Fairgrounds Maintenance Dept.
Randy Dacker	Stanislaus County Fairgrounds Maintenance Dept.

6.2 Analysis of Ordnance Activities

Before arriving on the site, we knew a "bomb" had been found on the site (a 1991 incident reported in the INPR) and that a small arms range was located in the southern portion of the site.

The site is basically the Stanislaus County Fairgrounds. We met with two maintenance employees and an employee of the Turf Club (off track betting). It became obvious very quickly that more than one "bomb" has been found on the property. The two maintenance employees related a story of a round found in 1994. They said the round was turned over to the sheriff's office. They showed us where the round was found and gave us a verbal description of the size and shape of the round. We also showed them drawings of the bombs loaded at the Turlock Bomb Loading Plant. They said the round definitely did not match these drawings. Their description of the round made it sound more like a mortar round.

We inspected the general area where the two known rounds were found. We did not find ordnance.

We inspected the rifle range. It is now a golf driving range. No evidence of the rifle range or associated buildings remains. We did not find ordnance.

Ordnance has only been reported in the area where the two "bombs" were found.

In the evening, we contacted Sgt. Darrell Freitas of the Stanislaus County Sheriff's Dept. regarding the 1994 incident. He was aware of both incidents and said he might even have one of the rounds. It turned out he did not have one of the original rounds, but he did have a similar round. He said he talked with another member of the bomb squad who said that many rounds have been retrieved from the fairgrounds and that all of the rounds were 81mm practice mortar rounds. Sgt. Freitas brought the sample round to our hotel. It was a solid steel, 81mm mortar practice round. We took pictures and gave the round back to him.

6.3 Current Site Characterization

This entire site is highly developed. There is a concrete pipe facility on the northernmost portion of the site. The central (largest portion of the site) is the fairgrounds. The southernmost portion of the site is residential.

7.0 EVALUATION OF ORDNANCE PRESENCE

Drawings, historical documents, interviews, and air photos confirm the site was used as an internment camp. A drawing and the air photos confirm there was a small arms range in the southwest portion of the site.

Prior to our site visit, we were aware that a round (reported to be a bomb) had been found on the site in 1991. During the site visit, we were told of another round being found in 1994. We inspected the general area where the rounds were found and did not find ordnance. We also inspected the former small arms range and did not find ordnance.

After visiting with the sheriff's deputy who responded to the incidents of rounds found on the site, we learned the rounds were solid steel practice mortars (see photos in Appendix I).

Subsequent to our site visit, we learned the National Guard used the site. Although we don't know the exact time period of National Guard use, National Guard personnel indicated they used the site after DoD disposal and stopped using the site in approximately 1964. They said the site was used for small arms activities, but they do not remember mortar training.

We are not able to definitely state the source of the practice mortars. The locations of the 1991 and 1994 mortar incidents are both in the vicinity of the barracks (see Plate 3). It seems unlikely the rounds were fired while the buildings were present. However, persons associated with the National Guard indicate no mortar training occurred. Either way, the practice mortars do not pose an unexploded ordnance risk since they are solid steel rounds that do not contain a spotting charge.

8.0 TECHNICAL DATA OF ORDNANCE AND EXPLOSIVES

8.1 Ordnance Related Mission

DoD used the site as a rehabilitation center and as such there was not a specific ordnance related mission. There was a small arms range in the southwest portion of the site. Subsequent use by the National Guard was reportedly only small arms training, but several practice mortar rounds have been removed from the site.

8.2 Description of Ordnance

Small Arms Ammunition: Weapons that use small arms ammunition include rifles, automatic rifles, pistols, machine guns up to caliber .60, and shotguns. Small arms ammunition is defined as ammunition fired in weapons whose bore is .60 inches or less in diameter. Examples of small arms ammunition include "Cartridge, Ball, Caliber .50, M2", "Cartridge, Ball, Caliber .30, M2", "Shell, Shotgun, 12 Gage".

Mortar, 81-MM, Training, M68: The shell is designed to give the mortar crew training in loading and practice firing under conditions which will not permit firing in more than the first zone. The body of the shell is cast iron. It is similar in shape to the High Explosive, 81-mm shell which is tear-drop with a blunt nose and tapered tail. It has a bourrelet on the body near the nose to act as a gas check. At the tail end is a recess which is threaded to receive a stabilizer assembly. The nose is closed and rounded with no provisions made to receive a fuze. Nine weight zones are used with a minimum of 9.5 pounds and a maximum of 10.10 pounds, weight without fin assembly and ignition cartridge. The fin assembly consists of six stationary fins. It receives the Ignition Cartridge M3. Several ignition cartridges are provided with each round so the shell can be fired more than one time. There are no propellant increments used because the shell is designed to be fired in the first zone only. The maximum range is 350 yards. The shell is painted black with white stencil.

See related drawings located in Appendix C.

9.0 EVALUATION OF OTHER SITE INFORMATION

We found no HTRW or building debris concerns.

APPENDIX A
REFERENCES

Demographic References

U.S. Census report as listed below:

- 1990 Census of Population and Housing, Stanislaus County, California
- 1990 Census of Population and Housing, Turlock, California
- 1994 County and City Data Book, Land Area and Population, Stanislaus County, California
- 1994 County and City Data Book, Land Area and Population, Turlock, California
- 1992 County Business Patterns, Stanislaus County, California

Telephone interview:

- Turlock Chamber of Commerce (03/25/97)

Geology and Soils Reference

Arkley, R.J.

- 1964 *Soil Survey of the Eastern Stanislaus Area, California*. U.S.D.A., Soil Conservation Service.

Page, R.W.

- 1986 *Regional Aquifer-System Analysis; Geology of the Fresh Ground-Water Basin of the Central Valley, California*. U.S. Geological Survey Professional Paper 1401-C.

Thornbury, Wm. D.

- 1965 *Regional Geomorphology of the U.S.* John Wiley & Sons, Inc.

Williamson, A.K., Prudic, D.E., and Swain, L.A.

- 1989 *Regional Aquifer-System Analysis--Central Valley, California*. Ground-Water Flow in the Central Valley, California.

Historical References

Faulkner, Olin J.

- 1946 Transfer of 9th S.C. Rehabilitation Center, Turlock, California. Record Group 121, Box 8, Accession 85-001. National Archives-Pacific Sierra Region, San Bruno, California.

Gardner, George W.

- 1997 Early History Of Turlock National Guard. Written by former Commander of the National Guard unit at Turlock, California

Inventory

- n.d. Inventory Report Of Buildings And Structures On Government-Owned Land. Record Group 121, Box 10, Accession 85-001. National Archives-Pacific Sierra Region, San Bruno, California.

Rehabilitation Center

- 1945 Rehabilitation Center, Turlock, California. Posts, Camps, and Stations. US Army Center for Military History, Washington, D.C.

Robinson, E B

- 1946 Estimate Cost Of Construction Of Various Items. Record Group 121, Box 8, Accession 85-001. National Archives-Pacific Sierra Region, San Bruno, California.

Turlock Rehabilitation Center

- n.d. Use Of Property When Acquired. Record Group 270, Box 140. National Archives-Pacific Sierra Region, San Bruno, California.

Williams, Paul C.

- 1946 Letter to the Director of Surplus Property Disposal dated June 18, 1946. Record Group 121, Box 8, Accession 85-001. National Archives-Pacific Sierra Region, San Bruno, California.

Wolfe, Henry C.

- 1945 Memorandum For The Adjutant General. Subject: Excess Status of Ninth Service Command Rehabilitation Center, Turlock, California dated December 14, 1945. Record Group 160, Box 52, Entry 27, Archives I, College Park, Maryland.

INPR Reference

U.S. Army Corps of Engineers

- 1992 Inventory Project Report (INPR), for Site No. J09CA098201, Turlock Rehabilitation Center, CA, U.S. Army Corps of Engineers, Sacramento District

Ordnance References

TM 9-1904, Ammunition Inspection Guide, dated 2 March 1944

TM 9-1900, Ammunition General, dated June 1956

APPENDIX B

GLOSSARY AND ACRONYMS

AAF	Army Air Field
AA	Anti-Aircraft
AEC	Army Environmental Center
AGO	Adjutant General's Office
ANG	Army National Guard
AP	Armor Piercing
APDS	Armor Piercing Discarding Sabot
APERS	Antipersonnel
APT	Armor Piercing with Tracer
ASR	Archives Search Report
ATV	All Terrain Vehicle
Aux	Auxiliary
BAR	Browning Automatic Rifle
BD	Base Detonating
BD/DR	Building Demolition/Debris Removal
BE	Base Ejection
BGR	Bombing and Gunnery Range
BLM	Bureau of Land Management
BRAC	Base Realignment And Closure
CADD	Computer-Aided Design/Drafting
Cal	Caliber
CBDA	Chemical and Biological Defense Agency
CBDCOM	Chemical and Biological Defense Command
CE	Corps of Engineers
CEHNC	Corps of Engineers, Huntsville Support Center
CELMS	Corps of Engineers, St. Louis
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
cfs	Cubic Feet Per Second
COE	Chief of Engineers
COMP	Composition
CTG	Cartridge
CSM	Chemical Surety Material
CSM	Command Sergeant Major
CWM	Chemical Warfare Material
CWS	Chemical Warfare Service
DA	Department of the Army
DARCOM	Development and Readiness Command
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program

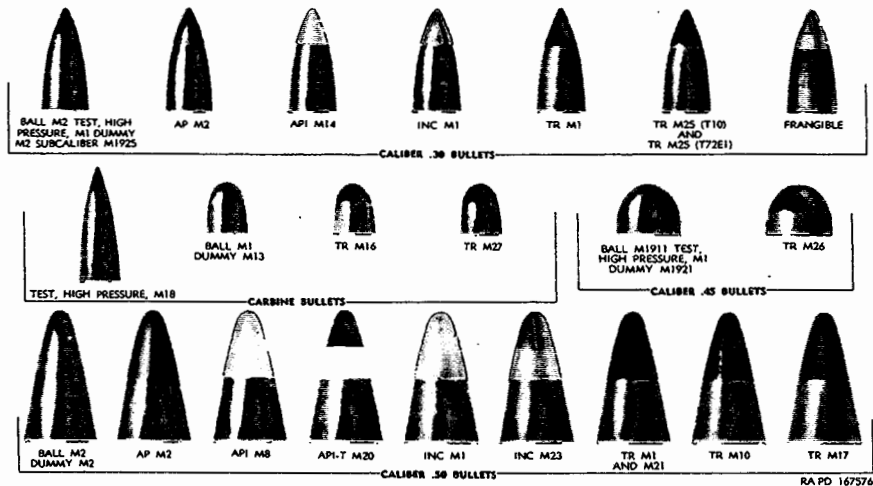
DERP-FUDS	Defense Environmental Restoration Program- Formerly Used Defense Sites
DoD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DTC	Desert Training Center
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ERDA	Environmental Restoration Defense Account
4WD	Four-Wheel Drive
F	Fahrenheit
FDE	Findings and Determination of Eligibility
FFMC	Federal Farm Mortgage Corporation
FS	Feasibility Study
FUDS	Formerly Used Defense Sites
GIS	Graphic Information System
GPM	Gallons Per Minute
GSA	General Services Administration
HE	High Explosive
HEAT	High Explosive Anti-Tank
HEI	High Explosive Incendiary
HEP	High Explosive Plastic
HS	Mustard Gas
HTRW	Hazardous Toxic and Radioactive Waste
HTW	Hazardous and Toxic Waste
IAS	Initial Assessment Study
ILLUM	Illuminating
INPR	Inventory Project Report
IRP	Installation Restoration Program
MCX	Mandatory Center of Expertise
MG	Machine Gun
MG	Major General
mm	Millimeter
mph	Miles Per Hour
MT	Mechanical Time
MTSQ	Mechanical Time Super Quick
NARA	National Archives and Records Administration
NAS	Naval Air Station
NCDC	National Climatic Data Center
NCP	National Contingency Plan
NFS	National Forest Service

NG	National Guard
NGVD	National Geodetic Vertical Datum
NOAA	National Oceanic and Atmospheric Administration
NOFA	No Further Action
NPRC	National Personnel Records Center
NRC	National Records Center
OEW	Ordnance and Explosive Waste
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PBR	Precision Bombing Range
PD	Point Detonating
PIBD	Point Initiating, Base Detonating
PL	Public Law
POC	Point of Contact
PPM	Parts Per Million
QASAS	Quality Assurance Specialist Ammunition Surveillance
RA	Removal Action
RAC	Risk Assessment Code
RD	Remedial Design
RG	Record Group
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
SAC	Strategic Air Command
SARA	Superfund Amendments and Reauthorization Act
SCS	Soil Conservation Service
SLD	St. Louis District, Corps of Engineers
SSHO	Site Safety and Health Officer
SSHP	Site Specific Safety and Health Plan
SWMU	Solid Waste Management Units
TECOM	Test Evaluation Command
TEU	Technical Escort Unit
TNT	Trinitrotoluene
TP	Target Practice
USA	United States of America
USACE	U.S. Army Corps of Engineers
USADACS	U.S. Army Defense Ammunition Center and School
USAED	U.S. Army Engineer District
USAEDH	U.S. Army Engineer Division, Huntsville, AL
USATHMA	U.S. Army Toxic and Hazardous Materials Agency Materials Agency
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

USGS	U.S. Geological Survey
UXO	Unexploded Ordnance
WAA	War Assets Administration
WCAFTC	West Coast Air Force Training Center
WD	War Department
WNRC	Washington National Records Center

APPENDIX C
TEXT / MANUALS

SMALL ARMS, GENERAL



Identification of bullets of small arm cartridges

Use: Cal, .50 machine guns, Cal, .30, carbines, rifles, semiautomatic rifles, automatic rifles, and machine guns, Cal, .22 pistols, rifles, and machine guns (for gallery practice), Shotguns, 12-gauge, Cal, .45 automatic pistols, revolvers, and submachine guns, Subcaliber tubes and adapters for artillery weapons which use ammunition of similar size and type.

Description: A complete round of small-arms ammunition is known as a cartridge, and is made up of the following components:

Bullet: The bullet in general is cylindrical. The nose may be round, as in the cal, .50 bullet, or ogival as in all service rifles and machine gun bullets. The base may be square or boat-tailed. Types are identified by the color of the tip and include the following:

- Armor-piercing bullets contain a core of hardened steel.
- Ball usually contain a slug of antimony hardened lead except in the case of the cal, .50, wherein the outer core is of soft steel.
- Tracer contains a lead slug, and a chemical composition in the rear.
- Incendiary bullets contain an incendiary composition.

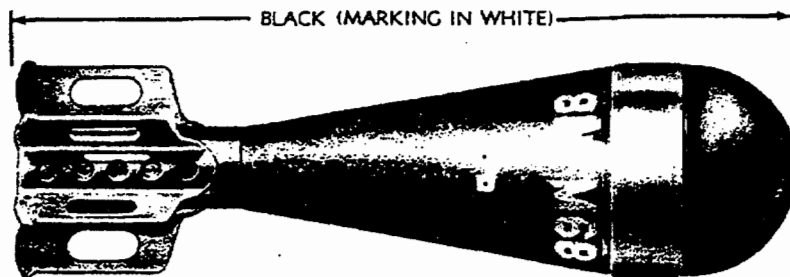
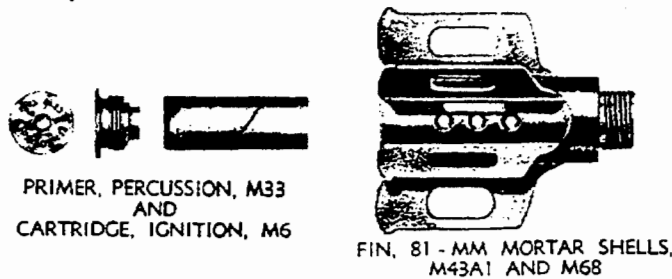
Cartridge case: The cartridge case is the means whereby the other components are assembled into the unit. It also provides a waterproof container for the propelling charge.

Primer: Percussion

Propelling charge: The propelling charge consists of a quantity of smokeless powder. The weight of the charge is not constant. It is adjusted for each powder lot to give the required velocity with pressure within the limits prescribed for the weapon in which it is fired.

Reference: TM 9-1904, Ammunition Inspection Guide, dated 2 March 1944
 TM 9-1900, Ammunition General, dated June 1956

MORTAR, 81-MM, TRAINING, M68



Use: The shell is designed to give the mortar crew training in loading and practice in firing under conditions which will not permit firing in more than the first zone.

Description:

Shell body The body of the shell is cast iron. It is similar in shape to the light High Explosive, 81-mm shell which is tear-drop with a blunt nose and tapered tail. It has a bourrelet on the body near the nose to act as a gas check. At the tail end is a recess which is threaded to receive a stabilizer assembly. The nose is closed and rounded with no provisions made to receive a fuze. Its weight varies depending on its weight zone. Nine weight zones are used with a minimum of 9.50 pounds and a maximum of 10.10 pounds, weighed without fin assembly and ignition cartridge.

The fin assembly and propelling charge. The fin assembly consists of six stationary fins. It receives the Ignition Cartridge M3. Several ignition cartridges are provided with each round so the shell can be fired more than one time. There are no propellant increments used because the shell is designed to be fired in the first zone only. The maximum range is 350 yards.

Markings. The shell is painted black with white stencil. On the shell body may be found a number of white squares (one to nine) with a prick punch mark in the center of each to indicate the zone weight.

Reference: TM 9-1904, Ammunition Inspection Guide, March 1944

APPENDIX D
REPORTS / STUDIES



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

CESPK-ED-M (200-1b)

20 March 1992

MEMORANDUM FOR Commander, South Pacific Division

SUBJECT: DERP-FUDS FINAL Inventory Project Reports (INPR)

1. Five copies each of the following seven INPR's are enclosed. A site visit was conducted for each site.

a. Siskiyou County Airport	J09CA095000
b. Stinson Beach Fire Control Station	J09CA095900
c. Turlock Rehabilitation Center	J09CA098200 ✓
d. Jenner Radar Site B-76	J09CA091000
e. Unionville Gap Filler Annex	J09NV098500
f. Redwood Central Repair Shop	J09UT091600
g. Russian Gulch Campsite	J09CA092100

2. We have determined that the above are formerly used defense sites. A recommended Findings and Determination of Eligibility for each site is included.

3. We have also determined that there is hazardous waste at the Siskiyou County Airport, Stinson Beach Fire Control Station, Turlock Rehabilitation Center, Jenner Radar Site B-76 and Unionville Gap Filler Annex sites.

4. I recommend that you:

a. Approve and sign the Findings and Determination of Eligibility for each site.

b. Forward a copy of the INPR's for the Siskiyou County Airport, Stinson Beach Fire Control Station, Jenner Radar Site B-76 and Unionville Gap Filler Annex to CEMP for approval and funds for this district to proceed with the proposed projects.

c. Forward a copy of the INPR's for the Siskiyou County Airport, Turlock Rehabilitation Center and Jenner Radar Site B-76 to CEHND for evaluation of the proposed OEW projects.

CESPK-ED-M

SUBJECT: DERP-FUDS FINAL Inventory Project Reports (INPR)

d. Forward a copy of the INPR's for the Redwood Central Repair Shop and Russian Gulch Campsite to CEHND for removal from the Inventory Database.

7 Encls

TIMOTHY P. MASON
LTC, EN
Acting Commander

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES

INVENTORY PROJECT REPORT

TURLOCK REHABILITATION CENTER
STANISLAUS COUNTY, CALIFORNIA

SITE NO. J09CA098200

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Prepared by:

RADIAN CORPORATION
10395 Old Placerville Road
Sacramento, CA 95827

March 1992

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO. J09CA098200
TURLOCK REHABILITATION CENTER

SITE NAME: Turlock Rehabilitation Center

LOCATION: The Turlock Rehabilitation Center is located 15 miles southeast of Modesto and 20 miles northwest of Merced, in the city of Turlock, Stanislaus County, California (Figure 1 and Figure 2).

SITE HISTORY: During 1943 and 1944, the United States acquired fee title to 19.27 acres of land by a Declaration of Taking. During the same period of time, the United States obtained leases for a total of 111.81 acres of land and obtained fee titles for easements for a total of 0.33 of an acre of land. The total acquisition was 131.41 acres of land.

The site was acquired by the War Department in 1943 and 1944 for a Japanese American receiving center and internment camp. Improvements to the site included barracks, latrine and laundry facilities, septic systems, and military buildings.

In 1946, accountability of 19.6 acres was assumed by the Federal Farm Mortgage Corporation. The remaining 111.81 acres of leased land was terminated for a total disposal of 131.41 acres.

SITE VISIT: A site visit was conducted on 10 October 1991 by Scott Kranhold and Matt Breen of Radian Corporation. The southern area of the site is occupied by a cemetery, agriculture land, and low-income housing. The northern portion of the site is occupied by the Turlock Irrigation District as a substation and material storage area and by the 38th District Agriculture Association as the Stanislaus County Fairgrounds. The northernmost tracts are presently occupied by light industrial buildings, including a cement fixture manufacturer and a scrap metal yard. A detailed site map is presented in Figure 3. No evidence was found on the site to indicate the presence of UST's.

Mr. Dick Wilkey, substation division manager, Turlock Irrigation District, said that he knew of no environmental hazards or health concerns associated with the former internment camp.

An interview with Dana Sheets, senior maintenance supervisor of the Stanislaus County Fairground, was conducted on the fairgrounds property. Mr. Sheets stated that the only "significant" camp remnants are large buried gravel pits, which he believes were part of a septic system. A Quonset hut and a large building remain from 1940s; both are used extensively by the Stanislaus County. Mr. Sheets also stated that unexploded ordnance was recently found on the site. While digging a utility trench, a worker unearthed a large, intact shell. Mr. Sheets described it as "probably a bomb"

indicating that it was at least 2 feet in length and had fins on one end. The Stanislaus County Sheriff's department was contacted and the ordnance was disposed of without incident.

Mr. Jess Blaker, the owner of Turlock Cement, stated that the land to the north of the fairgrounds was not developed until the 1950s. During World War II, the area was used as a recreational area. After that, it was an alfalfa field, until it was developed for light industrial land use.

CATEGORY OF HAZARDS: OEW

PROJECT DESCRIPTION: OEW- Refer this project to CEHND for evaluation and further action.

AVAILABLE STUDIES AND REPORTS: Attached to this INPR is the Stanislaus County Sheriff Report for the ordnance found at the County Fairgrounds (Report # 891-02713).

PA POC: Natalie Sterling, U.S. Army Corps of Engineers, Sacramento District (916) 557-7227.

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES
FINDINGS AND DETERMINATION OF ELIGIBILITY

TURLOCK REHABILITATION CENTER
STANISLAUS COUNTY, CALIFORNIA
SITE NO. J09CA098200

FINDING OF FACT

1. During 1943 and 1944, the United States acquired fee title to 19.27 acres of land by means of a Declaration of Taking. During the same period of time, the United States obtained leases for a total of 111.81 acres of land and obtained fee titles for easements, totaling 0.33 of an acre. The total site acquisition listed on real estate maps was 131.41 acres of land.

2. The Turlock Rehabilitation Center is located 15 miles southeast of Modesto and 20 miles northwest of Merced, in Stanislaus County, California. The site was acquired by the War Department for use as a Japanese-American receiving center and internment center. Improvements to the site included barracks, latrine and laundry facilities, septic systems, and military buildings.

3. In 1946, accountability of 19.60 acres of land was assumed by the Federal Farm Mortgage Corporation. This accountability, comprised 19.27 acres in fee and 0.33 acres of easements. The remaining 111.81 acres of leased land was terminated for a total disposal of 131.41 acres.

DETERMINATION

Based on the foregoing findings of fact, the site has been determined to be formerly used by the DOD. Therefore, it is eligible for the Defense Environmental Restoration program for Formerly Used Defense Sites, established under 10 U.S.C. 2701 et seq.

26 Sep 94
Date

DAVID E. PIEXOTTO
DAVID E. PIEXOTTO
Colonel, EN
Commanding

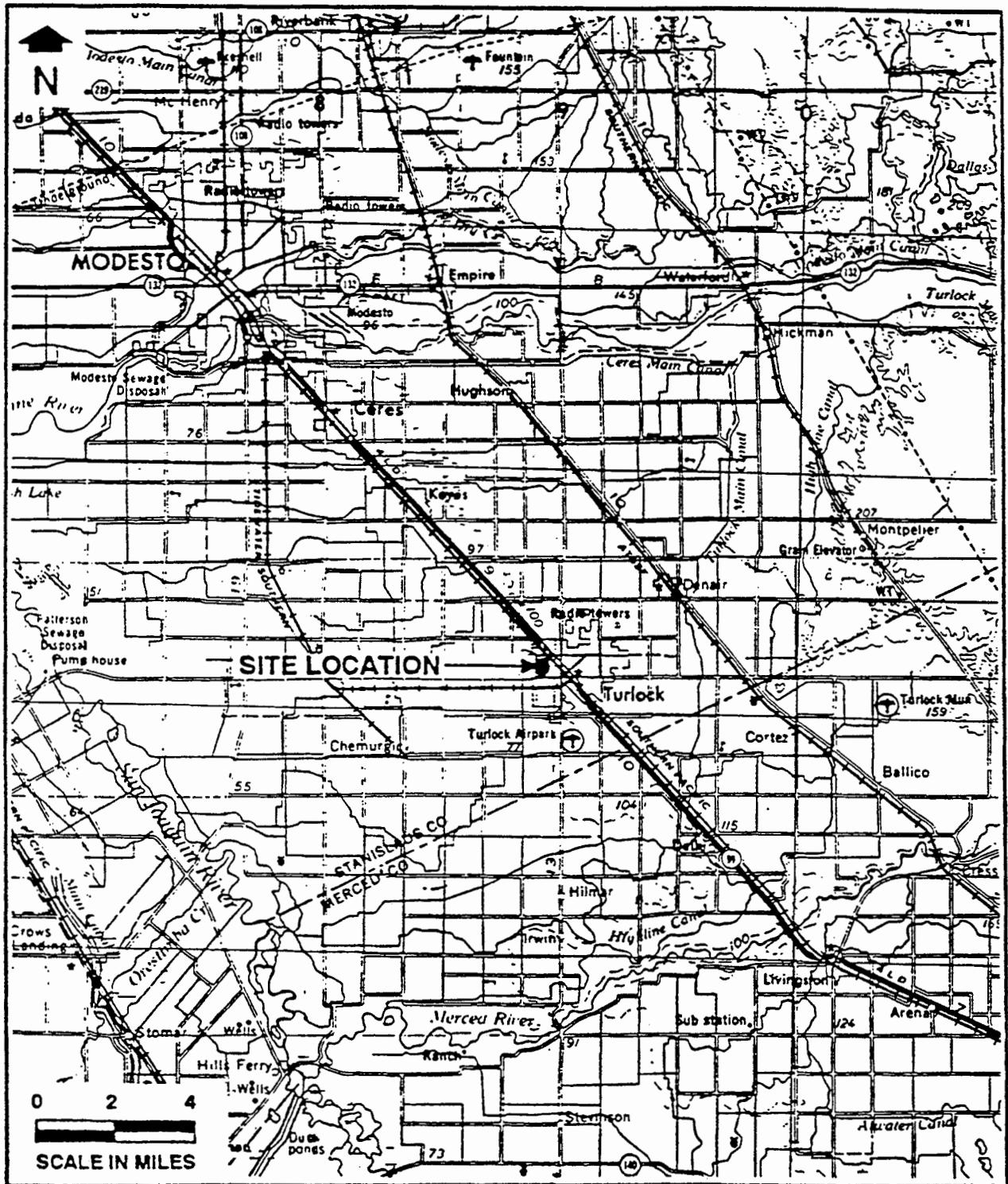


Figure 1. Location Map - Turlock Rehabilitation Center
 Site No. J09CA098200

SOURCE: USGS 1:250,000 Scale Series Topographic Map, San Jose, CA Quadrangle

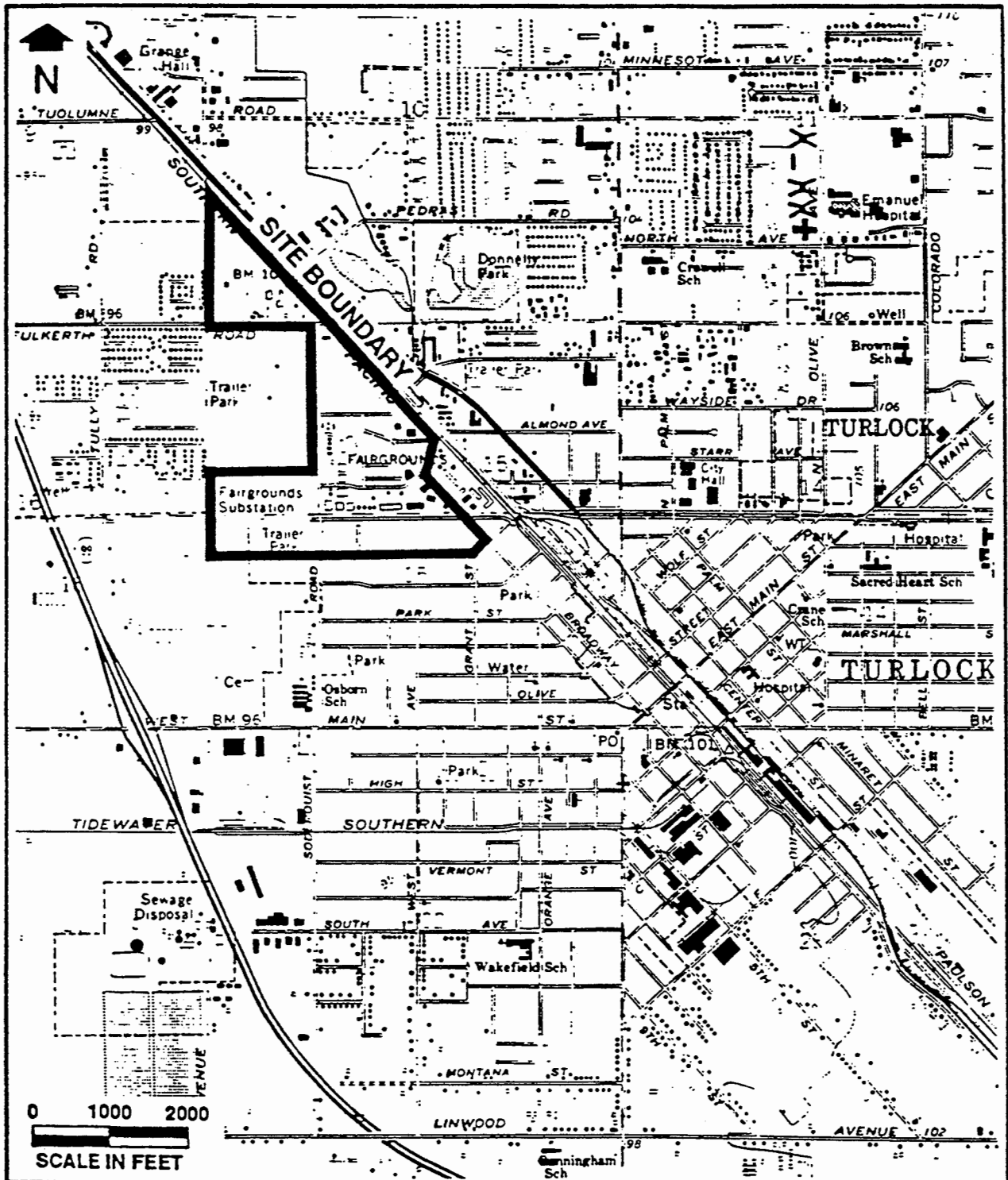


Figure 2. Site Map - Turlock Rehabilitation Center
 Site No. J09CA098200

SOURCE: USGS 7.5 Minute Topographic Maps, Denair, Ca and Turlock, CA Quadrangles

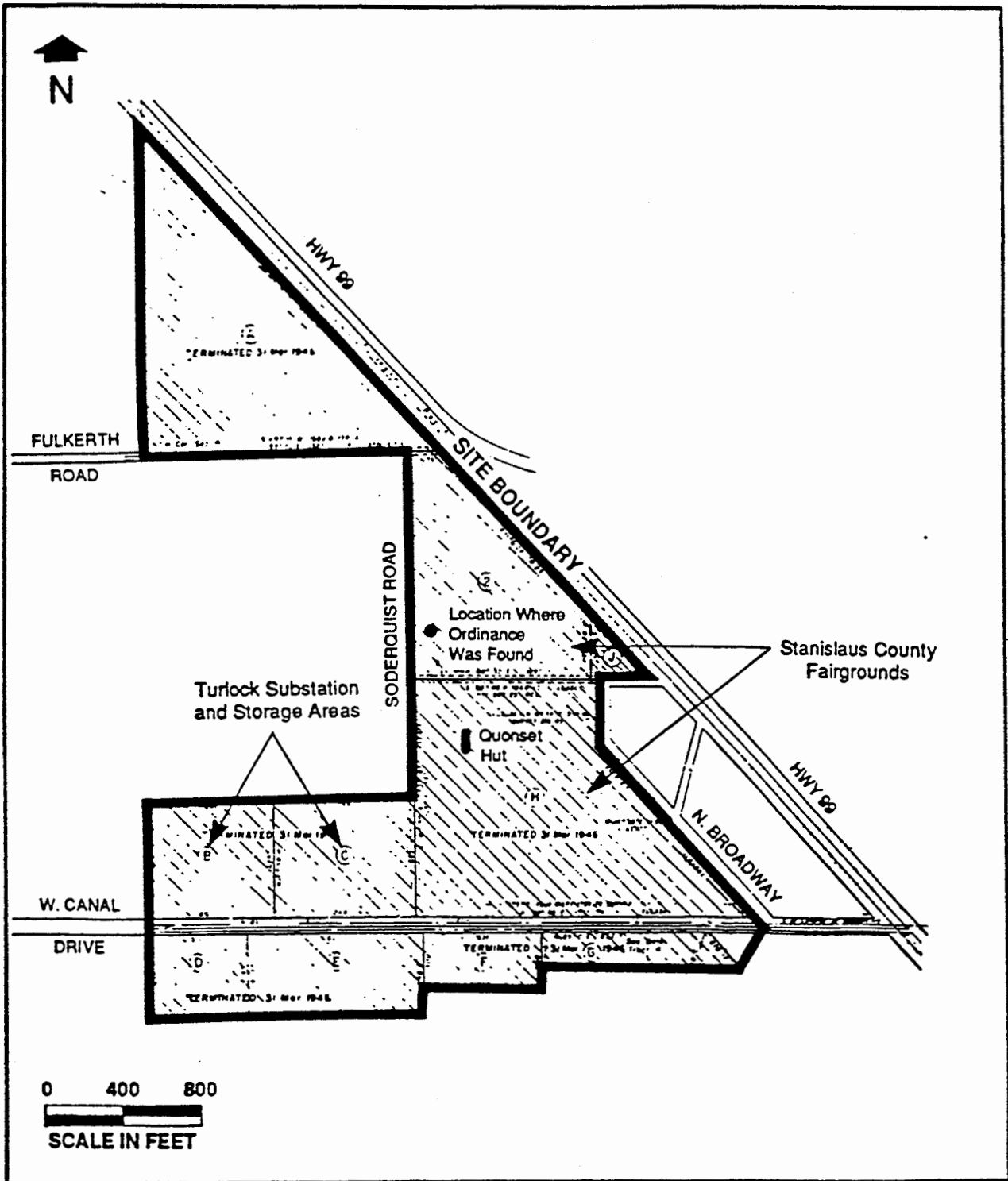


Figure 3. Detailed Site Map - Turlock Rehabilitation Center
 Site No. J09CA098200

PROJECT SUMMARY SHEET
DERP-FUDS OEW PROJECT NO. J09CA098201
TURLOCK REHABILITATION CENTER
SITE NO. J09CA098200

PROJECT DESCRIPTION: The site was used as an internment camp. It is located within 5 miles of the Turlock Bomb Loading Plant. The site is presently the Stanislaus County Fairgrounds. During a site visit, Fairgrounds personnel commented on an incident where unexploded ordnance was discovered and removed.

PROJECT ELIGIBILITY: The Turlock Rehabilitation Center was installed by the War Department.

POLICY CONSIDERATIONS: None.

PROPOSED PROJECT: Refer this project to CEHND for evaluation and further action.

RAC: Attached.

PA POC: Natalie Sterling, U.S. Army Corps of Engineers, Sacramento District (916) 557-7227.

DATE 02/15/91	<input type="checkbox"/> INCIDENT REPORT	<input type="checkbox"/> FOLLOWUP REPORT	FILE NO. 891-02713
VICTIM (AS LISTED ON ORIGINAL REPORT) TURLOCK PD		LOCATION OF OCCURRENCE TURLOCK FAIRGROUNDS TURLOCK CA 953	

----- OTHER REPORT -----

OTHER REPORT: OTHER
 CRIME CLASSIFIED: 8001 REPORTING AREA: D999 REPORTING BEAT: 00
 LOCATION: LOC TURLOCK FAIRGROUNDS TURLOCK CA 95380
 OCCURRED: 02/15/91 1000
 REPORTED: 02/15/91 1030
 ID NOTIFIED: NO

----- PARTY DESCRIPTION -----

REPORTING PARTY
 TURLOCK PD

----- DICTATION SECTION -----

DICTATION: NO
 TPD ADVISED OF POSSIBLE MILITARY ORDNANCE. WHEN I ARRIVED THEY SHOWED ME
 WHAT APPEARS TO BE A MORTAR TRAINING ROUND. I BROUGHT THE ITEM TO THE
 SHERIFF'S OFFICE PENDING DISPOSAL. YR/D797/02-15-91

3

SUPERVISOR APPROVING	INVESTIGATING OFFICER(S) FREITAS, DARREL	PAGE 0808
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RAC

19 Apr 94
Previous editions obsolete

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVE WASTE (OEW) SITES

Site Name Turlock Rehabilitation Center
Site Location Turlock, California
DERP Project # J09CA098200
Date Completed 7 September, 1994 (revised)

Rater's Name M. H. Breen
Phone No.
Organization
RAC Score

OEW RISK ASSESSMENT:

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The RAC score will be used by CEHND to prioritize the remedial action at this site. The OEW risk assessment should be based upon best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) detachment actions, and field observations, interviews, and measurements. This information is used to assess the risk involved based upon the potential OEW hazards identified at the site. The risk assessment is composed of two factors, **hazard severity** and **hazard probability**. Personnel involved in visits to potential OEW sites should view the CEHND videotape entitled "A Life Threatening Encounter: OEW."

Part I. Hazard Severity. Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel exposure to various types and quantities of unexploded ordnance items.

TYPE OF ORDNANCE
(Circle all values that apply)

A. Conventional Ordnance and Ammunition	VALUE
Medium/Large Caliber (20mm and larger)	10
Bombs, Explosive	10
Grenades, Hand and Rifle, Explosive	10
Landmines, Explosive	10
Rockets, Guided Missiles, Explosive	10
Detonators, Blasting Caps, Fuzes, Boosters, Burstern	6
Bombs, Practice (w/spotting charges)	6
Grenades, Practice (w/spotting charges)	4
Landmines, Practice (w/spotting charges)	4
Small Arms (.22 cal - .50 cal)	1
Conventional Ordnance and Ammunition (<u>Select the largest single value</u>)	<u>6</u>

What evidence do you have regarding conventional OEW?

Stanislaus County records an incident reported by the Turlock Police Department where a mortar training round was found.

B. Pyrotechnics (For munitions not described above.)

VALUE

Munition (Container) Containing White Phosphorus or other Pyrophoric Material (i.e., Spontaneously Flammable)	10
Munition Containing a Flame or Incendiary Material (i.e., Napalm, Triethylaluminum Metal Incendiaries)	6
Flares, Signals, Simulators, Screening Smokes (other than WP)	4
Pyrotechnics <u>(Select the largest single value)</u>	<u>0</u>
What evidence do you have regarding pyrotechnics? none	

C. Bulk High Explosives (Not an integral part of conventional ordnance; uncontainerized.)

VALUE

Primary or Initiating Explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition Charges	10
Secondary Explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	10
Military Dynamite	6
Less Sensitive Explosives (Ammonium Nitrate, Explosive D, etc.)	3
High Explosives <u>(Select the largest single value)</u>	<u>0</u>
What evidence do you have regarding bulk explosives? none	

D. Bulk Propellants (Not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized)

VALUE

Solid or Liquid Propellants	6
Propellants	
What evidence do you have regarding bulk propellants? none	<u>0</u>

E. ** Chemical Warfare Material and Radiological Weapons

	VALUE
Toxic Chemical Agents (Choking, Nerve, Blood, Blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (Vomiting, Tear)	5
Chemical and Radiological <u>(Select the largest single value)</u>	<u>0</u>
What evidence do you have of chemical/radiological OEW? none	

TOTAL HAZARD SEVERITY VALUE 6
 (Sum of Largest Values for A through E--Maximum of 61).
 Apply this value to Table 1 to determine Hazard Severity Category.

TABLE 1

HAZARD SEVERITY *

Description	Category	Value
CATASTROPHIC	I	21 and greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE		0

* Apply Hazard Category to Table 3.

** If Hazard Severity Value is 0, you do not need to complete Part II. Proceed to Part III and use a RAC Score of 5 to determine your appropriate action.

Part II. Hazard Probability. The probability that a hazard has been or will be created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used DOD site.

AREA, EXTENT, ACCESSIBILITY OF OEW HAZARD
(Circle all values that apply)

A. Locations of OEW Hazards

	VALUE
On the surface	5
Within Tanks, Pipes, Vessels or Other confined locations.	4
Inside walls, ceilings, or other parts of Buildings or Structures.	3
Subsurface	2
Location <u>(Select the single largest value)</u>	<u>5</u>

What evidence do you have regarding location of OEW?
practice mortar round found.

B. Distance to the nearest inhabited locations or structures likely to be at risk from OEW hazard (roads, parks, playgrounds, and buildings).

	VALUE
Less than 1250 feet	5
1250 feet to 0.5 miles	4
0.5 miles to 1.0 mile	3
1.0 mile to 2.0 miles	2
Over 2 miles	1
Distance <u>(Select the single largest value)</u>	<u>5</u>

What are the nearest inhabited structures?
Warehousing and other industrial.

C. Number of buildings within a 2 mile radius measured from the OEW hazard area, not the installation boundary.

	VALUE
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
Number of Buildings (<u>Select the single largest value</u>)	<u>5</u>

D. Types of Buildings (within a 2 mile radius)

	VALUE
Educational, Child Care, Residential, Hospitals, Hotels, Commercial, Shopping Centers	5
Industrial, Warehouse, etc.	4
Agricultural, Forestry, etc.	3
Detention, Correctional	2
No Buildings	0
Types of Buildings (<u>Select the largest single value</u>)	<u>5</u>

E. Accessibility to site refers to access by humans to ordnance and explosive wastes. Use the following guidance:

	VALUE
No barrier in security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier, (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the facility; or An artificial or natural barrier (e.g., a fence combined with a cliff), which completely surrounds the facility; and a means to control entry, at all times, through the gates or other entrances to the facility (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the facility).	0
Accessibility <u>(Select the single largest value)</u>	<u>3</u>

F. Site Dynamics - This deals with the site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion by beaches or streams, increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.

	VALUE
Expected	5
None Anticipated	0
Site Dynamics <u>(Select largest value)</u>	<u>5</u>

Total Hazard Probability Value
(Sum of Largest Values for A through F--Maximum of 30)
Apply this value to Hazard Probability Table 2 to determine
Hazard Probability Level

28

TABLE 2
HAZARD SEVERITY *

Description	Category	Value
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

* Apply Hazard Probability Level to Table 3.

Part-III. Risk Assessment. The risk assessment value for this site is determined using the following Table 3. Enter with the results of the hazard probability and hazard severity values.

TABLE 3

Probability Level		FREQUENT A	PROBABLE B	C	OCCASIONAL D	REMOTE E	IMPROBABLE
Severity Category:							
CATASTROPHIC	I	1	1	2	3	4	
CRITICAL	II	1	2	3	4	5	
MARGINAL	III	2	3	4	4	5	
NEGLECTIBLE	IV	3	4	4	5	5	

RISK ASSESSMENT CODE (RAC)

- RAC 1 Expedite INPR, recommending further action by CEHND - Immediately call CEHND-ED-SY-- commercial 205-955-4968 or DSN 645-4968.
- RAC 2** High priority on completion of INPR - Recommend further action by CEHND.
- RAC 3 Complete INPR - Recommend further action by CEHND.
- RAC 4 Complete INPR - Recommend further action by CEHND.
- RAC 5 Usually indicates that no further action (NOFA) is necessary. Submit NOFA and RAC to CEHND.

CESPD-ED-G (200-1c)

MEMORANDUM FOR

Commander, U.S. Army Corps of Engineers, 20 Massachusetts Avenue,
N.W., Washington, DC 20314-1000

Commander, U.S. Army Engineer Division, Huntsville,
P.O. Box 1600, Huntsville, Alabama 35807-4301

SUBJECT: Defense Environmental Restoration Program for Formerly
Used Defense Sites (DERP-FUDS), Inventory Project Report (INPR)
for Turlock Rehabilitation Center, Stanislaus County, California,
Site No. J09CA098200

1. I am forwarding the INPR for Turlock Rehabilitation Center
for appropriate action. The site is eligible for DERP-FUDS. The
proposed OEW project is also eligible.

VDG/ln
CESPD-ED-G
5-1514
14 Sep 94

2. I recommend that:

DGP
CESPD-ED-G

a. CEMP-R approve the proposed OEW project and assign it
through this headquarters to CESPK for RD/RA.

JMH

b. CEHND determine the need for further investigation and
action at this site. Sacramento District has estimated on RAC 2
on this project.

WCD
CESPD-ED

APS
CESPD-OC

Encl

DAVID E. PEIXOTTO
Colonel, EN
Commanding

GAD
CESPD-RE

DLF
CESPD-PM

CF:

CESPK-ED-M (HTRW)
CESPD-SO
CESPD-PM-M/Kong w/o encl
CESPD-ED-G/Del Greco w/o encl
CESPD-PM-M/FILE COPY
CESPD RF

HLH
CESPD-XA

DEP
CESPD-DD

MH
CESPD-DE

CESPD-ED-G (200-1c)

MEMORANDUM FOR

Commander, U.S. Army Corps of Engineers, 20 Massachusetts Avenue,
N.W., Washington, DC 20314-1000

Commander, U.S. Army Engineer Division, Huntsville,
P.O. Box 1600, Huntsville, Alabama 35807-4301

SUBJECT: Defense Environmental Restoration Program for Formerly
Used Defense Sites (DERP-FUDS), Inventory Project Report (INPR)
for Turlock Rehabilitation Center, Stanislaus County, California,
Site No. J09CA098200

1. I am forwarding the INPR for Turlock Rehabilitation Center
for appropriate action. The site is eligible for DERP-FUDS.

VDG/ln
CESPD-ED-G
5-1514
15 Sep 94

2. I recommend that CEHND determine the need for further
investigation and action at this site. Sacramento District has
estimated an RAC 2 on this project.

DGP
CESPD-ED-G

JMH

Encl

DAVID E. PEIXOTTO
Colonel, EN
Commanding

WCD
CESPD-ED

APS
CESPD-OC

CF:
CESPK-ED-M (HTRW)
CESPD-SO
CESPD-PM-M/Kong w/o encl
CESPD-ED-G/Del Greco w/o encl
CESPD-PM-M/FILE COPY
CESPD RF

GAD
CESPD-RE

DLF
CESPD-PM

HLH
CESPD-XA

DEP
CESPD-DD

MH
CESPD-DE



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

04 JAN 1995

REPLY TO
ATTENTION OF:
CEMP-RF (200-1a)

MEMORANDUM FOR

COMMANDER, SOUTH PACIFIC DIVISION, ATTN: CESPDM-PM-M
COMMANDER, HUNTSVILLE DIVISION, ATTN: CEHND-PM-OT

SUBJECT: DERP-FUDS Inventory Project Report (INPR) for Turlock
Rehabilitation Center, Stanislaus County, California, Site No.
J09CA098200

1. Reference memorandums:

a. Memorandum, CESPDM-ED-G, 26 September 1994, subject as
above.

b. Memorandum, CEHND-PM-SO, 1 December 1994, Subject:
DERP-FUDS INPRS Requiring an Ordnance and Explosive Waste
Engineering Evaluation and Cost Analysis (EE/CA).

c. DERP-FUDS Manual, U.S. Army Corps of Engineers,
Directorate of Military Programs, Division of Environmental
Restoration, Washington, D.C., 8 December 1993.

2. This memorandum authorizes Ordnance and Explosive Waste (OEW)
Project Number J09CA098201. This project will be executed in
accordance with above reference 1.c.

3. The geographic district, CESPL, will provide the project
manager for this project in accordance with ER 5-7-1.

4. CEMP-RF POC for this action is Sara G. Angus, (202) 504-5223.

FOR THE DIRECTOR OF MILITARY PROGRAMS:

For

CARY JONES
Chief, Environmental Restoration
Division
Directorate of Military Programs

CF: CESPL-PM
CEHND-PM-ED

CESPD-ED-G (200-1c)

26 SEP '94

MEMORANDUM FOR

Commander, U.S. Army Corps of Engineers, 20 Massachusetts Avenue,
N.W., Washington, DC 20314-1000

Commander, U.S. Army Engineer Division, Huntsville,
P.O. Box 1600, Huntsville, Alabama 35807-4301

SUBJECT: Defense Environmental Restoration Program for Formerly
Used Defense Sites (DERP-FUDS), Inventory Project Report (INPR)
for Turlock Rehabilitation Center, Stanislaus County, California,
Site No. J09CA098200

1. I am forwarding the INPR for Turlock Rehabilitation Center
for appropriate action. The site is eligible for DERP-FUDS.
2. I recommend that CEHND determine the need for further
investigation and action at this site. Sacramento District has
estimated an RAC 2 an this project.

ORIGINAL SIGNED

Encl

DAVID E. PEIXOTTO
Colonel, EN
Commanding

CF:
CESPK-ED-M (HTRW)

cc Mike Metw

This is to
be set
description

TURLOCK B.S.C. REHABILITATION CENTER

Turlock, California

S.P.R. 5 Report

LEGAL DESCRIPTION

TRACT # 2

PARCEL NO. I:

BEGINNING at the Northwest corner of Section 15, Township 5 South, Range 10 East, Mount Diablo Base and Meridian; thence North $88^{\circ} 45'$ East 1408 feet on the section line between Sections 10 and 15 of said township and range as the point of beginning; thence South $00^{\circ} 50'$ East 1235.5 feet; thence North $89^{\circ} 30'$ East 1290 feet to the Southwest line of the right of way of the Southern Pacific Railroad; thence North $43^{\circ} 15'$ West 1653 feet along said right of way of said Railroad to the Section line between Sections 10 and 15 of said Township and Range; thence South $88^{\circ} 45'$ West 175 feet along the Section line between said Sections 10 and 15, to the point of beginning, and containing 20.77 acres, more or less.

EXCEPTING THEREFROM that part of the above described land described as follows:

COMMENCING at the Northwest corner of Section 15, Township 5 South, Range 10 East, Mount Diablo Base and Meridian; thence Easterly along the line between sections 10 and 15, a distance of 1583.0 feet, more or less, to the Southwesterly right of way line of the Southern Pacific Railroad; thence South $42^{\circ} 21'$ East along the said Southwesterly right of way line, a distance of 1663.0 feet, more or less, to the Northeast corner of the Carl Peterson Tract, and the point of beginning of this description, a map of said Tract is on file and of record in the office of the Recorder of Stanislaus County, in Volume 8 of maps, at page 32, thence South $89^{\circ} 32'$ West along the North line of the said Carl Peterson Tract, a distance of 342.38 feet; thence North $0^{\circ} 27'$ West, a distance of 381.68 feet to the said Southwesterly right of way line of the Southern Pacific Railroad; thence South $42^{\circ} 21'$ East along said right of way, a distance of 512.73 feet to the point of beginning, and containing one and one-half (1 1/2) acres, more or less.

PARCEL NO. II:

COMMENCING at the Northwest corner of Section 15, Township 5 South, Range 10 East, Mount Diablo Base and Meridian; thence Easterly along the line between Sections 10 and 15, a distance of 1583.0 feet, more or less, to the Southwesterly right of way line of the Southern Pacific Railroad; thence South $42^{\circ} 21'$ East along the said Southwesterly right of way line, a distance of 1663.0 feet, more or less, to the

TURLOCK REHABILITATION CENTER

TURLOCK, CALIFORNIA

S.P.B.-5 Report

LEGAL DESCRIPTION OF PROPERTY

All that real property situate in the County of Stanislaus, State of California, more particularly described as follows:

Commencing at the Northwest corner of Section 15, Township 5 South, Range 10 East, N. D. B. & M. running thence N 88° 45' E along the north line of section 15 a distance of 1408 feet to the point of beginning, thence from said point of beginning S 00° 50' E 1235.5 feet, thence N 89° 30' E 847.62 feet, thence N 0° 27' 30" W 381.68 feet, more or less to the Southwesterly line of Southern Pacific Railroad Right of way, thence N 43° 15' W along said right of way 1150.27 feet more or less to the north line of said section 15, thence S 88° 45' W along said section line 175 feet to the point of beginning.

Containing 19.27 acres more or less in FEE.

Also: A Permanent Easement 10 feet in width lying within Blocks 356, 357 and 361, City of Turlock, and being more particularly described as lying 5 feet on each side of the following described center line:

Beginning at a point on the center line of an existing sewer, said point being North 6.7 feet and 109.7 feet West of the Southeast corner of that certain tract of land situate in Section 15, Township 5 South, Range 10 East, N. D. B. & M. conveyed by Anna Elizabeth Lee, a widow, to Edward Claes and Emma E. Claes, his wife, as Joint Tenants by deed dated 27 October 1932, and recorded 3 November 1932, in Volume 482 of Official Records, at page 83, Stanislaus County Records; thence from said point of beginning N. 0° 31' 30" W 15.11 feet to the North line of Park Street, continuing thence North 0° 31' 30" West 915.70 feet, thence N. 11° 13' 30" E 427.4 more or less to a point on the North line of Block 361, City of Turlock, and the Southerly right of way line of Turlock Irrigation District Lateral No. 4, continuing thence N. 11° 13' 30" E 25.0 feet, thence N 2° 33' E 15.0 feet, thence N. 2° 23'

Block 6, Schedule A

LEGAL DESCRIPTIONTract #2 (cont.)

BEGINNING at a point on the South boundary of Block Three Hundred Fifty-seven (357) of the CITY OF TURLOCK, according to the Official Map thereof filed in the office of the County Recorder of the County of Stanislaus, State of California, on February 6, 1920, in Volume 9 of Maps, at page 25, said point of beginning being 752.7 feet westerly from the Southeast corner of said Block 357; thence along the center line of right of way, North $0^{\circ} 31' 00''$ West 211.6 feet to a point in the North boundary line of said Block 357, and containing 0.05 acres, more or less.

Tract #3

A permanent easement and right of way over and through, under, along and across that certain parcel of land situated in the County of Stanislaus, State of California, and more particularly described as follows, to wit:

That portion of Block 345 of the CITY OF TURLOCK, according to the Official Map of said City of Turlock filed in the office of the County Recorder of the County of Stanislaus, State of California, on February 6, 1920, in Volume 9 of Maps, at page 25, more particularly described as follows:

A right of way 10 feet in width the center line of which is described as follows:

BEGINNING at a point on the South line of said Block 345, said point being North 19.8 feet and 109.7 feet west of the Southeast corner of that certain tract of land situated in Section 15, Township 5 South, Range 10 East, Mount Diablo base and meridian, conveyed by Anna Eliza both dec. a widow, to Edward Glass and Emma E. Glass, his wife, as joint tenants, by Deed dated October 27, 1932, and recorded November 3, 1932, in Volume 182 of Official Records, at page 83, Stanislaus County records; thence from said point of beginning running along the centerline of said right of way North $0^{\circ} 31' 00''$ West 613.1 feet to the North boundary line of said tract, and containing 0.11 acres, more or less.

For the purposes as set forth in Deed from Edward Glass and Emma E. Glass, husband and wife, to the United States of America, dated May 6, 1943 and recorded June 13, 1943, under Recorder's Series No. 8350, Stanislaus County Records.

TURLOCK W.S.C. REHABILITATION CENTER

Turlock, California

S.P.B.-5- Report

LEGAL DESCRIPTION

Tract #4

All that certain real property situate in the County of Stanislaus, State of California, described as follows, to-wit:

An easement and right of way 10 feet in width the center line of which is described as follows:

BEGINNING at a point on the centerline of the Turlock Irrigation District Lateral No. 4, said point of beginning being North $89^{\circ} 50'$ East 2923.8 feet and North 2794.9 feet from the Southwest corner of Section 15, Township 5 South, Range 10 East, Mount Diablo Base and Meridian; thence North $20^{\circ} 23'$ East 40.0 feet, more or less, to the northerly right of way line of said Turlock Irrigation District Lateral No. 4. Also beginning at the aforesaid point on the centerline of Turlock Irrigation District Lateral No. 4; thence South $20^{\circ} 33'$ West 15.0 feet; thence South $11^{\circ} 13'$ West 25.0 feet, more or less, to the southerly right of way line of said Turlock Irrigation District Lateral No. 4.

Said easement and right of way being for the purposes as set forth in the Deed from Turlock Irrigation District, a public corporation, to the United States of America, dated July 25, 1943 and recorded October 16, 1943, under Recorder's Series No. 15167, Stanislaus County Records.

Tract #5

A permanent easement and right of way over and through, under, along and across that certain parcel of land situated in the County of Stanislaus, State of California, and more particularly described as follows, to-wit:

That portion of Park Street adjoining Block 315 of the CITY OF TURLOCK, on the South, according to the Official Map of said CITY OF TURLOCK, filed in the office of the County Recorder of the County of Stanislaus, State of California, on February 6, 1920, in Volume 9 of Maps, at page 25, more particularly described as follows:

A right of way 10 feet in width the center line of which is described as follows:

BEGINNING at a point on the center line of an existing sewer, said point being North 6.7 feet and 109.7 feet West of the South-

TURLOCK REHABILITATION CENTER

TURLOCK, CALIFORNIA

S.P.B.-5 Report

LEGAL DESCRIPTION OF PROPERTY

**E 40.0 feet more or less, to the Northerly right of way line
of said Turlock Irrigation District Lateral No. 4, said line
being the Southerly line of Turlock Fairgrounds.**

Containing 19.27 acres more or less in FEE

.333 acres more or less in EASEMENT.

Turlock, California

S.P.H.-5-Report

LEGAL DESCRIPTIONPARCEL NO. II: (cont.)

Northeast corner of the Carl Peterson tract, and the point of beginning of this description, a map of said Tract is on file and of record in the office of the Recorder of Stanislaus County, in Volume 8 of Maps, at page 32; thence South $89^{\circ} 32'$ West along the North line of the said Carl Peterson Tract, a distance of 142.38 feet; thence North $0^{\circ} 27'$ West, a distance of 381.66 feet to the said Southwestly right of way line of the Southern Pacific Railroad; thence South $42^{\circ} 21'$ East along said right of way, a distance of 512.73 feet to the point of beginning, and containing one and one-half ($1\frac{1}{2}$) acres, more or less.

SEWAGE EASEMENTTract #1

All that certain real property situate in the City of Turlock, County of Stanislaus, State of California, described as follows, to-wit:

A right of way ten (10) feet in width the center line of which is described as follows:

BEGINNING at a point on the South boundary of Block Three Hundred Sixty-one (361) of the CITY OF TURLOCK, according to the Official Map of said City filed in the office of the County Recorder of the County of Stanislaus, State of California, on February 6, 1920, in Volume 9 of Maps, at page 25, said point being 567.2 feet Westerly from the Southeast corner of said Block 361; thence along the center line of said right of way, North $0^{\circ} 31'$ West 90.7 feet; thence North $11^{\circ} 13'$ East 427.4 feet, more or less, to a point on the North boundary line of said Block 361, and containing 0.12 acres, more or less.

Said easement and right of way for the purposes as set forth in the Deed from Elmer L. Harris and Edith M. Harris, husband and wife, to the United States of America, dated May 29, 1943, and recorded July 12, 1943, under Recorder's Series No. 10296, Stanislaus County Records.

Tract #2

All that certain real property situate in the City of Turlock, County of Stanislaus, State of California, described as follows, to-wit:

A right of way ten (10) feet in width the center line of which is described as follows:

TURLOCK F.S.C. REHABILITATION CENTER

Turlock, California

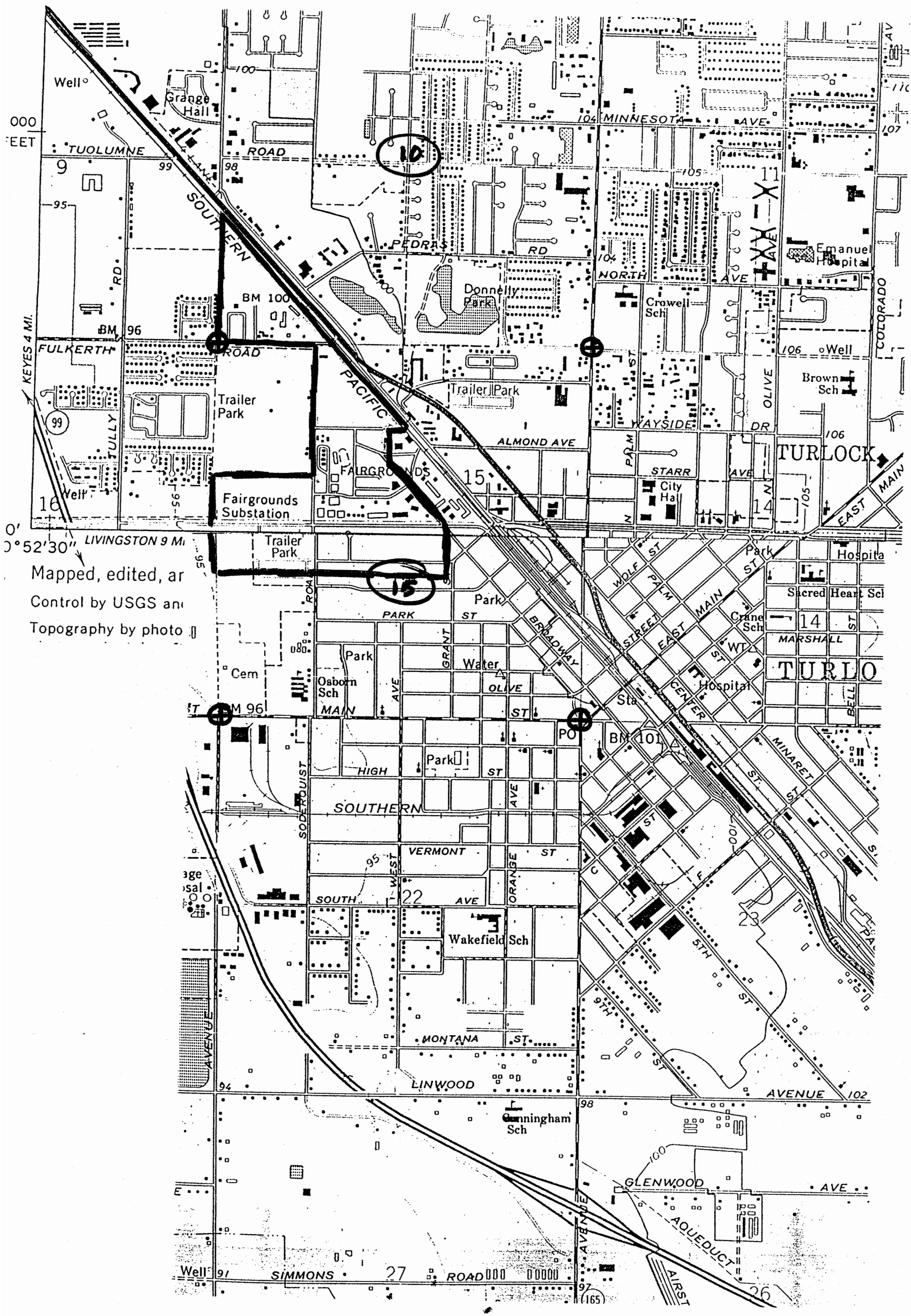
S.F.E. -5- Report

LEGAL DESCRIPTION

Tract #5 (cont.)

east corner of that certain tract of land situated in Section 15, Township 5 South, Range 10 East, Mount Diablo Base and Meridian, conveyed by Anna Elizabeth Lee, a widow, to Edward Glass and Emma E. Glass, his wife, as Joint Tenants, by Deed dated October 27, 1932 and recorded November 3, 1932, in Volume 482 of Official Records, at page 83, Stanislaus County Records; thence from said point of beginning running along the centerline of said right of way North $0^{\circ} 31\frac{1}{2}'$ West 13.1 feet to the North boundary line of said Park Street;

for the purposes as set forth in Deed from Anna C. Lindblom, a widow, to the United States of America, dated May 6, 1943 and recorded June 10, 1943, under Recorder's Series No. 8349, Stanislaus County Records.



Mapped, edited, and
 Control by USGS and
 Topography by photo

KEYES 4 MI.

0° 52' 30" LIVINGSTON 9 MI

Well 91 SIMMONS 27 ROAD

000
EET

9

95

BM 96

16

56

ST 96

95

94

Well 91

10

15

22

104 MINNESOTA AVE

NORTH AVE

ALMOND AVE

TURLOCK

TURLO

SOUTHERN

VERMONT

SOUTH

LINWOOD

GLENWOOD

SIMMONS

27

ROAD

165

26

110

107

106

106

106

14

14

101

95

95

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95

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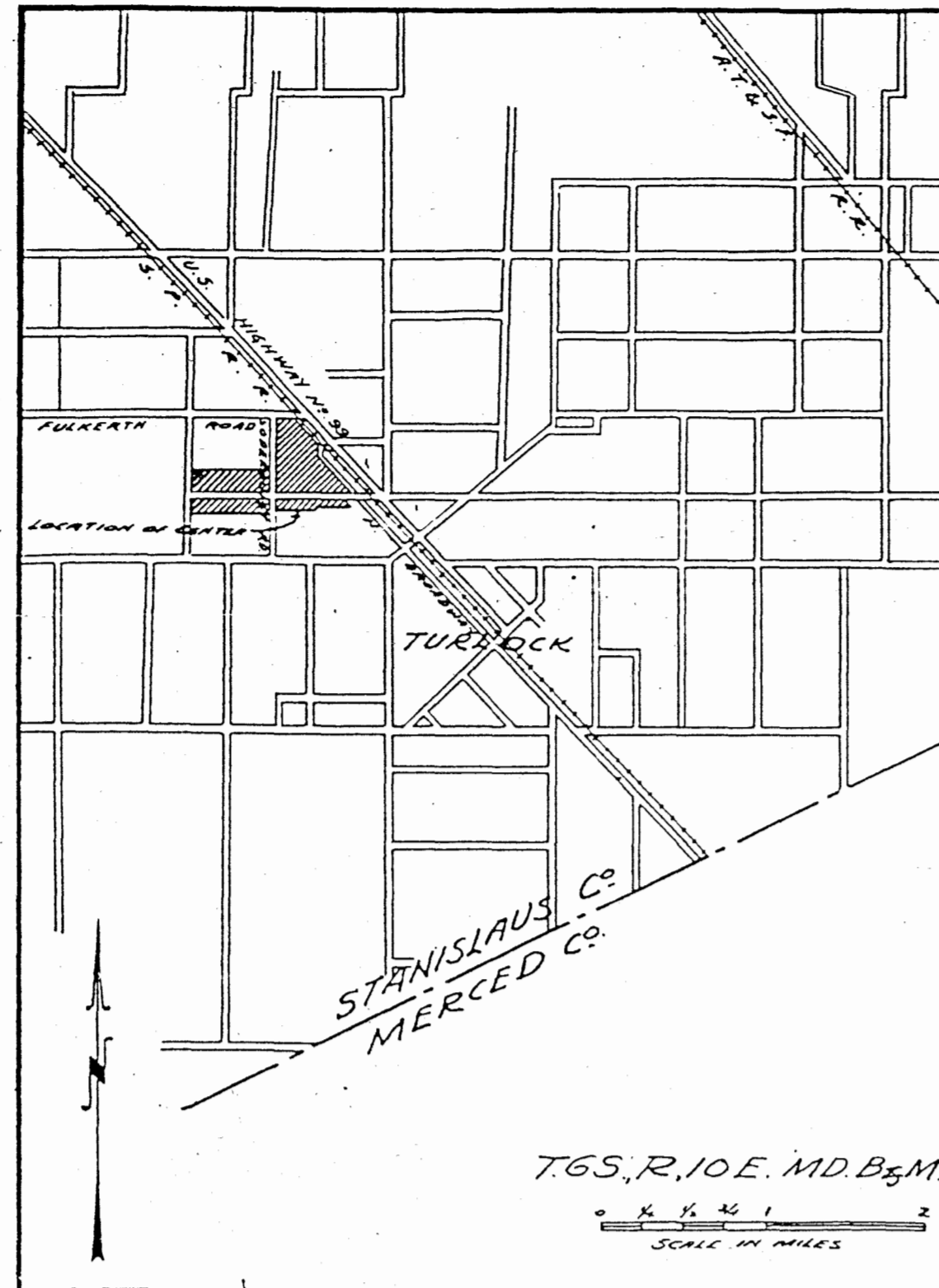
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APPENDIX E

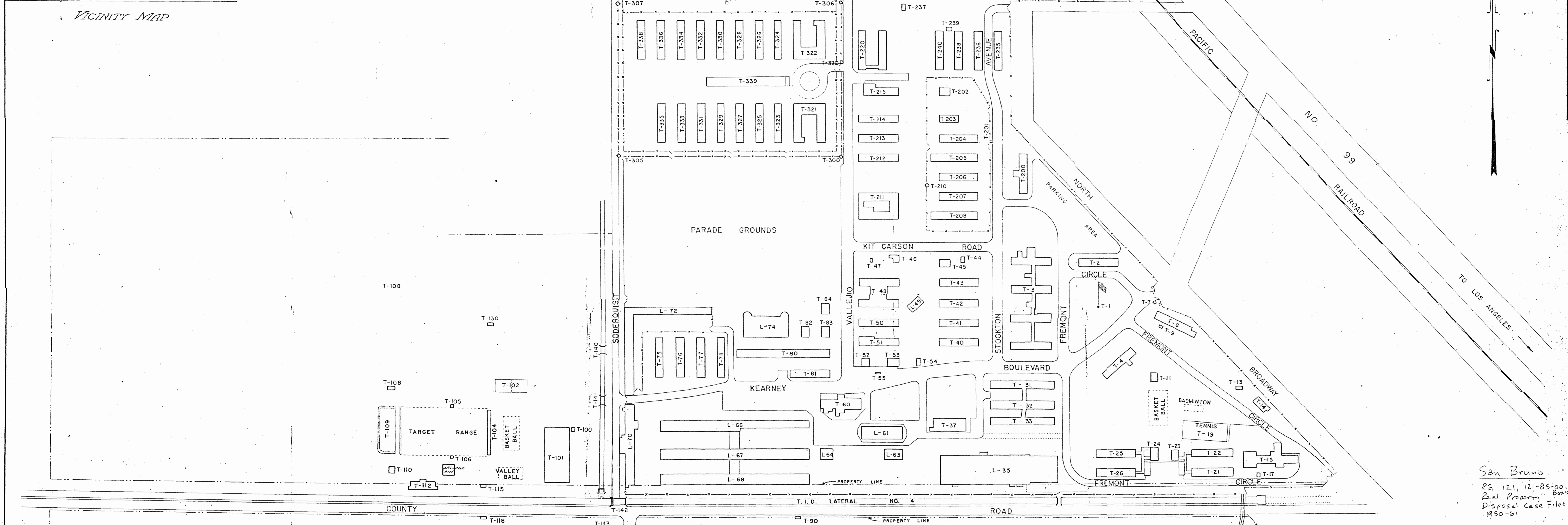
LETTERS / MEMORANDA / MISCELLANEOUS ITEMS

(NOT USED)

APPENDIX F
REAL ESTATE DOCUMENTS



VICINITY MAP



Area included in SPB-5 Report

San Bruno
 PG 121, 121-85-001
 Real Property Box 10
 Disposal Case Files
 1450-61

MILITARY CONSTRUCTION
 HEADQUARTERS REHABILITATION CENTER
 NINTHS SERVICE COMMAND
 NEAR TURLOCK, CALIFORNIA.
 GENERAL LAYOUT PLAN

IN 1 SHEET SCALE 1" = 100' SHEET NO. 1
 U. S. ENGINEER OFFICE, SACRAMENTO, CALIFORNIA. JULY 1945.

PREPARED <i>W. J. Rice</i>	SUBMITTED <i>R. W. Benda</i>	RECOMMENDED <i>H. E. Webb</i>
HEAD GENERAL DRAFTING	SECTION HEAD OFFICE SERVICE	BRANCH HEAD ENGR. DIV. MILIT. PROJECTS
APPROVED FOR THE DISTRICT ENGINEER <i>W. J. Rice</i>	DR. A. S.	TR. A. S.
	FILE	DIV. DRAWING
	143	13 44

MAJOR, CORPS OF ENGINEERS, U. S. A.

APPENDIX G
NEWSPAPERS / JOURNALS
(NOT USED)

APPENDIX H

INTERVIEWS

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 17 June 1997

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION Turlock Rehabilitation Center		
OUTGOING CALL		
PERSON CALLING Ted Moore	ADDRESS CELMS PM-M	PHONE NUMBER AND EXT. (314) 331-8849
PERSON CALLED Dick Wilkey	OFFICE Turlock Irrigation District	PHONE NUMBER AND EXT. (209) 883-8300

SUMMARY OF CONVERSATION:

The Turlock Irrigation District owns a one acre parcel near the site of the small arms range. I called Mr. Wilkey to get permission to inspect the site and to see if he has information about the entire project area. He has lived in the area his whole life (50 years).

He said they have never found ordnance on the property. I then asked if he was aware of any landfills on the site and he said no. I told him about the bomb found buried on the fairgrounds property and he said he had no idea how it got there. He said he knew some old timers and would talk with them and let me know if they were of help.

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 1 and 9 July 1997

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION Turlock Rehabilitation Center		
OUTGOING CALL		
PERSON CALLING Ted Moore	ADDRESS CELMS PM-M	PHONE NUMBER AND EXT. (314) 331-8849
PERSON CALLED Sgt Darrell Freitas	OFFICE Stanislaus County Sheriff's Dept.	PHONE NUMBER AND EXT. (209) 525-7221

SUMMARY OF CONVERSATION:

Sgt Freitas has been with the sheriff's dept for about 10 years and is a member of the bomb squad.

Sgt Freitas was involved with the 1991 and 1994 incidents of rounds being found on the Turlock Rehabilitation Center property. My first call to him was on 1 July to see if he had pictures or perhaps the actual round found on the site. He did not have one of the original rounds, but he said he had a cleaned up round just like the ones taken from the site. We were in Turlock at the time and he said he would bring the round to our hotel. The round was a practice 81mm mortar. Sgt Freitas had spoken with Lynn Buechler (a fellow member of the bomb squad) earlier in the evening. Mr. Buechler said they have been taking the same kind of round off the fairgrounds property for the past 20 years.

Sgt Freitas said he would talk with other bomb techs and asked me to call him back on 8 or 9 July. He spoke with Lt. Voortman who has been with the sheriff's dept for 20 years and a bomb tech since 1987. He said the practice 81mm rounds are the only ordnance reported on the site.

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 1 July 1997

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION		
Turlock Rehabilitation Center		
OUTGOING CALL		
PERSON CALLING	ADDRESS	PHONE NUMBER AND EXT.
Ted Moore	CELMS PM-M	(314) 331-8849
PERSON CALLED	OFFICE	PHONE NUMBER AND EXT.
Randy Smith Randy Dacker	Stanislaus County Fairgrounds, Maintenance Dept.	(209) 668-1339

SUMMARY OF CONVERSATION:

Randy Smith was our point of contact to make arrangements for our site inspection. We met with he and Randy Dacker during the site visit.

Mr. Smith has worked at the fairgrounds for 5 years and Mr. Dacker has worked at the fairgrounds for 6 years. They told us about a piece of ordnance found near the off track betting facility located on the fairgrounds property. After they showed us the location of the round, it became obvious they were not talking about the piece of ordnance reported in the INPR. They said the round was found during grading activities around the off track betting facility in 1994. They said Terry Mann knew exactly where the round was found. Randy Dacker went into the building to get Mr. Mann.

Mr. Mann described the round and said we should contact Lynn Buechler of the Modesto County bomb squad. Mr. Mann has knowledge of the site since 1957 and said he heard the site had been used for mortar training.

Randy Smith suggested we contact Mr. Howard Norton. Mr. Norton retired recently after working at the fairgrounds for 20 years.

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 29 July 1997

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION Turlock Rehabilitation Center		
OUTGOING CALL		
PERSON CALLING Ted Moore	ADDRESS CELMS PM-M	PHONE NUMBER AND EXT. (314) 331-8849
PERSON CALLED Howard Norton	OFFICE Stanislaus County Fairgrounds, Maintenance Dept.	PHONE NUMBER AND EXT. (209) 632-5773

SUMMARY OF CONVERSATION:

Mr. Norton retired recently after 22 years at the fairgrounds.

I told him that Randy Smith suggested we call him but he said we really needed to talk with Cliff McBeath. He said Mr. McBeath was maintenance supervisor until he retired 10 years ago. Mr. McBeath was on the site when the Rehabilitation Center buildings were demolished and they supposedly found buried ammunition bunkers (made of concrete).

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 30 July 1997

For use of this form, see AF340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION Turlock Rehabilitation Center		
OUTGOING CALL		
PERSON CALLING Ted Moore	ADDRESS CELMS PM-M	PHONE NUMBER AND EXT. (314) 331-8849
PERSON CALLED Cliff McBeath	OFFICE Stanislaus County Fairgrounds, Maintenance Dept.	PHONE NUMBER AND EXT. (209) 632-1816

SUMMARY OF CONVERSATION:

Mr. McBeath retired in 1982 after 29 years at the fairgrounds. He was the maintenance supervisor.

We called Mr. McBeath at the suggestion of Mr. Howard Norton.

Mr. McBeath confirmed that he was working at the site when the original Rehabilitation Center buildings were demolished. He does not remember any concrete bunkers being excavated.

He said a shell was found on the site prior to his beginning work there in 1952.

I told him we were frustrated knowing there have been practice mortar rounds found on the site but have not found the source.

I asked if he knew of anyone else with knowledge of the site and he said most were deceased. He said there were a couple of people that he could talk to and would call back if he found any new information.

Mr. McBeath called back and apologized for not remembering that the National Guard trained on the site from about 1950 until about 1964. He could not remember exactly what the training consisted of but he remembers them being there on weekends and pretty much using the whole area.

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 30 July 1997

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION Turlock Rehabilitation Center		
OUTGOING CALL		
PERSON CALLING Jim Luebbert	ADDRESS CELMS PM-M	PHONE NUMBER AND EXT. (314) 331-8840
PERSON CALLED Bill McClusky	OFFICE Retired NG technician from Turlock	PHONE NUMBER AND EXT. (209) 634-6493

SUMMARY OF CONVERSATION:

Bill McClusky was a full time technician for the National Guard at Turlock from 1950-84. He remembers the WPA built the building(s) for the NG May 1947 and the State of California recognized the site in October 1947. The NG rented the property from the State. The NG was finished at the site in 1963. He remembers they fired blank small arms ammunition, but not practice grenades or practice mortars. Colonel George W. Gardner ((209) 668-4082) was the commander for several years and is currently writing a history of the NG activity there.

APPENDIX I

PRESENT SITE PHOTOGRAPHS

Page/Photo # Description

Page I-2

Photo # 1 Northern Portion of the Site - Concrete Pipe Manufacturer

Photo # 2 Southern Portion of the Site - Residential

Page I-3

Photo # 3 Former Small Arms Range - Now a golf driving range

Photo # 4 General View of Fairgrounds

Page I-4

Photo # 5 Fairgrounds Parking Area - General Location of Recovered Mortar Rounds

Photo # 6 Location of 1994 Mortar Round Incident (Foreground)

Page I-5

Photo # 7 Example of Mortar Rounds Recovered from the Site

Photo # 8 Example of Mortar Rounds Recovered from the Site



PHOTO # 1
NORTHERN PORTION OF THE SITE - CONCRETE PIPE MANUFACTURER



PHOTO # 2
SOUTHERN PORTION OF THE SITE - RESIDENTIAL



PHOTO # 3
FORMER SMALL ARMS RANGE - NOW A GOLF DRIVING RANGE



PHOTO # 4
GENERAL VIEW OF FAIRGROUNDS



PHOTO # 5
FAIRGROUNDS PARKING AREA - GENERAL LOCATION OF
RECOVERED MORTAR ROUNDS



PHOTO # 6
LOCATION OF 1994 MORTAR ROUND INCIDENT - (FOREGROUND)



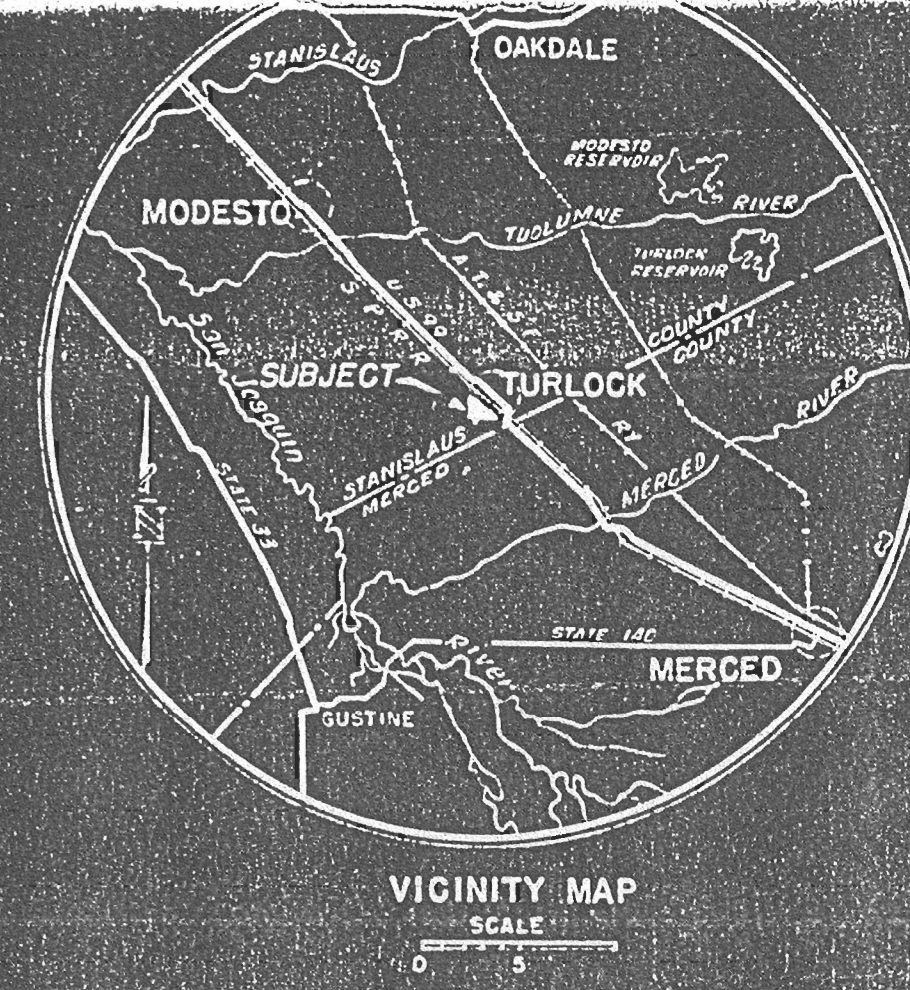
PHOTO # 7
EXAMPLE OF MORTAR ROUNDS REMOVED FROM THE SITE



PHOTO # 8
EXAMPLE OF MORTAR ROUNDS REMOVED FROM THE SITE

APPENDIX J
HISTORICAL PHOTOGRAPHS
(NOT USED)

APPENDIX K
HISTORICAL MAPS / DRAWINGS



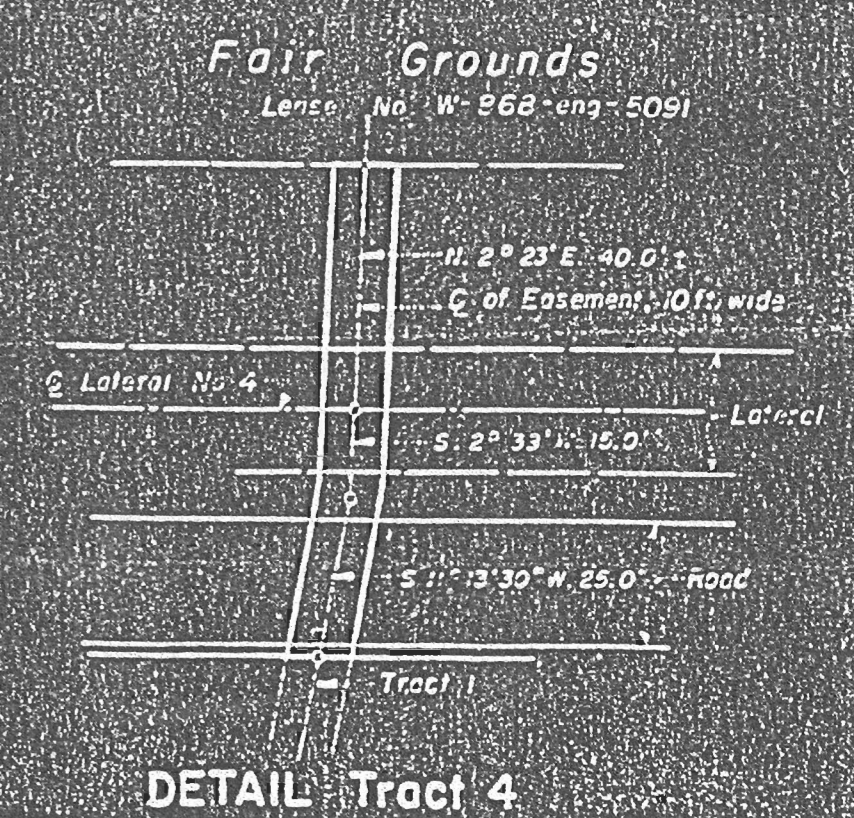
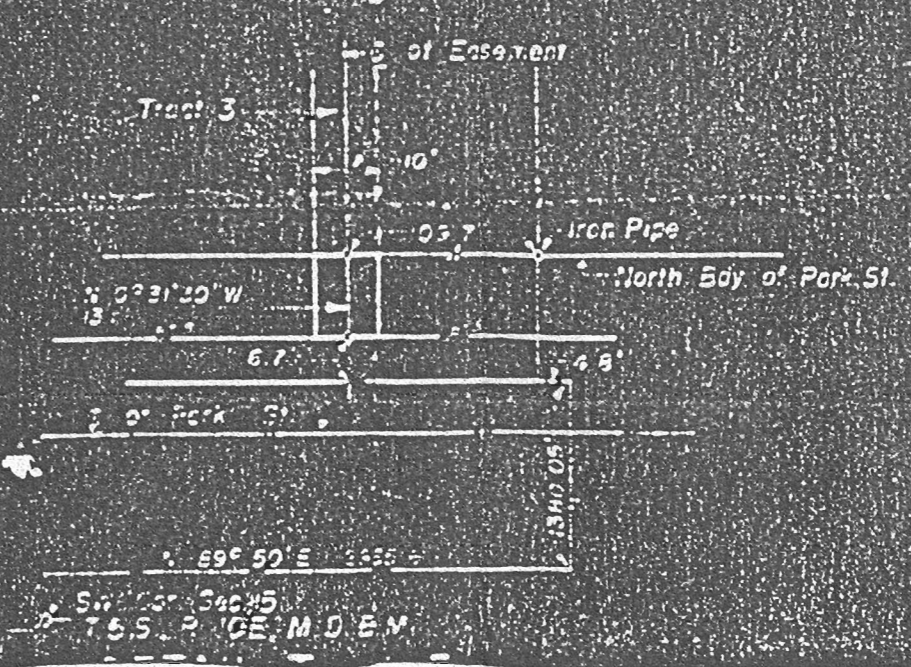
TRACT REGISTER

TRACT NO.	VENDOR	ACRES	DATA	D/T Filed	RECORDING DATE	RECORD VOL.	RECORD PAGE	INTEREST TAKEN
2	JOHN GOMEZ & MARY L. GOMEZ	19.27	Judgmt 9 Mar 43		3-9-43	766	541	FEE
1	ELMER L. HARRIS & EDITH M. HARRIS	.12			5-29-43	773	412	EASEMENT
2	GEORGE E. MOLINE & WALTER R. MOLINE	.05			2-23-43	785	189	EASEMENT
3	EDWARD CLAES & EMMA E. CLAES	.14			5-9-43	769	540	EASEMENT
4	TURLOCK IRRIGATION DIST	.02			7-26-43	779	508	EASEMENT
5	ANNA O. LINDBLOM	.003			5-6-43	769	539	EASEMENT
A	PACIFIC STATES SAV and LOAN CO.	31.12	W-404-eng-2852					LEASE
B	A. G. DANBOM and ELIZABETH DANBOM	9.46	W-3460-eng-3834					LEASE
C	A. G. DANBOM and ELIZABETH DANBOM	10.1	W-868-eng-4567					LEASE
D	JOHN A. TURNER & MYRTLE A. TURNER	5.26	W-2972-eng-1157					LEASE
E	GEORGE E. MOLINE	9.43	W-3460-eng-3833					LEASE
F	GEORGE E. MOLINE and WALTER R. MOLINE	2.39	W-3460-eng-3835					LEASE
G	ELMER L. HARRIS and EDITH M. HARRIS	4.55	W-2972-eng-1249					LEASE
H	38th DISTRICT AGRICULTURAL ASSN	36.0	W-868-eng-5091					LEASE
J	STANISLAUS COUNTY	1.50	W-4-193-eng-568					LEASE

Annually and thereafter, to six months after the official termination of the present war.

NOTES: ALPHABETICAL DESIGNATIONS AS SHOWN ON MAP & TRACT REGISTER ARE FOR REFERENCE & IDENTIFICATION PURPOSES ONLY & ARE NOT A PART OF ANY TRACT OR FILE.

DIRECTIVE DATA
 DIRECTIVE RE-D-1018, dated 28 May 1942 (Trs. H-C-J)
 RE-D-1018, Amendment, dated 7 Dec 42 (Trs. 1, 2, 3, 4, 5, Sewage Easement)
 RE-D-1487, dated 21 Aug 1942 (Tr. 2, 19.27 Ac.)



DETAIL Tract 4

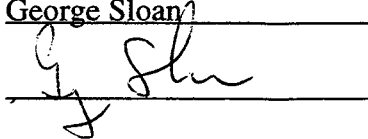
APPENDIX L

**SITE SPECIFIC SAFETY AND HEALTH PLAN /
SITE INSPECTION REPORT**

SITE SAFETY AND HEALTH PLAN (SSHP)
for
TURLOCK REHABILITATION CENTER
STANISLAUS COUNTY, CA
SITE # J09CA098200

The purpose of this site visit is to reconnoiter, document, and photograph areas on Turlock Rehabilitation Center suspected to be contaminated with unexploded ordnance and/or toxic chemical munitions.

PREPARED BY: Randy Fraser
OFFICE USACE, CEMVS-ED-P
ADDRESS 1222 Spruce St. St. Louis, Mo
PHONE (314) 331-8268
DATE PREPARED 6-23-97

REVIEWED/APPROVED BY: George Sloan


NOTE This SSHP is to be used only for non-intrusive site visits and must be approved by safety prior to the start of the field visit. All team members must read, and comply with the SSHP, and attend the safety briefings. The Site Safety and Health Officer (SSHO) shall ensure the Safety Briefing Checklist and the SSHP acceptance form (Appendix C) is filled out prior to the start of the site visit.

A. SITE DESCRIPTION AND PREVIOUS INVESTIGATIONS

1. Site Description

a. **Size** 131.41 Acres

b. **Present Usage** (check all that apply)

- | | | |
|--|--|--|
| <input type="checkbox"/> Military | <input type="checkbox"/> Recreational | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Residential | <input checked="" type="checkbox"/> Commercial | _____ |
| <input type="checkbox"/> Natural Area | <input checked="" type="checkbox"/> Industrial | _____ |
| <input checked="" type="checkbox"/> Agricultural | <input type="checkbox"/> Landfill | _____ |
| <input type="checkbox"/> Secured | <input type="checkbox"/> Active | <input type="checkbox"/> Unknown |
| <input checked="" type="checkbox"/> Unsecured | <input type="checkbox"/> Inactive | |

2. Past Uses The Turlock Rehabilitation Center is located 15 miles southeast of Modesto and 20 miles northwest of Merced, in the city of Turlock, Stanislaus County, California. During 1943 and 1944, the United States acquired fee title to 19.27 acres of land by a Declaration of Taking. During the same period of time, the United States obtained leases for a total of 111.81 acres of land and obtained fee titles for easements for a total of 0.33 of an acre of land. The total acquisition was 131.41 acres of land. The site was acquired by the War Department in 1943 and 1944 for a Japanese American receiving center and internment camp. Improvements to the site included barracks, latrine and laundry facilities, septic systems, and military buildings.

3. Surrounding Population (check all that apply)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Rural | <input checked="" type="checkbox"/> Residential | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Urban | <input checked="" type="checkbox"/> Industrial | _____ |
| <input checked="" type="checkbox"/> Commercial | | |

4. Ordnance/Explosives (OE) Potential Small-arms residue from the small arms range that was present. In addition, a worker, while digging a utility trench, unearthed a large, intact shell, described as a "probably a bomb" indicating that it was 2 feet in length and had fins on one end. Approximately 5 miles from the site was the location of the Turlock CWS Plant which manufactured incendiary bombs during the Second World War.

B. DESCRIPTION OF ON-SITE ACTIVITIES (check all that apply)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Walk-through | <input checked="" type="checkbox"/> Drive-through | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> On-Path | <input checked="" type="checkbox"/> On-road | _____ |
| <input checked="" type="checkbox"/> Off-Path | <input type="checkbox"/> Off-road | |

C. SITE PERSONNEL AND RESPONSIBILITIES

1. Responsibilities

a. Project Manager The Corps of Engineers Project Manager (PM) is overall responsible for the site visit. He will assign a Team Leader, (most situation will be the PM). The PM will ensure that the SSHP is completed. Coordinates and executes the site visit.

b. Site Safety and Health Officer Individual designated to conduct safety, enforce the SSHP, conduct safety briefings, and ensure that the team leader can safely fulfill his objectives. The SSHO will maintain the safety gear, and monitor on-site operations. The SSHO is responsible for identifying, marking, and reporting any unexploded ordnance and explosives.

2. Team Members

Name	Position	Address	Phone
<u>Ted Moore</u>	<u>PM/Team Leader</u>	<u>USACE, St. Louis, MO</u>	<u>(314) 331-8849</u>
<u>Randy Fraser</u>	<u>SSHO, UXO Spec</u>	<u>USACE, St. Louis, MO</u>	<u>(314) 331-8268</u>
<u>Jim Luebbert</u>	<u>Historian</u>	<u>USACE, St. Louis, MO</u>	<u>(314) 331-8840</u>

D. OVERALL HAZARD EVALUATION (check one)

High Moderate Low Unknown

This assessment was developed using the Site Investigation Hazard Analysis and Risk Assessment Code Matrix.

E. GENERAL PRECAUTIONS Prior to the on-site visit, all team members are required to read this SSHP and sign the form acknowledging that they have read and will comply with it. In addition, the SSHO shall hold a brief tailgate meeting in which site specific topics regarding the days activities will be discussed. If unanticipated hazardous conditions arise, team members are to stop work, leave the immediate area and notify the SSHO. The buddy system will be enforced at all times.

F. STANDARD OPERATION SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

1. **Site Rules/Prohibitions** At any sign of unanticipated hazardous conditions, stop tasks, leave the immediate area and notify the SSHO. Smoking, eating and drinking allowed in designated areas only.
2. **Material Handling Procedures** Do not handle.
3. **Drum Handling Procedures** Do not handle.
4. **Confined Space Entry** A area identified as a Permit Required Confined space will not be entered. All confined spaces shall be considered permit required confined spaces until the pre-entry procedures demonstrate otherwise. Confined spaces may be entered without a written permit or attendant provided the space is determined not to be a permit required confined space as specified in 29 CFR 1910.146.
5. **Electrical Protection** Overhead power lines, downed electrical wires and buried cables pose a danger of shock and electrocution. In addition, buildings may contain exposed wiring that may hold a potential load. Workers should avoid contact with any and all exposed wire and cables
6. **Spill Containment** N/A
7. **Excavation Safety** Do not enter trenches/excavations.
8. **Illumination** Site visits will be conducted during daylight hours only.
9. **Sanitation** Use existing sanitary facilities.
10. **Buddy System** Individuals will maintain constant contact with other personnel at all times. No one will work alone at any time during the site visit.
11. **Engineering Controls** N/A
12. **Insects** Wearing light colored clothing and tucking in the pant legs can reduce contact. In severely infested area it may be necessary to tape all openings. Apply repellents to both clothing and bare skin. Diethyltoluamide (DEET) is an active ingredient in many repellents, which is effective against ticks and other insects. Repellents containing DEET can be applied on exposed areas of skin and clothing. However, repellents containing permethrin should be used on only clothing. For more information on insect bites, refer to Appendix B.
13. **Poisonous Vegetation** Recognition and avoidance is the best protection. Cover all exposed skin. If it is known or suspected that an individual has been exposed, wash the effected area with soapy water.

14. Inclement Weather When there are warnings or indications of impending severe weather (heavy rains, strong winds, lightning, tornados, etc.), weather conditions shall be monitored and appropriate precautions taken to protect personnel and property from the effects of the severe weather.

15. Hot Weather In hot environments, cool drinking water shall be made available and workers shall be encouraged to frequently drink small amounts, e.g., one cup every 15 - 20 minutes; the water shall be kept reasonably cool. In those situations where heat stress may impact worker safety and health, work regimens shall be established. Environmental monitoring of the Wet Bulb Globe Temperature Index shall be conducted and work loads and work regimens categorized as specified in the American Conference of Governmental Industrial Hygienist (ACGIH) publication "Threshold Limit Values and Biological Exposure Indices". For more information on Heat Stress refer to Appendix A of this SSHP.

16. Cold Weather Cold injury (frost bite and hypothermia) and impaired ability to work are dangers at low temperatures and when the wind-chill factor is low. To guard against them; wear appropriate clothing; have warm shelter readily available; carefully schedule work and rest periods, and monitor workers' physical conditions.

17. Off-Road Driving Ensure all emergency equipment is available with the vehicle i.e. tire changing equipment. Drivers shall familiarize themselves with the procedures for engaging four-wheel drive systems before the need for added traction arises. Vehicles will not be driven into an environment that is unknown, such as deep water, or an unstable surface. Vehicles will not be driven into a suspected ordnance impact area.

18. Ordnance

a. General Information

(1) The cardinal principle to be observed involving explosives, ammunition, severe fire hazards or toxic materials is to limit the exposure to a minimum number of personnel, for the minimum amount of time, to a minimum amount of hazardous material consistent with a safe and efficient operation.

(2) The age or condition of an ordnance item does not decrease the effectiveness. Ordnance that has been exposed to the elements for extended periods of time become more sensitive to shock, movement, and friction, because the stability agent in the explosives may be degraded.

(3) When chemical agents may be present, further precautions are necessary. If the munitions item has green markings leave the area immediately, since it may contain a chemical filler.

(4) Consider ordnance that has been exposed to fire as extremely hazardous. Chemical and physical changes may have occurred to the contents which render it more sensitive than it was in its original state.

b. On-Site Instructions

(1) DO NOT TOUCH or MOVE any ordnance items regardless of the markings or apparent condition.

(2) DO NOT conduct a site visit during an electrical storm or an approaching electrical storm. If a storm approaches during the site visit leave the site immediately and seek shelter.

(3) DO NOT use a radio or cellular phone in the vicinity of a suspect ordnance item.

(4) DO NOT walk across an area where the ground cannot be seen.

(5) DO NOT drive a vehicle into a suspected OE area; use clearly marked lanes.

(6) DO NOT carry matches, cigarettes, lighters or other flame producing devices into a OE site.

(7) DO NOT rely on color code for positive identification of ordnance items or their contents.

(8) Approach ordnance items from the side; avoid approaching from the front or rear.

(9) Always assume ordnance items contain a live charge until it can be determined otherwise.

(10) Dead vegetation and animals may indicate potential chemical contamination. If a suspect area is encountered, personnel should leave the immediate area and evaluate the situation before continuing the site visit.

c. Specific Action Upon Locating Ordnance

(1) DO NOT touch, move or jar any ordnance item, regardless of its apparent condition.

(2) DO NOT be misled by markings on the ordnance item stating "practice",

"dummy", or "inert". Practice munitions may contain an explosive charge used for spotting the point of impact. The item may also be mismarked.

(3) DO NOT roll the item over or scrape the item to read the markings.

(4) The location of any ordnance items found during site investigations should be clearly marked so it can be easily located and avoided.

(5) Reporting will be conducted in accordance with CELMS-PM-M, Standard Operating procedure for Reporting Ordnance and Unexploded Ordnance (UXO), dated 19 January 1995.

19. Other (specify) _____

G. SITE CONTROL AND COMMUNICATIONS

1. **Site Map** Map will be maintained by the PM or Safety Officer.

2. **Site Work Zones** N/A

3. **Buddy System** Individuals will maintain constant contact with other personnel at all times. No one will work alone at any time during the site visit.

4. Communications

a. **On-Site** Verbal communications will be used among team members.

b. **Off-Site** Communications shall be established on every site. Communications may be established by using an cellular phone or by public or private phone which may be readily accessible. (specify below)

Cellular phone

Public/private phone (location _____)

Other _____

c. **Emergency Signals** In the case of small groups, a verbal signal for emergencies will suffice. An emergency signal for large groups (i.e. air horn, whistle) should be incorporated at the discretion of the SSHO. (specify below)

Verbal

Nonverbal (specify) _____

H. EMERGENCY RESPONSE Team members are to be alert to the dangers associated with the site at all times. If an unanticipated hazardous condition arises, stop work, evacuate the immediate area and notify the SSHO. A First Aid Kit and emergency eye wash (if applicable) will be located in the SSHO's field vehicle. If qualified persons (i.e. fire department, medical facility or physician) are not accessible within five minutes of the site at least two team members shall be qualified to administer first aid and CPR.

1. Emergency/Important Telephone Numbers

- Emergency 911
- Modesto County Sheriffs Department (209) 525-7221
- Hospital (209) 667-4200
- 3rd Ord Bn (EOD) (206) 967-1972
- 787th Ord Co (EOD) (415) 603-8301
- Huntsville Safety Office (205) 895-1582/1579
- Huntsville's 24 hour number (800) 627-3532, PIN 777-2534
- On-site cellular phone (314) 606-4960
- St Louis Corps of Engineers (314) 331-8036

2. Hospital/Medical Facility Information

Name: Emanuel Medical Center
Address: 825 Delbon Ave
Turlock, CA
Phone: (209) 677-4200

Route to Hospital: refer to the site map

I. MONITORING EQUIPMENT AND PROCEDURES

1. Exposure Monitoring For non-intrusive on-site activities such as site visits, air monitoring is typically not required. However, if the site situation dictates the need for monitoring, complete the following information on a separate page and attach the page to the SSHP.

a. Monitoring Equipment To Be Utilized N/A

b. Equipment Calibration Results N/A

c. Action Levels N/A

2. Heat/ Cold Stress Monitoring

a. Heat Stress monitoring criteria published in Chapter 8 of the NIOSH/OSHA/USCG/EPA "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" shall be followed.

b. Cold Stress monitoring shall be conducted in accordance with the most current published American Conference of Governmental Industrial Hygienists (ACGIH) cold stress standard.

J. PERSONAL PROTECTIVE EQUIPMENT Typically, for non-intrusive site visits, Level D is required. If a higher level of protection is to be used initially or as contingency, a brief discussion will be attached. At a minimum personnel shall wear clothing suitable for the weather and work condition. The minimum for field work shall be short sleeve shirt, long trousers, and leather or other protective work shoes or boots. If a higher level of protection is to be used initially or as contingency, a brief discussion will be attached.

1. Footwear Footwear providing protection against puncture shall meet the applicable requirements as stated in EM 385-1-1, paragraph 05.A.08. All activities which personnel are potentially exposed to foot hazards will be identified and documented in a hazard analysis.

2. Hand Protection Persons involved in activities which subject the hands to injury (e.g., cuts, abrasions, punctures, burns) shall use leather gloves.

3. Head Protection Hardhats shall be worn when personnel are subject to potential head injury. The identification and analysis of head hazards will be documented in a hazard analysis.

4. Eye Protection Personnel will wear eye protection when activities present potential

injuries to the eyes. All eye protection equipment shall meet the requirements as stated in EM 385-1-1, paragraph 05.B.

K. DECONTAMINATION PROCEDURES Decontamination procedures are not anticipated for this site investigation. Team members are cautioned not to walk, kneel or sit on any surface with potential leaks, spills or contamination.

L. TRAINING All site personnel shall have completed the training required by EM 385-1-1 and 29 CFR 1910.120 (e). The U.S. Army Corps of Engineer (USACE) Project Manager shall ensure, and the SSHO shall verify, that all on-site personnel have completed appropriate training. Additionally, the SSHO shall inform personnel before entering, of any potential site-specific hazards and procedures.

M. MEDICAL SURVEILLANCE PROGRAM The USACE Project Manager shall ensure, and the SSHO shall verify, that all on-site personnel are on the Medical Surveillance Program meeting the requirements of 29 CFR 1910.120, and ANZI Z-88.2, as appropriate, depending on the PPE and site specific tasks.

Provide the following information on Training and Medical

NAME	HAZWOPER	PROVIDER	MEDICAL
		DATE	DATE
<u>Ted Moore</u>	<u>12-96</u>	<u>Corps of Engineers</u>	<u>4-97</u>
<u>Randy Fraser</u>	<u>1-97</u>	<u>Corps of Engineers</u>	<u>4-97</u>
<u>Jim Luebbert</u>	<u>12-96</u>	<u>Corps of Engineers</u>	<u>6-97</u>

N. LOGS, REPORTS AND RECORDKEEPING Site logs are maintained by the Project Manager and SSHO. This is to include historical data, personnel authorized to visit the site, all records, standard operating procedures, air monitoring logs and the SSHP.

O. GENERAL The number of personnel visiting the site shall be a limited to a minimum of two, maximum of eight. The more personnel on-site, the greater potential for an accident. The SSHO may modify this SSHP if site conditions warrant it and without risking the safety and health of the team members. This modification will be coordinated with the team members. The SSHO shall notify Corps of Engineers Safety Office in Huntsville, AL. of the change as the situation allows.

APPENDIX A

HEAT- RELATED INJURIES

Once the signals of a heat-related illness begin to appear, the victim's condition can quickly get worse. A heat related illness can result in death. If you see any of the signals of sudden illness, and the victim has been exposed to extremes of heat, suspect a heat-related illness.

People at risk for heat-related illness include those who work or exercise outdoors, elderly people, young children, and people with health problems. Also at risk are those who have had a heat-related illness in the past, those with medical conditions that cause poor blood circulation, and those who take medications to get rid of water from the body (diuretics).

People usually try to get out of extreme heat before they begin to feel ill. However, some people do not or can not. Those that work outdoors often keep working even after they begin to feel ill. Many times, they might not even recognize that they are in danger of becoming ill.

Heat cramps, heat exhaustion, and heat stroke are conditions caused by overexposure to heat. You can help prevent heat-stress emergencies by recognizing and properly treating symptoms. Below is a quick reference guide to heat-related emergencies:

HEAT CRAMPS Heat cramps are the least severe, and often are the first signals that the body is having trouble with the heat. *Symptoms* include: Muscle twitching; painful spasms in the legs, arms or abdomen.

WHAT TO DO:

- Have the individual rest in a cool place.
- Give cool water or a commercial sports drink.
- lightly stretch the muscle and gently massage the area.

HEAT EXHAUSTION Heat exhaustion is a more severe condition than heat cramps. *Symptoms* include: cool, moist, pale, or flushed skin, headache, nausea, dizziness, weakness, and exhaustion.

HEAT STROKE Heat stroke is the least common but most severe heat emergency. It most often occurs when people ignore the signals of heat exhaustion. Heat stroke develops when the body systems are overwhelmed by heat and begin to stop functioning. **Heat stroke is a serious medical emergency.** *Symptoms* include: red, hot, dry skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing.

WHAT TO DO: When you recognize a heat-related illness in its early stages, you can usually reverse it.

- Get the victim out of the heat.

- Loosen any tight clothing and apply cool, wet cloths, such as towels or sheets.
- If the victim is conscious, give cool water to drink. Do not let the conscious victim drink too quickly. Give about 1 glass (4 ounces) of water every 15 minutes.
- Let the victim rest in a comfortable position, and watch carefully for changes in his or her condition. The victim should not resume normal activities the same day.
- **Refusing water, vomiting, and changes in consciousness mean that the victim's condition is getting worse. Call for an ambulance immediately if you have not already done so.**
- If the victim vomits, stop giving fluids and position them on their side.
- Watch for signals of breathing problems.
- Keep the victim lying down and continue to cool the body any way you can. If you have ice packs or cold packs, place them on each of the victim's wrists and ankles, on the groin, in each armpit, and on the neck to cool the large blood vessels.

APPENDIX B

BITES AND STINGS

Scorpions, Bees and Spiders

Bee stings are painful, but rarely fatal. Some people, however have a severe allergic reaction to an insect sting. This allergic reaction may result in a breathing emergency. If someone is stung by an insect, remove the stinger. Scrape it away with from the skin with your fingernail or plastic car, such as a credit card, or use tweezers. If you use the tweezers, grasp the stinger, not the venom sac. Wash the site with soap and water. Cover it to keep it clean. Apply a cold pack to the area to reduce the pain and swelling. Watch the victim for signals of an allergic reaction.

Scorpions live in dry regions of the southwestern United States and Mexico. They live under rocks, logs, and the bark of certain trees and are most active at night. Only a few species of scorpions have a sting that can cause death.

Spiders; there are also only two spiders in the United States whose bite can make you seriously sick or be fatal. These are the black widow spider and the brown recluse. The black widow is black with a reddish hourglass shape on the underside of its body. The brown recluse is light brown with a darker brown, violin-shaped marking on the top of its body. Both spiders prefer dark, out of the way places. Often, the victim will not know that he or she has been bitten until he or she starts to feel ill or notices a bite mark or swelling.

Symptoms: include nausea and vomiting, difficulty breathing or swallowing, sweating and salivating much more than normal, severe pain in the sting or bite area, a mark indicating a possible bite or sting, and swelling of the area.

First Aid: if someone has been stung by a scorpion or bitten by a spider he or she thinks is a black widow or brown recluse, wash the wound, apply a cold pack to the site, and get medical help immediately.

Lyme Disease

Lyme Disease is an illness that people get from the bite of an infected tick. Lyme disease is affecting a growing number of people in the United States. Everyone should take precautions against it. Not all ticks carry Lyme disease. Lyme disease is spread mainly by a type of tick that commonly attaches itself to field mice and deer. It is sometimes called a deer tick. This tick is found around beaches and in wooded and grassy areas. Like all ticks, it attaches itself to any warm-blooded animal that brushes by. Deer ticks are very tiny and difficult to see. They are much smaller than the common dog tick or wood tick. They can be as small as a poppy seed or

the head of a pin. Adult deer ticks are only as large as a grape seed.

Symptoms: The first signal of infection may appear a few days or a few weeks after a tick bite. Typically, a rash starts as a small red area at the site of the bite. It may spread up to 7 inches across. In fair-skinned people the center is lighter in color and the outer edges are red and raised. This sometimes gives the rash a bull's-eye appearance. In dark skinned people the area may look black and blue, like a bruise.


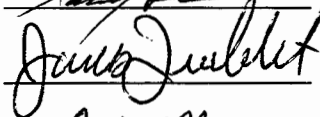

Other symptoms include fever, headache, weakness, and joint and muscle pain similar to the pain of "flu". These symptoms might develop slowly and might not occur at the same time as a rash. In fact you can have Lyme disease without developing a rash.

First Aid: If you find a tick, remove it by pulling steadily and firmly. Grasp the tick with fine-tipped tweezers, as close to the skin as possible, and pull slowly. If you do not have tweezers, use glove, plastic wrap, or a piece of paper to protect you finger. If you use your bare fingers, wash your hands immediately. Do not try to burn a tick or use other home remedies, like coating the tick with Vaseline or nail polish or picking it with a pin. Once the tick is removed, wash the area with soap and water. If available, apply antiseptic or antibiotic ointment. If you can not remove the tick or parts of the tick stay in your skin, obtain medical care. If a rash or flu like symptoms develop, seek medical attention.

APPENDIX C

SSHP ACCEPTANCE FORM
ABBREVIATED SITE SAFETY AND HEALTH PLAN
FOR
TURLOCK REHABILITATION CENTER
STANISLAUS COUNTY, CALIFORNIA

I have read and agree to abide by the contents of the Site Safety and Health Plan.

NAME	OFFICE	SIGNATURE	DATE
<u>RANDY FRASEK</u>	<u>CEMVS-ED-P</u>	<u></u>	<u>6/30/97</u>
<u>JAMES LUEBBERT</u>	<u>CEMVS-ED-P</u>	<u></u>	<u>6/30/97</u>
<u>Ted Moore</u>	<u>CEMVS-ED-P</u>	<u></u>	<u>6/30/97</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
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SITE SURVEY SAFETY BRIEFING

(Check subjects discussed)

Date 7/1/97

GENERAL INFORMATION

- Purpose of Visit
- Identify Key Site Personnel

SITE SPECIFIC INFORMATION

- Site Description/Past Use
- Results of Previous studies
- Potential Site Hazards
- OE Safety Procedures
- Site SOP
- Site Control and Communications
- Emergency Response
- Location of First aid Kit
- Emergency Phone Numbers
- Map to Facility
- PPE
- Weather Precautions
 - Cold/Heat *Sunny, low 90's*
 - Severe Weather

Safety Briefing Attendance

All team members and any accompanying personnel will be briefed and sign this form.

NAME (Print)

ORGANIZATION

SIGNATURE

Ted Moore

USACE-STL, CEMVS-ED-P

Ted Moore

Randy Fraser

USACE-STL, CEMVS-ED-P

Randy Fraser

Jim Luebbert

USACE-STL, CEMVS-ED-P

Jim Luebbert

Site Investigation Hazard Analysis for Turlock Rehabilitation Center

Activity: Site Investigation **Analyzed by/Date:** Randy Fraser 6-23-97 **Reviewed by/Date:** George Sloan 6-23-97

<u>Operation</u>	<u>Hazard</u> Potential Energy	<u>Cause</u> Stimuli	<u>Effect</u> Mishaps Results	<u>RAC</u> without controls	<u>Countermeasures</u> Hazard Controls	<u>RAC</u> with controls
Site investigation	Explosives unexploded ordnance	detonation	puncture wounds, amputation, death	I, D, 3	do not touch or disturb, avoidance	I, E, 5
	slippery, uneven surface	slip, trips and falls	sprains, strains fractures	III, C, 4	attentiveness, avoidance, approved footwear	III, D, 5
	sharp pointed objects	punctures	foot injury	III, C, 4	approved footwear	III, E, 5
	branches	contact	eye injuries	II, C, 3	eye protection	II, D, 4
	poisonous reptiles	bites	sickness, death	III, D, 5	avoidance	III, E, 5
	animals	bites	punctures, lacerations, rabies	III, D, 5	avoidance	III, E, 5
	insects	bites	sickness, discomfort	IV, C, 5	insect repellent, proper clothing	IV, D, 5
	poisonous vegetation	contact	rash	IV, C, 5	PPE, recognition, avoidance laundered work clothing.	IV, D, 5

RISK ASSESSMENT CODE MATRIX

Hazard Severity	Hazard Probability				
	A Frequent	B Probable	C Occasional	D Remote	E Improbable
I Catastrophic	1	1	2	3	5
II Critical	1	2	3	4	5
III Marginal	2	3	4	5	5
IV Negligible	3	4	5	5	5

Hazard Severity

<u>Description</u>	<u>Category</u>	<u>Mishap Definition</u>
Catastrophic	I	Death or permanent total disability.
Critical	II	Permanent partial disability or temporary total disability in excess of (3) months.
Marginal	III	Minor injury, lost workday accident, or compensable injury or illness.
Negligible	IV	First aid or minor supportive medical treatment.

Hazard Probability

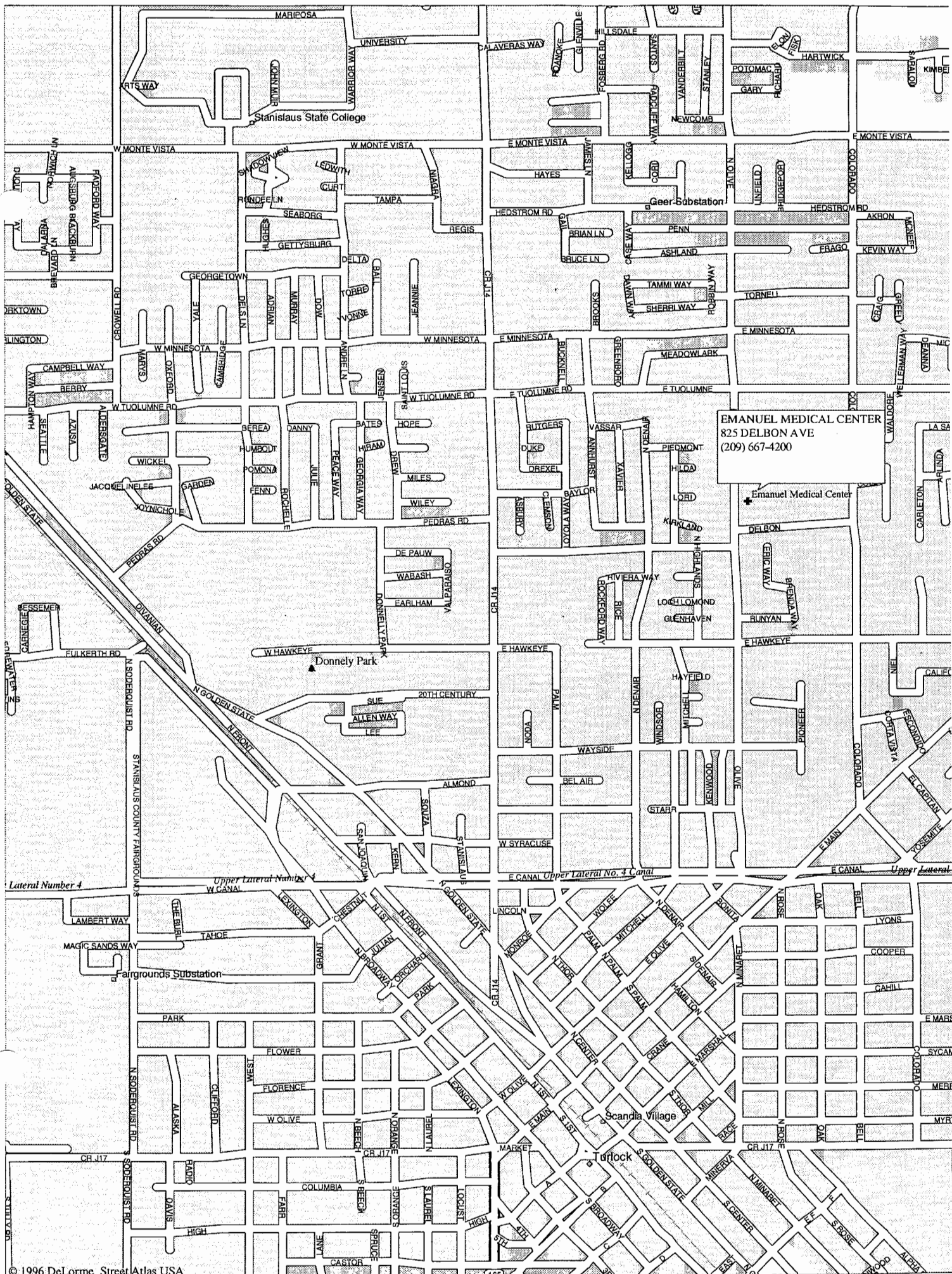
<u>Description</u>	<u>Level</u>	<u>Event</u>
Frequent	A	Likely to occur frequently during the project.
Probable	B	Will occur several times during the project.
Occasional	C	Likely to occur sometime during the project.
Remote	D	Unlikely, but possible to occur during the project.
Improbable	E	So unlikely it can be assumed occurrence may not be experienced during the project.

Risk Assessment Code

1,2
3
4,5

Hazard Evaluation

High
Moderate
Low



EMANUEL MEDICAL CENTER
825 DELBON AVE
(209) 667-4200

Emanuel Medical Center

MEMORANDUM FOR: Mike Dace

SUBJECT: Turlock Rehabilitation Center - Site Visit

Participants:

Ted Moore	Project Manager
Randy Fraser	UXO Specialist and Safety Officer
Jim Luebbert	Historian

Tuesday, 1 July 1997

Before arriving on the site, we knew a "bomb" had been found on the site (a 1991 incident reported in the INPR) and that a small arms range was located in the southern portion of the site.

The site is basically the Stanislaus County Fairgrounds. We met with two maintenance employees and an employee of the Turf Club (off track betting). It became obvious very quickly that more than one "bomb" has been found on the property. The two maintenance employees related a story of a round found in 1994. They said the round was turned over to the sheriff's office. They showed us where the round was found and gave us a verbal description of the size and shape of the round. We also showed them drawings of the bombs loaded at the Turlock Bomb Loading Plant. They said the round definitely did not match these drawings. Their description of the round made it sound more like a mortar round.

We inspected the general area where the two known rounds were found. We did not find ordnance.

We inspected the rifle range. It is now a golf driving range. No evidence of the rifle range or associated buildings remains. We did not find ordnance.

This entire site is highly developed. There is a concrete pipe facility on the northernmost portion of the site. The central (largest portion of the site) is the fairgrounds. The southernmost portion of the site is residential.

Ordnance has only been reported in the area where the two "bombs" were found.

In the evening, we contacted Sgt. Darrell Freitas of the Stanislaus County Sheriff's Dept. regarding the 1994 incident. He was aware of both incidents and said he might even have one of the rounds. It turned out he did not have one of the original rounds, but he did have a similar round. He said he talked with another member of the bomb squad who said that many rounds have been retrieved from fairgrounds and that all of

the rounds were 81mm practice mortar rounds. Sgt Freitas brought the sample round to our hotel. It was a solid steel, 81mm mortar practice round. We took pictures and gave the round back to him.

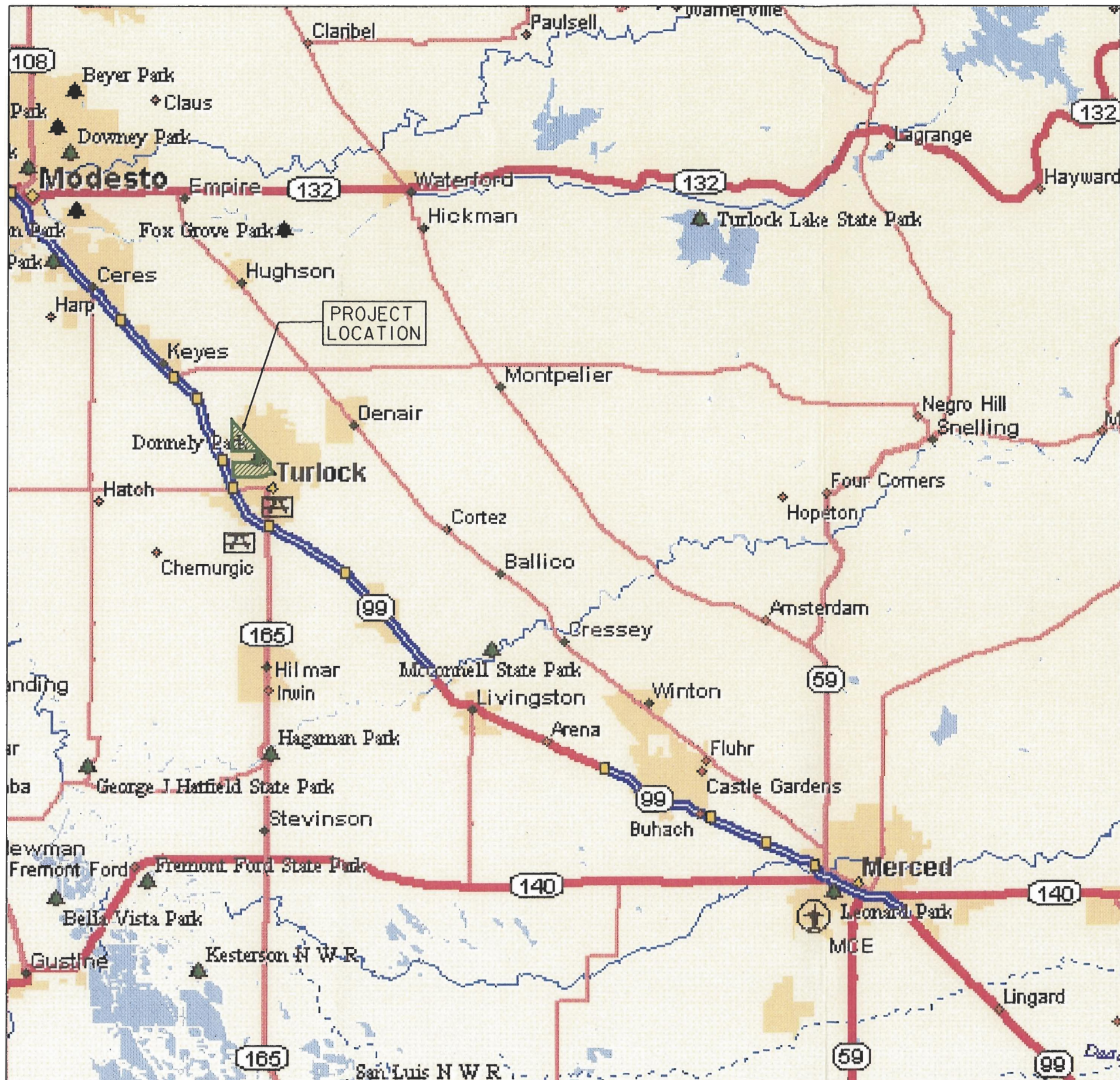
APPENDIX M
REPORT DISTRIBUTION LIST

<u>Addressee</u>	<u>No. Copies</u>
Commander, U.S. Army Engineering Support Center Huntsville, ATTN: CEHNC-ED-SY P.O. Box 1600 Huntsville, AL 35807-4301	2
Project Manager Chemical Demilitarization, Non-Stockpile ATTN: SFAE-CD-N, Bldg 4585 Aberdeen Proving Ground, MD 21010-5401	1
Commander, U.S. Army Chemical & Biological Defense Command ATTN: AMSCB-CIH, Bldg E5183 Aberdeen Proving Ground, MD 21010-5423	1
U.S. Army Technical Center for Explosives Safety ATTN: SMCAC-ESM Savanna, IL 61074-9639	1
Commander, U.S. Army Corps of Engineers Sacramento District, ATTN: CESP-K-ED-E 1325 J Street Sacramento, CA 95814-2922	1

REPORT PLATES

ARCHIVES SEARCH REPORT - FINDINGS

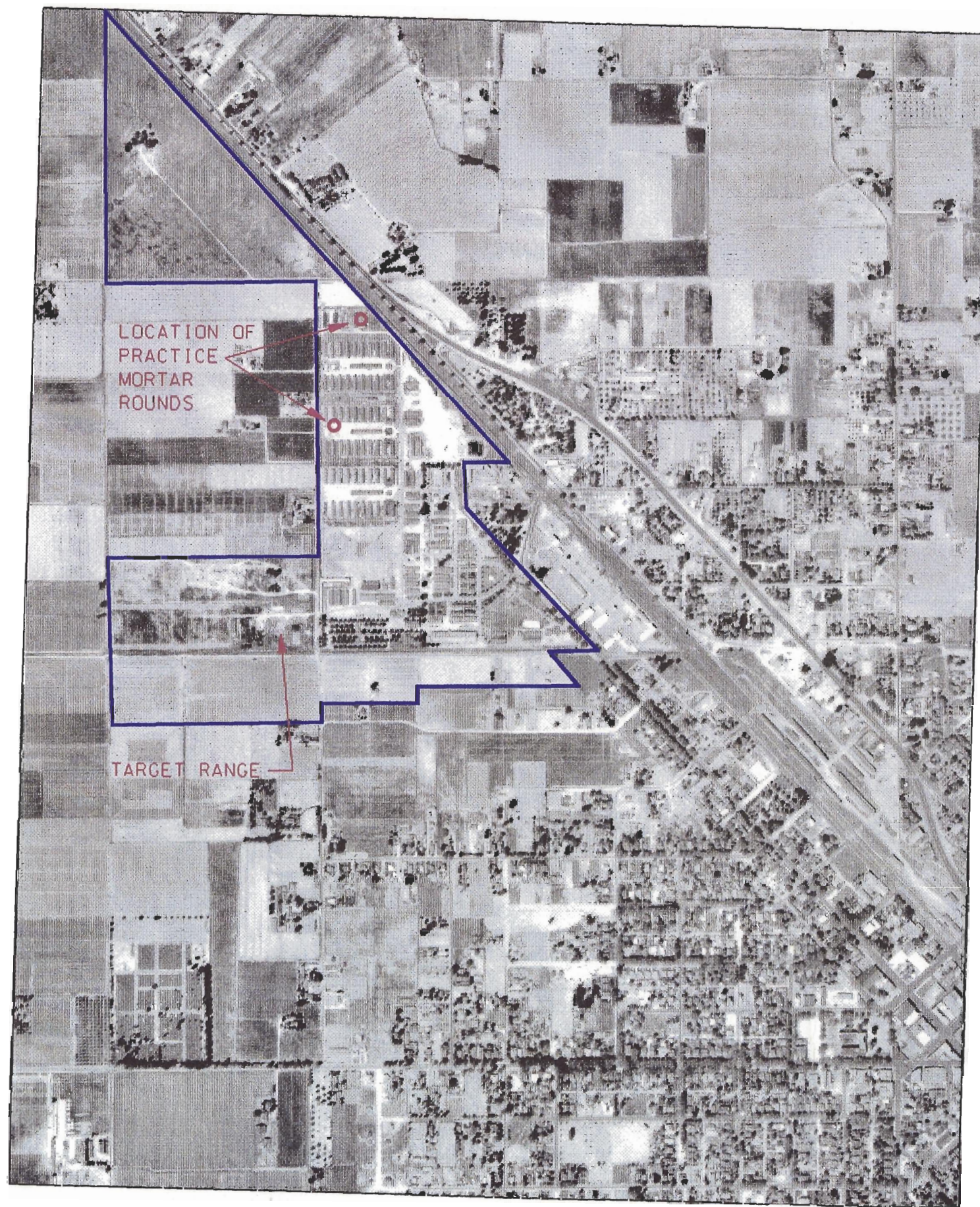
PLATE 1	VICINITY MAP
PLATE 2	SITE FEATURES 1946
PLATE 3	AREAS INSPECTED/SITE FEATURES 1993



NOT TO SCALE

PLATE I
TURLOCK REHABILITATION CENTER
TURLOCK, CALIFORNIA
STANISLAUS COUNTY
DERP-FUDS #J09CA098201
VICINITY MAP

PROJ. DATE: AUGUST 1997 DATE OF MAP: 1995
 11-SEP-1997 08:20 N:/0EW97B/0EW97C/CALIF3/TURLOCK/PHOTO/TURLOCKV.DGN & EXT



LEGEND

PROJECT BOUNDARY





NOT TO SCALE

PLATE 2






TURLOCK REHABILITATION CENTER
TURLOCK, CALIFORNIA
STANISLAUS COUNTY
DERP-FUDS #J09CA098201
SITE FEATURES - 1946



LEGEND

-  PROJECT BOUNDARY
-  AREA INSPECTED

FEATURE LOCATIONS

-  CONCRETE PIPE MANUFACTURER
-  FAIRGROUNDS PARKING
-  FAIRGROUNDS
-  GOLF DRIVING RANGE
-  LOCATION OF PRACTICE MORTAR ROUNDS



NOT TO SCALE

PLATE 3

**TURLOCK REHABILITATION CENTER
 TURLOCK, CALIFORNIA
 STANISLAUS COUNTY
 DERP-FUDS #J09CA098201
 AREAS INSPECTED/SITE FEATURES 1993**

PROJ. DATE: AUGUST 1997	DATE OF PHOTO: 1993
12-SEP-1997 09:23	N:/OEWS97B/OEW97C/CALIF3/TURLOCK/PHOTO/TURLOC93.DGN & EXT