

U.S. NAVAL BASE, PEARL HARBOR, ONE-STORY STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard, Facility No. 72)
East side of the two 1936 Repair Basins, Berths B20 & B21, Fronting
the intersection of Avenue C & Club Road
Pearl Harbor
Honolulu County
Hawaii

HABS HI-468

HI-468

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
PACIFIC GREAT BASIN SUPPORT OFFICE
National Park Service
U.S. Department of the Interior
1111 Jackson Street
Oakland, CA 94607

HISTORIC AMERICAN BUILDINGS SURVEY

U.S. NAVAL BASE, PEARL HARBOR, ONE-STORY STOREHOUSE (U.S. Naval Base, Pearl Harbor, Naval Shipyard) (Facility No. 72)

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- Location:** East Side of the Two 1936 Repair Basins, Berths B20 and B21
Fronting the Intersection of Avenue C & Club Road
Pearl Harbor Naval Base
City and County of Honolulu, Hawaii
- This building falls within the UTM coordinates of the Pearl Harbor, Naval Shipyard as defined in the location section of the overview report HABS No. HI-483. This building's UTM coordinates are: 04.608480.2361920.
- Significance:** Facility 72 is a significant structure within the Pearl Harbor National Historic Landmark and has been determined to be of high historic value. It is an example of a distinctive type and reflects adaptation to a changing setting (i.e. construction of the repair basin), and changing mission needs of the Navy.
- Description:** Facility 72 has an industrial warehouse appearance and open plan that corresponds to the minimal needs of storing large machinery and tools. It was constructed as a permanent, rectangular plan, single-story warehouse. It has a tripartite roof structure with a higher central section, to accommodate a bridge crane, which has a low-pitched gable and is flanked by two symmetrical sections with sloping shed roofs. The original building measured 120'-0" x 480'-0". The transverse length is divided into three bays, the higher central bay having a width of 50'-0" and the shorter lean-to side bays having a width of 35'-0". The longitudinal length has 24 bays at 20'-0" per bay. The total floor area measured 57,600 square feet. Its height from grade to the top of the ridge is 36'-0". In 1941, 12,000 square feet of the west lean-to, except for the six bays utilized for the substation at the northern side, was demolished. This significantly altered the appearance of the building. However, the other sections of the building are intact.
- The building has a reinforced concrete slab foundation with concrete footings under the structural steel columns. At about the center section of the building in the longitudinal direction, the grade slopes down approximately 6'-0" feet. In order to compensate for this level change, some excavation and infill was done. However, a grade difference between the north and south sides still exists. The floor height at the north end is built approximately 2' above grade whereas the floor height at the south end is level with the surrounding grade. A

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1'-6" high exterior concrete curb wraps the perimeter of the walls, except where doors are located. The siding above this curb was originally an asbestos-covered corrugated metal, but has since been replaced with standard corrugated metal siding. Several concrete loading platforms and ramps were later modified on the east side of the warehouse. The loading platforms still exist; however, the ramps have been replaced with asphalt-covered ramps formed by sloping the surrounding soil to meet with the entry doors.

The structure of the building is made entirely out of steel. Heavy Steel columns are anchored to the footings, double-layered web joists form beams, which run at the center-span and tops of the columns. Steel members cross-brace the columns to give lateral strength, and steel trusses support the roof.

The tripartite roof structure is similar to that of Facility 68 (HABS No. HI-467) and several other shop structures of this type remaining at Pearl Harbor. It has a higher central section that has a low-pitched gable with overhanging eaves flanked by two symmetrical sections with sloping shed roofs with clipped eaves. A continuous wire mesh band runs under the roof eave of the higher central roof portion. Its box-like shape, diagonal bracing, and riveted construction, characterizes the steel truss roof framing. The roof is covered with bituminous built-up roofing on wood tongue-and-groove plank boards, which are exposed at the interior. Metal roof ventilators are aligned at equal intervals along the roof ridge. Originally, a clerestory helped illuminate the interior with a band of windows at a 45-degree slope where the higher central section of the tripartite roof intersects the lower flanking sections. Although the form of the roof has not changed, the glass clerestory has been replaced with corrugated metal panels.

The entry doors were originally large steel sliding doors, which have been replaced with oversized roll-up steel slat doors with the exception of a pair of sliding wood tongue-and-groove recessed panel doors on a hangar and track on the west wall. There were originally metal canopies along portions of the west elevation lengths. These have been removed in order to make room for the several additions that have been built along this length over the years.

Fenestration is symmetrical and strictly utilitarian, with bands of multi-light steel windows along the east, west, and south walls. They are approximately uniform in size and shape, some being fixed lights and some horizontal pivoting windows. The panes are wire safety glass of varying color and texture; many panes of the multi-light windows have been replaced over the years. The west side, where the lean-to section was removed, is clad with corrugated metal siding as well, and it appears as though the windows from the demolished lean-to section were retrofitted into the new wall.

An overhead 10-ton bridge crane runs the full length of the structure.

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Several additions and alterations have been made to the structure over the years. These alterations have been listed and described within the Historical Context section of this report.

Historical Context:

Facility 72 was constructed in 1924 as a one-story storehouse possibly to facilitate the re-supplying of ships. Original drawings were produced by the Navy Bureau of Yards and Docks and dated September 17, 1923. February 1934 marked the beginning of construction of the new repair basin to the west of Facility 72, currently Berths B-12 through B-21. By September 1935, the repair basin was nearly complete and the repair of ships commenced for those that did not require dry-docking.

The addition of the new repair basin required a significant increase in electrical power. In 1936, in order to accommodate the increased demand, a new 1,200 KW automatic electric substation was constructed utilizing six bays on the northern most end of the west lean-to of Facility 72. A CMU wall was built on the interior side of the walls of the lean-to to protect the substation.

At the end of 1941, 12,000 square feet of the west lean-to, except for the six bays utilized for the substation, was demolished. The removal of this portion of the building, it appears, was due to the fact that this corner of the building was unstable. This area was built on a filled fishpond, which had slid and twisted the foundation piles. (Contractors Pacific Naval Air Bases, n.d.)

On the wharf next to Facility 72, a plaque commemorates the actions of the USS Honolulu and its crew, who were positioned at the nearby repair basin and defended the navy yard during the December 7, 1941 attack.

During WWII, a time of great expansion at the Naval Base, Building 72 was converted from a storehouse to an industrial shop, possibly to facilitate the enormous amount of repair work being accomplished in support of the war. The northern two-thirds of the building was converted into a pipe, refrigerator, and lagging shop, including offices, restrooms, locker rooms, material storage, and a tool room.

Facility 72 was later modified to be the Naval Shipyard's Sheet Metal Shop, Shop 17. In 1952, a two-story office and locker room lean-to was constructed against the original east lean-to, on the northeast end of the building. Construction included a layout section office within the original east lean-to, a locker room, shower and head facility on the first floor of the new lean-to, and administrative offices on the second floor.

Other historically insignificant additions and modifications were later accomplished, including a 400 square foot spray paint booth lean-to (1956) and a storage shed lean-to both on the east side of the building. The exterior of the building was re-clad with corrugated

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metal in 1972. Facility 72 is currently utilized as the Pearl Harbor Naval Shipyard's Sheet Metal Shop, Shop 17.

A Historical Preservation Plan for Facility 72 was completed in April 1997, which documented the kinds of improvements Facility 72 required. Included in the report was the history of the building, a cost summary and recommendations for future renovations, including general building guidelines. The plan was the result of conditions for demolition of a similar period and type of structure (Facility 660) demolished at Submarine Base.

For an overview of the Naval Shipyard see HABS No. HI-483.

Sources:

The original drawings for this building are on digitally scanned images or microfilm at Pacific Division, Naval Facilities Engineering Command (NAVFAC EFD Pacific) Plan Files. Historic photos of this building are located at the National Archives II, Still Photo Section, RG 71 CA, Box 165 Folder "Storehouse, Bldg. 72", and Boxes 158, 171, 178, and 171-D.

Commander, Navy Region Hawaii
2000 Pearl Harbor Naval Complex, Cultural Resources Management Plan, Pearl Harbor, HI.

Commander, Navy Region Hawaii
2002 Integrated Cultural Resources Management Plan, Pearl Harbor Naval Complex, Pearl Harbor, HI.

Commanding Officer Covington, G.B.
1997 Letter dated June 23, 1997 to the State Historic Preservation Division. Subject: Implementation of Facility 72 Historic Preservation Plan.

Contractors Pacific Naval Air Bases
n.d. *Technical Report and Project History, Contracts NOy-3550 and NOy-4173, Pacific Naval Air Bases.* Microfiche of report at Pacific Division Naval Facilities Engineering Command Library.

Fogel, Frederick F.
1980 Historic Resources Inventory Form for Bldg #72. Prepared by Pearl Harbor Naval Shipyard, Facilities Planning & Programming for State Historic Preservation Office.

HABS/HAER Documents

var. dates For those resources on the Navy database at the time the CRMP (Contract No. NB62742-93-D-0502) was prepared, the HABS/HAER numbers assigned have been included in the electronic database as an additional field, as noted in Appendices: Pearl Harbor Naval Complex Cultural Resources Management Plan, 1998, p. A-6.

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Pearl Harbor Naval Shipyard

1992 Historic Preservation Documentation Program,
photocopied document dated 15DEC92 including
Appendix B Historic Inventory.

Pearl Harbor Naval Shipyard

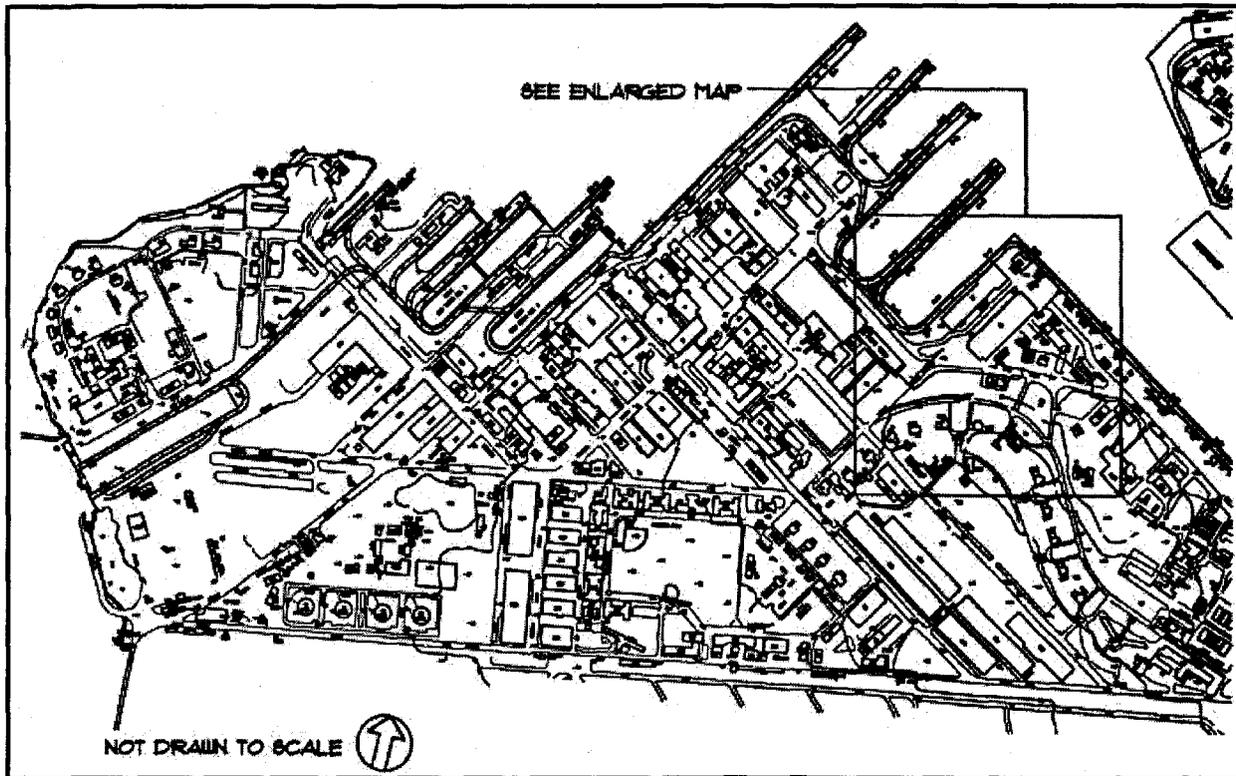
1997 *Building 72 Historical Preservation Plan, Pearl Harbor*
Naval Complex. U.S. Navy, Public Works Center
Engineering Department: Honolulu, Hawaii.

Project Information:

Photo documentation and recordation of this facility by the Navy has been done in anticipation of future alterations or potential demolition of the structure. Photo documentation of historic facilities by the Navy assists in expediting planned undertakings by having the documentation prepared prior to taking actions. Also, photo documentation assists the Navy in gaining more information about its historic facilities to assist in making proactive management decisions. This project is being supervised by Jeffrey Dodge A.I.A., Historic Preservation Specialist at the Pacific Division, Naval Facilities Engineering Command (NAVFAC EFD Pacific). The photographic documentation was undertaken by David Franzen, photographer. Lorraine M. Paulmbo, Ph.D. Architectural Historian, of Mason Architects, Inc. prepared the written documentation. The field work and research was conducted for this report between July 2001 and December 2001.

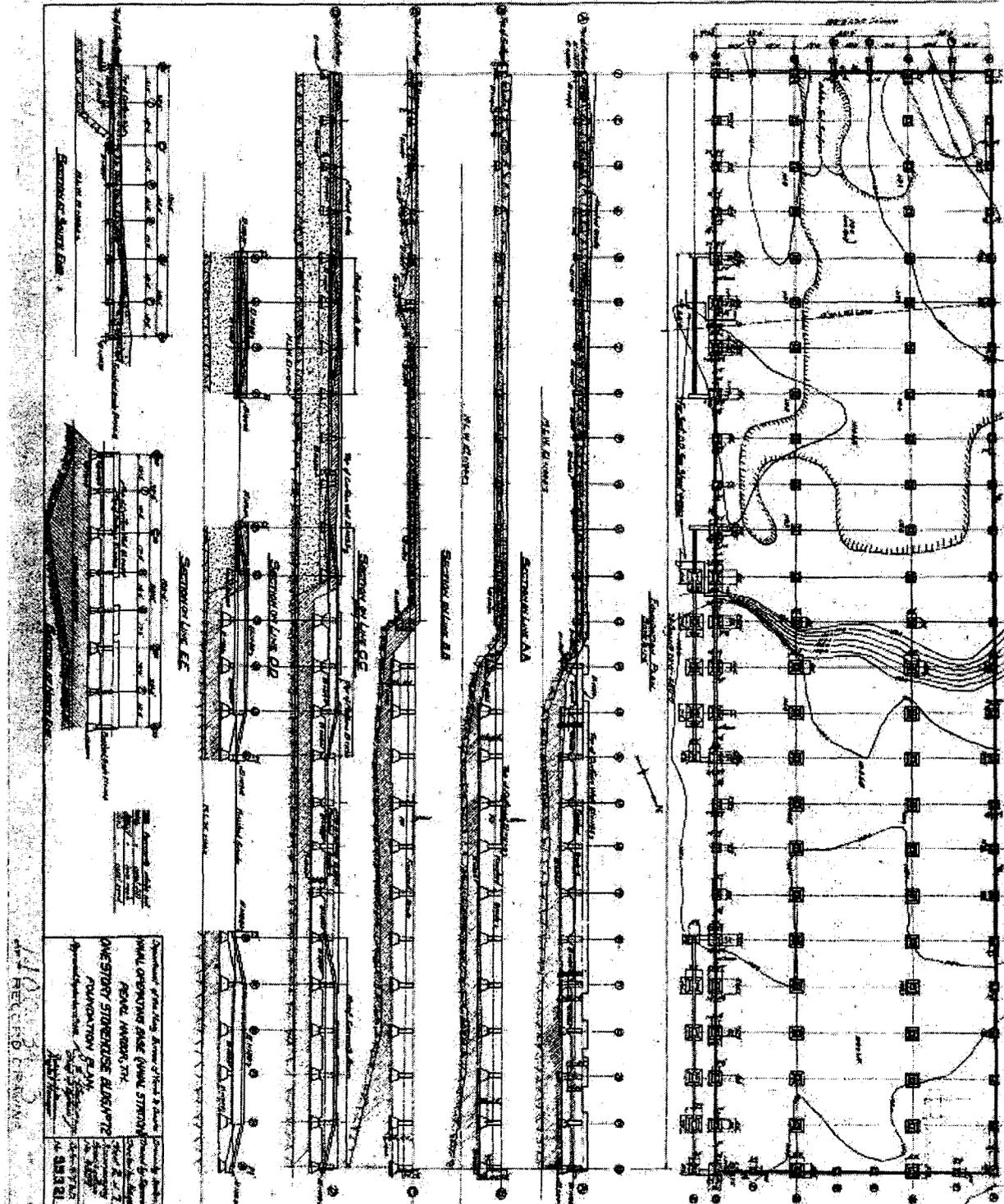
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Shipyard Map



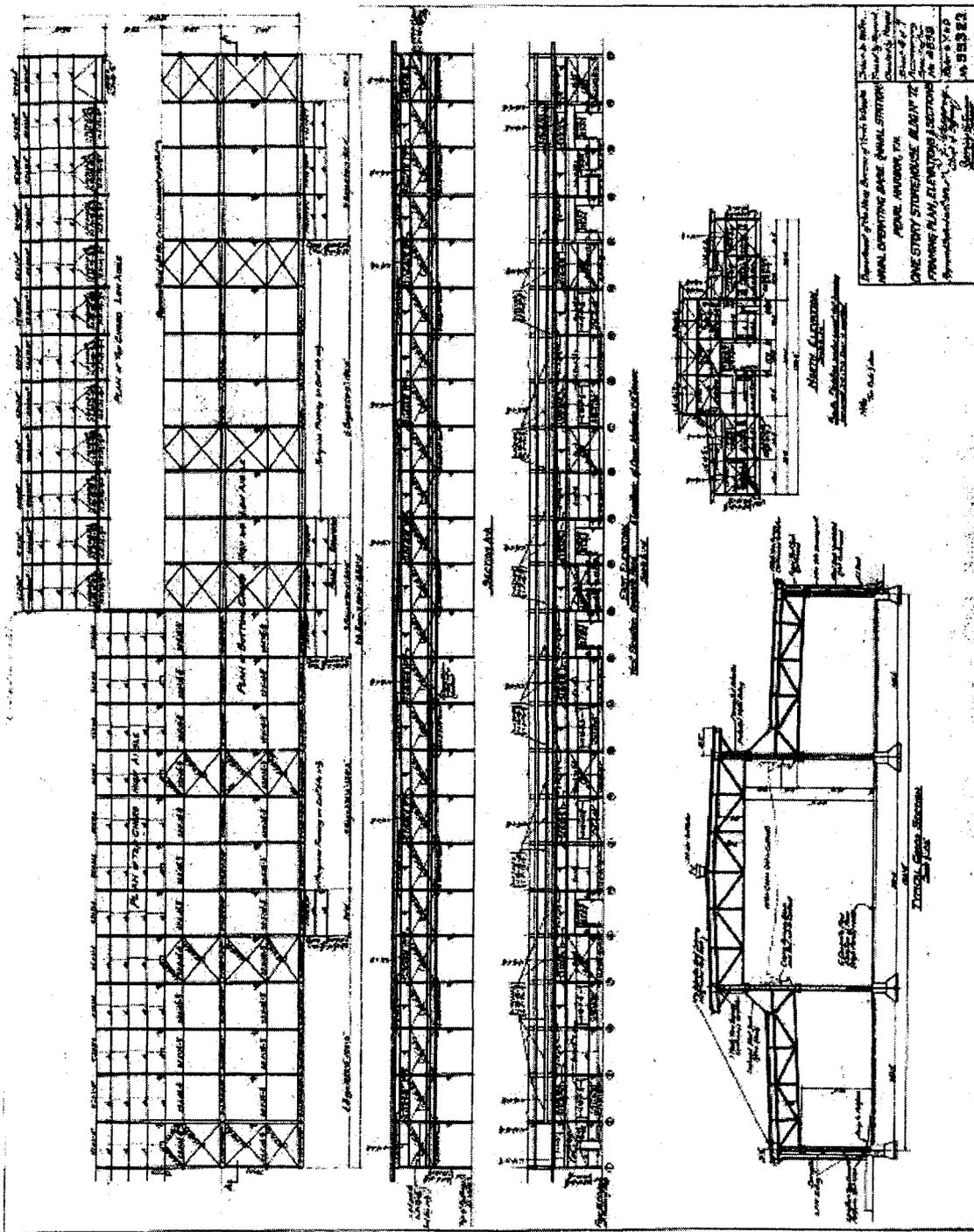
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Facility 72, Foundation Plan and Sections (Drawing No. 99321,
 dated 9/17/1923) (reduced, not to scale)



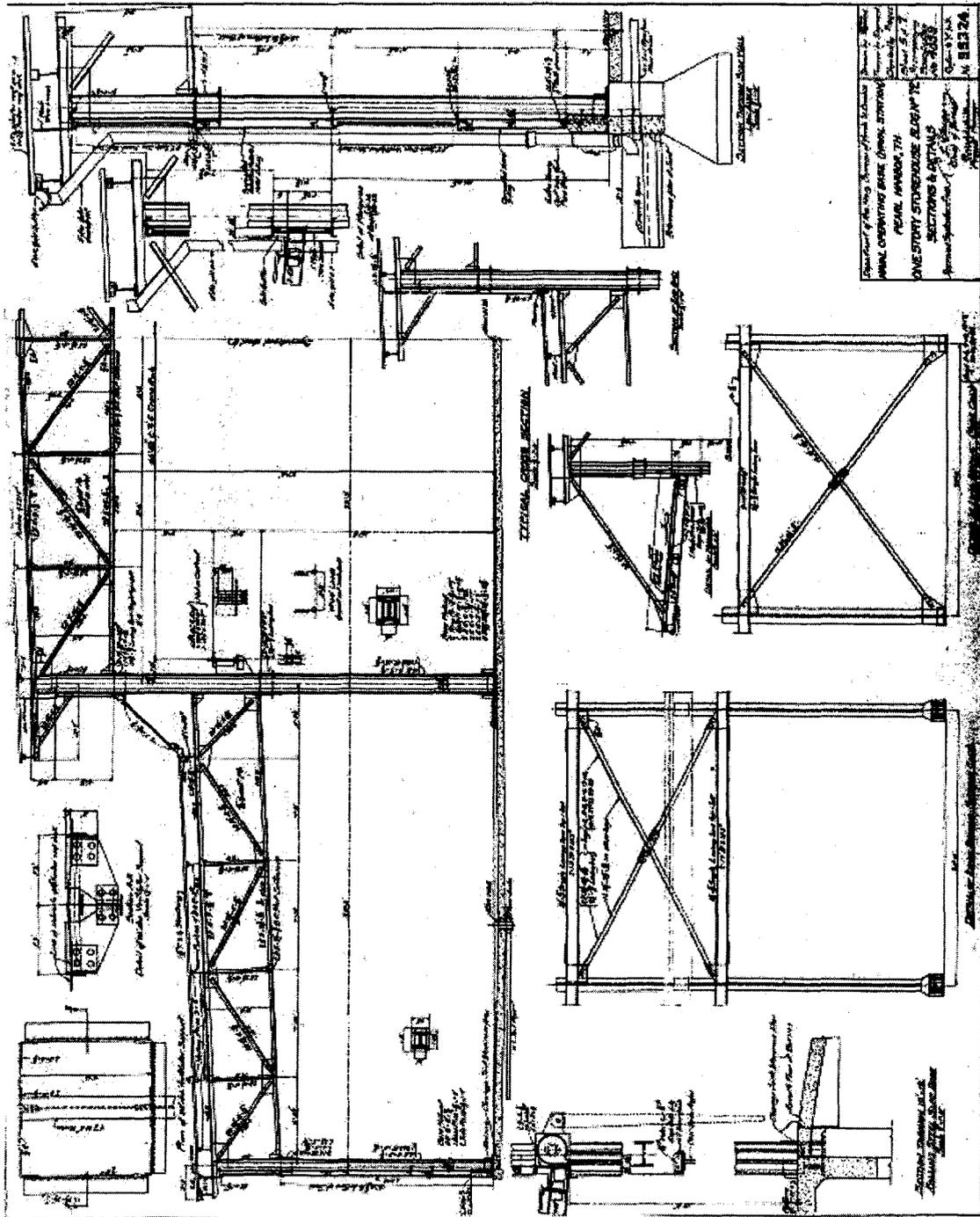
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Facility 72, Framing Plan, Elevations, Typical Cross-Section
 (Drawing No. 99323, dated 9/17/1923) (reduced, not to scale)



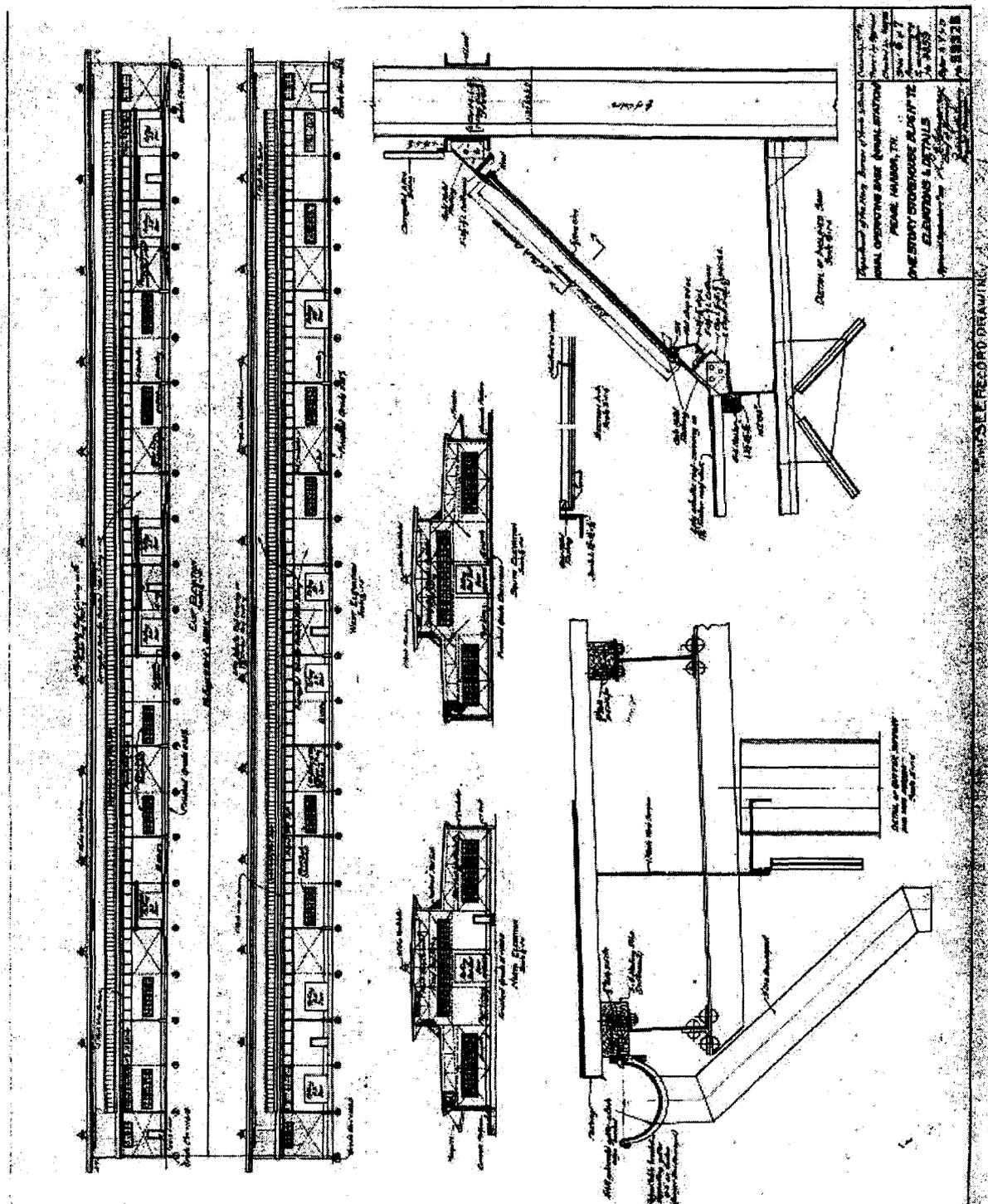
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Facility 72, Cross-Section, Bracings, and Side Wall Sections
 (Drawing No. 99324, dated 9/17/1923) (reduced, not to scale)



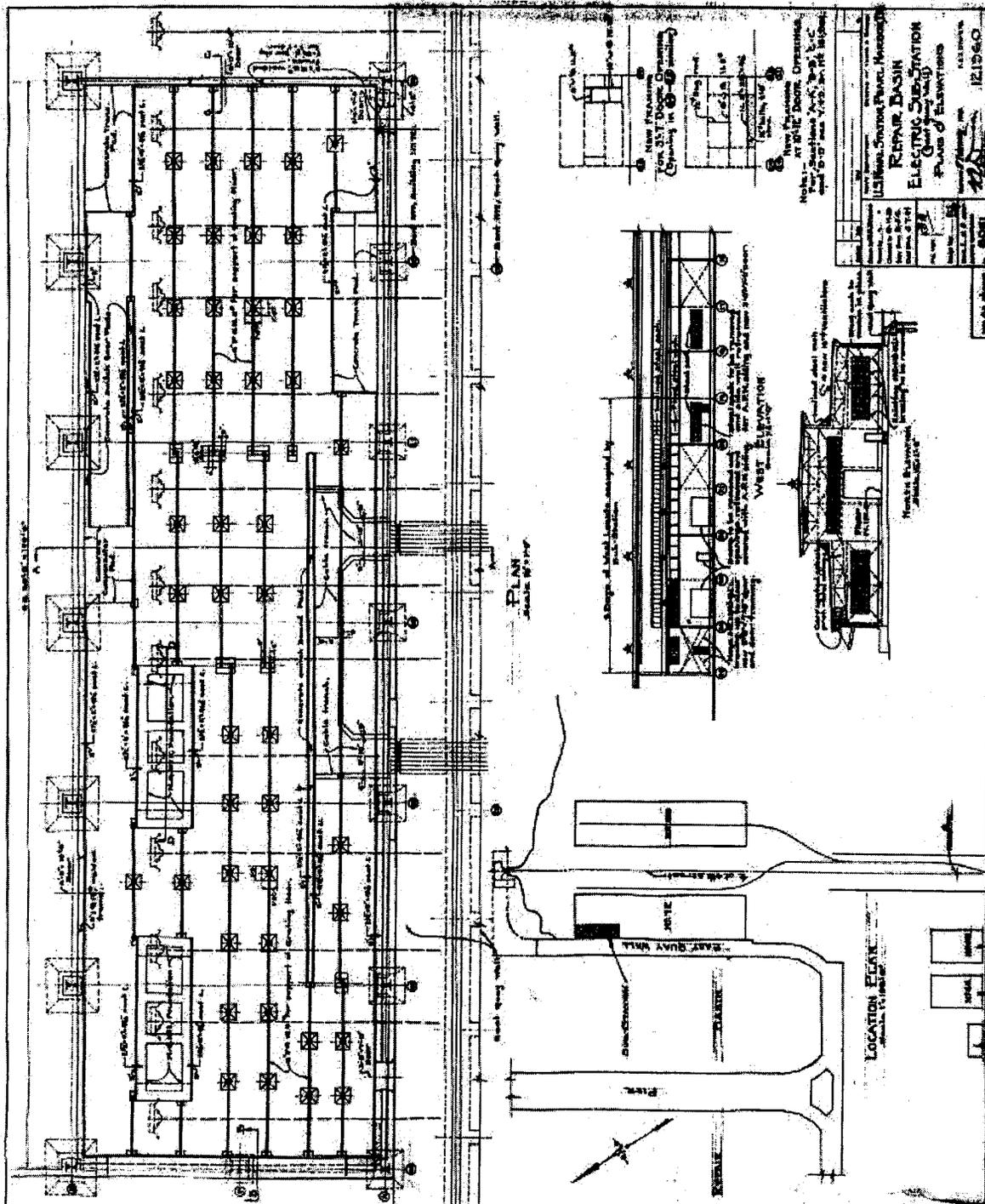
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Facility 72, Exterior Elevations, Sash, Gutter Details
 (Drawing No. 99325, dated 9/17/1923) (reduced, not to scale)



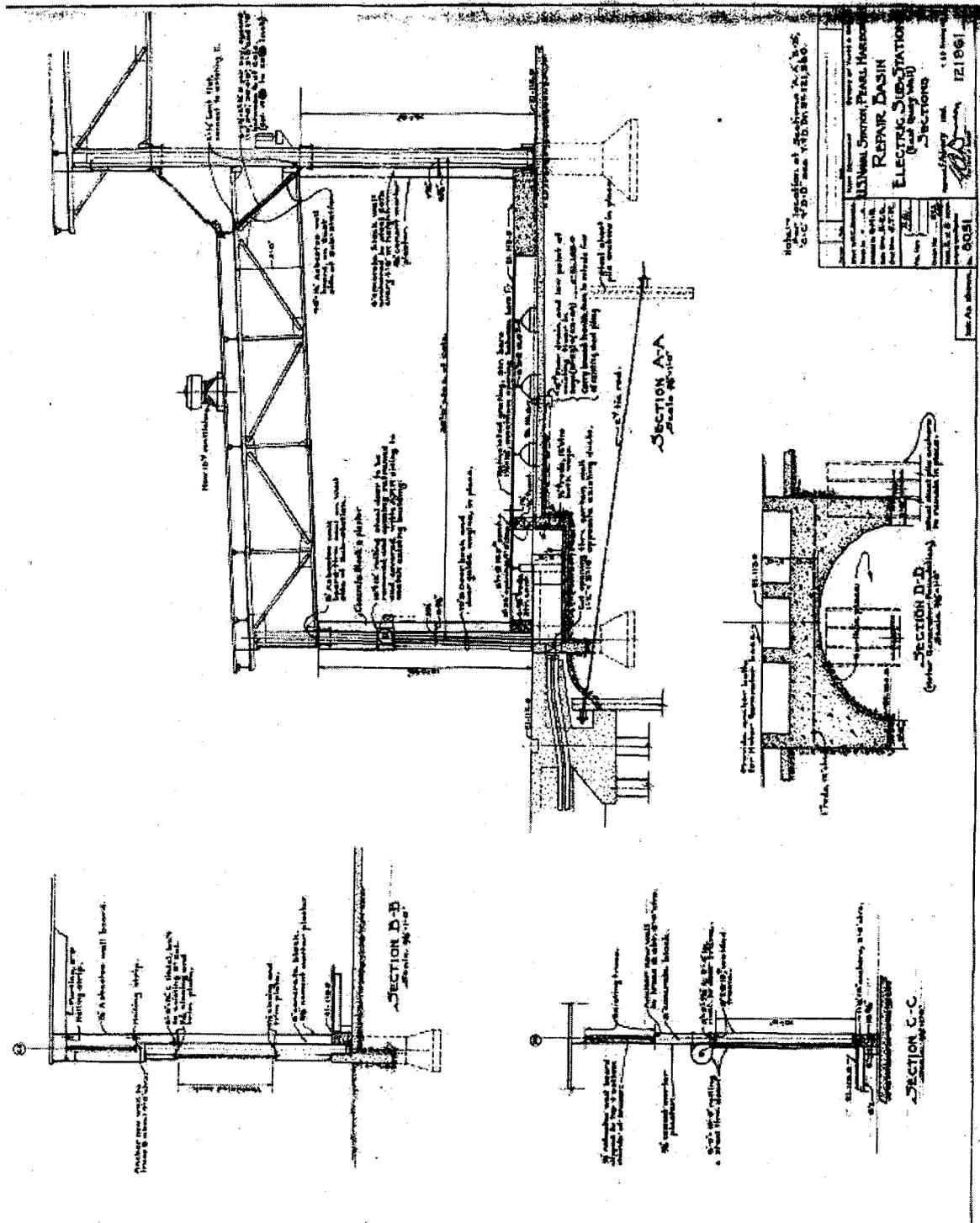
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Facility 72, 1936 Substation Plan and Elevations
 (Drawing No. 121960, dated 7/14/1936) (reduced, not to scale)



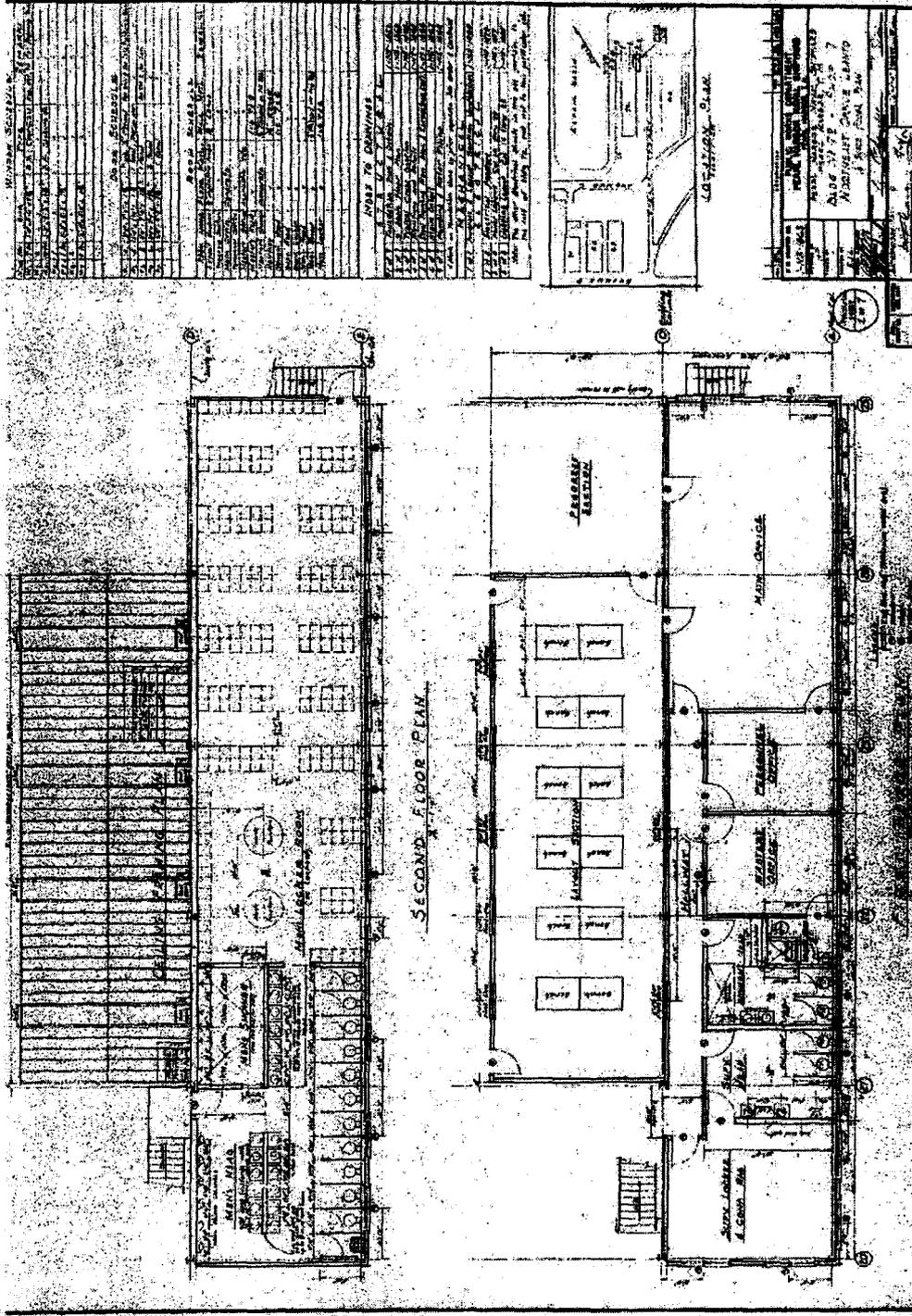
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Facility 72, 1936 Substation Sections
 (Drawing No. 121961, dated 2/5/1936) (reduced, not to scale)



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Facility 72, 1952 Northeast Office Lean-to Floor Plans
 (Drawing No. I-N05-1863, dated 5/23/1952) (reduced, not to scale)



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Facility 72, 1952 Northeast Office Typical Cross-Section
(Drawing No. I-N05-1864, dated 5/26/1952) (reduced, not to scale)

