

MADIGAN HOSPITAL (Madigan Army Medical Center)
Fort Lewis
Bounded by Wilson and McKinley Aves.,
and Garfield and Lincoln Streets
Takoma
Pierce County
Washington

HABS NO. WA-202

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WASH
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Western Region
Department of the Interior
San Francisco, California 94107

ADDENDUM
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HISTORIC AMERICAN BUILDING SURVEY

MADIGAN ~~GENERAL~~ HOSPITAL
(Old Madigan Army Medical Center)

HABS No. WA-202

- Location:** Roughly bounded by Wilson and McKinley Avenues and Garfield and Lincoln Streets, Fort Lewis, Washington.
- U.S.G.S.
Mercator Coordinates: 10 53475E 521675N
- Present Owner:** United States of America
U.S. Army
- Present Occupant:** Portions of the complex included in this recordation (refer to Table 1) are unoccupied and scheduled for immediate demolition.
- Present Use:** Portions of the complex included in this recordation (refer to Table 1) are not in use. Refer to Table 2 for identification of buildings that shall remain in use for general office purposes.
- Significance:** Madigan General Hospital is a well-preserved example of the semi-permanent emergency hospital plan type, Mobilization General Hospital Type A, developed by the War Department and constructed for emergency purposes during the later part of World War II. Completed in August 1944, Madigan General Hospital is the only one of twelve hospitals of this type to have continued to serve as a military hospital beyond 1951. It continued to provide extensive medical services, as constructed, adapted, expanded and modernized until 1992, when the new Madigan Army Medical Center was completed.

PART I: PHYSICAL CONTEXT OF THE MADIGAN GENERAL HOSPITAL SITE

Madigan General Hospital is located on approximately 120 acres in the eastern section of the 85,000 acre Fort Lewis Military Reservation, approximately 3 1/2 miles northeast of the Fort Lewis Historic District (1927-39) and 1 1/4 miles southeast of Interstate 5. The primary portion of the old hospital facility consists of 68 buildings constructed between 1943 and 1952. This complex of buildings, interconnected by approximately one and one half miles of corridors, was constructed according to standard plans developed by the War Department for mobilization and evacuation purposes during World War II. The architectural character of the complex is distinguished by minimal traditional Colonial Revival features and homogeneous brick masonry building fabric.

The complex was constructed in an isolated portion of the military reservation, known as the Fourth Division Prairie. The site was relatively level open prairie with wooded areas and brush land to the west, south and east and was accessed in 1939 by unimproved dirt roads. While a substantial distance from the developed pre-W.W.II core of the Fort and other pre-existing hospital facilities, its desirability as a semi-permanent Type A hospital site appears to be based on several factors. Northern Pacific Railway lines were situated directly east, within a 1 1/2 miles, and could be extended to provide for both the delivery of heavy construction materials and the transportation of patients to and from the hospital by troop train. The nearly concurrent construction of the Mt. Rainier Ordnance Depot, a short distance to the north, also necessitated the extension of a common rail spur. The proximity of the site to the newly constructed McChord Air Field and accessibility from the old Pacific Highway, for ambulance transportation purposes, also appear to be have been contributing factors.

In addition to this facility, the eastern portion of the military reservation currently includes a substantial amount of post-W.W.II construction. Most dominant is the modern Madigan Army Medical Center constructed in 1987-1990 and situated approximately 1/2 mile to the west of the historic hospital complex that it replaced.

PART II: HISTORICAL CONTEXT OF MADIGAN GENERAL HOSPITAL

Planning and Development of the Hospital

As the tempo and extent of the war increased, it became necessary to make changes to the military hospital system which provided medical services to sick and wounded soldiers and airmen evacuated from overseas requiring specialized treatment

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and care. It was determined that existing small station hospitals serving Army Air Forces and Army Service Forces would be closed and consolidated into larger regional or general hospitals. These consolidated hospital facilities could provide more specialized and efficient care to a greater number of patients. In December 1941, the Army operated about 200 station hospitals and 14 general hospitals located within the United States with approximately 74,250 beds. By June 1943 approximately 260,500 additional beds had been added. Concurrently, it became necessary to make improvements to the design of the cantonment-type complexes typically utilized by the military for hospital purposes. Speed of construction and the conservation of building materials became paramount factors in an on-going debate over the desirability of wood frame cantonment style, theater-of-operations type construction or two-story semi-permanent facilities.

In early 1942, the War Department began to seriously consider the construction of semi-permanent hospitals for a variety of reasons including the desire to construct facilities which could be converted to postwar use, the Surgeon General's preference for nonflammable construction materials and the clay products manufacturers lobbying efforts for the use of clay materials by the U.S. Army. By June 1942 shortages of lumber had developed and surpluses of brick and tile were available. On August 10th the War Department formally urged the Surgeon General to use clay materials in hospital construction. Shortly thereafter, plans for a new hospital type were developed. During the winter of 1942-43, a civilian architectural firm, York and Sawyer Architects-Engineers of New York City, was employed by the Chief of Engineers to complete an extensive set of drawings, the 1100 Series, for the Mobilization General Hospital Type A.

The Type A hospital was considered by the Surgeon General's Office as the best solution for emergency construction in the zone of the interior. By utilizing a one-story form, rather than a two or multi-story plan, a complex of 60-70 dispersed but interconnected buildings could be rapidly and simultaneously constructed over a relatively short period of time. The site configuration varied slightly from the earlier use of this dispersed pavilion principle. The wards and barracks were bisected by the interconnecting corridor/ramps system, thus the complex covered a smaller area than earlier one-story hospitals and could be more rapidly constructed than the prior two-story model. By the end of W.W.II, twelve hospitals were in use that had been constructed according to on the basic Type A hospital plan.

Primary records or sources of information, regarding the specific planning for Madigan General Hospital (initially identified as Fort Lewis Station Hospital - Section 5), were unavailable for use related to the research for this record-

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ation. The volume The Medical Department: Hospitalization and Evacuation, Zone of Interior included in the *United States Army in World War II - The Technical Series*, written by Clarence McKittrick Smith (Department of the Army, 1956) provides thorough documentation of the decisions made within the War Department regarding military hospital facilities constructed within the United States during World War II.

Madigan General Hospital began as an expansion of the Fort Lewis Station Hospital, which was constructed as part of the permanent fort in 1928-29. During the early stages of World War II, the Station Hospital rapidly expanded into four separated sections within the military reservation. The original three story brick Post Hospital building, now known as Building 4290, was designated as Section 1. A cantonment style hospital complex of forty-five interconnected one-story, wood frame buildings located across the street to the west of Section 1, served as Section 2. Section 3, a temporary wood frame cantonment style complex, was located across the Pacific Highway in the newly constructed portion of the reservation designated as North Fort Lewis. Section 4, also a temporary wood frame complex was located approximately one-half mile south of Section 1.

Groups of standard plans for each of the component Type A hospital buildings began to be received by the Fort Lewis Engineer in January 1943 and construction of the Fort Lewis Station Hospital - Section 5 began in July 1943. A "Key Plan" (HABS Photo WA-202-1) delineated by Seattle architect Victor Steinbrueck and dated 7-23-43, recorded the planned layout of Section 5 at the Fourth Division Prairie site. The initial 58-building complex appears to have been constructed by J.C. Boespflug Construction Co., a civilian general contractor based in Miles City, Montana, under the direction of the Seattle District U. S. Army Corps of Engineers. The multiple building complex was constructed simultaneously, with the first buildings completed and occupied by February 1944. By August 4, 1944, the entire complex was complete and the five hospital sections were consolidated under one command as the Fort Lewis General Hospital.

World War II use of the Hospital

On September 22, 1944, War Department General Orders No.76 officially redesignated the five hospital sections as Madigan General Hospital in honor of Colonel Patrick Sarsfield Madigan, a noted Army neuropsychiatrist. In addition to its initial mission as a station hospital for Fort Lewis and a regional hospital for the Pacific Northwest area, Section 5 was designated as a general hospital, specializing in orthopedic surgery and treatment, general surgery and medicine.

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Madigan General Hospital served as a debarkation hospital for sick and wounded soldiers and airmen returning from overseas combat zones. Once patients were considered fit to travel they were transferred to the military hospital facility which could best care for them or for specialized treatment nearest their home. Patients typically arrived at Madigan via ambulance or train from debarkation ports at Seattle, Tacoma and Portland or nearby McChord Field. It also served as a general hospital for patients transferred from other debarkation hospitals on the east and west coasts. As a post hospital and regional hospital, Madigan continued to provide medical care for military personnel stationed at Fort Lewis and for seriously ill troops from other Pacific Northwest Army camps. In April 1945, Madigan was also designated as a convalescent hospital.

Madigan General Hospital - Section 5 was built to comfortably provide 1,567 hospital beds with an emergency capacity of 2,500 beds. Section 5 included administrative facilities and service personnel housing in addition to extensive medical, surgical, therapeutic, clinical and recreational facilities. The remaining four sections functioned to provide other medical or convalescent services, including obstetrics (Section 1), treatment of contagious disease (Section 2) and advanced reconditioning programs (Section 3). By April 1945, the five sections included 296 buildings and utilized a staff of over 1,500 doctors, dentists, nurses, officers, enlisted personnel (including Army Corps and Women's Army Corps) and civilians. Several important medical units were attached to the hospital including the Ninth Service Command Army Nurse Training Center which trained three to four hundred nurses and the 193rd Hospital Train Unit utilized to evacuate and move military patients.

During the peak of wartime casualties Madigan Hospital Center (the name used for the entire five sections for a period after April 1945) was able to care for 7,000 or more patients. An important part of the medical program were extensive facilities devoted to the reconditioning of wounded military personnel in order to return them to military duty or civilian life in top physical and mental condition. Section 5 included several specialized patient services including recreational facilities operated by the Red Cross (Bldg. 9940), a well-equipped library (Bldg. 9952), a Post Exchange with snack bar and Post Office (Bldg. 9950) as well a recreational facilities for detachment and medical personnel (Bldgs. 9976 & 9903), a chapel (Bldg. 9928) and a guest house (Bldg. 9938).

Post World War II Use of the Hospital

With the end of World War II, Madigan Hospital Center was formally dedicated on August 21, 1945. Soon American soldiers

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repatriated from Japanese prison camps arrived at Madigan from overseas for medical treatment. Gradually, the training units were disbanded, personnel returned to civilian life, the convalescent hospital became an annex and the hospital sections were consolidated. While Section 1, the old Post Hospital building continued to be utilized for out-patient and obstetrical services, the functions of Sections 2, 3 and 4 were all relocated to Section 5.

In 1946, a gymnasium, swimming pool and outdoor recreational facilities were constructed adjacent to the Madigan complex. A green house, utilized to grow indoor plants for the hospital, was constructed in 1947. A modernization program as established by the Surgeon General in 1949, began improvements to all of the clinics, wards, surgical pavilions and hospital services. During this period, Madigan became one of eight Army Hospitals in the United States to train interns under the Surgeon General's Professional Training Program and began to conduct training programs for various organized reserve units. An annual report issued by the Commanding Officer in 1949, on the fifth anniversary of the hospital, is illustrative of the degree of activity and the complexity of the hospital operation and includes a descriptive aerial view of the entire complex. The report includes in depth descriptions of the personnel, medical and operational services required in order to operate the hospital including;

Surgical Service, composed of Army surgeons, civilian doctors and consultants

Dental Service, which included a teaching service as well as professional treatment

Medical Service, providing medical, diagnostic and therapeutic care with extensive clinical facilities.

Radiological and Laboratory Services

Neuropsychiatric, Ear/Eye/Nose & Throat Services

Physical Medicine Service, with coordinated physical and occupational therapy and physical reconditioning program

The Graduate Professional Education Program, training programs for medical interns and residents.

Army Nurse Corps

Nine (9) separate specialized Medical Detachments

Pharmacy Officer and staff

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Director of Personnel (military and civilian) and staff

Headquarters Section, providing hospital administration

Chaplain Section, with both a Roman Catholic and a Protestant Chaplain

Mess Department, with 197 employees responsible for the preparation of approximately 50,000 rations a month.

Office of the Registrar, responsible for the administrative control of patient movement and records.

Grounds and Maintenance, including greenhouse operation

Supply Division, including the operation of a twenty-three vehicle motor pool

Inspector General, USAF Liaison, & Legal Assistance Officers

American Red Cross, including a resident staff of social workers and recreation workers

In August of 1950, modern obstetrical-gynecological services were established within the complex as the facility entered into a forty year period of modernization and gradual change as it was adapted to meet the needs of modern medical technology and practices. By 1951, Madigan was the only one of the original twelve Mobilization Type A hospitals to have been retained in service as a regular Army hospital. All of the other facilities had been transferred to the Veterans Administration or to state or local governmental agencies.

In 1952, two large Enlisted Men's Barracks were constructed to the west of the complex and the original Detachment Barracks began to be converted and adapted to clinical and administrative uses. Five additional buildings based on the original Detachment Barracks plans and two additional Combination Wards based on the original ward plans were added to the complex in 1952. In 1956, the hospital theater was constructed adjacent to the gymnasium. New out-patient services for military dependents of both Fort Lewis and McChord Air Force base were established at Madigan in 1957, which required further modernization and changes to the original barracks and wards.

Patient information booklets published by the hospital in the 1960s provide insight into the extensive services offered to patients and personnel within the facility. The hospital included a bank, barber shop and barber services, beauty shop and beautician services, cafeteria and snack bar, a daily

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schedule of religious services, clothing and equipment sales, a commissary store, legal assistance and letter writing services, a semi-monthly newspaper "The Mountaineer", a post office (Bldg. 9950), a gymnasium, a theater, a crafts shop, a library (Bldg. 9952), and a recreation hall, known as the Red Cross building (Bldg. 9940). The corridor/ramp between the Post Office/P.X. and the recreation hall became known as "Times Square" and functioned as a small town center.

By 1969, the Madigan General Hospital consisted of 88 separate buildings (not including the nearby family housing) and covered approximately 120 acres. It provided care for an average of 1,100 patients, including U. S. Army, Navy and Air Force personnel and their families from the Pacific Northwest, overseas evacuees and retired military and their dependents. This huge medical operation was staffed by 2,500 military and civilian personnel composed of military and civilian physicians and dentists representing all of the professional specialties, Army Nurse Corps and civilian nurses, research, laboratory and administrative staff, enlisted men and women, training interns and residents, and Red Cross staff, as well as hundreds of volunteers. By 1973, when it handled a daily average of nearly 4,000 out-patient visits and 350 inpatients, it was the largest and busiest military hospital on the West Coast.

In 1974, the operation of all military hospitals was converted from the Surgeon General to the newly created Health Services Command and the hospital was designated Madigan Army Medical Center. Between 1983 and 1987 major renovation of portions of the facility were completed to accommodate Surgical, Obstetrics/Delivery, Neo-natal Intensive Care, Cardiac Catheterization, Linear Acceleration, Laboratory, Magnetic Resonance Imagery, and virtually all hospital critical care facilities. In 1985, major renovation of portions of the facility included the installation of new corridor/ramp flooring, painting and lighting.

In 1990, the old Madigan Army Medical Center facility was replaced by a new 414-bed, eight-story hospital and out-patient clinic equipped with state-of-the-art technology. The old facility continued to be used for a variety of out-patient and administrative purposes until December 1993. The portion of the facility that is not scheduled for demolition continues to be used for office purposes.

Individuals Associated with the Design, Construction and
Initial Use of the Hospital

John F. Boespflug, Sr. (ca.1911-1978) - Partner with his father, Jerome C. Boespflug, in J. C. Boespflug Construction Co., which

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appears to have been the civilian contractor responsible for the construction of Madigan General Hospital. J. C. Boesflug Construction Co. was initially based in Miles City, Montana. They are known to have been responsible for the construction of the Sisters of St. Joseph Hospital (n.d. Missoula, Montana) and the Yesler Terrace Public Housing Project (ca.1940-43 Seattle, WA.) prior to the construction of this hospital. The company moved its headquarters to Seattle ca.1942 and continued in the heavy construction business for 30 years. Subsequent construction projects included the University of Washington Medical School, University of Washington Hospital, King County General Hospital, hospitals in Long Beach and Los Angeles, California and Anchorage, Alaska as well as bridges, airports and dams.

Colonel Arthur R. Gaines - Commanding Officer, Madigan General Hospital, August 1944-March 1945

Colonel Wilbur G. Jenkins- Commanding Officer, Madigan General Hospital, March 1945-July 1945

Philip Sawyer (1868-1949) - Co-partner with Edward P. York in the architectural firm of York & Sawyer (New York, NY.), responsible for the design and preparation of construction drawings and specifications for the Mobilization General Hospital Type A ("one-story masonry wall general hospital") for the War Department. The firm was established in 1904 and is known to have designed several noteworthy hospitals and federal government projects; Federal Reserve Bank, Academy of Medicine, Rockefeller Hospital, Fifth Avenue and Orthopedic Hospitals in New York City, Department of Commerce Building in Washington DC. and the federal building and General Hospital in Honolulu, Hawaii.

Victor E. Steinbrueck (1911-1985) - Prepared the Key Plan for Fort Lewis Station Hospital-Section 5 for Boesflug Construction Co. dated 7-23-43 (HABS Photo WA-202-1). Mr. Steinbrueck is regarded as an important architect and civic activist who was instrumental in the design and preservation of notable Seattle buildings, landmarks and historic districts. His association with the construction of the hospital and John F. Boesflug appears to have been due to their mutual involvement with the design and construction of the Yesler Terrace Public Housing project (ca.1940-1943).

PART III: PHYSICAL DESCRIPTION/ARCHITECTURAL DESCRIPTION

General Statement

Madigan General Hospital is complex of approximately sixty-eight (68) interconnected and approximately 20 freestanding buildings.

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The subject of this recordation is a group of forty-two (42) buildings, according to Table 1 & Plate 1, all of which are scheduled for immediate demolition.

Madigan General Hospital is well-preserved example of the semi-permanent emergency hospital plan type, Mobilization General Hospital Type A, developed by the War Department and constructed for emergency purposes during the later part of World War II. Madigan General Hospital remained in active use until 1992, as the W.W.II complex was adapted, expanded and modernized over a period of fifty years. The architectural character of this extensive complex is distinguished by minimal Colonial Revival style features and homogeneous brick and tile building fabric. Although interior spaces have been altered and modernized for hospital and clinical purposes, the exterior building fabric and architectural features and significant interior spaces and finishes have been well-maintained and preserved.

Original Site Plan

The original Fort Lewis Station Hospital - Section 5 key/site plan (HABS Photo WA-202-1), as recorded July 23, 1943, follows the dispersed pavilion configuration plan prescribed by the War Department for all Type A hospitals. Thus, the complex could be rapidly and simultaneously constructed. Subsequent construction in 1944-45 and 1952 also followed the prescribed Type A site plan. A photograph published in *The Seattle Times*, April 22, 1945, shows the development of the site features noted on the 1943 key site plan; the perimeter and internal street systems, parking areas and formal entry circle with flagpole. An early employee described the site in the 18th anniversary issue of the *Madigan Mountaineer* (Vol.9, No.17 - Sept. 21, 1962) and noted that dense woods bordered the site to the south.

"Madigan in the year 1944 impressed me as being located in an isolated area far from the activities of the Fort...the buildings of new brick with white [trim] sat in a square of recently seeded lawn and native grasses. Areas around the wards were undeveloped...grass grew tall in the circle beyond the entrance to the hospital. A farmer's cows often came to grass there and sometimes chose to feed on the lawn. It was not uncommon to see deer at the edge of the clearing".

Typical Building Fabric

Foundations: Reinforced concrete, concrete block and load bearing clay tile.

Structural Systems: Typical wall construction 8" brick masonry bearing wall, 2 x 4 stud wall partitions with concrete slab on grade floor systems. Ramp/corridors typically 8" brick/clay tile wall system, reinforced concrete floors over concrete utility tunnel.

Fenestration: Typical six-over-six double-hung wooden sash independently placed except where grouped at solarium spaces. Twenty different window types including eight-over-eight and twelve-over-twelve double hung. Placed in segmental arched openings at Detention Wards, Guest House and Chapel.

Exterior Features: Exterior elevations distinguished by roof ventilators, screen porches (now typically enclosed) on south facing elevations of wards and solarium spaces on east and west ends of standard and combination wards. The Patients' & Medical Detachment Mess, the ramp/corridor between the Patients' Recreation and the Post Office & P.X. and the lunchroom area in the P.X. include monitor windows. Exterior doors are typically double leafed wooden type with multiple nine-light glazing and panel construction.

Exterior finishes: Exterior walls are typically unpainted red brick masonry. Wood windows, doors & frames, other wood, concrete and metal features (roof ventilators, delivery bays, enclosed screen porches, entrance porches, wood frame gable ends covered with horizontal wood siding and/or plywood frame) are typically painted white.

Roofs/Roofing: Roof forms are typically simple gable (5:12 pitch) of wooden truss construction with asphalt shingle roofing materials. The warehouses, utilitarian structures and ramp/corridors have wood frame flat-roof systems covered by built-up 3 ply felt, tar and gravel roofing material. Monitor windows are located on some of the flat-roofed buildings.

Interior Wall systems: Typical 2 x 4 interior partition systems within buildings. Ramp/corridors typically 8" brick/clay tile wall system.

Interior Finishes:

Floors: Originally black (with white marbled accent) 9x9 asphalt tile throughout corridors, wards, barracks and service buildings. Corridors were edged with a continuous narrow band of solid black asphalt tile. For the most part the original flooring has been removed and replaced and/or covered with vinyl tile flooring or carpet. [Note: surgical and original clinical areas include terrazzo floor finishes].

Ceilings: Typically insulated gypsum board with the exception of ramp/corridors which are painted T&G decking.

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Walls: Covered with gypsum wall board or Portland cement plaster typically. Extensive use of ceramic wall tile in toilet/bath/shower, service and utility areas including Mess kitchens and serving areas. Gypsum finishes are typically are painted. Pastel color, smooth formica wainscoting appears to have been added within the barracks buildings in order to adapt these spaces to clinic uses. Ramp/corridor interior walls are typically painted hollow tile, although historically the tile was left an unpainted terra cotta finish.

Doors: Doors within wards, barracks and utilitarian spaces are typically the original painted wooden, five panel type. Detention Ward doors are painted flush type with a single 6"x 6" window glazed with wire glass. Original Corridors doors were painted wooden panel type with the upper half multi-glazed w/clear glass. While numerous original interior doors remain in place, doors have typically been replaced at the corridor/ramps and within some interior clinic spaces with modern solid core flush type.

Individual Building Plans

Each of the 42 buildings listed on Table 1 and located on Plate 1 were constructed according to standard plans developed by civilian architects for the construction of the typical Mobilization General Hospital Type A. Approximately 35 different floor plan or building types were used to construct the entire facility, fifteen of those building types are included in the group recorded herein;

Chapel (1 building); per HABS Photo WA-202-5-1-7, rectangular plan 88'-4" x 37'-4" with nave (47'-6" x 36'-6"), balcony, chancel & sanctuary, entrance vestibule, three offices and restroom. Distinguished by 32'+ high steeple, two (2) 4'-0" round painted glass windows (which have been removed and installed in the new Madigan Medical Center chapel), unfinished masonry interior walls, exposed interior purlin and truss system, stained wooden pews (removed) and chancel grillwork, ornate interior and exterior doors.

Combination Ward (5 buildings); per HABS Photo WA-202-9-2 & 9-15, rectangular plan 30'-0" x 287'-8" with bisecting central ramp/corridor, two 16-bed wards with toilet/bath/shower and twenty (20) single-bed wards (some w/private bath/shower), two screen porches (7'-6" x 29'-8") on south facing elevation, solarium (12'x 30') typical each end of building, utility room, nurse office, kitchen, examination and treatment rooms. Screen porches have typically been enclosed to provide additional interior space.

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Detention Ward (3 buildings); per HABS Photo WA-202-10-1-10, rectangular plan 294'-4" x 30' with bisecting central ramp/corridor, one twenty-four(24)-bed ward, one sixteen(16)-bed ward w/toilet/bath/shower and sixteen (16) single-bed wards, two screen porches on south facing side, nurse & ward offices, utility, examination & treatment rooms, kitchen & dining space. No solarium spaces. Enclosed exercise yard with brick wall and gate typical between detention wards. Windows typically include wire guard and screen. [Note: The adjacent Occupational Therapy Building is similar to the Detention Wards]

Guest House (1 building); per HABS Photo WA-202-13-1-2, rectangular plan 123' x 30 w/ 9' x 22' solarium at east end, central lobby, 12 individual guest rooms, mens' & womens' toilet/bath facilities and a lounge area, unfinished masonry interior walls.

Hospital Shop & Morgue (1 building); per HABS Photo WA-202-16-1, rectangular plan 30' x 180', morgue & autopsy areas at west end/hospital shop area at east end, four sets of (non-original replacement) garage doors on south elevation (west end). [Note: built according to revised Hospital Shop & Morgue plan dated Apr. 15,1943.]

Medical Detachment Barracks (14 buildings); per HABS Photo WA-202-11-1-15, rectangular plan 30' x 168'-6" with bisecting central ramp/corridor, two (2) squad rooms (28'-6"x 59'-6") accommodating 16-20 beds, four (4) NCO bedrooms, two toilet rooms, showers & washrooms. Floor plan/materials vary slightly between 1943 and 1952 construction. Extensive interior remodeling to clinic/administrative uses 1952-1987.

Medical Detachment Recreation (1 building); per HABS Photo WA-202-17-1, rectangular plan 47'x 84' with enclosed screen porch 9'x 26', remodeled for out-patient records area 1974.[Note: original architect Wilbur Watson & Associates Arch/Eng., Cleveland, Ohio from plans dated 3-12-43].

Medical Storehouses (2 buildings); per HABS Photo WA-202-18-1-3, rectangular plan 51'-0" x 261'-6" w/ 5'-0" wide loading dock at each end of building. Window and window opening alterations at south elevation of the one storehouses.

Officers' & Nurses' Recreation (1 building); per HABS Photo WA-202-3-1-4, rectangular plan 30'x 150' w/ enclosed screened porch area 10'x 56' at central exterior entry north elevation, extensive remodeling of dining (recreation room) and bar area 1968.

Patients' & Medical Detachment Mess (1 building); per HABS Photo WA-202-8-1-6, 30,693 sq. ft. building, irregular H shaped

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plan, facility includes separate medical detachment & patient serving & dining areas, extensive kitchen & food preparation areas including bakery, flour and bread storage, fruit, vegetable, meat and dairy refrigerator rooms, various dish washing, storage and utility spaces, dietitians office and coal bunker. Extensive loading docks on west elevation. Serving areas remodeled & relocated 1958. Dining areas extensively remodeled 1974.

Patients' Recreation (1 building); per HABS Photo WA-202-6-1-4, cruciform plan, 44'x 80' auditorium space & stage (20'x 34') w/ footlights & proscenium, dressing rooms and balcony, lobby, restrooms, offices, kitchen, storage, reading room, three (3) bedrooms w/ bath. Exposed wooden roof/ceiling truss system. Lobby redecorated & modernized in 1981.

Post Office & Post Exchange (1 building); per HABS Photo WA-202-7-1-7, approx. 10,000 sq.ft., irregular U-shaped plan with Post Exchange area (40'x 140'), snack bar & dining lounge, post office area (28'x 100'), most recently included facilities for banking, florist shop, barber/beautician, optical shop, the commercial spaces were extensively remodeled ca.1982.

Receiving & Evacuation Building (1 building); per HABS Photos WA-202-15-1, rectangular plan 51' x 210', 10,807 sq. ft. building, covered ambulance entrance area located on west side, loading platform north elevation, portions (approx. 5,730 sq. ft.) extensively remodeled 1979 and 1985 for NCO club use.

Standard Ward (8 buildings); per HABS Photo WA-202-9-1 & 9-3-14 & 9-16, rectangular plan 30'-0" x 295'-8" with bisecting central ramp/corridor, two 32-bed wards with toilet/bath/shower and five (5) single-bed wards (some w/private bath/shower), two screen porches (9'-0" x 59'-0") on south facing elevation, solarium (12'x 30') typical each end of building, utility room, nurse office. Screen porches have typically been enclosed to provide additional interior space.

These hospital buildings were interconnected by approximately 1 1/2 miles of corridor/ramps, per Plate 1. A utility vault runs under the corridor system to house electrical, plumbing, heating and communication systems. The corridor/ramps include typical double hung windows with the exception of the ramps leading to and connecting the Barracks buildings, which were originally open covered walkways. When the Barracks were converted to clinics, ca.1957, the breezeway openings were infilled and small aluminum windows installed.

Physical Evolution 1949-1993

Due to a modernization program established by the Surgeon General in 1949, improvements to all of the clinics, wards, surgical pavilions and hospital services began to be undertaken. In August of 1950, modern obstetrical-gynecological services were established within the complex as the facility entered into a forty year period of modernization and gradual change in order to meet the needs of modern medical technology and practices.

The first major change to the facility occurred in 1952, when two Enlisted Men's Barracks were constructed to the west of the original complex and the Detachment Barracks (Bldgs. 9962-9965 & 9971-9975) began to be converted and adapted to clinical and administrative uses. Five additional buildings (Bldgs. 9966-9970), closely based on the original Detachment Barracks plans, were constructed and two additional Combination Wards (Bldgs. 9958 & 9937), based on the original plans were also added to the complex in 1952. New out-patient services for military dependents of both Fort Lewis and McChord Air Force base were established at the hospital in 1957, which required further modernization and changes to the original barracks and wards.

Serious efforts to determine the feasibility of continuing to use the facility for hospital purposes begun in 1968, but due to funding issues no extensive modernization occurred. In 1985, the facility received extensive renovation with the installation of new corridor/ramp flooring, painting and lighting systems. In 1987, Bldgs. 9973 and 9974 were substantially remodeled with an addition for new out-patient services.

PART IV: SOURCES OF INFORMATION

Architectural Drawings

Mobilization General Hospital Type A - 1100 Series, War Department, Office of the Chief of Engineers - Construction Division, Washington DC., dated Oct.31,1942.[Sepia reproducible copies of these standard plans are available at Fort Lewis - Housing & Engineering Services and are reportedly available on microfilm from the US. Army Corps of Engineers Archives.] Note: Construction appears to have closely followed the standard plans although there were some minor deviations

Station Hospital - Section 5 - Key Plan - Fort Lewis, Washington" drawn by Victor Steinbrueck, dated 7-23-43.[Included in misc. hospital (Community Library) records, Madigan Army Medical Center, Fort Lewis, WA.]

MADIGAN GENERAL HOSPITAL
(Old Madigan Army Medical Center)
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Historic Photography

No original historic photographs or negatives of the hospital were uncovered although good quality historic exterior and interior views were included in several of the Published Sources listed below, most notably the Catherine Flood article and the commemorative anniversary publications.

Interviews

Boespflug, John F., Jr., Bellevue WA, Dec. 6, 1993.

Hilyard, Olen "Bill", [former Comptroller Madigan Army Medical Center], Lakewood, WA, Nov. 23, 1993

Richmond, Barney [Madigan Medical Center Chief Engineer], Fort Lewis, WA, December 1993.

Bibliography

Primary/unpublished Sources

Fort Lewis Real Property Cards, Housing & Engineering Services, Fort Lewis, WA,

Secondary/Published Sources

Bailey, John. "Madigan largest, busiest military hospital in West, The News Tribune, May 20, 1979.

Flood, Catherine. "Madigan General Hospital - It's Big and Getting Bigger!", The Seattle Times, magazine. pg.4-5, April 22, 1945.

Smith, Clarence McKittrick. The Medical Department: Hospitalization and Evacuation, Zone of Interior, United States Army in World War II - The Technical Series, Department of the Army, 1956.

Withey, Henry F. & Elsie Rathbun. Biographic Dictionary of American Architects (Deceased), New Age Publishing, Los Angeles, CA, 1956.

_____. Madigan General Hospital - Silver Anniversary [25th Anniversary commemorative publication], published by Madigan General Hospital, n.d.(c.1969).

_____. Madigan General Hospital - Tacoma, Washington, [Fifth Anniversary commemorative publication], published by Madigan General Hospital, 1949

MADIGAN GENERAL HOSPITAL
(Old Madigan Army Medical Center)
HABS No.WA-202 (Page 17)

_____ . "Madigan Marks 18 Years of Progress and Improvement", *Madigan Mountaineer*, Vol.9, No.17, September 21, 1962.

Miscellaneous hospital & (community) library records, Madigan Army Medical Center Community Library, Fort Lewis, WA. [including historic photography related to the Community Library and several patient information booklets published by the hospital in the 1960s]

Other not yet investigated sources:

Completion Reports believed to be in the Records of the Chief of Engineers (Record Group 77) in the Suitland Reference Branch (NNRR) have yet to be located due a lack of response to numerous written and telephone inquiries.

C.K. Smith specifically refers to Medical Department documents regarding the construction of the (Zone of the Interior) hospitals filed under #632 in records "in the custody of the Adjutant General" in 1956. The NNRR has been unresponsive to inquiries as to the current status or location of these primary sources.

PART V: PROJECT INFORMATION

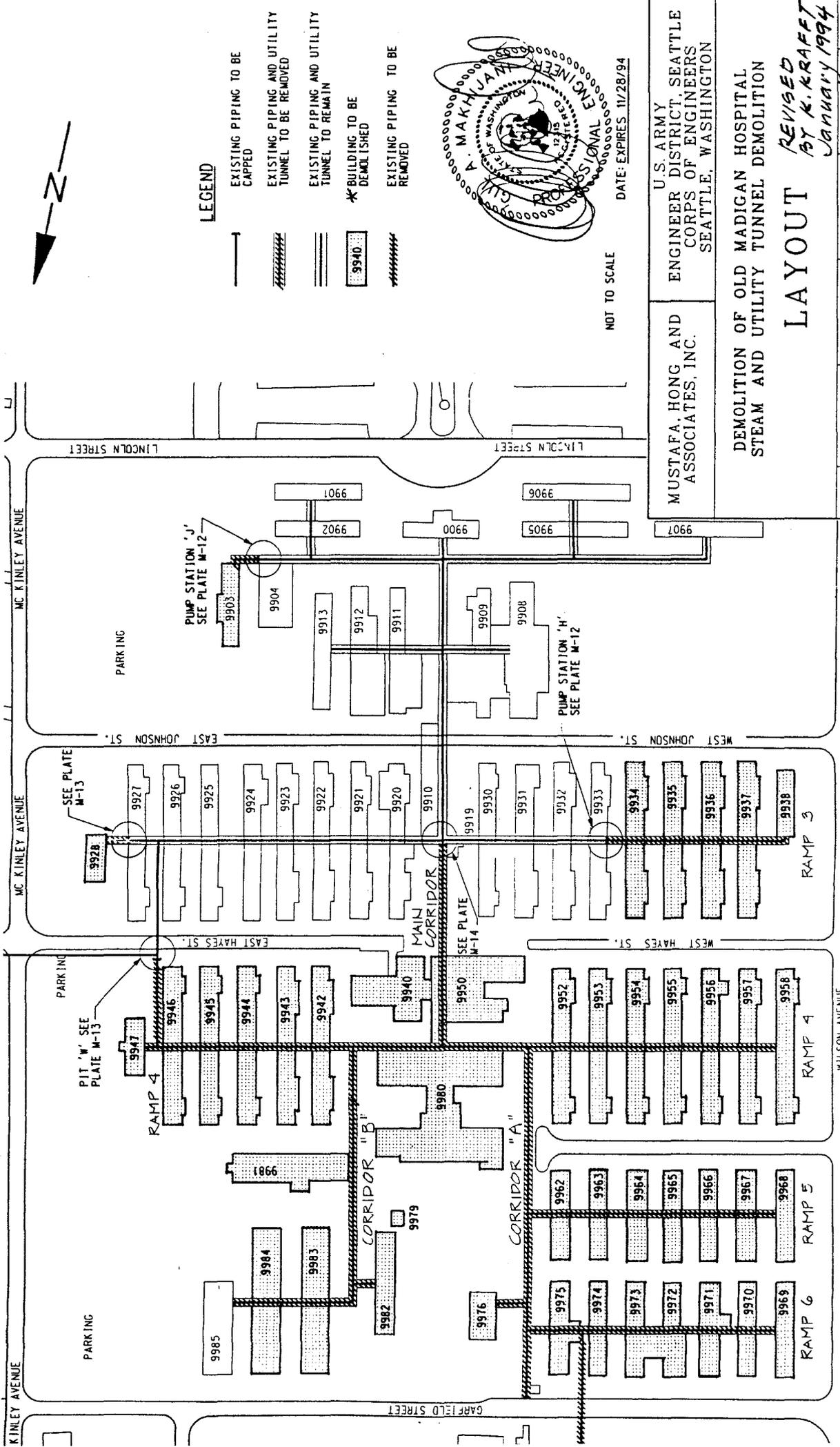
The US. Army, I Corps and Fort Lewis intend to immediately undertake Project No. DEP00004-3J involving the demolition of the subject portions of the Old Madigan Medical Center. It has been determined that funding for this demolition will have an effect upon properties considered eligible for inclusion in the National Register of Historic Places. Based on consultation with the Washington State Historic Preservation Office and the Advisory Council on Historic Preservation, pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f), a Memorandum of Agreement was entered into by the interested parties on September 27, 1993. The Agreement stipulated that prior to the demolition or removal of the subject buildings, the I Corps and Fort Lewis contact HABS/HAER at the Western Regional Office of the National Park Service to determine the appropriate level and kind of recordation for the properties. This recordation, which includes historic context text regarding the history/development of the hospital and HABS photography of the entire complex, and specific Level II documentation regarding the 42 buildings scheduled for demolition, has been prepared in order to meet that stipulation.

MADIGAN GENERAL HOSPITAL
(Old Madigan Army Medical Center)
HABS No.WA-202 (Page 18)

Text prepared by: Katheryn Hills Krafft
Title: Cultural Resource Specialist
Affiliation: Krafft & Krafft, Seattle, WA.
Photography prepared by: John Stamets, Seattle, WA.
Project supervised by: Florence K. Lentz
Date: January 1994

MADIGAN GENERAL HOSPITAL
 (Old Madigan Army Medical Center)
 HABS NO. WA-202 (Page 19)

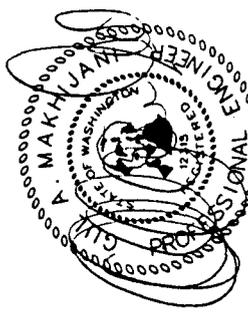
PLATE 1
 * HABS RECORDATION GROUP



LEGEND

- EXISTING PIPING TO BE CAPPED
- ▨ EXISTING PIPING AND UTILITY TUNNEL TO BE REMOVED
- ▧ EXISTING PIPING AND UTILITY TUNNEL TO REMAIN
- ▩ *BUILDING TO BE DEMOLISHED
- ▧ EXISTING PIPING TO BE REMOVED

NOT TO SCALE



U.S. ARMY
 ENGINEER DISTRICT, SEATTLE
 CORPS OF ENGINEERS
 SEATTLE, WASHINGTON

DEMOLITION OF OLD MADIGAN HOSPITAL
 STEAM AND UTILITY TUNNEL DEMOLITION

LAYOUT

REVISED BY K. KRAFFT JANUARY 1994

SIZE	PROJECT NO.	PACKAGE NO.	FILE NO.	DATE	PLATE
B	DEP00004-3J	335004	26s/510-10-27	1993, JULY 27	M-11
DSCN	CM	CHK	KM	SHEET	63 OF 81

HABS Recordation Group Table 1

Bldg #	ORIGINAL BUILDING TITLE	COMPLETED	PER 7-43 PLAN	RECENT USE ca.1992
9903	Officers' & Nurses' Recreation	12/29/43	REC-G-H #9	Officers' Club
9928	Chapel	4/28/45		Chapel
9934	Standard Ward	12/17/43	WARD-J-H #21	Ward
9935	Standard Ward	12/17/43	WARD-J-H #20	Nuclear Medicine/Neurosurgery
9936	Standard Ward	1/17/44	WARD-J-H #19	Pulmonary/cardiology clinic
9937	Combination Ward	8/25/52		G.I. clinic/neurology service
9938	Guest House	1/17/44		VOQ/VIP Suite
9940	Patients' Recreation	1/3/44	REC-F-H #3	Recreation Hall/Office(Red Cross)
9942	Standard Ward	12/17/43	WARD-J-H #39	Admin./Nursing Education
9943	Standard Ward	12/17/43	WARD-J-H #40	Pharmacy/supply
9944	Detention Ward	11/2/44	WARD-L-H #41	Records / Administration
9945	Detention Ward	11/2/44	WARD-L-H #42	Pediatric clinic
9946	Detention Ward	11/2/44	WARD-L-H #43	Adolescent/Pediatric clinic
9947	Occupational Therapy	4/28/45		Well Child Clinic
9950	Post Office & Post Exchange	12/29/43	POPX-A-H #2	mailroom, snack bar, PX
9952	Standard Ward/Library	12/17/43	WARD-J-H #38	community library occup. therapy
9953	Standard Ward	12/17/43	WARD-J-H #37	Physical Therapy & Medicine
9954	Standard Ward	12/17/43	WARD-J-H #36	Ward
9955	Combination Ward	12/17/43	WARD-K-H #35	Ward
9956	Combination Ward	8/25/52	WARD-K-H #34	Ward/CCU
9957	Combination Ward	12/17/43	WARD-K-H #33	Psychiatry
9958	Combination Ward	8/25/52		Psychiatry
9962	Medical Detachment Barracks	1/4/44	BKS-D-H	Plastic surgery /Dermatology
9963	Medical Detachment Barracks	1/4/44	BKS-D-H	immunization/allergy clinic
9964	Medical Detachment Barracks	1/4/44	BKS-D-H	Optometry/Ophthalmology
9965	Medical Detachment Barracks	1/4/44	BKS-D-H	Social Work Service
9966	Medical Detachment Barracks	8/25/52		Internal Med./Rheum. clinic
9967	Medical Detachment Barracks	8/25/52		Oncology/Hematology clinic
9968	Medical Detachment Barracks	8/25/52		Endocrinology/Med. Dept.
9969	Medical Detachment Barracks	8/25/52		Family Practice Service
9970	Medical Detachment Barracks	8/25/52		Family Practice Service
9971	Medical Detachment Barracks	1/4/44	BKS-D-H #48	Gen. Surgery/Family Practice
9972	Medical Detachment Barracks	1/4/44	BKS-D-H #49	Emergency Room/Acute Illness
9973	Medical Detachment Barracks	1/4/44	BKS-D-H #50	Pharmacy
9974	Medical Detachment Barracks	1/4/44	BKS-D-H #51	Adult Clinic
9975	Medical Detachment Barracks	1/4/44	BKS-D-H #52	Med. Admin./Emergency Medicine
9976	Medical Detachment Recreation	1/4/44	REC-H-H #5	Baggage/Outpatient Records
9980	Patients' & Med. Det. Mess	12/29/43	MESS-Z-H #4	Dining Hall
9981	Receiving & Evacuation Building	3/1/44	RECG-A-H #7	NCO Club/Resource management
9982	Hospital Shop & Morgue	ca.1944	GA/SHMO-A-H#7	Ambulances/Morgue/Publications
9983	Medical Storehouse	12/1/43	STOR-H-H #55	Logistics/AMO
9984	Medical Storehouse & Office	12/1/43	STOR-H-H #54	Med. Maintenance/Housekeeping

Remaining Buildings - Table 2

Bldg #	ORIGINAL BUILDING TITLE	PER 7-43 PLAN	NOTES
9900	Administration Building	ADM-E-H#1	
9901	Officers' Quarters	OQ-F-H#13	
9902	Officers' Quarters	OQ-F-H#14	
9904	Officers' & Nurses' Mess	MESS-AA-H#8	
9905	Nurses' Quarters	NQ-A-H#12	
9906	Nurses' Quarters	NQ-A-H#11	
9907	Nurses' Quarters	NQ-A-H#10	
9908	Clinic/Surgery	SURG-B-H#15	
9909	Clinic/Surgery	SURG-B-H#16	
9910			Post-1943 Addition
9911	Clinic/Lab/Prof. Services	CLIN-Q-H#17	Non-historic additions
9912	Clinic/Lab/Prof. Services	CLIN-Q-H#18	Non-historic additions
9913			Post-1943 Addition
9919			Post-1943 Addition
9920	Standard Ward	WARD-J-H#26	
9921	Standard Ward	WARD-J-H#27	
9922	Standard Ward	WARD-J-H#28	
9923	Standard Ward	WARD-J-H#29	
9924	Standard Ward	WARD-J-H#30	
9925	Combination Ward	WARD-K-H#31	
9926	Combination Ward	WARD-K-H#32	
9927			1945 Addition
9930	Combination Ward	WARD-K-H#25	
9931	Combination Ward	WARD-K-H#24	
9932	Standard Ward	WARD-J-H#23	
9933	Standard Ward	WARD-J-H#22	
9979			Non-historic**
9985	Storehouse	STOR-J-H#55	
			**To be demolished

ADDENDUM TO:
MADIGAN HOSPITAL
(Madigan Army Medical Center)
Bounded by Wilson, McKinley Avenue, Garfield, & Lincoln Street
Fort Lewis
Pierce County
Washington

HABS No. WA-202

HABS
WASH
27-TACO,
8-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of the Interior
1849 C St. NW
Washington, DC 20240

HISTORIC AMERICAN BUILDINGS SURVEY

**MADIGAN HOSPITAL
(Madigan Army Medical Center)**

HABS
WASH,
27-TACO,
8

This report is an addendum to a twenty-one-page report previously transmitted to the Library of Congress in February 1994.

Location: Roughly bounded by Wilson and McKinley Avenues to the west and east and Garfield and Lincoln Streets on the north and south, Fort Lewis, Washington.

Fort Lewis Quadrangle, Pierce County, Washington,
7.5 minute series, 1:24,000, Revised 1994
Universal Transverse Mercator Coordinates: Zone 10 53475E 521675N

Present Owner: U. S. Department of the Army

Original Use: Army General Hospital

Present Use: Madigan General Hospital remained in active use until 1992. In 1994, a portion of the complex was recorded to the standards of the Historic American Buildings Survey and 42 buildings were demolished. The existing buildings are currently used for various laboratory and clinical functions.

Significance: The Type A Hospital, as represented by Madigan General Hospital, is associated intimately with the historical context of military medicine. The complex was a significant part of the Army's national medical program during World War II and provided health care to individuals who served their country in war theaters, from Europe to Asia. Madigan represents the military treatment philosophies of World War II and the Army's concern with adequate health care for its soldiers from induction to separation. It is, however, as a major building type that Madigan General Hospital is significant. Madigan is associated with two architects and a contractor who were important in the fields of design and construction of hospitals. Most important, however, the design and layout of Madigan is representative of the changing understanding of infectious diseases, sanitation practices, developments in building and medical technology, and the provision of health care to a great many people. Madigan General Hospital is the only one of twelve hospitals of this type to have continued to serve as a military hospital beyond 1951. It continued to provide extensive medical services, as constructed, adapted, expanded and modernized until 1992, when the new Madigan Army Medical center was completed. Although a large number of buildings have been demolished, a sufficient number have been retained which serve as representative examples of Madigan's historic associations with the operation of a Type A hospital.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of Construction: Construction of the complex began in July 1943 and by February 1944 the first buildings were completed and occupied. The entire complex was completed on August 4, 1944.
2. Architect: Philip Sawyer (1868-1949) co-partner with Edward P. York of the architectural firm of York & Sawyer Architects and Engineers, N.Y.C. (New York, NY), was responsible for the design and preparation of construction drawings and specifications for the Mobilization General Hospital Type A for the War Department. The firm was established in 1904 and is known to have designed several noteworthy hospitals and federal government projects; Federal Reserve Bank, Academy of Medicine, Rockefeller Hospital, Fifth Avenue and Orthopedic Hospitals in New York City, Department of Commerce Building in Washington D. C. and the federal building and General Hospital in Honolulu, Hawaii.

Victor E. Steinbrueck (1911-1985) prepared the key plan (site layout plan) for Fort Lewis station hospital-section 5 for Boespflug Construction Co., dated July 23, 1943. Mr. Steinbrueck is regarded as an important architect and civic activist who was instrumental in the design and preservation of notable Seattle buildings, landmarks and historic districts. His association with the construction of the hospital and with John F. Boespflug appears to have been due to their mutual involvement with the design and construction of the Yesler Terrace Public Housing project (circa 1940-1943).

3. Original and subsequent owners: U. S. Department of the Army.
4. Builder, contractor, suppliers: John F. Boespflug, Sr. (circa 1911-1978) partner with his father, Jerome C. Boespflug, of J. C. Boespflug Construction Co., which appears to have been the civilian contractor responsible for the construction of Madigan General Hospital. J. C. Boespflug Construction Co. was initially based in Miles City, Montana. They are known to have been responsible for the construction of the Sisters of St. Joseph Hospital, Missoula, Montana and the Yesler Terrace Public Housing Project (circa 1940-43 in Seattle, WA) prior to the construction of Madigan. The company moved its headquarters to Seattle in about 1942 and continued in the construction business for 30 years. Subsequent projects included the University of Washington Medical School, University of Washington Hospital, King County

General Hospital, hospitals in Long Beach and Los Angeles, California and Anchorage, Alaska as well as bridges, airports and dams.

5. Original plans and construction: *Mobilization General Hospital Type A – 1100 Series*, War Department, Office of the Chief of Engineers – Construction Division, Washington, D.C., dated October 31, 1942. Construction appears to have closely followed the standard plans although there were some minor deviations.
6. Alterations and additions: See individual building floor plan descriptions.

B. Historical Context:

1. Summary

The level of medical care available to members of the American armed forces in the United States has been directly related to the development of medicine from 1790 to the present time. The military, in turn, has made great contributions to medicine. In recent years, military planners have understood the relationship between preventive medicine and success on the battlefield and designed appropriate health-care facilities. Not all military medicine, however, is war-related. Military research has contributed to understanding disease and military doctors have taken care of patients during peacetime.

The accomplishments of the Army's Medical Department, led by a succession of Surgeon Generals, include the planning, design, construction, maintenance, operation and repair of numerous types and levels of health care facilities, notably station hospitals (located on installations) and general hospitals which provided health care to individuals from many posts. Designs for the Type A General Hospital were developed during World War II and were considered by the Surgeon General as the finest solution to emergency health care. Madigan General Hospital at Fort Lewis, Washington, is the only remaining Type A hospital still under Army management and ownership. Originally a 58 building complex, by 1969 Madigan had grown to include 88 buildings (most were permanent construction, however, some of these were temporary buildings). By 1998, when 96 buildings and structures were evaluated, a few of the original buildings had been demolished and new ones built.

Madigan General Hospital, although altered by the demolition of 42 buildings in 1994, is eligible for listing in the National Register of Historic Places because of its association with events within the historic theme of World War II. Madigan reflects important developments in military hospital design as a

major building type.

2. Evolution of Military Medicine, 1790-1940

Medical science, from the late 1700s through the mid-1800s, was primitive. Diseases were thought to be caused by “vapors” and, while there was an awareness of the relationship between disease and diet, living conditions and cleanliness, it was viewed with skepticism. Patients requiring surgery were fortunate to survive operations done without anesthetics. Post-operative infection was expected, hospitals were filthy, and there were few medicines beyond the level of folk and home remedies.

Within the Army, surgeons were authorized “for regiments or posts at levels that varied through time”¹ and it was not until 1813 that the Physician General and the Apothecary General were founded. By 1818, the office of the Surgeon General had been created and was staffed by a military surgeon. Medical care was, however, continued to be poor. During the Mexican War (1846-1848), disease-related deaths outnumbered battlefield casualties by a ratio of seven to one.² The Civil War caught the Medical Department by surprise. Organized to care for a peacetime army of about 16,000 soldiers, the Union Army grew to over 500,000 soldiers. Nearly 140,000 Union soldiers were killed in battle, but over 220,000 died from other causes. During the Civil War, the Army made important medical advances. The Ambulance Corps was developed by the Medical Director of the Army of the Potomac, leading to efficient and timely evacuation of wounded soldiers from battlefields to care facilities. The general hospital system was also developed under the direct supervision of the Surgeon General. Military units already used field hospitals to treat wounded soldiers, and long-term care was now provided in general hospitals that accepted patients from any unit. These led to “pavilion” hospitals, distinguished by widely separated wards and connecting corridors. These open air pavilions—designed to separate patients, prevent the spread of “vapors” and thereby limit the spread of disease—evolved into the temporary wood frame hospitals of World War I and II. By the end of the Civil War, the Army “had 204 general hospitals, with 136,894 beds.”³ Large-scale use of civilian physicians and medical laymen as volunteers was initiated during the Civil War when the United States Sanitary Commission was formed to provide labor and medical supplies.

¹ R. Christopher Goodwin & Associates, Inc. *National Historic Context for Department of Defense Installations, 1790-1940*, Baltimore: U. S. Army Corps of Engineers, Baltimore District, 1995, p. 131.

² Gillett, Mary C., *The Army Medical Department, 1775-1818*, Washington: GPO, 1981, pp. 1-22.

³ Goodwin, p. 134.

In the twenty years between 1870-1890, Louis Pasteur discovered that microbes were the cause of disease and Sir Joseph Lister pioneered the use of carbolic acid as a surgical antiseptic to prevent post-operation infection. Medical science began to study microbes, link them to specific diseases and develop vaccinations and treatments. The transmission of disease was also examined, leading to improved knowledge about proper food storage, human carriers of microorganisms, safe sewage systems, control of insects and so on.

Between the Civil War and the Spanish-American War, the Army's budget and size was reduced to peacetime levels. As the nation mobilized for the Spanish-American War in 1896, the Army's size grew from around 25,000 troops to an average of 65,000, a number that would hold steady for the next decade. Volunteers were housed in crowded temporary training camps with inadequately designed water supplies and sewage systems. Over 14,000 soldiers contracted typhoid fever, and one in ten died.

As in the Civil War, some medical improvements came from the Spanish-American War. By 1898, over 1,100 women were employed by the Army as nurses and the Army Nurse Corps was established shortly thereafter. The Surgeon General decreed that six post hospitals were to become general hospitals to take care of the increased number of war patients.⁴ Within the regular Army, there was increased understanding that proper medical care was essential to both peacetime and combat operations. The Army's Medical Department increased research on the spread of diseases. In 1909, the British Army began using a typhoid vaccination; it was quickly adopted by the American Army and by the American public shortly thereafter. In 1901, William Gorgas, Chief Sanitary officer in Cuba, established that the female *Anofiles* mosquito transmitted yellow fever. Gorgas later served in Panama to minimize the spread of yellow fever and malaria during construction of the Panama Canal by controlling the size of the mosquito population. Education, too, improved with "increased attention to medical education for line officers and military education for medical officers."⁵

In 1901, the Army was reorganized. Creation of the General Staff and the Chief of Staff meant that the Surgeon General reported through the Chief of Staff. The Army's Medical Department expanded to include a Veterinary Corps (1916) and a Sanitary Corps (1917). At the start of World War I, Army designers took their lessons from the Spanish-American War and rushed to

⁴ Cosmas, Graham A., *Army for Empire: the United States Army in the Spanish American War*, Columbia: University of Missouri Press, 1971, pp. 270-274.

⁵ Goodwin, p. 138.

complete training camps before new troops arrived to occupy them. These camps were built with adequate water and sewage systems and contained hospital facilities to deal with any outbreaks of diseases.

Turning to potential battlefield casualties, the Medical Department staff organized systems to ensure efficient evacuation of wounded soldiers to aid facilities and then to provide effective care at different types of hospitals. Wounded soldiers were given first aid at regimental aid stations, then moved to field hospitals for doctors' care before being moved to evacuation and mobile hospitals for surgery and, finally, to base hospitals for recuperation and long-term care. In France, the American Expeditionary Force was served by two base hospitals in France at Mesves and Mars. The 4,000 bed convalescent hospital at Mars was contained in 700 buildings on 33 acres with the water, sewage and lighting facilities of a small municipality.⁶ During World War I, medical care was improved: battlefield deaths (35,556) were less than the 45,585 deaths from other causes: war wounds, 15,130; diseases, 24,786; and other injuries, 5,669.⁷ The ratio of deaths from disease to battlefield casualties had drastically improved from seven to one in the Mexican War to less than one to two.

The Medical Department continued to build hospitals and conduct research during the quiet years between World Wars I and II. The Walter Reed Army Medical Center, in the District of Columbia, became a hospital and research center with over a hundred buildings. Beaumont Hospital was built near Fort Bliss, Texas, and Fitzsimons General Hospital, near Denver, Colorado, provided specialized care for the Army's tuberculosis patients.

Part of the funds generated from the sale of surplus Army property in 1926 was applied to build station hospitals and permanent housing at many World War I training cantonments. But many hospitals were located in temporary World War I wood structures that were fire hazards and had exceeded their design life. In 1934, the Army started a hospital improvement program but a shortage of funds limited the project. By 1939, the Army operated just seven general hospitals and 119 station hospitals. Calling the Army's hospitals "inadequate", the Surgeon General noted on the eve of World War II that they lacked facilities to separate patients according to grade, sex and disease, and that many did not have X-ray, oxygen, or physical therapy equipment. He considered

⁶ U. S. Army, *United States Army in the World War, 1917-1919*, Washington: Center of Military History, 1991, pp. 57-60.

⁷ Ashburn, Percy, *History of the Medical Department of the United States Army*, Boston: Houghton Mifflin Company, 1929, 332-333 & 340-347 and U. S. Army, *United States Army in the World War, 1917-1919*, Washington: Center of Military History, 1991, pp. 57-60.

“only twenty-five as modern fire-resistant buildings and only fifty of the remainder as worth modernization.”⁸ The Medical Department prepared for war with the understanding that the nation would only fight if attacked, with little support from Congress, and the belief that the Army’s size would only reach about 1,000,000 soldiers. In September 1939, the Regular Army’s enlisted strength was 210,000 soldiers but by the end of 1941 after Congress authorized mobilization, the Army’s authorized strength grew to 1,686,403 soldiers.

The Surgeon General, medical advisor to the Chief of Staff and responsible for planning and technical supervision of all Army hospitals, was supervised by the War Department’s General Staff. In matters of construction work, the Surgeon General’s office worked directly with the Quartermaster Corps and the Corps of Engineers.⁹ In 1939, corresponding to an increase in the Army strength, the Surgeon General proposed an increase in hospital facilities. The number of hospital beds needed was calculated by multiplying the current troop strength by between 4 and 5 percent. Hospital expansion, however, was no simple matter. Expansion addressed growth rates for different hospital levels, training and housing of personnel, and expansion of associated services like administration, utilities and transportation. As Army hospitals were not yet dealing with battle casualties, there was some time to plan for the care of wounded soldiers. Planning also had to be done for hospitals in potential overseas theaters of war. These were organized in a different manner than those in the United States and served specialized battlefield needs.

Within the United States, planning continued for station and general hospitals. It was easier to plan general hospitals as their size, number and location was not directly tied to changing numbers of troops at individual stations. Also, although station hospitals were under the nominal supervision of the Surgeon General, their day-to-day operations often came under the direction of the post commander. General hospitals, on the other hand, served more than one post and were under the direct supervision of the Surgeon General. In 1940, the Surgeon General proposed construction of 10 new general hospitals with a total of 9,500 beds, bringing the number of general hospital beds in the Army to 15,000 for an expected strength of 1,400,000.

⁸ Smith, Clarence McKittrick, *The Medical Department: Hospitalization and Evacuation, Zone of the Interior*, The Technical Services, Washington: Center of Military History, 1989, p. 4.

⁹ By 1939 debates had arisen over the success of the Quartermaster Corps in addressing the Army’s design needs. Efforts to consolidate all Army construction with the Corps of Engineers was formalized in a bill enacted December 1, 1941. During the next year, there were project overlaps as the Quartermaster Corps completed previously assigned projects and the Corps of Engineers assumed new ones.

Hospital plans were drawn in 1935 and, by 1940 it was clear that they contained inadequate and obsolete features. The Quartermaster General proposed a complete revision but was overruled by the Surgeon General in favor of waiting until there was sufficient experience with the plans to make "a complete and satisfactory revision possible."¹⁰ By 1941, the plans were evaluated and found to lack space for certain medical and administrative activities and were inadequate from a safety perspective. Meanwhile, the Quartermaster's and the Surgeon General's staff were developing a new type of semi-permanent hospital.

The new hospitals were compact, built with fire-resistant materials, and occupied two stories instead of one. Ward buildings were located on either side of two-story central corridors, "permitting one diet kitchen and one ward office and examining room to serve two wards."¹¹ Beginning in August 1941, this type of hospital was authorized for all future hospital construction. However, the United States went to war before the plans could be used. New construction aside, the Surgeon General's office found two other ways to meet its obligations for health care. Five existing hospital facilities that were suited for modernization were expanded and 43 private hotels and hospitals were taken over for use as Army hospitals.

In 1942, the War Department returned to semi-permanent buildings. The Clay Products Association of the Southwest lobbied the Army to use its products, particularly in hospital construction. At the same time, the Veterans Administration complained that the Army was constructing hospitals that could not be converted for post-war use. When the War Production Board indicated there were shortages of lumber and a surplus of brick and tile, the Surgeon General's staff and the Corps of Engineers began developing plans for a new type of hospital. The new hospital, called the Type A hospital, was a redesigned two-story semi-permanent hospital. The clinic buildings were all one-story, and were safer for patients because they had no ramps.

Individual clinics offered more equipment and the hospitals were arranged in a more efficient layout than the two-story hospitals. The Surgeon General came to consider it, "the best for emergency construction in the zone of interior."¹²

¹⁰ Smith, p. 22.

¹¹ Smith, p. 23.

¹² Smith, p. 76. The "zone of interior" was the designation given to the continental United States by the Medical Department.

By the end of World War II, the Army had 16 multi-story permanent brick hospitals, 26 cantonment hospitals and 15 one-story semi-permanent Type A hospitals.¹³ The Type A hospitals included two specifically designed for post-war use by the Veteran's administration, two special hospitals, and 11 Type A hospitals (See Table 1). Madigan General Hospital, located on Fort Lewis, Washington, is a Type A one-story hospital.

**TABLE 1. LIST AND DISPOSITION OF
U. S. ARMY ONE-STORY TYPE A HOSPITALS**

Hospital	Location	Date	Specialties	Service	Disposition
Ashburn*	McKinney, TX	1943	General medicine Arthritis	2 yr 6 mo	Transferred to Veterans Admin.
Battery	Rome, GA	1943	General medicine, general and orthopedic surgery, psychiatry	2 yr 2 mo	Transferred to State of Georgia
Birmingham	Van Nuys, CA	1944	General medicine, syphilis, rheumatic fever, psychiatry	2 yr 1 mo	Transferred to Veterans Admin
Crile	Cleveland, OH	1944	General and orthopedic surgery, plastic surgery, ophthalmologic surgery, psychiatry	2 yr 2 mo	Transferred to Veterans Admin.
Cushing	Farmingham, MA	1944	Neurology, plastic surgery, ophthalmologic surgery, neurosurgery, psychiatry	2 yr 7 mo	Transferred to Veterans Admin
DeWitt	Auburn, CA	1944	General medicine, neurology, neurosurgery, vascular surgery, psychiatry	1 yr 10 mo	Transferred to State of California
Dibble	Menlo Park, CA	1944	Plastic surgery, ophthalmologic surgery, blind, psychiatry	3 yr 2 mo	Transferred to Federal Public Housing Auth.
Foster*	Jackson MI	1943	General medicine, rheumatic fever, general and orthopedic surgery	2 yr 3 mo	Transferred to Veterans Admin.
Glennan	Okmulgee, OK	1943	Prisoners of war.	2 yr 0 mo	Transferred to OK A.&M. College
Madigan	Fort Lewis, WA	1943	General medicine, general & orthopedic surgery	N/A	Retained for Regular Army
Mayo	Galesburg, IL	1944	General medicine, neurology, neurosurgery, vascular surgery	2 yr 7 mo	Transferred to the State of Illinois,
McGuire**	Richmond, VA	1944	Neurology, amputations, neurosurgery	1 yr 8 mo	Transferred to Veterans Admin.
Newton D. Baker	Martinsburg, WV	1944	Neurology, plastic surgery, ophthalmologic surgery, neurosurgery, psychiatry	2 yrs 5 mo	Transferred to Veterans Administration
Northington	Tuscaloosa, AL	1943	Neurology, plastic surgery, ophthalmologic surgery, neurosurgery, psychiatry	2 yrs 7 mo	Transferred to City of Tuscaloosa
Vaughn**	Chicago, IL	1944	General medicine, general and orthopedic surgery, psychiatry	1 yr 8 mo	Transferred to Veterans Admin.

* Special type resembling Type A using tile and brick.

** Type A with brick buildings, designed for Veterans Administration.

3. Development of Type A Hospital at Fort Lewis

Madigan General Hospital began as an expansion of the Fort Lewis Station Hospital, which was constructed as part of the permanent fort in 1928-29.

During the early stages of World War II, the station hospital rapidly expanded

¹³ See Appendix A on page 33 for a list of multi-story permanent brick and cantonment hospitals.

into four separated sections (see **Figure 1**) within the military reservation. The original three story brick Post Hospital building, now known as Building 4290, was designated as Section 1¹⁴. A cantonment-style complex of 45 interconnected one-story, wood frame buildings was located across the street to the west of Section 1, serving as Section 2, now demolished (see **Figure 2**). Section 3, a temporary wood frame cantonment style complex, was located across the Pacific Highway in the newly-constructed portion of the post designated as North Fort Lewis, outside the present historic district. Section 4, also demolished, was a temporary wood frame complex located approximately ½ mile east of Section 1.

Standardized plans for the Type A hospital were received at Fort Lewis in January 1943 and construction of the Fort Lewis Station Hospital - Section 5 began in July 1943. A "key plan" (see **Figure 3**) delineated by Seattle architect Victor Steinbrueck and dated July 7, 1943, recorded the planned layout of Section 5 at the Fourth Division Prairie site. The initial 58 building complex was constructed by J.C. Boespflug Construction Co., a civilian general contractor based in Miles City, Montana, under the direction of the Seattle District U. S. Army Corps of Engineers. The multiple building complex was constructed simultaneously, with the first buildings completed and occupied by February 1944. By August 4, 1944, the entire complex was complete and the five hospital sections were consolidated under one command as the Fort Lewis General Hospital.

Section 5 was built to comfortably provide 1,567 hospital beds and an emergency capacity of 2,500 beds. It included administrative facilities and personnel housing in addition to extensive medical, surgical, therapeutic, clinical and recreational facilities. The remaining four sections provided medical services, including obstetrics (Section 1), treatment of contagious disease (Section 2) and advanced reconditioning programs (Section 3). By April 1945, the five sections included 296 buildings and utilized a staff of over 1,500 doctors, dentists, nurses, officers, enlisted personnel (including Army Corps and Women's Army Corps) and civilians. Several important medical units were attached to the hospital including the Ninth Service Command Army Nurse Training Center, which trained three to four hundred nurses.

4. World War II Use of Madigan

On September 22, 1944, War Department General Orders No. 76 officially redesignated the five hospital sections as Madigan General Hospital in honor of Colonel Patrick Sarsfield Madigan (1887-1944), a noted Army Medical Corps

¹⁴ Building 4290 is a contributing feature within the Fort Lewis Historic District.

neuropsychiatrist. In addition to its mission as a station hospital for Fort Lewis, and as a regional hospital for the Pacific Northwest, Madigan specialized in orthopedic surgery, general surgery and medicine. In the later war years, several hospitals including Madigan also served as debarkation hospitals for sick and wounded soldiers and airmen returning from overseas, in transit to other facilities.¹⁵ Debarkation hospitals served patients in transit with some difficulty because the full use of specialized equipment was not needed and, because patients arrived and left in large groups, there were awkward periods of idleness and intense activity. See **Table 2** for a comparison of different hospitals.

Once patients were considered fit to travel they were transferred to the military hospital facility which could best care for them or for specialized treatment nearest their home. Patients typically arrived at Madigan in small groups via ambulance and in large groups by train from debarkation ports at Seattle, Tacoma and Portland. Madigan also served as a general hospital for patients transferred from other debarkation hospitals on the east and west coasts. As a post hospital and regional hospital, Madigan continued to provide medical care for military personnel stationed at Fort Lewis and for seriously ill troops from other Pacific Northwest Army camps.

During World War II, hospitals underwent tremendous growth. In 1944, several convalescent hospitals were opened on the same post as general hospitals and, by 1945, the number of staff and patients at hospitals like Percy Jones General and Convalescent in Michigan was more than 16,500. These convalescent/general hospitals were essentially two independent hospitals with separate command, administrative, record-keeping and legal systems. Madigan was designated as a convalescent/general hospital in early 1945. In mid-1945, The Surgeon General centralized the combined hospitals into hospital centers. Madigan, along with nine other general hospitals, was designated as a hospital center.¹⁶

¹⁵ Those hospitals were Lovell at Fort Devens, MA; Barnes at Vancouver Barracks, WA; McGuire in Hampton Roads, VA; Birmingham in Los Angeles, CA; LaGarde in New Orleans, LA; Mason in New York, NY; and Madigan in WA.

¹⁶ These hospitals were at: Camp Pickett, Virginia; Camp Butner, North Carolina; Camp Edwards, Massachusetts; Camp Carson, Colorado; Camp Atterbury, Indiana; Fort Custer, Michigan; Fort Sam Houston, Texas; Camp Forrest, Tennessee; and Fort Lewis, Washington.

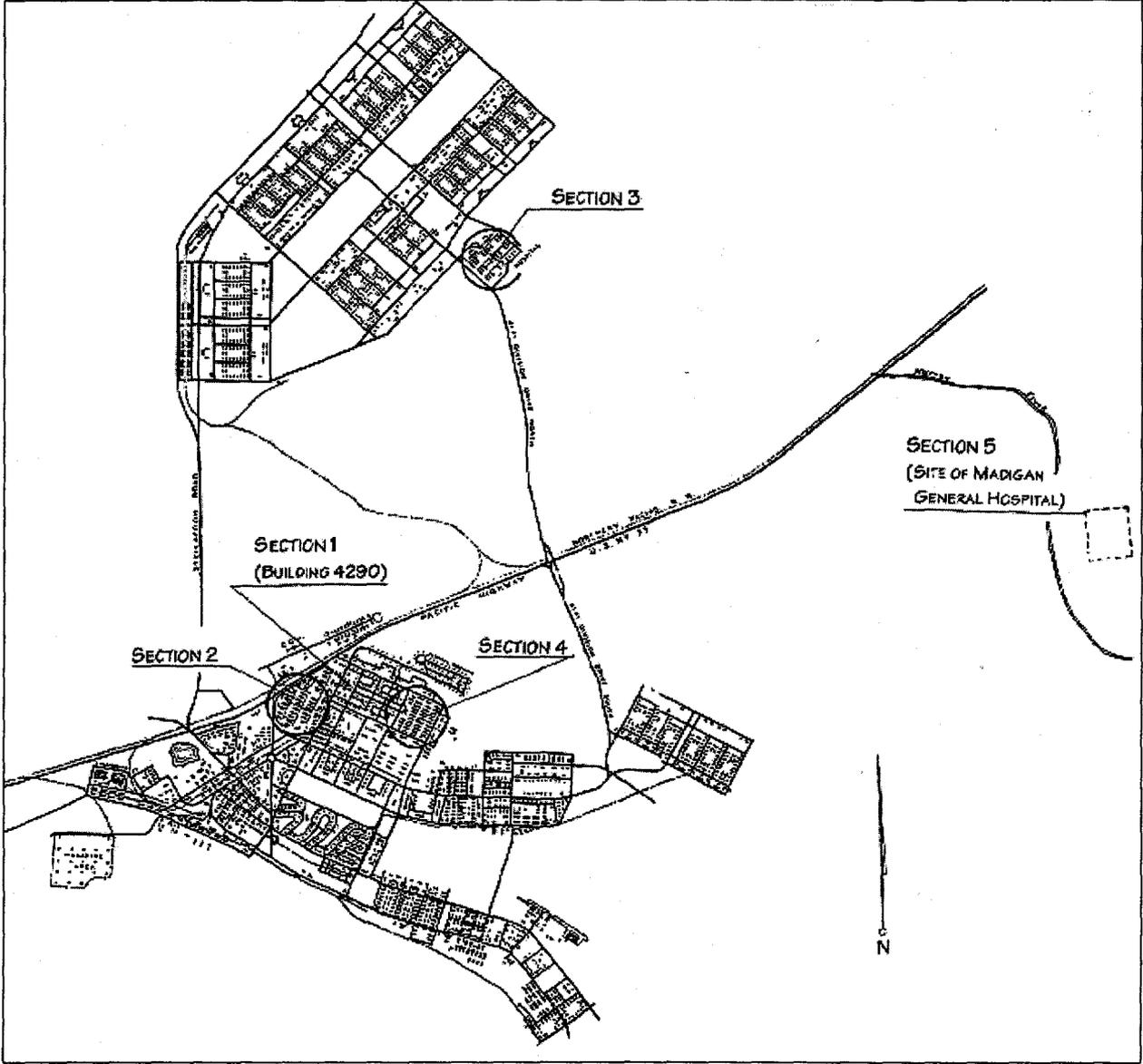


FIGURE 1. Sections 1-4 of Madigan Hospital are shown on this 1941 map. Future site of Section 5, Madigan General Hospital, is indicated with dashed lines.

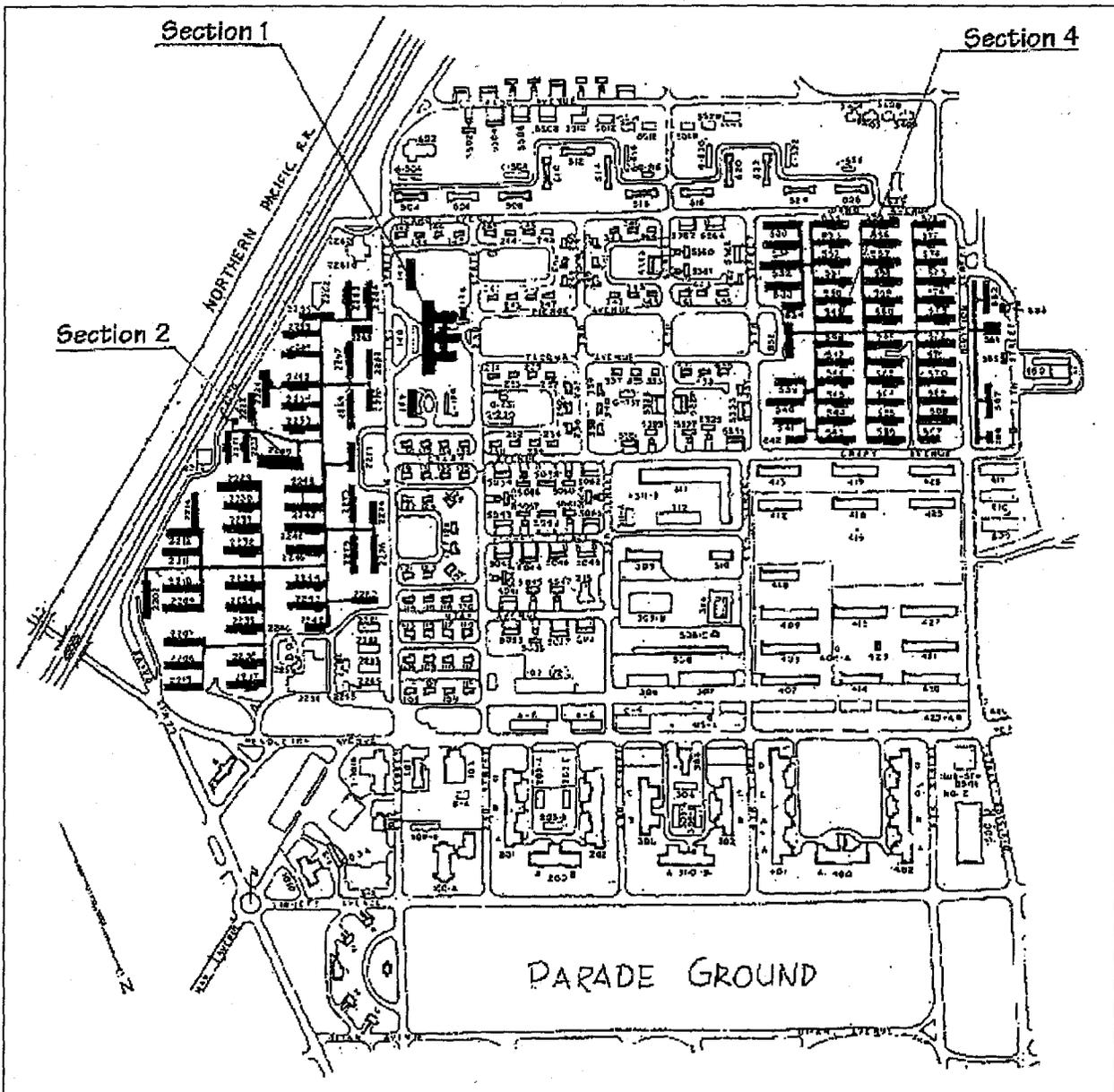


FIGURE 2. Sections 1, 2 & 4 are shown as solid figures. Note the grid-like layout, location of buildings on one side of corridors and the distinctive ward outlines.

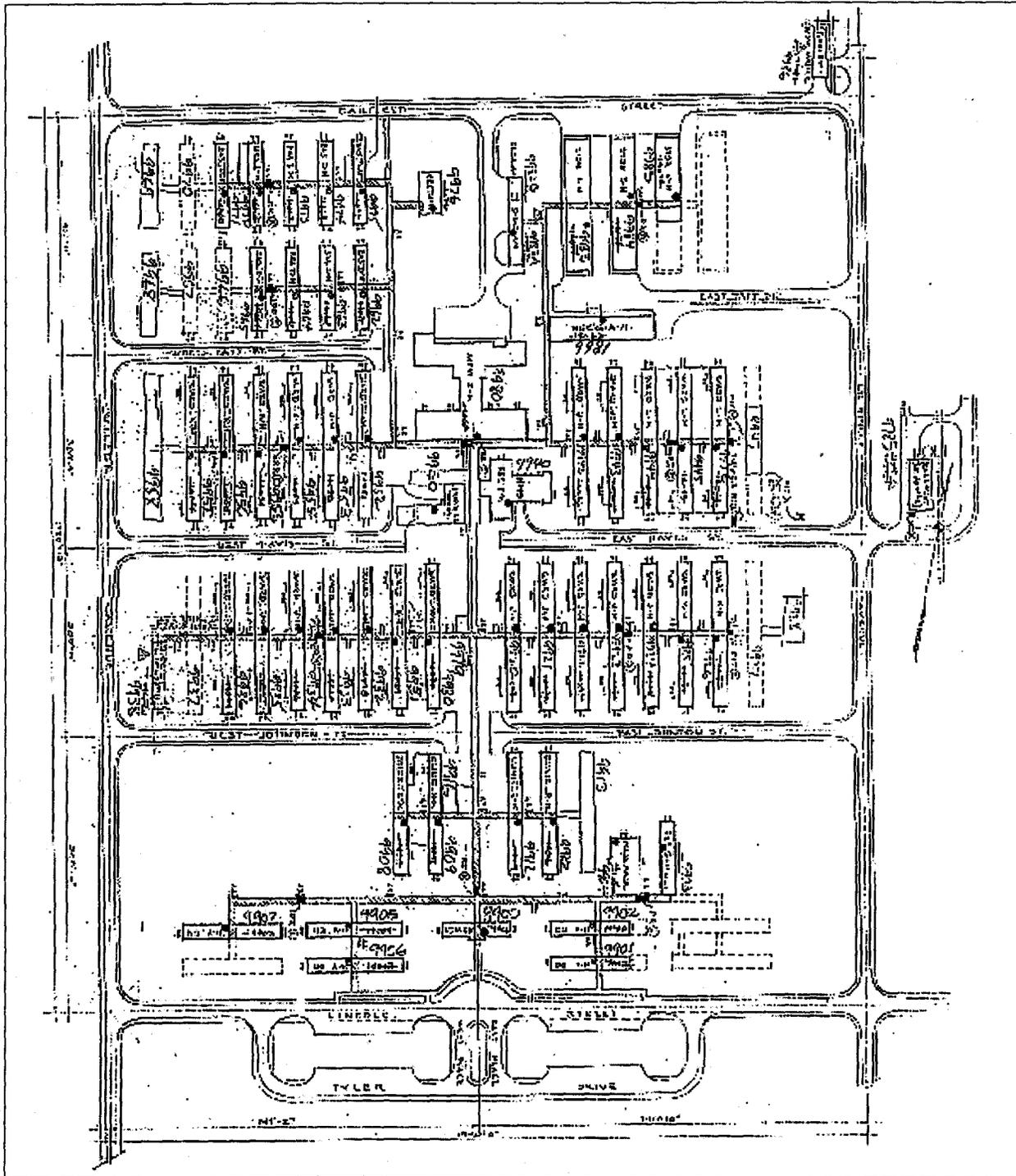


FIGURE 3. Layout Plan for Station Hospital Section No. 5, July 23, 1943. (A "key plan" delineated by Seattle architect Victor Steinbrueck and dated July 23, 1943.)

TABLE 2. DEBARKATION HOSPITALS

Hospital	March 1945			June 1945			August 1945		
	Total Beds	Dbktn Beds	Hosp Beds	Total Beds	Dbktn Beds	Hosp Beds	Total Beds	Dbktn Beds	Hosp Beds
Birmingham	1777	800	977	*					
Boston	1700	1700	0	1700	1700	0	*		
Edwards	3200	800	2400	2950	900	2050	*		
Camp Haan	*			800	800	0	800	800	0
Halloran	5350	2700	2650	5350	2700	2650	5350	2700	2650
Patrick Henry	1100	1100	0	1100	1100	0	*		
Kilmer	2000	2000	0	2000	2000	0	2000	2000	0
LaGarde	1176	0	1176	1300	0	1300	*		
Letterman	3500	3140	360	3500	3140	360	3500	3140	360
Madigan	4300	1000	3300	4300	1000	3300	4380	1000	3380
McGuire	*								
Mason	3032	1000	2032	2532	500	2032	3032	500	2532
Shanks	2300	2300	0	2300	2300	0	*		
Stark	2400	2125	275	2400	2125	275	2400	2125	275
TOTAL	31,835	18,665	13,170	30,232	18,265	11,967	21,462	12,265	9,197

* No figures are shown for beds in hospitals when those hospitals were not being used for debarkation purposes. (Source: Smith, p. 193.)

During the peak of wartime casualties, Madigan Hospital Center was able to care for more than 7,000 patients. An important goal of the medical program was devoted to reconditioning wounded military personnel with the intent to restore them to military duty or civilian life in top physical and mental condition. Section 5 included several specialized patient services including recreational facilities operated by the Red Cross (bldg. 9940), a well-equipped library (bldg. 9952), a post exchange with snack bar and post office (bldg. 9950) as well as recreational facilities for detachment and medical personnel (bldg. 9976 & 9903), a chapel (bldg. 9928) and a guesthouse (bldg. 9938).

5. Post World War II Use of Madigan

With the end of World War II, Madigan Hospital Center was formally dedicated on August 21, 1945. Soon American soldiers repatriated from Japanese prison camps arrived at Madigan for medical treatment. Gradually, the training units were disbanded, personnel returned to civilian life, the

convalescent hospital became an annex and the hospital sections were consolidated. While Section 1, the old post hospital building continued to be utilized for out-patient and obstetrical services, the functions of Sections 2, 3 and 4 were all relocated to Section 5.

The consolidation of Madigan Hospital was repeated in military hospitals across the country. The Surgeon General's office came under pressure to estimate the hospital requirements in 1946 and reduce the number of beds accordingly. The needs of post hospitals were tied to the number of soldiers stationed there so general/convalescent hospitals were scrutinized first. Following victory in Europe (May 8, 1945), it became difficult to estimate the number of battle casualties that might occur in the Pacific where the war with Japan was still under way. As a result, the Surgeon General, issued conservative quarterly estimates to allow for still-unknown demobilization rates and still unknown numbers of demobilizing soldiers who would suffer from tuberculosis and deafness. These estimates also took into account delays from the lack of specialists to perform amputation and plastic surgery, and the speed at which German prisoners-of-war were repatriated. By the fall of 1945, the decision was made to close entire hospitals by returning leased buildings to their owners and transferring hospitals to other agencies that needed them. In less than a year all but one convalescent hospital was closed and all regional hospitals were either closed or reverted to station hospitals. At the start of 1947, there were "only 54 station hospitals with 15,715 beds, only 14 general hospitals with 34,846 beds, and only 1 convalescent hospital with 100 beds."¹⁷

In 1946, a gymnasium, swimming pool and outdoor recreational facilities were constructed adjacent to the Madigan complex. A green house was constructed in 1947 to grow indoor plants for the hospital. A modernization program established by the Surgeon General in 1949 began improvements to all of the clinics, wards, surgical pavilions and hospital services. During this period, Madigan became one of eight Army hospitals in the United States to train interns under the Surgeon General's professional training program and began to conduct training programs for various organized reserve units. An annual report issued by the Commanding Officer in 1949, on the fifth anniversary of the hospital, is illustrative of the degree of activity and the complexity of the hospital operation (see **Table 3**).

¹⁷ Smith, p. 315. The 14 general hospitals were: Army and Navy, William Beaumont, Fitzsimons, Letterman, Walter Reed, Brooke, Madigan, Oliver, Percy Jones, Tilton, Valley Forge, McCormack, Murphy, and Pratt.

TABLE 3. SERVICES AT MADIGAN GENERAL HOSPITAL IN 1949

Service	Description
Surgical Service	Army surgeons, civilian doctors and consultants
Dental Service	A teaching service also provided professional treatment
Medical Service	Provided medical, diagnostic and therapeutic care with extensive clinical facilities
Radiological and Laboratory Services	Complete facilities
Neuropsychiatric, Ear/Eye/Nose & Throat Services	Facilities available
Physical Medicine Service	Coordinated physical and occupational therapy and physical reconditioning program
The Graduate professional education program	Training programs for medical interns and residents
Army Nurse Corps pharmacy officer and staff	Nursing staff
Director of Personnel	Military and civilian staff
Headquarters Section	Provided hospital administration
Chaplain Section	Included a Roman Catholic and a Protestant chaplain
Mess Department	Prepared approximately 50,000 meals per month
Office of the Registrar	Administrative control of patient movement and records
Grounds and Maintenance	Included a greenhouse operation
Supply Division	Included a twenty-three vehicle motor pool
Inspector General	USAF Liaison, & Legal Assistance Offices
American Red Cross	Social workers and recreation workers

Source: Historic American Buildings Survey, National Park Service, *Written Report: Madigan General Hospital*, HABS No. WA-202, Washington: Library of Congress, 1993, pp. 6-7.

In August of 1950, modern obstetrical-gynecological services were established within the complex and the facility entered into a forty-year period of modernization and gradual change as it adapted to meet the needs of modern medical technology and practices. By 1951, Madigan was the only original one-story Type A mobilization hospital to be retained in service as a regular Army hospital. All other Type A hospitals had been transferred to the Veterans Administration or to state or local governmental agencies (see **Table 1**).

In 1952, two large enlisted men's barracks were constructed to the west of the complex and the original detachment barracks was converted and adapted for clinical and administrative uses. Five additional buildings, based on the original detachment barracks plans, and two additional combination wards, based on the original ward plans, were added to the complex in 1952 (see **Figure 4**). In 1956, the theater was constructed next to the gymnasium. New out-patient services for military dependents of both Fort Lewis and McChord Air Force base were established at Madigan in 1957, requiring modernization and changes to the original barracks and wards.

Patient information booklets published by the hospital in the 1960s provide insight into the extensive services offered to patients and personnel within the facility. The hospital included a bank, barber shop and barber services, beauty shop and beautician services, cafeteria and snack bar, a daily schedule of religious services, clothing and equipment sales, a commissary store, legal assistance and letter writing services, a semi-monthly newspaper *The Mountaineer*, a post office (bldg. 9950), a gymnasium, a theater, a crafts shop, a library (bldg. 9952), and a recreation hall, known as the Red Cross building (bldg. 9940). The corridor/ramp between the post office/P.X. and the recreation hall became known as "Times Square" and functioned as a small town center.

By 1969, Madigan General Hospital consisted of 88 separate buildings, excluding the nearby family housing, and covered approximately 120 acres. It provided care for an average of 1,100 patients, including U. S. Army, Navy, and Air Force personnel and their families from the Pacific Northwest, overseas evacuees, and retired military and their dependents. This huge medical operation was staffed by 2,500 military and civilian personnel composed of military and civilian physicians and dentists representing all of the professional specialties, Army Nurse Corps and civilian nurses, research, laboratory and administrative staff, enlisted men and women, training interns and residents, and Red Cross staff, as well as hundreds of volunteers. By 1973, it handled a daily average of nearly 4,000 out-patient visits and 350 in-patients.

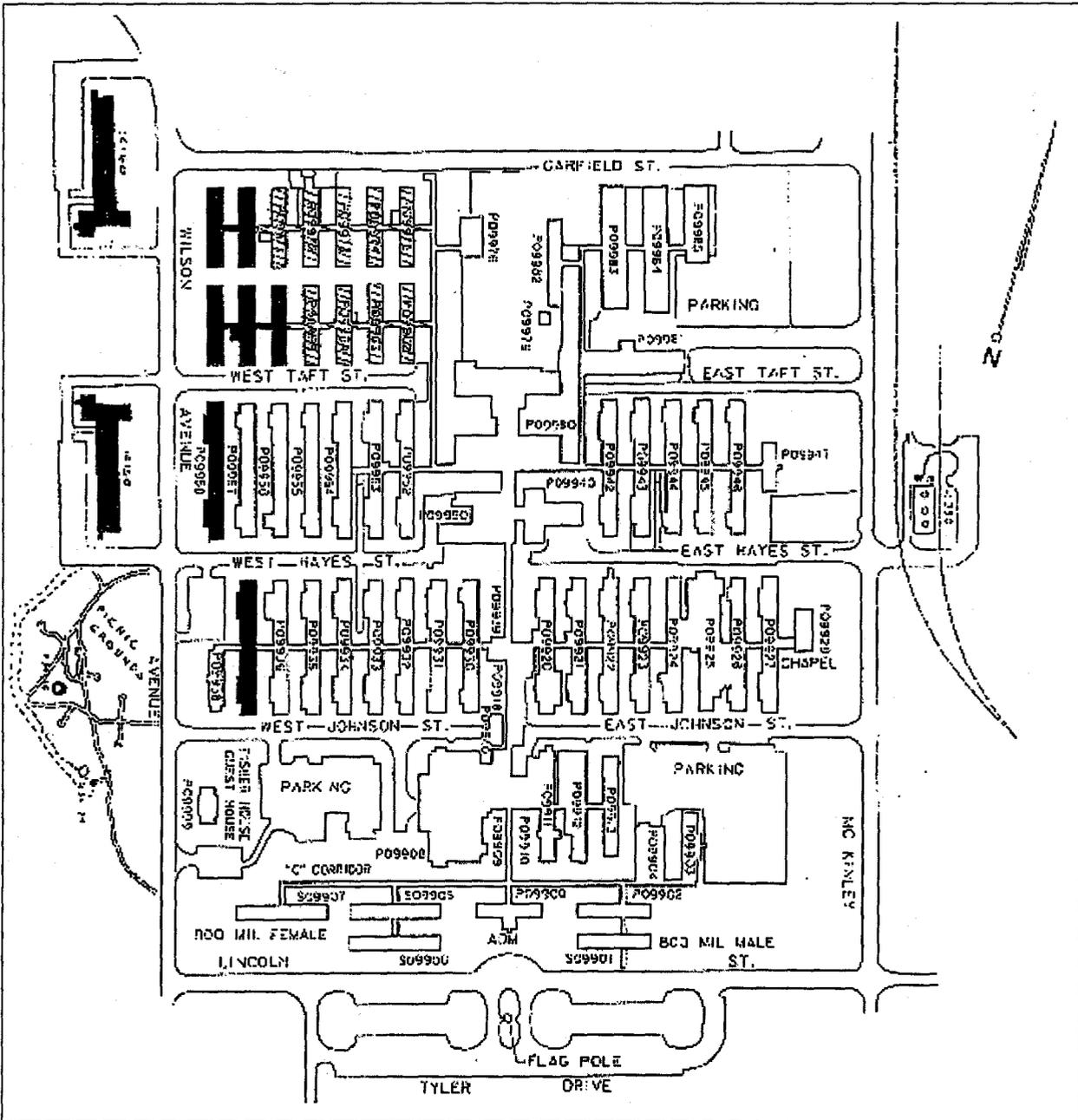


FIGURE 4. *Solid figures:* two enlisted men's barracks east of Wilson Avenue. Also, five buildings based on detachment barracks plans and two combination wards built in 1952. *Hatched figures:* detachment barracks converted for clinical and administrative uses in 1952.

In 1974, the operation of all military hospitals was converted from the Surgeon General to the newly created Health Services Command and the hospital was designated Madigan Army Medical Center. Between 1983 and 1987 major renovation of portions of the facility was completed to accommodate Surgical, Obstetrics/Delivery, Neo-natal Intensive Care, Cardiac Catherization, Linear Acceleration, Laboratory, Magnetic Resonance Imagery, and virtually all hospital critical care facilities. In 1985, major renovation of portions of the facility included the installation of new corridor/ramp flooring, painting and lighting. In 1990, the old Madigan facility was replaced by a new 414-bed, eight-story hospital and out-patient clinic equipped with state-of-the-art technology. The old facility continues to be used for a variety of out-patient and administrative purposes.

PART II. ARCHITECTURAL INFORMATION:

A. General Statement:

1. Architectural character:

At it peak, Madigan General Hospital was a complex of 88 buildings, interconnected by one-and-one-half miles of corridors, and approximately 20 free standing buildings. The buildings were standardized semi-permanent Type A General Hospital buildings constructed for the War Department for emergency purposes in the latter part of WWII. The buildings are brick and tile masonry structures with simple Colonial Revival style features.

2. Condition of fabric:

Most interior spaces have been altered and modernized, however, the exterior building fabric and architectural features and significant interior spaces and finishes have been well maintained and preserved.

B. Description of the Exterior:

1. Overall dimensions: See individual building floor plan descriptions.

2. Foundations:

Reinforced concrete, concrete block and load-bearing clay tile.

3. Walls:

Wall construction is an 8" thick brick masonry bearing wall. The ramps/corridors typically have an 8" brick and clay tile wall system. The brick walls are running bond (stretcher) pattern and are typically unpainted.

4. **Structural System:**
2"x 4" stud wall partitions with concrete slab on grade floor systems. The ramps/corridors typically have reinforced concrete floors over concrete utility tunnels.
5. **Openings:**
 - a. **Windows:**
Six-over-six double-hung wooden sashes are typical. They are individually placed except where grouped at solarium areas. Twenty different window types, including eight-over-eight and twelve-over-twelve double-hung sash were used. These are placed in segmental arched openings in the detention wards, guesthouse and chapel. Monitor windows are located on some of the flat-roofed buildings, the patients' and medical detachment mess, the ramp/corridor between the patients' recreation and the post office and post exchange (PX), and the lunchroom area in the PX. Window frames are typically painted white.
 - b. **Doors:**
Exterior doors are typically double-leafed, wood with multiple, nine-light glazing and panel construction. Doors and doorframes are typically painted white.
6. **Roof:**
The roof forms typically have wood frame gable ends covered with horizontal wood siding and/or plywood frames that are typically painted white. The asphalt shingle roofs have a 5:12 pitch and are supported with a wood truss and have metal roof ventilators. The warehouses, utilitarian structures and ramp/corridors have wood-framed, flat-roof systems that are covered with built-up, 3-ply felt, tar and gravel. Monitor windows are located on some of the flat-roofed buildings.
7. **Porches and Solariums**
Standard and combination wards had screen porches on south-facing elevations and solariums on the east and west ends. The administration building (No. 9900) and officers' and nurses' mess also had screen porches. The wood framing for porches and solariums is typically painted white. Most screen porches have been enclosed to provide additional interior space. Solariums have six-over-six and eight-over-eight double-hung sash windows along the sides and front and a six-by-one light hinged transom window over

the double door. The windows in the gable end portion of solariums are fixed sash except for a 3-by-3 light, hinged-sash transom window in the center.

C. Description of Interior:

1. Floor Plans:

Each of the buildings listed below were constructed according to standardized plans developed by civilian architects for the construction of Type A General Hospitals. Approximately 35 different floor plan or building types were used to construct the entire facility, and 14 of those building types are represented in the group recorded herein. There are no basements in any of the buildings.

a. Standard Ward

Remaining: 9922, 9923, 9924, 9932, 9933.

Demolished: 9934, 9935, 9936, 9942, 9943, 9952, 9953, 9954,

HABS Photo: WA-202-9-1 through 16.¹⁸

1943 Type A General Hospital Plan: WARD-J-H.

Rectangular plan 30'-0" x 295'-8" with bisecting central ramp/corridor, two 32-bed wards with toilet/bath/shower and 5 single-bed wards (some with private bath/shower), two screened porches (9'-0" x 59'-0") on south facing elevation, solarium (12' x 30') typical each end of building, utility room, nurse office. Screened porches have typically been enclosed to provide additional interior space.

b. Combination Ward

Remaining: 9925, 9926, 9927*, 9930, 9931*

Demolished: 9937, 9955, 9956, 9957, 9958

HABS Photo: WA-202-9-1 through 16.

1943 Type A General Hospital Plan: WARD-K-H.

Rectangular plan 30' x 287'-8" with bisecting central ramp/corridor. Two 16-bed wards with combined toilet/bath/shower and twenty single-bed wards (some with private bath/shower), two screened porches (7'-6" x 291'-8") on south facing elevation. Solarium (12' x 30') typical on each end of the building, as is utility room, nurse's office, kitchen, examination and treatment rooms. Screened porches have typically been enclosed to provide additional interior space.

*9927 was a pediatric ward, 9931 was a ward and clinic. The building, plans and building type, however, are of the combination ward type.

¹⁸ HABS photo numbers reference the 1994 HABS documentation prepared for Madigan General Hospital (Old Madigan Army Medical Center).

c. Medical Storehouses:

Remaining: 9985

Demolished: 9983, 9984

HABS Photo: WA-20218-1 through 3

1943 Type A General Hospital Plan: STOR-J-H.

Rectangular plan 51'-0"x 261'-6" with 5'-0" wide loading dock at each end. Windows and window openings altered at south elevation of one of the storehouses.

d. Administration Building:

Remaining: 9900

Demolished: None

HABS Photo: WA-202-1-1 through 2.

1943 Type A General Hospital Plan: ADM-E-H.

T-shaped plan containing 9,480 square feet. Two-story main building is 142'x 30' with a 6'-8"x 30' porch and a 20'x 30' addition added in 1958. With the exception of insulating the attic in 1980, the building has had few modifications.

e. Officers' Quarters:

Remaining: 9901, 9902

Demolished: None

HABS Photo: WA-202-2-2

1943 Type A General Hospital Plan: OQ-F-H.

Two-story rectangular building containing 9,660 square feet. The buildings, measuring 30'x161' were renovated in 1958, and the attics were insulated in 1980. These buildings have had practically no modifications.

f. Officers' and Nurses' Mess:

Remaining: 9904

Demolished: None

HABS Photo: WA-202-4-1

1943 Type A General Hospital Plan: MESS-AA-H.

Built as a mess for officers and nurses, this building has been used as a laboratory and as a blood bank. It was built with a rectangular plan with 9,836 square feet and measures 62'-8"x 117'-8". In 1967, a 120 square foot porch was enclosed and in 1984 a partial second floor was added when an electron microscope was installed. The changes to this building have not affected the appearance, style or massing.

g. Nurses' Quarters:

Remaining: 9905, 9906, 9907

Demolished: None

HABS Photo: WA-202-2-1

1943 Type A General Hospital Plan: NQ-A-H.

A rectangular plan (200'x 30'-2") defines these two-story buildings. The interior of these two buildings was modified in 1971-1972: 9905 for general administration, and 9906 as quarters for officers in transit. Alterations to 9907 were made in 1954 and the attic was insulated in 1980. The few changes these buildings have experienced were sensitively done and have not affected the appearance, style or massing.

h. Clinic/Surgery:

Remaining: 9908, 9909

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: SURG-B-H.

Built on a 7,260 square foot rectangular plan measuring 30'x 242', 9908 has been modified numerous times with small accretions that, over time, have caused 9908 and 9909 to join as a single unit. The additions, however, have been done sensitively, and form part of the continuing medical history of this complex. As 9908 and 9909 are generally out of sight within the core of buildings, the additions do not impact the complex's physical integrity.

Date	Dimensions	Use
Modifications to 9908 include:		
1956	40'x 61'-8"	Underground electrical system
1958	60'x 16'	Medical
1968	Infill between 9908 & 9909	Storage
1974	15'x 60'	Storage
1982		Interior renovated
Modifications to 9909 include:		
1958	81'-6"x 10'	Medical
1959	35'x 34'	Therapy
1959	40'x 55'-9"	Storage
1966	11'x 21'-6"	Special procedures room
1968	22'-8"x 26'	Storage
1971	10'x 24'	Addition to recovery room
1972	22'-8"x 34'-4"	Addition to exposure room
1972	8'x 15' & 50'x 29'4"	Addition to cobalt room

1974	21'x 13' & 12'x 5'-8"	Addition
1975	26 x 17'-4"	Addition

i. Pharmacy:

Remaining: 9910

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: SERV-E-H.

Originally built as a 1,530 square foot building, measuring 26'x 58'-10", this structure has had two additions and now covers the north half of the west side of 9911. Additions were done in 1959 (79'-2"x 33' and 58'-2"x 25'-4") for a supply and office area, and for equipment storage and service space. In 1961, another addition (33'x 75') was built, bringing the total area to 4,106 square feet. The materials used in the additions were in conformance with the architectural character of the building, concrete foundations and floors and masonry exterior and frame interiors were used, thereby maintaining the building's physical integrity. The entry was slightly modified in 1976.

j. Clinic/Lab/Professional Services

Remaining: 9911, 9912

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: CLIN-Q-H.

Building 9911 was built as a 7,356 square foot structure measuring 30'x 242' with interior alterations in 1960 to provide pathology services, and an 8'x 12' addition in 1967 to provide space for 2 sterilizers. In 1972, a 102'x30' addition was built. The hematology lab was removed in 1977, the attic insulated in 1980 and a fire sprinkler system installed in 1984. The changes this building has experienced were sensitively done and have not adversely affected the appearance, style or massing.

Building 9912 was also built as a 7,356 square foot structure measuring 30'x 242' with a gas cylinder storage shed (17'-1"x 58'-9") added in 1981 and the dental operating room remodeled at the same time. A second addition (116'x 30') was done at an unknown date; both additions are on the west elevation. The changes this building has experienced were sensitively done and have not adversely affected the appearance, style or massing

k. Medical Administration:

Remaining: 9913

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: Unknown.

Built as a medical administration building and designated as an auditorium and professional library, measuring 30'x 103'-2", Building 9913 contained 3,096 square feet of space. In 1973, a 30'x 30' addition was built; the attic was insulated in 1980. The few changes this building has experienced were sensitively done and have not affected the appearance, style or massing.

l. Corridor/Ramps:

Remaining: 9914: Ramps 1, 2 and most of 3 (old designations C, D and E Ramps)

Demolished: Ramps 4, 5, and 6

HABS Photo: WA-202-12-1 through 7

1943 Type A General Hospital Plan: WALK AH to CH.

Buildings in the complex were connected by approximately 1½ miles of 9'-6" wide corridor/ramps. A utility vault system runs beneath the floors and houses electrical, plumbing, heating and communication systems. Oxygen lines were added to the vault system in 1982. The corridor/ramps include typical double hung windows, except for the ramps connecting the medical detachment barracks. These were originally open, covered walkways.

When the medical detachment barracks (now demolished) were converted to clinics in about 1957, the breezeway openings were filled in and small aluminum windows installed. The corridors in the remaining portion of the complex retain their double hung wood windows.

m. Generator Building:

Remaining: 9916

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: N/A

Built in 1951 as a 102 square foot hot water generator building (740 gallon capacity) measuring 6'-4"x 17'-5," this building is unaltered. The foundations and floor are concrete, the walls are 8" thick brick, and the built-up timber roof is covered with asphalt and roofing paper.

n. Clinic

Remaining: 9920, 9921

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: WARD-J-H

Building 9920 measured 296' x 30'. An enclosed porch addition was built in 1967 (9' x 24'). In 1971, extensive interior alterations to 9920 were made for it to function as an orthopedic brace shop and clinic. In 1975, a 17' x 74' addition was built and the attic was insulated in 1980. Building 9921 measured 296' x 30' and was designated as a recovery ward. In 1972, the bed capacity increased from 26 to 51 in 1972 and interior altered in 1974, slightly reducing the bed capacity from 51 to 49. Toilets and lavatories were installed in two isolation rooms in 1981 and, in 1984, two nurses stations were added. The few changes these buildings have experienced were sensitively done and have not affected the appearance, style or massing.

o. Storehouse

Remaining: 9985

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: STOR-J-H.

Built on a rectangular plan (161' x 51') Building 9985 was designated as a storage building and now used as engineering offices. It is located nearly two blocks from other Madigan buildings.

p. Heating Plant

Remaining: 9785

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: Unknown.

The original plans for this building were executed by the architectural firm of York and Sawyer, architect-engineers in New York City for the War Department in 1943. Approved by the Office of the Chief of Engineers and by the Surgeon General, the heating plant is an integral part of the Type A Hospital and was built in 1944. It is in sound condition and has retained the features that contribute to its integrity. An addition, built in 1976, is architecturally compatible with the main building.

q. Fire Station

Remaining: 9986

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: FIRE-B-H.

Rectangular plan measuring 95'x 33' with a 16'-10"x 37'-4" addition in 1967, the fire station was built in 1944 with a concrete foundation and floor, brick and clay tile walls and a built-up roof. The main building is essentially unchanged and the addition is an unobtrusive one. The fire station was an integral part of the Type A Hospital complex and was noted on plans dated 1943. It is located away from the main Madigan complex.

r. Road System

Remaining: No Number

Demolished: No Number

HABS Photo: None

1943 Type A General Hospital Plan: N/A

The road system is formed by the east-west streets of Roosevelt, Garfield, Taft, Hayes, Johnson Lincoln and Tyler, and the north-south streets of Wilson and McKinley avenues. These circulation elements remain in place and are in sound condition. They have been maintained and their locations, widths and profiles are essentially unchanged. The feature retaining the greatest degree of integrity is the main entry, formed by Lincoln Street and Tyler Drive.

s. Railroad Tracks and Loading Docks

Remaining: No Number

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: N/A

Originally located on east and west sides of the heating plant, the railroad tracks now exist only on the east side although a very short portion survives on the west side. The rails carry manufacturer's dates of 1943 (as do the plates that secure the rails to the ties). In the immediate area of the complex, the railroad tracks parallel to McKinley Avenue, between Garfield and East Hayes Street, have the greatest physical integrity. This is particularly true between East Hays and East Taft, where the existing loading docks were used to transport patients from railroad cars to the Receiving and Evacuation Building (building 9981 no longer standing). The loading docks were also used to move equipment and supplies.

t. Theater

Remaining: 9992

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: N/A

Built in 1956 of red brick with white trim and measuring 43'x 124' with two additions (86'-2"x 8'-4" and 5'x 16') in 1969, the foundation are concrete, the floors are tile and hardwood, the walls are concrete block and brick, and the metal roof is clad with 5-ply roof and gravel. Although a later addition, the theater's style is in conformance with the other buildings in the complex. The architect was Decker and Christenson of Seattle.

u. Gymnasium and Swimming Pool

Remaining: 9993 (Gymnasium, Swimming Pool and Corridor)

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: N/A

Built in 1946 of red brick and white trim and measuring 78'-8"x 135'-4" with two wings built in 1973 (24'-8"x 68'-8" and 21'-6"x 32'-4"), the gymnasium has concrete foundations, hardwood floors, brick walls and asphalt roofing. Apart from metal window guards installed in 1075, the building has had few changes.

The 240,000-gallon swimming pool (75'x 133'), also completed in 1946, has concrete foundations and floors, brick walls, wood trusses and a built-up asphalt roof. The building has had few changes and its materials, form and plan indicate it is part of the Madigan General Hospital complex.

The corridor between the gymnasium and the swimming pool, built in 1949, measures 10'x 45' and has concrete foundations and floors, brick walls and a built-up asphalt roof. Apart from being periodically repainted, the building is intact.

v. Masonry Fireplace

Remaining: Masonry Fireplace

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: N/A

The masonry fireplace is not carried on any inventory cards. It does not appear on layout plans for the complex, dated 1954, indicating that it was built before this time, but not on plans dated 1943. It does not appear to be

an official Army structure but, rather, is the responsibility of a nearby military unit that maintains and uses the recreation facilities in this area.

w. Picnic Shelter, wood

Remaining: Picnic Shelter, wood

Demolished: None

HABS Photo: None

1943 Type A General Hospital Plan: N/A

The picnic shelter is not carried on any inventory cards. It does not appear on layout plans for the complex, dated 1954, indicating that it was built before this time, but not on plans dated 1943. It does not appear to be an official Army structure but, rather, is the responsibility of a nearby military unit that maintains and uses the recreation facilities in this area.

2. Stairways:

A majority of the buildings are one-story. The chapel (demolished), Headquarters (No. 9900), patients' recreation (No. 9940), officers' and nurses' quarters (No. 9901-02, 9905-07) are two-story buildings with stairways. Some ramps have stairways.

3. Flooring:

Floors were originally black – with white marbled accents – 9"x 9" asphalt tile throughout the corridors, wards, barracks and service buildings. The corridors were edged with a continuous narrow band of solid black asphalt tile. For the most part, the original flooring has been removed and replaced and/or covered with vinyl tile flooring or carpet. Surgical and original clinical areas include terrazzo floor finishes.

4. Wall and Ceiling Finish:

The walls are typically covered with gypsum wall board or Portland cement plaster. Ceramic wall tile was used extensively in toilet, bath, and shower rooms, and in service and utility areas, including mess kitchens and serving areas. Gypsum wallboard surfaces are typically painted in pastel colors. Smooth Formica wainscoting was added within the barracks buildings to adapt these spaces for use as clinics. The interior walls of ramp/corridors are typically painted hollow tile, although historically the tile was left as an unpainted terra cotta finish. Ceiling finish is typically insulated gypsum board with the exception of ramp/corridors that are painted T & G decking.

5. Openings:

Doors inside wards, barracks and in utilitarian spaces are typically the original, painted, wood, five-panel type. Detention ward doors are painted, wood, flush

type with a single 6"x 6" window glazed with wire glass. Original doors in the corridors were painted, wood, panel type with multi-pane, clear glass glazing in the upper half. While numerous original interior doors remain in place, the doors have generally been replaced at the corridor/ramps and within some interior clinic spaces with modern, solid-core, flush doors

D. Site

1. Historical Landscape Design:

Victor E. Steinbrueck, 1911-1985, prepared the key plan for Fort Lewis station hospital-section 5, dated July 7, 1943. This plan follows the standardized dispersed pavilion configuration plan prescribed by the War Department for all Type A hospitals. Thus, the complex could be rapidly and simultaneously constructed. Subsequent construction in 1944-45 and 1952 also followed the prescribed Type A site plan. The arrangement of building types is similar to standardized site plans for one-story frame construction, called "cantonment type" construction, prepared by the Quartermaster General's Office in 1935.

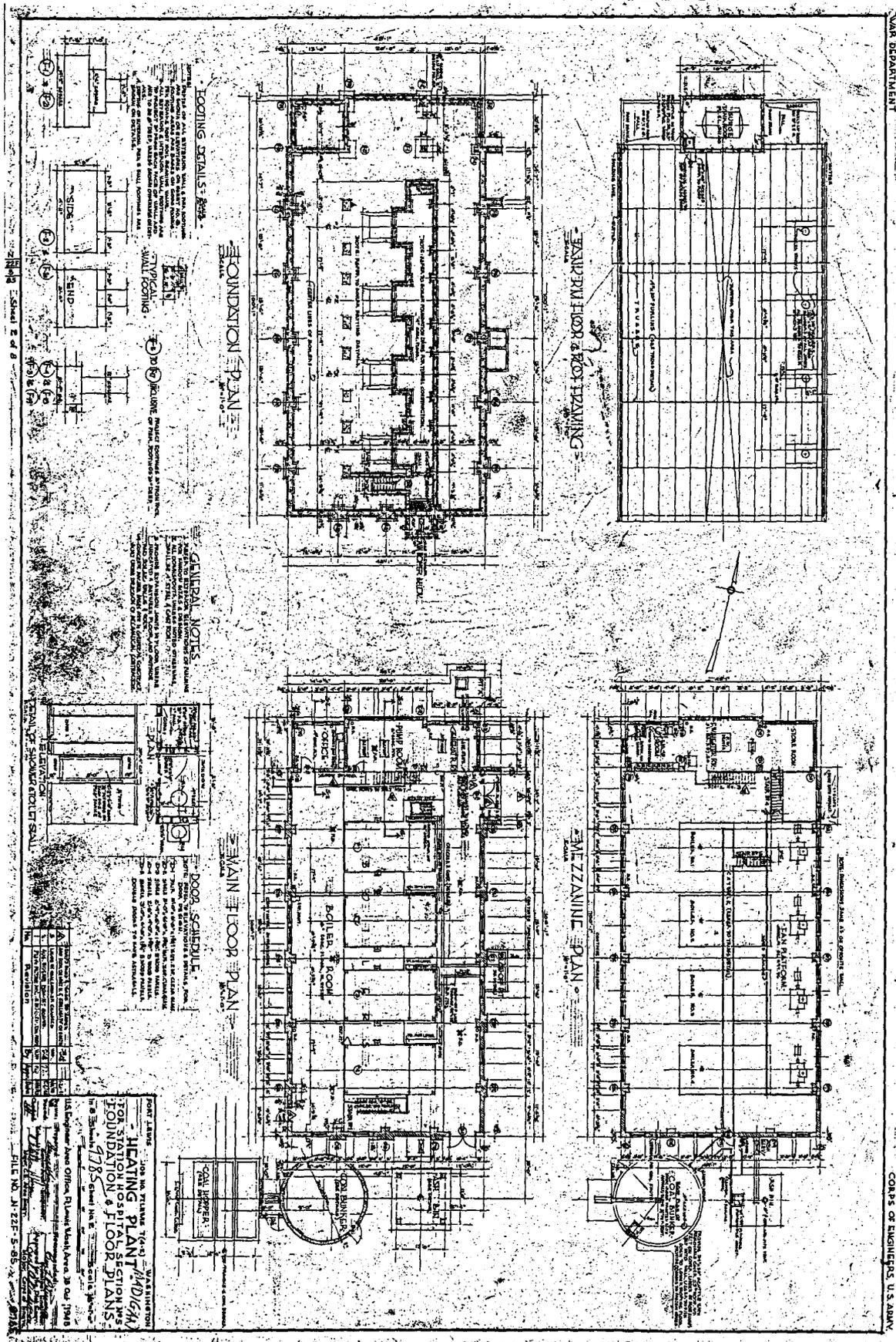
The plan is a rectangular street grid formed by Lincoln and Garfield streets and Wilson and McKinley Avenues with cross streets East and West Johnson, Hayes and Taft streets and is divided into different building use areas. A formal entry ellipse leads to the administration building and two major parking lots and a flagpole are located across from the administration building, between Lincoln Street and Tyler Drive. Officers' and nurses' quarters, bachelor officer's quarters (BOQ) and guesthouses, were located between Lincoln and West and East Johnson streets. The BOQ buildings were located on either side of the administration buildings, with women's barracks located on the west side and men's on the east. The medical detachment barracks were located between West Hayes Street and Garfield Street. Hospital wards were located in the central portion of the site, between Johnson Street and East Taft Street. The patients' and medical detachment mess was located in the center of the wards between Hayes Street and Taft Street.

The complex was located in an isolated portion of the military reservation, known as the Fourth Division Prairie. The site covered approximately 120 acres in an open level prairie that was surrounded by wooded areas on the west, south and east. An important consideration in site selection was easy and efficient access to the hospital through a variety of transportation routes and types. The Northern Pacific Railway lines were situated directly to the east, within 1½ miles, and could be extended to provide for both the delivery of heavy construction materials and the transportation of patients to and from the hospital by troop train. The nearly concurrent construction of the Mt. Rainier ordnance depot, a short distance to the north, also necessitated the extension of

a common rail spur. The proximity of the site to the newly constructed McChord Air Field and its accessibility from the old Pacific Highway, for ambulance transportation purposes, also contributed to the site's location.

The following twelve photocopied drawings in this draft HABS report were reproduced from 8" x 10" black and white prints made from original brown line drawings, taken from "Mobilization General Hospital, Type A," drawings. They were drawn in 1942-1945 by the architect/engineer firm, York & Sawyer of New York, NY for the U. S. War Department, Construction Division. The original drawings (1100-series), and others, are in the collection of Department Public Works, Housing and Engineering Services, Fort Lewis, WA.

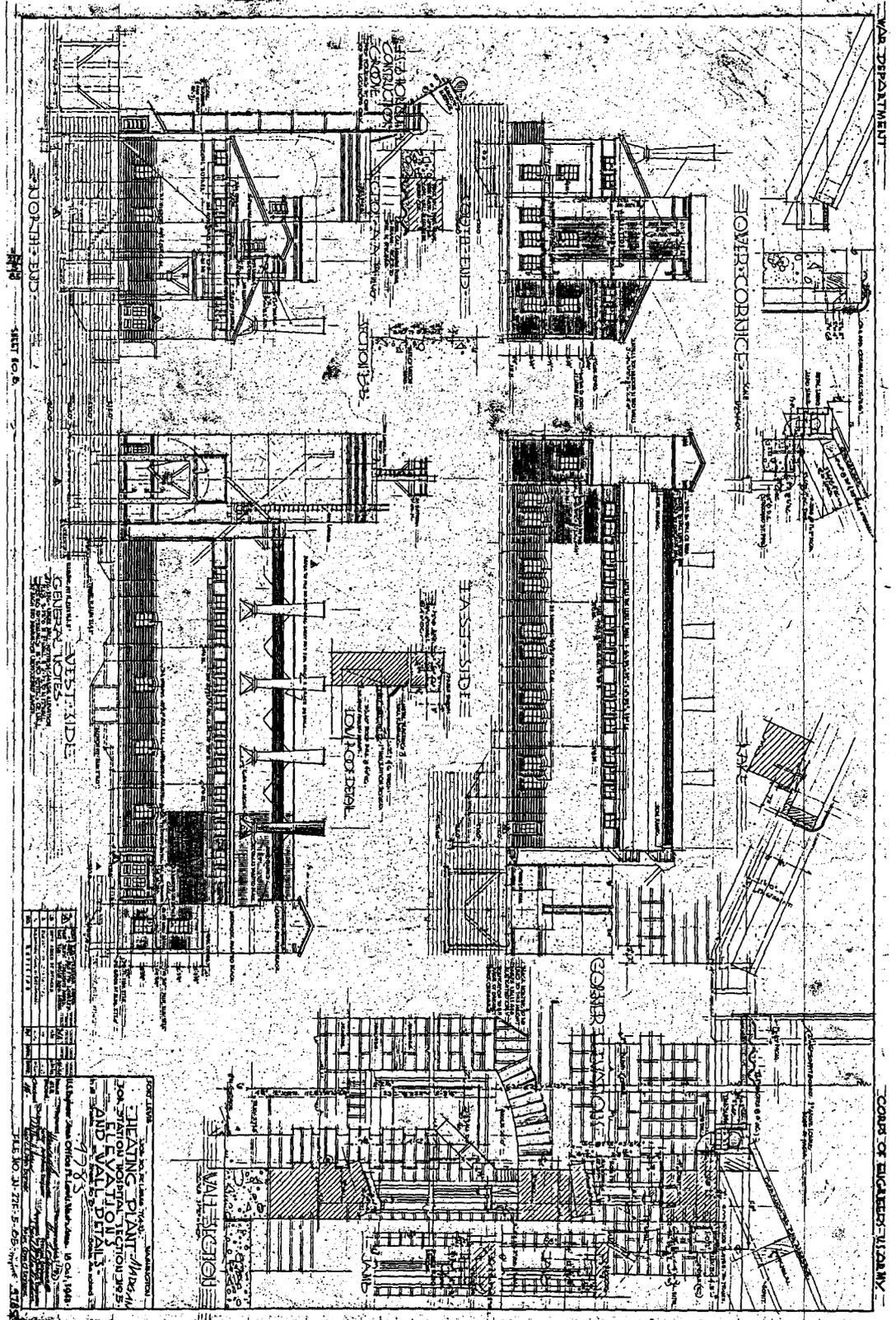
<u>Page No.</u>	<u>Description</u>
WA-202-56	Heating Plant, Foundation & Floor Plans, 10-18-1943
WA-202-57	Heating Plant, Elevations & Wall Details, 10-18-1943
WA-202-58	Surgical Building Surg.-B-H, Elevations, Sections & Roof Framing, 11-28-94 Details, 10-18-1943
WA-202-59	Clinic Building-CLIN-X-H, Floor & Framing Plans, 11-28-1942
WA-202-60	Clinic Building-CLIN-X-H, Elevations, Sections & Roof Framing, 11-28-1942
WA-202-61	Pharmacy, Schedules, Plans, Elevations & Wall Details, 1-18-1942
WA-202-62	Clinic Building-CLIN-Q-H, Floor & Framing Plans, 11-26-1942
WA-202-63	Clinic Building-CLIN-Q-H, Elevations, Sections & Roof Framing, 11-26-1942
WA-202-64	Auditorium and Professional Library, Elevations, Sections, Details, 6-25-45
WA-202-65	Fire Station Fire B-H, Floor, Foundation & Framing Plans, 10-31-1942
WA-202-66	Theater, Plans, Elevations and Schedules Plans, 04-11-1945
WA-202-67	Swimming Pool, Floor Plans, and Elevations, 05-29-1945
WA-202-68	Gymnasium & Swimming Pool, Floor Plans, and Elevations, 05-29-1940

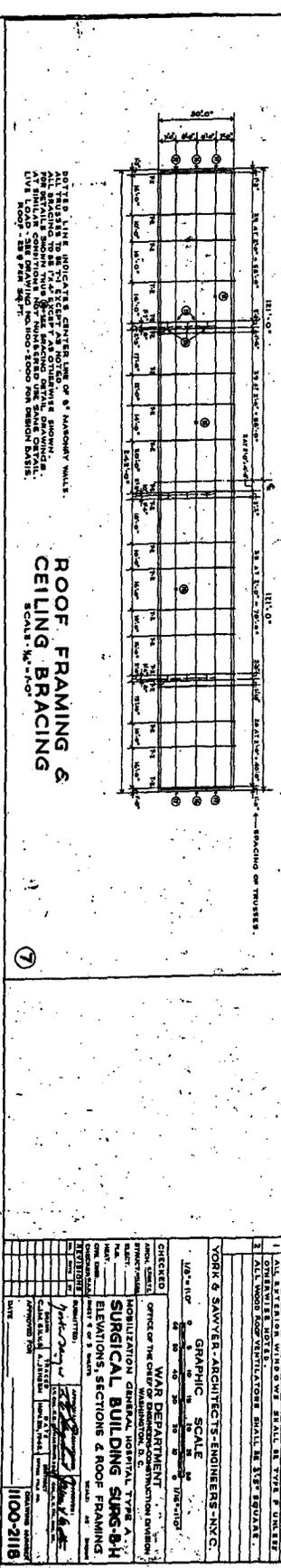
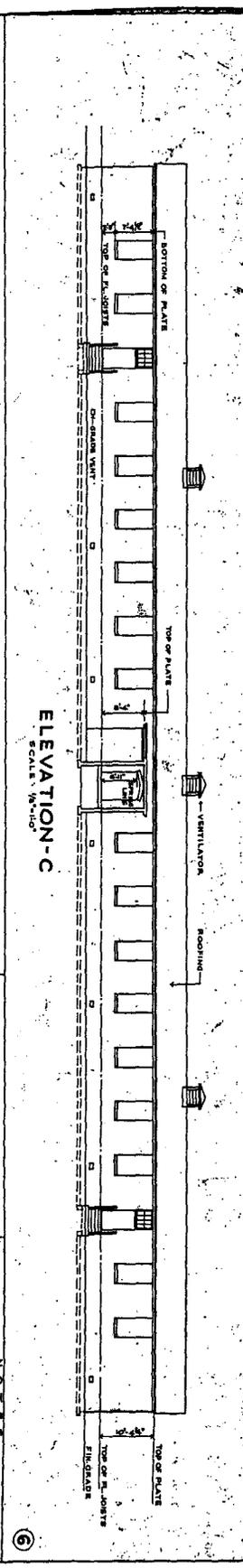
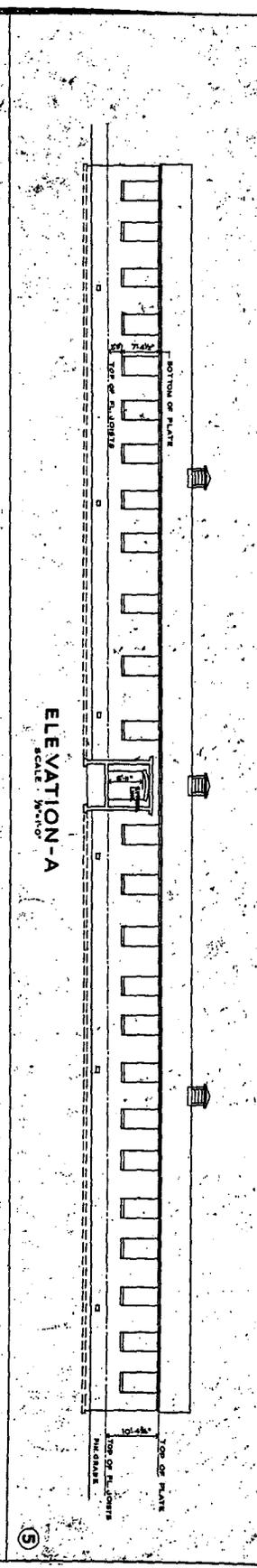
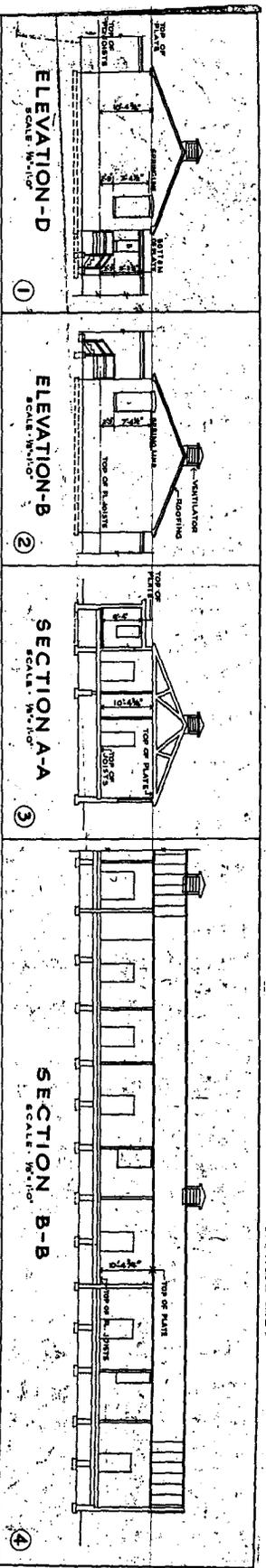


WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

MADIGAN HOSPITAL
HABS No. WA-202
(page 56)





NOTED: LINE INDICATES CENTER LINE OF MASONRY WALLS.
ALL DIMENSIONS TO BE TO FACE UNLESS OTHERWISE SHOWN.
APPROXIMATE CONDITIONS OF WORKING SHALL BE AS SHOWN.
LIVE LOAD - SEE DRAWING NO. 1000 FOR DESIGN BASIS.

NOTES

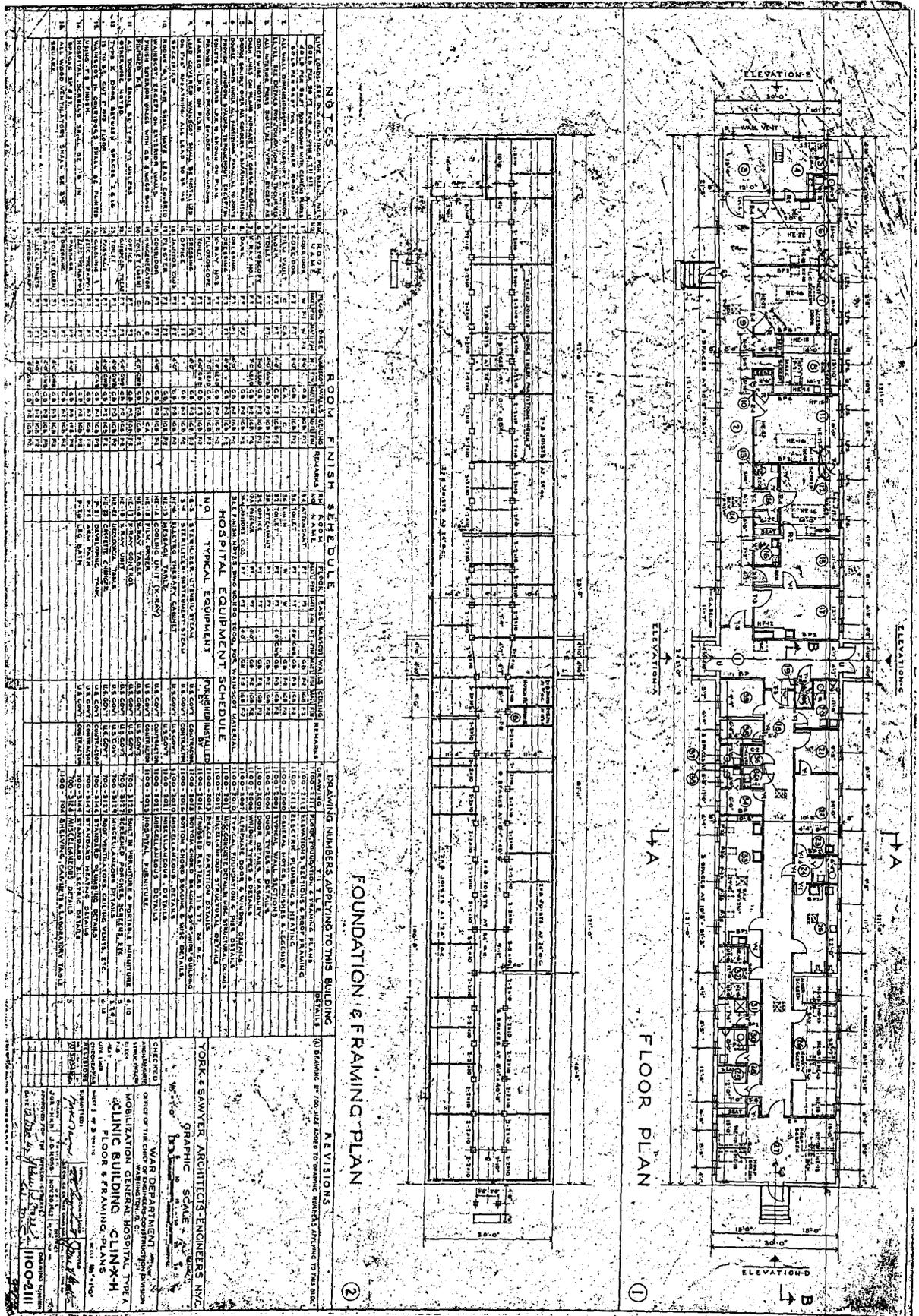
1. ALL EXTERIOR WINDOWS SHALL BE TYPE "P" UNLESS OTHERWISE SHOWN.
2. ALL WOOD ROOF VENTILATORS SHALL BE TYPE "E" UNLESS OTHERWISE SHOWN.

YORK & SAWYER ARCHITECTS-ENGINEERS - N.Y.C.
GRAPHIC SCALE
1/8"=1'-0"

WAR DEPARTMENT
MOBILIZATION GENERAL HOSPITAL TYPE "A"
SURGICAL BUILDING SYNG-BH
ELEVATIONS, SECTIONS & ROOF FRAMING

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: [Date]

1100-2118



FOUNDATION & FRAMING PLAN

ROOM FINISH SCHEDULE

NO.	DESCRIPTION	UNIT	QTY	REMARKS
1	CONCRETE FLOOR	SQ. YD.	1000	
2	CEILING	SQ. YD.	1000	
3	WALLS	SQ. YD.	1000	
4	DOORS	EA.	10	
5	WINDOWS	EA.	10	
6	PAINT	SQ. YD.	1000	
7	PLASTER	SQ. YD.	1000	
8	TRIM	EA.	100	
9	MECHANICAL	SQ. YD.	1000	
10	ELECTRICAL	SQ. YD.	1000	
11	MECHANICAL	SQ. YD.	1000	
12	ELECTRICAL	SQ. YD.	1000	
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28	ELECTRICAL	SQ. YD.	1000	
29	MECHANICAL	SQ. YD.	1000	
30	ELECTRICAL	SQ. YD.	1000	

NOTES

1. ALL WORK TO BE ACCORDING TO THE SPECIFICATIONS AND DRAWINGS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
4. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
5. THE CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL WASTE.
7. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL WORK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES.
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49. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL WORK.
50. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES.

REVISIONS

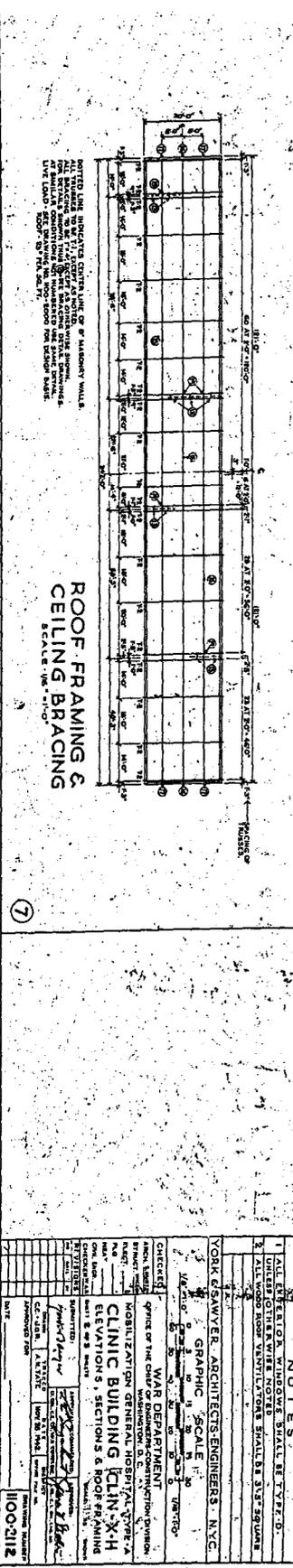
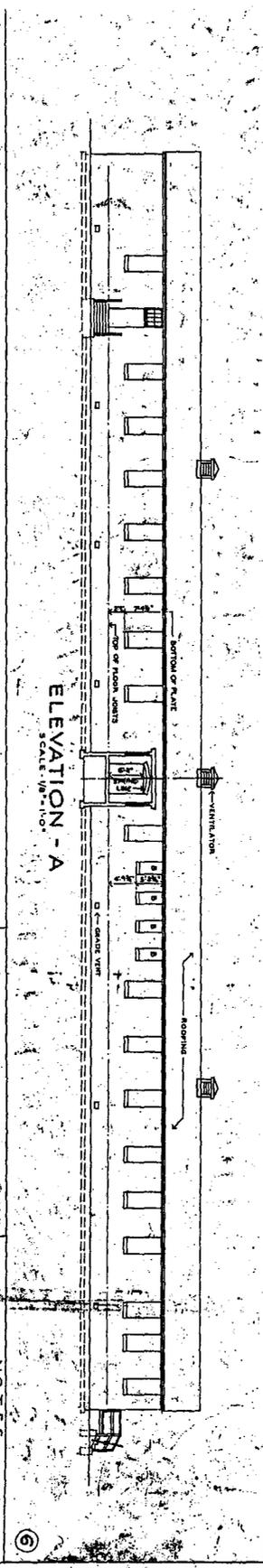
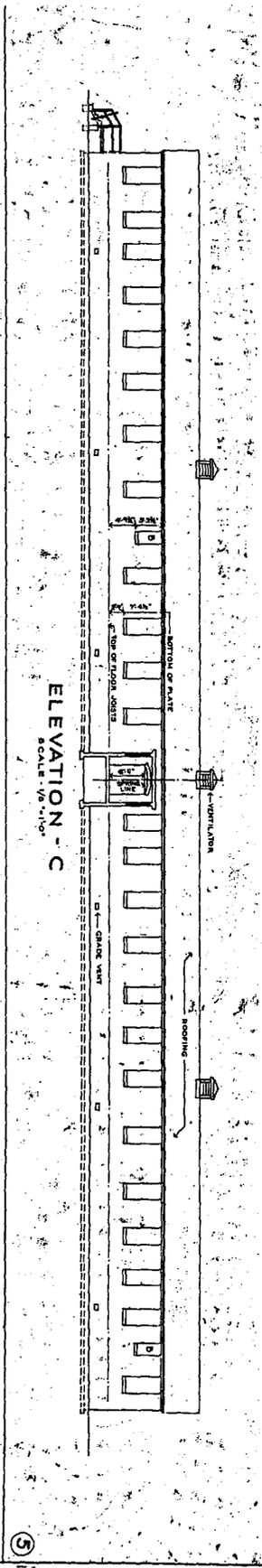
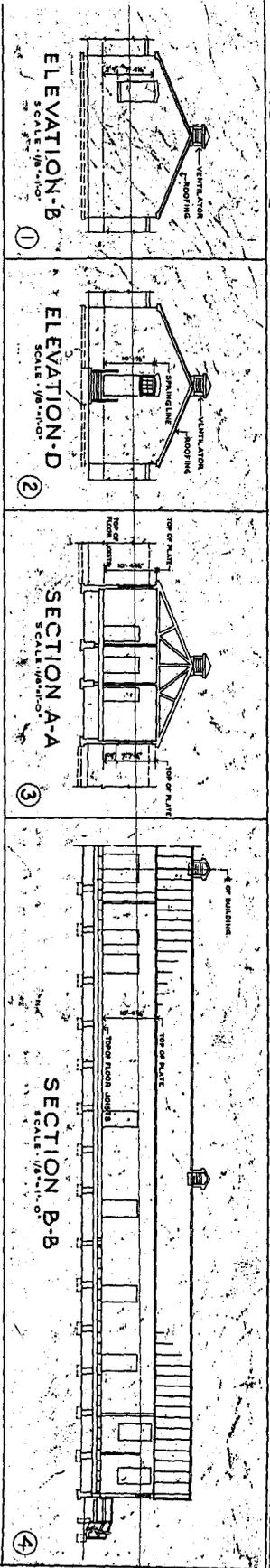
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WAR DEPARTMENT

WAR DEPARTMENT
MOBILIZATION GENERAL HOSPITAL TYPE A
CLINIC BUILDING CLIN-X-H
FLOOR & FRAMING PLANS
1100-2111

GRAPHIC ARCHITECTS

GRAPHIC ARCHITECTS
SCALE: 1/8" = 1'-0"
1100-2111



NOTES

1. THE DESIGNER'S SEAL SHALL BE TYPE "D".
2. DIMENSIONS SHALL BE IN FEET AND INCHES.
3. ALL WOOD SHALL BE DRY LUMBER.

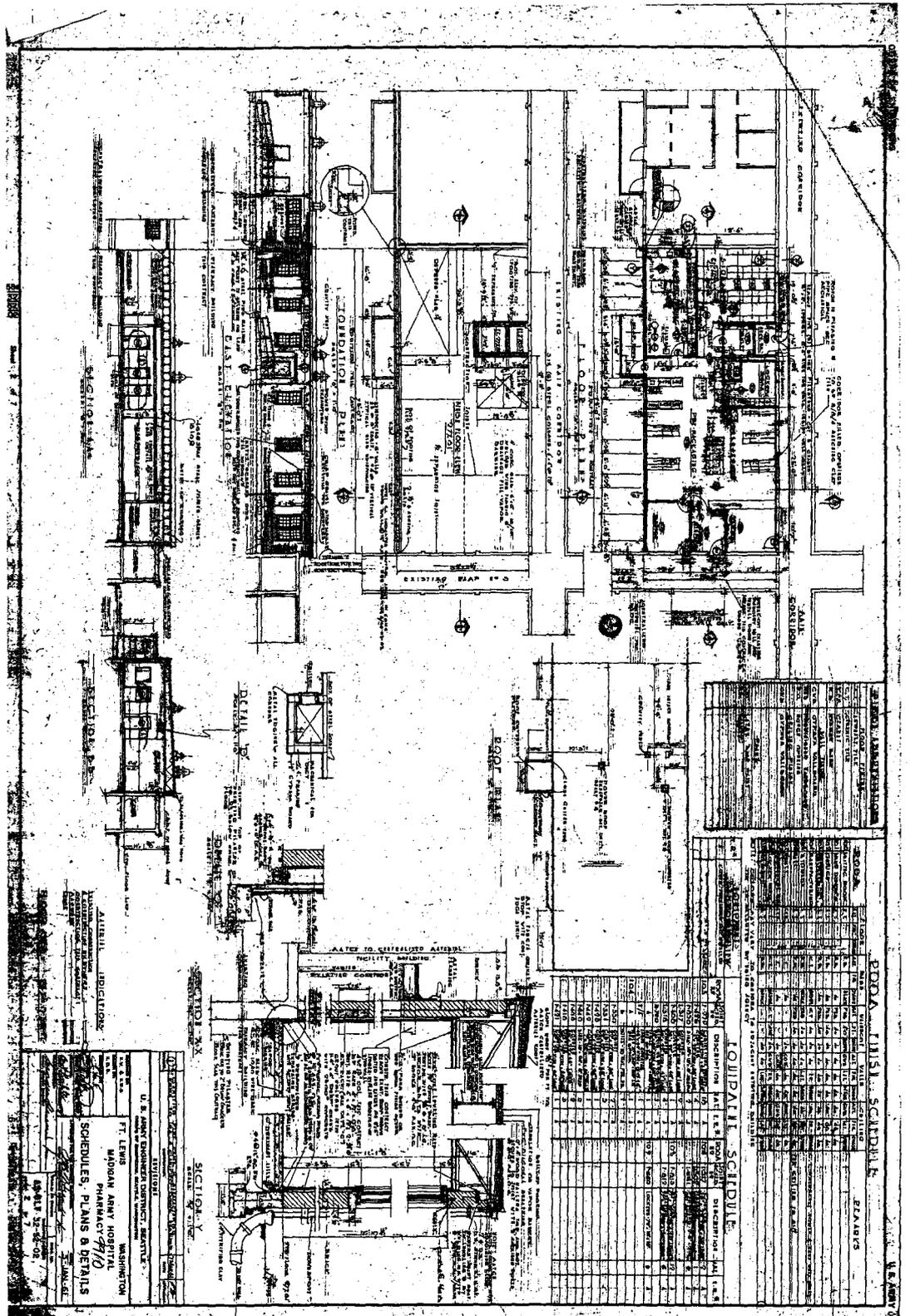
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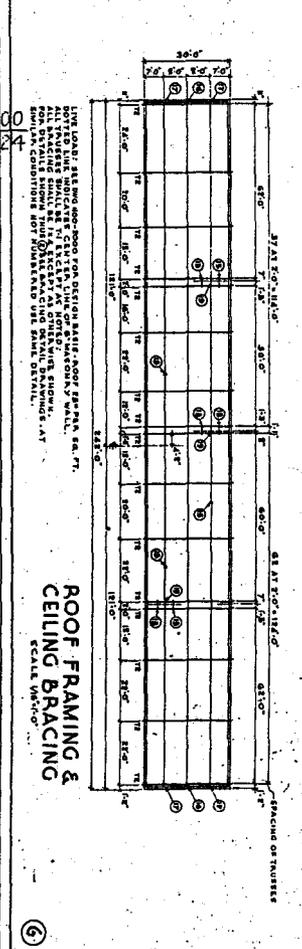
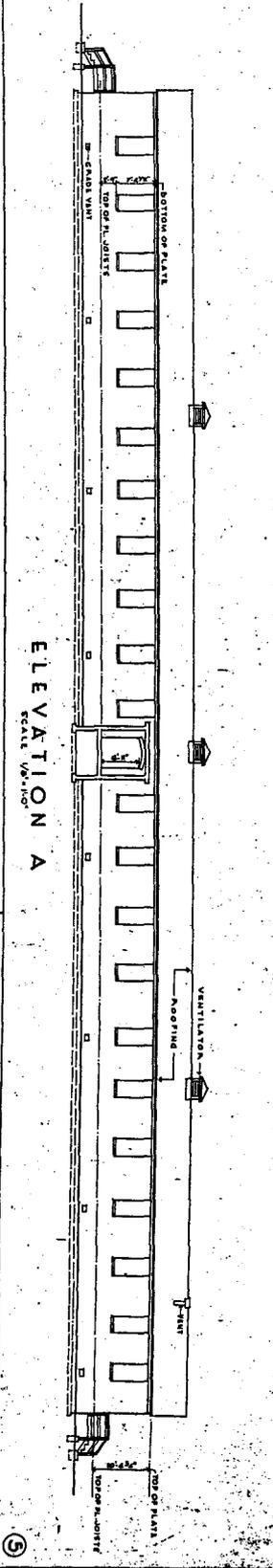
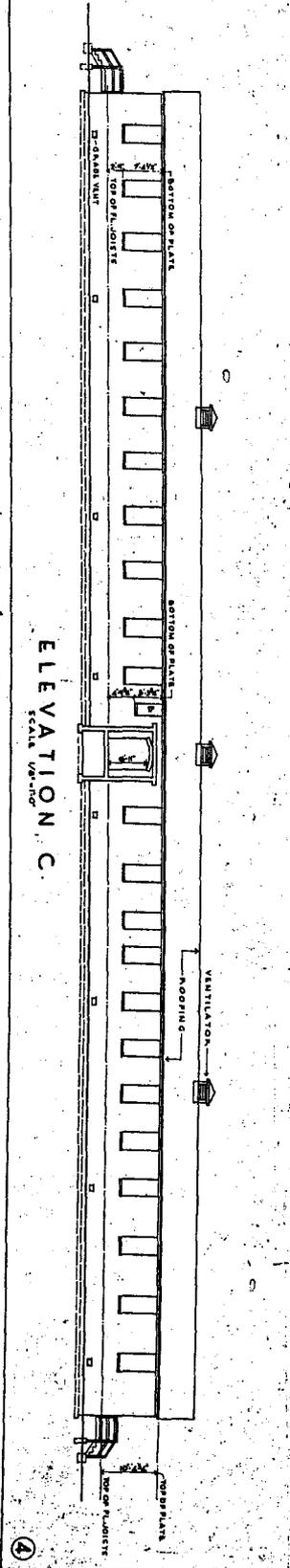
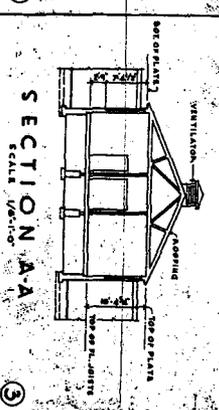
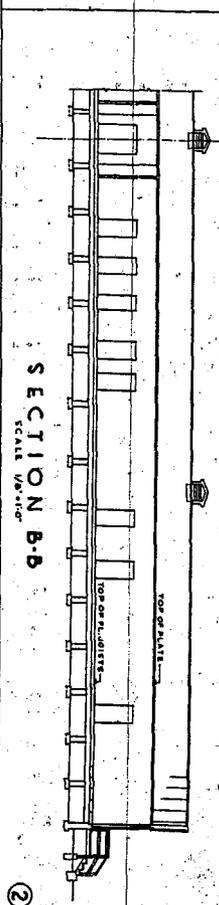
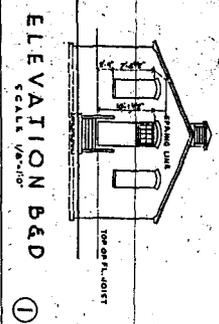
WAR DEPARTMENT
OFFICE OF THE CHIEF ENGINEER
MILITARY CONSTRUCTION DIVISION
CLINIC BUILDING (CLIN-X-H)
ELEVATIONS, SECTIONS & ROOF FRAMING

CHECKED: [Signature]
DATE: [Date]

APPROVED: [Signature]
DATE: [Date]

1100-2112





NOT TO SCALE

ALL DIMENSIONS SHALL BE TYPE COURTESY OTHERWISE NOTES 1. ALL DIMENSIONS SHALL BE TYPE COURTESY OTHERWISE NOTES 2. ALL DIMENSIONS SHALL BE TYPE COURTESY OTHERWISE NOTES 3. ALL DIMENSIONS SHALL BE TYPE COURTESY OTHERWISE NOTES

TOOK & SAWYER ARCHITECTS-ENGINEERS INC.

GRAPHIC SCALE

CHECKED: [Signature]

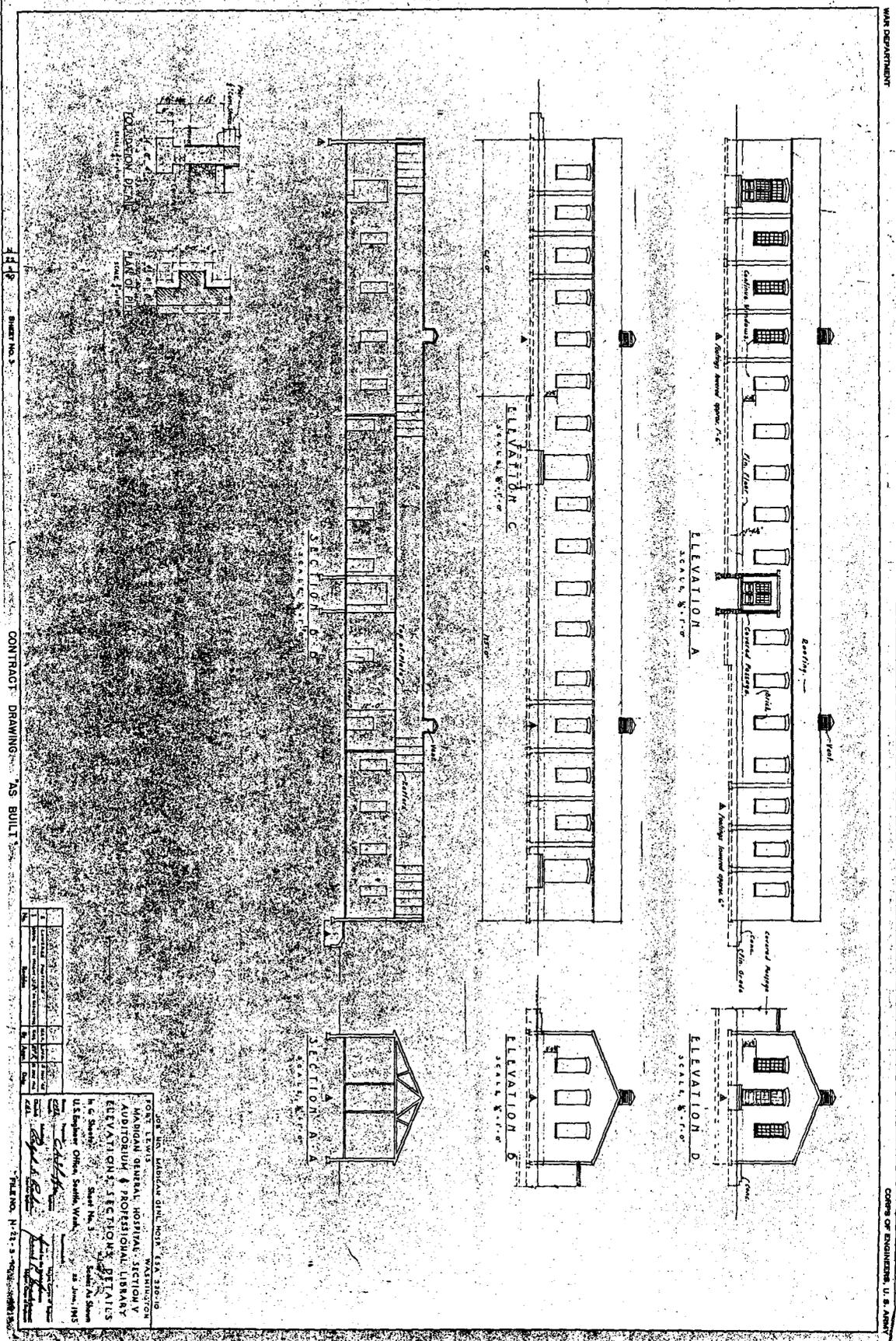
DESIGNED: [Signature]

PROJECT: MADIGAN HOSPITAL TYPE-A CLINIC BUILDING CLIN-Q-H

DATE: 1/15/54

SCALE: 1/8"=1'-0"

100-2124

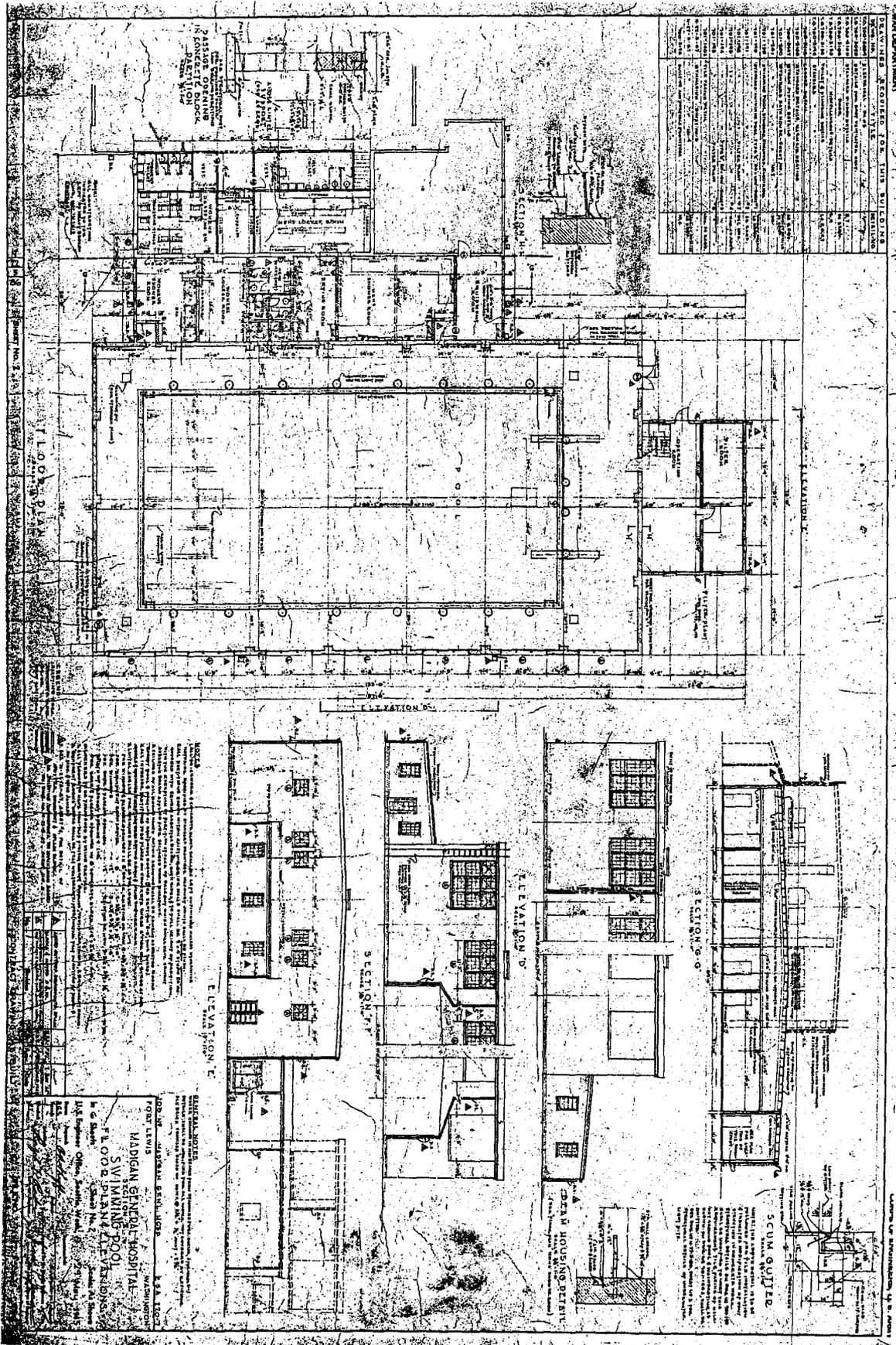


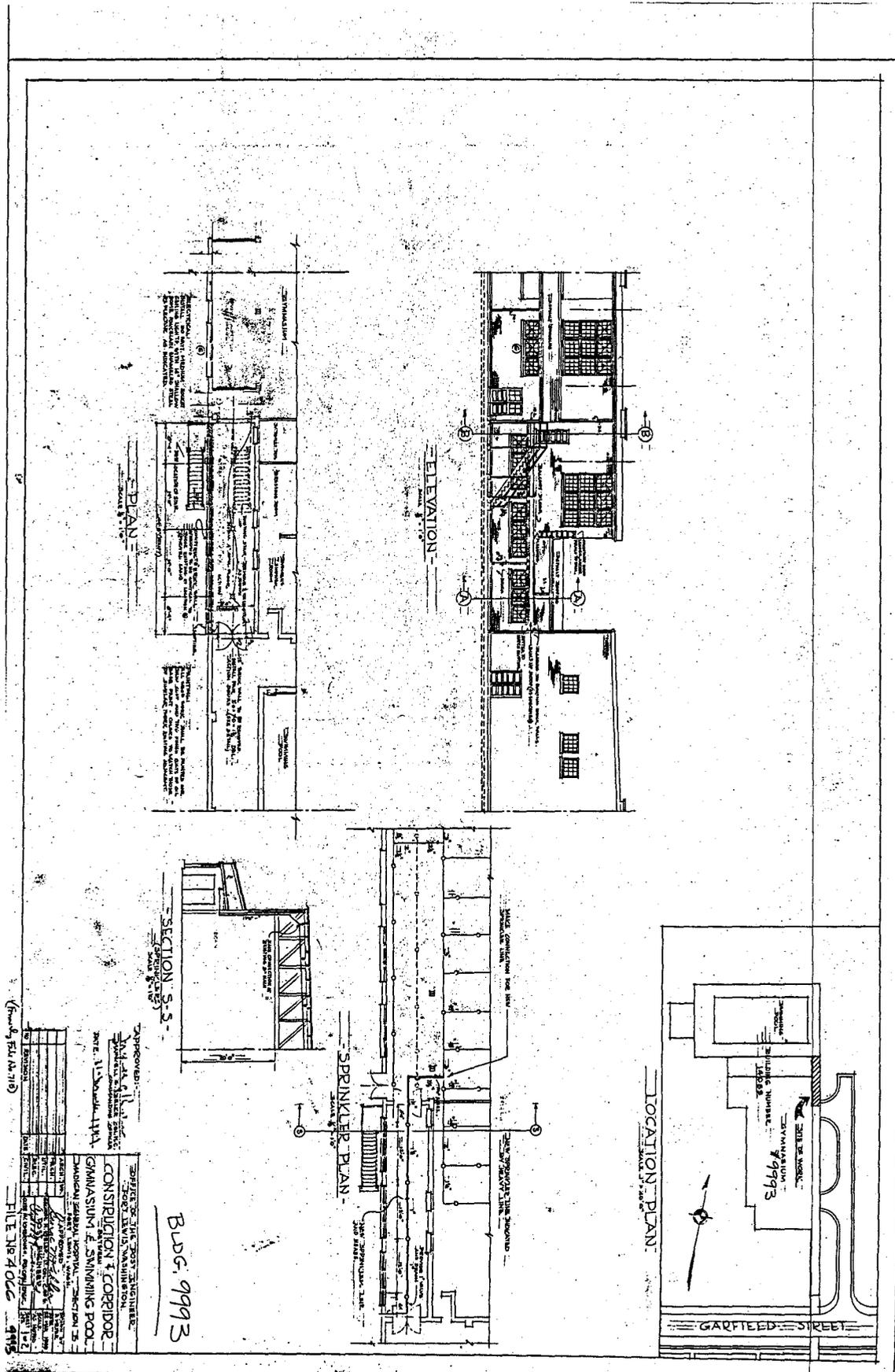
CONTRACT DRAWINGS - AS BUILT
 SHEET NO. 3
 FILE NO. N-22-2-100-100-100-100

NO.	DATE	DESCRIPTION	BY	CHECKED
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OFFICE OF THE ARCHITECT, GENERAL INVESTIGATION
 MADIGAN HOSPITAL, SECTION A
 ARCHITECTURE & PROFESSIONAL LIBRARY
 ELEVATION ON N. SECTION A, STATES
 IN C. STATES
 Sheet No. 3
 U.S. Engineer Office, Seattle, Wash.
 as shown on I.M.S.

MAIN DEPARTMENT
 CORPUS OF ENGINEERS, U.S. ARMY





APPROVED: [Signature]
DATE: 11/20/64
PROJECT: MADIGAN HOSPITAL
CONSTRUCTION & SWIMMING POOL
SECTION S-S
FILE NO: 4066

Bldg. 9993

PART III. SOURCES OF INFORMATION

- A. Original Architectural Drawings:
Mobilization General Hospital Type A – 1100 Series, War Department, Office of the Chief of Engineers – Construction Division, Washington, D.C., dated October 31, 1942. The drawings and specifications were prepared by the architectural firm, York & Sawyer Architects and Engineers, N.Y.C. Sepia reproducible copies of these standard plans are available at Fort Lewis. Victor E. Steinbrueck, 1911-1985, prepared the key plan for Fort Lewis Station hospital-section 5, dated July 23, 1943.
- B. Early Views: No original historic photographs or negatives of the hospital were discovered.
- C. Interviews: Interviews were conducted as part of the 1994 *Madigan General Hospital*, HABS No. WA-202, project.
- D. Bibliography
1. Primary and unpublished sources:
 - a. Paul W. Chattey, *National Register of Historic Places nomination form for Old Madigan General Hospital*, December 1999, on file at AFCH-DEQ, Fort Lewis Cultural Resources Office, Ft. Lewis, Washington. A majority of this HABS report was derived from the National Register nomination.
 - b. Katheryn Hills Kraft, *Madigan General Hospital*, HABS No. WA-202, Historic American Buildings Survey, National Park Service, Washington: Library of Congress, 1994.
 - c. *Fort Lewis—A History*, manuscript on file with AFCH-DEQ, Fort Lewis.
 - d. *Fort Lewis Old Historical Record Books, Volumes I, II and III*, Real Estate Office, AFCH-DEQ, Fort Lewis, Washington.
 - e. Historic Property Survey, Fort Lewis, Washington, 1978, Fort Lewis Cultural Resources Office.
 - f. Real Property Record. Real Estate Office, Fort Lewis, Washington.

2. Secondary and published sources:

Ashburn, Percy, *History of the Medical Department of the United States Army*, Boston, Houghton Mifflin Company.

Cosmas, Graham A., *Army for Empire: the United States Army in the Spanish American War*, Columbia, University of Missouri Press, 1971.

Gillett, Mary C., *The Army Medical Department, 1775-1818*, Washington: GPO, 1981.

Goodwin, R. Christopher, & Associates, Inc. *National Historic Context for Department of Defense Installations, 1790-1940*, Baltimore: U. S. Army Corps of Engineers, Baltimore District, 1995.

Smith, Clarence McKittrick, *The Medical Department: Hospitalization and Evacuation, Zone of Interior*, United States Army in World War II, The Technical Series, Department of the Army, 1956, The Technical Services, Washington: Center of Military History, 1989. U. S. Army, *United States Army in the World War, 1917-1919*, Washington: Center of Military History, 1991

E. Likely Sources Not Yet Investigated:

According to the 1994 Madigan General Hospital HABS documentation, Completion Reports are reported to be in the Records of the Chief of Engineers (Record Group 77) at the National Archives in Washington, D.C. but were not located.

PART IV. PROJECT INFORMATION

The documentation of Madigan General Hospital was undertaken by the Center of Expertise for Preservation of Historic Buildings and Structures (CX) of the U. S. Army Corps of Engineers, Paul W. Chattey and Terri A. Taylor, project managers, during 2000-2001. The project was funded by the Cultural Resources, Public Works, Fort Lewis, Washington, Paul McGuff, Installation Cultural Resource Manager. This documentation was undertaken in response to mitigation measures established by the Washington State Historic Preservation Office in consultation with Fort Lewis. Large format photography was undertaken by John Stamets.