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AN OASIS FOR RAILROADERS IN THE MOJAVE
The History and Architecture of the Los Angeles and Salt Lake Railroad Depot, Restaurant and Employees' Hotel at Kelso, California, on the Union Pacific System

Kelso Depot Historic Structure Report

MOJAVE

National Preserve • California

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AN OASIS FOR RAILROADERS IN THE MOJAVE

The History and Architecture of the Los Angeles and Salt Lake Railroad Depot, Restaurant and Employees' Hotel at Kelso, California, on the Union Pacific System

January 1998

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Kelso Depot Historic Structure Report

MOJAVE

National Preserve • California

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INTRODUCTION

A Historic Structure Report is prepared to provide an analysis of requirements for treatment of a historic resource for preservation and use. Historic Structure Report standards are found in NPS-28, the Cultural Resource Management Guidelines. Treatment recommendations are developed in conformance with historic preservation standards and guidelines and national and state codes. The Historic Structure Report includes documentation of the history and importance of a structure, evaluation of the condition of the structure, consideration of alternative methods of implementation, and recommendations for appropriate preservation measures and the best possible strategies to achieve management goals while protecting the qualities and characteristics of the resource which make it eligible for inclusion in the National Register of Historic Places.

The Kelso Depot is one of the significant cultural resources within Mojave National Preserve, representing one of the major influences on the history of southeastern California, an element in the history of railroad development in the western portion of the United States, and one of the few surviving examples of railroad related architecture in the southwest. After the building no longer provided support for the Union Pacific Railroad functions here and was closed in 1985, the effort to preserve this historic structure began with local citizens, which resulted in transfer of ownership to the Bureau of Land Management, then to the National Park Service upon the creation of the Mojave National Preserve. This historic structure report is an element of planning for the preservation of both the natural and cultural resources of the Preserve.

We wish to thank those many individuals, citizens groups and the Bureau of Land Management who have contributed their efforts toward preservation of the Kelso Depot. We also thank all of those of the National Park Service who have provided assistance in preparation of this report, including Thomas Mulhern, Cultural Resources Team Leader in the Pacific Great Basin Support Office, and Mojave National Preserve staff Mary Martin, Superintendent, Doug Scovill, Resource Management, Kirsten Talken, Interpretation, David Paulissen, Administrative Officer, and James Newton, Maintenance.

Photo 1: Union Pacific System (Los Angeles and Salt Lake Railroad) Depot, Restaurant and Employee's Hotel (Kelso Depot) at Kelso, California, March 16, 1974. Photo courtesy Steve Patterson, Denver, Colorado.

EXECUTIVE SUMMARY

RESEARCH TO PREPARE HISTORIC STRUCTURE REPORT

Union Pacific records, Bureau of Land Management files, and various public and private archives were researched for historic and architectural data. This provides a basis for building treatment and for interpretation. An archeological evaluation of the site was conducted to determine important remaining historic features. Detailed but nondestructive building investigations were conducted to determine material conditions and evaluate requirements and alternatives for rehabilitation.

MAJOR RESEARCH FINDINGS

The Los Angeles and Salt Lake Railroad, as part of the Union Pacific System, constructed the Kelso Depot not just as a depot or to provide housing and meals for its crews operating "helper" locomotive service to assist trains on the Cima grade, but also to serve as a meal stop for passengers on certain passenger trains. The building was originally called the Kelso Club House and Restaurant, and construction was completed in 1924. All functions in the building were closed in 1985. The Bureau of Land Management acquired the building in 1992, then with the creation of the Mojave National Preserve, ownership was transferred to the National Park Service.

The architectural integrity of the depot remains relatively intact. Most major building modifications appear to have occurred late in its historic period (from ca. 1942) or post historic period. However, it has been difficult to verify the dates of some of these modifications because of insufficient documentation.

MAJOR ISSUES IDENTIFIED IN PROJECT AGREEMENT

The Union Pacific has a company water system for service to its employee residences. A short-term agreement with BLM provided water for two fire hydrants at the depot. A new temporary agreement is needed for continuation of service for fire protection. Before the depot can be rehabilitated and opened to the public, it is necessary for the NPS to either produce a cooperative use agreement with Union Pacific, or develop its own water system. In a similar manner, either a cooperative use agreement or provision of separate sewage disposal systems is necessary. Related to resolution of site utility service is the high priority of providing an automatic fire suppression system within the building and provision of some form of public rest room facilities.

The primary building use has been defined by the Advisory Commission and Planning Team to be interpretation of the Mojave Desert and related railroad and local history. Secondary functions will be offices for park site support functions and quarters for park personnel. Rehabilitation of the building for use will require improvements and modifications to meet code requirements for life safety, accessibility and structural, including seismic, strengthening. Preparation for work will require verification of previous hazardous materials abatement and removal of any remaining problem materials.

RECOMMENDATIONS FOR TREATMENT OR USE

Through public meetings and consultations with the East Mojave Advisory Commission, the Planning Team has established the guideline that the project objective is preservation of the Kelso Depot structure and site by active, productive use for public education through interpretation of the Mojave Desert environment and associations with national and local trends and events related to railroad history. The building should also provide office space for park support operations, and because of the remoteness of the site, quarters for park staff.

The proposed building treatments include repair and replacement of deteriorated, damaged or missing building materials and components, structural improvements, including seismic retrofit, modifications for emergency egress and accessibility and new mechanical and electrical systems to provide for adaptive use and preservation of this cultural resource.

ADMINISTRATIVE DATA

Photo 2: Palm trees, brick walks and lawn were remaining historic landscape features in 1995. Photo by Thomas Mulhern, NPS.

ADMINISTRATIVE DATA

IDENTIFICATION OF STRUCTURE

The Kelso Depot is a two story (approximately 11,600 gross square feet floor area) mission revival style stuccoed wood frame structure with basement and hipped mission style tile roof. The main two-story portion of the building is approximately 138 feet by 43 feet and also contains a basement. A single story kitchen extension with basement at the rear measures 43 feet by 24 feet. Completed in 1924, it served not only as a depot, but also as a hotel and restaurant for train crews which provided 24 hour essential helper (engine) service eastward from Kelso to the top of the Cima grade, about 19 miles. As shown on the as-constructed drawings, the original name of the building was "Club House and Restaurant." The Depot was closed in 1964 and the Lunch Room and employees' rooming house was closed in 1985, and efforts were made to secure and protect the structure.

LOCATION

The Kelso Depot is the primary structure in the very small community of Kelso, California, which is located 235 track miles east of Los Angeles. Kelso is in the west central portion of the Mojave National Preserve, southeast of Baker, California. The depot is at the intersection of Kelbaker Road and the Kelso-Cima Road, the two primary cross-park roads. The nearest major airport is in Las Vegas, Nevada, approximately 92 miles from the Kelso Depot via paved secondary roads and Interstate Highway 15. The historic railroad community existed primarily because its residents provided support services for railroad operations. The present community provides similar railroad operations support.

The structure is located on lands with title in the United States of America. Other immediately adjacent land owners include: the Union Pacific Railroad between the depot and first railroad track (operational main line) to the south (or in front of the building); and the remains of a store and post office across the street to the northeast, owned by a local resident.

PURPOSE OF PROJECT AND PROPOSED TREATMENT

The project objective is preservation of the Kelso Depot structure and site by active, productive use for public education of the Mojave Desert environment and the history of the area and association with national historical trends and events through interpretation of railroad and local history. As identified by the Planning Team, park operations activities will also be provided with office space for support functions, such as interpretation, law enforcement and maintenance, and because of the remoteness of the site, quarters for park staff, research cooperators and volunteers.

The proposed building treatments include: repair and replacement of deteriorated, damaged or missing building materials and components; structural improvements, including seismic retrofit; modifications for emergency egress and accessibility and new mechanical and electrical systems.

The historic data indicates sufficient information is available that consideration could be given to restoring and refurnishing the Lobby and Lunch Room to its original design to serve in part as a

historic room interior. In any case the original cashier's counter and registration desk, which is still in place, should be restored to serve as the information desk. Further, consideration could be given to the restored Lunch Room providing minimal food service, at least cold water and cold soda pop, fruit juice, etc. The Ticket Office and Waiting Room should also be refurnished. Based on the historic data, the details of refurnishing would be developed in a Historic Furnishing Study.

ESTIMATED REHABILITATION COSTS

The estimated construction cost for rehabilitation of the Kelso Depot building only is $2,162,000. If the NPS develops its own water supply system, the cost is estimated to be approximately $626,000. Estimates are "Class C", that is, preliminary design level, and are "net construction" costs; design and construction management are not included.

The recommended restoration of the grounds in front of and at the ends of the building is estimated at $99,000. Although this report includes criteria and a possible scheme for development of the remainder of the building grounds (at approximately $303,000), the final design could be influenced by recommendations made in a Development Concept Plan for the two NPS owned land parcels. Therefore, these cost estimates for site development only provide initial guidance for this portion of the project.

There are also many unresolved aspects and unknown factors which will determine how site utilities will be handled and will thus influence the costs. For the purpose of this report, site utility estimated development costs are based on an assumption of the NPS providing its own water source and storage. These are basic costs and would need to be adjusted for test well findings, location of wells and storage, equipment sizing and other factors. Insufficient information is available at this time to determine sewage disposal requirements or alternatives; therefore, no estimates are included.

FUNDING

Portions of the project work could be accomplished, in the initial phases, by "day labor", small construction contracts, or NPS preservation training/restoration/maintenance. The preferred major rehab construction would be a single advertised construction contract.

PROJECT PHASING

If funding is not available for basic rehabilitation to be accomplished by a single construction contract, the work can be phased. This, however, increases the total outlay because the administrative, contract document preparation, contractor overhead and profit and project supervision costs increase as a proportion of the total construction. Phasing of the construction would need to be planned to cause the least disruption of work accomplished in a previous phase.

Provided that adequate water volume and pressure is available, a recommended initial project is installation of an automatic fire suppression system and a fire and intrusion detection system. Preparation for such installations should include abatement of any remaining asbestos containing materials and removal of recent interior finishes materials.

Although there is a need and concern for providing interim public restroom facilities, it is recommended that such facilities not be provided within the building until adequate site utility services are available, the building can be staffed to provide on-site security and building rehabilitation is sufficiently complete for public occupancy. Interim facilities should be provided outside the building, with several alternative approaches available.

RELATED STUDIES

An archeological evaluation of the site is reported in *The Kelso Depot: An Archeological Evaluation*, by Steven E. Daron, February 1997. The evaluation is reproduced in the appendixes of this report. Significant site elements include: the remaining brick edging of the track platform; the brick walks, remains of the lawn, palm trees and flag pole in front of the building; and the coal and storage shed behind the building.

CULTURAL RESOURCE DATA

The structure has been determined eligible for the National Register of Historic Places. The period of significance is identified as 1925-1945 in the National Register registration form, dated September 30, 1991. The architect/builder of the structure was the Office of the Chief Engineer, Los Angeles and Salt Lake Railroad. The extant plans include construction drawings issued May 31, 1923, and revised December 12, 1924, to "as-constructed" drawings. A small wooden shed behind the structure is also included in the National Register nomination.

The National Register form describes the significance of the Kelso Station:

> ...The station retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. ...lodging, bathing, food and recreation — provided by this facility allowed the Union Pacific to meet increased traffic demands, with helper locomotives from Kelso ensuring continued eastward train movement over Cima Hill. During the hectic days of World War II, the facilities at Kelso ensured provision of essential services for train crews moving war materials westward for the Pacific Theater. ...it is a rare surviving station on the San Pedro, Los Angeles & Salt Lake/Union Pacific Railroad in California, and a rare surviving example of the railroad hotel/restaurant/club house. ...[1]

However, research for the National Register form was not thorough and a primary aspect of the significance of the building was not identified — that its Lunch Room was also designed for and served as a meal stop for some passenger trains.

MATERIALS DISPOSITION RECOMMENDATIONS

It is recommended that originals or copies of historic documentation, test results, field notes or other research materials generated for development of this Historic Structure Report or for

1. National Register Registration form, Section 8 continuation, page 7.

preparation of construction documents be cataloged and stored in park collections or records as appropriate.

It is also recommended that historic materials or equipment modified or removed from the building before or during construction be documented with photographs, drawings and written descriptions as applicable for permanent record. Samples of removed materials or equipment as recommended in this report should be placed in a building artifact collection.

SUMMARY OF ARCHEOLOGICAL DATA

An archeological survey of the site was conducted in June 1995 and subsurface testing was conducted in March 1996. The results are reported in *The Kelso Depot: An Archeological* Evaluation, by Steven E. Daron, February 1997. The evaluation is reproduced in the appendixes of this report.

Significant site elements include, in addition to the depot building (Feature 32): the remaining brick edging of the track platform (Feature 11); the brick walks (Feature 19), remains of the lawn (Feature 18), palm trees (Feature 24) and flag pole (Feature 25) in front of the building; the coal and storage shed (Feature 12) behind the building; the lighted sign-post base (Feature 20); and historic utility manholes (Features 13, 29 and 30).

Some features listed as having unknown significance may be of possible significance — future research may provide sufficient information for determinations to be made. The concrete curb (Feature 33) along the railroad tracks, may have been the outer edge of the brick platform. It is possible that the concrete foundation (Feature 4) on the west side of Kelbaker Road may be the remains shown on UP maps of a Kelso Jail. The importance of the grave or memorial marker (Feature 16) west of the building has not yet been determined. During construction of the depot basement, a flash flood filled the excavation, which evidently prompted the Union Pacific at some later date to construct the levee (Feature 35).

Features indicated as significant contributing elements are to be preserved. Until information is available for determination, it should be assumed that the features indicated as having "unknown" significance in the evaluation should be preserved as well.

The historical research indicates that there was a depot dump site across the road to the north. Because it was on private land, the archeological survey did not include the site. That dump, however, is likely to contain broken fragments of the original white Lunch Room counter top, which would allow identification of the material of which it was made, and possibly remains of the original Lunch Room stools and their bases. There also almost certainly would be broken china and flatware which would allow positive identification of the different styles of china and flatware used in the Kelso Lunch Room over sixty-one years.

DEVELOPMENTAL HISTORY

Photo 3: Kelso Depot, February 1995. Photo by Thomas Mulhern, NPS.

DEVELOPMENTAL HISTORY

KELSO, CALIFORNIA, AND ITS LEGACY

A motorist driving down one of the massive *bajadas* or alluvial fans which characterize a central part of Mojave National Preserve in the Great Mojave Desert of southeastern California during the 1990s suddenly would encounter a rather large, empty white building in the Spanish mission style of architecture, standing nearly alone alongside modern, high speed main line tracks of the Union Pacific Railroad's Los Angeles to Salt Lake route. A few ruined buildings to the northeast, and some modern prefab housing southeast of the tracks, alone hinted that this might at one time have been a small town. But could it ever have been a town large enough to accommodate a railroad depot so large and imposing as this white building with red tile roof? It hardly seemed possible.

Yet here stood the Kelso Depot, the largest and most imposing surviving building within the boundaries of the Mojave National Preserve.

In fact, Kelso as a settlement or town never did require a depot so large, except perhaps in the boom times of World War II and of iron mining at nearby Foshay Pass during the 1940s.

The Kelso Depot in fact was more than a depot, for here the Los Angeles and Salt Lake Railroad, a part of the Union Pacific System, combined in a single building a depot and an employees' boarding and rooming house with billiard room and library, and a restaurant which served both employees and as a meal stop for passenger trains without dining cars. In contrast, at Yermo, just east of Daggett, 72 miles west of Kelso, the railroad built around this same time separate buildings to serve as a depot, and as the employee boarding and rooming house and entertainment center. But at Kelso, the railroad combined all of these facilities in a single building.

Early in the 20th Century before the coming of diesel-electric locomotives, huge, powerful steam locomotives, which demanded copious and periodic infusions of boiler water and fuel oil, struggled over mountain passes such as Cajon and desert divides such as Cima Hill, and railroad traffic required many more railroad employees working under much more primitive conditions than today. The sixteen hour law which put a cap on how long they could work helped to dictate where they would lay over for eight hours of sleep and for meals. And if no city or town existed where railroad crews needed to lay over, the railroad would have to build one. Furthermore, in those days before multiple-unit operation of modern diesel-electric locomotives eliminated the need, stiff grades such as that up Cima Hill east of Kelso required the addition of "helper" locomotives to freight and passenger trains, which created the need for a town to serve as a "helper station," with a "roundhouse," a sort of garage for locomotives, complete with mechanics to make minor and "running" repairs, and crews to man the "helper" locomotives.

Thus the Kelso Depot is a window into a past age, when railroads were far more important as a means of transportation than they are in the present age of government-built Interstate Highways accommodating individual motor vehicles and massive freight trucks, and movement of a high volume of passenger traffic by jet aircraft operating out of government-subsidized airports.

The modern, heavy steel welded ribbon rails of the Union Pacific main line tracks passing the Kelso Depot carry huge tonnages of freight, and until May 10, 1997, when a Congress intent on cutting further the budget of the National Railroad Passenger Corporation, eliminated it, Amtrak's

streamlined *Desert Wind* passenger train continued to pass by the Kelso Depot in its eastbound and westbound runs between Los Angeles and Salt Lake City, a reminder of passenger traffic of the past.[2]

TRANSCONTINENTAL RAILROADS IN THE AMERICAN WEST

Kelso constituted virtually a railroad company town for most of its history, on a railroad line that could be construed as part of a transcontinental route, but one which came late in the history of construction of such routes. It is necessary to understand the basic background of transcontinental railroad construction to understand the railroad of which the Kelso Depot was a part.

During the early 19th Century the United States gave birth along the Atlantic Seaboard to a new industry — the railroad. As the decades passed, the new technology grew and expanded and evolved and continually improved. Tempered and in various ways both accelerated and retarded by Civil War, the railroads which by 1861 had extended their networks of tracks throughout the eastern and southern United States were ready to follow the dictates of Manifest Destiny by extending clear across the continent to the Pacific Coast. During the remainder of the century, five great transcontinental routes would span the United States, which actually meant spanning the West from the valleys of the Mississippi and Missouri Rivers which provided maritime access to the Gulf of Mexico and the Atlantic Ocean, to the Pacific shore or at least its navigable rivers, the Sacramento and the Columbia. The eastern quarter of that leap westward lay across the Great Plains, terrain comparatively unchallenging to railroad engineers except for such obstacles as hostile Lakota, Cheyenne, and Arapaho Indians and monstrous herds of wild buffalo. Beyond, however, lay mountain ranges like none any railroad ever had crossed in Europe or the United States: the Rocky Mountains with peaks up to 14,000 feet in altitude and passes ranging from around 7,000 to 11,000 feet, and the Sierra Nevada guarding California from the east, a granite barrier with horrendous winter snows unlike anything eastern railroads had ever encountered. Between lay arid deserts with few sources of fuel or locomotive water, and much of what little water existed in these deserts was naturally polluted with minerals which made it unsuitable for use in locomotive boilers. Furthermore, much of the land lay yet undeveloped, and the railroads would themselves have to aid such development if the lands were to offer them passengers and freight to carry.

The first of these great transcontinental railroads came in the form of a joint line, the Union Pacific Railroad, building from Omaha, Nebraska, to northern Utah Territory; there it would meet at Promontory Summit on May 10, 1869, the Central Pacific Railroad, building east from navigable water at Sacramento, California, across the Sierra Nevada and the deserts of Nevada and Utah. This pioneering "transcontinental" railroad across the central regions of the Great West would remain the *only* transcontinental line for 11 years.[3] Meanwhile, the builders of the Central Pacific, having

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2. "Amtrak goes down to the wire on train-offs," in the "Railroad News" section, *Trains*, Vol. 57, No. 6, June 1997, p. 16. In addition to reporting the demise of the *Desert Wind*, the article went on to say, "It's possible that service will come back in 1998 on the southerly portion of the *Wind's* route, for Amtrak West is negotiating with potential private and public partners toward an L.A.-Las Vegas 'demonstration,' once Talgo trains now being assembled in Washington state become available . . . "

3. Stuart Daggett, *Chapters on the History of the Southern Pacific*, pp. 1-118; John Debo Galloway, *The First Transcontinental Railroad: Central Pacific - Union Pacific*, in its entirety; George Kraus, *High Road to Promontory: Building the Central Pacific across the High Sierra*, in its entirety; Gerald M. Best, *Iron Horses to Promontory*, in its entirety; Maury Klein, *Union Pacific: Birth of a Railroad, 1862-1893*, pp. 7-234.

acquired a line from Sacramento to tidewater at Oakland on San Francisco Bay, decided to construct a new line they organized as the Southern Pacific from San Francisco southward into southern California, and then eastward partially across the lands of the Gadsden Purchase from Mexico, which had been negotiated in 1854 to acquire a route for a railroad, across southern Arizona Territory and New Mexico Territory into Texas. Meeting the subsidiary Galveston, Harrisburg and San Antonio Railway on a bridge two and a half miles west of the Pecos River on January 12, 1883, it would form a through route from San Francisco to the Atlantic seaboard in the form of the Gulf Coast and, to be more precise, the Mississippi River near its mouth at New Orleans, Louisiana.[4]

Between these two transcontinental lines, along what the U.S. Army Corps of Topographical Engineers had surveyed during the 1850s as the 35th Parallel Route, an Atlantic and Pacific Railroad had been projected between St. Louis and San Francisco, California. The original Atlantic & Pacific Railroad stalled before it got across the Plains, and reengineered itself as the St. Louis-San Francisco Railroad, while a competitor, the Atchison, Topeka & Santa Fe Railroad built from eastern Kansas to Santa Fe and Albuquerque. Then jointly the S.L.-S.F. and the Santa Fe organized the Atlantic and Pacific Railroad, Western Division, to construct track from Albuquerque (actually from Isleta Pueblo a short distance south of Albuquerque) to southern California across northern New Mexico and Arizona. The Atlantic & Pacific, Western Division, destined to become wholly a part of the Santa Fe System, reached the Colorado River at the California border, completed a bridge over the Colorado, and connected with the Southern Pacific on August 8, 1883. A year later the A.& P. acquired access through a traffic agreement with the Southern Pacific for its trains to reach San Francisco. Subsequently, it added, by new construction and by purchase of various short lines, its own trackage from Barstow over Cajon Pass to Los Angeles; furthermore, it soon acquired its own line across Tehachapi Pass and the great Central Valley of California to Richmond on the eastern shore of San Francisco Bay, and by passenger ferryboat and railroad tugboats and barges, reached San Francisco itself.[5] Along the way, another branch of the Santa Fe had met the Southern Pacific at Deming, New Mexico, on March 8, 1881, which provided a track connection to California even before the Atlantic & Pacific had completed its through route, except that the Southern Pacific would route no eastbound traffic via the Santa Fe, thus in effect nullifying the route for two-way transcontinental traffic.[6]

Concurrently, during the 1870s, the Northern Pacific Railroad, for many years a creature of Jay Cooke, pushed construction westward from St. Paul, Minnesota, across the northern Plains of North Dakota and Montana, and eastward across the Cascades and the Rocky Mountains, from Seattle and the Puget Sound region, completing yet another transcontinental link across the west on August 23, 1883, followed by a formal "Gold Spike" ceremony and actual opening of the railroad for business

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4. The literature on the history of the first transcontinental railroad is extensive. See: Neill C. Wilson and Frank J. Taylor. *Southern Pacific: The Roaring Story of a Fighting Railroad*, pp. 74-78; Stuart Daggett, *Chapters on the History of the Southern Pacific*, pp. 119-227; Guy L. Dunscomb, *A Century of Southern Pacific Steam Locomotives, 1862-1962*, pp. 363-432 contains a capsule corporate history of the 300 companies that made up the Central Pacific and Southern Pacific Railroads. See also, John Debo Galloway, *The First Transcontinental Railroad: Central Pacific — Union Pacific;* and for a pictorial treatment, Lucius Beebe, *The Central Pacific and the Southern Pacific Railroads.*

5. Glen Danford Bradley, *The Story of the Santa Fe*, pp. 224, 236; James Marshall, *Santa Fe: The Railroad that Built an Empire*, pp. 166-167; L.L. Waters, *Steel Trails to Santa Fe*, p. 71; The most recent and scholarly history of the Santa Fe is Keith L. Bryant, *History of the Atchison, Topeka & Santa Fe Railway*, pp. 90-105.

6. Bradley, pp. 225-226; Marshall, pp. 166-167; Waters, p. 60; Bryant, pp. 79-80.

on September 8, 1883, at Gold Creek, Montana, 55 miles west of Helena.[7] Finally, guided by James J. Hill the Great Northern Railway built across a route parallel to and near the Northern Pacific, but just a bit farther north, the rails from east and west meeting near Scenic, Washington, on January 6, 1893.[8]

By the century's end, the United States featured five great transcontinental linkages between the Mississippi-Missouri Valleys and the Pacific Coast: the Central Pacific-Union Pacific Railroads; the Southern Pacific and Galveston, Harrisburg and San Antonio Railroads; the Atchison, Topeka & Santa Fe and Atlantic & Pacific Railroads; the Northern Pacific Railroad; and the Great Northern Railway. Furthermore, as will be discussed below, the Union Pacific drove a subsidiary, the Oregon Short Line Railroad, northwest from Wyoming to a junction with the Oregon Railway and Navigation Company which gave it access to navigable Pacific Ocean waters via the Columbia River at Portland, Oregon.

From the point of view of the Union Pacific, their problem lay in that the company owned only half of a transcontinental railway, the other half being the Central Pacific, eventually under Southern Pacific control and later absorbed by the Southern Pacific, west of Ogden. The Union Pacific at first had no direct outlet of its own to tidewater on the Pacific Ocean. By 1884, another railroad combination, the Denver & Rio Grande Railway and the Denver & Rio Grande Western Railway, had constructed a link between Denver and Ogden, paralleling the Union Pacific not far south of it, which gave the Central Pacific *two* sources of traffic in Ogden, and two outlets to the east of Ogden — the Denver & Rio Grande connected in Colorado with a couple of lines eastward. Collis Huntington's Central Pacific thereafter would split its business at Ogden between the Union Pacific and the Denver & Rio Grande combine, thus diluting UP profits. (There eventually would be fascinating legal maneuvering over the handling of freight and passenger traffic through the "Ogden Gateway," as it was known.)[9] One U.P. response was to seek its own outlet to the Pacific, building the aforementioned Oregon Short Line Railroad from western Wyoming to the Columbia River in Oregon — eventually Portland, a riverine port accessable to oceanic shipping. The OSL met a local line building eastward, the Oregon Railway & Navigation Company, at Huntington, Oregon, on November 25, 1884, and eventually would first lease, then acquire, the O.R.& N. This gave the Union Pacific its own direct through route to the ocean via the Columbia River at Portland, bypassing the Central Pacific in one sense, although not giving the U.P. direct access to any California markets.[10]

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7. Louis Tuck Renz, *The History of the Northern Pacific Railroad*, pp. 98-101. (Actually, the railroad still had to build a line to Seattle, which it did not complete until July 6, 1884).

8. Charles Wood and Dorothy Wood, *The Great Northern Railway; A Pictorial Study*, p. 157.

9. Robert G. Athearn, *Rebel of the Rockies: A History of the Denver & Rio Grande Western Railroad*, pp. 122, 128-144; The Denver & Rio Grande Railway, building west from Colorado, and the Denver & Rio Grande Western Railway, building east from Salt Lake City and Ogden, met at Desert Siding in eastern Utah Territory on March 30, 1883; see also, Gordon Chappell, "Narrow Gauge Transcontinental, I; Scenic Line of the World," in, Chappell and Cornelius Hauck, *Scenic Line of the World*, the *Colorado Rail Annual* for 1970, which contains the most thorough account yet of building this line; see pp. 74, 75 for its completion.

10. Maury Klein, *Union Pacific: Birth of a Railroad, 1862-1893*, pp. 7, 119, 438, 551, 559-564, 566-579, 583, 612-614, 616, 623, 626, 641; Jeff Asay, *Union Pacific Northwest; The Oregon-Washington Railroad and Navigation Co.*, pp. 42-44.

Not until the 20th Century would railroad builders fill in the spaces between the five great transcontinentals with lines of intermediate and short length, sometimes built as branches of the great transcontinentals, sometimes as independent railroads, sometimes as independent railroads swallowed up by the great transcontinentals. Yet two more true transcontinentals, at least insofar as spanning the West was concerned, remained to be built: the Denver & Rio Grande Railroad already existed from Denver to Salt Lake City as an east-west line midway between the Union Pacific and the Santa Fe, and George Gould would create a Western Pacific Railroad to build from Salt Lake City across Utah, crossing the old Central Pacific in Nevada, and crossing the Sierra north of the Central Pacific's Donner Pass, meeting construction from the west on the bridge a half mile west of the later Keddie, California, at 4:05 p.m., November 1, 1909, then reaching tidewater finally in the Central Pacific's own former terminus of Oakland. Eastward from Pueblo, Colorado, Gould's Missouri Pacific provided a connection to the Missouri River. Thus he had cobbled together from these three lines yet another transcontinental.[11]

In the northern tier, others had extended the Chicago, Milwaukee and St. Paul Railway into the Chicago, Milwaukee, St. Paul and Pacific Railway which completed its line between Chicago and Puget Sound on May 14, 1909, though the line did not provide full through service until August 15, 1909, and it was not until May 28, 1911, that the railway began offering through passenger service on the new trains *Olympian* and *Columbian*, thus forming a seventh transcontinental.[12]

Where did the Salt Lake Route fit into this framework of transcontinental railroad construction? It has been argued that in building a railroad between San Pedro, on tidewater in the Los Angeles Basin, northeastward across California, Nevada, and Utah to Salt Lake City, Senator William Andrews Clark constructed an eighth transcontinental railroad. But his line extended no farther east than Utah, where it connected with existing portions of other true transcontinental lines: the Union Pacific and the Gould lines. The Union Pacific, in fact, in the form of the Oregon Short Line, had been inching its way southwest from Salt Lake City for nearly three decades. In one sense, while eventual acquisition by the Union Pacific gave it seemingly the character of yet another transcontinental line, as did the Union Pacific's construction of the Oregon Short Line toward the Pacific Northwest, Clark's line actually represented the infilling of country not yet tapped by other lines rather than constituting a true new transcontinental railroad, for while all of the other true transcontinental lines represented a new link all the way from the navigable water connected with the Atlantic in the Mississippi-Missouri basins to the Pacific, Clark's San Pedro, Los Angeles and Salt Lake Railroad represented a new link only between the western foot of the Wasatch Mountains of Utah, and the Pacific. It did not cross the Rocky Mountains or traverse the Great Plains, as did all the true transcontinentals. It could, however, be argued that in terms of their effects on traffic patterns, both the OSL/OR&N and the Salt Lake Route did represent true transcontinental links, for both became in the 20th Century heavily used main line routes. This, then, is the context for construction of the early 20th Century railroad between Los Angeles and Salt Lake City. Built initially in opposition to Union Pacific interests, the U.P. having moved from Salt Lake City haltingly in the direction of southern California as early as the 1870s, by compromise with the Union Pacific in the form of eventual joint ownership, it would give the Union Pacific a second route to tidewater on the Pacific shore, in southern California, and thus access to the coveted California markets.

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11. Robert G. Athearn, *Rebel of the Rockies*, pp. 189-215; Guy L. Dunscomb and Fred A Stindt, *Western Pacific Steam Locomotives, Passenger Trains and Cars*, p. 11.

12. August Derleth, *The Milwaukee Road; Its First Hundred Years*, pp. 186-187.

How ironic that in late 20th Century consolidations, the Great Northern Railway, the Northern Pacific Railway, the Chicago, Burlington & Quincy Railroad, and in 1996 the Atchison, Topeka & Santa Fe Railway and various short and intermediate lines all would end up in the corporate blender of a sequence of massive mergers resulting in the Burlington Northern Santa Fe Corporation, creating a single massive railroad operating from Puget Sound to the Gulf of Mexico and from Chicago to San Francisco and Los Angeles. Paralleling that astounding and unprecedented sequence of mergers, the Union Pacific Railroad would by the end of 1996 swallow up not only the Chicago and North Western Railway, but then in one massive gulp the whole system of the Southern Pacific and the Denver & Rio Grande Western, creating a second monstrous railroad under the simple name Union Pacific reaching from Portland to New Orleans and from Chicago to San Francisco and Los Angeles. What would Jay Cooke, Jay Gould, Henry Villard, Collis P. Huntington, Edward Henry Harriman and William Andrews Clark have thought of that?!

The Union Pacific Railroad

Incorporated on July 1, 1862, the Union Pacific Railroad constructed, as mentioned above, the eastern half of the nation's first transcontinental railroad during the 1860s, its main line extending from Omaha, Nebraska, westward to Promontory Summit, Utah (later cut back to Ogden, Utah). Subsequently the Union Pacific took over the Utah Central extending south from Ogden to Salt Lake City, and the Utah & Northern, originally a narrow gauge line, extending northward from Ogden through Idaho into Montana, and it built or absorbed other local lines which gave it access from Cheyenne to Denver (the Denver Pacific), between Kansas City and Denver (the Kansas Pacific, originally the Union Pacific, Eastern Division, though in essence a separate railroad from the UP itself), the Union Pacific, Denver and Gulf Railway from Denver through Colorado and New Mexico into Texas, and narrow gauge lines into the Rocky Mountains of Colorado such as the Denver, Leadville and Gunnison Railway (originally the Denver, South Park and Pacific). It also built the Oregon Short Line Railroad from a station on its main line in what now is Wyoming northwest across Idaho and into Oregon and acquired Oregon Railway and Navigation Company trackage to reach navigable Pacific waters at the Columbia River at Portland.[13]

The railroad's early economic troubles led to consolidation and reorganization of the Union Pacific Rail*road* as the Union Pacific Rail*way* on January 24, 1880. But that company, too, entered bankruptcy after the Silver Crash of the early 1890s, from which it emerged on July 1, 1897, reverting again to the original name, Union Pacific Rail*road*. Such minor changes in corporate titles commonly resulted from reorganization after bankruptcy among American railroads, but the terms "railroad' and "railway," while interchangeable in common usage, were *not* interchangeable in the proper title of a company, and generally designated a specific and definable period in that company's history.[14]

13. The best history of the Union Pacific is in two volumes: Maury Klein, *Union Pacific: Birth of a Railroad, 1862-1893,* and *Union Pacific: The Rebirth, 1894-1969.*

14. Klein, Vol. I, pp. 400-417; 641-658.

Early History of the San Pedro, Los Angeles and Salt Lake Railroad

In August 1900, eager to become a railroad magnate, Senator William Andrews Clark, a wealthy mine owner with rich copper holdings at Helena, Montana, and Jerome, Arizona Territory, purchased the Los Angeles Terminal Railways, a switching line in Los Angeles, California, which essentially connected various railroads with each other and with trackside industries, though already it had grown beyond its small beginnings. Using its corporate structure as a springboard and as access across Los Angeles, Clark started surveys under Henry Hawgood for a railroad from Los Angeles eastward across California and then northeast across Nevada and Utah to Salt Lake City. In so doing, Clark was, as mentioned, infringing on a long-standing objective of the Union Pacific Railroad, which had plans to build southwest from Salt Lake City to Los Angeles, and in fact had already undertaken some steps in that direction.[15]

At the other end of his projected route, Clark had also made a strategic purchase. He had bought in secret the franchise of a "paper railroad," one that had been incorporated and thus had a legal existence even though it had not yet constructed any track, purchased any locomotives or cars, or operated any trains. Owning this "Utah and California Railroad" gave him a right-of-way from Salt Lake City to the Nevada-Utah border. Clark then managed to obtain right-of-way across a part of Nevada.

On March 20, 1901, Senator Clark, along with his brother, J. Ross Clark, and others, formed the San Pedro, Los Angeles and Salt Lake Railroad Company. The story of its construction is complex and fraught with battles both legal and physical between the San Pedro, Los Angeles and Salt Lake Railroad and the Union Pacific Railroad System. Corporate rivalries, and the personal rivalry between Edward Henry Harriman of the Union Pacific and Senator Clark were settled by a secret agreement of July 9, 1902, in which certain Union Pacific (actually subsidiary Oregon Short Line Railroad) trackage (most of which Union Pacific subsidiaries had built years earlier), was sold to Clark's Salt Lake Route in exchange for half of the stock in the San Pedro, Los Angeles and Salt Lake Railroad. Thus the Union Pacific acquired half ownership of Clark's line two and a half years before it was completed, and it was thus partially a Union Pacific property practically from the beginning.

Construction of the San Pedro, Los Angeles & Salt Lake Railroad eastward from Los Angeles reached Siding No. 16 in April 1904, and a tent camp for railroad construction grew there. Apparently, there also were three trackside warehouses, one, at least, for the storage of sacked borate ore awaiting shipment. The warehousemen assigned to two of these three structures wanted some name other than "Siding No. 16" for the place, so each wrote his name on a piece of paper, and prepared one for the third man who had just moved away, then scrambled the papers in a hat

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15. Three excellent volumes on the Salt Lake Route have proved fundamental and basic secondary works underpinning this Historic Structure Report: David F. Myrick wrote a pioneering study of the building of the San Pedro, Los Angeles & Salt Lake Railroad as a chapter in his *Railroads of Nevada and Eastern California, The Southern Roads.*, Vol. 2, (Berkeley: Howell-North Books), 1963, pp. 623-683; John R. Signor, *The Los Angeles and Salt Lake Railroad Company; Union Pacific's Historic Salt Lake Route.* (San Marino: Golden West Books, 1988), is the most complete textual and pictorial history of the Salt Lake Route; and most recent, Mark W. Hemphill, *Union Pacific Salt Lake Route.* (Erin, Ontario: The Boston Mills Press, 1995), offered a color pictorial sequel to Signor's work, dealing principally with the era of diesel-electric locomotives on the Salt Lake Route, and using comparatively recent all-color illustration, but also with useful sections of text and informative photo captions. All of these volumes contain background on the construction and operation of the Salt Lake Route in far greater detail than can be included in this report, and the reader is referred to them for a thorough understanding of the railroad on which Kelso served as one helper station.

and finally drew one out: it bore the name of the warehouseman who had left, John H. Kelso, and thus the place became "Kelso."[16]

The last spike completing the railroad was driven on the afternoon of Friday, January 30, 1905, near a siding west of Las Vegas in southern Nevada where construction crews working eastward from Los Angeles and those working southwest from Utah had met. It was not until February 9, 1905, that the first through train operated from Salt Lake City to Los Angeles, and the line did not formally open for business until May 1, 1905.[17]

THE REASONS FOR A RAILROAD COMPANY TOWN AT KELSO

Kelso became an important railroad town for two reasons: (1) the stiff two per cent grade between Kelso and the summit 18 miles to the east originally called "Kessler Summit," later renamed "Cima," 2,078 feet higher than Kelso, and (2) a reliable source of water from deep wells fed by springs flowing down underground from the Providence Mountains to the southeast. Kelso lay near the western foot of several *bajadas* or huge alluvial fans from the Mid Hills and the Providence Mountains which merged to form a steeply sloping section of desert. These *bajadas* between the mountains formed a ridge 18 miles east of Kelso. On the east side of the ridge, the L.A.& S.L. surveyors were able to plot a comparatively gentle one per cent grade down from the ridge into the Ivanpah Valley en route to Las Vegas, Nevada. But on the west side, from Kelso to Cima, the grade proved a comparatively stiff 2.2 per cent. A steam locomotive could negotiate a grade as steep as four per cent, but it would be slow, hard work, requiring the consumption of much fuel and water, a locomotive could not pull much tonnage up such a grade, and it was not desirable for any main line railroad. (In exceptional circumstances, a rod locomotive even managed seven per cent, but that was on a virtually unique narrow gauge branch line in Colorado, and no model to be followed in the Mojave.) On a main line railroad any grade over 2 per cent would require the use of an additional "helper" locomotive from near the bottom of the grade to the top, and thus a

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16. Allan Krieg, "Building a Railroad through the Mojave," in Patricia Jernigan Keeling (Editor), *Once Upon a Desert*, pp. 136-138. Krieg identified Kelso as Siding No. 16 and Kessler Summit, which became Cima, as Siding No. 21. Krieg was an employee of the Public Relations Department of the Union Pacific Railroad at the time he wrote this, and had access to official San Pedro, Los Angeles & Salt Lake Railroad records. The best source on the naming of the town of Kelso and on John H. Kelso himself are two letters from John D. Kelso and Marie A. Kelso, Tuesday, March 6, 1984 and Friday, April 6, 1984, to Velma Pennington, published in the *Baker Valley News*, Vol. III, No. 24, p. 2. John and Marie Kelso had visited the town named after John's father, John H. Kelso, on February 27, 1984, and talked with Postmistress Pennington. John said his father, born March 17, 1868, had as a young man driven 20 mule teams hauling borax, then got a job in the borax warehouse at the new railroad station on the San Pedro, Los Angeles and Salt Lake Railroad. He spent 10 or 12 years in the desert, some of them as a prospector, and eventually owned a small gold mine. When he left the desert he worked as a lumberjack topping trees in northern California and Oregon, and also worked as a ranch hand and eventually had his own ranch. He also drove a water truck for Modesto County, keeping dust down on the roads. He died in July 1935 in Modesto.

17. The exact site of completion of the railroad appears lost, and there are several candidate locations, roughly 43 miles west of Las Vegas, Nevada. The railroad planned no grand celebration; Mark Hemphill, p. 28: "Disappointed that no official golden spike celebration of Promontory proportions was planned, the wife of SPLA&SL general manager R.E. Wells had a tiny gold spike made up. After the last steel spike was driven, chief engineer E.G. Tilton pushed the miniature spike into the last tie with his thumb. A cheer went up from the workmen, and a construction locomotive rolled over the last rails." See also, Signor, p. 39; Signor said a Harris track-laying machine was the first rolling stock to cross the completed joint.

railroad would establish a "helper station" near the foot of such grades, generally with wye tracks, a roundhouse, houses for employees, a depot, locomotive water and fuel facilities, and so forth.[18]

A helper locomotive might be coupled onto the front of a train, ahead of the regular or "road" locomotive; in a freight train it might be coupled into the middle of the train, especially when the railroad had one or more bridges that could not stand the weight of two locomotives coupled together; or, again principally with freight trains, it might be coupled to the rear of the train, for safety reasons preferably ahead of the caboose, so that it was not pushing a car containing crewmen, which in some circumstances could telescope or derail, causing injury or death. Not infrequently a train facing an especially heavy grade might require more than one helper, perhaps as many as two or three, perhaps more.

Actually, Kelso was not even the bottom of the grade to Cima from the west; that was at Cork at an elevation of 994 feet, the sixth siding west of Kelso, a distance of 28.7 miles, but the best available water for watering helper locomotives was at Kelso at an elevation of 2126 feet, so Kelso became the helper station instead of Cork, or any of the sidings between: Balch, Sands, Glasgow, Kerens, and Flynn. Furthermore, the grade to Cima became stiffer just east of Kelso. Nevertheless, it was sometimes necessary for Kelso to send a helper west to Balch to assist an especially heavy eastbound freight or passenger train; more often, helper locomotives went to Sands to meet eastbound trains. In later years, helper locomotives routinely went to Sands for No. 104, the eastbound, streamlined *City of Los Angeles*. By picking up its helper at Sands, the passenger train could make a better run at the hill to Cima, and would not even stop at Kelso. A large steam locomotive "helping" the armour yellow, diesel-electric-powered, streamlined *City of Los Angeles* made quite an impressive sight. So Kelso was not necessarily ideally situated to provide helper service, but the reliable water supply at Kelso made it the helper station even though it was part way up the grade to Cima at 4204 feet of elevation.[19]

Usually at Kelso, helper locomotives would be coupled to the front of eastbound trains to assist them to the summit at Cima, where the helper locomotives would uncouple, turn around on the wye tracks north of the main line, and then drift downgrade westward "light" (without train) back to Kelso, where they would again turn on the Kelso wye and be parked or "spotted" there until their service was needed again. Some westbound trains proved heavy enough to require helper service, in which case an eastbound helper locomotive on an earlier train after reaching Cima would continue eastward down the gentler one per cent grade to Desert, just west of the Nevada line, where they would await the arrival of the westbound train needing assistance to Cima, and

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18. Signor, see profile opposite p. 114; Hemphill provides a similar profile in the endpapers to his book, and see also p. 74. It was the Denver & Rio Grande Railroad that operated rod locomotives on the incredible seven per cent grades of the Calumet Branch north of Salida, Colorado. See Dick Dixon, "The D.& R.G.'s Calumet Branch and the Turret Mining Area," in *Trails Among the Columbine, A Colorado High Country Chronicle*, 1995-1996 (Denver: Sundance Publications, Ltd., 1996), pp. 15-19.

19. Signor, p. 122, 148-149; Hemphill, pp. 74, 78-79, described a disastrous runaway through Kelso that occurred on November 17, 1980 which killed an engineer, a conductor, and a head brakeman, as one train rear-ended another four times. Art Francis, letter to the author, January 4, 1997, with enclosed review comments on an early draft of this study, commented on p. 1 of the enclosure, "Helpers were no doubt sent [to] Balch to pick up a train, but most were met at Sands. Helpers routinely went to Sands for No. 104, the City of Los Angeles. This was the streamliner and did not stop at Kelso unless it was to pick up a helper. By going to Sands, there was no stop in Kelso, and the train could make a run at the hill. I remember my dad telling stories about how they would come through Kelso with the cut-off [on the steam locomotive helper] set just right to make the stack bark and which engines sounded the best when they were helping the streamliner."

eventually return to their station at Kelso. On certain occasions, Las Vegas supplied helper locomotives westbound to Cima.[20]

The original depot at Kelso, built in 1905, was a single story, 22 by 33 1/2-foot, wood frame, hip-roofed building with two brick chimneys and a bay window for the agent-telegraph operator on the track side. Kelso at that time had no electricity, so kerosene lights illuminated the depot, and batteries powered the telegraph. The first station agent was G.L. Stafford, who assumed those duties when Kelso became a station on the railroad, then still under construction in 1904. He served also as the telegrapher. Up until this assignment, Stafford had been a "boomer" telegrapher; a "boomer," whether an engineer, fireman, conductor, telegrapher, or other railroad employee, was a man with wanderlust who moved from one station to another, from one railroad to another. When he was a child, George L. Stafford had learned telegraphy from an elder brother. He went to work as a railroad telegrapher, and went from job to job for quite a few years until he met Bonnie Kern, the daughter of the Archuleta County sheriff, when he worked for the Rio Grande, Pagosa & Northern Railroad, operated with Denver & Rio Grande rolling stock, at the depot in Pagosa Springs, Colorado. Then Stafford moved to Crucero as a crossing guard where the new Tonopah & Tidewater Railroad crossed the San Pedro, Los Angeles and Salt Lake Railroad. Soon he transferred to Buena Park, California, where he held several jobs for the S.P.,L.A.& S.L., moved to Erie on the same railroad as a telegrapher or train order operator, and finally won appointment to the more stable and responsible position of station agent at Kelso in 1905, where he would settle down and quit the ranks of boomers. A man named Cheney who had been a telegrapher under Stafford at Kelso replaced Stafford as agent in 1918. [21]

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20. Signor, opposite p. 114, illustrated the engineering profile of the railroad; see also, pp. 42, 122, 142, 148, 151, 152, 161, 166, 169; Hemphill, p. 27, said that Kelso was "one of the most isolated helper terminals in North America." See also pp. 78, 79, 158-159; I have also examined, at the California State Railroad Museum Library, Los Angeles and Salt Lake Railroad Employes' Time Tables for the Los Angeles Division, No. 61, March 26, 1922, Joint Salt Lake and Los Angeles Division No. 84, May 3, 1931, System Time Table No. 5, October 15, 1933, System Time Table No. 7, January 20, 1935, and System Employes' Time Table No. 8, April 1, 1935.

21. Ausmus, pp. 65-67; "Interview with Edwin Montgomery Stafford," 20 August 1991, by Dennis G. Casebier, pp. 10-13. Hardbound copy of interview in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis Casebier. See also p. 28: Stafford also reported one bit of periodic vandalism the railroad suffered at Kelso: possibly a couple of times a year, general store owner Henry Hotz would get drunk, get a gun, and while everyone in town locked their doors and Stafford's father locked himself in the depot, Hotz would take pot shots at the water tank just east of the depot. Most of his bullets would ricochet off the tank's rounded steel sides, but eventually one or more would hit it squarely enough to penetrate the steel. "By God, I got it," he'd shout once he had punched a hole in the tank and one or more streams of water, size .45 caliber, poured out. The railroad would have to use the other "upper" Kelso water tank until the Water Service Gang could come down from Las Vegas to rivet a patch on the tank next to the depot that Hotz had partially drained.

The reason that Hotz would go after the water tank when he was drunk is that he had the only private store and home in Kelso, the rest of the town being owned by the railroad with its employee-residents supplied free water. While Hotz also got his water piped from the railroad, it was on a meter and the railroad made him pay for it, which, without any real justification, he resented. See "Interview with Edwin Montgomery Stafford," 10 September 1991, by Dennis G. Casebier, p. 33.

Photo 4: The original depot at Kelso, California, built in 1905, was moved farther eastward along the track in 1923 (northeast in compass direction) and became first the Station Agent's Residence, and later the Roadmaster's Office, in order to make room for a new Kelso depot. Steele's Photo Service, courtesy Dennis Casebier.

As early as 1905 it was apparent that Kelso would become a permanent helper station for trains climbing eastbound to the summit at Cima, and would become at least a small company town, so Kelso acquired a post office on May 20, 1905.[22] That same year, construction began on facilities at Kelso, one being a gable-roofed, two stall, 32 by 152-foot, engine house constructed of corrugated iron on a wood frame. Its two parallel tracks probably were long enough to accommodate two engines each, one ahead of the other, and thus house four locomotives rather than two. It had an 18 by 56-foot shed-roofed addition which accommodated the roundhouse foreman and shop men. Near the depot, the railroad erected a wood frame, gable-roofed, 24 by 36-foot "eating house" or restaurant, whose exterior signs proclaimed it to have a "Lunch Counter." This would serve railroad employees and passengers during a meal stop on those trains without passenger cars. South of the tracks the railroad erected a 12 by 22-foot frame freight depot with a 774 square foot plank depot platform. Additional facilities included a 13 by 19-foot sand house, to which the company later added a 13 by 23-foot expansion, and a 14 by 16-foot ice house. The railroad erected two 25-foot diameter 30 foot high cylindrical riveted steel water tanks on steel towers with concrete foundations in 1905, along with two pump houses and a hoist house.

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22. H.E. Salley, *History of California Post Offices*, 22. (n.p.: The Depot, 1991), p. 106; Martha Burnau, "The Post Offices of San Bernardino County," in, Patricia Jernigan Keeling (Ed.), *Once Upon A Desert*, p. 234; Lewis Garrett, "Postal History of San Bernardino County," *San Bernardino County Museum Association Quarterly*, Vol. 39, No. 4, Fall 1992, p. 36.

Photo 5: The original corrugated iron on wood frame two-stall engine house built in 1905. Two more stalls were added ca. 1921. Then ca. 1922-23, it was torn down and replaced with a five-stall concrete roundhouse with radial tracks and ladder switches (no turntable). Photo probably by Lester Packard, courtesy collection of Theo Packard.

Employing oil as a locomotive fuel from the beginning, in view of southern California's developing petroleum industry, the company built in 1905 a fuel oil storage reservoir, an oil delivery tank, a double standpipe to deliver fuel oil, and a single standpipe for the same reason, so that three locomotives could be fueled at once.[23] The company built a frame cottage at Kelso in 1905, probably for the station agent, added two more in 1907, five more in 1910, and many more in the decades that followed. Kelso also had a plethora of outhouses, bunkhouses, tool sheds, and other small miscellaneous structures.[24]

On August 16, 1916, the railroad company shortened its name to "Los Angeles and Salt Lake Railroad," with the change to take effect on August 25.[25] On April 27, 1921, Senator Clark, then 82 years of age, was persuaded to sell his half-interest in the line to the Union Pacific, which already owned the other half. The Union Pacific Railroad now fully owned the line from Salt Lake to Los Angeles, although it continued to operate that line under its 1916 name.[26]

A UNION PACIFIC SYSTEM MODERNIZATION PROGRAM

Upon acquiring complete ownership of the Los Angeles and Salt Lake Railroad, and with the World War over, although times were not prosperous, the Union Pacific began looking towards modernization of the L.A.& S.L. with new motive power, railroad cars, yard and shop facilities, track, and depots. At Kelso, the first step in this direction would be construction of a new roundhouse to replace the four-stall corrugated iron on wood frame engine house which must have been enlarged from two to four stalls about 1921. In New York City on June 13, 1922, three members of the Executive Committee of the Board of Directors, Committee Chairman Robert S. Lovett, Director W. Averill Harriman and Director C.B. Seger considered 22 "Authority for Expenditure" requests, the last of which, A.F.E. Request No. 12A for Kelso would fund:

> Constructing 5 stall enginehouse [sic] replacing 4 stall wood frame corrugated iron enginehouse: also constructing .413 mile of additional 75 lb. trackage and retiring [dismantling] .2803 mile of 75 lb. skeleton trackage.

Total cost of work		$33,003
Charge Op. Exp.	$ 6,346	
Charge M. on H.	4,467	
	$10,813	$22,190

23. One hostler during the 1920s, about the time the present Kelso depot was being built, fell asleep while fueling a locomotive and let the tender tank overflow and fuel oil pour onto and puddle on the ground. Waitress Elma Ann Erickson recalled that he told her he had to carry a lot of buckets of gravel to bury and soak up the oil. "Interview with Elma Ann (Erickson) Leland," by Cindy Stead and O.B. O'Brien, 30 April, 1987, in Las Vegas, p. 50; in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis Casebier.

24. Extracts from Interstate Commerce Commission Valuation Docket No. 26, typescript "Final Engineering Report," for Valuation Section No. 8 in California on the San Pedro, Los Angeles & Salt Lake Railroad, based on an inventory prepared on June 30, 1914 under H.J. Saunders, Supervising Field Engineer, pp. 1 (map of the railroad), 81, 83, 84, 87, 91, 94, 95, 97, 99, 100. Record Group 134, The National Archives, College Park, Maryland. The author is indebted to David Pfeiffer of the National Archives staff for locating and providing this information.

25. Signor, p. 86; Hemphill, p. 9.

26. Signor, p. 87; Hemphill, p. 9.

Photo 6: Kelso roundhouse, built ca. 1922 or 1923, a five stall concrete structure to the east of the Depot. This "roundhouse" did not have a turntable; locomotives turned on wye tracks. The structure was demolished in 1948. Behind the roundhouse at right is the powerhouse. Photo courtesy collection of Art Francis.

Photo 7: A portion of the five-stall roundhouse with mechanical department employees (machinists, boilermakers, etc.). Photo courtesy collection of Art Francis.

Photo 8: A 4-6-2 locomotive, Union Pacific No. 3181, built by Schenectady in 1912, alongside the Kelso roundhouse, probably during the 1930s. Photo courtesy collection of Art Francis.

Photo 9: The Kelso roundhouse, ca. 1920s or 1930s. Photo courtesy collection of Art Francis.

Photo 10: Power house at Kelso, California. Photo courtesy collection of Art Francis.

Photo 11: Power house and smokestack. The stack remained until the late 1970s or 1980s. Photo 1950s courtesy collection of Art Francis.

Given initial approval by the Executive Committee that same day, its official approval date by the committee was June 20, and it was approved by the Board of Directors of the Los Angeles & Salt Lake Railroad on September 14, 1922. The new concrete roundhouse, its stalls accessed like those of the old one by a succession of turnouts (ladder switches) rather than by a turntable, apparently was built in late 1922 and early 1923. As Kelso had wye tracks just to the northeast of the new roundhouse, it had no need for a turntable on which to turn locomotives around.[27]

It is clear that Los Angeles & Salt Lake Railroad management intended to construct new depot, restaurant and employee facilities east of Barstow at Yermo and Kelso, California, Caliente, Nevada, and Milford and Lynndyl, Utah. President Carl R. Gray spelled out part of the urgency of building such facilities in a letter to Robert S. Lovett, Chairman of the Executive Committee of the Union Pacific System on February 28, 1922, in advancing a new and higher cost request for Authority for Expenditure for constructing and equipping a new modern mission style metal lath

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27. Los Angeles & Salt Lake Railroad, [Minutes of the] Executive and Finance Committees, Vol. 2, pp. 75, 77, 78, on microfilm in the Union Pacific Archives, Omaha Union Station (Western Heritage Museum), Omaha, Nebraska. Bob Ausmus in his *East Mojave Diary*, p. 55, quoted Ralph Smeath who was relief foreman at the Kelso roundhouse in 1939 remembering that two Mallet articulated engines (probably of the Challenger class), were too large to fit on the roundhouse turntable. But the little printed booklets issued by the Los Angeles & Salt Lake Railroad Accounting Department known as "Form 70," *List of Officers, Agencies, Stations, etc.*. carried a listing pf "Engine Houses and Turntables" and showed no turntable at Kelso as of No. 1, January 1, 1919, p. 36; No. 2, January 1, 1922, p. 42; No. 53, January 1, 1923, p. 42; No. 54, January 21, 1924, p. 42; No. 55, January 1, 1925, p. 44. Kelso yard plans for 1942 showed no turntable. There is no evidence Kelso *ever* had a turntable, and Smeath must having gotten Kelso mixed up in his memory with some other terminal at which he worked.

While the Union Pacific acquired its first Mallet articulated locomotives in 1909, they seem always to have worked in Wyoming or on the Oregon Short Line, especially in the Blue Mountains, and never to have been assigned to the Los Angeles and Salt Lake Railroad. However, in 1936 construction began at the Schenectady Works of the American Locomotive Company on forty of the Challenger class 4-6-6-4 3900-series locomotives. Originally all coal-burners intended for use between Cheyenne, Wyoming, and Ogden, Utah, on the main line over Sherman Hill, the Continental Divide, and the Wasatch Range, in 1937 the Omaha Shops converted a number of them to oil burners for use in fast passenger service between Los Angeles and Las Vegas over Cajon Pass and Cima Summit. William Kratville and Harold E. Ranks, *Motive Power of the Union Pacific*, pp. 135-146, 187-196. Art Francis, letter to the author, September 15, 1996, pp. 1, 2, said that there was no turntable. Theo. Packard, Message Record of a telephone interview, March 4, 1997, stated flatly that Kelso never had a turntable, at least after the 1920s when he lived there. A civil engineer's field note from the Union Pacific Museum Collection dated June 1, 1923 entitled "Tracks at Roundhouse at Kelso" may document initial completion of the new tracks to the new five stall enginehouse or roundhouse at Kelso.

It should be noted that technically, what Kelso had, was a five stall roundhouse, rather than an engine house; the distinction is that a roundhouse, however many stalls it had, always was built on an arc, with radiating tracks entering it whether from switches (for a small number of stalls) or from a turntable. A true engine house, whether one stall or several, generally was a rectangular building with doors at one or both ends and parallel rather than radiating stalls. The earlier engine facility at Kelso, built in 1905, was a true "engine house," rectangular in plan with at first, two, and near its end, four, parallel tracks. The Kelso Roundhouse built in 1922-1923 was a true roundhouse with radiating stalls, even if it did not have a turntable. But the railroad itself thoroughly misused the terms, confusing the two types of buildings.

Los Angeles & Salt Lake documents seem unusually contradictory. Although clearly Kelso had a wood frame, corrugated metal engine house from 1905 to 1922, the "Form 70" lists show no such building at Kelso until construction of the new one in 1922-1923. Perhaps the railroad considered a mere corrugated metal on frame engine house a "temporary" structure not worth listing. Furthermore, the "Form 70" booklets initially showed the length of stalls in the new building as 105 feet, reducing that as of January 1, 1925, to 92.8 feet. A civil engineer's field note made January 16, 1929 by engineers Thompson and Stumpf for proposed concrete runways, i.e., flooring between four of the five tracks, in what they still called the "Engine House" indicated it was 92.5 feet in length from front to rear. The back side of the wedge-shaped building extended in a 123-foot arc. Their field note did not include measurements of the shorter front of the building which contained the engine doors.

and stucco 58 by 117-foot station building and similar 32 by 82-foot rooming house with brick platform at Yermo, California. He told Lovett,

> Yermo is only a short distance away from the Santa Fe joint track where that line is equipped with such good station facilities, especially at division points, that our own facilities are in marked contrast thereto. The comparison of our facilities with those of the Santa Fe at Barstow, where all through trains stop has always been the subject of criticism by passengers.
>
> The Southern California business is intensely competitive with the Santa Fe and we suffer by comparison with them more in connection with their passenger stations at terminals than possibly in anything else. I would like to see attractive mission style buildings at Yermo that will present a pleasing and restful appearance to the traveler. All trains stop at Yermo on account of this being a train division point. The type of construction chosen is of the mission style of metal lath and stucco. The platforms are to be of brick to avoid mud and dust.
>
> The building will be thoroughly modern in every respect and include a restaurant with complete equipment. There will be gardening and parking around the buildings to give them an inviting appearance.

After perusing President Gray's letter, Lovett drafted on March 22 his own letter to the secretary of the Union Pacific System in New York City, in which while referring specifically to Yermo, he framed the Yermo project more broadly, placing it in the context of wider plans:

> Mr. Gray's letter explains the circumstances, but please say to the Committee that this is in line with the policy which Mr. Gray and I have carefully considered of adopting at important stopping places on the L.A.& S.L. in California and Nevada, such as division terminals and other places where there are dining stations, a mission style of architecture and layout where we have occasion to construct or reconstruct station buildings. It is a frame, stucco style of construction and adds very little to the expense but a great deal to the appearance of the place. It is a dreary country and the lack of anything of this sort contrasts very conspiciously with the Santa Fe. Yermo is a division terminal and we have just provided for another, but necessarily larger and more expensive passenger station building with hotel accommodations at Caliente. There are two or three other important stopping points where new or enlarged stations are required, but these can be deferred until 1923.[28]

28. Gray's letter to Lovett and Lovett's letter to U.P. System secretary Thomas Price are filed with Authority for Expenditure Request No. 26. February 28, 1922, for "Constructing and equipping modern Mission style" station and rooming house at Yermo, California, Union Pacific System, L.A.& S.L.R.R. Authority for Expenditure Files, Interstate Commerce Commission Account No. 17, Depots and other facilities, Union Pacific Archives, Omaha, Nebraska. At the time I used these files, they were in the basement of the Omaha Union Station, which had become the city-operated Western Heritage Museum, but the files were still owned and maintained by the Union Pacific Railroad.

Thus the Union Pacific proposed not only to emulate the Santa Fe facilities in quality of service but also in what has been perceived to be a dominant Santa Fe architectural style: mission revival.[29]

But the urgency in which the railroad undertook such new construction seems to have been dictated in part by which facilities burned down. On June 20, 1921, the depot at Yermo burned and would have to be replaced. On September 9, 1921, the wood frame depot at Caliente, Nevada, burned, and the company faced replacing it. The L.A.& S.L.'s new management apparently hired the Los Angeles architects, John and Donald Parkinson, to design a new depot for Caliente, and the depot they designed was a 58 by 207 foot combination two story station and employees' rooming and boarding house together with a cafe offering passenger trains without dining cars a meal stop for passengers, in a Spanish mission revival style, with arched windows on the ground floor and a walkway enclosed in a colonnade of arches, and five scrolled, stepped gables of a style borrowed from the facades of Spanish colonial mission churches, of course with the red, white and blue "Overland Route" version of the Union Pacific's shield symbol centered on each gable. Painted white on the exterior, the depot featured a red Spanish tile roof. This depot apparently established a model, in style at least, for the new depots and employee restaurant and hotel facilities across the Los Angeles and Salt Lake Railroad.[30] The lunch room at Kelso burned on September 28, 1922, and the depot at Milford, Utah, burned in February 1923, adding urgency to the reconstruction of those facilities.

As mentioned, on September 28, 1922, fire destroyed a 24-by-44-foot wood frame "Lunchroom" [restaurant] and the attached box car body sleeping quarters at Kelso, California. Part of the building apparently dated from 1905, part from 1916. That fire added urgency to building new facilities at Kelso, just as the Caliente fire a year earlier had given Caliente priority. Consequently, on February 18, 1923, President C.R. Gray signed Los Angeles and Salt Lake Railroad Authority for Expenditure Request No. 8 to

> Construct [at Kelso] and equip modern Mission type Station building, having two stories and basement, which will provide club, restaurant and hotel facilities in addition to ordinary station facilities for handling passenger and baggage.
>
> New facilities will replace small lunchroom and carbody sleeping quarters destroyed by fire September 28, 1922, and will serve in lieu of present small depot to be relocated and converted into dwelling house for Station Agent.
>
> Improved general station facilities necessary for proper conduct of operations at this engine terminal and for accommodation of employees. The restaurant feature is

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29. Mission revival indeed was a popular style for Santa Fe depots and adjacent Harvey Houses, beginning with the depot and La Castaneda in Las Vegas, New Mexico, the depot and Hotel Cardenas in Trinidad, Colorado, the depot and El Otero in Lamy, New Mexico, above all the clearly California-derived depot and Alvarado Hotel in Albuquerque, the depot at San Bernardino, and the depot in San Diego. Yet two represented a Moorish offshoot of mission revival style: La Grande Depot in Los Angeles, and the depot and Casa del Desierto at Barstow. More surprising, a number of key Santa Fe depots and Harvey Houses represented non-mission revival styles: the depot and Fray Marcos Harvey House at Williams, Arizona, neoclassical or Palladian revival, and the similarly neo-classical El Garces at Needles, California, not to mention the Havasu at Seligman, Arizona, and the Flagstaff depot, both half-timbered in a Tudor style. This is based on personal observation of those structures still standing and chromolithographed Fred Harvey postcards in the author's files of those now gone.

30. Signor, pp. 89-93, 98-100, 133-135; Hemphill, p. 97. The L.A.& S.L. had a few earlier mission-revival depots.

Photo 12: The original lunch room at Kelso, ca. 1920-21. The building, built in 1905, burned on September 28, 1922. Note the signs state "lunch counter." Photo probably by Lester Packard, courtesy collection of Theo Packard.

particularly required for accommodation of passengers on Train No. 4, which under present schedule provides a 20 minute station stop at Kelso for breakfast, as this train does not carry dining cars.

The railroad estimated the cost of the new depot at Kelso to be $88,600, from which they could subtract $1,651 to be charged to Operating Expenses, and another $429 to be charged to the Insurance Reserve, the final appropriation for expenditure being $86,520.

Gray attached a cover letter of the same date to forward the A.F.E. to the chairman of the railroad's executive committee, Robert S. Lovett in New York City, restating what the A.F.E. said, while adding, "Kelso is also a permanent helper station where it is necessary to provide quarters for helper crews, there being no commercial facilities whatever available." He went on to say, "This station is to be built of the same general type and appearance as the ones recently built at Yermo and Caliente and leaves only the stations at Milford and Lynndyl to be improved to complete the entire chain of eating stations and depot facilities on the L.A.& S.L." In his final paragraph, Gray hinted at which of the two Utah facilities would have priority: "The depot at Milford burned a few days ago and it will be necessary to construct new station facilities there this year for which I will submit an A.F.E. Request soon."[31]

On Tuesday, March 13, 1923, the Executive Committee of the Union Pacific System held their regular semi-monthly meeting in Room 3206 of the company offices at 120 Broadway in New York City. Directors Henry W. Clark, W. Averill Harriman and C.B. Seger were present and Clark, who was vice president and general counsel, presided over the meeting. After dealing with closing the transfer of stock pending an upcoming annual meeting of stockholders in Salt Lake City on April 10, approving construction of an addition to a packing house at Ontario, California, and its lease to the San Antonio Orchards Company, and approving lease of office space in San Diego, the committee turned to ten requests for "Authority for Expenditure," commonly known as "A.F.E.s", the second of which proved to be the one for the new Kelso depot, restaurant and hotel. The board quickly approved all ten A.F.E.s and moved on to other business. The formal date of approval by the Executive Committee was March 27, 1923, and by the Board of Directors, April 27, 1923, after which the Los Angeles and Salt Lake Railroad Company was authorized to commence construction of its new Kelso facilities.[32]

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31. Union Pacific System, Los Angeles & Salt Lake Railroad, Authority for Expenditure Files, Interstate Commerce Commission Account No. 17, Depots, etc., filed in the basement of Omaha Union Depot, Omaha, Nebraska. The National Park Service has copies of the A.F.E.s cited in this study, or at least extracts from them.

32. Los Angeles and Salt Lake Railroad Company, [Minutes of the] Executive and Finance Committees, Vol. 2, January 12, 1909 to August 12, 1924, incl., p. 133, 124, 125, 139; under A.F.E. 12, the committee also approved installing a 10,000 gallons-per-hour water softener, a 40 foot high, 25 foot diameter water storage tank, a 12-inch standpipe and connecting lines, a high-pressure fire pump, and 4476 linear feet of six inch diameter water main with new distributing lines, a 14 by 18-foot chemical house, and a standard frame dwelling house, possibly for a water service man to maintain and operate the softener.

The actual A.F.E. file for building the Kelso Depot contained, first, a Form 268-C, "Report of Property Retired from Service and Replaced by New Property," which documented the loss by fire of the 24 by 44 foot frame restaurant and carbody sleeping quarters, acquired in 1905 and 1914. Then came a form 268-A, "Report of Completed Work — Additions to Existing Property Replacing Property Retired," the contents of which will be discussed in relation to the completion of the new depot. Next in the file was the actual Authority for Expenditure, Request No. 8, already quoted in the narrative, followed by a two page letter from U.P. President Carl R. Gray to R.S. Lovett, Chairman of the Executive Committee, dated February 18 from Los Angeles, and a letter from Lovett, dated February 23, 1923, to Thomas Price, Secretary of the Union Pacific System in New York City.

TEMPORARY LUNCH ROOM FACILITIES

It should be noted that after the original 1905 Kelso lunch room, whose signs on the exterior of the building actually read "Lunch Counter," burned on September 28, 1922, the railroad spurred out two dining cars south of the main tracks across from the depot as a temporary meal service facility until the new depot and lunch room could be constructed. Elma Ann Erickson, a waitress in the lunch room in Las Vegas, was transferred to Kelso in 1922 and worked in the temporary dining car facility while the railroad undertook construction of the new depot. On the way down to Kelso, she asked the conductor what the Joshua trees were, and tongue in cheek, he told her they were pineapple trees. At Kelso, aside from local employees, the dining car supplied breakfast to passengers on the eastbound train, No. 4. Elma recalled that they would get a piece of ham or bacon, depending upon what was on hand, and two eggs, with biscuits if there was a cook on the job to make them, or toast if there was no cook available. Sometimes they would serve a hundred to a hundred and thirty or hundred and forty passengers. Soon, across the tracks to the north, construction began on the new depot, restaurant, and employees hotel in which she would work when it was finished.[33]

BUILDING A NEW DEPOT AT KELSO

In May, June and July 1923, civil engineers in the Office of the Chief Engineer of the Los Angeles and Salt Lake Railroad in Los Angeles drew up plans, among their other work, for a "Club House and Restaurant" in mission revival architectural style at Kelso, California, to replace the small wood frame depot and lunch room. The new building would stand on the same northwest side of the track as the old depot, but a short distance northwest of it, the site of the old depot's west wall probably roughly three feet eleven inches from the outer edge of the porch of the new building at its northeast end. The railroad would move the old depot northeast along the track and convert it into, at first, the station agent's residence, and later, a Roadmaster's office. As such, it stood a bit farther back from the track than it had when used as a depot. Railroads were into the "recycling" of buildings and other things long before the practice became more widely fashionable.[34]

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33. "Interview with Elma Ann (Erickson) Leland," 23 August 1990, in Las Vegas, Nevada, by Dennis G. Casebier, pp. 86-94, 147; Interview with Elma Ann (Erickson) Leland, 30 April 1987, by Cindy Stead and O.B. O'Brien, pp. 8, 13, 55-58. Both of these hardbound oral history transcripts are in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis Casebier.

34. The plans for the Kelso Depot bear the title block, "Union Pacific System / Office of the Chief Engineer, L.A. & S.L. R.R. / Kelso, Cal. / Club House and Restaurant / Work Order No. 4353" and consist of 13 sheets: No. 45125, "Revised Stucco Details," July 26, 1923; No. 45127, "Location Plan," May 31, 1923, Revised July 6, 1923, Revised [further] February 7, 1924, Revised [still further] December 12, 1924; No. 45128, "First Floor & Basement Plans," May 31, 1923, Revised July 6, 1923, Revised [further] July 8, 1924; No. 45129, "Second FLoor & Roof Plans," May 31, 1923, Revised July 6, 1923, Revised [further] July 8, 1924; No. 45130, "Elevations," May 31, 1923, Revised July 6, 1923, Revised [further] July 23, 1923; No. 45131, "Cross Section," May 31, 1923, Revised July 6, 1923; No. 45132, "Interior Elevations," May 31, 1923, Revised July 6, 1923; No. 45133, "Exterior Details," May 31, 1923, Revised July 6, 1923; No. 45134, "Exterior Details," May 31, 1923, Revised July 6, 1923; No. 45135, "Interior Details - Revised Drawings, May 31, 1923; No. 45136, "Interior Details - Revised Drawings," May 31, 1923; No. 45137, "Heating Plan," May 31, 1923, Revised July 6, 1923; No. 45140, "Portion of Club House Platforms to be Built at This Time," January 31, 1924. Apparently most of these plans were further revised to show "as built" conditions on December 12, 1924, although the depot opened for business on March 2, 1924, and the railroad listed the official completion date as June 15, 1924. See footnotes 32 and 61.

In fact, this building was to be a new depot with baggage room, but it also would house a "lunch room," actually a cafe to serve both employees and as a meal stop for passenger trains which did not include dining cars, that for many years would be open around the clock. The building would also contain single room housing for the men and women who staffed the cafe and its kitchen, and rooms upstairs for transient railroad crews who would be housed overnight there. In the basement would be some recreational facilities. The "Club" terminology might be evocative of some form of membership, but there was in fact no "club" to which employees held membership, other than being an employee of the Union Pacific System. The building was in fact to be a combined depot, baggage room, cafe, rooming house, billiard room, and library or reading room.[35]

For American railroads to supply room, board and entertainment facilities for their employees was not uncommon; the Atchison, Topeka & Santa Fe Railway had an extensive system of such facilities, including reading rooms sometimes combined with other employee recreational facilities, often in their own buildings, although Santa Fe employees probably ate at the public cafes operated by Fred Harvey. As far back as the 1880s, the Denver & Rio Grande Railroad operated employee cafes, such as the one in the little hip-roofed building at Gunnison, Colorado, which still stands next to the depot abandoned about 1950 by the railroad, and employee rooming houses, such as the one at Chama, New Mexico, now long gone, and the Black Canyon Hotel at Cimarron, Colorado, also vanished. The Denver & Rio Grande Western Railroad maintained an employee restaurant and hotel at Bond, Colorado, until the end of its existence when it was swallowed up by the Southern Pacific. The White Pass & Yukon Route operated not only a public eating house at the halfway point at Bennett, British Columbia, on the shore of Lake Bennett, but also a separate room in which railroad employees were fed on real china instead of paper plates. So the "Kelso Club" which incorporated a rooming house and cafe, billiard room and reading room, along with a depot and baggage room in a single building was not an unusual facility except in all such functions being combined in a single structure. At Yermo, for example, the "club" or facility to feed and house employees was in a single story, mission-revival style building separate from the single story, mission-revival style depot. Like the others, it was not really a "club" at all except in name. The term "club" seems to have been a psychological ploy to create in employees a sense of membership in an exclusive fraternity and perhaps enhance their loyalty to their employer. [36]

The question does arise as to what the proper terminology for the Kelso building was throughout its history. The original architectural drawings called it a "Club House & Restaurant." But an undated station plan for Kelso showing all its railroad facilities, sandwiched between correspondence dated February 20 and March 14, 1942, used both "Depot and Club Ho. [House]" and "Kelso Pass. Sta. [Passenger Station] & Club House" to describe the building. "Club House" seems to have been a term peculiar to the Union Pacific Railroad in describing the company rooming and boarding houses and recreational facilities, and it would be a term confusing to the public unless explained at

35. The railroad needed to supply at certain remote locations boarding, lodging, and some recreation (a library and billiard room for crews especially to keep them away from alcoholic beverages), typical corporate paternalism of the day; calling these facilities "clubs" may have suggested exclusive membership, but the only membership requirement was to be a railroad employee on railroad duty, and even then such facilities would accommodate others from time to time if space were available. Interestingly, the room register card printed in September 1965 in the collection of Art Francis after the heading "Union Pacific Railroad" has a blank line ending in the word "Club" so the employee registering could fill in "Kelso" Club, "Milford" Club, "Caliente" Club, "Yermo" Club, whichever location was appropriate.

36. Waters, pp. 292-298; Bryant, pp. 237-238. Railroad paternalism towards employees often was directed principally against the use of alcohol, and the Atchison, Topeka & Santa Fe, as one example, encouraged railroad Y.M.C.A.s, hospital associations to deal with sickness and injury, and reading rooms. The author of this study remembers the Southern Pacific Railroad's company hospital located between the depot and the Sacramento River in Sacramento, California.

length. "Kelso Depot" is probably the most satisfactory term for the building, although "Kelso Passenger Station" is even more specific and precise. As for the restaurant, which for many years remained open 24 hours a day, the illuminated sign on the front of the building said simply "Lunch Room," though it clearly was more than that, serving breakfast and supper as well as lunch. Some plans called it a "restaurant," and its later menus termed it a "Coffee Shop."[37]

Under Job Number 4353, the Engineering Department of the Los Angeles & Salt Lake Railroad in Los Angeles, now a part of the Union Pacific System, completed the initial plans for the "Kelso Club" building on May 31, 1923, however on July 6 that year, redrew them to add nine and a half feet to the southwest end of the building, adding two additional rooms for "female help" on the ground floor and two additional rooms for men on the second floor.[38]

Description of the Plans for the New Kelso Depot

As of this July 6, 1923, alteration, the plans called for a two story Spanish mission revival-style building with tile-covered hip roof and stuccoed exterior with a colonnade of arches along the track side, the west end, and part of the east end. Strictly for style and not function, the four corners of the colonnade would each feature a pair of buttresses. Due to track direction, the building would actually lie with its longer axis somewhat southwest to northeast on the northwest side of the tracks. Centered near the top of the second story on the track side it would feature the red, white and blue Union Pacific System shield symbol or "herald" executed in terracotta.[39]

While the second story would form a rectangle, the ground floor would form an "L" with the kitchen extending into the foot of the "L". An "L"-shaped basement, somewhat shorter and narrower than the main floor of the building, would lie beneath it.[40]

Beginning at the southwest end and moving northeastward, the building had at its southwest corner a "Conductors' Room" which also served as a waiting room with a bench along its southwest wall, in which also conductors signed in and out on train registers, and they and enginemen received their copies of train orders, adjacent to a ticket and telegraph office which served prospective passengers in the waiting room through a window with a grill. At the north end of the wall between the ticket office and waiting room, by World War II (1942) a waist high device sort of like a quarter of a"lazy susan" not in the original 1923 plans had been installed to carry a telephone in a little cabinet which could be turned to serve one room or the other. Also, a window not in the original plans between the Conductor's or Waiting Room and the baggage room behind it had been added at an unknown date. Replacing a small window between the ticket window and the door between the Ticket Office and the "Conductors' Room" or Waiting Room, another alteration involved installation at an unknown date of nine boxes or "pigeonholes" which held company mail

37. See title block of the original plans for the "Club & Restaurant" at Kelso, California, Los Angeles & Salt Lake Railroad Drawings Nos. 45127 through 45134 and 45137. See also undated plan circa February or March 1942 filed in "Kelso - Construct 4310 ft. passing track, install water column, signal, etc.," File No. WO-2057, Union Pacific Los Angeles General Offices. It should be noted that there was a separate freight depot across the tracks from the building which is the subject of this report. See also, menu for "Kelso Coffee Shop" printed January 1982 by the Union Pacific Commissary Services Department.

38. L.A.& S.L.R.R. Drawing No. 45127.

39. L.A.& S.L.R.R. Drawings Nos. 45127-45134 and 45137.

40. L.A.& S.L.R.R. Drawing No. 45128.

for pickup by the roundhouse foreman, section foreman, telephone lineman, in later years a CTC maintainer and supervisor, DC&H (i.e., the manager of the restaurant and rooming house, a part of the Dining Car and Hotel Department) and possibly other company officers or departments. Below these "pigeon-holes," a slot in the wall received the time slips from helper crews, work train crews, and swing brakemen when they "tied up" (went off duty), and also served as a drop for outgoing company mail. In the northwest corner behind these two rooms at the west end of the building lay the baggage room, and outside it, within the portion of the arcade wrapped around the southwest end of the building, a ramp for baggage trucks entering the baggage room. Aside from the depot bench in the waiting room, in the desert climate, passengers could also await their trains on benches on the porch or arcade; at different times there were benches within the arcade, and benches along the north edge of the vitrified brick depot platform. A solid wall separated the Ticket Office and Baggage Room (and thus also the Conductor's or Waiting Room) from all the rest of the ground floor; there was no access from this end to the rooming/boarding house end without walking outside onto the colonnaded veranda and entering the main door into the cafe and rooming house. This appears to have been a deliberate effort on the part of the architect to separate depot and boarding/rooming house/cafe functions.[41]

After this partition, flanking a southwest to northeast central hallway, there were on the southeast side of the hallway four rooms of varying configurations for "Female Help," each featuring a small closet and a washbasin or sink with running water. North of the hallway, across from these, were, at the southwest end, one more room for female help, then two rooms for a boarding house manager, then a community bathroom, presumably for women only. A door separated the northeast end of this hallway from a large "Lunch Room."[42]

The principal entrance into this part of the building consisted of a doorway into this lunch room from the colonnaded walkway outside. Immediately left of this entrance, and occupying the space between it and the hallway door into the southwestern part of the building, stood an "L"-shaped counter for the cashier and manager of the rooming house. The wall behind the counter, adjacent to the hallway door, mounted a hook board on which at one time keys to the rooming house rooms may have hung, although in later years at least, they did not use keys. There also was a display case for cigars. On the northwest side of the hallway door, a wide, u-shaped open stairway which reversed direction at a landing halfway up provide access to the second floor, and also downward into the basement. It had a craftsman-style railing of boards each decorated with a long, "I"-shaped cutout in the center.

The Lunch Room occupied half of the northeast end of the building, the other half being the adjacent kitchen to the northwest, extending as a single story "L" beyond the wall of the rectangular-shaped second story. In the lunch room, northeast of the counter and stairway, this

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41. L.A.& S.L.R.R. Drawing No. 45128, "First Floor and Basement Plans." The foregoing description also derives from the author's detailed examinations of the first floor on Tuesday, April 2, 1996 and Wednesday, November 13, 1996. Additionally, the information on what the "lazy susan" and pigeonholes and slots were for was provided by Art Francis, letter to the author, January 4, 1997, enclosing review and comments on an early draft of this study; see p. 3 of the enclosed comments, items 10 and 11.

42. L.A.& S.L.R.R., Drawing No. 45128, "First Floor & Basement Plans," and detailed examination of these rooms by the author on Tuesday, April 2, 1996, and Wednesday, November 13, 1996. This is one of the most thoroughly altered portions of the depot, all of the rooms south of the hallway having been given outside access by having one each of their windows converted to doorways by the railroad itself, two after the roundhouse closed in 1948 being converted into offices, and two more converted in 1981; the railroad converted the latter two rooms, and either at this time or earlier, also the two offices, into overnight accommodations for railroad "executives," all four now featuring windows converted to doors opening onto the arcade.

large open room featured, first, two round tables with four chairs each, and then a large "U"-shaped lunchroom counter, which had nine round "T"-backed swivel stools outside its southwest side, nine across the bottom of the "U", and 13 along the northeast side of the "U", which extended all the way to the wall between the lunch room and kitchen, the top of the other arm of the "U" being a bit shorter to allow waitresses access from behind the counter to the two lunch tables. The counter had a top that was white, either porcelain or tile. In the center of the "U"-shaped counter stood two rectangular counters, one for a "Display" probably of the desserts of the day, and the other for three urns for coffee and hot water for tea. A double doorway across the top of the "U"-shaped lunch counter accommodated traffic between the lunch room and kitchen, and the kitchen could also be entered by an outside door and concrete stairway on the back or northwest side. Just to the left inside the kitchen doors from the lunchroom, a stairway descended westward into the storage room in the basement, a second inside connection between the ground floor and the basement.[43]

In the center of the kitchen stood a steam table. A large, originally coal-burning, kitchen range or stove stood northwest of it. Along the east (or actually northeast) end wall beneath the windows were two large sinks with running water. On the other side of the kitchen, in its northwest corner, a large, walk-in refrigerator featured three internal rooms or compartments. Southeast of it, in the southwest corner of the kitchen, beyond the west end of the stairwell and alongside the refrigerator a "Machine Room" housed the refrigeration plant. However, a subsequent note by a field engineer suggested that instead of installing the refrigeration plant in the Machine Room, they installed it instead in a basement storeroom, and there is no evidence today that the Machine Room ever housed a refrigeration plant.[44]

Kelso as a Meal Stop for Passenger Trains

As mentioned, the plans for the building called this restaurant a "lunch room," but in practice it was actually a cafe or "coffee shop" that for most of its history was open around the clock. The

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43. Ibid.; this space was changed in later years principally by the addition of a partition separating the lobby and stairwell from the restaurant, and by changing the "U"-shaped counter with stools with T-shaped backs for a linear counter and new stools without backs, according to Art Francis, letter, September 15, 1996, to the author, p. 2. In corroboration of Francis' childhood memories of the original counter and stools in the Kelso lunch room, on p. 58 the November 1922 issue of *The Union Pacific Magazine* (Vol. I, No. 11), carried at the bottom of the page a montage of five photographs of "Our new Depot-Hotel at Caliente, Nevada." The photo at the upper right was the lunch room at Caliente, which appeared to have had a layout similar to that of Kelso with a U-shaped counter and T-backed stools. Clear in the photo, as Francis remembered at Kelso, was a bright white top to the counter, and the base of the T-backed stools was, as Francis also remembered, of metal finished in white enamel, which tapered out at the bottom like the bell mouth of a bugle to sit on a square white base attached to the floor. If the assumption holds that the railroad used the same type of interior furnishings at Kelso as it had in the station at Caliente, Nevada, a year and a half earlier, Art Francis' recollections are confirmed. The Caliente lunch room photo also showed the fixtures within the "U" of the counter, as well as the type of ceiling light fixtures, and at least three ceiling fans, details which may also have been duplicated in the original design of the Kelso lunch room.

44. L.A.& S.L.R.R. Drawing No. 45128. Based on an examination of the building by the author on Tuesday, April 2, 1996, and Wednesday, November 13, 1996, in comparison with the original plans, the principal structural changes in the kitchen area included the elimination of the stairway down to the "Vegetable Room" in the basement, and plastering over of its entrance, and the addition of a wire partition on wood frame separating the kitchen area from the pantry or storage area and the refrigerators.

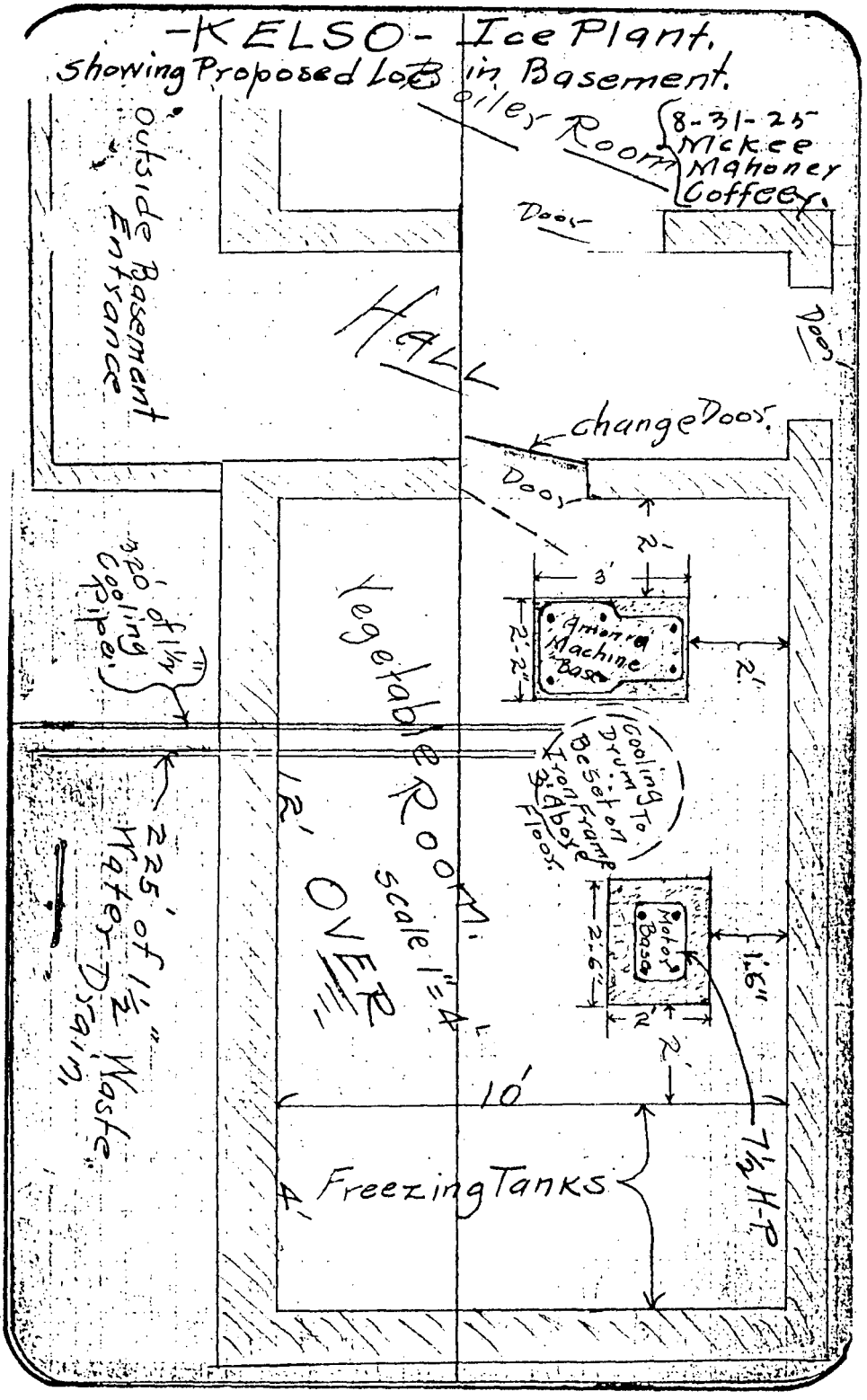

Figure 1: Field Engineers's drawing of August 31, 1925 showing a proposed location for an ice plant in the basement of the depot. It identified the room as the "Vegetable Room" which is the "Storeroom" shown on the 1924 as-built drawings. Credit: Union Pacific Museum Collection.

new building continued the tradition of the little frame building erected in 1905 to house a "lunch counter," a facility that served not only company employees, but also served as a meal stop for certain trains which operated without dining cars. Accordingly, although intended partially to serve railroad employees whose jobs might strand them overnight in this empty piece of Mojave Desert, as well as employees who lived in Kelso, the new cafe in the new depot also was intended to provide a meal stop for passengers of certain trains whose "consist" (makeup, or composition) did not include dining cars, and it could also provide meals to an occasional cowpuncher, rancher, miner, or a tourist family, and the rooming house might, on *rare* occasions, provide an overnight room, if it was not full with railroad employees. It should be stated that the "female help" for which the building offered rooms on the ground floor were principally the waitresses in the cafe.[45]

In its later years, all of the passenger trains that passed through Kelso had dining cars for the passengers, and railroad meal stops were a thing of the past. That was not true at the time the Kelso Depot was built. Dining cars had become popular as far back as the 1890s, and the "flagship" trains of a railroad, especially express trains and all-Pullman trains, almost always featured dining cars. But railroads, including the Los Angeles and Salt Lake, also offered less expensive passenger service on through trains that did not have dining cars. Those trains had to make stops three times a day for meals at stations which had a depot cafe or "eating house." That was how the far-famed Fred Harvey system of "Harvey Houses" got started on the Atchison, Topeka & Santa Fe Railroad: meal stops were common on all railroads, and most of them were in facilities that were the greasiest of "greasy spoon" establishments, while the other alternative facing the passenger was buying prepackaged sandwiches of dessicated ham and rubbery cheese on stale bread to be washed down with rancid coffee from the "news butcher" or some other vendor. What set the Harvey Houses apart was the spotless cleanliness of the establishments, the excellence of the service and the outstanding quality, freshness and variety of the food they served (not to mention hard-working classy young waitresses in starched black and white outfits known as "Harvey Girls". The Harvey system for many years even had its own dairys and farms to provide fresh milk, eggs, and chickens.) While it might be difficult to prove, it seems likely that success of the Harvey houses probably forced other railroads to improve the quality of their off-train eating establishments, in order to remain competitive with the Santa Fe, and thus forced a rise in the standard of food service industry-wide well before the Kelso Depot with its restaurant was constructed in 1923.[46]

The Kelso Depot was *not* a "Harvey House" because Harvey Houses existed *only* along the lines of the Atchison, Topeka and Santa Fe Railway and its subsidiaries, and the Kelso facility should never be referred to as a "Harvey House." But other railroads including the Los Angeles and Salt Lake Railroad had their own version of Fred Harvey facilities, such as the "lunch room" in the new Kelso Depot. While the "flagship" passenger train of the Salt Lake Route, the all Pullman sleeping car *Los Angeles Limited*, had dining cars in its makeup and therefore did not make meal stops, another category of passenger train on the through run between Los Angeles and Salt Lake City, westbound Train No. 3 called the *California Express* and eastbound Train No. 4, called the *Utah Express*, did *not* have dining cars; the schedules in the October 1 and October 28, 1923, issues of the Union Pacific System Public Timetables and the November 1923 issue of the monthly *Official Guide of the Railways and Steam Navigation Lines in the United States, Porto Rico, Canada, Mexico, and Cuba*, showed the equipment or rolling stock of the *California Express* and the *Utah*

45. Ibid.; Bob Ausmus, *East Mojave Diary*, p. 53.

46. James David Henderson, *Meals by Fred Harvey*, is the only real history of the Harvey House system available, although it is discussed in Marshall, pp. 97-113, Waters, pp. 261-285, and Bryant, pp. 106-122.

Express to include standard sleeping cars, tourist sleeping cars, and coach and chair cars operating between Los Angeles and Salt Lake City, but no dining cars, and for the first time went on to say, "Meals at Kelso, Las Vegas and Caliente in dining and lunch rooms" for the eastbound train, although the westbound train stopped for meals at Milford, Utah, Caliente, and Las Vegas, Nevada, not stopping at Kelso for supper. The *Utah Express* during the winter, spring, and summer of 1924 left Los Angeles at 11:55 p.m., passed through Barstow at 5:20 a.m. the next morning and stopped for breakfast at Kelso at 8:35 a.m. While the length of the Kelso meal stop did not appear in the schedule, the same train arrived at Las Vegas at 11:55 a.m. and departed at 12:20, after a 25 minute meal stop, and one can infer that the Kelso meal stop was of similar duration. The train went on eastbound, stopping at Caliente, Nevada at 5:30 p.m. Pacific Time, departing there at 7 p.m. Mountain Time, after a 30 minute meal stop for supper. (It continued on overnight, arriving at Salt Lake City at 6:30 a.m., so no more meal stops were necessary). The only westbound train on the route which made meal stops that summer was Train No. 3, the *California Express*, which made meal stops at Milford, Utah, Caliente, Nevada, and Las Vegas. A similar schedule for May 1927 showed that the *Utah Express* stopped for breakfast at Kelso, made only a 15 minute meal stop for lunch in Las Vegas, and but a ten minute meal stop in Caliente, Nevada. Service in those lunch rooms must have been swift indeed. In January 1929, the railroad offered "Meals at Kelso, Las Vegas, Caliente and Milford in dining and lunch rooms," as shown in the Equipment List in the *Official Guide* which published all the railroad passenger schedules in the nation. The June 9, 1929, Union Pacific System Public Time Tables showed eastbound No. 4, the *Utah Express* stopping for breakfast at Kelso, lunch at Las Vegas, and supper at Caliente, while its sister train, No. 3, the *California Express* westbound, stopped for breakfast at Caliente, lunch at Las Vegas and supper at Kelso. Theo. Packard worked as a second shift cashier during afternoons and evenings in the Kelso Lunch Room that summer and fall, and recalled forty or fifty passengers coming in from the westbound evening train. In January 1930, the westbound No. 3, the *California Express* stopped for "Meals at Caliente, Las Vegas and Kelso in dining and lunch rooms," and the eastbound No. 4, the *Utah Express*, stopped for "Meals at Kelso, Las Vegas and Caliente in dining and lunch rooms." So in its early years, the "Lunch Room," cafe, or coffee shop in the Kelso Depot indeed served railroad passengers either breakfast or supper, as well as serving railroad employees, was designed for those purposes, and constituted the Union Pacific System's equivalent of a Fred Harvey cafe. But the Great Depression apparently terminated that service to passengers, at least insofar as the surviving long-haul passenger trains between Los Angeles and Salt Lake were concerned. Kelso last appeared as a meal stop in the issue of *The Official Guide* for August 1930, by which time only three long-haul passenger trains operated in each direction between Los Angeles and Salt Lake. The Union Pacific System Public Time Tables issued September 7, 1930, showed no meal stops on the Salt Lake Route and the surviving passenger trains all had dining cars. The schedules which went in effect in March and April 1933 showed service reduced from three passenger trains in each direction to but two in each direction, the *Los Angeles Limited* and the *Pacific Coast Limited*, all incorporating dining cars, since the reduction in traffic left the Los Angeles & Salt Lake Railroad with enough dining cars to go around.[47]

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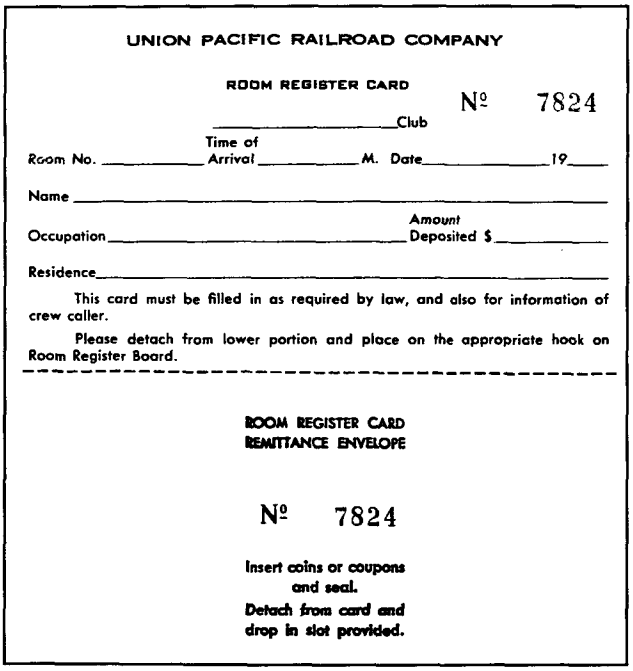
47. *The Official Guide of the Railways and Steam Navigation Lines of the United States, Porto Rico, Canada, Mexico, and Cuba*, Vol. 56, No. 5, October 1923, pp. 755, 762; Vol. 56, No. 6, November 1923, pp. 755, 762; Vol. 57, No. 1, June 1924, pp. 795, 802; Vol. 59, No. 12, May 1927, pp. 850, 851, 858; Vol. 61, No. 8, January 1929, p. 873; January 1930, pp. 885, 888; Vol. 63, No. 3, August 1930, pp. 886, 894; Vol. 63, No. 4, September 1930, pp. 894, 895, 902; Vol. 66, No. 5, October 1933, pp. 781-783, 789.

The Union Pacific Museum Collection in Omaha has a hard bound set of public time tables of the Union Pacific System which runs from January 1, 1901 through April 26, 1970; Amtrak took over in 1971. The Los Angeles & Salt Lake Railroad was not listed until the issue for September 11, 1921. Beginning with that issue, I examined service on the Salt Lake Route in all issues of system timetables until the fall of 1930, encompassing the entire period the new Kelso Depot

Company Hotel and Recreation Facilities

On the other hand, the company hotel or rooming house portion of the Kelso Depot definitely was not designed for or intended to house the general public, although it could under special circumstances. Kelso, after all, was not a destination resort for tourists, and in that age of Model A and Model T Fords and other flivvers, it was in a remote backwater which featured few primitive dirt roads, and few people other than Los Angeles & Salt Lake Railroad employees needed any accommodations there. When Art Francis worked for the railroad during the early 1960s, he recalled:

> When you registered for a room, you completed the top of a two part form. You entered your name, occupation, date, time of arrival and room number. Both the top and bottom half were prenumbered. The bottom half included an envelope into which engineers, firemen, brakemen and conductors deposited 25 cents per night. Others were charged either two or two and a half dollars per night. The top half of the form was prepunched and was hung on the hook corresponding to the room number being checked into. There were no keys.[48]



UNION PACIFIC RAILROAD COMPANY

ROOM REGISTER CARD

Nº 7824

_____Club

Room No. _____ Time of Arrival _____ M. Date _____ 19____

Name _____

Occupation _____ Amount Deposited $ _____

Residence _____

This card must be filled in as required by law, and also for information of crew caller.

Please detach from lower portion and place on the appropriate hook on Room Register Board.

ROOM REGISTER CARD
REMITTANCE ENVELOPE

Nº 7824

Insert coins or coupons and seal.
Detach from card and drop in slot provided.

Figure 2: A Union Pacific "Room Register Card," this version printed in September 1965, is what railroaders used to get a room upstairs in the Kelso Depot. The user filled in the first blank line with "Kelso," "Milford," "Caliente" or "Yermo" as appropriate. Credit: Collection of Art Francis.

Lunch Room served as a meal stop for certain passenger trains. The list of timetables I examined is too lengthy to be cited here, but I will list those which reflected changes in service during that period: *Union Pacific System [Public] Time Tables* issued Sept. 11, 1921, January 28, 1923, and April 1, 1923, in each issue pp. 15-22 and 31-34; issued October 1, 1923, October 28, 1923, December 1, 1923, January 13, 1924, March 19, 1924, June 1, 1925 (first edition), June 1, 1925 (second edition), November 25, 1925, November 25, 1928, June 9, 1929, and September 7, 1930, in each issue pp. 19-26 and 35-38. Combined with entries from *The Official Guide*, these provide a pretty complete picture of the use of the Kelso Lunch Room as an official meal stop for passengers on certain trains that lacked dining cars. See also, Message Record, Telephone Interview by Gordon Chappell with Theo. Packard, March 4, 1997, pp. 1-3. Letter, Theo. (T.C.) Packard, no date, published in the *East Mojave Monitor*, Vol. VI, No. 2, July 1987, p. 5.

48. Letter, Art Francis to the author, January 4, 1997, enclosing review and comments on an early draft of this study; see pp. 3 and 4 of the comments, item 13. Mary Lu Moore donated to the National Park Service several of these blank room register cards for Union Pacific "club" facilities.

No, the experience of staying in those upstairs rooms with meager facilities in the Kelso Depot definitely was not one to attract the general public.

On the second floor, a central hallway ran from one end of the building to the other without obstruction, and featured a window at each end. It was accessed by the single, wide, open, "U"-shaped stairway which led up from the southwest side of the "lunch room." On its southeast side or front, along the track, the upstairs featured twelve small rooms without closet, washbasin, or toilet, incorporating only a steam heater in each, which would be used for transient railroad crewmen staying overnight between runs. Their furniture apparently ordinarily consisted of a metal frame bed and a tall, narrow metal locker. Along the northwest side of the upstairs hallway, beginning at the southwest end, were five similar rooms for "Male Help" which did have one small closet and one washbasin or sink with running water each. The difference between the two classes of rooms probably rested in the rooms with sink and closet being for permanent housing of the depot employees such as the cooks, while the rooms without sinks or closets were for transient trainmen or enginemen who would be staying only overnight. East of these five rooms came a communal mens' "Bath and Toilet" with one urinal, two toilets, one bath tub, and one shower. There was also a janitor's closet, accessed from the hallway. Next on the northeast side of these came the open stairwell up from the cafe below, and finally, at the northeast end of the building, three more rooms for "Male Help" with a washbasin and closet each. So the northwest side of the hallway had eight rooms for permanent male station employees at Kelso and the southeast side had twelve rooms for train and engine crewmen, such as engineers, firemen, brakemen and conductors.[49]

The basement replicated the "L"-shape of the ground floor and occupied all of the foot of the "L" under the kitchen, but the rest of it was about seven feet narrower than the ground floor above, and terminated about eight feet short of the southwest end of the building, those portions being unexcavated. Entered from both the main staircase, the kitchen staircase, and from an exterior stairway down from the back or northwest side of the foot of the "L", the basement featured a short hallway off of which doors entered a small store room to the west, which later drawings called a "Vegetable Room," and the boiler room to the east. The hallway then terminated with a door into a supply room. Southeast of the supply room a doorway led into a locker room, from which in turn a doorway to the northeast led into a toilet room which had three bath tubs, two showers, two toilets, two urinals, and four washbasins or sinks. This occupied the space at the southeast corner of the basement adjacent on the northwest to the boiler room. Another door led from the Locker Room southwest into a large Billiard Room, 19 feet 6 inches wide by 30 feet, eight and a quarter inches long, with two billiard tables. On the southwest side of the Billiard Room, a door led into a large "Reading Room" or Library, 19 feet 6 inches wide by 25 feet, three and a quarter inches long, which had beautiful wooden bookshelves with glazed doors at its southwest end. The entire basement had concrete floors, those in the Billiard and Reading Rooms colored.[50]

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49. L.A.& S.L.R.R. Drawing No. 45129, "Second Floor & Roof Plans." This description draws also from the author's detailed personal inspection of the second floor on Tuesday, April 2, 1996, and Wednesday, November 13, 1996. The only significant changes in the second floor appear to be adding hallway doors with transoms east and west of the stairway top of the stairwell, and converting windows at each end of the hall into doors and adding exterior metal fire escapes. Other than those changes probably for fire safety reasons, the interior of the second floor seems to have been little altered since completion of the building in 1924.

50. L.A.& S.L.R.R. Drawing No. 45128, "First Floor and Basement Plans." This description also derives from the author's detailed examination of the basement on Tuesday, April 2, 1996, and Wednesday, November 13, 1996.

The layout of the building with respect to access from the ground floor to both the second floor and the basement was most peculiar, and suggested that either the designer was a railroad civil engineer rather than an architect, or at least that the decisions made regarding the layout of the building were made by someone with little architectural training. In case of fire, escape from the second story was only by an open, central stairwell to the ground floor — unless one wished to climb out a window onto the roof of the arcade on the southeast side and both ends, or onto the roof over the kitchen, or to jump from a second story window where there was no roof below the windows as on part of the northwest side. Around 1960 when the railroad shut down the power house, the company took a metal ladder, actually more a stairway, out of the power house where it had been used to access the top of boiler or generating equipment, and installed it as a fire escape at the northeast end of the depot building, converting the end window in the second floor into a door to access the ladder. In 1961 the company constructed a metal stairway outside the southwest end of the building, similarly converting a second story hallway window into a door to provide access. In case of fire in the basement, escape, especially from the Reading Room, was only through two other rooms to the main staircase, through three other rooms to the staircase up to the kitchen, or through three other rooms and a hallway to the back door. The access designed between the three floors of the building in fact was not very good, and as designed, the building had no fire escapes, though the company did keep an extension ladder to the rear of the building.[51]

Along the track (southeast) side, the southwest end, and part of the northeast end, the building featured a covered porch with an arched colonnade called on some drawings the "cloister" and on others the "arcade." It stood 11 feet 2 inches wide along the track side and 11 feet one inch wide across the east and west ends of the building. This arcade formed a long covered porch which shaded all the downstairs windows and doors on the front and two ends of the building from the scorching desert sun. In later years, at least, a depot bench within the arcade provided passengers a shaded place to sit while awaiting their train. [52]

Above the second story the front of this hip-roofed building featured a cross gable terminated in a large espadana parapet, which might also be termed a stepped and scrolled parapet, or a stepped and scrolled gable, of a design borrowed right from the front facade of Spanish colonial mission churches such as San Carlos Borromeo del Rio Carmelo, or any number of others in the chain of Alta California missions. The aforementioned Union Pacific shield symbol of the "Overland Route" variety stood out in the middle of this parapet in bas relief, painted red, white and blue. Similar but smaller parapets, too small to accommodate UP symbols, featuring instead quatrefoil windows shaped with barrel tiles, decorated the ends of the building. Such parapets were a common feature not only of Spanish missions but of almost all mission revival buildings. The Kelso Depot, however lacked one other feature common to both missions and mission revival architecture: one or

51. Art Francis, letter to the author, January 4, 1997, enclosing review and comment on an early draft of this study, p. 4, item 18 of comments. The Bureau of Land Management removed both of these fire escape stairways, probably principally to retard vandalism, during the early 1990s when that agency owned the building. Francis said that the depot did have fire lines located throughout and strategically located fire extinguishers, and in the rear the railroad kept an extension ladder for use in accessing the upper floor windows; it could be used in case of a fire. He also noted that the occupants of the depot did not include children or the elderly or infirm — they were able-bodied employees of the railroad. "In the years of the facility, the only two fires I recall included a gardener's tool shed attached to the side of the official's sleeping quarters behind the telegraph office [and] baggage room . . . and a spontaneous fire in the coal house during the summer of 1957. Both were quickly handled without extensive damage or danger to personnel."

52. L.A.& S.L.R.R. Drawings Nos. 45128, 45130.

more bell towers. The Kelso Depot had none. Above the center arch on the front of the building metal letters spelled out in Railroad Roman style the name "K E L S O."[53]

The exterior of this wood frame building was to be stuccoed on metal lath in simulation of the mud-plastered adobe walls of genuine Spanish mission buildings, the interior generally plastered, and the roof finished in mission tile of variegated colors. A pair of 12 foot wide walkways of vitrified (paving) brick were to connect the concrete walkway behind the colonnade with the oiled gravel or asphalt station platform, thus dividing the lawn in front of the station into three sections.[54]

At some unknown location, serving either the original wood frame depot or the agent's residence, the company had erected at an unknown date a small 9 by 12 foot coal house. When planning the new depot and "club" building, the company moved this coal house to a position behind the kitchen of the new building; the front of the coal house would stand 29.9 feet from the back of the depot. Even before undertaking construction of the new depot, boarding and rooming house, on February 7, 1923, the Engineering Department produced a plan for roughly doubling the size of the coal house by adding to its northeast end a store room 9 by 11 feet, eleven inches. In the process, the company added two new 21 by 36 inch windows in the coal house and two more in the addition, putting one on each end of the building and two in the rear wall.[55]

The rooming house and lunch room in the Kelso Depot would be operated by the railroad's Dining Car and Hotel Department, known to railroad employees simply as "D.C.& H.," until in the last decade or so of its operation it came under the "Commissary Services Department." In their jargon, railroaders often described going to lunch, or dinner, or supper, as "going to beans," so it was only natural that in time the coffee shop or cafe in the Kelso Depot came to be called by railroad employees, especially trainmen (brakemen and conductors) and enginemen (engineers and firemen), "The Beanery."[56]

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53. L.A.& S.L.R.R., Drawing No. 45130, Elevations.

54. L.A.& S.L.R.R., Drawings Nos. 45133 and 45134, both "Exterior Details," and No. 15140, "Portion of Club House Platforms to be Built at This Time," January 31, 1924.

55. L.A.& S.L.R.R. Drawing No. 15110A, "Store Room Addition to Coal House for Club House & Restaurant Bldg., Feb. 7, 1923.

56. The author has found no history of the Dining Car and Hotel Department of the Union Pacific, but the Superintendent of the Dining Car & Hotel Department in Omaha, H. A. Hansen, wrote an article, "The Remarkably Varied Work of Our D.C. & H. Department" which appeared in *The Union Pacific Magazine*, Vol. VII, No. 6, June 1928, pp. 6-8, which explained the Department's current operations. There is also a reminiscence of a long-time employee: Paul R. McDonald, *Forty-One Years in the D.C.& H.; Jules Hansink and His Career in the Dining Car and Hotel Department of the Union Pacific Railroad, 1931-1972.* But Hansink was hired just about the time Kelso ceased to be a meal stop for passengers, and made no mention of the Kelso facility. Since the Dining Car and Hotel Department's principal concern had been operating dining cars on Union Pacific trains, it was perhaps not surprising that the china, silverware, and glassware used in the Kelso "Beanery" was the same railroad monogrammed service used on dining cars. Hemphill, p. 27, 77, noted that in March 1984, a year before the "Beanery" closed, the Commissary Services Department used Union Pacific "streamliner"-pattern china in the Kelso restaurant, and that the burgers were called "Challenger burgers" after one of the railroad's "name" trains which had once passed the Kelso depot. Of course, all such passenger traffic, and use of such china on dining cars, had ceased in May 1971 when Amtrak took over operation of passenger trains on most of the nation's railroads, so its use in the Kelso restaurant down to 1985 was already an anachronism. Railroad china and silverware are expensive collectables today, though the "Streamliner" pattern of Union Pacific china was late enough and common enough that examples could be acquired for the park collection if desired. For details on Union Pacific china, see Richard Luckin, *Dining on Rails - An Encyclopedia of Railroad China*, pp. 255-261; and Douglas W. McIntyre, *The*

After construction forces began building the basement of the depot, a flash flood filled the excavation with sand. Originally a wash ran down where the road now is, crossed by a footbridge that led to the Kelso store. It was probably this flash flood that led the railroad to construct the system of earthen dikes which protected the town from such floods.[57]

Exactly when construction of the Kelso Depot began is not at present known, but on June 1, 1923, Salt Lake Route field engineers Clausen, Bailey, and Balling surveyed the section ties for the land for the proposed depot using Berger Transit No. 4694 and a plumb bob on all the chaining. It was, they noted on their field notes, a hot, windy day.[58] In Los Angeles, the draughtsmen made the final major revision to the plans on July 6, 1923. Presumably construction did not begin until at least July 1923.

A "New" *Los Angeles Limited*

It should be noted that during the fall of 1923, while railroad construction forces busily erected the Kelso Depot, employees' hotel and Lunch Room, as another phase of its modernization the railroad placed into service a daily *Los Angeles Limited* made up of entirely new rolling stock. The first consist of the new train apparently reached Kelso westbound on Thursday, December 6, 1923, in its 68 1/2 hour run from Chicago to Los Angeles. "The monster Pacific type locomotive pulled a train of brand new, spick and span Pullman equipment, considered by railroad men to be one of the finest and most perfectly appointed trains in America," the *Barstow Printer* subsequently told its readers. The new train sported observation cars "of the U.P. design which embody every modern convenience," including a library, buffet service, barber shop, bath and valet service, together with a "commodious" lounge-smoking room for men. New dining cars costing $50,000 each seated 36, and a new system of ventilation prevented kitchen odors from reaching those dining. The train featured new Pullman sleeping cars as well as a new compartment drawing room Pullman. The

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Official Guide to Railroad Dining Car China, pp. 146-150. For dining car silver, see Arthur L. Dominy and Rudolph A. Morgenfruh, *Silver at your Service; A Collector's Guide to Railroad Dining Car Flatware Patterns*, pp. 22, 33, 34, 42, 90, 95, 119, 129, 132, 133, 135, 150, 158, 159, 163: Everett L. Maffett, *Silver Banquet: A Compendium on Railroad Dining Car Silver Serving Pieces*, p. 183; and Everett L. Maffett, *Silver Banquet II; A Compendium on Railroad Dining Car Silver Serving Pieces*, pp. 215-219. For dining car crystal, see Larry R. Paul, *Sparkling Crystal: A Collector's Guide to Railroad Glassware*.

When the author photographed operations of the narrow gauge lines of the Denver & Rio Grande Western Railroad in the 1960s, he often heard the enginemen and trainmen say that it was time to "go for beans" or "go to beans," generally meaning lunch, sometimes supper. John West, who worked his way through college at the University of California as a fireman for Southern Pacific out of San Francisco on the Coast Division in 1960 confirmed to me on February 11, 1997, in a telephone conversation that Southern Pacific enginemen and trainmen used the same slang, meaning any meal including breakfast. (That doesn't mean they actually ate beans for breakfast.) Furthermore, the author has seen from on board the *California Zephyr* during the 1960s, the Denver & Rio Grande Western railroader's hotel and restaurant at Bond, Colorado, and has in his files at least one menu from the place. In February 1981, the author rode the White Pass & Yukon Route mixed train from Skagway, Alaska, to Whitehorse in the Yukon Territory of Canada, and on the northbound trip by accident ate in the railroad employees' dining room at Bennett, British Columbia, where he served himself on white china with a dark green border, though no monogram. On the return trip he was shown into the passengers' dining room where he was served on paper plates, and was the only person in the room, as he had been the only passenger on that winter train.

57. Letter, Art Francis to the author, January 4, 1997, with enclosed comments on an early draft of this study; see p. 3 of the comments, item 9; letter, Theo. Packard, June 30, 1997, to the author.

58. Field engineers' notebook page supplied by the Union Pacific Railroad Museum in Omaha, Nebraska.

Union Pacific had to purchase nine complete train sets for daily operation, for three were operating in each direction at 24 hour intervals at any given time between Chicago and Los Angeles, and the additional three provided one to be undergoing cleaning at each end of the line, with a spare set to allow for cars to be shopped for repairs when necessary. Each train set, not counting the locomotive, cost the Union Pacific about $423,000, for a total investment of four million dollars for the nine train sets. The railroad staffed each train with 26 employees: an engineer, fireman, conductor, brakeman, flagman, train baggageman, train electrician, barber, steward, six waiters, a chef, two assistant cooks, a pantryman, a Pullman conductor, six Pullman porters, and an observation car porter, for a total of 234 men in service on the trains. Since the *Los Angeles Limited* had a dining car, its passengers would not avail themselves of the Kelso Lunch Room when it was finished, but during a station stop to take water and possibly fuel, they might get off to stretch their legs and buy candy or tobacco products at the Lunch Room.[59]

Completion of the New Kelso Depot

As the depot neared completion early in 1924, Waitress Elma Ann Erickson from the two-dining outfit car substitute eating house across the tracks, and undoubtedly some of her co-workers, were assigned to prepare the Lunch Room and Kitchen for operation. The Dining Car and Hotel Department headquarters were in Omaha, Nebraska, in a commissary building, and the D.C.& H. Department also had a commissary office and commissary storehouse in Ogden, Utah, and Los Angeles. Supplies such as railroad-pattern China, silver and glassware as well as Irish linen napkins, tablecloths and employee uniforms, aprons and towels, and kitchen and pantry equipment, probably came out of the main commissary in Omaha in a special shipment in the quantity needed to stock an entirely new Lunch Room. Normally, weekly supplies would have been shipped in a special baggage car known as a "Supply Car" which carried a supply car clerk or "messenger" who handled the requisitions and distribution. The railroad hauled the supply cars on passenger trains. The commissary also supplied domestic and imported Cuban cigars, cigarettes, tobaccos, and candy. Supplies of food and replacement china, silver and glassware came by a regularly-scheduled supply car. Food itself could also be procured in Los Angeles and shipped east to Kelso, especially seafood, fruits and vegetables, dairy products, poultry and eggs. The railroad generally served Kansas corn-fed beef for its steaks and roasts. Elma Erickson had to help get all of this material properly stored in the new kitchen and Lunch Room in preparation for its opening.[60]

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59. "Union Pacific New Trains Among Finest in America." *The Barstow Printer*, Thursday, December 12, 1923, p. 1. Exactly when the *Los Angeles Limited* ceased to run is a subject for future research. The new Union Pacific streamlined, diesel-powered *City of Los Angeles* superseded it as the Salt Lake Route's "flagship" train during the late 1930s, but with its own diesel-electric motive power, the *Los Angeles Limited* still ran in 1952. When after that the railroad discontinued it is not known at the time this is written.

60. H.A. Hansen, Superintendent, Dining Car & Hotel Department, Omaha, "The Remarkably Varied Work of Our D.C.& H. Department," *The Union Pacific Magazine*, Vol. VII, No. 6, June 1928, pp. 6-8. Ogden was a logical place for a D.C.& H. office and storehouse since it was the original western terminus of the Union Pacific (after the track between Ogden and Promontory Summit had been transferred to the Central Pacific), and from Ogden the Utah Central soon extended south to Salt Lake City and beyond, and the Utah Northern north across Idaho to Garrison, Montana, crossing the Oregon Short Line en route, and the Union Pacific soon owned all of these lines. In addition to Omaha, Ogden and Los Angeles, the Union Pacific maintained commissary offices and storehouses in Denver, Colorado, Portland, Oregon, and Pocatello, Idaho, and had terminal representatives known as "commissary agents" at Kansas City, Missouri, and Chicago, Illinois. The D.C.& H. also had by 1928 a superintendent located in Cedar City, Utah, responsible for the hotels run by the Utah Parks Company subsidiary at Zion, Bryce Canyon, Grand Canyon's north rim, and the lunch room at Cedar Breaks, all of which were supplied by the Dining Car & Hotel Department. Incidentally, dirty linen was shipped to

As for completion of the depot, the April 1924 issue of *The Union Pacific Magazine* reported:

> . . . The combination lunch room station and club house at Kelso was opened March 2. There was great rejoicing at Kelso on the opening of this building. It is a beauty, and will be appreciated by the traveling public, railroad men, and citizens of Kelso . . . . [61]

A small photograph of the front of the "New club house recently completed at Kelso, California," appeared two pages later in the magazine. An unidentified Los Angeles & Salt Lake Railroad photographer took a photograph from the west of the rear of a completed building on March 10, 1924. From what little could be seen around the ends of the building, it seems landscaping had not yet been completed as of March 10, 1924, if indeed it had yet begun.[62] In the May 1924 issue of the employees' magazine, T.M. Freeborn, correspondent for the Los Angeles Division reported:

> . . . The new Club House and Restaurant at Kelso is attracting a good deal of attention and favorable comment. Manager Brown of the Las Vegas Restaurant spent two days there recently looking it over . . . .[63]

In the railroad's A.F.E. files, Form 268-A, "Report of Completed Work — Additions to Existing Property Replacing Property Retired," the company reported the "Date Work Reported Physically Completed" as June 15, 1924, a little over three months after the building actually opened. The building had cost $86,308.17, of which $569.53 for removing the burned structures had been charged against operating expenses, another $1,651 was charged off to another category of operating expenses, and the railroad charged $429 to an insurance reserve, no doubt covering the loss of the earlier structures to fire, bringing the total cost of the new Kelso building down to $83,658.64. In another distribution of accounts listed as "Road and Equipment subsequent to June 30, 1914," the railroad charged $1,105.18 to engineering, $212.46 to "Land for Transportation Purposes," $84,421 to "Station and Office Buildings," and in another category listed as "Operating Expenses," charged $325.85 to "Station and Office Buildings" and $243.68 to "Telegraph and Telephone Lines." However the accountants wanted to describe the expenses, Kelso now had its depot.

On November 1, 1924, Field Engineers McKee, Morris and Keithley sketched the exact location of the depot in terms of distance from the centerline of the main line to Salt Lake City (81.13 feet) and drew a line extending along the east end of the building which met the track at right angles at engineering station 1697 + 33.5, thus pinning the location of the station down to a tenth of a foot. The drawing also showed that the supposedly 12 foot wide west vitrified walk actually was 12.2

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a company laundry in Ogden, Utah, for cleaning and, if necessary, repair. See also, "Interview with Elma Ann (Erickson) Leland," 30 April 1987, by Cindy Stead and O.B. O'Brien, pp. 34, 35-38; "Interview with Elma Ann (Erickson) Leland," 23 August 1990, by Dennis G. Casebier, pp. 88-89, 114, 134-135; hardbound transcripts in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis Casebier.

61. Vol. III, No. 4, April 1924, p. 53, with a small halftone photograph of the front of the Kelso depot on P. 55.

62. Had this depot been built in a city, a local newspaper would have covered its construction and opening. But Kelso stood out in the middle of the Mojave Desert remote from even the local newspapers at Barstow, Las Vegas, and Needles.

63. *The Union Pacific Magazine*, Vol. III, No. 5, May 1924, p. 70.

Photo 13: Kelso Depot, March 10, 1924. The earliest dated view of the building. Landscaping appears not to have been done yet. Credit: Union Pacific Museum Collection.

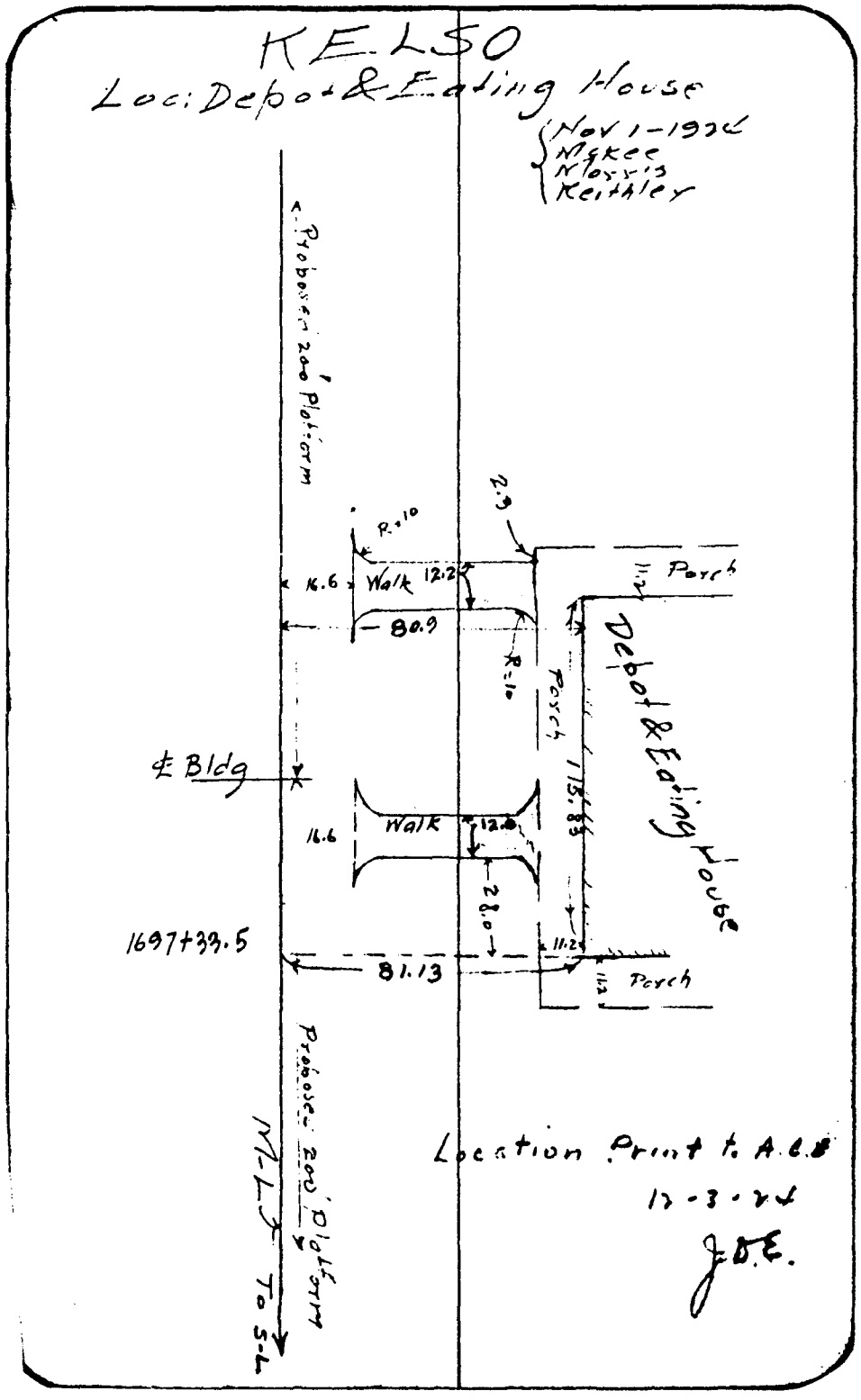

Figure 3: Field Engineer's drawing, Nov. 1, 1924, showing the new vitrified brick walks connecting the depot arcade with the not yet built station platform. A location print was sent to the Assistant Chief Engineer on Dec. 3, 1924. Credit: Union Pacific Museum Collection.

feet wide, only the east one being 12.0. A copy of this location print went to the Assistant Chief Engineer in Los Angeles on December 3, 1924.[64]

A number of cats wandered around the depot, probably attracted, like the burros, by the scraps of food thrown on the dump. Elma Erickson adopted one as a pet and took it into her downstairs room in the depot. The cooks and waitresses made every effort to keep cats out of the Lunch Room and kitchen, however, but with people coming and going through the doors, that didn't always work. Naturally, when visiting D.C.& H. inspector A.J. Buttle was having breakfast one day, a scrawny cat slipped in through one of the doors, and he asked Elma, "What are you doing with that?" She told him the cat was there for breakfast. It was also Buttle who spotted the cook using a "thunder mug" as a stew pot in the kitchen, and asked, "What in the Hell is *that*? What are you doing with that on the stove?" Elma Erickson, who at times served as the acting head of the "Beanery," had to explain that she had requisitioned a stew pot from the commissary store in Ogden, and the chamber pot was what the supply car had delivered. A "thunder mug," of course, was a chamber pot for urine which people kept under their beds for use at night and emptied in the morning in the days before indoor plumbing. Since the Kelso kitchen needed a stew pot and that was what the D.C.& H. commissary store had sent, that was what they used as a stew pot. One would hope that Inspector Buttle subsequently had a proper stew pot sent to Kelso.[65]

One of the early D.C.& H. managers at Kelso, a man named Grant, drove to Los Angeles, apparently using the Old Government Road, and on the return trip his car either broke down or became mired in the sand and salt on or near Soda Lake, and by the time they found him several days later, he was dead and his hair had all turned white. The desert could still be lethal, even with pockets of civilization such as Kelso and Baker.[66]

Landscaping the Depot Grounds

In landscaping the depot grounds, the railroad first laid out two twelve foot wide, 52-foot long paths of vitrified (hard fired) red (actually a pink) paving brick connecting the arcade or covered

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64. See engineers' field note cited in the text, supplied by the Union Pacific Railroad Museum, Omaha, Nebraska. Railroads measured portions of an inch in tenths, rather than in fractions.

65. "Interview with Elma Ann (Erickson) Leland," 30 April 1987, Las Vegas, by Cindy Stead and O.B. O'Brien, pp. 33, 34, 35-37, 40-41; "Interview with Elma Ann (Erickson) Leland," 23 August 1990, by Dennis G. Casebier, pp. 88-89. 114. 134-135; hard cover transcripts of both interviews are in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis Casebier. Elma Erickson on one occasion passed out from heat stroke at Kelso, and they had to send for a doctor from Yermo, but the only way the railroad could get him to Kelso was by a handcar on the track.

In the latter interview, pp. 127-128, Dennis Casebier asked Elma whether the work in the Lunch Room was hard, and she replied, "Well, that just depends on what you are doing. Because sometimes when these trains would come in, why sometimes you'd have a cook and sometimes you wouldn't. And sometimes you'd have a waiter and waitress. So it was pretty hard because you had to even be, or tried to be a cook, and this and that, and the other . . . So at times it was a little difficult." She remembered being paid about fifty dollars, probably per month.

66. "Interview with Elma Ann (Erickson) Leland," 30 April 1987, by Cindy Stead and O.B. O'Brien, p. 33; Interview with Howard and Wanda Wasden," 19 February 1992, by Dennis G. Casebier, pp. 25, 26. Hardbound transcripts of both interviews are in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis Casebier. The oral history informants were not clear on whether Grant's car broke down, or simply got stuck in the salt and sand of Soda Lake.

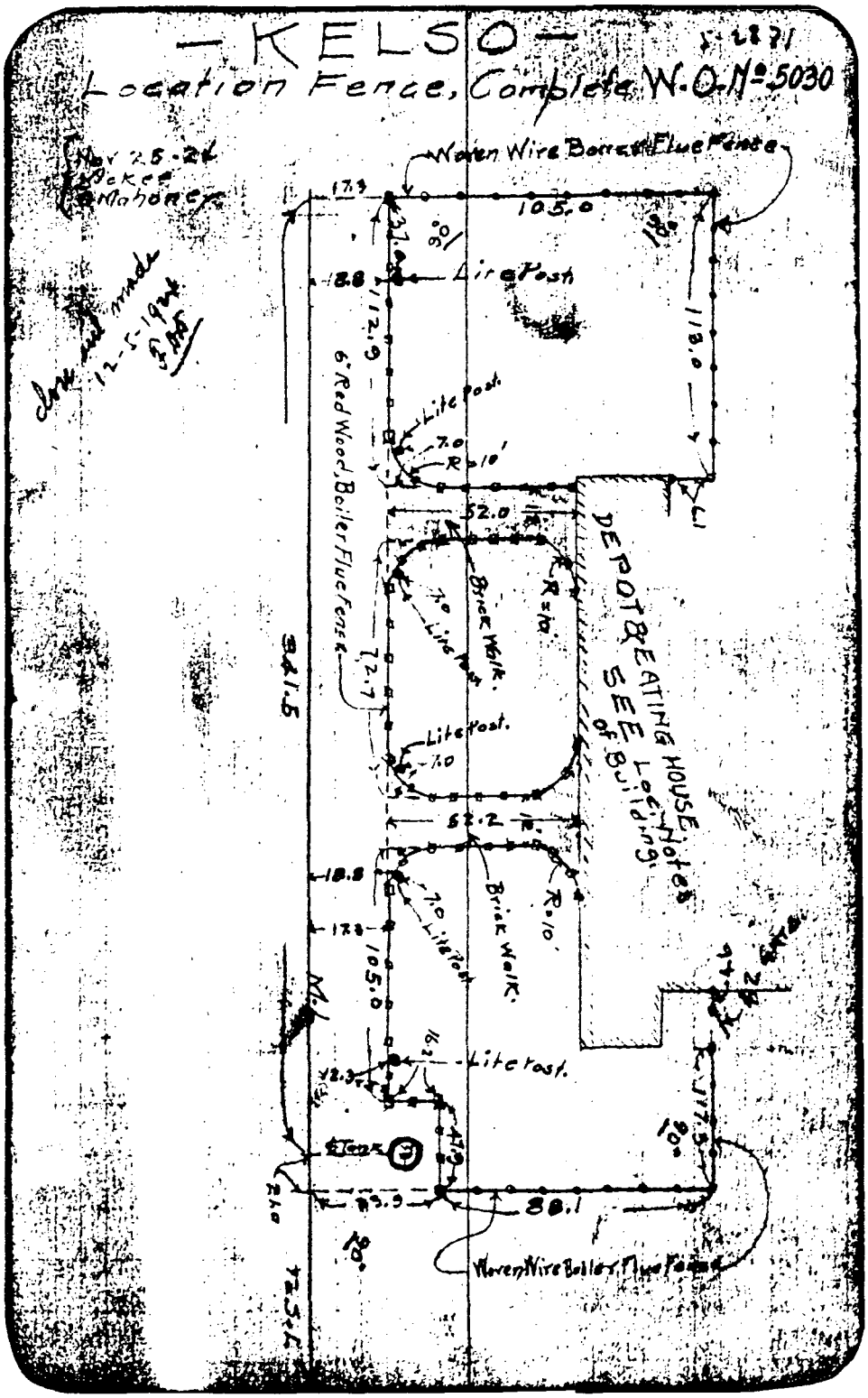

Figure 4: Field Engineer's drawing, Nov. 25, 1924, of the depot fences which had been built under Work Order No. 5030. The front fence consisted of six-inch square redwood posts with beveled tops, drilled for a pair of rails of used boiler flues from locomotives. To the east and west of the lawn area and building, the fencing was of woven wire on boiler tube posts. The work was closed out December 5, 1924. Credit: Union Pacific Museum Collection.

porch with the station platform (actually, as noted, the west walk was 12.2 feet wide, only the east walk being 12.0).[67] Initially, the station platform itself consisted of oiled gravel (which in practice, probably meant asphalt or what the railroad sometimes called Macadam), but the railroad replaced this in January 1926 with a vitrified brick platform which matched the vitrified brick paths from the depot, except in one respect. The two paths thus trisected the rectangular portion of depot grounds between the southeast side of the depot and the parallel station platform into three rectangles which then the railroad planted in lawn. To protect the lawn, the railroad erected on each side of the brick paths and along the northwest edge of the station platform a fence made up of drilled redwood posts six inches square and a pair of either new or used boiler tubes or flues, which appear from photographs to have been around two inches in diameter and were hollow iron or steel pipes, connecting the posts to form a two-rail fence. The edges of the tops of the posts were beveled, and the tops, the beveled edges, and another three inches or so of the sides above the top pipe rail were painted a dark color, possibly dark green, but probably black. Below that, the railroad painted the posts white, leaving the pipe rails apparently unpainted; if so, they were probably the reddish brown color of rust, either from exposure to the elements or from having been used and removed from some locomotive boiler for replacement with new flues.[68]

Beginning at its southwest end, the fence consisted of eight redwood posts along the edge of the station platform, then one or two posts accommodated a curve towards the depot on a ten foot radius (to which the flues or pipes were bent before installation), and six posts extended at right angles to the platform from the end of this curve, the final post against the building itself. However on the east edge of this twelve foot wide vitrified brick path, the fence featured a 10 foot radius curve at both the station platform end and at the depot end, with two posts in the middle of the initial curve at the station platform, five in a straight row along the edge of the vitrified brick, one in the middle of the curve at the building end, and one terminating the fence against the building. The first fenced plot of lawn and its fence extended 112.9 feet along the station platform, parallel to the main track, to the first brick walk, and the brick walks, as already noted, extended 52 feet from the northwest edge of the station platform to the southeast front of the building.

Along the station platform, between the two vitrified brick paths from the depot to platform, five more redwood posts holding twin horizontal boiler pipes ran eastward along the edge of the station platform, then encountered the curve at the second brick walk, featured one or possibly two

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67. Union Pacific System, L.A.& S.L.R.R., Kelso, Cal., Portion of Club House Platforms to be built at this time. Drawing No. 15140, Office of the Asst. Chief Engineer, Los Angeles, California, January 31, 1924. This drawing showed the platforms consisting of 4 by 8 by 2 1/4-inch brick laid flat on top of a one inch thick bed of sand, which lay on top of a five inch thick concrete base, which was laid on top of a six inch thick bed of sand or cinders. A concrete curb topped with bricks laid on edge flanked both sides of each walkway. This drawing also covered a twelve foot wide "Future Platform Parallel to Track," which apparently was of basically identical design *except that* whereas the walkways from the building toward the track were flat but inclined downward slightly to the south, the north half of the future platform alongside the track was to be level in front of the depot, whereas the south half was to have a downward pitch of a quarter inch per twelve feet toward the south probably so that it would drain. This track platform was to be six and a half inches above head of the nearest rail at its southern edge. The southern edge of the platform was to be 5 feet, 3 inches from the centerline of the nearest track.

68. Field engineer's note by Field Engineers McKee and O'Mahoney, November 25, 1924, supplied by the Union Pacific Railroad Museum, Omaha. Vitrified brick is a brick that has been fired in such manner or with such chemical additives that it has a very hard, abrasion-resistant exterior, and thus can be used as a paving brick for sidewalks and driveways and, in this case, depot platforms. Vitrified brick platforms were widely used by railroads, the Atchison, Topeka & Santa Fe Railway being a notable user of them.

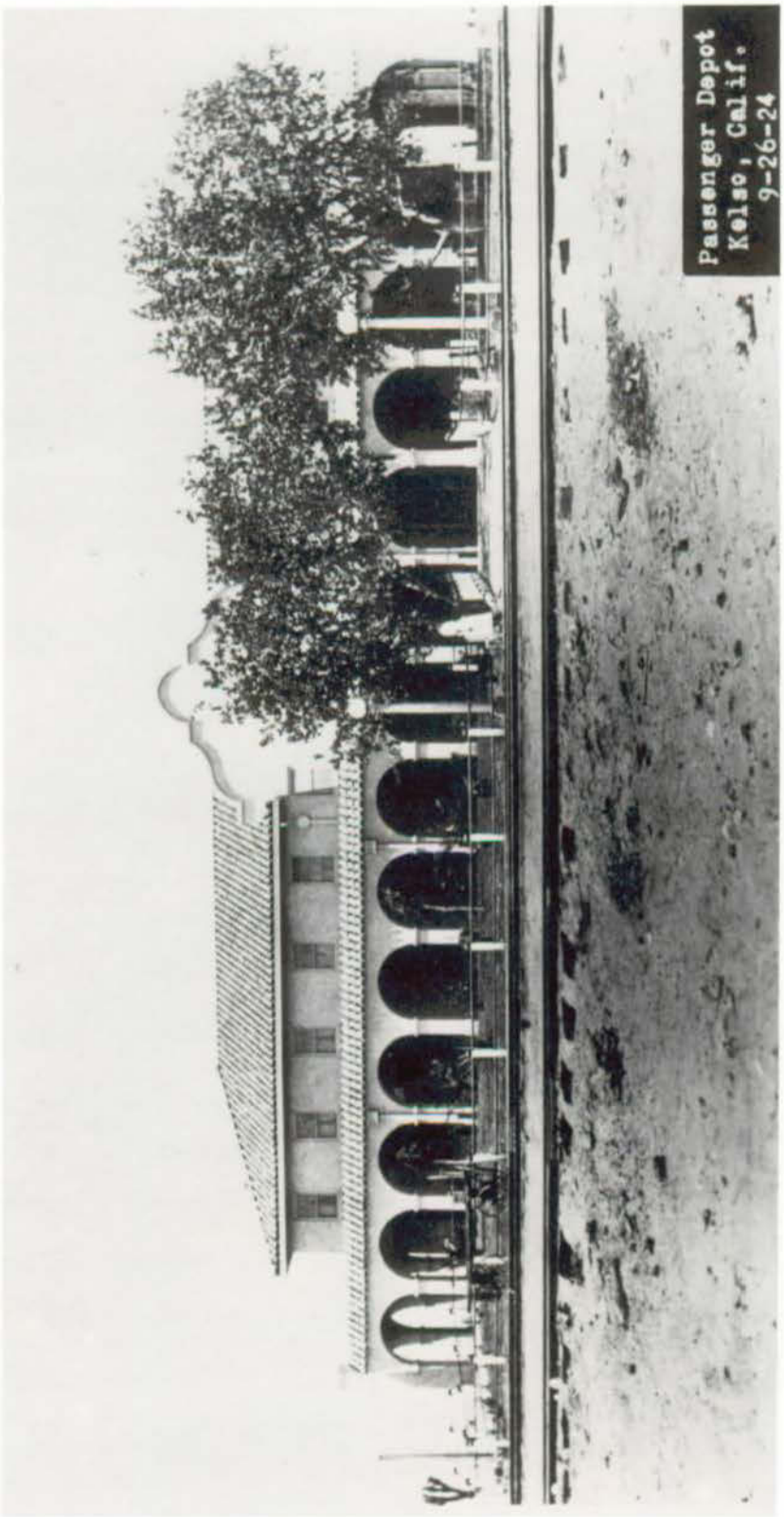

Photo 14: "Passenger Depot, Kelso, Calif.," September 26, 1924. The earliest dated view of the depot and completed landscaping in front of the building. Note the baggage cart. Credit: Union Pacific Museum Collection.

redwood posts in the curve itself, then five along the brick path at right angles to the track, one in the middle of the curve near the arcade, and a final post terminating the fence against the wall of the arcade. A mirror image of this fence, with the curves reversed, bordered the northeast side of this second path, except that it apparently had two redwood posts in the middle of the curve near the building. This second section of lawn and the fence which protected it extended 72.7 feet along the station platform.[69]

Along the station platform, the fence resumed its eastward course with seven redwood posts in a straight line, which, along with the initial curve, reached a length of 105 feet along the edge of the station platform. Then the fence turned at right angles toward the building for the space of two posts, or 16.2 feet, then turned again at right angles at the second post and continued parallel to the station platform for the distance of three more posts, or 47.9 feet, where it terminated. This "L" in the fence at its eastern end accommodated a large, cylindrical, riveted steel, 70,000 gallon capacity water tank elevated on steel posts to supply water to locomotive tenders.[70]

The extreme ends of the fence, running at right angles to the track at the east and west ends of the lawn, passing the ends of the building, then turning at right angles to meet it were different from the boiler tube and redwood post portions of the fence. A sketch of the fence dated November 25, 1924, apparently documenting the date of its completion, showed these sections of fence on the east, west and north sides of the lawn as "Woven Wire Boiler Flue Fence," and the sketch depicted the posts for these sections as round, rather than square as in the case of the redwood posts in front of the depot. Nine such posts, probably made of boiler tube sections driven into the ground to serve as posts, extended northwest from the wooden end post at the station platform at the far western edge of the lawn for a distance of 105 feet, eight more posts marched at right angles northeast from the ninth and corner post of the first row for a distance of 113 feet, and the fence then turned in at right angles for a distance of 6.1 feet to meet the building at a final post. Whether these sections of fence had a horizontal boiler tube attached or welded to the upright presumably boiler flue posts at or near the top to hold up the woven wire is unknown.[71]

At the southeast end of the lawn, as already mentioned, a rectangular area of lawn had been excised to accommodate a cylindrical steel water tank mounted on a platform of steel posts. The redwood post and boiler tube fence made an "L" around this tank. Then from the redwood post at the southeast end of this "L", eight boiler tube posts extended in a row northwest at right angles to the track for 88.1 feet; from the last post, five more extended southwest toward the building 117.3 feet, then came a 4.2-foot wide gate, and the gatepost and a final 4.6 feet of fence from the gatepost to a post at the wall of the building.[72]

The plan to put up both the boiler tube and the woven wire fences had been worked up by early May 1924. On May 8, 1924, President Carl Gray submitted to U.P. Controller F.W. Charske in New York request for Authority for Expenditure No. 39 for the L.A.& S.L., also prepared on May 8, which called for the railroad to construct 940 feet of fence, 460 feet of which was to consist of wire on concrete posts, the remaining 480 feet being boiler tubing on wooden posts. The A.F.E.

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69. Ibid.

70. Ibid.; L.A.& S.S.R.R. Drawing No. 45127 stipulates the capacity of the water tank.

71. Ibid.

72. Ibid.

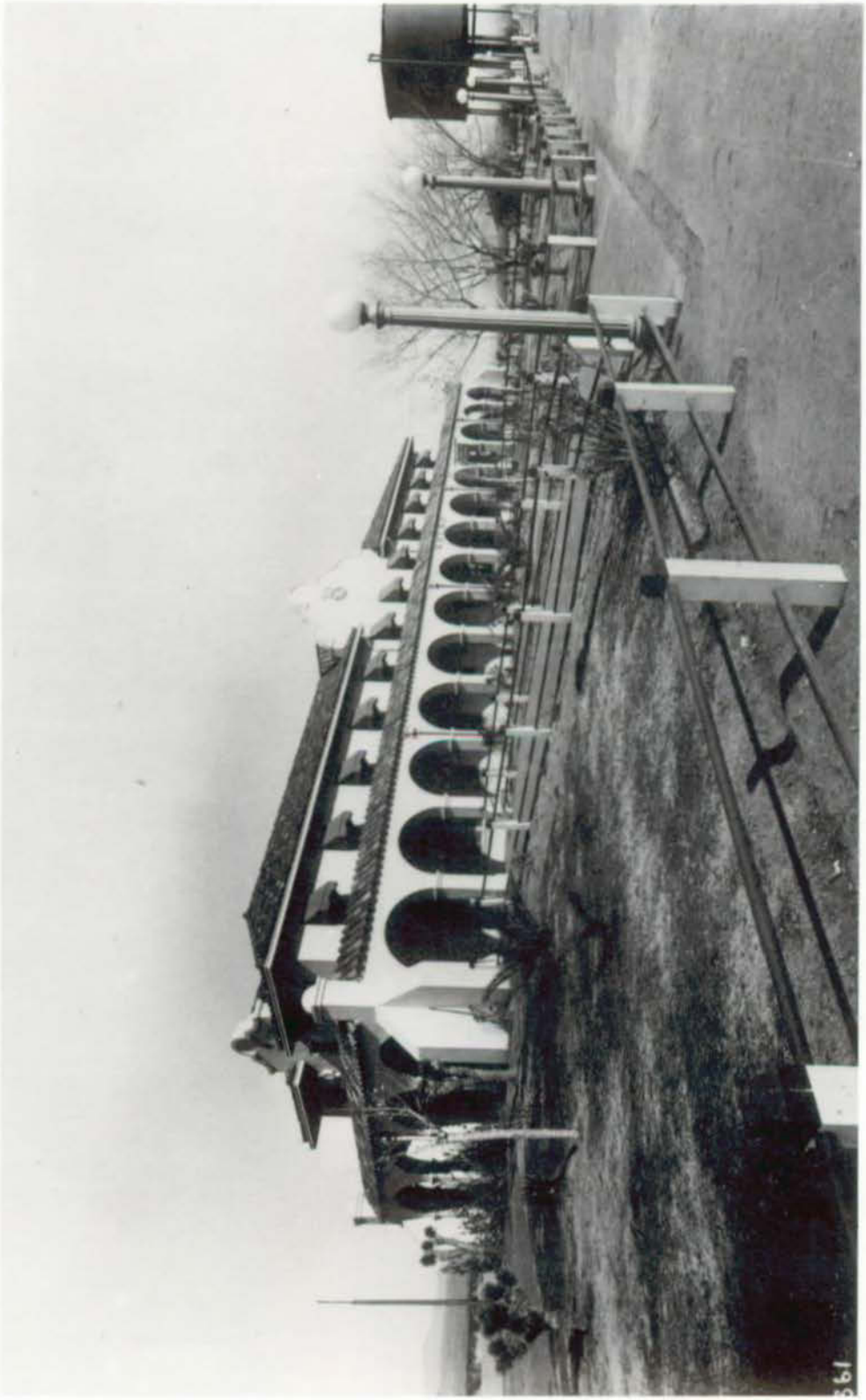

Photo 15: "Kelso Club" - Depot, Boarding and Rooming House, Kelso, California, ca. fall 1924. Note the boiler tube and redwood post fence, the brick walks from the building to the asphalted gravel station platform, the light posts with spherical globes and the water tank at the far right. Credit: Union Pacific Museum Collection, Nos. 501857 and 501518.

request also covered unspecified "landscape improvements" and the installation of a sprinkling system. The A.F.E. form stated the reason for this work as being "To improve appearance of station grounds in harmony with newly constructed modern mission type depot, restaurant, and club house facilities." The form projected a cost of $2,610. In transmitting the A.F.E. to New York, President Gray in Omaha wrote, peculiarly using the word "parking" to mean, not placement of a wagon or motor vehicle when not in use, but to mean a small section of land developed with lawn, trees and shrubs as a small park:

> We have just completed a modern Mission Type depot, restaurant and club house at this point, and it is now proposed to build some parking in front and at each end of the building, in which will be planted grass, trees and shrubbery. This parking will be outlined by fence built of wooden posts with pipe hand railing made from discarded boiler tubes.
>
> Kelso is in the desert, where there is very little green vegetation to be seen, and it is particularly desirable to beautify and make attractive our station grounds so that they will be particularly inviting to passengers en route to and from California.

Even though he did not use the word "oasis," Gray made it clear that was what the Union Pacific proposed to create. Gray went on to note that the project had inadvertently been omitted from the budget for 1924. Nevertheless, the Finance Committee in New York approved the funding request on May 20.[73]

Meanwhile, E.D. Adams, in Omaha, wrote J.L. Hough on May 8:

> I think the plan now proposed has been very well worked out; probably the woven wire fence on the back and sides is justified and the pipe rail fence on the front would be entirely satisfactory and look well. I recommend approval.
>
> We have an immense surplus of obsolete length and size boiler tubing on System Lines and this job will use a considerable quantity of material that would otherwise remain idle in our stock for many years, and which we have been unable to sell except at scrap prices.

But another agenda came into play. Apparently in response to a memorandum of May 28, 1924, on the subject of the Kelso fencing which did not survive in the file, E.E. Adams responded to Chief Engineer R.L. Huntley on June 2,

> This requirement should be filled from stock of 2-1/4" by 18'8" charcoal iron tubes on hand at Pocatello on the Oregon Short Line.
>
> Information is being secured as to amount at which these flues stand in the accounts of the Oregon Short Line and we will advise what the same will cost f.o.b. lines of the L.A.& S.L.

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73. Authority for Expenditure No. 39, Los Angeles & Salt Lake Railroad, prepared May 8, 1924, approved May 20, 1924; letter, C.R. Gray, President, Omaha, May 8, 1924, to F.W. Charske, Vice President and Controller, New York; Union Pacific Museum Collection, Omaha.

Reading between the lines, charcoal iron flues probably were new and unused, but being of iron, of an obsolete type that had been replaced by steel flues. Adams subsequently advised Chief Engineer Huntley that they would cost the L.A.& S.L. $32.54 per hundred feet f.o.b. Salt Lake City, Utah, after which the L.A.& S.L. would have to stand the cost of shipping them to Kelso, California.[74]

But on June 16, 1924, L.A.& S.L. General Manager F.H. Knickerbocker in Los Angeles wrote N.A. Williams that he approved using the second hand flues:

> The new flues from Pocatello would cost nearly nine times as much as SH [second hand] flues authorized by Work Order 5030, and as the latter will satisfactorily answer the purpose, the substitution proposed by the Chief Engineer does not appear warranted.

But thereafter, for the rest of June, the correspondence became both confusing and inconclusive as to whether they installed at Kelso second hand steel flues, new and unused but obsolete charcoal iron flues, or some of both, perhaps one type in the pipe rail fence and another as posts in the woven wire fence.[75]

Los Angeles & Salt Lake field engineers McKee and O'Mahoney sketched the completed fence on November 25, 1924, and the railroad's engineering department filed a final close-out form on the project on December 5, 1924. This completed the initial fencing which extended 362.5 feet along the station platform, wrapping 105 feet around the west end of the depot building and 104.3 feet around the east end.

The railroad removed the boiler tube fence early in World War II during 1942, donating the salvaged pipes to a wartime scrap drive, replacing them mostly with trimmed hedges.[76]

Vegetation. The plantings within the lawn areas apparently had not been made by March 1924 but were complete by September, to judge by dated photographs, and two mature trees in front of the depot probably had stood west of the original 1905 depot. Extending diagonally eastward from the northeast corner of the new depot, the railroad planted in line a row of five joshua trees, a native desert plant, with a sixth close to the southeast corner of the building. It planted one each near the northwest and southwest corners of the building, and at least one more to the south of the southwest end of the building. The grounds of the new depot featured two trees, apparently a pair of Chinese elms, one in front of the first arch to the east of the center arch of the arcade on the southeast side of the building, and one in front of the fifth arch to the east of the center arch. These were fairly mature trees, may have been growing for some time northwest of the original depot, and now stood about half way between the southeast edge of the arcade of the new depot and the edge of the depot platform. A September 9, 1924, photo showed at least two younger and presumably newly planted Chinese elms in line west of these, one in front of the second arch to the

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74. Union Pacific System, File No. 39-3-32, Office of the Assistant to the President, Omaha, Subject: PASSENGER STAION [sic] -Kelso, California (copies of letters on file with NPS). E.E. Adams to J.L. Haugh, Omaha, May 8, 1924; E.E. Adams, Mailgram, to R.L. Huntley, June 2, 1924; E.E. Adams, Omaha, Mailgram, to R.L. Huntley, Omaha, June 3, 1924.

75. Ibid.: F.H. Knickerbocker, Los Angeles, June 16, 1924, Mailgram to N.A. Williams; J.H. Cragin, Los Angeles, June 25, 3:35 p.m., to U.K. Hall, Omaha; U.K. Hall, Omaha, June 26, 1924, to J.H. Cragin, Los Angeles.

76. Art Francis, letter to the author, January 4, 1997, enclosing review and comments on an early draft of this study; see p. 5, item 23, of the comments regarding disposition of the boiler tube fence to a scrap drive.

Photo 16: "Kelso Club" - Depot, Boarding and Rooming House, Kelso, California, ca. fall 1924. This view from the southeast shows the landscaping. Also note the second floor window awnings and the lunch room sign, both of which are seen in the previous photo. Credit: Union Pacific Museum Collection.

west of the center arch, another in front of the fifth arch to the west of the center arch, both of these in the center rectangle of lawn, and a different photograph suggested the presence of yet another one in line still farther west, in the westernmost section of lawn. Off to the east of the east end of the building, towards the front, stood an unidentified tree, possibly a sycamore. Between the southeast corner of the building and the farthest Joshua tree stood what might have been an ocotillo plant, and a number of agave cactuses decorated the grounds, one east of the southeast corner of the building, one at the southeastern corner of the westernmost rectangle of lawn, one near the southwestern corner of the middle section of lawn, and possibly several others.[77]

Probably the most lasting of the original plantings, the railroad planted a row of date palms and some Washingtonia fan palms across the front of the depot, as well as several others in the lawn. Five of these survive today.[78]

Flanking each of the brick paths at the corners where they met the station platforms stood a pair of street lamps, consisting of electroliers on Tuscan columns of concrete, originally equipped with spherical globes. An additional lamp illuminated the corner at the southwest end of the lawn and the northeast end of the lawn adjacent to the platform where the fences ended, for a total of six lamps in a row. In later years, as the original globes became broken, the railroad company replaced them at unknown dates with acorn-shaped globes. These would remain in place until the railroad sold the depot in 1992.[79]

This did not complete the landscaping of the Kelso Depot, however. By mid-1929, 31 cottonwood trees stood behind the depot and lawn areas, but a field engineer's sketch drawn by "L.M.C." and "J.V.S." on July 26, 1929, of which four prints were sent to the Los Angeles engineer's office on August 3, 1929, showed actually 52 trees, whether all cottonwoods or a mix of species is unknown. First of all, there were two in a row west of the west section of lawn near its north edge, their row parallel to the tracks; then a row of twelve, the first two directly in line with the two already mentioned, the remainder continued eastward *behind* the west section of lawn, continuing behind the western half of the depot building itself. A third row of trees, another twelve, ran parallel to these a bit farther north, but staggered so as to be offset half the distance to the east of the distance between each tree in the first and second rows. This made a total of 26 trees in two rows of twelve and a row of two.[80]

A gap in the trees lay behind the depot kitchen. Then, two more rows extended eastward parallel to the tracks, behind the east section of depot lawn and extending a bit beyond it, but not precisely in line with the second and third rows west of the kitchen: rather, staggered a bit farther to the northwest. This fourth row had eight trees in line, the fifth row seven staggered to line up at a point northwest of but between the trees of the fourth row, with sort of an offset tree between the

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77. This landscape description is based on a careful examination of two company photographs taken apparently in 1924 showing the initial landscaping of the depot; the photographs are included in this report.

78. Ibid.

79. Ibid. These Tuscan column light poles lay damaged in the basement of the Kelso Depot in 1997.

80. An undated, untitled field engineer's note, attached to another note dated July 26, 1929, showed water lines and what presumably were sprinklers to water the trees, and carried the notation, "total 31 cotton wood trees." The note to which it was attached, which actually showed the location of 52 trees. was a Field Engineers note drawn by "L.M.C." and "J.V.S." on July 26, 1929, supplied by the Union Pacific Railroad Museum. This sketch map showed the trees behind and along the east side of the depot and depot lawn areas, but did not show the trees within the depot lawn areas.

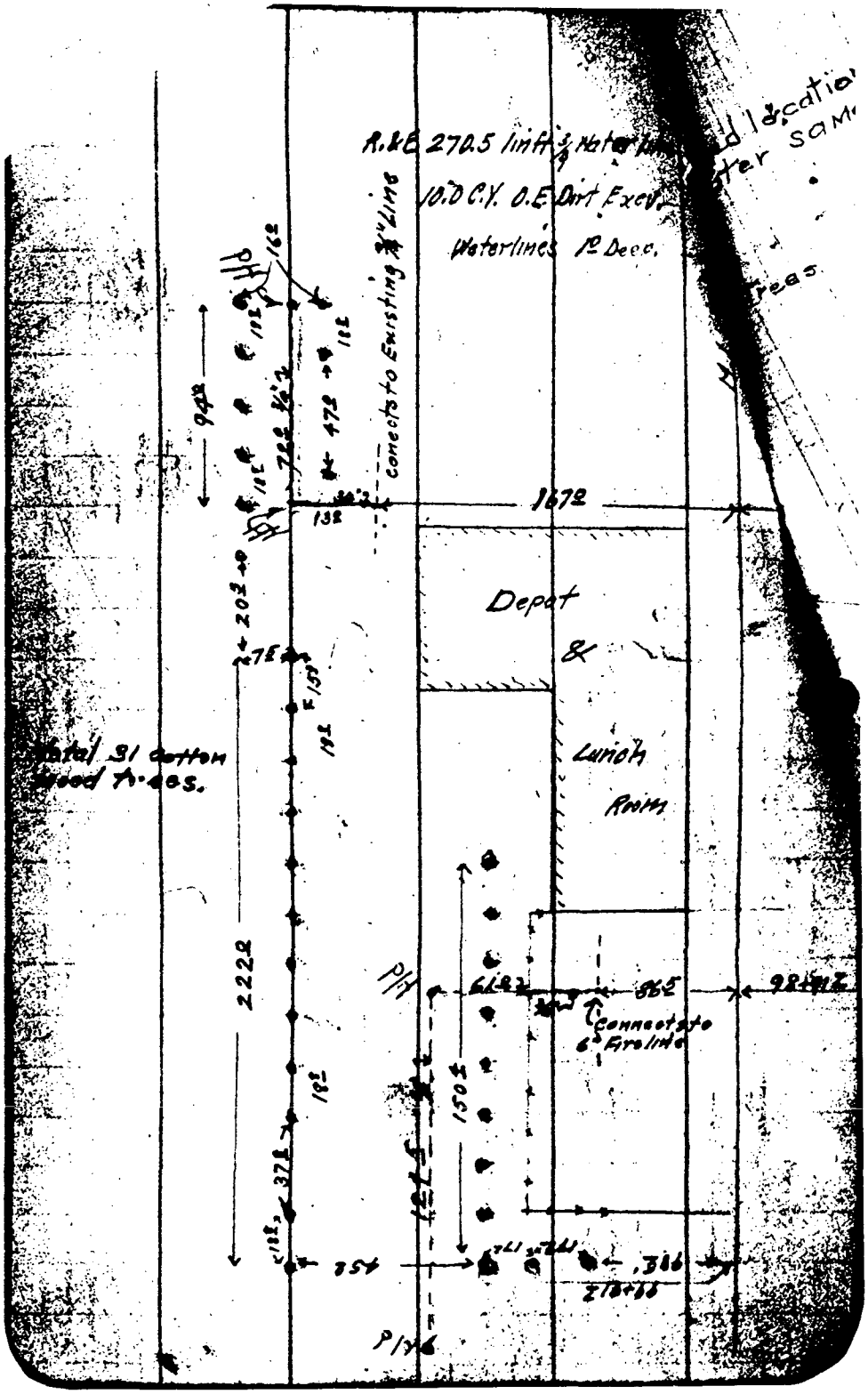

Figure 5: Field Engineer's drawing showing a sprinkler system apparently intended to water a group of cottonwood trees behind the depot. This may have accompanied another drawing of July 26, 1929. Credit: Union Pacific Museum Collection.

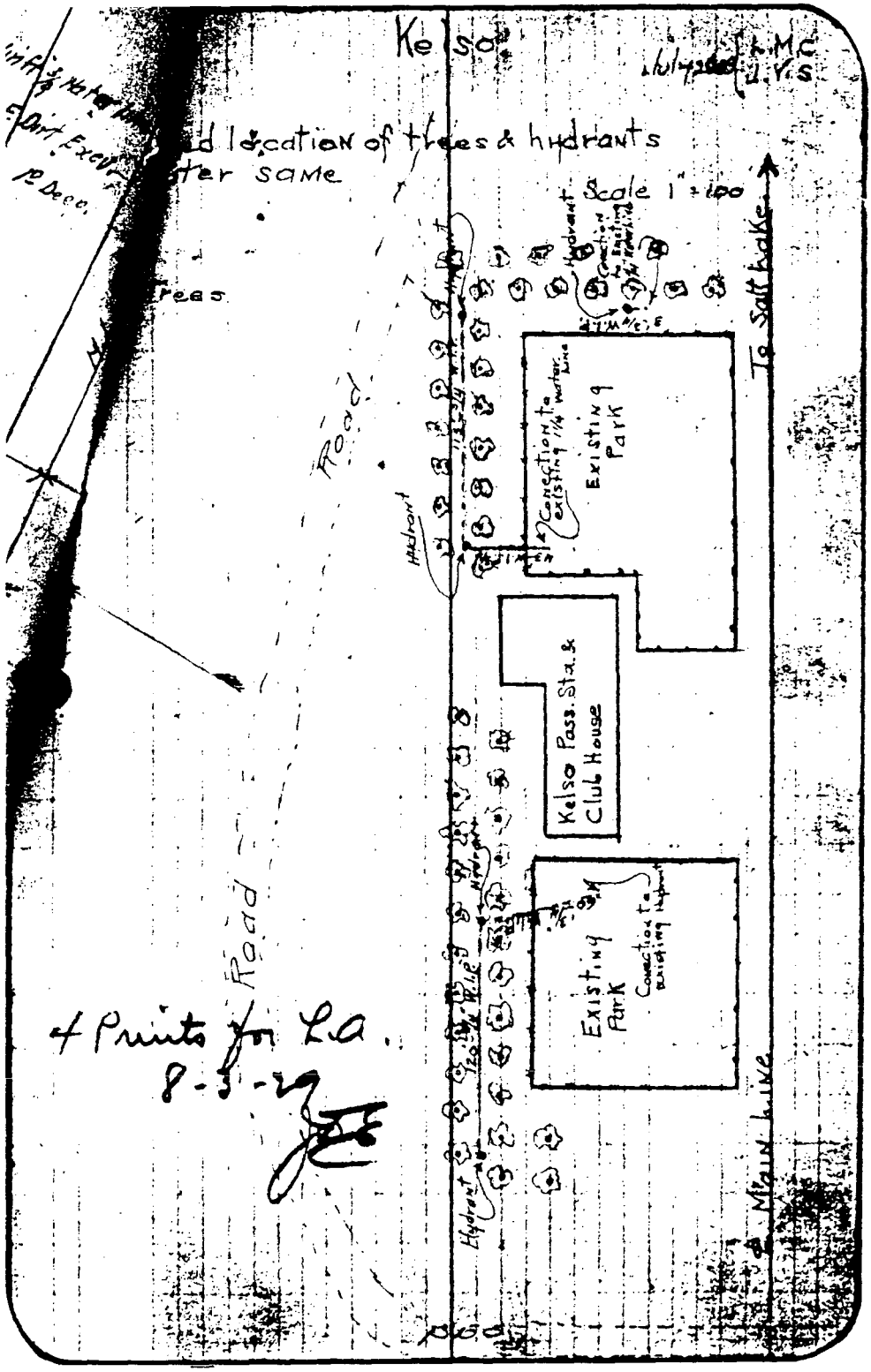

Figure 6: Field Engineer's drawing dated July 26, 1929 showing cottonwood trees behind the depot and lawn areas. Four prints were sent to railroad headquarters in Los Angeles on August 3, 1929. Credit: Union Pacific Museum Collection.

two rows at the east end. From the easternmost tree of the fourth row, six more trees stood in a straight line at right angles extending along the east side of the depot building and lawn to the vicinity of the station platform to form a sixth row, or, if one preferred, it could be called a continuation at right angles of the fourth row. From the tree at the extreme east end of the fourth and fifth rows, offset between them, three trees, then a space, then a fourth tree, marched parallel to the sixth row to form a seventh row, or if one preferred, a continuation of the fifth row at right angles, toward the depot platform, but terminating short of it. What species were included in the fourth, fifth, sixth and seventh rows is unclear. Furthermore, the date all the trees, cottonwoods and others, were planted is unclear, as the field engineer's notes of August 1929 showed both the trees and a new 3/4-inch water line laid one foot deep behind the depot and its grounds to water them, and it is not clear whether the purpose of the drawing was to document completion only of the water line among already existing trees, or both construction of the water line and planting of the trees. What is clear is that by July or August 1929, the railroad had cottonwood trees and other trees in rows behind the depot and along its east side, a total of 52 trees, and planned or had already built water lines to irrigate them. The trees may have been intended to provide a windbreak behind the depot.[81]

As time passed, increasingly visitors to Kelso found the station grounds to be an "oasis" of greenery in the arid Mojave Desert, whether or not that was the original intent of the landscaping. There is no evidence that the Los Angeles & Salt Lake Railroad deliberately set out to create an oasis — the company simply undertook to landscape the Kelso Depot grounds as they would have landscaped the grounds of a depot in any city or town. But Kelso was not an ordinary city or town — it was a small company town in the middle of a vast, arid, expanse, and as time passed, more and more visitors viewed Kelso as an oasis in the Mojave, a welcome island of greenery in a sea of brown aridity.

The Station Platform. According to the original plans for the depot, the vitrified brick walkways from the depot to the platform met a platform that was "oiled gravel," which from its appearance in late 1924 photographs probably meant asphalt, or what the railroad called "Macadam." The railroad intended from the beginning to replace this with vitrified brick to match the walkways across the depot lawn. On January 31, 1924, a Los Angeles & Salt Lake Railroad engineer in Los Angeles prepared a drawing of the "Portion of Club House Platforms to be Built at This Time." That portion consisted of the two vitrified brick "platforms" or walkways which extended from the arcade down to meet the asphalt station platform. At the bottom of this drawing, however, the engineer included the bare outlines of a "12'0" Future Platform Parallel to Track." Except in one aspect, this was to be of a design identical to that of the vitrified paths which connected the station platform with the building: four by eight by two and a quarter inch brick laid flat on top of a one inch bed of sand on top of five inch thick concrete on top of a six inch bed of sand or cinders, with concrete curbs topped with vitrified brick laid on edge, but with the top of the "curbs" even with the platform surface, not extending above it.. The exception was that whereas the walkways were flat from edge to edge, only the north edge of the station platform was to be level, the south half having a downward pitch toward the track of a quarter inch per foot, or 1 1/2 inches in the six feet from the center to the trackside edge. At that edge, the top of the platform was to be six and a half inches higher than the head of the rail in the adjacent track, and that edge was to be five feet,

81. Ibid.

three inches from the centerline of the first track.[82] It would take almost exactly two years for the railroad to get around to actually replacing the asphalt platform with this vitrified brick platform.

Union Pacific System President Carl R. Gray submitted the Authority for Expenditure request of $4,760 to "Construct 12' x 600' station platform consisting of concrete curb and vitrified paving brick on 9" gravel base with 4" sand cushion" on September 15, 1925. The form gave as the reason for building a vitrified brick station platform:

> Existing station platform consists of natural soil treated with oil, which is unsatisfactory for operation of baggage and express trucks as well as being unsightly and objectionable to passengers. Modern brick platform will enable station employes to perform their duties more efficiently, provide for convenience of patrons and present an appearance in keeping with recently constructed station building.

The railroad's Finance Committee in New York approved the funding on September 22, 1925. Exactly when the work began is not known, but "Report of Completed Work" No. 1396 indicated that the work was "physically completed" on February 28, 1926, and that the actual length of the platform had turned out to be 602.4 feet.[83] Meanwhile, a field engineer's sketch dated January 16, 1926, showed a 12 foot wide station platform with an inclined Macadam approach at its east end, its southeast edge 5.25 feet from the centerline of the main line track through Kelso. This sketch showed work "Closed 1/30/26," and the following month an item in *The Union Pacific Magazine* reported, ". . . Kelso station grounds are being renovated and we have a new brick platform . . ." [84]

At an unknown date, but probably about this same time, the late 1920s, the railroad erected a pair of illuminated "Kelso" station signs on 11.14-foot high metal posts which stood on octagonal concrete foundation blocks which extended two or three inches above the surface of the ground. One east and one west of the depot within the rectangular areas of lawn, these featured electric lights behind reflectors above the signs so they could be illuminated at night. These were aligned originally with the ends of the depot collonade rather than alongside the station platform, the west sign 65.7 and the east sign 65.6 feet from the centerline of the main track to Salt Lake City.[85]

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82. Union Pacific System, Los Angeles & Salt Lake Railroad Drawing No. 15140, "Portion of Club House Platforms to be Built at This Time," January 31, 1924.

83. Los Angeles & Salt Lake Railroad Authority for Expenditure No. 180, submitted September 15, 1925, approved September 22, 1925; Report of Completed Work — Extensions and Additions to Existing Property, No. 1396, certified correct by the Auditor on June 26, 1926, Union Pacific Museum Collection.

84. The Field Engineer's note by an anonymous field engineer dated January 16, 1926 and indicating the work was closed out on January 30, 1926, was supplied by the Union Pacific Railroad Museum Collection in Omaha, Nebraska. Another in the same batch of field notes, by Thompson, dated Feb. 1, 1929, definitely showed the "Brick Platform" was in place along the tracks at that time; the purpose of this note was to show the location of a water line for treated water to the Kelso Depot. The paragraphs on "Kelso" submitted by Mrs. Walter S. Hutchins to *The Union Pacific Magazine* which documented the new brick platform appeared in Vol. V, No. 2, February 1926, p. 63.

85. Undated Field engineer's note, without name of field engineer(s) or title, from the context in the group of notes of which it was a part probably prepared during the late 1920s, supplied by the Union Pacific Railroad Museum. An accompanying note shows the western sign 65.7 feet from the center of the main track directly opposite engineering station 1699+06.0 and eastern sign 66.6 feet from the track center at station 1696+78.0.

Photo 17: One of two illuminated Kelso signs erected on the Kelso Depot grounds, both now gone, except the steel base of the west light still exists. Credit: San Bernardino County Museum.

An entirely undated field engineer's note clearly showed as a platform "Present brick walk" and went on to document "oil and gravel" extensions beyond the brick extending 232 feet farther southwest and 396 feet farther east (the latter not counting the 9.7 foot long asphalt ramp with copings probably of brick which already existed at the east end of the brick platform. A notable difference between these and the brick platform was that, whereas the brick platform ended a couple of feet short of the rail, the "oil and gravel," probably really asphalt, platforms, appear to have extended flush to the outside of the near rail in the track. The platform to the east of the 12-foot wide "Macadam" ramp which already existed thus was 15 feet wide, whereas the one to the west of the brick platform tapered westward from the edge of the brick to a width of 13.8 feet. The extension of the platform to the west required relocating the wagon road track crossing farther to the west to get around it, along with relocating the probably "X"-shaped crossing sign on the north side of the track. No mention was made of a comparable crossing sign south of the track. Together, the "oil and gravel" platform additions required 680 cubic yards of gravel.[86] L.L. Norris reported in *The Union Pacific Magazine* in February 1931 that "An asphalt extension reaching to the east tool house is being added to the brick station platform by P.C. Cleary and his B.& B. gang."[87]

86. Undated, untitled Field Engineer's note, from the context of other notes with which it was supplied, probably from the late 1920s, from the Union Pacific Railroad Museum.

87. Vol. X, No. 2, February 1931, p. 63.

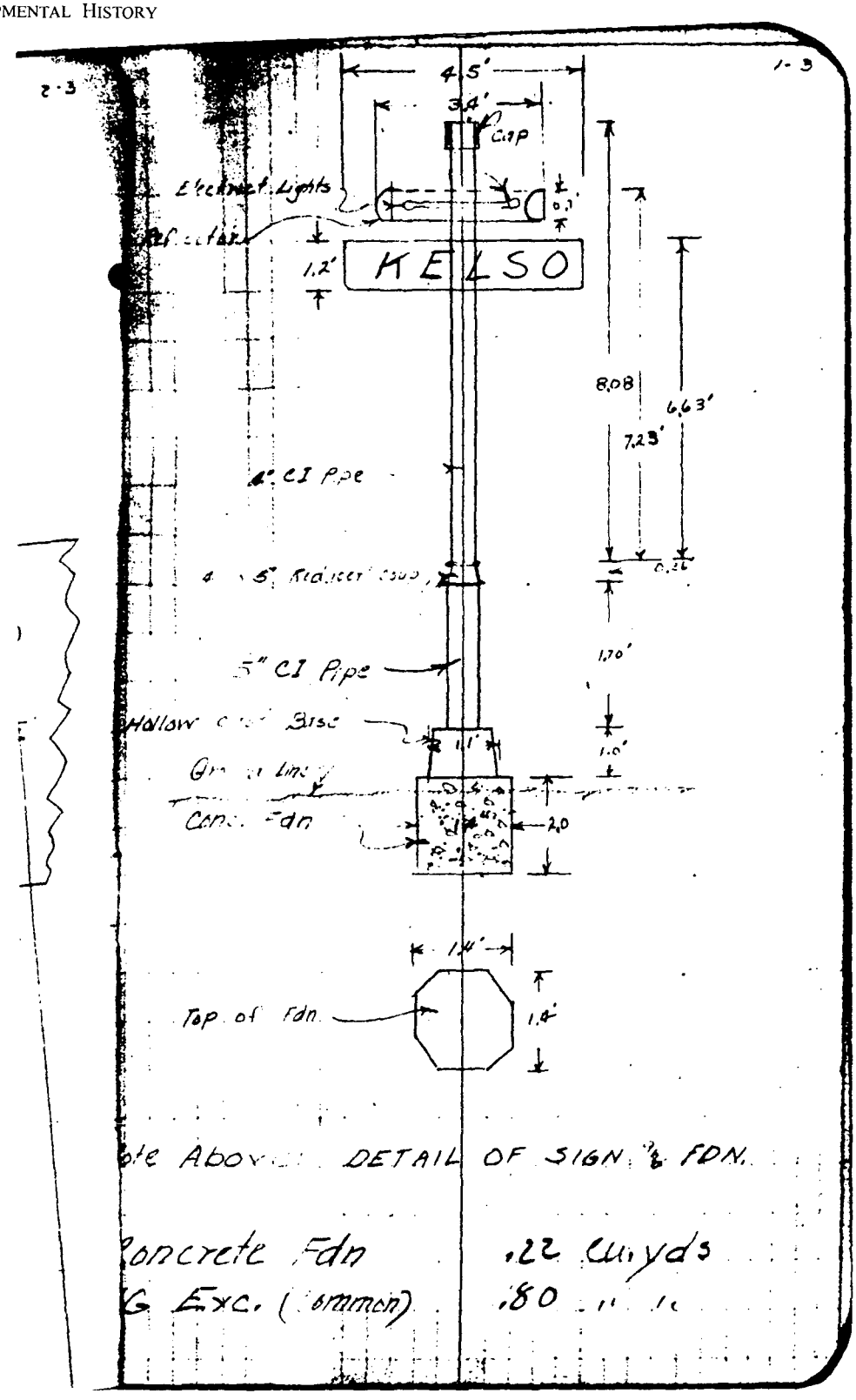

Figure 7: An undated field engineer's drawing probably from the mid or late 1920s of a lighted sign for the depot grounds. Credit: Union Pacific Museum Collection.

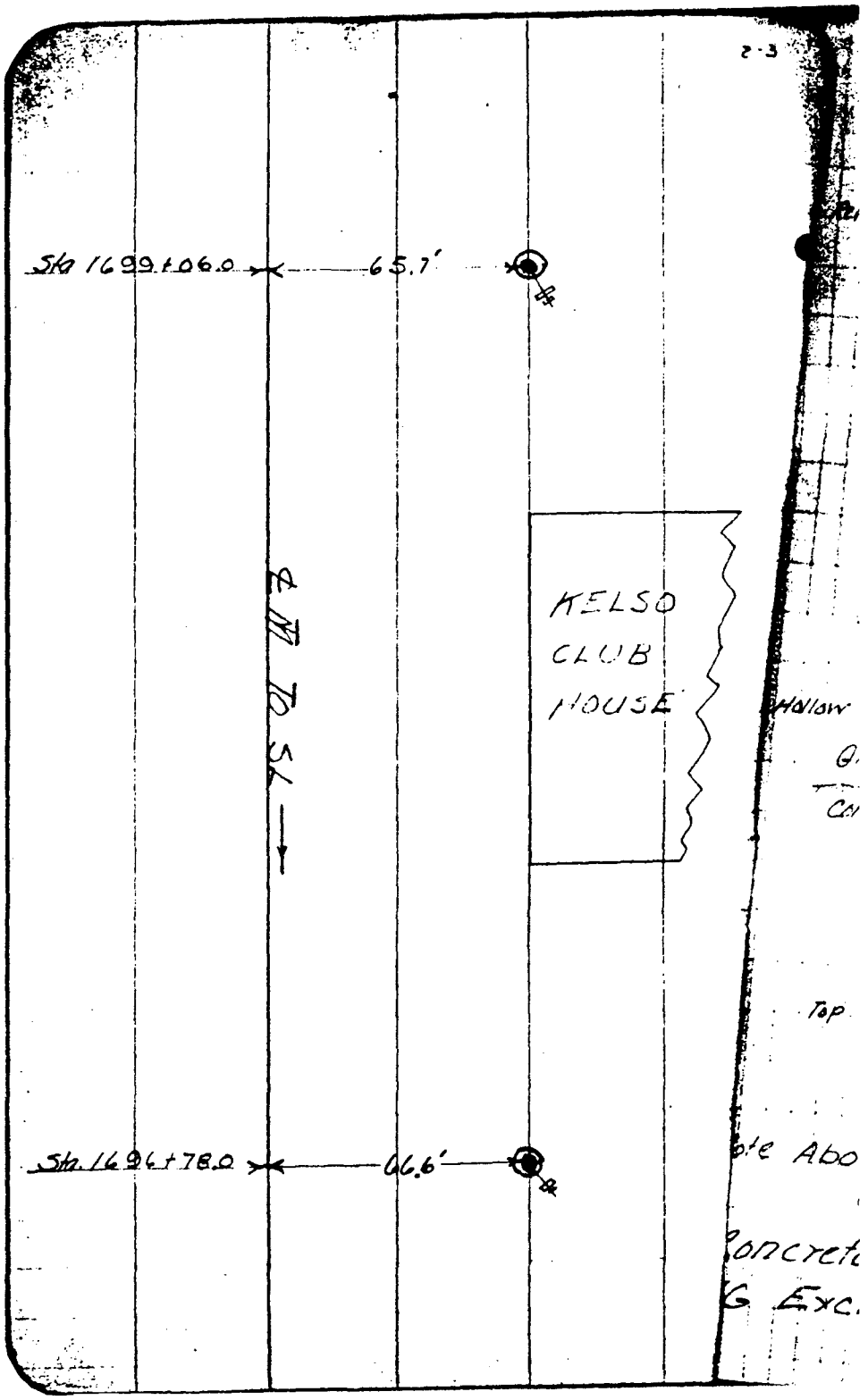

Figure 8: Undated field engineer's sketch showing the locations of the illuminated Kelso signs on the depot grounds. Credit: Union Pacific Museum Collection.

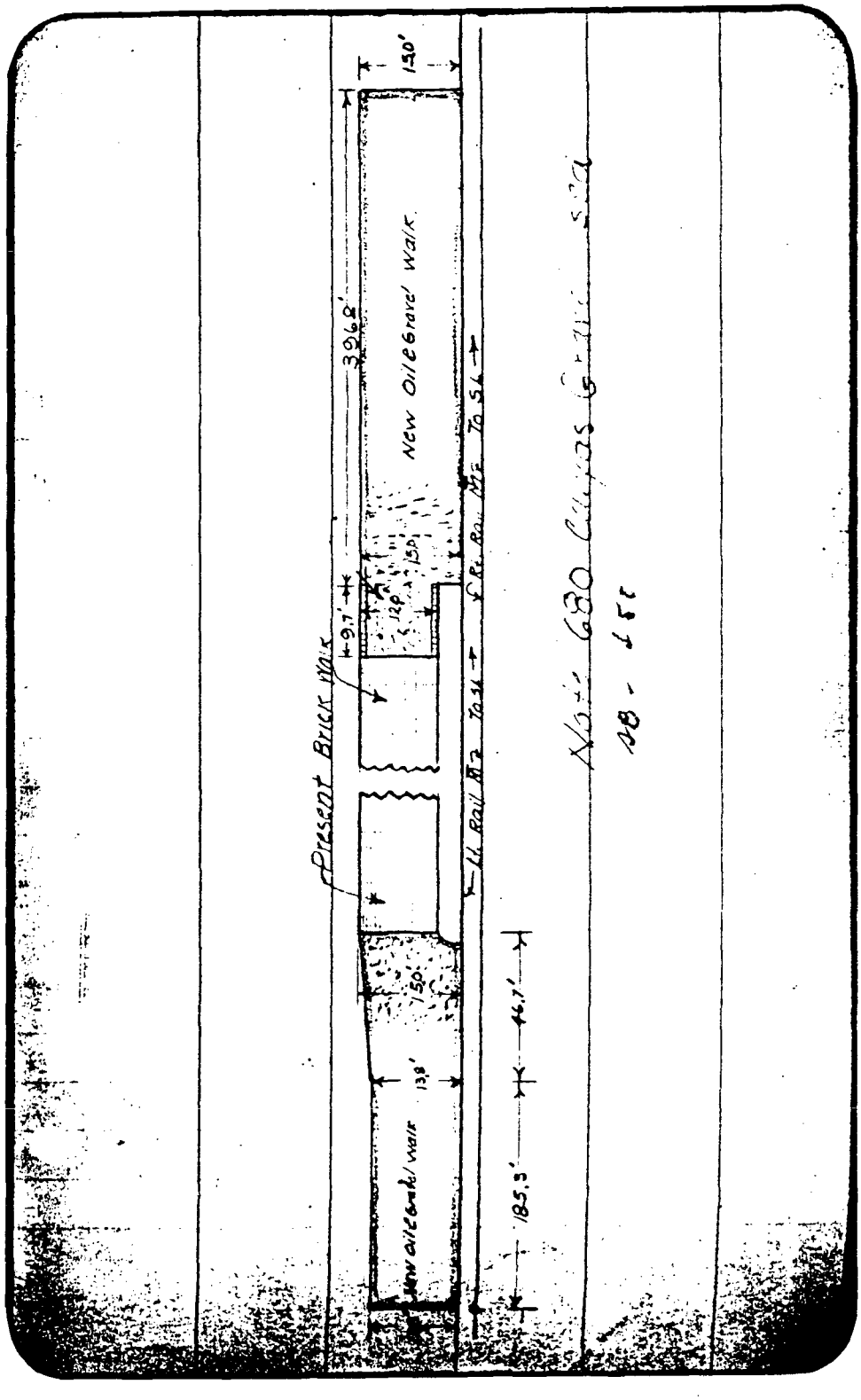

Figure 9: Undated field engineer's sketch showing oil and gravel extensions of the brick station platform. These extensions later became concrete. Credit: Union Pacific Museum Collection.

On February 1, 1929, a Salt Lake Route field engineer named Thompson drew up "Completion Notes" for the "Loc[ation] of [a] Treated Water Line," i.e., a pipe line to carry water treated for drinking, cooking, and other domestic use, to the Kelso Depot kitchen. The line came from a treatment plant south of the tracks, passed beneath them and presumably beneath the brick station platform and pipe fence, then extended 17.5 feet at right angles from the centerline of the main track, turned east for 19-1/2 feet, then north for 40-1/2 feet, then southwest parallel to the tracks for 105-1/2 feet, then just short of the depot collonade on the east end of the building, turned northwest parallel to the northeast end of the depot for 45 feet, then turned southwest and ran 17-1/2 feet to the wall of the depot kitchen where it entered the depot basement beneath the kitchen. The railroad completed this under Work Order No. 8467.[88]

On September 24, 1929, the Los Angeles & Salt Lake Railroad closed out construction of a manhole behind the depot, nearly behind the center of the depot. A six inch vitrified tile pipe extended 299.3 feet east to another manhole east of the depot and near the roadmaster's office, which was the first in a row of small buildings on the northwest side of the tracks east of the depot.[89]

It was to feed a World War II scrap drive, as already mentioned, that the railroad removed the boiler tube fence, replacing it with box hedges flanking both sides of the vitrified brick paths and the northwest side of the station platform. A row of bricks, painted white and laid in the earth diagonally and staggered to create a sawtooth top edge, flanked the hedge beds and separated them from the lawn and the station platform. The railroad laid a sprinkler system to water the lawn, trees and hedges.

Also at a later date, the railroad planted a row of additional Chinese elm trees along the edge of the station platform, probably to provide more shade in that vicinity.[90]

RECOLLECTIONS OF THE KELSO DEPOT IN ITS EARLY YEARS

The year following completion of the new Kelso Depot, the county erected a new schoolhouse at Kelso. *The Union Pacific Magazine* reported its construction in progress in its June 1925 issue. The new schoolhouse would take some of the pressure off of the depot by offering an alternative building in which to have dances, parties, and other community functions, although some dances and other such functions would continue to be held in the basement recreation rooms in the Depot, as well. Theo. Packard remembered his mother playing the piano at dances, and often someone would play a guitar as well. Packard said that the railroad authorities generally didn't like to have dances in the depot basement because it would be too noisy when trainmen were trying to sleep

88. Field Noted dated Feb. 1, 1929, by Thompson, "Kelso / Loc. of Treated Water Line / to Club House W.O. 8467, Completion Notes," supplied from the Union Pacific Museum Collection, Omaha.

89. Anonymous field engineer's note dating closeout of work, September 24, 1929, supplied by the Union Pacific Railroad Museum.

90. This statement is based upon interpretation of and comparison of 1924 and 1975 photographs of the depot included in this report.

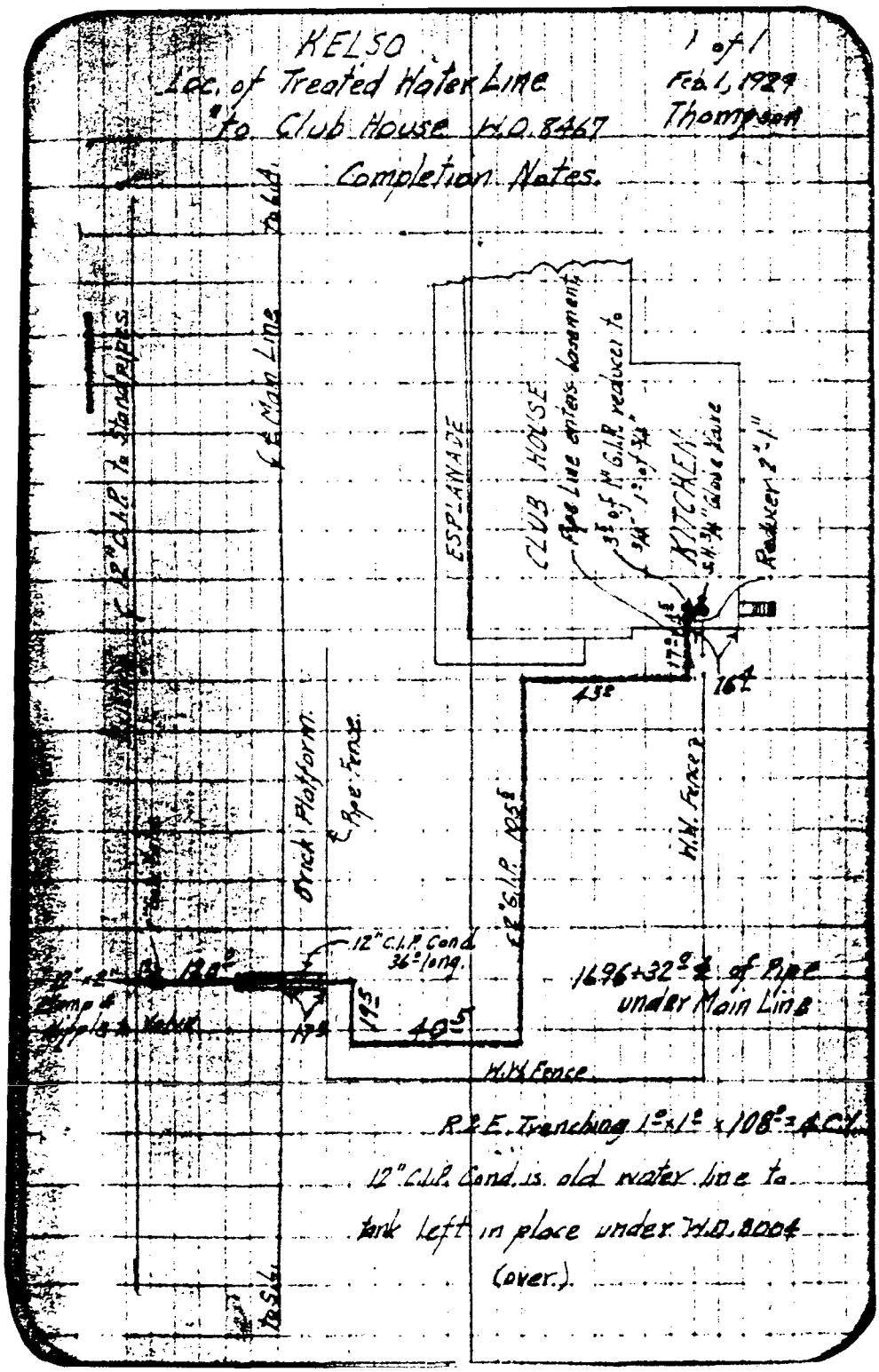

Figure 10: Field engineer's sketch, February 1, 1929, showing water line work at the depot; also indicating some of the brick platform and fences. Credit: Union Pacific Museum Collection.

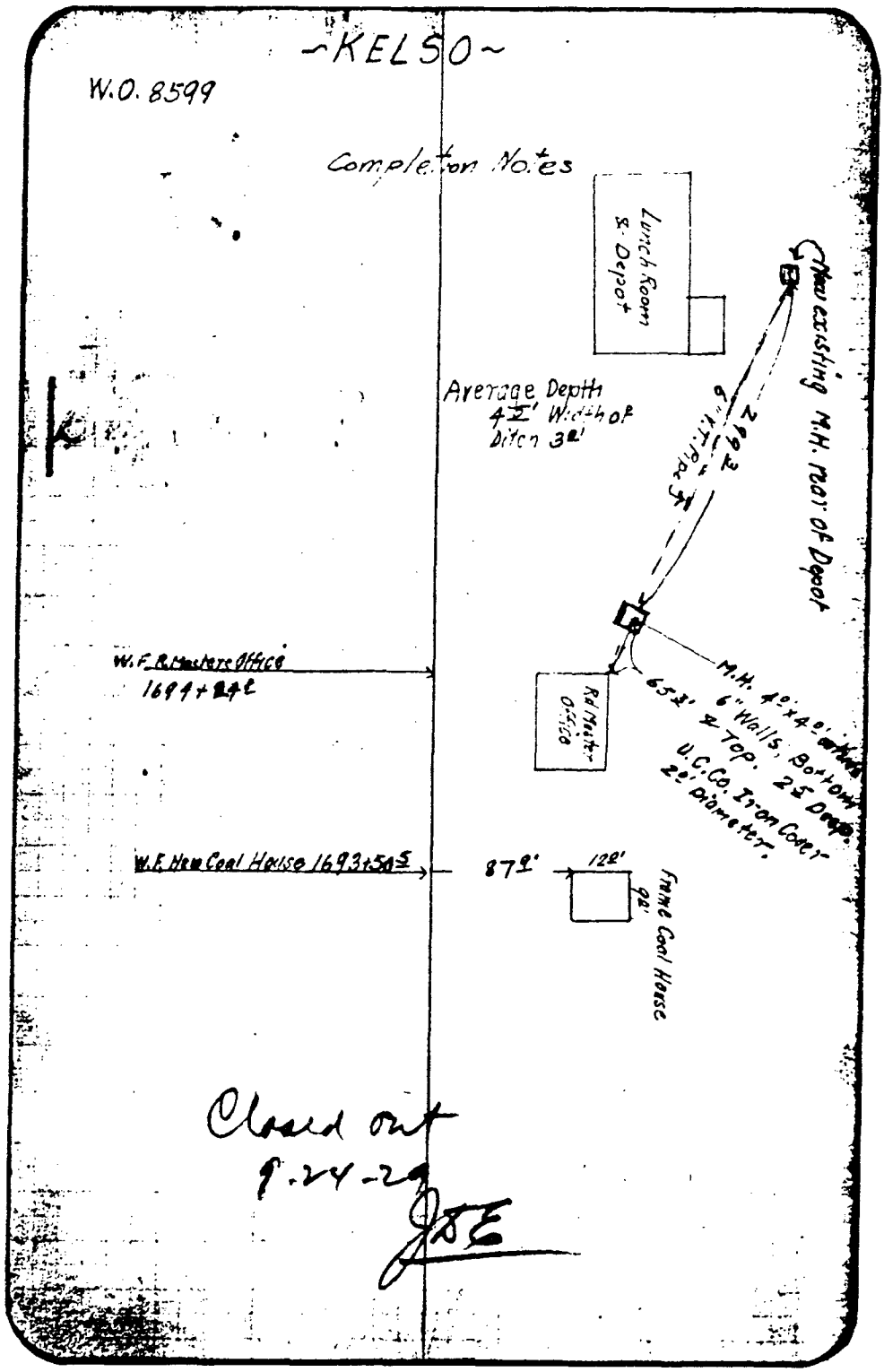

Figure 11: Field Engineer's sketch plan for a pipe and manhole behind the depot, which was closed out (completed) on September 24, 1929. Credit: Union Pacific Museum Collection.

upstairs between runs. Nevertheless, the depot basement did accommodate many community dances, as well as other functions, during the next six decades.[91]

It is interesting to note that alcoholic beverages were not served on these occasions. Nor did Kelso have any bootleggers, though there may have been some in other parts of the Mojave Desert. Nor did Kelso have any prostitutes; Howard Wasden recalled that one railroad employee at Kelso who wanted the services of a hooker had to go to Las Vegas to find one.[92]

A number of children used to play around the Kelso depot, attracted either by the lawn and the shade of the trees, or by the wild burros which used to assemble at night behind the depot where the kitchen dump offered them food. Edith Wasden's father used to say the burros were eating tin cans, but what they really were doing was eating the paper labels and glue off the tin cans. Her brother Ray and other children would rope the burros and make pets of them. To capture the burros, the children would lay out a loop of rope at night and then hide, and when a burro stepped into a loop, pull it tight. Theo. Packard remembered many rope burns as the frightened burros would try to escape, dragging kids after them. Edith Wasden shared a captured burro with Melva Packard and they named their pet burro "Sparky." The kids would build little corrals to hold the burros they had captured. Theo. Packard remembered his cousin attempting to pet a burro behind the depot which immediately bit him in the calf and wouldn't let go; the child let out a shout, and the cook came out of the depot and said, "What's the matter?" When he found out, the cook went in and got a piece of pipe and beat the burro until it let go. Packard's cousin then had a long-lasting mark on his leg and limped for quite a while. The children fed the burros lettuce that had wilted which the kitchen was discarding, as well as all sorts of other garbage from the kitchen. After several days of captivity, most of the burros became quite tame, and the kids would ride the burros around Kelso, out to the Kelso Dunes, or up into the Providence Mountains. Some of them collected baby desert tortoises which they attempted to sell to passengers on the evening train for twenty-five cents each, which could provide for a spree of buying candy or gum in Packard's General Store. Fortunately for desert tortoises, the children were not successful in selling many. Some of the older children could get into trouble; a favorite trick was to throw live bullets down the chimney of some construction workers' dwellings and into the campfire of tramps in a nearby hobo jungle in Kelso; eventually the bullets would explode in the fire and scare the men. They would also throw rocks at hobos riding freight trains; sometimes this had a purpose, for the kids had been sent to collect fuel for a stove at home, and when they threw rocks at hobos riding coal trains, the hobos would retaliate, throwing lumps of coal back at them, which the children then would collect. Eventually the school district sent a counselor down to talk with some of the more mischievous children, who of course were causing their teacher problems as well as getting into other trouble. But none of them committed any serious crime.[93]

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91. *The Union Pacific Magazine*, Vol. IV, No. 6, June 1925, p. 64; "Interview with Theophilus Charles Packard & Hazel Packard," November 5, 1991, by Dennis G. Casebier, pp. 19-20, 25-26. Hardbound transcript in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California.

92. "Interview with Howard & Wanda Wasden," 19 February, 1992, by Dennis G. Casebier, pp. 41, 63-64. Hardbound transcript in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California.

93. "Interview with Edith Wasden Chase," 6 February 1992, by Dennis G. Casebier, pp. 40-42, 61-63 (the latter, read into the interview recording, consisted of extracts from the third chapter of a book entitled *The Incidents in the Life of Howard Wasden*, beginning on p. 20 of that book); "Interview with Howard & Wanda Wasden," 19 February 1992, by Dennis G. Casebier, pp. 12-13, 15-16, 58-59; " Message Record," Telephone interview with Theo. Packard, March 4, 1997, by Gordon Chappell, 3 pages. The children probably did not make any serious inroads into the desert tortoise population. Robert McCoy, who worked for the railroad, reported encountering about 1956 or 1957 on the power line

The first station agent in the new Kelso depot was A.H. "Hugh" Haden, and he would retain that position for at least a decade. From time to time, of course, he would have vacations, during which the railroad would assign a temporary "relief agent" to fill his shoes. For example, when A.H. Haden went on vacation with his wife in the summer of 1927, A.H. Haworth served as his relief agent.[94] The railroad followed that practice with nearly all the other positions housed in the Kelso Depot, both those of the Operating Department and of the Dining Car and Hotel Department in the cafe and hotel facilities.

After the station agent, the most important people working in the depot end of the building were the telegraph operators. Telegraphic train orders helped keep the railroad running in an orderly fashion, averting collisions on the single track main line. The "operator's" position thus was a key position in the running of the railroad which carried great responsibility. Furthermore, the position, unlike that of the station agent, was always a 'round-the-clock job, so that there were three eight-hour "tricks" or shifts daily, thus Kelso always had three "operators" assigned full-time.

After *The Union Pacific Magazine* began publishing regular Kelso news in its monthly issues, the first specific mention of a Kelso telegraph operator was of a man named Mahnesmith in the December 1925 issue.[95] In the February 1926 issue, the Kelso correspondent, Mrs. Walter S. Hutchins, wife of a locomotive fireman, reported that an operator named Clark had returned with his wife from vacation.[96] In the July 1926 issue, she reported that Operator Lloyd L. Norris [misspelled "Norse" in this first mention] was taking a month's vacation and J. Clark served as his relief.[97]

By November 1926, Duane Ashcraft had taken one of the "tricks" as operator. He would remain for many years.[98] Kelso store owner and postmaster Lester J. Packard reported to the *Barstow Printer* that on Monday, December 23, "a Christmas entertainment including a Christmas tree was held in the Club [basement] rooms. The children, as well as the grown-ups, were pleasantly surprised with the evening entertainment."[99] Operator Norris took a month's vacation in the summer of 1927, being replaced by Operator F. E. Williamson temporarily, and Operator Ashcraft took two weeks in June due to an injury to his foot, being relieved by Operator Myers. Elma Hutchins, the regular Kelso correspondent to the employees' magazine, had left for Las Vegas with her husband, who had bid in firing on a regular passenger run on the Third District, and Operator Duane Ashcraft took over as the regular correspondent to *The Union Pacific Magazine*.[100]

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road between Nipton and Cima, apparently near Brant, a migration of thousands of desert tortoises of every size covering an area about fifty to a hundred feet wide and at least a quarter mile long, all moving in a northwesterly direction. "Interview with Robert McCoy," 15 June, 1993, by Dennis G. Casebier, p. 45. The interviews cited are in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California.

94. *The Union Pacific Magazine*, Vol. VI, No. 9, September 1927, p. 62.

95. Ibid., Vol. IV, No. 12, p. 62.

96. Ibid., Vol. V, No. 2, p. 64.

97. Ibid., Vol. V, No. 7, p. 62.

98. Ibid., Vol. V, No. 11, November 1926, p. 60.

99. "Kelso News Items," *The Barstow Printer*, December 25, 1924. Copy in Kelso subject file, library of the Mojave Desert Heritage and Cultural Association, Goffs, California, courtesy Dennis Casebier.

100. Ibid., Vol. V, No. 8, August 1927, p. 60.

Many more operators at Kelso received mention during the late 1920s and early 1930s. A man named Adams relieved Norris according to the September 1927 issue.[101] Shortly thereafter a man named J. M. Mauzy briefly relieved Norris as operator so the latter could visit Los Angeles.[102] Later, both Norris and Ashcraft went on sick leave, the former being relieved by an operator named Plantz and the latter by an operator named E. Fowler.[103] Not long thereafter Norris left on a sixty day leave, being relieved by C.A. Clark for part of the time, then by J. Pitcher.[104] An operator named Fenton relieved Pitcher on the third trick for a few days that spring.[105] Operator Mauzy reportedly moved his family to Kelso in the summer of 1928.[106] Mauzy served as correpondent to the employees' magazine in October and November 1928 while Ashcraft and his wife were on vacation. On November 28, 1928, Mrs. Mauzy gave birth to a son.[107] Duane Ashcraft with his wife and son, Vincent, took a holiday to shop in Los Angeles in the spring of 1929, and an operator named Pollard filled in for ten days.[108]

On June 14, 1929, Operator Lloyd Norris married Margaret Moritz of Aitken, Minnesota, in San Francisco. He would bring her back to Kelso to live. In the September 1929 issue of the employees' magazine, Norris replaced Duane Ashcraft as the Kelso correspondent. In his first column he had to report the death of F.E. Williamson, a former Kelso operator more recently assigned as operator at Crucero.[109] In the January 1930 issue, Norris reported that Ashcraft had gone to Los Angeles for a few days and had been relieved by Operator Sterling.[110] Norris himself had left at Christmas, being relieved by Operator Stout.[111] Early in 1930, Duane Ashcraft went to Los Angeles briefly, and Norris reported in the employees' magazine that "'Ash' was relieved by "Extra Operator" Buckles. Mrs. Norris, meanwhile, had just returned from a month in Los Angeles.[112] During the summer of 1930, Duane Ashcraft, general chairman of the Order of Railway Telegraphers and official delegate for the L.S.& S.L. attended the O.R.T. convention in Los Angeles, being relieved by A.C. Bartell on his Kelso shift.[113] That fall, while "Ash" was off on more O.R.T. business, Operator Dick Cammack relieved him. Ashcraft, meanwhile, had just driven his Chevrolet to Las Vegas and bought a new Pontiac sedan for his wife to drive.[114] In the

101. Ibid., Vol. VI, No. 9, September 1927, p. 62.

102. Ibid., Vol. VI, No. 12, December 1927, p. 62.

103. Ibid., Vol. VI, No. 2, February 1928, pp. 62-63.

104. Ibid., Vol. VII, No. 3, March 1928, p. 63; Vol. VII, No. 4, April 1928, p. 62.

105. Ibid., Vol. VII, No. 6, June 1928, p. 62.

106. Ibid., Vol. VII, No. 9, September 1928, p. 58.

107. Ibid., Vol. VIII, No. 1, January 1929, p. 64.

108. Ibid., Vol. VIII, No. 5, May 1929, p. 63.

109. Ibid., Vol. VIII, No. 9, September 1929, p. 62.

110. Ibid., Vol. IX, No. 1, p. 60.

111. Ibid., Vol. IX, No. 2, February 1930, p. 58.

112. Ibid., Vol. IX, No. 3, March 1930, p. 60.

113. Ibid., Vol. IX, No. 7, July 1930, p. 63.

114. Ibid., Vol. IX, No. 12, December 1930, p. 64; Vol. X, No. 1, January 1931, p. 63.

spring of 1930, Station Agent A.H. Haden took off a few days for a trip to Salt Lake City, and an operator named Palmer served as relief station agent.[115]

The first manager of the "Club House," i.e., the rooming house or hotel and "lunch room," according to *The Union Pacific Magazine*, was Mr. V.H. Spahr, and as early as April 1925, the basement recreation rooms in the depot had housed an evening dance program.[116] In June or early July, a "desert missionary" named Rankin visited the Kelso school and held evening services in those same recreation rooms.[117] Accompanying a photograph published in January 1926, *The Union Pacific Magazine* listed as employees of the "Kelso Lunch Room" Jerry McGrath, Joseph De Boser, George Hall, Lena Melter, Peggy Donn, Peggy Carry, Grace Hart, Ray Skeeles, Victor Epenhach, Joseph Coats, Leonard Williams, George Wheaton, Mrs. V.S. Spahr, and of course the manager, V.S. Spahr.[118] That number of employees implied three eight-hour shifts in the cafe, or around-the-clock service. As with Santa Fe Harvey Houses, the number of single women employed in Union Pacific lunch rooms would lead to a number of marriages; in less than a year after it opened, "Room 26 of our Club House has the reputation of assisting our young ladies in getting married. We know of three attractive girls that had this room when working for our company in lunch room, and they now are happily married — Mrs. Hutchins, Mrs. McKelly and Mrs. Bigler," according to the employees' magazine.[119] By April 1926 two more residents of Room 26 had entered matrimony, the last being Lina Miller from Lima, Montana, who met her fiance, S.E. Bullington, at Kelso, and they married on Christmas Day 1925 in Los Angeles.[120]

In July or early August 1926, V.H. Spahr transferred to Las Vegas to run the L.A.& S.L. lunch room there, probably because his wife was then in a Las Vegas hospital for unknown treatment, and had been before, and W. E. Smith replaced him as the second manager of the Kelso Club House. At the same time, William Shilts replaced George Wheaton as chief cashier at Kelso.[121] Smith's appointment apparently was only temporary, for in November Mrs. W.S. Hutchins reported in *The Union Pacific Magazine* that "We now have a new D.C.& H. manager, P.G. Bears, who hails from Frisco . . . "[122]

The "Club House" clerk towards the end of 1926, Ceylon Brewer, was succeeded by F.R. Hodgman.[123] In February, the employees' magazine reported that "Mr. and Mrs. George Montgomery are in charge of Kelso lunch and club house . . . " That apparently implied that George Montgomery was the manager and Mrs. Montgomery worked in the lunch room.[124] In July or August 1926, Kelso hosted a large "signal gang" or crew finishing a new block signal

115. Ibid., Vol. X, No. 5, May 1931, p. 64.

116. Ibid., Vol. IV, No. 5, May 1925, p. 63.

117. Ibid., Vol. IV, No. 7, July 1925, p. 61.

118. Ibid., Vol. V, No. 1, January 1926, p. 63.

119. Ibid., Vol. IV, No. 2, February 1925, p. 61.

120. Ibid., Vol. V, No. 4, April 1926, pp. 62-63.

121. Ibid., Vol. V, No. 8, August 1926, p. 60.

122. Ibid., Vol. V, No. 11, November 1926, p. 60.

123. Ibid., Vol. VI, No. 1, January 1927, p. 60.

124. Ibid., Vol. VI, No. 2, February 1927, p. 61.

system on the main line in the vicinity of Kelso, and then R. Birch arrived with his "paint gang" to "doll up the depot and club building . . . "[125] The employees' magazine for September 1927 reported that W.E. Crawford had taken the job as "club" cashier, and Robert Laruh a subordinate position of cashier-clerk.[126] But in December, Kelso correspondent Ashcraft reported that a former cashier, Richard Clifton, had returned to his old position in the "Kelso Club."[127]

The October 1928 issue of the employees' magazine reported that the manager of the lunch room and depot hotel, George Montgomery, had moved to Milford, Utah, to take a similar position there, being replaced by Mr. George Peer and his wife. Kelso was a busy place that fall, the L.A.& S.L. having just completed a new ice house insulated with cork and equipped with an unloading hoist, as well as installing two new water columns between the main track and passing track enabling trains to take water from either track and permitting all trains to stand in front of the station.[128] The November 1928 issue of the magazine had more development to report: a new well and water system had gone into service on October 1 with a new compressor pumping 200 gallons per minute from the well. Meanwhile a new sewer system engineered by Pat Mahoney neared completion. Additionally, the railroad had removed the water tank located along the station platform just east of the depot to the vicinity of the roundhouse to handle the reserve water supply.[129]

Though George Montgomery and his wife reportedly had transferred to the facilities at Milford, Utah, the December 1928 issue of *The Union Pacific Magazine* reported simply that he had "returned from vacation, and will again have charge of the club house."[130]

Vincent Ashcraft, who arrived in Kelso in 1928 as the nine year old son of Duane Ashcraft, the second "trick" [shift] telegraph operator in the depot (and successor in August 1927 to Elma Hutchins as reporter to the employees' magazine when Fireman W. S. Hutchins bid in a job at Las Vegas and left Kelso with his wife) recalled,

> On hot summer evenings we kids around Kelso would lay around on the lush green lawn & palm trees [sic] around the depot. It was kept by a Japanese gardener named Nakajima. When dad was relieved at [the] depot @ 11 PM I would ride home with him 1 mile in his '26 Maxwell auto or [later] '32 Olds [Oldsmobile]. We had a phone & telegraph line to depot from our house on the same wire Dad had installed himself.

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125. Ibid., Vol. VI, No. 8, August 1927, p. 60. It is not clear what the time lag between reporting and the item appearing in the monthly employees' magazine was; the news could have been a month or six weeks old, or if the magazine arrived late in the month listed on its cover, the news might have been only several weeks old and in the same month.

Railroads used the term "gang" to describe a crew of specialized laborers and their foreman, such as the "Bridge and Building Gang," made up mostly of carpenters, the "Paint Gang" consisting of painters, the "Water Service Gang" which included plumbers and others, the "Signal Gang," to work on signal systems, and so forth. Some of these had their own "outfit" trains consisting of bunk cars, a cook car, a dining car, tool cars, material or parts cars, and so forth, to which the railroad would periodically couple a locomotive and caboose and move them from one job to another across the railroad. Smaller gangs might have only a car or two which the railroad might move in a freight train.

126. Ibid., Vol. VI, No. 9, September 1927, p. 62.

127. Ibid., Vol. VI, No. 12, December 1927, p. 62.

128. Ibid., Vol. VII, No. 10, October 1928, p. 62.

129. Ibid., Vol. VII, No. 11, November 1928, pp. 61-62.

130. Ibid., Vol. VII, No. 12, December 1928, p. 62.

Young Ashcraft also observed that no one was allowed in the ticket office except the station agents and telegraph operators.[131]

Early in 1929 Mr. and Mrs. Jesse Redington celebrated their eighteenth wedding anniversary at a dance given for them in the basement recreation rooms of the depot; a Mrs. Joe Barret supplied a delicious cake for the occasion.[132]

Kelso Station Agent A.H. Haden acquired two new items to wear during the summer of 1929: his first pair of glasses, and a badge marking his appointment as Kelso constable and justice of the peace. According to the employees' magazine, with his new pair of "specks," "his dignified appearance makes us believe he is going to make a good judge . . ." [133]

Theo. Packard, son of the Kelso postmaster and general store owner, graduated from high school in Las Vegas in May 1929, returned home to Kelso, and got his first regular job as a cashier in the "Lunch Room" beginning around June 1929. He worked there until that fall when he was "cut off" [laid off] in a reduction of staff as a consequence of the beginning of the Great Depression. At that time the restaurant was open around the clock, and staffed with three shifts, and he remembered forty or fifty passengers coming in when certain trains made an evening meal stop at Kelso. He worked the second shift during the afternoon and the evening. He recalled the lunch room as having one table with several chairs to the left of the white, "U"-shaped counter, but that it was not used for serving food, rather used by the cafe managers who did paperwork on it. During the day there apparently were two waitresses, but at night the night manager did the cooking and his wife worked as the only waitress. Packard recalled that "the personnel at the depot consisted of a manager, his wife, 2 cashiers, 2 cooks, 2 dishwashers and 4 waitresses serving meals around the clock."[134]

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131. Questionnaire prepared by Gordon Chappell and sent August 21, 1996, returned by Vincent D. Ashcraft of 6563 Zena Drive, San Diego, California, 92115-7029 [subsequently Ashcraft moved to 10751 Strathmore Drive, Santee, California, 92071-1096], postmarked on return August 24, 1996, pp. 1, 2 and back of p. 3. *The Union Pacific Magazine.*, Vol. V, No. 2, February 1926, p. 63, reported that "Mr. and Mrs. Sam Nakaniski are proud parents of a boy born December 7 . . . " and Vol. X, No. 9, September 1931, p. 63, said, "We congratulate Mr. and Mrs. Sam Nakanishi, who on July 9 became the parents of a baby boy." Presumably these references are to the same family; if so, the latter spelling seems more likely correct. But whether Sam Nakanishi was the man young Ashcraft remembered as Nakajima does not necessarily follow. The employees' magazine did not identify Nakanishi's job, and in addition to a Japanese-American who did gardening work around the depot, there reportedly was a man of Japanese extraction who worked at the Kelso roundhouse, in what capacity is unknown, but possibly as a machinist or boilermaker. It seems probable that these people were interned at Manzanar or some other War Relocation Center during World War II.

132. Ibid., Vol. VIII, No. 2, February 1929, pp. 62-63.

133. Ibid., Vol. VIII, No. 7, July 1929, p. 61.

134. Message Record, Telephone Interview by Gordon Chappell with Theo. Packard, March 4, 1997, pp. 1, 3; "Interview with Theophilus Charles Packard and Hazel Packard," 5 November 1991, by Dennis G. Casebier, pp. 64-67. Packard recalled that at the time he worked in the Lunch Room, anybody, not just railroad employees, could go in there and eat. It was only much later that the railroad "got fussy about it and they didn't want anybody but railroad people" to eat in the Lunch Room. Letter, Theo (T.C.) Packard, Studio City, California, to "Dear Citizens," undated, but published in the *East Mojave Monitor*, Vol. VI, No. 2, July 1987, p. 5.

Packard recalled a Mexican grounds keeper at the depot, who lived up the road in the section house. One day he got into a fight with another "Mexican," stabbed him, and the other fellow died right there. The authorities, according to Packard, deported the murderer to Mexico.[135]

Packard also recalled that about that time a surveying crew from Boulder Dam was staying in the Kelso Depot and eating there while they ran a survey for a power line from the dam via the Kelso Dunes to Los Angeles. But this was only one of several surveys that were made, and this route never was used. However, the episode demonstrated that on occasion, the railroad did allow the "Club" to provide accommodations to non-railroaders, at least when there were rooms to spare not needed by train crews.[136]

DEPRESSION YEARS ON THE LOS ANGELES & SALT LAKE RAILROAD

The Great Depression which began in 1929 hit all the railroads in the country, including the Union Pacific System, but of that system, the Los Angeles & Salt Lake Railroad did comparatively well, losing only 24 per cent of its ton-miles between 1929 and 1935 compared with 29 per cent for the entire Union Pacific System. As already mentioned, one effect the Depression had on the Kelso Depot was the ending as of September 1, 1930, of the Lunch Room serving as a meal stop for the *California Express* and the *Utah Express*, which the railroad had discontinued operating, cutting back from four passenger trains each way each day to three, all the surviving trains having dining cars and thus not needing to provide a meal stop for passengers. A short while later, the railroad cut back further to only two passenger trains each way each day. It was not a happy time for railroaders at Kelso. It was not until 1940 that war in Europe and Asia began to boost freight and passenger traffic on the railroad[137]

But the railroad had to continue operating and maintaining its system. Mrs. L.L. Norris reported, probably in April 1930 for publication in the next month's employees magazine that "Ralph Birch and gang are giving the interior of the station a new coat of varnish." The "gang" referred to was the "Paint Gang," typical railroad terminology. [138]

The early years of the Depression seemed to encompass a great increase in turnover of employees of the Dining Car and Hotel Department at Kelso. On the eve of the Depression, in August or September of 1929, Club Manager H.L. Lindsay resigned and moved to Oregon, accompanied by combination cook Jim Villers, and two waitresses, Betty Mathews and Lorna McCarthy also resigned and reportedly "are contemplating a boat trip up the coast to Portland . . . " It sounded almost as if Lindsay had decided to open his own restaurant somewhere in Oregon and took part of the Kelso lunch room staff with him, though the resignations of the waitresses could have been mere coincidence. Nevertheless, it marked the single greatest turnover in Lunch Room staff since the cafe had opened. Incidentally, as the unanticipated Depression loomed, the railroad had just created a sixth helper position at Kelso, assigning an engineer named Salter and a Fireman named

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135. Ibid., p. 2; "Interview with Theophilus Charles Packard and Hazel Packard, 5 November 1971, by Dennis G. Casebier, p. 45, hardbound transcript in the library of the Mojave Desert Heritage and Cultural Association, Goffs, California.

136. Ibid., p. 2.

137. Hemphill, p. 151; Signor, pp. 114-122, 128.

138. *The Union Pacific Magazine*, Vol. IX, No. 5, May 1930, p. 60.

Myers, with Engineer Richhart filling in until Salter arrived.[139] But by November the Depression was in full swing, and the railroad cancelled the extra helper assignment and pulled off the sixth helper crew, who went back on the "extra board" at Las Vegas.[140]

In October 1929 the employees' magazine reported that Kelso Club cashier Claude Morris had transferred to a similar position at Milford, Utah, and had been replaced by Keith Stebbins from the D.C.& H. at Ogden, Utah. Club waitress Margaret Johnson was on vacation at that time.[141] Cashier Stebbins apparently didn't like Kelso, for in short order he returned to his old position at Ogden, being replaced by Russell Campbell.[142] But in a month or less, Campbell resigned, and the railroad transferred Russell Lewis from the cashier's position at Caliente, Nevada, to Campbell's position at Kelso. The club's manager at that time, was a "relief manager" named D.L. Tribe, a former telegraph operator, who went on vacation and was himself relieved temporarily by a D.C.& H. Inspector named Rodgers.[143] Within a month, George Montgomery, who had spent a year as manager of the company hotel at Milford, Utah, had returned to manage the Kelso facility. At the same time, Club cashier Russell Lewis resigned due to ill health.[144] Cashier Clerk Paul Manuel filled in as acting cashier after Lewis until Harry Ludwig from the D.C.& H. at Ogden, Utah, transferred to Kelso as the new cashier.[145] On a lighter note, the defeat of an apparently proficient billiard player, a watch inspector named Charlton, in the basement billiard room in the Kelso depot apparently created quite a "furore" among the billiard gang. Less palatable, Club Chef John Bavaria resigned and moved east, being replaced temporarily by Ray West, until George Feldcamp from Ogden came in as the permanent new chef. The club also acquired a new waitress named Helen Yapp, who was no sooner hired than she had to take leave to go to Jewell, Kansas, to bury her stepmother. About that same time, one of the Kelso chefs, John Freeman, resigned, and the railroad brought in Jack Coleman from Green River, Wyoming, as his replacement.[146]

The Depression continued and rapid employee turnover in the Kelso "Club" continued. The July 1930 issue of the employees' magazine reported that Herschell McKelly, formerly a chef at Kelso, was back in that capacity. The night cook, Lester Christensen, resigned and the railroad replaced him with George Norton. Cashier Harry Ludwig transferred to the same position at Grand Canyon Lodge on the north rim of the Grand Canyon, to be replaced by Fred Berger, formerly clerk at Glenns Ferry, Idaho.[147] Later that year Club Manager George Montgomery went on vacation and was relieved by T.R. Nance, and Chef McKelley went on vacation and was relieved by Albert Raunow. Jim Weeks, apparently a baker in the lunch room, had returned after spending the summer in Yellowstone — probably in the Oregon Short Line depot at West Yellowstone. Tod Fahrer, from

139. Ibid., Vol. VIII, No. 9, September 1929, p. 62.

140. Ibid., Vol. VIII, No. 12, December 1929, p. 60.

141. Ibid., Vol. VIII, No. 10, October 1929, p. 63.

142. Ibid., Vol. VIII, No. 11, November 1929, p. 61.

143. Ibid., Vol. VIII, No. 12, December 1929, pp. 60, 62.

144. Ibid., Vol. IX, No. 1, January 1930, p. 60.

145. Ibid., Vol. IX, No. 2, February 1930, p. 58.

146. Ibid., Vol. IX, No. 3, March 1930, p. 60; Vol. IX, No. 4, April 1930, p. 60; Vol. IX, No. 6, June 1930, p. 61.

147. Ibid., Vol. IX, No. 7, July 1930, p. 63.

Los Angeles, had been hired as a new night cook.[148] By December, Club Cashier Harry Ludwig was back after three months' leave of absence, and his relief, Fred Berger, had moved on to a similar relief cashier job at Caliente, Nevada.[149]

In the depot end of the Kelso building, during the fall of 1930 third "trick" Operator Lloyd Norris moved to Los Angeles, being replaced by C.B. Gordon, third trick operator at the Magnolia Tower.[150] Duane Ashcraft remained at Kelso as second trick operator, although in November or December 1930, he had to be relieved for several days by Relief Operator E.K. Wright during an illness. R.C. Clifton may have been the first trick operator at Kelso at that time.[151]

During the spring of 1932, "Ash" went to Carson City on business for the Order of Railway Telegraphers, and a relief operator named E.C. Ewing filled in for Ashcraft.[152] Shortly thereafter, Ashcraft went to Salt Lake City to met with O.R.T. Vice President Lewis from San Francisco and O.R.T. General Chairman Stice of the Oregon Short Line branch with an eye toward consolidating the two units under a single O.R.T. general chairman. An operator named Herrar from Los Angeles filled in for Ashcraft, while another new Kelso operator named Gordon had gone off to San Francisco to attend a school of photography, being relieved by an operator named Hoch from San Bernardino.[153] When Operator Gordon returned to Kelso, he had with him, not a camera, but a bride.[154]

By the beginning of 1931, the Depression apparently had caused some consolidation of jobs in the "Kelso Club," with club manager George Montgomery now made "manager-chef" and the former chef, Herschell McKelley, downgraded to third shift cook, replacing Tod Fahner, who transferred to a position in Salt Lake City.[155] Early that year the club acquired a new waitress, Gertrude Carpenter.[156]

Undoubtedly due to the Depression, at an unknown date probably in 1930 helper service had been cut back to four locomotives and crews. But by March 1931, the railroad had experienced sufficient upturn in traffic that it had to assign a fifth helper locomotive and crew to Kelso.[157]

The employees' magazine reported in May 1931 that a man named Jim Weeks was a "combination cook" in the lunch room, whatever that title may have meant, and several regular waitresses having returned from vacation, relief waitress Martha Luedtke returned to her home in Los Angeles. The

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148. Ibid., Vol. IX, No. 11, November 1930, p. 62.

149. Ibid., Vol. IX, No. 12, December 1930, p. 64.

150. Ibid., Vol. X, No. 12, December 1931, p. 64.

151. Ibid., Vol. XI, No. 1, January 1931, p. 64.

152. Ibid., Vol. XI, No. 6, June 1932, p. 47.

153. Ibid., Vol. XI, No. 8, August 1932, p. 48.

154. Ibid., Vol. XI, No. 11, November 1932, p. 47.

155. Ibid., Vol. X, No. 1, January 1931, p. 63.

156. Ibid., Vol. X, No, 2, February 1931, p. 63.

157. Ibid., Vol. X, No. 3, March 1931, p. 64.

Lunch Room also had a new waitress named Alice Hunter.[158] The next month a restaurant employee named Bill Addison, position otherwise unspecified, laid off for a few days to attend to business in Los Angeles, and surprised his fellow employees by coming back married to a nurse formerly on the staff of the Atchison, Topeka & Santa Fe Railway hospital in Needles, California. Among the Kelso Lunch Room waitresses, Gertrude Carpenter had entered a hospital in Los Angeles and faced the possibility of an appendectomy. Another waitress, Ludmilla Roll, had resigned, being replaced by Edith Dunn, while Alice Hunter had gone on vacation in Los Angeles and had been relieved by Esther Jensen.[159] The Kelso Club meanwhile acquired a new porter, Leo McDonald.[160]

A hobo who had entered Kelso by train one spring day in 1931 tried to leave by stealing Wes Bolton's new Chevrolet roadster one night, streaking out of town along the tracks to the southwest on "a road that goes nowhere." Several railroaders followed, and found the thief stuck in the sand just west of Flynn on the northern edge of the Kelso Dunes. They hauled him before Station Agent and Justice of the Peace A.H. Haden who "fixed matters so he can't steal any more automobiles for six months — unless he gets away with a county highway truck." In other words, Haden sentenced him to six months' labor on a county road gang.[161]

A vicious wind storm followed by heavy rain hit Kelso about 6:30 p.m. on Monday, July 20, 1931. The wind blew at gale force, ripping double doors off the roundhouse and demolishing the front of Packard's store. The wind uprooted trees and whipped telegraph and telephone lines to the ground. The wind abated about 8 p.m., only to be followed by a cloudburst of rain which washed out the Kelso wye tracks and damaged the exposed stock in Packard's store. The newspaper report of the storm did not mention any damage to the depot.[162]

Margaret Goodnight, one of the Kelso waitresses, planned to leave for two months in Los Angeles in July or early August of 1931, and apparently was popular with her peers, for "The girls at the club got up a farewell surprise party" prior to her departure.[163] Loraine Evans served as her temporary relief waitress. Toward the end of the summer of 1931, Cashier Leo McDonald resigned to return home to Omaha, Nebraska, and Robert W. Spong replaced him. Waitress Marie Wimberly also resigned and went to Portland, Oregon, to live with her uncle.[164] Two other waitresses, Clara Carter and Irene Hobbs, resigned about September 1931, and the railroad replaced them with Alma Thaler of Los Angeles and Ovena Potter of Salt Lake City. Station Agent A.H. Haden, who filled in as reporter to the employees' magazine for October 1931, claimed that Fireman Guy Hill broke his false teeth on Chef George Montgomery's pie crust in the Kelso Lunch Room and had to drive to Los Angeles for repairs. "Tough luck, Guy," Haden concluded, in what must have been a local joke.[165]

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158. Ibid., Vol. X, No. 5, May 1931, p. 64.

159. Ibid., Vol. X, No. 6, June 1931, p. 64.

160. Ibid., Vol. X, No. 7, July 1931, p. 64.

161. Ibid.

162. "Freak Storm Does Damage at Kelso," *The Barstow Printer*, Thursday, July 23, 1931.

163. Ibid., Vol. X, No. 8, August 1931, p. 64.

164. Ibid., Vol. X, No. 9, September 1931, p. 63.

165. Ibid., Vol. X, No. 10, October 1931, p. 64.

Whether his pie crust was too tough to chew or not, Montgomery soon took vacation, with E.B. Hewitt as his relief. Richard Clifton, who had left Kelso three years earlier for a position in the Dining Car and Hotel Department commissary in Los Angeles had returned as the Kelso cashier. Grace Farrell who had been working apparently in the restaurant in Las Vegas came to Kelso as a night waitress so she could live with her parents; her father was a signal maintainer at Kelso.[166] But shortly Edna Montgomery, wife of the Kelso club manager/chef, returned after major surgery in Los Angeles and was reported to have resumed her position as a waitress, so that Miss Farrell would have to move back to Las Vegas.[167] But for some reason that didn't happen; a month later, Grace Farrell still worked at Kelso. Another of the Kelso waitresses, Margaret Goodnight, was noted as one of the best students at a weekly Bible class held in Kelso.[168] In December 1931, "The holiday spirit was very much in evidence; the club-house was nicely decorated with two Christmas trees and the trimmings, a Christmas tree party was held, and everyone present received a gift," reported R.C. Clifton in the employees' magazine. Many Kelso residents reportedly enjoyed turkey dinners in the Lunch Room on Christmas Day, others on New Years' Day. Grace Farrell, meanwhile, finally did move to Las Vegas, for the railroad transferred her father, Signal Maintainer R.R. Farrell, to Rox, Nevada, and the whole family moved to Las Vegas, which was nearer his new station.[169]

Waitress Margaret Curry left Kelso and moved to Las Vegas early in 1932.[170] Shortly thereafter, for reasons that are unclear but stated as on account of a change in the working force at the club, Ralph Carver, Margaret Goodnight, Fred Crossman and Joe Gravel also left Kelso and returned to Los Angeles. Kelso schoolteacher Marion Gay also left and returned to her home in Pasadena; she had lived in the Club while serving as the Kelso schoolteacher during winter terms. She and Theo. Packard spent a day touring Death Valley before she left.[171]

What exactly happened in the "Kelso Club" during the spring of 1932 remains unclear, but on March 10 the L.A. & S.L. shut down the lunch room, apparently eliminating most of its staff. Then on March 27, the lunch room reopened, apparently with a skeletal staff consisting of George Montgomery as manager, and probably day cook, his wife as day waitress, and a Mr. and Mrs. Stepovich who handled the night shift. The report by Station Agent A.H. Haden in the May issue of the employees' magazine did not say whether this meant that the railroad had cut the cafe back from three eight hour shifts to two, or otherwise explain what changes had been made.[172]

Soon thereafter, George Montgomery and his wife left Kelso for the season to manage one of the Los Angeles and Salt Lake Railroad's subsidiary Utah Parks Company national park resorts; the report didn't indicate whether he went to Grand Canyon Lodge on the north rim of the canyon or to or to the lodge in Zion National Park. Meanwhile, while Mr. and Mrs. Stepovich vacationed in

166. Ibid., Vol. X, No. 11, November 1931, p. 62.

167. Ibid., Vol. X, No. 12, December 1931, p. 64.

168. Ibid., Vol. XI, No. 1, January 1932, p. 64.

169. Ibid., Vol. XI, No. 2, February 1932, p. 62.

170. Ibid., Vol. XI, No. 3, March 1932, p. 47.

171. Ibid., Vol. XI, No. 4, April 1932, p. 48.

172. Ibid., Vol. XI, No. 5, May 1932, p. 48.

the east, the railroad brought Mr. and Mrs. Herschell McKelley back as their relief.[173] When the Stepoviches returned, A. Stepovich served as manager of the restaurant, with McKelley handling the night shift. Reportedly the lunch room experienced good business after its March 27 reopening.[174]

On October 1, 1932, a man named C. Whiting who had managed the L.A.& S.L.'s Utah Parks Company lodge at Bryce Canyon National Monument, Utah, came to Kelso to replace a man named White who had managed the Club since Montgomery had left for one of the lodges in the spring. White returned to Los Angeles.[175]

On October 24, 1932, an increase of business resulted in the railroad putting an extra shift on at the club house, suggesting that indeed it had been cut back from three shifts to two back in March due to lack of business during the Depression. The club hired H.W. Barnett and Gayle Merrill, formerly of the Utah Parks Company, to beef up its staff. Meanwhile, in the depths of the Depression, helper locomotives and crews at Kelso apparently had been cut back to a mere three, although in November or December 1932, the railroad added a fourth.[176] By early 1933, George Montgomery and his wife were back running the Kelso facility.[177] Shortly thereafter, the Kelso lunchroom hired Ed Long and H.W. Barnett as waiters.[178]

In addition to cutting back on helper locomotives and crews at Kelso from six to as few as three, and cutting back by one eight-hour shift on staffing the Kelso Lunch Room, the Great Depression had another effect on the Los Angeles and Salt Lake Railroad and, indeed, the parent Union Pacific System: railroad management believed it could no longer afford to publish a magazine for company employees, although other lines such as the Santa Fe continued to do so throughout the lean years of the 1930s. Thus railroad management killed that monthly window into the railroad's affairs, which also provided the most detailed information regarding the role of women in the history of the Kelso Depot. It appeared for the last time in April 1933.

THE COMING OF THE DIESEL

Probably the first diesel-electric locomotive to pass through Kelso hauled the Union Pacific's first "streamlined" passenger train which made a run over the Salt Lake Route in March 1934. Nicknamed "Little Zip," the experimental M-10000 consisted of a single locomotive powered by a 600 horsepower Winton distillate engine and two streamlined passenger cars. Such trains, later powered by diesel-electric locomotives and with "lightweight" passenger cars featuring aluminum alloys were all the rage in the mid-1930s: the Chicago, Burlington and Quincy had its "Zephyrs" with stainless steel exteriors and the Santa Fe had its red, yellow and silver "Chiefs." The Union Pacific put its first regularly scheduled armour yellow lightweight train, powered by locomotive M-10002, into service between Los Angeles and Chicago on May 15, 1936, and redubbed the Salt

173. Ibid., Vol. XI, No. 6, June 1932, p. 47.

174. Ibid., Vol. XI, No. 8, August 1932, p. 48.

175. Ibid., Vol. XI, No. 11, November 1932, p. 47.

176. Ibid., Vol. XI, No. 12, December 1932, p. 45.

177. Ibid., Vol. XII, No. 2, February 1933, p. 47.

178. Ibid., Vol. XII, No. 3, March 1933, p. 47.

Lake Route "The Route of the Streamliner." Officially named the "City of Los Angeles," the train would join a whole fleet of armour yellow "name" trains: the *City of San Francisco*, the *City of St. Louis*, the *City of Portland*, the *City of Denver*, and so forth.[179]

Numbered Trains Nos. 103 (westbound) and 104 (eastbound), the "streamliner" soon set speed records. In December 1937, the addition of diesel locomotive units LA-1, 2, and 3 increased Los Angeles-Chicago service to every third day. Authorized to travel at a maximum of 90 miles per hour over the Los Angeles and Salt Lake, in practice the streamliner was restricted by curves and grades, and required a helper from San Bernardino to the summit of Cajon Pass en route to Barstow and again from Kelso to Cima. But coming down the east slope of the Cajon grade, No. 104 occasionally made 121 miles per hour. With increasingly modern locomotives and cars, the beautiful armour yellow "City" trains including the *City of Los Angeles* running through Kelso across the Salt Lake Route continued to operate over the Union Pacific until the end of UP passenger service with the advent of Amtrak in 1971.[180]

On Friday, February 11, 1938, 50 representatives of Mojave Desert communities met for a turkey dinner at 6.p.m. in the Kelso Lunch Room and then retired to the basement meeting room where at 7:30 p.m. C.D. Strickler called into order a business session to push for more and better roads through the desert, especially improvement of the road between Kelso and Baker. The primary concern of the group focused on getting road signs placed immediately along the Kelso-Baker road, but those attending undoubtedly had other items on their minds as well. The County Surveyor and a Supervisor were supposed to appear, but had sent regrets, so the group appointed a committee of four to go to meet them. Kelso store owner Lester Packard was one of the four.[181]

DEPOT IMPROVEMENTS

In 1938 and 1939, the Los Angeles & Salt Lake made two improvements in the Kelso Depot whose records survived. Between October 1 and October 3, 1938, an L.A.& S.L. crew installed in the D.C.& H. Department at Kelso, probably in the Lunch Room, a portable electric room cooler (probably of the type commonly known as a "swamp cooler" which fit in a window). The cooler had become surplus at Las Vegas and the company had therefore transferred it to Kelso. Work Order Authority No. 1348 for the job did not get drawn up until December 29, 1938, nearly three months *after* the job had been completed.[182]

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179. Signor, pp. 121-123; William Kratville and Harold E. Ranks, *Union Pacific Streamliners*, Omaha: Kratville Publications, 1974, pp. 10-27, 86-89. The body color of Union Pacific "lightweight" streamliners was "armour yellow enamel, Dupont Dulux No. 83-9356." For details on this and other colors used as trim, see Gary Binder and Dean Dickerhoof, "Alco FA's," *The Streamliner*, Vol. 3, No. 3, July 1987, pp. 14-15.

180. Signor, pp. 121-122; Hemphill, p. 141; William Kratville and Harold E. Ranks, *Union Pacific Streamliners*, pp. 100-157, 164-241, 304-342. The Union Pacific had retained 69 of its streamlined, armour-yellow passenger cars for company specials and for special excursions, although as of April 1997 it was the company's intention to sell off a majority of them.

181. "Action Started on New Link at Kelso Conclave. Desert Communities Meet to Launch Move for Road to Baker." *The Needles Nuggett*, Friday, February 18, 1938.

182. L.A.& S.L.R.R. Work Order File No. 1348; see especially, F.W. Gentsch, Los Angeles, February 3, 1939 to H.H. Larson, and Form 30, December 29, 1938, Work Order Authority No. 1348, from the Los Angeles General Office. NPS has a copy of this file.

Then during the summer of 1938, the General Chairman of the Brotherhood of Enginemen had requested that the railroad install in the upstairs hall in the Kelso Clubhouse where engine and trainmen stayed between runs a drinking fountain attached to a water cooler to provide chilled drinking water. "At present," reported Work Order Form No. 30, dated August 29, 1938, "there is no way for employees sleeping at [the] club house to secure a cool drink without dressing and going to the restaurant or fountain outside of building. This breaks their rest . . . "[183] Presumably if they could just step out into the hallway in the all-male upstairs dormitory for a drink without dressing, it would not "break their rest." Anyway, it was a reasonable request, and the railroad complied, though it took some time. When they got the fountain — it was in the Kelso freight house by January 6, 1939 — the various pipe fittings ordered with it were not there. They had been shipped separately as baggage.[184] Eventually the railroad found them, and the Water Service Gang under Foreman J.E. Winn began the installation on January 17, 1939, completing it on January 18.[185] The job cost $52.13 for the material and $27.47 for the labor, a total of $79.60, plus $4.47 labor and 20 cents material connecting the fountain to existing water lines. As a final accounting measure, since the job cost less than a ceiling of $100, the company transferred it from Work Order No. 1257 to a Work Order No. M-2387, which handled such accounts.[186]

Years later, Ed Warner, at one time Kelso constable, told Bob McCoy of two episodes at Kelso that occurred during the late 1930s or early 1940s. The first involved a "steel gang" totalling in its entirety about 500 men who apparently were changing out rail on the U.P. main line, putting in new and heavier rail, between Salt Lake and Los Angeles. The gang had been so unruly in Utah that they had reportedly been run out of the state, either by law enforcement officers or the National Guard. While this rowdy bunch was working in the vicinity of Kelso, one of them assaulted a lady. When Constable Warner came after the man, he ran into the "Beanery" to be with some of his rowdy friends, and when Warner entered the cafe, the culprit ran upstairs, Warner after him. Then a mob of the culprit's friends started up the stairs after Warner, who turned and pulled out his pistol and said, "I'll shoot one of you for every step you come up." No one tried further. Apparently Warner made the arrest; at that time the depot had no fire escapes or second story doors to the outside through which the culprit could escape.

In the other incident, a porter had raped a woman in one of the Pullman cars on an eastbound train. The passenger train stopped just short of the depot on the west side, near a hobo jungle which lay west of the depot. Just as the train stopped, the porter escaped from the conductor and Warner went after the man, who ran across the tracks near the road crossing. Warner called for the man to stop and fired a couple of shots into the air, and at that exact moment the porter tripped and fell, breaking his leg. Some of the hobos heard the shots and saw the porter fall, and spread that word of what they thought they had witnessed, and in short order there was a mass migration of hobos heading on west on foot to get away from Kelso where, they mistakenly thought, the law enforcement authorities were absolutely ruthless and would not hesitate to shoot a man in the back.

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183. L.A.& S.L.R.R. Work Order File 1257; Work Order Authority Form 30, August 29, 1938.

184. L.A.& S.L.R.R. Work Order File No. 1257; J.M. Anderson, General Water Service Foreman, January 6, 1939, to J.E. Winn, Water Service Gang Foreman.

185. L.A.& S.L.R.R. Work Order File No. 1257; J.E. Winn at Kelso, January 19, 1939, to J.M. Anderson, at Los Angeles.

186. L.A.& S.L.R.R. Work Order File No. 1257; H.H. Lawson, March 1, 1939 to B.H. Prater; Form 4907, Details of Expenditures Account of Work Order No. 1257, Los Angeles, March 1939. The NPS has copies of this Work Order File.

Warner and another man thereafter rounded up a wheelbarrow in which to haul the porter off to a doctor who resided in Kelso at that time, to get his leg set before taking him off to jail.[187]

THE WORLD WAR II BOOM YEARS AT KELSO

Along with the rest of the United States, the Los Angeles and Salt Lake Railroad went to war on December 7, 1941, and in 1942 Kaiser Steel opened the Vulcan Iron Mine nine miles to the south of Kelso near Foshay Pass in the Providence Mountains (as well as a new steel mill at Fontana). Many of the 50 miners lived in a camp or company town near the mine, but the mine had employees located in Kelso to help transfer the tons of ore from trucks to railroad hopper cars. They lived in covered trailers in a trailer park. In addition to the mine traffic, war brought a great increase in all kinds of freight traffic, especially military, requiring additional helper runs out of Kelso and more railroad employees. Early in the war the railroad reportedly had rushed seventeen helper crews to Kelso, as well as additional men from the Mechanical Department to maintain the locomotives and keep them running. The population of the Kelso vicinity reportedly reached around 1,500 to 2,000 at that time. Cima section foreman Roger T. Finnell recalled:

> At the peak of our [World] War II movements, some ten to twelve steam locomotives were stationed at Kelso - in helper service - to furnish additional power for Eastward trains, moving between Kelso and Cima. This distance is nineteen miles, and over that distance the track rises some 2,000 feet, which represents quite a grade, as regards railroading. These engines were maintained and serviced at Kelso, and some 100 to 150 employees resided and were employed at Kelso, in the Mechanical department of the railroad. At the time we had a five-stall round-house, in which the boiler-makers, mechanics, hostlers, water tenders, and the many other necessary employees took care of the engines. There were some twelve to fourteen engine crews assigned to this helper service, and three call-girls were employed to call crews. Also, three Mechanical Foremen were employed, working the clock around, and keeping the engines ready for service at all hours.
>
> During this 'steam period' we had nine water wells producing, as well as the Union Pacific Springs [Cornfield Spring] - located some distance from Kelso - and during some periods of the long hot summers it was also necessary to haul water into Kelso from distant points. This water had to be treated for use in the locomotive boilers, and this represented quite an expensive chore for the railroad - also an additional chore for the section gang, which had to unload and store the various chemicals used in the treatment of this water.
>
> During this same period we also had oil storage at Kelso and the large storage tank would hold one-million gallon[s] of oil, used as fuel in these locomotives. . . . We also had two service points for servicing these engines on the main line - one East and one West of the

187. Robert McCoy, P.O. Box 247, Grenora, North Dakota, 58845, letter, August 29, 1997, to the author, enclosing three photographs and a copy of his wife's typescript, "'Overshadowed.'" [Telephone] Message Record, Interview with Robert McCoy by Gordon Chappell, September 2, 1997. By the time McCoy lived in Kelso during the 1950s, the hobo encampment or "jungle" had moved, and was a quarter mile or so *east* of the depot, rather than west.

Photo 18: Helper locomotive No. 5090 about to be coupled to eastbound train No. 24, "The Pacific Limited," 1944. The Kelso Depot is behind the trees at the right. Note the concrete station platform in the foreground; the brick platform in front of the depot is in the distance. Credit: Union Pacific Museum Collection.

Photo 19: This 1944 view southwest from a signal tower showed the Kelso yard and the depot hidden by trees at the right of the tracks. At far left is the west leg of the wye tracks; at far right, the World War II temporary housing. Credit: Union Pacific Museum Collection.

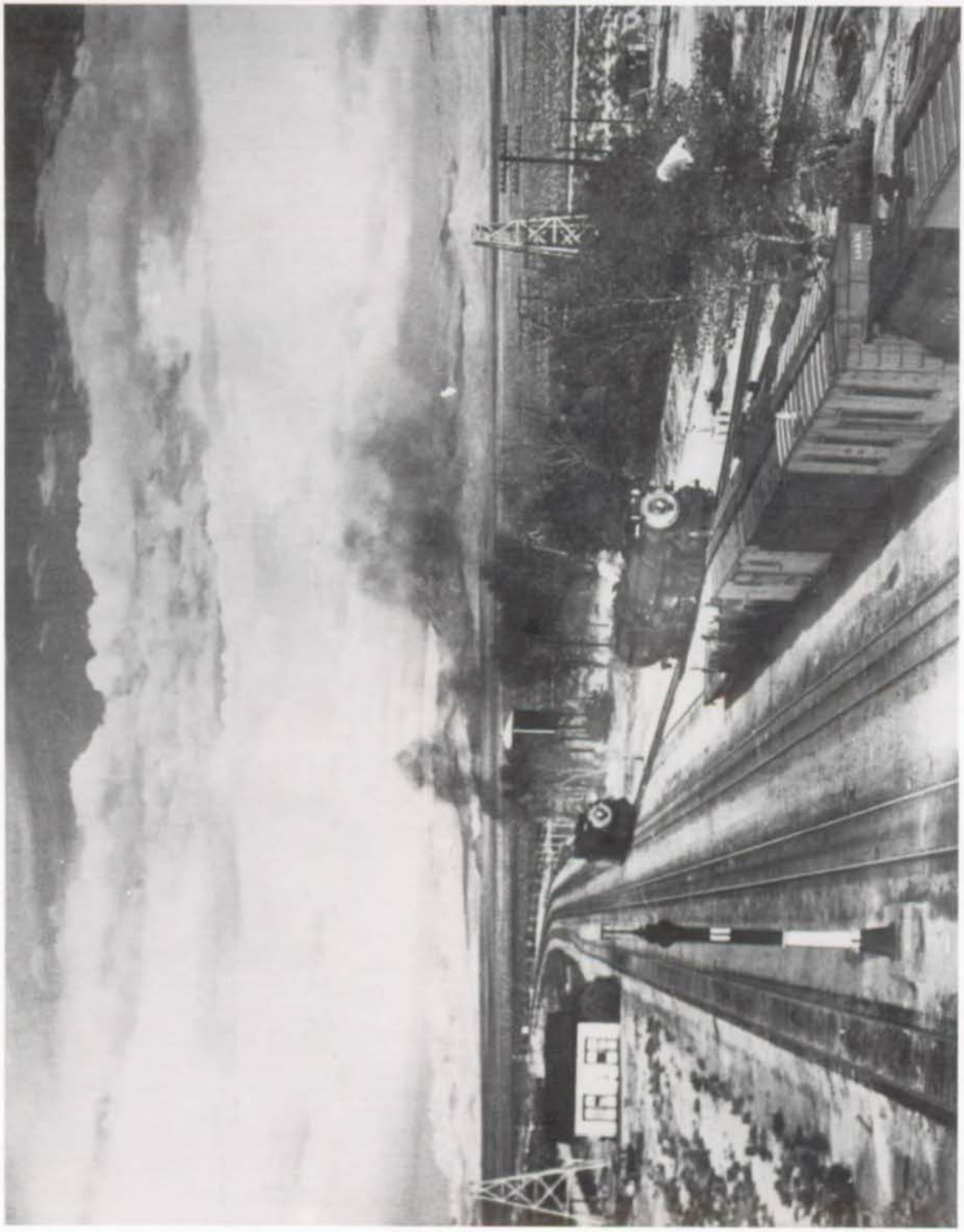

Photo 20: Two helper locomotives returning to Kelso from Cima, 1944. Credit: Union Pacific Museum Collection.

present depot. The engines were serviced, checked, greased, and the water tanks filled - usually while the crews had their lunch at the depot restaurant.[188]

A year after the war started, in December 1942, the Vulcan Mine began shipping iron ore. While it operated, the Vulcan Mine hauled more than 2,500 tons of ore per day by truck to Kelso to be loaded into railroad cars there and hauled by rail to Kaiser's Fontana Mill. To accommodate the trucks, Kaiser paved the road between Kelso and the Vulcan Mine in the Providence Mountains nine miles to the south, and the railroad built a special set of loading tracks southwest of the Kelso Depot where the trucks dumped their ore into hopper cars for the railroad to move to Fontana.[189]

Early in the war, during the summer of 1942, in connection with a World War II scrap drive, Los Angeles & Salt Lake management decided to remove the boiler tube and woven wire fences enclosing not only the Kelso Depot but also similar fences enclosing company dwellings. Bridge and Building Gang No. 76 led by a foreman named Huff began removal of the fences on July 15, 1942, and completed the work on July 29, 1942. They accomplished the work under Work Order Authority PDG 267A, transferred in November to Work Order Authority No. 2293, prepared on November 17, 1942, three and a half months *after* the fence had been removed. The company salvaged from one fence 563 linear feet of boiler flues and 534 linear feet of 45 inch wide woven wire; that was probably from around the depot. From other Kelso fences the company salvaged 1384 linear feet of boiler flues and 3404.7 linear feet of woven wire fence.[190] Photographs indicate that later the company planted low hedges around the depot in place of the fences.

Train operation through Kelso became increasingly difficult as the war in the Pacific progressed. By January 1943, partly due to a clogged up harbor at Los Angeles, the entire line south of Salt Lake City had become absolutely jammed. Both the government and the railroad searched for solutions. The Army found one in a former New York Central Railroad ticket clerk who had become an Army officer; assigned to handling transportation at the Port of Los Angeles, he soon had the harbor cleared out and operating smoothly. But he could do nothing about the jammed up railroad that the harbor blockage was partially responsible for causing. Virtually every passing track on the Salt Lake Route was filled with trains and the railroad faced a motive power shortage. Salt Lake Route General Manager Knickerbocker and U.P. Vice President of Operations E.J. Connors went to work to develop a motive power plan to handle the traffic expeditiously. They decided to assign all heavy freight to the fifteen Challenger articulated 4-6-6-4 locomotives and ten 4-10-2s assigned to the line, as well as bringing two more Challengers fresh out of the Cheyenne,

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188. Roger T. Finnell, letter, May 19, 1958, to Willa S. Oldham, copy in the Myrtle Pennington Collection, Mojave Desert Heritage and Cultural Association library, Goffs, California, courtesy Dennis G. Casebier. Finnell also recalled that Kelso had both a Roadmaster's Office and a Signal Supervisor's Office at that time.

189. Signor, pp. 128-157; Hemphill, p. 174; Art Francis, letter to the author, January 4, 1997, enclosing review and comments on an earlier draft of this study; see the comments, pp. 8 and 9, items 29 and 30.

190. Work Order File No. 2293; see especially: J.P. Mack, December 2, 1942, to George Wilson; G.L. Fish, Los Angeles, December 17, 1942, to E.J. Doolin; Form 30-C, November 17, 1942; Work Order Authority Form No. 30-2, Detail of Estimated Credits, Nov. 17, 1942. In the last-mentioned form, the Engineering Department reported the "Ledger Value of fence around Depot and Dwellings." Under the heading "unit cost" it claimed the depot boiler flue fence of 563 linear feet cost $286.61 and the 534 linear feet of 45-inch woven fire fence around the ends of the depot cost $328.29; both had been built in 1924 under Work Order Authority No. 5030 for a total cost of $614.90. The 1,384.4 linear feet of boiler flue fence around company houses had cost $528.21, and the 3404.7 linear feet of 45-inch woven wire fence cost $902.89, and these were built two years later than the Depot fences, or in 1926, under Work Order Authority No. 6324, for a total cost of $1,456. It cost the railroad only $60 to remove all of this, and the scrap metal value of the flues and woven wire was ten dollars!

Wyoming, Shops, equipped with oil burners, down to work the runs between Los Angeles and Las Vegas. Additionally, they assigned about fifteen 2-10-2 locomotives as helpers, some working Cajon Pass (along with 2-8-2s), three operating out of Kelso, and the rest east of Las Vegas. This reassignment of power allowed heavy freight trains to go through without cutting them into sections. To further speed train movement, tonnage of individual trains was cut so they could make a district in four to six hours instead of twelve. This plan freed up many lighter locomotives which had been in helper work, and made them available for reassignment.[191]

One other response to the wartime traffic congestion was a Union Pacific decision to install Centralized Traffic Control (CTC) on the Los Angeles & Salt Lake Railroad. By use of electronic signals and communications, a dispatcher then could keep track of exactly where trains in his district were at any given moment, and control train movements much more efficiently than by relying merely on timetables and train orders. CTC had been developed late in the 1920s, but the relatively high cost of initial installation made it impractical — until wartime conditions made it necessary. With equipment obtained from Union Switch and Signal Company, the L.A.& S.L. began installation of CTC equipment late in 1942, and the 18 mile section from Kelso to Dawes was the first to be switched over to the new system, on December 2, 1942, followed by the section from Dawes to Cima on December 6. The 72-mile segment from Yermo to Kelso was next, and by the summer of 1943, the entire 171-mile subdivision was under CTC controlled by the dispatcher in Las Vegas. At that time, it was the longest stretch of railroad CTC in the world.[192]

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191. William W. Kratville and John E. Bush, *The Union Pacific Type; The Story of the Union Pacific's Three Cylinder Locomotives*, pp. 102-104; Signor, 142-157.

192. Signor, p. 148, 149; Hemphill, pp. 42, 43, said the Daggett to Yermo section was the first to be completed; letter, Union Pacific Railroad Assistant General Solicitor Jeff S. Asay, March 18, 1997, to Gordon Chappell, 2 pp., enclosing U.P.R.R., Los Angeles Division, Form 2733, "Report of Progress on Improvement Work (Involving Charges to Capital Account) as of June 30, 1943," 2 pages. CTC installation was authorized under A.F.E. (Form 30) No. 2137 (26) approved April 14, 1942, with the work commencing June 22, 1942. In the "Remarks" column, this document indicated completion of CTC on sections of the trackage between Yermo and Las Vegas across Mojave National Preserve:

CTC turned over to operation:

Bet. Kelso & Dawes	Dec. 2, 1942
Bet. Dawes & Cima	Dec. 6, 1942
Bet. Cima & Ivanpah	Dec. 20, 1942
Bet. Ivanpah & Desert	Jan. 15, 1943
Bet. Desert & Jean	Feb. 8, 1943
Bet. Jean & Sloan	Feb. 25, 1943
Bet. Sloan & Arden	Mar. 7, 1943
Bet. Arden & Las Vegas	Mar. 19, 1943
Bet. East & West switch Kelso	Apr. 12, 1943
Bet. Kelso & west switch Sands	Apr. 29, 1943
Bet. Sands & west switch Crucero	May 12, 1943
Bet. Crucero & west switch Afton	May 26, 1943
Bet. Afton & west switch Harvard	June 8, 1943
Bet. Harvard & Yermo	June 16, 1943

This document did not indicate when the Daggett to Yermo section was finished.

Roger Finnell, letter, May 19, 1958, to Willa S. Oldham, recalled further that Kelso had a dispatcher during the period C.T.C. was under construction. He remembered, "Early in 1942 the railroad began the construction of Centralized Traffic Control between the division points of Las Vegas and Yermo, California. This was quite a construction job, and required some two years or better to complete. During the better part of 1942 I was assigned to work-train duty, unloading

Still another change brought to Kelso by the wartime increase in business, according to Art Francis, who lived with his parents at Kelso beginning in 1943 shortly after his birth, his father mentioned to him in later years that "the arches on the southwest end of the depot were enclosed in 1942 to create a baggage room." Actually, there was a small baggage room behind the ticket and telegraph office and the conductor's or waiting room, and judging from Robert McCoy's memory of Kelso in the 1950s, the old baggage room was converted into a new station agent's office, with the enclosure of the "arcade" at the southwest end of the building serving as new space for baggage and railway express. Francis recalled, "Two baggage trucks were used by telegraph operators to handle mail, express and baggage to and from trains. These were fairly large four wheeled units with metal spokes and metal wheels." He also recalled that a Railway Express Agency sign hung over the southwesternmost arch of the arcade facing the track, and to the right (east) of that sign a large Western Union telegraph sign extended at right angles to the building.[193]

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materials for this job. We usually worked sixteen hours daily, and were assigned seven days weekly. Many gangs, both railroad employees and contractor's employees, were employed in this construction. Kelso was more or less headquarters for this program, since it was centrally located on the district, and there was plenty of activity around here during that period." The letter is in the Mojave Desert Heritage and Cultural Association library at Goffs, California.

193. Art Francis, letter to the author, September 15, 1996, p. 1. No authoritative Los Angeles and Salt Lake Railroad documentation on this alteration to the building has been found despite an effort to do just that, but of the varied reminiscences of Kelso veterans, Francis' seems to this author the most logical and most authoritative, since he lived there from 1943, shortly after he was born, until 1961. Robert McCoy, letter, August 29, 1997, to the author, indicated that the station agent had an office behind the ticket and telegraph office when he worked there as a telegraph operator during the mid-1950s, and that the baggage room was at the far west end of the depot.

Another source claimed that the enclosure of the west end of the arcade occurred much later. See draft National Register of Historic Places Registration Form prepared for the Bureau of Land Management by P.S. Preservation Services (Bonnie Parks, and John W. Snyder), September 30, 1991, Section 7, p. 2. The form stated: "The east and west elevations of the two-story portion are similar except for the frame infill of the west arcade, an easily reversed alteration which dates from the end of passenger service to Kelso in the 1960s, when this end of the station was converted for storage and workshop use by the Bridge & Building/Signal Maintenance forces." It is not clear whether this is intended to mean that the alteration was made after the depot closed on August 14, 1964 (not 1962 as the form stated), on May 1, 1971 with the advent of Amtrak, or some other date in between. Neither John Snyder nor Kevin Bunker, who assisted P.S. Preservation Services with the research, could remember the source of the particular information, although it seems likely it was imparted to them when they were given a tour of the depot interior by a Union Pacific employee. Still, Art Francis, another Union Pacific employee, who was raised at Kelso from 1943 to about 1960 when he went to work for the railroad for a couple of years, recalled in a letter to the author dated September 15, 1996, p. 1, that his father had told him that the infilling of the arcade had been made in 1942 to provide additional baggage room space as a result of the World War II boom in railroad traffic and Vulcan Mine ore shipments. Both had brought a large number of additional people to live in the Kelso community who, from time to time, would need to come and go by passenger train, creating a boom in passenger traffic and an increase in baggage to be handled. Francis has proved very knowledgeable about Kelso, many of his other statements having been confirmed by records subsequently found, and his father's statement seems to this author to be far more logical and authoritative than the uncited source in the National Register form. Furthermore, if the arcade had not been enclosed until *after* 1960, Francis would almost certainly have remembered it as being open. Nevertheless, no documentary proof of when and why that change was made in the building has yet been found despite a search for just that information.

Dennis Casebier has one of the Kelso baggage trucks at his museum at the Goffs Schoolhouse, and at a meeting with National Park Service officials including the author there on November 15, 1996, Casebier offered to give the baggage truck to the National Park Service for exhibit at the Kelso Depot when the NPS is ready to take care of and use it.

Photo 21: The Goff Schoolhouse Museum at Goffs, California, has one of the two Kelso baggage trucks, shown here on November 15, 1996. Photo by Gordon Chappell, NPS.

"Casey" Finnell recalled that during the World War II boom years Kelso was a "bawdy, raucous, hell-on-wheels town in those days . . . full of hard-drinking, hard-living railroad men and miners. Why in one month, they'd down more than $30,000 of hard liquor and there were so many wild characters that they would have to chain them up to the trees outside the depot to sober 'em up." Finnell did have a reputation for telling tall tales, and $30,000 spent on liquor by men many of whom made only $10 per day seems a bit of a stretch.[194]

During the war years, "The Beanery" operated around the clock to feed helper crews. Troop trains or trains of military equipment and freight arrived several times each hour, and some of the soldiers on troop trains were allowed to get off the train while it was serviced, and some of them probably patronized the Lunch Room. The Union Pacific itself reportedly had 500 employees in Kelso. Sometimes during the war years there were so many helper crews assigned that there were lines of enginemen and trainmen awaiting space in the cafe.[195]

194. Signor, p. 149. See also, Roger T. Finnell, letter, May 19, 1958, to Mrs. Willa Oldham, 4 pp., in the Myrtle Pennington Collection, Mojave Desert Heritage and Cultural Association library, Goffs, California; in this document, answering an inquiry for information on the history of Kelso, Finnell cited $30,000 as the monthly income of the general store during World War II for all kinds of merchandise, including beer.

195. Art Francis, letter to the author, December 29, 1996, p. 3, item 6.

The need for rooms for enginemen and trainmen so escalated during World War II that the company had the basement rooms partitioned with dividers and installed separate additional beds for trainmen and enginemen. After the war, the first large basement room south of the stairway returned to use as a pool room, except that on Monday evenings a minister came over from Yermo to hold belated Sunday school and church services in that room.[196]

A NEW SECTION FOREMAN FOR THE KELSO SECTION

It was during the month after the war ended that Kelso received a new section foreman, when in October 1945 the L.A.& S.L. transferred Roger T. Finnell, nicknamed "Casey," to take over the Kelso section gang. Finnell had worked for the railroad for a decade in Utah when in 1937, the Brant section gang, running their motor car through a blinding snowstorm, collided with a locomotive between Joshua and Brant, about 28 miles northeast of Kelso, killing the entire crew. Reportedly it was in the reshuffling of personnel caused by that collision that the railroad transferred Finnell to the Mojave Desert, whether to Brant initially or elsewhere is uncertain. In November 1941, the railroad assigned Finnell to Glasgow as section foreman. In April 1942, he became section foreman at Cima, but it was not until October 1945 he took over the Kelso section gang. During Finnell's 29 years at Kelso as Section Foreman, up to his retirement in 1974, he saw to it that the depot had the greenest grass in the Mojave by trading used crossties to ranchers for use as fenceposts, in exchange for steer manure he could use as fertilizer. He also got manure for this purpose out of empty stock cars set out from time to time on a yard track at Kelso.[197]

THE POSTWAR YEARS

As the population grew, the local Justice of the Peace of the Kelso Judicial District, occasionally held court in the basement rooms in the depot. Robert P. Mohle continued the practice. He lived in a little trailer located on the northwest side of the tracks. One of the justices was a man named Pratt; he had been a Salt Lake Route telegraph operator who lived in Company House No. 39. He suffered a stroke that paralyzed him on one side, but he remained as justice and lived in the company house until about 1954. At that time a female operator, Pat Larsen, received assignment to the afternoon shift in the depot and moved into the house that had been occupied by Justice Pratt. Among the constables were Robert P. McCoy, Joe Leroux, Ed Warner, a Salt Lake Route machinist who ended up locked in his own jail for beating his wife while drunk, and later a cowboy named Jones became constable.[198]

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196. Art Francis, letter to the author, January 4, 1997, enclosing review and comments on an early draft of this history; see comments, p. 9, Item 34.

197. Ausmus, *East Mojave Diary*, pp. 53-55; Burk, *The Kelso Depot Story*, p. 5; Art Francis, letter, January 4, 1997, to the author, enclosing review and comments on an early draft of this study: see comments, p. 9, item 36. Francis recalled Finnell also getting manure for fertilizer from the stock cars at Kelso. The railroad kept a string of these empty stock cars at Cima so that they, with their brakes, could be added to heavy trains to increase the braking power, and of course after such use they would be set out at Kelso until there was extra motive power to take them back to Cima, or they were needed to move livestock. Finnell retired on September 27, 1974; *INFO*, (Union Pacific magazine for employees), Vol. VI, No. 12, November 1974, p. 31. For Finnell's own reminiscences, see Roger T. Finnell, letter, May 19, 1958, to Mrs. Willa S. Oldham, 4 pp., copy in the Myrtle Pennington Collection, Mojave Desert Heritage and Cultural Association library, Goffs, California, courtesy Dennis Casebier.

198. Ibid., comments, pp. 8, 9, items 33 and 34.

McCoy, who served as a constable during the 1950s while he worked for the railroad at Kelso, recalled a drunken woman coming in on a westbound train from Las Vegas. She had taken one of her high-heeled shoes off and beat up a brakeman on the train, and then started in on the conductor. They kicked her off the train at Kelso, and McCoy took her into the depot Lunch Room and got her a cup of coffee to attempt to sober her up, but she threw the coffee in his face. Then he took her down to the waiting room and called her daughter in Las Vegas to come down and get her, and after that he took her down to the strap steel jail, opened the door, and asked her if she was going to behave. She got down on her knees and begged him not to lock her in the jail. Apparently she did behave, and he didn't lock her up.[199]

Kaiser's Vulcan Mine operated until 1949 when it shut down due to the sulphur content of its ore, and the Fontana blast furnaces began drawing ore from Eagle Mountain instead.[200]

The two recreation rooms in the basement, the Billiard Room and the Reading Room, served many "public" functions for the Kelso community over the years, but since nearly all residents of Kelso were Union Pacific employees, the basement recreation rooms still retained the character of being a company facility for employees. Weekly square dances, for which Casey Finnell spread sawdust on the floor, Sunday church services, parties, meetings, and other such uses occupied the basement of the Kelso Club building over the years. The Union Pacific also used them for training classes for railroad personnel.[201]

As might be expected in the desert, Kelso generally had a dry climate, but between January 10 and 13, 1949, snow fell to a depth of 40 inches or more at Kelso. One railroad official in Omaha who heard of it reportedly came all the way out to Kelso to see it. Even downtown Los Angeles had two inches of snow, Pasadena six, and Las Vegas ten to twelve.[202] Furthermore, the snow delayed remodeling the Lunch Room in the Kelso Depot.

REMODELING THE LUNCH ROOM

Following World War II, the amount of railroad traffic had dropped off precipitously for no longer did troop trains pass through carrying soldiers out to the war in the Pacific, and no longer did long trains of military tanks, trucks, jeeps, and other supplies pass through Kelso, nor did raw material

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199. "Interview with Robert McCoy," 15 June 1993, by Dennis G. Casebier, pp. 28-29. A hardbound transcipt of this interview is in the library of the Mojave Desert Heritage and Cultural Assocation at Goffs, California; information courtesy Dennis Casebier.

200. Ibid., p. 14; Robert McCoy remembered the Vulcan Mine moving all of their people out of there in the first two or three months of 1949. There is disagreement among various published sources as to when the Vulcan Mine shut down, with dates ranging from 1946 to 1951, some of which may be attributable to how "shut down" is defined. Peter Burk, *The Kelso Depot Story*, p. 6, said 1948. Ausmus, p. 68, said that "By 1947 . . . the Vulcan Mine had shut down . . . . " Hemphill, p. 170, said the Vulcan Mine closed in 1949. Marion F. Ely, II, writing in Dennis Casebier, *East Mojave Heritage Trail: Rocky Ridge to Fenner*, p. 266, said that while the Vulcan Mine was superseded by Eagle Mountain in 1948, some ore still was mined from the Vulcan for use in cement as late as 1951.

201. Burk, p. 4.

202. Signor, p. 179; Ausmus, pp. 19, 80, 82. There had also been a bad snowstorm in 1937, but nothing has been found about Kelso in that storm. The 1937 storm was very wet snow with little wind that did not drift, and roads and track, once cleared, stayed cleared; the 1949 snowstorm, on the other hand, was very dry snow with much wind that drifted badly, closing and reclosing roads and the railroad as soon as they were plowed.

for the vast aircraft manufacturing industry of southern California. After the end of the war in September 1945, eventually a traffic of soldiers returning from the Pacific War to be mustered out did boost passenger travel temporarily, but most of the supplies did not return. Whole motor parks of jeeps and other equipment, new from the factory, simply were dumped in the ocean off the reefs of Guam and other Pacific islands. Thus beginning in late 1945 and 1946, the number of helper crews required at Kelso dropped off dramatically, along with the number of mechanics and other employees, and as mentioned, the Vulcan Mine also phased down, eliminating Kelso's one industry other than the railroad.

The Kelso Depot Lunch Room probably still had most of its original equipment, including a now-antiquated coal-fired range. It was expensive to operate and staff, and probably for that reason, some time shortly after the end of the war, the railroad shut it down and remodeled Company House No. 8-8A into a small substitute lunch room for employees that was less expensive to operate. In fact, the company contracted out operation of this "mini-beanery" to Roundhouse Foreman Bud Massman. Exactly how that worked is unclear; Massman apparently took on the contract as an outside contractor, continuing to do his regular job, and must have hired one or more combined cook/waiters to run the substitute lunch room for him, although Art Francis remembered Massman himself scooping out ice cream for Francis.[203] Massman eventually gave up that contract, possibly due to being transferred in his regular job to Yermo, and by mid-1948 (and perhaps much earlier) the company had spurred out on a short piece of track a surplus dining car that became a second substitute lunch room. That one also proved unsatisfactory — especially being very cold and uncomfortable in winter, conditions surrounding it became unsanitary, it became a source of employee/patron complaint, and this "derelict diner" did not comply with State of California restaurant codes. Thus in the fall of 1948 management decided to further remodel Company House 8-8A to make it more comfortable, and incidentally to be operated by a single man who served as cook and waiter.[204]

On November 9, 1948, Los Angeles and Salt Lake Railroad Supervisor of Bridges and Buildings M.S. Williams reported to Division Engineer J.P. Mack in Los Angeles that he had discussed remodeling of House No. 8 with two officials of the Dining Car and Hotel Department, and supplied estimates of $150 in material and $245 in labor to complete the work. Two days later, Division Superintendent D.F. Wengert wrote Mack that the Superintendent of the D.C.& H. had told him the house formerly used for a restaurant could be put in serviceable condition for $650. "Believe this should be done in order to eliminate the use of dining car that we now have at Kelso," Wengert concluded.

As it developed, Bridge and Building forces were occupied for some time with snow troubles on the line, and could not be made available to do the work at Kelso immediately. It wasn't until January 29, 1949, that company officials placed an order for materials needed to rewire Company House 8-8A. Nothing further occurred until March 1 when Division Engineer Mack advised M.S. Williams that he had Water Service Gang 628 at Kelso to deal with the piping and he wanted Williams and his Bridge and Building Gang "to proceed to complete this work as soon as possible."

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203. Message Record, Telephone Interview by Gordon Chappell with Art Francis, office number 702 295-1155 (Las Vegas, Nevada), June 17, 1997.

204. The story of the remodeling lies in a half-inch thick file of correspondence, telegrams and forms labeled "UP W.O. [Work Order] M-1257" found in an old filing cabinet among intermodal files in the basement of a Union Pacific building in Los Angeles. The NPS has a copy of this file. Citations to specific documents appear woven into the narrative.

Accordingly, B.& B. Foreman F.A. Golden got his men to work, but on March 8, while he was momentarily away, the D.C.& H. cook had the section men carry the steam table outside, and told them that they would be getting new equipment instead. Golden complained to Mack that this made "all the work we had done a complete loss." As it turned out, a new electric stove was on hand and had been for three months, and a weekly supply car sent out from the Dining Car & Hotel Deparment in Ogden and due to reach Kelso on Friday, March 11, carried a new steam table, electric ice box, and sink. The "company house cafe" still would need an electric hot water tank, but on March 10, M.S. Williams telegraphed Caliente ordering that a water heater intended for use in the Pioche depot be sent instead to Kelso.

By this time, J.P. Mack had become concerned and on March 10, 1949, wired Ogden from Las Vegas,

> These repairs running into considerable amount of money and understand now requires electric hot water tank. Please advise what authority we have to do this work. Info very important in view of instructions that all expense be kept at minimum.

A U.P. official in Ogden talked with the superintendent of the Dining Car and Hotel Department who admitted he had no funding authority to fix up Company House 8-8A but if the division superintendent wanted to feed employes through the summer the D.C.& H. Department would not operate the old diner, and other quarters for a cafe would have to be provided. Meanwhile, division officials were beginning to have second thoughts about what had started out as a very small project, but seemed to be growing in cost beyond what they had anticipated. M.S. Williams ordered a Paint Gang foreman in Las Vegas after completing painting the depot rest rooms to move his gang to Kelso and paint House 8-8A.

While work thus proceeded on Company House 8-8A, on March 16 Division Engineer J.P. Mack wired a U.P. official in Omaha,

> My wire of last week in regard to authority for heavy expenditure on remodeling the house to be used for restaurant Kelso has not been answered. Evidently what is desired invovles a lot more work than originally mentioned and in view of present curtailment of expenses I expect severe criticism for going to all the work now requested. Wish you would send some one there at once who can say definitely what is desired. Have had a carpenter working for several days and now more work desired. Also understand electric hot water tank wanted and someone shipping linoleum for floor. Also chimney to be changed and new bottom put in steam table which rquries [sic] it be sent to LA. Have painters there and a water service gang. Looks to me that the cost of all the work and changes desireed [sic] will run at least $1,000.00. Advise as cannot keep forces there indefinitely.

Two days later, Division Superintendent Wengert wired Mack, "If as you say work requested by DC&H will approximate $1,000.00, assume you have submitted Form 30 to Genl Mgr for approval in order preclude any criticism." That was just it: Mack had not, for initially he apparently thought the work just included some minor changes by a carpenter. He replied at 9:14 a.m. the next day, March 20, that he had not submitted a Form 30. "The work as originally requested is so much different from that apparently wanted at this time am stopping all work." And in a telegram sent one minute later, he ordered M.S. Williams, "Stop all work in connection with work on houses 8 and 8 1/2 Kelso."

On April 5, 1949, Division Engineer J.P. Mack, as instructed, submitted a Work Order which listed work totaling $1,160 to rehabilitate House 8-8A to D.C.& H. requirements. That caused Division Superintendent D.F. Wengert to have second thoughts. On April 7, he wrote F.C. Paulsen in Omaha,

> It is my thought in the matter that we again occupy the restaurant portion of the depot building at Kelso on a small basis to be operated by the DC&H Dept. I understand from Mr. Mack that it would cost very little to put this portion of the building back in shape for operation as a restaurant. I have not as yet handled with Mr. Keller relative to operating with DC&H forces, but will do so if you approve, and believe this would be a much cheaper and much better operation, as well as permitting us to retire [demolish] houses 8 & 8A.

Paulsen replied on April 11,

> I agree that $1160 is too large an expenditure to make on the two old portable houses at Kelso [someone in Los Angeles inserted, "They are not portable houses as I understand it," and they weren't!], and am agreeable to again permitting occupancy of the restaurant portion of the depot building on a "small basis". However, I would like prompt advice from you as to just how much space you propose to have the restaurant occupy and what, if any, expense would be involved in getting this operation underway.

Wengert wired Paulsen's question to C.A. Keller of the D.C.& H. in Ogden, but the answer he got came from H.A. Hanson, superintendent of the D.C.& H. in Omaha:

> . . . Have discussed proposal install service facilities in building 8 8 1/2, at cost approximately $1200 and then result in unsatisfactory service. Present dining car unsuitable for continued operation, and boarding outfit cars would present similar problem[.] Our conclusion would be disirable reopen meal facilities in club building, using equipment on hand, to be located north wall lunch room [actually, the northeast end wall of the building] requiring minimum help. CAK [Keller] advises has given you outline for estimated expense. Technically, we would be required to reestablish previous club operation, and based on present wages and business we would lose $2500 to $3000 per month, compared with present loss at club and on diner of around $1500 monthly. . .

Interestingly, Wengert received a memo from an unidentified official in Los Angeles on April 29, 1949, that the work in Company House 8-8A had already been completed, except for connecting up electric wiring and a canopy, and the building now was ready to operate as a restaurant. However, as Hansen had wired Wengert, the D.C.& H. management apparently believed even the remodeled house-cafe would not provide satisfactory service. Anyway, Wengert had already told Mack on April 20 to work up an estimate of the cost of remodeling the original Kelso lunch room in the depot. So all the work on Company House 8-8A apparently went for nothing. It was too bad that the company had not had better internal communication.

On May 5, C.A. Keller signed a Work Order Authority form which under "Description of Work" called for the company to "Install electric rang[e] and electric hot water heater. Relocate kitchen equipment, counter and stools in restaurant portion of depot." Below, accompanied by estimates, the form provided more detail:

New Additional Property

N [new] -40 Gal. Electric Hot Water Heater
SH [second hand] Electric Range
Metal Hood & Vent over stove
Electric Wiring
Water Pipe & Fittings

Operating Expense Work

Relocate, Desert Cooler
" Counter & Stools
Seal Up Windows
Install Vent thru Window
Relocate Drain Lines
" Sink & Steam Table
Rearrange Wiring
" Transformers
. . . .

The total cost for this work the company estimated to be $850, less than they already had spent on Company House 8-8A. On June 6, 1949, F.C. Paulsen advised Division Superintendent Wengert from Salt Lake City that Work Order M-1257 had been approved, and added, "This work should be undertaken and completed as quickly as possible so as to permit discontinuing operation of the dining car and eliminate heavy expense." Consequently, Division Engineer J.P. Mack ordered Water Service Gang No. 628 under Foreman Golden at the East Yard in Los Angeles to go to Kelso "right away to do this job." On June 14, Mack inquired of Keller in Ogden that since there was a coal fired hot water tank in the basement of the Kelso depot which was kept hot all the time and formerly supplied hot water for the restaurant, would that suffice to eliminate the need to buy, or at least install, an electric hot water heater? Keller wired the following day that it was "OK" with him.

Work on remodeling the Kelso Depot Lunch Room commenced on June 29, 1949. Bridge and Building Gang No. 621 spent 32 hours between July 1 and July 15, 1949, relocating the counter and stools at a cost of $42.72. Note that the company did not purchase new stools at this time; it is unclear whether these were the original stools with backs, or newer backless stools. B.& B. Gang 621 also spent 16 hours relocating the desert cooler at a cost of $21.36, and 16 hours installing a vent through a window, also for $21.36, by July 15. During the same period Electrician G.S. Jopling spent 24 hours installing wiring for the new electric range at a cost of $42.81, 24 hours rearranging other wiring in the building also at $42.81, and 24 hours rearranging the transformers, also at a cost of $42.81. Meanwhile, also between July 1 and July 15, Water Service Gang No. 630 under Foreman John Snorf spent 16 hours installing a metal hood and vent over the stove at a cost of $25.22, 56 hours installing new water pipe and fittings at a cost of $77.44, and 8 hours relocating drain lines at a cost of $9.84. Between July 16 and July 30, the Water Service Gang put in another 26 man-hours constructing the hood over the range for a cost of $36.76.[205]

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205. John Sherwood Snorf authored reminiscences, *Early Days at Hart*, published in October 1991 by the Tales of the Mojave Road Publishing Company at Goffs, California; unfortunately, they deal almost exclusively with his years at Hart before he went to work for the Union Pacific, terminating with his taking a job with the Union Pacific on May 1, 1922;

The blueprint for the layout of the remodeled Lunch Room showed a counter running from near the door between the lunch room and the kitchen to the wall beneath one of the front windows, with 12 stools aligned along its west side. Between the counter and the parallel northeast end wall of the building stood a work table in the center of the area. Aligned along the northeast wall were, north to south, a sink, a scrap table, an electric refrigerator, after a space the electric range, and then a steam table. This arrangement apparently was intended for economy to be operated by one person, a combined cook and waiter. The cooking apparently was all to be done in the Lunch Room itself, none in the Kitchen, and the project involved no changes to the Kitchen. The Company forces completed the work on July 14, 1949, although it was August 30 before all the paperwork reached completion.[206]

THE END OF STEAM LOCOMOTIVES ON THE SALT LAKE ROUTE

Outside the Kelso Lunch Room, diesel-electric locomotives, dating back to the 1920s, had begun making serious inroads in railroad motive power in the streamlined name trains of the mid-1930s, and World War II accelerated their use in freight service and particularly use of diesel switch engines. After the war, use of diesel locomotives increased still further. In December 1946, the Union Pacific placed what allegedly was the largest standing order for diesel-electric locomotives up to that time, an investment of 22 million dollars in 29 more diesel switchers, 21 more diesel passenger units, and 112 freight units, delivery to be made by the two builders, Electro-Motive

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on June 10, 1924, Snorf became foreman of a Water Service Gang, and stayed with the railroad until he retired. There is simply nothing in his book, other than the simple fact of his being hired, that is really relevant to this history of the Kelso Depot.

206. All of the correspondence cited or quoted in the narrative beginning with footnote 179 is in U.P. Work Order File No. M-1257, Union Pacific Railroad, Los Angeles, but a complete copy of the file is in the archives of Mojave National Preserve.

Art Francis, letter to the author, September 15, 1996, p. 2. Francis was a small child during and just after World War II, and did not actually remember when the remodeling was done, but on the basis of other events at Kelso, he believed in was in 1948 or 1949. In several other instances as well as in this case, documents have confirmed changes he described. According to Francis, the original counter top was finished in "white porcelain" and he found a broken piece of that counter top north of the berm north of the depot. He also claimed that the posts on which the original stools revolved were metal with a white enamel finish.

Subsequent to receiving Art Francis' description of the original counter and stools in the Kelso Lunch Room, the author of this study found in *The Union Pacific Magazine*, Vol. I, No. 11, November 1922, p. 58, a montage of five photographs of "Our new Depot-Hotel at Caliente, Nevada." The upper right photo showed a lunch room at Caliente which had a somewhat larger apparently U-shaped counter than the one at Kelso, and it seems a reasonable inference that the counter, stools and other furnishings were similar except in size to those built at Kelso in late 1923 and early 1924. Confirming Art Francis' statements, the Caliente lunch room counter had a shiny bright white top and the stools had T-shaped backs, and posts finished in white paint or enamel that tapered out at the bottom onto a square base affixed to the floor. Circumstantial evidence in this case, or perhaps it might be termed comparative evidence, seems to confirm the accuracy of Francis' statements.

Still later in the research for this report, documentation for rearranging the counter and stools and other remodeling in the lunch room was found in Union Pacific files in Los Angeles, and the project had begun in 1948 just when Art Francis thought it had, although the actual work was not done until the summer of 1949. It is not clear whether the present linear counter is made up of parts of the old "U"-shaped counter, or is an entirely new piece of restaurant furniture, although it seems likely to the author of this study that it was made up of parts of the original counter, although it no longer has its original white top. Railroads did like to recycle materials.

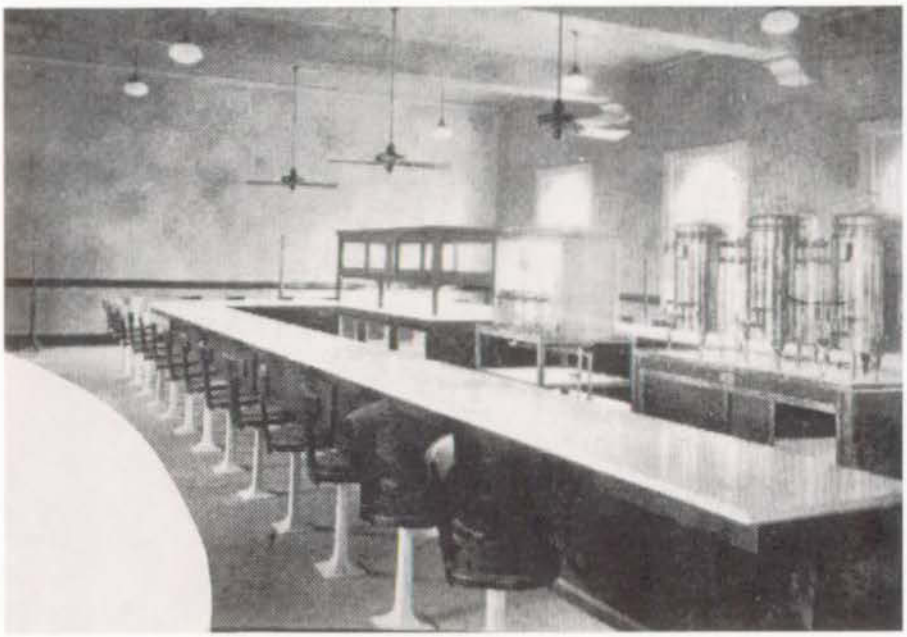

Photo 22: The Caliente, Nevada, depot lunchroom, *The Union Pacific Magazine*, Vol. 1, No. 11, November 1922, page 58. The Kelso lunchroom and counter were probably similar except that the U-shaped counter was not as long and had fewer stools.

Division of General Motors Corporation (EMD) and the American Locomotive Company (ALCO) in 1947 and 1948. The handwriting was on the wall for steam motive power and, incidentally, further down the track in time, for helper locomotives and Kelso's principal reason for existence.

During the spring and summer of 1948, acquisition by Union Pacific of Fairbanks-Morse H15-44 and H20-44 road switchers allowed the Los Angeles and Salt Lake Railroad to dieselize both the Cajon Pass and Cima Hill helper operations, so that by the summer of 1948, steam locomotives had all but vanished from the California end of the railroad. The use of Mountain locomotive No. 7852 as a helper and Northern No. 803 as the road engine westbound from Las Vegas doubleheading the passenger train "Utahn" into Los Angeles appeared to be the last revenue steam run through Kelso. Union Pacific officials boasted long and loudly of their success in dieselizing the west end of the railroad.[207]

The Kelso Roundhouse fell victim to the change in motive power, being demolished in 1948 concurrent with the disappearance of steam locomotives from the line. That affected the depot as well, for there still was a need for helper locomotives — diesel-electric helpers — but the operating department apparently believed such locomotives did not require a roundhouse, as did the steam locomotives. Once the five-stall roundhouse was gone, management decided to relocate the Roundhouse Foreman's office — that official still had work at Kelso, even if there was no roundhouse — into the depot. The Bridge and Building Gang converted a first floor room for one of the "female help," the one immediately east of the ticket and telegraph office, into a roundhouse foreman's office by enlarging the window on the track side into a door, providing direct access from the exterior. The B. & B. Department converted a second adjacent room for the help into an office for the Roadmaster, who previously had maintained an office in a building just east of the

207. Signor, pp. 159-162; Hemphill, pp. 156-157.

Kelso Depot. As it turned out, the Roadmaster did not use that office, and a few years later, in the mid-1950s, moved his office eastward to Las Vegas, a slightly more cosmopolitan community than Kelso.[208]

A RETURN OF STEAM LOCOMOTIVES TO KELSO AND VICINITY

Alas, the boasting of L.A.& S.L. officials about the elimination of steam motive power from the western end of their railroad proved premature. The new diesel electric motive power was spread too thin. Without fanfare, the railroad soon had to bring back a number of their best steam locomotives. During December 1948, steam hauled some mail and express trains into Los Angeles during the Christmas rush, and some steam locomotives filled Kelso to Cima helper assignments.[209]

The officers who had been crowing about their achievement were more than a little embarrassed. A diesel-powered eastbound freight with a 7800 series Mountain type steam locomotive as helper pulled into Kelso one day that winter and the engineer was ordered to quickly take his steam locomotive off the freight train and hide it out of sight, probably either in the freight yard behind a string of box cars or out on the tail of the wye. It seemed a highballing UP Board of Director's Special was racing westbound down the line, and the operating officials had told the directors that this end of the Los Angeles and Salt Lake had been completely dieselized. They were a bit sensitive about being proven liars.[210] On another occasion, a 6000 series steam locomotive had been called for a job on the east end of the line, but the Division Superintendent realized that an official from headquarters in Omaha had his business car parked on the business car spur, also known as the "Whisky Spur," and would see the steam locomotive; he had the crew which had

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208. Art Francis, letter to the author, September 15, 1996, p. 1. What Francis did not mention is that the next two ground floor rooms for "Female Help" also had windows cut into doorways, for a total of four rooms given direct access to the outside arcade, for what reason or when, he apparently did not know, it having been done after he left Kelso about 1962, apparently in 1981 to create rooms for "railroad executives."

Francis was the initial source of the date of demolition of the roundhouse built in 1922, indicating it was demolished in 1948. Subsequently, Union Pacific Assistant General Solicitor Jeff Asay sent the author a copy of Union Pacific Railroad, California Division, Form 2733, "Report of Progress on Improvement Work (Involving Charges to Capital Account) as of December 31, 1948" which listed under A.F.E. (Form 30) No. 3758, approved August 20, 1947, work commenced September 3, 1947, work completed December 31, 1948, "Kelso. Replace powerhouse, generator, engine house [roundhouse] & other facil. with Diesel loco. servicing facil." Not only does this form prove authoritatively when the Los Angeles & Salt Lake replaced the steam locomotive servicing facilities at Kelso with facilities designed for servicing diesel-electric motive power, it adds credibility to Art Francis' reminiscences of what was done at Kelso and when during the years he lived there.

Incidentally, that same form, and a similar sheet as of October 31, 1948, documented other work done at Kelso that year: "Retire water softener tank, chemical tank, and pumping facilities;" "Retire sand tower, spout and bins;" " Retire 22x33' Co. House No. 12. Sold to Mrs. L.G. Chapman 11-29-48;" "Retire 24x32' frame store building. . . ;" "Retire four Co. dwellings Nos. 50, 52, 54 and 61 sold to H.W. Rawlins;" "Retire 12 Co. dwellings Nos. 1, 5, 6, 13, 49, 50, 60, 64, 67, 68 and 72, also pumper's dwelling & coal house. Nos. 1, 5, 6, 13 sold to Mrs. L.G. Chapman;" "Retire two 9x36' Company dwellings with leanto's, Nos. 51 and 65." Clearly 1948 was a year devastating to Kelso's physical development and population as the railroad shifted its facilities from those needed by steam locomotives to those needed by diesel-electric locomotives, and reduced employment accordingly.

209. Signor, p. 161.

210. Signor, p. 161.

been called to operate its steam engine go back to the roundhouse and "tie up," rather than again expose the fact that steam still had a role to play on the old Salt Lake Route.[211]

Nor was that the end of steam locomotives through Kelso. The Korean War in 1950 coupled with a Shriners' convention in Los Angeles created a rush of railroad freight and passenger traffic through Kelso. The Union Pacific had to send west a number of heavy 4-8-2, 2-10-2 and 4-10-2 steam locomotives to cover some of the helper assignments. However that summer traffic declined and more diesels arrived. The last steam helper locomotive apparently worked on Cajon Pass, and having finished its last assignment, ran "light" back to the roundhouse at Yermo on October 24, 1951. It was 2-10-2 locomotive No. 5317 borrowed from the Union Pacific's subsidiary Oregon Short Line. Use of steam locomotives retreated eastward across the Salt Lake Route, yet the last revenue steam operation on the line reportedly was as late as December 1957 between Provo and Salt Lake City. And, of course, in still later years including the 1980s and 1990s, the Union Pacific kept two steam locomotives, Northern type No.844 (for a number of years renumbered 8444) and Challenger No. 3985 operational for special excursions and special events.[212]

NEW FACILITIES TO SERVICE DIESEL-ELECTRIC LOCOMOTIVES

Dieselization affected Kelso profoundly. Diesel-electric locomotives did not need the copious amounts of water that steam locomotives drank, and their fuel tanks carried enough diesel oil to make the entire run between Salt Lake City and Los Angeles with but a single refueling at Las Vegas, Nevada. Kelso's fuel and water facilities therefore became much less important, useful only for the Kelso helpers, not for main line power.[213]

With the roundhouse gone, the railroad needed new facilities to handle the diesel-electric motive power. Art Francis, whose parents lived at Kelso when he was born at Montebello in 1942 and who lived at Kelso with his parents until 1961, recalled:

> Two tracks were located across from the depot as a servicing facility for diesel helpers after steam was retired and the roundhouse torn down. Diesel fuel facilities were installed between the tracks to service helper locomotives on both tracks. The south track had a concrete lined service pit four unit lengths long to enable mechanical forces access to locomotive traction motors, etc.
>
> A traction motor drop pit was located toward the east end of the service pit separating the western three unit lengths of the pit from the easternmost section. I remember this drop pit being used once when the Fairbanks-Morse 1300 class power was used as helpers between 1948 and 1951 or 1952. However, the drop pit was removed and filled in with

211. Art Francis, letter to the author, December 29, 1996, p. 1; one wonders if these were two separate incidents, or different versions of the same incident as it got told and retold among L.A.& S.L. employees! Railroads apparently borrowed some language from the 19th Century stagecoach industry; thus when an engine crew finished a job it "tied up" its locomotive when it parked the machine in or near the roundhouse and shut it down. Then, just as a "hostler" in the stagecoach era was responsible for feeding, watering, and taking care of stagecoach horses between runs, a railroad "hostler" was responsible for fueling, watering, and keeping a locomotive "hot" with steam pressure up between runs.

212. Signor, p. 162; Hemphill, pp. 156-157.

213. Signor, p. 165.

sand by the mid 1950's. A portion of the concrete slab served as a foundation for a small ice storage box for use by mechanical forces servicing the helper engines.[214]

Francis also recalled that in 1962, employees had poker games in the basement of the depot; he was in Water Service at that time. "Lots of fun and there was no drinking."[215] In fact, railroads generally had a "Rule G" in their rule book for operating employees which forbade it. It was a part of the safety program of most railroads to punish drinking, a firing offense, and the pool room and library in the Kelso Depot basement were characteristic alternative activities most large railroads offered their employees to eliminate boredom in off-duty hours and direct them into other pursuits than quaffing alcoholic beverages.

The dynamic braking of diesel-electric locomotives was another major change, but one which did not affect operations around Cima, because the Kelso-Cima grade was so long, steep and comparatively straight (curves tend to slow a train through increased friction between wheels and rail), that even dynamic brakes were not enough. Thus diesel-electric freight trains had to stop at Cima westbound while the brakemen set retainers (a type of individual car air brake) on the freight cars, and at Kelso or Balch to release them. A Kelso stop would afford the brakeman an opportunity to knock down (place in the direct release position) the retainers and might give the engine crew an opportunity to patronize the "Beanery."[216]

Many heavy westbound trains picked up a string of empty stock cars at Cima to serve as extra braking power (each car offered brakes on eight more wheels) while descending the hill to Kelso. At Kelso, such trains would stop east of the depot and the empty stock cars would be cut out of the train and spotted on a yard track west of the depot. All of these westbound trains had the extra or swing brakeman out of Las Vegas who got off and tied up at Kelso to await an eastbound; another customer for the "Beanery."[217]

At an unknown date, the Los Angeles and Salt Lake Railroad erected a "U"-shaped complex of three shed-roofed structures immediately behind the metal fire-escape stairway on the west end of the depot, with the open top of the "U" towards the track. The railroad used the building on the west side of the "U" to house visiting officials of the Operating Department who needed to stay overnight at Kelso, the one on the east side housed visiting officials of the Maintenance of Way Department, and the connecting shed at the base of the "U" housed toilet and shower facilities used jointly by personnel of either department stopping over there.[218]

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214. Art Francis, letter to the author, September 15, 1996, p. 2.

215. Art Francis, letter to the author, January 4, 1997, enclosing review and comments on an early draft of this history; see comments, p. 9, item 34.

216. Signor, p. 169. The railroad crews still had to set retainers at Cima and release them at Kelso or Balch when the author visited Kelso and Cima in 1996; he and a National Park Service crew were blocked at a grade crossing near Cima when returning from the Death Valley (Dolly Varden) Mine by the last two cars of a westbound freight train stopped to set retainers.

217. Art Francis, letter to the author January 4, 1997, enclosing review and comment on an early draft of this study; see P. 9, item 36, of comments.

218. Letter, Art Francis to the author, March 1, 1997, p. 2, under discussion of enclosed photographs Nos. 18 and 19. This complex of three shed-roofed buildings appears on Kelso maps as early as 1944; it probably was built during the Second World War.

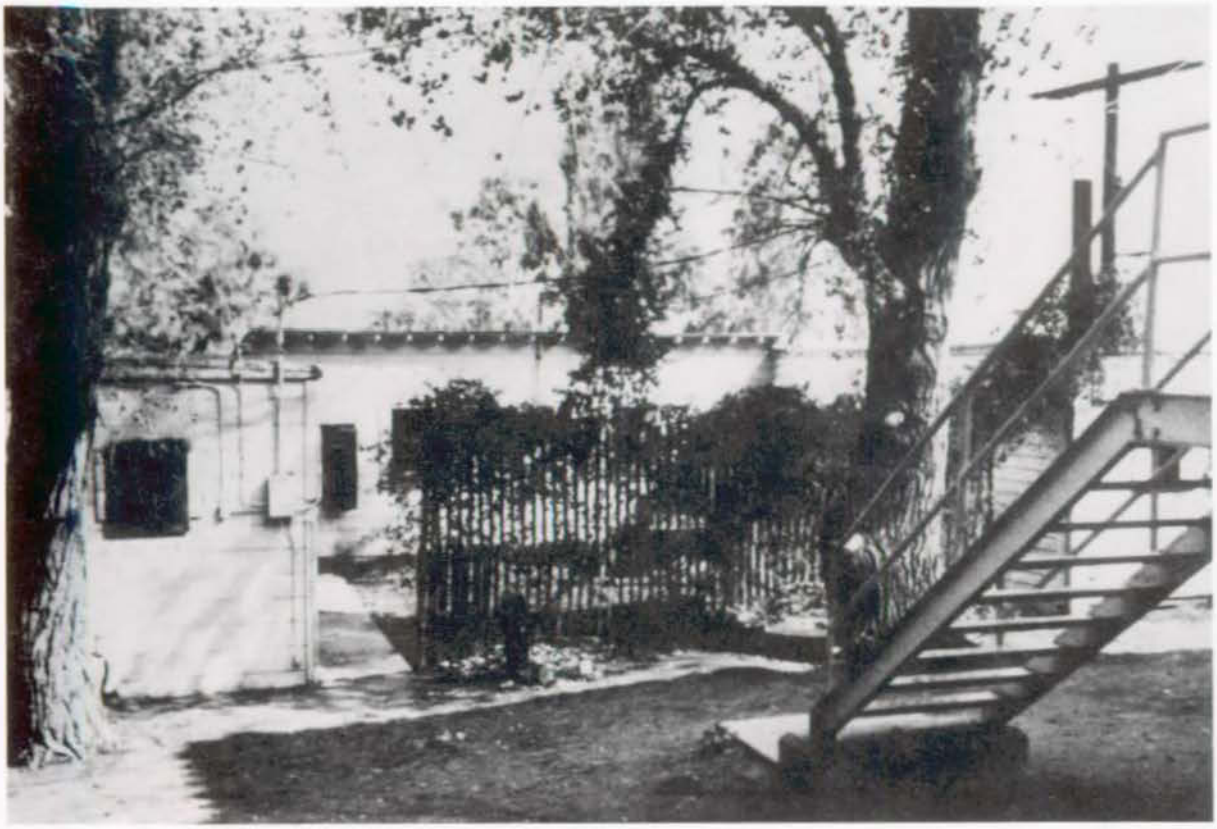

Photo 23: Three shed-roofed buildings erected behind the west fire escape stair used for housing Union Pacific officials visiting Kelso. This group of buildings appears on Kelso maps as early as 1944. Photo ca. 1960s courtesy collection of Art Francis.

KELSO DURING THE 1950s AND EARLY 1960s

Robert and Ann McCoy returned to Kelso for a third time in July 1953 when he became the second trick telegraph operator. At that time they had three children. The town's population was not more than a hundred. Ann Elizabeth McCoy recalled:

> The depot at Kelso, where Bob worked as an operator, was on the north west side of town. The structure was of Spanish architecture with a beautiful red Spanish clay-tile roof. Also the building housed a restaurant called the "Beanery" & upstairs were rooms for the R.R. helper engine crews & trainmen. In the basement, (recreation room) on Mondays the inter-denominational pastor from Yermo, California came over on the train to hold evening church services. In front of the depot was a lovely lawn with large Date Palm Trees & shrubs. . . .

The McCoys found Kelso to be an interesting town, but it being a small town, "everybody knew you & your business."[219]

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219. Ann Elizabeth McCoy, "'Overshadowed:' The desert experiences of Robert Morgan McCoy, and Ann Elizabeth McCoy, at Kelso, California, between the years 1953 to 1959," typescript, p. 4; in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California.

One problem the town had at that time was the number of tramps who traveled there on freight trains, congregating when they stopped at a "hobo jungle" a quarter mile east of town, occasionally causing trouble for Kelso residents. At that time the local constable lived at Ivanpah and rarely visited Kelso, and Bob McCoy consequently decided to run for constable in the next election. In the 1954 June primary, McCoy defeated "Two Gun Charlie Hale" of Ivanpah, and in short order had cleaned out the hobo jungle and eliminated the problems caused by the transients.[220]

The Kelso General Store had only a small amount of merchandise, and at that time "existed mostly for the bar." Consequently, the McCoys did part of their shopping in Las Vegas about every two weeks, which also gave them time to have a good dinner in a restaurant. But they also ordered groceries through the railroad commissary, which came in once a week from Ogden, Utah, in refrigerator cars, and the railroad deducted the cost of the groceries from McCoy's pay check. "It was fun when the groceries came in," Ann McCoy recalled, "Kind of like Christmas. Kids sitting on the table watching excitedly as we opened box after box." She especially remembered "Such good cheese & bologna!!" But once she ordered a bag of pinto beans, and the Commissary, accustomed to supplying restaurants, sent her a 100 pound bag of pinto beans. Thereafter she ordered by the pound, but in the meantime, everyone ate beans for a long while[221].

The store and bar created many of the problems Bob McCoy faced as constable. When they had first lived in Kelso in 1949, Harry Holbert was running the store, but he had a heart attack and died on the depot lawn. A man and his wife named Brown were operating the store in 1953.[222]

During the fall of 1954, the McCoys had their fourth child, and a concern was that polio had stricken the community that year, but while another pregnant woman at Kelso was stricken with it, the McCoys escaped it.[223]

Passenger trains discontinued making scheduled stops at Kelso during the mid-1950s, which ended the pastor coming to provide Monday night services in the basement of the Depot. But then in 1957, Mormons started holding Sunday morning church services in the basement of the depot, and Mrs. McCoy, though not a Mormon, played the piano for them for six months or so. Then she decided to start Sunday school services of her own in her home, since she disagreed with Mormon doctrine.[224]

One evening when an outfit train carrying the Paint Gang was parked in Kelso, one of the crew came calling for the services of Constable McCoy. It seems a poker game had been in progress, when suddenly there were five aces on the table, whereupon everyone grabbed for their money from the pot and a big fight ensued. McCoy had to take one copiously bleeding combatant to the emergency room in the hospital in Las Vegas where a doctor took 68 stitches in his head.[225]

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220. Ibid.

221. Ibid., pp. 4, 5.

222. Ibid., p. 5.

223. Ibid.

224. Ibid., p. 6.

225. Ibid., p. 8.

Photo 24: Telegraph operator Robert McCoy, with his hand on the telegraph key, faced south, or toward the tracks, in this view. Behind him was the east wall of the ticket and telegraph office. On the desk near his hand a Form 19 telegraphic train order dated the photograph as May 2, 1955. To McCoy's right, behind the camera, was the ticket counter and window into the Conductor's and Waiting Room. Back of McCoy, out of view to the left, a door led from the ticket office into the Station Agent's Office (the original Baggage Room). A door led from it into the added baggage room formed in 1942 by enclosing the arcade at the west end of the depot; baggage trucks were kept in that room. At McCoy's left, just beyond his hand, was the telegraph sounder, as usual with a Prince Albert tobacco can inverted on it to resonate and amplify the sound of incoming messages. Above the sounder and behind the map or other document, the wall featured an old and by now obsolete semaphore instrument. Originally used to alert telegraph operators of the direction from which a train was approaching to receive train orders, after installation of Centralized Traffic Control in 1942 the Signal Department rewired it and it served only to alert an operator who had been out of the office momentarily that the Dispatcher in Las Vegas was trying to reach him by company phone, generally to call (notify) a swing brakeman sleeping upstairs when he was to go on duty to return on an eastbound train to Las Vegas. On top of the semaphore stood a common desk lamp. Note the telephone in front of McCoy, the old typewriter to his left, and the bulletins, tariffs and waybills on and in the bookshelf at far left behind him. Credit: Collection of Robert McCoy.

One cold December evening during the mid-1950s, Bob McCoy was summoned east to Dawes, a siding 14 miles from Kelso, to help uncouple a burning mail car from a passenger train. McCoy and others managed to get the car uncoupled, but the car apparently rolled over the wooden wedges or blocks they had set against the wheels to hold it, and began rolling downhill on the main line. McCoy hopped in his auto and raced for Kelso to clear people from the crossing. Ann could see the mail car coming like a big fireball, the wind of its passage turning it into a blowtorch. It probably had reached about 50 miles per hour by the time it got to town. The mail compartment had mostly Christmas mail that was burning, but in the baggage compartment were several bodies being shipped in coffins. Female telegrapher Pat Lawson was among those on duty that night who came out on the platform to see the runaway car go through, and as Pat watched, the heat of the fire had caused one of the bodies to sit upright, popping the lid of the coffin; it gave her nightmares for some time, and she slept with the lights on for weeks. The car rolled another 40 miles downgrade to the west, finally coming to a stop on level track near Crucero.[226]

Bob McCoy remembered the railroad force at Kelso at that time consisting of: a section foreman and twelve section hands; a roundhouse foreman, three electricians [for work on diesel-*electric* locomotives] and one wiper; a signal superintendent and signal maintainer; the station agent and four telegraphers; in the "Beanery" a Manager and his wife; an afternoon cook and his wife; one person on the "graveyard" or night shift; in the hotel, one man who cleaned the upstairs rooms. McCoy also recalled many Indians from Arizona and New Mexico, such as Navajos, and many Mexican nationals working on the railroad's section gangs. McCoy remembered handling many commercial telegrams from these workers, and selling many of them American Express money orders so they could send money back home. At the time McCoy lived in Kelso, the railroad generally had two helper locomotives there, the two, two-man crews (engineer and fireman) living in Kelso on at least a semi-permanent basis. McCoy recalled that the California full crew law required the use of a third or "swing" brakeman on the steep grade between Kelso and Cima, and they stayed overnight upstairs in the Depot before returning to Las Vegas, their home station. McCoy recalled that twice a month, on pay days, the station agent received from the Railway Express Agency agent riding on the head of Train No. 38 out of Los Angeles from $10,000 to $20,000 in currency with which to cash the pay cheques of railway employees at Kelso.[227]

In February 1959, McCoy bid in the job of station agent at Arden, Nevada, where he also served as town postmaster, and the McCoys left Kelso. They had come to Kelso with three children and left with six, the most recent only a week old. And it was about Kelso, not Arden or any of the other stations at which they had lived, that Ann Elizabeth McCoy later sat down and typed a fourteen page memoir for her family.[228]

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226. Ibid., p. 10.

227. Robert McCoy, P.O. Box 247, Grenora, North Dakota, 58845, letter, August 29, 1997, to the author, 2 pp., enclosing three photographs.

228. Ibid., p. 13. The McCoys spent 10 years at Arden, Nevada, but by that time Ann McCoy was suffering increasingly from allergies, and they moved to the Pacific Northwest for her health, living first at Bonners Ferry, Idaho, and then to a 17 acre farm at Lamont, Washington. McCoy retired in 1985 as a dispatcher on the Burlington Northern. Subsequently he moved to North Dakota.

At the beginning of her typescript, Ann McCoy provided a listing of people she remembered living at Kelso between 1953 and 1959; relevant to the Kelso Depot, she mentioned Pat Larson, the woman who held down one of the "tricks" or shifts as a telegraph operator, and Joe Leroux, the other operator (the third being her husband, Bob), Slim Morrison, the night chef in the Lunch Room (she didn't mention the manager), and a locomotive engineer known as "Main Line Jones"

Section Foreman Roger Finnell recalled one thing Elizabeth McCoy had not mentioned; during the summer of 1957 "the burros nearly wrecked our hedges at the hotel-restaurant." He noted that burros and coyotes constituted the most common wildlife around Kelso, "and during dry seasons they come right into town for food and water." Finnell also mentioned the rattlesnakes, and especially the sidewinders, "that we are constantly on the alert for."[229]

More Remodeling of the Lunch Room

On March 29, 1954, B. Fellars, the Los Angeles & Salt Lake Railroad Supervisor of Bridges and Buildings in Los Angeles, wrote W.A. Jurden:

> Referring to scheduled repairs to DC&H buildings, station and company buildings at Kelso:
>
> This work should be done in the near future and should be programmed for the month of May and in order to handle the work without delay, all material needed should be requisitioned now, as it will take at least 30 days to get delivery.
>
> To do this work will require a B&B Gang of Foreman and 10 men and when the repairs have been completed at Kelso, as listed on the attached sheet, the gang should start scheduled bridge repairs on bridges between MP 254.2, Cima and MP 287.2, Calada.

The remainder of Fellars' letter focused mainly on the repair of bridges, but an enclosed second letter of the same date listed repairs to miscellaneous buildings at Kelso as well as a dozen to be made on the

> **DC&H Restaurant**
>
> Remove & replace plaster in kitchen
> Replace rear door & screen door in kitchen
> Replace shelving in kitchen
> Place panic locks on rear door & basement
> Repair plaster in ceiling of furnace room
> Repair plaster in basement ceiling & walls
> Repair plaster around radiators in club room
> Replace locks on doors of bedrooms
> Repair floors each bedroom upstairs
> Repair walls shower bath upstairs
> Renew wire all window screens
> Repair plaster exterior archways

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who lived upstairs in the depot. (Other shop employees, enginemen, and railroad maintenance personnel largely were married and lived in company houses rather than the depot.)

229. Roger T. Finnell, letter, May 19, 1958, to Willa S. Oldham, p. 3; collection of Myrtle Pennington, Mojave Desert Heritage and Cultural Association library, Goffs, California, courtesy Dennis Casebier.

Unfortunately, none of this work appears to have been done.[230]

On October 15, 1954, two representatives of the California State Department of Public Health, J.B. Howard and J.H. Martin, inspected the Kelso restaurant, and on October 21, 1954, they wrote the Union Pacific's Ogden, Utah, offices (probably intended for the Dining Car and Hotel Department offices in Ogden) listing five infractions of the California State Restaurant Act and the County Health Code:

1. The kitchen floor about the range is worn and rough not a smooth, easily washable surface as required. Replace with new smooth cement or cover with grease resistant asphalt tile.

2. The ceiling in the kitchen has broken patches of plaster out; the walls and ceiling both have scaling paint with large pieces falling and loose. The ceiling and walls are required to be of a smooth, impervious material, well oil-painted or enameled. Cover ceiling and walls with smooth putty coat plaster finish and paint with an oil based paint or enamel.

3. The walls and ceiling in the food preparation area and fry cook area of the main room has a rough plaster finish and has an accumulation of grease on the wall adjacent to the range and hood.

   The ceiling and walls are required to be of a smooth impervious material, well oil painted or enameled. Stop preparation of food in this room or cover ceiling and walls from counter back with smooth putty coat plaster finish and paint with an oil based paint or enamel.

4. Hood over fry cook range is too small, allowing smoke and grease to accumulate on walls. Hoods must extend 6" larger than all cooking surfaces, and wall back of range must be flashed with metal from hood to floor.

   Install hood over range that extends 6" beyond all cooking surfaces; hood must have a grease trough, vent to be provided with filters, and exhaust fan to be provided.
5. Provide suitable racks at least 6" high that will allow air to circulate under sacked potatoes, onions, etc.

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230. The correspondence and other documents which tell the story of this second major remodeling of the Lunch Room are to be found in two separate files which have the same work order no.: M-3493. One is labeled, "Kelso -Remodeling Club House, To comply with State Public Health Regulations," and the other is labeled "*Kelso, Calif.* Remodeling and rearranging eating house facilities at Club House." Apparently from the files of the "Office Engineer" in Los Angeles, they were discovered in a filing cabinet of work orders mislocated among files on intermodal activities in the basement of a Union Pacific building. While there is some duplication of material between the two files, each has information the other lacks and they must be read together. The National Park Service has copies of these two files. Some of the documents in the files will be cited in the narrative in the paragraph above and those following, but it seems unnecessary to cite each document from which information was drawn separately in separate footnotes. The individuals sending and receiving letters, mailgrams, telegrams, and other correpondence generally are unidentified in these files, and sometimes are addressed or have signed using only three initials. Cross-checking the files, using the few instances in which the title associated with an individual is given, and examining *The Pocket List of Railroad Officials*, Vol. 61, No. 1, Serial No. 241, First Quarter, 1955, pp. 793-797 have provided the titles of a number of the Los Angeles & Salt Lake and Union Pacific officials involved in this remodeling of the depot lunch room and kitchen.

The State Department of Public Health required correction of those conditions by December 31, 1954, or they would not grant a permit for the Kelso Lunch Room to operate in 1955.

Union Pacific officials apparently mulled this over, and about three weeks later, on November 10, Acting Division Engineer J.D. Ellis advised Division Superintendent V.S. Smith by Mailgram, "We have scheduled repairs to Kelso Club House for first half of December. You have my assurance this work will be completed before the end of the year. B&B Supervisor is being instructed accordingly." Of course, it was not. As they moved further into the project, the more complex it became, involving not only the work required by the Department of Public Health, but work earlier called for in the depot but never completed, and still further work. As a consequence, the railroad brought in another surplus dining car and spurred it out on a track near the depot as a temporary replacement for the lunch room for however long in 1955 the repairs would require.

The railroad prepared a new but undated list of "Necessary Work to Be Done in Clubhouse at Kelso" around November 24:

Replace work bench and pastry table, 2'6" wide x 14' long with flour and sugar bin, shelves under balance of table, 6' of table top to be tinned.
Remove kitchen range and refrigerator. [someone penciled in "Destroy" under the word "range" and "relocate" under the word "refrigerator"]
Remove 5 tables and 2 sinks. [Someone penciled in the word "Retire" under the words "tables" and "sinks"; it meant the same in railroad parlance as "destroy."]
Remove wainscoating in kitchen and plaster to floor.
Relocate wash sinks, install at location of double metal sink to be removed in kitchen.
Paint kitchen walls and ceiling with No. 9605 gray and 1/2 white enamel.
Install wire partition from center of swinging doors to west wall, install door in middle.
Remove shelves from basement and install in storeroom where range now stands.
Install grease proof asphalt tile in kitchen - 764 sq. ft. and dining room 662 sq. ft.
Remove stairs [from kitchen] to basement and close doorway.
Remove wainscoating in dining room. [Someone penciled in: "Replace?"]
Move fan over stove out approx. 1 1/2 ft. and install conduit outside building.
Install desert cooler over window at end of lunch counter [in the front window on the track side], 5000 C.F.M. [Someone penciled in, "Esser Evaporated Cooler"]
Remove and replace plaster walls and ceiling in dining room, approx. 1500 sq. ft.
Paint dining room and kitchen.
Remove lath and plaster in kitchen and install plaster board. [Someone penciled in "Replaster"]
Relocate hood over stove, flash behind stove.
Replace 3'x6' wood rack, 6" high for potatoes and onions. [Someone penciled in, "in Kind"]

A revised list dated December 22 either intentionally or otherwise dropped the word "board" from "plaster board," and added "over all" in the third from last item, and the second from last item became "Replace hood over stove, flash behind stove. New hood also back galv. steel." A new final item said, "Re-condition ice boxes in old kitchen." On December 15, 1954, the Division Superintendent submitted this list along with a work order authority form estimating the cost of the remodeling as $4540. Actual work on the project commenced on December 27, 1954.

Responding to a question from the Division Superintendent, Acting Division Engineer J.D. Ellis reported on January 25, 1955, that he expected to complete the work in the Kelso Club House some time during February. Then it turned out the plumbing had to be brought up to code, which involved still further work.

The truth of the matter is that there was a lot more work than the Work Order Authority envisioned, such as "install wire partition" in the kitchen, consisting of 24 inch wide 20 gauge poultry netting on a wooden frame with a door through it, "remodel counter & set stools" in the Lunch Room, "place asphalt tile floor" in the kitchen and lunch room, "remove concrete floors" probably in the basement, "place concrete floors (probably in the basement), "remove bathrooms in basement," "remove plaster & wood lath," "place rock lath," "build temp.[orary] partition in dining room," and so forth. The work involved all kinds of materials that had to be ordered and shipped to Kelso: screen doors, door lock sets, 36" gauge galvanized screen wire, two different sizes of Crane toilet seats, ten metal door threshholds, double strength window glass, an Essex cooler, ten sacks each of white finish plaster and miracle white lime, metal lath, 50 sacks of Portland cement, and many more items. The job required whole lists of plumbing fittings: galvanized pipe, lead, caps, elbows, gate valves, gate unions, couplings, shower heads, etc. Much of the plumbing in the entire building must have been replaced or repaired. And the paints indicated the color scheme: 20 gallons of No. 1-84 Jersey cream, 20 gallons of No. 27-153 Mellow Ivory, 15 gallons of No. 71-19 pale ivory, 12 gallons of No. 3-23 walnut, ten gallons each of gloss white and No. UC-9605 grey, 10 gallons of something called Meadow Green floor hide, five gallons each of No. 71-19 clear varnish and No. 3 fire red, and a quarter gallon of No. 83 bar top varnish. Clearly the color scheme featured predominately off-whites such as cream or ivory, light green, and gray.

Paint foreman R.H. Warren reported completing repainting of the interior of the Club House on March 16, 1955, and beginning on the exterior on March 17. Bridges and Buildings Gang Foreman E.E. White reported completing the B.& B. work on March 17. An electrician completed his work on March 18, 1955. On March 28, R.E. Haacke reported to Supervisor of Bridges and Buildings B. Fellars in Los Angeles that the Bridge and Building, Paint and Electrical gangs had completed their work. Actually, although he didn't yet know it, the Water Service Gang had also completed its work some time that month. On March 18, 1955, the last actual work on the building had been completed, although it took until April 26, 1955, to complete all the requisite paperwork.[231]

The Impact of Weather

During the summer of 1955, Kelso experienced severe thunderstorms. Late every afternoon for about a week, thunderheads would form over the mountains and let loose about dark. They brought with them hard winds and a lot of lightning, though as one might expect in the desert, not much rain. But the wind tore apart the rows of cottonwoods behind the depot. Cottonwood is, anyway, a rather soft wood, and the winds brought down branches galore, some quite large. To help clear the mess each morning, the section gang was brought over from Sands. They would find many large limbs blown down onto roofs, and the cleanup would require a lot of work.[232]

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231. Union Pacific System, Los Angeles & Salt Lake Railroad, Work Order No. M-3493, two files cited in the preceding footnote. This paragraph ends the material drawn from those two files.

232. Art Francis, letter to the author, January 4, 1997, enclosing review and comment on an earlier draft of this study; see p. 6 of the comments, item 25, which describes this storm.

A year later, during the summer of 1956, more thunderstorms washed out Salt Lake Route tracks at Chase, the first passing track west of Cima, and all of the signals were down as well. Eastbound passenger train No. 10, which was due in Kelso around 4:10 p.m., didn't get in until that night due to the signal outage, and when it arrived, stopped on the Kelso passing track west of the road crossing west of the depot to await repair of the washout. The next morning many of the passengers were in the depot.[233]

Art Francis recalled one aspect of life at Kelso during those years:

> Many families in town with children purchased milk from the Rancho Grande Creamery and later the Anderson Dairy in Las Vegas. The dairy would ship milk in twenty quart cases via Railway Express to Kelso on the evening passenger train out of Las Vegas. This was Train 37, the *Pony Express* which was later changed to Number 5, a mail and passenger train. Operators would have a baggage truck on the platform to unload this milk. In addition, large laundry containers of linens and uniforms for the Dining Car and Hotel Department (DC&H) personnel who ran the "Beanery" were handled to and from the trains on these baggage trucks.[234]

The D.C.& H. Department shipped the dirty linens to its Ogden laundry and clean linens back from there.

The End of Helper Service at Kelso

The Los Angeles and Salt Lake Railroad reached a milestone at Kelso in 1959 when the provision of helper locomotives to assist eastbound trains to Cima ceased. On February 3, 1959, the Union Pacific abolished Kelso's last scheduled helper job. Up to this time, despite the replacement of steam locomotives by the mid-1950s entirely by diesel-electric locomotives, the stiff grade between Kelso and Cima still required the assistance of "helper" locomotives — diesel helpers — and the Union Pacific kept a number of "cow and calf" units, consisting of two coupled diesels with a control cab on only one of them, for that service. By 1959, however, the use of multiple general purpose diesel units coupled together, all controlled from a single cab, eliminated the need for helper locomotives. That, of course, also eliminated the requirement at Kelso for a certain number of enginemen for helper service and mechanics for running repairs, one more step in its decline as a railroad town. The log book for Kelso helpers (it would once have been called a roundhouse log book, except that Kelso no longer had a roundhouse) indicated that the railroad made its last official helper assignment on February 1, 1959, when Engineer Hammon on Locomotive 139 helped the 168 to Cima. But another entry in the book a day later, said, "Cut 139 in rear of 276

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233. Art Francis, letter to the author, December 29, 1996, pp. 3 and 4, item 6.

234. Art Francis, letter to the author, September 15, 1996, pp. 1, 2. An unidentified author, possibly Editor M.J. Haddock, in the *Preliminary Newsletter* of the Southern Nevada Chapter of the National Railway Historical Society, Vol. 0, No. 2, p. 1, reported that in past years at Kelso "All linen was inked with a 'UPRR' stamp in two inch letters." The item said further: "Up to the late 1960s, one could board train No. 5 - the California Fast Mail -out of Las Vegas at 7:25 P.M. and 98.7 miles later, arrive at Kelso about 9:50 P.M. — a very enjoyable evening ride, then a little something to eat at the 'lunch counter' located at the North end of the building, and it's up to bed on the second floor where individual rooms were maintained for trainmen as Kelso was a 'crew change' point. The best room was at the southeast corner. . . After a good nights rest, a hearty meal at the lunch counter, there is plenty of time to walk around the town and tour the remains of the railroad yard and foundations before the arrival of train No. 116 - the City of Las Vegas - at 1:08 P.M. for an all daylight ride home, arriving at 2:45 P.M. Round trip fare? About $6.00!"

power east," so February 2, 1959, probably was the real date that a helper locomotive last operated out of Kelso.[235]

The service pit for helper locomotives remained until the power plant closed in 1960.[236]

After Art Francis became old enough to work for the railroad, he hired on as a fireman and worked through Kelso during 1960 and 1961 on heavy westbound "K"-Trains, which were coal trains received from the Denver & Rio Grande Western Railroad at Provo, Utah, which the Union Pacific ran westward and delivered to the Santa Fe at Barstow for handling to the Kaiser steel mill at Fontana, California, which was along the Santa Fe. The "k" designation stood for "Kaiser."[237]

Lunch Room Headaches for Management

Two troublesome problems arose around the end of the decade ensnaring Clubhouse Manager G.H. "Bud" Bolen in controversy. Apparently around the beginning of 1959, tourists began appearing at the Kelso Lunch Room, which had become accustomed to operating as an employees-only cafe. When women visitors needed to use a rest room, they were sent to the rest rooms in the basement, which had been designed as a men's room, complete with urinals. One lady asked what those "new things" were in the ladies' rest room downstairs. Another encountered a man leaving the rest room as she went in, and thought that strange. As the Depot and its Lunch Room had no rest rooms designated for ladies except within the employees' hotel part of the building, a number of women and children walked over to the general store and bar, asking to use their rest rooms. Mrs. W.F. Merriman, at that time operator of the store, complained to the Union Pacific about it, and Division Superintendent W.B. Groome looked into the matter on one of his trips through Kelso. Groome talked to D.C.& H. Manager Bolon about it, and the situation improved for a couple of weeks, then worsened again. On June 16, 1960, Mrs. Merriman wrote the San Bernardino Health Department office in Barstow about it. She also claimed that on Sunday, June 12, the Lunch Room staff refused to give water to children in a party passing through, and refused the women use of the rest room, so they all came over to her store to use its rest room. If that was to be the common practice, she wanted the U.P. to pay her for allowing their Lunch Room customers to use her rest rooms. It was evident in her complaint that in the latter instance she was missing the point; the women and children who wanted water and rest rooms were no more customers of the Lunch Room than they were of the store — they simply needed public water and public rest rooms, and there were neither available in Kelso so they sought them in the railroad restaurant and the general store. The women and children undoubtedly would have been given water had they ordered anything in the Lunch Room, and under those circumstances would have been afforded rest room privileges as well.[238]

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235. Signor, p. 198; Art Francis, letter to the Author, January 4, 1997, enclosing review and comments on an early draft of this study; see pp. 9, 10 of the comments, Item 37; Subsequently, accompanying a letter of February 3, 1997, Francis supplied an electrostatic copy from the Kelso Roundhouse Book of the page for January-February, 1959 documenting the last helper service out of Kelso.

236. Art Francis, letter to the author, December 29, 1996, p. 2, item No. 4.

237. Art Francis, letter to the author, September 15, 1996, pp. 1, 2.

238. Mrs. W.F. Merriman, Kelso Store, June 16, 1960, to a Mr. Richards, San Bernardino County Health Department, Barstow, carbon copy in "Kelso - Clubhouse — Gen. File, File 9203-3-R, Vol. 2, Correspondence Files, Union Pacific General Offices, Los Angeles. Subsequent correspondence cited *supra* is from this same file.

On June 27, 1960, Groome asked Trainmaster R.L. Richmond in Las Vegas for his observations regarding the Kelso situation. Richmond replied that the Kelso Clubhouse manager had placed a sign in the restaurant to the effect that the ladies restroom was downstairs, and downstairs, placed another sign indicating that it was kept locked and that Union Pacific employees on duty had the key, which was available whenever a woman wanted to use it. He did not say the urinals had been removed! On June 3, 1960, Groome wrote the San Bernardino County Health Department, telling Mr. Richards what Trainmaster Richmond had told him. There the matter apparently ended.[239]

Meanwhile, Groome had also received a complaint not as easily resolved from the general chairman of one of the railway unions or "brotherhoods" that the rooms and hallways upstairs in the Clubhouse were very untidy and the toilet room facilities were unsanitary. He and General Manager Cunningham had met with D.R. Altier, General Chairman of the Brotherhood of Railroad Trainmen, in Groome's office on June 2. Altier said he had a letter of complaint signed by 17 brakemen. Again, Groome asked Trainmaster Richmond to look into the matter. Richmond went down to Kelso on June 7 and inspected the Clubhouse. From Las Vegas two days later, he told Groome that the rooms and hallways were in good condition, and that Manager Bolen said arrangements were being made to replace the urinal and install tile on part of the floor in the second story restrooms.[240]

Meanwhile, on June 8, Groome had received a letter written two days earlier from D.R. Altier quoting a portion of the letter signed by 17 brakemen:

> The manager's wife has the job of maintaining the living quarters located upstairs yet she has never applied herself to the task. The manager himself does the work in the living quarters. He cooks and serves the meals from 5 A.M. to 1 P.M. and during slack intervals makes the beds and makes the pretense of cleaning which the sanitary conditions belie.
>
> The floors of the rooms are not kept clean and the urinal is very unsanitary. You have to walk at least two steps in urine on the floor before you can approach the urinal properly. The stench absolutely takes your breath while urinating. If you use the toilet facilities before eating you can depend on your appetite being completely erased."

Groome asked Richmond again to investigate, and sent a note on June 10 to Division Engineer G.D. Scheer saying that replacement of the urinal and flooring should be handled promptly.[241]

Again on the morning of June 10, Trainmaster Richmond went down to Kelso from Las Vegas and inspected the rooms in Clubhouse. He reported that same day to Groome,

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239. Groome to R.L. Richmond, June 27, 1960; R.L. Richmond, Las Vegas, July 8, 1960, to W.B. Groome; W.B. Groome, July 30, 1960, to San Bernardino Health Department, Attn: Mr. Richards. Some automotive service stations today, as well as other businesses today, will not allow use of their restrooms by the general public, only by their own customers.

240. W.B. Groome, June 3, 1960, to R.L. Richmond, Las Vegas; Union Pacific Railroad Company Mailgram, R.L. Richmond, Las Vegas, June 9, 1960, to W.B. Groome.

241. D.R. Altier, General Chairman, Union Pacific Railroad Southwest District of the Brotherhood of Railroad Trainmen General Chairman, June 6, 1960, to W.B. Groome; Groome to R.L. Richmond, June 9, 1960; Groome to "GDS" June 10, 1960.

> . . . I found that they were in neat and tidy condition, floors and halls had been swept, and the rooms dusted. The restroom, as indicated in Mr. Altier's letter, does lack something to be desired. The floor in the restroom in front of the urinal should be tiled and the urinal should be replaced. In addition, there is some plaster falling from the wall above the urinal and this should be patched and the restroom painted. Mr. Bolen advises me that he understands that this will be done, and also that new duck boards will be placed in the shower used by the trainmen.

Richmond told Groome that he believed the matter should be "followed up closely" to see that the Water Service Department promptly made the repairs, and went on to say:

> It seems odd to me that as much time as I spend in the Yermo and Kelso area, no trainman has ever made any complaint to me about the conditions of these rooms. It has been my observation that Mr. Bolen does an excellent job of running the restaurant and rooming house at Kelso. It is true that the cleaning is taken care of by him and Mrs. Bolen, and he can not expect a cook on second or third shift to go upstairs and clean the rooms, and leave the cafe with its supply of cigarettes and money unattended. This, of course, means that the rooms can only be cleaned in the daytime.

Richmond said he would continue to check on the conditions in the Clubhouse and keep Groome advised.[242]

As it turned out, Frank S. Slama, Superintendent of the Dining Car and Hotel Department in Ogden had requested among yearly repairs in both 1959 and 1960 that the walls, ceilings and floors in the Clubhouse be repaired and the entire interior of the building be given a fresh coat of paint, but nothing had been done. He also advised Groome on June 16:

> The inspector assigned to this territory makes frequent inspections of the premises as well as myself, and under the existing conditions, (due to sand and dust storms) have found them in good order. The state inspectors, in February of this year, inspected the [Kelso] premises, including the rooms, and gave us a rating of 96.5.

Clearly, every level of L.A.& S.L. management had looked into the matter, and found Bolen's efforts at cleaning and maintenance in the Kelso Clubhouse to be satisfactory, and certainly Bolen was not responsible for work that had been requisitioned which the B.& B. Gang had not done.[243]

It seems the Union Pacific found another reason to delay the repairs, however. Southern California Edison Company had a power line under construction into Kelso, and the B.& B. Department planned to convert the heating system in the Clubhouse from coal-fired steam to electricity as soon as the power line was completed. An estimate for the cost of this conversion had been sent to Groome on June 14, 1960. Two days later, Groome responded to Division Engineer G.D. Scheer that as he had written earlier, the replacement of the urinal and repair of the floor should be

242. R.L. Richmond, Las Vegas, June 10, 1960, to Groome, received June 13.

243. F.S. Slama, Ogden, June 16, 1960, to W.B. Groome.

handled promptly. "Quickly advise if this has now been handled." Of course, it had not. Scheer responded, "will progress consistent with available operating expense money."[244]

On September 12, Groome wrote Scheer that he had just learned that the railroad was about to be cited by the county health authorities because of the condition of the urinal, and asked specifically when the Water Service Department could handle the repair. Scheer replied three days later that the water service forces would install the new urinal "within the next few days." Presumably at last it was done.[245]

Meanwhile on June 9, 1960, as mentioned above, the railroad prepared Work Order Authority No. 6331 for converting the heating facilities in the Kelso Depot from coal-fired steam to electricity. In forwarding the form to the General Manager in Salt Lake City, the Division Superintendent indicated on June 14 that it cost the Union Pacific $31,000 in 1959 to furnish power for Kelso, and they estimated power from Southern California Edison would cost only $7,500 annually. The cost of heating the Clubhouse itself was $4,500 during 1959, and with electrical heating, the railroad estimated it would cost only $1,500 annually. And so, on the one hand, the railroad set out to install electric heating facilities for both space heat and hot water in the Depot, Clubhouse and Lunch Room and under other work orders, probably in other buildings around Kelso, and on the other hand, once that was done, subsequently arranged to tear down the company Power House, which it did between July 25, 1960, and December 29, 1961, except for the smokestack which was allowed to remain standing. After some revision, General Manager G.A. Cunningham in Salt Lake City approved Work Order No. 6331 for the work in the Kelso Depot and instructed Division Engineer W.B. Groome in Los Angeles on August 30, 1960, to proceed with the new work. Traveling Engineer Accountant H.H. Melhuish's closeout report indicated that the railroad began the work on September 6, 1960, and finished the job on June 30, 1961.[246]

Meanwhile, another problem arose. The railroad had used a ladder salvaged from the now-to-be-retired Power House as a fire escape on the northeast end of the depot, converting a window at the northeast end of the upstairs hallway into a doorway to provide access to the ladder from above.

On June 9, 1960, the company had submitted to management an estimate based upon fabricating from new material and installing on the southwest end an identical ladder. Only then did the Engineering Department learn that the proposed new ladder did not meet codes, the riser tread ratio

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244. G.D. Scheer, July 20, 1960, to W.B. Groome; Groome to Scheer, 4:10 p.m., July 22, 1960; Scheer, telegram, July 25, 1960, to Groome. Scheer also wrote to Frank S. Slama of the D.C.& H. Department in Ogden defending "Bud and Flosie" Bolen, urging that they be retained in Kelso. Scheer, September 7, 1960, to Slama.

245. Groome to Scheer, September 12, 1960; Scheer to Groome, September 15, 1960.

246. Work Order File No. 6331; see especially, W.B. Groome, Los Angeles, June 14, 1960, to G.A. Cunningham, Salt Lake City, enclosing Work Order Authority estimates dated June 9; G.D. Scheer, Los Angeles, August 26, 1960, to G.R. Cottmire and B. Fellars (with copies to seven other UP employees); Scheer to Cottmore and Fellars (and the others), August 29, 1960, enclosing Work Order Authority Form No. 6331; Cunningham, August 30, 1960, to W.B. Groome; T.E.A. H.H. Melhuish, East Los Angeles, July 31, 1961, to A.O. Mercer, Omaha. For demolition of the Power House, see Work Order File No. 6520 (1959-61), Kelso, California — Main Line), "Retirement of 34' x 70' frame and corrugated iron power house with 14' by 21.6' addition, reinforced concrete inspection pit, 4-2" fuel oil risers with pump, filter and piping," Union Pacific Railroad, Los Angeles General Offices. The beginning and ending dates are to be found on p. 1 of Traveling Engineer Accountant's Work Order Closeout Report, dated East Los Angeles, California, January 31, 1922, signed by H.H. Melhuish.

Photo 25: Northeast end of the depot showing the fire escape ladder that had been salvaged and recycled from the power house, installed here in 1960. Photo September 2, 1991 by John W. Snyder.

Photo 26: Southwest end of the depot with the fire escape constructed in 1961 still in place on September 2, 1991 when this photo was taken. The fire escape stairs were removed as part of a BLM contract in 1993. Photo courtesy John W. Snyder.

being too steep, the ladder being too narrow, and not having a landing at midpoint. During the first half of 1961, probably mostly in April, May, and June, the railroad constructed a stairway, not ladder, with landing and railings, to serve as a fire escape outside the southwest end of the depot, the end window upstairs being converted into a door, and a runway being constructed across the roof of the arcade to connect the door and ladder.[247]

Meanwhile, repairs to the men's room upstairs in the Clubhouse did not end employee complaints. While Trainmaster Richmond was at Kelso on July 10, 1961, Brakeman M. Van Renselaar complained bitterly to him about a chicken fried steak that had been served to him in the restaurant about 6:30 p.m. He said the meat appeared to be bad and the odor from it was so strong he was unable to eat it. Van Renselaar claimed that Brakeman C.L. Coston, who was with him in the cafe, confirmed his statements. So Richmond went down to the Lunch Room and examined the piece of meat Van Renselaar had complained about — it apparently was still on his plate on the counter. Richmond said he found no offensive odor to it, and Clubhouse Manager Bolon went so far as to cut and eat a piece of it, finding nothing wrong with it. He then took Richmond and Van Renselaar back to the icebox, and brought out the supply of steaks from which Van Renselaar's chicken fried steak had been taken. Again, Richmond found nothing wrong with the meat. This did not placate Van Renselaar, who contacted the local chairman of the Brotherhood of Railroad Trainmen, D.J. Workman. Workman later told Richmond he also had examined and tasted the meat and could find nothing wrong with it. Richmond advised Groome of what had happened, and added, "It is my understanding that VanRenselaar is continuously complaining about the conditions at Kelso and in this case, he has nothing to talk about."[248]

The following year brought the most serious complaint yet. On June 19, 1962, General Manager G.A. Cunningham in Salt Lake City received from General Chairman T.A. Kunz of the Brotherhood of Railroad Trainmen a letter claiming that he had received a complaint signed by 78 employees "in train and engine service" who had to stay in the Union Pacific rooming house at Kelso. "These men have requested that the manager of this establishment, Mr. G.H. Bolen, be removed and a new manager take his place," Kunz wrote. He gave four reasons for their request:

1. The choice rooms at Kelso are reserved for other than train and engine service employees, while train and engine service employees are required to take the most undesirable rooms. At the Union Pacific rooming houses at Yermo, Las Vegas and Milford, all rooms are available on a first come first served basis.

2. Train and engine service employees are discriminated against in the quality of food served them and the quality of food served other employees who eat there.

3. The attitude of Mr. Bolen toward these men is very belligerent and quarrelsome creating a most unfavorable atmosphere.

4. The rooming house at Kelso is not being kept in a clean or sanitary condition. The rooms are seldom swept or scrubbed.

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247. W.B. Groome to G.A. Cunningham, Salt Lake City, November 15, 1960. The original Work Order for this job, was No. 6321; but the Work Order file only has seven sheets of paper in it, and the dates of construction have been inferred from the dates on invoices, there being no clear statement as to when the work began and when it was completed.

248. R.L. Richmond, Las Vegas, July 11, 1961 to W.B. Groome in Los Angeles.

General Manager Cunningham advised Division Superintendent Groome in Los Angeles, asking that he look into the matter and take corrective action. Unwilling to ignore the complaint, Cunningham told Groome, "Apparently this situation has deteriorated rapidly, and there may be some basis for complaints being received from the employes [sic]."[249]

By this time, Groome was about fed up with complaints about the Kelso Club manager. It was true that rooms had not been assigned on a first come, first served, basis that summer, but that was because while Bolen was on vacation for about three months, the relief manager who temporarily filled in for him had, probably at the suggestion of some of the "swing" brakemen, changed the system, and Bolen changed it back to "first come, first served," as soon as he returned from vacation, so he was not to blame at all for the first complaint in the trainmen's bill of particulars against him. On July 10, 1962, Division Superintendent Groome, together with Frank S. Slama, Superintendent of the Outfit Service in Ogden, went out to Kelso and made a joint inspection of the Dining Car and Hotel Department operation in the Kelso Clubhouse. Groome reported to General Manager Cunningham from Las Vegas later that same day,

> All unoccupied rooms were inspected and were found to be neat and tidy, reflecting the good housekeeping which existed throughout the entire portion of the building assigned to the DC&H Department. With one exception, all beds were good. All except the occupied rooms were made up with fresh bed linens and with the exception of some cigarette butts in ash trays in three of the rooms we could take no exception whatsoever to the cleanliness of the sleeping rooms. The toilets and shower rooms were inspected and found to be clean. When we arrived Manager Bolen had just about finished cleaning the rooms on the second floor and had not cleaned the ash trays before our arrival, which was done before the rooms were finished. The manager has a bed to replace the one with a cracked side rail in one of the rooms which will remove from service the only poor bed in the sleeping rooms.
>
> The entire restaurant, meat locker, cold and storage rooms were inspected and found to be exceptionally clean. Manager Bolen informed us just a few days ago an inspector of the State of California looked over the restaurant portion and took no exceptions in his inspection.

Groome had a number of comments to offer to Cunningham about the Kelso situation, outlining at first the method of assigning rooms and reporting what had happened while Bolen was on vacation:

> . . . Undoubtedly, the relief manager, at the suggestion of some of the swing brakemen, started the practice of reserving most of the rooms on the north side of the building for trainmen [away from the tracks on the back side of the building, these would have been the quietest and most desirable rooms].
> (2.) I have been assigned to the California Division more than three years and have eaten frequently in the Kelso restaurant. Without exception, the food served me is the same food served other employes and the claim that train and engine service employes are discriminated against in the quality of food served is completely erroneous. The food served anyone in the Kelso restaurant is from the same food stocks, and in the case of items such as roast beef or roast pork, from the same piece of meat. Liberal quantities are

249. Kunz to Cunningham, June 18, 1962; Cunningham, Salt Lake City, June 20, 1962, to Groome.

> served at Kelso to all employes. In fact, the complaint from General Chairman Kunz does not take exception to the quantity served to train and engine service employes.
> (3) I have known Manager Bolen for the past 17 years and I do not agree that he is belligerent and quarrelsome in his dealings with other employes. I am certain if Bolen knows he is right he will not be pushed around by other employes, regardless of craft or department. . . .
>
> You will recall Bolen was manager of the Lynndyl restaurant during the war years and did a good job there. For some reason Bolen has never been too popular with some of the more radical members of the train and engine service organizations [unions], which I attribute to the fact the man knows his job, does a good job for the company, and has enough backbone not to tolerate some of the ideas regarding the operation of the facilities that are constantly advanced by the radical fringe of the train and engine service organizations.
>
> I know that a better manager would not be secured at Kelso if Bolen was replaced. In fact when Bolen takes his annual vacation the operation at Kelso suffers from the quality of the food and the general operation of the entire project [facility].

Groome pointed out that four times in the last four years, Bolen had used his own station wagon to haul sick or injured employees from Kelso to the hospital at Las Vegas. Groome had, of course, found Bolen to be very cooperative with management. Moreover,

> It has been my personal observations during the evening hours if Bolen is around the restaurant and a train and engine crew stops at Kelso for a meal, he will get behind the counter and assist the cook on duty to get the meal before the men in the least possible time. Bolen has always worked on the premise at Kelso that in serving meals, train and engine service employes on trains stopped to eat there must have preference over off duty employes regardless of department.

Groome believed that the complaint filed with Cunningham asking Bolen's dismissal was "one of the most unjustified requests that has been directed to my attention in a number of years." He also thought he knew the real reason for it; he told Cunningham, "From what I can learn, about five BRT members are trying to secure the removal of Bolen," and proceeded to name five brakemen. "None of these men are considered as being some of the better brakemen." Groome recommended unequivocally "that we stand behind Bolen, who is doing what he was sent to do at Kelso," and that the Union Pacific tell the General Chairmen of the Brotherhood of Railroad Trainmen that the request that Bolen be fired is refused. Frank Slama filed a separate letter to Superintendent Jules Hansink of the Dining Car and Hotel Department in Omaha, agreeing with Groome, telling Hansink, "It may be that, on occasion, Mr. Bolen has offended someone by standing up for his own rights and convictions," and added, "The complaint rendered by the BofRT in my opinion is not justified, and appears to be more of a personal nature between a minority of the trainmen who patronize Kelso, and Mr. Bolen.[250]

While company employees complained about the manager and other aspects of the Kelso depot, employes' hotel and lunch room, from time to time outside parties eagerly sought to be allowed to

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250. W.B. Groome, Las Vegas, July 10, 1962, to G.A. Cunningham, Salt lake City, 4 pages; F.S. Slama, July 17, 1962, Ogden, Utah, to J. Hansink, Omaha.

Photo 27: A view to the east along the brick station platform during the 1950s or early 1960s. Photo courtesy collection of Art Francis.

Photo 28: By 1960 the railroad had installed air conditioners in the transoms over the doors from offices onto the arcade, and a large evaporative cooler near the phone booth which cooled the lunch room. The bench on the arcade had originally been at the west wall of the Conductor's Room or waiting room at the west end of the depot. Photo courtesy collection of Art Francis.

use the building for both housing and meals. In December 1963, the Southern California Edison Company approached the Union Pacific, asking for room and board for three to four weeks for a construction crew installing a new line to a microwave station on Kelso Peak and another at Granite Pass. Immediately thereafter, in February 1964, Pacific Telephone and Telegraph had a crew of six men splicing cable on their Mojave-Bull Head line for six to eight weeks room and board at Kelso, followed by another crew of six to ten men to inspect the new line and correct any deficiencies, taking another four weeks. That was stretching the Kelso facility a bit. F.S. Slama responded to P.T.& T. from the D.C.& H. office in Ogden,

> Our facilities at this point are limited, and it will be necessary that we place and extra bed in sufficient rooms, (8 in number), to take care of 16 men. The rental rate will be $2.50 per night per person.
>
> Due to serving railroad employes exclusively, our meal rates are far below the average of restaurants in that vicinity, (Baker, California), and to partially offset our additional pay roll expense it will be necessary to add a charge of 15% on all meal service.
>
> Our counter service is comprised of eleven stools and we will have to limit the number of telephone company employes to be served from time to time as train crews would have to be shown preference.

Pacific Telephone and Telegraph moved 14 men to the Kelso area on February 4, scheduled to stay until February 28, after which a second crew of ten men would move in immediately and stay about a month.[251]

Note that at some time since the remodeling of the Kelso Lunch Room in 1949, one of the twelve stools had been removed, so that only eleven remained in February 1964.

CLOSURE OF THE KELSO DEPOT

After the end of World War II in September 1945, Kelso had entered a long decline as a company town. The end of the war brought a sharp reduction in the volume of freight traffic, which caused a reduction in helper assignments, which meant fewer engineers and firemen, hostlers, boilermakers and machinists, and fewer employees using the Lunch Room in the Depot Building. The Vulcan Mine sputtered down to closure early in 1949, which further reduced freight traffic and also reduced passenger traffic, as it reduced the number of non-railroaders buying tickets. (Railroad employees and their families generally traveled on annual or trip passes which brought in no revenue — it was a "perk" of railroad employment.) Dieselization had resulted in further decline in Union Pacific personnel needed at Kelso, and ultimately the appearance of multiple unit operation from a single cab with a single crew eliminated the need for helper locomotives entirely in 1959.

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251. Union Pacific Railroad, Kelso Gen. File, Vol. II, Los Angeles; H. Sanderson, Customer Service Consultant, Southern California Edison Company, December 9, 1963, to W. B. Groome; Groome, December 11, 1963, to F.S. Slama; J. W. Padden, Pacific Telephone and Telegraph Company, Los Angeles, December 12, 1963, to F. S. Slama, Superintendent, Outfit Service, DC&H Department, Union Pacific Railroad, Ogden; Slama, Ogden, January 2, 1964 to Padden; V.F. Farrah, District Construction and Engineering Superintendent, The Pacific Telephone and Telegraph Company, Riverside, January 20, 1964, to E.G. Hayes, General Traffic Agent, Union Pacific Railroad, Riverside; E.G. Hayes, Riverside, January 21, 1964, to F.L. Morgan, Los Angeles; V.F. Farrah, January 28, 1964, to E.G. Hayes; E.G. Hayes, January 30, 1964, to F.L. Morgan.

There were few cattlemen, homesteaders and miners in the Kelso vicinity during those years to buy tickets or ship or receive freight or express. By 1960 it was difficult to justify keeping a depot manned by an agent, operator, and express and baggageman at Kelso. The only surprise is how long it took the Los Angeles & Salt Lake to take appropriate action.

It was not until 1963 that Division Superintendent W.B. Groome consulted with General Manager G.A. Cunningham and Traffic Manager J.W. Padden about the Kelso situation and then on October 24, 1963, wrote the L.A.& S.L. General Solicitor in Los Angeles, Edward C. Renwick:

> For some period of time freight business at Kelso Agency has been very poor and there seems to be no prospects for improvement [sic]. The business handled at Kelso for the past couple of years does not justify retaining the agency.

He went on to ask Renwick to prepare an application to the "proper regulatory authorities" for closing the Kelso agency, that is, ending the depot function at Kelso. He told Renwick the Operating Department would furnish promptly any further information needed.[252]

After researching the matter, Attorney Renwick reported that the first step was to post a public notice that the company intended to close the Kelso agency, also filing a statement with the California Public Utilities Commission to the same effect. If, after thirty days, no one objected to the closure, the railroad could close the depot with no further proceedings. "We can expect protests," Renwick advised Padden and Groome on December 11, 1963, "and will probably have to file a formal application." He went on to request the detailed statistics he would need to justify closure in such an application.[253]

The Kelso Depot was not only an agency for the Los Angeles & Salt Lake Railroad with station agent, operator, and baggageman, but also a joint agency with REA Express, the new name for the historic Railway Express Agency created during World War I by consolidating a number of private express companies. Accordingly, on December 16, Division Superintendent Groome had written Superintendent C.L. Moore of REA Express in Los Angeles, asking for statistics on REA business which could be used to justify closure.[254]

The express company superintendent, C.L. Murphy, replied on January 13, 1964, supplying the statistics Groome had requested, adding:

> REA Express is willing to close the station and would appreciate being included in your petition to the Public Utilities Commission. We would be willing to have Union Pacific represent us in the matter.

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252. W.B. Groome, Los Angeles, October 22, 1963 to E.C. Renwick; this and all the subsequent documents cited with respect to closure of the Kelso Agency are from Union Pacific Law Department Case File No. 5935, Docket 13, "Application to the Public Utilities Commission of California by U.P.R.R.Co. and Railway Express Agency giving notice of intention to discontinue agency service at Kelso Station, California; Application No. 46496; Decision No. 67525, Box No. 123-2, Los Angeles General Offices. The NPS has a copy of this file.

253. Edward C. Renwick, December 11, 1963, to J.W. Padden and W.B. Groome; cc: to G.A. Cunningham, General Manager in Salt Lake City, and Auditor E.M. Kerrigan, Omaha.

254. W.B. Groome, December 16, 1963 to C.L. Moore, Supt., REA Express, 357 Aliso Street, Los Angeles.

> There was a total of 21 LCL [less than car lot or carload] shipments handled at Kelso in 1963 [sic].[255]

On January 28, 1964, Renwick sent Groome 10 copies of a notice to be posted at Kelso in every conspicuous location possible no later than January 30. He added:

> If no protests are received, we can proceed to close the station without further proceedings. Unfortunately, we can anticipate some protest from the Telegraphers Union and others so that we will probably have to proceed with the application to the commission.[256]

Groome had the notices posted at Kelso at 8 a.m. on January 30; they said that the depot would close effective February 29, 1964. Meanwhile, Renwick wrote the P.U.C., sending 13 copies of a statement explaining why the Union Pacific and REA planned to close the depot.[257]

The Public Utilities Commission acknowledged on February 7 receiving the closure notices, but on February 17 advised both the Union Pacific and REA Express that it had received a protest from the Order of Railway Telegraphers, the telegraphers' union, opposing the closure. The P.U.C. ordered the U.P. to refrain from closing the depot and express office, and to file a formal application with the P.U.C. if it wished to pursue further the matter of closing the Kelso Agency.[258]

Cunningham asked Renwick to proceed accordingly, and Renwick asked E.M. Kerrigan on February 21 to assemble the statistics and legal exhibits needed and send 50 copies, and advise who would be the Accounting Department witness at the hearing. Groome, meanwhile, advised U.P. headquarters in Omaha.[259]

Kerrigan responded to Renwick on March 4 that Omaha would have the statistics and exhibits ready by about April 7. The company had various other station closing proceedings, branch line abandonments and other work in progress among which the Kelso matter would have to be scheduled. Actually, Kerrigan sent the data on April 2, five days earlier than he had promised.[260]

On April 10, Renwick sent the P.U.C. the original and 13 copies of its formal application, No. 46496, for "Authority to Discontinue Agency Service at Kelso Station . . . " The P.U.C. received it

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255. C.L. Murphy, Supt., REA Express, January 13, 1964 to Supt. W.B. Groome, U.P.R.R., 5500 Ferguson Drive, Los Angeles 22, Calif.

256. Edward G. Renwick, January 28, 1964, to W.B. Groome; there is no copy of the notice posted in the file.

257. Groome to Renwick, January 31, 1964; Renwick to P.U.C. of California, State Building, San Francisco, January 31, 1964.

258. R.V. Pavalich, Secretary, P.U.C., February 7, 1964, to Renwick; Pavalich, February 17, to U.P.R.R. General Manager G.A. Cunningham, Los Angeles, and REA Superintendent C.C. Moore.

259. Cunningham, Salt Lake City, to Renwick, Los Angeles, February 19, 1964; Renwick to E.M. Kerrigan, February 21, 1964; Groome, Mailgram, February 21, 1964, to C.D. Hayre, Omaha.

260. Kerrigan to Renwick, March 4; Kerrigan to Renwick, April 2.

on April 13, and scheduled a hearing on Thursday, May 21, 1964, at 11 a.m. in the conference room of the Barstow Fire District Building at 209 North First Street in Barstow, California.[261]

Union Pacific Attorney Marshall Vorkink, actually handling the Kelso proceeding for General Solicitor Renwick, advised REA Express on May 5 of the hearing and asked them to prepare exhibits similar to the ones they had used in closing the Daggett station some time earlier, and to have their witness get in contact with Vorkink prior to the hearing. That same day, Renwick wired Omaha about the status of the closure proceedings.[262]

On May 1, the Public Utilities Commission had sent Cunningham and Moore a notice of the hearing to be posted at Kelso at least ten days before, and asked them to send the P.U.C. an affadavit that this had in fact been done. Accordingly, the Union Pacific posted the hearing notice at Kelso on May 11, but forgot to send the requested affadavit.[263]

The hearing on closing the Kelso Agency took place as scheduled on May 21, 1964, in Barstow, 87 track miles west of Kelso, and the nearest town of any suitable size for such a proceeding. Trainmaster R.D. Smith testified for the Operating Department, J.M. Hannom, the REA Express agent at Barstow, testified for the express firm, and Mr. R. Limbeck from Omaha represented the Auditing Department of the Union Pacific.[264]

In its application for discontinuance of the Kelso Agency, the U.P. reported selling 30 passenger tickets at Kelso in 1963. The railway shipped from Kelso nine carloads of freight and received 25 car loads; it forwarded three less than carload shipments from Kelso and received 44. The carload shipments received were principally for construction projects of a one-time nature, such as 14 cars of reels of copper cable for Pacific Telephone and Telegraph to use in stringing wires across the Mojave Desert. They also shipped out nine cars of empty cable reels, waybilled to Western Electric in Baltimore, Maryland. Kelso also received five cars of pitch for the Molybdenum Corporation at Mountain Pass, east of Baker, and one car of pipe for Raymond Concrete Pile Company. J.A. Skinner received five cars of cattle at Sands, handled by the Kelso Agency.

The figures offered in attached exhibits ostensibly did not match those in the above accounting, probably in part due to the fact that the Kelso agency also handled the paperwork for shipments to and from Cima and Sands and perhaps other points. The arcane rules of railroad accounting, furthermore, which Auditor Limbeck from Omaha had come to Barstow to explain as an expert witness for the Union Pacific, also confused matters. Whichever set of figures one used, the railway's evidence was rather conclusive. One exhibit indicated that during 1963, the Kelso station agent had sold only 11 tickets, one each in March, July, September and October, two each in April and December, three in November, and none at all in January, February, May, June and August. The total ticket revenue was $102. (The remainder of the ticket sales claimed must have been at Cima, Sands, and elsewhere.)

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261. Renwick, April 10, 1964, to P.U.C.; P.U.C. Receipt, April 13, 1964, sent to Renwick; U.P. Attorney Marshall W. Vorkink to REA Express, May 5, 1964.

262. *ibid.*; E.C. Renwick, telegram, May 5, 1964, to Auditor E.M. Kerrigan, Omaha.

263. Noel Coleman, Acting Secretary, P.U.C., to Cunningham and REA Express, May 1, 1964.

264. John K. Skinner, Box 37, Cima, May 22, 1964, to W.B. Groome.

As to freight, Kelso had shipped four carloads of empty copper cable reels from Cima in December and received 5 carloads of copper cable on reels in October and one in November. Less than carload traffic included one shipment each sent in April and September, and L.C.L. received, two each in January, February, March, May, June, September and December, three each in April, four each in August, and five each in July, October and November. That made a total, in this accounting, of only ten car loads shipped *and* received, and 38 l.c.l. consignments shipped *and* received for the year, revenue being $3,579 for cars shipped and $4,704 for cars received, $14.00 for l.c.l. shipments sent and $735 for l.c.l. shipments received. The company received $78 for cans of milk and cream from Las Vegas, probably shipped on a mail or passenger train.

In all, the Union Pacific reported $9,212 in revenue for freight, passenger tickets, and handling milk and cream received and empty milk cans returned for 1963. Expense of running the Kelso Agency, *not counting* superintendence, maintenance, depreciation, insurance, and taxes other than payroll taxes for 1963 added up to $6,770.78. Following railway accounting rules, the total revenue was $9,032, expenses $13,713, for a loss for the Kelso Agency in 1963 of $4,681.[265]

Among the witnesses opposed to closing the Kelso Depot, a man named Herrera represented the Order of Railway Telegraphers, and asked the Public Utilities Commission to impose some sort of severance pay or job protection for operators thrown out of work if they permitted the railroad to close the Kelso Depot. Ralph Bullock appeared on behalf of the Superintendent of Schools of San Bernardino County but "made no effective protest," and the purpose of his presence was therefore a mystery, although he may have been concerned about the availability of public transportation for the Kelso schoolteacher. Cattle rancher J.K. Skinner, owner of the 280,000 acre Valley View Ranch near Cima, said it would be a great inconvenience for him and other ranchers to have to go all the way to Yermo to pay for shipments received at Cima or Sands. U.P. Attorney Vorkink told Skinner and the P.U.C. examiner that he could have the railroad's Traffic Department contact Skinner and other ranchers to arrange a method of payment that would eliminate the need for them to go all the way to Yermo. Skinner also complained that he had "heard" that the U.P. planned to "retire" (demolish) the cattle pens and loading chutes at Cima, and the U.P. attorney took steps to placate him on that issue, which was not relevant to this hearing anyway.[266]

It came out at the hearing that the Union Pacific attorneys had forgotten to mail to the P.U.C. or bring to the hearing an affadavit of the company posting of a notice of the Barstow hearing on the Kelso Depot, but the P.U.C. examiner allowed the railroad to mail one as a followup. That ended the meeting.[267]

By July 16, 1964, the railway had received Public Utilities Commission permission to close the Kelso Depot no less than ten days after posting a notice of the closure on the depot, and on the day before amended tariffs published by the railroad showing the closure went into effect.[268]

In Los Angeles on July 22, 1964, the Union Pacific issued Circular No. 51 announcing closure of the Kelso Agency on August 1, after which business would be handled either at Yermo, California,

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265. See Exhibit A in the railroad's application for authority to close the Kelso Agency.

266. John K. Skinner, May 22, 1964, to W.B. Groome.

267. Vorkink to P.U.C., May 22, 1964, enclosing the requisite affadavit.

268. Renwick, July 16, 1964, to F.J. Mella, G.A. Cunningham, W.B. Groome, and F.L. Morgan.

72.3 miles west of Kelso, or Sloan, Nevada, 79.5 miles east of Kelso. The company also posted a notice on the Kelso Depot, as required. But it didn't happen.[269]

On July 24, the railroad issued a new notice, dated July 22, to be posted on the depot, which added to what the original notice had said, "Company dial phone service to conduct business at Yermo & Sloan is located in depot waiting room. Instructions on use of phone are posted adjacent thereto."[270] The amended notice, posted on the building less than ten days before the proposed closure, probably violated the P.U.C.'s conditions for closure, requiring the railroad to issue Circular No. 52 of July 29, cancelling Circular No. 51, and rescheduling closure of the Kelso Agency at the close of business on August 10. But even that was a date destined not to be met, because the new railroad tariffs documenting the closure, Tariff Supplement No. 14, did not become effective until August 15, 1964.[271]

Thus the Kelso Agency, or the depot function of the Kelso station, ceased at the close of business on August 14, 1964. Kelso no longer would have a station agent, a telegraph operator, a baggageman, or an REA express man. One of the three principal functions of the Kelso depot building was gone forever.[272]

The building thereafter served principally as a rooming and boarding house for Union Pacific employees. However, with the agency terminated and space no longer needed for the ticket agent, telegrapher, and baggageman, the railroad probably at this time turned the ticket office, conductor's room and baggage room over to the Bridge and Building and Signal Maintenance Departments for use as a workshop and storage.[273]

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269. The circular was issued by the Office of the Superintendent, California Division, Union Pacific Railroad, and signed by W.B. Groome.

270. Groome to T.P. Rogers, July 24, 1964, enclosing notice.

271. Groome to T.P. Rogers, July 24, enclosing notice; Circular No. 52, Office of the Superintendent, California Division, Union Pacific Railroad, Los Angeles, July 29, 1964, signed by W.B. Groome; F.L. Morgan, August 7, 1964, to W.B. Groome.

272. Groome to Cunningham, August 17, 1964; Groome, August 18, 1964, to R.J. Pavalich, Secretary, P.U.C.

273. Signor, pp. 203-205; see also draft National Register of Historic Places Registration Form prepared for the Bureau of Land management by P.S. Preservation Services (Bonnie W. Parks and John W. Snyder, with assistance from Kevin Bunker), September 30, 1991, Section 7, p. 2. The form stated: "The east and west elevations of the two-story portion are similar except for the frame infill of the west arcade, an easily reversed alteration which dates from the end of passenger service to Kelso in the 1960s, when this end of the station was converted for storage and workshop use by the Bridge & Building/Signal Maintenance forces." Neither John Snyder nor Kevin Bunker could remember the source of that information, although it seems likely it was imparted to them when they were given a tour of the depot interior by a Union Pacific employee. Still, Art Francis, at one time also a Union Pacific employee, one who was raised at Kelso from 1943 to about 1960 when he went to work for the railroad, recalled in a letter to the author dated September 15, 1996, p. 1, that his father told him that the infilling of the arcade had been made in 1942 to provide additional baggage room space as a result of the World War II boom in railroad traffic and Vulcan Mine ore shipments. Francis has proved very knowledgeable about Kelso, and his father's statement seems to this historian to be far more logical and authoritative than the uncited source in the National Register form. Nevertheless, no documentary proof of when and why that change was made in the building has yet been found despite a search for just that information in Union Pacific files in Omaha, Nebraska, and (by Jeff Asay and others) in the General Offices in Los Angeles, California. Again, oral history testimony has proved to be contradictory and in conflict, and no Union Pacific records which document the alterations have been found. Francis' story makes more sense than the one reported in the National Register form, though it is possible, even likely, that the B.& B. and Signal Departments *made use of* this baggage room space after the Kelso agency closed, and the foregoing paragraph reflects that assumption on the part of the author.

Ironically, it was in the 1960s that tourists and others began to discover Kelso, and especially its depot restaurant. A man named Andrews (or possibly Andrus) recalled: "When the restaurant was open in the '60's, anybody could eat here - but they had a sign that if the train came, you'd better be ready to move fast so they [the train crews] could sit down and eat." Lou Donally recalled, "In the 60's we would stop for hamburgers. My daughters loved the large 10 cent cookies." Some remembered the ice cream cones and the lemonade. Experiencing Kelso from a different perspective, Bill Tomlinson of Barstow had just married: "I remember Kelso as it was when I spent my honeymoon in this area in 1968 with the beautiful lawn & the restaurant open — terrific meals![274] Art Francis, who was around Kelso until late 1962, recalled: "Menus during the time that I was around the depot had the standard breakfast and lunch items. During the 50's and early 60's there were no soft drinks or shakes offered. Ice cream was available in Dixie cups at ten cents, and pints at 40 cents. You could also have a pint container cut into two and only buy half for 20 cents. Pies were all home made."[275]

Two years after the depot closed, in 1966, Stanford University Press published the third edition of the book *Historic Spots in California*. Its authors noted, "There are many other interesting old towns in the desert area of San Bernardino County, including the railroad towns of Kelso, Cima, and Ivanpah. At Kelso stands a beautiful Spanish-style Union Pacific depot built about 1906 [sic], surrounded by shade trees, a welcome rarity in the hot, barren desert."[276]

Also during the 1960s, San Bernardino County paved the road from a point below the Vulcan Mine south to U.S. Highway 66 (today, Interstate 40). In 1972, the county paved the Kelbaker Road between Baker and Kelso in order that it could bus secondary school children to Baker schools. Three years later, in 1975, the county closed the Kelso school and thereafter bussed all the school-aged children from Kelso to Baker for schooling.[277]

Art Francis recalled that during the 1960s the basement of the depot served as a polling place during elections. Locally, the only elected officials were a Justice of the Peace and the three member school board. The rooms between the stairway to the basement in the lobby/cafe and the east wall of the ticket office and baggage room all housed D.C.& H. Department employees who ran the Beanery. The manager and his wife worked the day shift. He would cook and she would be the waitress. Afternoon business generally was good and the afternoon crew in the cafe was also a couple. The graveyard shift was pretty slow, generally requiring a cook and waiter combined. During the mid-1950s the wife of an engineer named Stout had worked as a waitress on the afternoon shift. An old fellow named Eddie Livingston made the beds in the boarding house. He lived upstairs in room No. 5 in the northwest corner above the baggage room. It was the quietest room in the house, probably because it was on the corner farthest from the roundhouse and the later diesel servicing tracks.[278]

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274. "Kelso Depot Memories: The first time, the last time, you saw Kelso." Typescript prepared from a flip chart of comments solicited by the Bureau of Land Management probably at a public meeting for planning purposes on Kelso in November 1992. Typescript prepared by Gordon Chappell, NPS, 1996.

275. Art Francis, letter, December 29, 1996, to the author, p. 2, item 3.

276. Mildred Brooke Hoover, Hero Eugene Rensch and Ethel Grace, *Historic Spots in California*. (Stanford: Stanford University Press, 1966), p. 327. The first edition, published in 1939, did not mention Kelso; I have not been able to locate a copy of the second edition.

277. Burk, p. 8

278. Art Francis, letter to the author, December 9, 1996, p. 4, item 8, p. 5, item 12.

The *San Diego Tribune* for December 2, 1969, contained a description of the Kelso Depot:

> In the days of the steam locomotive, Kelso was a town of 1,200. Now the residents are a few railroad workers. From a towering, useless smokestack to tumbledown residences, there is a ghost-town aura here, except for the Union Pacific's hotel and restaurant.
>
> The two-story stucco structure is freshly painted white with bright green trim. About it, well watered and manicured, is a green lawn bordered by low hedges. There are big elm trees.
>
> The hotel is used occasionally, by men only. Three cooks in full, white regalia were in the restaurant — alone. One told us they served occasional public customers but were kept there in case there was an emergency along the tracks and a work crew needed to be fed.[279]

Judging from this article, it was apparently about this time that the columns of the arcade from their bases to the spring line of their arches received a coat of green paint, which appears in later photographs of the Kelso Depot.

On January 19, 1970, the H.K. Ferguson Company, a construction and engineering firm in San Francisco, wrote the Union Pacific saying that it had a contract with Sandia International Metals Corporation to explore for mineral deposits at the Devil's Playground, and wanted to rent a room in the company hotel, preferably one on the ground floor with an outside entrance, for use as office space for six weeks. The Union Pacific agreed, subject, as always, to priority for the railroad's own needs.[280]

A single page breakfast menu on pale cream card stock issued in May 1969 with "(Kelso)" in the printing code carried the words "Union Pacific" at the top in railroad Roman type above a drawing of a fleet UP streamliner. It offered nine club breakfasts, such as: No. 1, ham, bacon or sausage and two eggs with potatoes and toast, for $1.55; No. 2, the same with one egg for $1.35; No. 3, minced ham with scrambled eggs, potatoes and toast for $1.40; No. 4, two griddle cakes with two eggs at $1.20; No. 5, two eggs with potatoes and toast at $1.05; No. 6, two griddle cakes with ham, bacon or sausage for $1.30; No. 7, a small breakfast steak with two eggs, potatoes and toast at $2.10, the most expensive club breakfast; No. 8, French toast with bacon or sausage at $1.50; and No. 9, chilled fruit or juice and cereal, cooked or dry, at a mere dollar, the least expensive club breakfast. All came with coffee, and the customer was supposed to order by number. The menu also listed a number of A' La Carte items as well as coffee, tea and milk. The Union Pacific reissued this menu in February 1971, the only change being the date in the printing code.[281]

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279. Untitled article from the *San Diego Tribune*, December 2, 1969, in the Kelso Papers of Mary Lu Moore, which she kindly loaned to the National Park Service. Apparently during typesetting and layout, lines of the original piece became considerably scrambled, some being placed in the wrong paragraph; the author of this study retyped the article, rearranging the lines in proper sequence in order to quote them above.

280. R.V. Smith, Vice President and Western District Manager, the H.K. Ferguson Company, 760 Market Street, San Francisco, January 29, 1970, to R.D. Smith, Division Superintendent, Union Pacific, Los Angeles; "T.W.B., February 6, 1970, to R.V. Smith.

281. "Union Pacific" breakfast menus, single page cream-colored card stock, with printing dates: "(Kelso) / 5-69" and "(Kelso) / 2-71," in the Dennis Casebier collection, "Kelso" subject file, Mojave Desert Heritage and Cultural Association library at Goffs, California.

Not to be outdone by the *San Diego Tribune*, on December 13, 1970, the *San Diego Press-Enterprise* carried a long, 26 paragraph article by Bill Jennings datedlined Kelso, which contained some information on the depot:

> *Kelso* — Now that the railroad strike is over, you can get the Union Pacific dispatcher to stop the streamliner here again, if you want to travel by rail to scenic Kelso, that is.
>
> Kelso is a green oasis in the heart of the Mojave Desert, renowned to railroaders, jeep and dune buggy enthusiasts and those strange folks who like to travel back roads.
>
> It's halfway between Amboy and Baker on the Kelbaker Road, and there isn't a more back road than that in Southern California. It's 80 miles of blowsand and washboard, spliced in the middle by this cottonwood grove at the foot of UP's tough Cima Hill.
>
> Cima Hill is the primary reason Kelso exists.
>
> In the 18 miles from Kelso east to Cima siding, the single-track mainline of the old San Pedro, Los Angeles and Salt Lake Railway [sic — properly, it was Rail*road*] rises 2,022 feet, with many curves that make the grade even stiffer for heavy freight trains. For 50 years steam helper engines were used. . . .

The article reported erroneously that the "large combined tile and concrete hotel and station building that still stands" had been built about 1906, and said that

> The second story is still in use as a UP crew hotel with occasional rooms rented to outsiders.
>
> Downstairs the extensive depot facilities have been closed in recent years but the Kelso station's most famous auxiliary service, a 24-hour cafe, remains open.
>
> Jeep parties making the tour of the Kelso sand dunes and Mitchell Caverns area for the first time are amazed to find the modern cafe away out there 35 miles from either Interstate 15 at Baker or U.S. 66 near Amboy.
>
> The food is excellent, with railroad menus, staff provided by the Union Pacific under an old work agreement, bright lights and a gleaming clean counter. There are no tables or booths, however.
>
> Kelso Cafe is not the only public facility at the remote railroad town, however. Just across the Cima Road is the Trails End, a combined grocery store [formerly Packard's store] and beer bar that is the scene of frequent late hour jollity.
>
> The Trails End is the only store between Baker and Amboy and thus enjoys a considerable business. Cima also rates a store and postoffice. Oddly, the only paved road in the area runs between the two rail station-store points, perhaps because a school bus uses the route daily to serve the one-room elementary school at Kelso.
>
> Students there are children of rail workers, ranch families and now some coming from the new gas pipeline maintenance station near Kelso.

The Kelso station resembles the Riverside terminal of the Old "Pedro" as early railroaders called the Clark line from that port to Salt Lake City. Mission style buildings were a trademark.

Clark's empire was merged with Union Pacific in 1921, but for many years the big steam engines serviced at Kelso as helpers bore the legend LA&SL on the rear of their oil and water tenders. . . .

One recent morning a reporter stopped for breakfast on his way up to Death Valley the hard way and found a UP track supervisor and his wife waiting patiently on the brick platform for the westbound City of Los Angeles, last passenger train on the line.

He said the train will stop in either direction to take or drop passengers, "but only if you tell the dispatcher the day before."

The reporter has not yet made that contact, but an easy scenic overnight trip is possible from Riverside this way, if the Kelso Railroad Hotel has room for a guest or two.

After World War II, the UP began cutting its heavy passenger service through Kelso. The Railway Official Guide listed six trains daily each way through the old cottonwood grove in 1946.

Only three, the unnamed No. 43-44, the Challenger and the combined Pacific Limited-Pony Express, stopped for passengers.

Today, the streamlined dome car "city" train seems an incongruous visitor, particularly westbound when it reaches Kelso at 8 a.m. — in time for its still drowsy passengers to stare incredulously at the oasis in the "middle of nowhere." The stop is brief.

The old helper tricks [shifts] on the Cima Hill used to keep four or five big Mikado type steam engines busy, shoving hard on the caboose end of nearly every freight. There was a small roundhouse, an adjoining light repair shop, and the big hotel was full of crews most of the time.

Diesel power took over shortly after World War II on the Salt Lake line, hastened by the lack of boiler water for steam engines. The helpers disappeared by the early 1950s [actually, in 1959].

A tall smokestack is the only remnant of the little shop and roundhouse complex [actually, it was the Power House smokestack]. About 15 company houses are still occupied by track maintenance gangs and supervisors. The station cafe, open 24 hours a day, employs about a dozen more UP people.[282]

282. Clipping, minus the headline, of an article by Bill Jennings in the San Diego *Press-Enterprise*, dated in pen 12/13/70, in the Kelso Papers of Mary Lu Moore, loaned to the National Park Service and copied.

Photo 29: Eastbound streamliner No. 10 *City of St. Louis* at the Kelso, California depot, ca. 1960. Photo courtesy collection of Art Francis.

An undated clipping from the *Los Angeles Times* published around the same time said, "the freights still stop at Kelso for a few hours or overnight so the Union Pacific maintains the restaurant which serves mammoth railroader-type meals. Occasionally a tourist party drops by."[283]

A Partition Dividing the Lobby from the Lunch Room

In March 1969, a change in the use of "swing" brakemen on trains operating through Kelso resulted in a reduction of use of the Kelso restaurant. Division Engineer G.A. Cunningham from the U.P. offices in Los Angeles wrote Superintendent R.D. Smith in Salt Lake City that Superintendent Hansink of the Dining Car and Hotel Department had reduced the force at Kelso by one porter. But the real point of his letter was that in checking revenues for the three Kelso restaurant shifts, the 9 p.m. to 5 a.m. "swing" shift was bringing in an average "take" of only $6.00 to $10.00 per night. He wondered if it might be possible to eliminate that shift and substitute a system whereby crews desiring a meal during those hours could notify the dispatcher who could then call and awaken one

283. Undated clipping, without headline or author listed, attributed to the *Los Angeles Times*, pasted on a page with December 1969 and December 1970 clippings from two San Diego newspapers, in the Kelso Papers of Mary Lu Moore, loaned to the National Park Service and copied.

of the cooks from the other shifts assigned to serve in rotation on an "on call" basis as both cook and waiter between 9 p.m. and 5 a.m.[284]

Consulted by Smith, M.L. Samuelson in Las Vegas said that crews frequently would have coffee or a coke only instead of a meal when serving on freight drags, or when stopped to release retainers. He was dubious about advertising such an "on call" meal service, thinking it might encourage crews to stop and eat on company time who otherwise wouldn't. Those doubts, however, were not destined to be taken into account.[285]

But Samuelson raised another interesting point: "Am also questioning what provisions are anticipated in regards to closing off hotel from restaurant, as they now utilize joint entrance facilities." This concern would lead to construction of a partition separating the restaurant from the hotel so the former could be closed and secured during the 9 p.m. to 5 a.m. swing shift.[286]

As is typical with a bureaucracy — and railroads are, above all, bureaucracies — the matter of shutting down the swing shift and building a partition would drag on for months, in fact, for over two and a half years. It was not until December 9, 1971, that the California Division of the Union Pacific Railroad in Los Angeles issued Circular No. 117:

> Trainmen and Enginemen:
>
> Effective Thursday, December 16, 1971, Kelso restaurant will be open between the hours of 5:00 am and 9:00 pm.
>
> During the time restaurant is closed, trainmen and enginemen who, under the provisions of their respective [union] agreements are entitled to eat and if desire to do so, may arrange for meal service by notifying Dispatcher sufficiently in advance of arrival, who will contact restaurant employes on a "call" basis.
>
> L.B. Maskill
> Superintendent

D.C.& H. Superintendent Jules Hansink in Omaha already had instructed his subordinates on December 7, 1971, to implement steps announced in the circular, and also ordered the employees' hotel *closed* "with exception of eight rooms which should be kept made-up for Union Pacific supervisors or technicians. These rooms may also be used on rare occasions for emergency travelers in *dire* circumstances," he added. Thus, except for railroad "brass hats," the proposal for cutting back on the swing shift in the Lunch Room had focused Hansink's attention on Kelso with the result that he effectively eliminated the second principal function of the Kelso Depot building in December 1971 — that of an employees' hotel for enginemen and trainmen. Its use for that purpose apparently had waned to the point such lodging no longer was needed, train crews stopping

284. Union Pacific Railroad, Kelso - Clubhouse - Gen[eral] File, 9203-3-R, Vol. 2, in the Los Angeles General Offices. The correspondence cited in the following discussion of events resulting in construction of a partition in 1972 all is from this General File.

285. R.D. Smith, Salt Lake City, March 25, 1969, to M.L. Samuelson, Las Vegas.

286. M.L. Samuelson, Las Vegas, April 1, 1969, to R.D. Smith, Salt Lake City.

between runs elsewhere than Kelso. But in actual practice, "brass hats" and others would continue to use the Kelso depot for lodging occasionally for nearly another decade and a half.[287]

Advised by Cunningham, Division Superintendent L.B. Maskill requested on December 16, 1971, installation of a company phone in the quarters of the D.C.& H. Manager at Kelso for the "on call" meal service.[288]

On December 29, 1971, a Union Pacific official on Omaha, H.H. Noar, sent a mailgram to R.L. Richmond in Salt Lake City, advising that for fire safety there must be two means of egress for occupants from every point in the Kelso Club. He called further for the installation of "panic hardware" bars on all exterior doors and ordered that no doors should be padlocked "under any circumstances."

> Also, kitchen and dining room areas should be furnished with closures required to separate them from the club area at night in order to secure supplies and equipment in the kitchen and dining areas.

Noar said that the front door should have an arrangement whereby it could be locked from the outside but not the inside. "Regularly known B&B or other Union Pacific supervisors and technicians who use the specially set-aside rooms could be issued numbered keys," Noar added. He requested that the local B.& B. Gang be assigned to make the changes.[289]

Accordingly, on January 6, 1972, General manager R.L. Richmond in Salt Lake City wrote Division Superintendent Maskill, enclosing Noar's Mailgram, and told Maskill:

> Please arrange to provide suitable protection between the club and kitchen and dining room areas during hours that they are closed, and also the front door should be equipped with a lock with sufficient keys to be issued to just those employees who will require entrance during the period between 9:00 p.m. and 5:00 a.m.

This order caused construction of the partition separating the restaurant from the lobby of the employees' hotel. Although no Work Order Authority form for this job has been found, and the work did not appear among the list of "Running Repairs" needed at Kelso submitted for review by R.L. Richmond on January 12, 1972, L.B. Maskill advised Richmond that the work had been completed on March 10, 1972. Unfortunately, the partition stopped several feet short of the ceiling, so that a bold thief could crawl over it, which invited future trouble.[290]

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287. J. Hansink, Omaha, December 9, 1971, to C.M. Stuart, Superintendent of Commissary Services Department, Denver, Colorado, cc: to G.A. Cunningham, Salt Lake City; G.A. Cunningham, December 10, 1971, to L.B. Maskill, Los Angeles.

288. U.P.R.R. Telegram, L.B. Maskill, December 16, 1971, to R.B.M. in Salt Lake City.

289. H.H. Noar, Omaha, December 29,. 1971, to R.L. Richmond, Salt Lake City, cc: to G.M. Stuart, Denver.

290. R.L. Richmond, Salt Lake City, January 6, 1972, to L.B. Maskill, Los Angeles; R.L. Richmond, January 12, 1972, to H.H. Brandt and L.B. Maskill, with two enclosures; L.B. Maskill, March 14, 1972, to R.L. Richmond.

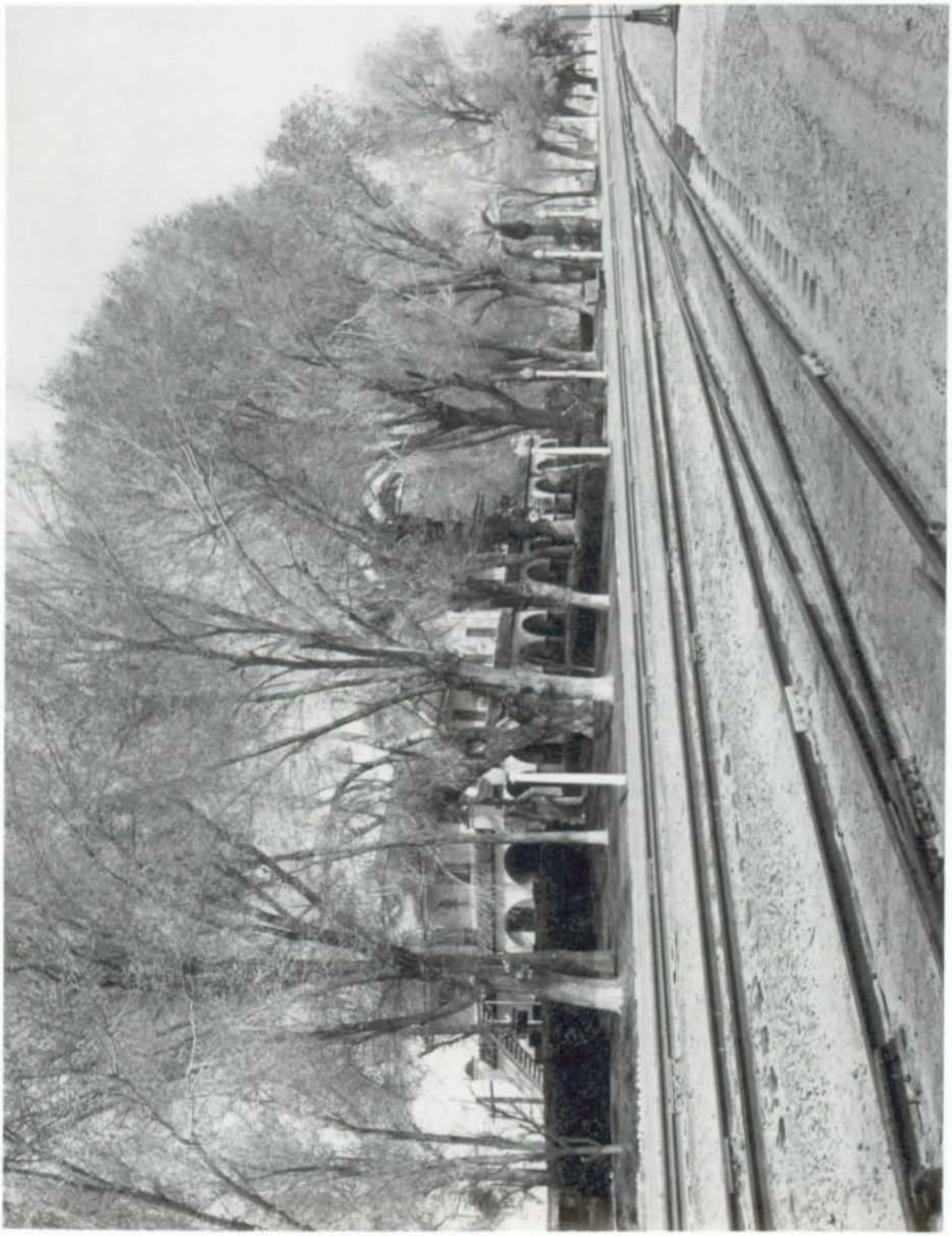

Photo 30: March 16, 1974. The Kelso Depot's grounds featured rich green lawns and mature trees which offered an oasis of greenery in the middle of the Mojave Desert. The depot boiler tube fence had been salvaged for a World War II scrap drive, and the spherical globes on the lamp posts had long since been broken and replaced by acorn-shaped globes. A pair of benches flanked the walkway to the Lunch Room, and an old oil drum converted into a trash can stood nearby. Sawtooth brick edgings and box hedges were now an established part of the landscaping. Photo by Steve Patterson.

Photo 31: The grounds in front of the Kelso Depot during the 1970s and 1980s featured box hedges. The bench in the arcade was originally at the west wall of the Conductor's Room. At this time the Union Pacific shield was plain, without the "Overland Route" banner. Photo by Shirley Burman.

Photo 32: For a number of years up to the March 16, 1974, date of this photograph, the columns below the springlines of the arches were painted a dark green, as were portions of the drain pipes. The "Overland Route" language stretched diagonally across the Union Pacific shield had been expunged at that time. Photo by Steve Patterson.

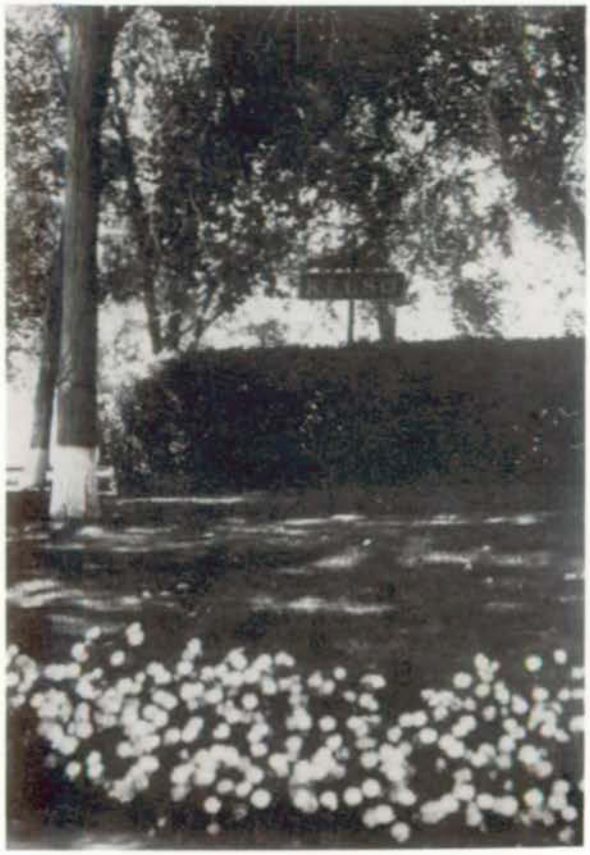

Photo 33: On May 26, 1974, the illuminated "Kelso" signs still were in place, flowers bloomed, and the bottom three feet of tree trunks were whitewashed. The Kelso Depot grounds struck most passers-by as a rich oasis in the desert, albeit a man-made one. Photo by Steve Patterson.

Photo 34: In 1979 or 1980 the flagpole still carried a flag, and the depot still featured benches along the platform, and the original "Lunch Room" sign, but the columns now were all white. Photo by Shirley Burman.

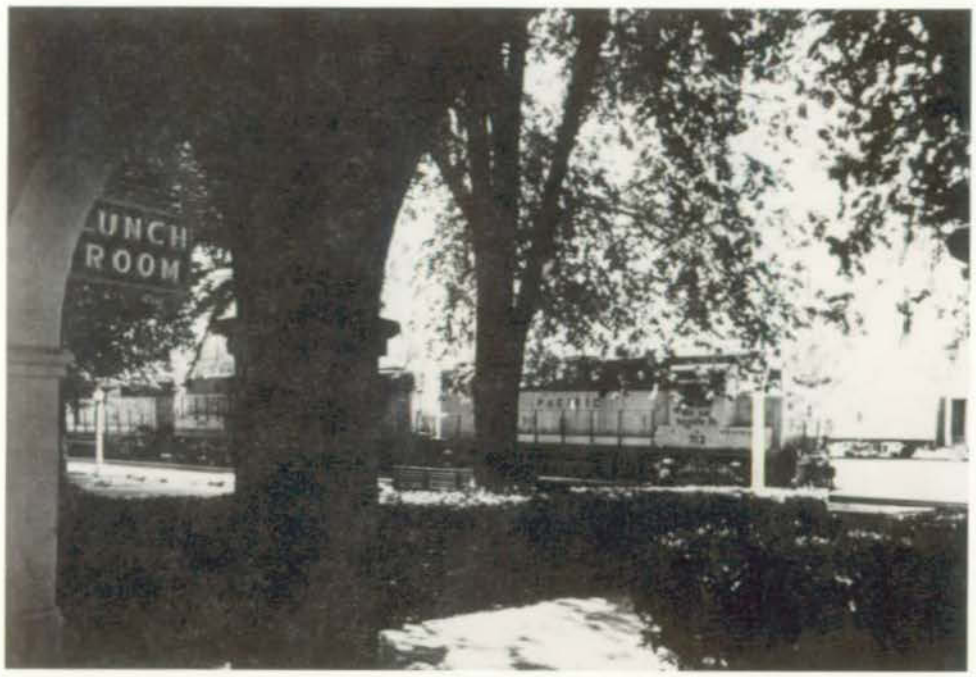

Photo 35: Diesel locomotives in front of the Kelso Depot, 1975. The Lunch Room sign belied the fact that the lunch room always had offered breakfast, lunch and dinner, or supper, and for many years was open 24 hours a day, though by this time in had much shorter hours. Photo by Richard Steinheimer.

"Running Repairs" to the Kelso Depot, Employees' Hotel and Lunch Room

The aforementioned "Running Repairs" called for in the Kelso Clubhouse for the year 1972, included only six items for the Bridges and Building Gang from Las Vegas to tackle:

1. Replace glass in swinging door in upstairs hallway.
2. Replace glass in upstairs windows, 4 windows 34 x 25 1/2 inches
   7 windows 12 1/2 x 11 inches
3. Check and repair all door locks on upstairs rooms.
4. Repair or replace ceiling in kitchen.
5. Roof over annex leaks, make necessary repairs.
6. Replace flooring in front of counter in lunch room.

The B.& B. Gang completed the work on July 12, 1972.[291]

It was apparently in October 1972 that a major reorganization changed the Dining Car & Hotel Department into the Commissary Services Department, and the latter office in Denver, under Superintendent C.M. Stuart, took over supervision of the Club facilities at Yermo and Kelso, as well as outfit trains. Of course, the previous year, Amtrak had taken over passenger service on the

291. "Running repairs required for year 1972," signed by C.M. Stuart; R.L. Richmond, Salt Lake City, January 12, 1972, to L.B. Maskill and H.H. Brandt; R.L. Richmond to L.B. Maskill, March 7, 1972; Maskill, January 13, 1972, to F.D. Wengert; Maskill to Wengert, February 16, 1972; Wengert to Maskill, February 22, 1922; Maskill to Richmond, March 14, 1972; L.B. Maskill, April 18, 1972, to R.L. Richmond; F.D. Wengert, July 24, 1972, to L.B. Maskill.

Union Pacific, and now ran the dining cars, so the work of the old Dining Car and Hotel Department had been greatly reduced.[292]

On June 3, 1974, the Union Pacific requested bids on painting the exterior of the Kelso and Yermo Clubhouses. The railroad contracted with the Do-All Painting and Decorating Company, headed by Carrold R. White. The firm apparently did the work that November.[293]

Two other minor matters affected the depot that fall. Union Pacific Special Agent (railroad police officer) J.C. Swinehart while at Kelso on October 3, 1974, inquired how Club funds were handled. He found that the manager held $100 in cash for change, the balance being forwarded to Omaha by postal money order. However, he also found that the drawer in the cash register did not work; once closed, it would not open, so the manager kept it open with a wedge. Swinehart said it was in plain view of the counter and could easily be pilfered, and consequently should be repaired. It turned out that a new cash register had been ordered for the restaurant at Yermo, and once it was received, the second-hand Yermo cash register would be transferred to Kelso to replace the one with the broken drawer. The correspondence did not say what was wrong with the Yermo cash register that it had to be replaced.[294]

The second matter involved moving the public telephone. Kelso had received its first public telephone in 1956 as a consequence of the Cold War: The U.S. Air Force had decided to establish a Ground Observer Corps Post at Kelso whose observers would report to a filter center at Bakersfield, California, which led to construction of a telephone line to Kelso. Eventually a public telephone was installed in the lobby of the Kelso Club. On October 24, 1974, Division Superintendent L.B. Maskill wrote Pacific Telephone asking the company to move the telephone to the outside of the building under the covered walkway.[295]

THE COMING OF AMTRAK

Efforts by American railroads to get rid of money-losing passenger trains had continued for years, and finally the United States Congress responded by creating a Federally chartered and government-subsidized corporation called the National Railroad Passenger Corporation to take over from the individual railroads the running of passenger trains. Popularly known as "Amtrak," an acronym for "American track," the new corporation would take over certain routes on those railroads that wanted to participate, and the participating railroads then could abandon all the passenger trains Amtrak did not want to operate. A few railroads chose not to participate, and continued, for a time, to run their own passenger trains; the Denver & Rio Grande Western Railroad, for example, continued to run a segment of the old *California Zephyr,* renamed the *Rio*

292. C.M. Stuart, Denver, October 12, 1972, to M.L. Samuelson, Los Angeles, with a copy to F. D. Wengert.

293. L.B. Maskill to J.P. Carroll Company, Los Angeles, June 3, 1974; Maskill to Williams Waterproofing & Painting Co., Alhambra, June 3, 1974; Maskill to Do-All Painting and Decorating, July 31, 1974, attaching agreement; L.B. Maskill, September 13, 1974, to Western Administrators, Inc.; Acknowledgement of Receipt of Agreement, Omaha, October 31, 1974.

294. J.C. Swinehart, Las Vegas, October 5, 1974, to S.S. Van Fleet, Special Agents Department, Salt Lake City; H.H. Brandt, Salt Lake, October 16, 1974, to L.B. Maskill: L.B. Maskill, Los Angeles, October 24, 1974, to H.H. Brandt.

295. L.B. Maskill, October 24, 1974, to Pacific Telephone Company; Art Francis to the author, June 21, 1997.

Photo 36: An Amtrak "Fun Train" returning to Los Angeles from Las Vegas with gamblers and show-goers passed the Kelso Depot westbound on October 13, 1974. Note the light posts and benches along the station platform. Photo by Steve Patterson.

Grande Zephyr, between Denver and Salt Lake City for a number of years. The Union Pacific, however, was one of the railroads which chose to participate with Amtrak, and therefore was able to discontinue many trains. Amtrak took over operation of passenger trains on most of the nation's railroads on May 1, 1971, initially using the railroads' own passenger equipment. In time, Amtrak would acquire its own fleet of silver locomotives and passenger cars decorated with red and blue stripes, which meant the end of armour-yellow streamlined cars. In any event, Kelso was not on one of the routes Amtrak chose originally to operate, though later it would operate a Salt Lake Route train, the *Desert Wind*, although it also operated a train between Los Angeles and the gambling resorts of Las Vegas for awhile.[296]

While technically and legally May 1, 1971, was the date Amtrak took over the operation of most of the nation's passenger trains, in reality it took several years for Amtrak to become fully operational with its own facilities. But as time passed, Amtrak developed its own way of running dining cars, and the Union Pacific Railroad's Dining Car and Hotel Department rather quickly lost its principal mission, that of operating dining cars, although it would still have the "club" restaurants and hotels to run, and employee kitchen and dining cars used on work outfit trains, although these too were almost gone, having been replaced by off-track vehicles used for Maintenance of Way, B. and B. and Water Service Gang activities. Most relevant to the Kelso situation, the D.C.& H. was no longer in a position to provide "supply cars" that kept the restaurants such as Kelso in operation. Within two or three years, this had created a crisis for the Kelso Lunch Room, for it could not get adequate supplies; it was reduced, in fact, to food being brought in by Maintenance of Way truck, and even to the employees going out to one of the nearby towns in their personal automobiles to buy supplies. The shortage of supplies led them to post the Lunch Room with an "Employees Only" sign. The railroad consequently began exploring other ways to supply Kelso. One idea would be a supply car from Las Vegas on a westbound freight that would have to stop at Kelso anyway to release retainers; the idea was that supplies could be unloaded while retainers were being released, which required a brakemen to walk the length of the train and turn a valve on each car. The problem with that was that such trains were at that time barely making it to their terminal under the 12 hour law, and ANY delay beyond the time needed to release retainers could run them out of time short of a terminal. Nevertheless, railroad officials batted around the idea of an "ice car" (refrigerator car) carrying food to Kelso.[297]

On August 19, 1974, Division Superintendent L.B. Maskill recommended to H.H. Brandt in Salt Lake City that the Union Pacific initiate an "ice car" between Las Vegas and Kelso, "as we did in the past." He believed two trips a week would keep Kelso supplied amply so that it could still accommodate "all our personnel as well as others who may desire service at this location." On August 26, 1974, General Manager H.H. Brant wrote Maskill, "This is approved." So Kelso's critical supply problem caused by the advent of Amtrak and the withdrawal of the Union Pacific

296. Actually, as of May 1997, the Union Pacific still had a fleet of 69 mostly armour-yellow passenger cars which it used for special trains for employees, trains for the Board of Directors, steam-powered "railfan" excursions, and the like. Even after the advent of Amtrak, the author rode in such cars behind Union Pacific steam locomotive No. 8444 in Colorado. During the mid-1980s the author saw a U.P. employees' special train of armour yellow cars in Salt Lake City. Shortly after May 1997, the railroad put ten of its cars up for sale, and intended to sell still more.

297. Telegram, "TAW," Las Vegas, August 12, 1974, to "FDW" (F.D. Wengert?), Los Angeles; telegram, "FDW," Los Angeles, August 13, 1974, to "TAW," Las Vegas; telegram, "FDW," Los Angeles, August 1, 1974, to "LBM" (L.B. Maskill), Los Angeles.

from passenger traffic, had been solved. Whether the "Employees Only" signs came down is not known.[298]

AN ATTEMPT TO DEMOLISH THE KELSO DEPOT

On January 21, 1975, Union Pacific South Central District General Manager H.H. Brandt in Salt Lake City wrote to California Division Superintendent L.B. Maskill in Los Angeles, "You should begin a discreet study of our facilities at Kelso with the view in mind of demolishing all of the present buildings, other than company houses, and erecting a small structure to serve as a restaurant, with living quarters for the DC&H employe, as well as any rooms that you feel are absolutely necessary to accommodate the few supervisors and/or officers occasionally staying overnight." He suggested that perhaps a trailer house could be installed for the latter purpose, and asked, "What are our present costs to staff and maintain the clubhouse and restaurant, and what would we require to replace them?" Then he added, "This must be done quietly to avoid alarming the 'historical landmark' groups in Southern California."[299]

Maskill on January 24 delegated the task to Division Engineer F. D. Wengert, who replied on February 20 that the cost for maintaining the clubhouse and restaurant from mid 1972 until 1975 had amounted to $3,300, or about $1,320 per year. On the recommendation of Union Pacific General Architect R.J. Martens in Omaha, Wengert had contacted Atco Homes, Inc., a firm which had constructed prefabricated depots on other divisions, and Atco had supplied an estimate of: $30,425 to install a 30 by 52-foot sleeper trailer for 8 men, with lounge and extra restroom area, complete with furnishings; $14,134 to build living quarters for Dining Car and Hotel Department employees, consisting of a 12 by 60 foot mobile trailer incorporating two completely furnished bedrooms, but not including appliances or utility hookup. When utility hookups, foundations and additives were factored in, the total cost estimate reached $80,000. In other words, at the costs stated, the Kelso Depot could be operated for another sixty years for what it would cost to replace those facilities. General Manager Brandt dropped the matter.[300]

A 1975 newspaper article described the Kelso Depot in these terms:

> There's a hotel in Kelso, a stately, rambling old two story stucco structure with tile roof.
>
> But only 40 male railroad workers may stay in the hotel. And all guests must be in their rooms no later than 9 p.m. or they are locked out and cannot get in.
>
> That's when Jean and Mickey Valor, the cooks in the hotel dining room and managers of the hotel, go to bed. They're up at 5 a.m. to begin feeding railroad workers.

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298. L.B. Maskill, Los Angeles, August 19, 1974, to H.H. Brandt, Salt Lake City; H.H. Brandt, Salt Lake City, August 26, 1974, to L.B. Maskill; L.B. Maskill, Los Angeles, September 4, 1974, to F. D. Wengert.

299. H.H. Brandt, Salt Lake City, January 21, 1975, to L.B. Maskill [at Los Angeles], Union Pacific Railroad, Kelso - General File, file No. 9203-G 0810, Los Angeles Office, Union Pacific Railroad.

300. L.B. Maskill to F.D. Wengert, Los Angeles, January 24, 1975; F.D. Wengert to L.D. Maskill, Los Angeles, February 20, 1975, Union Pacific Railroad, "Kelso - General File," File No. 9203-G 0810, Los Angeles Office. The correspondence does not identify the positions or titles of the individuals involved; for that I am indebted to: *The Pocket List of Railroad Officials*, Vol. 81, No. 1, Serial No. 321, First Quarter, 1975, pp. 591, 594, 595.

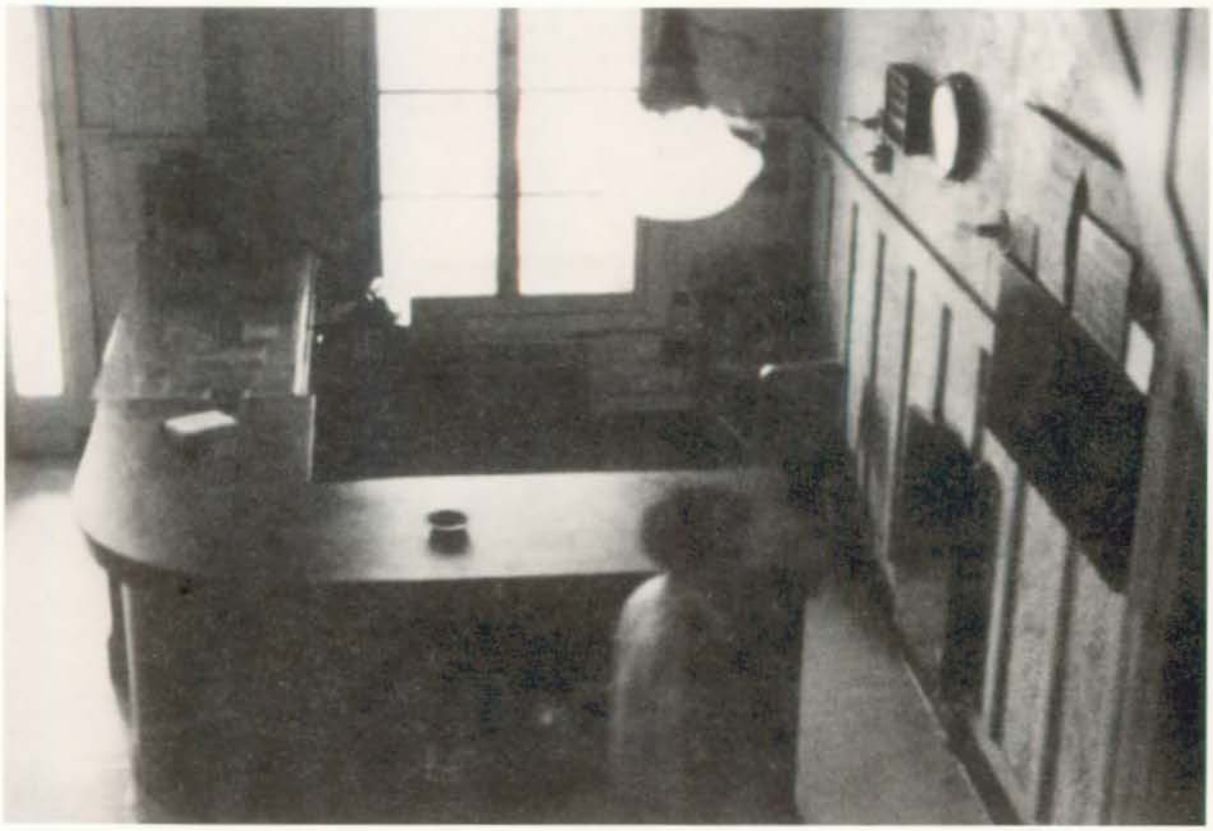

Photo 37: Main desk in the lobby of the Kelso Depot. Photo ca. 1980 by Art Francis.

> There are no stores, no gas stations, no movie houses in Kelso. Only the post office, homes of the railroad workers, hotel, the school and cemetery.

The article went on to say that everyone in the tiny town, whose population then was about 100, worked for the Union Pacific Railroad except the schoolteacher, Mrs. Dorothy Cady, the postmistress for the last 26 years, Lena Finnell, Chester Haislip, and some housewives.[301]

About two years later, world-traveling photographer Robert Wenkam visited Kelso, subsequently writing up his description and reactions in a 1977 publication. Starting out in his automobile from Needles, he had ended up mired in the sand of the Kelso Dunes, walked east up the track, and found a Union Pacific section gang, who hopped in their van, drove him back to his car, and pulled it out. Thirsty and hungry, he headed for the only place on the map nearby, to see if he could get at least a coke at Kelso.

> As I drove closer I saw that Kelso barely existed. It was like so many other once active desert communities that have today become almost ghost towns after the closing of nearby mines and phasing out of steam locomotives by the railroad. Most of what once

301. Undated newspaper clipping, by Charles Hillinger, Times Staff Writer, "Remote Town in Mojave Desert: Even TV Can't Get to Kelso," probably from the *Los Angeles Times*, filed in Union Pacific Railroad Correspondence File 9203-G between correspondence dated March 27 and April 7, 1975. One of the two photographs accompanying the article provided a closeup view of one of the benches alongside the edge of the station platform at that time.

had been a fairly good-sized community was gone, only faded detritus remained, scattered around the few still intact buildings like the droppings of a windstorm. Man had come and mostly gone, deciding Kelso was not a suitable place to build anything permanent. I just hoped they had left behind a place to eat.

A tall concrete smoke stack stood alone at the edge of town. Nothing remained nearby to feed it pollutants or identify its builder. As I slowly drove in and out and around the few remaining buildings, some with clothes lines in the backyard full of colorful shirts and white sheets blowing in the wind, it became evident Kelso once had been an old railway town . . . . When trains no longer stopped the town was not needed. Kelso had been left behind to die.

But Kelso station is still there. When I first sighted the unexpected building, it was like discovering a lost treasure. The old station was bright and clean in the desert sun, still looking exactly as it must have appeared to the passengers and railway people who enjoyed its cool shade and welcome for perhaps 75 years. The building stood proud and magnificent beside the rails it had served for so many years of California history.

The large two story structure of traditional Union Pacific style — slightly southern Californian with a touch of Spain, perches gracefully behind broad, covered walkways to ward off oppressive summer heat. The building had been recently painted white and gleamed brightly in the noon sun, Union Pacific's company shield with red and white stripes prominent on the curving facia trimmed with orange tiles.

"Kelso" was carefully lettered in relief over the main entrance with a companion cast iron plaque standing alone at the west end of the building. Giant cottonwood trees and date palms shaded the luxuriant grass lawn, a bright green in dramatic contrast to the surrounding desert. The old station, bordered by neatly trimmed hedges, was set back a sleeping car length from mainline rails. Carefully laid red brick paving formed a walkway of maybe six passenger car lengths along tracks where passengers would never arrive again.

Hung within the arched, covered entrance-way was a faded sign lettered in the unmistakable style of the nineteen twenties. It said, "LUNCH ROOM". I could hardly believe it. Must be something left over from the old days! I tried the screen door. It opened, and I stepped inside.

Mounted flat against the inside lobby wall was a large black board with bold, white lettering across the top: "Train Bulletin". Under, "Westbound", I read, "Train No. 103,

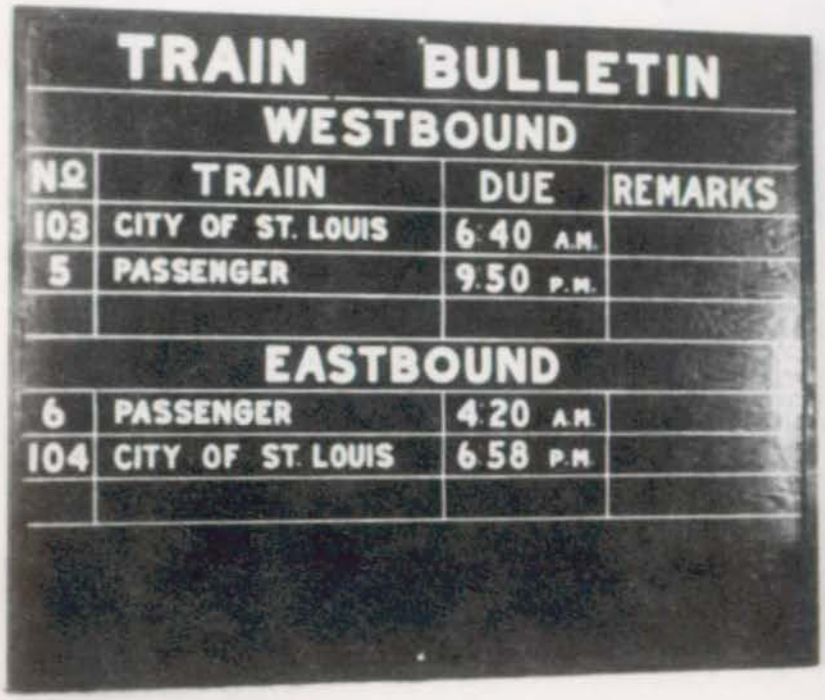

Photo 38: The Train Bulletin board during the late 1960s and early 1970s showed only two eastbound and two westbound passenger trains which passed through Kelso. Trains Nos. 103 and 104 actually were the *City of Los Angeles*, not the *City of St. Louis*. Their listing as the *City of St. Louis* was a mistake. Photo ca. 1968-71 by Art Francis.

Due 6:40 AM".[302] There was nothing under the heading for "Remarks", so I assumed the train had been on time.

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302. Kratville and Ranks, in their book *Union Pacific Streamliners*, pp. 517-525, did not really answer the question of how Trains Nos. 103 and 104, traditionally the streamliner *City of Los Angeles*, came to be called the *City of St. Louis* on the train bulletin board in the Kelso Depot, nor can the author. Faced with drastically declining passenger revenues, the railroad consolidated the *City of San Francisco* and the *City of Los Angeles* on September 25, 1960, between Cheyenne, Wyoming, and Ogden, Utah (a train which railroad enthusiasts dubbed at that time the *City of Everywhere*). That should not have affected the name of the train between Ogden and Los Angeles. Reducing service further, the railroad and the U.S. Post Office Department eliminated railway post office service on the Salt Lake Route between Los Angeles and Ogden after January 27, 1967. On September 7, 1968, three years before the advent of Amtrak, the Union Pacific consolidated the *City of St. Louis* and the *City of Los Angeles* between Cheyenne and Ogden, operating them under the traditional numbers of the latter, Nos. 103 (westbound) and 104 (eastbound). Again, that should *not* have affected the name of the train between Ogden and Los Angeles, but apparently it did. Why the railroad would drop the name *City of Los Angeles* between Los Angeles and Ogden remains inexplicable to the author. The *City of Los Angeles* had a notable history as a transcontinental train, one of the first streamliners, whereas the *City of St. Louis* had been a train operating from St. Louis via Denver to Cheyenne, where it connected with the transcontinental trains, such as Nos. 101 and 102, the *City of San Francisco*, 103 and 104, the *City of Los Angeles*, and 105 and 106, the *City of Portland*. Why the railroad would in the last several years before Amtrak transform it by change of name into a train running all the way from St. Louis to Los Angeles, whereas the *City of Los Angeles* had run all the way from Chicago to Los Angeles, is a mystery. Asked by the author by phone on August 27, 1997, Bill Kratville said he thought it was simply a mistake. The Train Bulletin board, incidentally, would have been in the Conductor's/Waiting Room until the depot closed in 1964, after which it had been moved to the lobby.

Taped to the glass counter below was a small card, headed, "Dining Room Service", dated, "Kelso, Calif. May 23, 1925," with a short breakfast menu, possible for the passengers from St. Louis enroute west, who were reassured that, "Ample Notice will be given before departure of trains". It all was a marvelous nostalgic step backward into another time that I had not quite forgotten. I was five years old when that train stopped at Kelso. My parents had taken me on many train trips through southern California when I was a young boy, and I wondered now if I had been here before. I opened the inside lunch room door and sat down.

The comfortable room no longer accommodated separate tables. A wide counter with small stools divided the few customers from new stainless steel refrigerators and a hooded hot plate for short orders. But the dishes were of another era, inscribed with the "Challenger" logo from famous Union Pacific transcontinental passenger limiteds.

The tall waitress was a woman of rather ample girth, possibly 55 years of age, who affirmed my judgement that Kelso had been a flourishing railroad town as recently as twenty years ago when over 2500 people lived here. "Today, only a dozen or so count themselves as residents," she said. I guessed that almost all were escapees from urban crime and pollution in coastal California cities.

She was a relatively new resident, having moved to Kelso only a few years ago from Ontario in the smog soaked valley east of Los Angeles, where her husband managed a successful furniture store. They decided to leave while still young and able to get around. She liked Kelso and the desert, as she put it, "You can live longer here."

They had work to do and saw no reason to travel farther. "Kelso is a nice place — quiet and small. It's more or less the center of everything around here," she added. "We must drive twenty miles to Baker for shopping since the Kelso store closed. That's far enough".

A printed menu, with typed paper strips clipped to the upper edge announced specials of the day, including homemade pies baked on the premises and iced lemonade. It was a discovery not anticipated and with pleasure I ordered everything I had not expected to find in the desert.

Finishing my lunch, satisfied and full, I remained at the counter, feeling at ease and reluctant to leave. It was quite pleasant just being here and I watched curiously as a casually dressed older man entered, greeted the waitress warmly and sat at the counter a few stools away. She asked where he had been the past week and he related the details of a short business trip to Arizona where various cattle auctions had resulted in favorable prices for his stock. His felt hat was stained around the brim with sweaty finger prints and his chin was gray with the short, stiff bristles of a three day trip without shaving. He looked like an old tired cowboy.

Ordering a dish of strawberry ice cream, he ate silently until the waitress asked if he were staying at home for awhile. "Yes", he replied, "I'm not going anywhere anymore. I'm staying right here". Then he added, without being asked for any elaboration, "It's better here".

> I paid my check at not quite yesterday's prices, and wandered outside into the bright mid-day sun, letting the screen door swing loose behind me like screen doors should. I walked across the grass to trackside, stepping lightly upon the brick platform where a fading white painted line parallel to the rails warned waiting passengers of years past to stand back from arriving and departing trains. I looked around the station platform, searching for something familiar, some hint that as a child I had passed this way long ago. The desert beyond was silent, the hot afternoon very quiet and unwilling to give up any secrets. I hoped I had been here because it was nice to return.
>
> I blinked from the glaring sun reflecting off the brightly polished rails, now in heavy use by daily freight trains. The tracks were paired together like two knife blades on edge, joining into one as the rails disappeared in the distance beyond the dunes, near where the desert horizon blurred into a hazy sky. The rails extended to everywhere in the world beyond that horizon.
>
> I turned and looked again at the clean, white station. At the neatly trimmed grass, the hedges enclosing the world not a part of the desert beyond the ancient cottonwoods. I thought of the varied choices in my world beyond Kelso where I worked and lived, and how at times I considered my home to be of no particular place, but everywhere - the entire earth. How very interesting it is, I thought, that to the people of Kelso the entire world was right here.[303]

The advent of radio communication between trains and dispatchers in the years after the Korean War also affected the operation of the restaurant at Kelso. Before radio communication, crews had to phone their orders to Kelso from a previous station, such as Cima, but radio changed that. For example, Union Pacific Special Rule No. 871 (R) in the employees' time table in 1975 stipulated: "Train or engine crews desiring to eat at Kelso must notify dispatcher as much before arrival as practicable, but not later than at Kelso initial switch." Eventually, it became customary for trains to radio an order to the Kelso restaurant in time for it to be all prepared and bagged pending their arrival to pick it up.[304]

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303. Robert Wenkam, "Kelso Station: The Personal Discovery of a Park to be," *Outdoors West*, month unknown, 1977, pp. 16-22. The portion quoted is from p. 18 through p. 22. This publication was issued by the Federation of Western Outdoors Clubs. Copy in the collection of Mary Lu Moore. Wenkam, like some others, had assumed that Kelso had at one time been what a railroad called a "division point." It had not; it was merely a helper station. Las Vegas and Yermo qualified as division points. Incidentally, although the Santa Fe Railway's yard and roundhouse facilities and the Harvey House known as Casa del Desierto (which still stands) were in Barstow, the Union Pacific's comparable facilities were not at Barstow, but a few miles farther east at the much smaller town of Yermo (originally named Otis).

304. Hemphill, p. 76. Eight years later, a similar sentence appeared in Union Pacific System Employes' Timetable No. 8, effective 12:01 A.M., November 20, 1983, under Special Rules for the Second Subdivision of the California Division on P. 240, under Rule 871 (RC-1): "Train or engine crew desiring to eat at Kelso must notify dispatcher as much before arrival as practicable, but not later than at Chase on westward trains and Balch on eastward trains." The rule went on to say, "While crew is eating and train left on siding, engine must be left with air coupled and, in addition, sufficient hand brakes must be applied to keep train from moving, but not less than 20 hand brakes must be set on west end of train [the downhill end].

"While crew is eating and train left on main track, engine must be left with air coupled and, in addition, a member of crew, mechanical employe, or road officer must remain on engine at all times."

ROUTINE YEARLY MAINTENANCE

The list of "Running Repairs" for the Kelso Club for 1975 has not been found, but for 1976, the required repairs were:

1. Patch and repair ceiling in Manager's apartment. Paint entire apartment.
2. Paint both bathrooms on lower floor.
3. Paint regularly used rooms and hallway on second floor.
4. Insulation or sealing rubber needed on doors of both walk-in coolers.

The list went through the usual review by various U.P. officials, and on February 2, 1976, J.E. Sanford reported that they could be handled under the present maintenance allowance and could be accomplished in April. One thing that was not on the list which came up in July, the Kelso Depot at that time had six "desert coolers," three upstairs and three down, and only two of those downstairs were working. The matter dragged on into August, the hottest month of the year, and the coolers did not get repaired until August 18, and then one of them was found to have a "bad order" (broken) pump for which a part had to be ordered.[305]

The "Running repairs" for 1977 comprised a longer list than in 1976:

First Floor

1. Screens need repairs
2. Lobby and Restaurant walls, ceiling, need cleaning.
3. Plaster falling off walls and ceiling in Manager's apartment; bath upstairs ran over and leaked through.

Second Floor

4. Plaster falling, need repair in rooms Number 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 17, 18, 19, 20, 21. Painting needed.
5. Plaster falling and needs painting in bathroom, shower and hall.
6. Screens need repairs
7. Windows need repairs so they can be locked for security.

Outside Doors

8. Locks should be replaced on outside doors, were removed and never replaced; needed for security.

Basement

9. Needs cleaning and repainting throughout (Basement)

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305. L.B. Brandt, Salt Lake City, January 21, 1976, to L.B. Maskill and J.E. Sanford, enclosing to Sanford a copy of the list of running repairs required at the clubhouse at Kelso; Sanford, February 2, 1976, to Brandt; H.H. Noar, Manager, Commissary Services, Council Bluffs, July 17, 1976, to J.T. Comer; F.D. Wengert, August 10, 1976, to D.T. Reeder and E.M. Kuchera; Reeder, August 30, 1976, to Wengert; "JTC" (Comer?), August 24, 1976, to Wengert; Wengert, August 30, 1976, to H.H. Noar, Council Bluffs, and "WRT" in Salt Lake City.

Prepared on January 31, 1977, by C.J. Queen, R.E. Irion in Salt Lake City sent this list around for review by various U.P. officials on February 18. He still hadn't received a reply from J.E. Sanford by April 18 and again asked for it. Division Engineer F.D. Wengert on April 7, meanwhile, had asked D.T. Reeder whether the Kelso repairs could be completed out of operating expenses, to which Reeder made an undated notation on the bottom of Wengert's message, "Doubtful if we complete all the Painting Requested." Sanford reported to Irion on April 25 that the work could be done out of operating expenses, "however, it is doubtful that all items outlined in Mr. Queen's request can be completed prior to the end of the year."[306]

Some of the work must have been done, either that year or the next, although no list of "running repairs" for the Kelso Club for 1978 has been found. But a list submitted by B.G. Beaird [sic] on August 22, 1979, called for the following:

1. Window and door screens need repair or replaced [sic].
2. Lobby and restaurant walls and ceiling need cleaning and painting.
3. Plaster and paint falling off walls in downstair rooms.
4. Replace missing tile in restaurant work room.
5. Bare plaster in rooms No. 6, 12, 14, 18 need painting.
6. Bathrooms and showers need painting.
7. Second floor shower drain should be repaired to handle both showers. Both showers should be operational.
8. Windows should be repaired in order to open and close also lock.
9. Staircase wall and ceiling need cleaning and painting.
10. Seal around air conditioners in rooms where installed.
11. Air conditioner plaster covers melted due to installation above electric wall heaters. Should be replaced with metal.
12. Basement need cleaning and painting thruout [sic], especially repair to windows, drain and clean floor in old boiler room.
13. Roof drain gutters need cleaning and repair.
14. Missing roof tile should be replaced.
15. Meat block in kitchen should be re-surfaced in order to pass county health inspection.

About that same time, a basement drain became clogged, and after three days' work by the Water Service Gang, remained clogged, with greasy water from the kitchen and dirty water from showers and sinks in the hotel backing up in the basement and creating a stench. On August 17, two men from the Water Service Gang arrived from Yermo at 4 p.m. and stayed about 20 minutes, said they couldn't fix it, to wait until Monday, but on August 18, the General Water Service Foreman called the Kelso Club at 10 a.m. to advise that men were on the way to remove the water from the basement. They didn't arrive until 3 p.m., but by 4 p.m. had the basement clear of water and the

306. R.E. Irion, Salt Lake City, February 18, 1977, to W.A. Ridge and J.E. Sanford enclosing copy of list of running repairs desired at Kelso prepared by C.J. Queen; F.D. Wengert, Los Angeles, March 10, 1977, to D.T. Reeder; Wengert to Reeder, March 18, 1977; Wengert to Reeder, April 7, 1977; duplicate of preceeding with handwritten response, undated, at bottom; J.E. Sanford, Los Angeles, April 25, 1977, to R.E. Irion, Salt Lake City; all in the Union Pacific Kelso Gen. File, Vol. II.

drain running freely. "Basement a greasy mess," B.G. Beaird, the Supervisor of Commissary Services at Kelso noted, but a later note indicated it had been cleaned.[307]

Occasional tourists still enjoyed the Kelso Lunch Room. Sarah Chesney of Needles recalled, "In the late 1970s I remember the cook at the cafe made the best chocolate chip cookies & sold them out the side window. Our children always wanted to come get his cookies." Paul Sweeny of Barstow claimed that "The restaurant at Kelso Station was reputed to make the best milk shakes in Southern Ca." If so, the Lunch Room must have acquired equipment for making milkshakes some time since 1960, when it had none.[308]

Late in the fall of 1980, T.E. Ballard submitted the longest list yet of "Running repairs" to be done in the Kelso Club in 1981, a list of 51 items, which on January 27, 1981, R.E. Arnold submitted to L.D. Nelson in Los Angeles:

First Floor

1. Need screens installed in back work rooms.
2. Screens removed from first floor and never replaced.
3. Broken window in restaurant - front wall.
4. Broken window in executives bathroom.
5. Wall cracked above deep sink. Health Dept. requires it be repaired and painted with a waterproof paint.
6. Front screen door needs replacing. Hinges broken and framing rotten.
7. Exterior exit door needed in mgr's. apt. Has no access to outside and is a safety hazzard [sic].
8. Floor tiles need replacing in dishwasher area.
9. Floor tiles missing and broken in range area.
10. Security of rest. supplies should be supplemented by the partial wall between Lobby & Rest. being raised to ceiling. Hotel has been broken in to twice and access both times gained to supplies by the simple procedure of climbing over the partial wall.
11. Some tiles in Lobby broken and/or missing.
12. Exeterior [sic] doors to executives rooms do not fit door frames at bottom. As much as 2" clearance allowing snakes, bugs, etc., entrance.
13. 2'x2' space next to a/c installation in each executive room filled in with cardboard. Energy loss.
14. A/C installation in mgr's apt needs sealing around outside.

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307. B.G. Beaird, Los Angeles, August 22, 1979, "Repairs reported for 1979 Kelso Club & Restaurant that should have immediate attention;" Beaird, at Kelso, undated, to "Planning & Scheduling, Division Engineer, B & B Supervisor, General Water Service Foreman, Electrical Supervisor," received by T.W.B. on August 27, 1979, with phoned messages added at the bottom, 8/17/79 at 9:25 a.m., 4 p.m., and 8/18/79, with added penned note: "Basement clean - now in service," and another, "Mr. G.H. Cahoon: Thank you very much for handling," followed by B.G. Beaird's rubber stamp, which indicated that he was "Supervisor Commissary Services," probably in Los Angeles. All in Union Pacific Railroad, Kelso Gen. File, Vol. II.

308. "Kelso Depot Memories: The first time, the last time, you saw Kelso," typescript in NPS files originated as a BLM flip chart.

Second Floor

15. Plaster & paint needed rooms #1, 2, 3, 7, 8, 9, 10, 16, 18, 19, 20, 21.
16. Flooring torn & missing rooms #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 15, 18, 19.
17. Doors or door panels need replacing rooms #6, 8, 9, 12, 14, 15, 16, 19, 21, 20 [sic].
18. Window broken rooms #6, 16, 18, 19.
19. Screens need repaired or replace rooms # 5, 6, 7, 16, 18, 19.
20. Transoms inoperable rooms #4, 5, 6, 9, 11, 12, 16, 17, 18, 19.
21. Locks on windows inoperable rooms #12, 18, 19, 20.
22. Emergency exit doors at each end of hall will not lock.
23. Lockers in all rooms tip over. need to be attached to wall.
24. Shower door will not close. Allows water to run out on floor.
25. Bath & shower room floor needs painting.
26. Roof leaking over room #6. Wall stained, blistered and cracking.
27. Hallway plaster cracking and peeling.
28. Covers needed to enclose swamp cooler openings in winter.
29. Stair risers rooting [rotting?]. Steps give when weight applied.
30. Need sound deadener of some sort to allow employees some sleep in downstairs apt.
31. Flooring in hallway torn missing and cracked.
32. Electricians reccommend [sic] flourescent light and light for reading.

Stairwell

33. Window in front of swamp cooler will not close. Allows cold air and dirt to enter bldg.
34. Walls & ceiling needs patching and painting.
35. Air conditioner faces melted due to being installed over heaters. Need replacements.
36. Plumbing access door missing. Removed and never replaced.
37. Window in stairwell between Lobby and basement will not lock. Security risk.

Basement

38. Window broken in schholroom [sic] and bathroom.
39. New toilets needed (2). Tank tops missing, etc. In generally delapidated [sic] condition. Tanks take appro[x]imately 8 minutes to fill after each use.
40. Shower walls peeling. Needs waterproof covering.
41. Shower floor needs painting.
42. Holes in wall where plumbing was removed never been closed. Allows snakes, bugs, rats to enter bldg.
43. Graffitti needs painted over as scrubbing will not remove.
44. Bathroom floor needs painting.

Exterior

45. Roof walkway from fire escape to emergency exit door rotted out. Serious safety hazzard [sic]. Large holes a person can step in and fall thru. Water runs thru and has rotten p[o]rch [arcade] ceiling.
46. Frame holding large swamp cooler above emergency exit door rotting and shakey. Safety hazard.

Equipment

47. Fish freezer door broken inside. Needs repaired or replaced.
48. Salad bar refrigeration unit has holes. Not holding correct temp.
49. Large reach in refrigerator needs repaird (sic?). Will not hold temp.
50. Under counter refrigeration unit temperature cannot be controlled.
51. Ice machine works sometimes. Old — needs repaired and/or replaced.[309]

Whether the B.& B. and Water Service Gangs addressed all the items on this list or not remains unclear, but one item that was accomplished in 1981, the railroad remodeled four ground floor rooms to serve as overnight rooms for railroad "executives." According to Art Francis, two ground floor rooms immediately east of the Ticket and Telegraph Office had their windows converted into doors to the outside shortly after the roundhouse closed in 1948, intended to serve as offices. It seems likely that those two were subsequently converted into overnight rooms for railroad "executives," whether in 1981 or earlier is not clear, and it appears that in 1981, two more rooms, east of the first two, also had windows converted to outside doors, and were refurnished as more rooms for railroad "brass hats." The railroad numbered these 1 through 4, and refurbished the two rooms of the manager's quarters, for a total of six rooms.[310]

These rooms became an issue late in 1981 when the railroad began testing the use of helpers again between Calada and Kelso. F.H. Bithell wrote Division Superintendent David M. Wheeler and L.D. Smith from Las Vegas on December 4, 1981, "If helpers are assigned at Kelso, would like to bring to your attention that the rooms at Kelso where the crews will be staying will need to be refurbished, as they are unfit for the crew members to sleep in at the present time." Apparently informed that some rooms at Kelso had been entirely refurbished, i.e., the rooms for railroad "executives," Wheeler wrote F.D. Wengert, L.D. Smith and O.L. Brown from Los Angeles ten days later, asking how many rooms had been refurbished; receiving no answer, he asked again on December 30, 1981. O.L. Brown replied on January 5 that four rooms, plus the two rooms in the manager's quarters, had been refurbished, for a total of six. Six days later L.D. Smith replied that four had been refurbished, omitting the managers' which presumably the manager still used. But it was D.R. Lyon, on February 18, who gave Division Engineer Wheeler the most complete picture of the condition of the Kelso Club:

> Rooms 1-4 on the ground floor of the Kelso clubhouse were completely remodeled in 1981. Each room is carpeted, has individual heating, air conditioning and company telephone for crews to receive call. The ground floor bathroom facility was also completely remodeled in 1981 and is totally satisfactory for crews' use. These rooms were remodeled for officers' use, but they are used on a very limited basis and could easily be used for helper crews.
>
> The second story rooms are in generally poor condition. They are uncarpeted and would require carpeting. The air conditioners and heaters do not function properly and would require repair or replacement. I would recommend that if any of the second story rooms

309. R.E. Arnold, Manager, Commissary Services Department, Union Pacific Railroad, Council Bluffs, Iowa, January 27, 1981, to L.D. Nelson, Los Angeles, enclosing copy of two page list of "Running repairs" for the "Kelso Hotel-Rest." submitted by T.E. Ballard, the Kelso Club manager.

310. O.L. Brown, Supervisor, Commissary Services (Los Angeles?), to "Dear Sir," January 5, 1982, Union Pacific Railroad, Kelso Gen. File, Vol. II.

> were used for helper crews, that they be completely remodeled and rewired before placing crews in there on permanent basis.
>
> It would be my recommendation that rooms 1-4 on the ground floor be used for helper crews and former officers quarters located behind the Kelso clubhouse be reestablished as officers quarters.[311]

Lyon was referring to the "u"-shaped complex of buildings which stood north of the fire escape stairway on the west end of the depot which had been used as officers' quarters prior to the remodeling of the four rooms in the Depot building. It should be noted further that while the upstairs rooms in the Kelso Depot needed work, the real problem was that over the decades, expectations in what did and did not constitute acceptable overnight accommodations had changed greatly, and what had been acceptable overnight accommodations in 1924 were by 1982 considered spartan and obsolete, when most hotels and motels had individual bathrooms attached to each rental room, and rooms also were much more spacious than the little upstairs rooms in the Kelso depot.

Among the other items in the 1981 repair list, one that seems to have been addressed was Item No. 10; it was presumably during that year that a B.& B. Gang installed decorative wood bars between the top of the partition separating the Lunch Room from the Lobby and the ceiling above, so that at night thieves could not crawl over the partition into the closed Lunch Room and kitchen.

At some unknown time since the railroad had cut back on the shifts in the Lunch Room from three to two, eliminating the "swing" shift from 9 p.m. to 5 a.m., in 1972, the railroad must have revived a "swing" shift and kept the Lunch Room open 24 hours per day, for on January 29, 1982, the railroad again abolished the night shift. A.J. Bleizeffer, Superintendent of the Commissary Services Department in Denver wrote Club Manager T.E. Ballard on January 22, 1982, telling him to abolish the Third Shift Manager and the helper at the "Kelso Restaurant" effective with the close of business January 29, and he wrote Ballard again on January 25, telling him that the new hours of operation of the restaurant were to be 6 a.m. to 10 p.m., Monday through Friday. On Saturdays and Sundays, T.E. Ballard and Shift Manager E.G. Ballard (possibly T.E. Ballard's wife) were each to serve a day on an on-call basis. It also appears that these people worked six days a week, having only one off. Bleizeffer added that emergency service between 10 p.m. and 6 a.m. would also be handled on a "call-in" basis.[312]

KELSO COFFEE SHOP MENUS

The cover of a breakfast menu printed in January 1982 on yellow card stock carried a photograph of a diesel-powered Union Pacific freight train operating 25 miles west of Salina, Kansas, and called the lunch room the "Kelso Coffee Shop," and it offered a typical coffee shop selection.

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311. F.H. Bithell, Las Vegas, December 4, 1981, to D.M. Wheeler and L.D. Smith; D.M. Wheeler, Los Angeles, December 14, 1981, to F.D. Wengert, L.D. Smith, and O.L. Brown; Wheeler to Wengert, Smith and Brown, December 30, 1981; O.L. Brown, January 5, 1982, to "Dear Sir;" L.D. Smith, Los Angeles, January 11, 1982, to D.M. Wheeler; D.M. Wheeler, January 11, 1982, to D.R. Lyon, cc: to F.D. Wengert; D.M. Wheeler to D.R. Lyon and F.D. Wengert, February 16, 1982; D.R. Lyon, Las Vegas, February 18, 1982, to D.M. Wheeler; D.M. Wheeler, March 10, 1982, to F.D. Wengert; F.D. Wengert, March 16, 1982, to D.M. Wheeler; all, Union Pacific Railroad, Kelso Gen, File, Vol. II.

312. A.J. Bleizeffer to T.E. Ballard, Manager, Kelso Club, Denver, January 25, 1982, Union Pacific Railroad, Kelso Gen. File, Vol. II.

Seven numbered "Club Breakfast Specials" offered such items as: No. "3 Two eggs with ham, bacon or sausage" at $3.30 and No. "6 French toast with ham, bacon, sausage or eggs" for $3.10, other specials including hotcakes, and the orders with meat included potatoes, while all included coffee or tea. There was also a more expensive, mouth-watering "Ranch Breakfast" featuring a steak, two eggs, four dollar-size "hot cakes" with syrup or honey, "Potatoes Du Jour," toast with butter and jelly, and coffee or tea for $5.15. The other "Special Breakfast" for $3.40 featured "Browned Roast Beef Hash with Poached Egg" along with the potatos, toast, etc. A La Carte one could order, in addition to the items cited on the left hand page, a Danish or sweet roll, a donut, a "Cookie - Home Baked" for 45 cents, milk toast, milk, buttermilk, and hot chocolate. By the time this menu appeared in 1982, passenger traffic had been in the hands of Amtrak for eleven years, and the Union Pacific's Dining Car and Hotel Department was long defunct; what eating facilities the railroad now operated were mostly for employees and in the hands of a "Commissary Services Department" managed by R.E. Arnold, in Omaha, which was responsible for running the Kelso Coffee Shop.[313]

On November 24, 1982, General Manager R.E. Irion in Salt Lake City wrote D.M. Wheeler, who sent a similar message to five others:

> For your information, it is planned to increase meal prices approximately 10% at Kelso Club Restaurant effective January 1, 1983. The increase is being made to partially offset our cost of operation, as well as to bring prices in line with comparable facilities.[314]

The result was a new breakfast menu printed on a pale cream card stock in January 1983, though the increase in prices it contained was selective, and did not affect every item listed. The new menu had items and prices similar to the old one, a few of the prices slightly higher, and a few new items such as orange, tomato and grapefruit juice and on the club breakfasts, Polish sausage with two eggs, and biscuits and gravy, with sausage. The "Club Breakfast" prices remained mostly the same, but many of the A La Carte items had prices five to fifteen cents higher. The "Cookie — Home Baked," had gone up from 45 to 50 cents — the menu didn't say whether it was a chocolate chip cookie as Sarah Chesney remembered, or an oatmeal cookie as Theo. Packard recalled. But instead of a cover which read "Kelso Coffee Shop," the new issue read simply "Union Pacific Coffee Shop," intended apparently as a generic menu to be used at all remaining Union Pacific restaurants. The railroad would thus save a small amount in printing costs by having the same cover and contents for all, instead of an individual cover and printing code inside for each. The same 1982 photograph decorated the front of the new 1983 menu.[315]

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313. Original breakfast menu for the "Kelso Coffee Shop" printed January 1982, donated to the National Park Service by Art Francis, 6616 Brandywine Way, Las Vegas, Nevada, 89107. This menu, incidentally, listed no fruit juices available for breakfast, although the 1969 and 1971 menus had listed "Chilled Juice" at 30 cents, without specifying what kind of juice it was.

314. R.E. Irion, Salt Lake City, November 24, 1982, to D.M. Wheeler, with copies to J.E. Sanford and A.C. Hallberg; D.M. Wheeler, Los Angeles, November 26, 1982, to D.R. Lyon, R.C. Klepper and R.E. Main, with copies to L.D. Smith and F.D. Wengert, Kelso General File, from January 1977, Los Angeles General Office, Union Pacific Railroad.

315. *Union Pacific Coffee Shop* menu, printing code "U.P. Club - 1-83" on page 3, inside, in the collection of Dennis Casebier, subject file on "Kelso," Mojave Desert Heritage and Cultural Association library at Goffs, California.

THE LAST "RUNNING REPAIRS" TO BE MADE IN THE KELSO DEPOT

Again towards the end of 1982, probably in mid-December, the Kelso Club manager prepared a list of "Running Repairs" that the railroad needed to make in 1983:

First Floor

1. Screens needed installed in back work rooms [sic]
2. Screens in rest[room] need repaired or replaced.
3. Wall cracked above deep sink. Health Dept. requires it to be repaired and painted with waterproof paint.
4. Exterior exit door needed in mgr's apt. Has no access to outside. Safety hazzard [sic].
5. Floor tiles in dishwasher area cracked and missing.
6. Floor tiles missing and broken in range (stove) area.
7. Tile in lobby missing and broken.
8. Screen torn * executive room #1.
9. Leak in lobby. Water running down front wall and thru ceiling causing wall and ceiling to crack

Second Floor

10. Plaster & paint needed rooms # 1, 2, 3, 7, 8, 9, 10, 16, 18, 19, 20, 21.
11. Floor covering torn and missing rooms # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 17, 18, 19.
12. Door drags floor room #10.
13. Windows broken rooms # 6, 16, 18, 19.
14. Screen missing room # 5.
15. Locks inoperable or missing rooms # 12, 18, 19, 20.
16. Emergency exit door at each end of hall will not lock.
17. Lockers in all rooms tip over. Need to be attached [to wall].
18. Shower door will not close tightly. Allows water on floor.
19. Bath & shower need repainting.
20. Roof leaking over room # 6. Wall stained & cracked.
21. Hallway plaster cracking and peeling.
22. Stair risers rotting. Steps give when weight applied.
23. Need sound deadener of some sort to allow employees in downstairs room to sleep.
24. Flooring in hallway torn, missing and cracked.
25. Electricians recomment [sic] reading lights be installed.
26. Transoms over doors ino[p]erable rooms # 4, 5, 9, 11, 12, 16, 17, 18, 19.

Stairwell

27. Windows in front of swamp coolers will not close.
28. Walls & ceiling need painting and patching.
29. Air conditioner faces (second floor) melted due to being installed over heaters. Need replacing.
30. Window in stairwell between lobby and basement will not lock. Security risk.

Basement

31. 4 windows cracked and/or broken in schoolroom.
32. Holes in wall where plumbing was removed not covered. Allows snakes, bugs, etc., entry.
33. Graffitti on walls needed painted over.
34. School room walls cracking, plaster falling due to water leak. Big hole in wall.

Exterior

35. Some cracking and peeling of stucco coating — especially rear of building.

It seems obvious that while some items in the previous years' running repairs had been fixed, many others had not. Wheeler had the list retyped, correcting a few of the misspellings, and sent it on to Division Engineer F.D. Wengert on December 27, 1982. Then he sent Wengert a succession of notes saying "Would appreciate your advising if any repairs have been completed at this time" (Feb. 1) or "Would appreciate your advising when each item is completed" (March 2 and again on March 30). Finally on May 9, 1983, Wengert sent a copy of the list back to Wheeler marked by hand in green ink, "Done" opposite items 1, 2, 3, 8, 12, 13, 14, 16, 17, 18, 20, 22, 25, 26, 27, 29, 30, 31, and 34. On June 10, Wheeler asked Wengert for an update on the remainder of the items, to which Wengert replied three days later, "Please be advised with the workload required of B&B forces at this time, will be unable to complete any additional work until a later date this summer," adding that he would advise as further repairs were completed. On September 27, 1983, Wengert advised Wheeler that all items noted on the list had been corrected, "with the exception of the painting." If any of the painting was done before January 1984 when the new year's list of "Running repairs" was compiled, nothing in the Union Pacific's Kelso General File indicated it. These were destined to be the last "running repairs" the Union Pacific Railroad would make in the Kelso Depot.[316]

For an unknown number of years, various Boy Scout troops occasionally had stayed in the Kelso Depot at the end of a hike during the week of school vacation ending on Easter Sunday. On February 24, 1983, Donald V. Renda, representing Boy Scout troops Nos. 173 and 756 of the Ventura Council wrote Division Superintendent Wheeler:

> Each year, during Easter vacation, we take a desert endurance hike that involves 25-30 scouts and leaders. We hike from Halloran Summit to Kelso, California, a distance of 32.5 miles in one day.
>
> In the past we have been able to stay in the Union Pacific Hotel in Kelso on the night that our hike ends. Needless to say, after such an arduous day, the Hotel is a necessity for the success of the hike.

316. R.E. Arnold, Manager, Commissary Services Department, Council Bluffs, Iowa, December 15, 1982, to Division Superintendent D.M. Wheeler, Los Angeles, enclosing two page list of "Running repairs" required at the Kelso Clubhouse for 1983; Wheeler to Division Engineer F.D. Wengert, December 27, 1982, enclosing retyped version of list; Wheeler to Wengert, February 1, 1983; Wheeler to Wengert, March 2, 1983; Wheeler to Wengert, March 30, 1983; Wengert to Wheeler, May 9, 1983, enclosing two page list of running repairs with those completed marked by hand in green ink; Wheeler to Wengert, June 10, 1983; Wengert to Wheeler, June 13, 1983; Wengert to Wheeler, September 27, 1983; all in Union Pacific Railroad, Kelso Gen. File, Vol. II.

> This year we were informed that the Hotel closes each Friday, Saturday and Sunday in an economy measure.
>
> In an effort to perpetuate this event we would respectfully request that a modification of the Hotel schedule be considered. We do not need the services of the cafe and we are willing to pay in excess of the going rate for you to keep the Hotel open.
>
> We have an eager group anticipating this years hike. In the past the hike has received considerable publicity in our local community and our behavior and conduct has always been praised by the Union Pacific staff in Kelso.
>
> We would need the use of the Hotel on April 1 staring at 3 PM until April 2 to 9 AM. Any consideration you could give in our behalf would be greatly appreciated.

Wheeler on March 11 ordered a letter written in response telling the scout troops leader that the restaurant would be opened and available to them on Friday evening for dinner, and Saturday for breakfast, and ordered the Kelso club manager to have an area cleaned out for the scouts. He ordered the scout leader told to have them bring sleeping bags for use in the building. Wheeler then talked with Renda on the phone, and on March 15 wrote him that there would be rooms available at $6.50 per person, and they would have the restaurant open Friday evening until 9 or 10 p.m. and for Breakfast Saturday. A total of 46 scouts and scout leaders made the hike, the weather was wonderful, and aside from the usual blisters and aches and pains, all had a "terrific" time. Renda wrote Wheeler afterward, "I can't say enough about the cooperation of your personnel. We had 32 stay in the hotel, and we all appreciated the shower and bed that night. The food was excellent, as usual, and the helpful, cheerful attitude of your personnel were greatly appreciated." Wheeler passed the letter, with his own congratulations, to D.R. Lyon and to Mr. Gene Ballard and Ms. Mickey Ballard at Kelso.[317]

On September 17, 1983, the scoutmaster of San Bernardino Boy Scout Troop No. 2, H.M. Dunn, wrote Wheeler, saying that his Scout troop had to perform a yearly service project, and this year had selected Kelso as the location in which to do it. They proposed to clean, scrape and paint the crosses in the cemetery, along with the fence surrounding it. Another scout troop had done it in the past, but apparently had stopped, leaving an opportunity for Troop 2 to do it.

> We have tentatively scheduled the outing on November the 19th and 20th of this year. We also would like to stay at the Kelso Station, as this not only would help us but allow for an exciting evening for the scouts. We will cook and prepare our own meals on the grounds insuring the area will look better than when we arrived.

317. Donald V. Renda, 5912 Colony Drive, Agoura, California, February 24, 1983, on the letterhead of the Ventura County Council of the Boy Scouts of America to David Wheeler; note, Los Angeles, 3/11/83, "DMW said, regarding letter to Boy Scouts . . . " author unknown; Wheeler to Renda, March 15, 1983; Renda, April 14, 1983, on letterhead of Westlake Securities, Inc., of Thousand Oaks, to Wheeler; Wheeler to D.R. Lyon, Mr. Gene Ballard and Ms. Mickey Ballard, the latter two at Kelso. One wonders if Mickey Ballard were Gene Ballard's daughter. The Union Pacific customarily used husband-wife teams as club managers/staffs, but Wheeler referred to Mickey Ballard as "Ms." rather than "Mrs." Still, she might have been his wife. Political correctness can complicate historical investigation.

Dunn told Wheeler than the visit would involve about 25 scouts, plus ample adult supervision including himself. Wheeler replied to Dunn approving the request and directing him to get in touch with D.R. Lyon to set up final arrangements.[318]

Again in 1984, Ventura scout leader Donald V. Renda wrote the railroad, this time to the new division superintendent in Los Angeles, G.R. Jensen, about the Easter hike from Halloran Summit to Kelso, asking for use of the Depot Hotel on the night of April 20 and morning of April 21. Jensen approved Renda's request, with the same arrangements as the previous year, and told him to contact Road Foreman of Engines H.M. Dunn if he had further questions. A total of 36 men and boys made the hike, 28 of whom stayed in the Kelso Club. Renda hoped they might do it yet another year.[319]

The upshot of it was that they did do it another year. Renda wrote again on February 27, 1985, to set up a hike using the hotel on the night of April 5 and 6. Some Union Pacific official penned a note at the bottom of Renda's letter to the effect that the Kelso Coffee Shop closed at 6 p.m. on the night of the 5th. Renda's original letter apparently went temporarily astray and the Union Pacific had to have his secretary send a copy, which she did on March 20. Jenson then wrote Renda that he had no objection to the scouts using the Kelso Club, and that he should contact Road Foreman of Engines W.M. Emery in Las Vegas regarding any further questions. This time 34 men and boys made the hike. Renda thanked Jensen on April 12, 1983, practically quoting his first letter about blisters and the cheerful staff, but also enclosing a "Kelso Desert Hike" pin the scouts had made up this year. Renda did not then know that this would be the last Scout use of the Kelso Club as its history as a Union Pacific facility would soon come to a close.[320]

IMPRESSIONS OF KELSO IN 1984

Mark Hemphill stopped at Kelso to photograph Union Pacific trains on March 14, 1984, and recorded his impressions of Kelso in his fine book on the Salt Lake Route in the diesel locomotive era:

> . . . a hot, dry wind has blown hard through Kelso all day. It sears your skin, cracks your lips, and fills your mouth with grit and your eyes with tears. Tumbleweeds bound over the tracks, carom off the bunk cars, and sail into the desert. A coal train comes down

318. H.M. Dunn, Scoutmaster, Boy Scout Troop 2, San Bernardino, September 17, 1983, to D.M. Wheeler; Wheeler October 11, 1983, to Dunn, cc: to D.R. Lyon and F.H. Bithell. There is a bit of confusion here: on Scoutmaster Dunn's original letter, someone, probably Wheeler, wrote in ball point pen: "HMD - OK with me - get together with DRL [D.R. Lyon] & set up same arrangements as before. After set up, talk to me." It turns out that there was a Road Foreman of Engines named H.M. Dunn. Was this a coincidence in names, two different men with the same last name and initials, or was "H.M. Dunn," the Scoutmaster in San Bernardino, also a Road Foreman of Engines, and if so, for which railroad? The Atchison, Topeka & Santa Fe Railway had large shops in San Bernardino. Or was there a second H.M. Dunn who was a Road Foreman of Engines for the Salt Lake Route in Yermo or Las Vegas?

319. Donald V. Renda, February 17, 1984, on the letterhead of Westlake Securities, Inc., in Thousand Oaks, California, to G.R. Jensen, received February 21; Jensen, February 21, 1984, to Renda; Renda, April 24, 1984, to Jenson; all in the Union Pacific Railroad, Kelso Gen. File, Vol. II.

320. Donald V. Renda, February 27, 1985, to G.R. Jensen; Dorothy Doerfler of Westlake Securities, Inc., March 20, 1985, sending Ms. Nancy Beam of the U.P.R.R. a xerox copy of Renda's original letter; G.R. Jensen, March 27, 1985, on letterhead of the Union Pacific System, to Donald V. Renda; Renda, April 12, 1985, to G.R. Jensen; all in Union Pacific Railroad, Kelso Gen. File, Vol. II. Renda's original letter must have been only temporarily mislaid by the U.P.R.R., for it is in the file along with the later xerox copy.

> Cima Hill into Kelso, its headlight just a golden glimmer in the dusty air. It is one of two 11,000-ton unit trains that have been working west from Las Vegas since early morning, their progress slowed by the crosswind, meets with several superior eastbounds, and the grueling 1.0 percent climbs from Las Vegas to Erie and from Desert to Cima. Their crews have worked up an appetite since morning. After leaving Cima each crew radioed in its order to the Kelso lunchroom. An hour later their sack lunches await them in a line on the lunchroom counter, each bag tagged with the name of a crewman. While the brakemen turn down the retainers, the engineers and conductors collect the lunches. After they leave, the day-shift counterwoman totes up her receipts while a retired rancher slowly sips a cup of coffee.
>
> At four o'clock the school bus arrives from Baker, drops off five children who live in the modular homes on the east side of the tracks, then turns around and hightails it back to Baker. While the first coal train pulls out, and the engineer of the second returns to his cab, brown bag in hand, the children huddle together for protection from the gale. The moment the caboose of the first train clears the depot, they look both ways, then happily run for home.
>
> At day's end the wind dies out. The cottonwood trees around the Kelso depot come alive with the noisy chatter of hundreds of birds. After dark the platform lamps come on, little pools of yellow light on the brick platform. Bats swoop and dip through the trees, homing in on insects that dizzily circle the lampposts. The swing-shift counterman props the lunchroom door open in hopes of a cooling breeze. His transistor radio broadcasts Hank Williams through the screen door into the calm desert night, and Jeannie Pruitt sings about her satin sheets for the ten-thousandth time. A few men from a maintenance gang enjoy a smoke on the steps of their bunk cars, then retire to bed. The pay phone on the depot wall offers a scratchy connection with the rest of the world. After a few rings an operator in Los Angeles answers, then pauses as you tell her your location, dumbfounded that big Pacific Bell has a pay phone identified only as Kelso #1.
>
> At 10 p.m. the coffee is still hot and the hamburgers are served up on UP Streamliner china. An eastbound stops with its caboose even with the depot to pick up its lunch, then throttles up for the climb to Cima. At midnight a westbound drops down Cima Hill. Its dynamic brakes wail in the distance for what seems like an hour. When the home signal at East Kelso waves it onward with a high green over two reds, its engineer kicks off the air and shuts off the dynamics. There is a momentary lull in the noise, then he pushes his throttle into power. The diesels gather their feet under them and shoot towards Kelso. A few minutes later the train slams past the depot like the thunderclap of Armageddon, jarring the roof tiles and rattling the window sashes in their frames. Then the train is gone, its clamor fading into the distance. A few minutes later the counterman clicks off his radio and turns off the platform lights. . . .

Hemphill took a color photo of the Lunch Room which showed that its walls and counter top were a pale yellow or cream color, the door and window frames a pale green. The backless round stools had brick-red tops, steel sides, posts, and round bases. Part of the counter had a gray strip along the edge. The kitchen walls were pale green with slightly darker green trim on door and window frames. The restaurant would last only a year and three and a half months more.[321]

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321. Hemphill, pp. 76-77. The Hemphill photo showed what appeared to be a rancher having coffee at the counter.

During its last years of operation, for a period of time a wild range bull showed up at Kelso every evening to graze on the green lawn. The cook and waitresses in the cafe were afraid of him, because he would charge anyone he saw, so while the bull grazed, they all stayed inside or used the rear exit if they had to leave.[322]

The Closing of the Kelso Lunch Room

From Union Pacific offices in Council Bluffs, Iowa, on January 6, 1984, R.E. Arnold had submitted to the Division Superintendent in Los Angeles a lengthy list of "Running Repairs" to the Kelso Club required that year:

First Floor

1. Walls Cracked, paint peeling in the work room, needs plastering, and painting.
2. Floor tile missing, and cracked in dish-washing area, need to be replaced.
3. Floor tile missing, and cracked around range area, need to be replaced
4. Wall in the cooking area and lunch room cracked, and peeling, need to be palastered [sic], and painted.
5. Tile in the lobby cracked, and missing, needs to be replaced.
6. Rugs in downstairs area need to be steam cleaned.
7. Out side exit door needed in manager's quarters, for safety regulations.

Second Floor

8. Rooms Number 1, 2, 3, 5, 6, 7, 8, 22, 24, 27, and 29 need [? patching ?] and painting.
9. Doors handles [sic] needed on room number 2, And 9.
10. New screens for rooms number 5, 6, 12, 14, 17, and 19.
11. New blinds needed for rooms number 6, and 11.
12. Plaster, and paint rooms number 1, 2, 3, 5, 6, 7, 8, 10, 11, 14, and 21.
13. All of the upstairs needs new floor covering.
14. Upstairs bath rooms, And showers floors need painting.
15. Door exits on both ends of the hall need to be made air tight, To keep out the sand, and cold air.
16. Some kind of floor covering for the hall, To keep down the sound. Also all of the stairs.

Basement

17. [There was no item 17.]
18. All of the wall need plastering, and painting.
19. All of the floors need painting.
20. School room walls need to [be] plastered, and painted.
21. New blinds needed for all of the windows.

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322. Gordon Chappell, Trip Diary, Trip to Mojave National Preserve, November 12-16, 1996, reporting a convesation with two Union Pacific signal maintainers who stopped to see what he was doing there.

Photo 39: The Lunch Room, ca. 1960, showing the 1949 and 1955 modifications, including the lunch counter, stools, and doorway to the kitchen. Photo by Art Francis.

Although it was not apparent at first, and although this inventory of needed repairs was much shorter than the list of 51 items submitted for repair in 1981, nevertheless this list of maintenance work on the Kelso Depot, restaurant, and employees' hotel brought its history as a Union Pacific Railroad facility to an end. Division Engineer F.D. Wengert responded on January 17, 1984, to that list of work: "Please be advised that the B.& B. Department is heavily committed to capital improvement projects and replacement of bridge decks (7) on Second Subdivision." He said that the work on that list represented about six weeks' work, "and cannot be undertaken in the near future."[323]

Division Superintendent Jensen raised the issue again with Wengert on March 13, 1984: "Can you now furnish status in connection with the above?" On March 27, Wengert replied, "All B&B in this area are heavily programmed to replace bridge decks which must be done before hot weather." He said that furthermore, his B.& B. forces had just been reduced by four carpenters between Yermo and Las Vegas. "In addition, all gangs must concentrate on capital expenditure work or be cut off [laid off] in accordance with instructions from the Chief Engineer," he told Jensen; "With these problems it is doubtful that any progress can be made at the Kelso Clubhouse in the near future."

323. Union Pacific Railroad, Kelso General File, Vol. 2; F. D. Wengert, January 17, 1984, to Division Superintendent G.R. Jensen. The remainder of the correspondence cited, supra, regarding closure of the Kelso Depot is from this file. The file covers a period from about 1960 to 1988; the earlier Vol. 1, which would be invaluable, has not been found.

Division Superintendent G.R. Jensen read this letter on April 1, 1984, and in response, penned on his UP scratch pad a handwritten note to "FDW" (F.D. Wengert): "Why do we need this building? Can we close a part of it down, i.e. 2nd floor?"

That opened the floodgates! Wengert responded on April 11 with a two page letter to Jensen with copies to seven other Los Angeles and Salt Lake Railroad civil engineers and to R.H. White of the Law Department:

> As explained to you in my letter of March 27, 1984, we have just encountered a force reduction to our B&B Gangs. The remaining forces must concentrate on capital expenditure work due to critical shortages of operating expense funds, which required work at Kelso must use to [be] accomplished.
>
> In the future the Carrier [railroad] must look to every possible way to eliminate *terminal* buildings in order to reduce our current maintenance costs and subsequent use of operating expense funds.
>
> Therefore, I recommend that the Kelso Clubhouse in its entirety be closed and demolished. By copy of this letter to Mr. R.M. White, I am requesting him to provide information concerning whether this building has been registered as an historical monument.[324]
>
> As you are aware, due to the age of this building, it is becoming more and more of a maintenance problem. In addition, because of its location it is convenient for Maintenance of Way forces to drop in for a cup of coffee and the acccompanied [sic] conversation when they should be out in the field doing their thing. I am also aware that your train crews hassel [sic] constantly with your dispatchers regarding lunch breaks at Kelso. It appears that it would be in the best interest of both your trainmen and my Maintenance of Way forces to eliminate this constant problem. I am sure at first it may be an inconvenience to us not to have this facility, however, all wounds eventually heal and the scarred tissue is usually tougher than the original.
>
> I have already received the concurrence of our Chief Engineer as far as our Department is concerned in this matter, and strongly recommend that we proceed on this basis.[325]

After perusing Wengert's impassioned letter, Jensen on April 23, 1984, summarized in three brief paragraphs what Wengert had said in two pages, and wrote four other U.P. officials for their recommendations. From Las Vegas, D.R. Lyon and F.H. Bithell responded in support of closing and demolishing the Kelso depot. They said the railroad had no agreement with the brotherhoods

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324. This is the second Union Pacific official to raise the question of whether the Kelso Depot has been listed as a historic building. As up to this time there seems to have been almost no public mention of giving the depot official recognition as a historic resource, probably in part because of its remoteness and relative obscurity, the fact that two U.P. officials raised the issue, apparently in the throes of a managerial fear that it might have acquired such status which might get in the way of their plans to eliminate it, is curious. It is difficult not to conclude that these two officials *themselves*, familiar with the building, recognized that it was something special architecturally and historically.

325. F. D. Wengert to G.R. Jensen, Los Angeles, April 11, 1984, with copies to District Engineer G.F. Hite, Salt Lake District, Engineers G.R. Groves, J.L. Peterson and D.R. Gallegos, Las Vegas, and D.T. Reeder, F.C. Bruner, J.W. Almquist and R.M. White, Los Angeles.

requiring it to operate an eating facility at Kelso, which means that at some point since 1971, that provision must have been omitted from later contracts with the brotherhoods. Anyway, they said, a ten-man work train dining car would accomplish the same objective, Work train crews could be tied up at Las Vegas, Yermo, or, particularly since most maintenance was done with off-track motor vehicles now, even at Baker, 35 miles from the railroad, since Baker had plenty of motels. Similarly, railroad officers could stay at Baker, Las Vegas, or Yermo.[326]

From Salt Lake City, C.H. White responded on May 3, "This should have been done 15 years ago. Our sack lunch expense during month of January, February and March was $9,589.80." He went on to say that if officers' quarters were allowed to remain, they could be refurbished also for crews used in work train service with a tieup point at Kelso, and arrangements could be made with the signal maintainer or section foreman to provide meals and lunch (but he hadn't asked those individuals whether they could provide that service.)[327] D.B. Jenks, Jr., responded in Los Angeles much along the line of the others.[328] Joe Gray reported to Jensen and seven others on May 10 that neither the Real Estate Department nor the Law Department had any indication that the Kelso Clubhouse had been designated any kind of historic building or monument.[329] Jensen then wrote General Manager R.E. Irion in Salt Lake City on May 17, 1984, repeating much of what he had been told and adding that discontinuation of the sack lunch program at Kelso could save $30,000 per year, getting rid of the Kelso building would avoid $25,000 to repair and rehabilite the facility, and closing it further would eliminate $80,000 per year in wages for DC&H employees. "I have the support of local Engineering and Operating officers in recommending the abandonment of this facility," Jensen told Irion, " although I do foresee considerable opposition from the UTU [United Transportation Union] and the BLE [Brotherhood of Locomotive Engineers]. This for your consideration."[330]

In June, it was decided that Jensen would discuss the matter with both the general chairmen and the local chairmen of the unions, telling them that the Union Pacific could no longer afford to subsidize the meal operations not only at Kelso but also at Caliente, Nevada.[331] There is no indication that Jensen did meet with brotherhood officials at that time.

On September 12, 1984, the Engineering Department prepared a drawing, No. B-3345, for "Proposed Retirement of Clubhouse" at Kelso, and on October 4, Jensen sent it to Irion in Salt Lake City. The drawing called for removing the Kelso Depot and club, the brick, concrete and gravel station platforms, the store house and other buildings behind the club house (the "U"-shaped complex plus a portable house west of it), a section tool house and motor car house east of the depot, and south of the tracks a storage house and platform, possibly the old freight house. Jensen proposed fencing the lawn, trees and shrubs in front of the depot as a small park for U.P.

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326. D.R. Lyon and F.H. Bithell, Las Vegas, May 3, 1984, to Jensen.

327. C.H. White, Salt Lake City, May 3, 1984, to Jensen.

328. D.B. Jenks, Jr., Los Angeles, May 7, 1984, to Jensen.

329. Joe S. Gray for R.M. White, Los Angeles, May 10, 1984, to G.R. Jensen.

330. Jensen to Irion, May 17, 1984.

331. R.M. Chapman to R.E. Irion, June 26, 1984.

employees living in Kelso. He had also received an estimate from a contractor of a cost of $36,000 for removal of the facilities.[332]

One Union Pacific official in Las Vegas opposed demolishing the Kelso Clubhouse. "I personally feel that the Kelso Clubhouse facility should be left standing for hotel usage by trainmen and enginemen in emergency in light of the flooding problems we have had in the past," R.C. Klepper wrote Jensen on October 29, 1984. "Even though Baker, California, is not that far away, we may not be able to get motel rooms for our employes, and travel time could be a factor as well," he added.[333]

Meanwhile, Jensen had asked D.B. Jenks, Jr., in Los Angeles, to discuss the proposal to "retire" the Kelso clubhouse facility with the local "brotherhood" or union representatives of the trainmen (conductors and brakemen), enginemen (engineers and firemen), and firemen (a separate union), getting their reactions. Two, R.H. Lynder and L.R. Tyler, were not opposed. R.J. McIntyre was concerned about meals, but apparently accepted the possible solution of the railroad providing box lunches from Las Vegas on westbound trains.[334]

Meanwhile, two other matters required attention in November: first, removal of asbestos from the heating plant in the Kelso Depot (though despite correspondence and estimates from a contractor, apparently it was not done before the depot lunch room closed); second, the county sanitation department wanted the hood over the cooking area in the Lunch Room cleaned.[335]

On October 25, 1984, R.E. Irion in Salt Lake City sent Jensen in Los Angeles a copy of a letter a U.P. official in Omaha had prepared on October 8, evaluating the financial effects of closure of the Kelso Lunch Room. In response to a query from J.R. Davis, J.H. Rebensdorf had reported:

> The results of our analysis show that either discontinuing the meal service or continuing the meal service utilizing a four-in-one diner car will be less costly that rehabilitating and operating the current clubhouse facility. Based on our review of the operating costs associated with each alternative, discontinuing the meal service is the least costly alternative for the Company. In order to assess the cost to the Company of continuing to provide meal service to train crews, we allocated the estimated costs of operating the four-in-one diner car ($110,650 per year) to the estimated number of meals to be served to train crews (10,200 per year based on recent experience). The resulting estimated cost per meal is approximately $10.85. Since the crew members currently pay approximately $3.25 per meal, the net cost to Union Pacific is approximately $7.60 per meal (or about $77,500 annually).

Rebensdorf also apparently provided detailed figures on running the clubhouse with a husband and wife team providing 24-hour on-call meal service, but did not cite figures in his letter. "In summary," he said, "we recommend that the current Kelso clubhouse and restaurant be closed in

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332. Jensen, October 4, 1984, to R.A. Irion, Salt Lake City, enclosing Drawing No. B3345.

333. R. C. Klepper, Las Vegas, October 29, 1984, to G.R. Jensen.

334. Jensen, October 22, 1984, to Jenks; notes on top of a copy of the aforementioned letter.

335. G.J. Clark, Los Angeles, November 20, 1984, to F.C. Bruner; F.D. Wengert, November 19, 1984, to D.T. Reeder; F.D. Wengert, December 3, 1984, to G.R. Jensen.

order to avoid the costs of rehabilitating the facility and at least reduce the ongoing costs of providing meal service. In addition, we also recommend that meal service to crews at Kelso be discontinued unless you believe that an adverse impact on employee morale would result. On October 25, 1984, Irion asked Jensen to furnish comments and recommendations after reading Rebensdorf's letter, and when he got no response, asked Jensen again on November 16, but there is no evidence Jensen ever did respond.[336]

The issue continued to drag on into 1985. In a letter no longer on file, on March 20, 1985, Vice President of Operations J.R. Davis in Omaha inquired of General Manager R.E. Irion in Salt Lake City about progress. But now politics had intervened. Irion told Davis on April 17,

> I am very cognizant of the delays which have occurred in affecting [effecting] the closure of this facility, but I feel they have been necessary for labor relations and political reasons.
>
> As you know, Senator Hickey of North Las Vegas has taken exception to almost every action involving labor relations in the Las Vegas area, including some imagined events, as an excuse to oppose our efforts toward repeal of the Nevada Full Crew Law, as well as the threat of mandatory caboose legislation. It is my intention to close this facility [which of course was in California, not Nevada] as soon as the Nevada Legislature adjourns which should be within the next three to four weeks. With Legislative matters at a critical stage I do not feel it is appropriate to take any action at this time which might be used as an excuse for future action by Senator Hickey.[337]

Then on April 24, 1985, Union Pacific President Arthur G. Flannery received a letter from the local Congressman, Jerry Lewis:

> In the past several weeks I have been contacted by constituents expressing concern over the fate of the Kelso (California) train depot. It is their understanding that your organization is planning to demolish this structure and they have asked me to express to you their distress over such action being taken.
>
> The history and development of the Eastern Mojave is intertwined with this beautiful and unique piece of architecture, Mr. Flannery, and it is my sincere hope that my constituents fears are unfounded.
>
> If Union Pacific Railroad, however, is indeed considering such action, I wish to add my voice in requesting that you reconsider such a decision.[338]

The one immediate effect of Congressman Lewis' letter was to uncouple the issue of *demolishing* the depot from the issue of closing the building down and ceasing operation of the Lunch Room.

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336. J. H. Rebensdorf, Omaha, October 18, 1984, to J.R. Davis, forwarded by R.E. Irion October 25, 1984, to G.R. Jensen.

337. R.E. Irion, Salt Lake City, April 17, 1985, to J.R. Davis, Omaha.

338. Member of Congress Jerry Lewis, April 16, 1985, to Arthur G. Flannery. It is stamped as having been received on April 24, and Flannery directed J.R. Davis to reply. (The letter, incidentally, was misaddressed to 1460 Dodge Street, Omaha, instead of 1416 Dodge.)

Davis had asked Irion for some information prior to preparing his reply to Lewis, and Irion wrote on May 12, 1985:

> We are still utilizing that building, and it is my thought we will leave it intact for a while after we cease operations unless vandalism poses a severe problem when the building is vacated. Most of the expressed "concern" is from various outdoor enthusiasts who would like to use it as a clubhouse when in the desert with their ATV's, 4-wheelers, dune buggies and motorcycles. Due to the remote location, I anticipate difficulty in finding a responsible organization to take over this building and relocate it.
>
> The building needs considerable maintenance, which will be an ongoing requirement; also the furnace system contains asbestos and will have to be corrected. The building is 80 feet from centerline of main track and I am assuming our policy will be the same as at other stations, where we have required building be removed from our property by new owners.
>
> I would suggest Congressman Lewis be advised the building will be available for sale and removal in the future after we cease using it for our operations.[339]

Thus the Congressman's letter did move the Union Pacific as far as suspending their plans to demolish the building immediately; they would close it, but they would not demolish it.

Meanwhile, word of the closure had leaked into the press. The *Desert Star* in Needles published an item which on April 25 the *Baker Valley News* quoted: "The Union Pacific Railroad has decided to remove the pleasant hotel-restaurant at Kelso, which for many years served not only the Providence Mountains area [sic]. The hostelry is located in what best can be described as an oasis because the green and white building blends in well with the lush shrubbery and palm trees surrounding it." The *Baker Valley News* then went on to say, "It would be nice if the Bureau of Land Management could purchase this historical old building for some sort of Desert Interpertive [sic] Center or Museum." Thus the little local sheet put out in Baker, California, seems to have been the first to suggest acquisition and preservation of the Kelso Depot by a federal government agency.[340]

During May or June the Nevada legislature must have recessed, for on June 12, 1985, R.E. Irion told the Commissary Services Department, and by copy Division Superintendent Jensen and others, "You may close the clubhouse at Kelso effective as of July 1." He added that Jensen should arrange to give notice to the employees in the clubhouse.[341]

In Los Angeles on June 19, 1985, Union Pacific California Division Superintendent G.R. Jensen signed Circular No. 52 to "All Employes" [sic] California Division:

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339. R.E. Irion to J.R. Davis, May 12, 1985.

340. "A Little Bit Of History Disappears," *Baker Valley News*, Vol. IV, No. 4, April 25, 1985.

341. Irion, Salt Lake City, June 12, 1985, to Mr. F. Bealer, Commissary Room, Council Bluffs, with copies to Jensen, A.C. Hallberg, and P.S. Blood, superintendent of the commissary depot at Ogden, Utah. On June 19, R. C. Irion wrote K.B. Palfreyman, General Chairman of the United Transportation Union chapter for conductors and trainmen, C.L. Barrett, Jr., General Chairman of the U.T.U. chapter for Enginemen, and E.A. Hudgens, General Chairman of the Brotherhood of Locomotive Engineers, "Pursuant to our phone conversation this is to advise that we are closing the restaurant at Kelso, California, effective July 1, 1985, due to the very large deficit incurred in this operation over the past two years and the need for repairs and renovation to meet various building requirements."

> Effective July 1, 1985, the Clubhouse at Kelso, California, is closed.[342]

Thus at midnight on June 30, 1985, after 61 years, 3 months and 17 days, the last official functions of the Kelso Depot, employees hotel and restaurant came to an end, when the Lunch Room closed permanently.

THE EFFORT TO PRESERVE THE KELSO DEPOT

In 1985, the worst fears of Union Pacific management that someone might want to preserve the Kelso depot as a historic structure came to pass. Late in 1984 the U.P. had applied to the San Bernardino Planning Commission for approval for some sort of labor camp facilities at Kelso, and the map accompanying the application covered all the railroad lands at Kelso including the depot. On February 26, 1985, the county held an environmental hearing on the proposal, and the county environmental officer told the railroad representatives that they would find no environmental impact from the proposed camp. Shortly thereafter, Union Pacific attorney R.M. White received a telephone call from Mrs. H. Marie Brashier, representing "various charitable organizations in the desert," who said that she had heard a rumor that the railroad planned to demolish the Kelso depot. She said she viewed the building as a valuable historic building that she wanted the Union Pacific to preserve, but if the railroad would not preserve it, she hoped to organize others to preserve it.[343]

Word must have flashed around southern California like sheet lightning. Early in June, the same San Bernardino County Planning Commission environmental officer who foresaw easy approval of the railroad's labor camp proposal, Chuck Bell, notified White that he intended to reopen the hearing to discuss the historical nature of the depot and requests he had received from the public asking that it be preserved. Around June 24, the chief desert planner for the county called White, asking if the U.P. would enter negotiations with the county and other groups with a view to preserving the depot or allowing others to preserve it. The county held an additional environmental hearing on June 25, and to the railroad's frustration, the hearing was not concluded but "continued" indefinitely.[344]

Division Superintendent G.R. Jensen was among those in the railroad most frustrated. He wired General Manager A.W. Rees, Solicitor White and three other officials on July 12, 1985,

> As you are aware, this facility was vacated on July 1, 1985, and is no longer occupied by DC&H, B&B or Water Service employes. As a result of the isolated location of this

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342. Circular No. 52 was posted in all circular books for employees to read; two copies went to officials in Salt Lake City and one to the Union Pacific Passenger Depot there (which still stands), probably for posting; 23 went to nine officials in Los Angeles; 3 went to Yermo, one to an official in Milford, Utah; one each went to station agents at Caliente, Henderson, and Las Vegas, Nevada; Cedar City and Milford, Utah; City of Industry, Colton, Long Beach, Mira Loma, Moapa, San Bernardino, Victorville and Yermo, California; and one went to an official of the Harbor Belt Line in Los Angeles. See also, Hemphill, pp. 74-75; Signor, p. 204.

343. R.M. White, Los Angeles, June 26, 1985, "Personal and Confidential," to A.W. Rees, Salt Lake City, with copies to J.S. Gray, Sacramento, G.R. Jensen, Los Angeles, and Wayne K. Horiuchi, Sacramento, Union Pacific Railroad, Kelso Gen. File, Vol. II.

344. Ibid., p. 2.

Photo 40: View westward along the Kelso station platform, ca. 1985. Photo by Mary Lu Moore.

> facility, believe that this facility is now an easy target for vandalism, unauthorized entrance, and a legal liability.
>
> As stated in my letters of May 17, 1984, and October 4, 1984, we again recommend that this facility be demolished or removed from our property at the earliest possible date.
>
> As previously stated, this building contains asbestos and is in need of considerable maintenance which would preclude its use by any interested party without considerable capital investment which the Union Pacific Railroad is in no position to make.

As time would tell, he was already too late.[345]

According to Union Pacific Attorney R.M. White, Chuck Bell, the San Bernardino County environmental officer

> was adamant that he planned to take a personal interest in this project and wanted to begin discussions with appropriate Union Pacific officials. He plans to use this proceeding or whatever other environmental review might be required of an application for a demolition permit for the depot in his efforts to preserve it. He had had comments from an officer of the BLM and letters from other interested citizens that he will send to me. He was told that Congressman Lewis was approaching our railroad officers in Washington D.C. in an effort to support the move to save the building.

White proposed trying to separate the depot issue from that of the labor camp, revising the map with the labor camp proposal to remove the depot and its grounds from the area proposed for the labor camp. He thought that might get the labor camp proposal approved. But he noted that the county environmental officer

> still intends to acquire jurisdiction over the depot when the Union Pacific applies for a demolition permit. He expects the building and safety officer to require an environmental review of the demolition permit and he can conduct his negotiations on the authority of that review, rather than the current review of the application for site approval.

The whole issue had sort of "blindsided" White, who had known nothing of the proposed closure of the Kelso depot.[346]

Meanwhile, on June 24, 1997, Judy Durand, the Director of Washington Affairs-Transportation for the Union Pacific Corporation at One Lafayette Center in Washington, D.C., answered Congressman Lewis' April 16 letter to President Flannery. "Please be assured that if the depot is retired in the future," she told Lewis, the railroad would cooperate with those interests who wished to acquire the building. "However, because of the depot's proximity to Union Pacific's railroad tracks, it would be necessary, for safety reasons, for any group wishing to acquire the depot to

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345. "GRJ," telegram, July 12, 1985, to A.W. Rees, Salt Lake City, with copies to J.S. Gray, Sacramento, W.K. Horiuchi, Sacramento, F.B. Wengert, Los Angeles, and R.M. White, Los Angeles; Union Pacific Railroad, Kelso Gen. File, Vol. II.

346. Ibid.

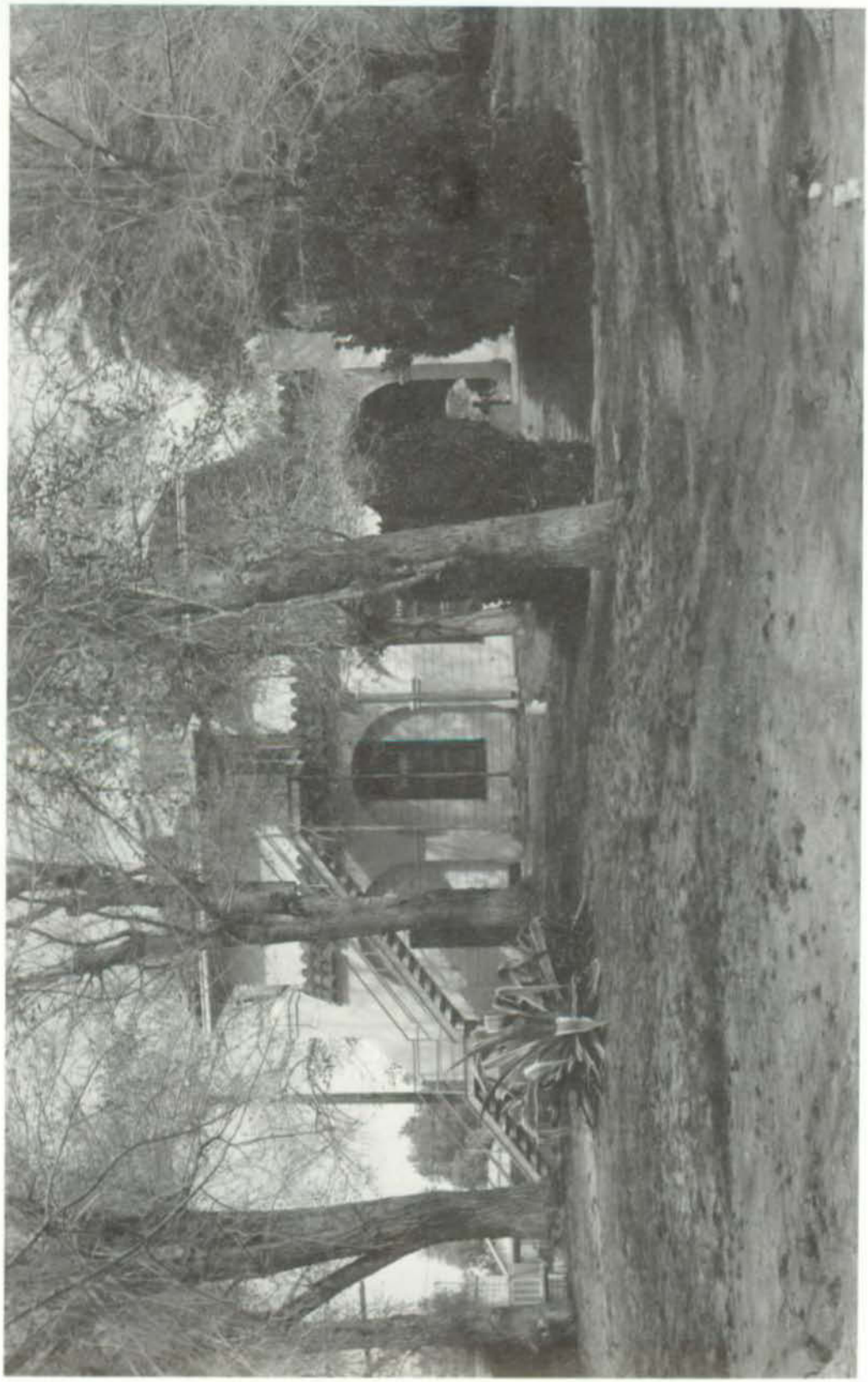

Photo 41: Landscaping at west end of Kelso Depot, ca. 1985. Photo by Mary Lu Moore.

Photo 42: View westward along the arcade, ca. 1985. Photo by Mary Lu Moore.

move it to a location off the railroad right-of-way." She added that the building needed considerable maintenance and removal of asbestos in the furnace system.[347]

After closing the depot on July 1, 1985, the railroad shut down watering the lawns, shrubs and trees at Kelso, and they and the cottonwoods behind the depot began to dry up and die. In short order, Bureau of Land Management District Manager Gerald Hillier contacted the railroad's division superintendent, asking that watering be resumed, which G.R. Jensen apparently ordered done. BLM Area Manager Everell Hayes in Needles wrote Jensen on July 17, thanking him, and telling him that on Monday, July 22, 1985, a meeting would be held in the Barstow Fire Station Training Room in Barstow of people and organizations interested in saving the Kelso depot, inviting the railroad to send a representative if they wished. Hayes also told the U.P. he would have BLM rangers regularly check the closed depot to help protect it.[348]

Meanwhile, a rumor had gone around that the railroad planned to rip up the vitrified brick station platform. The preservationists again contacted Congressman Lewis, who both wired and had one of his staff phone Union Pacific Chairman of the Board John C. Kenefick in Omaha, asking the railroad to "cease and desist" until interested parties could come to some agreement regarding the Kelso Depot and its grounds. Kenefick wired back that "Pursuant to your request, we will do nothing at the Kelso depot site until all interested parties are in agreement."[349]

While all of these maneuverings proceeded, Bob Ausmus fired his shot. A local rancher and owner and operator of the general store at Cima, Ausmus had trained as a journalist, a career aborted by World War II during which he served in the Merchant Marine. After the war, he had taken on management of the family ranch and the Cima store, but he had recently begun satisfying his long-deferred journalistic ambitions by writing a regular weekly column for the tiny *Baker Valley News*, published in Baker, California. An ardent advocate of saving the Kelso Depot, Ausmus now typed a long, largely accurate article (except for the old saw about a mallet locomotive that was too long for the nonexistant Kelso turnable) which appeared on July 14, 1985, not in the little local sheet put out from Baker, but in the Las Vegas *Review Journal's* prominent Sunday magazine, *Nevadan*, under the headline "Is nostalgic Kelso Station closed for good?" The *Review-Journal* even provided a front page boxed headline, "Can progress, culture agree on threatened Kelso railroad depot?" Exactly three weeks later, on Sunday, August 4, the San Bernardino *Sun* picked up the gauntlet with an article by Staff Writer Chuck Mueller entitled "Drive on to save railroad depot in remote High Desert town." Two weeks and a day later the *Los Angeles Times* published Charles Hillinger's article, "Desert Hamlet Hopes to Derail Plan to Raze Depot." That appeared on Monday, August 19, 1985. Together, the three newspapers had pretty well blanketed southern California and southern Nevada with the story of the Kelso Depot and efforts to save it.

Sadly, while all of this was going on, at Kelso, railroad employees began hauling off railroad collectables, such as most of the upstairs furniture, the oak chandelier from the downstairs lobby,

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347. Judy C. Durand, Suite 600 South, One Lafyette Center (the letterhead misspelled "Lafayette"), 1120 Twentieth Street, N.W., June 24, 1985, on the letterhead of the Union Pacific Corporation, the holding company, to Congressman Jerry Lewis; Union Pacific Railroad, Kelso Gen. File, Vol. II.

348. Everell G. Hayes, Area Manager, Needles Resource Area, Bureau of Land Management, 901 Third Street, Needles, California, July 17, 1985, to Division Superintendent Jensen; Union Pacific Railroad, Kelso Gen. File, Vol. II.

349. Telegram, Jerry Lewis to John C. Kenefick, July 19, 1985; Union Pacific Telegram, J.C. Kenefick, Omaha, July 19, 1985, to Congressman Lewis; Union Pacific Railroad, Kelso Gen. File, Vol. II.

the large train schedule board, and various historic objects such as an engineer's oil can and documents exhibited in the display case in the lobby, not to mention whatever railroad papers and records the company itself had left in the building.[350]

The Local Effort to Preserve the Kelso Depot

Even before the closing of the depot lunch room, the desert community could see the handwriting on the wall, and a group of local citizens decided to lobby the Union Pacific to preserve, rather than demolish, the Kelso depot. As mentioned, they met in the Barstow Fire Station's conference room on July 25, 1985, and created an organization, after some discussion adopting the name "Kelso Depot Fund" as a relatively neutral and non-threatening name. Those present included Bob Ausmus of Cima, Gerry Hillier, District Manager of the Bureau of Land Management from Riverside, Everell G. Hayes, Area Manager of the of the Needles Resource Area of the Bureau of Land Management from Needles, Mrs. H. Marie Brashear of Fontana, representing the National Outdoor Coalition, Chuck Bell of Lucerne Valley, San Bernardino County's environmental officer, and environmentalist Peter Burk of Barstow of the Citizens for Mojave National Park. Marie Brashear volunteered to enlist the support of the off-road-vehicle community, Peter Burk promised to try to enlist the environmental community, and Chuck Bell said he would get San Bernardino County to assist. Initially, they had 90 days to get a plan together. At a second meeting in Barstow, on August 13, 1985, Union Pacific special representative Wayne K. Horiuchi from Sacramento explained how the local community in Caliente, Nevada, had helped to save the Caliente depot, also about to be demolished. Instead it became the city hall, and formed an inspiration for the people who wanted to save the Kelso depot, just as its original design had inspired the architecture of the Kelso Depot.[351]

A lot of the discussion on August 13 was on how to put together a proposal from the Kelso Depot Fund to the Union Pacific requesting donation of the depot. Through Congressman Lewis, the group had obtained a commitment from Union Pacific Chairman John Kenefick to delay any consideration of demolition of the building until at least October 1, 1985. Kenefick wanted the group to not delay advancing a proposal to the U.P., and that the group develop a plan to address long term use of the depot so that it would not become a visual blight on the community and the railroad. Inexperienced at this, the group simply couldn't meet the October 1 deadline, and BLM's Everell Hayes phoned Wayne Horiuchi, the railroad's lobbyist in Sacramento who was playing a key role in the negotiations, asking for an extension of the deadline to November 4, but although Horiuchi recommended granting the extension, Union Pacific General Manager Ab Rees in Salt Lake City wanted to make it October 15, a mere two more weeks. On October 17, Kelso Depot Fund President H. Marie Brashier sent Kenefick the group's three part proposal: the proposal itself,

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350. Burk, pp. 8, 9. One of the original Kelso baggage carts is in the museum at the Goffs Schoolhouse and Dennis Casebier has promised to turn it over to the National Park Service when the NPS is ready to exhibit it. Verbal communication to the author and other NPS employees during a meeting at the Goffs Schoolhouse on Friday, November 15, 1996. Casebier had bought it from another party who had obtained it in Kelso.

The first that BLM official Everell "Butch" Hayes heard of the threat to the Kelso Depot was when Bob Ausmus, the rancher and storekeeper at Cima, called Hayes one July day in 1985 to complain that Union Pacific train crews were "looting" the Kelso Depot of its historic objects and documents, the Train Bulletin board, and just about any and every memento they could lay their hands on. [Telephone] Message Record, Gordon Chappell, interview with Everell Hayes, with the Bureau of Land Management at P.O. Box 12000 in Reno, Nevada, 89520-0006, 702 785-6479, August 21, 1995.

351. Burk, pp. 9-13; Ausmus, pp. 47-63.

how the group planned to implement the proposal, and a background statement. Basically it was a proposal for the railroad to donate the building — the Kelso Depot Fund would acquire it for one dollar, leasing the grounds under and around the depot for a dollar per year. It would repair and rehabilitate the depot, seek relocation of the post office into it, seek location of some BLM offices in it, place a small museum in it, use it for various university study groups, symposiums, workshops, etc., and take various other steps. They proposed to refurnish and reopen the Lunch Room, and to reopen some rooms for lodging, the latter not to be advertised. Why, even the Union Pacific, they proposed, might have some of its employees lay over there. They enclosed a statement of rent they hoped to reap out of the building, and a list of other potential sources of income, mostly from groups that supported preservation of the building.[352]

John C. Kenefick, meanwhile, on October 28 told Congressman Lewis,

> We are agreeable to donating the structure in place with a lease of the underlying property for a nominal consideration to an IRS-qualified organization (San Bernardino County, the California Department of Parks and Recreation, or a similar entity) which can provide reasonable assurances that the depot will be renovated and satisfactorily maintained in good appearance. In the interest of safety, however, the donation would not include the brick platform which is located immediately next to our main line.

He went on to say that he had written Mrs. Brashear that he had received the Fund's proposal, and that General Manager A.W. Rees in Salt Lake City would contact her to work out the terms of an agreement which would be compatible with railroad operations and the public interest.[353]

Some time in the next week and a half, between Kenefick's October 28 letter and November 7, unbeknownst to almost all the "players" in this drama, the Kelso Depot nearly ended up demolished. Division Superintendent G.R. Jensen, never having been sent a copy of Kenefick's letter, a prime case of the left hand of a company not knowing what the right hand was doing, continued to arrange for demolition of the Kelso Depot. It was not a simple matter of having a company bulldozer turn it into a pile of rubble; the depot had to be demolished, the debris had to be hauled off and disposed of in a pit somewhere on U.P. property (quite a number of truckloads), the concrete basement floor had to be perforated to permit drainage, the concrete basement walls and foundations had to be excavated and dug out, and the resulting hole had to be filled in with clean desert soil. A project beyond the usual capabilities of the B.& B. Gang, Jensen and Division Engineer F.D. Wengert had invited several firms to submit bids for the job. On October 2, Kostelac Demolition of Las Vegas submitted a bid of $37,000 for the job, and on October 24, Pasco Excavating and Demolition, also of Las Vegas, submitted a bid of $39,850. Somehow, word of it got to a BLM official who phoned Wayne Horiuchi, the Union Pacific lobbyist, in Sacramento. Horiuchi tried unsuccessfully to get Jensen on the phone, but Jensen didn't answer his calls, so Horiuchi telefaxed Jensen a copy of Kenefick's October 28 letter, and sent a followup note on a little office notepad dated November 7: "The least you could do is return my phone calls especially

352. Ibid.; Wayne K. Horiuchi, Special Representative (Lobbyist), Sacramento, September 27, 1985, to A.W. Rees and others; Rees, on the same page, October 2, to Horiuchi, approving deadline only until October 16; Horiuchi to Everell G. Hayes, October 2, 1985; Robert M. White, November 4, 1985, to W.K. Horiuchi; Union Pacific Railroad; J.C. Kenefick, October 28, 1985, to Congressman Jerry Lewis; Kelso Gen. File, Vol. II. H. Marie Brashear, President, The Kelso Depot Fund, Inc., October 17, 1985, to John C. Kenefick, Chairman, U.P.R.R., enclosing "Kelso Depot Proposal," 10 pp., Union Pacific Railroad, Kelso - General File, From January 1977, Vol. 2 (different from the other "Kelso Gen. File, Vol. II").

353. J.C. Kenefick, October 28, 1985, to Congressman Jerry Lewis, Union Pacific Railroad, Kelso Gen. File, Vol. II.

after I saved your a__." Then Jensen did call Horiuchi and they had an angry shouting match over the phone, but Jensen, just in time, stopped the awarding of the contract for demolition. He later apologized to Horiuchi, who had indeed "saved his a__."[354]

At about the same time Horiuchi was trying to reach Division Superintendent "Rich" Jensen, the Bureau of Land Management's Needles Resource Area Manager, Everell Hayes, had reached by phone Salt Lake Route General Manager Ab Rees in Salt Lake City to attempt to persuade Rees to hold off demolishing the Kelso Depot. Rees was telling Hayes forcefully and in no uncertain terms that the Union Pacific Railroad was in the business of hauling freight, not preserving obsolete old depot buildings, when Hayes' secretary walked in and handed Hayes a telephone message from Congressman Jerry Lewis' office, saying that Lewis had received a letter from the Union Pacific in Omaha with a commitment that the railroad would NOT tear down the Kelso Depot. When Rees finished what he had to say to Hayes, Hayes told him about the message from Lewis' office. Rees' answer was a single four letter word starting with "f."[355] In all fairness, Division Engineer Jensen and General Manager Rees were pursuing what they considered to be the best interests of the company and what they understood to be long-standing company policy, only to have their decisions overturned by brass hats in Omaha without either consulting or even telling them.

Those Union Pacific officials most bitterly opposed to preservation of the Kelso Depot tended to be in the railroad's Operating Department, such as the General Manager of the Salt Lake Route in Salt Lake City, and the Division Superintendent and Division Engineer in Los Angeles, and their subordinates. The railroad's own solicitors in Los Angeles, the special representative to the state government in Sacramento, and the president and chairman of the board in Omaha were much more willing to accommodate the preservationists who wished to save the depot. Gradually during the negotiations, the condition that the building, if sold, be moved off its original location faded away, due no doubt to its utter impracticality, although the railroad would insist to the end that the brick station platform be removed.

Meanwhile, the Kelso Depot Fund held two more meetings by the end of the year. On November 28, 1985, Bob Ausmus and Marie Brashear incorporated the Kelso Depot Fund to serve as the instrument for saving the depot.[356]

Union Pacific Assistant General Solicitor Robert M. White reviewed Brashear's Kelso Depot Fund proposal, and on November 4, wrote Horiuchi, instructing him to open discussions with the Fund on the subject of the asbestos located in the depot, and the proximity of the depot platform to the track, saying that they would have to deal with Public Utilities Commission Order 26-D and Order 118 which dealt with clearances and walkways.[357]

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354. Typed note, November 7, 1985, "W.K.H." to G.R.Jensen, Kelso Gen. File, Vol. II; telephone interview with Wayne K. Horiuchi by Gordon Chappell, August 13, 1997. Horiuchi was telling the author about the 'near miss' on demolishing the Kelso Depot, and mentioned the note he had sent Jensen, and I said, "Yes, I know, I have it right here on my desk; the Union Pacific loaned me some files from Los Angeles," and we both enjoyed a laugh over that.

355. [Telephone] Message Record, Interview by Gordon Chappell, August 21, 1997, with Everell Hayes in Reno Nevada.

356. Burk, pp. 9-13; Ausmus, pp. 47-63; W.K. Horiuchi, Sacramento, August 16, 1985, to A.W. Rees, Jr., Salt Lake City, Union Pacific Railroad, Kelso Gen. File, Vol. II.

357. Robert M. White, Los Angeles, November 4, 1985, to W.K. Horiuchi;

On December 10, D.E. Warner from the Union Pacific in Las Vegas inspected the closed Kelso Depot building and found that a downstairs window or vent had not been repaired, and worse, the west end fire escape door upstairs had been broken open. He said both should be secured. Also, the buildings which constituted the "U"-shaped complex of quarters for officers behind the west fire escape stair of the depot were unlocked and "wide open," and the electricity in them had not been shut off. Upon receiving this note on January 10, Wengert penned on the bottom of it a note to "DTR" and "JRJ" to "Promptly secure" the buildings.[358]

On December 17, 1985, General Manager A.W. Rees from Salt Lake City, Wayne Horiuchi from Sacramento, M.J. Gallowa and G.G. Escalante all of the Union Pacific met at the Kelso Depot with Marie Brashier, now President of the Kelso Depot Fund, and Everell Hayes, Needles Resource Area Manager for the Bureau of Land Management. The Union Pacific proposed to the latter to lease the Kelso Depot to the Kelso Depot Fund for five years in a series of five one-year leases; if each year, the Fund showed progress in restoring the building, the railroad would lease for another year. If at the end of five years the Fund had showed progress in restoring the building, the railroad would donate the building to the fund, although retaining the ground under the building, leasing it to the fund at a "nominal" lease. If, on the other hand, the Fund failed to show progress in restoration any one of the five years, the Union Pacific would NOT renew the lease, and would demolish the building.[359]

As the next step, Joe Gray in Los Angeles drew up a draft of a lease of the Kelso Depot to the Kelso Depot fund, which he sent on January 24, 1986, to General Manager Rees and three others for review and comment. The lease required the fund to build a six foot high fence around the property, remove the depot platform, 20 feet wide and 150 feet long (the Fund to retain the vitrified brick so removed), remove and properly dispose of all the asbestos in the depot, and present a five year plan for rehabilitation of the depot, that plan to become a part of the lease. The lease was to be for a dollar a year, paid in advance to the U.P. in Omaha. The remainder of the 11 page lease form consisted of a plethora of legal requirements usual in such a lease.[360]

Others expressed interest in saving the Kelso Depot, such as Editor Lee Perry of the Needles *Desert Star*, who described the Kelso Depot as a "jewel in the desert." Mary Lu Moore of K.C. Publications in Las Vegas, who also taught history in the Division of Continuing Education at the University of Nevada at Las Vegas and took her class to Kelso on a field trip, added her voice to the preservation effort.[361]

In 1986, Patty Carpenter and Elden Hughes of the Sierra Club in Whittier became interested in the project. They discovered a Kelso resident, "O.B." O'Brien who would contribute work to the project. They devised as a fundraising event having an Amtrak train stop at Kelso — normally they breezed through at about 60 mph — and on April 19, 1986, about forty supporters (roughly one

358. D.E. Warner, Las Vegas, December 17, 1985, to G.W. Sherman, G.R. Jensen and F.D. Wengert.

359. A.W. Rees, Salt Lake City, December 19, 1985, tp J.S. Gray, W.K. Horiuchi, R.M. White, G.R. Jensen, and M.A. Passo, Kelso General File, Vol. 2; Letter, Wayne Horiuchi, Union Pacific Special Representative, 555 Capitol Mall, Suite 490, Sacramento, California, 95814, November 21, 1985, to Everell Hayes, Bureau of Land Management, 901 Third Street, Needles, California, Collection of Everell Hayes.

360. Joe S. Gray, in the Law Department in Los Angeles, January 24, 1986, to A.W. Rees, copies to M.A. Passo, G.R. Jensen and W.K. Horiuchi, Kelso General File, Vol. II.

361. Ausmus, p. 56.

coach load) boarded the eastbound Amtrak train, the *Desert Wind*, at Los Angeles Union Station, all wearing engineer caps, and at 8 p.m. that night arrived in Kelso and stepped down from the train. Reportedly this was the first passenger train to stop at Kelso in 20 years. After it had unloaded its Kelso passengers, as it pulled away from the Depot en route for Las Vegas, Ausmus heard the conductor say, "I wish you good luck in saving the depot." O'Brien and Chester Haislip had their pickup trucks at the depot to take the passengers' luggage to the campground. Most of the residents of Kelso had turned out for the affair, and one group awaited the passengers with a barbeque of steaks, salad, beans, bread and drinks. O'Brien had built a small stage, illuminated with floodlights, and Patty Carpenter explained what it was all about, after which the group sang railroad songs under the direction of Elden Hughes, and watched a short skit. Bureau of Land Management representative John Bailey, in charge of the East Mojave National Scenic Area, expressed his support for saving the depot.[362]

The people attending this event, which cost $115 per person plus a donation to the Kelso Depot Fund, camped out at a campsite prepared by O'Brien near his trailer, and the next day toured the depot. After breakfast on Sunday, April 20, buses took the participants first to the Kelso Dunes, then to the "preserved" ghost town of Calico, and then back to the Los Angeles Union Depot.[363]

On May 3, 1986, the Southern Nevada Chapter of the National Railway Historical Society ran a "Kelso Station Trip," apparently by bus, with a number of stops en route for photographs, ending up at Kelso for lunch.[364]

During 1986, the Kelso Depot Fund continued its efforts toward preservation of the Kelso Depot, and established a quarterly newsletter. The Fund also continued efforts towards fund-raising, at which they were notably unsuccessful. Marie Brashier became Board chair, and Patty Carpenter became president. On November 24, 1986, Brashear sent the Union Pacific Assistant General Solicitor Robert M. White a letter updating U.P. management on the Fund's progress, indicating that they had acquired a broadened base of supporters. She did not tell him that as of the previous month, they had collected all of $1,000 toward a project that could cost a quarter of a million dollars.[365]

On March 6, 1987, Kelso Depot Fund Directors Everell Hayes and Elden Hughes presented Union Pacific Assistant General Solicitor Robert M. White at a meeting in Los Angeles a "discussion paper" the two of them had written with a bit of help from unnamed others. It tried to frame the depot issue in terms positive towards preservation of the Depot, noting the Union Pacific did not want a hazard, or a derelict, and wanted the premises to be maintained and beautiful. They said the Fund could accomplish that. The Fund's estimate for bringing the depot up to code was $250,000, and the fund-raising prospects were good. Perhaps most important, and most indicative of the future, their "discussion paper" said:

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362. Ausmus, p. 159; Burk, p. 11; [Telephone] Message Record, Interview with Elden Hughes by Gordon Chappell, August 25, 1997. Hughes recalled the unscheduled stop of the Amtrak train at Kelso as being exceedingly difficult to arrange, although ultimately he succeeded.

363. Patty Carpenter, "Angeles Chapter To Help Save Kelso Depot," *Southern Sierran*, March 1986, p. 5

364. Flyer for "Kelso Station Trip, May 3, 1986" put out by the Southern Nevada Chapter of the National Railway Historical Society, copy loaned by Mary Lu Moore.

365. Brashear, November 24, 1986, to R.M. White, Kelso Gen. File, Vol. II. Burk, pp. 9-13; Ausmus, pp. 60-62.

> One of the most likely uses of the Depot building is as an Interpretive Center for the East Mojave National Scenic Area [i.e., for the Bureau of Land Management]. In discussions this January with Congressman Rick Lehman, his Legislative Director pointed out that the cost of refurbishing the Kelso Depot is far less than what is presently being spent to build an Interpretive Center for the Mono Lake National Scenic Area.

Keep in mind that the co-author of that statement was Manager of the Bureau of Land Management's Needles Resource Area.[366]

State Government-Recognized "Point of Historical Interest"

On April 28, 1987, California Governor George Deukmejian wrote the Kelso Depot Fund, commending them for their efforts and wishing them "every future success" in their endeavors. More useful, in May 1987, the fifteen-member State Historic Resources Commission appointed by the governor met in Fontana, and, among other items on the agenda, formally listed the Kelso Depot as a "Point of Historical Interest." This constituted the first formal recognition of the historic values of the Kelso Depot.[367]

Meanwhile, at the suggestion of Mary Lu Moore, as another fund-raising and publicity measure, the Kelso Depot Fund had a number of tee-shirts made up with a Kelso Depot monogram, to be given to anyone who donated $25.00 or more to the Kelso Depot Fund.[368]

By the Kelso Depot Fund Board of Director's meeting on October 20, 1986, it had become apparent that one great stumbling block was the Union Pacific's requirement that the Kelso Depot Fund have a one million dollar liability insurance policy before they could take over the Kelso Depot, and Elden Hughes had obtained a quotation of a premium of $15,000 per year for such a policy. At that premium, it was clearly beyond the Kelso Depot Fund's reach at that time; the Fund's treasury as of the end of that calendar year had $1,140.05 in it.[369]

In May 1987, Assistant General Solicitor R.M. White reported to Union Pacific officials in Los Angeles on a conversation he had had with Kelso Depot Fund representatives. They claimed difficulty in raising funds due to not having a signed lease. First of all, they wanted a lease allowing O.B. O'Brien to move a mobile home into the proposed lease parcel and to become a caretaker of the building, although he was 70 years of age. He already was an unofficial caretaker, and had been watering the lawn surreptitiously pending approval from the U.P. to do so. The fund also did not like the provision in the proposed lease that granted them the building for 15 years if their restoration efforts were successful; they wanted the own the building and the land under it,

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366. Ev Hayes, Secretary, Kelso Depot Fund, "Special Note to All Board Members," 07 Mar. 87, enclosing discussion paper, "Kelso Depot - The Road Ahead," 2 pp. The letter went on to list and cite possible sources of grants the Fund might be able to obtain. This material is in the Collection of Everell Hayes.

367. Letter, Governor George Deukmejian, April 28, 1987, to the Kelso Depot Fund, Inc., copy in the collection of Mary Lu Moore; *Kelso Depot Update*, Summer 1987, p. 1.

368. Ibid.

369. Kelso Depot Fund Meeting, 10/20/86 [Minutes], p. 1; Financial Statement of Kelso Depot Fund, Inc., Account No. 218,687, San Bernardino County Central Credit Union, Barstow, 1986 Calendar Year; both in the collection of Everell Hayes.

and now planned to turn it into a visitors center for the Bureau of Land Management's East Mojave National Scenic Area. They also wanted to leave the brick depot platform in place as a historic structure, obtaining permission from the California Public Utilities Commission to do so, although they had no objection to erecting a fence between it and the depot. The "reasonable progress" requirements for the first five years would remain the same. White circulated these proposals to E.C. May and A.W. Rees in Salt Lake City, A.O. Meyer in Omaha and K.D. Milam in Los Angeles for comment. E.C. May responded with approval of having O'Brien on the premises as a caretaker, but insisted the platform be removed and a fence between the depot and track be erected before the Fund did anything else. Removal of the platform, he indicated, was necessary for tie replacement and other track work to be done with conventional track-maintenance machines. May also opposed selling the land, or water rights which went hand-in-hand with the land ownership. He indicated that the whole reason for the proposed lease package was

> . . . to encourage this group to get this program underway and keep momentum. The agreement was reached about two years ago and they are no further along than when we reached agreement. For that very reason, do not feel it's anyone's best interest to modify our agreement until this group proves its ability to accomplish the prearranged milestones.

Indeed, the Kelso Depot Fund, while continuing to publish its quarterly newsletters and raise small amounts of funds, seemed to be spinning its wheels. Someone needed to apply sand between the wheels and the rails to give them traction.[370]

That summer, the Kelso Depot Fund received something of a setback when its caretaker at Kelso, O.B. O'Brien, received serious injuries in a traffic accident, and ended up in the San Bernardino Hospital. The depot, meanwhile, suffered in a rainstorm, numerous leaks coming through the ceilings.[371]

The Kelso Depot Fund and its supporters had made a good start, but ultimately it would require government, in the form of the Bureau of Land Management, to step in, acquire, and thus save, the Kelso Depot. Actually, through two of its key administrators in the Mojave Desert, the Bureau of Land Management had been hovering behind the effort to preserve the Kelso Depot from the beginning, because it was virtually in the center of their East Mojave National Scenic Area. The Kelso Depot Fund had in essence bought the government the time to get its act together.[372] But it was a bitter pill to some that private enterprise could not save the Kelso Depot, that it took a Federal agency to do it. Of course, one of the purposes of government is to accomplish things private enterprise cannot or will not, generally because there is no profit in it; there would be few historic sites if it were left to profit-making private enterprise. And of course the entire campaign to preserve the Kelso Depot, in which mutually antagonistic interests such as environmentalists, recreational vehicle users, San Bernardino County, the Sierra Club, the Citizens for Mojave National Park, a Federal government agency, local residents who opposed any Federal government involvement in the Mojave Desert, and others, had come together to form the Fund, this entire preservation effort took place while many of these same people were engaged in a bitter struggle against each other over whether to turn the Bureau of Land Management's East Mojave National

370. E.C. May to R.M. White, May 22, 1987, Kelso General File, Vol. II.

371. Letter, Bob Ausmus, Cima, August 29, 1987, to Mary Lu Moore, Mary Lu Moore Collection.

372. Burk, pp. 9-13; Ausmus, pp. 60-63.

Scenic Area into a Mojave National Park and transfer it from the B.L.M. to the National Park Service to manage.

But the preservation effort nevertheless continued. A number of volunteer work parties helped to spruce up the Kelso Depot during the late 1980s. Kelso Depot Fund Chairman Elden Hughes wrote other members of the Board of Directors on October 10, 1987, about the urgent need for a work party at Kelso, and instead of a director's meeting on the evening of October 19, he scheduled a work party at Kelso for Saturday, October 24, during which also the directors would meet. Hughes was concerned about the roof leaks, a broken upstairs window which allowed birds and bees to enter the building, and a couple of dead trees on the north side of the depot which needed to be cut down.[373] Subsequently the Kelso Depot Fund published a brochure, with text by Bob Ausmus and artwork by Carl Faber. Peter Burk of Barstow, meanwhile, had published a 16-page booklet, *The Kelso Depot Story*, while Elden Hughes designed a Kelso Depot bumper sticker. O.B. O'Brien, recovered from his auto accident, worked on radio announcements. O.B.'s trailer, which had space for a Kelso Depot Fund office, still rested behind the Post Office, though O.B. reportedly was "chomping at the bit" to move it onto the depot grounds. An effort also was under way to increase the membership of the Fund Board of Directors to nine. A major concern at this time continued to be the amount of liability insurance the Union Pacific required before any serious restoration of the depot could be undertaken.[374] In February 1988, Chairman Hughes sent a letter to Fund members listing a number of problems that needed to be addressed: (1) when the Union Pacific repaired a broken water line during the summer of 1987, they somehow cut off two thirds of the sprinkler system serving the Depot grounds; the Chinese elms desperately needed pruning, and the Fund had hired a company to do proper pruning and haul away the cuttings; (3) the flat roof over the kitchen had rotted, and the Fund was replacing the roofing; (4) the Fund needed to plant grass and complete repairs to the irrigation system. Hughes went on to solicit donations from members.[375] During the winter of 1987-1988, Henry Heusinkveld, who became the Fund's newest Director, (and later would become president of the Kelso Depot Fund), led a crew consisting of Brent Washburn, Bob Greenwalt, Roy Wells and George Harper who undertook tree trimming and attempted to restore the lawn sprinkler system. A painting crew from Las Vegas, led by Dave Wangler, patched the plaster and painted the front of the building. Phyllis Pfeiffer, a female volunteer, carried fresh plaster up the scaffold, and later repainted the Union Pacific herald on the front of the building.[376]

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373. Memorandum, Elden Hughes, on the letterhead of the Kelso Depot Fund, Inc., P.O. Box 35, Kelso, 92351, October 10, 1987, to "Members of the Board of Directors (and a few friends)," collection of Mary Lu Moore.

374. *Kelso Depot Update*, Winter 1987, pp. 1, 2.

375. Elden Hughes on Kelso Depot Fund letterhead, to "Dear Members of the Kelso Depot Fund, Inc.," February 1988, Collection of Mary Lu Moore.

376. Ausmus, p. 61. Originally, the Union Pacific symbol or "herald" had been of the "Overland Route" variation, which meant that on the lower striped part of the Union Pacific shield, a diagonal bar from upper left to lower right had carried the words "Overland Route" diagonally across the vertical stripes. At an unknown date, but probably well after World War II, the railroad had repainted that herald as the plain Union Pacific shield, with the vertical stripes without the bar. Either Phyllis Pfeiffer during the late 1980s or the contractor who rehabilitated the depot for the Bureau of Land Management in 1992 restored the Union Pacific symbol to its original "Overland Route" pattern. Ironically, the term "Overland Route" originally applied to the main line of the railroad from Omaha, Nebraska, to Ogden, Utah. One would have thought that once it acquired complete control of the Los Angeles & Salt Lake Railroad it might have adapted the bar to read "Salt Lake Route," which historically was the slogan used by the San Pedro, Los Angeles and Salt Lake Railroad, which better defined the route; instead, the Union Pacific applied in 1923 the slogan which originated with an entirely different part of the railroad.

Operated by and wholly owned as a part of the Union Pacific System, the Salt Lake Route remained legally the Los Angeles and Salt Lake Railroad Company until January 1, 1988, when the Union Pacific management had it formally dissolved, and thus absorbed the line fully into the Union Pacific Railroad.[377]

That same month, Everell Hayes set out to explore with John Bailey the legal hurdles of an interim lease of the depot from the Union Pacific by the Bureau of Land Management, but apparently nothing useful came from the idea. At the April board meeting, Marie Brashier, who stepped down from the Board at that time, indicated she had found a firm that would provide a million dollar insurance policy for a yearly premium of $10,000; it was still beyond the Fund's reach, the Fund at that time having $3,193.76 in the bank.[378]

On May 14, 1988, the Kelso Depot Fund held a flag-raising on the depot grounds to celebrate the sprucing up of the depot. LeRoy W. Stohs from Yermo, manager of Train, Industry and Yard Operations for the Union Pacific there, represented the railroad, presenting a railroad company flag which O.B. O'Brien raised along with the Stars and Stripes at noon, and Stohs then received a Kelso Depot tee shirt in return. During the day Fund directors inquired whether they could get a steam engine to be placed at Kelso as an exhibit, and Stohs reported that the company only had two steam locomotives, which they used in excursions, but further indicated that the Union Pacific might be able to provide a caboose.[379]

On the following day, Kelso Depot Fund Chairman of the Board of Directors Elden Hughes wrote one of the key documents in the effort to preserve the Kelso Depot when he told Everell Hayes on Fund letterhead, "get the Depot in BLM hands, if it is possible to do so. I encourage you and stand ready to help any way I can." Hayes would be transferred elsewhere by B.L.M. before he could fully implement B.L.M. acquisition, but he was able to start the wheels turning in that direction.[380]

A month later, Secretary of the Interior Donald Hodel, touring BLM's East Mojave National Scenic Area with his wife, Barbara, visited the Kelso Depot on June 20, 1988, and presented the fund with a placque from BLM. The Fund sponsored and funded a "desert lunch" for the Hodels there consisting of fruit and bagels with cheese, which Donald Hodel thought was "fabulous." In a "thank you" letter to Elden Hughes and the Kelso Depot Fund, B.L.M. State Director Ed Hastey said that the Hodels' stop at the Kelso Depot was definitely a highlight of their tour, and that Hodel was pleased with the local outpouring of the East Mojave National Scenic Area's community and the many people who supported restoration of the Kelso Depot.[381]

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377. Signor, p. 223; Hemphill, p. 9.

378. Minutes, Kelso Depot Fund Board Meeting, 23 January, 1988; Minutes, Kelso Depot Fund Board Meeting, April 18, 1988, both from the Collection of Everell Hayes.

379. *Kelso Depot Update*, Spring 1988, p. 1. By October 1989, Bob Ausmus had heard that the Union Pacific indeed was donating a caboose to the Kelso Depot Fund; Letter, Bob Ausmus, October 2, 1989, to Mary Lu Moore; the caboose had arrived by February 1, 1990, letter, Bob Ausmus, Cima, Feb. 1, 1990, to Mary Lu Moore; Collection of Mary Lu Moore.

It should be noted that at that time all American railroads were phasing out the use of cabooses, so there were plenty of surplus cabooses destined for sale, donation or scrapping in the yards of railroad companies such as the Union Pacific.

380. Elden Hughes, letter, May 15, 1988, on Kelso Depot Fund letterhead, to Everell Hayes, Collection of Everell Hayes.

381. Ibid.; Ed Hastey, B.L.M. State Director, Letter, July 1, 1988, to Elden Hughes, Collection of Everell Hayes.

During 1988, the Kelso Depot Fund had held work parties at the Kelso Depot on January 23, March 5, March 12, March 26, April 9, and April 23. The March work parties had focused on the grounds sprinkler system. As Henry Heusinkveld subsequently reported in an undated letter to "Dear friends of the Depot" probably issued late in April 1988,"

> A great effort was put out discovering where to tap into the main MAIN, connecting to it with a 2-inch PVC [poly-vinyl chloride pipe] instead of the previous steel, replacing a lot of steel pipe with PVC, abandoning the old steel system of the center lawn and completely replacing it with PVC. This included digging all new trenches and laying six laterals. A lot of effort went into restoring the old steel system of the SW Lawn. This may have been a mistake, as that effort might better have gone into an all new PVC system.

At the April 9 work party the volunteers had torn out all the old shrubbery and hauled it to the dump, replacing it with new shrubs, and they leveled the area of the southwest lawn. On April 23 they trimmed excess fronds from the palm trees, and trimmed trees overhanging the main walk and platform.[382]

May 1989 encompassed the 50th Anniversary of Los Angeles Union Depot, and to celebrate the event, the Union Pacific Railroad dispatched its most famous still-operable steam locomotive, Northern type 4-8-4 No. 8444, from Cheyenne to Los Angeles with a passenger train of armour yellow cars to participate in the ceremonies. On May 4, 1989, Extra 8444 West stopped at Kelso so the engine could be serviced, as once steam locomotives routinely were serviced, before continuing to Yermo. Including extra tenders to make up for the lack of water facilities on the now-dieselized railroad, No. 8444 had a 19 car train; several diesel-electric locomotives were included in the consist, but reportedly only to provide dynamic braking. The train stopped at Kelso eastbound, as well, once the Los Angeles festivities were over.[383]

Two unfortunate things happened in the spring or summer of 1989. First, O.B. O'Brien at Kelso gave up on preserving the Kelso Depot, saying he was tired of being a "slave" to it. He, Ausmus, and others, were fed up with both the BLM representatives on the Kelso Depot Fund board, and with the Sierra Club members. Ausmus, too, would give up on the project early the following year, not long before his death. The second unfortunate event occurred when a Union Pacific official,

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382. Letter to "Dear friends of the Depot" on letterhead of the Kelso Depot Fund, Inc., from Henry Heusinkveld at 2828 E. Burntwood Avenue, Anaheim, Calif., 92806, undated but from internal data probably late April 1988, collection of Mary Lu Moore. Heusinkveld was nothing if not ambitious; he laid out in the letter future work for work parties: (1) further improvements to the Kelso watering system; (2) hauling off a huge pile of trash, such as palm fronds, to the dump; (3) leveling all lawns, and applying cow manure that was on hand; (4) felling seven nearly dead trees, and removing the logs and slash; (5) painting the Depot — Danny Wangler and a crew of professional painters from Las Vegas, donating their time and equipment, planned to do that May 7-8 and May 14-15, and the Kelso Depot Fund hoped to support them with four volunteers; (6) cleaning and repairing the coal shed north of the Depot; (7) restoring the electric lighting system along the station platform; (8) trimming and further pruning of all the deciduous trees (the Chinese elms); and (9) landscaping with new shrubs. The proposed painting seems to have been accomplished; how much of the remainder was remains a matter of question.

383. Casebier, *East Mojave Heritage Trail: Rocky Ridge to Fenner*, p. 258; Ausmus, pp. 62-63.

without contacting the Fund, had most of the restaurant equipment stripped out of the Kelso Lunch Room and kitchen for donation to a church in Las Vegas.[384]

The Decisions for the Bureau of Land Management to Acquire the Kelso Depot

It was also during the summer of 1989 that acquisition of the Kelso Depot by the Bureau of Land Management became publically the preferred option for preserving the building. During the summer of 1989, the Kelso Depot Fund Board of Directors

> concluded that the most feasible way to secure long term preservation and use of the structure is for a public entity to assume ownership. Because of Kelso's central location in the Scenic Area, and traffic patterns which provide significantly higher visitor contact potential than Hole-in-the-Wall or other semi-developed sites, BLM is the only logical public entity which could make full use of the building.

On July 17, 1989, the B.L.M.'s California Desert District Manager asked the Needles Resource Area manager for information and suggestions regarding the B.L.M.'s role in preserving the Kelso Depot. In response, the Needles Resource Area staff of the B.L.M. prepared a "Kelso Depot Proposal" which the new Resource Area Manager, Elena C. Daly, sent on October 11, 1989, to the District Manager in Riverside, along with a list of the requirements for B.L.M. use of the depot. The proposal suggested using the ground floor as a B.L.M. visitor center, small museum, and office space for two B.L.M. employees, as well as public restrooms; the restaurant portion of the building would be turned over to a concessioner to operate as a restaurant. Upstairs, the depot would have rooms for use of B.L.M. and concessioner employees, some with bath and kitchenettes, and there might be one or two for the concessioner to rent to overnight visitors. The basement would serve as a conference facility and community recreation rooms. With this document, the B.L.M. was off and running.[385]

Soon thereafter, in 1990 Congressman Jerry Lewis obtained a budget add-on for Fiscal Year 1991 in the amount of $1,300,000 to be spent on the Kelso Depot project. B.L.M. personnel had a meeting in their Riverside office on June 14, 1990, and developed a five-stage plan of action to begin immediately with project completion during Fiscal Year 1994. First, they had to acquire the depot from the Union Pacific and do a property-line survey. That phase also included coordination with the State Historic Preservation Officer, completion of a site plan, and seismic and flood studies. Phase II in Fiscal Year 1991 would require B.L.M.'s Denver Service Center to design the rehabilitation of the depot, undertake building stabilization, landscape rehabilitation, fencing, etc., as well as contracting interpretive design for the Visitor Center. Phase III in Fiscal Year 1992 would include interior renovation of the ground floor, involving construction of the Visitor Center's interpretive exhibits, an audio-visual room exhibit area, offices, and two bath rooms. This phase also would involve renovation of two conference rooms in the basement, and all work on utilities. B.L.M. also envisioned construction elsewhere at Kelso of a duplex to house the facility supervisor and a resident ranger during this phase. Phase IV during Fiscal Year 1993 would involve expansion

384. Bob Ausmus, P.O. Box 7, Cima, California, letter, July 22, 1989, to Mary Lu Moore in Phoenix; Ausmus, May 24, 1990, to Mary Lu Moore; collection of Mary Lu Moore.

385. Elena C. Daly, Manager, Needles Resource Area, Bureau of Land Management, Memorandum, October 11, 1989, enclosing undated "Kelso Depot Proposal," to California Desert District Manager, B.L.M., "Kelso Depot" File, California Desert District Office, Bureau of Land Management, Riverside, California, transferred to the National Park Service.

and renovation of the existing campground and recreational vehicle park, and construction of a dump station. The final phase, Phase V, constituted the installation of a bed-and-breakfast concession in the Kelso Depot, including renovation of the entire top floor of the Kelso Depot and rehabilitation of the kitchen and dining room facilities on the first floor. A still newer Needles Resource Area manager, Richard E. Fagan, sent a memorandum outlining this planning/implementation/scheduling on June 21, 1990 to the California Desert District Manager, telling him:

> The Kelso Depot issue is approaching resolution and BLM stewardship is that resolution. Through the determined efforts of the Kelso Depot Fund Committee and high public visibility and notoreity, this facility has now become politically sensitive to the point where funding appears ultimately assured. The Needles Resource Area soundly supports Bureau Administration of the Depot as a major Visitor Center. It will contribute greatly to BLM image and visibility and will serve as a Scenic Area focal point.[386]

Returning to the first order of business, the Bureau of Land Management still had to acquire the depot from the Union Pacific Railroad.

Meanwhile, due to lack of business, the Kelso Post Office, which had opened on May 20, 1905, closed at the end of business on January 31, 1990, sort of a final blow to the history of the town of Kelso.[387] The one piece of good news was that the Union Pacific Railroad indeed had donated to the Kelso Depot Fund a yellow, all-steel caboose for eventual exhibit on the grounds of the Kelso Depot. It had arrived by February 1, 1990, and the railroad had spotted it near the west end of the Kelso Yards.[388]

One complication during this period arose in the summer of 1990 when mining promoter named Art Parker breezed through like a whirlwind with a prominent San Francisco civil engineer and a San Francisco attorney at his elbows, and announced a grandious project to mine the Kelso Dunes for gold, using the depot as his headquarters. Parker envisioned turning part of the Kelso Depot's ground floor into his mining company offices, rehabilitating the upstairs to serve as a bunkhouse for miners, and allowing the Kelso Depot Fund or B.L.M. to use part of the building, perhaps the restaurant area, as a visitor center with museum exhibits. Parker brought in a crew and did a "terrific job" of cleaning the place up, and apparently told potential investors that had a lease of the depot from the Union Pacific. Some thought that it was Parker who remodeled certain downstairs rooms, installed drop ceilings, and changed walls; as for the drop ceiling in the reading room in the basement, it seems more likely the railroad did that around 1981 or later to convert the reading room into a classroom for railroad company training sessions. Now, however, the lack of documentation or correspondence in Union Pacific Railroad files of Parker having any right to use the building suggests that the alterations to the downstairs were those made in 1981 by the railroad itself. After several months, it became evident the civil engineer from San Francisco had not been

386. Bureau of Land Management Needles Resource Area Manager Richard E. Fagan, Memorandum, June 21, 1990, to District Manager, California Desert District, enclosing various documents; "Kelso Railroad Station" file, Bureau of Land Management, California Desert District Office, Riverside, California, transferred to the National Park Service.

387. Lewis Garrett, "Postal History of San Bernardino County," *San Bernardino County Museum Association Quarterly*, Vol. 39, No. 4 (Fall 1992), p. 36.

388. Bob Ausmus, letter, February 1, 1990, to Mary Lu Moore, p. 2, collection of Mary Lu Moore.

paid. Anyway, the idea of mining the Kelso Dunes ultimately came to nothing, and Parker and his company faded from the scene.[389]

By 1990, the Kelso Depot Fund had some 400 members, and as another fund raising scheme, Bill Claypool commissioned a painting of the Kelso Depot by Carl Faber which the Fund then had reproduced as color prints for sale at $10.00 each.[390]

From the beginning, Bureau of Land Management officials had played key roles in the Kelso Depot Fund, especially Everell Hayes, who was BLM's Needles Resource Area manager, and Gerry Hillier, BLM's District Manager for the California Desert District, headquartered in Riverside. Hillier had gotten Marilyn Glick of Redlands, aide to Congressman Jerry Lewis, out to Kelso to see the depot, and it was she who enlisted the Congressman's support. B.L.M. staff personnel Leslie Smith, Veronica Forun from the Riverside office, Amy Galperin, and Jill Miller-Allert also were active. Unquestionably, the Bureau of Land Management's interest in preserving the depot and the support they were able to enlist from the area's member of Congress proved key developments in saving the Kelso depot from demolition. Although no one had planned it that way, the Kelso Depot Fund unintentionally had served as a sort of a "stalking horse" for the B.L.M. eventually taking over and preserving the depot itself.[391]

It is clear that by mid-summer of 1989, preservation and acquisition of the Kelso Depot had become an official project of the Bureau of Land Management.[392] As BLM geared up to preserve the Kelso Depot, it established a group of volunteer advisors which included Gerald Freeman of Nipton, Chuck Bell, Dennis Casebier, Theo. Packard, Bernard Peterson, Brad Smith, and Smith's wife, Barbara Koning.[393]

Meanwhile, in August of 1990, a major "monkey wrench" had been thrown at B.L.M. acquisition of the depot. As mentioned, the B.L.M. commissioned a flood plain study of the Kelso vicinity. Jack D. McCollom completed that study in August, 1990, and it indicated that in the theoretical 25 year flood (a type of flood that might be expected to occur perhaps once every quarter century), there would be two feet of water on the ground floor of the Kelso Depot, filling the basement, IF the flood escaped the Union Pacific's earthen berms erected to channel such waters away from the railroad north of the depot; in the case of the theoretical 100 year flood, the basement would be filled and the ground floor as well, with seven feet of water in it, and the Union Pacific's flood

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389. [Telephone] Message Record, Senior Historian Gordon Chappell, National Park Service, Pacific/Great Basin Support Office, August 21, 1996, to Jill Miller-Allert, Bureau of Land Management Needles Resource Area Office, P.O. Box 808, Needles, California 92363, p. 2; [Telephone] Message Record, Interview with Elden Hughes, August 25, 1997, by Gordon Chappell.

390. Elden Hughes, on the letterhead of the Kelso Depot Fund, Inc., to "Dear Kelso Depot Member," undated, but early 1990; flyer addressed to "Dear Kelso Depot Fund Member," undated, but December 1992, containing a color photo of the painting by Carl Faber and instructions on how and where to order it. Fifty numbered and signed copies could be purchased at $50 each. The print measured 20 by 30 inches. Both documents are from the Collection of Mary Lu Moore.

391. The foregoing discussion of efforts to save the Kelso Depot is drawn partially from: Ausmus, pp. 51-63; and Burk, pp. 9-13.

392. Letter to "Dear Kelso Depot Member" on the letterhead of the Kelso Depot Fund, Inc., from Elden Hughes, undated but early in 1990; letter, Bob Ausmus, Cima, May 14, 1990, to Mary Lu Moore; both, collection of Mary Lu Moore.

393. [Telephone] Message Record, Gordon Chappell with Jill Miller-Allert, ibid., p. 1.

channel to the north would provide no protection. Reading this, the Assistant District Manager for Operations of the California Desert District drafted a memorandum dated August 30, 1990 to the District Manager, enclosing the "Drainage Study," and saying:

> Based upon this study, I cannot recommend Bureau acquisition or development of any interest, for financial and liability reasons, in this area except perhaps a small Bureau presence in the depot (dedicated space in a building that we would not own) for which there would not be a significant financial investment. I recommend that we not accept space in the basement. I also recommend that we not establish Kelso as a permanent duty station for any Bureau employee.[394]

Of course, with Congressman Lewis going to bat for funding for B.L.M. acquisition and rehabilitation of the depot, it was a little bit late to discover a theoretical flood threat to the depot. Whether the California District Manager of B.L.M. simply chose to ignore the "Drainage Study," or some B.L.M. official overruled the recommendations of the Assistant District Manager does not appear in the files, but B.L.M. proceeded with acquisition of the depot.

Apparently even before obtaining ownership of the depot, in 1991 the Bureau of Land Management contracted with P.S.Preservation Services, the principals of which were Bonnie W. Parks and John Snyder, to prepare a National Register of Historic Places Registration Form for the Kelso Depot. The firm completed the form on September 30, 1991. In Section 8, the form stated the significance of the depot:

> Designed as a necessary hotel and restaurant for train crews providing essential helper service eastward from this point to the top of Cima Hill, the Kelso Station remains largely intact and with a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. Though the advent of modern, high-horsepower diesel locomotives rendered it obsolete by the mid-1960s and led to its closure in the 1970s [actually, 1964 for the depot and 1985 for the cafe], the Kelso Station remains, oasis-like, as a tangible link to an older period of railroading, when Kelso provided a service essential to the successful modernization of the Union Pacific Railroad's main line link to Southern California. The Kelso Station appears to meet National Register criteria A and C at the local level of significance, as an essential element in the modernization of the Union Pacific Railroad and in that line's operation during the hectic days of World War II, and as an excellent and rare remaining example of a mid-1920s Mission Revival style railroad station and hotel on the Union Pacific Railroad in California . . . .
>
> The Kelso Station appears to meet National Register Criteria A and C, at the local level, with a period of significance 1925-1945 . . . . Under Criterion A, its facilities — lodging, bathing, food, and recreation — provided by this facility allowed the Union Pacific to meet increased traffic demands, with helper locomotives from Kelso ensuring continued eastward train movement over Cima Hill. During the hectic days of World War II, the

394. Bureau of Land Management, Memorandum, Assistant District Manager, Operations, to the California Desert District Manager, August 30, 1990, enclosing the "Drainage Study" prepared by Jack D. McCollom and completed that month. B.L.M. subsequently had the study reviewed by county officials, who raised some questions about McCollom's possible misuse of a certain equation in developing his figures, but chose not to refute the described effect of the theoretical 100 year flood. Bureau of Land Management, California Desert District Office, Riverside, California, "Kelso Railroad Station" file, transferred to the National Park Service.

> facilities at Kelso ensured provision of essential services for train crews moving war materials westward for the Pacific Theater. Under Criterion C, it is a rare surviving station on the San Pedro, Los Angeles & Salt Lake/Union Pacific Railroad in California, and a rare surviving example of the railroad hotel/restaurant/club house. In the context of California, only the 1914 Mission Revival style Riverside station (National Register-listed), now isolated from its tracks, and the Kelso Station remain; all the others listed earlier have been demolished. Of the railroad hotels, Yermo has been demolished and only Kelso remains, in the context of California, as a surviving element of the period of modernization following Union Pacific acquisition of the SPLA&SL [actually, of the successor Los Angeles and Salt Lake Railroad] in 1921; the Caliente Station remains in Nevada, and has been listed in the National Register and adaptively reused for offices and Museum.
>
> Contributive elements include the station building, landscaped grounds, electroliers, sign mountings, flag pole, brick walks and platform [the platform subsequently was dismantled and the bricks stored], and wood frame coal and supply [storage] shed.[395]

Actually, the case could easily be made that the exceptional significance of the Kelso Depot extended to the end of helper service out of Kelso in 1959, or perhaps even to the closing of the agency in 1964. The 1945 date stipulated in the draft National Register form, which seems arbitrary, terminated the period of significance coincident with the end of World War II, but Vulcan Mine traffic continued several years more, the advent of diesel-electric locomotives replaced steam locomotives still a year or two later, and the Korean War brought a boom in traffic which again increased the importance of the helper service Kelso provided and the depot/boarding/rooming house enabled. Early diesel-electric locomotives such as the Fairbanks-Morse units and EMD TR-5 "cow and calf" units were not equipped for multiple-unit operation by a single crew from a single cab, hence the elimination of steam-powered helper locomotives meant only the substitution of diesel-electric locomotives for helper service until true multiple-unit diesels became available in 1959. Furthermore, research for the National Register form had not uncovered the fact that the Kelso "Lunch Room" originally served as a meal stop for passenger trains without dining cars, a particularly significant role for the "Beanery," making it much more important historically than a facility merely for employees of the railroad. And, as Mark Hemphill later would comment, Kelso was "one of the most isolated helper terminals in North America," surely an element of its significance.[396]

Acquisition of the Kelso Depot by the Bureau of Land Management

In the end, the Union Pacific Railroad donated the Kelso Depot to the Bureau of Land Management, executing the transfer of title document on August 19, 1992. The California State Director of the B.L.M., Ed Hastey, signed for the agency at an unknown date, accepting the donation subject to approval by the Department of Justice. The San Bernardino County Recorder

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395. National Register of Historic Places Registration Form, Kelso Club and Restaurant, a.k.a Kelso Station; the quoted portions are from Section 8, pp. 1, 7, 8. The entire text of the form is reproduced as an appendix to this report.

396. Hemphill, pp. 27, 156-159.

received and processed the document on August 28, 1992.[397] The Bureau held a ceremony to celebrate the transfer of title on Saturday, November 21, 1992, at 1:30 p.m. The program included guest speakers and the official transfer of title between 1:30 and 2:30, an "old fashion [sic] lawn party" with refreshments being served from 2:30 to 3:30, and "For those who want to work off the Cake," a guided "sunset hike" from Kelso to the top of the Kelso Dunes and back from 3:30 to 6 p.m.[398] The Bureau of Land Management subsequently bought four additional acres around the depot for $30,000.

The Bureau meanwhile prepared to contract for "restoration" of the Kelso Depot. The initial solicitation for bids had to be cancelled on September 12, 1991, due to ambiguous specifications and drawings, a hazardous material issue, a question regarding water, and a question regarding use of the railroad right-of-way, none of which issues had been resolved. More important, the Bureau had not yet acquired title to the property. Bureau staff revised the proposed contract and added one drawing, and in the interim the Bureau acquired the depot. Accordingly, the Bureau issued a new bid solicitation, received four bids, and awarded the 178 page contract to the Steve Bowden Construction Company of 74929 Twilight Drive, Twenty-nine Palms, California, on April 20, 1993. On Page 111, the contract summarized the work as

> Furnishing labor, equipment, supplies, and materials to perform stabilization work on the Kelso railroad depot. The work includes removal and replacement of built-up roofing, removal and replacement of tile roofing, spot replacement of deteriorated sheathing, installation of fencing and electrical service, pruning and removal of trees, repair of stucco walls and other minor repair.

A more detailed accounting of the work appeared in the bid schedule issued by the Bureau of Land Management in March 1993:

1. Furnishing labor, equipment and supplies to remove the existing tile roof and roofing felt, install new roofing felt, replace the tile, and make spot repair on the sheathing. The felt used for underlayment should be No. 40, asphalt-saturated, non-perforated. Wood used for ridge boards, hip boards, cover tile boards, gable rakes and cants was to be douglas fir, grade No. 2 or better. The clay tile was to be barrel shaped, variegated color, 18 inches long and 11/16th of an inch thick, tapering from nine and a quarter inches wide to seven inches wide. Gladding McBean and Company of Lincoln, California, was cited as one source of supply of the tile. Existing tile salvaged intact was to be reused to the extent possible. Where the roof was flat above the arcade, the contractor was to remove the existing built-up roofing and install a hot applied smooth surfaced four ply fiberglass felt roofing membrane, replacing also cants, crickets, flashing and spot replacement of any deteriorated sheathing.

2. Providing electrical service system components to be used for electrical service distribution, the types of components to include conduit riser, conductors, meter base,

397. Transfer of Title, Donative Bill of Sale, Donor (Union Pacific Railroad) executed (signed) on August 19, 1992, Bureau of Land Management, Kelso Railroad Station File, California Desert District Office, Riverside, California, transferred to the National Park Service.

398. Invitation from BLM and the Kelso Depot Fund to the ceremony postmarked October 31, 1992, sent to Mary Lucille Moore at P.O. Box 27552, Phoenix, Arizona, 85061.

disconnect, lightning arresters. The contractor was to supply one duplex outlet in the lobby and one ceiling light in the lobby.

3. Furnishing labor, equipment and material to (a) install fencing along the northwest edge of the depot platform (required by the Union Pacific Railroad); (b) remove the vitrified brick station platform (also required by the railroad); (c) remove the metal fire escape from the southwest end of the depot and one at the east end as additions inconsistent with the depot's design, and for reasons of security; (d) cover window and door openings with sheet plexiglass 3/8 of an inch thick, except for four entrances where the contractor was to install an aluminum or steel framed security door: one at the main lobby entrance, one at the baggage room entrance, one at the rear kitchen entrance; and one at the rear basement entrance; (e) remove dead trees and prune living ones; (f) repair stucco walls as directed by BLM; (g) install a polyvinyl chloride water line gate valve at the property line between the railroad and the Bureau of Land Management properties. The fence was to be steel American Classic or the equivalent, flat topped, zinc coated with electrostatically applied black polyester powder final coating in eight foot panel lengths, five feet high, with 3/4 inch square flat top pickets, the top rail 8 inches from the top, the bottom 8 inches from the bottom, the rails 1 1/2 inch square, of 14 gauge metal. End panel posts were to be two inches square, of fourteen gauge metal.

As it turned out, all of the Chinese elm trees were dead but two, and those were dying, so the contractor removed all of those trees rather than pruning them. Five palm trees were pruned and remain. During the course of the work, the Bureau issued eight amendments or change orders. All of this was completed in the spring, summer and fall of 1993. B.L.M. staff had estimated the cost at $160,000; Bowden had bid $121,607.69; in the end, in view of the amendments, Bowdown was paid $139,750.22. The Bureau of Land Management completed the final paperwork on the project a little less than five months before it would lose responsibility for the Kelso Depot.[399]

Transfer of the Kelso Depot to the National Park System in Mojave National Preserve

Congress established Mojave National Preserve to take over most of what had been, under the Bureau of Land Management, the East Mojave National Scenic Area, including the Kelso Depot. The Preserve, consisting of roughly 1,600,000 acres, came into existence under the provisions of the California Desert Protection Act, enacted into law on October 31, 1994. The act transferred management of the land, and incidentally also the Kelso Depot, to the National Park Service.[400]

On April 2, 1996, five historic preservation specialists from the National Park Service's San Francisco office visited the Kelso Depot during a trip to Mojave National Preserve. One result of this visit was assignment of List of Classified Structure identification numbers to four structures at Kelso:

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399. Bureau of Land Management, California Desert District Office, Riverside, California, "Kelso Depot Contract File." Transferred to the National Park Service. The 178 page contract was dated January 21, 1993; Contracting Officer Gwendolyn L. Moore at the Bureau of Land Management's Denver Service Center sent the signed, approved contract, No. 1422-N651-C3-2016, to Bowden on April 20, 1993. Bowden's bid was in response to Solicitation No. N651-1FB3-2026; the cancelled earlier solicitation was No. N651-1FB1-2111. See also the certificate for contract payment, June 6, 1994.

400. Public Law No. 103-433, the California Desert Protection Act, October 31, 1994 (108 Stat. 4471-4525).

Kelso Depot	Kelso 1	IDLCS 56852
Coal Shed	Kelso 2	IDLCS 56853
Flagpole	Kelso 3	IDLCS 56854
Brick Walkway	Kelso 4	IDLCS 56855

The LCS entries were not completed at that time, but set aside for further work on the forms.

In 1996, John Wiley & Sons' Preservation Press published Janet Greenstein Potter's book, *Great American Railroad Stations*. Among the 31 depots spotlighted and discussed in her California chapter, Potter included Kelso. Written at least partially from the perspective of architectural history, Potter's study could almost stand as a National Historic Landmark theme study of architecturally significant railroad depots in the United States. At the very least, it provides a basic context for any discussion of railroad depot architecture at statewide and nationwide levels, though there are many other depots lacking architectural distinction which would qualify for National Register listing at regional or local levels of significance for reasons of associations or significance in other areas of history than architecture. But the inclusion of Kelso in this study of depots nationwide further confirms the significance recognized in the Bureau of Land Management's National Register of Historic Places Registration Form for the Kelso Depot.

A GRAVE AFFAIR

Every historic old building should have its own ghost, and the story of a Kelso Depot ghost appeared in sheets headed "Do Not Remove, Code 2.306" which some anonymous party had nailed to the Kelso Depot in January 1997. The flyer read:

> The Kelso Depot ghost is almost certainly, Juan Antonio. His grave location is nearby. Juan Antonio was born in the year 1905, the day the town of Kelso was established and astonishing, died in the year 1986, the same year the depot was closed.
>
> Juan was a prospector and worked occasionally for the railroad. Many people have seen Juan Antonio near the depot. He always carries his prospector's pickaxe over his shoulder. He will appear as a white glow or occasionally, he will appear as real as anyone, only to disappear.
>
> Juan Antonio, it is thought, cannot rest in peace because, he continues to look for his lost love. — "Maria" was her name and she worked in the "Beanery" restaurant housed within Kelso Depot.
>
> One day, Maria suddenly disappeared without a trace. Foul play was suspected.
>
> Until Juan Antonio finds her, he will certainly forever, walk in search, for his lost love.
>
> AHPS

Indeed, the Kelso Depot grounds harbor what seems to be a grave, between the west end of the building and the road approaching the railroad crossing from the north. Some railroaders believe it was simply a memorial to one or more deceased railroad employees and that no one actually is buried there. No other information about the grave or who lay in it, if anyone, had come to light

Photo 43: A memorial or grave marker, reportedly from the 1980s, on the grounds west of the depot near the road grade crossing. It is not known whether a grave actually exists here, or if this is only a memorial. Photo by Gordon Chappell, NPS.

until these flyers appeared on the building in January 1997. Who "AHPS" was and what "Code 2.306" meant remain unknown.[401]

In 1996, National Park Service personnel in the San Francisco office and at the Denver Service Center began work on this historic structures report, completing it in the latter half of 1997.

As the Kelso Depot, or "Kelso Club," or Kelso Passenger Station, Coffee Shop and employees' hotel entered its 73rd year, a remark made by the author of the most recent book on the Salt Lake Route, Mark Hemphill, offered a fitting conclusion to this history of the building and its grounds: "The Kelso Club will survive in body. But without rooms for seven bucks a night, iced tea served up in frosty UP glasses, and trains stopping for sack lunches, Kelso's soul is gone."[402]

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401. Memorandum, Bob Carper [historical architect, Denver Service Center], January 23, 1997, to Doug Scovill [Chief, Cultural Resources, Mojave National Preserve], with copies to Steve Daron, [archeologist], Lake Mead National Recreation Area, and Gordon Chappell [Senior Historian, San Francisco Office], enclosing a xerox copy of one of the flyers that had been nailed to the depot.

402. Hemphill, p. 75.

Photo 44: A westbound Amtrak *Desert Wind* passenger train rolled through Kelso on November 13, 1996 at sixty or seventy miles per hour. The last passenger service was on May 10, 1997. Photo by Gordon Chappell, NPS.

ACKNOWLEDGEMENTS

Any history of this kind rests on the gracious assistance of many. In the Union Pacific Railroad Company I am greatly indebted to Don Snoddy and William W. Kratville (the latter author and co-author of many books on Union Pacific locomotives) of the Union Pacific Museum Collection in Omaha, who provided photographs of the Kelso building when new and of steam locomotives in Kelso during World War II, as well as copies of pages from the notebooks of various field engineers that proved invaluable, and other material. When I spent about four days in Omaha in April 1997, they graciously guided me through the holdings of their library and archives located on the main floor and in the basement of the old Omaha Union Station, which has become the city's Western Heritage Museum although the U.P. records there are still under Union Pacific control. Until January 1, 1996, the Union Pacific Railroad had an excellent small museum on the ground floor of the headquarters building at 1416 Dodge Street in Omaha, but on that date the railroad closed it in order to put an employees' cafeteria in the space, and what had constituted the museum and its library and archives now is essentially all in storage in the Omaha Union Station building.

Also in Omaha, I am indebted to Gary K. Swartz, Manager of Architectural Maintenance, at 1416 Dodge Street, who supplied copies of some of the original architectural drawings of the Kelso Depot and its coal shed.

Union Pacific Assistant General Solicitor Jeff Asay in Los Angeles (author of *Union Pacific Northwest*) searched many old files in basement rooms and loaned copies of certain railroad records for research in San Francisco, and provided much other information, correcting some errors which appeared in early drafts of this study. This study could not have been as thorough as it is without his gracious help. Carol Nolan, who was hired by the Union Pacific to screen various old records in Los Angeles for disposition, found much that was of assistance in preparation of this history.

Dennis Casebier of the Mojave Desert Heritage and Cultural Association headquartered at Goffs, California (though with a post office box in nearby Essex), provided a photograph of the original Kelso depot, graciously granted access to his organization's library and archives, and guided the author through the oral history and subject files pertaining to Kelso, which proved rich in useful information indeed. I should also mention Wilhelmina, the resident coyote around Goffs, who kept a hopeful eye on the author, especially around mealtime, alas without result.

Mary Lu Moore of Tucson, who during the 1980s while living in Las Vegas supported preservation of the Kelso Depot, loaned files and photographs by mail, and answered some of the author's questions by phone. She also donated to the NPS several of the little cards the railroad used to register overnight guests in the "Kelso Club."

Art Francis of Las Vegas provided in a series of letters answering my inquiries a great deal of information, as well as an original menu from the "Kelso Coffee Shop" and a copy of a blank card form for UP employees to use in checking into the rooming house in the depot building, as well as many historic photographs of Kelso and its railroad facilities.

Vincent Ashcraft kindly responded to a questionnaire I sent him. Theophilus Packard, a long-time resident of Kelso and still owner of land there, provided much information by phone and letter, and loaned old nitrate negatives of Kelso during the 1920s for the NPS to print.

James Ozment, a retired civil engineer from the Denver & Rio Grande Western Railroad, in Golden, Colorado, loaned a number of San Pedro, Los Angeles and Salt Lake Railroad telegrams sent from Kelso in 1905, in the months after completion of the railroad. Charles Albi, Executive Director of the Colorado Railroad Museum, in Golden, Colorado, provided answers to a number of questions from material in that museum's fine library, and allowed me to perform research in that library in April 1997, as did Kevin Bunker of the California State Railroad Museum Library in Sacramento, California, and their librarian, Ellen Halteman, where I did some of the research for this history on Saturday afternoons. The staff of the California Section of the California State Library in Sacramento, and their newspaper room, provided some assistance. This report also relied on a large number of references in the author's personal library in San Francisco.

In the National Park Service I am indebted above all to Tom Mulhern, my supervisor for nearly 23 years as Chief of the Division of Park Historic Preservation in the old Western Regional Office, and the best supervisor a person could hope to have. This is the last study I will do under his supervision, as he transferred from the Pacific Great Basin Support Office to San Francisco Maritime National Historic Park at the end of June 9, 1997, as this history reached its final draft. Tom will be missed by me and by nearly all who worked with him in the Western Regional Office of the National Park Service over nearly a quarter of a century. Under the guidance of Regional Directors Howard Chapman and Stanley Albright, Tom gave the Western Region of the National Park Service a record of honest compliance with all facets of historic preservation law, guidelines, policy and standards unmatched by any other NPS Region. He is one of those rare people who is truly irreplacable.

Also in the National Park Service I am indebted to Jonathan Bayless, former Regional Curator, who kept repairing the software glitches resulting from the mistakes I made in writing this report into a computer, and to Robbyn Jackson, Historical Architect of the Pacific Great Basin Support Office, and Historian Mark Luellen of the List of Classified Structures Program. At our Denver Service Center, I will mention Jon Holbrook, overseer of preparation of this historic structures report, and Bob Carper, a historical architect, who read and commented on early drafts of this study and made many suggestions and supplied additional information. In Mojave National Preserve, I am indebted to Superintendent Mary Martin and Chief of Resources Management Doug Scovill; it was the latter who found funding for my research in Omaha.

Jill Miller-Allert, Rolla Queen, Russell Kaldenberg, Everell Hayes and a number of others in the Bureau of Land Management which helped to save the Kelso depot, whom I contacted by phone, provided much assistance, and transferred to the National Park Service official files on Kelso from the Needles and Riverside offices.

John West answered some of my questions regarding railroad terminology. David Pfeiffer in the Textural Reference Branch of the National Archives at College Park, Maryland, was of great assistance in this research.

For peer review, I am indebted to Robert William Richardson, currently of Bellefonte, Pennsylvania, for twice reviewing and commenting on drafts of this study and answering other technical questions; Richardson was co-founder in 1958 of the renowned Colorado Railroad Museum and served as its Executive Director until retiring in 1991, and he also authored a number of books and articles on railroad history. Art Francis, a native of Kelso, formerly an employee of the Union Pacific who now works for Bechtel in Las Vegas, kindly read and commented on a copy of this history, as did Union Pacific Assistant General Solicitor Jeff Asay, who is also the author of

a history of the Oregon-Washington Railroad and Navigation Company, now a component of the Union Pacific System. David F. Myrick, author of *Railroads of Nevada and Eastern California* who devoted a chapter in the second of his two volumes to the Salt Lake Route kindly read a next-to-last draft of this study and made a number of suggestions. Tara Travis, park historian at Canyon de Chelly National Monument, Arizona, whose master's degree thesis was on the subject of Mission-revival style railroad depots in Texas, read and critiqued this typescript, since it deals with a Mission-revival style railroad depot in California; it was her comments, useful throughout, which specifically led to an additional appendix placing the Kelso Depot in the contexts of Mission Revival and Spanish Colonial Revival architectural styles. Finally, John R. Signor, author of *The Los Angeles and Salt Lake Railroad Company*, read a draft of this study and found no changes or corrections to recommend.

A NOTE ON SOURCE MATERIAL

Despite the valiant efforts of Don Snoddy, Bill Kratville, Jeff Asay and others, many historically important Union Pacific Railroad, and subsidiary Los Angeles and Salt Lake Railroad, records, have not survived. The earlier Authority for Expenditure files for Interstate Commerce Commission Account No. 17, Depots and related structures, are reasonably complete for the 1920s and perhaps 1930s, but diminish in completeness thereafter. The Union Pacific Museum Collection in Omaha does have a complete run of *The Union Pacific Magazine*, whose value is constrained by the fact that it ceased publication in 1933. In December 1968 the railroad commenced publishing *INFO*, another monthly employees' magazine, but not only is the reporting in it not thorough enough to be useful for historical purposes, a complete file of it could not even be found in either the Union Pacific Archives in Omaha Union Station or in the Union Pacific headquarters at 1416 Dodge Street in Omaha; specifically, the first four years of the magazine could not be located. The Union Pacific Museum Collection has an excellent hardbound set of system public timetables extending down to the eve of Amtrak operation. A set of plans for the Kelso Depot, as originally designed, has been obtained from the Union Pacific Engineering Department the Union Pacific General Offices at 1416 Dodge Street in Omaha, Nebraska. The Union Pacific Museum Collection produced a few company photographs made of the depot within its first year of operation, and copies of mostly anonymous L.A.& S.L. civil engineers' field notes on work in and around the depot during the 1920s. But no comprehensive building record file or authority for expenditure file covering later alterations in the Kelso Depot have been found, so that some alterations to the depot are not a matter of documented record. Some files of work orders affecting this building have been found in Union Pacific General Office files in Los Angeles, but not all. Such dates as it has proved possible to assign to some of the physical alterations to the depot and grounds not documented in surviving railroad company records have come from reminiscences of former employees and residents of Kelso, and they sometimes disagree with each other. In 1971, Amtrak took over passenger service on the Union Pacific and most of the nation's railroads, and the U.P. Dining Car and Hotel Department lost its principal function at that time, a quarter of a century ago, and what was left of it apparently was converted into a "Commissary Services Department" to serve railroad employees only. Most of its records must have been destroyed since then. Much Union Pacific history, particularly on the local level, seems to be lost forever.

RECOMMENDATIONS FOR FURTHER RESEARCH

The purpose of this report has been not to serve as light and entertaining reading, but to serve as a reference for National Park Service management personnel, historical architects, interpreters and others who will be dealing with the rehabilitation and restoration and interpretation and use of the Kelso Depot and its grounds. Its focus has been on the *physical history* and human history of that one building and its landscaping, with just enough information about the remainder of the town of Kelso, and about the railroad, to place the Kelso Depot in its proper historical context.

A search of all available Authority for Expenditure files in Omaha, Nebraska, has not turned up information regarding the date of alteration of the southwest end of the arcade to provide an additional baggage room, although Jeff Asay subsequently found in Los Angeles work order files for the two known major remodelings of the Lunch Room. Documentary evidence of the enclosing of the arcade may exist in Union Pacific Files somewhere, but that is far from certain, and beyond the limits of research possible at this time. A thorough search of all southern California libraries which might have material on Kelso — this study has targeted only those *most* likely to have such material — should be undertaken. A search of newspaper "morgues" and files of newspapers in Baker, Barstow, Las Vegas, Los Angeles, Needles, San Bernardino, and perhaps elsewhere undoubtedly would turn up much more information than the limited searches hitherto possible have found. In short, a special history study focused on Kelso is recommended, to amplify and expand the information in this historic structures report, but also to develop the history of the whole Kelso establishment and the people of its community. Remember, the focus of this report is on a single building and its grounds, and the people who lived in, worked in, and used and altered this building and its designed landscape. A broader history of the company town of Kelso is needed.

With respect to the Kelso Depot itself, enough information probably exists to permit restoration of the Lunch Room to its original design, following preparation of a Historic Furnishing Study. Taking off from the original Lunch Room plan, and the half-tone of the interior of the comparable lunch room at Caliente, the furnishing study should involve a search of restaurant supply catalogs of the early 1920s, and a search for surviving cafes and soda fountains which have original stools, counters, and other components of the types used at Kelso. Art Francis has a fragment of the original Lunch Room countertop which he found on the Kelso Depot dump north of the depot years ago; an archeological investigation of the depot dump might turn up more of the countertop, perhaps some of the original stool bases, and samples of china, silver and glassware used in the Lunch Room during the early years.

Having said all of the above, it is worth recalling Dennis Casebier's plea at a planning meeting at Goffs Schoolhouse on November 15, 1996, that the Kelso story, important as it is, and the survival of the Kelso Depot more or less intact while most mine and other historic structures within Mojave National Preserve are long gone, should not be even the principal or primary focus of history research and historic preservation within Mojave National Preserve. While much more research is needed to tell fully the story of Kelso, and of its depot, there exists a parallel great need for a thorough, multi-volume historic resources study that deals with the whole history of historic Indian occupation and use, Anglo exploration, military activities, the development of wagon roads (only partly researched to date), the history of mining, the history of railroads other than the Union Pacific, the history of other towns and stations along the Union Pacific such as Cima and Ivanpah III, the history of ranching and homesteading, the construction of power and communication lines, the construction of and later paving of modern roads, the history of schools and school lands, the history of water use and development, the history of tourism, and much more that is a part of the history of the lands now encompassed by the boundaries of Mojave National Preserve.

PHYSICAL DESCRIPTION AND ANALYSIS

Photo 45: View of depot from east in 1995. Photo by Thomas Mulhern, Jr., NPS.

PHYSICAL DESCRIPTION AND ANALYSIS

SITE

The majority of the historic landscape features on the building site no longer exist. The trees and other plantings originally installed by the railroad had matured and as seen in mid-1970s photographs the station was an oasis in the desert. The ample growth of trees, hedges and lawn was undoubtedly due to the use of great amounts of water over the years. After the station operations were terminated in 1964 and the restaurant closed in 1985, the grounds received less than adequate attention and the trees and other plantings deteriorated. Most had been removed by 1993 except for some of the original palms in front of the building. The hedges and most other plantings are gone and the lawn areas now barely survive.

The historic concrete lighting standards that illuminated the track platform in front of the building have been removed and are stored in the depot basement. Some of these standards are broken. Any that can be restored should be reinstalled. Replacements needed can be fabricated if not available from a reproduction manufacturer.

Brick paving removed from the track platform is stored in a shipping container to the west of the building. The paving brick of the walkways from the platform to the building is still in place and is in good condition. The lack of wear would cause the observer to think that it may not be the earliest paving, but no information to date has suggested that it is not original. Its overall good condition suggests that this brick paving should continue in use with only minor attention to replace any broken bricks or reset uneven ones to assure a smooth, safe walking surface.

The steel fence is a recent installation (1993) to discourage people from walking onto the tracks. Restoration of the historic brick platform is desirable, which will require a cooperative agreement with the railroad. Even so, some form of safety barrier will still be needed, whether it be the existing fence or some other design acceptable to both the National Park Service and the railroad. The present safety fence is approximately where the historic boiler flue fence was located, hindering reconstruction of the portions of the historic fence along the brick platform.

The intersection of Cima Road and Kelbaker Road occurs within the NPS site. When Kelbaker Road was constructed, Cima Road was probably altered at its intersection with the new road. Whether the alignment of the remaining portion across the depot site has been changed is not known. In addition to site utilities, a major site design concern will be provision of parking. For safety, parking should be on the building side of the roads to the extent possible, but space is limited. There could come a time when available parking space would be inadequate. Utilization of the National Park Service owned parcel of land to the northeast of the depot site may become necessary in the future. Future planning activities would be predicted to include a Development Concept Plan for both National Park Service owned parcels and final development will be influenced by a number of considerations. The small wood frame coal and supply shed north of the depot is still in existence. This wooden shed is a historic feature of the site and will need to be preserved.

It is proposed that the historic landscape be reconstructed in those portions of the site in front of and at each end of the building. For detailed descriptions of the historic landscape see the historic data. Development of the remainder of the depot site can be deferred until broader planning can be

accomplished. The area of the site behind the building will need to accommodate functional requirements including traffic control, parking and accessible visitor walkways to the building.

In planning and design of the landscaping, it is necessary to give consideration to the extent of reconstruction of the historic planting. There are two views with regard to this. One approach is to reconstruct the oasis character of the historic landscaping including the cottonwood trees which were installed. An alternative is to reconstruct the landscaping as shown in the earliest photos following completion of the building but before the cottonwood trees were planted. The issue concerns the amount of water necessary to maintain the oasis concept. In as much as there apparently is concern regarding the water table of the area, reconstruction of the oasis landscaping concept would not be a sustainable design approach.

Until such time as the building is rehabilitated and can be opened to the public, some form of rest room facility is needed. This should be separate from the depot building and a temporary facility until a complete development plan is prepared. A temporary facility within the depot building is not recommended. Occupancy of the building should not be permitted until rehabilitation is complete.

LANDSCAPE ANALYSIS

Background

An interpretation of the historic landscape as implemented in the period of significance indicates that the designer(s) strove to achieve an overall park-like effect utilizing large exotic shade trees planted in lawn. Palms, joshua trees, and other "desert" plantings provided some regional definition.

From its utilitarian inception, the Kelso depot and rooming house site evolved into what it probably will be remembered for the most: an oasis in the desert, with a place to get a good meal. A small community had emerged around the station and the depot had become an ad hoc town center, with social and civic functions intermingled with the normal railroad business at hand. If the structure served as an intermittent town hall, then the grounds, with its large shade trees, verdant lawn and stately palms, were the closest thing Kelso had to a city park.

Visiting the scene now, one is surprised and awed by the presence of a remarkable building that seemingly appears out of nowhere in a breathtaking landscape. Mature date palms, all that remains of the historic plantings, stand as exclamation points in this vast land with hundred mile vistas, telling the desert traveler that there is something important here. The site is dusty and vacant. Tourists arrive at the crossroads and gawk at the building; some appear to be looking at a mirage.

The original landscape design called for groupings of palms and large shade trees in and around rectangular lawn areas located between the depot building and the track platform and extending around the ends of the building. Various varieties of desert plants were located in the developed landscape area, especially in the portions off the ends of the building. The portion of the site behind the building does not appear to have been developed in this planned landscape scheme, but by 1929, rows of cottonwood trees had been planted in the areas off the southwest and northeast ends and behind the depot. By 1975 the site had become a veritable garden spot in the Mojave. However, since all of the railroad operations terminated by 1985, the historic landscaping of the site had virtually disappeared by 1993 because of inadequate maintenance. With the exception of five remaining palms, nothing remains of the original plantings.

For detailed descriptions of the historic landscape and site evolution, see the historic data in this report.

Treatment Options

Treatment options for historic landscapes may involve one of four approaches: preservation, rehabilitation, restoration or reconstruction. The definitions of the four treatment options are found in The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes (1996). Any treatment, however, must be based upon thorough historical documentation and an analysis of the character defining features of the landscape. Brief descriptions of the four treatment options and their applicability to Kelso depot follow, but recommendations are presented only for the preferred reconstruction alternative.

Preservation resembles a "no action" alternative, but emphasizes retaining the historic landscape's existing integrity and character. This treatment is deemed unapplicable on the grounds that the existing historic landscape of the Kelso depot, with the exception of the palms, has been totally eradicated.

Rehabilitation retains the significant historic character of the landscape, while permitting alterations that are necessary for both the efficient management and contemporary use of the property, including the accommodation of life safety issues and legal code requirements. This option is based on the existence of substantial remaining historic landscape character, consequently this treatment is not recommended because of the lack of most of Kelso depot's historic landscape.

Restoration accurately depicts the form, features, and character of a landscape as it appeared at a specific period or was intended by its original design. Restoration illustrates a narrow period in the landscape's history, not its history as it evolved. The restoration treatment should only be considered when the landscape's earlier history is so significant that it justifies removal or alteration of features or materials that would ordinarily be retained. This method is not considered a viable treatment alternative because very little of the historic landscape still remains to be restored.

Reconstruction involves depicting the form, features, and details of a non-surviving historic landscape, either as it appeared at a specific period or was intended by its original design. Such a treatment is appropriate only for a landscape that has lost most, if not all, of its integrity. This option is considered to be the most viable treatment alternative for the Kelso depot historic landscape. The reconstructive focus should be directed toward those aspects of the original landscape that retain significant historic character while still permitting the efficient management and contemporary use of the property.

Proposed Site Development

The first stage of site development is recommended to be the reconstruction of the originally landscaped portion of the site between the railroad tracks and the front of the building and the areas at each end of the building which were integral to the scheme. The remainder of the site can be developed at a later time following additional planning and evaluation of visitation levels. Throughout all site development stages, all identified significant historic and archeological features are to be preserved. Some of these elements can be interpreted.

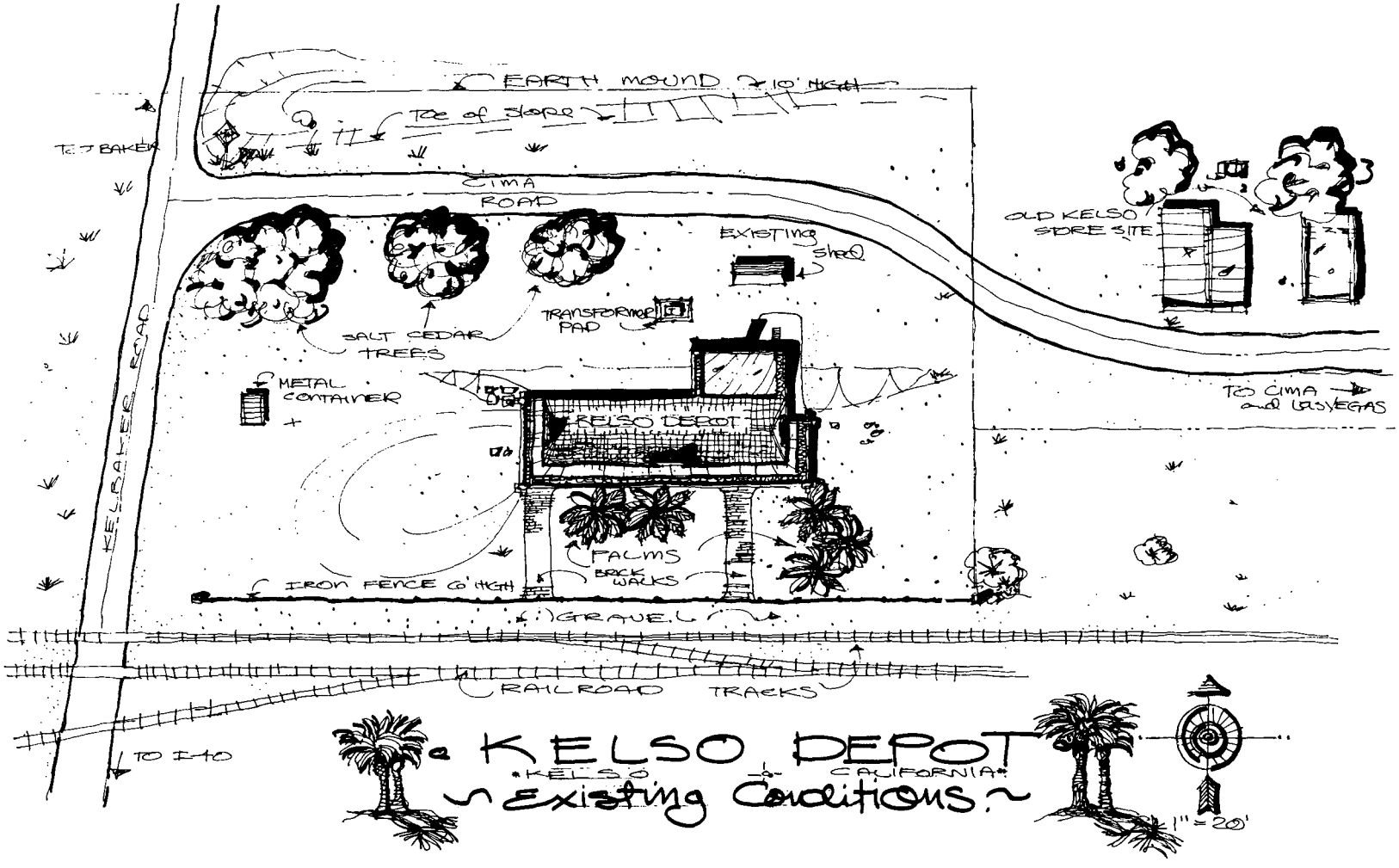

Figure 12: Sketch of existing site.

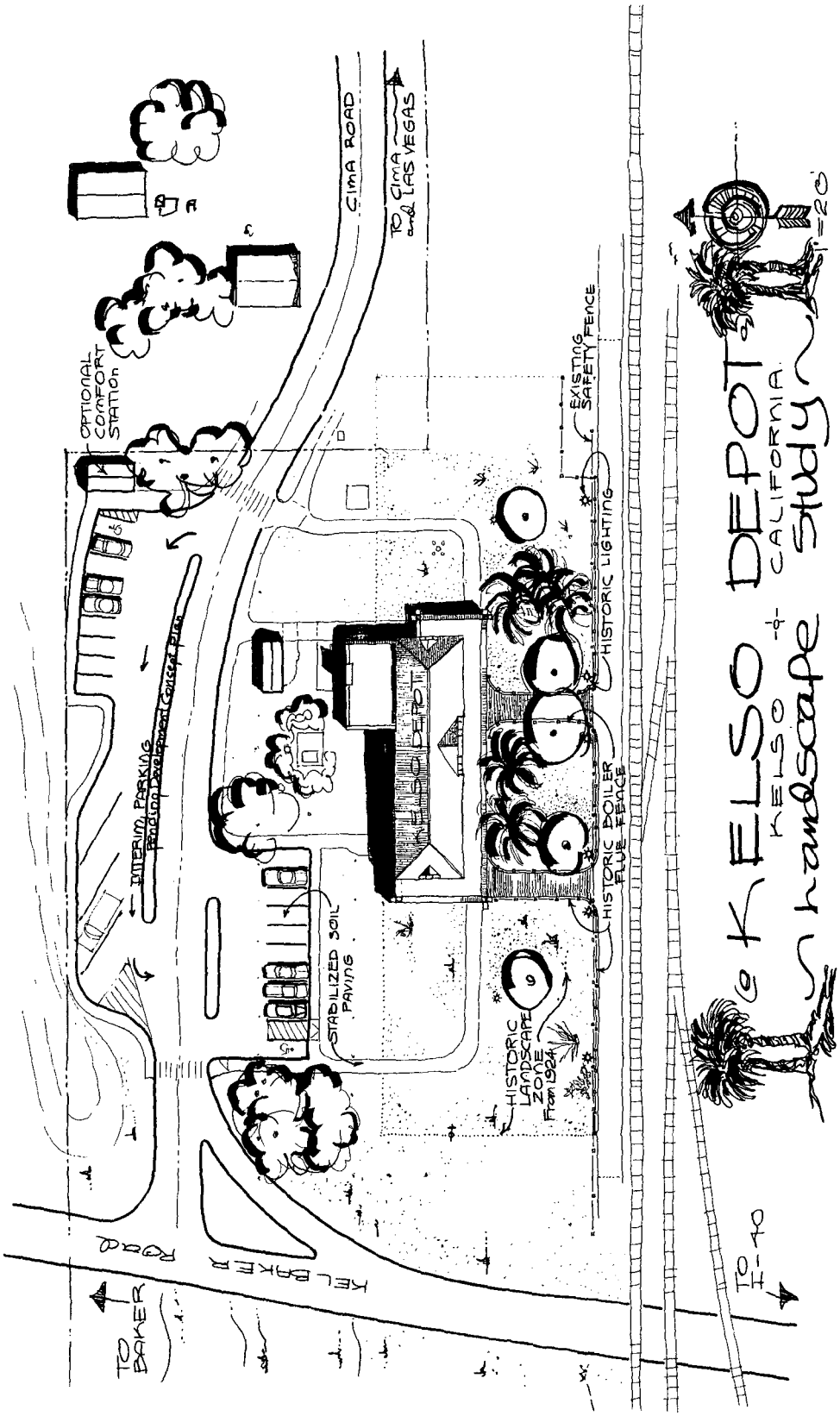

Figure 13: Sketch of possible site development.

Reconstruction of Historic Landscape.

Plant Materials —

- New plantings should reflect the elements of the initial design and character demonstrated in the historic photos.
- As much as possible, plants should be low water consuming.
- Lawn area to be restored.

Site Amenities —

- Existing brick walkways will remain.
- The historic concrete lighting standards should be restored or reproduced and installed in their original locations.
- Historic photos show benches located in various locations on the site. These could be duplicated and installed on site.
- Reconstruct the boiler flue fence along the brick walks between the building and the former brick platform. The present safety fence hinders reconstruction of the portions of the boiler flue fence along the platform because it is in approximately the same alignment. Ideally a safety barrier design could by developed which would allow reinstallation of the brick platform and reconstruction of the boiler flue fence along the platform.

Design Criteria for Future Site Development.

Circulation —

- Vehicular access and parking should be controlled.
- Parking should be located on the building side of the roads as much as possible. Special effort should be made to require safe pedestrian crossing of Cima Road if additional parking is required.
- All paving surfaces should be designed to blend into the landscape as well as be wheelchair accessible. Seek paving soil or aggregate binder which will provide hard-surfaced walkways but retain the natural earth color.

Plant Materials —

- Plants should be low water consuming.

SITE UTILITIES

Historically, utilities for the community including the depot have been provided by the railroad. Water is currently pumped from deep wells to standpipe storage and distributed by mains for community use and irrigation. An agreement with the railroad provided water for fire protection to the depot through the fall of 1996. A new short-term agreement for this same purpose is presently being negotiated. A community sewage collection, treatment, and disposal system appears to have served the depot and the historic railroad development north of the tracks and presumably the Kelso community on the south side of the tracks. Whether this system is in active use has not yet been ascertained.

Photo 46: View of rear of Kelso Depot building and site. The small building behind the kitchen, at left, is the coal and storage shed. Photo by Gordon Chappell, NPS, February 8, 1995.

Water

Two alternatives exist for a supply of water to meet the depot's needs. Both alternatives will require a new on-site water distribution system.

One alternative is to develop an on-site well supply and construct on-site storage and treatment facilities located either on the depot site or on the other National Park Service owned site to the northeast of the depot. Two small-diameter wells would be drilled and developed so as to have the capability of supplying daily domestic demands with one well out of service. The wells would be drilled and cased to a depth of probably 2,000 feet. Wells yielding the depot's peak daily water needs in 8 hours time are required. Chances for development of such wells appears to be good. The wells would be equipped with submersible pump and pitless adapter.

This on-site well supply alternative would require chlorination, storage, and domestic and fire pumping capabilities. Two domestic pumps and a fire pump would be required. The domestic pumps would be capable of furnishing the development's peak instantaneous water demands at constant pressure. The fire pump would be brought on line automatically. A hypochlorinator would be provided for the application of chlorine to source water. Water storage provided by two tanks would be required for fire suppression. If the water plant was located on the land northeast of the depot site, then a water easement would be required across the private land between the two sites. An emergency generator with automatic transfer capability would be provided to meet the critical power needs of the depot during periods of commercial power outages. Power needs for pumps would be included in sizing such a generator.

Another alternative is to negotiate a long-term cooperative use agreement with the railroad and to rehabilitate the existing water line or construct a new water line crossing and connecting to the Union Pacific water distribution system south of the tracks. Testing and evaluation is needed to determine if the existing water line can be rehabilitated. Three alternatives exist for perpetuating current water system operations (although the system would need to be upgraded). They are: (1) the railroad would continue to own and operate the system; (2) the park service would own and operate the system; or (3) a private contractor would own and operate the community water system. In any case, the operator would treat the water and the users would share the costs for improvements, operation and maintenance. This alternative would require a compound water meter at the point of connection to the railroad's water distribution system. Residual water pressures of 57 psi +/- 3 psi are available at the point of connection.

Both water supply alternatives require a water distribution system with service and fire sprinkler laterals to the depot and fire hydrants and hose houses outside the depot.

Sewer

Two alternatives exist for sewage facilities to serve the depot. One alternative is to construct an on-site sewage treatment and disposal facility consisting of septic tank and subsurface soil absorption system. The suitability of site soils for sewage disposal would need to be verified, and code separation requirements between sewage facilities and water supply wells would need to be maintained.

The other alternative is to continue to discharge sewage to the community sewage collection system and to construct all necessary renovations to these collection and disposal facilities. This alternative would require some form of easement or use agreement for use of the abandoned community sewage line from the north side of the tracks to the treatment facility. It would also require a sewer system evaluation survey, and it will likely require sewer repairs, and sewage treatment and disposal improvements. Negotiation of a utilities contract with a contractor to own and operate the community sewer facilities could be considered.

ARCHITECTURAL ANALYSIS

Description

Kelso Depot was designed and executed in the mission revival style, very popular in the southwest at the time. The main two-story rectangular block has a hipped roof with variegated red mission tile roofing. At the center is a stepped and scrolled gable end, an espadaña parapet, with the Union Pacific shield prominently centered. Similar but smaller gable ends adorn each end of the building. Across the front and along both ends at the main floor is an arched colonnade or arcade. At the rear and northeast end is a kitchen wing, resulting in an "L-shaped" building plan on the first and basement floors.

The building foundations and basement are constructed primarily of reinforced concrete. The first and second floors and roofs are wood framing. Steel beams were used to span the large lunch room space. The primary exterior finish is stucco and that of the interior is plaster. Concrete was used for the floors of the basement, Lunch Room (including the portion that has become a lobby), Kitchen, bathrooms and the rooms at the west end of the first floor housing railroad activities. The remaining areas of the first and second floors were finished with wood flooring.

Doors and windows are wood, doors being typically the cross panel style, and windows divided light, mostly double hung or casement. Photos taken ca. November 1924, not long after construction was completed, show that canvas awnings were installed on the second floor windows.

The main section of the basement, from southwest to northeast, contains a large Reading Room, a Billiard Room, then the central stair and Locker Room, and finally a large Toilet Room. The Locker Room has a linen closet and janitor's closet at the southerly side. These still are intact, complete with shelving. The toilet room had shower and bathtub compartments, some of which still exist. The "L" portion of the basement, under the Kitchen, contained a Supply Room, Store Room and Boiler Room.

At the southwest end of the first floor were three rooms for the railroad operations — Conductor's Room, Ticket Office and Baggage Room. In the central portion of the main rectangular block were rooms for the manager of the lodging and lunch room operation, lodging for female employees, and bath and toilet rooms. Next is the main entrance, with a cashier's counter and display case, and the main stair. This main entrance was originally directly into the Lunch Room which consists of one-third of the floor area of the main block of the first floor. The wing behind the Lunch Room is the Kitchen.

The second floor has a central hall with twelve rooms for lodging railroad personnel along the front (southeast) side. Along the back side, from the southwest end, are five rooms for male employees,

Photo 47: Close-up view of depot and palms. Photo by R. L. Carper, 1997.

a rest room and bath, the central stair, a linen closet, and to the northeast end, three more rooms for male employees.

The main two story plus basement section of the building is 115 feet 6 inches by 32 feet, exclusive of the arcade. The rear one story over basement kitchen wing is 43 feet by 24 feet. The total gross floor area of the building is approximately 11,600 square feet.

Architectural Significance

The Kelso Depot is symbolic of the development and history of railroad transportation in the west and southwest and is a significant feature in the history of the southern California Mojave Desert

area. The building is a fine specimen of the mission revival architecture utilized by the railroads in this region.

Historic Period. The period of significance recommended in the National Register of Historic Places nomination form (1991) is 1924, the year of construction, to 1945 because of the importance of this railroad transportation route during World War II. The building continued to serve the railroad activities in one form or another, although at a less significant level, until 1985. The last active function was the restaurant operation, which closed on June 30, 1985.

Contributing Elements. The elements contributing to the significance of the site as stated in the National Register form include "...the station building, landscaped grounds, electroliers, sign mountings, flagpole, brick walks and platform, and wood frame coal and supply shed." [NR form, Section 8, pg. 8].

In the National Register form principal character defining features of the building exterior are stated to include the "...overall building massing; tri-color Mission tile roof; espadaña parapets; Union Pacific herald in south espadaña; the arcade, with moulded bases and capitals on pillars and buttressed ends; original double-hung and casement window sash; entry; downspouts, collector boxes and decorative straps; brick walks and electroliers." The interior character defining spaces and features are stated to include "...lobby, lunch room, hotel rooms, billiard room and reading room; heavily-textured plaster wall and ceiling finishes; panel-and-batten wainscot; cigar case and check-in counter; lunch counter and stools; staircases, newel posts and balustrades; tubular steel beds; lockers." [NR form, Section 7, pgs. 7-8].

The historic information included herein, coupled with on-site investigation, indicates that the lunch counter and stools that are presently in the building are most likely not a part of the original but rather to be from the 1949 modifications. The tubular steel beds indicated in the National Register information are no longer in the building. The lockers listed are still in place in the basement Locker Room but not in the sleeping rooms.

Proposed Use

The preservation of the structure and site is proposed through an active, productive use for public education of the history of the area and association with national historical trends and events through interpretation of railroad and local history combined with providing offices and lodging for park personnel.

The first floor is proposed primarily for interpretive use, principally the Lunch Room, the central spaces which were originally the manager's and employee lodging rooms, and the southwesterly section of the first floor, which was the original railroad operations rooms. The original first floor entrance will continue to serve as the primary entrance. The Lunch Room can be used for interpretive exhibits, or alternatively, furnished for interpretation in the form of the original lunch room with the U-shaped counter, stools and appurtenances. It is felt that the historic research has provided sufficient information to be able to accurately depict the lunch room in its original form. The Kitchen could provide space for exhibits or for various support activities, such as offices or a workroom. The type of use influences code requirements, such as egress and fire separation. See the code analysis in this report for reference information. It is suggested herein that an appropriate use would be a workroom to serve the interpretive and exhibit activities, and cultural and natural

resources research activities. The first floor center rooms which historically were the manager's and employee lodging rooms can be utilized for various interpretive exhibits and activities. A cooperative association book sales space could also be included. The historic Ticket Office, Conductor's Room and Baggage Room can be utilized to exhibit the Kelso and Mojave railroad history.

The original basement Reading and Billiard Rooms are proposed for meeting rooms for park staff, research cooperators and volunteers, and for public meetings. The original basement Locker Room will serve as a lobby for the meeting rooms and the original Toilet Room (in modified layout) will remain for that function. The basement spaces in the Kitchen wing will contain building mechanical and electrical equipment, as they did originally.

The second floor is proposed for park staff offices and staff quarters. Offices will serve on-site personnel needed for interpretation, law enforcement and maintenance. Quarters for on-site staff residency provides the advantage of quick response for emergency conditions. In addition, it is suggested that overnight lodging should be considered for park personnel, research cooperators and volunteers with short-term field duty in remote park areas. Two of the original rooms at the top of the stairway have been identified for optional use for interpretation, if not needed for offices, and if visitor circulation on the stair and in the second floor hall can be accommodated safely and without disruption of staff activities. These rooms, opposite the top of the central stair, could be furnished to exhibit how the railroad crews would have been accommodated. For that option, these two rooms should be retained in their original basic form. The historic data indicates that these rooms could be furnished with little difficulty.

Description and Condition Analysis

Building Exterior

Roofing Systems — Most of the original clay tile mission-style roofing is still in place. Repairs were made under a BLM contract in 1993. The specifications for that project called for removal of the tile, replacement of deteriorated sheathing, replacement of the roofing underlayment, replacement of wood nailers, and reinstallation of the original tile, intermixing new tile to replace broken ones. Some original roofing tile samples are stored in the basement refrigeration and boiler rooms. Tile ends at eaves and upper side of the arcade parapet tile are not closed off. At the arcade parapet, rain falls directly into the spaces under the tile which will cause accelerated deterioration of the wood sheathing and tile support sleepers. The tiles do not project beyond the upper edge of the roof sheathing and framing as far as originally designed. This deficiency should be corrected as soon as possible. A close inspection of the tile roofing system should be conducted by a tile roofing expert to ascertain the tile stability and weathertightness of the system at the ridges and valleys. It appears that there may be a need for mortar bedding and closure at these locations.

Gutters and some collection hoppers and downspouts were removed in the BLM contract work, but not reinstalled or replaced. These are in storage in the basement mechanical room and freezer equipment room so the size and profile information can be duplicated for replacements.

The flat roofed arcade and Kitchen wing roofing was also replaced under the 1993 BLM contract. It was to be a built-up system. It appears that the installation was done with a cap sheet without gravel surfacing. At this time it is still in good condition.

Photo 48: Detail of downspout collection box (gutter is missing) and downspout strap. Photo by John W. Snyder, September 2, 1991.

Exterior Stucco — Exterior stucco is a metal lath system on the wall sheathing, which is horizontal 1x6 tongue and groove boards. In general, the system appears to be in reasonably good condition but repair and replacement is needed at some locations, particularly near grade because of water damage, and on the rear of the building. Major replacement under the rehabilitation program is not predicted at this stage. This exterior finish should be treated as a long-term maintenance element, with repair and replacement when required, similar to painting. The important techniques required are providing good sound joints at patches to prevent cracking and a patchwork appearance, and duplicating the finish texture.

Moisture has caused loss of stucco and deterioration of wood substrate materials on most of the arcade column bases, and in some cases, deterioration has occurred up to about the impost at the arch springline. Note that the impost profile (at the spring of the arches) was actually constructed with a half-round profile whereas it was shown on the 1924 construction drawings with a square edge profile. This latter condition is particularly evident at the east and west elevations. Stucco on the main building walls which are protected by the arcade is of course in the best condition. Within the more exposed wall areas, small cracks have been painted over from time to time. At the east and west elevations, damaged locations and former patches should be restuccoed.

Cracking of the stucco on the Kitchen wing walls and main building north wall is more extensive than the other building walls. Fifty to seventy percent of these wall areas are affected. Because of the cracking, delamination and failure will begin to occur in the near future.

The building walls have an accumulation of electrical conduit and telephone wiring, particularly the rear and east walls. All of this should be removed and wall penetrations and stucco repaired.

The stucco paint color has changed over time, tending toward lighter colors in the most recent paintings. The present color is a light cream, previously white to off-white in some locations. Earlier colors include several shades of salmon. It is possible that the original finish may have been a paint or stain rubbed into the stucco finish coat before it was cured, a technique found to have been used at the time.

Concrete and Metal Elements — The concrete arcade floor slab was scored to simulate 12 inch square tile paving. A strip at the perimeter and across the arcade at each column was poured separately from individual slab pours in each bay and are not scored. The concrete contains a red colorant. The slab in the southeast bay has cracked and some heaving has occurred in this bay as well as the bay to the west, causing some offsets up to 3/4 inch. Similar cracking and heaving has occurred in the front three bays at the west end of the arcade and the southerly one at the west side of the building that is within the addition. The arcade deck is slab on grade construction. The building roof drains were connected to a below-grade storm drain loop from the front of the building to a common connection point behind the building. As indicated on the 1924 drawings, the storm drains, as they turn from the front of the building to the ends, pass under the corner bays of the arcade. It is likely that in time the drains became clogged and were not cleaned, forcing excess water into the soil under the corners of the arcade, resulting in the cracked and heaved concrete slab sections.

The portion of the concrete foundation wall above the northwest basement Storeroom/Refrigeration Room window has failed, caused by moisture migration from the freezers in the first floor room above. The moisture penetrated the concrete, exfoliating the reinforcing, which in turn caused sufficient pressure to result in concrete failure. (See additional discussion of effects in the information pertaining to the Storeroom).

Along the rear and east sides of the building are concrete areaways with steel grates at partially below grade windows. Concrete damage has occurred at most of the grate support points. Several grates are missing, all need new screens, and all existing grates need repainting. Other damaged concrete elements needing repair include corners or edges of walls and curbs at the north basement stairwell, Kitchen stair and the access areaway to the Boiler Room, as well as the nosings of the concrete stairs. The steel cover on the Boiler Room access areaway is in poor condition and should be replaced. Various components of the Kitchen and basement stair railings need to be replaced. The concrete walk along the east side of the building, north of the arcade, has heaved and cracked and is an unsafe walking surface.

Adjacent to the west end of the building, various additions are concrete slabs and the concrete column bases for the 1961 emergency exit stair. Similar column bases occur to the east of the building also. Most if not all of these concrete elements were probably constructed in the 1940s and later. The slab elements at the west end are in poor condition and removal should be considered.

Photo 49: Northeast elevation of the depot. Photo by Gordon Chappell, NPS, February 8, 1995.

Wood Elements — Wood trim and the arcade ceiling will require some replacement, repair and refinishing. Eave fascia trim all around the building shows extensive weathering — peeling paint and unsecured sections — which indicates a high proportion of the material will be found with splits and rot damage.

The arcade ceiling exhibits evidence of past water leakage through the flat roof above. Rotted and warped ceiling boards should be replaced. The ceiling boards in the north bay of the east arcade exhibit extensive water stains; three boards are missing in the east center bay. In the west arcade, water damage occurred predominantly in the south and center bays (see also interior information). Water stained and warped ceiling boards characterize the majority of the south arcade ceiling although the severity of damage is less than at the ends of the building. Provision for framing replacement should be included in the work when the ceiling is open for repair and replacement. For all exterior and interior work related to painted surfaces, it should be assumed that many paint layers contain lead, requiring work and material disposal procedures to be executed in accordance with federal, state and local regulations.

Windows — Most of the original wood windows are in place but a variety of modifications were made over time, and the condition varies widely from window to window. In the south front, the original main sash of the east window of the Beanery was removed and replaced with a pass-through, consisting of an aluminum sliding window, interior counter and plywood panels to close the remaining opening. These components suggest that this modification was made along with the 1949 or 1955 Beanery and Kitchen modifications. The original transom at the top of this opening is still in place. The next window to the west (the south center Beanery window) was also modified, in this case the transom sash was removed for an air exhaust grill in a plywood panel. The third south Beanery window and the lobby window are in reasonably good condition. The two remaining east Beanery windows retain their original configuration and are in good condition. The original center window in the east Beanery wall was removed and in-filled except for a small opening which is now in-filled and closed with a stucco patch on the exterior. The interior plaster opening was not patched. This window modification was part of the 1949 Beanery and Kitchen remodeling and the small partly remaining opening was probably for the range hood exhaust.

There was a need in 1948, because the roundhouse was demolished, for offices for the roundhouse foreman and roadmaster, so in that year the south windows in the rooms to the east of the Ticket Office (Rooms 1 and 2) were removed and replaced with doors, but the window transoms were retained. The original window openings were reduced in width for the doors with stud framing, and this in-fill sheathed with plywood on the exterior and finished with cement stucco. The doors were set at the center of the openings. In 1981 the windows of Rooms 3 and 4 were similarly replaced with doors. At Room 3, the door was set at the west side of the original window opening instead of at the center. A concrete step was added at these doorway openings to match the interior floor level, approximately 6 1/4 inches above the arcade surface. In addition, wood door thresholds are as much as 1 1/2 inches above the concrete step surface.

In the south first floor wall aligned with the center of the sixth arcade bay from the west, is a 2 inch recessed panel approximately the same size as the window openings. The 1924 drawings indicate that a drinking fountain was to have been installed here; there is no obvious evidence that it was.

The Ticket Office window has a double leaf casement center sash and flanking single leaf casement sash, all operable, and a transom with a single operable unit above the center double sash. The

frame and sash are in good condition with only minor repairs needed, but replacement of some broken glass will be needed.

Windows throughout the remainder of the building vary in condition, from good to poor. Additional window information will be found below with interior descriptions, including the original west window of the Conductor's Room. The exterior of window sash and frames (also doors and frames) are painted green. The latest coat is a brighter value than the previous coat.

The 1924 photographs show that window awnings were installed on south, east and west second floor windows. These do not appear in later available photographs. Installation of reproduction awnings would be optional. The additional shading would reduce the air conditioning load, therefore some reduction of energy consumption. However, the wide roof overhangs provide good shading during the summer, so the additional shading provided by awnings may not result in significant energy savings. The mechanical systems analysis later in this report will provide data regarding the energy effects of window treatments as well as building insulation.

Doors — The main south entrance door is an 8 light wood door, 42 inches wide, flanked by 12 inch wide 4 light sidelights, with a 4 light transom above. The masonry opening is wider than that shown on the 1924 drawings, 78 inches rather than 74 inches and the door was hung on the west jamb instead of the east. There is an approximately 4 1/2-inch step at the opening from the arcade level to the interior floor slab. The frames and sash are in fair condition but the door has been slightly damaged and has undergone several hardware modifications. Some glazing is broken or missing. The lockset is missing but the hinges, a closer and a brass threshold are still in place. The threshold has a 1/2 inch rise at the exterior, 5/8 inch at the interior. The doors now in the original window openings of Rooms 1 through 4 were previously described. They are in fair condition but may have been salvaged from other structures.

The original west exterior baggage room door was relocated to the south end of the addition in the west arcade when that was constructed. Each leaf of this double door measures 42 inches by 106 1/2 inches and has six lights (3 by 2) in the upper panel and diagonal center grooved car siding in the lower panel. The door has some minor damage, broken glass and hardware modifications and additions but is in fair condition.

The remaining exterior and interior doors throughout the building are described in the information for the interior.

Window and door components will need repair and replacement. Typically, such treatment is needed for elements exposed to the hot, drying sun, ultraviolet degradation and water — particularly window sills, bottom sash frames, lower door stiles and frames, and the like. All wood elements should be repainted. Window and door reglazing will also be needed, including replacement of broken and missing glass and replacement of putty. Unless testing confirms otherwise, assume that old glazing putty contains asbestos which will require removal and disposal procedures in accordance with EPA and state requirements.

West Addition — The addition in the west arcade was probably constructed in 1942, although the exact date and purpose have not yet been confirmed. Some sources indicate there was need for shop space by the railroad; other sources indicate the addition to have been caused by the hectic World Was II and mining activities. As described in the historic data, this addition was most likely constructed for a baggage room because the original baggage room was converted to the station

Photo 50: Kelso Depot, October 1973. Photo by Toni Ruiz-Leuz, collection of Everell Hayes.

Photo 51: Southwest elevation of the depot showing the 1942 enclosure of the arcade at this end of the building to create an additional baggage and express room. Photo by Gordon Chappell, NPS, February 8, 1995.

agent's office. The west three bays of the arcade were enclosed simply by in-filling the arches and north and south ends of the arcade with wood frame walls and sheathing the exterior with horizontal siding and the interior with plywood. The exterior siding is 1x8 v-groove shiplap so that the surface has an appearance similar to the arcade ceiling, although that original material is tongue and groove and the edge profile presents a wider, deeper groove. The original ceiling of the west arcade was not altered, nor was the concrete floor slab.

The two west windows of the arcade addition, in the southerly two arched bays, are wood 2 over 2 double hung, probably salvaged from another building. These are in poor condition; the south window is missing the lower sash. A door was installed in the northerly arch bay, which is also in poor condition. A small window was installed in the north end. The original west Baggage Room door was relocated to the south end of the addition, and the west window of the Conductor's Room was removed to provide passage between that room and the addition, but no door was installed. Additional detail is provided in the interior information below.

Structural Systems — The building is a substantially designed and constructed wood frame structure on concrete foundations. With some exceptions the structural systems are in good condition with no obvious evidence of seismic or other major loading distress or damage. As previously described, there is some heaving and cracking of the concrete arcade paving and some cracking of stucco, which for the most part is probably from water intrusion or temperature stresses rather than structural effects. A detailed analysis with recommendations for strengthening load carrying systems and providing seismic resistance is presented in the structural portion of this report.

Structural improvements, as described and recommended in the structural analysis, will consist predominantly of additional framing members and framing connectors to improve the building's capacity for both vertical and lateral loading in compliance with today's code requirements. Because some of the historic interior finish materials had previously been removed, this work will not result in loss of historic materials in those areas. In other portions of the building, removal and replacement of plastered ceilings and walls, or portions of them, will be required to accomplish the work. However, some of this plaster will require replacement in any case because of water and vandalism damage.

Interior — Basement.

Stair and Locker Room — The original stair from the first floor is in reasonably good condition and should be preserved. The first basement room entered was the historic Locker Room. Ceiling and wall plaster here (including that in the closet under the stair) is a smooth finish, painted. Plaster is in good condition except for some spalling finish coat and peeling paint at the south wall and missing plaster beneath the opening to the crawl space at the south wall. The scored red concrete floor and red concrete base is in good condition.

At the south side of this space is a linen room containing original shelving, which is in excellent condition. Wall and ceiling plaster is also in good condition. The room and the shelving should be preserved in its present form. Adjacent to this linen room is a janitor's closet with a sink. Wall and ceiling plaster is in fair to good condition but the sink is in poor condition.

Crawl Space — The crawl space along the approximately one-third of the south side of the building, and along the west end, provides good access to plumbing and electrical installations, with approximately four feet of clearance.

Toilet Room — In the large restroom, at the east end of the basement, some historic fixtures are in place as well as original wood and steel toilet partitions along the north wall. The original bath compartments along the south wall no longer exist. In this room are two modern 82 gallon electric water heaters, which can be removed with new water heaters located at each restroom or bathroom location or in the mechanical equipment room. Plaster wall and ceiling finish is smooth, painted, in fair to good condition except for peeling paint, especially at the north side of the room. The floor is red scored concrete, in good condition. Windows are in good condition, considering this location. There is an access opening in the south wall to the crawl space, which was not shown on the 1924 drawings. It would be desirable to reuse the original extant toilet stalls and plumbing fixtures if possible. If the original toilet room is configured to provide new restrooms for men and women, some of the original toilet elements might be relocated. If not used the original partitions and urinals should be preserved in the building artifact collection. An alternative that could be considered to the two restrooms in the basement is to utilize all of the basement toilet room space for one restroom, say for men, and reconfigure the first floor restroom for women. This option would provide additional toilet fixtures for periods of high visitor occupancy.

Billiard and Reading Rooms — The two large rooms in the westerly portion of the basement were originally a Billiard Room and Reading Room. The original plaster ceilings were removed in 1981 and replaced with a suspended t-grid acoustical ceiling. This system is not only damaged and most acoustical panels are missing but it is also inappropriate for this rehabilitation and should be removed. Some original plaster remains at the center of the Reading Room ceiling, the heavy texture similar to the walls, painted white. In the Billiard Room, the ceiling plaster was also removed but the majority of the wood lath remains. Wood 1x3 nailers were applied over the lath, perhaps for a stapled-on acoustic ceiling material preceding the suspended acoustical ceiling. The plastered walls and most wood trim remain in both rooms. The heavily textured plaster is generally in good condition except for water damage along the north walls below the windows. Plaster is missing altogether below the east window of the Billiard Room. There are holes in the plaster wall between the two rooms.

Both rooms have a double wood chair rail along the walls, except the west wall of the Reading Room. The rails are 1x3 (3/4-inch by 3-inches actual) at 36 1/2 and 45 1/2-inches above the finish floor. Anchoring to the concrete walls was accomplished with wood plugs in the concrete at 2 feet on center. Some chair rail has been removed in both rooms but is still extant.

Floors in both rooms are the red scored concrete with red concrete base. In the Reading Room there is as much as 1/2 inch displacement at a slab joint across the center of the room. Otherwise the floors are in good condition.

Reading Room and Billiard Room doors, wood five panel, are in poor condition, with most panels broken or missing. Windows in both rooms are in surprisingly good condition for being in below grade window wells, although most glass is broken.

A wood and glass historic bookcase remains along the west wall of the Reading Room. It has been badly vandalized--all the door glazing is broken-- but it is repairable.

Storage and Equipment Rooms — In the rear section of the basement, beneath the Kitchen, are the original Supply Room, Store Room and Boiler Room, as labeled on the 1924 drawings. These will provide ample space to serve as mechanical and electrical rooms for new equipment.

Photo 52: Basement stair. Photo by R. L. Carper, 1997.

Photo 53: The historic Basement Toilet Room, with the original wooden shower stall, at left, metal toilet stalls and urinals. Also note the steam radiator hung from the ceiling. Photo by John W. Snyder, September 2, 1991.

Photo 54: Northeast corner of Reading Room. Photo by R. L. Carper, 1997.

Photo 55: The original bookcases in the Reading Room. Photo by R. L. Carper, 1997.

Storeroom (Refrigeration Room): The Storeroom (in the northwest corner of this wing) became the refrigeration equipment room instead of the room off the southwest corner of the Kitchen. This occurred late in the year 1925 or early in 1926 as evidenced by engineer's field notes laying out the equipment arrangement [Proposal for modifications to freezer equipment room in basement of Club House, Union Pacific Field Engineers notes, Aug. 31, 1925].

The ceiling plaster and wood lath of the west half of this refrigeration room became badly damaged by moisture from the freezer compartments in the room above. Some plaster is missing and some gypsum board replacement was installed in the southwest quarter. The first floor framing in this location is rotted (joists, plate and header) and will need to be replaced. The migrating moisture also exfoliated the steel reinforcing in the concrete over the west window causing failure of the concrete lintel section of the wall which will also need to be replaced. The walls of this room are concrete, unfinished. The concrete floor is not colored or scored. The west window sash is missing and the frame is in poor condition because of the moisture from above. The wood five panel door has three missing or broken panels.

The refrigeration equipment is still in place. This equipment should be preserved, either in place or at least as part of the building artifact collection. This room could be considered for use to store building artifacts although it is not large enough for all of the materials and items or for large elements. If items are stored here they should be material which would not be affected by water (roofing tile for example) in the event of flooding.

Supply Room: This supply room is located between the Locker Room and Storeroom/Refrigeration Room. The wall and ceiling plaster has a smooth finish and is in fair condition. There is extensive peeling of the paint finish. Plaster is missing and the metal lath rusted along the edge of the stairwell opening in the ceiling. There is some spalled plaster finish coat and extensive water damage near the floor all around the room but the plaster has been patched.

The shelving indicated on the 1924 drawings is not in existence. On the other hand, there is a 4x6 wood beam on 4x6 posts near the west center of the room that is not shown of the 1924 drawings. One post is at the west wall, the other near the center of the room. Both beam and posts have chamfered edges. There is no clear evidence of the direction of span of the first floor joists above this room, but the beam and posts would imply a north-south orientation and also for additional support of framing for the stairwell opening.

There is only slight evidence on the south wall of the original stair — light switches and conduit parallel to the stair slope and a faint paint line that would have corresponded to the bottom of the stair carriage. The stair was removed in 1955; the patch work was done in a better than average manner. There is missing plaster at the stairwell ceiling.

The flooring is concrete, without colorant or scoring, and is in good condition. The window in the west wall is in fair condition and has a steel round bar grille, which is rusted. The doors to the Locker Room and rear hall are in fair condition.

Hall: The unpainted ceiling plaster is in good condition. Walls are concrete, unfinished. The east and west walls both have a vertical crack from the south upper corner of the door openings. The cracks were patched although the east wall patch has cracked again. The flooring is concrete, without colorant or scoring, and is in good condition.

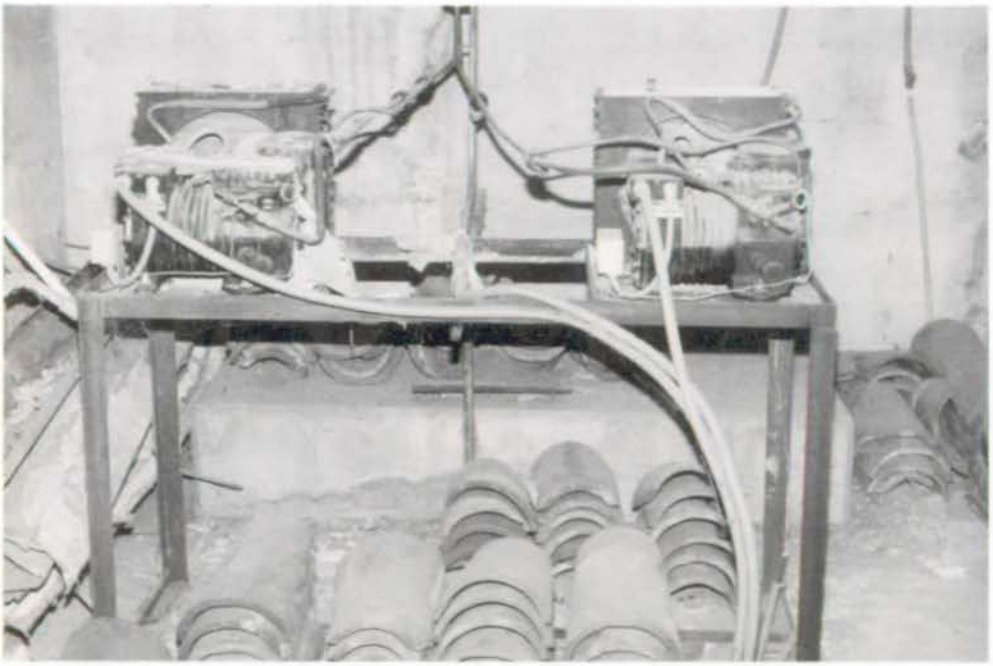

Photo 56: Originally planned as a basement Storeroom, in the northwest corner of the Kitchen wing, this refrigeration equipment was probably installed here ca. 1925 instead of on the first floor adjacent to the freezers. Photo by R. L. Carper, NPS, 1997.

Photo 57: Basement Boiler Room. Note fire door, a wooden door sheathed with sheet metal, with original hardware. Photo by John W. Snyder, September 2, 1991.

The north door to the exterior is a wood 2 over 2 light, with a 3 light transom. It is in poor condition at the bottom rail and latch stile, and the wood center panel is missing but the glazing is unbroken.

Boiler Room: The ceiling is plaster on wood lath, in poor condition, with some missing plaster, and either coated with fuel oil residue or painted gray or black, or both. The concrete walls had a red painted wainscot, coated later with black. The floor is concrete. The two east windows are in poor condition. Additional support for the first floor framing was installed at a later time. This was a column and beam fabricated from railroad track rail.

The door from the hall into the Boiler Room appears to be the original fire door. It is a heavy wood door overlaid with flat seam sheet metal. It also still has the heavy strap hinges and original latch mechanism. The Boiler Room side of the door casing is sheathed with galvanized sheet metal, a later replacement or installation than the door metal, which is probably original.

Interior — First Floor.

Lunch Room or Beanery, Lobby and Kitchen — A partition was added in 1972 at the column line immediately east of the main entrance to create a lobby separated from the Lunch Room. This is a wood stud and gypsum wallboard partition with a double door at the center flanked on both sides with windows. This partition was not constructed to its full height in 1972. In 1981 the "grille" of the upper portion was added, constructed of vertical boards set on the diagonal. The historic lobby display counter still exists and is in reasonably good condition. This should be repaired and refinished. The original stair to the second floor has been vandalized but should be repaired and restored because it is an important original design feature of the interior.

The original U-shaped Lunch Room counter, stools and serving tables were removed in 1949 and replaced with a single north-south oriented counter. The primary cooking location was relocated from the Kitchen to the Lunch Room. The center window of the east wall of the Lunch Room was removed and the opening in-filled for installation of cooking equipment and a small opening was provided for a range exhaust. The cooking equipment has been removed and the exhaust opening stuccoed over at the exterior. The existing counter is in fair to poor condition and the seating is mostly gone. The 1924 as-built construction drawings show a double door connecting the Lunch Room and Kitchen. The double doorway was removed and replaced with a single door.

The historic textured plaster ceiling and wall finish and wood wainscot treatment of the west three bays of the Lunch Room (now the lobby and west one-third of the present Lunch Room) still exists. The plaster was applied over the pilasters, beams and pilaster capitals, which is illustrated in the as-built construction drawings. Although the plaster is dirty and some finish coat failure has occurred, the condition is generally good. In the east two bays of the Lunch Room, the 1924 as-built drawings show textured plaster. This was recoated with a smooth plaster finish and painted a gloss white in 1955. With the exception of some cracking, this finish is in good condition. Some damage has occurred to the gypsum board finish of the later wall which separates what became the entrance lobby and Lunch Room.

The floors in the lobby and Lunch Room and in the Kitchen wing are concrete. As shown on the 1924 as-built drawings, the concrete was "...colored red and marked off in 12" x 12" squares to imitate tile." A molded concrete base trim was provided as well, also colored red. The lobby and

Photo 58: Main entry door into lobby/Lunch Room. Photo by R. L. Carper, NPS, 1997.

Photo 59: Main staircase from lobby/Lunch Room to second floor. Photo by R. L. Carper, NPS, 1997.

Photo 60: Detail of main stair. Photo by R. L. Carper, NPS, 1997.

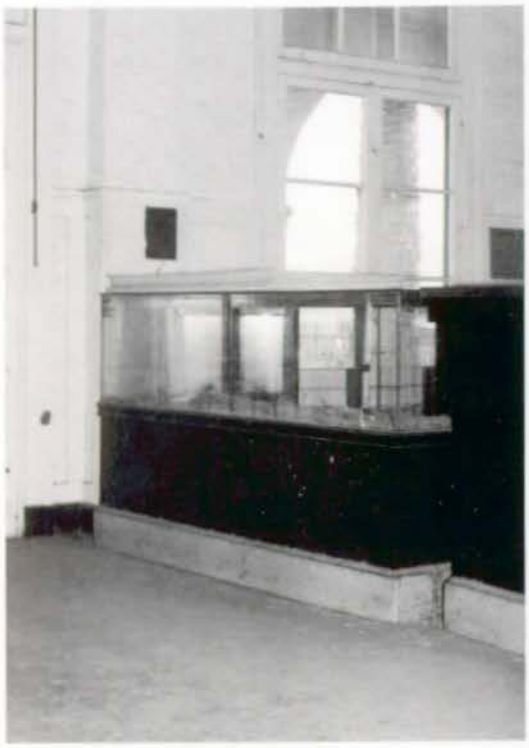

Photo 61: Original display case at entry. Photo by R. L. Carper, NPS, 1997.

Photo 62: Lunch Room, view toward southeast corner, with 1949 lunch counter. Photo by R. L. Carper, NPS, 1997.

Photo 63: Northwest corner of Lunch Room. At left is part of the 1972 and 1981 partition that separated the Lunch and entry; the doorway to the kitchen was changed in 1949. Photo by Gordon Chappell, NPS, November 13, 1996.

Photo 64: Northeast corner of Lunch Room. Photo by Gordon Chappell, NPS, November 13, 1996.

Photo 65: Dishwasher in kitchen, probably 1949. Photo by Gordon Chappell, NPS, November 13, 1996.

Photo 66: Stud and wire mesh partition in kitchen, installed in 1955. Photo by Gordon Chappell, NPS, November 13, 1996.

Lunch Room floors have a black coating which is apparently remaining adhesive for floor tile installed probably in 1955. The original concrete base in the east two bays of the Lunch Room was removed. The floor and base were painted gray in the Kitchen storeroom. The tile adhesive and paint should be removed in these areas and the red concrete floor cleaned and repaired. Some of the slab joints in the lobby and Lunch Room have separated. These joint separations should be cleaned and grouted. At any existing plumbing and electrical penetrations in the floor that will be removed, patch the remaining holes.

The kitchen space was very adequate for the service provided. It appears that none of the original kitchen equipment remains. The existing dishwasher unit and remaining tables have an appearance commensurate with the 1949 changes. A wood stud and hardware cloth divider was also constructed in 1955 to divide the Kitchen into two sections. The room off the northwest corner of the Kitchen still contains the original freezer compartments. The room off the southwest corner of the Kitchen was shown on the as-built drawings as a machine room, probably for the refrigeration equipment. There is no evidence of this equipment, and since such equipment still exists in the northwest basement room, it would appear that the original installation was made in the basement. There is documentary evidence in the UP engineer's field notes previously noted to support this also. However, shelving shown on the original drawings at the south wall of the first floor room still exists, but does not have doors as indicated on the drawings.

The Kitchen walls and ceilings are in poor condition, with some plaster missing and ceiling plaster replaced with plaster coated sheetrock, probably in 1955 or 1972. The freezer units are in fair to poor condition. In the storeroom off the southwest corner of the Kitchen, some wall finish coat plaster has spalled or is otherwise deteriorated. The ceiling plaster had failed sometime in the past and was replaced with gypsum board.

Central Section, First Floor — Originally the manager's and employees' rooms, these spaces are shown as Rooms 1 through 7 and Bathrooms on the 1924 as-built drawings. This section of the building was modified in the later period of the building's use, including the south window modifications done in 1948 and 1981 as previously described.

Other modifications were made in this section of the building as part of the 1948 and 1981 modifications. The original two partitions between Rooms 5, 6 and 7 were removed, probably in 1981, and the space divided into two rooms instead of three, with the new partition near the east side of the Room 6 window. The Room 6 door to the Hall and the original doorways interconnecting the three rooms at the south ends of the partitions were removed. An interconnecting doorway was installed at the north end of the new partition. Except in room closets, the original ceiling and wall plaster was removed throughout and replaced with gypsum board on walls and an acoustical suspended ceiling was also installed. Similarly, base, door and window trims were removed and replaced, except in closets. The original base trim consisted of a 1x6 capped with an ogee molding. The replacement trims were typical modern type, plain and narrow. Each of the employee rooms (Rooms 1, 2, 3, 4 and 7) originally had a lavatory; these were removed at least by the time of the latest modifications.

Original 1x3 (2 1/4-inch exposure) tongue and groove wood flooring (probably pine) is in place but in poor condition, with splintering and numerous gouges. Dark gray over brown paint finishes are visible. A recently installed particle board overlay is still in place over most of the floor area (Rooms 1, 3, 4, 6 and 7), which should be removed.

The original configuration of the bathrooms provided two separate sections, one for the employees accommodated in this section of the building, and the other for the manager. This basic configuration still remains but the fixtures were replaced, possibly in 1960 or 1981, and some of those are now missing. The floor of these bathrooms is also of the red concrete with the false tile scoring, and with a 6 to 6 1/2-inch red concrete base. This floor is 4 to 4 1/4 inches higher than the wood floor of the adjoining hall and rooms. Later, the partition enclosing the bathtub in the employee portion was replaced and a wood base was added on top of the concrete base throughout. The doors to both sections are 30-inches wide but have a clear opening passage of only 25 inches.

Railroad Functions — In the southwesterly end of the first floor are the original Conductor's Room, Ticket Office and Baggage Room. There is no doorway connecting these spaces with the adjacent manager's and employee's rooms. Some of the original finishes and appurtenances remain and can be repaired and refinished to become the basis of the interpretive space.

The construction date of the addition in the west arcade has not been confirmed, but the best evidence to date indicates a 1942 date. Although the construction quality is not equal to that of the original building and the details and character do not provide any redeeming architectural value, retention or removal of this addition will need to be considered in light of the degree of historic significance. The addition was caused by the immense boom in traffic due to World War II and Vulcan mine activity. It reflects the impact of WWII on Kelso and on this building. From the functional standpoint, it could be considered to be a candidate for removal, which would return the building to its original configuration and appearance. Alternatively it could be retained if space requirements dictate a need for its use.

Ticket Office: The plastered ceiling and walls are painted. Paint and the plaster finish coat are cracked, peeling and spalled (approximately 40%); there are diagonal cracks in the north wall from the upper east corner to the lower west corner. The existing paint scheme consists of a blue wainscot to 5 feet above the finish floor, with salmon above and a tan ceiling. Cabinets and trim are blue. Previous wall paint schemes included brown, over gray, which can be seen in the wainscot portion at missing cabinets. The concrete floor, with the 12 inch square scored pattern and concrete molded base, are both red.

The original ticket counter remains in the west wall. The original ticket window was converted into a compartmented information box for the trainmen and a new window installed to the north of the original. At the north end of the counter, a 90 degree rotating pass-through was also a later addition. In the center of the east wall, a varnished wood train schedule board remains. The counter and window assembly and the east wall train schedule board are recommended to be preserved and restored in their present form as part of the interpretive scheme. The interior sash, frames and trim of the large window in the south wall, as previously described, are all in fair condition. The original lighting may or may not be represented by the three extant ceiling mounted porcelain lampholders with bare lamps.

Conductor's Room: The painted plaster ceiling and walls are similar in condition to those in the Ticket Office but approximately 4 square feet of ceiling plaster is missing in the southeast corner. Diagonal plaster cracks in the north wall have a configuration similar to those in the Ticket Office. The present finish scheme includes a gray-green painted wainscot to 45 inches above the finish floor with salmon above (dark salmon under) and a green ceiling. The concrete flooring is similar to the Ticket Office.

The 1924 as-built drawings show a bench at the west wall and a writing shelf under the Ticket Office window. The bench was moved outdoors to the arcade in later years, but no longer exists. The writing shelf was replaced with a later one extending to and along the north wall. The shelf and all but two wood support brackets are missing at the east wall. Not shown on the original drawings in the north wall is a small pass-through window (24 x 27 3/4 inches) to the Baggage Room. The sash is a vertical sliding unit; the glass is missing. The later Ticket Office window in the east wall has a steel grill; the glazing is intact.

The original window in the west wall was removed when the west addition was constructed. The transom, window jambs and some hinges remain. The window sash, sill and wall below were removed to create a passage to the west addition but no door was installed. The broken plaster and cut lath (wood inside, metal outside) and the broken out section of concrete base were not patched, covered or trimmed out. The broken edges of the concrete base illustrate the red colorant additive used in the concrete mix.

Baggage Room: Plastered walls and ceiling are painted. Paint is peeling but there is less cracking and loss of plaster finish coat than in the Ticket Office and Conductor's Room. A wood wainscot to 7 feet above the finish floor consists of vertical 1x4 tongue and groove car siding with a center groove and a small cap molding. The wainscot finishes, from latest to earliest, includes blue, gray and salmon paint over the original grained wood. The original grained wood finish of the wainscot is exposed at the location of a probably later but now missing counter along the south wall. Two shelves remain above, from the room's southwest corner to the pass-through window. To the east of the door to the Ticket Office is a fire valve and the remaining parts of a fire hose rack. Flooring is red scored concrete similar to the Ticket Office and Conductor's Room.

The original double door from the Baggage Room to the exterior was relocated to the south end of the west addition and the opening in-filled except for a single-leaf door. The finish on the Baggage Room side is vertical 1x4 tongue and groove boards similar to the original wainscot but without edge or center grooves. The original double door dimensions match the original opening and the original strap hinges were retained.

West Addition — The original arcade ceiling was not altered. The boards are warped from water leakage at the outer half of the south and center bays but less at the north bay. These will need to be replaced. The stucco of the original exterior west wall of the building is in good condition. The original scored red concrete floor slab of the arcade is also still in place with the original ramp to the Baggage Room doorway. This ramp is a 2 foot run with a rise of 4 1/2 to 5 inches. The concrete slab is in good condition except for a 3/4-inch crack at the center of the slab section in the south bay.

The walls in-filling the west arches of the arcade were framed with 2x6 (actual) rough sawn lumber. The interior was sheathed with plywood with battens over the joints. The plywood was painted, gray to 6 feet above the finished floor and gray-white above, similar to the arcade ceiling. Trim boards are dark gray except for some added base trim at the west wall are green. The north wall is fiber board, partly unpainted. The inside of the original Baggage Room double door was painted dark gray.

Photo 67: Interior of Ticket Office. Doorway leads to Conductor's Room. Photo by Thomas D. Mulhern, Jr., NPS, April 2, 1996.

Photo 68: Interior of Ticket Office. Doorway at right leads to the Baggage Room. Photo by Thomas D. Mulhern, Jr., NPS, April 2, 1996.

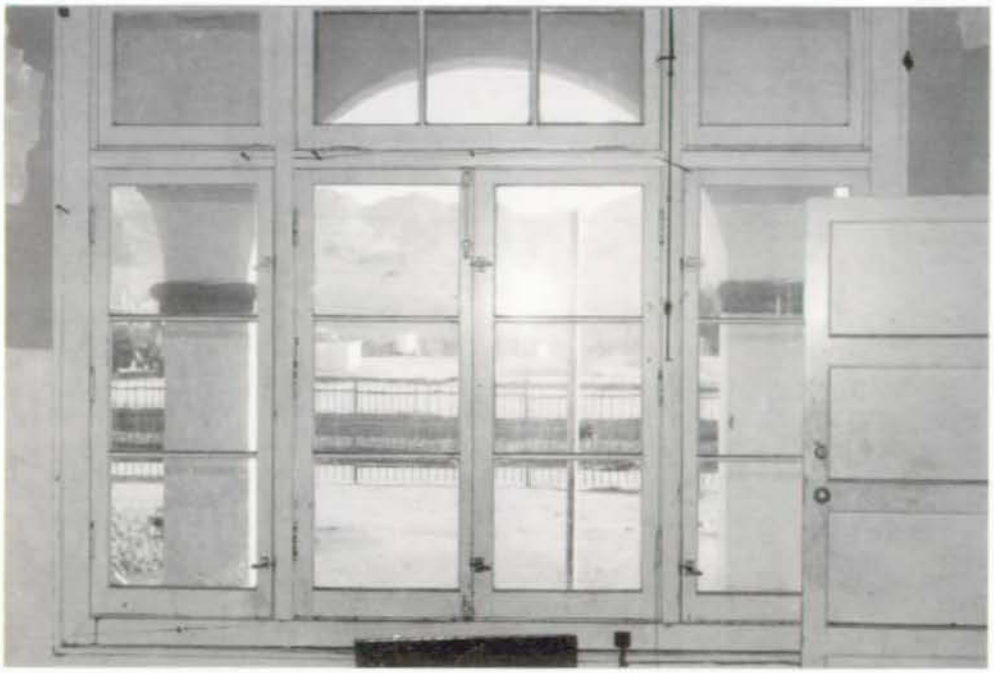

Photo 69: Ticket Office window. Photo by R. L. Carper, NPS, 1997.

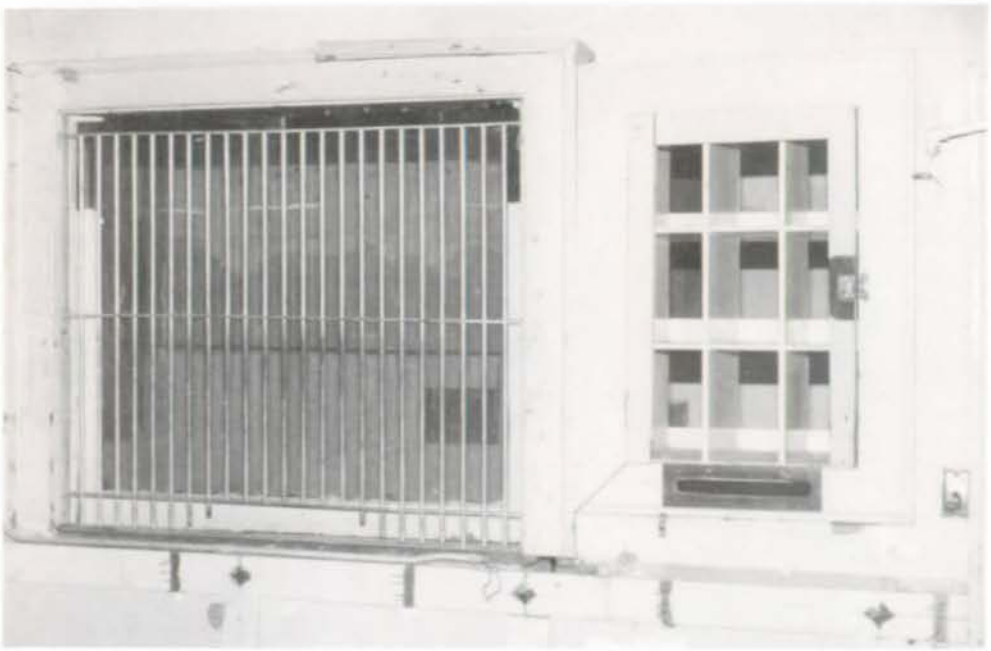

Photo 70: Ticket Office window at Conductor's Room side. Photo by R. L. Carper, NPS, 1997.

Photo 71: West window of Conductor's Room removed in 1942 when west arcade addition was constructed. Photo by R. L. Carper, NPS, 1997.

Photo 72: Baggage Room, southwest corner. Photo by R. L. Carper, NPS, 1997.

Photo 73: Baggage Room; in-fill and door in southwest wall at location of original double doors. Photo by R. L. Carper, NPS, 1997.

Photo 74: In-filled opening at original location of Baggage Room double doors as seen from west arcade, enclosed 1942. Photo by R. L. Carper, NPS, 1997.

Windows in this addition consist of two double hung units in the west wall, 34 1/2 x 83 1/2-inch sash opening, and a square window in the north wall, 36 x 36-inch sash opening, the sash now missing.

Interior — Second Floor. The second floor room arrangement and most fabric is original but has deterioration from roof leakage and has been vandalized. The plastered ceilings and walls have peeling paint and delaminated plaster finish coat generally throughout. The locations of the most plaster loss and deterioration correspond to the intersection of the valleys of the south, east and west cross gables with the main roof at the eaves, where the valleys intersect with the gable end parapet walls.

The latest wall and ceiling paint finishes are light green hues or off-white throughout most of the second floor with slightly darker green doors, windows and trims. The exceptions are Rooms 12 and 14 which have white walls and ceilings and brown doors, windows and trims. However, the trims were originally grained. Most base, door and window trims and moldings are still in place. Base trim is similar to the remaining first floor closet base trim — 1x6 with an ogee cap and quarteround shoe. Door and window trim is unembellished. Rooms have a cove molding and the

Photo 75: Original Baggage Room doors, relocated in 1942 to south end of west arcade addition. Photo by R. L. Carper, NPS, 1997.

hall has a "chair rail." (Note: Room numbers used here are as seen on the room doors, which is a different scheme than shown on the as-constructed drawings).

The central hall width varies from 48 1/2 to 49 inches. Hall walls are 2x6 framing. Doors are typically five panel wood. Hall to room doors are 32 inches in width; the average clear opening is approximately 29 3/8 inches. Doorways have a 32 by 12 inch transom sash. The bath door width is 30 inches (27 3/8 inches clear), and the Linen Room, sink closet and room closet door widths are 28 inches. Most doors are in fair condition, but several casings are split at the strike side (Rooms 1 and 10).

Cross-corridor doors were added, probably in 1960 or 1972, and emergency exit doors at both ends of the hall were installed in 1960 and 1961, to provide additional space separation and emergency egress. The cross-corridor doors were installed at the east side of the stairwell and at the east side of the Room 11 door opening (west side of the Bath door opening). Partition and door frames were constructed of 1 5/8-inch x 2 1/2-inch wood with one layer of 1x4 boards and one layer of 1x4 tongue and groove car siding, both on one side of the framing and all trimmed with quarteround. Doors are 32 inches wide, 29 3/4 inches clear, hinged at the south side, and had a spring closer and hold open; doors swung both directions. Transoms were provided above the doors; glass is now missing. The east door is missing. At the east and west ends of the hall, the windows were removed and the opening enlarged for 32 inch wide doors for exiting to the arcade roof, then by added stairs to the ground. These door assemblies do not meet current code requirements.

Typical room windows are 3 by 2 light over 1 light double hung. Sill height is 27 inches. The cased opening is 37 1/4 inches by 56 3/8 inches; the upper sash is 38 x 29 1/2, the lower 38 x 30. With the lower sash open, the clear opening is 37 1/4 inches by 24 inches. Windows are in fair to good condition.

Except for the bath, flooring throughout the second floor consists of 1x3 (2 1/4-inch face exposure) and 1x4 (3 1/4-inch face exposure) tongue and groove, probably pine. Linoleum was added and still is in place in some rooms. Where the wood flooring is exposed, the narrower wood flooring is found in the hall, Linen Room, Rooms 7, 9, 17, 20 and 21 and the wider flooring is seen in Room 6. Beneath linoleum mastic, it can be seen that the flooring was previously painted a light gray, with a darker gray in the Linen Room. The original finish was not in evidence but can be predicted to be a natural oiled or varnish finish. The flooring is in fair condition but will require removal of the remaining linoleum and mastic. To the extent possible, the flooring should be repaired and refinished, but this will need to be determined following removal of the linoleum and mastic. If the linoleum was installed because of earlier damage, extensive replacement can be expected.

The bath floor is the scored red colored concrete slab poured on the sub-floor, typical of those on the first floor, but has a later coating of gray paint. This finish floor level is approximately 3 1/2-inches higher than the hall floor level.

Some plumbing fixtures are original, some are later replacements. Most fixtures are in poor condition but some of the lavatories in the individual rooms may be possible to restore to usable condition. At a minimum, selected fixtures should be kept in the building artifact collection. Historic steam heating radiators were all replaced with electric heaters, probably in 1960 or 1961, which are now in poor condition.

Photo 76: Second floor corridor. Photo by Gordon Chappell, NPS, November 13, 1996.

Photo 77: View from second floor room 16 on south side across hall to room 21 on north side showing typical doorways. Photo by Gordon Chappell, NPS, November 13, 1996.

Photo 78: The second floor train crew lodging rooms were furnished with a metal bed frame and a clothes locker. Photo by John W. Snyder.

Photo 79: The second floor lodging rooms on the north side for depot employees had a washbasin and built-in clothes closets. Photo by Gordon Chappell, NPS, November 13, 1996.

Attic. Roof framing and decking is in good condition. Water stains are visible at the lower ends of the cross gable and main roof valley intersections described above but the framing and blocking at these locations do not appear to have serious rot damage. The attic has an access opening in the ceiling of the second floor hall which is of ample size and a center walkway was installed. The attic is spacious and will provide easy access for systems installation.

Accessibility and Egress. Providing accessibility and emergency egress for the new use will be more challenging than many other aspects of the project. The most difficult will be second floor access and egress, which will impact building spaces and use.

Accessibility — Existing first floor entry doorways are of adequate width but modifications of sills and replacement of hardware will be necessary. Some interior doors are of adequate width, others are not. Where necessary, some doorways may need to be widened and doors replaced, sills modified or replaced and new hardware installed.

A major deficiency is the absence of accessibility to the second floor and the basement. An elevator will be needed to provide this access. To minimize the effect on exterior appearance and interior functions and space usage, it is proposed that the most suitable location would be at the southwest corner of the kitchen wing, in the space indicated on the as-constructed drawings as a machine room. This would provide elevator entry from the rear of the main entry lobby, adjacent to the stairs. The original second floor linen closet could become the elevator lobby on that floor, again being adjacent to the stairs. The linen closet can be accommodated at a different location. This location would least impact the second floor room usage. In the basement, the west end of the original supply room would be the elevator shaft location, providing the entry point again adjacent to the stairs and in a logical area for public access to the meeting rooms (the original Reading Room and Billiard Room) and the rest rooms. The original Locker Room would become a lobby for the basement level. A new door would need to be provided in the north wall of the (original) Locker Room to provide access to the mechanical rooms. There should be sufficient space in the original Supply Room for the elevator machine room.

This location would minimize the visual effect of exterior additions. The elevator shaft, instead of rising from ground level, would project above the southwest corner of the kitchen roof. Its vertical extent, regardless of location, would be above the second floor ceiling level in order to provide the necessary clearance above the elevator car.

Egress — The original building was very inadequate in provision for emergency egress. Except for some kitchen and rear basement exterior doorways, and other than windows, the only means of egress from most of the building was the central stair and main entrance. The 1948 and 1981 modifications included conversion of four south front windows to door openings, which may be useful for additional egress. Still, providing proper means of egress with minimum impact on space useage and visual appearance is a major challenge.

A study of this requirement indicates several possible solutions, each with some variations. An interior stairway toward the southwest end of the building is one means, with an exterior exit to the rear of the building. Exiting to the rear of the building would be preferred because this routing would have less effect on interior space. An interior stair would reduce the interior space use availability. On the second floor, two of the original rooms would be impacted. On the first floor, the equivalent of two original rooms would be impacted and there would be a window to door modification as well as an exterior stair.

Another solution not impacting interior space is to utilize the existing, but non-original, opening at the southwest end of the second floor hall for a doorway, provide a walkway along the wall on the arcade roof to the rear of the building, and construct an exterior stair off the northwesterly end of the arcade. The stair could be slightly separated from the building and could be either open or partially enclosed to blend more with the building.

It appears that the northeasterly end of the second floor can be designed to comply with code requirements without the addition of another exit stair. Refer to the code analysis section of this report for a detailed explanation.

For the needed second exit from the basement meeting rooms, the most direct and simple method would be to develop an exit well from one of the window wells of the Reading Room. The east window well would be in conjunction with the exterior component of an interior upper floor exit stair if that option is selected. This could be done by providing a doorway opening at one of the two window openings (retaining the other window), deepening and extending the window well to sufficient size for a stair up to the ground level. This stairway would be a relatively short run and rise because the exterior grade level is less than six feet above the basement floor level.

The drawings accompanying this report (drawing set no. 170/25000) illustrate the two emergency egress alternatives as well as restroom alternatives. Alternative 1 illustrates the exterior emergency egress stair concept combined with the rest room option that minimizes space modifications using existing restroom spaces--a men's restroom in the basement and a women's restroom on the first floor. This combination has the greatest exterior visual effect but the least effect on the interior spaces.

Alternative 2 illustrates the interior emergency egress stair concept combined with the restroom option having restrooms for both men and women on both the basement and first floor levels. This combination has the least exterior effect but most modification of interior spaces and reduction of space available for interpretive use in the central section of the first floor.

By recombining the stair and restroom options, two other alternatives are possible. Particularly note the effect of combining the interior stair concept shown in Alternative 2 with the rest room scheme shown in Alternative 1. This would reduce the effect on interior space while having the least effect on the exterior. It is suggested that this combination may be the preferred alternative, having the least visual and physical effect on the building.

STRUCTURAL ANALYSIS

Objective

This section of the HSR is a structural assessment and limited structural analysis of the Kelso Depot to document the materials used for the building's structural systems, assess the known existing conditions of the materials, and identify structural deficiencies and corrective actions necessary to remedy the deficiencies.

General Notes

The Kelso Station is an "L" shaped structure at the basement and first floor levels, and rectangular at the second floor level. The first and second floors are wood framed, supported by cast-in-place concrete stem walls at the basement level. The stem walls are on spread footings. The stem walls frame the partial basement, which is below grade on the south side of the building and partially below grade on the other three sides. An arcade structure surrounds the building on the south, east and west sides. The arcade roof is supported by the building walls on the inner side and by an arched colonnade structure on the outer perimeter.

Structural information about the Kelso Station was obtained from as-constructed drawings. The drawings, dated December 12, 1924, were prepared by the Office of the Chief Engineer of the Los Angeles and Salt Lake Railroad. Additional information was obtained during a site visit on September 26, 1996 by Bridget Wanderer and Richard Silva. The majority of the structural members that were accessible during the site visit were as depicted on the drawings. Photos in this section are by Bridget Wanderer, 1996.

The U.S. Forest Products Laboratory in Madison, Wisconsin determined that a sample of wood removed from the roof framing was Douglas Fir. Structural calculations for wood were based on allowable stresses found in the National Design Specification for Wood Construction and its Supplement, 1991 Editions. Based on the date of construction and the condition of the wood, Douglas Fir Grade No.1 wood was assumed for the purpose of determining allowable stresses.

Allowable stresses for the steel I beam incorporated in the second floor framing were obtained from the AISC publication Iron and Steel Beams, 1873 to 1952.

Seismic forces were determined using the methods presented in the Federal Emergency Management Agency publication Number 178, NEHRP Handbook for the Seismic Evaluation of Existing Buildings.
All other applicable codes are listed in the Code Compliance Requirements section of this report.

The results of a limited vertical load analysis are presented in a spreadsheet on page. The spreadsheet lists the location, size, spacing, loads, and shear and bending stresses for members analyzed. Many of the remedial action recommendations are based on this analysis. Additional analysis will be required and additional recommendations are possible, based on final design.

Roof Framing. The relatively steep (6+:12) hipped roof framing for the rectangular second story is documented in the as-constructed drawings. The drawings show the 2 x 8 roof rafters and the 2 x 6 ceiling joists, both at 16 inches O.C. The 2 x 8 roof rafters frame into a 2 x 12 ridge board at the peak of the roof, and are supported by the wall framing at the exterior walls. The 2 x 6 ceiling joists bear on the exterior walls and on interior bearing walls that are located on either side of the second floor hallway. A separate 2 x 6 spans the hallway width.

Two 2 x 6 webs, located at 32 inches O.C., support alternate roof rafters on both sides of the roof. These webs create a truss configuration at every other rafter, with the remaining rafters spanning from the exterior walls to the ridge board. The webs are supported by the interior bearing walls on either side of the second floor hallway.

Wood bridging (1 x 4s) was installed midspan between ceiling joists. There is no blocking between structural members at the interior bearing walls, the ridge board, or the exterior walls. Planking laid lengthwise provides a walking surface at the center of the building in the longitudinal direction.

The one story kitchen wing at the northeast corner of the structure has a low monoslope roof (0.75:12) with composition roofing. Roof rafters consisting of 2 x 6s 24 feet in length are supported approximately midspan by 2 x 4s which bear on 3 x 14 ceiling joists. Both the 2 x 6s and the 3 x 14s were installed at 16 inches O.C. Wood bridging (1 x 4s) is installed at 8 feet intervals. There is no blocking between joists at either bearing wall.

Overall, almost all of the roof framing is in excellent condition. Small areas of water damage in the hipped roof framing were observed along the south and west exterior walls, where the parapets intersect the roof valleys.

Although the roof framing shows little sign of deterioration or failure, the following work will be necessary to allow the building to handle both vertical and lateral design loads:

Hipped Roof —

- Add webs (similar to those already constructed at alternate roof rafters) to roof rafters at 32 inches O.C.
- Reinforce ceiling joists at 16 inches O.C.
- Add blocking between joists at exterior walls, interior walls, and between rafters at ridge board.
- Install antifungal rods in framing that has experienced water damage if the framing is in usable condition; replace structural members as necessary.
- Add metal connectors at exterior and interior walls, and between rafters and ridge board to provide adequate load transfer capabilities.

Monoslope Roof —

- Add metal connectors at exterior and interior walls, and between rafters and interior wall framing to provide adequate load transfer capabilities.

Walls. Exterior walls are balloon framed with 2 x 6 studs at 16 inches O.C. with double plates above and below window and door openings. Interior bearing walls with 2 x 6 framing have double top plates. Interior partition walls are 2 x 4 framing. The exterior face of exterior walls were sheathed with 1 x 6s, placed horizontally and stuccoed. The interior faces of all walls were plaster on wood lath. The west end of the first floor, designed to be an open arcade, has been enclosed.

The wood wall framing is in generally good condition. The exterior stucco finish has extensive hairline cracking with few areas exhibiting a crack pattern. The areas with crack patterns were the transoms on the south wall, which had hairline cracks at their edges, and the 8 x 10 arcade beam pockets on the same wall. The interior bearing walls appear to be structurally sound. Plaster has spalled off the bearing walls and hallway ceilings at several locations, but the damage does not appear to be structurally related. There is no evidence of excessive movement. Several partition walls show signs of water damage, evidenced by staining and/or spalled plaster.

Photo 80: Detail of hipped roof framing at main ridge.

Photo 81: Hipped roof bracing connection at second floor ceiling joists.

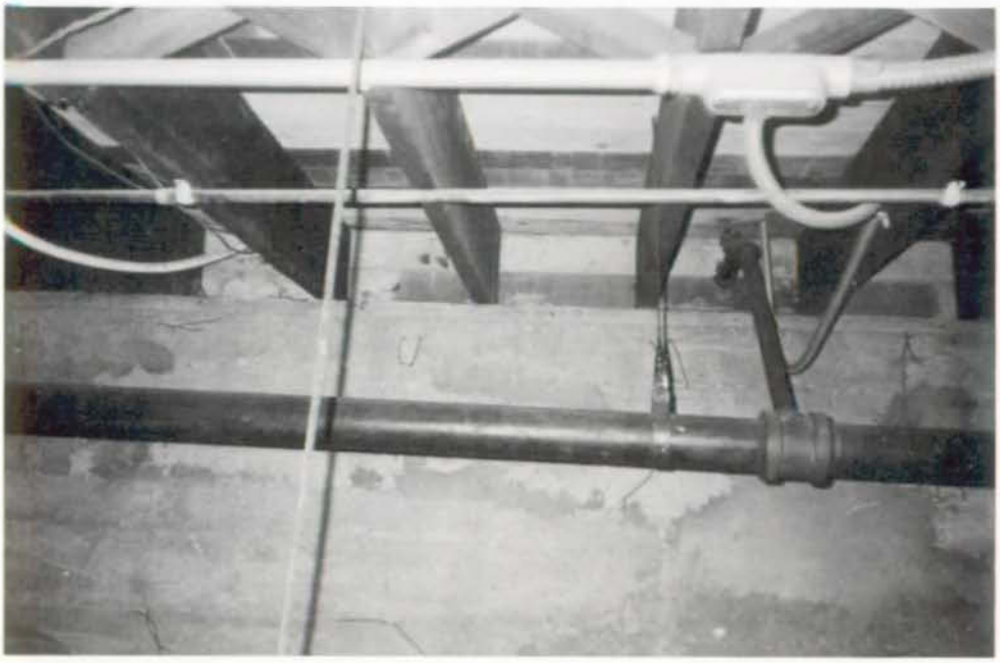

Photo 82: First floor framing at south exterior wall as seen in crawl space along south side of building.

Photo 83: Concrete failure above basement Storeroom window at northwest corner of Kitchen wing caused by moisture from freezers in northwest corner of Kitchen.

The wall above the basement window in the northwest corner of the kitchen wing is severely deteriorated, probably due to water leakage from the freezer compartments located directly above it. The wood wall and floor framing at and below the first story level is damaged at this location, as is the concrete lintel above the window. The exterior wall finish above the window has a crack pattern consistent with lintel failure and deflection, the interior face of the concrete lintel is cracked horizontally, and the reinforcing, which has exfoliated, is exposed.

Necessary work includes:

- Remove and replace wood framing and the concrete wall lintel at the basement window noted above.
- Add metal connectors to strengthen wall to floor connections.
- Add framing, bracing or connectors at window and door openings.
- Replace all gutters and downspouts, and redirect roof drainage away from building.

Second Floor Framing. The floor framing for the second story varies to accommodate variations in the wall framing on the floor below.

At the far west end of the building, 2 x 12 joists span 16 feet, from the building's exterior walls to a single interior bearing wall separating the Baggage Room from the Ticket Office and Conductor's Room. These joists were not fully accessible during the site visit. Bridging and blocking details do not appear on the drawings. These joists support uniform dead and live loads from the second story level, and a concentrated load from the interior bearing walls located on either side of a central hallway on the second floor.

East of the Baggage Room area and west of the stairway, the floor framing changes to 2 x 10s at 16 inches O.C. These joists span from the exterior walls to interior bearing walls on either side of the hallway. The hallway is spanned by separate joists. Wood bridging (1 x 4s) is installed at midspan, and there is no blocking between joists at bearing walls. The joists and sheathing appeared to be in good condition, with no visible signs of rot or splitting.

The floor framing east of the stairway is markedly different from the framing elsewhere in the building. At this location there are no bearing walls in the interior spaces below, and the floor framing spans the entire 32 foot width of the open lobby/cafe area. Steel I beams 20 inches deep installed at 9 feet 6 inches, supported on 10 x 10 wood columns, are used to span this distance. 2 x 10 joists at 16 inches O.C. frame into the beams. The joists are supported by a continuous wood 3 x 6 that is bolted to the web of the I beam. Wall to floor framing connections are provided by two 3/4 inch bolts that connect each I beam flange to the column, and two 3/8 inch wrought iron straps that bolt to the I beam web on one end and the column on the other end. A plaster and wood lath ceiling is supported by the second floor framing in this area. Bridging between each joist is detailed on the drawings, but the size and spacing of the bridging is not shown.

None of the framing in the lobby/cafe area was visible. Minor cracks in the plaster and small areas of plaster spalling did not indicate structural problems.

The entire second floor is sheathed with 1 x 6 tongue-and-groove boards, laid diagonally. Floor finish material is wood flooring (1 x 3 or 1 x 4 tongue and groove) at most locations; a 4 inch concrete slab with wire reinforcement was placed in the toilet rooms.

Necessary work includes:

- Install blocking between joists at bearing walls
- Increasing the capacity of the vertical and lateral wall to floor connections
- Verify the double 2 x 10 joists running parallel to and directly beneath the second story hallway bearing walls on the east end of the building. Reinforce joists if necessary.

First Floor Framing. The first floor of the Kelso Depot is framed almost entirely with 3 x 14 joists at 12 inches O.C. The joists span in an east/west direction below the kitchen area, and in a north/south direction at all other locations. Bridging at acceptable intervals (less than or equal to 8 feet) is detailed on the drawings. No blocking is detailed on the drawings, and where joists are visible at bearing points, no blocking is present. The cripple wall at the north side of the crawl space has brick and/or concrete in-fill between the joists which provides solid full height blocking.

A 9 feet wide section of the first floor along the south wall is framed with 2 x 10s at 16 inch O.C. This section of the floor is constructed over a partially excavated crawl space between two stem walls. (The area is described as "unexcavated" on the drawings.) The joists bear on a wood sill on the stem wall to the south, and are toenailed into a double joist at the top of a cripple wall to the north. The drawings detail anchor bolts at 4 feet O.C. to provide a sill plate to stem wall connection, but in the areas inspected there were no anchor bolts installed. Bridging is provided midspan between the 2 x 10 joists.

Floor sheathing and finish materials on this floor are the same as those on the second floor: 1 x 6 tongue and groove sheathing, topped by either 1 x wood flooring or a 4 inch concrete slab. Unlike the second floor, however, the majority of the first floor area has a concrete slab finish. Only the rooms between the railroad operations rooms (far west end of the building) and the stairway have 1 x wood flooring as finish material. Subfloor sheathing is laid diagonally at this location, and in an east/west direction below the railroad operations rooms.

A substantial portion of the first floor framing was accessible for inspection. Overall, the joists, sheathing, bridging and sills were in good condition. An analysis of the joists, however, indicates that the framing is inadequate for the intended use. With the exception of the 2 x 10 joists spanning the crawl space areas at the south side of the building, all joists will need to be reinforced.

The primary cause of excessive stress in the joists is the discontinuous vertical load path in the west half of the building. The exterior bearing walls are aligned with stem walls and foundations below; the interior bearing walls, however, are not aligned with stem walls. As a result, the roof and second story loads that are carried by the interior bearing walls are transferred to the joists as concentrated loads at the level of the first floor. These concentrated loads, coupled with substantial dead and live loads at assembly areas, produce stresses which significantly exceed allowable stresses.

Photo 84: Wood columns and beam added in basement Supply Room; date unknown.

Photo 85: Southeast corner of Boiler Room. Column at center of room (right side in photo) and beam are a later addition and made up of railroad track rail.

Joists supporting the open lobby/cafe assembly area, with no concentrated loads applied by interior bearing walls, are overstressed also but to a lesser degree. A preliminary analysis indicates that the kitchen joists are also overstressed. A makeshift beam and column, fabricated from pieces of track rail, is located midspan below the kitchen joists. No connections between the rail and the joists, or between the column and rail or slab were visible. In addition, an undetermined number of joists in the northwest kitchen corner require replacement due to water damage.

Necessary work includes:

- Reinforce 3 x 14 joists
- Replace floor framing as necessary at northwest kitchen corner
- Install sill plate to stem wall connections
- Install cripple wall to floor framing connections as necessary
- Install blocking between joists at bearing walls

Foundation. A system of concrete spread footings and concrete stem walls support the Kelso Depot. A continuous 2 feet 4 inch wide spread footing and 14 inch thick stem walls support the perimeter walls of the building. Footings and stem walls of the same design are found at two other locations. One system runs longitudinally under the building, parallel to and 9 feet 8 inches north

of the south perimeter foundation. The other runs in a transverse direction under the kitchen wing. The longitudinal foundation supports interior floor loads and acts as a retaining wall between the partial basement and the partially excavated area. The transverse foundation separates the boiler room from the store room and supply room.

Smaller continuous spread footings and stem wall foundations are located below the transverse wall next to the stairway, and between the store room and supply room.

Five feet six inches of the perimeter stem wall is above grade on the north side of the building. The foundation is completely below grade at the south and west sides of the building. The stem wall is above grade 5 feet 6 inches at the north side of the kitchen wing, and completely below grade south of the kitchen wing.

The arcade columns surrounding the building are supported by a system of individual column spread footings, tied together by a 1 foot wide, 1 foot 6 inch deep grade beam. Crack patterns and concrete joints in the arcade deck indicate that transverse grade beams tie each column pedestal to the building foundation. Bottom of column footing elevation is 6 feet 6 inches. The column footings on the east and west sides of the arcade are 1 foot 6 inches square in plan, with a 1 foot 4 inch pedestal supporting the wood arcade column. The column footings along the south side of the arcade are 2 feet square, with a 1 foot 4 inch pedestal.

Footings supporting the four arcade corner columns are roughly "L" shaped, with a 3 feet square center section. A retaining wall extending west from the northwest arcade column is detailed on the drawings. The wall does not exist and perhaps never did: its length is noted as "to be determined by the engineer in charge".

A 6 inch thick concrete slab on grade was placed around the south, east and west sides of the building to provide a paved walking surface under the arcade. The slab extends from the building to the outer perimeter of the arcade. The concrete is colored and scored to resemble paving tiles. The basement floor is concrete slab on grade also: 6 inches thick in the boiler room and 5 inches thick in all other locations. The boiler room finished floor elevation is 1 foot 6 inches below the finished floor elevation of the other basement rooms.

With the exception of a window lintel detail and the ash hoist detail, no reinforcing steel is shown on the plans. Concrete should be assumed to be plain (nonreinforced) concrete unless further investigation confirms the presence of reinforcement. Concrete structures built in the area during the same time period are reinforced.

The building foundation and basement slab on grade appear to be in good condition with two exceptions. The window lintel in the northwest corner of the kitchen wing has deteriorated (see Walls), and there is a crack in the concrete slab at the west end of the basement. Neither differential settlement nor concrete cracking was observed on interior or exterior walls. The extensive cracking in the plaster finish on the exterior appears to be due to weathering and lack of maintenance rather than a structural problem.

The arcade slab and grade beam system is in fair condition. Minor settlement has occurred at the southeast and southwest corner columns, possibly due to leaking underground drain pipes. Significant cracks extend from both the southeast and southwest corner columns. The west end of the arcade has major cracks in the slab also both inside and outside the later addition. A tie beam

extending from a column to the building foundation just east of the main door has a transverse crack.

The nonstructural sidewalk slab adjacent to the east side of the kitchen wing has deteriorated. It has been severely cracked, undermined and partially washed away by erosion. The exterior sidewalk slab at the west side of the building is badly cracked and deteriorated also. This section of concrete slab was added after original construction and is outside the arcade area. Although both these areas of concrete slabs are nonstructural, drainage conditions causing the deterioration should be corrected before settlement of the foundation occurs.

A hose bib has been installed at the outside of a column on the east side of the building; there is considerable erosion of the soil adjacent to the arcade concrete slab at this location, and settlement of both the column and the slab may be a problem in the future if not corrected.

The structural problems evidenced in the arcade foundation appear to be related to drainage problems. The work necessary to repair foundation problems focuses on correcting those problems, and preventing additional ones due to water intrusion.

Necessary work includes:

- Replace window lintel in northwest corner of the kitchen wing.
- Repair, replace or remove underground drainage system to prevent further settlement of arcade.
- Relocate hose bib from outside of column on east side of building to a location away from the building
- Seal cracks in the concrete slabs and grade beams.
- Remove, repair and/or replace concrete sidewalk on the east side of the building.
- Correct grade north of the building to drain away from the building.

Arcade. The arcade surrounding three sides of the first floor of the Kelso Depot is a wood framed structure. It is supported by the exterior Depot walls on the inner side, and by 7.5 inch square wood columns on the outer sides. Measured from the face of the Depot to the far side of the columns, the depth of the arcade is 11 feet, 1 inch.

The slope and configuration of the arcade roof framing varies. The 9 feet wide composition roof section, located immediately adjacent to the building, is supported by 2 x 8s at 16 inches O.C. This section of the roof is relatively flat (1:12). Framing for the 2 feet 6 inch wide Spanish style tiled roof section at the outer perimeter of the arcade consists of 2 x 4s at 16 inches O.C. This section of the roof slope is steeper than the composition roof section (9:12).

The arcade roof joists extend into the exterior wall cavity and are supported by a 2 x 10 ledger that is face nailed to the outside of the wall studs. The arcade ceiling joists are shown butted up against the same wall ledger, and are presumably toenailed to the ledger. Arcade roof connections were not accessible for inspection.

The roof and ceiling joists are supported by two 2 x 6s laid flat on three 2 x 10s, which form a beam that spans the 9 feet 6 inches between columns. Sections of 1 x 6s, each 2 feet 6 inches long, form the arch structure. Sheathing nailed to the arch frame provides support for the metal lath and plaster finish.

A concrete pedestal and spread footing support each 7.5 inch square wood column (see Foundation). A 3/4 inch dowel anchors the column to the pedestal. Buttresses occur at the outside of the four corner columns; these are apparently architectural in nature only, as details for them do not appear on the plans.

Wood beams, 8 inches by 10 inches, were installed at all arcade column locations. They are supported by the exterior wall framing on the building side and by the column on the perimeter of the arcade. The beams appear to be decorative, although if they are connected adequately they may provide some lateral support for the column. The connection is not detailed on the plans and was not accessible for inspection.

A 6 inch thick concrete slab, colored and scored to resemble 12 inch pavers, was placed between grade beams and column pedestals (see Foundation).

The arcade framing is in generally good condition. Water intrusion has caused deterioration and loss of some ceiling finish boards. Roof sheathing and framing in these vicinities may have experienced water damage also, although this was not noted during the site inspection. Deterioration due to moisture has also occurred to wood furring at column bases. The column bases themselves were not accessible for inspection.

Necessary work includes:

- Seal upper ends of roof tile
- Replace water damaged roof framing and columns as necessary.
- Improve column to roof framing and roof framing to wall connections.

Lateral System. Lateral force resistance is provided by diaphragm and shear wall construction. Wood diaphragms at the roof and floor levels transfer lateral forces to wood shear walls at the first and second story. The wood shear walls transfer the forces to the concrete foundation system (stem walls and spread footings) at the basement level.

The exterior walls of the building provide a complete load path from the roof to the foundation in both the transverse and longitudinal directions. In the transverse direction, there is an additional shear wall at the west side of the stairway. In the longitudinal direction, the wall between the kitchen and cafe/lobby areas functions as a shear wall. The arcade foundation system provides lateral force resistance in both the transverse and longitudinal directions.

The NEHRP Quick Check for shear stress indicates that the wood shear walls are adequate to handle the lateral loads. A limited analysis of the connections, however, indicates that they are inadequate to transfer the anticipated loads.

Necessary work includes:

Photo 86: Colored and scored concrete paving at southeast corner of arcade. Water from clogged storm drains has caused cracking and heaving.

Photo 87: Deteriorated sidewalk along northeast wall of Boiler Room and Kitchen.

Photo 88: Deterioration of wood in arcade ceiling along south side of building.

Photo 89: Missing boards in ceiling of arcade at northeast end of building.

- Verify existing connections as necessary. This work will include verifying roof sheathing to roof rafter nailing and wood sill to foundation stem wall connections.

- Install a metal strap connector between roof rafters at the ridge.

- Provide for adequate connections between the following: roof diaphragm and shear walls, floor diaphragms and shear walls, wood shear walls and concrete foundation system.

- Construct a lateral force resisting system to brace the 21 feet high chimney located at the north wall of the kitchen wing.

- Verify framing at architectural parapets on south, east and west walls. Install metal strap connectors as necessary to provide a lateral force resisting system.

Coal and Supply Shed. A shed, historically used for coal and supplies, stands approximately 30 feet to the north of the Kelso Depot, across from the kitchen wing. The shed is a one story wood framed structure.

Roof framing consists of 2 x 4 roof rafters installed at 2 feet O.C. These rafters span the 10 feet 2 inch building width, bearing on north and south Shed walls. There is no ridge board; the rafters butt against each other at the ridge of the building. There is no blocking at the ridge or the bearing walls.

Ceiling joists, also 2 x 4s at 2 feet O.C., span the building width and bear on the north and south walls. There is no blocking at the walls or bridging midspan. There is no ceiling finish material.

Rafters and joists bear on a single 2 x 4 plate at the top of the wall (7 feet 6 inches above grade). The top plate is present at the same elevation on the east and west walls also. At the east and west walls, it separates wall framing from the cripple wall framing at the gable end.

Walls are framed with 2 x 4s at 16 inches O.C. Cross bracing, consisting of 2 x 4s cut to fit between joists, is installed at the west end wall. Wall sheathing, 2 x 8s face nailed lengthwise to the inside of the stud wall framing, is installed with gaps of approximately 1/2 inch between boards. Openings approximately 1 foot high exist just below the roof ridge at the top of the gable ends. There is no blocking between wall studs.

Studs frame into a 2 x sill at the bottom of the wall. The flooring in the west half of the shed is 2 x 6 planks.

The shed is in fair condition. Some deterioration of the wood has occurred due to exposure to the elements.

Necessary work includes:

- Paint or otherwise seal wood to prevent further damage due to exposure to the elements.

- Install blocking between rafters, and between ceiling joists and wall studs.

- Improve connections between roof rafters, roof and wall framing, and wall and sill framing.

Photo 90: Coal and supply shed behind Depot. East half (at right) was an addition to the original.

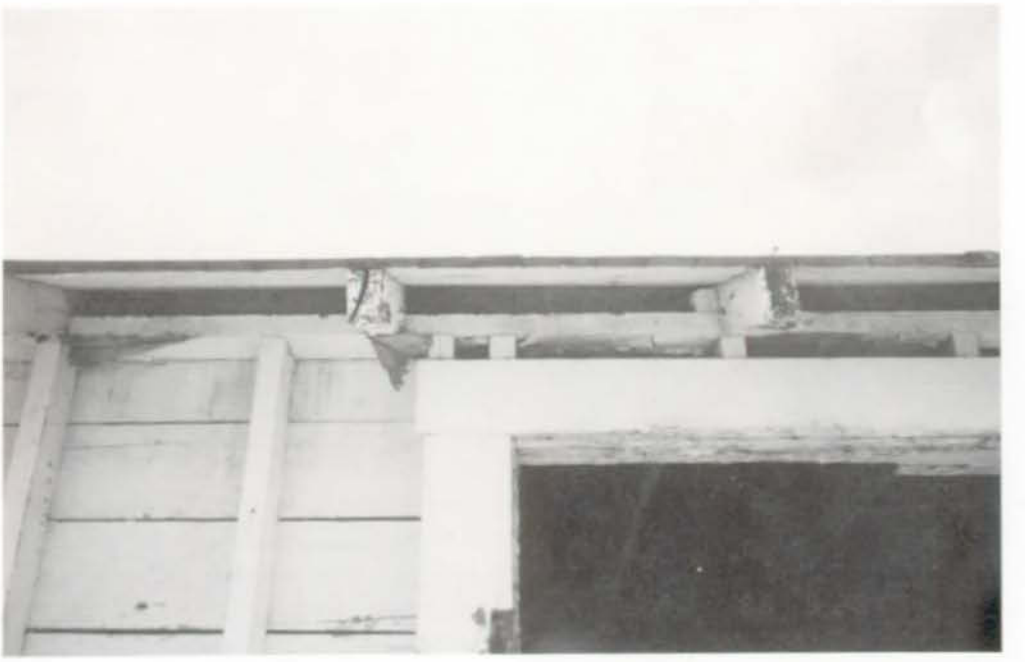

Photo 91: Detail of roof and wall framing of Coal and Supply Shed.

Photo 92: Wall framing of the coal and supply shed was left exposed. Photo by Gordon Chappell, NPS, February 8, 1995.

MECHANICAL SYSTEMS ANALYSIS

Purpose

The Kelso Railroad Depot building is planned to be rehabilitated and adaptively reused for Mojave National Park and Preserve interpretive, administrative, and residential functions. Because the National Park Service will be a long-term owner and occupant of this structure, it is in the best interest of the Government that long-term operating costs are as low as practically possible. To keep operating costs at a minimum, it is essential that all potential mechanical systems and building envelope treatments considered for inclusion into future designs be analyzed with respect to these costs. Efforts should be made to reduce construction and operating costs as much as possible, while maintaining historical integrity, aesthetics, comfort, simplicity of operation, ease of maintenance, and low environmental impact.

This section provides descriptions, analyses, and recommendations for building envelope treatments, heating, ventilating, and air conditioning (HVAC), plumbing, and fire protection systems in the Railroad Depot building at the Kelso site.

Because the configurations of and types of equipment used in commercial plumbing and fire protection systems are relatively fixed by code and standard requirements, these systems will not be quantitatively analyzed like the building envelope and HVAC systems. Any reductions in the initial

costs of these systems typically result from changes in piping materials (e.g., plastic vs. metal) and specification of "builder grade" plumbing fixtures. Further reductions in operating and maintenance costs in plumbing and fire protection systems are difficult to achieve without sacrificing functionality.

Recommendations Summary

Building Envelope. Because of the substantial energy savings that will result, the building should be fully insulated as part of any rehabilitation work. In addition to reducing energy consumption, insulating the building has the added benefits of reducing mechanical system size and increasing interior comfort levels.

Storm windows or window inserts are recommended for implementation, but only if the park staff is willing to live with non-operable windows or is willing to perform seasonal changeout of screens and storm windows. Sufficient storage space for screens or storm windows also needs to be available to make seasonal storm window changeout feasible. The only other alternative is to completely replace the existing windows or glazing with modern insulated units; this does not appear to be economically feasible, given the relatively small reduction in annual energy consumption. There is also the problem of maintaining historical accuracy with modern windows or glazing.

Adding awnings to the second floor windows is not recommended unless it is decided to install them for historical accuracy. If awnings are added to the building for historical accuracy, they need to be configured so that they can be rolled up (canvas awnings) in the winter so that passive solar gains can be taken advantage of.

Heating, Ventilating, and Air Conditioning System. The system recommended for implementation as part of any rehabilitation work is ground-coupled heat pumps. Although this system has a higher initial cost, its life cycle costs, energy cost, and maintenance cost are lower than System Alternative 1. The simple payback period is also reasonable at 5.6 years. This system also has other advantages beside economics:

- No visual intrusions outside the building. Greater flexibility in landscape design since there is no chiller or propane tanks.
- Elimination of chiller-generated noise.
- Contributes to fire safety by eliminating the propane tanks and gas-fired boiler.

Plumbing Systems. It is recommended that all of the piping in the building that is readily accessible be replaced with new piping. It may be possible to re-use portions of the drainage piping under the basement floor, if it is in sound condition and does not leak.

The original plumbing fixtures should be retained to the extent possible for use in public restrooms and, at the second floor, one or more historic lavatories. Original plumbing fixtures that are reused should be provided with water-conserving fittings wherever possible. New fixtures should be used in staff quarters. All new plumbing fixtures and fittings shall be water-conserving (low-flow) type.

Building Storm Drainage System. The underground building storm drain loop should be repaired or replaced as part of any rehabilitation work on the building. The storm drain loop should be rerouted outside of the arcade.

Whether the historic 8 inch storm drain can be reused or not will need to be determined. An alternative might be an underground collection tank to allow water to percolate into the ground. Consideration was given to constructing an underground storm water collection tank with filtration and overflow, and equipped with a pump for supplemental irrigation water for the landscaping around the building. However, this probably would not be of much benefit because of the low annual rainfall.

Historic Refrigeration System. Preservation (but not re-use) of the refrigeration equipment in the basement should be considered. The walk-in refrigerator and freezer boxes located in the kitchen area should be preserved and kept as part of the archival collection in the park after removal.

Fire Protection Systems. It is recommended that a standard dry pipe automatic sprinkler system with galvanized steel pipe and fittings be installed in the Kelso Railroad Depot. The existing water supply pressure should be adequate for a properly designed automatic sprinkler system.

Use of the existing water system to feed the sprinkler system in the Kelso Railroad Depot is based on the assumption that the park will be able to use Union Pacific's standpipe water tanks and water supply system. If this is not the case, a water storage tank, fire pump, and an emergency generator to drive the fire pump in the event of power failure would have to be provided somewhere on the site to perform this function (see "Site Utilities" section elsewhere in this document).

Most sprinkler system piping can be concealed. In areas where the configuration of building framing makes pipe routing difficult, or where plaster is sound and removal is not required for structural or other work, alternative pipe routing and sidewall sprinkler heads can be used. Where exposed piping is necessary, this will be consistent with the historic interior appearance because some piping was exposed.

Building Envelope

Historic Conditions. The existing building was constructed circa 1924 and is fairly typical of buildings built in this period. The major energy-conserving features of the building are the shading structures that were incorporated into the original design. A roofed arcade (approximately 11 feet deep from the face of the building) surrounds the east, south, and west sides of the building on the first floor. This structure effectively shades the east, south, and west walls and windows on the first floor throughout most of the day. Historic photographs indicate that canvas awnings were installed on the majority of the second floor windows shortly after the completion of the railroad depot construction. These awnings provided effective shading for the second floor windows throughout most of the day. Because there were no cooling systems installed in the building (other than operable windows), these shading devices helped to maintain tolerable temperature conditions inside the building.

The exterior of the building has light-colored walls which help with the cooling situation by reflecting a major portion of the suns rays that fall on them. The roof is covered with dark red

tiles, which have the opposite effect; they tend to absorb more heat than they reflect, which adds heat to the spaces below the roof.

All of the frame walls and ceilings are finished with plaster-and-lath (approximately 3/4" thick) on the interior surfaces. Some of the floors on the first and second floor levels are covered with a 4-1/2" thick concrete slab on a frame floor structure. The basement level is of standard construction with 14" thick foundation walls and a concrete floor slab. All of the plaster-and-lath, concrete slabs on frame structure, foundation walls, and basement floor slab can be classified as mass that acts as a "heat battery". The mass absorbs and releases heat on the interior of the building, and acts to stabilize the temperatures inside the building. The less mass there is inside a building, the greater the interior temperature swings during the day; conversely, the more mass there is inside a building, the smaller the interior temperature swings during the day. This building has more mass on the interior than a typical frame structure, which will help to reduce interior swings during the day. Keep in mind, however, that mass alone can only do so much toward maintaining comfortable temperatures in a building; adequate insulation is required also to retard the inevitable flow of heat into and out of the building envelope.

In keeping with the typical construction techniques of the period, no insulation was provided in the stud cavities in the frame walls on the first and second floors, and no insulation was provided in the first and second floor ceilings. All of the windows are single-glazed units with no modern seals or weatherstripping.

Existing Conditions. Other than some door and window modifications, interior partition modifications, vandalism, and the ravages of time, the building and building envelope remain much the same as they were when originally constructed in 1924. The major components that have been removed from the exterior of the building are the second floor window awnings.

Recommended Treatments. To accurately gauge the effects of energy conservation treatments related to the building envelope, the building was modeled with load/energy calculation software (Trace 600). This software produces quantitative results that can be economically compared. The weather data used with this software is for Edwards Air Force Base. Edwards was used because no hourly weather tapes or other tabulated weather data is available for the Kelso site. Edwards Air Force Base is at almost the same latitude and elevation as Kelso and was judged to be climatically similar enough to Kelso to make valid comparisons between building envelope alternatives. Climatic data for the Edwards site is listed in Appendix D. Four different building envelope alternatives were studied:

Envelope Alternative 1 - Existing Building, No Treatments
Envelope Alternative 2 - Insulate Walls and Ceilings (R19 in walls, R30 in ceilings)
Envelope Alternative 3 - Install Storm Windows (or window inserts)
Envelope Alternative 4 - Install Awnings on Second Floor Windows

To obtain annual operating (energy) costs, a conventional heating, ventilating, and air conditioning system was modeled. This system consists of a packaged air-cooled chiller, propane gas-fired boiler, and four-pipe blower coil air handlers. It is the same system as System Alternative 1 described and modeled in the "Heating, Ventilating, and Air Conditioning" section below. All energy-consuming equipment (lights, fans, pumps, elevator, domestic water heater, etc.) were considered in the analyses. Detailed monthly energy consumption and energy costs for each

alternative are presented in Appendix A. The results of the studies are summarized in the table below:

Envelope Alternative Number	Building Cooling Load (Tons)[a]	Building Heating Load (MBH)[b]	Annual Electrical Energy Cost	Annual Gas Energy Cost	Total Annual Energy Cost
1	47.1	565.5	$21,364.45	$6,141.76	$27,506.21
2	34.1	412.5	$18,954.03	$2,903.54	$21,857.57
3	45.1	498.4	$21,013.27	$5,216.98	$26,320.25
4	46.7	564.4	$21,167.42	$6,283.77	$27,451.19

[a]1 Ton = 12,000 BTU (British Thermal Units) per hour cooling capacity
[b]1 MBH = 1,000 BTU per hour

Alternative 2 vs. Alternative 1 — Fully insulating the building walls and ceilings results in the most dramatic drop in building loads and energy consumption. The decrease in annual energy costs is 27,506.21 - 21,857.57 = $5,648.64. The cost of fully insulating the building is estimated to be $33,500. This results in a simple payback period of 33,500/5,650 = 5.9 years. This is not the whole picture though; insulating the building also allows substantial reductions in the sizes of the mechanical systems required to condition the building (e.g., 50 ton chiller vs. 60 ton chiller). If these cost reductions are taken into account, the payback period may be reduced to nothing or even be negative. An additional benefit of insulating the building will be increased comfort levels inside the building. It is highly recommended that the building be fully insulated as part of any rehabilitation work.

Alternative 3 vs. Alternative 1 — Although adding storm windows (or window inserts) to the building reduces the loads and energy consumption, it does not result in reductions as dramatic as insulating the building. As can be seen from the energy cost figures in the table above, there is very little reduction in the electrical energy usage (small reduction in cooling load). The major reduction in load and energy consumption comes in the heating season. This tends to support the typical management mode for storm windows: remove screens and install storm windows in the fall, remove storm windows and install screens in the spring.

Whether the annual reduction in energy consumption (27,506.21 - 26,320.25 = $1,185.96) are sufficient to offset the cost of the storm windows in a reasonable period of time, there are other items of an operational nature that need to be considered. First, is the park staff willing to perform a biannual changeout of screens and storm windows for this facility? The building has a lot of windows and some of them will require a tall ladder to access. Second, if both storm windows and screens are used, storage space will need to be provided to store either the screens or the storm windows.

The recommendation of whether to add storm windows to the building as part of any rehabilitation work is contingent upon how the storm windows will be managed. If the storm windows are to be installed more or less permanently and it is acceptable for the windows in the building to not open, then it is recommended to install the storm windows to save energy. If the storm windows are going to be removed and installed on a seasonal basis, the decision of whether to implement storm windows should be based on the park's operational budget and the availability of sufficient storage space. The only other alternative is to completely replace the existing windows or glazing with

modern insulated units; this does not appear to be economically feasible, given the relatively small reduction in annual energy consumption. There is also the problem of maintaining historical accuracy with modern windows or glazing.

Alternative 4 vs. Alternative 1 — The addition of awnings to the second floor windows does reduce the building cooling load and electrical energy consumption, but not as much as might be expected. A surprise comes in the heating season where the awnings actually increase the energy consumption. This is most likely the result of losing passive solar gains during the winter because of the shading the awnings provide at low sun angles. Because the energy savings in the cooling season are negligible, it is not recommended to install awnings on the second floor windows. If it is decided to install the awnings on the building for historical accuracy, they need to be configured so that they can be rolled up (canvas awnings) in the winter so that passive solar gains can be taken advantage of.

Heating, Ventilating, and Air Conditioning

Historic Conditions. The building was originally equipped with a one-pipe steam heating system. The heat source was an oil-fired steam boiler, located in the basement boiler room. This boiler provided steam for cast-iron radiators and for domestic water heating. The main steam pipe loops supplying the cast iron radiators are located at the ceiling of the basement, with steam risers to the floors above taken off of the main loops at regular intervals. The steam risers are located at the perimeter of the building and are concealed inside the outside walls. No cooling systems, other than shade structures and operable windows, were provided in the original construction. Ventilation was provided by operable windows in most of the areas of the building. Kitchen exhaust was provided by a roof-mounted gravity ventilator.

Existing Conditions. All of the heating equipment (boiler, blowdown tank, domestic hot water tank, valves, piping, etc.) was removed from the basement boiler room (northeast corner under the kitchen) at some time in the past. The remainder of the historic piping which supplied the radiators is still in place. Asbestos bearing insulation that was originally installed on the steam piping was removed under a recent Bureau of Land Management (BLM) asbestos abatement contract. None of the original radiators remain in the building except for several ceiling mounted radiators in the east section of the basement.

All of the available evidence indicates that the fuel oil tank(s) and piping supplying the original boiler have been removed. There are no fuel oil tanks inside the building and there are no fill or vent pipes coming out of the ground outside of the building.

During the later portion of the building's active use period, when most of the original steam radiators were removed, electric heating units were installed. Also, some evaporative coolers and window air conditioners were installed to provide cooling in various areas of the building. All of the cooling units have been removed, but most of the electric heaters remain.

The roof-mounted kitchen ventilator was removed at some time in the past.

Recommended Treatments. To make the building suitable for year-round park operations, some type of modern HVAC system will need to be installed to provide comfort conditions inside the building. Different types of HVAC systems and energy sources that may be suitable for use in this

project are discussed below. These discussions outline features, advantages, and disadvantages of each type of system and are general in nature. Because of the historic nature and configuration of the building, there are several types of HVAC systems that were considered and rejected:

1. Direct Resistance Electric Heating

As far as integrating with the building itself, direct resistance electric heating in the form of baseboard radiation or electric coils in air handlers would be a good choice for this project. However, the operating costs would be excessive in the winter (both consumption and demand charges would be high). Also, the electrical service may not be able to handle a heating load of approximately 120 KW (this is the peak heating load with the building fully insulated) in addition to the other electrical loads.

2. Fuel Oil Heating

Fuel oil could be used to fire a boiler as was done historically, but presents some difficulties. First, fuel oil is not commonly used as a heating fuel in the Mojave Desert area. The heating fuel of choice is propane (or natural gas, if available). Second, the use of fuel oil as a heating fuel requires a storage tank. Whether this tank is located above or belowground, it is required to have overfill spill prevention devices and secondary containment with leak monitoring. Underground fuel oil piping must have a secondary containment also.

3. Air-to-Air Heat Pumps

Air-to-air heat pumps are a more energy-efficient choice for heating than direct resistance electric heat. Another advantage is that cooling can be provided also with the same piece of equipment. The major drawback of air-to-air heat pumps is that the heating capacity drops off as the outside temperature decreases and the cooling capacity drops off as the outdoor temperature increases. At low temperatures (typically around 20 degrees F), the heating capacity drops off so much that the heat pump cannot produce enough heat energy to adequately heat the indoor spaces. At this point, a supplemental heat source (typically direct resistance electric heat) must be turned on to provide additional heat energy. In colder climates, icing of the outdoor air coil can occur, requiring additional energy to defrost the coils.

Air-to-air heat pumps also require fairly large air-to-refrigerant heat transfer devices, located inside or outside the building. If these devices are located outside the building, they can produce noise and visual impacts that may be unacceptable. If they are located inside the building, large louvers will be required for intake and exhaust airstreams.

4. Evaporative Cooling

Evaporative cooling is used extensively in desert climates and has one of the lowest operating costs of any type of cooling system. The biggest drawback of using evaporative cooling is the elevated discharge air temperatures (75 degrees F vs. 55 degrees F for mechanical cooling). To obtain reasonable comfort conditions (85 degrees F), large supply air flowrates are required. In a building where duct space is at a premium, larger than normal ductwork is a distinct liability. Also, the equipment containing the evaporative media is fairly large and is typically located outside the building. Equipment noise is typically not a problem, but visual impacts may be unacceptable.

Depending on the water quality at the site, maintenance of the evaporative media may be a major issue. If the water has a high mineral content, the minerals will accumulate on the evaporative media and will require frequent cleaning and/or replacement of the media. Depending on the location of the evaporative cooling equipment, water leakage can lead to damage of historic fabric. In most cases, water leakage problems can be mitigated by constructing drain pans under the evaporative cooling equipment.

5. Solar Assist

Because of the historic nature of this structure, any type of active solar system collectors mounted on the building proper will be unacceptable. Active solar panels could be mounted on a ground array, but adequate site space near the building may not be compatible with other site features such as parking and landscaped areas.

Passive solar techniques are also possible, but only by sacrificing the historic character of the building. The arcade on the east, south, and west sides of the building could be closed in with glazing to form a sunspace to assist in heating the building, but may be unacceptable from a historic preservation standpoint.

Any systems that rely on central air handlers were also rejected because of the lack of space in the building for large duct risers and trunk ducts. This leaves the two HVAC systems that were considered the most suitable and thus were analyzed for this project. Both of these systems can provide equivalent levels of temperature control and allow thermostat zoning down to an individual room level. Both systems were also chosen under the assumption that cooling of the building is desirable for maintaining comfort conditions in the summer:

System Alternative 1: Air-Cooled Package Chiller with Propane Gas-Fired Boilers and Blower-Coil Air Handlers — This is a fairly common type of system and would be considered "conventional". Cooling is provided by an air-cooled package water chiller unit that would be located somewhere outside of the building. An air-cooled chiller unit was selected in lieu of a water-cooled chiller with a cooling tower or a chiller with an evaporative condenser because of reduced maintenance costs. However, it needs to be realized that there is an increased operating cost associated with the air-cooled chiller because of higher condensing temperatures. Heating is provided by a propane-fired boiler located in the existing basement boiler room. Chilled water and hot water from the chiller and boiler is supplied to blower-coil units with circulating pumps. Supply and return piping for both chilled and hot water is routed to and from the blower-coil units in a "four-pipe" configuration. Individual blower-coil units serving each zone are equipped with air filters, cooling coils, heating coils, fans, and control valves. Each zone blower-coil unit is controlled by its own thermostat. Outside air is provided to each blower coil unit by a outside air duct.

System Alternative 2: Ground-Coupled Heat Pumps — Ground-coupled heat pump systems have been in use for the past 20 or 30 years, but are not as common as the system described in HVAC Alternative 1 above. The operation of ground-coupled heat pumps is similar to that of air-to-air heat pumps, except that the earth surrounding the building is used as a heat source or heat sink rather than the outdoor air. Since the ground temperature varies less than the air temperature, the coefficient of performance of the heat pump remains higher over a wider range of outdoor temperatures. On average, for each unit of electrical energy input to the heat pump, three units of heat energy are "pumped" into or out of the indoor spaces. Ground-coupled heat pumps perform

well enough in the heating mode at low outdoor temperatures that supplemental heat sources are usually not required.

To form a ground-coupled heat exchanger for the heat pump, plastic pipe is inserted into wells (approximately 200 feet deep) located outside of the building, with all of the wells manifolded together. Water from the ground-coupled heat exchanger is supplied to the heat pumps with a circulating pump. Supply and return piping for the water is routed to and from the heat pump units in a "two-pipe" configuration. Water is pumped inside this piping loop to transfer heat from the heat pumps to the ground or vice-versa.

Individual heat pump units serving each zone are equipped with air filters, direct-expansion coils, fans, controls, and control valves. Each zone heat pump unit is controlled by its own thermostat. Outside air is provided to each blower coil unit by a outside air duct.

In the same fashion as the analyses performed on the building envelope, these systems were modeled with load/energy calculation software (Trace 600), using the same weather data as described in the "Building and Building Envelope" section above. The building envelope configuration chosen for the HVAC system comparison is Envelope Alternative 2 (insulated walls and ceilings). Again, the major reduction in heating and cooling loads afforded by insulating the building conserves energy and allows the HVAC equipment sizes to be reduced substantially. Life cycle cost calculations are based on a 25 year study period and a 4.1 percent discount rate (see Appendix C for detailed life cycle cost calculations). The results of the studies are summarized in the table below:

System Alternative Number	Initial Cost	Annual Energy Cost	Annual Maintenance Cost	Life Cycle Cost[a]	Life Cycle Cost[b]
1	$324,001.92	$21,857.57	$4,300	$785,869.09	$823,867.16
2	$342,740.93	$19,333.55	$3,500	$744,947.69	$780,252.76

[a]Environmental emissions costs not taken into account
[b]Environmental emissions costs taken into account

The difference in initial cost between System Alternative 2 and System Alternative 1 is

342,740.93 - 324,001.92 = $18,739.01.

The annual energy and maintenance cost difference between the two systems is

(21,857.57 - 19,333.55) + (4,300 - 3,500) = $3,324.02

This results in a simple payback period of

18,739.01/3,324.02 = 5.6 years.

The system recommended for implementation is System Alternative 2, Ground-Coupled Heat Pumps. Although this system has a higher initial cost, its life cycle costs, energy cost, and maintenance cost are lower than System Alternative 1. The simple payback period is also reasonable at 5.6 years. This system also has other advantages beside economics:

- Because the ground heat exchanger is completely buried, it will not be visible. This eliminates any visual intrusions outside the building and also allows greater flexibility in the landscape design by eliminating the chiller and propane tanks. Space (and screening) would have to be allocated somewhere outside of the building. The ground heat exchanger allows paving and landscaping to occur over those areas containing the ground heat exchanger loops

- Elimination of the chiller avoids having to deal with unwanted outdoor noise that would be generated by the chiller unit.

- Elimination of the propane tanks and gas-fired boiler contributes to fire safety. Although properly installed and maintained propane storage and distribution systems are reasonably safe, there would be some problems associated with this particular installation. The existing building has a boiler room in the basement. This room is the logical place to locate the boilers in any rehabilitation work. 1994 Uniform Mechanical Code (UMC), Section 304.6 prohibits the installation of liquified petroleum gas appliances in basements. This is because propane is heavier than air and any gas leakage will collect in the basement. Although there are some code-acceptable solutions to this problem, it is better to avoid the problem altogether by not using gas for heating purposes.

In addition to installing a new HVAC system in the building, removal of existing heating piping and any additional asbestos containing insulation needs to be done as part of any rehabilitation project. The basement ceiling radiators should remain as part of the historic scene inside the building.

Toilet exhaust systems will be provided for all of the public and private restrooms in the building. Outside ventilation air will be provided through louvers on the exterior of the building. Each heat pump unit will be supplied by outside air ducts connected to plenums on the back of the outside air louvers.

Controls will consist of individual zone thermostats, one for each heat pump. To save energy, it is recommended that night setback/setup thermostats be installed. A building automation system (direct digital controls) could be provided to perform this function also.

Plumbing Systems

Historic Conditions. The original domestic water system consisted of galvanized steel piping. A 250 gallon hot water storage tank was located in the boiler room. Soil, waste, and vent piping in the building is mostly cast iron, with galvanized steel being used for smaller diameter piping.

Existing Conditions. In the large restroom in the east end of the basement, some historic plumbing fixtures are still in place as well as the original wood and steel toilet partitions. There are two modern 82 gallon electric water heaters located in the large restroom also. The first floor kitchen and lunch room plumbing systems have been reconfigured and the plumbing equipment in these spaces has been replaced at least once since the original installation. Most of the original first and second floor plumbing and restroom fixtures are still in place. The water supply to the building has been shut off and there is no water currently available in the building.

Recommended Treatments. Because of the age of the piping, it is recommended that all of the piping in the building that is readily accessible be replaced with new piping. In the case of the domestic water piping, all of it should be replaced with copper pipe and fittings. Replacing the soil, waste, and vent piping presents some additional difficulties. Since the main waste piping in the basement in located under the basement floor, and the basement floor is made of scored and colored concrete, it will be difficult and expensive to repair or replace the portions of floor that need to be removed so that they match the original floor. With some of the new fixture layouts proposed for the basement restrooms, some cutting and patching of the original floor will be unavoidable. However, it should be possible to re-use portions of the drainage piping under the basement floor, assuming it is in sound condition and does not leak.

As proposed in the architectural assessment section of this report, original plumbing fixtures should be retained to the extent possible. It may not be appropriate or cost effective to retain all original fixtures, but selected examples might be rehabilitated and reinstalled. Their locations would be dependent on the final use configuration of the building spaces. Original plumbing fixtures that are reused should be provided with water-conserving fittings wherever possible. All new plumbing fixtures and fittings shall be water-conserving (low-flow) type.

Building Storm Drainage System

Historic Conditions. Roof storm water gutters and downspouts were connected to an underground storm water collection loop around the building. Downspouts from four points at the front of the building, one point on each of the east and west ends of the building, and two points on the rear of the building connected directly into the underground loop. An additional areaway drain for the rear basement stairwell was also connected to the underground loop. The storm drainage loop then connected to an 8 inch storm sewer north of the building. The ultimate discharge location of this storm drain is unknown. The original drawings show the storm drain loop piping from the front of building running diagonally under the corner bays of the arcade at each end of building.

Existing Conditions. The underground storm drain is clogged and is no longer functional. Water in the storm drain piping is suspected of leaking into the soil under the corner arcade bays. This excess water in the soil may be the cause of heaving and cracking of the concrete paving slab in the arcade corner bays.

Recommended Treatments. The underground building storm drain loop should be repaired or replaced as part of any rehabilitation work on the building. It is recommended that the portions of the piping that run under the arcade corner bays be rerouted outside of the arcade. Grade level cleanouts should be provided at all 90 degree corners in the underground piping for ease of maintenance.

If the storm drain is going to be reconnected to the existing 8 inch storm sewer, it needs to be determined whether the existing storm sewer line is suitable for re-use or if it needs to be replaced. An alternative might be an underground collection tank to allow water to percolate into the ground. Consideration was given to constructing an underground storm water collection tank with filtration and overflow, and equipped with a pump for supplemental irrigation water for the landscaping around the building. However, this probably would not be of much benefit because of the low annual rainfall.

Historic Refrigeration System

Some original refrigeration equipment remains in the basement room at the northwest corner under the kitchen. Preservation (but not re-use) of this equipment should be considered. There are also walk-in refrigerator and freezer boxes located in the kitchen area. These boxes will need to be removed to allow structural repairs to occur. They should be preserved and kept as part of the archival collection in the park.

Fire Protection Systems

Historic Conditions. Historically the interior of the structure may have been protected by use of manual fire extinguishers, but there is currently no evidence of fire extinguishers. Exterior fire protection was provided by fire hydrants located on the east and west ends of the building.

Existing Conditions. In 1996, someone drove their car into the fire hydrant located on the west end of the building, breaking it off at ground level. The fire hydrant was replaced by Union Pacific and bollards were installed around both the east and west hydrants to prevent vehicular damage in the future.

Recommended Treatments. NPS-50, the NPS "Loss Control Management Guideline" requires that an automatic fire suppression system be considered for this structure:

> Ensure that all new facilities are designed with automatic suppression and detection systems, as well as ensuring that existing and historic buildings are equipped with fire suppression and smoke detection systems.[403]

Although the wording of the published NPS-50 guideline does not include the word "automatic" with respect to historic buildings, it was intended as such. Additional guidance and standards can be found in NPS-28, "Cultural Resources Guideline", NPS-58, "Structural Fire Guideline", NFPA-913, "Protection of Historic Structures and Sites", and NFPA-914, "Rehabilitation and Adaptive Reuse of Historic Structures".

It is recommended that a standard dry pipe automatic sprinkler system with galvanized steel pipe and fittings be installed in the Kelso Railroad Depot. Reasons for selecting this type of system and piping materials are presented below:

- A dry pipe system will not freeze and allows greater latitude in system design since piping and sprinklers can be located on the exterior of the building or in unheated spaces without fear of freezing. In the event of a heating system failure, the sprinkler system will not freeze. In addition, by not having water in the system during normal operation, the risk of damage due to water leakage is reduced.

- A standard dry pipe system is relatively easy to maintain compared to a preaction system. Preaction systems require specialized training and additional maintenance that is not required with a dry pipe system. Preaction systems are also not as reliable as dry pipe systems, due to

403. NPS-50, *Loss Control Management*, Release No. 2, January 1991, Chapter 18, pg. 3.

the interlocks, additional equipment, and increased complexity. Even if the power fails or the fire detection system fails, the dry pipe system will operate in the event of a fire.

While preaction systems offer the ultimate in safety against accidental discharge, the chances for accidental discharge due to pipe or sprinkler damage in standard dry pipe systems used in light hazard occupancies are quite low. Given the controlled nature of the occupancy in the Kelso Railroad Depot, and the fact that the sprinklers will be located at ceiling height, the probability of system damage due to carelessness or vandalism will be very low.

- Materials and equipment for dry pipe systems are standard items and are available from a wide variety of manufacturers.

- Even though "on-off" types of systems would potentially reduce water damage in the event of a fire, they are not recommended for use in the Kelso Railroad Depot. The argument against the use of an on-off sprinkler system such as the Viking "Firecycle" is the same as the argument against the use of preaction systems: increased complexity and maintenance, and decreased reliability. In addition, the cost for a system such as this will be even more than that for a preaction system, due to the requirement of an additional special detection system.

  On-off sprinklers are also not recommended for use in the depot. On-off sprinklers are suitable for use only in wet pipe sprinkler systems or dry pipe systems that are not exposed to freezing. Since they can only be installed in a pendent position, this limits the installation flexibility of the system, resulting in greater visual impact and potentially greater installation impact.

  Water damage in the event of a fire is unavoidable. An automatic sprinkler system will reduce the amount of water required to control or extinguish a fire by catching the fire in its early stages versus not having a sprinkler system and having to apply excessive amounts of water with hose streams after the fire has had a chance to grow. With the recommended dry pipe system, water damage can be further reduced by shortening the response time. The sprinkler system will be designed give an alarm upon activation. The fire detection system will give an alarm even before the sprinkler system activates and will indicate the location of the fire. The fire situation can be assessed and, if the fire is extinguished, the sprinkler system can be shut off in a timely fashion.

- Galvanized steel pipe and fittings are the preferred choice for piping materials due to corrosion resistance, ease of assembly in the field, and reduced fire hazard during installation (no open flames or arcs). They are also reasonably inexpensive and are readily available. Galvanized steel pipe and fittings were installed during the historic period at the Kelso Railroad Depot, so the modern piping should not look too much "out of place" in exposed locations. The piping can be painted to match surrounding surfaces if necessary.

To make a sprinkler system functional and reliable, an adequate water supply must be available for feeding the sprinkler system. An evaluation of the water supply requirements for the proposed Kelso Railroad Depot sprinkler system, and the pressure and flowrate characteristics of the Union Pacific water system at Kelso are presented below.

Current Denver Service Center sprinkler system design policy for light hazard occupancies is to use Ordinary Hazard, Group 1 densities for calculating system flowrates, but to use light hazard sprinkler spacing, flow duration, and outside hose flow requirements. The reason for doing this is

to add an additional safety factor to the design, while keeping the water storage capacity and outside hose flows to a minimum. Using these criteria, the estimated flow, pressure, and flow duration requirements for the recommended dry pipe system are as follows:

Design Area (Attic) = 1,500 sq. ft.

Required Density for Ordinary Hazard, Group 1 Occupancy = 0.15 gallons/min. per sq. ft. (@1,500 sq. ft.) per 1996 NFPA 13 Figure 5-2.3[404]

Adjusting design area for dry pipe system per 1996 NFPA 13 5-2.3.2.6:

Adjusted Design Area = 1,500 x 1.3 = 1,950 sq. ft.

Adding 10 percent for friction:

Design Sprinkler Flowrate, Q = 1,950 x 0.15 x 1.10 = 322 gallons/minute

Pressure required at furthest sprinkler (for 150 sq. ft. coverage per sprinkler) = $(22.4 \text{ gpm}/8.1)^2$ = 7.6 psi (for 17/32" orifice sprinkler, k factor = 8.1)

Estimated pressure required for friction = 10 psi

Pressure required for double check valve assembly = 5 psi

Elevation pressure required (to upper part of attic) = 0.433 x 30 ft. = 13.0 psi

Total Design Pressure Required, P = 7.6 + 10 + 5 + 13.0 = 35.6 psi

Hose flows required:

Inside Hose Flow = 0 gallons/minute
Outside Hose Flow = 100 gallons/minute (per 1996 NFPA 13 Table 5-2.3)

Total Design Flow Required = 322 + 100 = 422 gallons/minute

Duration Required = 30 minutes (per 1996 NFPA 13 Table 5-2.3)

Water Storage Capacity Required = 422 x 30 = 12,660 gallons

Calculated pressure and flowrate available from the existing water supply at the point of connection to the dry pipe sprinkler system are as follows:

Tank Elevation (approx.) = 2,252 ft.
Point of Connection Elevation (approx.) = 2,126 ft.

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404. NFPA 13, *Standard for the Installation of Sprinkler Systems*, 1996 Edition

Static Pressure = (2,252 - 2,126) x 0.433 = 54.6 psi

Length of piping from tank:

1,400 ft. 6" ductile iron from tank to sprinkler system point of connection.

Using Hazen-Williams formula for friction loss in pipe:
Friction Loss, h_f =

$$\frac{4.52(1{,}400)}{6^{4.87}}\left[\frac{Q}{90}\right]^{1.85} = (2.49x10^{-4})Q^{1.85}$$

With Q = 422 gallons/minute at the point of connection, h_f = 17.9 psi
Residual Pressure = 54.6 - 17.9 = 36.7 psi

Pressure required for sprinkler system = 35.6 psi which is less than 36.7 psi; therefore the existing water supply pressure should be adequate with the sprinkler system designed as described above. The water pressure safety margin appears to be small, but keep in mind that the sprinkler densities were increased from 0.10 to 0.15 gpm per square foot, effectively producing a 50 percent safety factor.

The well pump supplying the standpipe tanks is rated at 375 gpm. Because the pump will be operating if the fire protection system is operating, the net flow out of the tanks will be 422 - 375 = 47 gpm. The total water quantity drawn out of the tanks during a 30 minute duration will therefore be 47 x 30 = 1,410 gallons. For two 12 foot diameter standpipe tanks, this amount of drawdown equates to:

$$1{,}410 \div \left[\frac{\Pi 12^2}{4} \times 2 \times 7.48\right] = 0.833 feet$$

This equates to 0.833 x 0.433 = 0.4 psi. Subtracting this from the residual pressure (36.7 - 0.4 = 36.3 psi) is still greater than 35.6 psi, which will provide sufficient pressure to operate the sprinkler system.

All of the above is based on the assumption that the park will be able to use Union Pacific's standpipe water tanks and water supply system to feed the sprinkler system in the Kelso Railroad Depot. If this is not the case, a water storage tank, fire pump, and an emergency generator to drive the fire pump in the event of power failure would have to be provided to perform this function (see "Site Utilities" section elsewhere in this document).

ELECTRICAL SYSTEMS ANALYSIS

Building Power and Lighting

New service equipment was installed in 1993 during the period of BLM management. The service equipment consists of a 75 KVA pad-mounted transformer located to the north of the building, a CT cabinet and meter at the north side of the building, and a distribution panel in the basement. The transformer and meter are owned and maintained by Southern California Edison (SCE). No service is presently being provided (and is not recommended until building wiring is replaced). Nameplate data from the existing equipment is as follows:

Pad Mounted Transformer: 75 KVA, 16340 Delta, 208Y/120
CT Cabinet: 600 Amp, 60 Hertz, 208V/120V, 3 Ph, 4W
Short circuit current rating: 42K RMS

A small branch circuit distribution panel was also installed on the north wall of the northwestern most room in the basement (under the Kitchen wing, labeled as a "Storeroom" on the as-built drawings). This room still contains original refrigeration equipment. The branch circuit panel is a Challenger, 20 circuit, with no main breaker, one 15 amp and one 20 amp branch circuit breaker, presumably for lighting.

The existing building electrical system is beyond its service life, does not meet current standards and is unsafe. Replacement of the building electrical system is recommended. The utility transformer and service entrance equipment do not appear to be large enough to accommodate the intended building use. See electrical load calculations in the appendixes.

Telephone, Data and Television Transmission

There is no functional building telephone system. The present service consists of an exposed line (twisted pair) strung around the exterior of the building to a public pay phone.

The rehabilitation program should include a complete system for the building, including telephone, computer data transmission and cable television capability throughout the building. It is recommend that raceway systems be installed for telephone, data and cable television.

Anticipate future telephone requirements to include 2 pay phones, a minimum of 4 lines for park use (2 dial, 2 data), and 2 lines for the apartments. Elevator and alarm communicators can be specified with line capture capability which could eliminate the need for additional dedicated lines for alarms.

Fire and Intrusion Detection

The building presently has no detection systems for either fire or intrusion. It is recommended that a fire detection system be installed as soon as possible from a resource protection standpoint. This "interim" system could dial out to predetermined park numbers or local fire department, or both. Even with no fire suppression system, a detection system will at least provide early warning, whether or not a fire truck is available at Kelso.

In conjunction with the building restoration, it is recommended that both fire and intrusion detection be incorporated into the facility. Addressable systems are recommended, hard-wired in conjunction with the interior rehabilitation work. Addressable systems identify for maintenance, law enforcement and fire personnel the specific detectors which require maintenance or have detected fire or intrusion conditions. Combination fire and intrusion detection systems are available (depending upon system size and complexity), however, often it is more economical and useful to keep these systems separate.

REQUIREMENTS FOR TREATMENT

LEGAL AND REGULATORY REQUIREMENTS

The rehabilitation design shall conform to NPS cultural resource policies and guidelines and will be reviewed for compliance with the GMP, NEPA, Section 106 of the NHPA, and all applicable codes and standards required by law and NPS policy.

A historic structure report (HSR) is prepared "whenever there is to be a major intervention into historic structures or where activities are programmed that affect the qualities and characteristics that make the properties eligible for inclusion in the National Register" (NPS-28, 2.21). Planning is being undertaken for the preservation and use of the Kelso Depot. To prepare the building and its site for new use, interventions are anticipated. The primary purposes of this report are to assess the requirements for these activities, assess the condition of the building, evaluate alternative methods of implementation, and to recommend appropriate preservation measures and the best possible strategies to achieve management goals while protecting the qualities and characteristics of the resource which make it eligible for inclusion in the National Register of Historic Places.

This Historic Structure Report has been developed under the standards set forth in Cultural Resource Management Guidelines, NPS-28. Assessment of the effects of the recommended treatments is included in this report. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and any programmatic agreements for NPS Projects, the State Historic Preservation Officer and the Advisory Council on Historic Preservation will be consulted.

The determinations of effects of recommended treatments are made in accordance with Section 36 CFR 800.3 of the Advisory Council on Historic Preservation's "criteria of effect." The following are excerpts from NPS-28[405] on compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

> The Advisory Council's criteria of effect require the Service to take a broad view of effect and the associated range of casual actions. Effect follows not only from actions having a direct physical impact on cultural resources and taken to preserve, modify, or use them, but also from an undertaking near a cultural resource, inside or outside a park or National Register boundary, that may introduce 'visual, audible, or atmospheric elements that are out of character with the property or alter its setting.'
>
> ..... Application of the criteria will yield one of the following findings for a project [or recommendations]: no effect, no adverse effect, or adverse effect.

The treatments recommended in this report will have effects on the cultural resource; however, it is intended that the treatments will result in benefits providing for a higher level of preservation of the resource than is now provided. Certainly, returning the building to active use will be a major step toward its preservation. Some proposed work will include actions that would be considered adverse effects. For example, installation of additional means of emergency egress will require some removal of building fabric and reorganization of spaces. One of the most important design criteria, however, is that the modifications be designed to minimize these effects, both physically

405. NPS-28, *Cultural Resources Management Guideline*, Release No. 3, August 1985, Chapter 4, page 3.

and visually. Those adverse effects will be mitigated by providing an improved environment for the preservation of the building and the safety of its users. Further evaluation will be necessary when the recommendations are developed to a level of design detail specific enough to definitively identify specific building fabric impacts.

Some recommended actions will have no adverse effect — actions for preservation or repair of building materials which are suffering from the processes of deterioration, such as weathering of exterior wood elements. Action is necessary to halt deterioration. Some replacement is necessary of materials which cannot be repaired or preserved, to halt further deterioration or to stop intrusion of water into the structure which causes deterioration of other materials. Overall, the intent is to produce beneficial actions for long term preservation of the resource. Preservation is not achieved by no action, which clearly would be an adverse effect.

As may be found often in this Historic Structure Report, a "no action" alternative is not addressed. As is often the case, preservation is the objective and if no action would be detrimental to the fabric, then no action is obviously not desired nor recommended since it would be an adverse effect. Thus the recommended action is toward preservation or restoration, which will normally be targeted to have a beneficial effect, and at a minimum no adverse effect. Actions which may have an adverse effect are avoided unless no reasonable alternative is available, or is temporary and can be restored or reversed.

Actions which are of net benefit to preservation of the resource may involve "sub-actions" which might be considered adverse effects in order to achieve the desired treatment or resource protection. To protect buildings and their contents from the deteriorating effects of weather and water leakage, for example, removal of broken roofing tile, rotted wood, or failing stucco is adverse, but these actions must be done for long-term protection of the resources. Such materials are considered the protective shell and have to be replaced as they wear out.

Architectural finishes (paints, clear coatings and other finishes) are usually considered to be sacrificial and to have a limited life span. Normally they are renewed by recoating or replacing. There are occasions, however, where the finish is so unique or of a specific decorative quality that it will be warranted significant enough for conservation, such as in murals or stenciling.[406]

In most cases it will probably be appropriate to preserve, restore or replace fabric with finishes matched to the original. There are other situations, however, warranting a different approach. An example is the interior plaster texture in some locations, which were later alterations but still within the historic period. The texture may be "incorrect" in relation to the original texture, but as long as it is sound and there is no reason to replace it, this "incorrect" texture can be retained to preserve the proper time context of such building alterations and material treatments. On the other hand, where major repairs or replacements are necessary, consideration can be given to return to the original finish, texture and color. This is true also where past repairs were made but done incorrectly, unless the repair in itself has historic significance.

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406. See for example Zucker, Joyce and Deborah Gordon, "Decorative Finishes, Aspects of Conservation and Cleaning", in "The Interiors Handbook for Historic Buildings", Edited by Charles E. Fisher, III, Michael Auer and Anne Grimmer, Historic Preservation Foundation, Washington, D.C., 1988. Also see bibliography of that article.

Code Compliance Requirements

The Public Buildings Amendment Act of 1988, shall be implemented for this project. Provisions in Section 21 of that law require ... "Each building constructed or altered by the General Services Administration or any other Federal agency shall be constructed or altered...in compliance with one of the nationally recognized model building codes and with other applicable nationally recognized codes. Such other codes shall include, but not be limited to, electrical codes, fire and life safety codes, and plumbing codes as determined by the Administrator." NPS management policies require that all designs comply with national building codes, national standards, and federal design requirements, including all required permit processes. National codes which are applicable under this legislation and management policy include the Uniform Building Code (UBC), Uniform Code for Building Conservation (UCBC), National Fire Protection Association Life Safety Code (NFPA 101), Accessibility Guidelines for Buildings and Facilities (ADAAG), Uniform Federal Accessibility Standards (UFAS), the Uniform Mechanical Code (UMC), the Uniform Plumbing Code (UPC) and the National Electric Code (NEC). Earthquake design will be in accordance with the UBC and applicable California Codes. Also applicable is the California Code of Regulations, Title 24, California Building Standards Code, particularly Part 6, the California Energy Code, and Part 8, the California State Historic Building Code. Where the proposal or design varies with prescribed laws, codes or policy, documentation must be submitted, supporting the variance and stating how this proposal or design mitigates the prescribed law or policy and the variance must be approved in writing by the safety officer of DSC before it can be incorporated.

The latest dated codes, standards and policies to be addressed include, but are not limited to the following:

Building Codes:

UBC, Uniform Building Code, 1994

UCBC, Uniform Code for Building Conservation, 1991

California Code of Regulations, Title 24, California Building Standards Code, particularly Part 6 - California Energy Code and Part 8 - California State Historic Building Code (apply CHBC in conjunction with UBC and UCBC)

Life Safety and Fire Protection:

UFC, Uniform Fire Code

NFPA 101, Life Safety Code

NFPA 101M, Alternative Approaches to Life Safety

NFPA 914, Rehabilitation and Adaptive Reuse of Historic Structures

NFPA 13-94, Installation of Sprinkler Systems

Accessibility:

ADAAG, Accessibility Guidelines for Buildings and Facilities

UFAS, Uniform Federal Accessibility Standards

Structural:

ACI - Building Code Requirements for Reinforced Concrete, ACI 318-95

AISC - Manual for Steel Construction, Allowable Stress Design, Ninth Edition

AITC - American Institute of Timber Construction, Timber Construction Manual, 1985

NDS, National Design Specifications, 1991 edition

Energy:

10 CFR 435, Subpart C, Mandatory Performance Standards for New Federal Residential Buildings

10 CFR 436 A Methodology and Procedures for Life Cycle Costing Analysis, as amended.

DSC Guideline 82-1 (revised April 1992)

ASHRAE Standards 90.1-1989 and 90.2-1993

Mechanical:

UMC, Uniform Mechanical Code, 1994

National Fire Protection Association standards as applicable.

UPC, Uniform Plumbing Code, 1994

Electrical:

NFPA 70, National Electrical Code, 1993

Pest Management:

NPS Integrated Pest Management Plan

Hazardous Materials:

CERLA, Comprehensive Environmental Response Compensation Liability Act, 1980

SARA, Superfund Amendments and Reauthorization Act, 1986

Hazardous Waste Management regulations, Title 22, California Code of Regulations

Cal OSHA Occupational Lead Poisoning Prevention Program (Title 11 CCR)

Maintainability:

Inventory and Condition Assessment Program (ICAP)

Planning and Design Reference Documents and Guildelines

National Park Service, U.S. Department of the Interior:

____ Secretary of the Interior's Standards for Rehabilitation (36 CFR 67)

____ NPS Management Policies

NPS-28 Cultural Resource Management Guideline

NPS-38 Historic Property Leasing Guideline

NPS-50 Loss Control Management Guideline

1881 Energy Conscious Planning Guidelines

Public Laws and Regulations:

National Historic Preservation Act of 1966 as amended through 1992

National Environmental Policy Act of 1969

Executive Order 11752 - Prevention, Control and Abatement of Environmental Pollution at Federal Facilities

Public Buildings Amendment Act of 1988

Section 504 of the Rehabilitation Act of 1973 (amended 1978)

Americans with Disabilities Act of 1990

Seismic Rehabilitation, Public Law 101-614

Clean Air Act, Public Law 91-604

Native American Grave Protection and Repatriation Act, Public Law 101-601

Code Analysis

General. The analytical information following is for basic construction requirements, fire protection and life safety from the Uniform Building Code and the Life Safety Code (NFPA 101). Fundamental requirements of the Uniform Building Code, 1994, are found in Chapter 3, Use or Occupancy, Chapters 5 and 6, General Building Requirements and Type of Construction, Chapter 10, Means of Egress, Chapter 11, Accessibility and Chapter 34, Existing Buildings.

In addition to those chapters that apply to all uses, the applicable portions of the Life Safety Code (NFPA 101-1994) that apply for the selected uses include Chapter 8, Assembly, Chapter 26, Business and Chapter 20, Lodging. These chapters apply to new and modified buildings [LSC 1-4]. Detailed requirements (for all occupancies) are found in: Chapter 5, Means of Egress; Chapter 6, Features of Fire Protection; Chapter 7, Building Service and Fire Protection Equipment; and Chapter 31, Operating Features.

Important fundamental requirements to keep in mind are:

- No lock or fastening device shall prevent free escape during an emergency [LSC 2-4, 5-2.1.5];
- Two means of egress are required from each floor; two exits may be required from spaces within a building for certain occupancy loads [LSC 2-8]; and
- Vertical exits and openings shall be enclosed or protected to prevent spread of fire, smoke and fumes [LSC 2-9]. The underlining here is added to emphasize that utilization of an automatic fire suppression system provides protection for stairwells so that enclosure is not necessary under some requirements or conditions, although other requirements may still require enclosure.

It is important to note that an automatic sprinkler system, in addition to being the most desirable for protection of both the building and its occupants, also reduces the impacts on historic building fabric because the building does not need certain alterations or additional construction for protection that would be required if a system were not provided.

Occupancy Classifications. Determination of occupancy classifications and calculation of occupancy loads is based on mixed uses. The most important are exhibit areas or meeting rooms, which are an assembly occupancy. The capacity calculation is based on gross square footage with no deduction permissible for furniture or equipment (both under the Life Safety Code and the Uniform Building Code).

When a building or any space within the building, such as an exhibit area or public meeting room, is occupied by 50 or more persons, the occupancy classification for the building or portion of the building is assembly [LSC 4-1.2]. For quarters or overnight accommodations (residential — sleeping accommodations), the Uniform Building Code classification of R-1 applies if more than 10 persons are accommodated; if the occupancy is 10 or fewer persons the classification is R-3 [UBC 310.1]. The occupancy classification under the Life Safety Code is slightly different: if the occupancy is 16 persons or greater, the applicable classification is hotel; if less than 16 persons, the classification is lodging and rooming houses [LSC 4-1.6, 16-1.3 and 20-1.1].

The business (offices) classification will apply also, except when offices are associated with another occupancy and incidental to operations of the other occupancy or occupancies, the requirements are subject to the predominant use [UBC 304.1; LSC 4-1.8]. An example would be if a room on the first floor were used as an office associated with the exhibit activities.

If a dining room is part of a lodging use and has an occupancy of less than 50, it is classified as part of the lodging occupancy [LSC 8-1.2.2] but any dining area having a capacity of 50 or more is an assembly occupancy [LSC 16-1.2]. These semi-public or public eating spaces are a distinctly different classification than a break or lunch room on the second floor, which is accessory to the office use, not a dining room, and is classified as part of the offices.

Calculation of occupant loads is essentially the same under both the Uniform Building Code and the Life Safety Code. For this calculation, the following are the occupant load factors (floor area per person) [UBC Table 10-A]:

Assembly:	
Lobbies	7 sq. ft. per person
Exhibit and meeting rooms	15 sq. ft. per person
Offices:	100 sq. ft. per person
Lodging (both staff apartments and overnight quarters included):	200 sq. ft. per person
Kitchen, if used as an exhibit/resources work room:	100 sq. ft. per person
(Kitchen use = 200 sq. ft. per person)	
Mechanical and electrical equipment rooms	300 sq. ft. per person

Two exits (other than an elevator) are required from the building or any portion of the building if the occupant loads are 50 or more in the assembly uses, 30 or more in the office use (mechanical equipment areas and kitchens are also in this category), and 10 or more for lodging uses.

In the following table are the calculated occupant loads for each major space or section of the Kelso Depot. This shows the occupancy for the selected uses or options in some cases. Also, other types of uses are included for comparison. Because the exits from the original ticket office and baggage rooms in the west end of the first floor and the added section in the west arcade are separate from the exits from the other portions of the building, these rooms are considered as a separate occupancy, but if an interconnection is created with the main part of the building, the total occupancy load would increase for the primary exits. Original room names are used for space identification.

If a doorway were provided to connect the Baggage Room exhibit section with the other exhibit areas on the first floor the total occupancy load would become 579 for the entire building.

Those areas which will be assembly occupancies and make up the total building assembly occupancy load will be the original Lunch Room, the first floor exhibit areas, the first floor and basement lobbies, and the two large basement meeting rooms (originally the Reading Room and Billiard Room). The total occupancy load of those spaces is greater than 300 (from table above, 490, or 535 with the Baggage Room section), therefore, the UBC classification is Assembly category A-2.1 [UBC 303.1.1 and Table 3-A]. This is a Class B assembly occupancy under the Life Safety Code. The Lunch Room is a Class C assembly classification (50-300 persons) under the Life Safety Code [LSC 8-1.4.1 and 8-1.7.1]. Related sections in the Life Safety Code for the first

MAIN BUILDING OCCUPANT LOADS

SPACE	AREA (SQ. FT.) ÷ LOAD FACTOR (PERSONS PER SQ. FT.)	COMPARATIVE OCCUPANCY LOAD	SELECTED USE OCCUPANCY LOAD
Second Floor:			
Staff offices (50%)	1848/100		19
Staff lodging (50%)	1848/200		10
All lodging use	3696/200	19	
All office use	3696/100	37	
First Floor:			
Lobby	818/7		117
Lunch Room (exhibits)	928/15		62
Kitchen (as exhibit and resources work room)	1032/100	11 (as office space)	11
Kitchen (as kitchen)	1032/200	5	
Kitchen (as exhibits)	1032/15	69	
Original office/lodging as exhibits	1286/15		86
Original office/lodging as lodging	1286/200	7	
Original office/lodging as offices	1286/100	13	
Basement:			
Lobby and restroom	1008/7		144
Reading Room (Meeting Room)	546/15		37
Billiard Room (Meeting Room)	651/15		44
Mechanical equipment rooms	1032/300		4
Total Occupancy Load		---	534

WEST SECTION, FIRST FLOOR OCCUPANT LOADS

SPACE	AREA (SQ. FT.) ÷ LOAD FACTOR (PERSONS PER SQ. FT.)	COMPARATIVE OCCUPANCY LOAD	SELECTED USE OCCUPANCY LOAD
West section, first floor — original conductor's room, ticket office and baggage room, and added section in west arcade.			
Exhibits:			
Original portion	664/15		45
Added portion	320/15		22
Total Occupancy Load		---	67

floor and basement lobby areas and the west first floor exhibit spaces are LSC 8-1.7.1 and LSC 8-1.7.1(b), respectively.

A maximum occupancy load of 37 for the second floor would occur if all the space were used for offices. A minimum of 19 would be the case if all of the space were used for lodging in a mix of

staff apartments and overnight accommodations. For the proposed use as a combination of staff quarters and offices, the occupancy load would be 29, assuming a 50 percent proportion of the space used for each function.

Hazard of Contents. The hazard classification of building contents is based on the relative danger of the start and spread of fire and the resulting smoke and gases generated. The uses under consideration are in the ordinary hazard group [LSC 4-2.2.3, 8-1.5, 16-1.5, 20-1.5] except for the office use, which is light hazard [26-1.5.1]. The ordinary hazard grouping should be applied for all of the building. For sprinkler system design, the classification of contents found in NFPA 13 applies [LSC 16-1.5.1].

Allowable Area, Height and Minimum Construction Requirements. Within the applicable occupancy classifications, the Depot does not exceed any of the maximum allowable floor area, number of stories or maximum height limitations [UBC Table 5-B, 504, 505, 506]. The basement is not included in the number of stories limitation and floor area calculations [UBC 504.5].

Being of wood frame with exterior stuccoed walls and interior plastered walls and ceilings, it appears that the Depot qualifies as a Type III, 1-hour construction type [UBC Table 5-A and 604]. The one-hour construction is required for assembly and residential occupancies, but the use of an automatic sprinkler system can be used as substitution of the 1-hour construction [UBC 508] except for the requirements for occupancy separations [UBC 302.3], shaft enclosures [UBC 711], dwelling unit separations [UBC 310.2.2], corridors [UBC 1005.7, 1005.8], stair enclosures [UBC 1009], and heating equipment [UBC 302.5]. One hour construction is not required for partitions within individual lodging units [UBC 310.2.2, 601.5.2.2].

For residential occupancies, a heating system must be capable of providing a room temperature of 70 degrees at 3 feet above the floor [UBC 310.11].

Ceiling Heights. The minimum ceiling height is 7'-6" except in baths and toilets where 7'-0" is minimum [UBC 310.6.1].

Mixed Occupancy Separation. Generally, the Uniform Building Code requires fire rated construction of wall and ceiling/floor assemblies to separate the uses within mixed occupancy buildings [UBC 302.1, 302.2, Table 3-B]. One hour fire rated walls and ceilings and floors are needed between portions of the building separating each of the assembly, office and lodging uses. Doorways or other openings between those uses also need to be one hour rated (UBC 302.3.4]. However, if the Lunch Room and Kitchen were used as their original functions, the wall between the two spaces is not required to have a separation rating [UBC 302.1.2.4]. When offices are accessory to the major use and less than 25 percent of the floor area of an assembly use, such office spaces are not required to have separation from the major use [UBC 302.1].

For the final design of the building, careful evaluation will be necessary with regard to the need for separation of egress routes from adjacent activities. The main exit provides, in addition to egress from the Lunch Room, egress from the west section of the first floor, plus the second floor and basement. Requirements are related to number of floors served, size of spaces, and other factors [references include UBC 302.1.2.1, 1009.1; LSC 5-1.3.1, 26-2.1.3]. Because the first floor main exit is the primary means of egress from the second floor and the basement, which has a large occupancy load, and because of the floor area of the Lunch Room, basic code requirements indicate the need for a fire rated separation between the Lunch Room and the exit route (lobby). The

existing partition which was added in the Lunch Room and created a lobby space was not built to serve as a fire separation, and should be removed. However, rather than replacing it with a fire rated partition, other approaches to provide equivalency of protection may be acceptable. In conjunction with a sprinkler system, one method to consider would be a draft curtain at approximately the location of the existing partition. This might be in the form of a glass divider from say eight feet off the floor to the ceiling. The purpose of a draft curtain is to block the spread of smoke from one area to another allowing additional time for building evacuation.

Mechanical equipment rooms are required to have one hour enclosure if fuel fired equipment is rated at greater than 400,000 BTU/hr. [UBC 302.5]. Any exterior openings in exterior walls of a mechanical room are required to have 45 minute protection if they are located below openings above the basement level [UBC 303.8].

Means of Egress Requirements. Building accessibility is required except for rooms containing mechanical and electrical equipment [UBC 1103.1.1]. When a space requires two exits, both must be accessible [UBC 1104.1.1].

Doors: Where a corridor serves an occupancy load of 30 or more and in lodging occupancies, room to corridor doors are to be 20-minute rated, with smoke gaskets and self-closing devices or smoke detector activated automatic closers. Corridor walls and ceilings are to be of one-hour construction [UBC 1005.10]. The Life Safety Code requirements are similar for lodging room to corridor doors — to be rated at 20 minutes, have smoke gaskets [LSC 16-3.6.2] and be self-closing [LSC 16-3.6.3]. The existing wood panel doors may not meet the 20 minute requirement [see UCBC].

Fire rated doors in one-hour assemblies are required to have automatic or self-closing devices; for doors across a corridor, automatic closers are required [UBC 713.6.1, LSC 5-2.1.8]. Glazing in such doors may not exceed 100 square inches [UBC 713.7, 2406.3].

Minimum door opening width is 32 inches clear except in existing buildings it is 28 inches if the space is not required to be accessible. On the exit floor level, exit doors must have a minimum clear width of 32 inches and at least one exit door must be 36 inches wide by 6'-8" [UBC 1004.6]. When exit doors serve an occupant load of 50 or more, they must be outswinging and not require more than a 30 pound force to push open [UBC 1004.2]. Exit doors must be operable from the interior at all times without the use of keys or any other device [UBC 1004.3, 1004.5]. A floor or landing is required on each side of a door and the minimum landing length is 44 inches [UBC 1004.9, 1004.10]. Maximum threshold height is 1/2 inch [UBC 1004.9].

The width of exit doorways and the aggregate width of all exit doors is also controlled by the occupancy loads [UBC 1006.2]. From the calculation, two 36 inch main floor exit doors will meet the requirements for the combination of uses. If the Kitchen were used for office space or for exhibits, the north doorway from the space would be a valid exit; if the space is used as an exhibit workroom (or a kitchen), that door cannot serve as an exit for more than the space itself.

Corridors: Minimum corridor width is based on the occupant load [UBC 1003.2] but not less than 44 inches or 36 inches if the occupant load is 49 or less [UBC 1005.2; also see LSC 5-3.4, 26-2.3.2]. Handrails and doors may not reduce the corridor width more than 7

inches; trim may project up to 1 1/2 inches [UBC 1005.4; LSC 5-3.2]. One hour corridor construction is required except when an automatic sprinkler system is provided.

Stairs: Minimum required width is the greater of: 44 inches; 36 inches if serving an occupant load of 49 or less [UBC 1006.2]; or as calculated from the occupant loads [UBC 1003.2]. The calculation for the later criteria yields a minimum width less than either of the first two criteria for both the second floor and basement stairs. However, if the stair is part of an accessible egress the minimum width is 48 inches between handrails except in a building with an automatic sprinkler system (no minimum width is given here) [UBC 1104.1.2]. The widths of each run of the existing main stair vary from 40 to 42 inches. Given the above criteria, the second to first floor stair is within the requirements — a total occupant load of 29 and an automatic sprinkler system. However, the basement to first floor stair, with a total occupant load of 229, does not meet the requirements. Because this stair one of the most important character defining features of the building interior, this condition should be reviewed with consideration of equivalency and California State Historic Building Code provisions.

Projections permitted into both sides of the stairway width are 3 1/2 inches for handrails and 1 1/2 inches for trim [UBC 1006.2]. Handrails are required on both sides unless the stair is less than 44 inches wide. Handrail height is between 34 and 38 inches with 12 inch extensions beyond the top riser and the width of the tread plus 12 inches beyond bottom risers. However, the accessibility standards require the handrail height to be between 30 and 34 inches [UFAS 4.9.4(5)] so 34 inches is the only height meeting all three codes. Handgrip diameter must be 1 1/4 inches minimum, 2 inches maximum, or an equivalent gripping surface. The handgrip diameter requirement of the UFAS is 1 1/4 to 1 1/2 inches [UFAS 4.26.2], which is the range to use to meet the most code requirements. There must be at least 1 1/2 inches between the handrail and walls [UBC 1006.9; LSC 5-2.2]. At an open side of a stair, the 34 to 38 inch handrail height also applies, but at an open landing, the height is required to be 42 inches [UBC 509.2]. Maximum opening dimensions in railing assemblies (such as between balusters) is 4 inches [UBC 509.3]. The historic stair railing height is 29 inches, 36 inches at landings and the handrail width is 2-1/2 inches, none of which meet the requirements. However, the baluster spacing does comply, being 2 inches. At the open side of the landings, additional protection is afforded by intersection of stairwell walls and ceiling elements directly above the railings, which occurs at 13 inches in one case, 22 inches in the other above the top of the railings. An additional handrail should be provided above the existing.

The minimum stair tread dimension is 11 inches. Maximum riser height is 7 inches, minimum 4 inches. However, the Life Safety Code permits existing stairs to have 7 1/2 (Class A) and 8 (Class B) inch risers, 10 (Class A) and 9 (Class B) inch treads [LSC 5-2.2.2.1]. The maximum variation permitted in riser height is 3/16 inch between adjacent risers and 3/8 inch difference between the shortest and highest riser in the stair [UBC 1006.3; LSC 5-2.2.2.4]. The historic stair has 11-1/2 inch treads and 7 inch risers. There are slight variations of riser dimension but these appear to be within the limitations.

Landings must be at least as wide as the stair and the maximum vertical dimension between landings is 12 feet [UBC 1006.7; LSC 5-2]. Minimum headroom is 6 feet 8 inches [UBC 1006.15; LSC 5-2]. Spaces under stairs may not be used (for storage for example) [UBC 1009.6] and must have 1 hour fire rated protection on the enclosed space

side [UBC 1006.12; LSC 5-2]. The upper landing is slightly wider than the stair; the lower landing several inches less than the stair width. Note that the closet under the stair at the basement level may not be used and access (such as for sprinkler inspection and maintenance) should be configured to prevent use of the closet.

When an exit stairway serves more than two floors, enclosure of the stairway is required [UBC 1009.1; LSC 5-1.3.1, 26-2.1.3]. The enclosure must be 1 hour construction [UBC 1009.2] with one hour rated doors having automatic closers [UBC 1009.2, 1009.3]. See the related discussion above for possible equivalency design approaches. The stair should be restored in its historic detail, although some modifications may be necessary.

Smokeproof enclosures: The main stairway could not be developed into a smokeproof enclosure because there would be no direct discharge to the exterior [see LSC 5-2.3].

Capacity: The basic requirements of the Life Safety Code [LSC 5-3] apply to the assembly, lodging and office uses [8-2.3, 16-2.3, 26-2.3], except for lodging for less than 16 persons (which is the case with the proposed building uses). The main exit must handle a minimum of one-half the total load [LSC 8-2.3.3]. Common exits are permitted. Units of exit width are calculated both separately and for simultaneous occupancy [LSC 8-1.2.3, 8-1.2.4]. The second floor corridor, main stair and lobby are adequate for egress of maximum capacity or one-half the total occupant loads except (a) the basement stair for the total basement load and (b) the existing main entrance/exit door for either total or one-half the building load.

Number of exits required: Minimum of 2 per floor, including the basement [LSC 16-2.4, 26-2.4 and 8-2.4.2], remote from each other, with travel in opposite directions [LSC 8-2.5.1]. Egress cannot be through a kitchen [LSC 8-2.5.3], storage or mechanical equipment rooms.

Arrangement of exits: Exit stairs are to be separated by a distance of at least one-half the diagonal measurement of the space served [UBC 1003.3]. Sixty feet is required in this case. The interior stair option at the third bay from the west end of the building does not meet this basic requirement, but with a sprinkler system and rated separations the exception cited may be applicable. From any corridor room door, exits must be accessible in at least two directions [LSC 16-2.5.2] except a 35 foot maximum dead end corridor is allowed in the lodging occupancy [LSC 16-2.5.3] but 20 feet in an office occupancy; but in both occupancies, 50 feet with an automatic sprinkler system [LSC 16-2.5.3, 26-2.5.2]. However, the maximum dead end corridor allowed by the UBC is 20 feet [UBC 1005.5]. The end of the second floor corridor east of the stairs is 42 feet from the stair. Therefore, the existing configuration complies with the Life Safety Code if an automatic sprinkler system is provided, but not with the UBC.

Travel distance to exits: The Uniform Building Code permits a maximum travel distance of 150 feet, which may be increased to 200 feet with an automatic sprinkler system or within one hour fire rated corridors [UBC 1003.4]. The Life Safety Code limitations are: from a room door maximum travel distance allowed to an exit is 100 feet, but this may be increased to 200 feet if an automatic sprinkler system is provided if the portion of the building has 1 hour separation from other portions of

the building [LSC 16-2.6.2]. For assembly occupancy, the maximum travel distance is 150 feet from any point, or 200 feet if the building has an automatic sprinkler system [LSC 8-2.6]. For the office use, the maximum travel distance is 200 feet, or 300 feet with an automatic sprinkler system [LSC 26-2.6]. The most remote room door from the main first floor front exit is the most northwest room door at the west end of the second floor corridor. The travel distance is approximately 125 feet. The travel distance from the Reading Room doorway is approximately 105 feet. With a sprinkler system compliance will be met. However, second floor corridor separations may be needed as part of equivalency approaches within the overall building protection scheme. Also keep in mind that a second exit does not exist in the present building from these areas.

Exit discharge: At least half of the required units of exit width from upper floors shall lead directly to the exterior [LSC 16-2.7.1, 16-2.7.2]. For the assembly and office occupancies also conform to LSC 5-7.

Aisles: For exhibit areas, consideration must be given to similar requirements as the building for emergency conditions with respect to the spacing and arrangement of exhibit cases and other units [LSC 8-2.5.5, 8-2.5.6].

Other Features. Building systems must be provided for illumination of all portions of the means of egress [LSC 5-8], for emergency lighting [LSC 5-9] and for marking (exit signs) [LSC 5-10].

Special Features. Re-entry from the exterior into stairwells is required in an emergency [LSC 5-2.1.5.2]. For assembly occupancies, panic or fire exit hardware is required [LSC 8-2.2.2.3 through 8-2.2.2.5].

Protection. Stairways, elevator shafts and vertical openings shall be enclosed or protected [LSC 6-2.4]. Vertical openings may be unenclosed if not connecting more than 3 floors and are protected. One means of protection (and the best means) is with an automatic sprinkler system [LSC 6-2.2.3.4].

Mechanical rooms, laundries, combustible materials or supplies storage shall be separated from other areas by 1 hour construction and self-closing fire doors. These requirements would also apply for the Kitchen if used for laboratory activities involving flammable chemicals. In some cases, protection by an automatic sprinkler system is also required, in others a sprinkler system may be used instead of the 1-hour separation [LSC 16-3.2.2, 6-4.1]. For assembly occupancies mechanical and electrical equipment spaces are to have 1 hour enclosures [LSC 8-3.2.3.1] with self-closing fire doors and outside venting in accordance with LSC 6-4 [LSC 8-3.2.3.2] or have a smoke barrier with an automatic sprinkler system [LSC 8-3.2.3.3]. In assembly occupancies, food preparation facilities are to be protected [LSC 8-3.2.4.3 and 7-2.3].

Depending on the occupancy, interior finishes are required to have some degree of resistance to ignition, spread of flame and release of smoke and toxic fumes. The categories are based on the flame spread and smoke development characteristics of materials used for walls and ceilings, and the ignition point for floor materials. (Except where floors are indicated, the classification is for walls and ceilings). [See LSC 6-5 for all occupancy classifications].

Exit enclosures (enclosed stairs): Class A [LSC 8-3.3, 16-3.3]
Corridors and lobbies: Class A or B [LSC 8-3.3, 16-3.3, 26-3.3]
Class B assembly spaces: Class A or B [LSC 8-3.3]
All other spaces: Class A, B or C [LSC 16-3.3, 26-3.3]
Floors in corridors and exits: Class I or II [LSC 16-3.3, 26-3.3]

With an automatic fire sprinkler system, one level lower class rating of interior finishes is permitted [LSC 6-5.7]. Therefore, in exit enclosures, Class A or B wall and ceiling finishes are permitted; Class A, B or C wall and ceiling finishes are permitted in all other spaces; and no rating would be required for floor finishes.

Fire Alarm System — Alarm systems are required by the UBC for the assembly occupancies [UBC 303.9] and for this Class B assembly occupancy by the Life Safety Code [LSC 8-3.4.1]. An alarm system for lodging is also required by the UBC [UBC 904.2] and the Life Safety Code [LSC 16-3.4; 7-6]. Smoke detectors are required for lodging uses under the UBC [UBC 310.9.1.1]. Sleeping room smoke detectors are not required to initiate the building alarms [LSC 16-3.4.2].

Sprinkler System — Automatic sprinkler systems must be installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems* [LSC 7-7.1].

Fire resistance ratings of corridor walls are to be of 1 hour construction except with an automatic sprinkler system they may be of 1/2 hour rating when rooms adjacent are sleeping rooms, but do not need to be rated when adjacent rooms are offices [LSC 16-3.6.1, 26-3.6.1]. The plaster walls will meet the 1/2-hour requirement with an automatic sprinkler system (see the UCBC).

No transoms are permitted [LSC 16-3.6.5]. However, where these are historic character defining features, making them inoperable may be an acceptable option under the California State Historical Building Code.

Operable windows in lodging rooms are required with a clear opening 20 inches wide, 24 inches high and 5.7 square feet area, with the bottom of the opening not more than 44 inches above the floor. These requirements are found in the Uniform Building Code [UBC 310.4] but no longer in the Life Safety Code. The historic windows are operable and of adequate size.

Elevators. Elevator lobby enclosures shall be of one-hour construction [UBC 1005.10]. An area of refuge and emergency power for an elevator are not required in a building with an automatic sprinkler system [UBC 1104], but if the elevator lobby is used as an area of refuge, it shall be pressurized, of one-hour construction and have 20-minute rated doors with self-closing devices or automatic closers and smoke gasketing [UBC 1104.2.2, 1104.2.4].

Communications. Assistive listening systems are required. In assembly occupancies, equipment is needed in meeting or lecture rooms [UBC 1103.1.2]. For a lodging occupancy, this building would require a minimum of one accessible apartment, one accessible overnight lodging room, and one room with an assistive listening system would be required [UBC 1103.1.2.9.3]. The code is not clear whether the assistive listening system must be in the accessible room or may be in another room.

Summary. This summary of compliance or deficiencies assumes that a fire suppression system will be installed in the building and that a fire alarm system will also be installed.

Mixed use occupancy classifications are: Assembly for the exhibit spaces; Business for the office spaces; and Lodging for the staff quarters and overnight accommodations (for less than 10 persons).

Hazard of contents: Ordinary. Automatic fire sprinkler system to be designed in accordance with NFPA 13.

Allowable building area, number of stories and height: Complies.

Minimum ceiling heights: Complies

Mixed occupancy separations: Complies although some modifications may be necessary.

> Recommended: Install an automatic fire sprinkler system and consider other measures to provide equivalency of protection so that the historic spatial and visual relationships are retained and the existing partition separating the Lunch Room from the entrance can be removed. Consider a draft curtain at this partition location, and at the second floor, separations in a manner similar to the existing (but not original) cross corridor walls and doors. Also consult the California State Historic Building Code for provisions allowing equivalency design approaches.

Number of exits: Deficient.

> Recommended: Provide additional exits (all floors).

Travel distance: Complies, including the second floor east corridor as a dead end under the Life Safety Code (20 feet maximum, or 50 feet with sprinkler system, but not under the UBC (20 feet maximum).

Corridors: Minimum width required = 44" (or as required by occupant load).
First floor = 48 1/4"; second floor = 48 1/2 (+). Complies.

Doors: Partially deficient.

> Recommendations: Provide where necessary replacement doors of required widths and fire ratings. Provide smoke seals on all doors. Provide self-closers or automatic closers where required. Replace hardware where required. Replace thresholds where required. Provide replacement doors, frames and trim and hardware in a design similar to but different than the historic (provide compatible style for door lever handles).

Main existing stair:

Minimum width (44 inches required): Basement to landing = 40 1/4"
Landing to 1st floor = 41" . . . . . Deficient.
(36 inches required): 1st floor to landing = 40"
Landing to 2nd floor = 42" . . . . . Complies.

Handrails--Railing both sides: Yes but discontinuous.
Height (34" required): 29" (36" at inside landing turn). . . . . Deficient.
Height at open landings (42" required): 36" (Stairwell wall at

intersection with basement ceiling 22" above railing at lower landing; bottom edge of beam in lobby 13" above upper landing railing [49" above landing floor]). . . . . Equivalent.
3 1/2 inch maximum projection: Little or no projection. . . . . Complies.
Clearance to wall (1 1/2" min.): No railing at wall sides.
Extensions at top and bottom: No. . . . . Deficient.
Railings, (1 1/4" to 1 1/2" required): Grip width = 2 1/2" . . . . . Deficient.
Baluster spacing (4" maximum): 2" . . . . . Complies.
Risers, 7 inches maximum: 7" ±1/8" . . . . . Complies.
Treads, 11 inches minimum: 11 1/2" ±1/8" . . . . . Complies.
Nosings: 1 1/8"
Landing width (same as stair): 38" at lower landing
[with ledge at 35", 8 1/2" wide]; . . . . . Deficient.
43 3/4" at upper landing . . . . . Complies.
Trim, maximum 1 1/2" projection: Less than 1 1/2" . . . . . Complies.

Hazardous Materials

Part of the scope of work of the 1993 BLM building repair contract was hazardous materials abatement. It is presumed that the original Boiler Room equipment was removed at that time, and the associated asbestos containing insulation. Asbestos steam heating piping insulation was removed, as can be observed in the basement crawl space along the south side of the building, and at exposed piping on the first and second floors.

An asbestos survey was performed in 1997 to determine whether other problem materials exist: *Asbestos Survey,* by Harding Lawson Associates, Novato, California, June 6, 1997. Testing revealed that there is residual pipe insulation containing asbestos in the soil of the basement crawl spaces.

The report also indicates that asphalt roofing material on the arcade roof is presumed to contain asbestos but samples were not taken because of the good condition of the roofing so as not to disturb the integrity of the roofing. This is assigned a low hazard ranking with a requirement for annual inspection and testing when repairs or replacement are performed. The consultant may not have been aware that this roofing system was installed in 1993. A May 2, 1992 Bureau of Land Management memorandum indicates that the roofing felt in existence prior to 1992 was reported to contain asbestos, which should have been removed and replaced in the 1993 repair work. Still, testing will be necessary for confirmation. (That same memorandum indicates that the railroad had removed two underground fuel oil storage tanks).

The 1997 report indicates that no asbestos was found in the following: wall and ceiling plaster (all layers); floor leveling compound; residual black or brown floor tile mastic; exterior wall plaster (all layers); non-skid stair tread adhesive and associated mastic; drywall, joint tape and compound; or 2 feet by 4 feet [acoustical] ceiling tile.

The asbestos contaminated crawl space soil will need to be removed, as well as any suspect materials that might be encountered during building rehabilitation and maintenance, with all work to be conducted to properly handle, remove and dispose of such materials in accordance with federal, state and local regulations.

Also, it should be assumed that lead based paints exist on all exterior and interior painted building surfaces and that lead is present in piping solder. This does not mean that all paint must be removed and replaced — it is not cost effective, nor is it required. However, the necessary precautions must be carried out not only during renovation work but also for long-term maintenance activities. All existing domestic water supply piping should also be removed and replaced.

TREATMENT ALTERNATIVES AND EFFECTS

Alternatives

The selected interpretive, park office and park quarters uses are compatible with the historic spaces of the building and these uses can be accommodated without compromising the historic character of the Kelso Depot.

Prior to NPS planning for the Preserve, the Kelso Fund citizens group and the Bureau of Land Management had considered alternative uses for the building. Some of the uses considered also included interpretation and administrative. In addition, one of the possible previously proposed uses for part of the building was a bed and breakfast through a lease agreement. Such a use would be compatible with the building and would be the closest use to the original. Code requirements for such a use would be very similar to the requirements for the selected use as recommended in this report. The space modifications needed for such a use would also not be significantly different than those for the selected use.

In the selected use, the majority of the basement and first floor will have public access and is an assembly classification. The second floor park offices and quarters are business and residential--sleeping accommodations, or lodging, classifications. The most extensive building modifications to meet code requirements for all three classifications are for emergency egress, accessibility and restrooms. Two alternatives for each of emergency egress and restrooms are feasible.

The two options for a second emergency egress stairway are an exterior stair at but slightly separated from the northwest corner of the building or an interior stairway at a position corresponding to the space immediately northeast of the historic Baggage Room. The exterior stair would have the greater exterior visual effect but would not reduce the usable interior space. On the other hand, the interior stairway would have the least visual effect on the exterior of the building but would reduce usable space both on the first and second floors.

Options for configuration of restrooms similarly have somewhat differing effects on the interior space needed to accommodate them. If the basement restroom is configured as men only and the first floor restroom as women only, this option requires less total space than if each of the basement and first floor spaces are configured for men and women's restrooms on both floors. In fact, on the first floor, more than the existing restroom space is needed to accommodate both men and women's restrooms.

Treatment Effects

Replacement of missing materials and elements and repair or replacement of damaged and deteriorated materials and elements will restore the historic character of the building, both exterior and interior. Some removal and replacement of historic material, primarily interior wall and ceiling plaster, will occur to accomplish the structural work, although portions of this material requires replacement anyway because of damage from water or vandalism.

Alterations in interior configurations and removal of historic materials will occur for functional requirements: an emergency egress stairway, if the interior option is selected; reconfiguration of restrooms for both public and staff use, as well as modifications to make these facilities accessible; space reconfigurations for staff quarters; and door replacements for accessibility. However, fewer modifications are necessary with the installation of an automatic fire suppression system. The proposed elevator does not impact significant interior spaces except for an added elevator doorway at the first floor level. The extension of the elevator shaft above the kitchen roof will be visible at the rear of the building, but this is the least important elevation.

Removal of the west arcade addition would restore the exterior appearance of the building to its original form, and in fact, as it appeared throughout the majority of the historic period since it was constructed (1942) very late in the historic period. Although it does have a relationship to historic activities; its design, materials and features are not architecturally significant; and it is not functionally critical for the selected uses of the building.

The design approach has been to provide an optimum balance of modifications to rehabilitate the building for new use and to meet code requirements as required by law and NPS policy while preserving the historically important features and character of the building.

Treatment Strategies

If construction funding is not available to rehabilitate the Kelso Depot under a single contract, or several major contracts, the following sequence of work is recommended if phasing is needed to accomplish the project:

1. Provide water and sewer service.

2. Structural improvements. Preparatory work should include abatement of remaining hazardous materials, basic cleaning of the building interior, and removal of post-historic period interior finishes.

3. Install automatic fire suppression and fire/intrusion detection systems.

4. Remove the west arcade addition (if removal is the selected option) and repair and replace related original materials as required.

5. Repair or replace as required deteriorated stucco and substrate materials at key locations, including arcade column bases and damaged areas. Repair or replace cracked concrete slabs in the arcade to eliminate tripping hazards and intrusion of water.

6. Survey roofing systems, and based on findings and recommendations, modify existing roofing systems as required. Repair and replace gutters and downspouts and provide a storm water collection and distribution system.

7. Install basic mechanical and electrical system components.

Remaining systems installation and finish work should be under a single construction contract to provide consistency of materials and quality of work.

RECOMMENDED TREATMENTS

Site Landscaping and Development

Reconstruction of Historic Landscape . Reconstruct the portion of the site between the building and the railroad tracks and those areas at the ends of the building that were originally landscaped. The extant elements of the original design are the brick walks, palm trees and flagpole. With the exception of trees and lawn, the original plantings were desert vegetation types.

Plant Materials —

- New plantings to reflect the elements of the initial design and character demonstrated in the historic photos.
- To the extent possible, plants should be low water consuming.
- Lawn area to be restored.

Site Amenities —

- Existing brick walkways will remain.
- The historic concrete lighting standards should be restored or reproduced and installed in their original locations.
- Historic photos show benches located in various locations on the site. These should be duplicated and installed on site.
- If the safety fence can be replaced in the future with an alternative design, the original brick platform could be reinstalled and the boiler flue fence could also be reconstructed.
- Provide temporary public restroom facilities.

Design Criteria for Future Site Development: The areas behind the building will need to be developed to provide traffic control, visitor and staff parking, and accessible walkways to the building entrances.

Circulation —

- Vehicular access and parking should be controlled.
- Parking should be located on the building side of the roads as much as possible. Special effort should be made to require safe pedestrian crossing of Cima Road if additional parking is required.
- All paving surfaces should be designed to blend into the landscape and be wheelchair accessible.

Plant Materials —

- Plants should be low water consuming.

Site Utilities

- Develop a cooperative use agreement with the Union Pacific Railroad for water and sewer service, or alternatively, construct separate water and sewer systems.

General and Architectural

General.

- For final design and preparation of construction documents, provide a finishes and paint analysis, including exterior stucco, and all exterior and interior finish systems. Review and include requirements as necessary for a Lead Worker Protection Plan.
- Remove asbestos contaminated soil in basement crawlspaces.
- Install thermal insulation in exterior frame walls and second floor ceiling. See the mechanical systems analysis for energy efficiency information.
- Consider providing plastic window glazing inserts for additional HVAC energy efficiency and for additional security. Such inserts could be mounted on the exterior side of the basement and first floor window sash for security purposes. At the second floor level, especially on the rear of the building, the inserts could be interior mounted for ease of installation and removal. The addition of awnings, in terms of energy savings, appears to be optional. See the mechanical systems analysis for the degree of energy savings that would be provided for each window treatment.

Exterior.

Roofing Systems —

- Analysis by tile roofing expert, verify the following proposed improvements:

Weather closure, upper edge of arcade parapet tile system.

Mortar bedding, weatherization at ridges and valleys.

- Analysis by roofing expert for flat roof systems, to verify condition and proper execution of 1993 arcade and kitchen roofing replacement.

Storm Water Control —

- Restore and replace gutters and downspouts, restore connection to building storm water drain loop. Use historic design.

- Replace (or restore good sections, if any) storm water drain loop.

Exterior Stucco —

- Replace deteriorated and damaged stucco and substrate materials at arcade column bases and shafts and imposts.

- Replace unsound and poorly executed stucco at previous repairs and patches.

- Repair and replace stucco at major cracks, delaminated areas, damaged locations and holes at all locations of removed utility penetrations and anchoring.

- For preparation of construction documents, conduct a finishes analysis, including stucco, plaster, paints and stains.

Concrete, Storm Drains and Metals —

- Level or replace concrete slab sections at the corners of the arcade and in adjacent bays only to the extent of remedying unsafe walking surfaces where offsets have occurred at cracks. Replace building roof drain loop from front of building to storm sewer connection point north of building.

- Basement and Kitchen Refrigeration Rooms: Replace the deteriorated reinforced concrete foundation wall section above the west window of the basement room; replace the wood first floor framing and flooring system under the Kitchen freezers. Replace related deteriorated and removed stucco and plaster and the basement window. The freezers will need to be removed in order to replace rotted flooring and framing and to replace the section of concrete foundation wall below (above the west window of the basement room which contained the refrigeration equipment). Restoration and reinstallation is optional: (a) it would be unlikely that these units would be interpreted; (b) but they could be restored or replaced if an active kitchen was established in the future. The cost of restoration and reinstallation would not be justifiable if they were not either interpreted or used. A complete drawing and photo record needs to be made of the units as they are disassembled and selected parts and materials of the removed units retained for the building artifact collection.

- Along the rear and east sides of the building, repair deteriorated and damaged concrete at window areaways, accessways and stairwells, steps and curbs. Repair or replace the concrete walk along the east side of the building, north of the arcade.

- At areaways along rear and east sides of the building, repair as required and repaint existing areaway grates, replace missing grates, provide new grate screens. Replace the steel access hatch on the Boiler Room accessway.

- Replace deteriorated components as required of the Kitchen and basement stair railings and repaint railings.

- Remove miscellaneous late period added concrete elements adjacent to the west end of the building, including deteriorated and broken concrete slabs and the concrete column bases for the 1961 emergency exit stair. Remove similar column bases to the east of the building. (Note: Do not remove the concrete on-grade slabs at the Kitchen and basement entries and at the wood supply shed north of the building; these are early historic period additions).

Exterior Wood Elements —

- Repair and replace deteriorated, warped and missing arcade ceiling boards and trim; replace rotted framing as required. Paint all retained and new finished surfaces.

- Repair and replace deteriorated, warped, split and missing eave fascias and other wood trim.

Windows and Doors —

- Repair and replace deteriorated window and door components as required, including window sills, bottom sash frames, lower door stiles and frames. Repair damaged elements where possible. Repaint all wood elements. Reglaze windows and doors, utilizing as much original glass as possible and replace broken and missing glass. Unless testing confirms otherwise, assume that old glazing putty contains asbestos which will require removal and disposal procedures in accordance with EPA and state requirements. Where doors are not required to have accessible hardware, repair and retain original hardware where possible. Replace all other hardware with accessible hardware, but retain existing hinges where possible.

- Remove 1949 modifications to two south front Lunch Room windows and restore the original window configuration with reproduction sash units.

- Remove east three of four south front 1948 and 1981 doorways, reconstruct window openings, provide reproduction windows to match historic. If advantageous for either egress or functional reasons, retain the west 1948 doorway, repair and refinish door and transom, repair stucco in-fill, replace threshold and provide ramp at doorway; otherwise the opening should be restored in the same manner as the other three.

- Reverse swing of main entrance door (to swing out); repair and refinish door, sidelights and transom, frames and trim; install new exit accessible hardware, retain existing hinges if possible; provide ramp to blend with and cause no alteration to arcade deck.

- Restore baggage room door. If west arcade addition is removed, return door to its original location.

West Addition —

- If the west addition is removed, repair original stucco and substrate and original wood elements as necessary where the addition walls were anchored. Reconstruct wall below west Conductor's Room window, provide reproduction window sill assembly and main sash, restore remainder of existing original window elements. Replace missing concrete base molding below west Conductor's Room window. Restore or reconstruct the stuccoed guard wall in the archway at the north end of the arcade. As shown on the 1924 drawings, the top of the original wall appears to have been 36 inches above the arcade deck. If this wall still exists within the addition framing and can be restored, an additional rail at 42 inches should be added. If the wall needs to be reconstructed, it could be built to 42 inches high. Repaint west stucco wall of original building.

- If the west addition is retained, repair and replace damaged, missing or deteriorated wall, window and door components and repaint. At the west Conductor's Room window where the window sill and wall below was removed, instead of repairing the plaster and retriming the opening, this uncompleted modification could be retained as an interpretive device. For protection and safety, the opening jambs could be enclosed with plexiglass and a ramp provided at the floor and opening to protect the remaining concrete edges and provide a safe and accessible walking surface.

Interior — Basement.

Stair and Locker Room — Proposed new use: Lobby.

- Repair stair and renew the paint finish. Repairs should be minor other than reinforcement of the landing framing.

- Provide new access doors to space under stair landing and to crawl space.

- Repair wall and ceiling plaster and repaint, including ceilings and walls in the janitor's closet.

- Retain the janitor's closet function; replace the laundry sink.

- Preserve the original Linen Room, including the extant original shelving.

Toilet Room — Proposed new use: Restroom.

- In order to provide for the occupancy load of the building, more fixtures could be provided by configuring the basement restroom for a men's restroom and using the first floor restroom for women. The alternative of subdividing the original basement toilet room space for both men's and women's restrooms would result in an inadequate number of fixtures for the occupancy load of the building. Similarly, additional restroom space would be needed on the first floor to create two restrooms, more than doubling the existing space on that floor. By using the single basement restroom option, the original toilet stall partitions and urinals could possibly be

retained, which would be desirable. Any components not retained in use should be placed in the building artifact collection.

- Remove existing water heaters. Provide new water heaters in mechanical equipment room or at each restroom.
- Rehab and reuse original urinals if possible; provide other fixtures new.
- Repair wall and ceiling plaster and repaint.
- Widen opening for new 36 inch door with new accessible hardware.
- Replace window glazing putty; repaint windows.
- Provide new door on access opening, south wall.

Reading and Billiard Rooms — Proposed new use: Meeting Rooms for staff, research cooperators, volunteers and the public.

- Remove acoustical ceiling system.
- Install new plaster ceilings. Metal lath may be used instead of wood lath where wood lath is missing. Sheetrock (as opposed to gypsum board) with plaster finish coat in historic texture can be used as an option to metal lath and plaster.
- Provide new opening in north wall of Reading Room at east window well for new emergency egress. Provide new door, hardware and trim. Enlarge exterior window well for concrete stair to grade.
- Repair wall plaster and repaint.
- Reinstall or replace, and refinish trims.
- Repair floor slab crack and offset in Reading Room.
- Repair or replace doors, provide new hardware.
- Repair windows as required; reglaze, replace missing and broken glass; refinish.
- Restore Reading Room bookcase, all new glass; clean and renew finish.

Supply Room — Proposed new use: Elevator, elevator machine room and connecting hall.

- Modify existing south doorway for elevator entry; construct elevator shaft and machine room; provide new door and hall to connect basement lobby (originally Locker Room) and rear hall.
- Repair ceiling and wall plaster; repaint.

Rear Hall —

- Refinish south door; repair north exterior door, replace missing elements; refinish and provide new hardware.

Store Room (Refrigeration Room) — Proposed new use: Building artifact collection storage (for items not requiring moisture protection) or for electrical equipment.

- Replace first floor framing as required; replace concrete foundation wall lintel section above west window opening; replaster ceiling.
- Replace west window.
- Repair or replace door and hardware.
- Preserve refrigeration equipment.

Boiler Room — Proposed new use: Building mechanical and electrical equipment room.

- Clean and repair ceiling and wall plaster; repaint.
- Repair or replace windows.
- Retain or replace fire door. If replaced, place historic door and hardware in building artifact collection.

Interior — First Floor.

Lobby —

- Repair and repaint ceiling and wall plaster, matching historic texture; retain historic wood wainscotting, repair as required.
- Clean and seal concrete floor joints; remove paint.
- Restore and refinish historic stair.
- Restore and renew finishes of historic counters.
- Remove existing partition between lobby and Lunch Room. Provide smoke and fire control to meet equivalent code standards.
- Provide new opening at north wall for elevator entry.

Lunch Room (Beanery) — Proposed new use: Exhibits.

- Repair ceiling and wall plaster; repaint. Replacement of 1955 plaster in the east two bays is optional because it appears to be in good condition. When future replacement is needed,

replace with textured plaster to match original. In-fill opening and patch wall at center of east wall or remove in-fill and restore the window.

- Clean and seal concrete floor joints; remove paint and mastic. Patch holes in floor at unused plumbing and electrical penetrations or anchoring locations. Replacement of concrete base in east portion is optional.

- Record with drawings and photographs the existing lunch counter and stools. Consider reconstruction of the original Lunch Room counter and stools as part of an exhibit of the historic Beanery.

Kitchen — Proposed new use: Consider as exhibit workroom and storage.

- Replace gypsum board and plaster ceiling, repair wall plaster; repaint.

- Remove wood stud and hardware cloth partition.

- Remove floor paint.

- Install elevator shaft and elevator in southwest storeroom.

- Remove and preserve freezers; record with drawings and photographs. Restoration and reinstallation of freezers only necessary for either interpretation or active use.

- Record probably ca. 1948 dishwasher with written description and photographs; preservation optional.

First Floor, West Central Section — Proposed new use: Exhibits.

- Remove ca. 1948 suspended acoustical ceilings, gypsum wallboard and window, door and base trims (retain original trims in closets). Replace with new plastered ceilings and walls (texture coated sheetrock is an option to wood lath and plaster). Install new trims similar to original.

- Remove flooring overlay. Replace wood flooring. The extent of damaged pieces and the probable age brittleness will most likely not permit reasonable repair or salvage of this flooring, therefore replacement should be assumed.

- Repair or replace interior doors and provide new hardware.

- Provide new restroom(s) with new fixtures. Retain the concrete floor and base except at a reconfigured entrance where a ramp will be needed and an outswinging door that does not interfere with hallway traffic.

- Provide additional emergency egress.

Ticket Office, Conductor's Room and Baggage Room — Proposed new use: Exhibits.

- See Exterior, West Addition above for additional treatment recommendations.

Ticket Office —

- Repair and replace as required ceiling and wall plaster. Repaint with color scheme to correspond to period of existing ticket counter configuration.

- Preserve ticket counter and other features *in situ*; incorporate with interpretive exhibits.

Conductor's Room —

- Repair and replace as required ceiling and wall plaster. Repaint with color scheme to correspond to period of existing ticket counter configuration.

- Replace missing elements of shelf at ticket counter.

Baggage Room —

- Repair and replace as required ceiling and wall plaster. Retain wood wainscot and trim and preserve exposed original grained finish of wainscot. Repaint remaining finish surfaces to the extant scheme, or alternatively, restore to an earlier or original scheme.

- If the west addition is removed, return the double door of the Baggage Room to its original location.

Interior — Second Floor. Proposed new uses: Park offices, employee accommodations.

- Repair and replace ceiling and wall plaster as required.

- Repair and refinish wood trims. Preserve original grained wood finish.

- Determine finish history of flooring in paint analysis. Remove linoleum, repair and refinish or replace flooring as required.

- Retain the original configuration of two rooms opposite the stairway for office use but preserve original doors, hardware or other appurtenances in the event of possible interpretive use as the historic accommodations for the train crews.

- Retain three or four rooms at the east front in their original layout for park offices. Whether three or four of these rooms are used is dependent on the final design layout for the staff quarters and in turn which rooms are reserved for possible interpretation.

- Retain two rear (northeasterly) rooms in their original configuration for a staff break room and an office. Restore the original sinks if possible or replace. Provide a "mini-kitchen" with refrigerator and microwave in the break room. Retain the room adjacent to the historic linen room for a meeting room.

- Utilize at least six, most likely seven, rooms at the west front for park staff quarters for employees needed to live on-site, whether for seasonal personnel or emergency or maintenance personnel. Two apartment units can be provided by reconfiguring three original rooms for one unit and four original rooms for an accessible unit.

- Utilize the west rear rooms not used for an emergency exit stairwell for overnight accommodations for staff on temporary field duty. A minimum of two units and a maximum of three units could be provided here, depending on the options exercised for the emergency exiting and bath/restrooms.

- Reconfigure the bath and restroom to accommodate both the office use and the overnight accommodations. The bath section would be shared by occupants of the overnight rooms. Provide new plumbing and fixtures. For accessibility, the concrete floor of the restroom will need to be modified to provide a ramp. This could be accomplished by replacing a section to form a ramp with a 1 in 12 slope, with the red colorant but without scoring. The entry door will need to swing outward and repositioned so as not to swing into the hall, and also widened to 36 inches (or 34 inches minimum), which in turn will require modification of partitioning and fixture locations.

- Provide new emergency egress stairway.

- Provide elevator. Convert the original Linen Room into an elevator lobby with fire rated enclosure.

- Replace the existing hallway fire door separations with rated partitions and doors.

- Retain unused original doors *in situ* with in-fill for corridor to room fire rating as required. Retain original openings, doors and hardware at rooms reserved for optional interpretation. Retain original closet doors. For remaining openings, widen for accessibility and provide new doors, hardware and trim with detailing compatible with but different than the historic doors. Repair door frames, doors and trim retained as required.

- Remove existing electric heaters, replace as recommended in the mechanical section of this report. Selected historic lavatories should be repaired, refinished and reused if possible within the new use scheme. If not feasible, selected units should be retained for the building artifact collection.

Structural

Hipped Roof.

- Add webs (similar to those historically constructed at alternate roof rafters) to roof rafters at 32 inches O.C.

- Reinforce ceiling joists at 16 inches O.C.

- Add blocking between joists at exterior walls, interior walls, and between rafters at ridge board.

- Install antifungal rods in framing that has experienced water damage if the framing is in usable condition; replace structural members as necessary.

- Add metal connectors at exterior and interior walls, and between rafters and ridge board to provide adequate load transfer capabilities.

Monoslope Roof.

- Add metal connectors at exterior and interior walls, and between rafters and interior wall framing to provide adequate load transfer capabilities.

Walls.

- Remove and replace wood first floor framing and the concrete wall lintel at the basement window of the northwest Storeroom (also see architectural recommendations above).
- Add metal connectors to strengthen wall to floor connections.
- Add framing, bracing or connectors at window and door openings.
- Regrade at building perimeter to provide positive drainage away from building.

Second Floor Framing.

- Install blocking between joists at bearing walls.
- Increase the capacity of the vertical and lateral wall to floor connections.
- Verify the double 2 x 10 joists running parallel to and directly beneath the second story hallway bearing walls on the east end of the building. Reinforce joists if necessary.

First Floor Framing.

- Reinforce 3 x 14 joists.
- Replace floor framing as necessary at northwest kitchen corner (also see above).
- Install sill plate to stem wall connections.
- Install cripple wall to floor framing connections as necessary.
- Install blocking between joists at bearing walls.

Foundation.

- Repair, replace or remove underground drainage system to prevent further settlement of arcade (also see architectural recommendations).
- Relocate hose bib from outside of column on east side of building to a location away from the building.
- Seal cracks in the concrete slabs and grade beams (also see architectural recommendations).

- Remove, repair and/or replace concrete sidewalk on the east side of the building (also see architectural recommendations).

- Correct grade north of the building to drain away from the building.

Arcade.

- Seal upper ends of roof tile (also see architectural recommendations).

- Replace water damaged roof framing and columns as necessary (also see architectural recommendations).

- Improve column to roof framing and roof framing to wall connections.

Lateral System.

- Verify existing connections as necessary. This work will include verifying roof sheathing to roof rafter nailing and wood sill to foundation stem wall connections.

- Install a metal strap connector between roof rafters at the ridge.

- Provide for adequate connections between the following: roof diaphragm and shear walls; floor diaphragms and shear walls; wood shear walls and concrete foundation system.

- Construct a lateral force resisting system to brace the 21 feet high chimney located at the north wall of the kitchen wing.

- Verify framing at architectural parapets on south, east and west walls. Install metal strap connectors as necessary to provide a lateral force resisting system.

Coal and Supply Shed.

- Paint or otherwise seal wood to prevent further damage due to exposure to the elements.

- Install blocking between rafters, and between ceiling joists and wall studs.

- Improve connections between roof rafters, roof and wall framing, and wall and sill framing.

Mechanical Systems

- Install complete building envelop insulation.

- Provide storm windows or insulating window insert panels provided that non-operable windows are acceptable, at least for the winter season, that biannual changeout of screens and storm sash is acceptable, and that storage space becomes available for the storm sash and screens.

- Second floor window awnings are not recommended unless desired for historic appearance. If provided, configure as roll-up or folding units.

- Provide complete heating, ventilating and air conditioning systems. A ground-coupled heat pump system is recommended.

- Replace the building plumbing system. Reuse sound drainage piping located beneath the basement floor. Clean, restore and reuse historic plumbing fixtures to the extent possible, fitted with water conserving devices where feasible. All new fixtures shall be water-conserving.

- Repair or replace the building storm drainage system, rerouted so piping is outside the loggia.

- Install an automatic dry-pipe fire suppression system throughout the building.

- Preserve the historic refrigeration equipment in the basement storeroom and place sound components of the freezers in the kitchen in a building artifact collection.

Electrical Systems

- Remove the existing (historic) electrical system and replace with a new complete power and lighting system. The preliminary load calculations indicate that a larger transformer than the existing ca. 1993 unit will be necessary, although the CT cabinet and meter may be adequately sized equipment.

- In the interpretive spaces, develop a lighting design to present the historic character of the building interior. To date there is little evidence of historic fixture types except for some remaining in the building. If evidence is insufficient to determine the historic fixture types for reproduction, compatible period fixtures could be used. Lighting in second floor rooms as well as other non-public rooms with windows will need to be compatible with the historic lighting plan because this lighting will be visible from the exterior. Use compact florescent or other low wattage lamps or fiberoptics as much as possible.

- Install a fire and intrusion detection system. For interim protection prior to full building rehabilitation, a wireless system is recommended. Recent technological advances have made such systems reliable but relatively inexpensive. The permanent installation should be an addressable system, hard wired in concealed raceway, in as much as code authorities have not yet recognized wireless systems.

- Provide telephone, computer data transmission and cable television systems throughout the building. It is recommended that these systems be installed in concealed raceway.

CONSTRUCTION COST ESTIMATE SUMMARY

Site Utilities — assume new water supply, storage and distribution for building use and fire suppression . . . . . $ 544,000
(Surveys, testing, design, test well drilling contract are separate PT15 costs = $210,000)

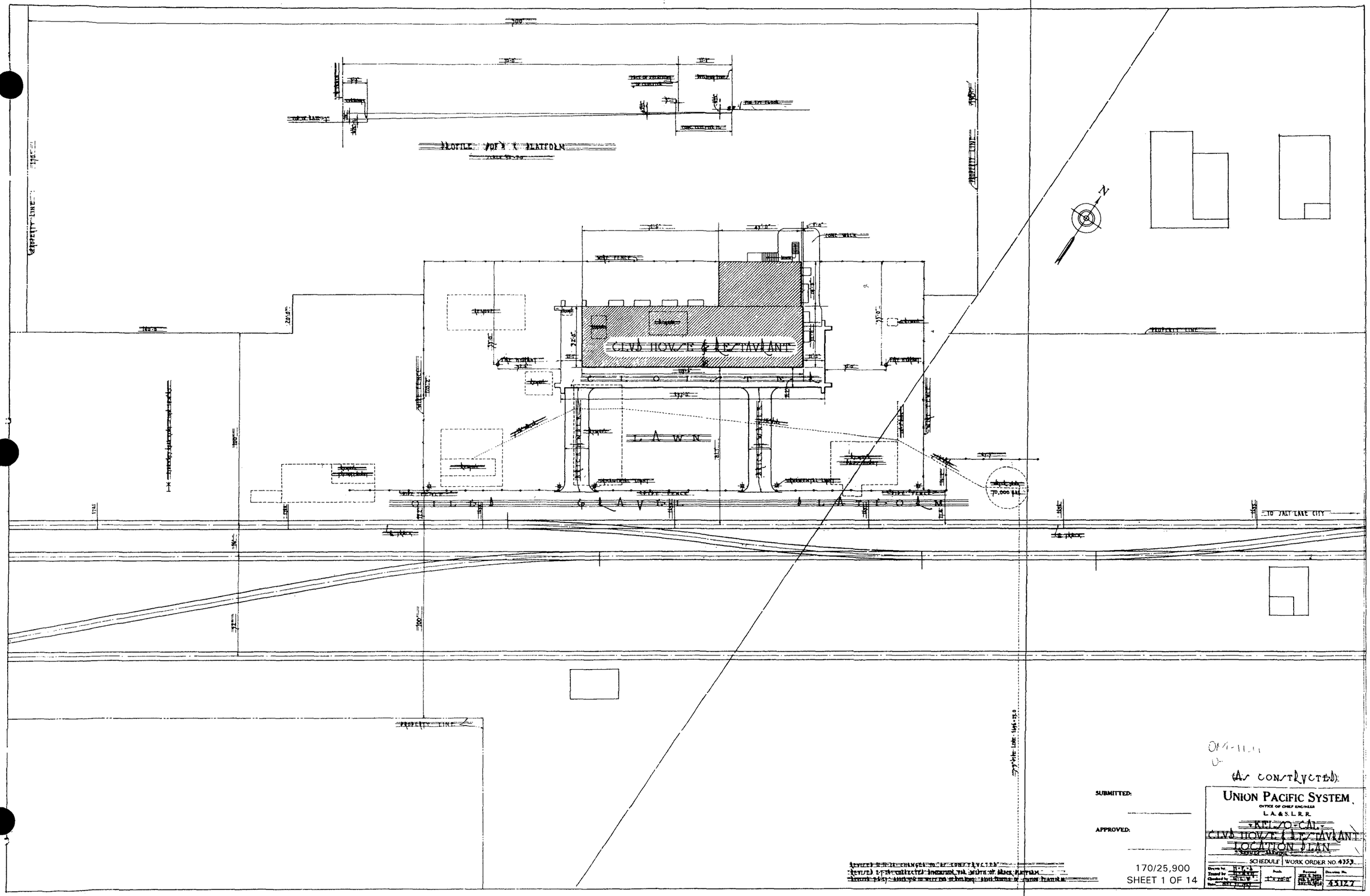
Structural improvements (includes related demolition and a related hazardous materials abatement allowance	276,980
Fire suppression system, fire and intrusion detection systems	180,320
Remove west arcade addition (if removal option selected) and repair related stucco, restore window and door	8,960
General exterior stucco repairs; arcade concrete slab repairs	34,905
Tile roofing system weatherization (assumed improvements pending roofing system survey), repair/replace gutters and downspouts, repair and modify storm water collection system	53,093
Landscape restoration at front and ends of building	86,125
Development of remainder of site (traffic control, parking, accessible walks, landscaping)	263,550
New basement emergency egress	11,680
New second floor emergency egress ($18,000 to $25,000 depending on alternative chosen; the higher estimate used here)	25,000
Heating, ventilating and air conditioning (complete systems; ground source heat pump system assumed)	342,741
Plumbing	89,675
Electrical systems	149,000
New elevator	100,700
Completion of exterior and interior building rehabilitation and finish work	606,486
Sub-total	2,773,215
15% design contingency	415,982
Total Estimated Net Construction (Class C)	$ 3,189,197
Gross Construction (+ 31% for construction supervision and contingency account)	$ 4,177,848

Notes:
1). The first six items above are the recommended construction sequence of the highest priority work.
2). Estimate prepared April 1997. Estimate is based on a detailed quantity take-off instead of general square footage costs, and can be considered a "Class C (plus)" estimate. Estimate valid for FY98.
3). Building rehabilitation portion = approximately $186 per gross square foot.

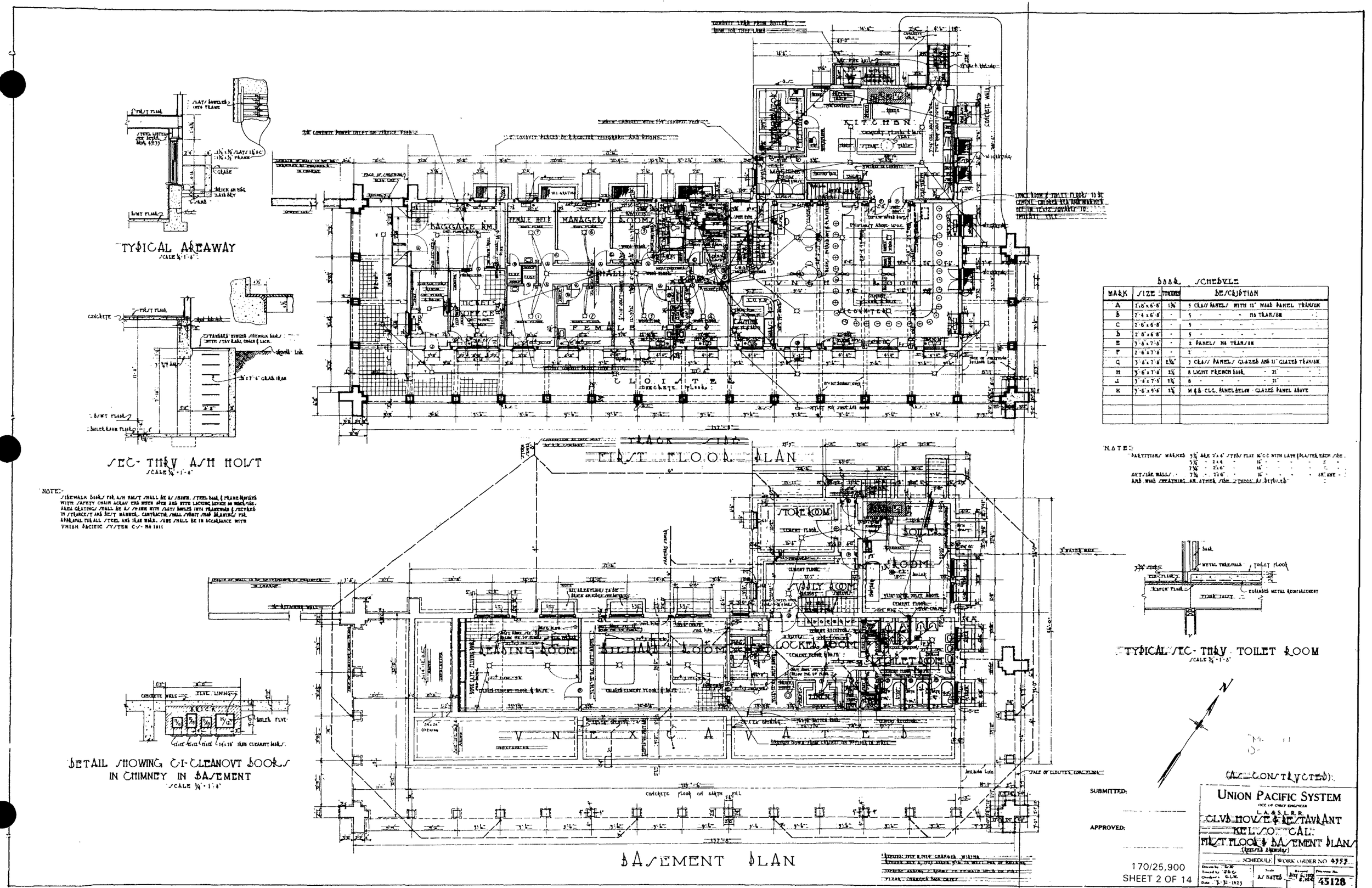
DRAWINGS

170/25,900[407]	As-constructed drawings, Kelso Club House and Restaurant (9 sheets), Office of Chief Engineer, Los Angeles and Salt Lake Railroad, Union Pacific System, December 12, 1924. Five additional drawings were found in the Union Pacific archives, two of which are denoted as "As constructed" drawings but do not have the December 12, 1924, date. The other three drawings are other revisions and details and are dated during the construction period but are not annotated "As constructed."
170/25,000	Existing Conditions and Proposed Treatment, Historic Structure Report Drawings, Denver Service Center, 1997

407. Drawing number is for Denver Service Center record set.



Drawing 1: Location Plan, As Constructed, No. 170/25,900, Sheet 1 of 14, December 12, 1924, Union Pacific System.

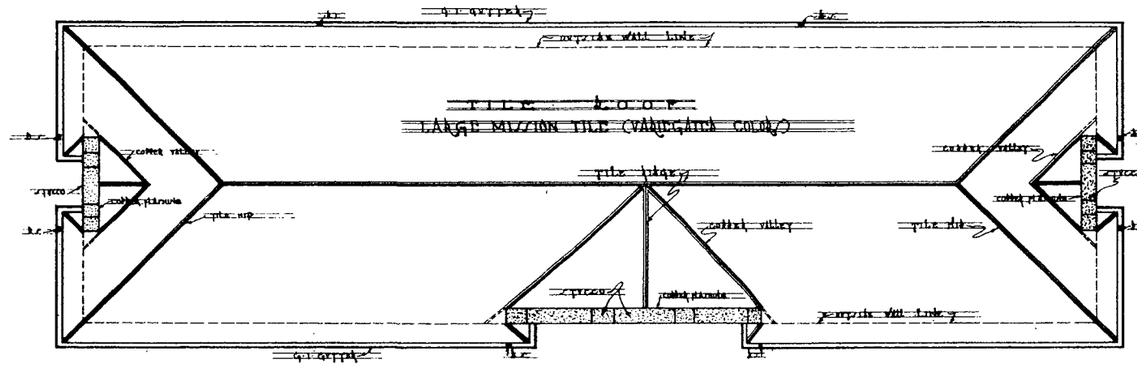


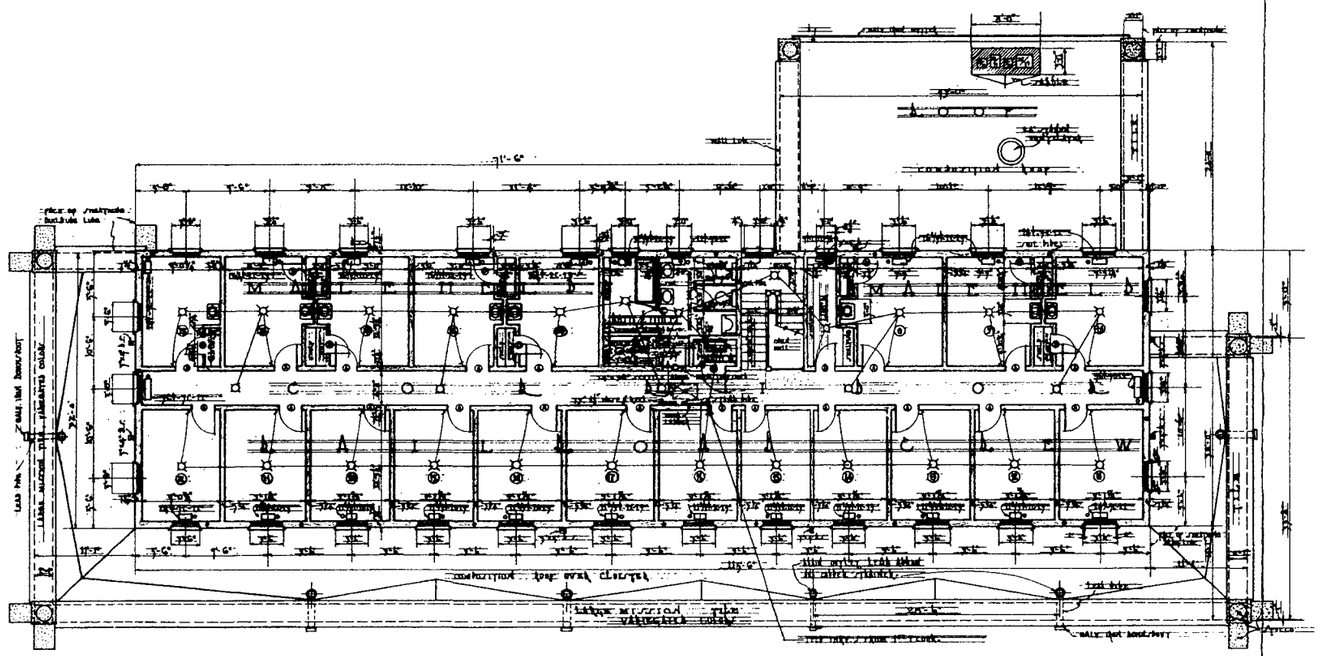
MARK	SIZE	THICKNESS	DESCRIPTION
A	7'-0"x6'-8"	1¾"	5 CLR// PANELS/ WITH 11" WASH PANEL TRANSOM
B	2'-4"x6'-8"	"	5 " " " NO TRANSOM
C	2'-6"x6'-8"	"	5 " " " "
D	2'-8"x6'-8"	"	5 " " " "
E	3'-0"x7'-0"	"	2 PANELS/ NO TRANSOM
F	2'-6"x7'-0"	"	2 " "
G	3'-0"x7'-0"	2¼"	3 CLR// PANELS/ GLAZED AND 11" GLAZED TRANSOM
H	3'-6"x7'-0"	1¾"	8 LIGHT FRENCH DOOR. 21" " "
J	3'-6"x7'-0"	1¾"	8 " " " 21" " "
K	3'-6"x9'-0"	1¾"	M & B CLG. PANEL BELOW GLAZED PANEL ABOVE

NOTE:
PARTITIONS/ MARKED 3¼" ARE 2'x4" //TYP// FLAT 16"CC WITH LATH & PLASTER EACH //SIDE.
3¼" " 2'x4" " 16" " " " " "
7¾" " 2'x6" " 16" " " " " "
OUT//SIDE WALLS/ 7¾" " 2'x6" " 16" " " " " ONE SIDE
AND WALL SHEATHING OR OTHER //SIDE. //TYCCA A/ DETAILED

NOTE:
//SIDEWALK DOORS/ FOR A/H HOIST /SHALL BE A/ //SIDEW. //STEEL DOOR & FRAME REINFORCED WITH /SAFETY CHAIN ACROSS/ EAS WHEN OPEN AND WITH LOCKING DEVICE AS WORK/DIR. AREA GRATINGS/ /SHALL BE A/ /FRAME WITH /LATS/ ANGLES INTO FRAMEWORK & /RIVETED IN /TERCE/T AND BE/T WARREN. CONSTRUCTION /SHALL /COMPLY /WITH /WARNING/ FOR APPROVAL FOR ALL /STEEL AND IRON WORK. /ARE /SHALL BE IN ACCORDANCE WITH UNION PACIFIC /SYSTEM C/- NO 1811

Drawing 2: First Floor and Basement Plan, As Constructed, No. 170/25,900, Sheet 2 of 14, December 12, 1924, Union Pacific System.





LIST OF PLUMBING FIXTURES

SECOND FLOOR		FIRST FLOOR		SECOND FLOOR	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

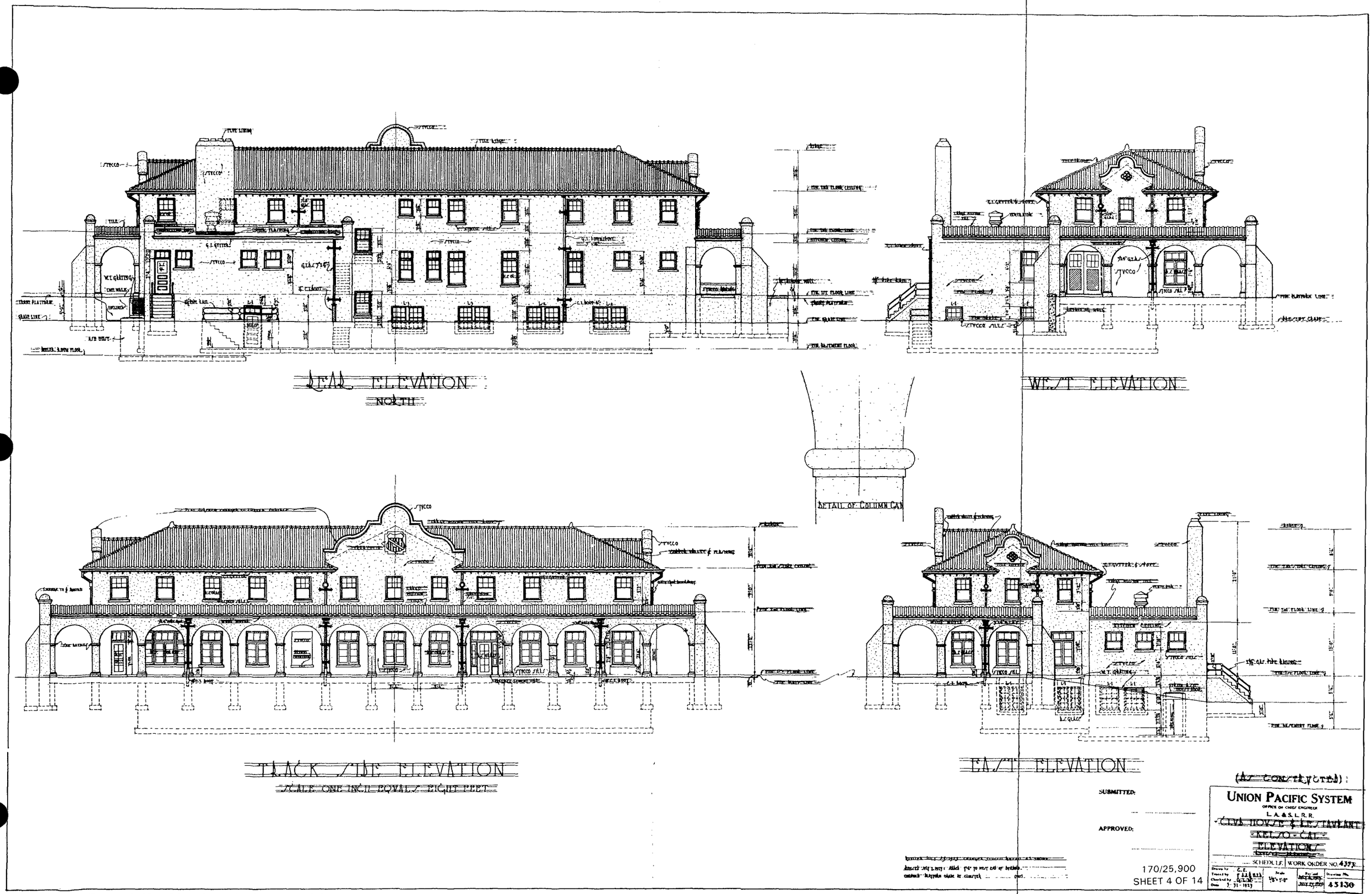
SUBMITTED:

APPROVED:

SHEET 3 OF 14
170/25,900

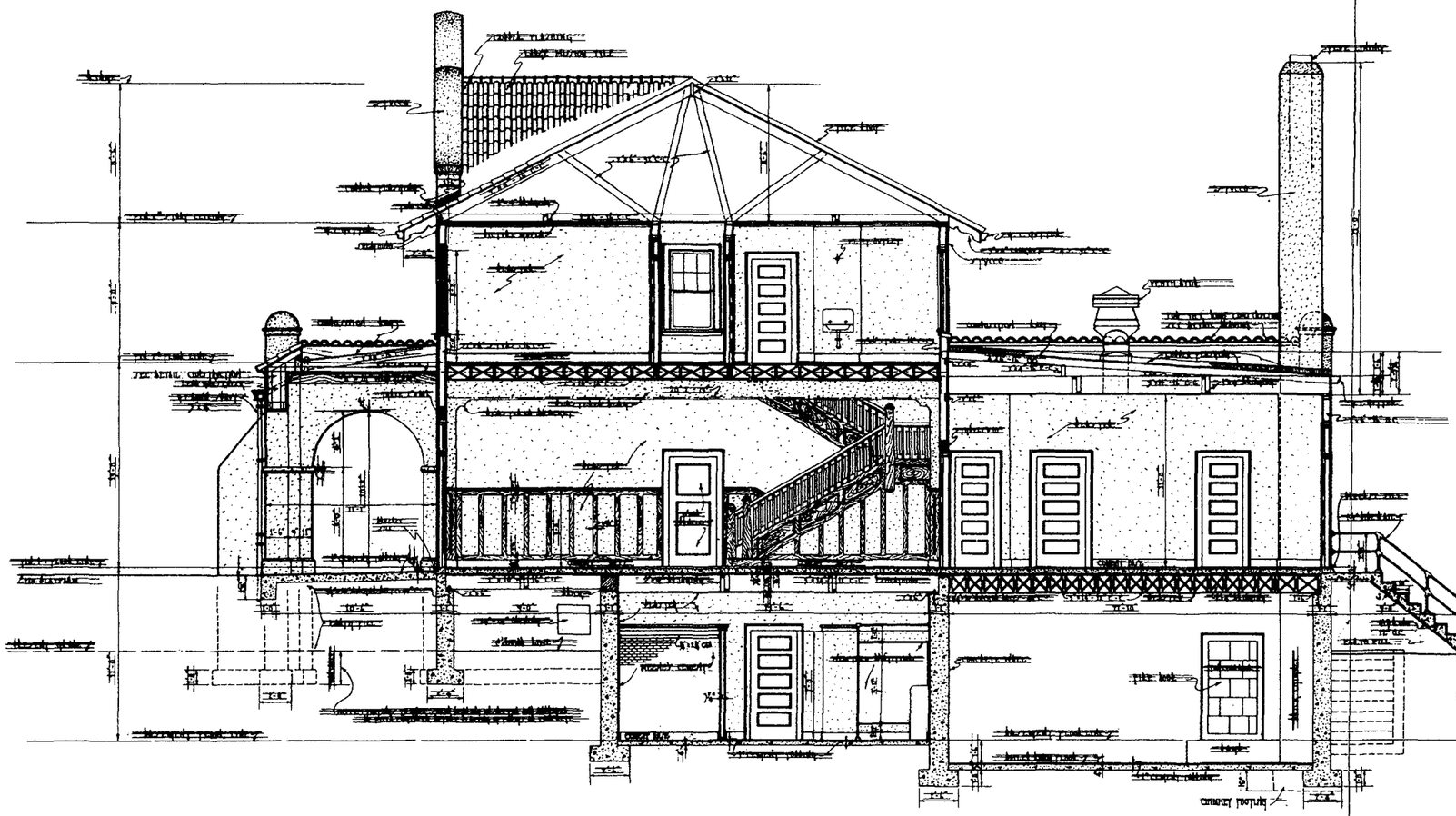
UNION PACIFIC SYSTEM
OFFICE OF CHIEF ENGINEER
L.A.&S.L.R.R.
CLVA NOV 12 & AC TAVIANT
KELZO CAL
SECOND FLOOR PLAN
(General Arrangement)
SCHEDULE | WORK ORDER NO. 47553
Drawn by: [illegible] | Scale | Started: July 5, 1924 | Drawing No. 45179
Traced by: [illegible]
Checked by: [illegible]
Date: [illegible]

Drawing 3: Second Floor and Roof Plan, As Constructed, No. 170/25,900, Sheet 3 of 14, December 12, 1924, Union Pacific System.



Drawing 4: East and West Elevations, As Constructed, No. 170/25,900, Sheet 4 of 14, December 12, 1924, Union Pacific System.

ON MICROFILM



CROSS SECTION

SUBMITTED:

APPROVED:

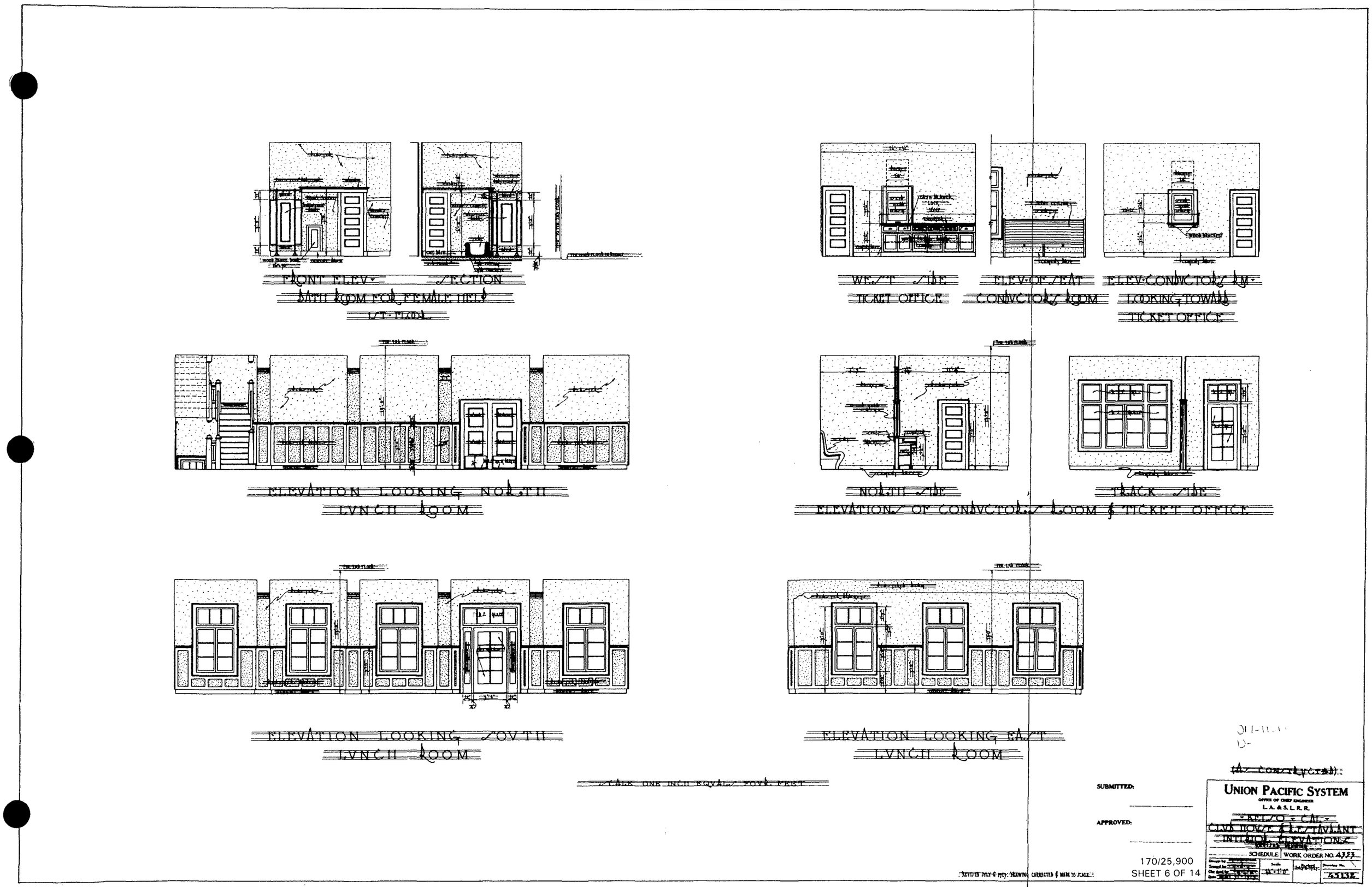
UNION PACIFIC SYSTEM
OFFICE OF CHIEF ENGINEER
L.A.&S.L.R.R.

SCHEDULE | WORK ORDER NO. 4222

170/25,900
SHEET 5 OF 14

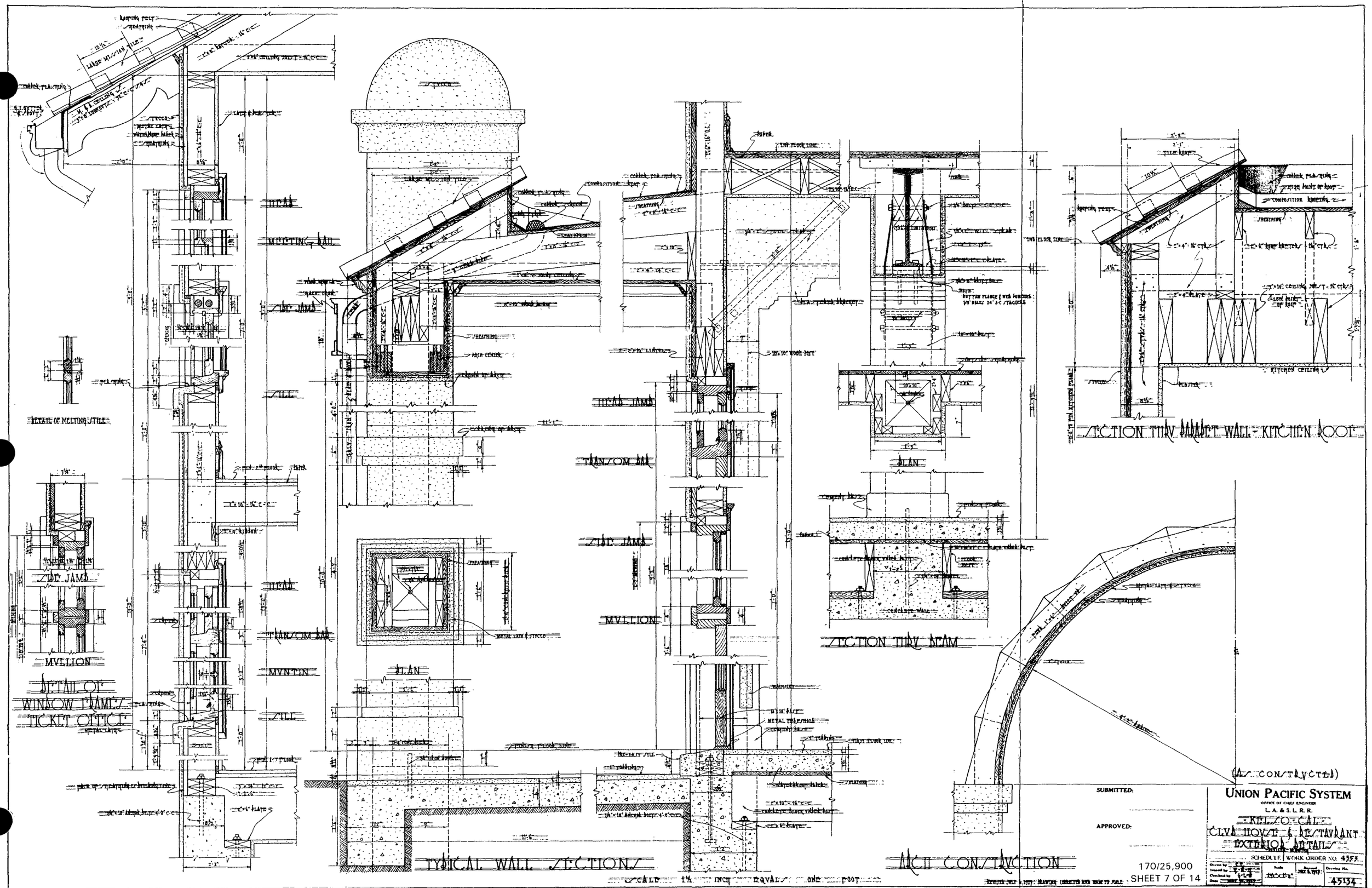
Drawing 5: Cross Section, As Constructed, No. 170/25,900, Sheet 5 of 14, December 12, 1924, Union Pacific System.

ON MICROFILM



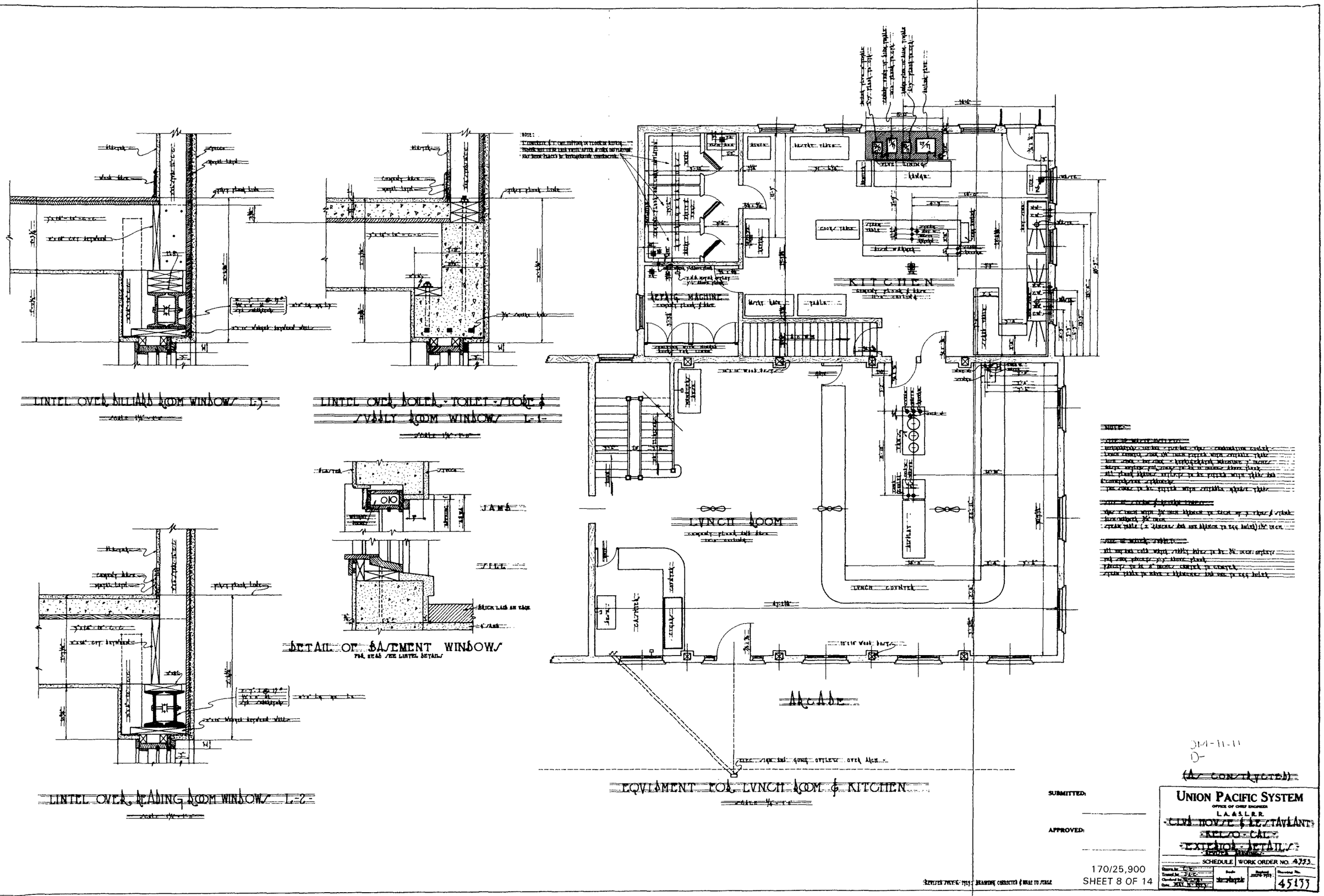
Drawing 6: Interior Elevations, As Constructed, No. 170/25,900, Sheet 6 of 14, December 12, 1924, Union Pacific System.

ON MICROFILM



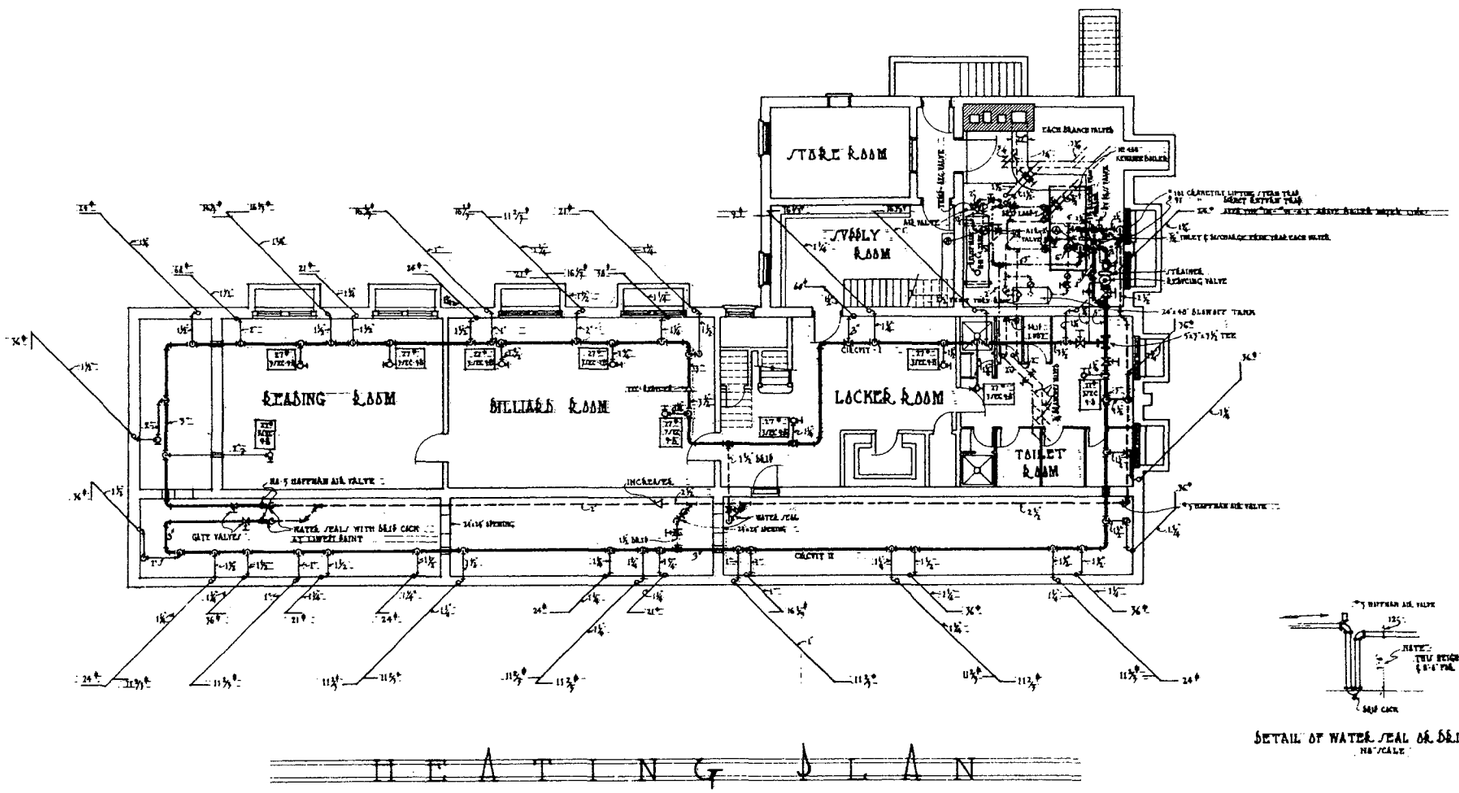
Drawing 7: Exterior Details, As Constructed, No. 170/25,900, Sheet 7 of 14, December 12, 1924, Union Pacific System.

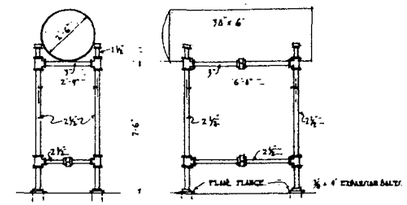
ON MICROFILM

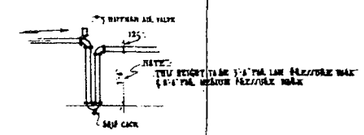


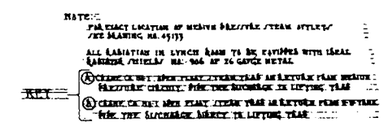
Drawing 8: Exterior Details, As Constructed, No. 170/25,900, Sheet 8 of 14, December 12, 1924, Union Pacific System.

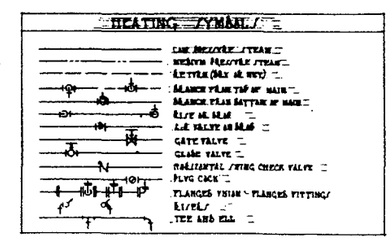
ON MICROFILM











(AS CONSTRUCTED)

SUBMITTED:

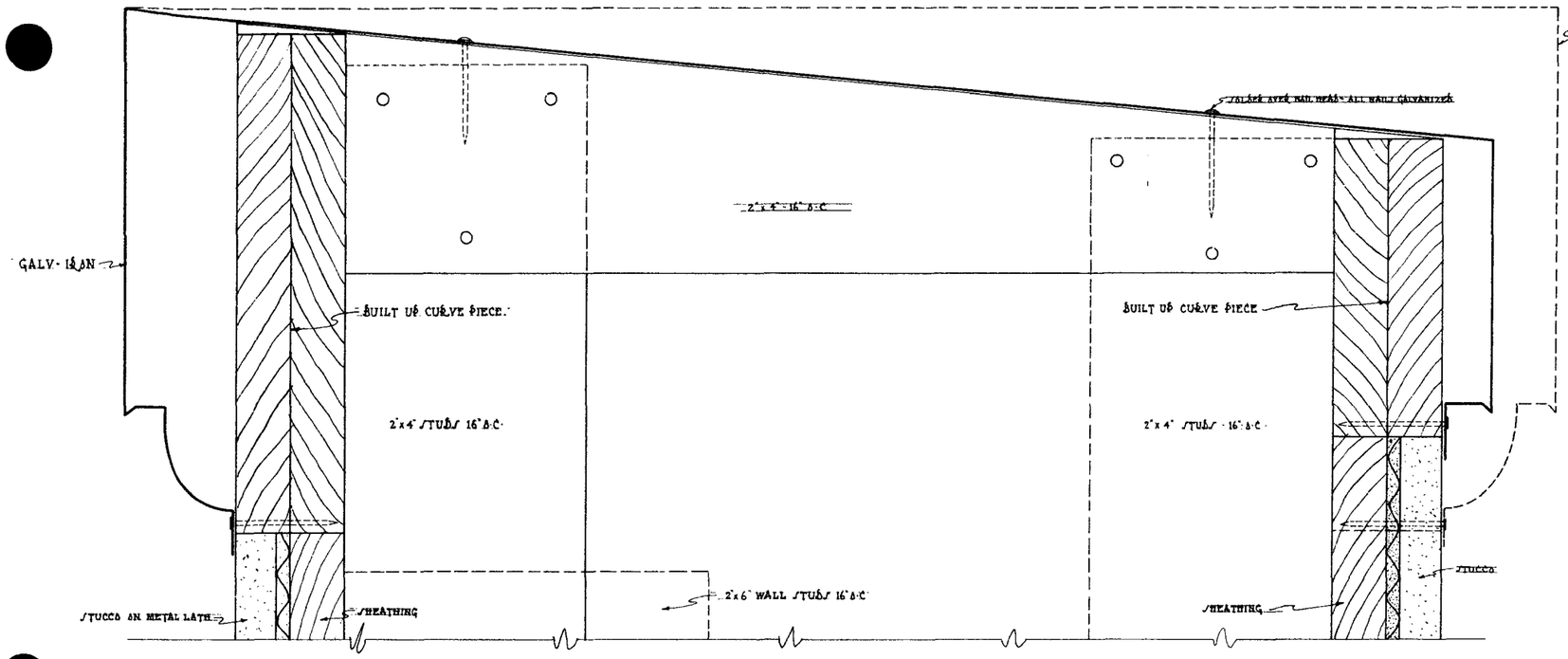
APPROVED:

UNION PACIFIC SYSTEM
OFFICE OF CHIEF ENGINEER
L.A.&S.L.R.R.
CLUB HOUSE & RESTAURANT
KELSO, CAL.
HEATING PLAN
SCHEDULE | WORK ORDER NO. 4353
43137

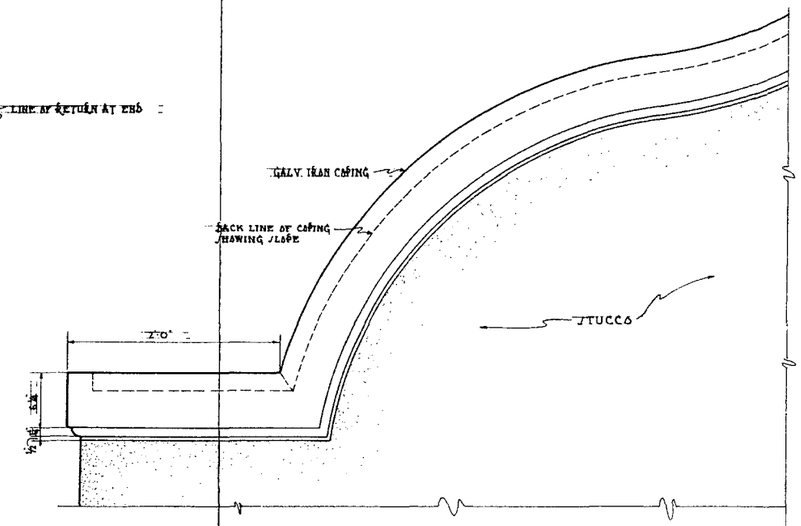
170/25,900
SHEET 9 OF 14

Drawing 9: Heating Plan, As Constructed, No. 170/25,900, Sheet 9 of 14, December 12, 1924, Union Pacific System.

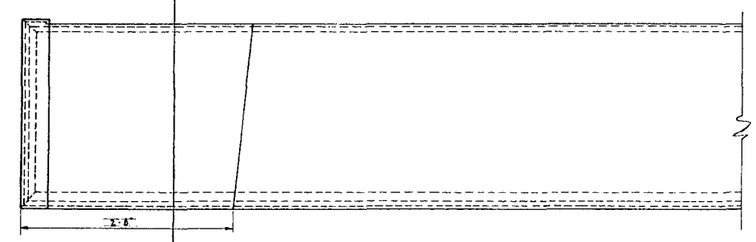
ON MICROFILM



FULL SIZE SECTION OF COPING

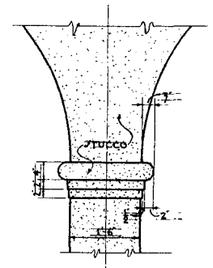


PART ELEVATION



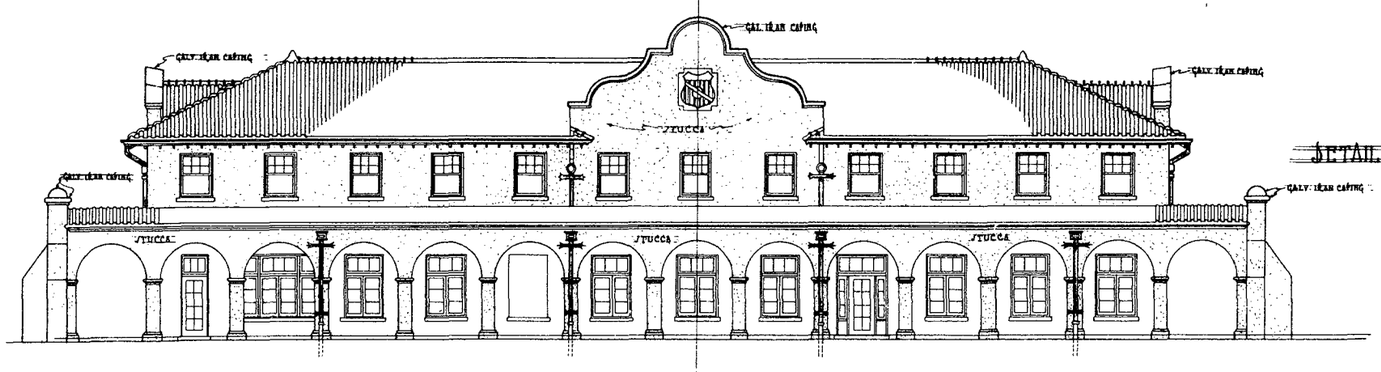
PART PLAN

SCALE 1½" = 1'-0"



DETAIL OF COLUMN CAP

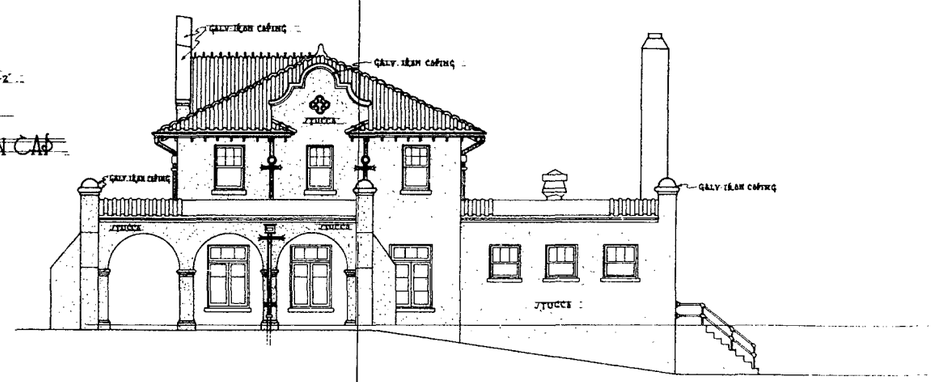
SCALE ¾" = 1'-0"



TRACK SIDE ELEVATION

SCALE ONE INCH EQUALS EIGHT FEET

OTHER ELEVATIONS TREATED SIMILAR



EAST ELEVATION

ON MICROFILM

SUBMITTED:

APPROVED:

170/25,900
SHEET 10 OF 14

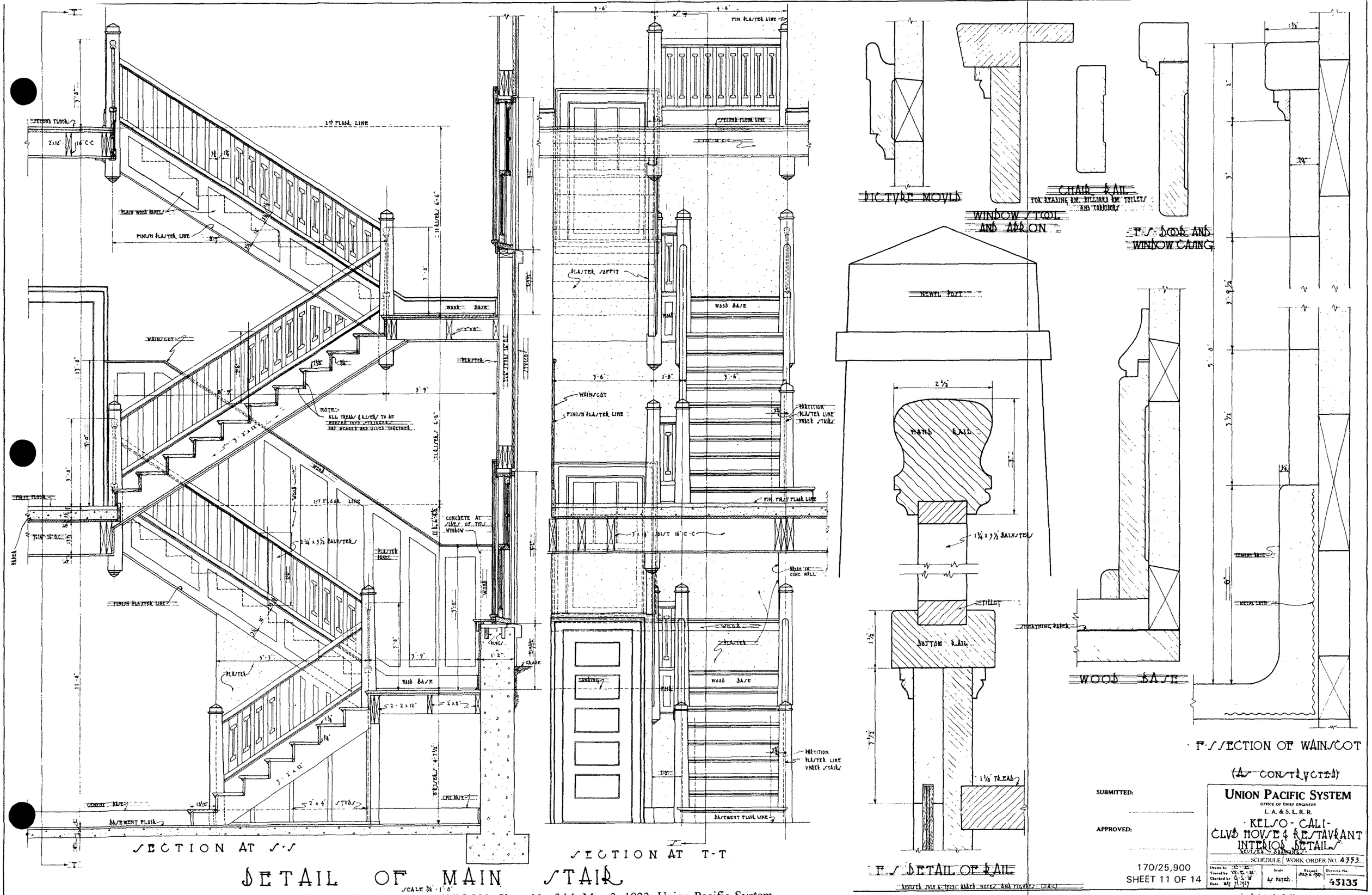
UNION PACIFIC SYSTEM
OFFICE OF CHIEF ENGINEER
L.A. & S.L.R.R.

CLUB HOUSE & RESTAURANT
KELSO CALI.
REVISED STUCCO DETAILS

SCHEDULE | WORK ORDER NO

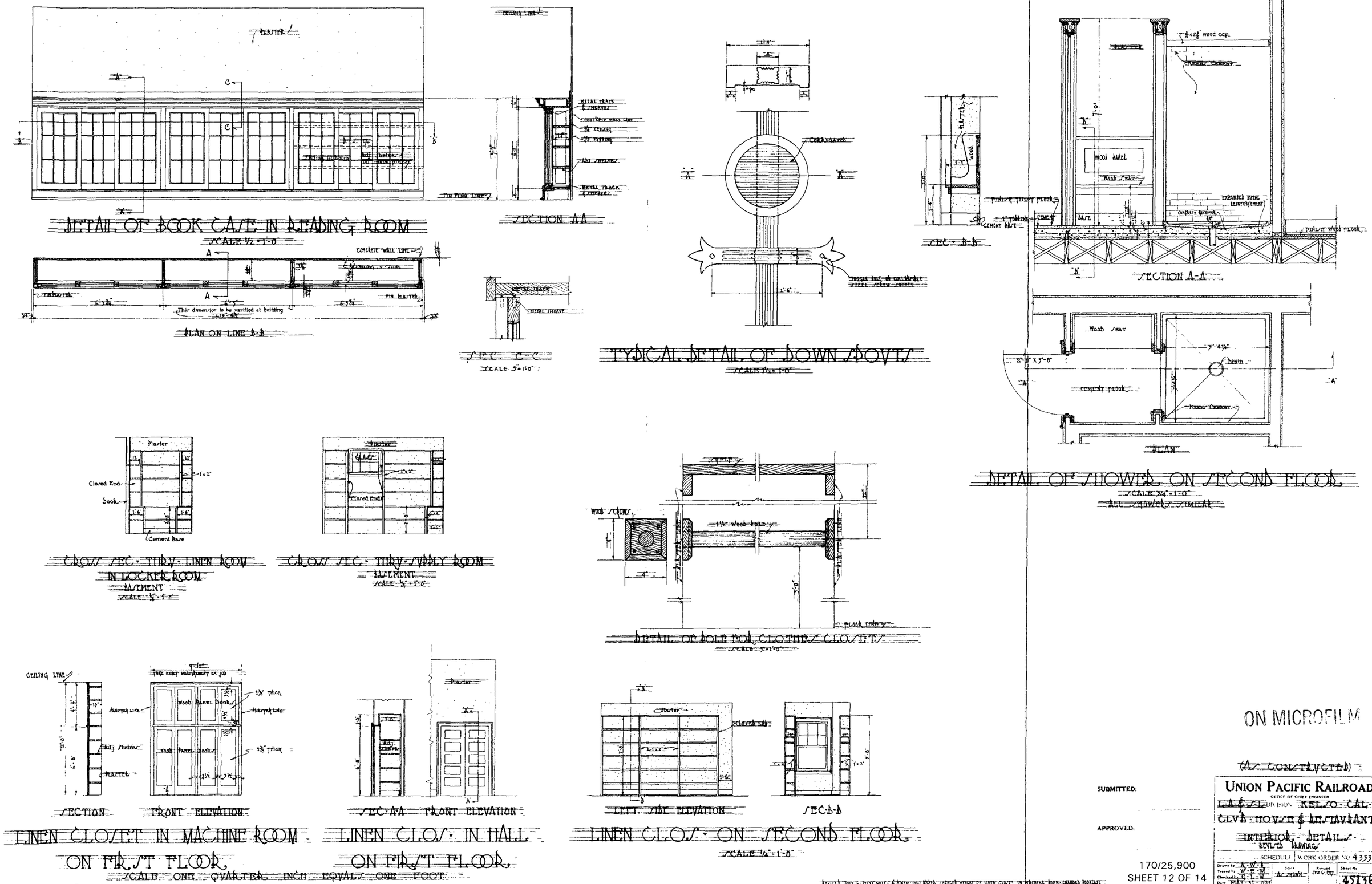
Drawn by C.E. Traced by W.E.M. Checked by Date JULY 26 1923	Scale AS NOTED	Revised	Drawing No. 45125

Drawing 10: Revised Stucco Details, No. 170/25,900, Sheet 10 of 14, July 26, 1923, Union Pacific System.

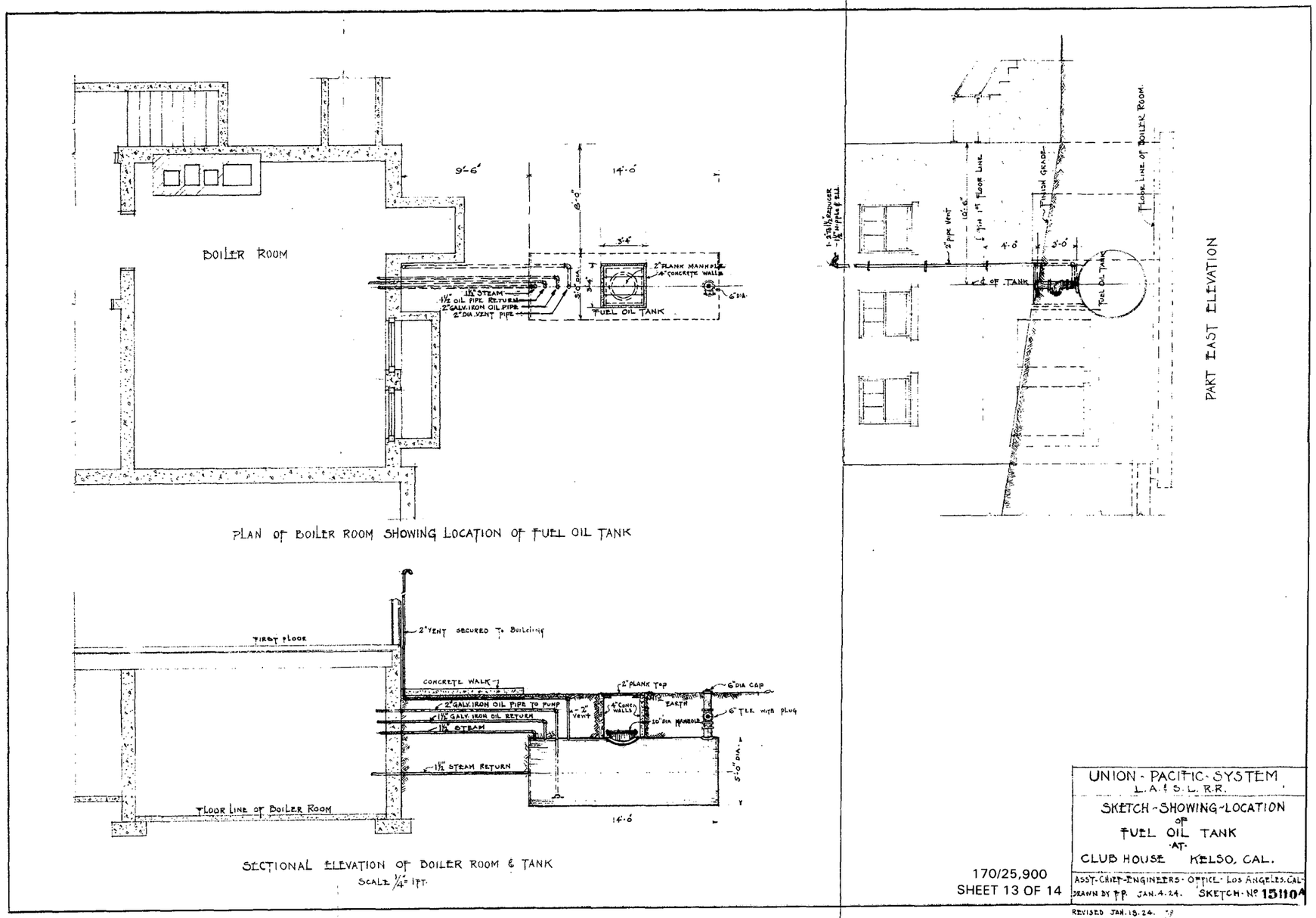


Drawing 11: Interior Details, As Constructed, Revised Drawings, No. 170/25,900, Sheet 11 of 14, May 3, 1923, Union Pacific System.

ON MICROFILM

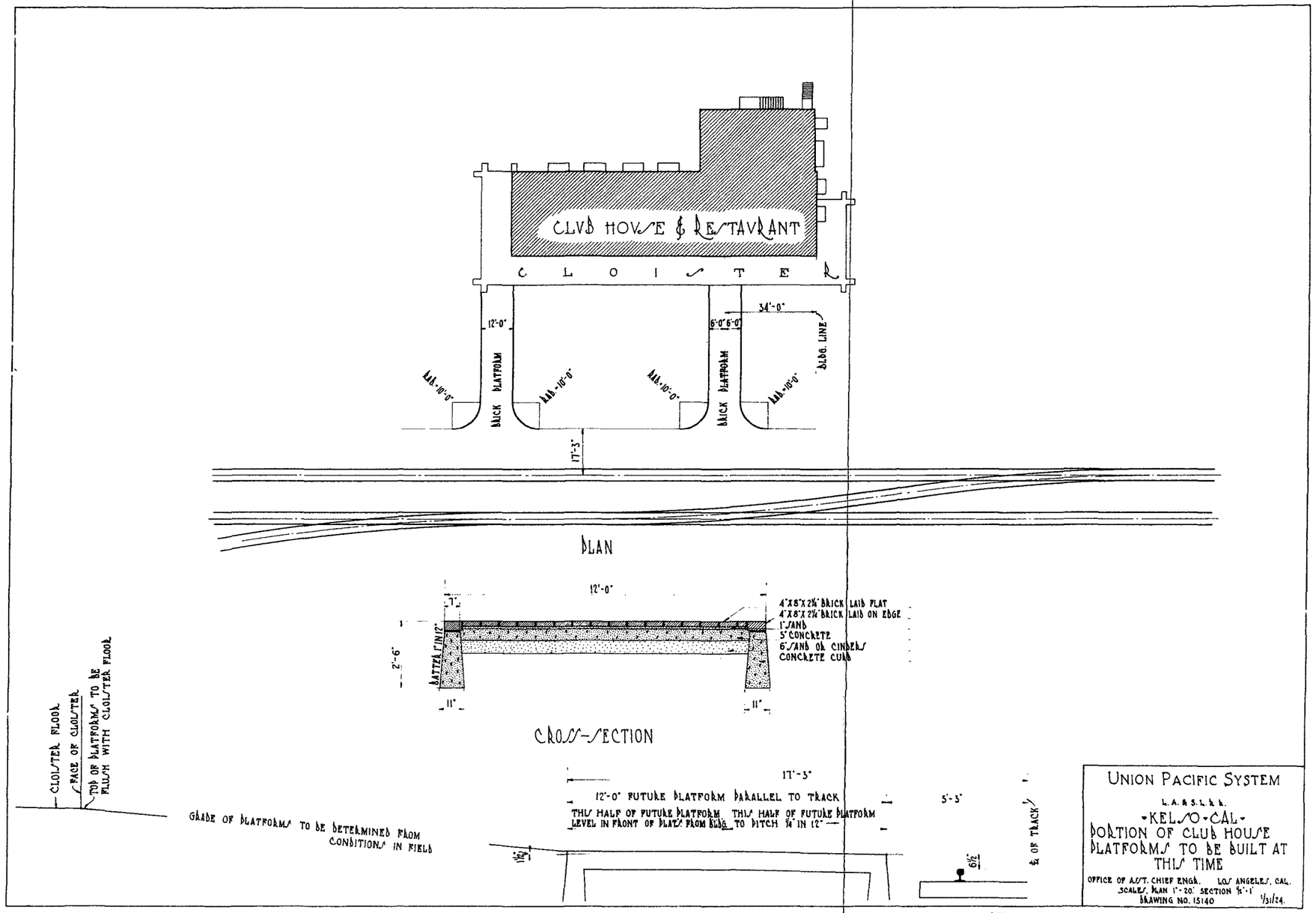


Drawing 12: Interior Details, As Constructed, Revised Drawings, No. 170/25,900, Sheet 12 of 14, May 31, 1923, Union Pacific System.



ON MICROFILM

Drawing 13: Location of Fuel Oil Tank, No. 170/25,900, Sheet 13 of 14, January 4, 1924, Revised January 15, 1924, Union Pacific System.



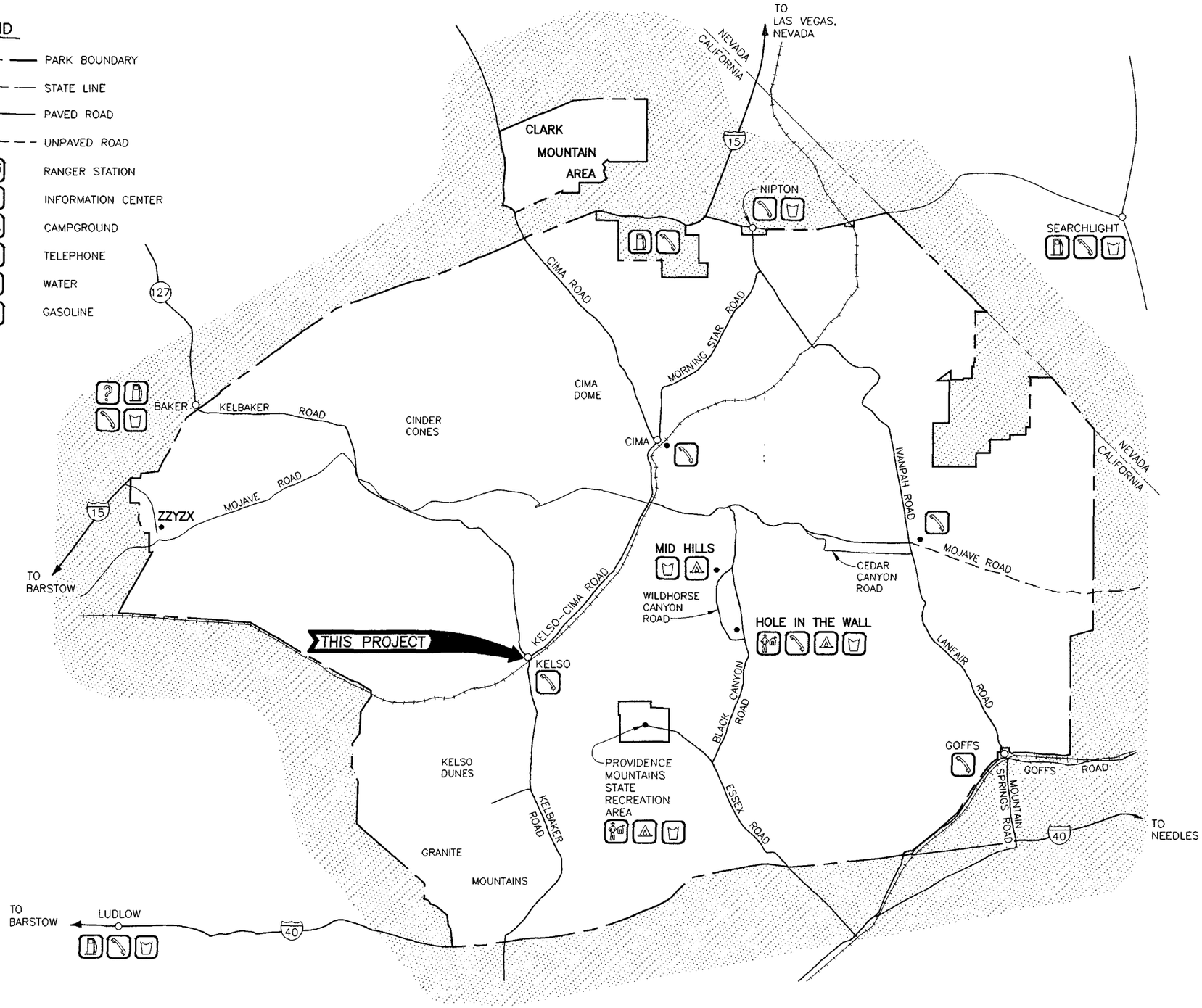
170/25,900
SHEET 14 OF 14

ON MICROFILM

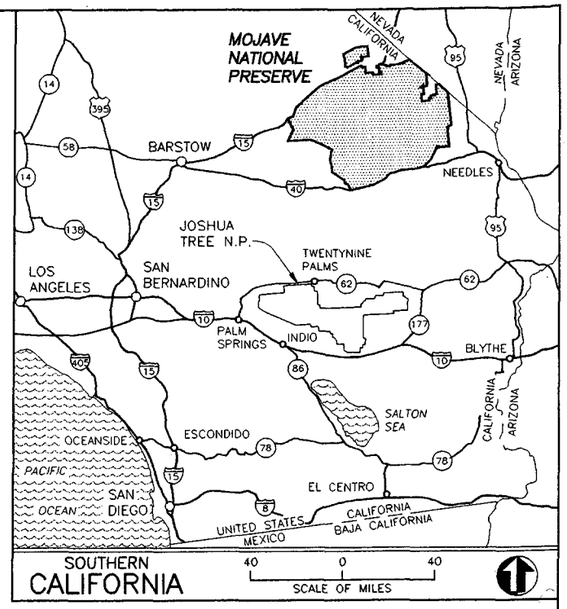
Drawing 14: Portion of Club House Platforms to Be Built at This Time, No. 170/25,900, Sheet 14 of 14, January 31, 1924, Union Pacific System.

LEGEND

- PARK BOUNDARY
- STATE LINE
- PAVED ROAD
- UNPAVED ROAD
- RANGER STATION
- INFORMATION CENTER
- CAMPGROUND
- TELEPHONE
- WATER
- GASOLINE



MOJAVE NATIONAL PRESERVE



INDEX

SHEET	SUB SHEET	TITLE OF SHEET
1		COVER SHEET
2	A1	EXISTING CONDITIONS – BASEMENT PLAN
3	A2	EXISTING CONDITIONS – FIRST FLOOR PLAN
4	A3	EXISTING CONDITIONS – SECOND FLOOR PLAN
5	A4	ALTERNATIVE 1 – BASEMENT PLAN
6	A5	ALTERNATIVE 2 – BASEMENT PLAN
7	A6	ALTERNATIVE 1 – FIRST FLOOR PLAN
8	A7	ALTERNATIVE 2 – FIRST FLOOR PLAN
9	A8	ALTERNATIVE 1 – SECOND FLOOR PLAN
10	A9	ALTERNATIVE 2 – SECOND FLOOR PLAN
11	A10	NORTH AND SOUTH ELEVATIONS
12	A11	WEST AND EAST ELEVATIONS

ON MICROFILM

SCALE OF MILES
8 0 8 16
8 0 8 16 24
SCALE OF KILOMETERS

Drawing 15: Kelso Depot Rehabilitation, Cover Sheet, No. 170/25,000, Sheet 1 of 12, January 19979, NPS.

ACADR13/XREF: MOJACH.DWG/SGS.
BASIC DATA: RECREATION MAP OF THE MOJAVE NATIONAL PRESERVE 1995; MOJAVE NATIONAL PRESERVE "MJ15" 12/95; DRAWN 7/96. PARK APPROVED 1/97. SGS.

HISTORIC STRUCTURE REPORT

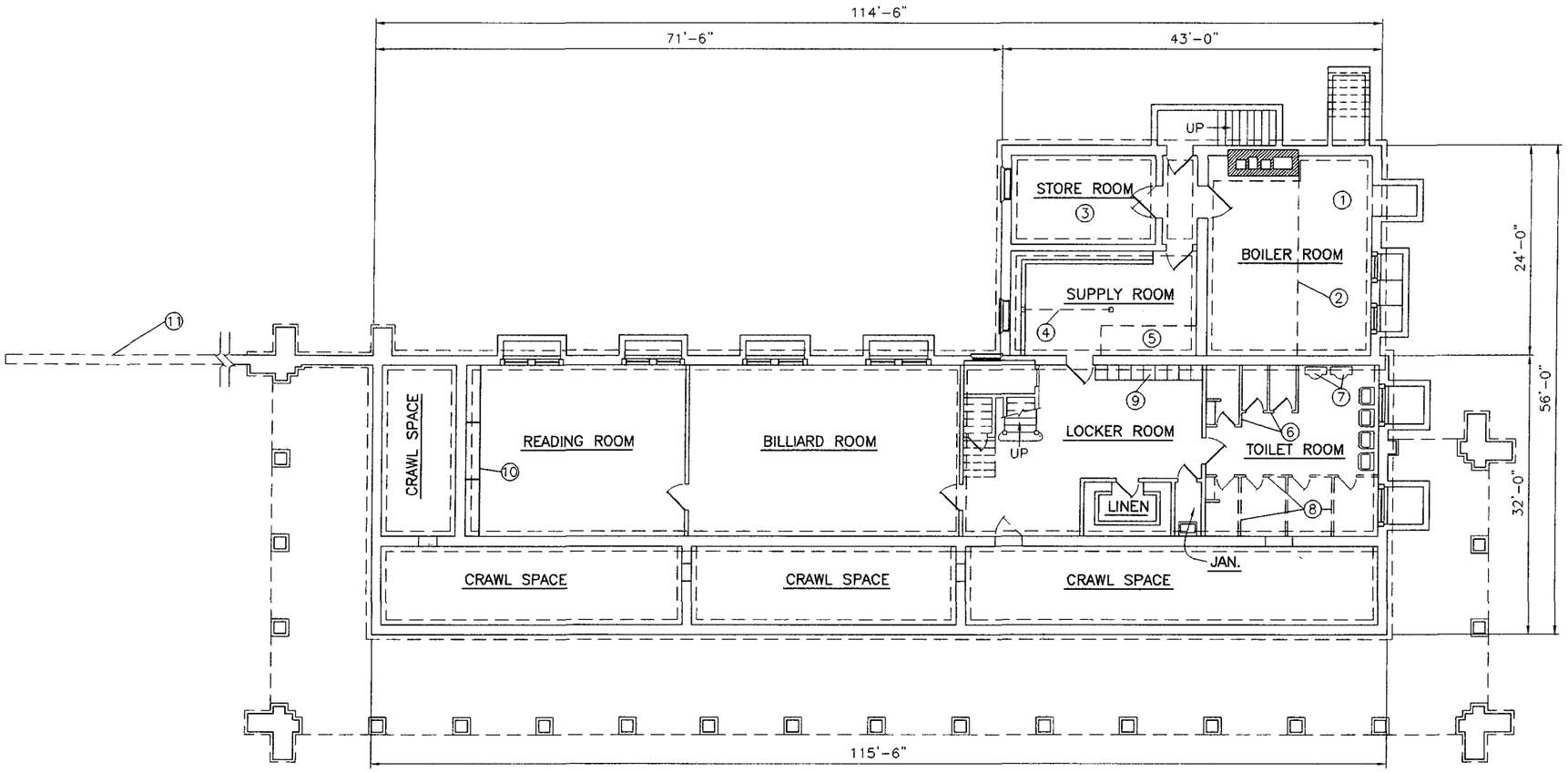
UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
DENVER SERVICE CENTER

TITLE OF DRAWING
KELSO DEPOT REHABILITATION
LOCATION WITHIN PARK
KELSO
NAME OF PARK
MOJAVE NATIONAL PRESERVE
REGION: PACIFIC WEST | COUNTY: SAN BERNARDINO | STATE: CALIFORNIA

DRAWING NO. 170 / 25,000
PKG. NO. 740 / 35
SHEET 1 OF 12

10/2/97 13:47 M:\MJA\764\35\GEN\COVER XREFS MAJACH.DWG



A / A1 BASEMENT PLAN

EXISTING CONDITIONS

ORIGINAL ROOM NAMES SHOWN ON EXISTING CONDITIONS DRAWINGS

1. ORIGINAL HEATING PLANT EQUIPMENT HAS BEEN REMOVED.
2. KITCHEN FLOOR FRAMING SUPPORT ADDED, DATE UNKNOWN. COLUMN AND BEAM FROM RAILROAD TRACK RAIL.
3. REFRIGERATION EQUIPMENT (EXTANT) INSTALLED CA. 1925 & DOOR SWING CHANGED.
4. 6x6 BEAM AND COLUMNS ADDED– DATE UNKNOWN.
5. STAIRWELL ABOVE
6. ORIGINAL SHOWER AND TOILET STALLS
7. ORIGINAL URINALS
8. ORIGINAL SHOWER AND BATHTUB STALLS REMOVED– DATE UNKNOWN
9. ORIGINAL LOCKERS
10. ORIGINAL BOOKCASES
11. RETAINING WALL OF ORIGINAL DESIGN NOT CONSTRUCTED

ON MICROFILM

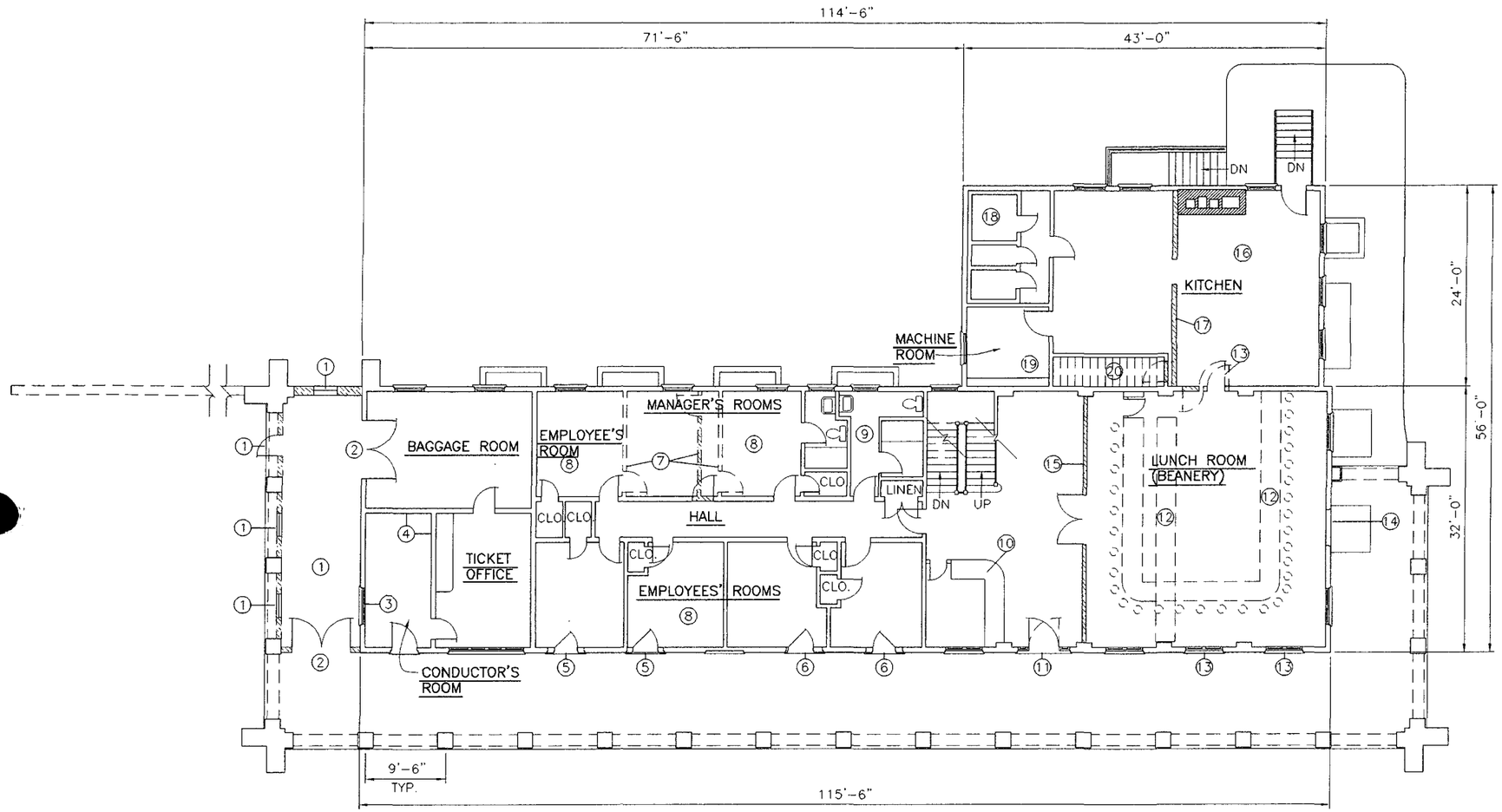
8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
RLC CADD DJS/MLS TECH. REVIEW: RLC DATE: 9/97	A1	EXISTING CONDITIONS BASEMENT PLAN HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	170 / 25,000 PKG. NO. 740 SHEET 2 OF 12

Drawing 16: Kelso Depot Rehabilitation, Existing Conditions, Basement Plan, No. 170/25,000, Sheet 2 of 12, September 1997, NPS.

10/2/97 12:57 M:\SIKES D\35\A1FLOR XREFS: BSMT B.DWG



A/A2 FIRST FLOOR PLAN

EXISTING CONDITIONS

ORIGINAL ROOM NAMES SHOWN ON EXISTING CONDITIONS DRAWINGS

1. WEST ARCADE ENCLOSED, CA. 1942 (DATE NOT CONFIRMED)
2. ORIGINAL BAGGAGE ROOM DOORS MOVED TO SOUTH END OF CA. 1942 ADDITION
3. ORIGINAL WINDOW REMOVED, CA 1942.
4. MODIFICATIONS MADE TO TICKET WINDOW AND ADDITIONS MADE IN CONDUCTOR'S ROOM AND BAGGAGE ROOM; DATE UNKNOWN– POSSIBLY CA. 1942
5. WINDOWS REMOVED AND REPLACED WITH DOORS; 1948
6. WINDOWS REMOVED AND REPLACED WITH DOORS; 1981
7. TWO ORIGINAL PARTITIONS REMOVED, NEW PARTITION ADDED; POSSIBLY 1981.
8. ORIGINAL FINISHES REMOVED AND REPLACED IN EMPLOYEE'S AND MANAGER'S ROOMS; 1948 & 1981
9. ORIGINAL BATH AND TOILET CONFIGURATION REMAINS, MODIFICATIONS MADE AND FIXTURES REPLACED, DATE NOT CONFIRMED, POSSIBLY 1955, 1960'S OR 1980'S.
10. ORIGINAL COUNTER AND DISPLAY CASE.
11. ORIGINAL DOOR; SWING CHANGED, DATE UNKNOWN.
12. ORIGINAL LUNCH ROOM COUNTER REMOVED 1949, REPLACED WITH STRAIGHT COUNTER.
13. DOOR AND WINDOWS MODIFIED, 1949 & 1955.
14. WINDOW REMOVED, 1949
15. PARTITION ADDED, 1972 & 1981
16. ALL EXISTING KITCHEN EQUIPMENT PROBABLY FROM 1949 MODIFICATIONS.
17. WOOD STUD AND WIRE SCREEN PARTITION ADDED; 1955.
18. ORIGINAL FREEZER COMPARTMENTS EXTANT.
19. REFRIGERATION EQUIPMENT PROBABLY INSTALLED IN BASEMENT, CA. 1925 AND ROOM USED FOR STORAGE.
20. STAIR REMOVED, 1955

ON MICROFILM

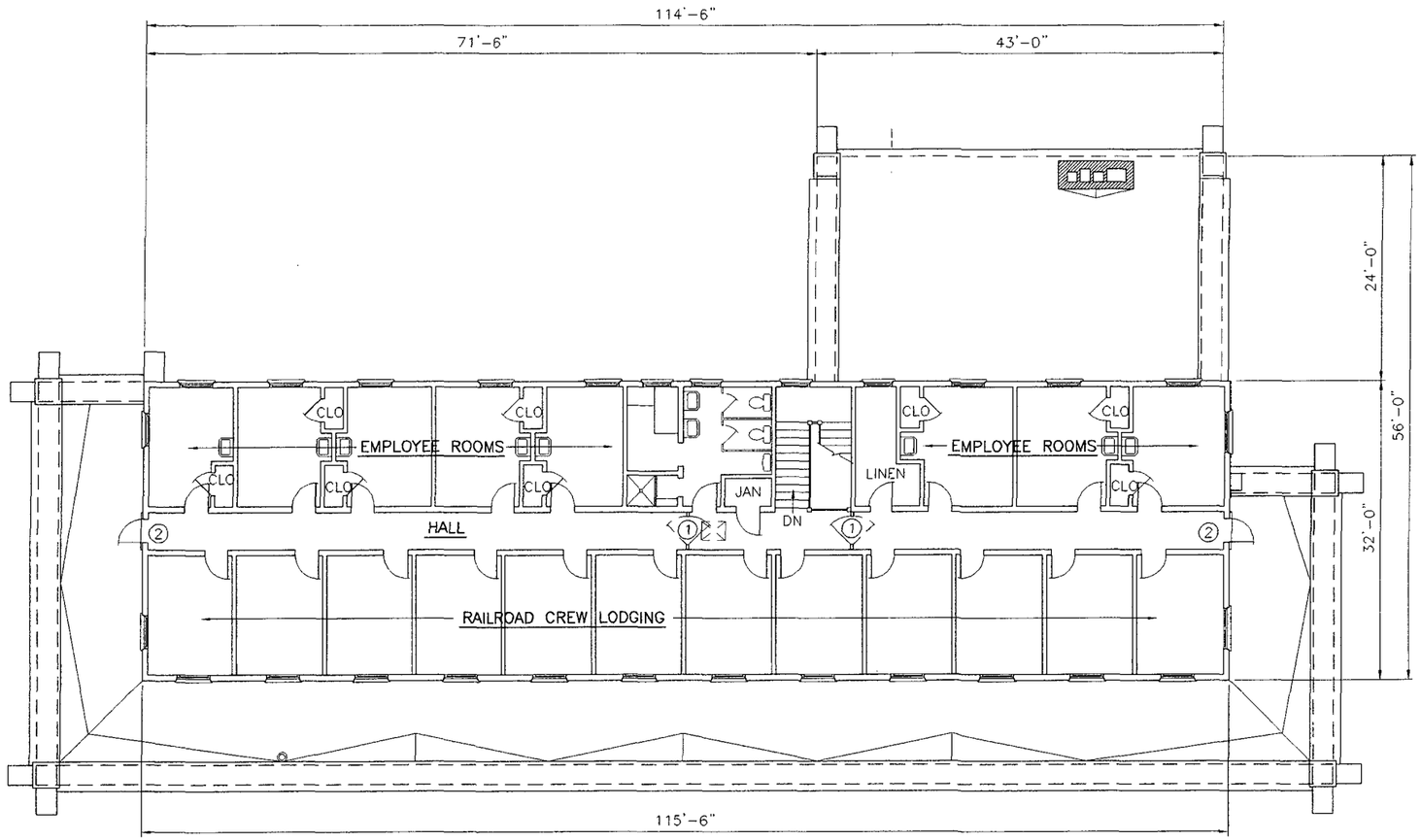
8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC CADD MLS TECH. REVIEW: RLC DATE: 9/97	SUB SHEET NO. A2	TITLE OF SHEET EXISTING CONDITIONS FIRST FLOOR PLAN HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	DRAWING NO. 170/25,000 PKG. NO. 740 SHEET 3 OF 12

Drawing 17: Kelso Depot Rehabilitation, Existing Conditions, First Floor Plan, No. 170/25,000, Sheet 3 of 12, September 1997, NPS.

10/2/97 12:57 M.SIKES 7641\35\A2FLOR XREFS: FIRST_B.DWG



A/A3 SECOND FLOOR PLAN

EXISTING CONDITIONS

ORIGINAL ROOM NAMES SHOWN ON EXISTING CONDITIONS DRAWINGS

1. FIRE SEPARATION DOORS ADDED; DATE UNKNOWN, POSSIBLY 1960 OR 1961
2. WINDOWS REMOVED AND REPLACED WITH DOORS FOR FIRE ESCAPES, 1960 & 1961

ON MICROFILM

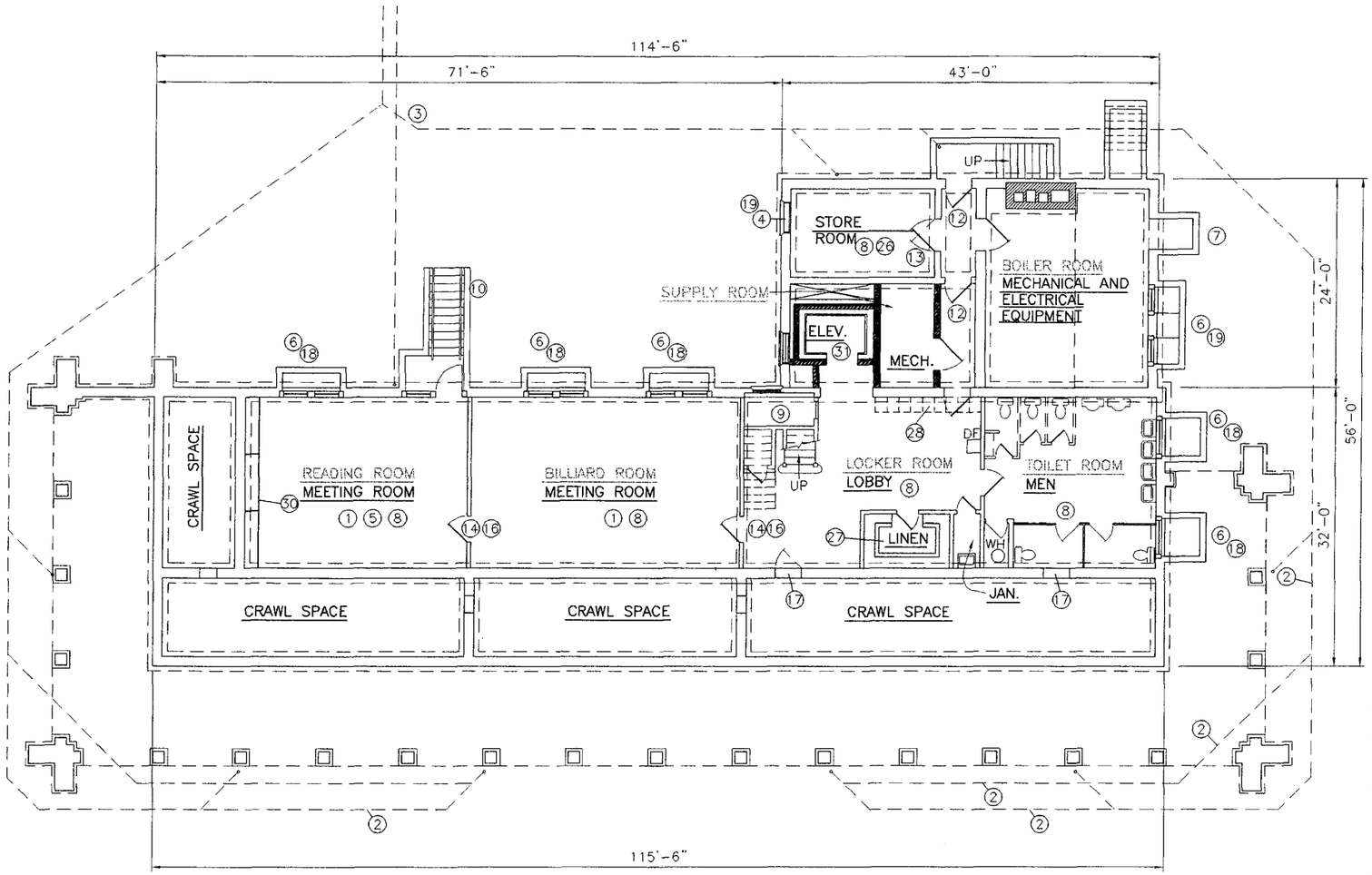
8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
CADD MLS	A3	EXISTING CONDITIONS SECOND FLOOR	170 / 25,000
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	PKG. NO. 740
DATE: 9/97			SHEET 4 OF 12

Drawing 18: Kelso Depot Rehabilitation, Existing Conditions, Second Floor Plan, No. 170/25,000, Sheet 4 of 12, September 1997, NPS.

10/2/97 12:58 M.SIKES 764\35\A3FLOR XREFS: SCND B.DWG



A / A4 BASEMENT PLAN

RECOMMENDED REHABILITATION TREATMENTS

ORIGINAL ROOM NAMES SHOWN AS ROOM NAME

NEW USES SHOWN AS **ROOM NAME**

LEGEND

= = = EXISTING TO BE REMOVED

NEW

GENERAL

1. REMOVE (E) ACOUSTICAL CEILING SYSTEM
2. REMOVE OR CAP (E) STORM DRAINS AT FRONT OF BUILDING AND UNDER ARCADE AND INSTALL (N) DRAINS OUTSIDE BUILDING PERIMETER. REPAIR OR REPLACE REMAINDER OF LOOP.
3. REPAIR STORM WATER SEWER
4. REPLACE CONCRETE STEM WALL WINDOW LINTEL.
5. REPAIR OR REPLACE CONCRETE SLAB AT UNSAFE CRACK OFFSET. MATCH ORIGINAL COLOR AND SCORING.
6. REPAIR AND REPAINT (E) AREAWAY GRATES AS REQUIRED; REPLACE MISSING GRATES. REPLACE GRATE SCREENS
7. REPLACE STEEL HATCH COVER
8. STRENGTHEN FIRST FLOOR FRAMING ABOVE. INSTALL CONNECTORS, BLOCKING, AND BRIDGING AS REQUIRED
9. REINFORCE STAIR LANDING. REPAIR (E) STAIR COMPONENTS AS REQUIRED AND REFINISH.
10. (N) EMERGENCY EXIT
11. INSULATE EXTERIOR FRAME WALLS

DOORS

12. REPAIR AND REFINISH EXISTING.
13. REPLACE MISSING DOORS OR DOORS WITH MORE THAN 50% DAMAGE.
14. WIDEN OPENING TO 36" AND PROVIDE (N) FRAME, DOOR, AND TRIM WITH CONFIGURATION AND MOLDINGS DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC. PROVIDE ACCESSIBLE HARDWARE.
15. PRESERVE HISTORIC HARDWARE.
16. PROVIDE ACCESSIBLE HARDWARE. USE HISTORIC HINGES WHERE POSSIBLE.
17. (N) ACCESS DOOR

WINDOWS

18. REPAIR, RE-GLAZE AND REFINISH EXISTING. REPLACE MISSING AND BROKEN GLASS.
19. REPLACE MISSING WINDOWS OR WINDOWS WITH MORE THAN 50% DAMAGE.
20. REHABILITATE (E) HARDWARE. REPLACE MISSING AND DAMAGED HARDWARE TO MATCH HISTORIC.

FINISHES

21. REPLACE MISSING AND DETERIORATED CEILING AND WALL PLASTER. MATCH HISTORIC TEXTURES
22. REMOVE AND REPLACE ALL CEILING AND WALL PLASTER REQUIRED FOR STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. MATCH HISTORIC TEXTURES.
23. REINSTALL OR REPAIR WOOD TRIMS; REPLACE MISSING AND DETERIORATED TRIMS, MATCH HISTORIC PROFILES.
24. REPAINT CEILINGS AND WALLS.
25. RESTORE NATURAL WOOD FINISHES.

FURNISHINGS AND EQUIPMENT

26. PRESERVE HISTORIC REFRIGERATION EQUIPMENT.
27. PRESERVE HISTORIC LINEN ROOM, INCLUDING SHELVING.
28. HISTORIC LOCKERS TO BUILDING ARTIFACT COLLECTION
29. HISTORIC FIXTURES TO BUILDING ARTIFACT COLLECTION
30. RESTORE HISTORIC BOOKCASES.

ELEVATOR

31. NEW ELEVATOR AND MACHINE ROOM.

MECHANICAL SYSTEMS

32. NEW HVAC SYSTEMS
33. NEW AUTOMATIC FIRE SUPPRESSION SYSTEM.
34. ALL NEW PLUMBING SYSTEMS.

ELECTRICAL SYSTEMS

35. ALL NEW POWER, LIGHTING, CONTROL, FIRE AND INTRUSION DETECTION, TELEPHONE, DATA, COMMUNICATIONS, AND TV SYSTEMS.

ON MICROFILM

8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
DRAWN: DJS/MLS	A4	ALTERNATIVE 1 BASEMENT PLAN	170 / 25,000
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	PKG. NO. 740 / SHEET 5 OF 12
DATE: 9/97			

Drawing 19: Kelso Depot Rehabilitation, Alternative 1, Basement Plan, No. 170/25,000, Sheet 5 of 12, September 1997, NPS.

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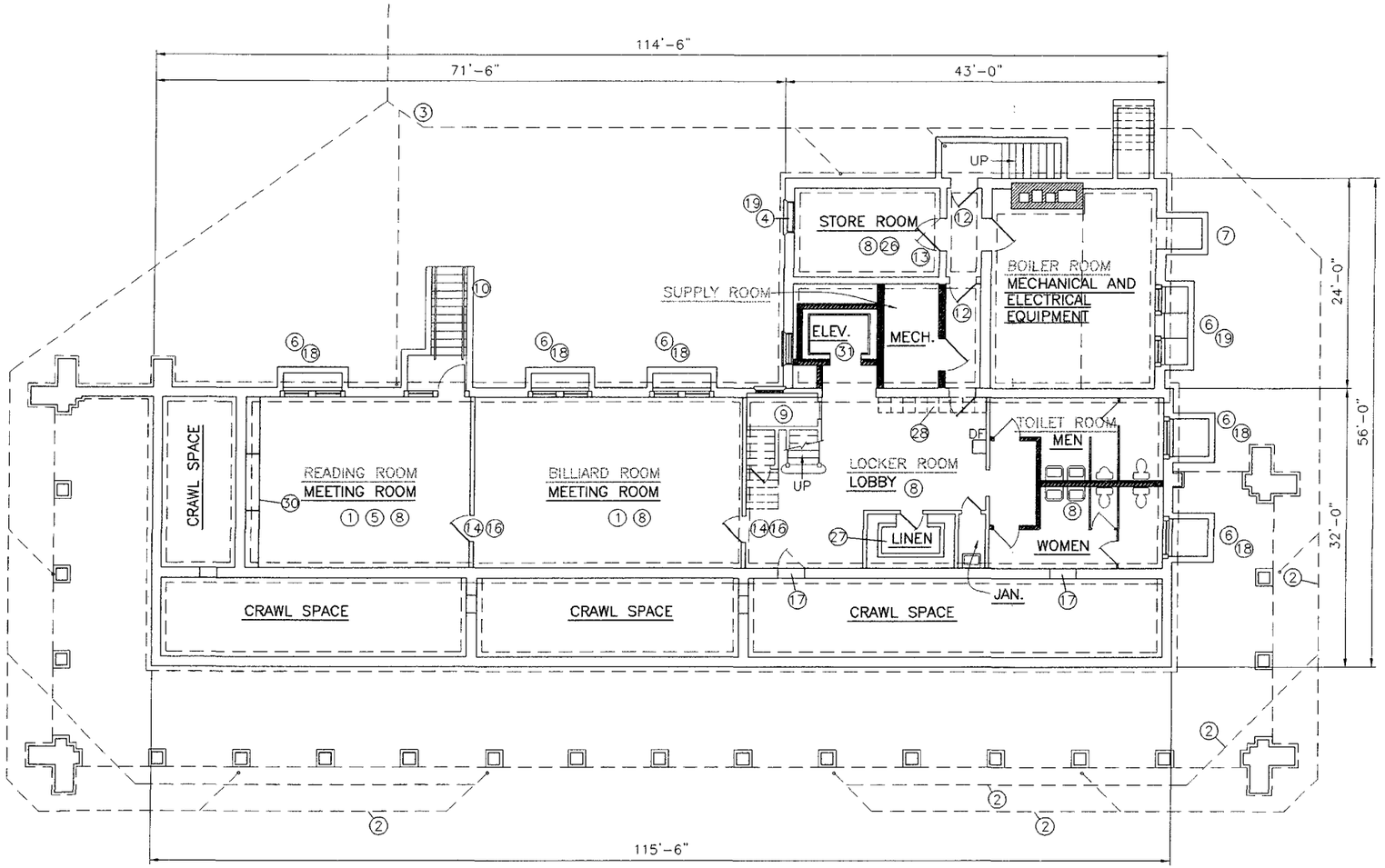

A/A5 BASEMENT PLAN

RECOMMENDED REHABILITATION TREATMENTS

ORIGINAL ROOM NAMES SHOWN AS ROOM NAME

NEW USES SHOWN AS **ROOM NAME**

LEGEND

EXISTING TO BE REMOVED

NEW

GENERAL

1. REMOVE (E) ACOUSTICAL CEILING SYSTEM
2. REMOVE OR CAP (E) STORM DRAINS AT FRONT OF BUILDING AND UNDER ARCADE AND INSTALL (N) DRAINS OUTSIDE BUILDING PERIMETER. REPAIR OR REPLACE REMAINDER OF LOOP.
3. REPAIR STORM WATER SEWER
4. REPLACE CONCRETE STEM WALL WINDOW LINTEL.
5. REPAIR OR REPLACE CONCRETE SLAB AT UNSAFE CRACK OFFSET. MATCH ORIGINAL COLOR AND SCORING.
6. REPAIR AND REPAINT (E) AREAWAY GRATES AS REQUIRED; REPLACE MISSING GRATES. REPLACE GRATE SCREENS
7. REPLACE STEEL HATCH COVER
8. STRENGTHEN FIRST FLOOR FRAMING ABOVE. INSTALL CONNECTORS, BLOCKING, AND BRIDGING AS REQUIRED
9. REINFORCE STAIR LANDING. REPAIR (E) STAIR COMPONENTS AS REQUIRED AND REFINISH.
10. (N) EMERGENCY EXIT
11. INSULATE EXTERIOR FRAME WALLS

DOORS

12. REPAIR AND REFINISH EXISTING.
13. REPLACE MISSING DOORS OR DOORS WITH MORE THAN 50% DAMAGE.
14. WIDEN OPENING TO 36" AND PROVIDE (N) FRAME, DOOR, AND TRIM WITH CONFIGURATION AND MOLDINGS DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC. PROVIDE ACCESSIBLE HARDWARE.
15. PRESERVE HISTORIC HARDWARE.
16. PROVIDE ACCESSIBLE HARDWARE. USE HISTORIC HINGES WHERE POSSIBLE.
17. (N) ACCESS DOOR

WINDOWS

18. REPAIR, RE-GLAZE AND REFINISH EXISTING. REPLACE MISSING AND BROKEN GLASS.
19. REPLACE MISSING WINDOWS OR WINDOWS WITH MORE THAN 50% DAMAGE.
20. REHABILITATE (E) HARDWARE. REPLACE MISSING AND DAMAGED HARDWARE TO MATCH HISTORIC.

FINISHES

21. REPLACE MISSING AND DETERIORATED CEILING AND WALL PLASTER. MATCH HISTORIC TEXTURES
22. REMOVE AND REPLACE ALL CEILING AND WALL PLASTER REQUIRED FOR STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. MATCH HISTORIC TEXTURES.
23. REINSTALL OR REPAIR WOOD TRIMS; REPLACE MISSING AND DETERIORATED TRIMS. MATCH HISTORIC PROFILES.
24. REPAINT CEILINGS AND WALLS.
25. RESTORE NATURAL WOOD FINISHES.

FURNISHINGS AND EQUIPMENT

26. PRESERVE HISTORIC REFRIGERATION EQUIPMENT.
27. PRESERVE HISTORIC LINEN ROOM, INCLUDING SHELVING.
28. HISTORIC LOCKERS TO BUILDING ARTIFACT COLLECTION
29. HISTORIC FIXTURES TO BUILDING ARTIFACT COLLECTION
30. RESTORE HISTORIC BOOKCASES.

ELEVATOR

31. NEW ELEVATOR AND MACHINE ROOM.

MECHANICAL SYSTEMS

32. NEW HVAC SYSTEMS
33. NEW AUTOMATIC FIRE SUPPRESSION SYSTEM.
34. ALL NEW PLUMBING SYSTEMS.

ELECTRICAL SYSTEMS

35. ALL NEW POWER, LIGHTING, CONTROL, FIRE AND INTRUSION DETECTION, TELEPHONE, DATA, COMMUNICATIONS, AND TV SYSTEMS.

ON MICROFILM

8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
CADD: DJS.MLS	A5	ALTERNATIVE 2 BASEMENT PLAN	170 / 25,000
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	PKG. NO. 740 / SHEET 6 OF 12
DATE: 9/97			

Drawing 20: Kelso Depot Rehabilitation, Alternative 2, Basement Plan, No. 170/25,000, Sheet 6 of 12, September 1997, NPS.

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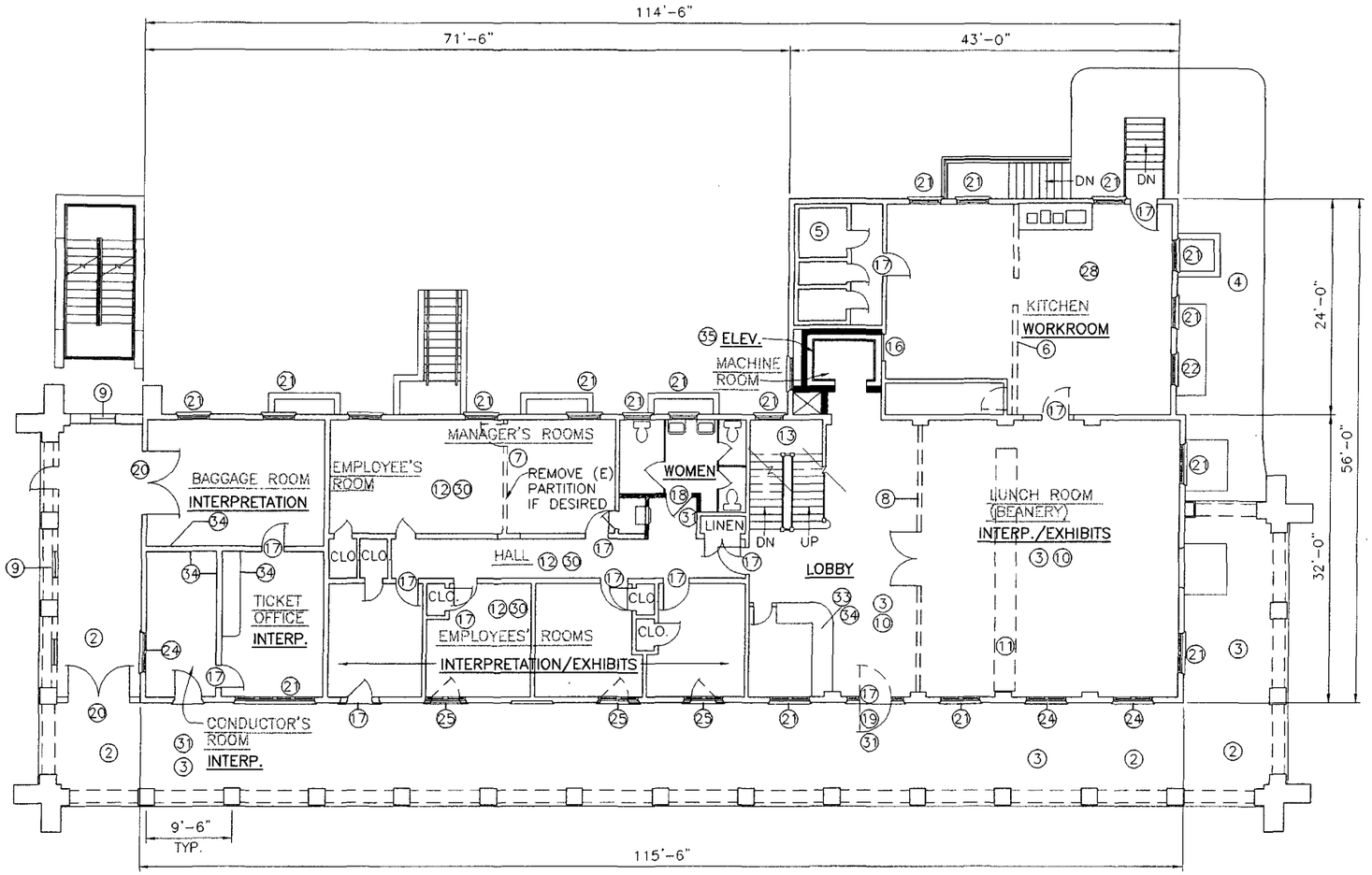

A
A6
FIRST FLOOR PLAN

RECOMMENDED REHABILITATION TREATMENTS

ORIGINAL ROOM NAMES SHOWN AS ROOM NAME

NEW USES SHOWN AS **ROOM NAME**

GENERAL

1. REGRADE AT BUILDING PERIMETER FOR POSITIVE DRAINAGE AWAY FROM BUILDING.
2. REPAIR OR REPLACE CRACKED AND OFFSET ARCADE CONCRETE SLABS. MATCH ORIGINAL COLOR AND SCORING. SEAL CRACKS IN SLABS NOT REQUIRED TO BE REPLACED FOR SAFETY.
3. REPAIR OR REPLACE CONCRETE SLAB AT UNSAFE CRACK OFFSETS. PATCH HOLES. MATCH ORIGINAL COLOR AND SCORING. SEAL OTHER CRACKS AND OPEN JOINTS.
4. REPAIR/REPLACE CRACKED AND SETTLED CONCRETE SIDEWALK.
5. REMOVE FREEZER COMPARTMENTS; RECORD AND STORE SOUND COMPONENTS. REPLACE ROTTED FLOORING AND FRAMING.
6. REMOVE POST-HISTORIC PERIOD STUD AND WIRE MESH PARTITION.
7. REMOVE (E) POST-HISTORIC PERIOD PARTITION.
8. REMOVE (E) POST HISTORIC PERIOD PARTITION
9. REMOVE CA. 1942 WEST ARCADE ADDITION. REPAIR/RESTORE DAMAGED STUCCO AND SUBSTRATE MATERIALS.
10. REMOVE PAINT ON CONCRETE FLOORS.
11. RECORD AND REMOVE (E) LUNCH COUNTER.
12. REMOVE CA. 1948-1980'S SUSPENDED ACOUSTICAL CEILINGS, GYPSUM WALL BOARD, DOOR, WINDOW, AND BASE TRIMS.
13. REPAIR AND REPLACE (E) STAIR COMPONENTS AS REQUIRED AND REFINISH.
14. INSTALL STRUCTURAL BRACING, LOAD TRANSFER CONNECTORS, BLOCKING AND BRIDGING.
15. INSULATE EXTERIOR WALLS.
16. IN-FILL (E) OPENING

DOORS

17. REPAIR AND REFINISH EXISTING. REPLACE MISSING OR MORE THAN 50% DAMAGED COMPONENTS. PRESERVE HISTORIC HARDWARE WHERE POSSIBLE.
18. (N) OPENING, FRAME, DOOR (36") AND TRIM WITH CONFIGURATION AND MOLDINGS DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC. PROVIDE ACCESSIBLE HARDWARE.
19. REVERSE DOOR SWING.
20. RELOCATE HISTORIC BAGGAGE ROOM DOOR TO ORIGINAL LOCATION.

LEGEND

= = = EXISTING TO BE REMOVED

NEW

WINDOWS

21. REPAIR, RE-GLAZE AND REFINISH EXISTING. REPLACE MISSING AND BROKEN GLASS.
22. REPLACE MISSING WINDOWS OR WINDOWS WITH MORE THAN 50% DAMAGE.
23. REHABILITATE (E) HARDWARE. REPLACE MISSING AND DAMAGED HARDWARE TO MATCH HISTORIC.
24. RESTORE WINDOWS TO HISTORIC CONFIGURATION WITH REPRODUCTION WINDOW UNITS TO MATCH HISTORIC.
25. REPLACE LATE HISTORIC PERIOD DOOR WITH REPRODUCTION WINDOW UNIT TO MATCH HISTORIC.

FINISHES

26. REPLACE MISSING AND DETERIORATED CEILING AND WALL PLASTER. MATCH HISTORIC TEXTURES
27. REMOVE AND REPLACE ALL CEILING AND WALL PLASTER REQUIRED FOR STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. MATCH HISTORIC TEXTURES.
28. REMOVE (E) GYPSUM BOARD USED FOR PREVIOUS CEILING AND WALL REPAIRS. INSTALL (N) PLASTER OR SHEETROCK. TEXTURE TO MATCH HISTORIC PLASTER TEXTURE.
29. REINSTALL OR REPAIR WOOD TRIMS; REPLACE MISSING AND DETERIORATED TRIMS, MATCH HISTORIC PROFILES. FOR NEW TRIM IN MODIFIED SPACES USE TRIM DIFFERENT BUT COMPATIBLE WITH HISTORIC.
30. REMOVE (E) FLOORING OVERLAY. REPLACE (E) WOOD FLOORING WITH (N) TO MATCH HISTORIC.
31. MODIFY (E) CONCRETE FLOOR TO PROVIDE RAMP.
32. REPAINT CEILINGS AND WALLS.
33. RESTORE NATURAL WOOD FINISHES.

CABINETRY

34. REPAIR AND RESTORE HISTORIC COUNTERS, CABINETS AND RELATED APPURTENANCES (LOBBY, TICKET OFFICE, CONDUCTOR'S ROOM, BAGGAGE ROOM).

ELEVATOR

35. NEW ELEVATOR.

MECHANICAL SYSTEMS

36. NEW HVAC SYSTEMS
37. NEW AUTOMATIC FIRE SUPPRESSION SYSTEM.
38. ALL NEW PLUMBING SYSTEMS.

ELECTRICAL SYSTEMS

39. ALL NEW POWER, LIGHTING, CONTROL, FIRE AND INTRUSION DETECTION, TELEPHONE, DATA, COMMUNICATIONS, AND TV SYSTEMS.

8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 170/25,000
CADD MLS	A6	ALTERNATIVE 1 FIRST FLOOR PLAN	PKG. NO. 740
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	SHEET 7 OF 12
DATE: 9/97			

Drawing 21: Kelso Depot Rehabilitation, Alternative 1, First Floor Plan, No. 170/25,000, Sheet 7 of 12, September 1997, NPS.

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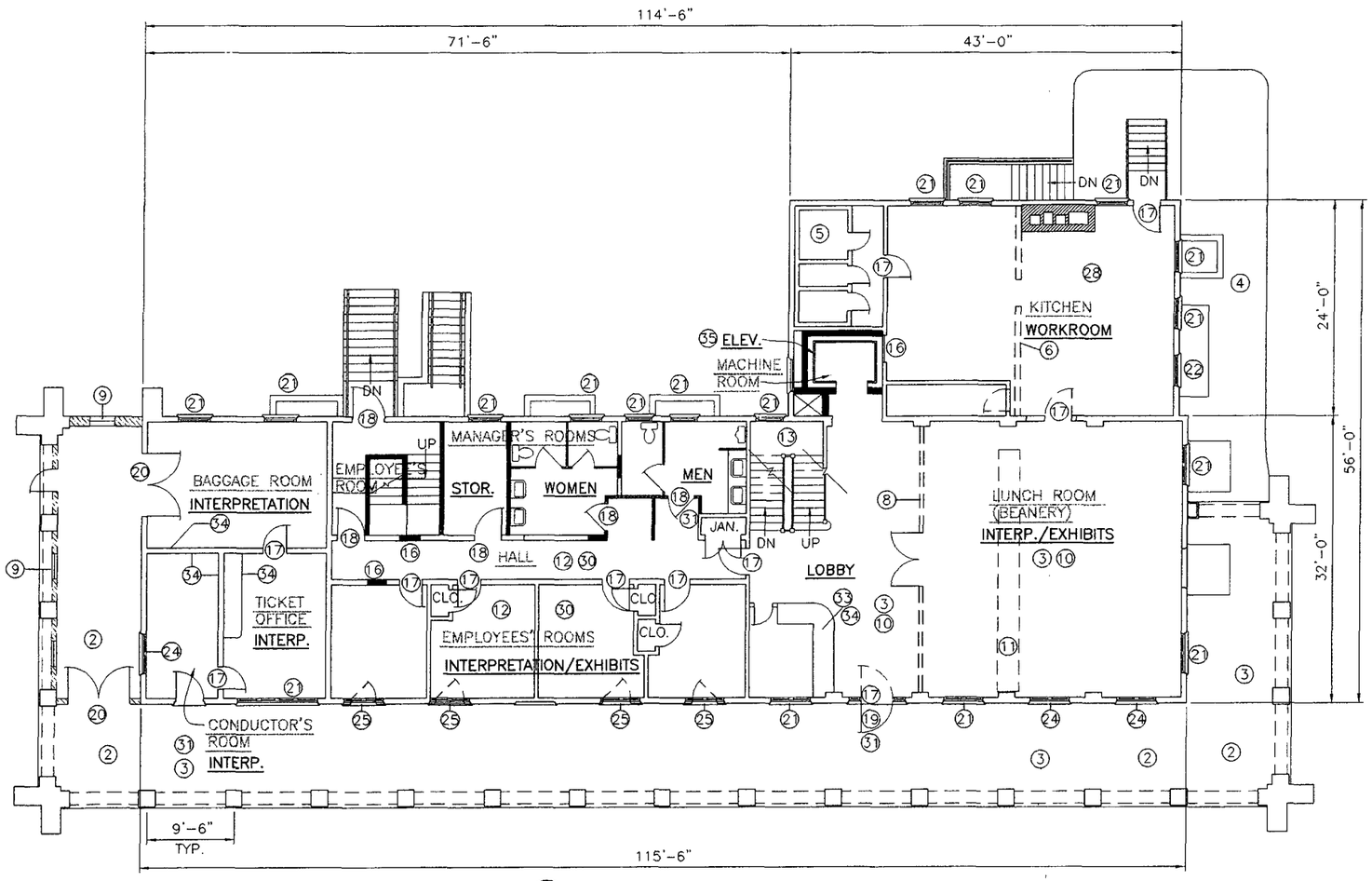

A / A7 FIRST FLOOR PLAN

RECOMMENDED REHABILITATION TREATMENTS

ORIGINAL ROOM NAMES SHOWN AS ROOM NAME

NEW USES SHOWN AS **ROOM NAME**

GENERAL

1. REGRADE AT BUILDING PERIMETER FOR POSITIVE DRAINAGE AWAY FROM BUILDING.
2. REPAIR OR REPLACE CRACKED AND OFFSET ARCADE CONCRETE SLABS. MATCH ORIGINAL COLOR AND SCORING. SEAL CRACKS IN SLABS NOT REQUIRED TO BE REPLACED FOR SAFETY.
3. REPAIR OR REPLACE CONCRETE SLAB AT UNSAFE CRACK OFFSETS. PATCH HOLES. MATCH ORIGINAL COLOR AND SCORING. SEAL OTHER CRACKS AND OPEN JOINTS.
4. REPAIR/REPLACE CRACKED AND SETTLED CONCRETE SIDEWALK.
5. REMOVE FREEZER COMPARTMENTS; RECORD AND STORE SOUND COMPONENTS. REPLACE ROTTED FLOORING AND FRAMING.
6. REMOVE POST-HISTORIC PERIOD STUD AND WIRE MESH PARTITION.
7. REMOVE (E) POST-HISTORIC PERIOD PARTITION.
8. REMOVE (E) POST-HISTORIC PERIOD PARTITION.
9. REMOVE CA. 1942 WEST ARCADE ADDITION. REPAIR/RESTORE DAMAGED STUCCO AND SUBSTRATE MATERIALS.
10. REMOVE PAINT ON CONCRETE FLOORS.
11. RECORD AND REMOVE (E) LUNCH COUNTER.
12. REMOVE CA. 1948-1980'S SUSPENDED ACOUSTICAL CEILINGS, GYPSUM WALL BOARD, DOOR, WINDOW, AND BASE TRIMS.
13. REPAIR AND REPLACE (E) STAIR COMPONENTS AS REQUIRED AND REFINISH.
14. INSTALL STRUCTURAL BRACING, LOAD TRANSFER CONNECTORS, BLOCKING AND BRIDGING.
15. INSULATE EXTERIOR WALLS.
16. IN-FILL (E) OPENING

DOORS

17. REPAIR AND REFINISH EXISTING. REPLACE MISSING OR MORE THAN 50% DAMAGED COMPONENTS. PRESERVE HISTORIC HARDWARE WHERE POSSIBLE.
18. (N) OPENING, FRAME, DOOR (36") AND TRIM WITH CONFIGURATION AND MOLDINGS DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC. PROVIDE ACCESSIBLE HARDWARE.
19. REVERSE DOOR SWING.
20. RELOCATE HISTORIC BAGGAGE ROOM DOOR TO ORIGINAL LOCATION.

LEGEND

= = = EXISTING TO BE REMOVED

NEW

WINDOWS

21. REPAIR, RE-GLAZE AND REFINISH EXISTING. REPLACE MISSING AND BROKEN GLASS.
22. REPLACE MISSING WINDOWS OR WINDOWS WITH MORE THAN 50% DAMAGE.
23. REHABILITATE (E) HARDWARE. REPLACE MISSING AND DAMAGED HARDWARE TO MATCH HISTORIC.
24. RESTORE WINDOWS TO HISTORIC CONFIGURATION WITH REPRODUCTION WINDOW UNITS TO MATCH HISTORIC.
25. REPLACE LATE HISTORIC PERIOD DOOR WITH REPRODUCTION WINDOW UNIT TO MATCH HISTORIC.

FINISHES

26. REPLACE MISSING AND DETERIORATED CEILING AND WALL PLASTER. MATCH HISTORIC TEXTURES
27. REMOVE AND REPLACE ALL CEILING AND WALL PLASTER REQUIRED FOR STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. MATCH HISTORIC TEXTURES.
28. REMOVE (E) GYPSUM BOARD USED FOR PREVIOUS CEILING AND WALL REPAIRS. INSTALL (N) PLASTER OR SHEETROCK. TEXTURE TO MATCH HISTORIC PLASTER TEXTURE.
29. REINSTALL OR REPAIR WOOD TRIMS; REPLACE MISSING AND DETERIORATED TRIMS, MATCH HISTORIC PROFILES. FOR NEW TRIM IN MODIFIED SPACES USE TRIM DIFFERENT BUT COMPATIBLE WITH HISTORIC.
30. REMOVE (E) FLOORING OVERLAY. REPLACE (E) WOOD FLOORING WITH (N) TO MATCH HISTORIC.
31. MODIFY (E) CONCRETE FLOOR TO PROVIDE RAMP.
32. REPAINT CEILINGS AND WALLS.
33. RESTORE NATURAL WOOD FINISHES.

CABINETRY

34. REPAIR AND RESTORE HISTORIC COUNTERS, CABINETS AND RELATED APPURTENANCES (LOBBY, TICKET OFFICE, CONDUCTOR'S ROOM, BAGGAGE ROOM).

ELEVATOR

35. NEW ELEVATOR.

MECHANICAL SYSTEMS

36. NEW HVAC SYSTEMS
37. NEW AUTOMATIC FIRE SUPPRESSION SYSTEM.
38. ALL NEW PLUMBING SYSTEMS.

ELECTRICAL SYSTEMS

39. ALL NEW POWER, LIGHTING, CONTROL, FIRE AND INTRUSION DETECTION, TELEPHONE, DATA, COMMUNICATIONS, AND TV SYSTEMS.

8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC DRAWN: MLS TECH. REVIEW: RLC DATE: 9/97	SUB SHEET NO. A7	TITLE OF SHEET ALTERNATIVE 2 FIRST FLOOR PLAN HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	DRAWING NO. 170 / 25,000 PKG. NO. 740 SHEET 8 OF 12

Drawing 22: Kelso Depot Rehabilitation, Alternative 2, First Floor Plan, No. 170/25,000, Sheet 8 of 12, September 1997, NPS.

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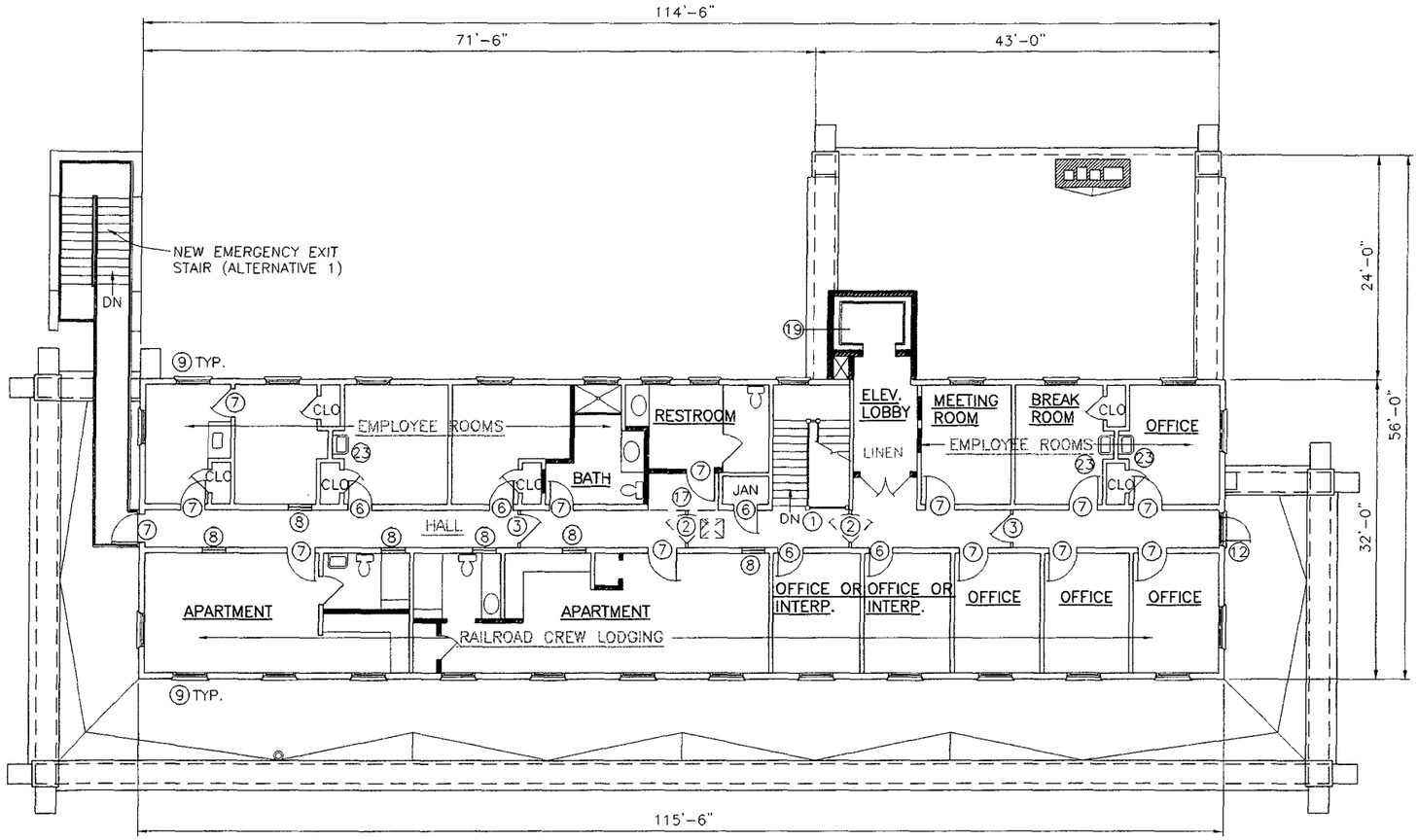

A/A8 SECOND FLOOR PLAN

RECOMMENDED REHABILITATION TREATMENTS

ORIGINAL ROOM NAMES SHOWN AS ROOM NAME

NEW USES SHOWN AS **ROOM NAME**

LEGEND

EXISTING TO BE REMOVED

NEW

GENERAL

1. RESTORE AND REFINISH HISTORIC STAIR.
2. REMOVE (E) HALLWAY FIRE SEPARATION DOORS AND PARTITION.
3. (N) FIRE RATED SEPARATION PARTITIONS AND DOORS WITH AUTOMATIC CLOSERS.
4. INSTALL STRUCTURAL BRACING, LOAD TRANSFER CONNECTORS, BLOCKING, AND BRIDGING IN ATTIC AND SECOND STORY.
5. INSULATE SECOND STORY CEILING AND EXTERIOR WALLS.

DOORS

6. REPAIR AND REFINISH EXISTING. REPLACE MISSING DOORS OR DOORS WITH MORE THAN 50% DAMAGED COMPONENTS. PRESERVE HISTORIC HARDWARE WHERE POSSIBLE.
7. WIDEN OPENING TO 36" (OR PROVIDE NEW OPENING) AND PROVIDE (N) FRAME, DOOR, AND TRIM WITH CONFIGURATION AND MOLDINGS DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC. PROVIDE ACCESSIBLE HARDWARE. RETAIN HISTORIC DOORS, HARDWARE AND TRIM IN COLLECTION.
8. INSTALL SMOKE AND SOUND SEAL. FIX DOOR IN PLACE. REMOVE KNOBS. RETAIN TRIM IN PLACE. INFILL OPENING.

WINDOWS

9. REPAIR, RE-GLAZE AND REFINISH EXISTING. REPLACE MISSING AND BROKEN GLASS.
10. REPLACE MISSING WINDOWS OR WINDOWS WITH MORE THAN 50% DAMAGE.
11. REHABILITATE (E) HARDWARE. REPLACE MISSING AND DAMAGED HARDWARE TO MATCH HISTORIC.
12. REMOVE (E) DOOR. REPLACE WITH REPRODUCTION WINDOW UNIT TO MATCH HISTORIC.

FINISHES

13. REPLACE MISSING AND DETERIORATED CEILING AND WALL PLASTER. MATCH HISTORIC TEXTURES
14. REMOVE AND REPLACE ALL CEILING AND WALL PLASTER REQUIRED FOR STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. MATCH HISTORIC TEXTURES.
15. REINSTALL OR REPAIR WOOD TRIMS; REPLACE MISSING AND DETERIORATED TRIMS. MATCH HISTORIC PROFILES. FOR NEW TRIM IN MODIFIED SPACES USE TRIM DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC.
16. REMOVE (E) LINOLEUM. REPAIR AND REFINISH OR REPLACE WOOD FLOORING AS REQUIRED.
17. MODIFY (E) CONCRETE FLOOR TO PROVIDE RAMP.
18. REPAINT CEILINGS AND WALLS.

ELEVATOR

19. NEW ELEVATOR

MECHANICAL SYSTEMS

20. NEW HVAC SYSTEMS
21. NEW AUTOMATIC FIRE SUPPRESSION SYSTEM.
22. ALL NEW PLUMBING SYSTEMS.
23. RETAIN HISTORIC LAVATORIES WHERE POSSIBLE. SELECTED REMOVED LAVATORIES TO BUILDING ARTIFACT COLLECTION.

ELECTRICAL SYSTEMS

24. ALL NEW POWER, LIGHTING, CONTROL, FIRE AND INTRUSION DETECTION, TELEPHONE, DATA, COMMUNICATIONS, AND TV SYSTEMS.

ON MICROFILM

8 0 8 16
SCALE OF FEET

BLDG. NORTH

DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
CADD MLS	A8	ALTERNATIVE 1 SECOND FLOOR PLAN	170 / 25,000
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	PKG. NO. 740 / SHEET 9 OF 12
DATE: 9/97			

Drawing 23: Kelso Depot Rehabilitation, Alternative 1, Second Floor Plan, No. 170/25,000, Sheet 9 of 12, September 1997, NPS.

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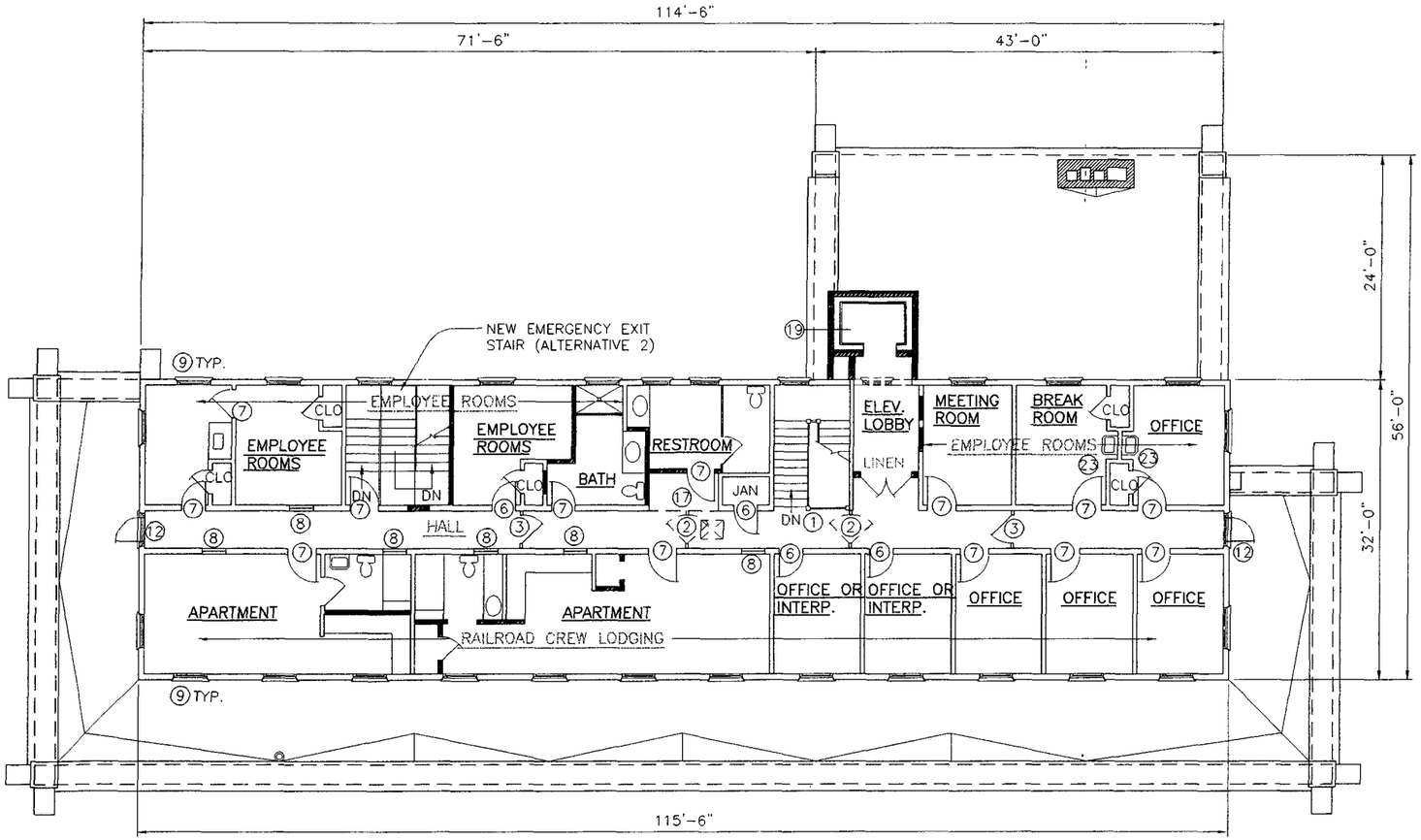


A / A9 SECOND FLOOR PLAN

RECOMMENDED REHABILITATION TREATMENTS

ORIGINAL ROOM NAMES SHOWN AS ROOM NAME

NEW USES SHOWN AS **ROOM NAME**

LEGEND

EXISTING TO BE REMOVED

NEW

GENERAL

1. RESTORE AND REFINISH HISTORIC STAIR.
2. REMOVE (E) HALLWAY FIRE SEPARATION DOORS AND PARTITION.
3. (N) FIRE RATED SEPARATION PARTITIONS AND DOORS WITH AUTOMATIC CLOSERS.
4. INSTALL STRUCTURAL BRACING, LOAD TRANSFER CONNECTORS, BLOCKING, AND BRIDGING IN ATTIC AND SECOND STORY.
5. INSULATE SECOND STORY CEILING AND EXTERIOR WALLS.

DOORS

6. REPAIR AND REFINISH EXISTING. REPLACE MISSING DOORS OR DOORS WITH MORE THAN 50% DAMAGED COMPONENTS. PRESERVE HISTORIC HARDWARE WHERE POSSIBLE.
7. WIDEN OPENING TO 36" (OR PROVIDE NEW OPENING) AND PROVIDE (N) FRAME, DOOR, AND TRIM WITH CONFIGURATION AND MOLDINGS DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC. PROVIDE ACCESSIBLE HARDWARE. RETAIN HISTORIC DOORS, HARDWARE AND TRIM IN COLLECTION.
8. INSTALL SMOKE AND SOUND SEAL. FIX DOOR IN PLACE. REMOVE KNOBS. RETAIN TRIM IN PLACE. INFILL OPENING.

WINDOWS

9. REPAIR, RE-GLAZE AND REFINISH EXISTING. REPLACE MISSING AND BROKEN GLASS.
10. REPLACE MISSING WINDOWS OR WINDOWS WITH MORE THAN 50% DAMAGE.
11. REHABILITATE (E) HARDWARE. REPLACE MISSING AND DAMAGED HARDWARE TO MATCH HISTORIC.
12. REMOVE (E) DOOR. REPLACE WITH REPRODUCTION WINDOW UNIT TO MATCH HISTORIC.

FINISHES

13. REPLACE MISSING AND DETERIORATED CEILING AND WALL PLASTER. MATCH HISTORIC TEXTURES
14. REMOVE AND REPLACE ALL CEILING AND WALL PLASTER REQUIRED FOR STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. MATCH HISTORIC TEXTURES.
15. REINSTALL OR REPAIR WOOD TRIMS; REPLACE MISSING AND DETERIORATED TRIMS, MATCH HISTORIC PROFILES. FOR NEW TRIM IN MODIFIED SPACES USE TRIM DIFFERENT THAN BUT COMPATIBLE WITH HISTORIC.
16. REMOVE (E) LINOLEUM. REPAIR AND REFINISH OR REPLACE WOOD FLOORING AS REQUIRED.
17. MODIFY (E) CONCRETE FLOOR TO PROVIDE RAMP.
18. REPAINT CEILINGS AND WALLS.

ELEVATOR

19. NEW ELEVATOR

MECHANICAL SYSTEMS

20. NEW HVAC SYSTEMS
21. NEW AUTOMATIC FIRE SUPPRESSION SYSTEM.
22. ALL NEW PLUMBING SYSTEMS.
23. RETAIN HISTORIC LAVATORIES WHERE POSSIBLE. SELECTED REMOVED LAVATORIES TO BUILDING ARTIFACT COLLECTION.

ELECTRICAL SYSTEMS

24. ALL NEW POWER, LIGHTING, CONTROL, FIRE AND INTRUSION DETECTION, TELEPHONE, DATA, COMMUNICATIONS, AND TV SYSTEMS.

MICROFILM

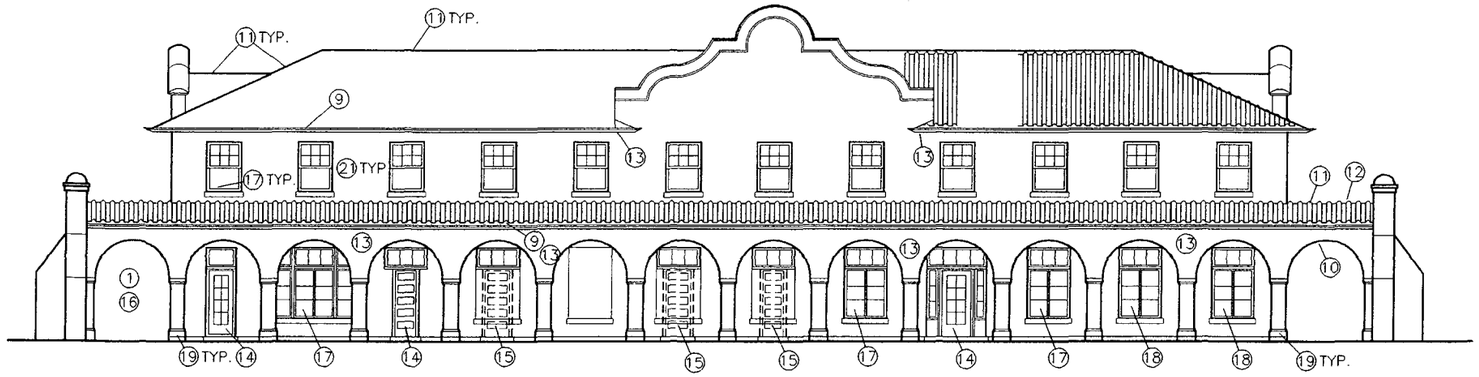
8 0 8 16
SCALE OF FEET

BLDG. NORTH

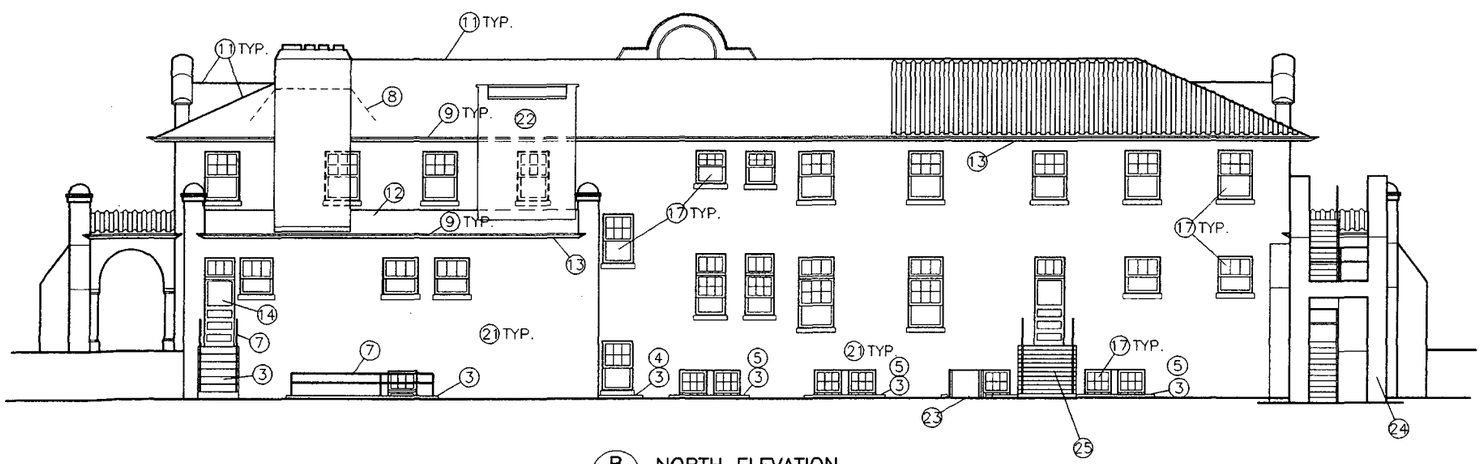
DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
CADD: MLS	A9	ALTERNATIVE 2 SECOND FLOOR PLAN	170 / 25,000
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	PKG. NO. 740 / SHEET 10 OF 12
DATE: 9/97			

10/2/97 13:01 M:\SIKES.PA\35\A9ALT2

Drawing 24: Kelso Depot Rehabilitation, Alternative 2, Second Floor Plan, No. 170/25,000, Sheet 10 of 12, September 1997, NPS.



A / A10 SOUTH ELEVATION



B / A10 NORTH ELEVATION

RECOMMENDED REHABILITATION TREATMENTS

REMOVAL

(1) REMOVE WEST ARCADE ADDITION (NOT SHOWN ON ELEVATION)

CONCRETE

(2) REPLACE DETERIORATED REINFORCED CONCRETE.

(3) REPAIR DAMAGED CONCRETE.

METALS

(4) REPLACE AREAWAY GRATES, PROVIDE NEW SCREEN.

(5) REPAIR AND REPAINT EXISTING AREAWAY GRATES, REPLACE SCREENS.

(6) REPLACE ACCESS HATCH

(7) REPAIR/REPLACE DETERIORATED STEEL RAILING COMPONENTS, REPAINT.

(8) PROVIDE NEW CHIMNEY BRACING.

WOOD

(9) REPLACE DETERIORATED AND MISSING TRIM AND SUPPORT MEMBERS. PAINT ALL EXPOSED WOOD.

(10) REPLACE/REPAIR DETERIORATED ARCADE CEILING BOARDS, TRIM AND FRAMING, AND PAINT.

ROOFING AND ROOF DRAINAGE

(11) PROVIDE WEATHER CLOSURE AS REQUIRED AT TILE ROOFING RIDGES, VALLEYS, WALLS AND ARCADE PARAPETS.

(12) VERIFY INTEGRITY OF LOW-SLOPED ROOFING AND FLASHING SYSTEMS. REPAIR AS REQUIRED.

(13) REPAIR SOUND, REPLACE DETERIORATED AND MISSING GUTTERS, DOWN SPOUTS, HOPPERS AND BRACKETS. MATCH HISTORIC DETAILS.

DOORS

(14) REPAIR AND REFINISH EXISTING DOOR, FRAME AND TRIM. REVERSE DOOR SWING. PROVIDE ACCESSIBLE HARDWARE.

(15) REMOVE 1948 AND 1981 DOORS, RESTORE OPENINGS AND PROVIDE NEW WINDOW UNITS TO MATCH HISTORIC.

(16) RESTORE HISTORIC BAGGAGE ROOM DOOR AND REINSTALL IN ORIGINAL LOCATION.

WINDOWS

(17) REPAIR/RESTORE EXISTING WINDOW AND REFINISH.

(18) REPLACE EXISTING MISSING, DETERIORATED OR MODIFIED WINDOW UNIT WITH REPRODUCTION TO MATCH HISTORIC.

STUCCO

(19) REPLACE DETERIORATED AND DAMAGED STUCCO AND SUBSTRATE MATERIALS.

(20) REPLACE UNSOUND AND POORLY EXECUTED PREVIOUS STUCCO REPAIRS AND PATCHES.

(21) REPAIR/REPLACE STUCCO AT UTILITY AND ANCHOR PENETRATIONS, DAMAGED LOCATIONS AND MAJOR CRACKS AND DELAMINATED AREAS.

ACCESSIBILITY AND EGRESS

(22) NEW ELEVATOR SHAFT

(23) NEW BASEMENT EGRESS

(24) NEW ALTERNATIVE 1 EXTERIOR EGRESS STAIR.

(25) NEW ALTERNATIVE 2 EGRESS STAIR (WITH INTERIOR STAIR).

ON MICROFILM

8 0 8 16
SCALE OF FEET

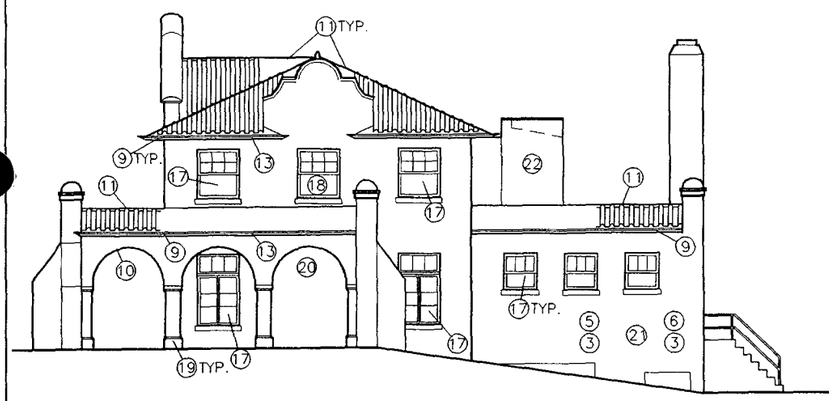
DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
CADD MLS	A10	NORTH AND SOUTH ELEVATIONS	170 / 25,000
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	PKG. NO. 740 / SHEET 11 OF 12
DATE: 9/97			

Drawing 25: Kelso Depot Rehabilitation, North and South Elevations, No. 170/25,000, Sheet 11 of 12, September 1997, NPS.

10/2/97 11:59 M:\SIKES P\...35\A10ELEV

A / A11 EAST ELEVATION
EXISTING CONDITION

C / A11 WEST ELEVATION
EXISTING CONDITION



B / A11 EAST ELEVATION
ALTERNATIVE 1 AND 2

D / A11 WEST ELEVATION
ALTERNATIVE 1

NOTE
TREATMENTS SHOWN ON ALTERNATIVE 2 ALSO APPLY TO ALTERNATIVE 1 EXCEPT AT EMERGENCY EXIT

E / A11 WEST ELEVATION
ALTERNATIVE 2

RECOMMENDED REHABILITATION TREATMENTS

REMOVAL

(1) REMOVE WEST ARCADE ADDITION

CONCRETE

(2) REPLACE DETERIORATED REINFORCED CONCRETE.

(3) REPAIR DAMAGED CONCRETE.

METALS

(4) REPLACE AREAWAY GRATES. PROVIDE NEW SCREEN.

(5) REPAIR AND REPAINT EXISTING AREAWAY GRATES. REPLACE SCREENS.

(6) REPLACE ACCESS HATCH

(7) REPAIR/REPLACE DETERIORATED STEEL RAILING COMPONENTS, REPAINT.

(8) PROVIDE NEW CHIMNEY BRACING.

WOOD

(9) REPLACE DETERIORATED AND MISSING TRIM AND SUPPORT MEMBERS. PAINT ALL EXPOSED WOOD.

(10) REPLACE/REPAIR DETERIORATED ARCADE CEILING BOARDS, TRIM AND FRAMING, AND PAINT.

ROOFING AND ROOF DRAINAGE

(11) PROVIDE WEATHER CLOSURE AS REQUIRED AT TILE ROOFING RIDGES, VALLEYS, WALLS AND ARCADE PARAPETS.

(12) VERIFY INTEGRITY OF LOW-SLOPED ROOFING AND FLASHING SYSTEMS. REPAIR AS REQUIRED.

(13) REPAIR SOUND, REPLACE DETERIORATED AND MISSING GUTTERS, DOWN SPOUTS, HOPPERS AND BRACKETS. MATCH HISTORIC DETAILS.

DOORS

(14) REPAIR AND REFINISH EXISTING DOOR, FRAME AND TRIM. REVERSE DOOR SWING. PROVIDE ACCESSIBLE HARDWARE.

(15) REMOVE 1948 AND 1981 DOORS, RESTORE OPENINGS AND PROVIDE NEW WINDOW UNITS TO MATCH HISTORIC.

(16) RESTORE HISTORIC BAGGAGE ROOM DOOR AND REINSTALL IN ORIGINAL LOCATION.

WINDOWS

(17) REPAIR/RESTORE EXISTING WINDOW AND REFINISH.

(18) REPLACE EXISTING MISSING, DETERIORATED OR MODIFIED WINDOW UNIT WITH REPRODUCTION TO MATCH HISTORIC.

STUCCO

(19) REPLACE DETERIORATED AND DAMAGED STUCCO AND SUBSTRATE MATERIALS.

(20) REPLACE UNSOUND AND POORLY EXECUTED PREVIOUS STUCCO REPAIRS AND PATCHES.

(21) REPAIR/REPLACE STUCCO AT UTILITY AND ANCHOR PENETRATIONS, DAMAGED LOCATIONS AND MAJOR CRACKS AND DELAMINATED AREAS.

ACCESSIBILITY AND EGRESS

(22) NEW ELEVATOR SHAFT

(23) NEW BASEMENT EGRESS

(24) NEW ALTERNATIVE 1 EXTERIOR EGRESS STAIR.

(25) NEW ALTERNATIVE 2 EGRESS STAIR (WITH INTERIOR STAIR).

ON MICROFILM

8 0 8 16
SCALE OF FEET

DESIGNED: RLC	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO. 170 25,000
CADD MLS	A11	WEST AND EAST ELEVATIONS	PKG. NO. 740 / SHEET 12 OF 12
TECH. REVIEW: RLC		HISTORIC STRUCTURES REPORT MOJAVE NATIONAL PRESERVE	
DATE: 9/97			

10/23/97 12:00 M.SIKES P:\MOJ...\35\A11ELEV

Drawing 26: Kelso Depot Rehabilitation, West and East Elevations, No. 170/25,000, Sheet 12 of 12, September 1997, NPS.

APPENDIXES

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APPENDIX A: CHRONOLOGY OF DEVELOPMENT OF THE KELSO DEPOT AND ITS GROUNDS

YEAR	MONTH/DAY	EVENT OR DEVELOPMENT
1901	March 20	San Pedro, Los Angeles and Salt Lake Railroad formed by William Andrews Clark and his colleagues.
1902	July 9	Union Pacific Railroad obtained half ownership of S.P.,L.A.& S.L.R.R.
1904	April	San Pedro, Los Angeles & Salt Lake Railroad construction forces reach Kelso
1905	January 30	Last Spike driven marking completion of the railroad, between the California/Nevada border and Las Vegas at Siding No. 18.
1905	February 9	First through train begins operation between Los Angeles and Salt Lake City.
1905	May 1	Railroad open for business .
1916	August 25	Name of railroad changed to Los Angeles and Salt Lake Railroad
1921	April 27	W.A. Clark sold his half interest in the railroad to the Union Pacific, which thereafter had total ownership of the Salt Lake Route
1923	February 7	Plans drawn for addition to coal house behind depot
1923	May 31	First set of plans for depot drawn in L.A.& S.L.R.R. Engineering Department
1923	June 1	Initial survey of land for depot by L.A. & S.L. Field Engineers Clausen, Bailey, and Balling
1923	July 6	Second floor and roof plans revised
1923	July 8	Second floor and roof plans further revised
1923	July 23	Drawing of Elevations Revised
1923	Unknown	Construction begun (perhaps in July)
1923	November	Kelso first listed as a meal top for passenger trains in *The Official Guide*
1924	February 7	Location plan further revised
1924	March 2	Depot opened for business
1924	March 10	Photo from rear shows building completed, landscaping not yet begun
1924	June 15	Depot reported "physically completed"
1924	September 9	Photograph shows landscaping complete

1924	December 12	Location plan still further revised
1926	January 30	Vitrified brick station platform to replace asphalt platform in front of depot completed
1929	August	52 trees, mostly cottonwoods, in place behind depot by this date (possibly since 1924)
1930	August	Kelso listed for last time as a meal stop for passenger trains in *The Official Guide*
1931	February	Asphalt extension to station platform built
1938	October 1-3	Room cooler installed in Lunch Room
1939	January 17-18	Drinking fountain with refrigeration unit installed in second floor hallway
1942		Based on oral history, possible date west end of depot was enclosed to form added baggage room
1942	July 15-29	Depot boiler tube and woven wire fences removed for World War II scrap drive
1948		Roundhouse demolished, and as a consequence, first room in depot east of Ticket & Telegraph Office converted to Roundhouse Foreman's office, second room east of Ticket Office converted to Roadmaster's office, both by B.& B. Department converting window looking onto arcade into a door from the outside
1949		Fire escape made from metal stairway removed from Power House interior installed at northeast end of depot, and window at end of upstairs hall converted into a door to provide access around this time.
1949	June 29 - July 14	Railroad remodeled lunch room, replaced "U"-shaped counter with straight counter with 12 stools, made other changes
1955	Dec. 27, 1954 - March 18	Railroad further remodeled lunch room, in part to meet State Health Department codes. Kitchen stairway to basement removed. Chickenwire partition in kitchen added. Shelves added. Other work done.
1960	July 25 - Dec. 29, 1961	Public power reaches Kelso and Depot hooked up - dates reflect demolition of Kelso Power House
1961	April 21 - June 30	Fire escape in the form of a metal stairway added to southwest end of depot and window at southwest end of hallway converted into door to provide access.
1964	August 14	Kelso Agency, that is, the Depot function, i.e. Ticket and Telegraph Office, Baggage and REA Express, closed at end of work day.
1972	March 10	B.& B. Gang completes construction of partition separating Lunch Room from Lobby, although it did not go clear to the ceiling
1981		Wooden bars added above Lunch Room partition, reaching to ceiling.
1985	June 30	Cafe or Lunch Room closed for the last time at midnight

1988	January 1	Los Angeles & Salt Lake Railroad dissolved and merged into the Union Pacific Railroad
1991	September 30	National Register of Historic Places Registration Form on the Kelso Depot and associated structures completed by P.S. Preservation Services under contract to the Bureau of Land Management.
1992	September	Bureau of Land Management acquired depot from the Union Pacific
1992	August 19	Union Pacific officials sign Donative Bill of Sale of the Kelso Depot to B.L.M.
1992	August 28	Bill of Sale recorded by County
1992	November 21	Ceremony transferring Depot and Grounds to Bureau of Land Management held on a Saturday at Kelso
1993	April 20	Bureau of Land Management contracted for stabilization of depot, new tile roof, removal of fire escapes, removal and storage of vitrified brick station platform bricks, removal of electroliers to basement, elimination of diseased Chinese Elm trees, other work
1994	October 31	Mojave National Preserve Created transferring Kelso Depot to National Park Service
1996		Kelso Depot included in new book on *Great American Railroad Stations*
1997	May 10	Amtrak passenger train *Desert Wind* makes last run through Kelso
1997	September	National Park Service completed Historic Structure Report on Kelso Depot

APPENDIX B: THE PLACE OF THE KELSO DEPOT IN MISSION REVIVAL ARCHITECTURE

During the 1880s, a great deal of interest, overly romanticized interest, developed in the era of the Spanish missions in California under the reign of the Spanish Empire and later, Mexico. This interest had historical, literary, and architectural facets. The architectural facet took the form of a revival of mission architectural design applied to public and private buildings, a "revival" of construction in the style of the missions, though not necessarily in same building materials. This meant especially the application of long collonades with arched openings on square piers, or arcades, espadana parapets, roofs of barrel tiles, and bell towers, to modern buildings. A hallmark of the style was simplicity, and stuccoed exteriors imitating the mud plaster applied over the adobe bricks of the original missions. Architects first applied the style to railroad depots, hotels, government buildings, and commercial structures, but eventually made the transition to individual homes, and even apartment buildings.[408]

The world fair in Chicago in 1893 known as the Columbian Exposition featured buildings erected by each state. Two, California and Texas, built in the Mission Revival style, and this great fair generally is regarded as kicking off the popularity of Mission Revival in the nation and giving it national prominence.[409] The style increased in popularity thereafter, and the period usually assigned to the greatest popularity of Mission Revival architecture extends from roughly 1890 to 1920.[410]

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408. David Gebhard, "The Spanish Colonial Revival in Southern California (1895-1930)," *Journal of the Society of Architectural Historians*, Vol. 26, No. 2, May 1967, pp. 131-135.

409. Tara Elisabeth Travis, "The Mission Revival Style Railroad Depots of Texas." Ts., M.A. Thesis, The University of Texas at Austin, May 1993, pp. 83-85, 87. It is interesting to note that of the two states represented by mission revival architecture at the Columbian Exposition, California seems to have had more influence. When the Waco Cotton Palace was erected in Texas in 1894, it copied not the Texas building at the Columbian Exposition of a year earlier, but the California building. Furthermore, one of the "best Mission Revival designs in Texas came directly from California and forecast one of the most prolific adaptations of Spanish design building to a new building type," namely, the Southern Pacific Railroad Passenger Station in San Antonio, Texas. See James W. Steely, "Spanish Mission Revival in Twentieth-Century Architecture," in *Hispanic Texas: A Historical Guide*, edited by Helen Simons and Cathryn A. Hoyt, pp. 95-106.

It is an observation of the author of this study, having stayed in the Alvarado Hotel and visited the adjacent depot in February 1969, a year before the hotel was demolished (the depot burned several years ago), that Chicago architect Charles Whittlesey's grand Harvey House and depot built in Albuquerque in 1902 for the Atchison, Topeka & Santa Fe Railway exhibited a distinctly Californian mission flavor, rather than reflecting the architectural detail of surrounding New Mexican missions.

It is also the author's observation that, based on visits to Mission San Antonio de Valero (the Alamo), the other missions in the chain near San Antonio (Nuestra Senora de la Purisima Concepcion de Acuna, San Francisco de la Espada, San Juan Capistrano, and San Jose y San Miguel de Aguayo), and La Purisima de Socorro south of El Paso, having visited in New Mexico the ruins of Nuestra Senora de los Angeles de Porciuncula de los Pecos as well as the intact San Jose de Laguna and San Esteban del Rey de Acoma, and in Arizona having seen San Jose de Tumacacori and San Xavier del Bac as well as the ruins of the *visitas* at Calabasas and Guevavi, and as a native Californian having visited, many more than once, San Diego de Alcala, San Luis Rey de Francia, San Juan Capistrano, San Gabriel Arcangel, Santa Barbara, Santa Ines, La Purisima Concepcion, San Luis Obispo de Tolosa, San Miguel Arcangel, San Antonio de Padua, Nuestra Senora de la Soledad, San Juan Bautista, San Francisco de Asis, San Francisco Solano, and my favorite San Carlos Borromeo del Rio Carmelo, there are regional differences from one colonial province to another. Alta California missions tend to be constructed of adobe bricks finished with adobe plaster. Missions of the part of northern Sonora now the state of Arizona also feature adobe walls with mud plaster. Tejas missions tend to be constructed of stone. In Nuevo Mexico, *both* adobe and stone missions exist. There are minor stylistic differences from one province to another, as well.

410. Architectural historian David Gebhard, *ibid.*, p. 136. described the mission revival style as being used principally from 1895 to 1920. Karen J. Weitze, *California's Mission Revival*, p. 139, said that by 1918 mission revival architecture was no longer fashionable. Grady Gammage, in *Mission and Mediterranean Revival Railroad Stations*, p. 3, said that "By 1910 the style produced many of the resort hotels for which it is still best known. Within only about ten years after that date, however,

While most Mission Revival architecture reflected the architectural elements of California or southwestern Spanish missions, there were two variant offshoots within the style: Moorish architecture, inspired by the notable buildings in Spain erected during occupation by the Moors, of Islamic and North African origins; and the pueblo style, inspired by ancient generally adobe buildings of the Indian pueblos of New Mexico.[411] These are considered components of Mission Revival style, but are not relevant to discussions of the Kelso Depot, although the Atchison, Topeka & Santa Fe Railway's depot and Harvey House in Barstow, California, not far west of Kelso, featured Moorish revival architectural style.

In 1915, one of two great international fairs held in California, the Panama-California International Exposition in San Diego, popularized what may be viewed as either a branching off from Mission Revival, or an entirely new style though one also deriving from Spanish origins.[412] This has been termed by architectural historians Spanish Colonial Revival, and is distinct from Mission Revival. Characterized above all by Churrigueresque ornamentation derived from the baroque architecture of Spain and its colonies in the late 17th and early 18th Centuries, some regard it as a distinct successor to Mission Revival, and consider Mission Revival as coming to an end in 1915 or 1920 and being entirely superseded by Spanish Colonial Revival.[413] It seems more likely that the popularity of Mission Revival diminished as Spanish Colonial Revival style increased, but that the two continued on parallel tracks, one on an ascending grade, the other on a descending grade.

The question arises, was the Kelso Depot of Mission Revival style or of Spanish Colonial Revival style? If one were to accept either 1915 or 1920 as an absolute cut-off in the construction of Mission Revival style, then the Kelso Depot would be classified as Spanish Colonial Revival. However, that seems too simplistic. Rather, the Kelso Depot's style should be evaluated against the characteristics of Mission Revival architecture versus those of Spanish Colonial Revival architecture.

Mission Revival architecture was characterized by:

1. A simplicity of design, detail, and lack of decoration
2. Stucco or concrete exterior finish imitating the mud plaster of Spanish missions
3. Roofs finished in barrel tiles, often red
4. Espadana or stepped and scrolled parapets
5. Quatrefoil windows

---

the Mission Revival in its original form had nearly ceased to exist."

411. Travis, *ibid*, p. 105; Rexford Newcomb, *Spanish Colonial Architecture in the United States*, pp. 105-109, features pueblo revival architecture.

412. The other exposition in 1915 was the Panama Pacific International Exposition in San Francisco.

413. Travis, Ibid., pp. 99-101.

6. Collonades or arcades, covered walkways, featuring a number of arches springing from square columns or piers
7. Overhanging eaves
8. One or more bell towers or faux bell towers

Spanish colonial architecture was characterized by:

1. A complexity of design, detail, and much decoration
2. Churrigueresque ornamentation, often "running wild" over buildings
3. Lack of overhanging eaves
4. Elaborate door or window architraves, spindle woodwork, wrought iron decoration or window grilles
5. Possibly other "Mediterranean" influences

In analyzing the architectural style of the Kelso Depot, it is clear that the plan or layout of the Kelso Depot is strictly utilitarian, but the exterior treatment meets all of the above defining elements of Mission Revival style except the last, for it lacks any bell tower or faux bell tower. On the other hand, it has only one small element of the Spanish Colonial Revival style: wrought iron trefoil-ended straps holding the copper drainpipes in place. Despite its late design date, 1923, it appears that the Kelso Depot still represents predominately Mission Revival style rather than Spanish Colonial Revival style.

APPENDIX C: TEXT OF NATIONAL REGISTER REGISTRATION FORM FOR THE KELSO DEPOT

The research in this historic structures report has corrected certain errors in the National Register registration form, such as the date of the end of helper service out of Kelso, certain other dates, the date of enclosure of the west end of the arcade or colonnade, and the movement of the original depot across the tracks (it was actually moved northeast along the same side of the tracks and became the Roadmaster's office and house), but the registration form still contains much useful information, and its text is reproduced herewith. Certain of its photographs have been included among the illustrations in this report.

NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-001

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

==========
1. Name of Property
==========
historic name: Kelso Club and Restaurant_____
other name/site number: Kelso Station_____

==========
2. Location
==========
street & number: East side Kelbaker Rd. at Union Pacific RR crossing___
not for publication: N/A
city/town: Kelso_____ vicinity:N/A
state: CA county: San Bernardino_____ code: 071 zip code:

==========
3. Classification
==========
Ownership of Property: public_____

Category of Property: building_____

Number of Resources within Property:

Contributing		Noncontributing
__2__	buildings	__0__
_____	sites	_____
_____	structures	_____
_____	objects	_____
__2__	Total	__0__

Number of contributing resources previously listed in the National Register: __0__

Name of related multiple property listing: N/A_____

==========

4. State/Federal Agency Certification

==========

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ____ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ____ meets ____ does not meet the National Register Criteria. ___ See continuation sheet.

_____ _____

Signature of certifying official Date

_____

State or Federal agency and bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria. ___ See continuation sheet.

_____ _____

Signature of commenting or other official Date

_____

State or Federal agency and bureau

==========

5. National Park Service Certification

==========

I, hereby certify that this property is:

____ entered in the National Register _____ _____
___ See continuation sheet.

____ determined eligible for the National Register _____ _____
___ See continuation sheet.

____ determined not eligible for the National Register _____ _____

____ removed from the National Register _____ _____

____ other (explain): _____

_____ _____ _____

Signature of Keeper Date of Action

==========

6. Function or Use

==========

Historic: Transportation_____ **Sub:** Rail-related_____
Domestic Institutional housing
Commerce/Trade Restaurant

Current: Vacant_____ **Sub:** _____

==========

7. Description

==========

Architectural Classification:

Late 19th and Early
20th Century Revivals

Other Description: California Mission Revival

Materials: foundation Reinforced concrete **roof** Tile_____
walls Stucco____ **other**

Describe present and historic physical appearance.
_X_ See continuation sheet.

==========

8. Statement of Significance

==========

Certifying official has considered the significance of this property in relation to other properties: _____.

Applicable National Register Criteria: A, C

Criteria Considerations (Exceptions): _____

Areas of Significance: Architecture_____
Transportation_____
Community Development_____

Period(s) of Significance: 1925-1945

Significant Dates: 1925

Significant Person(s): N/A_____

Cultural Affiliation: N/A_____

Architect/Builder: Office of the Chief Engineer, Los Angeles & Salt Lake RR

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.
_X_ See continuation sheet.

==========

9. Major Bibliographical References

==========

_X_ See continuation sheet.

Previous documentation on file (NPS):

_ preliminary determination of individual listing (36 CFR 67) has been requested.
_ previously listed in the National Register
_ previously determined eligible by the National Register
_ designated a National Historic Landmark
_ recorded by Historic American Buildings Survey # _____
_ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data:

_ State historic preservation office
_ Other state agency
X Federal agency: Bureau of Land Management
_ Local government
_ University
X Other -- Specify Repository: Union Pacific Railroad Archives____

==========

10. Geographical Data

==========

Acreage of Property: 1.95 acres

UTM References:	Zone	Easting	Northing		Zone	Easting	Northing
A	11	622960	3875030	B	__	_____	_____
C	__	_____	_____	D	__	_____	_____

___ See continuation sheet.

Verbal Boundary Description: _X_ See continuation sheet

Boundary Justification: _X_ See continuation sheet

==========

11. Form Prepared By

==========

Name/Title: Bonnie W. Parks, Principal; John W. Snyder, Principal_____
Organization: P.S. Preservation Services_____ Date: September 30, 1991
Street & Number: P.O. Box 191275_____ Telephone: (916) 736-1918__
City or Town: Sacramento_____ State: CA ZIP: 95819-1275__

NPS Form 10-900-a
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United States Department of the Interior
National Park Service

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Station Exterior

The Kelso Station (originally, Club House and Restaurant) is a two-story, twelve bay by three bay (approximately 44" x 138'), Mission Revival style structure, clad in stucco on metal lath, under a hipped, Mission tile roof. Surrounded on three sides by a buttressed arcade (called out on original plans as "cloister," hereinafter arcade), it is essentially symmetrically massed about a central element topped with a south-facing espadaña parapet on a cross gable. The cross-gable espadaña parapet is repeated on the east and west elevations. On the east side of the unembellished rear of the structure is a one-story wing which houses the kitchen.

NOTE: The building axis is aligned southwest-to-northeast. However, for the purposes of this description, directions are referenced to general railroad directions of travel, i.e., west-east. Thus the southwest end of the building is considered the west end, and the northeast end the east end. The principal (south) facade actually faces southeast.

The south (trackside) facade of the structure, has seen minor alterations in the form of several windows being converted to doors, and infill of the west end of the arcade. The espadaña parapet spans the sixth through eighth bays. Centered in the espadaña is the Union Pacific Railroad herald, as called out on the original plans. This herald, with its diagonal "Overland" logo, is as designed, but was modified and modernized during the station's middle years; it has recently been restored to its original appearance with the "Overland" logo. The regularly-spaced windows on the second story are 6/1 double-hung sash. On the ground floor, the fenestration consisted of doors and single windows, except in the second bay on the west which was lighted by a tripartite window, and the fifth bay which, is blind. Four of these windows have been converted to doors, though the surmounting transoms remain. The remaining windows, lighting the lobby and lunch room, are transomed six-light casement windows. All the windows are on concrete lug sills. The entrance to the lobby, which is off-center in the ninth bay, consists of an eight-light door, flanked by four-light sidelights and surmounted by a four-light transom.

The one-story arcade which spans the front and sides (south side, east and west ends) of the structure is under a flat roof with a three-course Mission tile parapet. Over the crown of the arch centered under the second-story espadaña parapet is the name "KELSO," in compressed Railroad Roman, metal letters. The pillars of the arches have moulded caps at the springing line, and stepped bases. Each end pillar is buttressed on the front and side, and capped with a hemisphere on a moulded base. The floor of the arcade is scored, red-tinted concrete.

Square downspouts, from the gutters on the roof adjacent to the parapets on both the facade and the east and west ends, feature a round collector box just below the elbow. The downspouts are attached to the building with a large, decorative metal straps with stylized *fleur-de-lis* ends. On the arcade level of the facade, the downspouts are topped with square, paneled collector boxes, and are attached by the same decorative metal straps. (See photo 8) The plans, and historic photos, show the collector boxes on the east and west facades to have been of the same design, but presently they are deeper units with a square opening at the top which tapers to meet the downspout. One of this type is also on the west end of the principal facade. Awnings originally shaded the second story windows, as can be seen in the historical photo (A) attached.

The east and west elevations of the two-story portion are similar except for the frame infill of the west arcade, an easily reversed alteration which dates from the end of passenger service to Kelso in the 1960s, when this end of the station was converted for storage and workshop use by the Bridge & Building/Signal Maintenance forces. Behind the infill, there was originally a two-leaf door in the north bay and a typical transomed casement on the south. The center bay was blind. The espadaña parapet tops the center of the three bays. Within the parapet is a quatrefoil vent segmented with sections of barrel tiles. On the west end, the fenestration pattern of the facade was continued on the second floor. The center window, however, has been changed into a door, to which a fire escape has been attached; the stairs run toward the rear (north side) of the structure. The arcade wraps around the full width of the west elevation, and terminates in a buttressed pier topped with a hemisphere on a moulded base.

The second floor of the east elevation is like that of the west. Here, too, a fire escape is attached at the center second floor

window, now altered to a door; the stairs here run directly east. On the first floor, the arcade terminates, with the same details, at the end of the second bay. The fenestration pattern appears to have been altered on this end. The plans show three typical windows; presently, however, that in the first bay is a door and that in the second, a shorter window. The date of these alterations is indeterminable, but most likely occurred after the 1962 closure of the station agency at Kelso, and thus post-date the period of significance. Window wells below grade in the two northern bays house paired 4/4 double-hung windows.

At the rear of this portion of the structure is the one-story kitchen wing. Three bays deep, this rectangular wing has a flat roof with a three-course Mission-tile parapet on the east and west sides terminating in the same hemispherically-topped piers as the arcades. On the east elevation, there are two 6/6 double-hung sash windows in wells below grade. A tall chimney, which served the basement boiler room, extends from the rear of the roof. At the rear, six concrete steps, topped by a pipe rail, lead to the door, and similar steps lead below grade to a basement door.

The grade at the rear of the structure is slightly lower than that at front. This (north) elevation has not been changed at all. The windows that light the interior of the first and second stories are of varying length and width. The shortest windows are 3/1 sash, the longer ones are 6/1 sash, and the longest ones are 6/1 sash topped by a three-light transom. The basement well-windows are consistently 6/6 sash, the upper sash of which protrude above grade. Square downspouts, without collector boxes, are attached with the same decorative metal straps: one on the west portion of the two-story unit and one on the west side of the rear of the kitchen wing.

Always intended to have park-like grounds, the station's immediate surroundings form an oasis in the desert. The building is surrounded by lawn, shaded on the front and sides by numerous Chinese elm and palm trees, an arrangement which shows in a ca.1925 photo. This same historical photo shows the sides to have been planted with Joshua trees, which probably died after the elm trees grew large and created too much shade for their survival. Published plans [Signor] updated to 1944 call out cottonwood trees behind the station, indicating that these dated to the period of significance. Two brick walks, called out in the original plans, lead from the arcade to the platform. These, and the platform, were originally bordered by a two-rail fence

of concrete posts and pipes. Original plans called for a platform of oil and gravel; by 1944 this had been reconstructed in brick to match the walks, and thus the platform also dates to the period of significance. An original brick walkway at the west end of the building has a thin concrete overlay, easily removed; since plans updated to 1944 still showed this area in brick, the concrete overlay post-dates the period of significance, likely dating to the 1950s or 1960s. Bordering the inside edges of the walkways at present are empty beds with sawtooth brick borders; these beds last contained box hedges, and immature plantings are visible in these beds in a ca.1925 photo, indicating planting beds in these locations date to the period of significance. Other elements which date to the period of significance are six ornamental electroliers on cast-concrete, Tuscan-column standards placed along the platform: two at the ends, and two flanking each of the walkways. The acorn globes, however, are missing. On the east end of the lawn is a flagpole; not shown on original plans, it likely dates to the World War II years and thus to the period of significance. On the west end of the lawn is a lighted signpost that once bore a sign reading "KELSO" (see historic photo H), and which dates to the period of significance. Another sign, reading "LUNCH ROOM," was originally located along the walk just in front of the entrance door (see historic photos D, E, and F).

Station Interior

First Floor

The first floor is generally divided into two general areas, the principal public rooms on the east, and the private, secondary rooms on the west.

The principal space on the first floor consists of the lobby and the lunch room, originally a combined space located in the east portion of the building. Entering the lobby, the original cigar case and hotel check-in counter are to the left and are still intact. The cigar case is of oak veneer with a glass display case beneath the counter; the L-shaped check-in counter, with its rounded corner, is a separate unit that abuts the end of the cigar case.

At the rear of the room on the left is the central stair case, very much intact both above and below the lobby. It is of wood construction in the Craftsman style, featuring simple, slightly

battered newel posts and a rail made of flat boards with an "I" cut-out in the center of each. These elements were originally stained and varnished. The stair treads have brown rubberized treads added over the wood risers; those leading from the lobby to the second floor are nosed in aluminum; those leading down to the basement have old brass nosings with embossed, raised diamond anti-skid patterns on them.

To the right (east) of the lobby is the lunch room, which originally opened directly onto the lobby, but is now separated from it by a windowed partition with centered, paired doors. This new wall is non-load-bearing, easily removable, and post-dates the period of significance. A portion (about a third) of the lunch counter remains. Originally "U-shaped" and surrounded by stools, at some point it was reduced in size and moved closer to the east wall. The tubular supports on which the stools sat are still in place.

Common to the lobby/lunch room space is the, still intact, character-defining surface treatment of textured plaster ceilings and walls, above a panel-and-batten wainscot about five feet in height. (This treatment was, in fact, common to most interior walls and much remains intact throughout the building.) The plans indicate three ceiling fans in the lobby/lunch room area which are no longer present, but the "footprints" of the electrical boxes can be seen on the ceiling. The floor surfaces in this area--originally cement--are now covered in asphaltic or linoleum tiles of indeterminable date, but which appear to post-date the period of significance.

Directly behind the lunch room is the kitchen. Immediately to the left upon entering the kitchen is a shaft that originally contained secondary stairs to the basement. At the rear is an exterior door leading to steps down to grade. No original furnishings are left intact in this room.

To the left of the lobby, a hall leads to rooms called out on the plans as bathroom, rooms for "female help," "manager's rooms," "ticket office," and "baggage r'm." These rooms and central corridor have been somewhat remodeled: the ceiling has been lowered throughout and all walls rebuilt of new framing/sheetrock. The original doors and mouldings have been reused in remodeling these areas. On exterior walls some windows have been changed to doors as discussed in the exterior description above.

Second Floor

On the south side of the central corridor on the second floor are twelve rooms originally designed for railroad crew. They are

identical rooms with a single central light in the ceiling. On the north side, flanking the stair case, bathroom and linen room are eight rooms for "male help" with built in closets. A total of six bed frames, which appear to be original, remain in the crew and "male help" rooms; they consist of head- and footboards of formed tubular steel, with dark wood-graining. Also remaining in the crew rooms are a number of narrow single lockers, required since these rooms had no closets.

To the left at the top of the stairs is the linen room which has its original wall shelving intact, and a steam radiator under the window. The bathroom, immediately to the right of the stairs, has been modified. Originally there was a shower room, with anteroom for changing, immediately to the left of the door. Behind and to the left of the shower room was a tub room. The sinks were directly in front of the door, and two toilets and one urinal were to the right of the sinks. The spaces and locations have all remained the same; the fixtures have changed. The original "Keene's cement" shower has been closed off at the anteroom by converting its door to a closet opening. The tub in the tub room has been removed, and two additional free-standing showers have been installed. In the sink/toilet area, one original enameled steel toilet is intact in the northernmost stall, while a modern commode is in the adjoining stall. A modern urinal occupies the location of the marble originals. Both original sinks have been replaced.

Basement

The basement extends under the entire structure east to west, but not north to south. The stairs terminate in a small hall, to the east of which are utility spaces, and to the west of which are the club rooms. The utility rooms consisted of a locker room, a toilet room, a boiler room, a supply room, and a store room, while the club rooms were a "Billiard Room" and "Reading Room."

The oil-fired boiler has been removed from the boiler room, though the brick end wall, flue and chimney remain. In the toilet room, an original shower, toilets, and urinals remain intact. The locker room,

supply room and store room remain intact, but are now vacant or used solely for storage.

The two recreation rooms--Billiard Room and Reading Room--are joined *en suite*.

In the Billiard Room, the walls retain the original textured plaster, with paired chair rails ringing the walls. A modern acoustical ceiling has been installed in place of the original; the original plaster has been removed, but the lath remains. The floor is concrete scored in a 12"x 12" grid pattern.

Other than the acoustical ceiling, the Reading Room is similarly intact. At the west end, the original built-in book cases still carry their original dark stain and varnish finish. The nine-light double sliding doors still roll easily, though much of the glazing is missing. The textured plaster walls are intact. The finish in this room, visible behind moulding, was glazed yellow ochre with rag-blotted antiquing. While no other original wall finishes were visible in the building, it is likely that rag-blotted antiquing was used in other formal spaces; however, it would be necessary to undertake paint analysis to determine original finishes.

Coal and Supply Shed

At the rear of the station building, behind the kitchen wing, stands a small wood frame Coal and Supply Shed, built to this configuration in 1923. Measuring approximately 9 x 24 feet, this structure is exterior-framed, that is, the framing members are all exposed on the exterior, with heavy plank sheathing on the interior only. The building represents an enlargement of a pre-existing 9 x 12 foot, wooden-floored Coal House by the addition of a 9 x 12 foot, concrete-floored Store Room. The building is gable roofed, with access doors in the south side; original roofing material was 3-ply asbestos roofing. Vacant now, its original function is clear from original plans. This small service building is reached from the rear door of the kitchen wing, over a concrete pad joining shed and station.

The Kelso Station, while modified somewhat in its later years, remains remarkably intact. Principal exterior and interior, character-defining details and spaces are extant. On the exterior, these include: overall building massing; tri-color Mission tile roof; espadaña parapets; Union Pacific herald in south espadaña; the arcade,

with moulded bases and capitals on pillars, and buttressed ends; original double-hung and casement window sash; entry; downspouts, collector boxes, and decorative straps; brick walks; electroliers. In the interior, these include: lobby, lunch room, hotel rooms, billiard room, and reading room; heavily-textured plaster wall and ceiling finishes; panel-and-batten wainscot; cigar case and check-in counter; lunch counter and stools; staircases, newel posts, and balustrades; tubular steel beds; lockers. The station grounds, though currently reflecting lack of regular watering and maintenance, are as laid out on the original plans and as shown in period photos, and lack only the original perimeter fence.

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Designed as a necessary hotel and restaurant for train crews providing essential helper service eastward from this point to the top of Cima Hill, the Kelso Station remains largely intact and with a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association. Though the advent of modern, high-horsepower diesel locomotives rendered it obsolete by the mid-1960s and led to its closure in the 1970s, the Kelso Station remains, oasis-like, as a tangible link to an older period of railroading, when Kelso provided a service essential to the successful modernization of the Union Pacific Railroad's main line link to Southern California. The Kelso Station appears to meet National Register criteria A and C at the local level of significance, as an essential element in the modernization of the Union Pacific Railroad and in that line's operation during the hectic days of World War II, and as an excellent and rare remaining example of a mid-1920s Mission Revival style railroad station and hotel on the Union Pacific Railroad in California.

In order to understand the significance of Kelso Station to the operation of this portion of the Union Pacific Railroad, it is necessary to first understand something of the history of this, the last transcontinental rail line to reach Southern California. The Southern Pacific Railroad had long monopolized California rail operations (and politics) when the Santa Fe finally managed to reach Southern California through Cajon Pass in the late 1880s. But as early as 1878, the Union Pacific began activities in Utah aimed at opening a line to Southern California. Mormon interests also had the same goal, and there ensued a number of railroad-building activities--some stillborn, some partially realized--over the course of the next two decades. Given the number of projected railroads involved, it is beyond the scope of this nomination to discuss them all in detail here; they will be summarized in a chronology on a continuation sheet.

Things began to heat up by the late 1890s when the Union Pacific, under the leadership of E.H. Harriman, began pushing an extension of the Oregon Short Line from Utah toward California. Simultaneously, Montana copper magnate William Clark acquired the Los Angeles Terminal Railway with the intention of extending it to Salt Lake City. Predictably, the Southern Pacific, under the control of Collis P. Huntington, took steps to block both these usurpers, while Huntington and Clark battled each other in Utah and Nevada. The power of these individuals at this period also merits discussion.

William Clark was a wealthy industrialist whose money came chiefly from his copper holdings in Montana. An art connoisseur, Clark also invested in other industries and activities. With the bulk of his copper being shipped south to rail terminals at Ogden and Salt Lake City, his projected San Pedro, Los Angeles and Salt Lake Railroad would give him access for direct shipment to Southern California, as well as providing access to mineral-rich lands in Nevada and developable lands in California.

Edward H. Harriman, already in a position of control of the Illinois Central Railroad and the Chicago & Alton Railroad, bought control of the Union Pacific at auction in Salt Lake City in 1897; the company had gone into receivership as a result of the Panic of 1893, which had affected railroads nationwide as banks withheld capital. Harriman immediately began improvements to the U.P. Harriman also had a position of extensive control of the Santa Fe through stock holdings, and his contacts in New York financial circles also gave him a strong voice in the management of the Northern Pacific, the New York Central, and the Baltimore & Ohio railroads. Clearly, Harriman was a man of power.

In the wake of the Spanish-American War, the Boxer Rebellion, and Secretary Hay's announced favor of an "open door" policy, a high degree of interest developed toward the Orient as a new, important market for trade. Harriman, and others, meant to tap that trade, and an extension of the Oregon Short Line to Los Angeles would provide port access. Harriman's chief rival was James J. Hill of the Great Northern Railway, who had the Puget Sound area under his control. Both Harriman and Hill had steamship lines to the Orient under their control. Harriman meant to seize control of Orient trade from Hill. Clark was in Harriman's way, since his projected railroad and Harriman's would use virtually the same alignment.

Still, for all his power, Harriman dared not risk the wrath of Collis P. Huntington, who let it be known that he would "...act unfavorably at Ogden..." in the event that Harriman tried to build to Los Angeles and breach Southern Pacific territory. It was not an idle threat. It was at Ogden that Huntington's Southern Pacific interchanged freight with Harriman's Union Pacific, and Jay Gould's Denver & Rio Grande Western. Huntington evenly divided freight traffic between Harriman and Gould. It was abundantly clear that Huntington would route all freight to Gould at Ogden should Harriman build to Los Angeles, leaving the U.P. to wither.

With regard to Clark, Harriman had concerns other than the conflict of projected alignments. Harriman feared that Clark's road would come under the control of either Hill or Gould, thus thwarting Harriman's drive for control of Orient trade. Clark's line would be 400 miles shorter than any other between Utah and Los Angeles, and would have the lightest grade of any of the transcontinental railroads; its operational advantages were obvious to Harriman and his rivals.

The door finally opened in 1901 with the death of Collis P. Huntington. Harriman gained control of the S.P. that year in stock acquisitions from Huntington's heirs. Between 1901 and 1903, Harriman and Clark continued in opposition. Finally, on July 7, 1903, they reached agreement for joint control of the San Pedro, Los Angeles & Salt Lake Railroad (SPLA&SL). That Harriman proved willing to compromise with Clark in the end was due chiefly to his fears that Hill or Gould might do so.

Construction of the SPLA&SL under joint control started from Caliente, Nevada (to which point both Clark and Harriman had built previously) on August 31, 1903. Subsequently, other crews began building east from California. The lines met and were completed, without ceremony, at Sutor, about 34 miles west of Las Vegas, on January 30, 1905. Regular service on the SPLA&SL began on May 1, 1905. The route proved as advantageous as projected, cutting a full 12 hours from the running time for mail between Salt Lake City and Los Angeles. The SPLA&SL was the first railroad west of Kansas to be built to permanent standards during initial construction, reflecting Harriman's penchant for permanence and standardization. It had 3,000-foot sidings every five miles, heavy ballast, cobblestone-lined side ditches where required, and the largest reinforced concrete bridge in the world (when that structure was completed in 1905). The line was completed in time for the completion of the Panama Canal, and the increased traffic to West Coast ports, and for the increased passenger traffic brought about by the 1915 expositions in San Diego and San Francisco.

Except for special train movements connected with moving troops and material to March Field in Riverside, Ross Field Balloon School in Arcadia, Fort MacArthur Submarine Base in San Pedro, and the various bases in San Diego during World War I, the SPLA&SL operated relatively conservatively for a decade and a half, in contrast to the dynamism of

other Harriman lines. This was largely a reflection of the Clark faction, which did not desire to pour large amounts of money into the railroad. Clark and the Union Pacific exercised equal control, each side requiring the approval of the other for capital expenditures and improvements. Harriman's death in 1909 probably also influenced that conservatism; his driving force might well have compelled Clark to more action. In any event, that conservatism came to a halt in 1921, when the Union Pacific bought out the Clark interest and gained sole control of the railroad, which by then was named the Los Angeles & Salt Lake Railroad. (Since San Pedro had been annexed by Los Angeles in 1909, stockholders voted in 1916 to change the name to the Los Angeles and Salt Lake Railroad Company.) Almost immediately, the Union Pacific undertook improvements to modernize the operation of the line. Not the least of these improvements was the building of a number of new station structures.

Promotion of a California image by railroads had begun 30 years earlier, when the Southern Pacific and Santa Fe railroads had begun construction of Mission Revival style stations throughout the state, the first being completed in 1893. Union Pacific continued that image, erecting Mission Revival style stations in California at Pomona, Ontario, Riverside, San Bernardino, Yermo, and Kelso, in Nevada at Las Vegas and Caliente, and in Utah at Milford. They surrounded these imposing, tile-roofed, arcaded stucco buildings with lawns and gardens. In isolated locations where there was a need for providing housing for train crews, the stations combined hotel and restaurant facilities. These were at Yermo, Kelso, and Caliente. There was ample need for such a facility at Kelso, a need which was to increase in the coming years.

An understanding of the use of "helper" locomotives is in order. Briefly, wherever a railroad finds its tracks laid over a constant grade generally exceeding 2% (a rise of 2 feet in each 100 horizontal feet), and with the added obstacle of heavy trains and numerous curves required to gain elevation in the least amount of mileage, extra locomotives are often used as pushers or helpers, sometimes cut in at a mid-train point and, if required, also at the rear behind the caboose. From the beginning, the 19 miles of 2.2% grade from Kelso east to the summit at Cima had required helper locomotives. A primary reason for selecting Kelso as a helper station was the availability of good water, water required not only for habitation, but also in copious amounts for the steam locomotives. Steam locomotives required water which was relatively mineral-free, to avoid boiler foaming and

mineral deposition; Kelso had an ample supply. Beginning in 1921, the Union Pacific's improvements were aimed at increasing traffic over the line, meaning more--and heavier--trains. As a helper point, Kelso was to play a pivotal role, since traffic increases were to require more helper crews available for service on the Cima Hill grade. Kelso, in desert isolation, had to provide housing.

There was a second need for a crew hotel and restaurant at Kelso. Federal law allows train crews--engineers, firemen, conductors and brakemen--a maximum period which they may operate, this being a total of 16 hours, which must be followed by 8 hours of rest. The Union Pacific shares trackage rights with the Santa Fe over Cajon Pass, far to the west of Kelso. Cajon's grades exceed 3-1/2% in places, and even today require helper locomotives. Serving two busy railroads, it is an operational nightmare. It was especially so in the busy years of World War II, when bottlenecked yards in Barstow and San Bernardino would result in a backup of trains stretching all the way to Las Vegas on the Union Pacific, creeping slowly westward as space became available on inbound yard tracks. Crews which came on duty at Las Vegas would often find their time limit expiring at remote desert sidings. The hotel at Kelso had to provide the required 8 hours' rest. Too, in these situations, with crews on the road for 12 to 16 hours, it was mandatory that they have some place to eat; if the crews didn't eat, the trains didn't move.

Thus in 1923 the Union Pacific completed a new station and hotel at Caliente, Nevada, a new division point. to a design by the Los Angeles architectural firm of Parkinson & Bergstrom. That same year the company's own architectural bureau drew up plans for a new Club House and Restaurant at Kelso, the design for which appears to have drawn heavily on the Parkinson & Bergstrom design for Caliente. Completed in 1925, the new building offered a small ticket office at the west end of the building for the infrequent passenger going to or from Kelso. Its major spaces revealed the building's real function: to house, feed, and entertain train crews at this isolated location.

Since Kelso had been a helper station prior to this time, there were already some structures at the site. A 1913 plat map of the 20-acre station property reveals the presence of a small, one story wood frame passenger and freight station, some small houses for railroad employees, a wye track for turning helper locomotives returning from the summit of Cima Hill, and a large underground fuel oil storage tank in the center of the wye. The new Kelso Station replaced the earlier

station on the same site. The earlier station was moved almost directly across to the south side of the tracks and was reused for other purposes. At the same time, the Union Pacific also erected a number of new, standard design cottages for the expanded number of employees required at the site, built a small engine house adjacent to the wye, and expanded the fueling facilities. All this activity was part of the modernization of the railroad for increased traffic.

The new Kelso Station, however, was the centerpiece of the 20-acre site. On the first floor were lobby and restaurant, service and supply rooms, rooms for female help, and the aforementioned ticket office and baggage room. From the lobby, a staircase detailed in the Craftsman aesthetic led up to the second story, and down to the basement. On the second story were lodging rooms for train crews, showers and toilets, linen storage, and rooms for male help. In the basement were further storage and service rooms, a boiler room with an oil-fired boiler providing hot water and steam heat, a larger lavatory and shower room, and a billiard room and reading room to provide entertainment. Since the restaurant was operated by the railroad's Dining Car and Hotel Department, its fare was likely similar to that provided in the company's restaurant at Green River, Wyoming, where, in the 1930s, $1.75 would purchase soup, salad, steak or prime rib, vegetable, two different rolls, and dessert (passengers would also receive a bottle of wine and a pony of French brandy, not available to the train crews). The importance of the building in this role is underscored by the fact that train crews knew it either as the "Kelso Club" or "the Beanery" (railroad crews traditionally refer to stopping for a meal as "going to beans").

As mentioned earlier, the facilities at Kelso were essential to the modernization of operations on the Union Pacific, particularly during the crucial years of World War II. During that period, the population in the Kelso area swelled to more than 2,000, with the opening of the nearby Vulcan Mine, owned by Henry J. Kaiser and supplying iron ore to his new steel mill at Fontana, which had opened in 1940. As might be expected, iron ore shipment further increased traffic on the Union Pacific. During this period, the Kelso Station functioned as the center of community life, and was the site of trials, church services, dances, and Christmas parties.

With the close of World War II, things quieted down considerably at Kelso. The Vulcan Mine closed in 1946, victim of high sulfur content in the ore, rising production costs, and opening of Kaiser's Eagle Mountain Mine. Population dropped back toward pre-war levels. The advent of dieselization in the 1950s did not immediately affect Kelso's role in helper service, since early diesel locomotives were relatively low-horsepower machines, and trains still required helpers in ascending Cima Hill. And the Korean War brought a renewal of high traffic levels, requiring increased activity at Kelso. But the higher-horsepower, second-generation diesels of the 1960s brought about the end of helper service on Cima Hill, and this, coupled with the closing of the station agency and cessation of passenger train service to Kelso at about the same time, spelled the beginning of the end. Kelso finally closed in 1985, after serving its final years as a home for track workers. Union Pacific closed the station at midnight on June 30, 1985. Shortly thereafter, the railroad proposed the razing of the Kelso Station, a vacant, lifeless building which had outlived its usefulness to the railroad. That proposal, however, may have been the catalyst to allow the station's continued existence.

The proposal to raze the Kelso Station led to the formation of the Kelso Depot Fund, Inc. in 1985, as an interim protective measure pending acquisition of the building by the Bureau of Land Management. This group proposed the acquisition of the building for rehabilitation and adaptive reuse. Thus, while the station may no longer be an oasis to train crews of the Union Pacific, it promises to become an oasis for the users of the thousands of acres of public lands who, in years to come, may find food, lodging, interpretive exhibits and other activities awaiting them at the Kelso Station.

The Kelso Station appears to meet National Register criteria A and C, at the local level, with a period of significance 1925-1945. The station retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. Under Criterion A, its facilities--lodging, bathing, food, and recreation--provided by this facility allowed the Union Pacific to meet increased traffic demands, with helper locomotives from Kelso ensuring continued eastward train movement over Cima Hill. During the hectic days of World War II, the facilities at Kelso ensured provision of essential services for train crews moving war materials westward for the Pacific Theater. Under Criterion C, it is a rare surviving station on the San Pedro, Los Angeles & Salt Lake/Union Pacific

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Railroad in California, and a rare surviving example of the railroad hotel/restaurant/club house. In the context of California, only the 1914 Mission Revival style Riverside station (National Register-listed), now isolated from its tracks, and the Kelso Station remain; all the others listed earlier have been demolished. Of the railroad hotels, Yermo has been demolished and only Kelso remains, in the context of California, as a surviving element of the period of modernization following Union Pacific acquisition of the SPLA&SL in 1921; the Caliente Station remains in Nevada, and has been listed in the National Register and adaptively reused for offices and museum.

Contributive elements include the station building, landscaped grounds, electroliers, sign mountings, flag pole, brick walks and platform, and wood frame coal and supply shed.

CHRONOLOGY OF THE BUILDING AND DEVELOPMENT OF THE SALT LAKE ROUTE

1878: Union Pacific purchases bankrupt, Mormon-owned Utah & Western Railroad.

1887: Mormon interests organize Salt Lake & Los Angeles Railroad Co. and make surveys into California's San Gabriel Mountains. Union Pacific's political/economic power stalls any further development on their part.

1888: Union Pacific Railroad (hereinafter UP) makes first survey forays of its own between Milford, UT and Barstow, CA.

1889, Feb.: UP subsidiary Utah Central RR votes to build extension from Milford, UT to Desert Springs, NV.

1889, May: UP forms Nevada Pacific Railway to continue line across Nevada to Daggett, CA and a junction with Santa Fe Railway.

1889: Virgil Bogue, UP Chief Engineer, begins three new surveys to Southern California on the Atlantic & Pacific RR (later the Atchison Topeka & Santa Fe Railway).

1890: UP stops further construction of Nevada Pacific because UP is close to bankruptcy. At this time, Jay Gould, owner of the Denver & Rio Grande Western RR, becomes major UP stockholder. Cessation of Nevada Pacific RR eliminates any threat to Central Pacific/Southern Pacific lock on rail entries into California.

1893: Panic of '93 drives UP into receivership. Mormons revive the Salt Lake & Los Angeles RR project, but this remains a "paper railroad."

1894-95: New Mormon interests form Utah & California RR (hereinafter U&CRR) and begin negotiations with both Los Angeles Terminal Railway and Japan's Consul General to: 1) establish joint free port improvements at San Pedro and; 2) establish joint trade between Utah and Japan. Japan wants US outlet for its goods, and access to steady supplies of Utah coal, iron, copper, etc. C.P. Huntington sees substantial threat in U&CRR, so shuts off any eastern interests/money supplies which might further U&CRR.

1896, July: U&CRR Co. collapses with death of its chief backer; all grading construction in Nevada and Utah stops in August.

1898: UP comes into control of E.H. Harriman. Harriman revives struggling UP and moves to block any Gould expansions of any kind to the west and California. Southern Pacific RR also moves to block any railroad trying to leave or enter Southern California.

1898, Aug.: A.W. McCune of Salt Lake City in partnership with David Eccles of Ogden incorporate Utah & Pacific RR (hereinafter U&PRR) to complete UP's abandoned Utah extension west 75 miles from Milford to Uvada on the Nevada state line. U&PRR strikes bargain with UP's Oregon Short Line (hereinafter OSL) which operated as far west as Milford, to use rails and ties supplied by OSL, to allow U&PRR to legally use old UP/OSL grade through Nevada. U&PRR exchanged bonds for track supplies, in addition to a 5-year purchase option granted to Union Pacific.

1898, Oct.: U&PRR begins construction and says it "...will not stop until the Pacific is reached." Earlier in 1898, Huntington reacts to Los Angeles Terminal Railway (hereinafter LAT) and U&PRR moves to build to and from Utah, by sending Southern Pacific (hereinafter SP) surveyors out to occupy the old OSL grade in Clover Creek Canyon, Nevada.

1899, Feb.: To regain possession of Clover Creek Canyon grade, UP incorporates the Utah, Nevada & California RR (Feb.1899) to build into California from U&P terminus at Uvada, and including a branch to the mines at Pioche, Nevada.

1899, July: U&PRR tracks reach Uvada, Utah.

1899, Aug.: Montana industrialist William A. Clark purchases interest in LAT to extend the railroad to Salt Lake City.

1900, Mar.: Clark incorporates San Pedro, Los Angeles & Salt Lake RR Co. (hereinafter SPLA&SL). Earlier that month, Clark interests purchased the option on the tax title of the suspended Utah & California RR from the State of Utah, which also gave ownership of the abandoned and incomplete grade and tunnels of the old Nevada Pacific RR, but not the legal right to build on the grade.

1900, Aug.: C.P. Huntington dies, leaving Central Pacific/Southern Pacific open to takeover.

1900, Nov.: Clark organizes Empire Construction Co. to build LAT eastward, and Utah & California Development Co. to handle land sales and lineside industrial development.

1901, April: Nevada Legislature passes bill granting SPLA&SL right to build railroad on old Nevada Pacific. SPLA&SL survey party already in Clover Canyon re-staking the grade. Harriman still wanted control of the route from Utah to California; in reaction

to Clark sending surveyors into Nevada, Harriman sends OSL surveyors and contractors immediately into Nevada to build a railroad, legally or not. UP exercises option on Utah Pacific RR and forms Utah, Nevada & California RR (of California) to build from Nevada/California state line into Los Angeles. From this time on, surveyors and contractors of both companies were simultaneously, sometimes physically, battling for a grade through Clover Canyon and Meadow Valley Wash, Nevada. The battle also became a protracted, state and federal, legal one through August 1901.

1901, Nov.: Harriman's UP controls 45.5% stock of SP.

1902 Jan.: Harriman gives orders to have the OSL rails into Los Angeles no later than January 1, 1903.

1902: Clark's SPLA&SL has three tentative grades surveyed east of San Bernardino: 1) via Beaumont and Morongo and Ash Mountain passes to a crossing of the AT&SF RR at Ludlow, thence through the Providence & Ivanpah Mountains to the Las Vegas Valley; 2) a line almost parallel to AT&SF Cajon Pass grade; 3) a proposition to use 81 miles of trackage rights over AT&SF between San Bernardino to Barstow, thence on new grade down the Mojave River drainage ending near Soda Lake [and continuing through what would be Kelso].

1902, July 9: Clark and Harriman agree to merge and proceed with joint construction between San Pedro and Salt Lake City. Terms of agreement were split basically 50/50, with stocks of both OSL and SPLA&SL going into a voting trust lasting ten years from completion of the line and involved 512 miles of rail.

1903, April: Rails reach Kelso.

1903, July 8: Harriman announces goal of completion by early 1905.

1903, Nov.: Rails are five miles south of Caliente, Nevada.

1904, Oct.: Nevada segment has rail laid as far as Rancho Las Vegas, working west.

1905, Jan. 20: Rails of east and west segments meet and join just east of siding No.31 at Sutor, roughly milepost 305.66 from Salt Lake City, and 34 miles west of Las Vegas.

1905, Feb. 9: First through [non-revenue] train passes over the new line.

1905, April 15: First special passenger train leaves Salt Lake City for Los Angeles, chartered to Modern Woodmen of the World.

1905, May 1: First regularly scheduled passenger train leaves Los Angeles for Salt Lake City, arriving late there the next day.

1905: SPLA&SL completes first year at modest profit.

1906/07: SPLA&SL shows impressive gains in profit.

1908: SPLA&SL operates at loss due to mining panic of 1907.

1908, Feb. 18: The U.S. District Attorney for Utah, acting under the direction of Attorney General Chas. J. Bonaparte, brings suit against Harriman in an effort to sever the ties between UP and SP, and with additional intent to force UP to dispose of its holdings in the SPLA&SL. Hearings last through April 1910.

1909: SPLA&SL shows minor profit.

1910-1912: SPLA&SL operates at consistent loss, worsened by disastrous floods in southern Nevada during winter 1910-11.

1911: The Circuit Court upholds Harriman's ownership of the merged western carriers.

1912, Dec. 2: The U.S. Supreme Court reverses earlier Circuit Court decision, orders UP and SP to separate, but allows UP to retain SPLA&SL.

1916, Aug. 16: SPLA&SL stockholders vote corporate name change to Los Angeles & Salt Lake Railroad Company (hereinafter LA&SL).

1917-1920 (World War I): United States Railway Administration assumes control of LA&SL.

1921, April 27: Clark associates agree to sell their remaining interest to the UP for over $2,000,000 in cash and over $29,000,000 in UP and SP mortgage bonds. UP and OSL become joint owners of the LA&SL, begin plans to modernize and improve the line.

NPS Form 10-900-a **OMB Approval No. 1024-0018**
(8-86)

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

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(8-86)

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OTHER SOURCES

Plans, Kelso Club House and Restaurant, prepared by Office of the Chief Engineer, Los Angeles and Salt Lake Railroad, dated July 6 and 23, 1923.

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Section number _10__ Page 1

==========

Verbal Boundary Description

The nominated property occupies the 1.95 acres located in Parcel 9 as shown on Page 11 of San Bernardino County Assessor's Map Book 563.

Boundary Justification

The boundary includes the parcel that has historically been associated with the property, and includes the station and outbuilding, and landscaping elements which maintain historic integrity.

The boundaries of the property do not include the railroad's entire original 20-acre site. Rather, they have been delineated to include only the station building and its landscaped grounds, and the small wood frame coal and supply shed at the rear of the station. The rationale for this delineation is that, with the exception of one cottage and the large underground oil tank, all of the other structures which existed historically on the 20-acre site have been removed and/or replaced. All ancillary operational structures, including the wye track, are gone. The original housing units have now been replaced by prefabricated double-wide modular homes. Thus, the rest of the site has suffered an irreversible loss of integrity which precludes its inclusion in the listed property.

Outside property boundaries, setting for the Kelso Station includes the isolated desert basin in which it sits, and the operational tracks of the Union Pacific Railroad immediately in front of it.

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Section number _Photos Kelso Station, Kelso, California_ Page 1

==========

Property Name: Kelso Station
Location: Kelso, California
Photographer: John W. Snyder
Date: September 2, 1991
Location of Negatives: USDI, Bureau of Land Management
101 W. Spikes Road
Needles, CA 92363

The above information is constant for all photos; description of view will follow each photo number below, unless otherwise noted.

Photographs arranged to correspond to discussion of building in text.

1. Kelso Station in setting, view to northwest. Note palm and Chinese elm trees, electroliers flanking brick walkway to lobby entry.

2. Kelso Station, oblique view to northwest, showing principal (south) facade and east end. Note buttressed end pillar.

3. Kelso Station, oblique view to northeast, showing principal (south) facade. Note arcade with three-course tile parapet, brick walkway to former ticket office, sawtooth brick border of planting bed.

4. Kelso Station, altered first story window, south facade, view to northwest. Note original transom, cracks in stucco indicating original fenestration.

5. Kelso Station, south facade, view to west through arcade from entry.

6. Kelso Station, detail, south facade, view to north, showing espadaña parapet, UP herald, station name. Note also downspout collector boxes, sawtooth brick border of planting bed, remnant of hedge in planting bed.

7. Kelso Station, detail, stepped pillars and buttress, west end of arcade, view to southwest.

8. Kelso Station, detail, collector box, downspout, decorative metal strap, south facade, view to north.

9. Kelso Station, west end, view to east.

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Section number Photos Kelso Station, Kelso, California Page 2

10. Kelso Station, east end, view to west. Note kitchen wing at right.

11. Kelso Station, oblique view to southwest, showing kitchen wing, chimney from boiler room.

12. Kelso Station, north elevation, view to south.

13. Kelso Station, detail, electrolier, view to north.

14. Kelso Station, lobby interior, view to south from staircase landing.

15. Kelso Station, detail, lobby interior, view to southwest, showing check-in counter and cigar case, panel and batten wainscot, bracketed pilaster.

16. Kelso Station, detail, lobby interior, view to northwest, showing main staircase.

17. Kelso Station, restaurant interior, view to southeast, showing lunch counter remnant, stool bases.

18. Kelso Station, lobby interior, view to north. Note textured plaster wall and ceiling surfaces, wainscot panels.

19. Kelso Station, second floor hall, view to east from top of stairs.

20. Kelso Station, typical second floor bedroom, view to southwest. Note bed.

21. Kelso Station, basement billiard room, view to west. Note textured plaster wall surfaces, paired chair rails, intact window sash, original ceiling lath above dropped ceiling.

22. Kelso Station, basement reading room, view to west. Note built-in bookcases.

23. Kelso Station, basement boiler room, view to northwest.

24. Kelso Station, basement toilet and shower room, view to northwest. Note original shower enclosure at left center, original stalls at center, original urinals at right.

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NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number Photos Kelso Station, Kelso, California Page 3

Historic, or other than current photos

A. Property Name: Kelso Station
Location: Kelso, California
Photographer: Original Unknown, rephotographed by John W. Snyder
Date: Original Unknown, rephotographed October 1991
Location of Negatives: USDI, Bureau of Land Management
101 W. Spikes Road
Needles, CA 92363
Description: Kelso Station, oblique view to northwest. Note absence of hedges, size of palms, desert landscaping on east side, awnings on second story.

B. Property Name: Kelso Station
Location: Kelso, California
Photographer: Shirley Burman
Date: 1979-80
Location of Negatives: Burman/Steinheimer Collection
Description: Kelso Station, view to northwest. Note hedge, bench, flagpole, lunch room sign.

C. Property Name: Kelso Station
Location: Kelso, California
Photographer: Shirley Burman
Date: 1979-80
Location of Negatives: Burman/Steinheimer Collection
Description: Kelso Station, view to northwest. Note, hedge, bench.

D. Property Name: Kelso Station
Location: Kelso, California
Photographer: Shirley Burman
Date: 1979
Location of Negatives: Burman/Steinheimer Collection
Description: Kelso Station, view to northeast. Note lunch room sign.

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CONTINUATION SHEET

Section number Photos Kelso Station, Kelso, California Page 4

E. Property Name: Kelso Station
Location: Kelso, California
Photographer: Shirley Burman
Date: 1979-80
Location of Negatives: Burman/Steinheimer Collection
Description: Kelso Station, detail, lunch room sign.

F. Property Name: Kelso Station
Location: Kelso, California
Photographer: Richard Steinheimer
Date: 1975
Location of Negatives: Burman/Steinheimer Collection
Description: Kelso Station, detail, view to southeast. Note lunch room sign.

G. Property Name: Kelso Station
Location: Kelso, California
Photographer: Richard Steinheimer
Date: 1975
Location of Negatives: Burman/Steinheimer Collection
Description: Kelso Station, view to southeast, showing north elevation in setting.

H. Property Name: Kelso Station
Location: Kelso, California
Photographer: Unknown
Date: Unknown
Location of Negatives: San Bernardino County Museum
Description: Kelso Station, lighted metal sign.

APPENDIX D: AUTHORITY FOR EXPENDITURE FILE FOR CONSTRUCTION OF THE KELSO DEPOT

Form 268—C

C. S.

LOS ANGELES & SALT LAKE RAILROAD COMPANY

Report No. 307-1

Report of Property Retired from Service and Replaced by New Property

Character of Improvement 17-Freight and Passenger Stations, Office Buildings, and Other Station Facilities.

Authority Reference— New York Office Number 8; Date Approved by Executive Committee March 13, 1923.; Operating Office Number (Form 30-A) 17-370; Date Approved

Location of Property— Kelso, California (Main Line)

Description of Property—Retire 24' x 44' frame restaurant and carbody sleeping quarters account destroyed by fire.

W.O. 4353

Date Acquired 1905 and 1916 Date Physically Retired June 15, 1924

Credit to "Property Retired and Replaced"—*See Form 268-A, Report No.* 307 - - - $ 2 080.00

Charged as follows:

Operating Expenses, - - - - -	$ 1 651.00
Material on Hand—Store Department, - - -	
Insurance Reserve -	429.00
Total, -	$ 2 080.00

Of the original cost of "Property Retired and Replaced" there was included in

First Mortgage dated July 1, 1911, - - $ 1 839.00

For which Bonds *were drawn* as follows: Date of Certificate May 11, 1917, Amount, $ 241.00

" " " , " $

DISTRIBUTION BY ACCOUNTS

CREDIT TO "ROAD AND EQUIPMENT SUBSEQUENT TO JUNE 30, 1914"		CHARGED TO "OPERATING EXPENSES"	
ACCOUNT	AMOUNT	ACCOUNT	AMOUNT
16-Station and Office Buildings	2 080.00	227-Station and Office Buildings	1 651.00

Note: Acquired under work orders 116 and 271 in amounts of $112.86 and $128.14, respectively, both reported on Statement of Expenditures from June 30, 1914, to October 31, 192 .

SEP 21 1927

Certified Correct:

Los Angeles, Calif., Sept. 17, 1927.

Auditor.

Form 268—C

C. S.

Cancelling Report No. 307

LOS ANGELES & SALT LAKE RAILROAD COMPANY

Report of Property Retired from Service and Replaced by New Property

Character of Improvement 17-Freight and Passenger Stations, Office Buildings and Other Station Facilities.

Authority Reference— New York Office Number 8; Date Approved by Executive Committee March 13, 1923; Operating Office Number (Form 30-A) 17-370; Date Approved

Location of Property— Kelso, California (Main Line)

Description of Property— Retire 24' x 44' frame restaurant and carbody sleeping quarters account destroyed by fire.

W. O. 4353

Date Acquired 1905 and 1916 Date Physically Retired June 15, 1924.

Credit to "Property Retired and Replaced"—*See Form 268-A, Report No.* 307 - - - $ 2 080.00

Charged as follows:

Operating Expenses, - - - - -	$ 1 651.00
Material on Hand—Store Department, - - -	
Insurance Reserve -	429.00
Total, -	$ 2 080.00

Of the original cost of "Property Retired and Replaced" there was included in

First Mortgage dated July 1, 1911, - - $ 1 839.00

For which Bonds *were drawn* as follows: Date of Certificate May 11, 1917, Amount, $ 1.98

" " " , " $

DISTRIBUTION BY ACCOUNTS

CREDIT TO "ROAD AND EQUIPMENT SUBSEQUENT TO JUNE 30, 1914"		CHARGED TO "OPERATING EXPENSES"	
ACCOUNT	AMOUNT	ACCOUNT	AMOUNT
16-Station and Office Buildings	2 080.00	227-Station and Office Buildings	1 651.00

SEP 21 1927

Certified Correct:

Los Angeles, Calif., Sept. 17, 1927.

Auditor.

FORM 268-B

LOS ANGELES & SALT LAKE RAILROAD COMPANY

Report No. 307
JUN 1925

Report of Completed Work—Additions to Existing Property Replacing Property Retired

Character of Improvement: 17-Freight and Passenger Stations, Office Buildings and Other Station Facilities.

Authority Reference—
New York Office Number: 8
Date Approved by Executive Committee: March 13, 1923
Operating Office Number (Form 30-A): 17-370
Date Approved:

Location of Work— Kelso, California (Main Line)

Description of Work— Construct 115' 6" x 32' 6" two story combination clubhouse, restaurant and passenger depot complete with heating, lighting etc. replacing facilities destroyed by fire.

V.O.4353

Date Work Reported Physically Completed: June 15, 1924 For Property Retired—*See Form 268-C, Report No.* 307

Total expenditures		$ 86 308.17
Less—Cost of Removal of Property, etc., charged to Operating Expenses	$ 569.53	569.53
Proportion payable by		
Total amount charged to "Investment in Road and Equipment"		$ 85 738.64
Less—Credit to "Property Retired and Replaced"		$ 2 080.00
Charged as follows: *Operating Expenses*	$ 1 651.00	
Material on hand—Store Dept.		
Insurance Reserve	429.00	
Total	$ 2 080.00	
Net Expenditure charged to "Investment in Road and Equipment"		$ 83 658.64

Of the Net Expenditure charged to "Investment in Road and Equipment."

Bonds *cannot be* drawn to the amount of $

Bonds *may be* drawn under Article 2, of Section 2,

of First Mortgage to the amount of $ 83 658.64

DISTRIBUTION BY ACCOUNTS

CHARGED TO "ROAD AND EQUIPMENT SUBSEQUENT TO JUNE 30, 1914"		CHARGED TO "OPERATING EXPENSES"	
ACCOUNT	AMOUNT	ACCOUNT	AMOUNT
1-Engineering	1 105.18	227-Station and Office Buildings	325.85
2-Land for Transportation Purposes	212.46	247-Telegraph and Telephone Lines	243.68
16-Station and Office Buildings	84 421.00	Total	569.53
Total	85 738.64		

G. C. E.
JUL

Los Angeles Calif., July 3, 1925.

Certified Correct: [signature]
Auditor.

LOS ANGELES & SALT LAKE RAILROAD COMPANY

Report No. 307

JUN 1925

Report of Property Retired from Service and Replaced by New Property

Character of Improvement 17-Freight and Passenger Stations, Office Buildings and Other Station Facilities

Authority Reference— New York Office Number 8; Date Approved by Executive Committee March 13, 1923; Operating Office Number 17-570 (Form 30-A); Date Approved

Location of Property— Kelso, California (Main Line)

Description of Property— Retire 24' x 44' frame restaurant and carbody sleeping quarters account destroyed by fire.

W.O.4355

Date Acquired 1905 and 1916 Date Physically Retired June 15, 1924

Credit to "Property Retired and Replaced"—*See Form 268-A, Report No.* 307 - - - $ 2 080.00

Charged as follows:

Operating Expenses, - - - - -	$ 1 651.00
Material on Hand—Store Department, - - -	
Insurance Reserve -	429.00
Total, -	$ 2 080.00

Of the original cost of "Property Retired and Replaced" there was included in

First Mortgage dated July 1, 1911, - - $ 1 559.00

For which Bonds *were drawn* as follows: Date of Certificate May 11, 1917, Amount, $ 1.98

" " " _____, " $ _____

DISTRIBUTION BY ACCOUNTS

CREDIT TO "ROAD AND EQUIPMENT SUBSEQUENT TO JUNE 30, 1914"		CHARGED TO "OPERATING EXPENSES"	
ACCOUNT	AMOUNT	ACCOUNT	AMOUNT
16-Station and Office Buildings	2 080.00	227- Station and Office Buildings	1 651.00

C. C. E.

Los Angeles, Calif., July 3, 1925.

Certified Correct: [signature]

Auditor.

Form A. F. R. 12A C. S.

LOS ANGELES & SALT LAKE RAILROAD CO.

AUTHORITY FOR EXPENDITURE *Request No.* 8

Mr. R. S. Lovett,
Chairman of Executive Committee, New York.

Authority is requested for the following Expenditure for Investment in Road and Equipment.

Submitted FEB 1 [illegible] 192 _____ *President.*

STATE FULLY CHARACTER OF WORK TO BE DONE AND REASONS WHY RECOMMENDED

LOCATION : Kelso, Calif. (Main Line).

DESCRIPTION: Construct and equip modern Mission type Station building, having two stories and basement, which will provide club, restaurant and hotel facilities in addition to ordinary station facilities for handling passengers and baggage.

New facilities will replace small lunchroom and carbody sleeping quarters destroyed by fire September 28, 1922, and will serve in lieu of present small depot to be relocated and converted into dwelling house for Station Agent.

REASON: Improved general station facilities necessary for proper conduct of operations at this engine terminal and for accommodation of employees. The restaurant feature is particularly required for accommodation of passengers on Train No. 4, which under present schedule provides a 20 minute station stop at Kelso for breakfast, as this train does not carry dining cars.

BUDGET REFERENCE: 1923 Budget Item 184 Amount $86 520

[illegible]

CHARACTER OF IMPROVEMENT: No. 17 Freight & Passenger Stations, etc.

1. Total estimated expenditure - - - - - - - -	$ 88 600	—
2. LESS—Cost of removal of Property to be Retired *chargeable to Operating Expenses*		—
3. Total amount chargeable to Investment in Road and Equipment - -	—	$ 88 600
4. LESS—Credit to Investment in Road and Equipment for ledger value of Property to be Retired, *chargeable as follows:* - - -	—	2 080
Operating Expenses - - $ 1 651		
~~Salvage~~ - INS. RESERVE - 429		
Total - - - - $ 2 080		
5. Additional amount chargeable to Investment in Road and Equipment		$ 86 520
6. Appropriated for expenditure *during calendar year 192* 3 - - -		$ 86 520

Approved by the Executive Committee at New York, N. Y.,

MAR 13 1923 192

(Signed) THOMAS PRICE
Secretary.

UNION PACIFIC SYSTEM

UNION PACIFIC RAILROAD COMPANY
OREGON SHORT LINE RAILROAD COMPANY
OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY
LOS ANGELES & SALT LAKE RAILROAD COMPANY

120 BROADWAY, NEW YORK

ROBERT S. LOVETT
CHAIRMAN EXECUTIVE COMMITTEE

At Santa Barbara, Calif.
February 23, 1923.

Mr. Thomas Price, Secretary,
Union Pacific System,
New York City.

Dear Mr. Price:

Herewith Mr. Gray's letter of Feb. 18th with L.A.&.S.L. requisition No. 8 for new mission type station building with club, restaurant and hotel facilities at Kelso, California - capital expenditure $86,520. The reasons are fully explained in Mr. Gray's letter. I am familiar with the place and location and discussed this matter with Mr. Gray in Los Angeles last week. This was considered in 1922 but was put over until 1923 because we undertook to build in 1922 a similar structure at Yermo and a larger one at Caliente. As pointed out in Mr. Gray's letter, we have two more yet to build - Milford and Lynndyl to complete the program we decided on last year and which is necessary and will make a noteable improvement on this line. Please submit to Executive Committee with my recommendation for approval.

Yours very truly,

R. S. Lovett
Chairman.

Encl.

UNION PACIFIC SYSTEM

UNION PACIFIC RAILROAD COMPANY
OREGON SHORT LINE RAILROAD COMPANY
OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY
LOS ANGELES & SALT LAKE RAILROAD COMPANY

CARL R. GRAY
PRESIDENT

1416 DODGE STREET
OMAHA, NEBRASKA

At Los Angeles,

February 13, 1923.

Mr. R. S. Lovett,
Chairman, Executive Committee,
Union Pacific System,
New York City.

UNION PACIFIC SYSTEM
EXECUTIVE DEPARTMENT
FEB 15 1923

Station Building - Kelso

Dear Sir:-

Attached is Request for Authority No. 8 for the Los Angeles & Salt Lake Railroad Company to cover the construction of a modern mission type station building having two stories and basement which will provide club, restaurant and hotel facilities in additional to ordinary station facilities for handling passengers and baggage at Kelso, California Capital Expenditure $86,520.

The former lunch room and carbody sleeping quarters were destroyed by fire on February 28, 1922. The present small depot will be relocated and converted into a dwelling for the station agent.

Kelso is the regular eating place for breakfast for train No. 4. This train does not carry a dining car. Kelso is also a permanent helper station where it is necessary to provide quarters for helper crews, there being no commercial facilities whatever available.

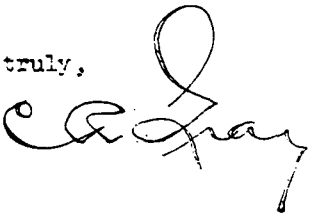
This station is to be built of the same general type and appearance as the ones recently built at Yermo and

Caliente and leaves only the stations at Milford and Lynndyl to be improved to complete the entire chain of eating stations and depot facilities on the L. A. & S. L. Railroad.

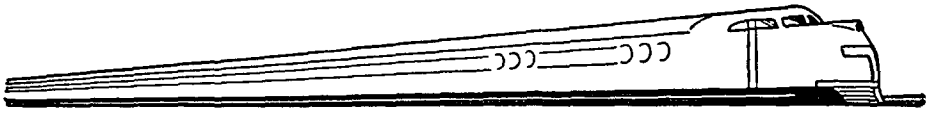
The depot at Milford burned a few days ago and it will be necessary to construct new station facilities there this year for which I will submit an A. F. E. Request soon.

I recommend approval.

Yours very truly,



UNION PACIFIC



Our Special Club Breakfasts

Please Order by Number with items Desired

No. 1 1.55
Ham, Bacon or Sausage
and
Two Eggs
Potatoes Toast

No. 2 1.35
Ham, Bacon or Sausage
and
One Egg
Potatoes Toast

No. 3 1.40
Minced Ham with Scrambled Eggs
Potatoes Toast

No. 4 1.20
Two Griddle Cakes
With
Two Eggs

No. 5 1.05
Two Eggs
Potatoes
Toast

No. 6 1.30
Two Griddle Cakes
with Ham,
Bacon or Sausage

No. 7 2.10
Small breakfast Steak and Two Eggs
Potatoes Toast

No. 8 1.50
French Toast
with
Bacon or Sausage

No. 9 1.00
Chilled Fruit or Juice
and
Cooked or Dry Cereal

The Above Breakfasts Served with Coffee

A' LA CARTE

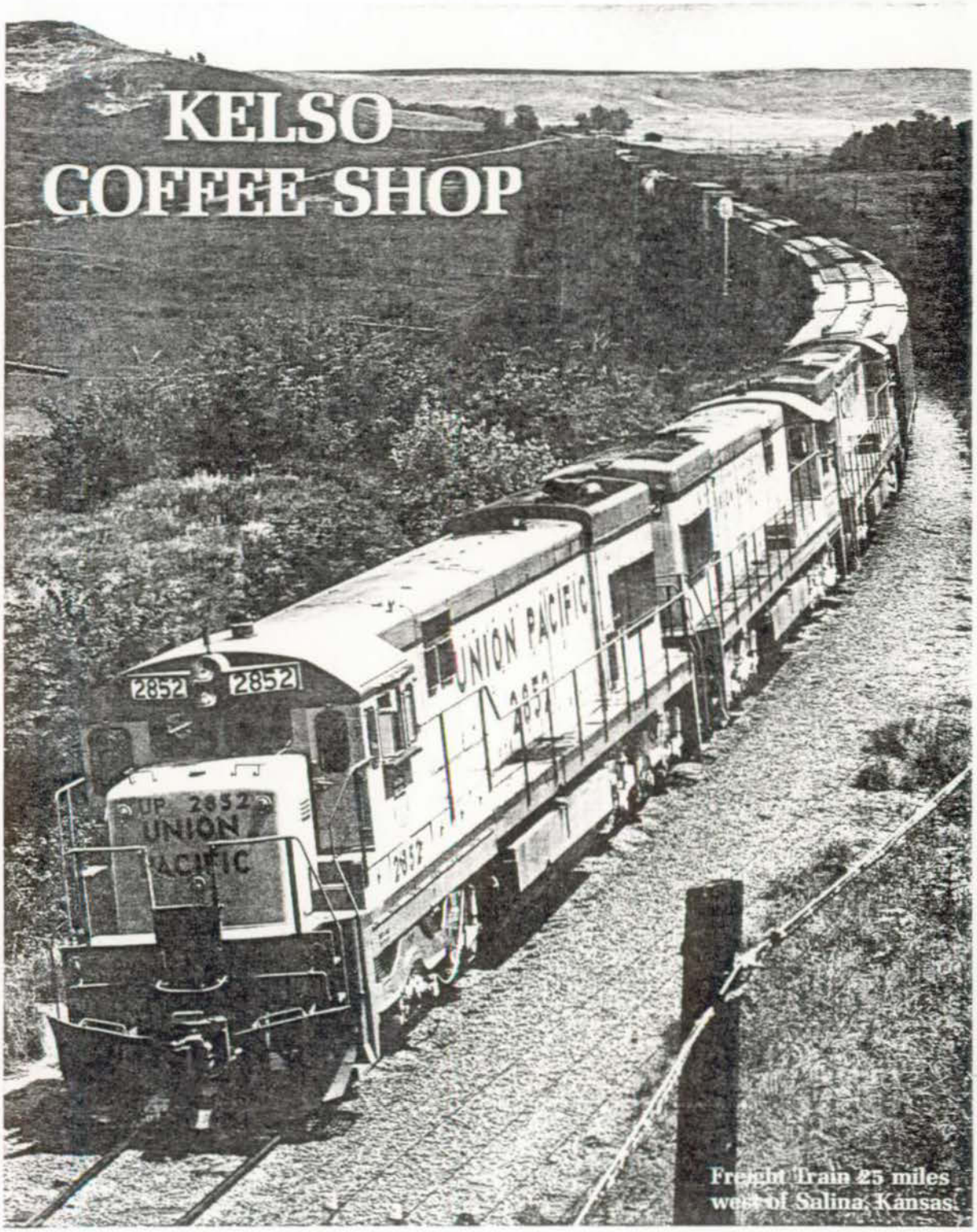
Chilled Fruit .45 Two Eggs .55 One Egg .30 Chilled Juice .30
Cooked or Dry Cereal .45
Griddle Cakes (3) .55 Griddle Cakes (2) .40 Toast .15
Coffee .15 Milk .20 Tea .25

Prices shown subject to Sales Tax in States where Applicable

We serve standard Pasteurized milk and cream exclusively

J. Hansink, Manager Dining Car and Hotel Department,
Union Pacific Railroad, Omaha, Nebraska

(Kelso)
5-69



Freight Train 25 miles west of Salina, Kansas.

Good Morning!!
Club Breakfast Specials

(Please order by Number with Items Desired)

1	Two eggs (any style)	2.35
2	One egg with ham, bacon or sausage	2.70
3	Two eggs with ham, bacon or sausage	3.30
4	Hot cakes (3) or French toast	2.75
5	Hot cakes (3) with ham, bacon, sausage **or** eggs	3.10
6	French toast with ham, bacon, sausage **or** eggs	3.10
7	Ham, cheese, jelly, mushroom or Spanish omelet	3.60

(The above items served with toast, butter and jelly)

Potatoes served with all Club Breakfast meat and egg orders, Coffee or Tea.

Ranch Breakfast **5.15**

Grilled Breakfast Steak with 2 eggs as desired.
4 dollar-size hot cakes with syrup or honey.

Potatoes Du Jour Toast Butter Jelly
Coffee Tea

Special Breakfast **3.40**

Browned Roast Beef Hash with Poached Egg.

Potatoes Du Jour Toast Butter Jelly
Coffee Tea

A La Carte

A la carte serving of any listed cereal	.80
2 Hot Cakes (short stack)	1.50
3 Hot Cakes (full stack)	1.75
French Toast - Powdered Sugar	1.75
Danish or Sweet Roll	.55
Toast and Jelly	.60
Donut	.25
Cookie - Home Baked	.45
Milk Toast	1.45
One Egg	.70
Two Eggs	1.30
Poached Eggs (2) on Toast	1.80
Portion Ham, Bacon or Sausage	1.85
Potatoes: American Fried	.75
Hashed Browned	.75
Coffee	.40
Tea (pot)	.40
Milk	.40
Buttermilk	.40
Hot Chocolate	.50
Thermos of Coffee or Tea (Pt.)	.65
(Qt.)	1.20

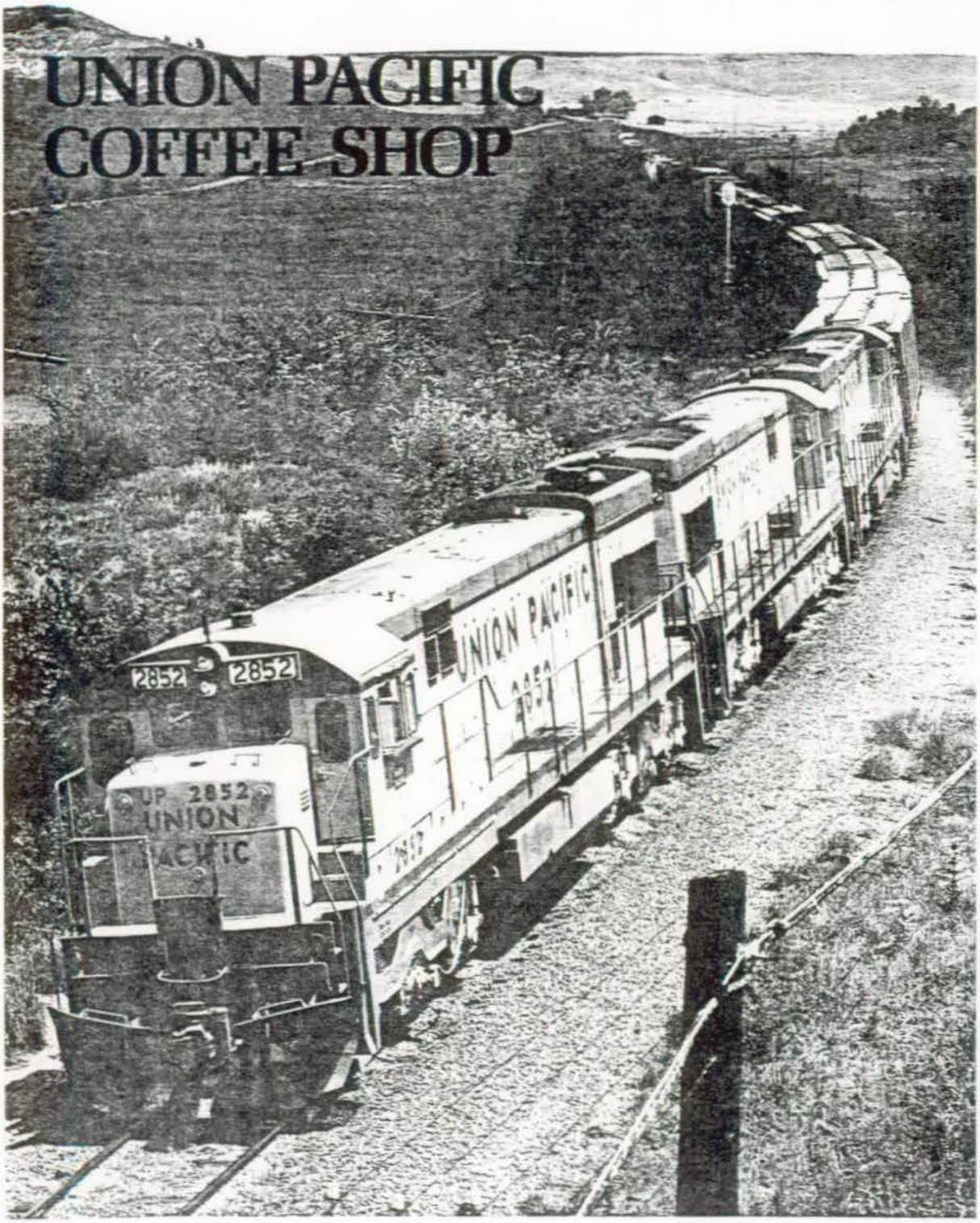
(Prices subject to State Sales Tax)

R. E. Arnold, Manager, Commissary Services Department
Union Pacific Railroad

Kelso - 1-82

UNION PACIFIC

SAFETY BEGINS WITH YOU


UNION PACIFIC
COFFEE SHOP
2852
2852
UNION PACIFIC
UP 2852
UNION

Good Morning!!

Club Breakfast Specials

Choice of one:
Juice — orange, tomato, grapefruit

(Please order by Number with Items Desired)

1	Two eggs (any style)	2.35
2	One egg with ham, bacon or sausage	2.70
3	Two eggs with ham, bacon or sausage	3.30
4	Two eggs with Polish sausage	3.55
5	Hot cakes (3) or French toast	2.75
6	Hot cakes (3) with ham, bacon, sausage or eggs	3.10
7	French toast with ham, bacon, sausage or eggs	3.10
8	Biscuits and Gravy, with sausage	2.75
9	Ham, cheese, jelly, mushroom or Spanish omelet	3.60

(The above items – except 5, 6, 7, & 8 – served with potatoes, toast, butter and jelly)

Choice of one:
Coffee Tea Milk

Ranch Steak **4.75**

6 oz. Grilled Steak with 2 eggs as desired.

Hash Browned Potatoes Toast Butter Jelly
Coffee, Tea or Milk

Special Breakfast **3.40**

Browned Roast Beef or Corned Beef Hash with Poached Egg

Hash Browned Potatoes Toast Butter Jelly
Coffee, Tea or Milk

A La Carte

A la carte serving of any listed cereal		.95
1 Hot Cake		1.10
2 Hot Cakes (short stack)		1.50
3 Hot Cakes (full stack)		1.75
French Toast – Powdered Sugar		1.75
Danish or Sweet Roll		.65
Toast and Jelly		.60
Donut		.40
Cookie – Home Baked		.50
Milk Toast		1.45
Side of Eggs	(1) .80	(2) 1.40
Poached Eggs on Toast	(1) 1.00	(2) 1.90
Portion Ham, Bacon or Sausage		1.90
Juice		.60
Coffee		.45
Tea (pot)		.55
Milk		.60
Buttermilk		.60
Hot Chocolate		.60
Thermos of Coffee or Tea (Pt.)		.85
(Qt.)		1.45

(Prices subject to State Sales Tax)

R. E. Arnold – Manager, Commissary Services Department
Union Pacific Railroad
1416 Dodge Street
Omaha, Nebraska 68179

U.P. Club – 1-83

UNION PACIFIC

SAFETY BEGINS WITH YOU

APPENDIX F: CLOSURE OF THE KELSO DEPOT AND LUNCH ROOM

N O T I C E

UNION PACIFIC RAILROAD COMPANY HEREBY GIVES NOTICE TO ALL THE PUBLIC THAT THE AGENCY STATION AT KELSO, CALIFORNIA WILL BE CLOSED AT THE END OF NORMAL BUSINESS HOURS ON AUGUST 1ST, 1964. SERVICE WILL CONTINUE TO BE PROVIDED AT KELSO ON A NON-AGENCY BASIS.

AGENCY SERVICE MAY BE OBTAINED AT THE YERMO CALIFORNIA STATION OR AT THE SLOAN, NEVADA STATION.

COMPANY DIAL PHONE SERVICE TO CONDUCT BUSINESS AT YERMO & SLOAN IS LOCATED IN DEPOT WAITING ROOM. INSTRUCTIONS ON USE OF PHONE ARE POSTED ADJACENT THERETO.

DATED: JULY 22nd, 1964.

UNION PACIFIC RAILROAD COMPANY

B. J. L.
AUG 3 1964

C. A. Z.
JUL 30 1964

W. B. M
JUL 31 1964

UNION PACIFIC RAILROAD COMPANY
Office of Superintendent
California Division

E. C. R.
JUL 30 1964

W. F. R.
JUL 31 1964

CIRCULAR No. 52

W. I. K.
JUL 30 1964

Los Angeles, July 29, 1964

M. W. V.
JUL 30 1964

9203-01
cc 513

R. D. D.
JUL 31 1964

ALL AGENTS:

Circular No. 51 of July 22 is cancelled.

Effective with close of business August 10, 1964, Agency at Kelso, California will be permanently closed.

Non-agency business will thereafter be handled at Yermo, California and Sloan, Nevada.

W. B. Groome,
Superintendent.

Post - Circular-Notice Books,
Remove - Dec. 31, 1964.

cc - WJF AWK JIS WJR HWS FJF HG GMH GDS GRT CFS HLL PFH
CEC BS CWB HCD HNJ GHR ALD PLH FLM PJP ECR LFD DJF - LA
GAC WRD CCL JAS - Salt Lake
TPR RAF JCC FLP RDO DUR LES - Las Vegas
RDS - San Bernardino
DFW ACR JAB GRV JRH EHK AOH CDH LCC GEJ GAO'k JB RBJ
CED KRA GRS RJM OJW - Omaha
Mr. C. L. Murphy, REA, 357 Aliso Street, Los Angeles
Mr. E. W. McBee, PCDB, 412 Hobart Bldg., San Francisco.

Los Angeles - August 7, 1964

M. W. V.

H-5403-3026

AUG 7 1964

Mr. W. B. Greene - Los Angeles

cc: Mr. F. J. Melia - Omaha
Mr. G. A. Cunningham - Salt Lake
Mr. E. C. Renwick - Los Angeles

Referring to Mr. Renwick's file 5935-13-150 of July 16, 1964 enclosing copy of Decision No. 67525, under Application No. 46496, which grants Union Pacific and Railway Express permission to discontinue agency service at Kelso, California.

Instructions were furnished Agent Leland to amend the Open and Prepay to indicate Kelso, California as a non-agency station, and publication of this action has been accomplished in Supplement 14 effective August 15, 1964 on one day's notice.

F. L. MORGAN

E. C.

Los Angeles, August 17, 1964

AUG 18 1964

9203-01

Mr. G. A. Cunningham:

Cy Mr. F. L. Morgan
Mr. E. C. Renwick

Referring to your letter July 21st file 9203 regarding closing of Agency at Kelso, Calif.

Agency actually closed completion business August 14th.

CONFORMED SIGNED
W. B. GROOME
W. B. Groome

148-Kelso
Corr. file

August 18, 1964.

File 9203-01

Mr. R. J. Pajalich
Secretary,
Public Utilities Commission,
California State Building.
San Francisco 2, Calif.

E. C. R.
AUG 18 1964

Dear Sir:

In accordance with Decision No. 67525, under application No. 46496, please be advised that the Union Pacific agency service at Kelso, California was discontinued effective with the close of business August 14, 1964.

Yours truly,
ORIGINAL SIGNED
W. B. GROOME

Superintendent.

Bcy - Mr. E. C. Renwick (File 5935-13-150 July 16th)
Mr. G. A. Cunningham (File 9203 July 21st)
Mr. F. L. Morgan.

9203-3-R

UNION PACIFIC RAILROAD
Office of Superintendent
California Division

CIRCULAR NO. 52

Los Angeles - June 19, 1985

TO: ALL EMPLOYES
California Division

Effective July 1, 1985, the Clubhouse at Kelso, California,

is closed.

G. R. Jensen
Superintendent

POST: Circular Books
REMOVE: December 31, 1985

cc: REI RMC - Salt Lake
MJG DRB MJK WJS(6) SJJ(10) GSN ALP GJG WRH - Los Angs
REM(3) - Yermo
GGE RCK AMG(6) DEG - Las Vegas
WBE - Milford
Agents - Caliente, Cedar City, City of Ind., Colton, Henderson, LVegas, Long Beach, Milford, Mira Loma, Moapa, SBernardino, Victorville, Yermo
Passenger Depot - Salt Lake City
R. P. Igo - Harbor Belt Line

sc/80

APPENDIX G: THE KELSO DEPOT — AN ARCHEOLOGICAL EVALUATION

By Steve Daron
Lake Mead National Recreation Area, Boulder City, Nevada
February 1997

PROJECT DESCRIPTION

With the passage of the California Desert Protection Act in 1994 the National Park Service (NPS) took over the management of lands previously administered by the Bureau of Land Management (BLM). These lands are located in the Mojave Desert west of the Colorado River in eastern California.

As part of this land exchange, two parcels in the historic town of Kelso were transferred to National Park Service jurisdiction as part of the Mojave National Preserve (Figure 1). The town of Kelso is located along the Union Pacific railroad tracks at the intersection of the Kelbaker and Cima roads. Parcel 1 is located west of the railroad tracks and east of a levee at the intersection of the Kelbaker and Cima roads. It covers an area of approximately 3 acres and includes the historic Kelso Depot and a coal and storage shed. Parcel 2 is located approximately 0.25 miles northeast of the Kelbaker Road and Cima Road intersection. It covers an area of approximately 2 acres west of the Cima Road and east of the levee.

The National Park Service is exploring the feasibility of rehabilitating the Kelso Depot and development of a visitor contact station at the site. As part of this effort, the Park Service is continuing the Section 106/110 evaluation of the Kelso Depot initiated by the BLM.

The project consists of an archeological inventory and evaluation of Parcel 1, and is part of the evaluation process under Section 106/110 of the National Historic Preservation Act of 1966, as amended. It involves an intensive pedestrian survey to locate surface features and artifacts, shovel testing to test for buried cultural components, and mapping of the site (Figure 2).

HISTORIC OVERVIEW

The following historic overview was abstracted from the National Register of Historic Places Nomination Form for the historic property named "Kelso Club and Restaurant" (Parks and Snyder 1991). The form was prepared by Bonnie W. Parks and John W. Snyder of P. S. Preservation Services in Sacramento, California, and is dated September 30, 1991. It should be noted that Gordon Chappell (Senior Historian, Pacific West Regional Office, NPS) is conducting research to update the information on the nomination form.

The San Pedro, Los Angeles, and Salt Lake Railroad completed its line connecting Salt Lake City and Los Angeles in January of 1905 (in 1916 the name of the railroad was changed to the Los Angeles and Salt Lake Railroad Company because Los Angeles annexed San Pedro). Kelso was established as a "helper" station to provide additional locomotives to help heavy trains up the steep grade to the top of Cima Pass 18 miles to the east. As an added bonus, Kelso had an abundant supply of water that was relatively mineral free as required by the steam locomotives.

In 1921, the Union Pacific gained sole control of the Los Angeles and Salt Lake Railroad and began improvements to modernize the line. One of these improvements was the construction of a club house and restaurant at Kelso. Completed in 1925, the building included a small ticket office, but its primary function was to house, feed, and entertain railroad crews passing through this isolated stretch of track in the Mojave Desert. Railroad crews referred to it as the "Kelso Club" or "the Beanery." Today, it is locally known as the "Kelso Depot," and will be referred to as the "depot" in this report.

When completed, the depot and landscaped grounds created an oasis-type environment in the desert. The building was a two-story, Mission Revival style structure clad in stucco and metal lath (Figures 3 and 4). A buttressed portico or arcade was attached to the south, west, and half of the east sides of the depot. A one-story wing was attached to the rear on the east end of the building which contained the kitchen.

Two brick walkways connected the portico to the oil and gravel platform area on the north side of the railroad tracks. The platform and walkways were bordered by six electroliers (lamp posts) of cast concrete standards and a two-rail fence of redwood posts and boiler flue pipes (Engineer's Field Notes dated November 25, 1924). Landscaping around the depot included a large grassy lawn with Chinese elm, palm, and Joshua trees. Beds containing box hedges bordered the lawn on the depot's south side and along the brick walkways. The beds were separated from the grassy lawn areas by sawtooth brick borders. A lighted signpost which bore a sign reading "KELSO" was located at the west end of the lawn.

A coal and supply shed was constructed north of the depot behind the kitchen wing. It consists of two halves which were built at different times. One half of the structure had a wood floor and was used as a coal shed. This half of the structure is of unknown origin. The other half of the structure had a concrete floor and was used to store supplies. This half of the structure was added to the first half in 1923.

Over the years, several changes have been made to the depot and grounds. By 1944 the oil and gravel platform was replaced with a brick platform to match the two walkways, and cottonwood trees were planted behind (north of) the depot. A flagpole was installed on the east side of the lawn probably during Word War II. During the 1960s the portico on the west side of the depot was framed in and enclosed, and fire escapes for the second story were added on the east and west ends of the depot.

Two events in the 1960s signaled the beginning of the end for the Kelso Depot. The first was the development of the high-horsepower, second-generation diesel locomotives that eliminated the need for helper engines on Cima Pass. The second was the cessation of passenger trains and the closing of the depot agency. These events limited the depot's function to a home for track workers until it was closed by the Union Pacific in 1985.

In 1977, the town of Kelso was recorded as a historic site by the BLM and assigned site number CA-SBr-3053 (site form on file, State of California, Office of Historic Preservation, Sacramento). On the site form, Kelso is described as a "1904 railroad hamlet with station and roundhouse", a brief history of the town is given (less then 500 words). The form states "the major significance of Kelso is its role in the operations of the Vulcon mine during a WWII boom, and its role as an important watering stop on the Salt Lake Route of the San Pedro, Los Angeles and Salt Lake Railroad."

Parks and Snyder (1991) recommended the depot eligible for the National Register of Historic Places at the local level under Criteria A and C, with the period of significance being 1924 to 1945. The depot was recommended eligible under Criterion A because the services "provided by this facility allowed the Union Pacific to meet increased traffic demands, with helper locomotives from Kelso ensuring continued eastward train movement over Cima Hill. During the hectic days of World War II, the facilities at Kelso ensured provision of essential services for train crews moving war materials westward for the Pacific Theater." (Park and Snyder 1991: Section 8, Page 7). It was recommended eligible under Criterion C because "it is a rare surviving station on the San Pedro, Los Angeles & Salt Lake/Union Pacific Railroad in California, and a rare surviving example of the railroad hotel/restaurant/club house." (Park and Snyder 1991: Section 8, Page 7 and 8). They indicate that the contributing elements include the depot building, landscaped grounds, electroliers, sign mountings, flagpole, brick walkways and platform, and the coal and supply shed.

Rivers (1992) indicates that the BLM was planning several modifications to the Kelso Depot building and grounds. These modifications included construction of a barrier fence between the government land and the Union Pacific railroad right-of-way, removal of the brick platform within the Union Pacific's right-of-way, removal of the fire escapes, and removal and pruning of hazard trees. All of these modifications were made

prior to NPS acquisition of the property. Figures 5 through 8 are photographs of the depot before the modifications, and Figures 9, 10, and 11 are photographs taken during this project.

METHODOLOGY

In June 1995, the project area was inventoried by pedestrian survey with transects spaced at 5 meter intervals paralleling the railroad tracks. All features were assigned a number and flagged with pinflags (when required) to aid in their relocation. The features were described and all historic period features were photographed.

A planview map was drawn of the project area. The fence that parallels the railroad tracks on the southeast side of the project area was used as the primary base line. Several secondary base lines were established throughout the project area by triangulating off of the fence. All historic and modern features were then plotted by measuring from the secondary base lines. A sketch map was drawn in the field and finalized in the office by using ARC/INFO version 7.0.4 (Figure 2).

In March 1996, subsurface testing was conducted on the Kelso Depot parcel using a gas-powered auger with an 8-inch bit. Auger tests were originally planned every 15 meters, however, this plan was changed in the field because of safety concerns associated with buried utility lines. All of the cultural material located during the auger testing was placed back in the auger test holes and no cultural material was collected.

Archival research was conducted. The Kelso files at the Barstow and Needles BLM Resource Area offices and the Mojave National Preserve, NPS office were searched. The State of California, Office of Historic Preservation in Sacramento, the San Bernadino County Museum in Redlands, California, and Dennis Casebier with the Friends of the Mojave Road in Essex, California, were contacted.

RESULTS OF SURVEY AND AUGER TESTING

Survey

A total of 39 features were located in the project area (Figure 2, Table 1). In the following discussion, the features will be described and evaluated as contributing elements to the National Register status of the Kelso Depot property. Four criteria are to be used when evaluating a property's National Register status (National Register Bulletin 15 1990). The criteria are: A, association with significant historic events; B, association with the lives of significant historic individuals; C, embody disticntive characteristics of a type, period, or method of construction; and D, have yielded, or be likely to yield, important prehistoric or historic information. The features will be evaluated under Criterion A and C based on their association with the period of significance 1925-1945 (Parks and Snyder 1991). Their significance under Criterion D will be evaluated based on the results of the survey. To date, there is no evidence that any historically significant individual was associated with the Kelso Depot, therefore, Criterion B will not be used in evaluating the National Register status of the property.

For purposes of discussion, the 39 features have been combined into eight categories. It should be noted that the railroad tracks and the long axis of the Kelso Depot are oriented northeast to southwest. Parks and Snyder (1991) use the general railroad direction of travel, i.e., east-west, when discussing the depot and its grounds. Thus the northeast end of the building is considered the east end, and the southwest end of the building is considered the west end. For consistency, the same terminology has been adopted for this report.

I — Standing Historic Buildings. Two features are included in this category, Feature 32, the Kelso Depot, and Feature 12, the coal and supply shed. The Kelso Depot, Feature 32, was constructed in 1924 and dominates the area. It is a two-story, Mission Revival-style structure clad in stucco and metal lath, with a one-story wing on the northeast corner of the building (Figures 2 through 11). A buttressed portico is

attached to the south, west, and half of the east sides of the depot (the portico on the west end has been enclosed). The depot covers an area of approximately 7064 square feet (including the portico). Three concrete slabs are attached to the depot. One is located at the north end of the portico on the east end of the depot and covers an area of 120 square feet. Another is located at the northeast corner of the depot and covers an area of 460 square feet. The last concrete slab is located on the west end of the depot and covers an area of 420 square feet. For additional architectural information see Parks and Snyder (1991).

Feature 12 is the coal and supply shed (Parks and Snyder 1991). It is a wood frame structure on a concrete foundation measuring approximately 10 feet by 24 feet (Figures 2, 11, 12, and 13). One half of the coal and supply shed has a wooden floor. It was used as a coal shed and is of unknown origin. The other half of the coal and supply shed has a concrete floor. It was added on to the coal shed in 1923 and was used as a store room (Parks and Snyder 1991). Feature 12 does appear on a partially-photocopied map (in files obtained from BLM) labeled "KELSO, CALIFORNIA / August 27, 1925 / Corrected to March 10, 1944." There is a concrete slab on the south side of the building. The slab has been damaged and part of it is missing. It currently covers an area of approximately 180 square feet.

The Kelso Depot (Feature 32) and the coal and supply shed (Feature 12) date to the period of significance and retain a high degree of integrity. They are contributing elements under Criterion A and C to the National Register status of the property (Table 1). The Kelso Depot and the coal and supply shed have been mapped and photographed exhausting their research potential. These structures are not contributing elements under Criterion D.

II — Concrete Foundations. Two features are included in this category, Feature 4 and Feature 5. Feature 4 is a concrete slab foundation measuring 16.25 feet by 16 feet (Figure 2 and 14). It is located approximately 40 feet west of the intersection of the Cima Road and the Kelbaker Road, and 50 feet south of the levee. The area west of the intersection and all around the foundation has been disturbed by heavy equipment. The remains of burned charcoal brickets and recent bottle glass fragments are scattered on and around the foundation. A few brick fragments, older patenated glass fragments, one sanitary tin can, and ceramic fragments from a broken hotelware cup are also scattered around the foundation. A large creosote bush is growing up through the foundation indicating that the foundation has been abandoned for some time.

Feature 5 is a concrete foundation measuring 11.65 feet by 10 feet and is 6.5 inches thick (Figures 2 and 15). It is located approximately 60 feet east of the depot and 35 feet south of the Cima Road. The west end of the foundation is missing; it cannot be determined if the foundation was designed this way or if the west end was removed. The foundation contains a concrete slab floor which extends beyond the west end of the foundation. This feature has been damaged. The west end of the concrete floor and the southwest corner of the foundation are missing. This damage has revealed what appears to be another concrete floor underlaying the present floor. Two multiple mail boxes (Neighborhood Delivery Collection Box Units) have been bolted to the east end of the concrete slab.

Feature 5 appears on a partially-photocopied map (in files obtained from BLM) labeled "KELSO, CALIFORNIA / August 27, 1925 / Corrected to March 10, 1944." Unfortunately, the feature is not identified and no other historical information about the feature has been located.
A partial map (Union Pacific Railroad Files) shows a structure in the area of Feature 4 which is identified as the "Kelso Jail", unfortunately, the map is not dated. Further historical information is needed to determine if these features are contributing elements under Criterion A and C to the National Register status of the property (Table 1). They have been mapped and photographed exhausting their research potential and rendering them non-contributing elements under Criterion D.

III — Concrete Footings. This category includes four features, Features 7, 14a and b, 17, and 33. Features 7, 14a and b, and 17 are concrete footings that supported fire escape stairs from the second story (Figures 2, 6, and 7). The fire escapes were added sometime in the 1960s (Parks and Snyder 1991) and were removed by the BLM before the Park Service acquired the property. Feature 7 is located 6.5 feet east of the portico on

the east end of the depot. It is a concrete footing measuring 30 inches by 18 inches and has two rebar mounts in its top for anchoring the bottom of the fire escape (Figure 16). Feature 14a is located 9 feet north of the concrete slab on the west end of the depot. It is a concrete slab measuring 4 feet by 4 feet and has a step measuring 4 feet long, 18 inches wide, and 10 inches high with two rebar mounts in its top for anchoring the bottom of the fire escape. Feature 14b is located at the north end of the concrete slab at the west end of the depot. It is a concrete footing measuring 4 feet long, 1 foot wide, and 10 inches high, and was the foundation of the supports at the middle of the fire escape. Feature 17 is located 3 feet west of the depot on the concrete slab at the west end of the depot. Feature 17 consists of two square concrete footings (Figure 17). The footings measure 18 inches on a side and each has a rebar mount in its top. Feature 17 was the foundation for the supports for the upper end of the fire escape. Features 7, 14a and b, and 17 post-date the period of significance (Parks and Snyder 1991) and are not contributing elements to the National Register status of the property (Table 1).

Feature 33 is a strip of concrete located 3 feet north of the railroad tracks. It is flush with the ground surface and is approximately 8 inches wide and of undetermined depth. It parallels the railroad track for an undetermined distance east and west from the depot (Figures 2 and 9). Although associated with the railroad tracks, its function and origin is unknown. Further historical information is needed to determine if the feature is a contributing element under Criterion A and C to the National Register status of the property (Table 1). It has been mapped exhausting its research potential and rendering it a non-contributing element under Criterion D. This feature is outside the parcel acquired by the National Park Service.

IV — Landscape Structures. This category includes six features. Feature 8 consists of a row of partially buried railroad ties placed end to end and two sign posts, located 120 feet east of the depot (Figures 2, 18, and 19). It begins at a point 20 feet north of the railroad tracks and runs north 96 feet. The sign post at the south end is missing a sign. The one at the north end has a sign reading "U. P. RR / PRIVATE PROPERTY / NO TRESPASSING / VIOLATORS / WILL BE PROSECUTED." The post, the back of the sign, and the three ties at the north end of the feature have been burned. This feature appears to mark the east end of the depot's original grounds.

Feature 11 consists of a line of mortared bricks laid side by side located 52 feet south of the depot and 14 feet north of the railroad tracks (Figures 2 and 9). The line of bricks parallels the railroad tracks. The feature begins on the east side of the Kelbaker road and runs east for a distance of approximately 565 feet. It appears to be associated with the brick platform that was recently removed.

Feature 18 consists of the remnants of the lawn located on the south and east sides of the depot (Figures 2, 9, 20, and 21). The lawn consists of three segments separated by brick walkways (Feature 19). Historically, the lawn segments were large grassy areas bordered by beds containing box hedges (Parks and Snyder 1991) (Figures 2 through 6). The beds were separated from the grassy areas by sawtooth brick borders. Sections of this brick border are still intact (Figure 22). Two small concrete sidewalks connect the central lawn's grassy area with the portico on the south side of the depot. The lawn has not been maintained and the grass has died. Feature 11 (the line of mortared bricks) and the beds created by the sawtooth brick borders are the only boundaries for the lawn that are still definable.

Feature 19 consists of two paved brick walkways that run from the depot portico south toward the railroad tracks (Figures 2, 20, and 21). The walkways are 50 feet long and 12 feet wide. The walkways widen at the north end where they abut with the portico (Figure 23).

Feature 25 is the flagpole located 45 feet south of the depot and 15 feet east of the eastern brick walkway (Figures 2 and 21). The flagpole consists of two round metal cylinders, each appears to be approximately 12 feet long, stacked one on top of the other. The bottom cylinder measures 3.25 inches in diameter, and the top cylinder has a smaller diameter of undetermined size. The flagpole sits on a square concrete pedestal measuring 23 inches on a side.

Feature 27 consists of a small patch of ground, possibly a flower bed. It is located at the west end of the depot. The feature is bounded on its east side by the depot and on the other three sides by the concrete slab adjacent to the west side of the depot (Figures 2 and 24). This feature was created when the concrete slab was added on the west end of the depot. The slab was probably added when the west portico was enclosed and the fire escape was added in the 1960s (Parks and Snyder 1991).

Features 11, 18, 19, and 25 date to the period of significance and retain a high degree of integrity. They are contributing elements under Criterion A and C to the National Register status of the property (Table 1). Further historical information is needed to determine if Feature 8 is a contributing element under Criterion A and C to the National Register status of the property. Feature 27 does not date to the period of significance and is not a contributing element to the National Register status of the property.

Features 8, 11, 18, 19, and 25 have been mapped and photographed exhausting their research potential. These features are non-contributing elements under Criterion D. It should be noted that Features 8 and 11 are not within the boundaries of the parcel of land obtained by the National Park Service.

V — Landscape Vegetation. This category includes Features 10, 23, 24, and 26 (Figure 2, Table 1). Feature 10 consists of several elm tree stumps that have resprouted. The stumps are located in the lawn areas south and southeast of the depot. Feature 23 is the dying remains of a century plant. It is located approximately 60 feet west of the west end of the depot (Figure 17). Feature 24 consists of five large palm trees also located in the lawn area south and southeast of the depot (Figure 20). Based on their size and historic photographs (Figures 2 and 3), these trees were part of the original landscaping in front of the depot. Feature 26 consists of three clumps of Tamarisk trees. They are located on the south side of the Cima Road, north and west of the depot.

The elm trees were part of the original landscaping but were removed by the BLM before the Park Service acquired the property because of safety concerns. The remaining stumps and resprouts, Feature 10, do not retain any integrity and are not a contributing element under Criterion A or C to the National Register status of the property. No information has been located about when the century plant, Feature 23, and the Tamarisk trees, Feature 26, were planted. Based on a photograph taken in 1975 (Figure 8), they do not appear to date to the period of significance and are not contributing elements under Criterion A or C.

The palm trees, Feature 24, are part of the original landscaping of the depot and, therefore, are contributing elements under Criterion A and C to the National Register status of the property. All of the features in this category have been mapped and photographed exhausting their research potential. They are not contributing elements under Criterion D to the National Register status of the property.

VI — Utilities. This is a broad category that includes 12 features, Features 6, 9, 13, 15, 20 through 22, 28 through 31, and 39 (Figure 2, Table 1). All of the features appear to relate to either electric, water, or sewer utilities; however, the exact function of several features could not be determined.

Features 6 and 15 are fire hydrants. Feature 6 is located approximately 30 feet east of the portico on the east end of the depot. This hydrant is copper in color and appears to be newer then the other hydrant (Figure 25). It has "JAMES JONES CO / L. A. CAL" embossed on its top. There are four metal posts, approximately 2.25 feet high surrounding the hydrant. The posts are made from 9-inch diameter heavy gauge metal pipe. This hydrant is a different hydrant than appears in a photograph taken in September of 1991 (Figure 6). Feature 6, the new hydrant and four metal posts, was installed sometime after September 1991. The second hydrant, Feature 15, is located approximately 35 feet west of the west end of the depot. It has a white base and a red nozzle and cap (Figure 26). It has no identifying marks and appears to be the same type of hydrant that was originally on the east side of the depot (Figure 6) and was replaced by Feature 6.

Feature 9 consists of a water pump and spigot (Figure 19), which probably delivered water for the trains. It is located approximately 115 feet southeast of the depot and 25 feet north of the railroad tracks at the south end of Feature 8. Feature 9 appears to be contemporary and is not of historical significance.

Features 13, 29, and 30 are concrete shafts covered with large metal discs (manhole covers) (Figures 27, 28, and 29). Feature 13 is located 60 feet north of the depot and 45 feet west of Feature 12. It is a cylindrical concrete shaft, 3 feet in diameter and approximately 20 feet deep. It has a metal cover 31 inches in diameter with a handle in the center. Feature 29 is located 50 feet north of the depot and 25 feet west of Feature 12. It is a rectangular concrete shaft measuring 47 inches by 42 inches with an unknown depth. The top is also concrete with 30-inch diameter hole covered with a metal disc. Feature 30 is located approximately 40 feet north of Feature 29 and three feet south of the Cima Road. It is a concrete shaft 49 inches by 49 inches with an unknown depth. The top is also concrete with a 28-inch diameter hole covered with a metal disc. The metal disc has the letter "S" embossed in its center.

Feature 20 is the base of a probable sign pole. It consists of a metal cone on a concrete footing (Figure 30). The footing is 16 inches in diameter and flush with the ground surface. The metal cone sits on top of the footing and is 11 inches high. It has a rectangular hole in its side with wires sticking out. Parks and Snyder (1991) indicate that there was a lighted signpost that bore a sign reading "KELSO" at the west end of the lawn. Feature 20 is located 45 feet west of the depot and could be the base for that sign.

Feature 21 consists of a 7-inch diameter metal pipe sticking vertically out of the ground located 35 feet west of the depot (Figure 31). The pipe has been capped with a rough-cut metal disk measuring 7.5 inches by 8.5 inches.

Feature 22 is a small diameter metal pipe laying horizontally on the ground (Figure 31). The west end is 15 feet west of the depot, and it extends eastward under the concrete slab at the west end of the depot.

Feature 28 is a buried metal box (Figure 32). The top of the box is flush with the ground surface and is painted silver. It is located 100 feet east of the depot and 15 feet south of the Cima Road. The top of the box measures 52 inches by 45 inches and has "EDISON" embossed on it.

Feature 31 is a fenced power unit located 2 feet south of Feature 29 on the north side of the depot. The enclosed fenced area measures 17 feet by 12 feet. Feature 39 consists of six utility poles scattered across the depot grounds.

Feature 6, the fire hydrant east of the depot, Feature 9, the water pump and spigot, Feature 28, the buried metal box, Feature 31, the fenced power unit, and Feature 39, the utility poles, are recent and are not historically significant (Table 1).

Features 13, 29, and 30, the concrete shafts, are identified as “man holes” on a set on engineer's field notes dated 1929 (Union Pacific Railroad Files). The engineer's field notes indicated that these features date to the period of significance. Feature 20, the base of the lighted signpost, also dates to the period of significance (Parks and Snyder 1991). Therefore, these features are contributing elements to the National Register status of the property under Criteria A and C (Table 1). They have been mapped and photographed exhausting their research potential and are not contributing elements under Criterion D to the National Register status of the property.

A partial map (Union Pacific Railroad Files) shows the location of two fire hydrants which correspond to the locations of Features 6 and 15. Unfortunately, the map is not dated. As indicated above, Feature 6 is a recent fire hydrant which post-dates 1991, therefore, it is not a contributing element to the National Register status of the property (Table 1). Feature 15 appears to be much older. Further historical information is needed to determine if Feature 15 is significant and a contributing element to the National Register status of the property under Criteria a and C (Table 1). It has been mapped and photographed exhausting its research

potential. Feature 15 is not a contributing element under Criterion D to the National Register status of the property.

No historical information was located for Feature 21, the 7-inch diameter metal pipe sticking vertically out of the ground, and Feature 22, the small diameter metal pipe laying horizontally on the ground. However, these features do not have integrity, and are not contributing elements to the National Register status of the property under Criteria A, C, or D (Table 1).

VII — Scatters. This category contains Features 1, 2, and 3 (Figure 2). They are located on the south side of the levee and on the north side of Cima Road. Feature 1 is a trash scatter located approximately 400 feet east of the Kelbaker Road at the base of the levee and covers an area approximately 50 feet long and 12 feet wide. It contains tin cans and bottle glass fragments (Figure 33). The cans are all sanitary cans. Most of the cans are beverage cans that have been opened with a church key-type opener. The church key can opener was invented in 1935, shortly after beer was first marketed (Rock 1980). The bottle glass consists of small fragments of various colors. All glass fragments appear to be from beverage bottles. The presence of crown cap finishes, in part, supports this.

Feature 2 is located approximately 330 feet east of the Kelbaker Road at the base of the levee. Feature 2 contains cinders, burned bottle glass, and a few burned and unburned hotelware ceramic fragments (Figure 34). Based on the presence of the hotelware ceramics, a link with the depot's "beanery" (food service facility), which was in use from 1924 to 1985, can be inferred. The above material has been pushed into a pile at the base of the levee by heavy equipment. The pile consists of approximately 15 percent cultural material and 85 percent soil and covers an area of around 75 square feet. Features 1 and 2 are not on the parcel owned by the National Park Service.

Feature 3 consists of a scatter of cinders (Figure 35). The densest concentration covers an area of approximately 4500 square feet located from 60 feet to 200 feet east of Kelbaker Road and between the base of the levee and Cima Road. A thin scatter of cinders covers the area from the Kelbaker Road east to Feature 2. A department of Transportation work crew that stopped at the depot while field work was in progress, indicated that the area where Feature 3 is located is used by the county as a cinder staging area for road maintenance activities.

Feature 1 has been fully documented, exhausting its research potential. Feature 2 has been pushed to its present location by heavy equipment and is out of context. Feature 3 does not date to the period of significance and is not associated with the depot. None of the features in this category have qualities that make them contributing elements under Criterion A, C, or D to the National Register status of the property (Table 1).

VIII — Miscellaneous. This category contains six features, Features 16 and 34 through 38 (Figure 2, Table 1). Feature 16 is a grave or memorial marker located 120 feet west of the depot. The feature consists of a rectangle of small stones measuring approximately 6 feet east/west by two feet north/south. It has a wrought iron cross and a concrete cross placed back to back at the east end of the rectangle (Figures 36 and 37). The concrete cross has the words "LOER / JUAN ANTONIO" painted on it. The wrought iron cross has the initials "J A L C" on the cross member. No historical information has been located about this feature, however, a Union Pacific Railroad crew indicated that this feature is a memorial for a past Union Pacific employee and that they maintain the memorial.

Feature 35, a levee, runs east-west and is located 200 feet north of the depot. It runs for 0.6 miles east of the depot and an undetermined distance west of the depot (Figure 38). It crosses the northwest corner of the NPS property, and is approximately 7 feet high and from 30 to 50 feet wide. The levee separates the town of Kelso and the Union Pacific Railroad tracks from the natural drainage system in Kelso Wash located west of the levee. The levee does not appear in an early photo of the depot (Figure 4), but it is on the Kelso, California, 7.5', USGS quadrangle map dated 1983 (Figure 1).

Because of the lack of historical information about Feature 16, the grave or memorial, or Feature 35, the levee, further research is needed to determine if these features are contributing elements under Criterion A or C to the National Register status of the property (Table 1). These features have been mapped and photographed exhausting their research potential. They are not contributing elements under Criterion D to the National Historic status of the property.

Feature 34 consists of two survey cadastrals. One is located south of the levee and north of Cima Road approximately 45 feet south of Feature 1. The other is located at the base of the levee on the north side of the levee, approximately 40 feet west of the Kelbaker Road. The cadastrals mark the northeast and northwest corners of the land acquired by the federal government.

A large metal shipping container, Feature 36, is located 120 feet west of the depot. It measures approximately 8 feet by 30 feet. Feature 37 consists of two portable toilets located approximately 100 feet northwest of the depot, next to one of the Tamarisk trees.

Feature 38 is the wrought iron fence located 50 feet south of the depot and 16 feet north of the railroad tracks (Figures 9 and 20). It parallels the railroad tracks for a distance of 385 feet. The fence is a recent addition. It was a requirement of the sale of the property to the government by the Union Pacific because of public safety concerns along their railroad right-of-way (Rivers 1992).

The cadastrals (Feature 34), the metal shipping container (Feature 36), the portable toilets (Feature 37), and the wrought iron fence (Feature 38) are recent additions to the property and do not date to the period of significance (Table 1).

Summary. A total of 39 features were located during the archeological survey of the Kelso Depot area. Eleven of the features, the Kelso Depot (Feature 32), the coal and supply shed (Feature 12), the line of mortared bricks (Feature 11), the lawn (Feature 18), the paved brick walkways (Feature 19), the palm trees (Feature 24), the flag pole (Feature 25), the base of the lighted signpost (Feature 20), and the three concrete shafts (Features 13, 29, and 30) date to the period of significance and are contributing elements under Criterion A and C to the National Register status of the property (Figure 2, Table 1). These features have been mapped and photographed exhausting their research potential and eliminating them as contributing elements under Criterion D to the National Historic status of the property.

Further historical information is needed to determine if Features 4, 5, 8, 15, 16, 33, and 35 date to the period of significance and are contributing elements under Criterion A and C to the National Register status of the property (Figure 2, Table 1). These features have been mapped and photographed exhausting their research potential. They are not contributing elements under Criterion D to the National Historic status of the property.

Five features, two of the scatters (Features 1 and 2), the metal pipes (Features 21 and 22), and the elm tree stumps and sprouts (Feature 10), lack qualities that would make them contributing elements under Criterion A or C to the National Register status of the property (Figure 2, Table 1). These features have been mapped and photographed exhausting their research potential.

Sixteen features (Features 3, 6, 7, 9, 14, 17, 23, 26 through 28, 31, 34, and 36 through 39) do not date to the period of significance as established by Parks and Snyder (1991) and are not contributing elements under Criterion A, C, or D to the National Register status of the property (Figure 2, Table 1).

Auger Testing

A total of 27 auger tests were dug on the Kelso Depot parcel (Figure 2, Table 2). The soils are silty sand, with the sand being fine to medium grain in size. Gravel content averaged around 25 percent. Testing reveals that there are no significant subsurface cultural deposits on the Kelso Depot parcel.

Cultural material was found in 11 of the auger tests. This included recent bottle glass fragments in Auger Tests 3, 4, and 5, pieces of asphalt in Auger Tests 20 and 27, buried PVC pipe running through Auger Tests 7 and 14, recent charcoal found at the surface of Auger Test 24, coal fragments in Auger Test 8, an iron fragment in Auger Test 19, and 3 marbles in Auger Test 17. None of these artifacts relate to the functions of the depot during its period of significance.

CONCLUSIONS AND RECOMMENDATIONS

This project consisted of an archeological survey and evaluation of a parcel of land administered by the National Park Service within the Mojave National Preserve. The parcel covers an area of approximately 3 acres and is located at the intersection of the Kelbaker Road and the Cima Road. The historic Kelso Depot is located on the parcel. The project area was surveyed and mapped, and subsurface testing was conducted using a power auger.

A total of 39 features were identified (Figure 2, Table 1). Eleven of the features (Features 11 through 13, 18 through 20, 24, 25, 29, 30 and 32) date to the period of significance and are contributing elements under Criterion A and C to the National Register status of the property. Further historical information is needed to determine if seven of the features (Features 4, 5, 8, 15, 16, 33, and 35) date to the period of significance and are contributing elements under Criterion A and C to the National Register status of the property. These features have been mapped and photographed exhausting their research potential and eliminating them as contributing elements under Criterion D to the National Register status of the property.

The remaining 22 features (Features 1 through 3, 6, 7, 9, 10, 14, 17, 20 through 23, 26 through 28, 31, 34, and 36 through 39) lack integrity or do not date to the period of significance and are not contributing elements under Criterion A, C, or D to the National Register status of the property.

No significant subsurface cultural deposits were located during the auger testing phase of the project.

The National Park Service recommends:

> The eleven features (Features 11 through 13, 18 through 20, 24, 25, 29, 30, and 32) that are contributing elements to the National Register status of the property should be avoided during ground disturbing activities.
>
> Further historical research should be conducted to determine if Features 4, 5, 8, 15, 16, 33, and 35 date to the period of significance and are contributing elements under Criterion A and C to the National Register status of the property. They should be avoided during any ground disturbing activities until their significance is determined.
>
> If concealed archeological resources are encountered during future project activities, all necessary steps will be taken to protect them and to notify the Park's Cultural Resource Specialist.

REFERENCES

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TABLE 1: FEATURE DESCRIPTION AND SIGNIFICANCE

F#	F/C	DESCRIPTION OF FEATURE	PROPERTY OWNER	SIGNIFICANCE	
				A & C	D
1	VII	Trash scatter	Unknown	No	No
2	VII	A pile of soil containing cinders, burned bottle glass fragments, and burned and unburned ceramic fragments.	Unknown	No	No
3	VII	A surface scatter of cinders.	NPS	No	No
4	II	Concrete foundation.	NPS	Unknown	No
5	II	Concrete foundation.	NPS	Unknown	No
6	VI	Fire hydrant.	NPS	No	No
7	III	Concrete footing for fire escape.	NPS	No	No
8	IV	Line of partially buried railroad ties and two sign posts.	Unknown	Unknown	No
9	VI	Water pump and spigot.	Unknown	No	No
10	V	Elm tree stumps and sprouts.	NPS	No	No
11	IV	Line of mortared bricks.	Union Pacific RR	Yes	No
12	I	Coal and storage shed.	NPS	Yes	No
13	VI	Concrete shaft	NPS	Yes	No
14	III	Concrete footings for fire escape.	NPS	No	No
15	VI	Fire hydrant.	NPS	Unknown	No
16	VIII	Grave or memorial marker.	NPS	Unknown	No
17	III	Concrete footings for fire escape.	NPS	No	No
18	IV	Lawn.	NPS	Yes	No
19	IV	Two brick paved walkways.	NPS	Yes	No
20	VI	Base for lighted signpost.	NPS	Yes	No
21	VI	Metal pipe buried vertically in ground.	NPS	No	No
22	VI	Partially buried metal pipe laying horizontally on ground.	NPS	No	No
23	V	Remains of century plant.	NPS	No	No
24	V	Palm trees.	NPS	Yes	No
25	IV	Flag pole.	NPS	Yes	No
26	V	Tamarisk trees.	NPS	No	No
27	IV	Small patch of ground at west end of depot, between depot and concrete slab.	NPS	No	No
28	VI	Buried metal box.	Unknown	No	No
29	VI	Concrete shaft.	NPS	Yes	No
30	VI	Concrete shaft.	NPS	Yes	No
31	VI	Fenced power unit.	NPS	No	No
32	I	Kelso Depot.	NPS	Yes	No
33	III	Concrete footing.	Union Pacific RR	Unknown	No
34	VIII	Cadastrals marking the northeast and northwest corners of NPS property.	NPS	No	No
35	VIII	Levee.	Crosses NPS	Unknown	No
36	VIII	Metal shipping container.	NPS	No	No
37	VIII	Portable toilets.	NPS	No	No
38	VIII	Wrought iron fence.	NPS	No	No
39	VI	Utility poles.	NPS	No	No

TABLE 2: KELSO DEPOT AUGER TESTS

AUGER TEST #	DEPTH	CULTURAL MATERIAL
1	40 cm	None.
2	41 cm	None.
3	34 cm	3 recent bottle glass fragments.
4	31 cm	2 recent bottle glass fragments/coal fragments only on ground surface.
5	41 cm	1 recent bottle glass fragment.
6	31 cm	None.
7	26 cm	Stopped when hit buried PVC pipe.
8	42 cm	Several pieces of coal near surface.
9	23 cm	None, stopped when hit a large rock.
10	45 cm	None.
11	25 cm	None, stopped when hit a large root.
12	18 cm	None, stopped when hit a large root.
13	28 cm	None.
14	12 cm	Stopped when hit buried PVC pipe.
15	35 cm	None.
16	22 cm	None.
17	38 cm	3 marbles.
18	23 cm	None.
19	21 cm	1 small piece of iron.
20	30 cm	1 small piece of asphalt.
21	24 cm	None.
22	40 cm	None.
23	42 cm	None.
24	38 cm	Charcoal at surface.
25	45 cm	None.
26	42 cm	None.
27	30 cm	Several small pieces of asphalt.

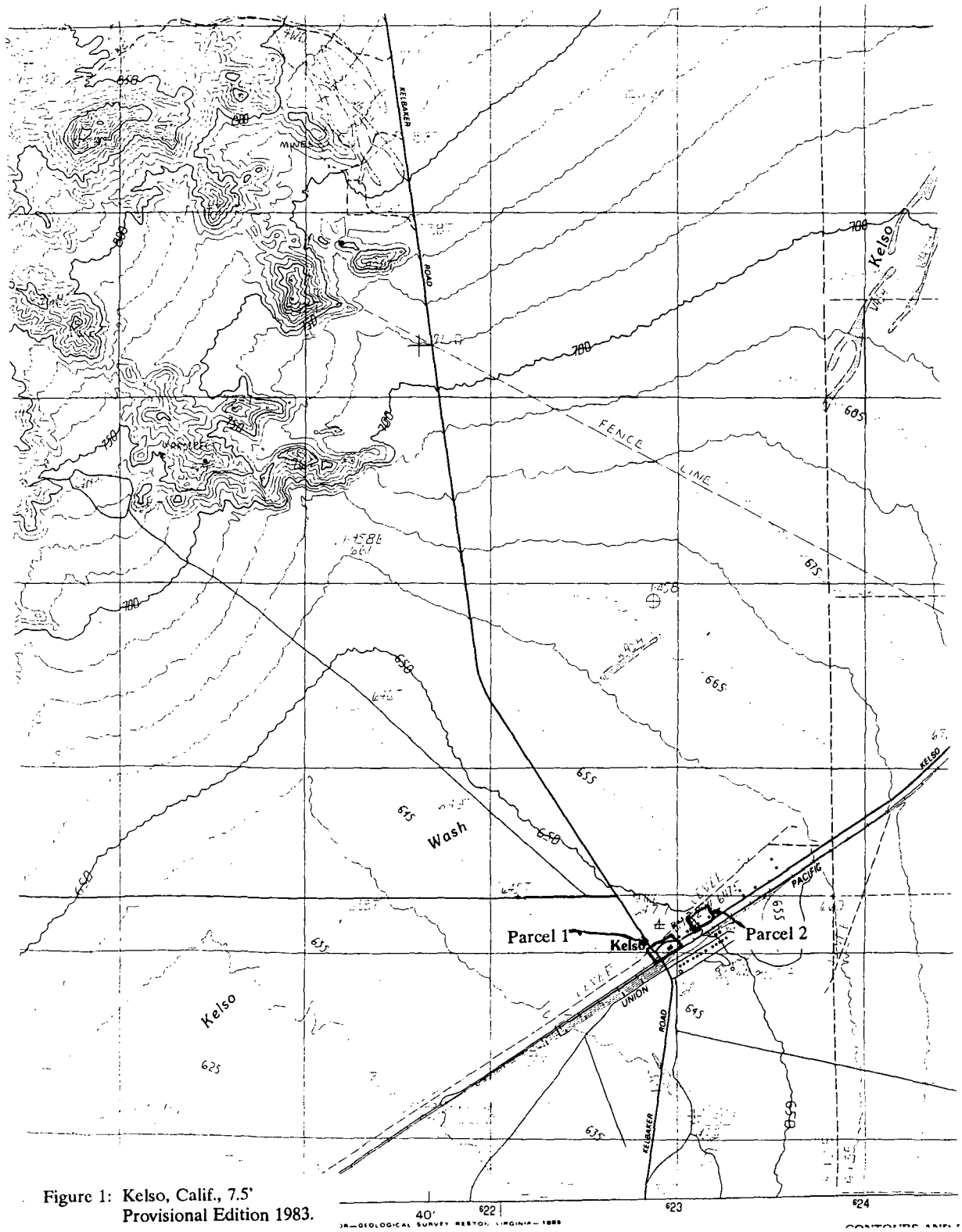

Figure 1: Kelso, Calif., 7.5' Provisional Edition 1983.

Figure 1: Kelso California, 7.5', Provisional Edition 1983

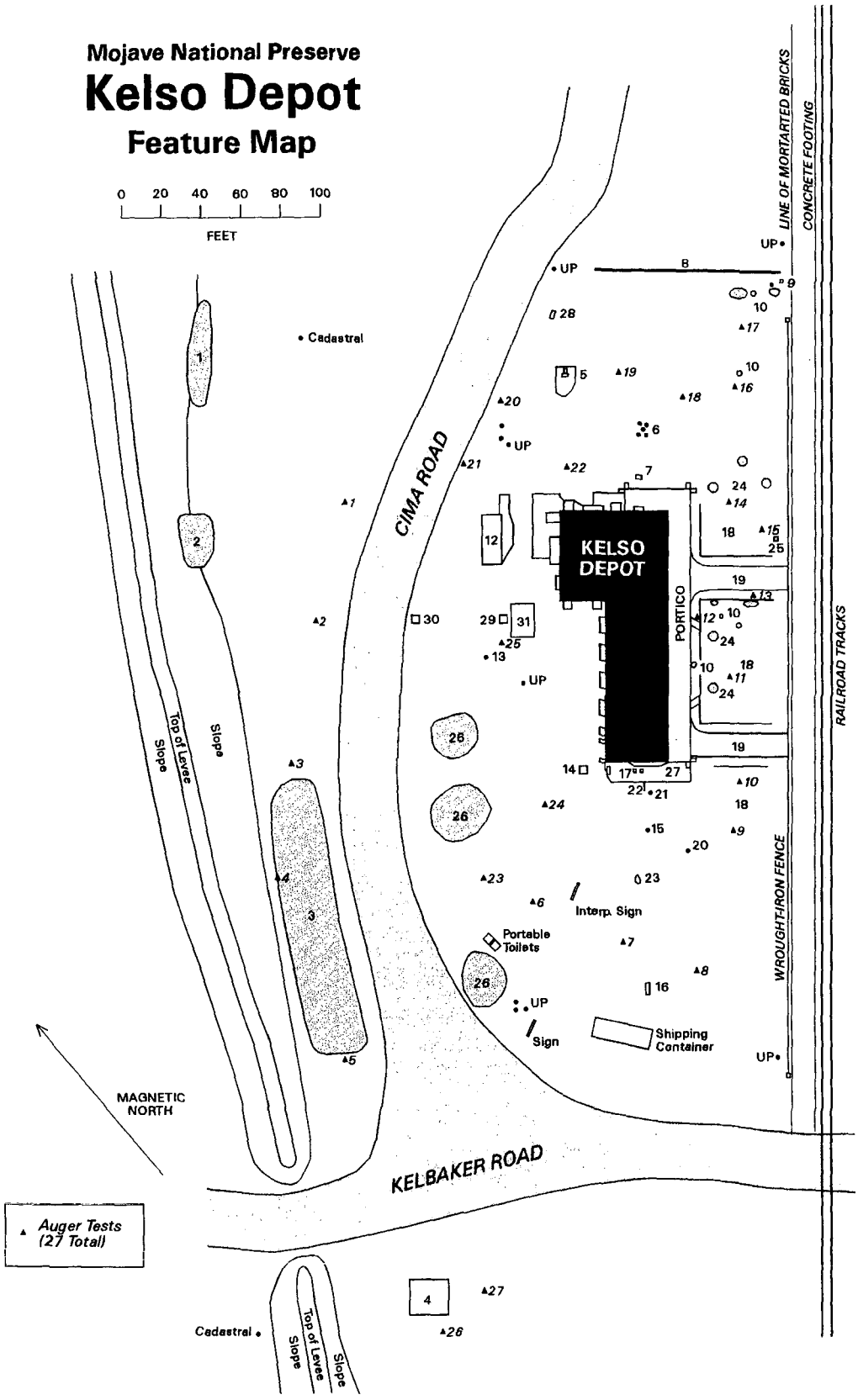

Figure 2: Planview map of Parcel 1 project area.

Figure 3: Kelso Depot, c. 1925, U.P.R.R. collection, Bill Kappele Enlargement, March 1992. Courtesy of Dennis Casebier.

Figure 4: Oblique view, date unknown, from National Register of Historic Places Registration Form prepared by Parks and Snyder, 1991.

Figure 5: Kelso Depot, front view, 1979-80, from National Register of Historic Places Registration Form prepared by Parks and Snyder, 1991.

Figure 6: Kelso Depot, east end, 1991, from National Register of Historic Places Registration Form prepared by Parks and Snyder, 1991.

Figure 7: Kelso Depot, west end, 1991, from National Register of Historic Places Registration Form prepared by Parks and Snyder, 1991.

Figure 8: Kelso Depot, back of depot, 1975, from National Register of Historic Places Registration Form prepared by Parks and Snyder, 1991.

Figure 9: View to west in front of depot, 1995.

Figure 10: View to east, west side of depot, 1995.

Figure 11: View to southwest, east and north sides of depot, 1995.

Figure 12: Feature 12, south and east sides of coal and supply shed, 1995.

Figure 13: Feature 12, west side of coal and supply shed, 1995.

Figure 14: Feature 4, foundation, view to west, 1995.

Figure 15: Feature 5, foundation, view to northeast, 1995.

Figure 16: Feature 7, fire escape footing, 1995.

Figure 17: Features 14 and 17 (fire escape footings), and 20, (remains of century plant), 1995.

Figure 18: North end of Feature 8, view to southwest, 1995.

Figure 19: Feature 9 and south end of Feature 8, 1995.

Figure 20: View to west in front of depot. Features 18 (lawn area), 19 (brick walkway), 24 (palm trees), and 38 (wrought iron fence), 1995.

Figure 21: View to west in front of depot. Features 18 (lawn area), 19 (brick walkway), 24 (palm trees), and 25 (flag pole), 1995.

Figure 22: Sawtooth brick border of lawn, 1995.

Figure 23: Detail of brickwork at north end of walkway, 1995.

Figure 24: Features 17 and 27, 1995.

Figure 25: Feature 6 (fire hydrant), 1995.

Figure 26: Feature 15 (fire hydrant), 1995.

Figure 27: Feature 13 (concrete shaft), 1995.

Figure 28: Feature 29 (concrete shaft), 1995.

Figure 29: Feature 30 (concrete shaft), 1995.

Figure 30: Feature 20 (base of lighted post), 1995.

Figure 31: Features 21 (vertically buried metal pipe), and 22 (partially buried metal pipe).

Figure 32: Feature 28 (buried metal box), 1995.

Figure 33: Feature 1 (trash scatter), 1995.

Figure 34: Feature 2 (pile of soil with cinders, and bottle glass and ceramic fragments), 1995

Figure 35: Feature 3 (cinder scatter), 1995.

Figure 36: Feature 16, memorial marker, view to east, 1995.

Figure 37: Feature 16, memorial marker, view to west, 1995.

Figure 38: Feature 35 (levee), view to west, 1995.

MOJA 764 – 35
KELSO STATION Vertical Load Analysis

BLDG.	AREA	MEMBER	SIZE	SPACING	SPAN	LOADING	SHEAR STRESS	BENDING STRESS	COMMENTS
MAIN	ROOF	RIDGE BOARD	2x12 S4S	CONT.					
"	"	RAFTER	2x8 S4S	16"O.C.	15' 6"	DL: 30 PSF LL: 16 PSF	f: 76 psi F: 95 psi	f: 1700 psi F: 1380 psi	**23% overstressed in bending for DF #1. This analysis applies to roof joists NOT supported mid span by web.**
"	"	RAFTER	2x8 S4S	16"O.C.	18' 0"	DL: 30 PSF LL: 16 PSF	ok by insp.	f: 564 psi F: 1380 psi	This analysis applies to roof joists supported mid span by web of roof truss. Roof truss located every 32" O.C. (every other joist).
"	"	VERT WEB	2x6 S4S	32"O.C.					
"	"	DIAG WEB	2x6 S4S	32"O.C.					
KITCHEN	COMP ROOF	RAFTER	2x6 S4S	16" O.C.	12' 0"	DL: 14 PSF LL: 20 PSF	f: 63 psi F: 95 psi	f: 1314 psi F: 1495 psi	Joist is 2 span continuous.
"	TILE ROOF	RAFTER	2x4 S4S	16" O.C.	2' 0"	DL: 27 PSF LL: 16 PSF		f: 113 psi F: 1006 psi	
ARCADE	TILE ROOF	RAFTER	2x8 S4S	16" O.C.	10' 6"	DL: 11 PSF LL: 20 PSF	f: 30 psi F: 95 psi	f: 529 psi F: 1006 psi	
"	"	RAFTER							OK by inspection
MAIN	2ND FLR CEILING	JOIST	2x6 S4S	16"O.C.	13' 0"	DL: 16 PSF LL: 25 PSF	f: 65 psi F: 95 psi	f: 1832 psi F: 1495 psi	**23% overstressed in bending for DF #1.**
KITCHEN	1ST FLR CEILING	JOIST	3x14 S4S	16"O.C.	24' 0"	DL: 18 PSF DL: 228 LB LL: 10 PSF LL: 324 LB	f: 94 psi F: 119 psi	f: 720 psi F: 1258 psi	
MAIN	2ND FLR FRAMING	BRDG	1x4	MID SPAN					
"	"	SHEATH	3/4" DIAG	2 LAYERS					
"	"	JOIST	2x12 S4S	12" O.C.	16'0"	DL: 16 PSF DL: 425 LB LL: VARIES LL: 382 LB	f: 120 psi F: 95 psi	f: 1318 psi F: 1150 psi	**Joist above ticket office on S side of bldg LL: 50 (office) or 100 (exit corridor) psf. 26% overstr. for shear w/o adjust. factor 15% overstressed in bending**
"	"	JOIST	2x12 S4S	12" O.C.	14'0"	DL: 16 PSF DL: 425 LB LL: 50 PSF LL: 382 LB	f: 108 psi F: 95 psi	f: 767 psi F: 1150 psi	**Joist above baggage rm. on N side of bldg. 14% overstr. in shear w/o adjustment factor.**

MAIN	2ND FLR FRAMING	JOIST	2x10 S4S	16"O.C.	13'0"	DL: 14 PSF LL: 50 PSF	f: 60 psi F: 95 psi	f: 1019 psi F: 1265 psi	Joist located in cntr. of bldg, E of baggage rm W of lobby stairs.
"	"	JOIST	2x10 S4S	16"O.C.	13'0"	DL: 14 PSF LL: 100 PSF	f: 107 psi F: 95 psi	f: 1813 psi F: 1265 psi	**Joist located in cntr. of bldg, assembly live loads. 43% overstr. in bending.**
"	"	JOIST	2x6 S4S	16"O.C.	5'0"	DL: 14 PSF LL: 100 PSF	f: 69 psi F: 118 psi	f: 754 psi F: 1869 psi	Joist spanning 2nd floor corridor.
"	"	JOIST	2x10 S4S	16"O.C.	9'6"	DL: 14 PSF LL: 100 PSF	f: 78 psi F: 118 psi	f: 962 psi F: 1581 psi	Joist @ proposed elevator lobby location
MAIN	2ND FLR FRAMING	JOIST	2x10 S4S	16"O.C.	9'6"	DL: 14 PSF LL: 100 PSF	f: 82 psi F: 118 psi	f: 1013 psi F: 1581 psi	Joist supporting exit corridor, spanning btwn steel beams above cafe.
"	"	JOIST	2x10 S4S	16"O.C.	9'6"	DL: 14 PSF LL: 40 PSF			Joist supporting residential load, spanning btwn. steel beams. OK by inspection.
"	"	JOIST	2x10 S4S	16"O.C.	9'6"	DL: 451 PLF LL: 382 PLF	f: 428 psi F: 118 psi	f: 5272 psi F: 1581 psi	**Joist supporting interior bearing wall, spanning btwn steel beams @ hall wall. Field verification of framing necessary**
"	"	STEEL BEAM	20" x 75#/FT	9'6"	31'0"	DL: 230 PLF DL: 4040 LB LL: VARIES LL: 3630 LB	f: 1427 psi F: 12000 ps	f: 18.5 ksi F: 18 ksi	**3% overstressed in bending LL: 50 psf rooms, 100 psf corridor**
"	LOBBY STAIR	STRNGR	2x6 S4S	2'0" O.C.	9'0"	DL: 10 PSF LL: 100 PSF		f: 1767 psi F: 1868 psi	Field verify stair framing and member sizes.
"	"	JOIST	2X6 S4S	2'0" O.C.	8'0"	DL: 10 PSF LL: 100 PSF		f: 2792 psi F: 1635 psi	**Member spans landing @ landing center. Member size requires field verification.**
"	1ST FLR FRAMING	JOIST	3x14	12"O.C.	20' 0"	DL: 77 PSF DL: 704 LB LL: 100 PSF LL: 1322 LB	f: 153 psi F: 118 psi	f: 2756 psi F: 1438 psi	**Joist located below baggage room. Conc Load applied by bearing wall. 92% overstress in bending for DF #1 Joist field measured 2.5in X 12.5in**
"	"	JOIST	2x10 S4S	16" O.C.	9' 0"	DL: 65 PLF LL: 100 PSF	f: 107 psi F: 95 psi	f: 1250 psi F: 1265 psi	Joist is located over unexcavated area on south side of bldg.
"	"	JOIST	3x14	12'0"O.C.	20' 0"	DL: 20 PLF DL: 600 LB LL: VARIES LL: 850 LB	f: 139 psi F: 95 psi	f: 2126 psi F: 1150 psi	**Joist located E of baggage room, W of stairs. Overstressed 46% in shear, 48% in bending for DF #1.**
"	"	JOIST	3x14	12'0"O.C.	20' 0"	DL: 77 PSF LL: 100 PLF	f: 85 psi F: 118 psi	f: 1634 psi F: 1438 psi	**Joist located below lobby and cafe. Joist 14% overstressed for DF #1.**
KITCHEN	1ST FLR FRAMING	JOIST	3x14	12'0"O.C.	18'0"	DL: 77 PSF LL: 200 PSF	f: 120 psi F: 118 psi	f: 2068 psi F: 1438 psi	**Joist located below kitchen. Joist 44% overstr. in bending for DF#1.**

FYI

United States Department of the Interior

NATIONAL PARK SERVICE
Denver Service Center
12795 W. Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-0287

IN REPLY REFER TO:
D3415 (DSC-EN)
MOJA-764-35

OCT 02 1996

U.S. Forest Products Laboratory
Attn: Harry Alden
One Gifford Pinchot Drive
Madison, Wisconsin 53705-2398

Mr. Alden:

Reference: Mojave National Preserve, Pkg. No. 764, Kelso Depot Historic Structure Report, PT: 35

Enclosed please find a wood sample from the Kelso Depot, a structure constructed in 1924 in southern California, near the California/Nevada border. Please determine the species of the sample.

I can be contacted by telephone at 303-969-2683 if you have any questions. Thank you for your assistance.

Sincerely,

Bridget Wanderer

Bridget Wanderer

Enclosure

IDENTIFIED BY
Center For Wood Anatomy Research
U. S. Forest Products Laboratory
Madison, WI 53705

Douglas Fir (Pseudotsuga sp.)

Harry G. Alden
10/7/96

APPENDIX I: MECHANICAL CALCULATIONS

Energy Consumption and Energy Cost Calculations

MONTHLY ENERGY CONSUMPTION - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 1
CHILLER AND BOILERS, EXISTING BUILDING ENVELOPE

---------- MONTHLY ENERGY CONSUMPTION ----------

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	GAS DMND On Peak (Thrm/hr)
Jan	12,910	52	1,243	4
Feb	11,304	57	390	3
March	12,405	55	594	3
April	11,895	56	450	3
May	14,560	74	93	1
June	15,215	81	59	1
July	20,374	105	59	1
Aug	18,829	97	59	1
Sept	16,440	87	59	1
Oct	13,224	66	152	2
Nov	12,191	53	674	3
Dec	12,956	53	1,195	4
Total	172,303	105	5,027	4

Building Energy Consumption = 104,740 (Btu/Sq Ft/Year)
Floor Area = 10,415 (Sq Ft)
Source Energy Consumption = 220,226 (Btu/Sq Ft/Year)

The above figures include estimated energy usage and demand for the building elevator and domestic water heating as follows:

Elevator Consumption – 1,226 KWh per month
Elevator Demand – 22 KW (30 HP motor)
DHW Consumption – 59 Therm per month
DHW Demand – 1 Therm per hour

Propane Usage -

Summer Season (Apr – Oct) – (931 x 100,000)/91,550 = 1,017 gallons
Winter Season (Nov – Mar) – (4,096 x 100,000)/91,550 = 4,474

Total Propane Usage - 5,491 gallons

ENERGY COSTS - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 1
CHILLER AND BOILERS, EXISTING BUILDING ENVELOPE

Electrical Energy Cost -

Month	ELEC (KWh)	DEMAND (KW)	Facility Demand Charge (@ $5.40 per KW)	Time Demand Charge (@ $7.75 per KW)	$0.0792 per KWh Charge (< 300 KWh/KW)	$0.04391 per KWh Charge (> 300 KWh/KW)	Basic Monthly Service Charge	Total
Jan	12,910	53*	286.20	-0-	993.04	-0-		60.301,339.54
Feb	11,304	57	307.80	-0-	869.50	-0-		60.301,237.60
March	12,405	55	297.00	-0-	954.19	-0-		60.301,311.49
April	11,895	56	302.40	-0-	914.96	-0-		60.301,277.66
May	14,560	74	399.60	-0-	1,119.96	-0-		60.301,579.86
June	15,215	81	437.40	627.75	1,170.34	-0-		60.302,295.79
July	20,374	105	567.00	813.75	1,567.17	-0-		60.303,008.22
Aug	18,829	97	523.80	751.75	1,448.33	-0-		60.302,784.18
Sept	16,440	87	469.80	674.25	1,264.56	-0-		60.302,468.91
Oct	13,224	66	356.40	-0-	1,017.19	-0-		60.301,433.89
Nov	12,191	53	286.20	-0-	937.73	-0-		60.301,284.23
Dec	12,956	53	286.20	-0-	996.58	-0-		60.301,343.08
Electric Totals —			4,519.80	2,867.50	13,253.55	-0-	723.60	$21,364.45

*50% of highest demand (July)

Gas Energy Cost -

Summer Season (Apr — Oct) — 1,017 x 0.98 =	996.66
Winter Season (Nov — Mar) — 4,474 x 1.15 =	5,145.10
Total Gas Energy Cost -	$6,141.76
Total Annual Energy Cost -	$27,506.21

MONTHLY ENERGY CONSUMPTION - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 2
CHILLER AND BOILERS, BUILDING WALLS AND ROOF INSULATED

---------- MONTHLY ENERGY CONSUMPTION ----------

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	GAS DMND On Peak (Thrm/hr)
Jan	11,407	50	612	3
Feb	10,251	52	152	2
March	11,178	51	237	2
April	10,817	51	169	2
May	13,159	66	59	1
June	13,749	71	59	1
July	17,469	86	59	1
Aug	16,209	82	59	1
Sept	14,371	75	59	1
Oct	12,054	61	70	1
Nov	10,876	51	270	2
Dec	11,457	50	586	3
Total	152,997	86	2,391	3

Building Energy Consumption = 73,094 (Btu/Sq Ft/Year)
Floor Area = 10,415 (Sq Ft)
Source Energy Consumption = 174,592 (Btu/Sq Ft/Year)

The above figures include estimated energy usage and demand for the building elevator and domestic water heating as follows:

Elevator Consumption – 1,226 KWh per month
Elevator Demand – 22 KW (30 HP motor)
DHW Consumption – 59 Therm per month
DHW Demand – 1 Therm per hour

Propane Usage -

Summer Season (Apr – Oct) – (534 x 100,000)/91,550 = 583 gallons
Winter Season (Nov – Mar) – (1,857 x 100,000)/91,550 = 2,028

Total Propane Usage - 2,611 gallons

ENERGY COSTS - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 2
CHILLER AND BOILERS, BUILDING WALLS AND ROOF INSULATED

Electrical Energy Cost -

Month	ELEC (KWh)	DEMAND (KW)	Facility Demand Charge (@ $5.40 per KW)	Time Demand Charge (@ $7.75 per KW)	$0.0792 per KWh Charge (< 300 KWh/KW)	$0.04391 per KWh Charge (> 300 KWh/KW)	Basic Monthly Service Charge	Total
Jan	11,407	50	270.00	-0-	877.43	-0-	60.30	1,207.73
Feb	10,251	52	280.80	-0-	788.51	-0-	60.30	1,129.61
March	11,178	51	275.40	-0-	859.81	-0-	60.30	1,195.51
April	10,817	51	275.40	-0-	832.04	-0-	60.30	1,167.74
May	13,159	66	356.40	-0-	1,012.19	-0-	60.30	1,428.89
June	13,749	71	383.40	550.25	1,057.57	-0-	60.30	2,051.52
July	17,469	86	464.40	666.50	1,343.72	-0-	60.30	2,534.92
Aug	16,209	82	442.80	635.50	1,246.80	-0-	60.30	2,385.40
Sept	14,371	75	405.00	581.25	1,105.42	-0-	60.30	2,151.97
Oct	12,054	61	329.40	-0-	927.19	-0-	60.30	1,316.89
Nov	10,876	51	275.40	-0-	836.58	-0-	60.30	1,172.28
Dec	11,457	50	270.00	-0-	881.27	-0-	60.30	1,211.57
Electric Totals —			4,028.40	2,433.50	11,768.53	-0-	723.60	$18,954.03

Gas Energy Cost -

Summer Season (Apr — Oct) — 583 x 0.98 =	571.34
Winter Season (Nov — Mar) — 2,028 x 1.15 =	2,332.20
Total Gas Energy Cost -	$2,903.54
Total Annual Energy Cost -	$21,857.57

MONTHLY ENERGY CONSUMPTION - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 3
CHILLER AND BOILERS, STORM WINDOWS (OR INSERTS) INSTALLED

---------- MONTHLY ENERGY CONSUMPTION ----------

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	GAS DMND On Peak (Thrm/hr)
Jan	12,676	52	1,077	4
Feb	11,108	56	317	2
March	12,290	55	482	3
April	11,768	56	358	3
May	14,311	74	79	1
June	14,979	80	59	1
July	19,771	102	59	1
Aug	18,431	95	59	1
Sept	16,224	85	59	1
Oct	13,038	65	129	2
Nov	12,046	53	554	3
Dec	12,744	52	1,040	4
Total	169,386	102	4,272	4

Building Energy Consumption = 96,526 (Btu/Sq Ft/Year)
Floor Area = 10,415 (Sq Ft)
Source Energy Consumption = 209,717 (Btu/Sq Ft/Year)

The above figures include estimated energy usage and demand for the building elevator and domestic water heating as follows:

Elevator Consumption – 1,226 KWh per month
Elevator Demand – 22 KW (30 HP motor)
DHW Consumption – 59 Therm per month
DHW Demand – 1 Therm per hour

Propane Usage -

Summer Season (Apr – Oct) – (802 x 100,000)/91,550 = 876 gallons
Winter Season (Nov – Mar) – (3,470 x 100,000)/91,550 = 3,790

Total Propane Usage - 4,666 gallons

ENERGY COSTS - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 3
CHILLER AND BOILERS, STORM WINDOWS (OR INSERTS) INSTALLED

Electrical Energy Cost -

Month	ELEC (KWh)	DEMAND (KW)	Facility Demand Charge (@ $5.40 per KW)	Time Demand Charge (@ $7.75 per KW)	$0.0792 per KWh Charge (< 300 KWh/KW)	$0.04391 per KWh Charge (> 300 KWh/KW)	Basic Monthly Service Charge	Total
Jan	12,676	52	280.80	-0-	975.04	-0-	60.30	1,316.14
Feb	11,108	56	302.40	-0-	854.43	-0-	60.30	1,217.13
March	12,290	55	297.00	-0-	945.35	-0-	60.30	1,302.65
April	11,768	56	302.40	-0-	905.19	-0-	60.30	1,267.89
May	14,311	74	399.60	-0-	1,100.80	-0-	60.30	1,560.70
June	14,979	80	432.00	620.00	1,152.18	-0-	60.30	2,264.48
July	19,771	102	550.80	790.50	1,520.79	-0-	60.30	2,922.39
Aug	18,431	95	513.00	736.25	1,417.71	-0-	60.30	2,727.26
Sept	16,224	85	459.00	658.75	1,247.95	-0-	60.30	2,426.00
Oct	13,038	65	351.00	-0-	1,002.88	-0-	60.30	1,414.18
Nov	12,046	53	286.20	-0-	926.58	-0-	60.30	1,273.08
Dec	12,744	52	280.80	-0-	980.27	-0-	60.30	1,321.37
Electric Totals —			4,455.00	2,805.50	13,029.17	-0-	723.60	$21,013.27

Gas Energy Cost -

Summer Season (Apr — Oct) — 876 x 0.98 =	858.48
Winter Season (Nov — Mar) — 3,790 x 1.15 =	4,358.50
Total Gas Energy Cost -	$5,216.98
Total Annual Energy Cost -	$26,320.25

MONTHLY ENERGY CONSUMPTION - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 4
CHILLER AND BOILERS, AWNINGS ON 2ND FLOOR WINDOWS INSTALLED

---------- MONTHLY ENERGY CONSUMPTION ----------

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	GAS DMND On Peak (Thrm/hr)
Jan	12,864	51	1,273	4
Feb	11,203	56	402	3
March	12,325	54	611	3
April	11,854	55	459	3
May	14,449	74	93	1
June	15,101	81	59	1
July	20,213	104	59	1
Aug	18,636	97	59	1
Sept	16,140	85	59	1
Oct	13,039	64	159	2
Nov	12,108	52	693	3
Dec	12,884	52	1,217	4
Total	170,816	104	5,143	4

Building Energy Consumption = 105,357 (Btu/Sq Ft/Year)
Floor Area = 10,415 (Sq Ft)
Source Energy Consumption = 219,926 (Btu/Sq Ft/Year)

The above figures include estimated energy usage and demand for the building elevator and domestic water heating as follows:

Elevator Consumption — 1,226 KWh per month
Elevator Demand — 22 KW (30 HP motor)
DHW Consumption — 59 Therm per month
DHW Demand — 1 Therm per hour

Propane Usage -

Summer Season (Apr — Oct) — (947 x 100,000)/91,550 = 1,034 gallons
Winter Season (Nov — Mar) — (4,196 x 100,000)/91,550 = 4,583

Total Propane Usage - 5,617 gallons

ENERGY COSTS - SYSTEM ALTERNATIVE 1, ENVELOPE ALTERNATIVE 4
CHILLER AND BOILERS, AWNINGS ON 2ND FLOOR WINDOWS INSTALLED

Electrical Energy Cost -

Month	ELEC (KWh)	DEMAND (KW)	Facility Demand Charge (@ $5.40 per KW)	Time Demand Charge (@ $7.75 per KW)	$0.0792 per KWh Charge (< 300 KWh/KW)	$0.04391 per KWh Charge (> 300 KWh/KW)	Basic Monthly Service Charge	Total
Jan	12,864	52*	280.80	-0-	989.50	-0-	60.30	1,330.60
Feb	11,203	56	302.40	-0-	861.73	-0-	60.30	1,224.43
March	12,325	54	291.60	-0-	948.04	-0-	60.30	1,299.94
April	11,854	55	297.00	-0-	911.81	-0-	60.30	1,269.11
May	14,449	74	399.60	-0-	1,111.42	-0-	60.30	1,571.32
June	15,101	81	437.40	627.75	1,161.57	-0-	60.30	2,287.02
July	20,213	104	561.60	806.00	1,554.78	-0-	60.30	2,982.68
Aug	18,636	97	523.80	751.75	1,433.48	-0-	60.30	2,769.33
Sept	16,140	85	459.00	658.75	1,241.49	-0-	60.30	2,419.54
Oct	13,039	64	345.60	-0-	1,002.96	-0-	60.30	1,408.86
Nov	12,108	52	280.80	-0-	931.35	-0-	60.30	1,272.45
Dec	12,884	52	280.80	-0-	991.04	-0-	60.30	1,332.14
Electric Totals –			4,460.40	2,844.25	13,139.17	-0-	723.60	$21,167.42

*50% of highest demand (July)

Gas Energy Cost -

Summer Season (Apr – Oct) – 1,034 x 0.98 =	1,013.32
Winter Season (Nov – Mar) – 4,583 x 1.15 =	5,270.45
Total Gas Energy Cost -	$6,283.77
Total Annual Energy Cost -	$27,451.19

MONTHLY ENERGY CONSUMPTION - SYSTEM ALTERNATIVE 2, ENVELOPE ALTERNATIVE 2
GROUND-COUPLED HEAT PUMPS, BUILDING WALLS AND ROOF INSULATED

---------- MONTHLY ENERGY CONSUMPTION ----------

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)
Jan	11,540	75
Feb	10,759	75
March	11,616	75
April	11,331	75
May	13,648	68
June	13,994	68
July	15,949	68
Aug	15,427	68
Sept	14,372	68
Oct	12,761	68
Nov	11,297	75
Dec	11,606	75
Total	154,300	75

Building Energy Consumption = 50,564 (Btu/Sq Ft/Year)
Floor Area = 10,415 (Sq Ft)
Source Energy Consumption = 151,708 (Btu/Sq Ft/Year)

The above figures include estimated energy usage and demand for the building elevator and domestic water heating as follows:

Elevator Consumption – 1,226 KWh per month
Elevator Demand – 22 KW (30 HP motor)
DHW Consumption – 500 KWh per month (GCHP water heater)
DHW Demand – 4 KW (GCHP water heater)

ENERGY COSTS - SYSTEM ALTERNATIVE 2, ENVELOPE ALTERNATIVE 2
GROUND-COUPLED HEAT PUMPS, BUILDING WALLS AND ROOF INSULATED

Electrical Energy Cost -

Month	ELEC (KWh)	DEMAND (KW)	Facility Demand Charge (@ $5.40 per KW)	Time Demand Charge (@ $7.75 per KW)	$0.0792 per KWh Charge (< 300 KWh/KW)	$0.04391 per KWh Charge (> 300 KWh/KW)	Basic Monthly Service Charge	Total
Jan	11,540	75	405.00	-0-	887.66	-0-	60.30	1,352.96
Feb	10,759	75	405.00	-0-	827.58	-0-	60.30	1,292.88
March	11,616	75	405.00	-0-	893.50	-0-	60.30	1,358.80
April	11,331	75	405.00	-0-	871.58	-0-	60.30	1,336.88
May	13,648	68	367.20	-0-	1,049.80	-0-	60.30	1,477.30
June	13,994	68	367.20	527.00	1,076.42	-0-	60.30	2,030.92
July	15,949	68	367.20	527.00	1,226.80	-0-	60.30	2,181.30
Aug	15,427	68	367.20	527.00	1,186.64	-0-	60.30	2,141.14
Sept	14,372	68	367.20	527.00	1,105.49	-0-	60.30	2,059.99
Oct	12,761	68	367.20	-0-	981.58	-0-	60.30	1,409.08
Nov	11,297	75	405.00	-0-	868.97	-0-	60.30	1,334.27
Dec	11,606	75	405.00	-0-	892.73	-0-	60.30	1,358.03
Electric Totals —			4,633.20	2,108.00	11,868.75	-0-	723.60	$19,333.55

Construction Cost Estimates

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL ESTIMATE (INC. O&P)
A	SYSTEM ALTERNATIVE ONE — AIR-COOLED PACKAGE CHILLER WITH PROPANE GAS-FIRED BOILERS AND BLOWER-COIL AIR HANDLERS				
1	Chilled Water Pipe Insulation	11,000	SF	0.60	6,600.00
2	Heating Water Pipe Insulation	11,000	SF	0.40	4,400.00
3	Duct Insulation	11,000	SF	1	11,000.00
4	1,000 Gallon Propane Tanks	3	Ea.	3,800	11,400.00
5	Propane Piping	1	LS	2,000	2,000.00
6	Gas Regulator, Transition Risers, Tank Fittings	1	LS	1,500	1,500.00
7	75 Gallon Gas-Fired Water Heaters (69 MBH Burners)	2	Ea.	800	1,600.00
8	Condensate Drain Piping	11,000	SF	0.25	2,750.00
9	Chilled Water Piping	11,000	SF	2.25	24,750.00
10	Heating Water Piping	11,000	SF	2	22,000.00
11	1-1/2 HP Chilled Water Circulating Pumps	2	Ea.	2,200	4,400.00
12	3/4 HP Heating Water Circulating Pumps	2	Ea.	1,400	2,800.00
13	Chemical Feeders	2	Ea.	300	600.00
14	20 Gallon Chilled Water Expansion Tank	1	Ea.	1,200	1,200.00
15	20 Gallon Heating Water Expansion Tank	1	Ea.	1,200	1,200.00
16	3" Chilled Water Air Separator	1	Ea.	925	925.00
17	2" Heating Water Air Separator	1	Ea.	550	550.00
18	50 Ton Air-Cooled Chiller	1	Ea.	34,250	34,250.00
19	500 MBH Gas-Fired Boiler	1	Ea.	5,300	5,300.00
20	1 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	6	Ea.	1,400	8,400.00
21	1-1/2 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	3	Ea.	1,665	4,995.00
22	2 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	2	Ea.	2,125	4,250.00

Item No.	Item Description	Estimated Quantity	Unit	Unit Price	Total Estimate (Inc. O&P)
23	2-1/2 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	5	Ea.	2,300	11,500.00
24	3 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	2	Ea.	2,300	4,600.00
25	4 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	1	Ea.	2,550	2,550.00
26	5 Ton Blower-Coil Units w/ Chilled & Hot Water Coils	1	Ea.	2,950	2,950.00
27	Ductwork	11,000	SF	2.50	27,500.00
28	Duct Accessories	1	LS	1,500	1,500.00
29	Registers, Grilles, Diffusers, and Louvers	1	LS	2,000	2,000.00
30	Controls	1	LS	5,000	5,000.00
31	Testing Building Piping	1	LS	750	750.00
32	Testing, Adjusting, and Balancing — Airside	1	LS	4,000	4,000.00
33	Testing, Adjusting, and Balancing — Waterside	1	LS	3,500	3,500.00
34	Materials and Labor Subtotal -				222,720.00
35	15% Remote Site Factor -				33,408.00
36	Subtotal -				256,128.00
37	15% Contractor Overhead -				38,419.20
38	Subtotal -				294,547.20
39	10% Contractor Profit -				29,454.72
40	Total Construction Cost -				$324,001.92

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL ESTIMATE (INC. O&P)
B	SYSTEM ALTERNATIVE TWO — GROUND COUPLED HEAT PUMPS				
1	4" Ground Heat Exchanger Wells	7,200	LF	7	50,400.00
2	Grout for Wells	7,200	LF	0.75	5,400.00
3	18" Wide x 4' Deep Trench and Backfill for Ground Heat Exchanger Manifold	1,020	LF	4	4,080.00
4	4" Polyethylene Pipe	310	LF	8	2,480.00
5	3" Polyethylene Pipe	70	LF	4.50	315.00
6	2" Polyethylene Pipe	55	LF	3	165.00
7	1-1/2" Polyethylene Pipe	820	LF	2.50	2,050.00
8	1-1/4" Polyethylene Pipe	365	LF	2.25	821.25
9	1" Polyethylene Pipe	15,260	LF	2	30,520.00
10	Heat Pump Loop Pipe Insulation	11,000	SF	0.75	8,250.00
11	Duct Insulation	11,000	SF	1	11,000.00
12	80 Gallon Water Heater Tanks	2	Ea.	500	1,000.00
13	72 MBH Water-to-Water Heat Pump	1	Ea.	3000	3,000.00
14	1/12 HP Circulating Pump	1	Ea.	400	400.00
15	Condensate Drain Piping	11,000	SF	0.25	2,750.00
16	Heat Pump Loop Piping	11,000	SF	2.75	30,250.00
17	3 HP Heat Pump Loop Circulating Pumps	2	Ea.	4,535	9,070.00
18	Chemical Feeders	1	Ea.	300	300.00
19	60 Gallon Heat Pump Loop Expansion Tank	1	Ea.	1,900	1,900.00
20	4" Heat Pump Loop Air Separator	1	Ea.	1,325	1,325.00
21	1 Ton Water-to-Air Heat Pump Units	6	Ea.	1,175	7,050.00
22	1-1/2 Ton Water-to-Air Heat Pump Units	3	Ea.	1,375	4,125.00
23	2 Ton Water-to-Air Heat Pump Units	2	Ea.	1,475	2,950.00
24	2-1/2 Ton Water-to-Air Heat Pump Units	5	Ea.	1,550	7,750.00
25	3 Ton Water-to-Air Heat Pump Units	2	Ea.	1,650	3,300.00
26	4 Ton Water-to-Air Heat Pump Units	1	Ea.	2,100	2,100.00
27	5 Ton Water-to-Air Heat Pump Units	1	Ea.	2,600	2,600.00
28	Ductwork	11,000	SF	2.50	27,500.00
29	Duct Accessories	1	LS	1,500	1,500.00
30	Registers, Grilles, Diffusers, and Louvers	1	LS	2,000	2,000.00
31	Controls	1	LS	3,000	3,000.00
32	Testing Building Piping	1	LS	500	500.00
33	Testing, Adjusting, and Balancing — Airside	1	LS	4,000	4,000.00
34	Testing, Adjusting, and Balancing — Waterside	1	LS	1,750	1,750.00
35	Materials and Labor Subtotal -				235,601.25
36	15% Remote Site Factor -				35,340.19
37	Subtotal -				270,941.44
38	15% Contractor Overhead -				40,641.22
39	Subtotal -				311,582.66
40	10% Contractor Profit -				31,158.27

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL ESTIMATE (INC. O&P)
41	Total Construction Cost -				$342,740.93

Life Cycle Cost Calculations

All of the life cycle cost calculations are based on a 25 year study period and a 4.1 percent discount rate in accordance with the provisions of the Federal Energy Management Improvement Act of 1988. Discount factors were taken from "Energy Price Indices and Discount Factors for Life-Cycle Cost Analysis 1996", Annual Supplement to NIST Handbook 135 and NBS Special Publication 709. Energy related uniform present worth factors take into account projected fuel price escalation. Initial cost and energy cost worksheets for all of the alternatives analyzed are included in Appendices E1 and E2. All replacement and maintenance tasks shown in the life-cycle cost calculations are assumed to be performed by the park maintenance staff; contractor's remote site factors, overhead, and profit are not included in these costs.

System Alternative 1 -

Air-Cooled Package Chiller with Propane Gas-Fired Boilers and Blower-Coil Air Handlers

Initial Cost -	$324,001.92
Energy Cost -	
Electricity — 18,954.03 x 17.29 =	327,715.18
Propane — 2,903.54 x 18.28 =	53,076.71
Water Heater Replacement (Year 15) — 1,600 x 0.547 =	875.20
Salvage Value — 1,600 x 0.1 x 0.547 =	-87.52
Chiller Replacement (Year 20) — 34,250 x 0.448 =	15,344.00
Salvage Value — 34,250 x 0.1 x 0.448 =	-1,534.40
Maintenance Cost — 4,300 x 15.46 =	66,478.00
Total Life Cycle Cost -	$785,869.09

System Alternative 2 -

Ground-Coupled Heat Pumps

Initial Cost -	$342,740.93
Energy Cost -	
Electricity — 19,333.55 x 17.29 =	334,277.08
Water Heater Replacement (Year 20) — 4,400 x 0.448 =	1,971.20
Salvage Value — 4,400 x 0.1 x 0.448 =	-197.12
Heat Pump Replacement (Year 20) — 29,875 x 0.448 =	13,384
Salvage Value — 29,875 x 0.1 x 0.448 =	-1,338.40
Maintenance Cost — 3,500 x 15.46 =	54,110.00
Total Life Cycle Cost -	$744,947.69

In the life cycle cost analyses presented above, only monetary costs for energy end-use are considered. DSC Guideline 82-1, Amendment 3 (January 12, 1994) requires that costs for environmental emissions from electrical energy generation and the combustion of heating fuel be quantified and taken into account in life cycle costing analyses. The types of emissions and their associated costs outlined in the above referenced document are as follows:

Emission Type	Environmental Emission Cost
CO_2	$8 per ton
SO_2	$0.75 per lb.
NO_x	$3.40 per lb.

For electricity generated near Kelso, the calculated environmental costs per delivered KWh using the above cited emissions cost figures are as follows

Emission Type	Environmental Emission Cost

CO_2	$0.00434 per KWh
SO_2	$0.00184 per KWh
NO_x	$0.00859 per KWh
Total	$0.0148 per KWh

For propane, the calculated environmental costs per gallon of fuel using the above cited emissions cost figures are as follows

Emission Type	Environmental Emission Cost
CO_2	$0.0461 per gallon
SO_2	$0.00004 per gallon
NO_x	$0.0280 per gallon
Total	$0.0741 per gallon

The costs presented above for electricity and propane were calculated using emissions quantities for those energy sources taken from "Environmental Building News", Volume 2, Number 6, November/December 1993. The electric emissions quantities used are averages for the western part of the United States. Taking environmental emission costs into account, the life cycle costs are as follows

System Alternative 1 -

Air-Cooled Package Chiller with Propane Gas-Fired Boilers and Blower-Coil Air Handlers

Initial Cost -	$324,001.92
Energy Cost -	
Electricity — 18,954.03 x 17.29 =	327,715.18
Propane — 2,903.54 x 18.28 =	53,076.71
Environmental Emission Cost -	
Electricity — 152,997 x 0.0148 x 15.46 =	35,006.94
Propane — 2,611 x 0.0741 x 15.46 =	2,991.13
Water Heater Replacement (Year 15) — 1,600 x 0.547 =	875.20
Salvage Value — 1,600 x 0.1 x 0.547 =	-87.52
Chiller Replacement (Year 20) — 34,250 x 0.448 =	15,344.00
Salvage Value — 34,250 x 0.1 x 0.448 =	-1,534.40
Maintenance Cost — 4,300 x 15.46 =	66,478.00
Total Life Cycle Cost -	$823,867.16

System Alternative 2 -

Ground-Coupled Heat Pumps

Initial Cost —	$342,740.93
Energy Cost —	
Electricity — 19,333.55 x 17.29 =	334,277.08
Environmental Emission Cost -	
Electricity — 154,300 x 0.0148 x 15.46 =	35,305.07
Water Heater Replacement (Year 20) — 4,400 x 0.448 =	1,971.20
Salvage Value — 4,400 x 0.1 x 0.448 =	-197.12
Heat Pump Replacement (Year 20) — 29,875 x 0.448 =	13,384
Salvage Value — 29,875 x 0.1 x 0.448 =	-1,338.40
Maintenance Cost — 3,500 x 15.46 =	54,110.00
Total Life Cycle Cost -	$780,252.76

Mechanical Systems — General

The following items represent general information and requirements pertinent to the analysis and design of mechanical systems and related building components for the Kelso Railroad Depot building.

Climatic Data Climatic data used for calculating space heating and cooling loads and space heating and cooling energy consumption for the Railroad Depot building are as follows

Design conditions for Edwards Air Force Base (taken from ASHRAE Publication SPCDX, "Climatic Data for Region X, Arizona, California, Hawaii, Nevada") -

Latitude (Kelso latitude is 35.2°N) —	34.9°N
Elevation (Kelso elevation is 2,100') -	2,300'

Winter Design -

Outdoor Temperature (0.2% Design) -	17°F
Indoor Temperature -	72°F
Heating Degree Days -	3,123

Summer Design -

Outdoor Temperature, Dry Bulb (0.5% Design) -	104°F
Mean Coincident Outdoor Wet Bulb Temperature (0.5% Design) -	68°F
Indoor Temperature -	75°F

Energy Costs Representative energy costs obtained from Southern California Edison (SCE) and ProFlame (Barstow, CA) in March 1997 are as follows

Electricity (General Service Commercial Rate GS-2):

Energy Charge -

$0.07692 for the first 300 KWh per KW of maximum demand
$0.04391 for all additional KWh

Demand Charge -

Facilities-Related Demand Charge* — $5.40 per monthly maximum KW
Time- Related Demand Charge — $7.75 per monthly maximum KW in summer months and zero in winter (summer Jun — Sep, winter Oct — May)

*Each month, this charge is applied to the higher of the current month's maximum KW demand or 50 percent of the highest demand recorded in the previous 11 months.

Basic Service Charge — $60.30 per month

LP-Gas (Propane):

Summer Rate (Apr — Oct) — $0.98 per gallon
Winter Rate (Nov — Mar) — $1.15 per gallon

Domestic Water Conservation: Plumbing fixtures and fittings shall be selected to comply with the following criteria (NPS Tech Bulletin 92-1 recommendations) to insure water and energy conservation:

Water Closets — 1.6 gallons per flush
Urinals — 1.0 gallons per flush
Showerheads — 2.5 gallons per minute at 80 psi
Kitchen Faucets — 2.2 gallons per minute at 60 psi
Lavatories (residential) — 2.2 gallons per minute at 60 psi

Heating and Ventilating Systems The design of the heating, ventilating, and air conditioning systems shall conform to the requirements of the 1994 Uniform Mechanical Code (UMC).

Plumbing and Domestic Water Heating Systems The design of the plumbing and domestic water heating systems shall conform to the requirements of the 1994 Uniform Plumbing Code (UPC).

The building water supply shall be individually metered in accordance with NPS Staff Directive 78-10, which requires that the water service to all NPS buildings and other facilities be metered at the use point.

APPENDIX J: ELECTRICAL CALCULATIONS

Electrical Calculations

Based on 1996 NEC Article 220-10

Lighting Load			
Office	2880 sf (4.5 W/sf)	=	12960 va
Apartment	1848 sf (2 W/sf)	=	3696 va
Assemblies	6933 sf (1 W/sf)	=	6933 va
Elevator (30HP)			33144 va
Air Cooled Chiller (.8PF)			57500 va
Fan Loads (.8PF)			7500 va
Total Loads			121733 va
20% Future			24347 va
Total			146080 va

Service Size:

146080 va / (208) (1.73) = 405 amps (1.25) = 506 amps

Recommend Use of: 600 amp Service

Existing 75 kva Transformer:

Good for: 75000 w / (.8) (08) (1.73) = 260 amps
Consult Utility for Appropriately Sized Service Transformer

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Sanchez, Doran. "Gettin' the Old Depot Back on Track," *Newsbeat*, [Bureau of Land Management California newsletter], January 1993, pp. 5-8.

Sappington, Linda. "Kelso Depot; New life for an old building." *Sunday Independent*, Sunday, July 24, 1994, p. A5

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NEWSPAPERS AND NEWSLETTERS

Baker Valley News, Baker, California

The Barstow Printer, Barstow, California

Desert Dispatch, Barstow, California

Desert Star, Needles, California

The Desert Trail

East Mojave Monitor, newsletter of the Citizens for Mojave National Park

Kelso Depot Update, quarterly newsletter of the Kelso Depot Fund

Los Angeles Times, Los Angeles, California

Needles Nuggett, Needles, California

Preliminary Newsletter, Southern Nevada Chapter, National Railway Historical Society

Preservation News, newsletter of the National Trust for Historic Preservation

The Press-Enterprise, San Diego, California

Review-Journal, Las Vegas, Nevada

San Bernardino Sun, San Bernardino, California

Southern Sierran, newsletter of the Angeles Chapter of the Sierra Club

Voices of the Desert, a joint National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service, and California State Parks newsletter

PERIODICALS

The Streamliner. Official Publication of the Union Pacific Historical Society.

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The Union Pacific Magazine. Railroad employees' magazine, January 1922 to April 1933, complete run in the Union Pacific Museum Collection, Omaha Union Station, Omaha, Nebraska.

DOCUMENTS, MANUSCRIPTS, TYPESCRIPTS, AND OTHER MATERIALS

Anonymous, "The Birth of Kelso." 5 page typescript on Kelso history in Bureau of Land Management files transferred to the National Park Service San Francisco Support Office, San Francisco, California. This may have been prepared by a member of the Kelso Depot Fund.

Bureau of Land Management, files on Kelso Depot from Needles Resource Area Office; transferred to National Park Service and now in Historic Preservation Library, San Francisco Support Office, National Park Service, 600 Harrison Street, Suite 560, San Francisco, California, 94107-1372, eventually to be transferred to Mojave National Preserve.

Bureau of Land Management, files on Kelso Depot from the California Desert District Office, Riverside, California; transferred to National Park Service and at the time of this writing in the San Francisco Office, although destined to be transferred back to headquarters of Mojave National Preserve in Barstow, California

Finnell, Roger T., Letter, May 19, 1958, Kelso, California, to Mrs. Willa S. Oldham, 4259 Oakwood Place, Riverside, California, 4 pp., in response to an April 4 inquiry from Mrs. Oldham regarding information on the history of Kelso. In the Myrtle Pennington Collection, Mojave Desert Heritage and Cultural Association, Goffs, California.

Hayes, Everell "Butch," Bureau of Land Management, P.O. Box 12000, Reno, Nevada 89520-0006, collection of letters, newsletters, correspondence, and other materials related to the effort to preserve the Kelso Depot and to the internal workings of the Kelso Depot Fund, donated to the National Park Service, August 1997.

Interstate Commerce Commission, Bureau of Valuation, Valuation Docket No. 26, Final Engineering Report, San Pedro, Los Angeles & Salt Lake Railroad, extracts pertaining to Valuation Section No. 8, typescript, Inventory as of June 30, 1914 compiled by W.H. Davisson, Assistant District Engineer, approved by J.H. Saunders, Supervising Field Engineer, pp. 1 (Map), 81-103; Record Group No. 134, Records of the Interstate Commerce Commission, The National Archives, College Park, Maryland.

Interstate Commerce Commission, Division of Valuation, 58A 434, Boxes 44 and 52, San Pedro, Los Angeles & Salt Lake Railroad, engineers' field notes, structural party, Kelso, California, March 24-26, and Dec. 19, 1914; Record Group 134, Records of the Interstate Commerce Commission. Unfortunately, while the notes include the engine house, the sand house, and the oil supply, the balance of the buildings were left to be dealt with by a "special party" whose notes have not been found in the National Archives.

"Kelso Depot Memories: The first time, the last time, you saw Kelso." Typescript prepared from a flip chart of comments solicited by the Bureau of Land Management probably at a public meeting for planning purposes on Kelso in November 1992. Typescript prepared by Gordon Chappell, NPS.

McCoy, Ann Elizabeth, "'Overshadowed:' The desert experiences of Robert Morgan McCoy and Ann Elizabeth McCoy, at Kelso, California, between the years 1953 to 1959." Typescript, 14 pp. Copy in the library of the Mojave Desert Heritage and Cultural Association at Goffs, California, courtesy Dennis G. Casebier. Another copy supplied to the National Park Service by Robert McCoy

Moore, Mary Lu, of 6255 N. Camino Pimeria Alta, Apt. No. 120, Tucson, Arizona, 85718- 3631, collection of correspondence, newsletters, newspaper clippings, periodical articles, and other material pertaining to the efforts to save the Kelso Depot, and to the internal workings of the Kelso Depot Fund, loaned to the National Park Service.

San Pedro, Los Angeles & Salt Lake Railroad: Kelso and vicinity telegrams, 1905, collection of James Ozment, Golden, Colorado.

Union Pacific Railroad; Copies of pages of sketches from the notebooks of anonymous field engineers relating to work at Kelso, California, provided by the staff of the Union Pacific Museum Collection, Omaha, Nebraska, either undated or dated in the middle and late 1920s. Copies on file in Historic Preservation Library, San Francisco Support Office, National Park Service, 600 Harrison Street, Suite 600, San Francisco, California, 94107- 1372; copies also on file at National Park Service Denver Service Center, and headquarters. Mojave National Preserve.

Union Pacific Railroad: Los Angeles & Salt Lake Railroad Authority for Expenditure Files in the Union Pacific Museum Collection in the basement of the Omaha Union Station, Omaha, Nebraska, now converted into the city-operated Western Heritage Museum, but with a small Union Pacific office, library, stack and archive room, microfilm room, and basement storage areas. The files I have called "Consolidated Files" are loose in file folders and apparently were refiled long ago according to Interstate Commerce Commission account numbers or categories. I.C.C. Account No. 17 deals with stations and

related facilities, while Account No. 18 deals with hotels and related facilities. These files are evidently quite incomplete, as the existence of chronological files still in binders for certain years indicates.

L.A.& S.L.R.R. – Authority for Expenditure – [Consolidated Files] – I.C.C. Account 17, Stations, etc., 1919-1923.

L.A.& S.L.R.R. – Authority for Expenditure – [Consolidated files] – I.C.C. Account 17, Stations, etc., 1923-1925.

L.A.& S.L.R.R. – Authority for Expenditure – [Consolidated Files] – I.C.C. Account 17, Stations, etc., 1926-1931.

L.A.& S.L.R.R. – Authority for Expenditure – [Consolidated Files] – I.C.C. Account 17, Stations, etc., 1931-1955.

L.A.& S.L.R.R. – Authority for Expenditure – [Consolidated Files] – I.C.C. Account 18, Hotels, etc., 1921-1953.

[In addition to the above "consolidated" files, filed by I.C.C. account number but chronological within each account category, the Union Pacific archives in Omaha contained four gray cloth binders holding 8 1/2 by 11 inch A.F.E. forms bound at the top, which apparently *should* at some point been broken down and refiled by account numbers in the file folders listed above, but never were. In other words, the handling of these files by railroad clerks was most inconsistent and incomplete. It seems likely that there were other files, perhaps other bound volumes, that did not survive at all.]

Form A.F.E.-12 – OSL – OWRN – LASL – 1936-1940 – Auditor of Disbm'ts [Disbursements]

Form A.F.E.-12 – OSL – OWRN – LASL – 1941-1942 – Auditor of Disbm'ts

Form A.F.E.-12 – OSL – OWRN – LASL – 1949 – Auditor of Disbm'ts

Form A.F.E.-12 – OSL – OWRN – LASL – 1950 – Auditor of Disbursements

Union Pacific Railroad – System Public Time Tables, hard-bound set, January 1, 1901 – April 26, 1970, in the Union Pacific Museum Collection Library, Omaha Union Depot, Omaha, Nebraska. Union Pacific System public timetables issued September 11, 1921, carried in red on the cover of an otherwise all black and white document the notice, "This folder now includes the schedules of the Los Angeles & Salt Lake R.R." and was the first to include L.A.& S.L. schedules. They have been examined comprehensively only from that issue through the issue for September 7, 1930, in which all meal stops at depots on the Los Angeles & Salt Lake Railroad had ceased due to increased availability of dining cars for use on all trains due to the cutbacks in train service caused by the Great Depression. After that date, such timetables have been examined only intermittently down to the advent of Amtrak in 1971; a comprehensive examination and analysis of changes in passenger traffic through Kelso would add greatly to our understanding of Kelso history, but is beyond the scope of this study.

Union Pacific Railroad: Salt Lake Route Employees' Time Tables (loose individual copies) in the Union Pacific Museum Collection archives, Omaha, Nebraska:

San Pedro, Los Angeles & Salt Lake Railroad Employees' Time Table No. 20, Monday, July 3d, 1905. [This was reportedly the first official through time table showing passenger traffic over both the Los Angeles and Salt Lake Divisions.]

Los Angeles & Salt Lake Railroad Company Employees' Time Table No. 60, Sunday, May 29, 1921. [This time table does not yet carry the name "Union Pacific System"]

Union Pacific System – Los Angeles & Salt Lake Railroad Company – Los Angeles Division – Employes' Time Table No. 63, Sunday, July 29, 1923. [This was the employees' time table in effect at the time construction of the Kelso Depot began.]

Union Pacific System – Los Angeles & Salt Lake Railroad Company – Los Angeles Division – Employes' Time Table No. 64, Sunday, January 13, 1924. [This was the employees' time table in effect at the time the Kelso Depot was completed and opened for business.]

Supplied by Jeff Asay from the Union Pacific Railroad General Offices, Los Angeles:

Union Pacific System – Los Angeles & Salt Lake Railroad Company – Los Angeles Division – Employes' Time Table No. 66, Sunday, May 10, 1925.

Supplied by the California State Railroad Museum Library, Sacramento, California:

Union Pacific System – Los Angeles & Salt Lake Railroad Company – Los Angeles Division – Employes' Time Table No. 61, Sunday, March 26, 1922.

Union Pacific System – Los Angeles & Salt Lake Railroad Company – Salt Lake Division and Los Angeles Division – Employes' Time-Table No. 84, Sunday, May 3, 1931

Union Pacific System – Los Angeles & Salt Lake Railroad Co. – Employes' Time Table No. 5, Sunday, October 15, 1933.

Union Pacific System – Los Angeles & Salt Lake Railroad Co. – Employes' Time Table No. 7, Sunday, January 20, 1935.

Union Pacific System – Los Angeles & Salt Lake Railroad Co. – Employes' Time Table No. 8, Monday, April 1, 1935

Union Pacific Railroad: Microfilm of Executive and Finance Committee Minutes. This is microfilm of ledger books which contain indexes at the front. However, for the late 1940s they seem incomplete, and terminate in December 1950. There seems to be no Volume 1 and no Volume 5 on the Microfilm, which is in the Union Pacific Museum Collection archives, Omaha, Nebraska.

Los Angeles & Salt Lake Railroad: [Minutes of the] Executive and Finance Committees, Vol. 2, January 12, 1909 to Aug. 12, 1924, incl.

Los Angeles & Salt Lake Railroad: [Minutes of the] Finance Committee, Vol. 3, Aug. 9, 1924 to March 22, 1927.

Los Angeles & Salt Lake Railroad: [Minutes of the] Finance Committee, Vol. 4, March 29, 1927 to August 20, 1929.

Los Angeles & Salt Lake Railroad: [Minutes of the] Finance Committee, Vol. 6, March 14, 1930 to May 2, 1933.

Los Angeles & Salt Lake Railroad: [Minutes of the] Executive Committee, Vol. 7, May 11, 1933 to Dec. 19, 1950, incl.

Union Pacific Railroad: Correspondence files from basement of Los Angeles General Offices, assembled and loaned to the author in San Francisco by Union Pacific Railroad Law Department Assistant General Solicitor Jeff Asay, 5500 Ferguson Drive, Suite J, Los Angeles, California 90022; during the research on this history, the Union Pacific General Offices moved from that address to 1200 Corporate Center Drive, 3rd Floor, Monterey Park, California, 91754. During that move, Carol Nolan found still more obsolete files that pertained to Kelso.

Kelso – General File 9203-G 0810 (May 25, 1944 – March 10, 1976).

Kelso – General File 9203-G 0810, Vol. 2 (December 15, 1975 – June 19, 1987). [The cover of this file is marked in pen, "Sale of Kelso Depot," but the file is about much more than the proposed sale of the depot.]

Kelso – Clubhouse – Gen.[eral] File, 9203-3-R 0911, Vol. 2 (June 16, 1960 – Sept. 27, 1985). [The cover of this file also is marked, "Old Number 18655 / Audit Number 122963 – Do-All Painting & Decorating – Paint Kelso Clubhouse & Yermo Depot – Carrold R. White," however, the painting job was only a small part of the material in this file. Vol. 1 of this file would have been invaluable, but has not been found].

Union Pacific Railroad: Work Order Authority files from the same source as the above.

Kelso – Diesel Facilities – Accounting File – WO 2758 Vol. 2 (August 15, 1947 – January 25, 1952)

Kelso, California – M.L. – Installing electric heating facilities in depot and rooming section replacing steam heating facilities. WO-6331 (June 8, 1960 – September 20, 1961).

Kelso – Installing metal outside fire escape from Club House second floor at south end of passenger station – WO-6321C (January 5, 1959 – December 20, 1961).

Kelso – Installing metal outside fire escape from Club House second floor at south end of passenger station at Kelso, California – WO-6321 (Aug. 4, 1960 – June 14, 1961).

Kelso – Install SH Auxillary 100 KW F-M Diesel engine generator and necessary equipment – WO-2054 (January 31, 1942 – July 31, 1944).

Kelso – Replace Power House, Trackage, and various facilities and construct facilities for Diesel Locomotives – Vol. 1. – WO-3858 (June 28, 1947 – November 22, 1947)

Kelso – Replace Power House, Trackage, and various facilities and construct facilities for Diesel locomotives – Vol. 2. – WO-3758 (October 31, 1947 – October 27, 1948)

(The above items either pertain to the depot directly or affected the depot indirectly, such as changes in and demolition of the power house; Gordon Chappel, however, has examined a number of other work order authority files for such projects at Kelso as drilling wells, removing old housing, building new housing, building or removing trackage, etc., that are not cited here as they are not directly relevant, but will be invaluable in the future broader history of the Kelso railroad plant and the Kelso community.)

Union Pacific Railroad – Union Pacific System – Los Angeles & Salt Lake Railroad – Work Order Authority files from the basement of the Los Angeles General Offices. These particular files were found mislocated among intermodal files; located by Jeff Asay.

W.O. M-1257 – Kelso, California – Install electric range and electric water heater and relocate kitchen equipment, counter and stools in restaurant portion of depot.

W.O. M-3493 – *Kelso, Calif.* Remodeling and rearranging eating house facilities at Club House. [See following item.]

W.O. M-3493 – Kelso – Remodeling Club House, To comply with State Public Health Regulations [These two separate files deal with the same project]

Other Work Order Authority Files located by Carol Nolan:

W.O. 1257 – Kelso, California. Install drinking fountain and cooler in upper hall of club house, 1938-1939.

W.O. 1348 – Kelso, Calif. Install portable electric room cooler for DC&H Department, moved from Las Vegas, 1938-1939.

W.O. 2293 – Kelso, California. Retire fence around depot and dwellings, 1942.

W.O. 6321 – Installing metal outside fire escape from CLUB HOUSE second floor at south end of passenger station at KELSO, CALIFORNIA, 1960-1961.

W.O. 6331 – Kelso, California – M[ain]. L[ine]. Installing electric heating facilities in depot and rooming section replacing steam heating facilities, 1960- 1961.

Other miscellaneous files from Los Angeles General Offices:

Los Angeles Division, Form 2733 – Report of Progress on Improvement Work (Involving Charges to Capital Account) as of June 30, 1943, 2. pp. (Documents installation of Centralized Traffic Control in Kelso and vicinity.)

California Division, Form 2733 – "Report of Progress on Improvement Work (Involving Charges to Capital Account) as of December 31, 1948. (Documents replacement of powerhouse, generator, roundhouse and other facilities with Diesel locomotive servicing facilities.)

Union Pacific Railroad – Law Department, Los Angeles General offices: Case File, Case No. 5935, Docket 13, Box No. 123.2, "Application to P.U.C. of California by UPRRCo and Railway Express Agency, giving notice of intention to discontinue agency service at Kelso Station, Calif. Public Utilities Commission – State of California, Application No. 46496, Decision No. 67525.

Union Pacific Railroad – Breakfast Menus, printed May 1969 and February 1971 under the authority of J. Hansink, Manager Dining Car and Hotel Department, Omaha, Nebraska, single page card menus identical except for printing dates (Copies donated to the National Park Service by Dennis Casebier.)

Union Pacific Railroad – Breakfast Menu of the "Kelso Coffee Shop," printed January 1982 under the authority of R.E. Arnold, Manager, Commissary Services Department. (Copy donated to the National Park Service by Art Francis.)

Union Pacific Railroad – Breakfast Menu of the "Union Pacific Coffee Shop," printed January 1983 under the authority of R.E. Arnold, Manager, Commissary Services Department, Omaha, Nebraska. (Copy donated to the National Park Service by Dennis G. Casebier).

Union Pacific System – Office of Assistant to the President, Omaha, File No. 39-3-32; Subject: PASSENGER SATION [sic] – Kelso, California. [Correspondence regarding depot fence, 1924.] Copies supplied by Union Pacific Museum Collection, courtesy Bill Kratville, Omaha.

Union Pacific System – Los Angeles & Salt Lake Railroad – Form 70 – *List of Officers, Agencies, Stations, Etc.* Issued annually by Accounting Department, Los Angeles, California. Hardbound set of these printed pamphlets in the Union Pacific Archives, Omaha, Nebraska.

No. 1, January 1, 1919 (actually, this issue does NOT say "Union Pacific System," instead carrying the heading "United States Railroad Administration," the World War I era federal agency that administered a temporarily nationalized railroad industry.) No. 2, January 1, 1922. No. 53, January 1, 1923. No. 54, January 1, 1924. No. 55, January 1, 1925.

From the California State Railroad Museum Library, Sacramento, California: No. 65, January 1, 1951 (headed "Union Pacific Railroad Company").

RAILROAD INDUSTRY REFERENCES

The Official Guide of the Railways and Steam Navigation Lines in the United States, Porto Rico, Canada, Mexico and Cuba. Published monthly since June 1868. Various issues. beginning in 1916.

The Pocket List of Railroad Officials. Published quarterly since 1895. Various issues.

Poor's Manual of Railroads. Published Annually since 1968; various issues, especially 1923, 1924.

CORRESPONDENCE WITH GORDON CHAPPELL

Assay, Jeff S., Assistant General Solicitor, Law Department, Union Pacific Railroad, letter, December 16, 1996, 1 p., accompanying a box of UP files.

_____, letter, March 18, 1997, from 5500 Ferguson Drive, Suite J, Los Angeles, California, 90022, to the author, 2 pp., enclosing Union Pacific Railroad, Form 2733, "Report of Progress on Improvement Work (Involving Charges to Capital Account) as of June 30, 1943," two sheets, illustrating principally installation of CTC System across Mojave National Preserve lands.

_____, letter, March 24, 1997, 1 p., enclosing form 2733, and employes' time table no. 67, May 10, 1925.

_____, letter, April 15, 1997, 1 p., enclosing field notebook pages on tree locations at Kelso and other desert stations.

_____, letter, May 30, 1997, 1 p., accompanying files of work orders.

Ashcraft, Vincent, questionnaire prepared by Gordon Chappell August 21, 1996, completed and returned from 6563 Zena Drive, San Diego, California, 92115-7029, with a postmark of August 24, 1996. [Ashcraft later moved to 10751 Strathmore Drive, Santee, California, 92071-1096.]

_____, letter, 25 June 1997, to the author; second page dated 26 June 1997.

Casebier, Dennis G., letter, 7 August, 1997, on the letterhead of the Friends of the Mojave Road, Goffs Schoolhouse, P.O. Box 7, Essex, California 92332-0007, to the author, 1 p., enclosing copies of an issue of the *Baker Vailey News.*

Francis, Art, letter, September 15, 1996, from 6616 Brandywine Way, Las Vegas, Nevada, 89107, to the author, 2 pp., in response to a questionnaire; on file in the San Francisco Office of the National Park Service.

_____, letter, December 29, 1996, to the author, 5 pp.

_____, letter, January 4, 1997, to the author, 1 p, with 11 pages of comments elicited by reading an early draft of this study.

_____, letter, February 3, 1997, to the author, 2 pp., with electrostatic copies of two photographs and of a Union Pacific blank room register card for the Kelso Club.

_____, letter, March 1, 1997, to the author, 3 pp., enclosing and describing 31 photos of Kelso scenes.

_____, letter, March 22, 1997, to Gordon Chappell, 1 p.

_____, letter, May 18, 19979, to Gordon Chappell, 1 p., enclosing copies of UPRR employes time table no. 21, Sunday, June 28, 1942, UPRR public time table, July 1, 1942, and other documents.

_____, letter, June 21, 1997, to the author, 1 pp., enclosing and describing six photos of Kelso scenes.

_____, letter, August 17, 1997, to the author, 1 p., enclosing four pp. of copies from books and documents.

_____, letter, October 20, 1997, to the author, 3 pp. enclosing sketch plan of power house.

McCoy, Robert, P.O. Box 247, Grenora, North Dakota, 58845, letter, August 29, 1997, to the author, 2 pp., enclosing copy of typescript "'Overshadowed'" by his wife, Ann Elizabeth McCoy (q.v., above), and three photos at Kelso, one of him at the telegraph key in the depot on May 2, 1955.

Moore, Mary Lu, letter, no date (but envelope postmarked July 25, 1997), from 6255 N. Camino Pimeria Alta, Apt. No. 120, Tucson, Arizona, 85718-3631. to the author, 1 p., enclosing (1) a small amount of original material regarding Kelso for donation to the National Park Service, (2) an envelope of color negatives and color prints loaned to the National Park Service for printing as needed, and (3) an envelope of clippings, newsletters, correspondence and other material related to the effort to Preserve the Kelso Depot.

Packard, Theo., letter, June 30, 1997, from 3775 Laurel Canyon, Studio City, California 91604, to the author, 2 pp., enclosing on loan nine nitrate negatives, seven of Kelso scenes during the early 1920s, one of the Yermo roundhouse, and one of a large railroad transfer table.

TELEPHONE INTERVIEWS

Hayes, Everell "Butch," Bureau of Land Management, P.O. Box 12000, Reno, Nevada, 89520- 0006. [Telephone] Message Record, interview by Gordon Chappell, August 21, 1997, 1 p.

Hughes, Elden, 14015 Honeysuckle Lane, Whittier, California 90604, [Telephone] Message Record, Interview by Gordon Chappell, August 25, 1997.

Horiuchi, Wayne K., Union Pacific Railroad, Sacramento, California, [Telephone] Message Record, interview by Gordon Chappell, August 14, 1997. 1 p.

McCoy, Robert, [Telephone] Message Record, Interview with Robert McCoy by Gordon Chappell, September 2, 1997, 1 p.

Miller-Allert, Jill, Bureau of Land Management, Needles Resource Area Office, P.O. Box 808, Needles, California 92363, telephone Message Record, interview by Gordon Chappell, Senior Historian, National Park Service, Pacific Great Basin Support Office, August 21, 1996, 2 pp.

Packard, Theo, 3775 Laurel Canyon, Studio City, California, 19604, telephone Message Record, interview by Gordon Chappell, Senior Historian, National Park Service, Pacific Great Basin Support Office, August 20, 1996, 2 pp.

_____, same, March 4, 1997, 3 pp.

ORAL HISTORY TRANSCRIPTS, Library of the Mojave Desert Heritage and Cultural Association Goffs, California

Chase, Edith Wasden, Interview by Dennis G. Casebier, 6 February 1992, pp. 19, 40-42, 56-57.

Davenport, Hugh Maurice (Bud), Interview by Dennis G. Casebier, 7 February 1992, pp. 7-12, 15-17, 27-30, 34-40.

Dawson, Dick Lee, Interview by Dennis G. Casebier, 19 October, 1995, pp. 3-4, 198-199, 219- 222.

Dolch, Eva, Interview by Eugene Vonderharr, 10 February 1973, pp. 3-8.

Leland, Elma Ann (Erickson), Interview by Cindy Stead and O.B. O'Brien, 30 April, 1987, pp. 4-14, 30-44, 47, 50-58.

Leland, Elma Ann (Erickson), Interview by Dennis G. Casebier, 23 August 1990, pp. 86-95, 109-118, 122, 125-127, 131-139, 146-151, 160-161.

McCoy, Robert, Interview by Dennis G. Casebier, 15 June 1993, pp. 14, 28, 34-39, 53-54.

Packard, Theophilus Charles, Interview by Dennis G. Casebier, 5 November 1991, pp. 10, 19- 20, 25-26, 45, 64, 67.

Stafford, Edwin Montgomery, Interview by Dennis G. Casebier, 20 August 1991, pp. 10-13, 27-28, 62-63, 73, 75-76, 96-97, 104-107.

Stafford, Edwin Montgomery, Interview by Dennis G. Casebier, 10 September 1991, pp. 13-58, 75, 90-96, 116-117.

Stafford, George and Edwin, Interview by O.B. O'Brien and Bob Ausmus, 28 April 1987, pp. 11-13, 23-31, 57.

Wasden, Howard & Wanda, Interview by Dennis G. Casebier, 19 February 1992, pp. 12-13, 15-16, 24-31, 36-39, 41, 47-52, 56-60, 63-64.

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by Mary Ryan, visual information technician, Resource Planning Group, Denver Service Center. NPS ~~D-166~~, January 1998
D-3

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