College Hill Reservoir Intensive Level Survey

Submitted to:
Eugene Water & Electric Board

Submitted by:
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Eugene, OR
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Historical
Research
Associates, Inc.

This project was implemented by HRA Principal Investigator Natalie K. Perrin. MS, who meet the Secretary of the Interior's professional qualifications standards for architectural history. This report is intended for the exclusive use of the Client and its representatives. It contains professional conclusions and recommendations concerning the potential for project-related impacts to cultural resources based on the results of HRA's investigation. It should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

Executive Summary

The Eugene Water & Electric Board (EWEB) owns a parcel of land bounded by Lawrence St. and Lincoln St., between W 23rd and W 25th Aves. The parcel currently has two reservoirs, College Hill 603 (completed in 1916) and College Hill 607 (1940), which provide drinking water storage for the city of Eugene. Additional resources associated with the reservoirs include a pump house (1927) and an elevated steel tank (1940), both of which are located on separate parcels.

EWEB assessed both reservoirs, neither of which meet current seismic codes. Further, the Oregon Health Authority Drinking Water Program deemed the 607 reservoir a water quality risk. EWEB is required to repair or replace College Hill 607 by 2023. Following multiple evaluations, EWEB is proposing to demolish the deteriorating reservoirs and replace them with two new 7.5-million-gallon (MG) circular concrete reservoirs in the location of the existing reservoirs.

In 2002, the Federal Emergency Management Agency (FEMA) determined "College Hill Reservoir" eligible for listing in the National Register of Historic Places (NRHP) under Criterion A, "because it was constructed as a (Works Progress Administration) WPA project, and because of the ongoing role it plays in the development of the city of Eugene" (Neinstact 2002). FEMA's 2002 determination of eligibility (DOE) is over ten years of age and lacks the required historic context, statement of significance, integrity assessment, areas and periods of significance, and boundary justification necessary to establish the eligibility of the College Hill Reservoirs 603 and 607. The purpose of this report is to update FEMA's DOE for the College Hill Reservoirs to meet current State Historic Preservation Office (SHPO) guidelines and definitively assess the College Hill Reservoir system's eligibility for listing in the NRHP.

Historical Research Associates, Inc. (HRA), recommends the College Hill Reservoir 607 is locally significant under Criterion A, in the areas of Community Planning and Development and Politics/Government, and under Criterion C, in the area of architecture, with a period of significance of 1940, the date of completion. The College Hill Reservoir 607 is recommended individually eligible as a *structure*. The significance of the resource seems best conveyed independent of associated resources (the College Hill Reservoir 603, pump house, and steel tank), which do not appear to retain sufficient integrity to convey historic significance. As such, the recommended boundary of the eligible property is limited to the footprint of the College Hill Reservoir 607.

EWEB's requirements to remove the College Hill Reservoirs will result in the demolition of an eligible historic property. HRA recommends EWEB acknowledge the impact to the resource under Oregon Revised Statute (ORS) 358.653 and begin consultation with the SHPO, local Tribes, Restore Oregon, the City of Eugene Historic Landmark Commission, local historical societies or museums, and other interested parties as appropriate. Consultation should include discussions about appropriate mitigation measures to resolve the adverse effect, which should be formalized in a Memorandum of Agreement (MOA).

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1. Introduction

The Eugene Water & Electric Board (EWEB) owns a parcel of land bounded by Lawrence St. and Lincoln St., between W 23rd and W 25th Aves. The parcel currently has two reservoirs, College Hill 603 (completed in 1916) and College Hill 607 (1940), which provide drinking water storage for the City of Eugene. Additional resources associated with the reservoirs include a pump house (1927) and an elevated steel tank (1940), both of which are located on separate parcels.

The "603" and "607" in the names refers to the elevation above sea level of the overflow pipe inside the reservoir; historically, the reservoirs were referred to as College Hill Reservoir Nos. 1 and 2, respectively. College Hill 603 is a 2.5-million-gallon (MG) rectangular concrete reservoir constructed in 1915. The reservoir was initially constructed as an open reservoir; in 1933–1934, EWEB removed the original hand railing and constructed a new concrete cover. To the best of EWEB's knowledge, no additional work was conducted on the reservoir since 1933, excepting routine maintenance and upkeep activities. The reservoir is no longer in use and was decommissioned.

College Hill 607 is a 15 MG rectangular concrete reservoir. Completed in 1940 with a Public Works Administration (PWA) matching grant, the reservoir has had numerous upgrades in the recent past to try and remedy a leaking roof, aging piping infrastructure, and weakened concrete. The improvements included constructing new roof joints, applying a coating on the top of the roof to stop leaks through the concrete, new fencing and gates, and new doors to the catacombs.

1.1 Project Description

EWEB assessed both reservoirs, neither of which meet current seismic codes. Further, the Oregon Health Authority Drinking Water Program deemed the 607 reservoir a water quality risk. EWEB is required to repair or replace College Hill 607 by 2023. Following multiple evaluations, EWEB is proposing to demolish the deteriorating reservoirs and replace them with two new 7.5 MG circular concrete reservoirs in the location of the existing reservoirs. The new reservoirs will have a diameter between 183 and 195 feet (ft), depending on the final depth. They will be 38 ft tall, but only 15 ft will be exposed to view. It is EWEB's intent to maintain the existing open-space characteristics of the reservoir parcel.

1.2 Eligible Historic Property

In 2002, the Federal Emergency Management Agency (FEMA) determined "College Hill Reservoir" eligible for listing in the National Register of Historic Places (NRHP) under Criterion A, "because it was constructed as a (Works Progress Administration) WPA project, and because of the ongoing role it plays in the development of the city of Eugene" (Neinstact 2002). However, the determination makes no mention of the fact that there are two reservoirs; provides no justification for association with the WPA; and does not provide an area or period of significance or recommended boundary for the historic property. Further, the determination provides no historic

context relative to the original period of construction, ca. 1915. FEMA's 2002 determination of eligibility (DOE) is over ten years of age and lacks the required historic context, statement of significance, integrity assessment, areas and periods of significance, and boundary justification necessary to establish the eligibility of the College Hill Reservoirs 603 and 607.

1.3 Consultation

In 2019, EWEB submitted an Oregon State Historic Preservation Office (SHPO) clearance form indicating the intent to replace the NRHP-eligible College Hill Reservoirs. In a letter dated August 16, 2019, under SHPO Case No. 19-1211, SHPO's Historic Preservation Specialist Tracy Schwartz assessed the demolition of the reservoirs as an adverse effect to historic properties. Schwartz advised EWEB to either provide information to SHPO that suggests the property is not NRHP-eligible, or to acknowledge an impact to the resource under Oregon Revised Statute (ORS) 358.653. Schwartz further advised that, if avoiding the adverse effect is not possible, discussions about appropriate mitigation measures to resolve the adverse effect should be formalized in a Memorandum of Agreement (MOA) following consultation with appropriate consulting parties. Consulting parties may include Tribes, Restore Oregon, the City of Eugene Historic Landmark Commission, local historical societies or museums, and other interested parties as appropriate. Mitigation is what all parties agree to and should provide a public benefit.

1.4 Purpose of Intensive Level Survey

The purpose of this report is to update FEMA's 2002 DOE for the College Hill Reservoirs to meet current SHPO guidelines for intensive-level surveys (ILSs). ILSs record in-depth information collected from a physical examination of a resource's physical features, include research about the property and ownership history, and identify the resource's eligibility for listing in the NRHP under all criteria either individually or as a contributing resource to a historic district. The following ILS is a compliance-driven documentation intended to clarify the history of the College Hill Reservoir system and definitively assess its eligibility for listing in the NRHP.

1.5 Assumptions

The ILS was written with an assumption that the College Hill Reservoir system, which includes a grouping of four structures, is eligible for listing in the NRHP as a *structure* (Figures 1-1 and 1-2). As defined by the National Park Service (NPS), a structure is a functional construction made for purposes other than creating human shelter. As with other NRHP classifications, a structure can include multiple individual resources (a small grouping) listed under a single category using the primary resource (NPS 1997:4). For the College Hill Reservoir system, the primary resource is the College Hill Reservoir 607, historically known as the College Hill Reservoir No. 2. Secondary resources include the College Hill Reservoir 603 (historically known as the College Hill Reservoir No. 1), a pump house, and an elevated steel tank. The eligibility of the system is further discussed in Section 4.

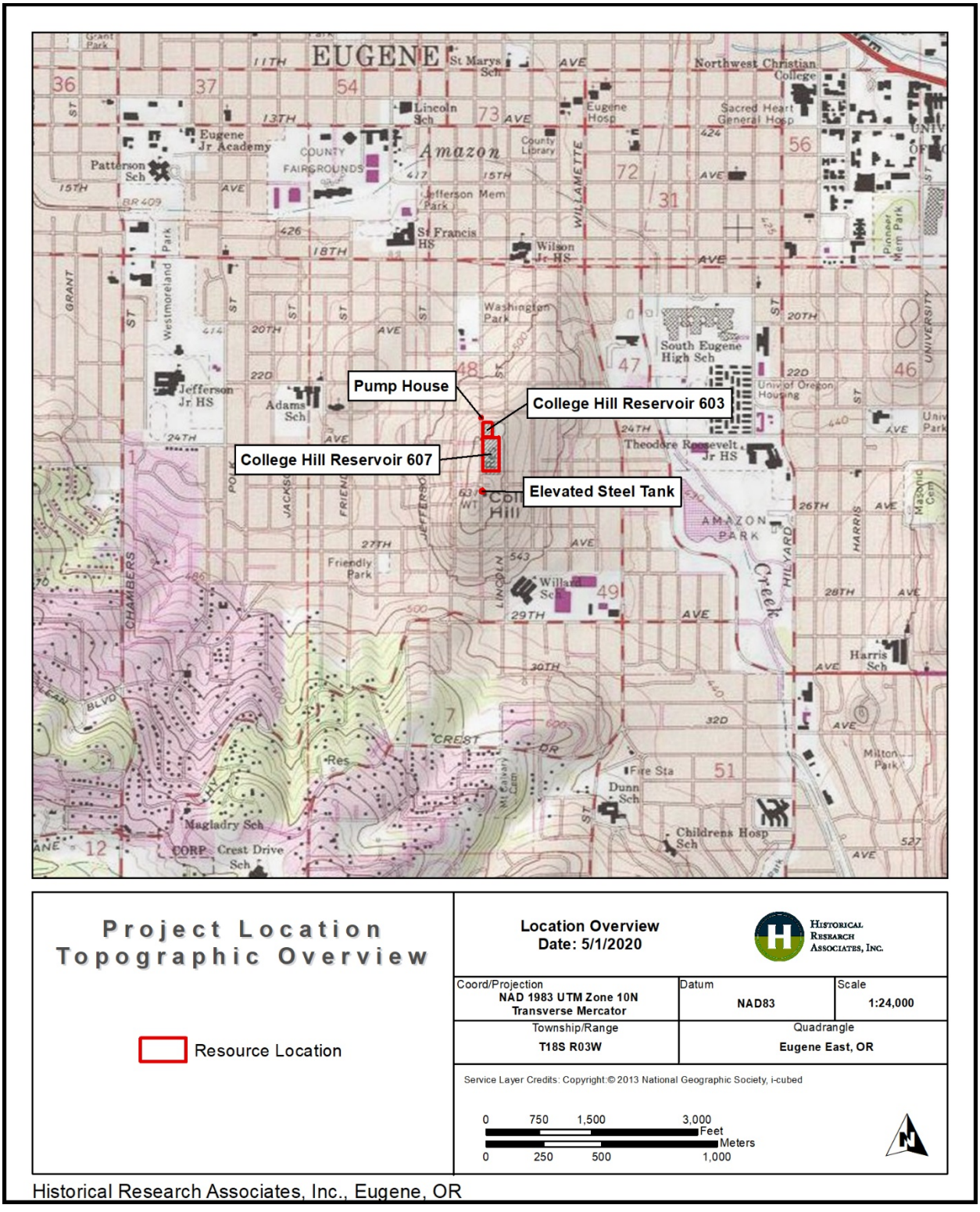

Figure 1-1. Topographical map of resources associated with the College Hill Reservoir system.

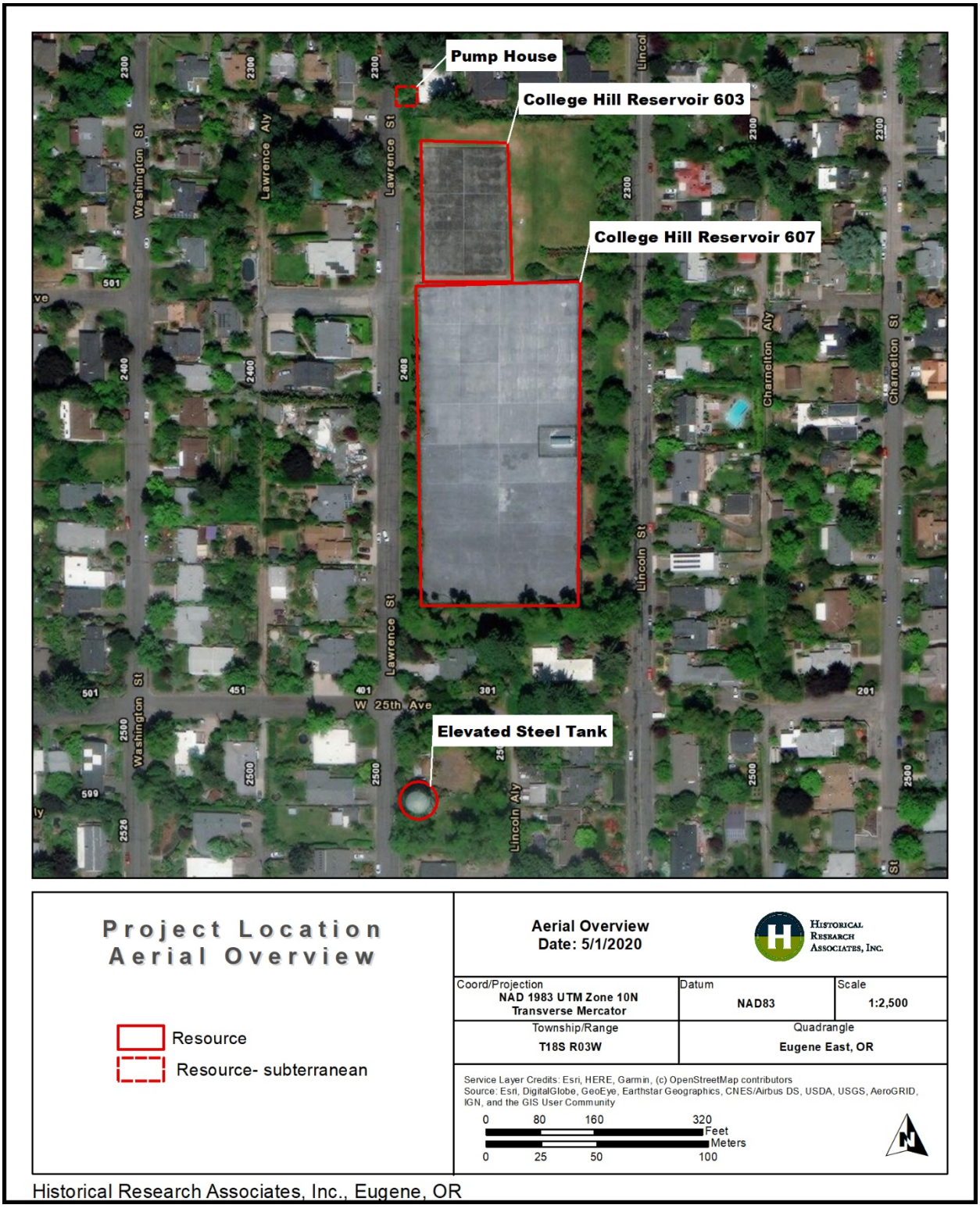

Figure 1-2. Aerial image of resources associated with the College Hill Reservoir system.

2. Historic Context

A favorable bond market in February 1914 enabled the City of Eugene to fund construction of "as fine a water system as can be had," expanding from one reservoir on Skinner's Butte to a three-reservoir system including College Hill, all connected by a 12-inch main and supported by two Willamette River wells (*Morning Register* 1914:1, 4). In 1915, the Eugene Water Board (EWB) selected one of the three designs by civil engineer and EWB member Carl A. McClain and Assistant Engineer F. W. Dietrich for a 2.5 MG reservoir on College Hill (Moore 1934:1). The "big concrete tank" was intended to provide additional water pressure in the main lines of the water system and to supply underserved areas of the city (*Morning Register* 1915a:3).

On April 3, 1915, members of the Eugene Water Board officially closed the bidding for the new reservoir, with 16 bids received (EWB 1915:1). On April 5, the board approved two proposals: one for excavation and embankment of the reservoir location by the Mohawk Wood Yard at a price of $6,758, and, the second, for construction by Mr. H. E. Doering of Portland, Oregon, for a price of $9,245 (EWB 1915:6–7). Doering, however, made a clerical error in his bid and withdrew it from consideration, resulting in construction award to Mr. Guy F. Pyle of Eugene, Oregon, for a price of $10,635 (EWB 1915:13–14). Gross Brothers was also awarded a $545.40 contract for fencing the reservoir (EWB 1915:15). In June, the Board awarded a contract for construction of a (wood) reservoir sewer drain to K. L. Hall for $187.00 (EWB 1915:34). Shortly after, in July, the newly poured reservoir was tested for leaks (*Morning Register* 1915b:5). On August 15, 1915, the new reservoir was placed into service, after which the surrounding area was backfilled (*Morning Register* 1915c:8). On May 8, 1916, the Board noted the work of the Mohawk Wood Yard complete (EWB 1916:138).

In 1925, the EWB purchased additional lots in the College Hill Park addition for the planned construction of a second reservoir on College Hill (EWEB 1925:353). It was not until May 9, 1927, however, that the Board executed a contract with the W.W.B. Construction Company in the amount of $267.00. The contract, for the construction of a pump house at 23rd and Lawrence at the site of the College Hill Reservoir, was in support of the "College Hill second level reservoir" (EWB 1927:112). The contract accompanied an order to "proceed with the laying of a four inch pipe on 23rd Avenue West from Lawrence to Charnelton and on Charnelton from 23rd to 22nd Avenue as a part of the College Hill second level system" (EWB 1927:112). Work on the pumphouse was completed by June 13, 1927 (EWB 1927:128).

By 1928, the City of Eugene had changed the water source from the Willamette River to the McKenzie River. This change, along with urban growth around the College Hill Reservoir, led to some concerns regarding water quality. The "troubles from human contamination increased," along with an increase in algae growth presumably from the new water source (Moore 1934:1). The combined problems led to unsatisfactory conditions and the need to drain, wash, and refill the College Hill reservoir on average every two weeks in the summer months (Moore 1934:1).

In 1932, under the direction of then Superintendent McClain, B. K. Taylor designed a concrete cover for the reservoir (EWB 1932:350; Moore 1934:1). On September 11, 1933, the decision to

expedite the covering of the reservoir resulted in the Board applying to the PWA for financial assistance. As noted in the Board's resolution, the

> Federal Government has adopted a policy favorable to the construction or public works, and has made funds available for the construction of the same when approved by the Government... [and] the Water Board is desirous of securing funds from the monies made available by the Government for the construction of a cover for said reservoir, the General Superintendent of the Eugene Water Board is therefore authorized hereby to make the proper application for such funds and have the proper reports, maps, plans, etc., prepared and presented to the Administrator, Federal Emergency Administration of Public Works at Portland. Oregon; and the said General Superintendent is also hereby authorized to sign all papers for making such application. [EWB 1933:397]

The resolution was unanimously approved, and the Eugene Water Board submitted a $250,000 application of grant to the Federal Emergency Administration of Public Works on August 10, 1933 (McArthur 1933). However, it is unclear if the PWA responded favorably and with funds. As noted by W. J. Moore in his *Chronological Report on Construction of Concrete Cover for College Hill Reservoir,* "...a great effort was made to get Federal money under the P.W.A. Act. After spending considerable energy, and losing much time, it was finally decided to go ahead with the work" (Moore 1934:2). Moore's statement implies the reservoir cover was not funded by PWA money. Regardless, from October 3 through December 31, 1933, the original wrought iron fence and concrete parapet wall were removed, a waterproof coating was added, and six concrete panels were constructed to cover the reservoir (Moore 1934).

The College Hill area, isolated by check valves and served by a booster pump to raise the pressure during the irrigation part of the day, was outgrowing the capacity of the booster pump (EWB 1938:125). On March 11, 1935, the Board authorized the purchase, "if available at tax sale, the Lots 1 - 8, inclusive, and Lots 12 - 18, inclusive, in Block 55 of College Hill Park. These lots lie adjacent to and directly South of the present College Hill Reservoir, and are especially suitable for additional reservoir construction" (EWB 1935:471). In addition to those lots previously purchased in 1925, the combined property enabled the Board to move forward with designs for a second reservoir. However, it was another three years before the design phase was complete.

On June 13, 1938, the Board heard multiple options for expanding the reservoir system on College Hill (EWB 1938:125). One option was to install a small tank reservoir on the top of the hill south of the extant main reservoir. However, a letter from V. H. Todd, Senior (local) WPA engineer, suggested

> he could secure through the W.P.A. agency allotments for aid in constructing a large reservoir on College Hill. The Board gave consideration to this letter, and also discussed the possibilities of a P.W.A. grant, but there seemed to be a question in the mind of the Board as to whether a large reservoir was needed at this time, and the Secretary was requested to secure more detailed estimates of the cost of both the suggested 15 million gallon reservoir and a smaller one of 5 or 6 million gallons, and report at the next Board meeting. [EWB 1938:125]

On July 11, 1938, the Board heard various estimates on different sizes and layouts for an additional reservoir on College Hill.

> Mr. V. H. Todd, Sr. Engineer for the W.P.A., was present and explained to the Board the estimate and proposal which he thought the W.P.A. would approve in regard to the construction of about a 15,000,000 gallon reservoir. The Board gave the various estimates and reports with regard to the reservoir construction due consideration, and after discussion... [authorized] application to the

> W.P.A., and also the P.W.A. if found advisable, for assistance in building a reservoir of approximately 15.000,000 gallons capacity, and a proper sized steel tower and tank for the higher level service on College Hill. [EWB 1938:127]

In order to make application for either WPA or PWA funds, the design of the reservoir and steel tank had to be completed. The Board approved a $4,000 proposal by R. E. Koon, of Stevens and Koon, to design the reservoir and elevated steel tank and prepare bid specifications (EWB 1938:127). On September 12, Koon presented partially completed plans to the Board, noting the plans and specifications would probably be completed and ready for construction in approximately six weeks (EWB 1938:139).

By October 10, "a formal offer had been received from the United States of America for a grant of $112,500," to aid in the construction of a reinforced concrete reservoir with concrete cover for approximately 15 MG water storage, and a 100,000-gallon steel tower tank, together with the necessary appurtenances. The Board unanimously resolved to accept the grant (EWB 1938:142). The federal grant, which represented 45 percent of the total construction costs, came with specific timelines: work had to begin within 12 weeks of the offer and be completed within 15 months from the commencement of construction (PWA 1938).

On November 14, the Board opened bidding for construction of Unit 1, which included excavation of the reservoir, and Unit 3, construction of the elevated steel tank; bids were closed on December 5, 1938. The Board opened bidding for Unit 2, which included construction of the concrete reservoir, at a later date on February 27, 1939 (EWB 1938:145, 157). The Board received eight bids for Unit 1 and awarded the contract to the lowest bidder, Mountain States Construction Company, who bid $51,523.50. The Board received six bids for Unit 3 and awarded the contract to the lowest bidder, the Steel Tank & Pipe Company, who bid $9,300.00 (EWB 1939:149–150). The Board reviewed ten bids for construction of Unit 2, and awarded the contract to the lowest bidder, H. J. Adler Construction Co., who bid $149,888.00 (EWB 1939:165).

The Board received the first requisition check for the PWA grant for the College Hill Reservoir for the sum of $62,500.00 in February 1939 (EWB 1939:164), at which time construction of Units 1 and 3 were already under way. By April 10, 1939, the Mountain State Construction Co. had completed excavation work (Unit 1) at a total cost of $52,890.48 (EWB 1939:172). By July, the Steel Tank & Pipe Company completed the elevated steel tank (Unit 3). At that time, the Board opened bidding for a myriad of materials and supplies required to complete the reservoir, including galvanized conduit, lamp receptacles, fuses, telephone wires, cables, and flanges (EWB 1939:185). The Board received three acceptable bids, from R. A. Babb Hardware Company and C. P. Tillman Company, both of Eugene, and the Consolidated Supply Company of Portland, all of which were approved to supply various items. These expenses, along with those associated with laying pipes and mains to the reservoir, required an amendment to the federal grant in the amount of an additional $31,932 (Clark 1935).

On January 12, 1940, the EWB and PWA inspected the reservoir (Unit 2) and deemed the work of H. J. Alder Construction Co. complete (EWB 1940:215). In May, the Board received the final grant check from PWA in the amount of $28,137.68 (EWB 1940:228).

Following completion of the reservoir, the site became a popular spot for various recreational activities. One idea, presented by the Eugene Playground Commission during construction of the reservoirs, was to locate tennis courts, basketball courts, and other playground facilities on the top of the reservoir (EWB 1940:186). While that concept never manifested, the spot became immediately popular with young bicyclists (see Figure 2-1). Motorists also found the spot a desirable lookout (EWB 1948:58). In the 1950s, City official expressed a desire to develop the site as a playground area, proposing $25,000 in landscaping and playground improvements though, again, these plans never manifested (EWB 1950:190; 1953:370). While not recreational, in October 1962, the U.S. Office of Civil Defense also classified, and the Board subsequently approved, the College Hill Reservoir for a Fallout Shelter License or Privilege (EWB 1962:156). Throughout the 1980s, EWB contracted the Lane County Sherriff's Department to patrol the reservoir during annual 4th of July celebrations, to "discourage capricious acts such as vandalism and illegal fireworks" to ensure "an atmosphere of leisure...to allow those families that annually spend the evening viewing our community's celebration from this vantage point a more placid surrounding" (Lum 1987).

Figure 2-1. College Hill Reservoir No. 2, February 11, 1940, looking north at entrance house structure. EWEB Image No. 1910, courtesy of EWEB.

3. Physical Description

The College Hill Reservoir system is located in Eugene's College Hill neighborhood in Section 6 of Township 18 East Range 3 West of Lane County, Oregon. The two rectangular reservoirs, known as College Hill Reservoir 603 (completed in 1916) and College Hill Reservoir 607 (1940), are positioned adjacent to each other in a residential neighborhood on tax parcels 1803061307600 and 1803061307600, respectably. The north–south aligned reservoirs are bordered by Lawrence St. and Lincoln St. to the west and east, and W 23rd Ave. and W 25th Ave. to the north and south. The reservoirs, named after their respective elevations of 603 ft and 607 ft, are built atop a slight rise. The sloping landscape leaves part of each reservoir built at grade, part supported by infill, and part exposed. Associated resources associated with the reservoir system include a pump house (1927) and elevated steel water tower (1940).

3.1 College Hill Reservoir 603 (No. 1, 1916, 1933)

College Hill Reservoir 603, now decommissioned, is the smaller of the two reservoirs (Figures 3.1-1 to 3.1-4). The poured-concrete reservoir measures 125 ft wide by 185 ft long, with variable depths of 12 ft (at the south end), 17 ft (to the west), and 18 ft (to the north and east) resulting in a capacity of 2.5 million gallons (McClain and Dietrich 1915). As originally designed, 3 ft of the reservoir extends aboveground. The north end the reservoir is supported by infill and a retaining wall bordering Lawrence St.

Reservoir 603 is covered with a six-panel concrete slab, completed December 31, 1933, at which time the original iron fencing was removed. A slight overhang on the slab creates a lip around the perimeter. Rectangular boxes affixed to the top of the concrete slab on the northwest and southeast corners provide narrow access shafts to the reservoir's interior.

Figure 3.1-1. College Hill Reservoir 603; view northeast.

Figure 3.1-2. College Hill Reservoir 603; view northwest.

Figure 3.1-3. College Hill Reservoir 603 (*foreground*), with College Hill Reservoir 607 partially visible (*back*); view south.

Figure 3.1-4. College Hill Reservoir 603 (*foreground*); with College Hill Reservoir 607 partially visible (*left*); view southwest.

Integrity

When initially constructed in ca. 1915, College Hill Reservoir 603 was an open-air reservoir surrounded by a decorative wrought iron fence (Figures 3.1-5–3.1-8). In 1933, prior to the construction of Reservoir 607, Reservoir 603 was covered with a concrete slab. At that time, the decorative wrought-iron fence was removed.

The reservoir retains integrity of location, as it is located on its original footprint. However, from its period of construction, Reservoir 603 suffers from an irretrievable loss of integrity of design, materials, workmanship, setting, feeling, and association. Covering the reservoir in 1933 altered its appearance and function as an open-air reservoir, removing decorative elements and removing the public water feature. Though these alterations are now considered of the historic period (meaning, the alterations were made more than 50 years ago), they were incompatible to the structure's original intent of beauty and functionality in utility. While the massing and function of the reservoir were retained, the integrity of association was further compromised with the reservoir was disconnected from the College Hill Reservoir system.

Figure 3.1-5. College Hill Reservoir 603, approximately July 1931; view southwest. Image courtesy of EWEB.

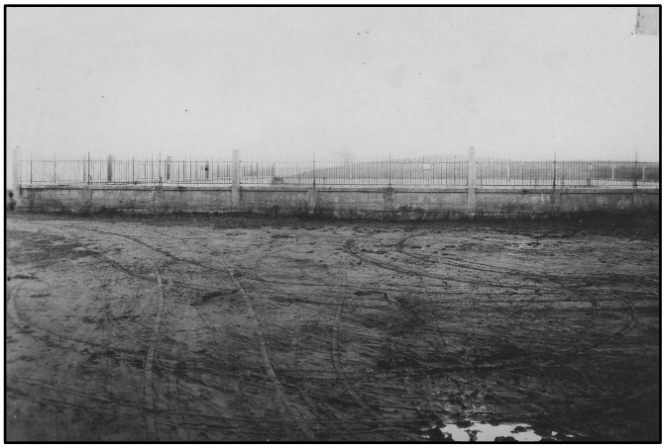

Figure 3.1-6. College Hill Reservoir 603, approximately July 1931; view (*assumed*) west. Image courtesy of EWEB.

Figure 3.1-7. College Hill Reservoir 603 cover, view showing No. 5 panel during placing of concrete. Photo by W. J. Moore, November 21, 1933. Image No. 1245, courtesy of EWEB.

Figure 3.1-8. Interior of College Hill Reservoir 603 after completion of cover, December 26, 1933. Photo by Dot Dotson. Image 1246, courtesy of EWEB.

3.2 Pump House (1927)

Northwest of Reservoir 603, fronting Lawrence St., is an EWEB-owned building constructed in 1927 into the hillside (Figure 3.2-1). The building aligns with a residence above and appears to be small in scale, though it is unknown how deep the building extends into the hillside. Visible portions include a symmetrical facade, marked by a central metal door with modern hardware. Flanking the doorway near the ground are rectangular vents with louvered metal covers. Above the door are two circular cutouts, likely air vents, with inset metal lattice screening. The facade is topped by a front-gabled roof covered in ivy. A metal pole extending upward from the north end of the facade supports electrical conduits.

Figure 3.2-1. EWEB building fronting Lawrence St.; view northeast.

Integrity

From its period of construction (1927), the College Hill pump house appears to retain integrity of materials, design, workmanship, and location. Integrity of feeling, association, and setting were compromised when residential construction was complete atop the resource; the result is that the pump house appears to be a subterranean garage space associated with the residence as opposed to a pump house associated with the nearby reservoir. It is unknown if the pump house is still utilized as part of the College Hill Reservoir system. Access to the interior was not available during the time of survey.

3.3 College Hill Reservoir 607 (No. 2, 1940)

College Hill Reservoir 607 is approximately 242 ft by 477 ft and has a 15 MG capacity (Figures 3.3-1–3.3-7) (Stevens & Koon 1939:1). The top pf the reservoir is located at a standard elevation of 6.7.75 feet above mean sea level (msl). The concrete cover of the reservoir, located at a standard elevation of 608.40 feet above msl appears at variable grades to the surrounding topography, with approximately 6 ft of wall exposed on the northwest corner; 22.25 ft on the northeast and southeast corners, and approximately 2 ft on the southwest corner.

As stated, on the west side, the poured-concrete reservoir is roughly at-grade on the south half, with approximately 6 ft of the reservoir wall exposed on the north end. At the middle of the west face is a pedestrian entrance to the concrete reservoir top. This entrance is marked by a modern metal guard rail with a switch back. At the north end of the west wall is an 11-step concrete stair, providing pedestrian access to the top of the reservoir. A small metal door on the south side of the stairs allows access to the underside of the stairway.

The exposed portion of the north wall of the reservoir gradually increases as the ground slopes downward to the east. As more wall is exposed toward the east end of the north side, relief details in the concert and a flare in the wall is revealed. The flare appears to be a decorative element used to on the exterior of a cantilevered toe support wall (Stevens & Koon 1939:3). A pedestrian door is located in an egress on the east end; metal fencing borders the egress, extending perpendicular from the reservoir wall.

On the east side of the reservoir, as stated, approximately 22.5 ft of the wall extends aboveground. The flare of the wall begins at approximately 10.5 ft above grade, with the swoop completed at 15 ft above grade, after which the wall continues vertically to the top of the reservoir (Stevens & Koon 1939:14). On this face of the reservoir, the poured-concrete wall reveals the modest ornamentation of the cubic relief insets in the concrete, positioned both above and below the flare.

Atop the reservoir, a safety fence rail lines the perimeter of the reservoir. The fence is made of tapered concrete pillars set equidistant, approximately 7.5 ft apart, with metal piping extending in three horizontal lines between and attached to the back side of each pillar. The rail line varies at the midline of the west and east walls, where additional expansion pillars (one on each side) are offset approximately 4 ft toward the center of the reservoir top to allow for expansion and contraction of the metal. The metal piping extends toward and is attached to the offset pillar. The railing also lines the stairway on the northeast corner of the reservoir. Alterations to the railing include an iron gate at the top of the stairs and cyclone fencing installed on the exterior of the safety rail around the perimeter of the reservoir.

The concrete slab atop the reservoir comprises 32 square sections. Atop the reservoir, in the middle of the east wall, is a rectangular entrance structure measuring approximately 30 ft by 8 ft. The entrance structure is made of concrete clad in stucco, and is topped by a metal, mushroom-shaped roof. At the narrow ends of the building (east and west faces), the north and south walls extend out with a flare complimentary to the flare of the reservoir's exterior walls. A single metal door is positioned on the west side of the building, which accesses the interior stairs to the enclosed reservoir below. The north face of the entrance structure is marked by two rectangular plaques—the top plaque honoring the Federal Works Agency's PWA, and the lower plaque names members of the EWB and people who constructed the reservoir.

Figure 3.3-1. West entrance to College Hill Reservoir 607; view northeast. Note the offset railing pillar.

Figure 3.3-2. College Hill Reservoir 607 roof and entrance structure; view east.

Figure 3.3-3. College Hill Reservoir 607, stairway on north end of west face; view northeast.

Figure 3.3-4. Reservoir 603 (*right*); and north face of Reservoir 607 (*left*); view southwest.

Figure 3.3-5. College Hill Reservoir 607, north face, east end; view southeast.

Figure 3.3-6. College Hill Reservoir 607, east face, north end; view southwest.

Figure 3.3-7. Entrance structure atop College Hill Reservoir 607; view northeast.

Figure 3.3-8. Plaques on entrance structure atop College Hill Reservoir 607.

Interior

There are two distinct interior spaces of the College Hill Reservoir 607: the reservoir itself (Figures 3.3-9 and 3.3-10), and an area located along the east side of the structure known as the catacombs (Figures 3.3-11 and 3.3-12).

The reservoir is bisected into two water retention/storage areas, one each north and south. These are separated by the central stairwell accessed via the entrance structure. The interior of the reservoirs are open for water storage, with the exception of the monumental concrete columns that support the structure's roof. The columns, which sit on concrete base footings, rise on average 20 feet to support a drop panel which in turn supports the roof panels (Stevens & Koon 1939:5).

The catacombs are located on the east face, accessed via pedestrian doors at the northeast corner, on the east face, and at the southeast corner. The catacombs are defined by the buttressing walls that brace the reservoir structure on the east (down sloping) side of College Hill, and partially wrap the structure at the north and south faces. Additional open spaces located approximately center of the reservoir (beneath the entrance structure) are defined by arched openings that allow access beneath the stairs for maintenance.

Figure 3.3-9. North reservoir area, with detail of columns and roofs, view south.

Figure 3.3-10. North reservoir area, view north.

Figure 3.3-11. Catacombs beneath College Hill Reservoir 607; view south.

Figure 3.3-12. Catacombs beneath College Hill Reservoir 607; view west.

Integrity

From its period of construction, the College Hill Reservoir 607 retains integrity of materials, design, workmanship, feeling, association, setting and location, as no major alterations appear to have been undertaken (see also Appendix B [Stevens & Koon 1939] and Appendix C, Select Historic Period Photographs).

3.4 Elevated Steel Tank (1940)

Constructed simultaneously to College Hill Reservoir 607, the elevated steel tank has a 100,000-gallon capacity (Figures 3.4-1 and 3.4-2). The multi-column (leg type) style features six concrete footings that support an equal number of cross-braced steel legs, set in a circle with a 32 ft diameter. The legs support an oblong cylinder accessed via a revolving ladder and manhole at the top.

Figure 3.4-1. View of elevated steel tank from top of College Hill Reservoir 607; view south.

Integrity

From its period of construction, the elevated steel tank retains integrity of materials, design, workmanship, and location. However, the integrity of feeling, association, and setting were altered when the steel tank, like the College Hill Reservoir 603, was decommissioned and disconnected from the water system. Physically, though the tank remains in its historic-period location and has not been moved, in the 1950s, EWEB sold the lots located between the College Hill Reservoir 607 and the steel tank. Houses were constructed, and the resources no longer retains spatial connectivity to the other resources of the College Hill Reservoir system.

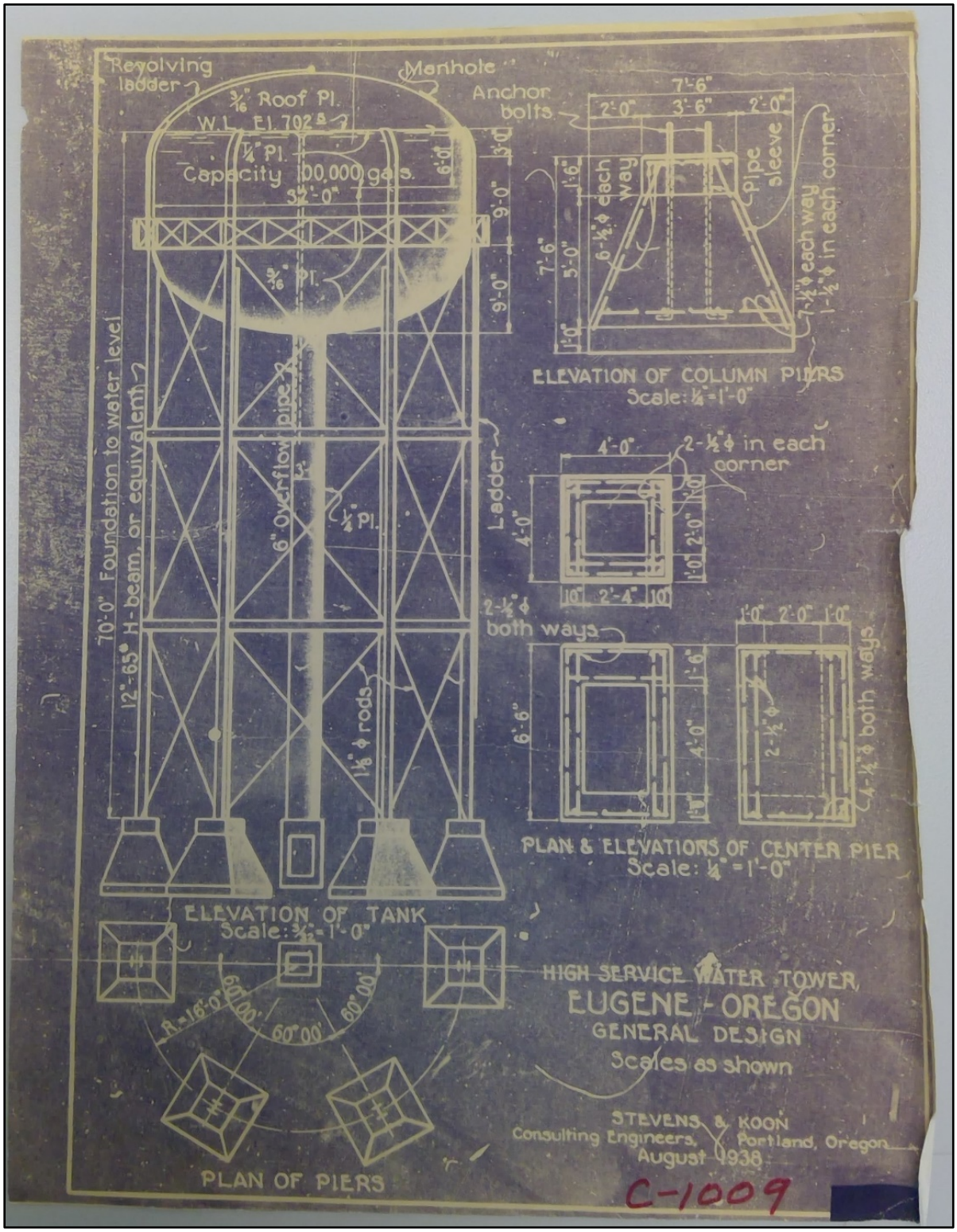

Figure 3.4-2. 1938 Design of "High Service Water Tower" by Stevens & Koon for Unit 3 of the College Hill Reservoir system. Image courtesy of EWEB.

4. Evaluation

As previously noted, the College Hill Reservoir system, as extant, includes a grouping of four structures assumed eligible for listing in the NRHP. As defined by the NPS, a structure is a functional construction made for purposes other than creating human shelter. As with other NRHP classifications, a structure can include multiple individual resources (a small grouping) listed under a single category using the primary resource (NPS 1997:4). For the College Hill Reservoir system, as extant at the time of survey in 2020, the primary resource is the College Hill Reservoir 607, historically known as the College Hill Reservoir No. 2. Secondary resources include the College Hill Reservoir 603 (historically known as the College Hill Reservoir No. 1), a pump house, and an elevated steel tank.

Criterion A

Under Criterion A, properties can be determined eligible for listing in the NRHP if they are associated with events that have made a significant contribution to the broad patterns of our history. The College Hill Reservoir system was initially constructed in 1915, completed in 1916, to provide additional water pressure in the main lines of the extant Eugene water system and to supply underserved areas of the city (*Morning Register* 1915a:3). The construction of College Hill Reservoir 603 expanded capacity from one reservoir on Skinner's Butte to an eventual three-reservoir system including College Hill and Hendrick's Park, all of which were connected by a 12-inch main and supported by two Willamette River wells (*Morning Register* 1914:1, 4). Designed by civil engineer and EWB member Carl A. McClain and Assistant Engineer F. W. Dietrich, the 2.5 MG reservoir on College Hill was excavated by the Mohawk Wood Yard at a price of $6,758, and constructed by Guy F. Pyle for a price of $10,635 (EWB 1915:13–14). Additional services such as fencing and the installation of sewer drains, were supplied by Gross and K. L. Hall, respectively.

In 1928, following the City's change in water source from the Willamette River to the McKenzie River and a period of urban growth around College Hill, concerns regarding water quality from human contamination and algae growth in the open reservoir led to unsatisfactory conditions and the need to drain, wash, and refill the College Hill Reservoir 603 on average every two weeks in the summer months. In 1932, under the direction of then Superintendent McClain, B. K. Taylor designed a concrete cover for the reservoir, which was completed on December 31, 1933 (Moore 1934). The loss of the open-air reservoir on College Hill marked the end of an era of open water systems, which in Oregon are typified by the NRHP-listed Mt. Tabor Reservoirs and Washington Park Reservoirs, both historically part of the Bull Run water system of Portland.

As early as 1927, when the Board contracted the W.W.B. Construction Company to build a pump house at 23rd and Lawrence, a second reservoir on College Hill was under consideration (EWB 1927:112). While the Board applied for but was apparently denied PWA financial assistance for covering of the College Hill Reservoir 603 in 1933, by 1938, the outlook was more favorable. At the urging of WPA Engineer V. H. Todd, the Board applied to the WPA and PWA for assistance in building a 15 MG reservoir and a 100,000-gallon steel tower and tank for College Hill (EWB

1938:127). The subsequent PWA grant of $112,500 represented 45 percent of the total construction costs and came with a requirement that all work must be completed within 15 months from the commencement of construction (PWA 1938).

The subsequent College Hill Reservoir No. 2 system was designed by Stevens and Koon. The Mountain States Construction Company completed the excavation. The Steel Tank & Pipe Company constructed the elevated steel tank. The H. J. Adler Construction Co. constructed the reservoir (EWB 1939:149–150, 165). While the PWA provided grant funding, all labor appears to have been provided by these local businesses.

While the construction of the first reservoir on College Hill was representative of the growth of Eugene in the early twentieth century, that significance is not typified by the extant College Hill Reservoir 603. The loss of the open-air reservoir and its character-defining iron fence, removed and covered in 1933, make it a poor example of a ca. 1915 reservoir. The College Hill Reservoir 603, and its associated system, do not convey significance within this early period, nor do they appear to convey significance with a PWA or other federally funded grant programs. Likewise, the pump house (1927), though arguably constructed in anticipation of a second reservoir on College Hill, does not convey significance for association with the construction programs of the PWA or the associated College Hill Reservoir expansion of the late 1930s.

Alternately, the College Hill Reservoir 607 and elevated steel tank (1940) are associated with the PWA programs of the late 1930s. Though the reservoir and tank were only partially subsidized by a PWA grant, they are representative of the use of the program to provide funding in support of local construction of public works projects during the Great Depression (1929–1939; the PWA was created in 1933). Functionally, however, the steel tank, like the College Hill Reservoir 603, has been decommissioned and is no longer is part of the water system. Physically, though the tank remains in its historic-period location and has not been moved, in the 1950s, EWEB sold the lots located between the College Hill Reservoir 607 and the steel tank. Houses were constructed, and the two resources no longer retain their spatial connectivity.

As such, the College Hill Reservoir 607 and the elevated steel tank, while locally significant under Criterion A in the areas of Community Planning and Development and Politics/Government, do not appear to collectively convey this association. Instead, the significance seems best conveyed by the College Hill Reservoir 607.

Criterion B

Under Criterion B, properties can be determined eligible for listing in the NRHP if they are associated with the lives of persons significant in our past (i.e., persons whose activities are demonstrably important within a local, state, or national context). While research revealed the collective resources of the College Hill Reservoir system were associated with numerous individual persons, the system itself is an example of a municipal water system developed and altered over many years (ca. 1915–1940). As such, the system as a whole (nor any of the individual resources) does not appear to be directly associated with any specific individuals and is not eligible under Criterion B.

Criterion C

Under Criterion C, properties can be determined eligible for listing in the NRHP if they embody the distinctive characteristics of a type, period, or method of construction, or represent the works of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction (i.e., are part of a district). Discrete features, a particular structure for example, may best be documented under this Criterion, though collections of resources may also have significance under Criterion C for architecture or engineering association.

As noted under Criterion A, while the first reservoir on College Hill was representative of an open-air reservoir, the loss of the character-defining iron fence and the subsequent covering of the structure in 1933 make it a poor example of the type. Likewise, the pump house (1927) does not embody the distinctive characteristics of a type, period, or method of construction; or represent the work of a master; or possess high artistic values. While both the College Hill Reservoir 603 and the pump house are part of the College Hill Reservoir system, that system does not seem to constitute a district (i.e., a significant and distinguishable entity whose components may lack individual distinction). Rather, as noted in the assumptions (Section 1.5), the College Hill Reservoir system does not appear to meet the classification of a district but is rather best considered as a *structure*. As defined by the NPS, a structure is a functional construction made for purposes other than creating human shelter. As with other NRHP classifications, a structure can include multiple individual resources (a small grouping) listed under a single category using the primary resource (NPS 1997:4).

For the College Hill Reservoir system, the primary resource, visually, is the College Hill Reservoir 607. Historically known as the College Hill Reservoir No. 2 and completed in 1940, the resource features a monumental scale of both exterior and interior massing. On the east face, specifically, the exterior buttress walls of the reservoir exhibit a funicular shaped curve before dropping horizontally to the ground. Additional research is needed to understand if this detail was a decorative decision or an engineering requirement to accommodate the water loads.

As with Criterion A, secondary resources associated with this context include the elevated steel tank, which was also completed in 1940. However, the tank does not feature the same monumental concrete construction with decorative details, and instead is a typical steel tank of the era. Further the tank has been separated from the College Hill Reservoir 607, both functionally and physically. Functionally, the steel tank, like the College Hill Reservoir 603, has been decommissioned and is no longer is part of the water system. Physically, though the tank remains in its historic-period location and has not been moved, in the 1950s, EWEB sold the lots located between the College Hill Reservoir 607 and the steel tank. Houses were constructed, and the two resources no longer retain their spatial connectivity.

As such, the College Hill Reservoir 607 is locally significant under Criterion C, in the area of Architecture.

Criterion D

Under Criterion D, properties may be eligible for listing in the NRHP if they have yielded, or may be likely to yield, information important in history. To be eligible under Criterion D, the property must have, or have had, information to contribute to our understanding of human history and that information must be considered "important." Most commonly applied to archaeological sites, structures may be eligible under Criterion D if they are the principal source of information (NPS 1997:21). The College Hill Reservoir system, though arguably monumental in scale, was built of common construction methods and well-known materials and is unlikely to answer important research questions or yield information about human history that can only be answered by the actual physical material, design, construction methods, or interrelation of these resources. As such, the system as a whole (nor any of the individual resources) does not appear to be eligible under Criterion D.

5. Conclusions

Historical Research Associates, Inc. (HRA), recommends the College Hill Reservoir 607 is locally significant under Criterion A, in the areas of Community Planning and Development and Politics/Government, and under Criterion C, in the area of architecture, with a period of significance of 1940, the date of completion. The College Hill Reservoir 607 is recommended individually eligible as a *structure*. The significance of the resource seems best conveyed independent of associated resources (the College Hill Reservoir 603, pump house, and steel tank), which do not appear to retain sufficient integrity to convey historic significance. As such, the recommended boundary of the eligible property is limited to the footprint of the College Hill Reservoir 607.

EWEB's requirements to remove the College Hill Reservoirs will result in the demolition of an eligible historic property. HRA recommends EWEB acknowledge the impact to the resource under ORS 358.653 and begin consultation with the State Historic Preservation Office, local Tribes, Restore Oregon, the City of Eugene Historic Landmark Commission, local historical societies or museums, and other interested parties as appropriate. Consultation should include discussions about appropriate mitigation measures to resolve the adverse effect, which should be formalized in an MOA.

6. References

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Lum, Anthony A.
1987 Re: Fourth of July Security/College Hill Reservoir Property. Letter to Neighbor from Right-of-Way Agent Anthony A. Lum. June 23, 1987. Records of the Water Engineering Department, Docutrak ID Box 40274961. On file with the Eugene Water and Electric Board, Eugene, Oregon.

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Moore, W. J.
1934 Chronological Report on Construction of Concrete Cover for College Hill Reservoir. March 1934. Records of the Water Engineering Department, Docutrak ID Box 40274961, Folder 191. On file with the Eugene Water and Electric Board, Eugene, Oregon.

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1914 Eugene Bonds Sell At 103.14. February 24.

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1915b Testing New Reservoir. July 27.

1915c New Reservoir Complete. August 10.

National Park Service (NPS)
1997 *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*. Electronic document, http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm, accessed April 30, 2020.

Neinstact, S. N.
2002 Oregon Inventory of Historic Properties Section 106 Documentation Form. Federal Emergency Management Agency – College Hill Reservoir. May 22, 2002. On file with the Oregon State Historic Preservation Office, Salem, Oregon, accessed via the electronic Oregon Historic Sites Database, https://heritagedata.prd.state.or.us/historic/.

Public Works Administration
1938 PWA Docket 1330-F. Records of the Water Engineering Department, Docutrak ID Box 40274961. On file with the Eugene Water and Electric Board, Eugene, Oregon.

Stevens & Koon
1939 College Hill Reservoir Number Two. Municipal Water Works. Eugene, Oregon. On file with the Eugene Water and Electric Board, Eugene, Oregon.

Appendix A: Oregon SHPO Clearance Form

OREGON SHPO CLEARANCE FORM

Do not use this form for ODOT or Federal Highway projects or to record archaeological sites

This form is for: ***federal*** *cultural resource reviews (Section 106);* ***state*** *cultural resource reviews (ORS 358.653)*

SECTION 1: PROPERTY INFORMATION	**SHPO Case Number: 19-1211**
Resource Name: Eugene Water & Electric Board (EWEB) College Hill Reservoir System	
Street Address: n/a	
City: Eugene	County: Lane County
Agency Project # 1801700	Project Name: College Hill 607 and 603 Reservoirs Replacement

If there is not a street address, include the Township, Range, and Section, cross streets, or other address description

Owner:	☐ Private	☒ Local Gov	☐ State Gov	☐ Federal Gov	☐ Other:_____

Are there one or more buildings or structures? ☒ YES ☐ NO – If no, skip to Section 2 and append photo(s)

Is the property listed in the National Register of Historic Places? ☐ YES – Individually ☐ YES – In a district ☒ NO

Original Construction date: 1916, 1940___ ☐ Check box if date is estimated

Siding Type(s) and Material(s): n/a — Window Type(s) and Material(s): n/a

Has the property been physically altered? ☐ No Alterations ☒ Few Alterations ☐ Major / Many Alterations

SECTION 2: APPLICANT DETERMINATION OF ELIGIBILITY - *Check the appropriate box*

The purpose of this review is to avoid impacts to properties that are "eligible" (historic) or already listed in the National Register of Historic Places. Fully establishing historic significance can be very costly and time consuming. Therefore initial evaluations are based on age (50 years or greater) and integrity (historic appearance), which are the minimum qualifications for listing in the National Register. Additional documentation may be needed further in the process, but typically initial evaluations allow the review process to proceed expeditiously.

☒ The property is considered **Eligible** at this time because it is already listed in the National Register ***or***
- is at least 50 years old ***and*** retains its historic integrity (minimal alterations to key features)
- has potential significance (architectural or historical)

☐ The property is considered **Not Eligible** at this time because it:
- is less than 50 years old ***or*** is 50 years or older but there have been major alterations to key features
- is known to have no significance, based on National Register-level documentation and evaluation

SECTION 3: APPLICANT DETERMINATION OF EFFECT - *Check the appropriate box*

☐ The project has **NO EFFECT** on a property that is eligible or already listed in the National Register, either because there is no eligible property involved or the eligible property will not be impacted physically or visually.

☐ The project will have a minor impact on a property that is eligible or already listed in the National Register, and therefore there is **NO ADVERSE EFFECT**. Minor impacts include replacement of some, but not all, siding, doors, or windows, etc.

☒ The project will have a major impact on a property that is eligible or already listed in the National Register, therefore there is an **ADVERSE EFFECT**. Major impacts include full or partial demolition, complete residing, full window replacement, etc.

STATE HISTORIC PRESERVATION OFFICE COMMENTS – *Official use only*

Eligibility:
☐ Concur with the eligibility determination above.
☐ Do not concur with the eligibility determination above.

Effect:
☐ Concur with the effect determination above.
☐ Do not concur with the effect determination above.

RECEIVED STAMP

RLS	
ILS	

Signed: _____ Date: _____

CONTACT INFORMATION STAMP

Comments:

OREGON SHPO CLEARANCE FORM

Do not use this form for ODOT or Federal Highway projects or to record archaeological sites

SECTION 4: PREVIOUS ALTERATIONS TO THE BUILDING OR STRUCTURE

Only complete this section for buildings that are 50 years old or older. Describe any alterations that have already occurred to the building, such as material replacement, including siding, windows, and doors; any additions, including garages; and any removal or addition of architectural details, such as brackets, columns, and trim. Provide estimated dates for the work. Attach additional pages as necessary.

See attached College Hill Reservoir Intensive Level Survey (Perrin 2020)

SECTION 5: PROJECT DESCRIPTION

Describe what work is proposed, including what materials will be used and how they will be installed. Specifically identify what historic materials will be retained, restored, replaced, or covered. Include drawings, photos, cut sheets (product descriptions), additional sheets, and other materials as necessary. For vacant lots, please describe the intended use.

See attached College Hill Reservoir Intensive Level Survey (Perrin 2020)

SECTION 6: FUNDING SOURCE

☐ ARRA ☐ FCC ☐ FERC ☐ HUD ☐ ODOE ☐ USDARD ☐ USFS ☐ HPF
☐ Other: _____

SECTION 7: AGENCY CONTACT INFORMATION

Name of Organization Submitting the Project: Eugene Water and Electric Board

Project Contact Name and Title: Laura Farthing, Senior Engineer

Street Address, City, Zip: 4200 Roosevelt Blvd, Eugene, OR 97440-2148

Phone: 541-685-7464 | Email: Laura.Farthing@EWEB.ORG

Date of Submission: May 1, 2020 (completed by Natalie K. Perrin, MS, Historical Research Associates, Inc.)

SECTION 8: ATTACHMENTS

REQUIRED	☒ 3 – 4, color, 4 x 5 photographs of the subject property, digital or print. One photo is sufficient for vacant property
AS NEEDED *Contact SHPO staff with questions*	☒ Project area map, for projects including more than one tax lot. (Required for HPF-funded projects). See instructions.
	☒ Additional drawings, reports, or other relevant materials
	☒ Continuation sheet for sections 4 or 5, or additional context to determine National Register Eligibility.

SHPO Mailing Address: Review and Compliance, Oregon SHPO, 725 Summer St. NE, Suite C, Salem, OR 97301
Documents meeting all aspects of the digital submission policy may be submitted by email to ORSHPO.Clearance@oregon.gov

Appendix B: Stevens & Koon 1939, Design Drawings

COLLEGE HILL RESERVOIR NUMBER TWO

MUNICIPAL WATER WORKS

Eugene, Oregon

EUGENE WATER BOARD

P.W. Brown, President

L.D. Pierce — W.R. Robertson

Orlando John Hollis — A.L. Williamson

J.W. McArthur, General Supt.-Secretary

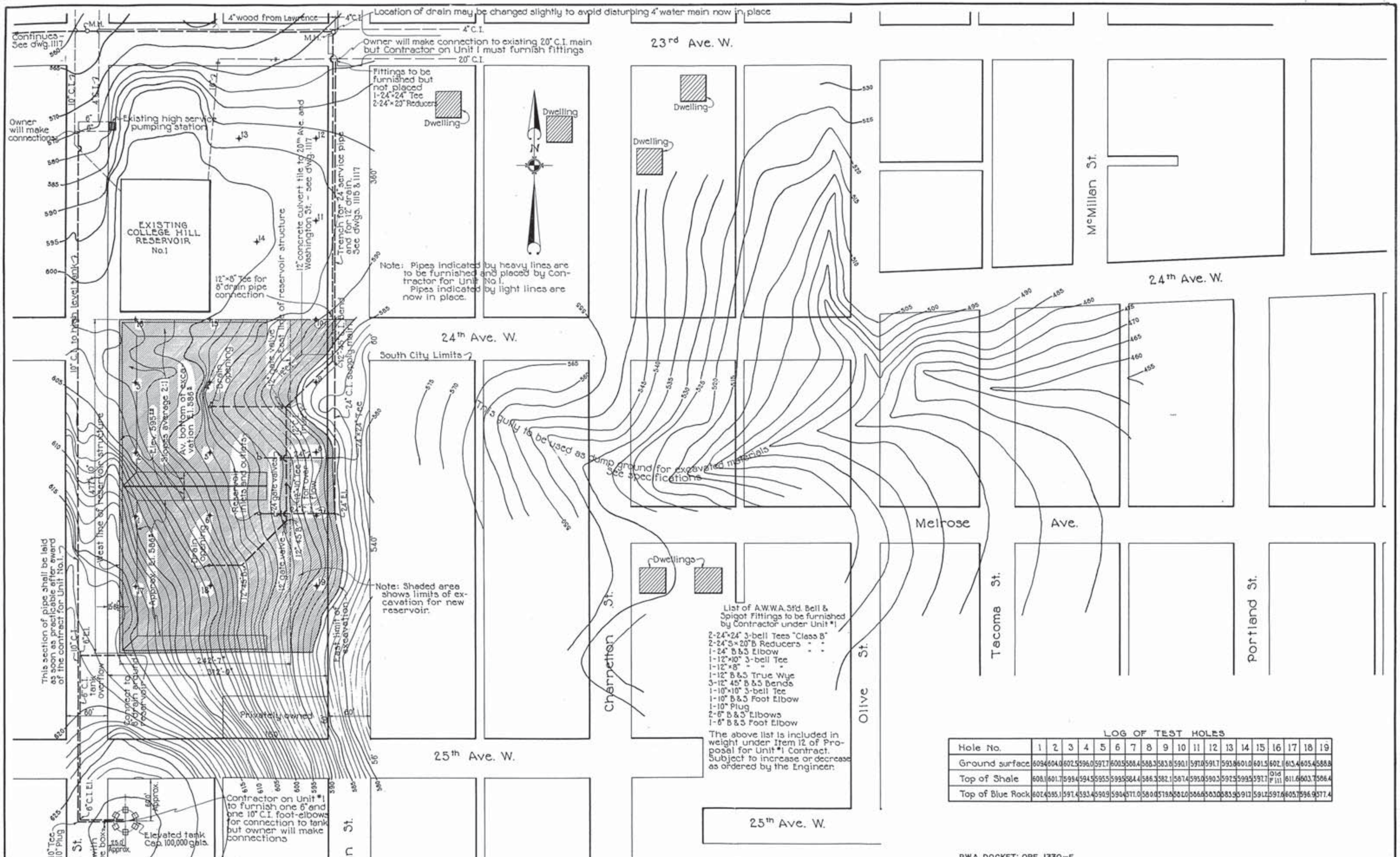
STEVENS & KOON

Consulting Engineers

PORTLAND, OREGON

1939

COVERED CONCRETE RESERVOIR IN TWO UNITS WITH TOTAL CAPACITY OF FIFTEEN MILLION GALLONS



LOG OF TEST HOLES

Hole No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Ground surface	609.4	604.0	602.5	596.0	597.7	600.5	588.4	588.3	583.8	590.1	597.0	591.7	593.8	601.0	601.5	602.1	613.4	605.4	588.8
Top of Shale	608.1	601.7	599.4	594.5	595.5	599.5	584.4	586.3	582.1	587.4	595.0	590.3	592.5	599.5	597.7	Old Fill	611.6	603.7	586.4
Top of Blue Rock	602.4	595.1	597.4	593.4	590.9	590.4	577.0	580.0	579.8	582.0	586.6	583.0	583.9	591.3	591.2	597.6	605.7	596.9	577.4

P.W.A DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2

EUGENE – OREGON

TOPOGRAPHY AT SITE

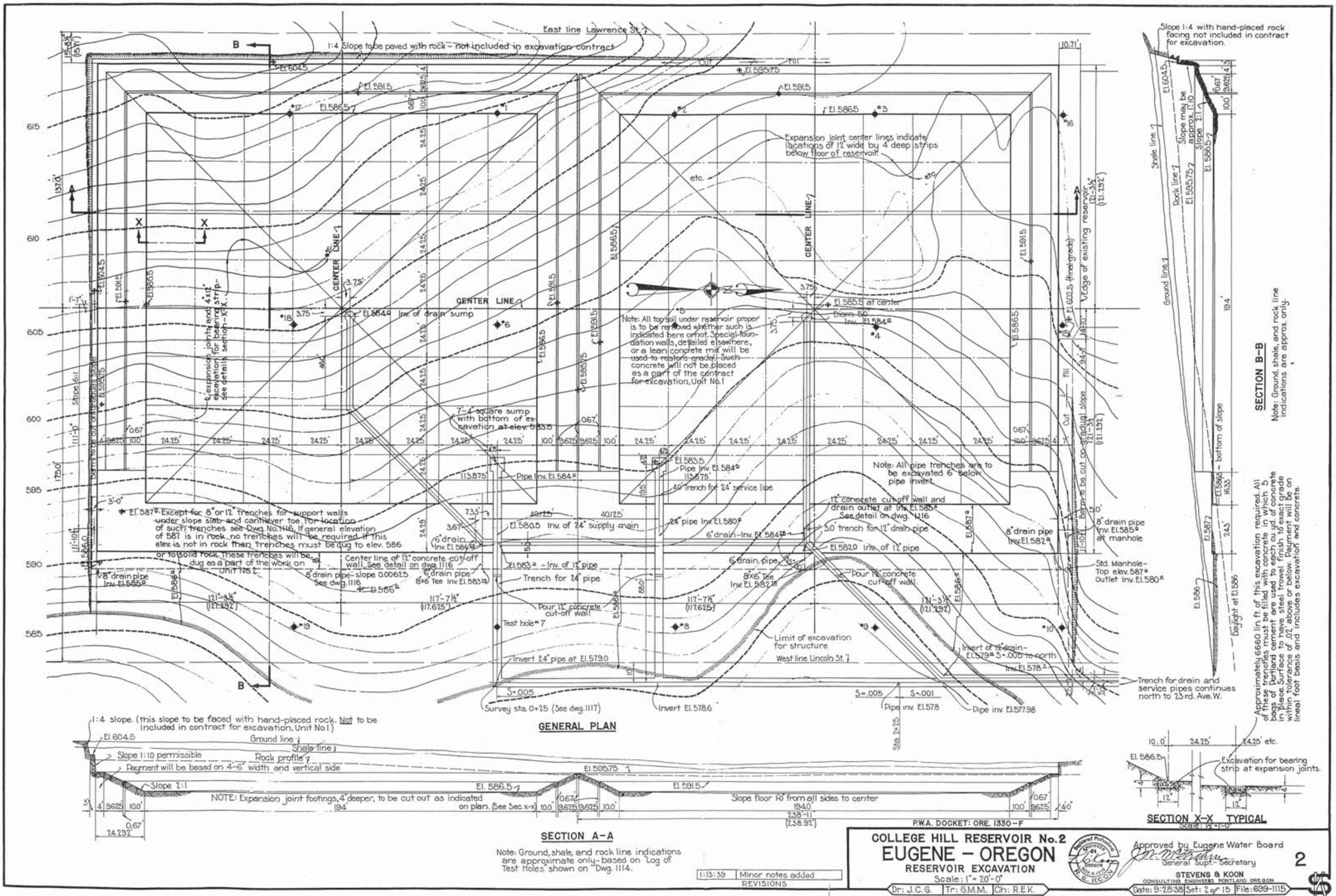
Scale: 1" = 60'-0"

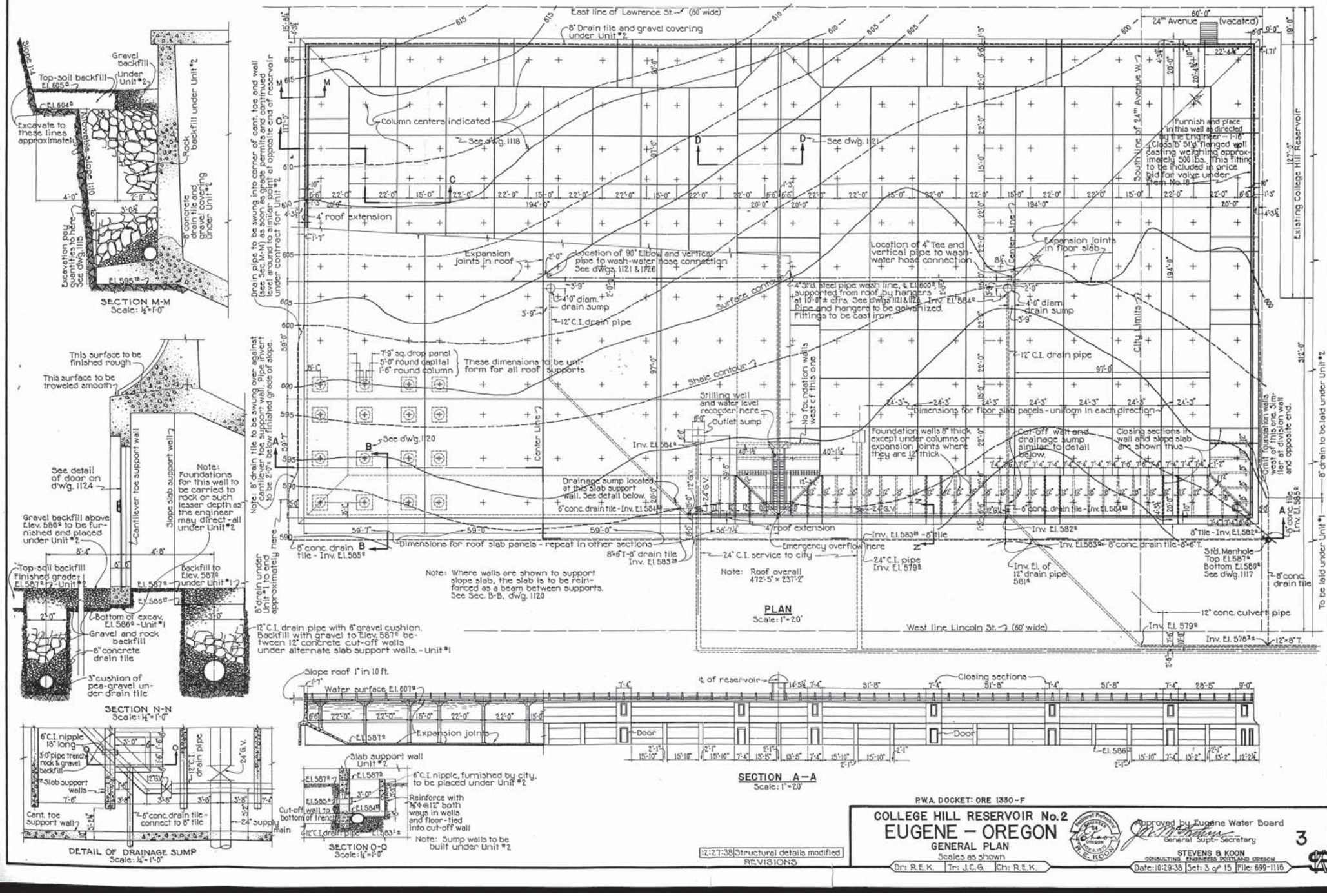
Approved by Eugene Water Board
General Supt.-Secretary

STEVENS & KOON
CONSULTING ENGINEERS, PORTLAND, OREGON

Dr: J.C.A. | Tr: J.C.G. | Ch: R.E.K. | Date: 7-20-38 | Set: 1 of 15 | File: 699-1114

1


East line Lawrence St.
1:4 Slope to be paved with rock - not included in excavation contract
B
El. 604.5
El. 591.5
El. 595.75
El. 586.5
Expansion joint center lines indicate locations of 12" wide by 4" deep strips below floor of reservoir.
etc.
CENTER LINE
3.75'
El. 584.0 Inv. of drain sump
El. 585.5 at center
Diam. 5.0' Inv. El. 584.0
Note: All top soil under reservoir proper is to be removed whether such is indicated here or not. Special foundation walls, detailed elsewhere, or a lean concrete mix will be used to restore grade. Such concrete will not be placed as a part of the contract for excavation, Unit No. 1
℄ expansion joints and 4'x12" excavation for bearing strip - see details section-X-X.
7'-4" square sump with bottom of excavation at elev. 583.5
Edge of existing reservoir
El. 602.5 (final grade)
24.25'
El. 587.0 - Except for 8" or 12" trenches for support walls under slope slab and cantilever toe. For location of such trenches see Dwg. No. 1116. If general elevation of 587 is in rock no trenches will be required. If this elev. is not in rock then trenches must be dug to elev. 586 or to solid rock. These trenches will be dug as a part of the work on Unit No. 1.
Center line of 12" concrete cut-off wall. See detail on dwg. 1116
8" drain pipe - slope 0.00625 See dwg. 1116
6" drain pipe 8x6 Tee Inv. El. 583.15
El. 580.5 Inv. of 24" supply main
El. 583.0 - Inv. of 12" pipe
Trench for 24" pipe
Pour 12" concrete cut-off wall
Test hole #7
Pipe Inv. El. 584.0
4.0' Trench for 24" service line
24" pipe Inv. El. 580.0
6" drain - Inv. El. 584.15
12" concrete cut-off wall and drain outlet at Inv. El. 585.0 See detail on dwg. 1116
5.0' trench for 12" drain pipe
El. 582.0 Inv. of 12" pipe
Pour 12" concrete cut-off wall.
Note: All pipe trenches are to be excavated 6" below pipe invert.
8" drain pipe Inv. El. 582.0
8" drain pipe Inv. El. 585.0 at manhole
Std. Manhole - Top elev. 587.0 Outlet Inv. El. 580.0
Limit of excavation for structure
West line Lincoln St.
Invert of 12" drain - El. 579.0 S=.005 to north
Inv. El. 578
Invert 24" pipe at El. 579.0
S=.005
S=.001
Survey sta. 0+25 (See dwg. 1117)
Invert El. 578.6
Pipe inv. El. 578
Pipe inv. El. 577.98
Trench for drain and service pipes continues north to 23rd Ave. W.
GENERAL PLAN
Slope 1:4 with hand-placed rock facing not included in contract for excavation.
Shale line
Rock line
Ground line
Slope may be approx. 1:1.0
Slope 2:1
Bottom of slope
Daylight at El. 586
SECTION B-B
Note: Ground, shale, and rock line indications are approx. only.
Approximately 6660 lin. ft. of this excavation required. All of these trenches must be filled with concrete in which 5 bags of Portland cement are used to each cu. yd. of concrete in place. Surface to have steel trowel finish to exact grade within tolerance of .02' above or below. Payment will be on lineal foot basis and includes excavation and concrete.
1:4 slope. (this slope to be faced with hand-placed rock. Not to be included in contract for excavation, Unit No. 1)
Ground line
Shale line
Rock profile
Slope 1:10 permissible
Payment will be based on 4'-6" width and vertical side
Slope 2:1
NOTE: Expansion joint footings, 4' deeper, to be cut out as indicated on plan. (See Sec. x-x)
Slope floor 1.0' from all sides to center
238'-11" (238.92')
SECTION A-A
Note: Ground, shale, and rock line indications are approximate only - based on "Log of Test Holes" shown on Dwg. 1114.
Excavation for bearing strip at expansion joints.
SECTION X-X TYPICAL
1:13:39 Minor notes added
REVISIONS
P.W.A. DOCKET: ORE. 1330-F
COLLEGE HILL RESERVOIR No. 2
EUGENE - OREGON
RESERVOIR EXCAVATION
Scale: 1" = 20'-0"
Dr.: J.C.G. Tr.: G.M.M. Ch.: R.E.K.
Approved by Eugene Water Board
General Supt.-Secretary
STEVENS & KOON
CONSULTING ENGINEERS PORTLAND OREGON
Date: 9-28-38 Set: 2 of 15 File: 699-1115
2



P.W.A. DOCKET: ORE 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE – OREGON
GENERAL PLAN

Scales as shown

Approved by Eugene Water Board
General Supt.-Secretary

STEVENS & KOON
CONSULTING ENGINEERS PORTLAND OREGON

Dr: R.E.K.	Tr: J.C.G.	Ch: R.E.K.	Date: 10:29:38	Sht: 3 of 15	File: 699-1116

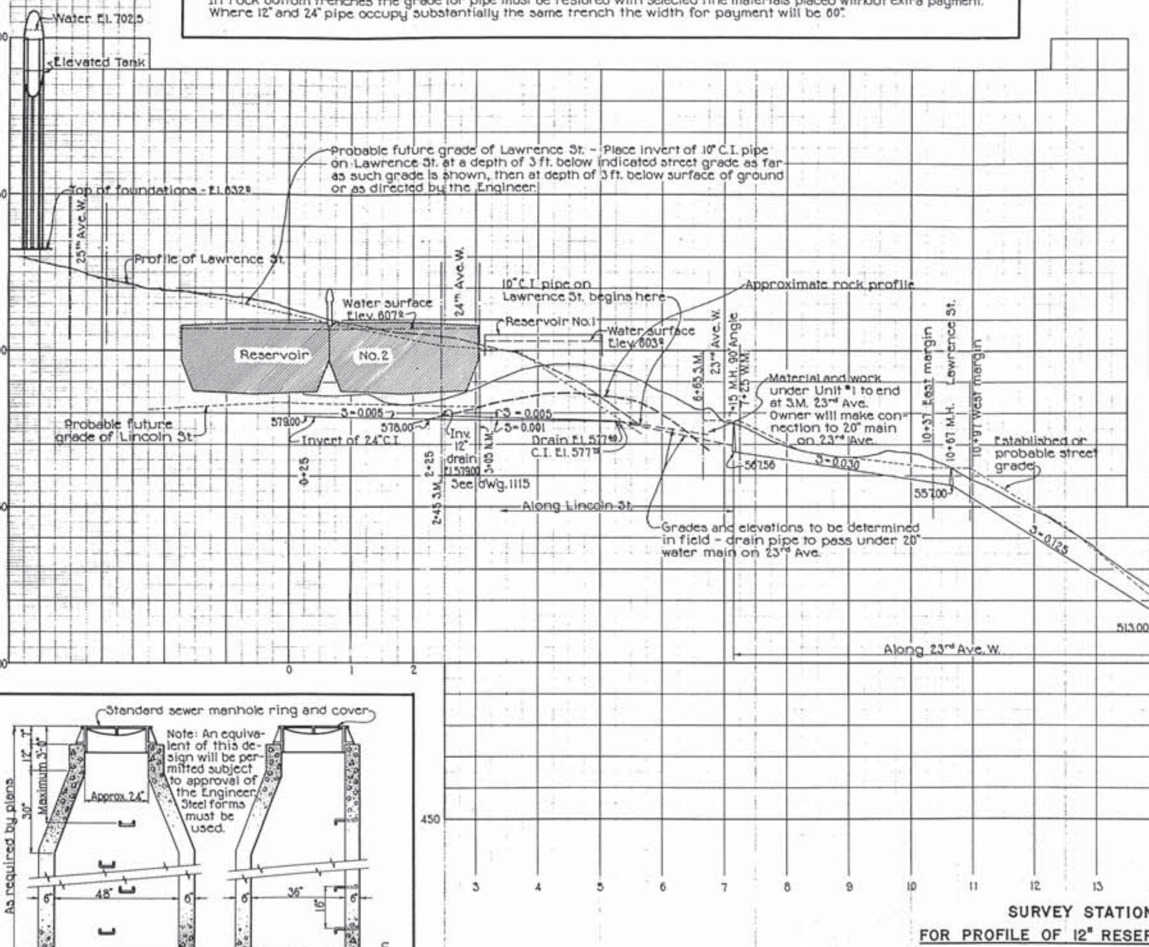
12:27:38 Structural details modified
REVISIONS

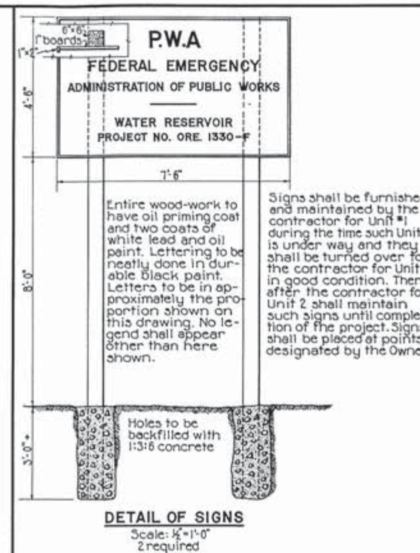
3

SCHEDULE OF PIPE TRENCH MEASUREMENTS
on which payments will be based

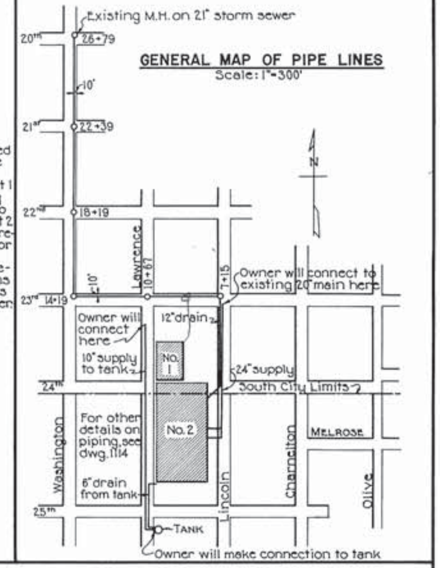
For 24" cast iron pipe – trench width 48" – trench depth to invert for earth and 6" lower for rock
" 12" " " " – " " 36" – " " " " " " " " " " "
" 12" concrete " – " " 30" – " " " " " " " " " " " , no extra for manholes
" 10" cast iron " – " " 30" – " " " " " " " " " " "
" 8" drain " – " " 24" – " " " " " " " " " " "
" 6" " " – " " 24" – " " " " " " " " " " "

In rock bottom trenches the grade for pipe must be restored with selected fine materials placed without extra payment.
Where 12" and 24" pipe occupy substantially the same trench the width for payment will be 60".

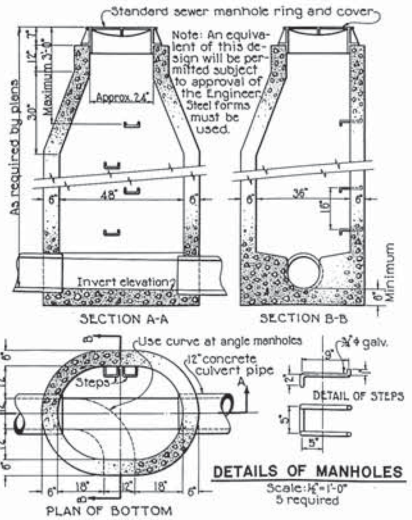




DETAIL OF SIGNS
Scale: ½"=1'-0"
2 required



GENERAL MAP OF PIPE LINES
Scale: 1"=300'



DETAILS OF MANHOLES
Scale: ½"=1'-0"
5 required

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE – OREGON
DETAILS FOR PIPE LINES
Scales as shown

Dr: R.E.K. | Tr: J.C.G. | Ch: R.E.K.

Registered Professional Engineer R. E. Koon, Oregon

Approved by Eugene Water Board
[signature]
General Supt.–Secretary

STEVENS & KOON
CONSULTING ENGINEERS PORTLAND OREGON

Date: 10-29-38 | Set: 4 of 15 | File: 899-1117

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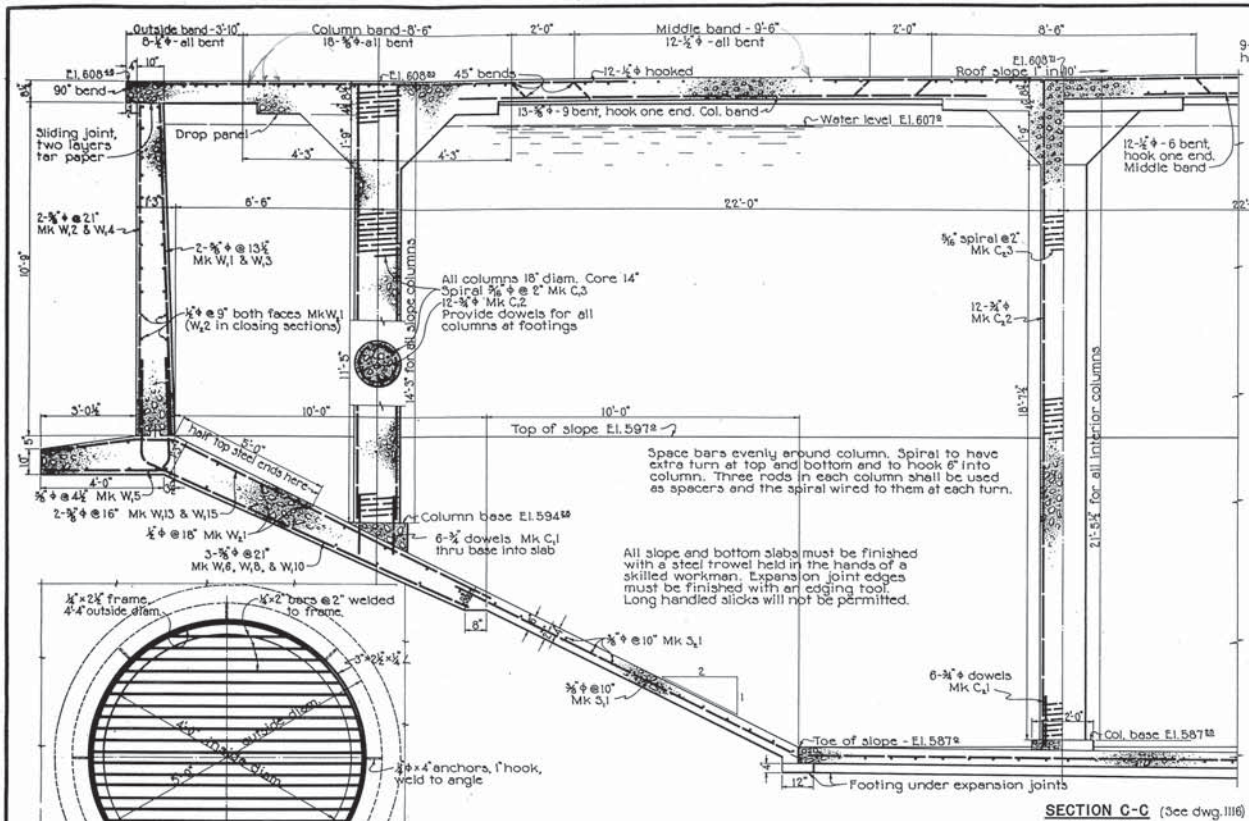
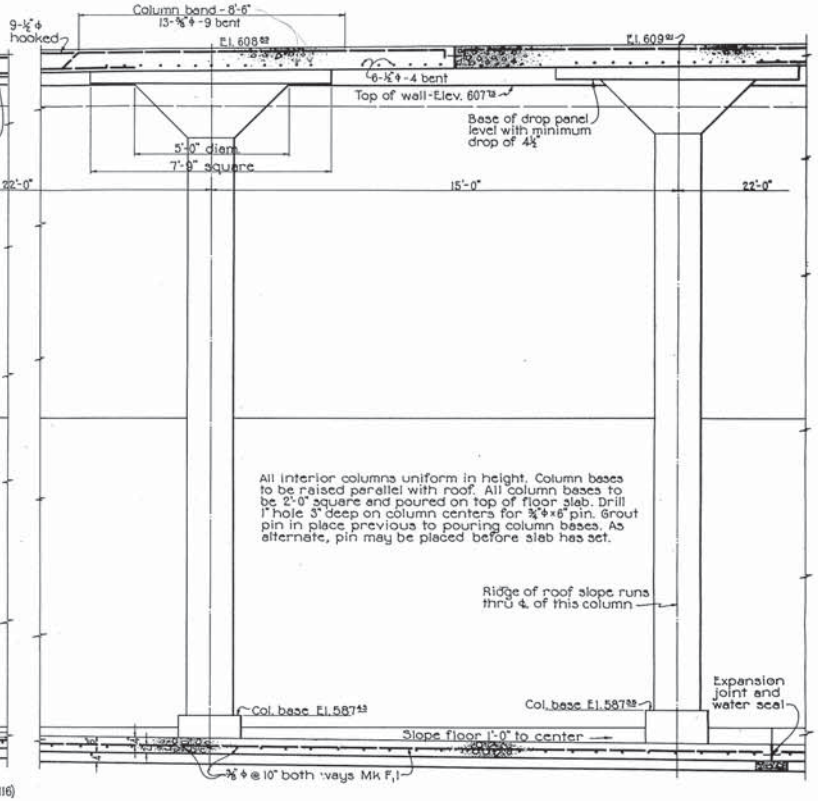
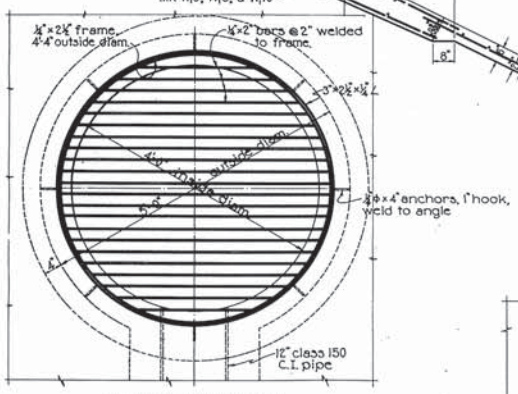
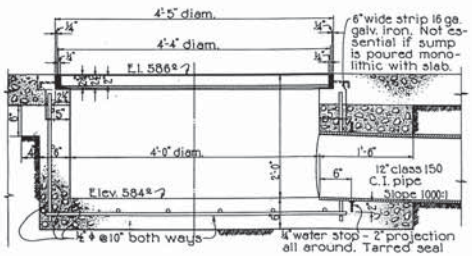


SECTION C-C (See dwg. 1116)
Scale: ½"=1'-0"

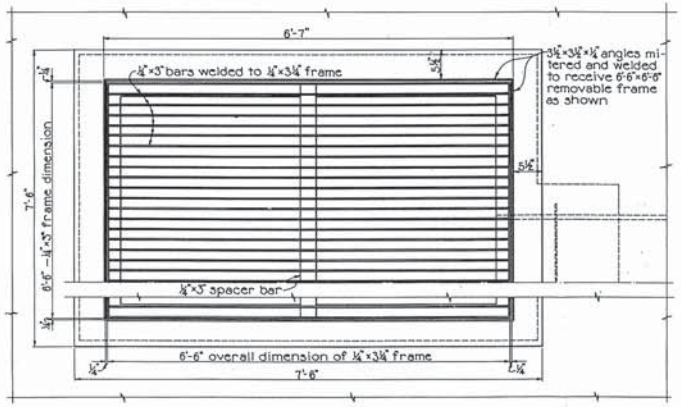




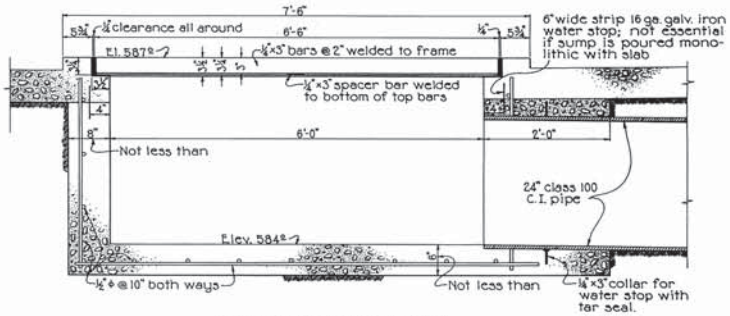
PLAN OF DRAIN SUMP
Scale: 1"=1'-0"



SECTION THRU DRAIN SUMP
Scale: 1"=1'-0"



PLAN OF OUTLET SUMP
Scale: 1"=1'-0"



SECTION THRU OUTLET SUMP
Scale: 1"=1'-0"

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No.2
EUGENE - OREGON
GENERAL SECTION AND SUMP DETAILS
Scales as shown

Approved by Eugene Water Board
J. N. Whitlow
General Supt.-Secretary

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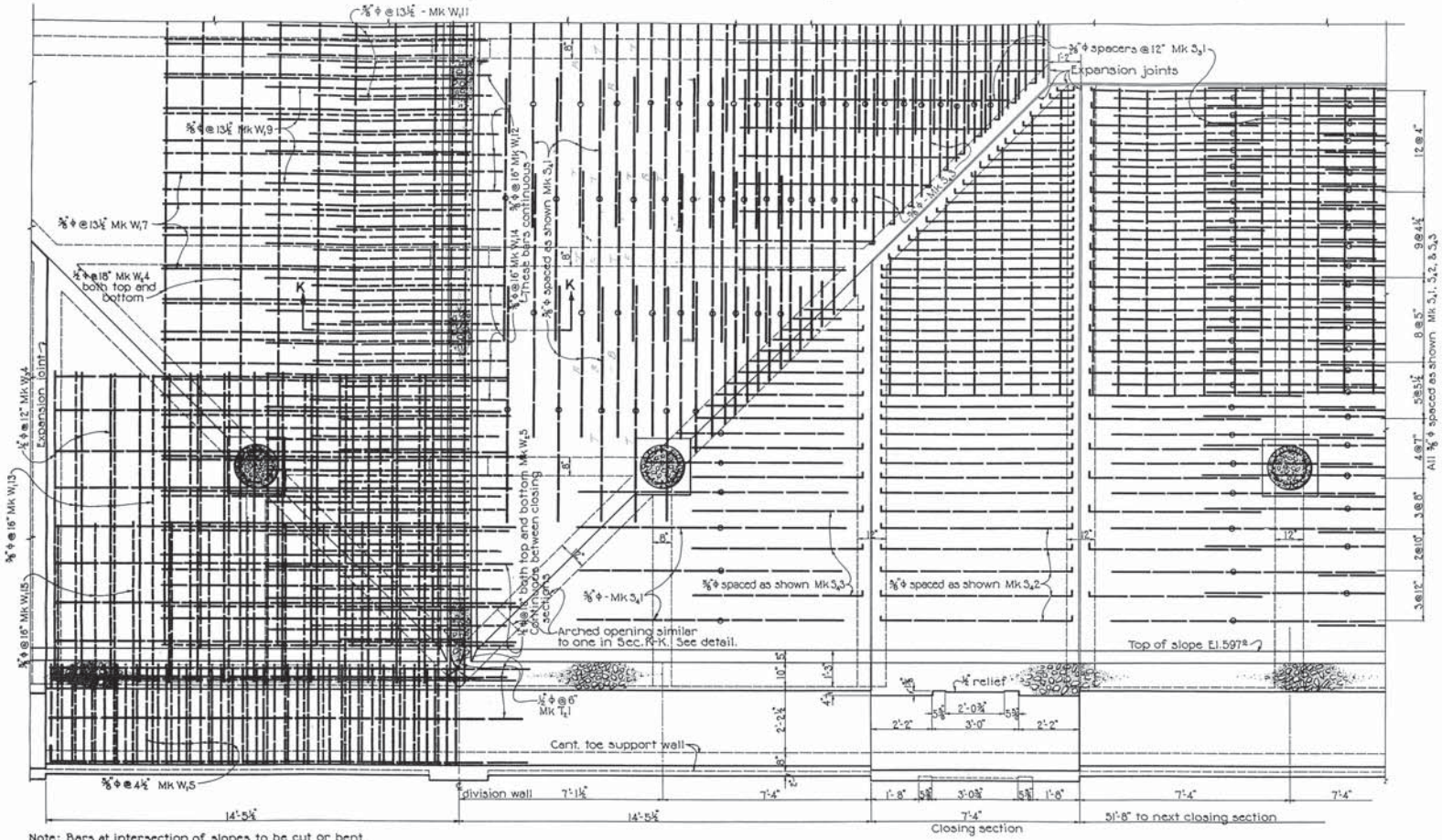
Dr: J.B.C. | Tr: J.C.G. | Ch: F.T.K.

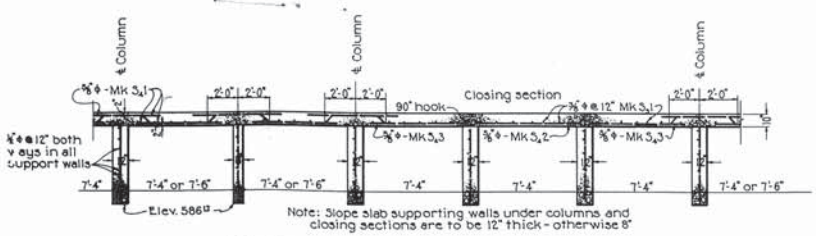
STEVENS & KOON
CONSULTING ENGINEERS PORTLAND, OREGON

Date: 10:10:38 | Set: 5 of 15 | File: 699-1118



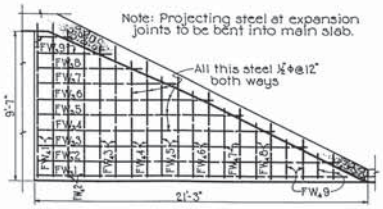
Note: Bars at intersection of slopes to be cut or bent, in field, to conform to slope or joint as shown. The portion right of the division wall shows slope slab steel over support walls and is to be duplicated on opposite side. The portion left of the division wall shows cantilever wall steel continued down into slope slab and is to be duplicated on opposite side.

TYPICAL STEEL PLACEMENT OVER FOUNDATION WALLS
Scale: ½" = 1'-0"

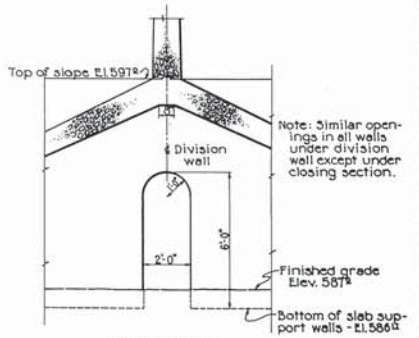


Note: Slope slab supporting walls under columns and closing sections are to be 12" thick - otherwise 8"

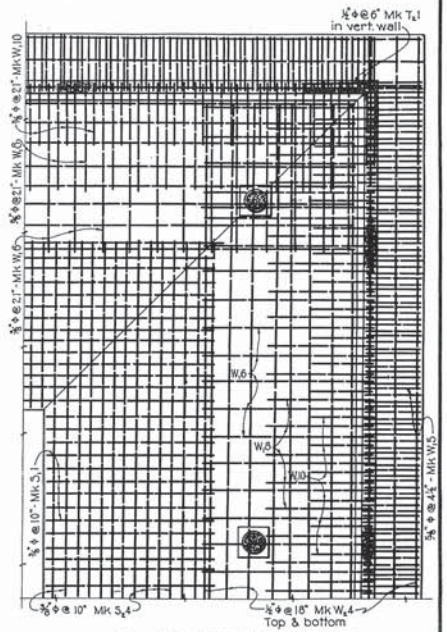
TYPICAL SECTION - SLAB SUPPORT WALLS
Scale: ½" = 1'-0"
Looking perpendicular to slope



STEEL DETAIL - SLAB SUPPORT WALLS
Scale: ½" = 1'-0"



SECTION K-K
Scale: ⅜" = 1'-0"



TYPICAL STEEL PLACEMENT - WEST CORNERS
Scale: ½" = 1'-0"

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE - OREGON
TYPICAL STEEL PLACEMENT DETAILS
Scales as shown

Approved by Eugene Water Board
General Supt.-Secretary

STEVENS & KOON
CONSULTING ENGINEERS PORTLAND, OREGON

Dr: J.B.C. | Tr: J.B.C. | Ch: F.T.K | Date: 10:10:38 | Sht: 6 of 15 | File: 699-1119

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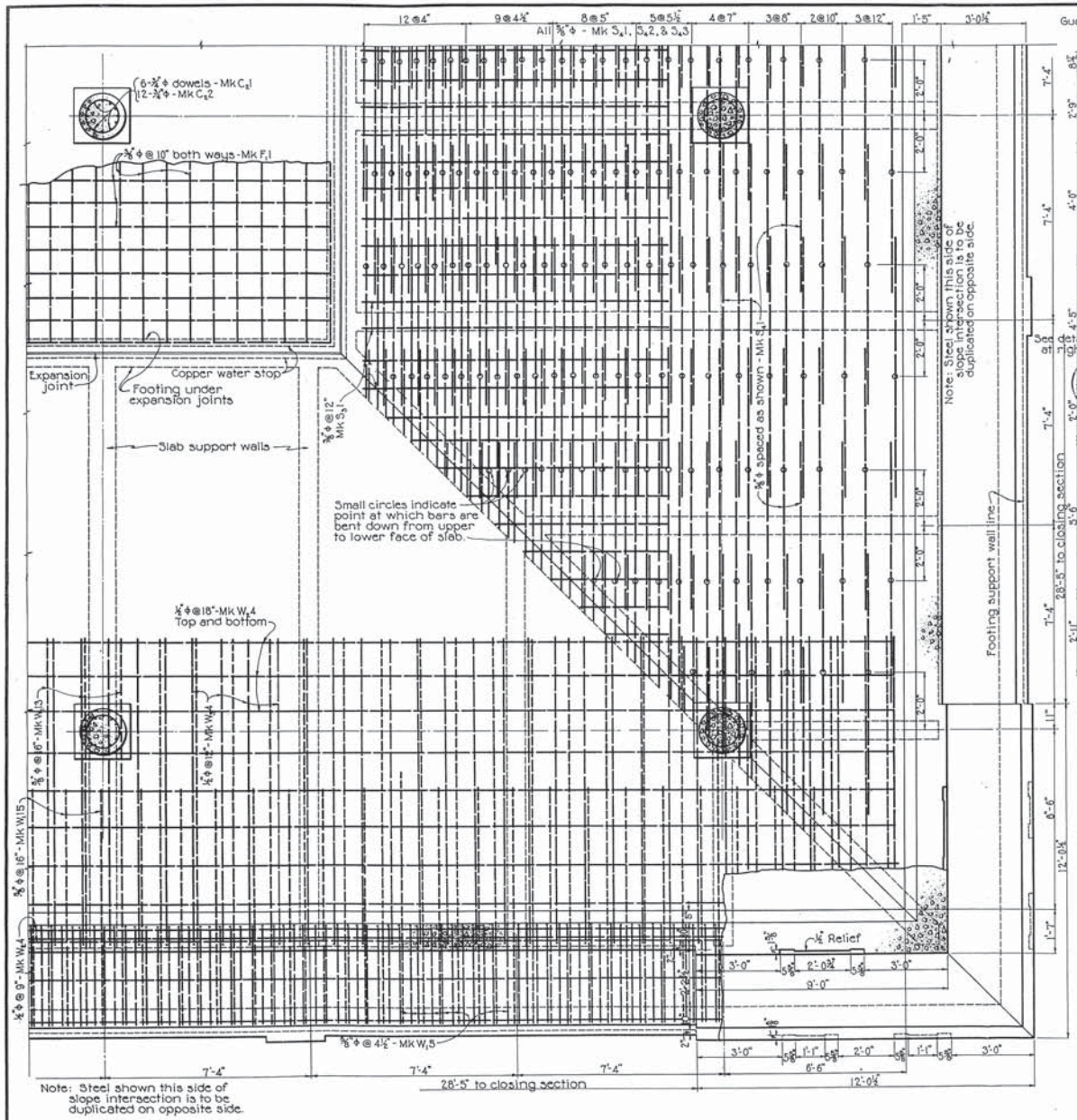
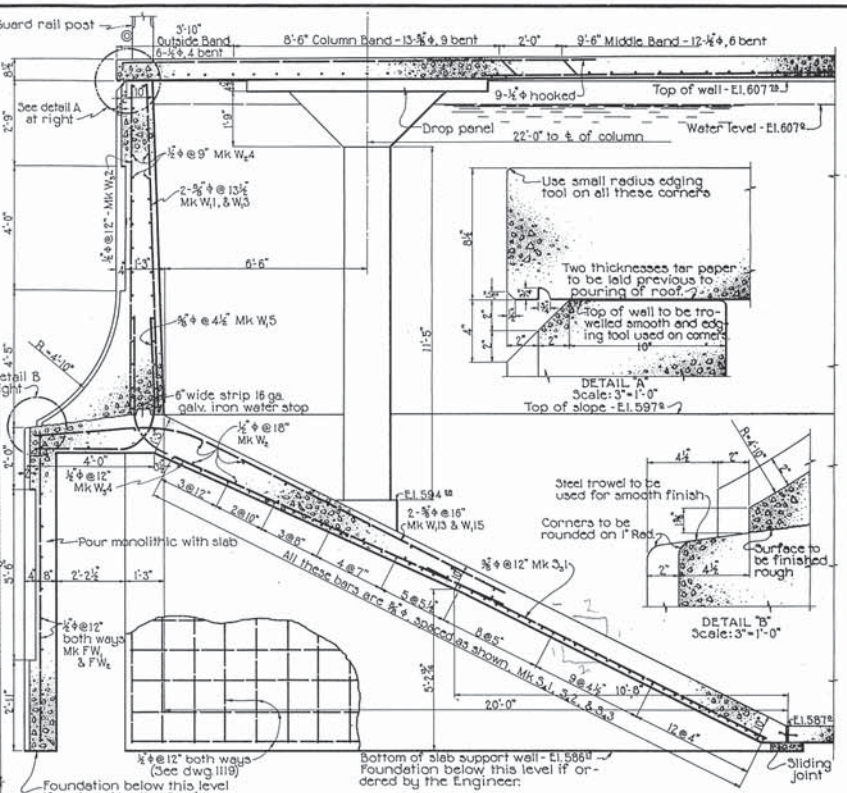
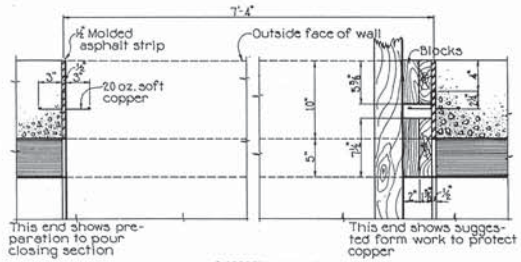


TYPICAL STEEL PLACEMENT – N.E. & S.E. CORNERS
Scale: ½"=1'-0"





CONSTRUCTION DETAIL AT CLOSING SECTION
Scale: 1½"=1'-0"

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE – OREGON
TYPICAL STEEL PLACEMENT DETAILS No. 2
Scales as shown

Approved by Eugene Water Board
General Supt.-Secretary

STEVENS & KOON CONSULTING ENGINEERS PORTLAND, OREGON

Dr: J.B.C. | Tr: J.B.C.-J.C.G. | Ch: F. T. K. | Date: 10-21-38 | Set: 7 of 15 | File: 699-1120

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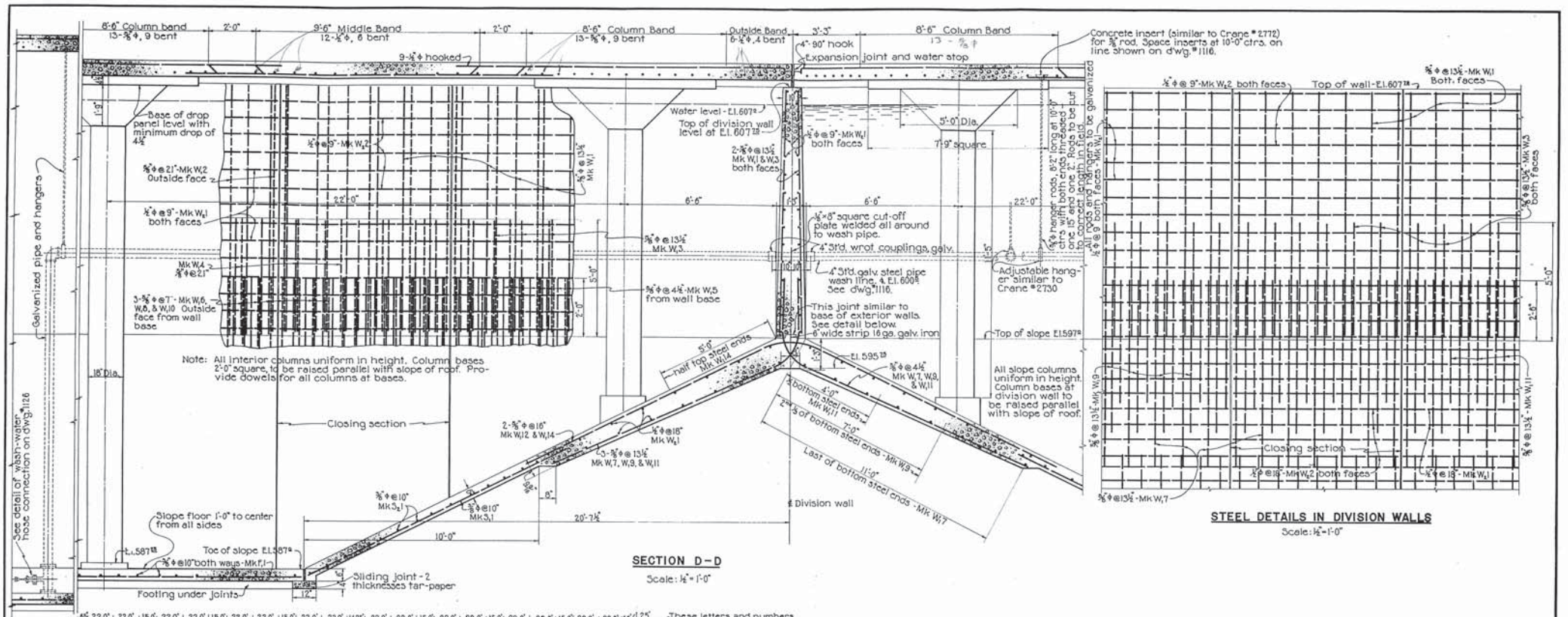
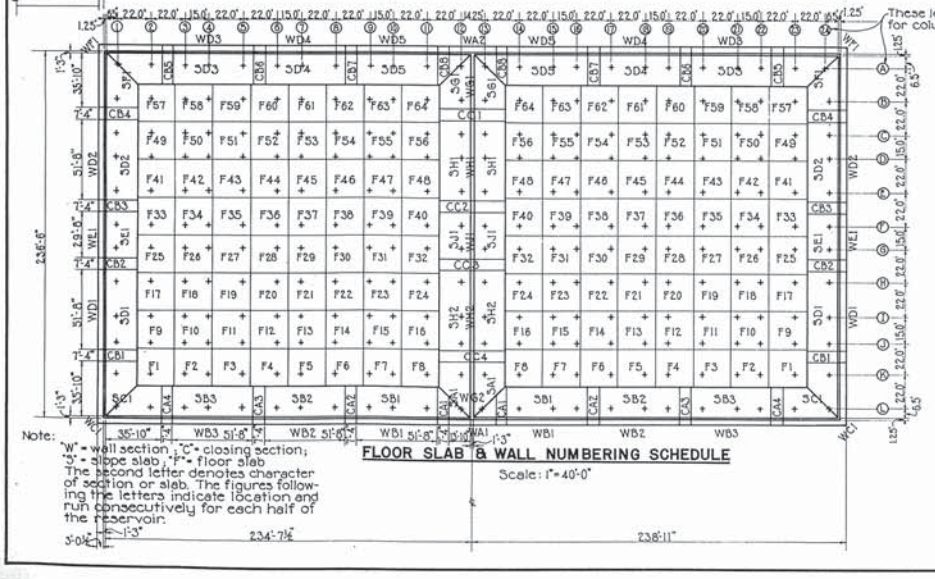


SECTION D-D

Scale: ½" = 1'-0"

STEEL DETAILS IN DIVISION WALLS

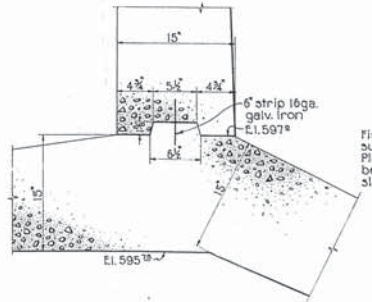
Scale: ½" = 1'-0"



Note:
"W" - wall section; "C" - closing section; "S" - slope slab; "F" - floor slab
The second letter denotes character of section or slab. The figures following the letters indicate location and run consecutively for each half of the reservoir.

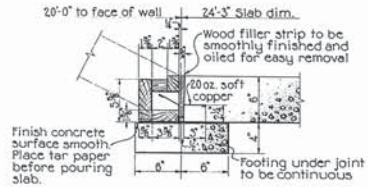
FLOOR SLAB & WALL NUMBERING SCHEDULE

Scale: 1" = 40'-0"



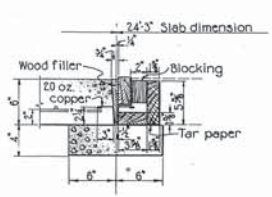
WATER STOP DETAIL - BASE OF EXTERIOR WALLS

Scale: 1½" = 1'-0"



DETAIL OF JOINT AT TOE OF SLOPE

Scale: 1½" = 1'-0"



TYPICAL FLOOR SLAB JOINT

Scale: 1½" = 1'-0"

Note: Slab forms shown above are designed to protect copper until adjoining slab is poured. The form as shown, or one equally satisfactory, must be placed and so kept until ready to pour adjacent slab. Wood filler strips in floor joints are not to be pulled until completion of roof. Joints are then to be poured with hot mastic.

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2

EUGENE - OREGON

NUMBERING SCHEDULE & WALL ELEVATIONS

Scales as shown

Approved by Eugene Water Board

General Supt.-Secretary

STEVENS & KOON CONSULTING ENGINEERS PORTLAND, OREGON

Dr: J.U.C. | Tr: O.W.P.-J.C.G. | Ch: F.T.K. | Date: 10-21-38 | Sct: 8 of 15 | File: 699-1121

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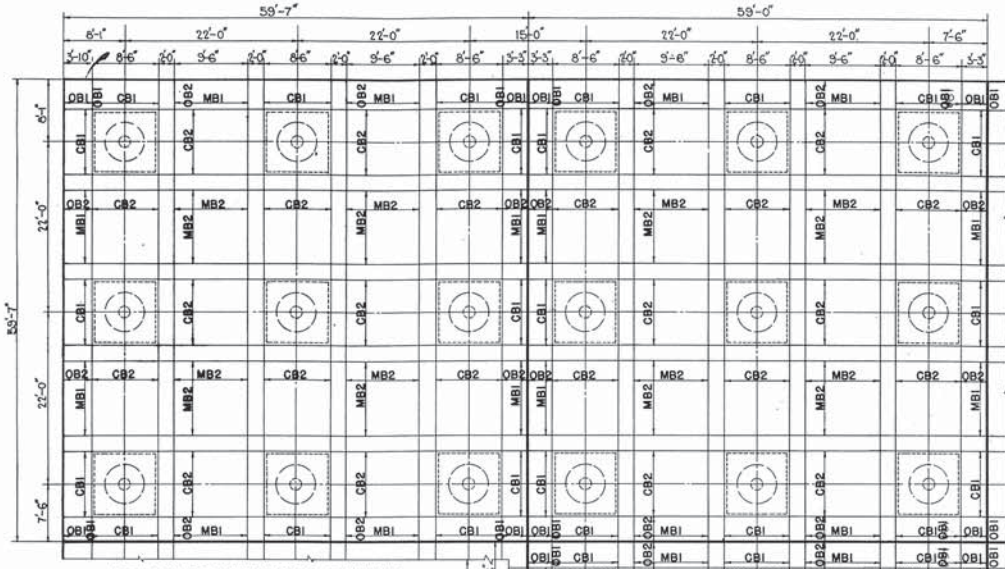
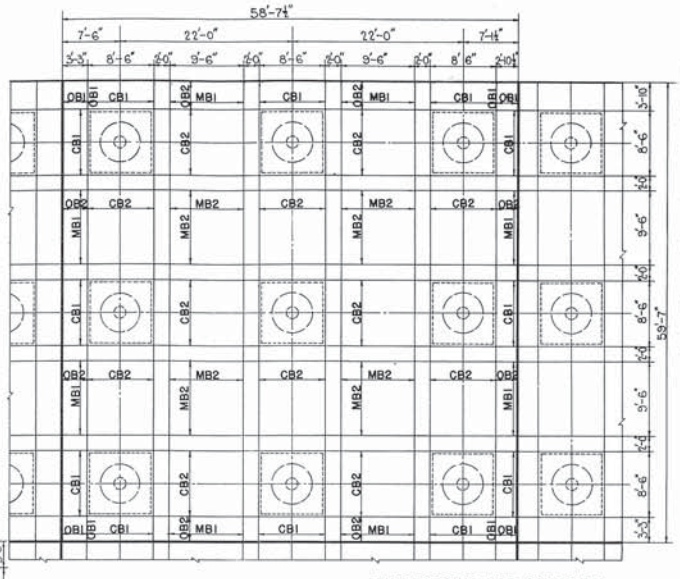
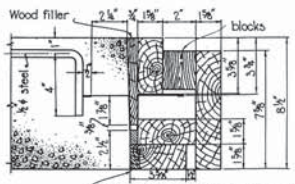




Details not shown shall be in accordance with the American Concrete Institute 1928 proceedings.
Bars in each band shall be spaced evenly across the band with the first and last bar one half space from band edge.
All steel shall be placed and supported at the proper depth and fastened so securely that it cannot be displaced while the concrete is being poured and tamped.
All flat slab roof panels are 8½" thick and drop panels have a total depth of 13 with slab, drop panel, and finish all poured in one course to form a monolithic roof panel.
Band bars to be detailed to conform as nearly as possible with the typical panel bending details shown.
The reinforcement shall be detailed and placed to provide designed steel at all critical sections.
Lapped splices shall not be permitted at or near the regions of the critical sections.
All bent up bars shall have 4'-90° hook at discontinuous edges.
All bars on each side of a section of critical moment either positive or negative shall be carried to points at least 20 diameters beyond the band width.

ROOF SLAB REINFORCING SCHEDULE

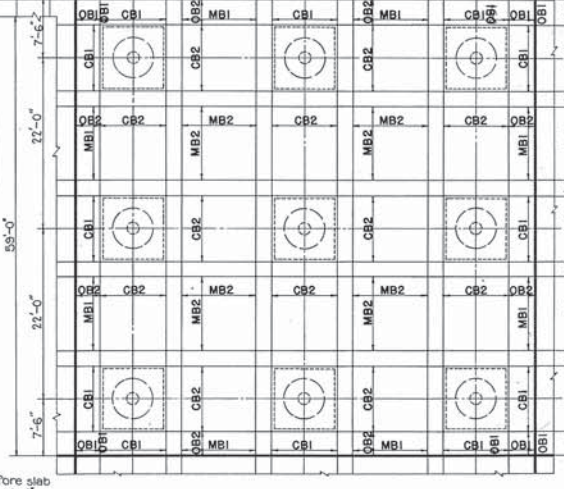
Mark	Bars	Band Width	Bar Shape	Length	No Pc's	Total Length
MB1	9-½" ϕ			14'-10"	2304	34176
MB2	6-½" ϕ	9'-6"		37'-6"	1536	57600
MB2	6-½" ϕ	9'-6"		15'-6"	1536	23808
CB1	9-⅝" ϕ			14'-10"	3456	51264
CB2	9-⅝" ϕ	8'-6"		37'-6"	3456	129600
CB2	4-⅝" ϕ	8'-6"		15'-6"	1536	23808
OB1	4-½" ϕ			14'-10"	1024	15189
OB2	4-½" ϕ			37'-6"	1024	38400
OB2	2-½" ϕ			15'-6"	512	7936
6-½" at inflection corners around columns						18432
⅜" ϕ Spacer steel in roof - assumed uniformly at 24" ctrs.						111392



Attach precast asphalt strip below copper strip before slab is poured. Use thin gage galv. nails to project into concrete 1"

Note: Slab forms shown detailed above are designed to protect copper until adjoining slab is poured. The form as shown, or one equally satisfactory, must be placed and so kept until ready to pour adjacent slab. Wood filler strip is not to be pulled until completion of the roof. Joints are then to be poured with hot mastic.

TYPICAL ROOF SLAB JOINT
Scale: 3"=1'



ARRANGEMENT OF BANDS IN ROOF SLAB
Scale: 1/16"=1'

REINFORCING BAR SCHEDULE

Dwg No.	Location	Size	Bending	No. Pc's	Length	Dwg No.	Location	Size	Bending	No. Pc's	Length
F1 1	F	⅜ ϕ		7424	23'-8"	FW1.6	WD1 Foundation wall - Horiz	½ ϕ		12	7'-6"
S1 1	CB, SD, SE, SF, SG, CC, SH, SJ	⅜ ϕ		1360	12'-0"	FW1.7	WD1 " Vert.	½ ϕ		16	6'-6"
S2 1	SD & SH	⅜ ϕ		420	26'-3"	FW1.8	WD1 " "	½ ϕ		24	3'-6"
S1 2	CB, CC	⅜ ϕ		360	6'-5"	FW2 1	Slab support walls - Horiz	½ ϕ		70	21'-0"
S1 3	SE, SJ	⅜ ϕ		60	25'-0"	FW2 2	" "	½ ϕ		78	20'-0"
S2 4	SF, SG	⅜ ϕ	Field	90	27'-6"	FW2 3	" "	½ ϕ		66	17'-0"
S2 1	SA, CA, SB, SC	⅜ ϕ		480	12'-0"	FW2 4	" "	½ ϕ		102	15'-6"
S2 1	SA, SB, SC	⅜ ϕ		2570	9'-3"	FW2 5	" "	½ ϕ		78	13'-6"
S2 2	CA	⅜ ϕ		368	7'-8"	FW2 6	" "	½ ϕ		78	11'-6"
S2 3	SA, SB, SC	⅜ ϕ		450	6'-4"	FW2 7	" "	½ ϕ		134	9'-6"
W1 1	Interior face of all walls	⅜ ϕ		1665	10'-6"	FW2 8	" "	½ ϕ		90	7'-6"
W1 2	CB, WD, WE, WF, WA	⅜ ϕ		516	10'-6"	FW2 9	" "	½ ϕ		168	5'-0"
W1 3	Interior face of all walls	⅜ ϕ		1665	5'-0"	FW4 1	" Vert.	½ ϕ		152	10'-3"
W1 4	CB, WD, WE, WF, WA	⅜ ϕ		516	5'-0"	FW4 2	" "	½ ϕ		168	9'-6"
W1 5	Exterior walls & cant. toe	⅜ ϕ		3771	7'-8"	FW4 3	" "	½ ϕ		172	8'-6"
W1 6	CB, WD, WE, WF, WA 2	⅜ ϕ		498	15'-0"	FW4 4	" "	½ ϕ		168	7'-6"
W1 7	CC, WH, WJ, WG	⅜ ϕ		417	15'-0"	FW4 5	" "	½ ϕ		172	6'-6"
W1 8	CB, WD, WE, WF, WA 2	⅜ ϕ		498	11'-0"	FW4 6	" "	½ ϕ		164	5'-6"
W1 9	CC, WH, WJ, WG	⅜ ϕ		417	11'-0"	FW4 7	" "	½ ϕ		136	4'-6"
W1 10	CB, WD, WE, WF, WA 2	⅜ ϕ		498	8'-0"	FW4 8	" "	½ ϕ		136	3'-6"
W1 11	CC, WH, WJ, WG	⅜ ϕ		417	8'-0"	FW4 9	" "	½ ϕ		140	2'-6"
W1 12	Division wall	⅜ ϕ		176	25'-0"	T2 1	Wall corners	½ ϕ		240	8'-0"
W1 13	All exterior walls	⅜ ϕ		1054	16'-0"	C1 1	Dowels - outside columns	¾ ϕ		528	2'-0"
W1 14	Division wall	⅜ ϕ		176	11'-0"	C1 2	Vertical steel "	¾ ϕ		1056	14'-0"
W1 15	All exterior walls	⅜ ϕ		1054	9'-0"	C1 3	Spirals "	⅝ ϕ	Spiral	88	13'-9"
W2 1	SB, SD, SH, WB, WD, WH	½ ϕ		1912	26'-3"	C2 1	Dowels - interior columns	¾ ϕ		1200	1'-6"
W2 2	CA, CB, CC	½ ϕ		1440	6'-9"	C2 2	Vertical steel "	¾ ϕ		2400	2'-4"
W3 3	WE, WJ, SE, SJ	½ ϕ		166	29'-0"	C3 3	Spirals "	⅝ ϕ	Spiral	200	2'-0"
W4 4	WC, WF, WG, SA, SC, SF, SG.	½ ϕ		540	37'-0"	Misc.	Field cuts as required	½ ϕ		ϕ 417	40'-0"
W2 5	WA, SA, SG	½ ϕ		104	28'-4"						
W3 2	WC, CA, WB, WA 1	½ ϕ		540	10'-3"						
W4 6	WC, CA, WB, WA 1	½ ϕ		540	15'-0"						
FW1 1	Foundation wall Vert.	½ ϕ		560	10'-3"						
FW2 1	WB (Foundation wall) Horiz.	½ ϕ		120	26'-3"						
FW1 2	CA, CB " "	½ ϕ		100	7'-0"						
FW2 3	WC " "	½ ϕ		40	40'-0"						
FW1 4	WA 1 " "	½ ϕ		10	28'-6"						
FW1 5	WD1 " "	½ ϕ		6	19'-8"						

ϕ Arbitrary estimate subject to modification in size and quantity.

Size	Length	Wt per ft.	Total Wt.
⅜ ϕ	326843	.38	124200
⅝ s	5410	Spirals 5.80	31378
½ ϕ	334587	.68	227519
⅝ ϕ	360628	1.06	382266
¾ ϕ	68840	1.52	104637
		Total Wt.	870000 lbs.

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE - OREGON
ROOF SLAB DIAGRAM AND STEEL SCHEDULES
Scale - as shown

Approved by Eugene Water Board
General Supt - Secretary

STEVENS & KOON CONSULTING ENGINEERS PORTLAND OREGON

Dr: J.C.G. | Tr: G.M.M. | Ch: F.T.K. | Oct. 10, 1938 | Sht: 9 of 15 | File: 689-1122

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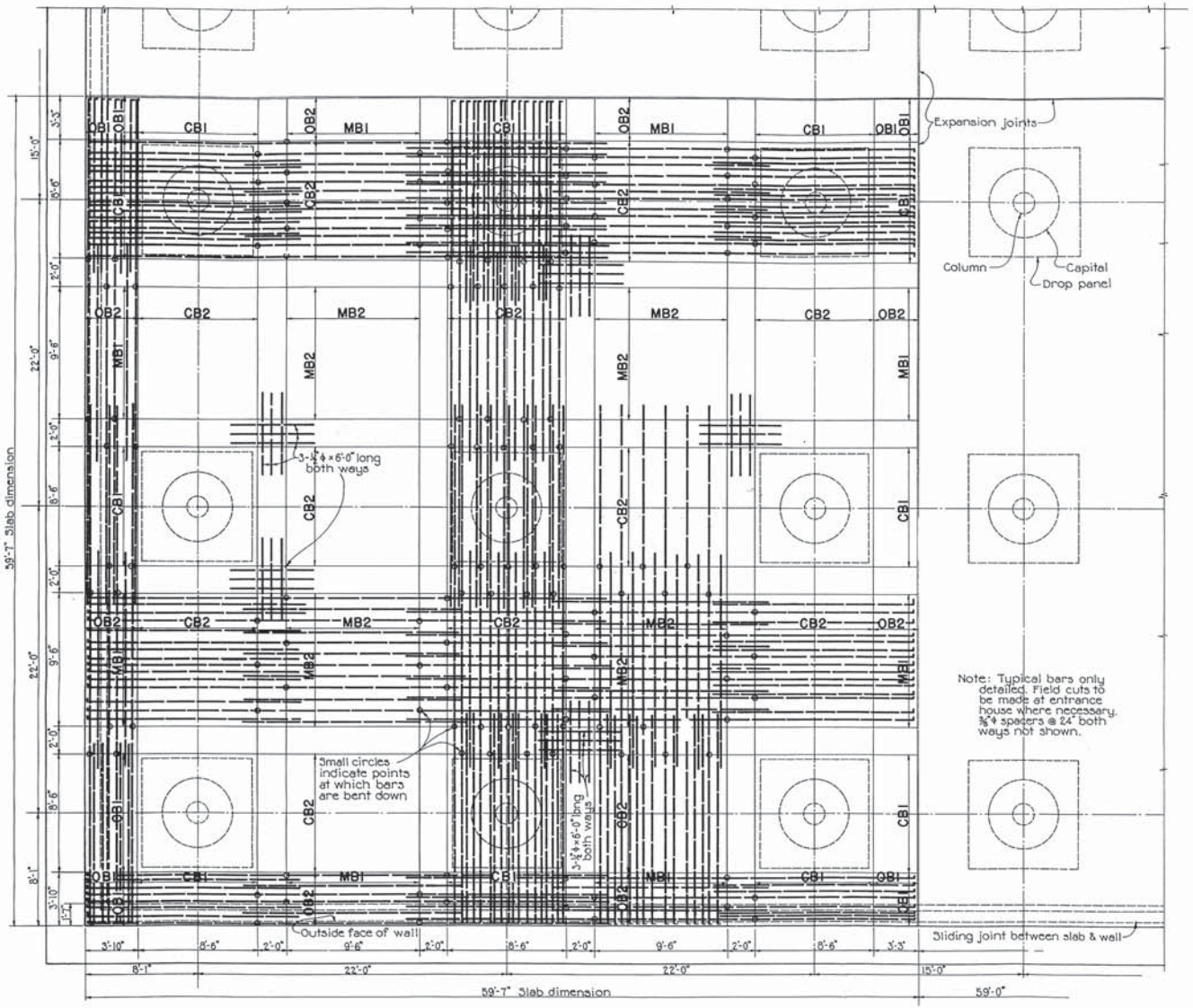
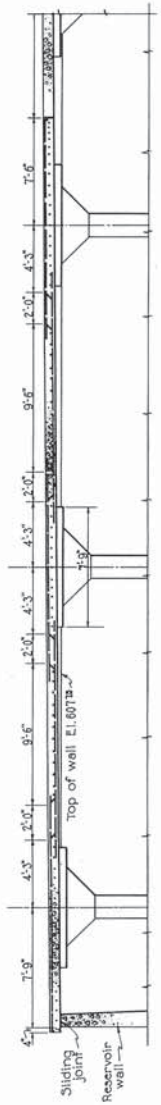
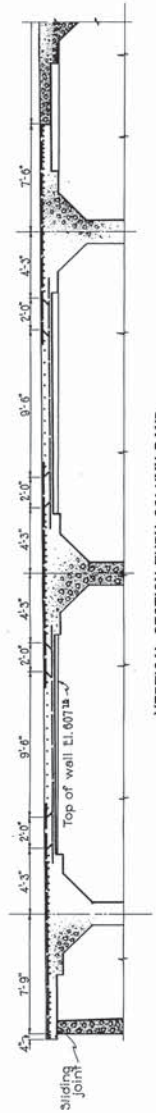


ROOF SLAB STEEL – BENDING AND PLACING DETAILS
Scale: ¼"=1'-0"



VERTICAL SECTION THRU MIDDLE BAND
Scale: ¼"=1'-0"



VERTICAL SECTION THRU COLUMN BAND
Scale: ¼"=1'-0"

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE – OREGON
ROOF DETAILS
Scale: ¼"=1'-0"

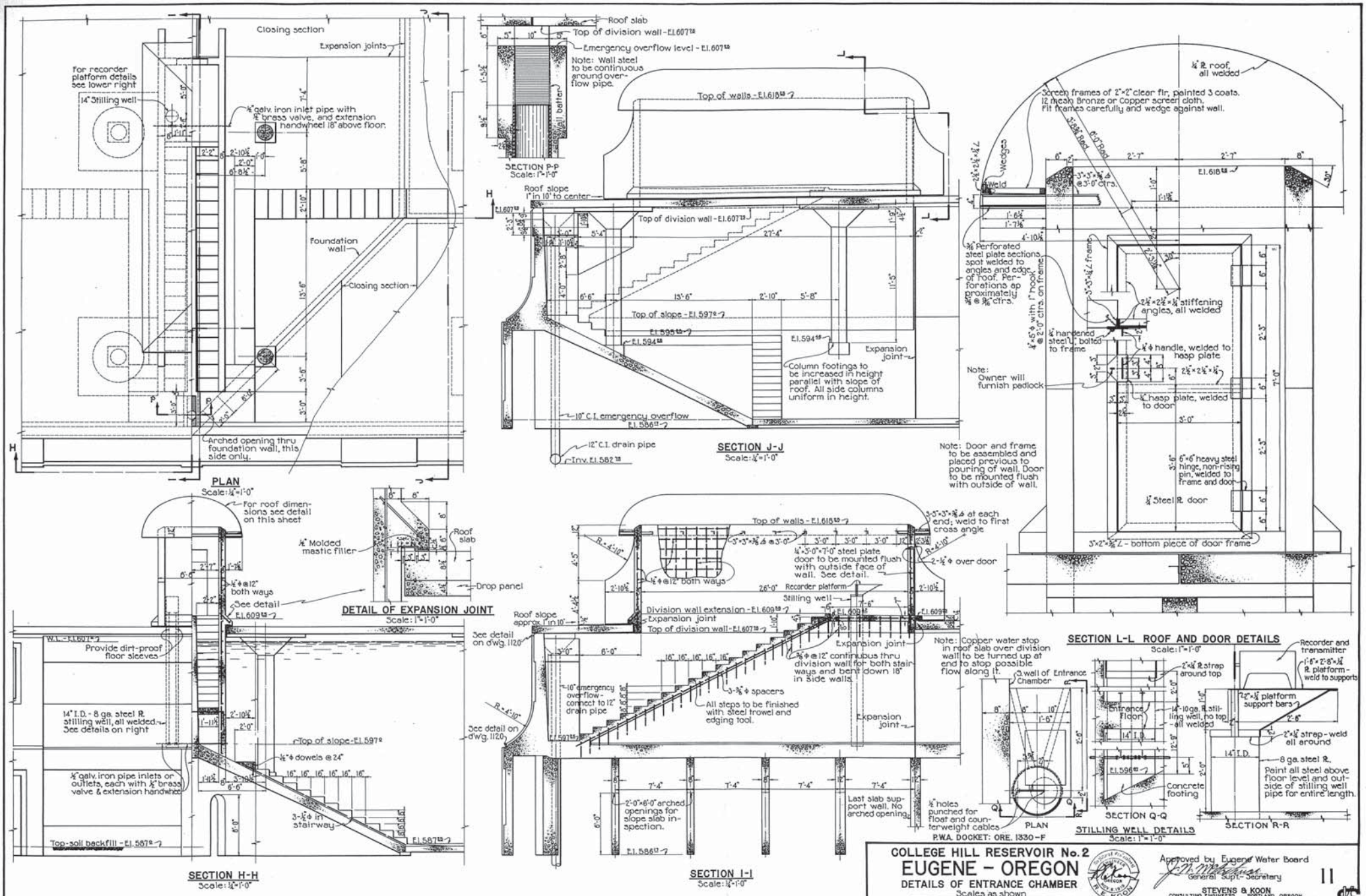
Dr: J.B.C. | Tr: J.B.C. | Ch: J.C.G.

Approved by Eugene Water Board
J. M. McFarland
General Supt.-Secretary

STEVENS & KOON
CONSULTING ENGINEERS PORTLAND, OREGON

Date: 10:6:38 | Sht: 10 of 15 | File: 699-1123

10



P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE - OREGON
DETAILS OF ENTRANCE CHAMBER

Scales as shown

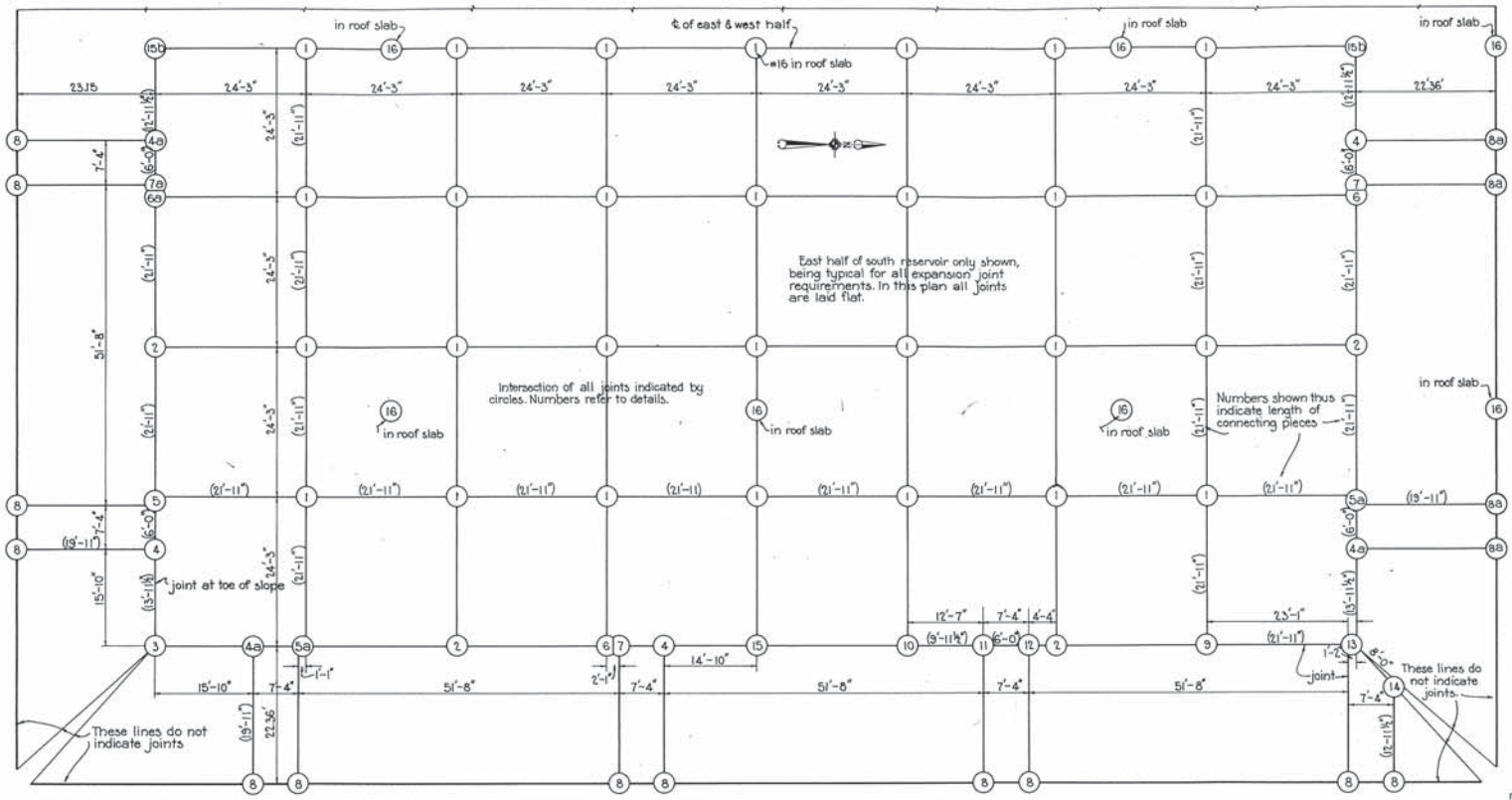
Approved by Eugene Water Board
General Supt.-Secretary

11

Dr: R.E.K. | Tr: J.C.G. | Ch: F.T.K.

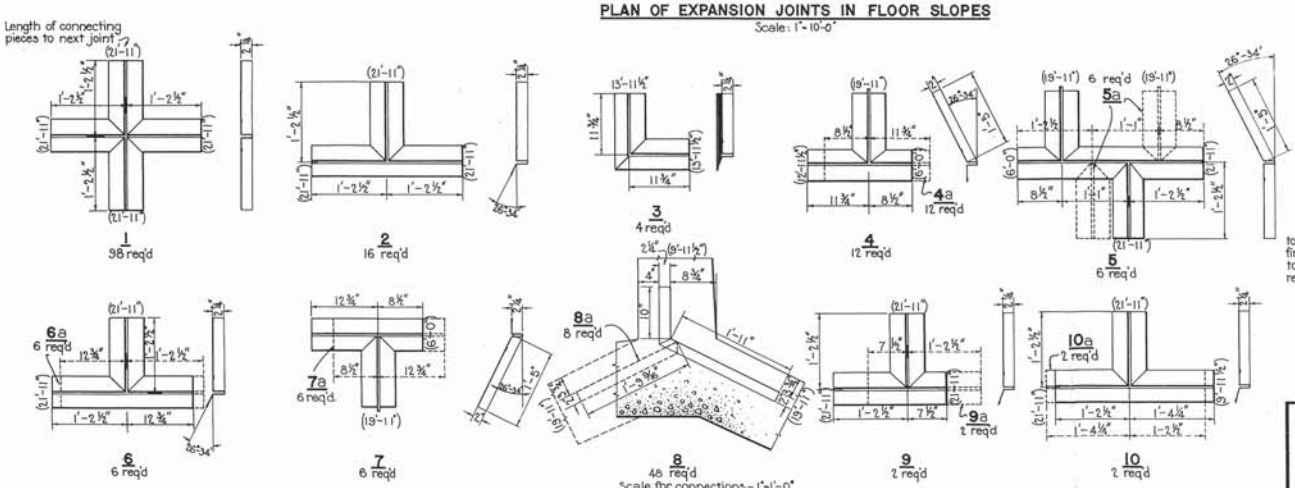
STEVENS & KOON
CONSULTING ENGINEERS, PORTLAND, OREGON

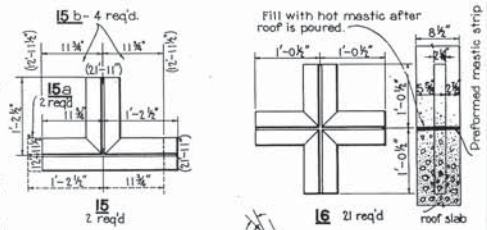
Date: 10:21:38 | Sht: 11 of 15 | File: 699-1124

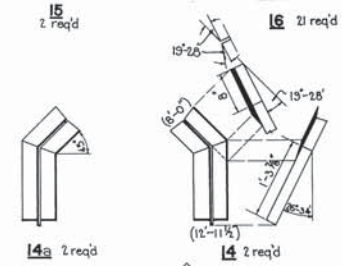


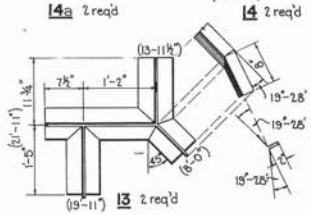
PLAN OF EXPANSION JOINTS IN FLOOR SLOPES

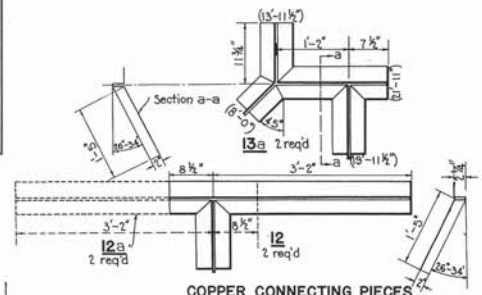
Scale: 1"-10'-0"

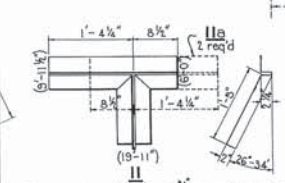












DETAIL OF TYPICAL SLAB JOINT

Scale: 3"-1'-0"

P.W.A. DOCKET: ORE. 1330-F

COPPER CONNECTING PIECES

	Length		No. Req'd	Total Length	Depth
Slab and wall connectors	22'-0"	(21-11)	260	5720'	2¼"
	20'-0"	(19-11)	60	1200'	2"
	14'-0"	(13-11½)	12	168'	2¼"
	13'-0"	(12-11½)	12	156'	2¼"
	13'-0"	(12-11½)	4	52'	2"
	10'-0"	(9-11½)	68	680'	2¼"
	8'-0"	(8-0	4	32'	2"
	6'-0"	(6-0	28	168'	2¼"
Roof connectors	58'-7"		19	1113'-1"	2¼"
	57'-0"		26	1482'	2¼"
	56'-7½"		6	339'-9"	2¼"
	23'-11"		1	23'-11"	2¼"
All joints				1135'-6"	
Total copper				12267'-3"	
Weight				15351-lbs.	

COLLEGE HILL RESERVOIR No.2
EUGENE - OREGON
EXPANSION JOINT DETAILS

Scales: as shown

Approved by Eugene Water Board

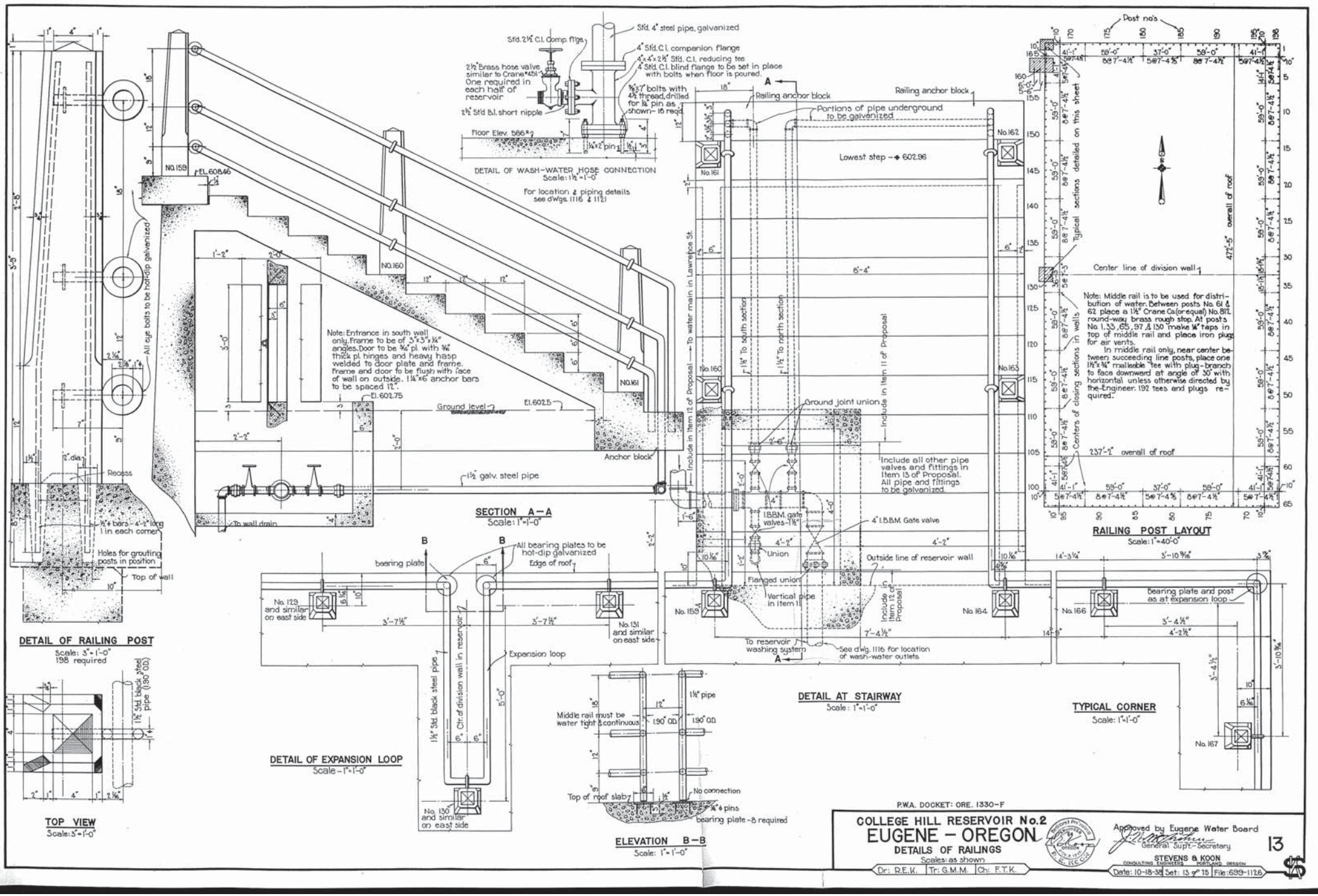
General Supt-Secretary

STEVENS & KOON
CONSULTING ENGINEERS — PORTLAND, OREGON

Dr: J.B.C. | Tr: G.M.M. | Ch: F.T.K.

Date: 10:19:38 | Sht: 12 of 15 | File: 699-1175

12



P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE – OREGON
DETAILS OF RAILINGS

Scales: as shown

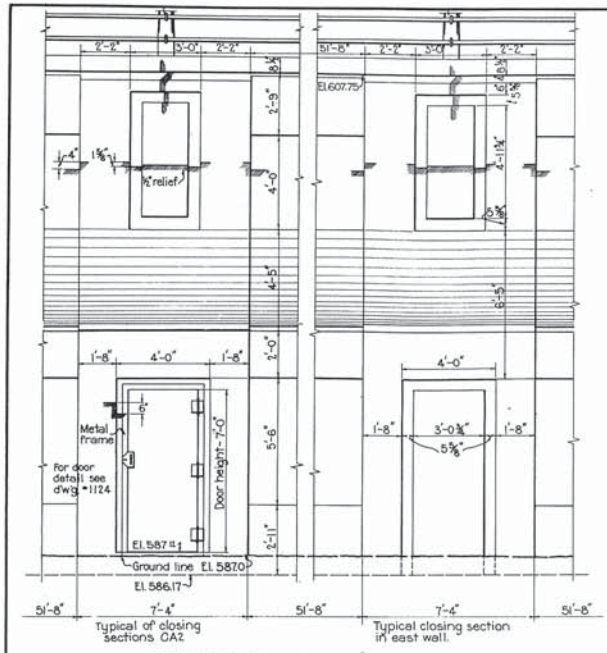
Dr: R.E.K. | Tr: G.M.M. | Ch: F.T.K.

Approved by Eugene Water Board
General Supt.-Secretary

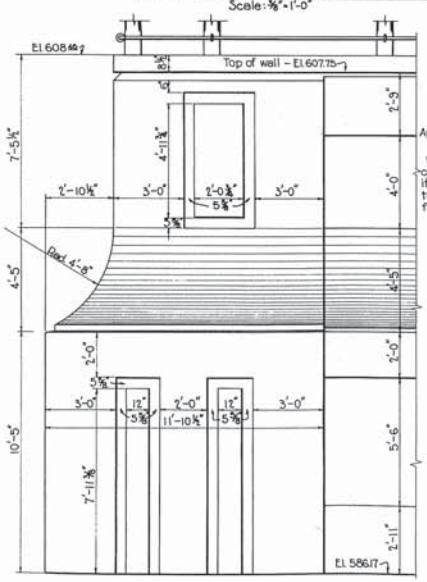
STEVENS & KOON
CONSULTING ENGINEERS PORTLAND, OREGON

Date: 10-18-38 | Set: 13 of 15 | File: 699-1126

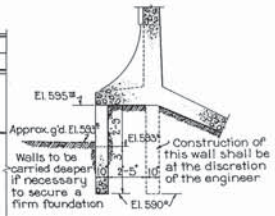
13



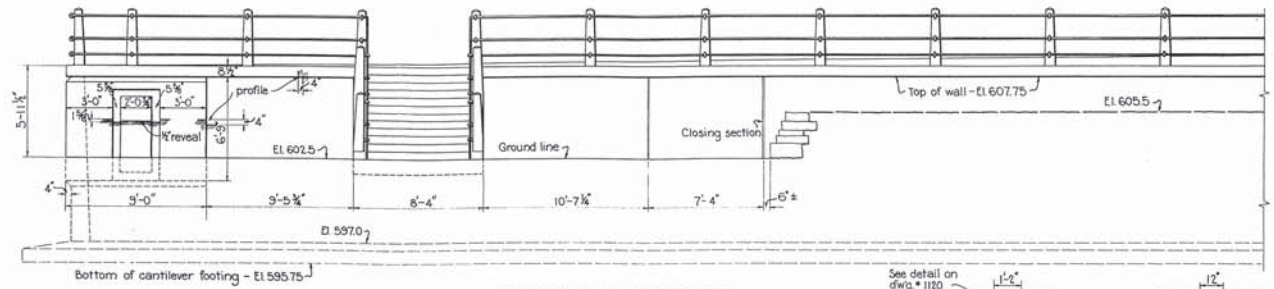
ELEVATION OF EAST WALL RELIEFS
Scale: ⅜"=1'-0"



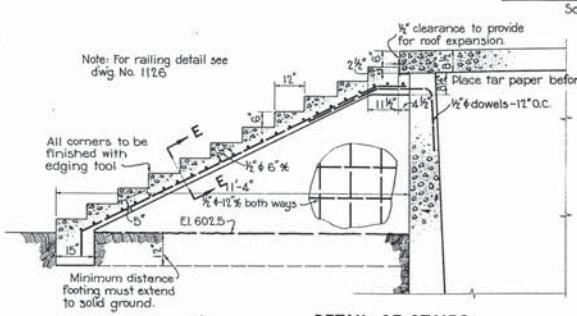
CORNER DETAILS
Scale: ⅜"=1'-0"



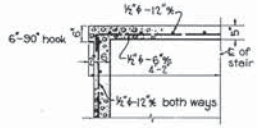
SECTION O-O
Scale: ¼"=1'-0"



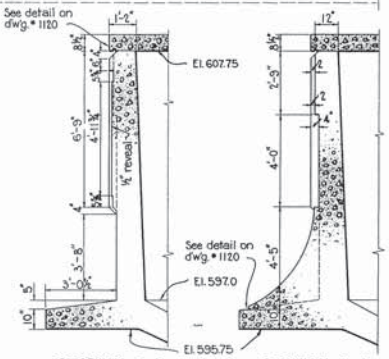
ELEVATION OF WEST WALL
Scale: ¼"=1'-0"



DETAIL OF STAIRS
Scale: ½"=1'-0"

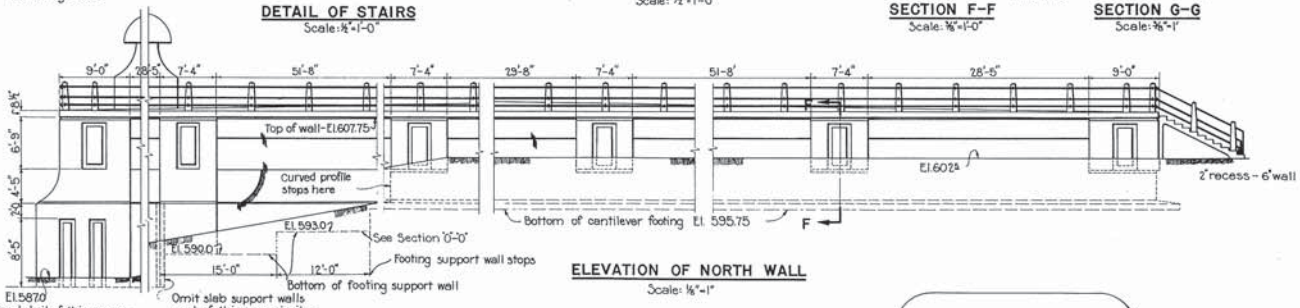


SECTION E-E
Scale: ½"=1'-0"

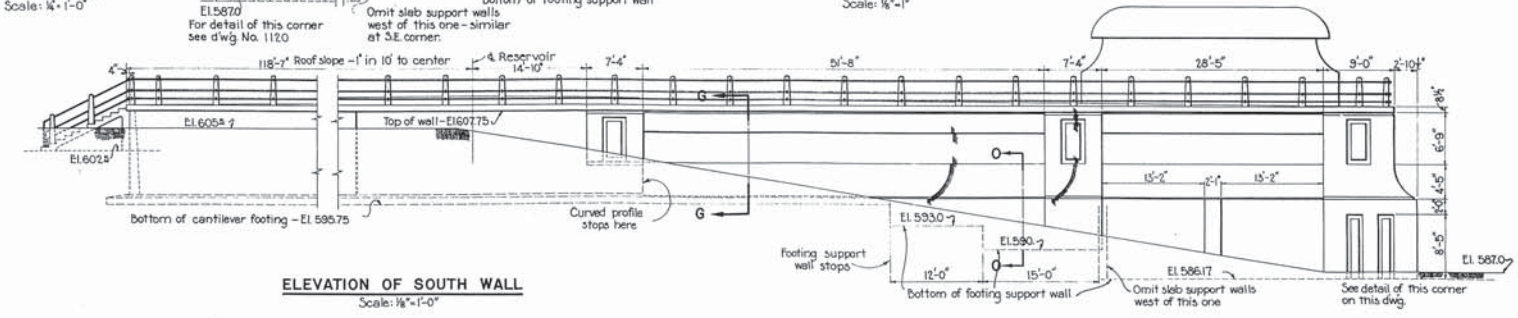


SECTION F-F
Scale: ⅜"=1'-0"

SECTION G-G
Scale: ⅜"=1'



ELEVATION OF NORTH WALL
Scale: ⅛"=1'



ELEVATION OF SOUTH WALL
Scale: ⅛"=1'-0"

P.W.A. DOCKET: ORE. 1330-F

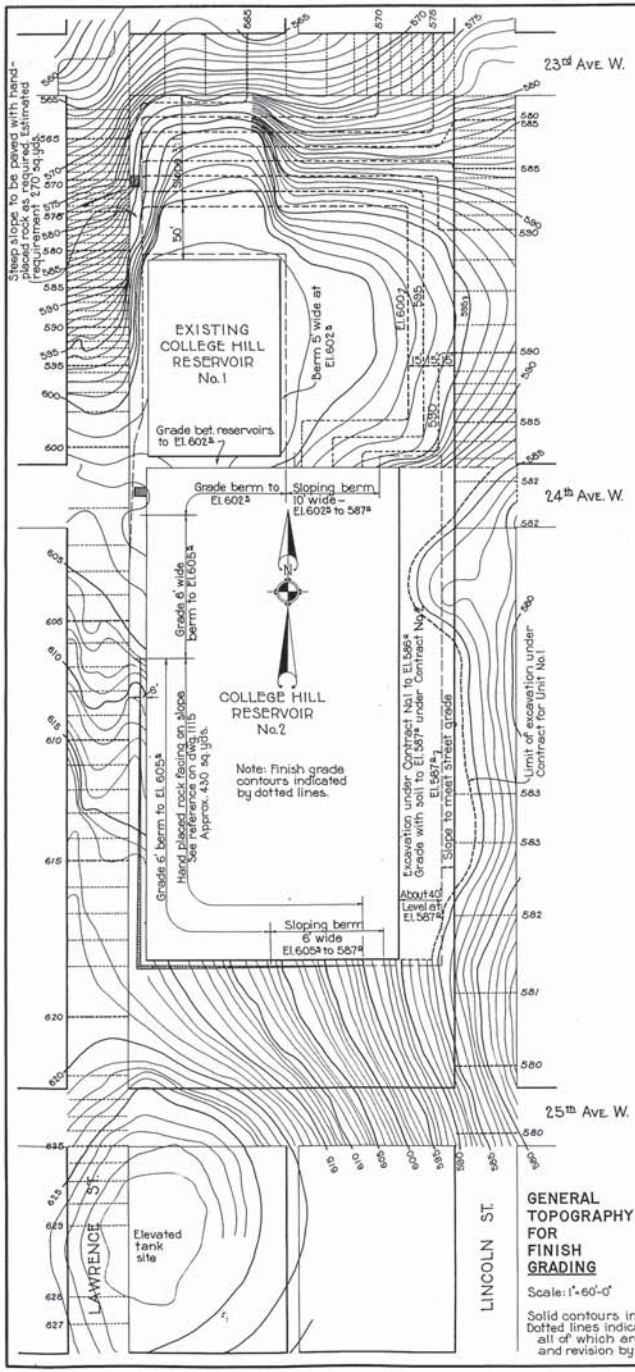
COLLEGE HILL RESERVOIR No. 2
EUGENE - OREGON
MISCELLANEOUS DETAILS
Scale: as shown

Approved by Eugene Water Board
J. H. Matthews
General Supt.-Secretary

STEVENS & KOON
CONSULTING ENGINEERS — PORTLAND, OREGON

Dr: J.C.G. | Tr: OWR-GMM | Ch: F.T.K | Date: 10-21-38 | Set: 14 of 15 | File: 699-112.7

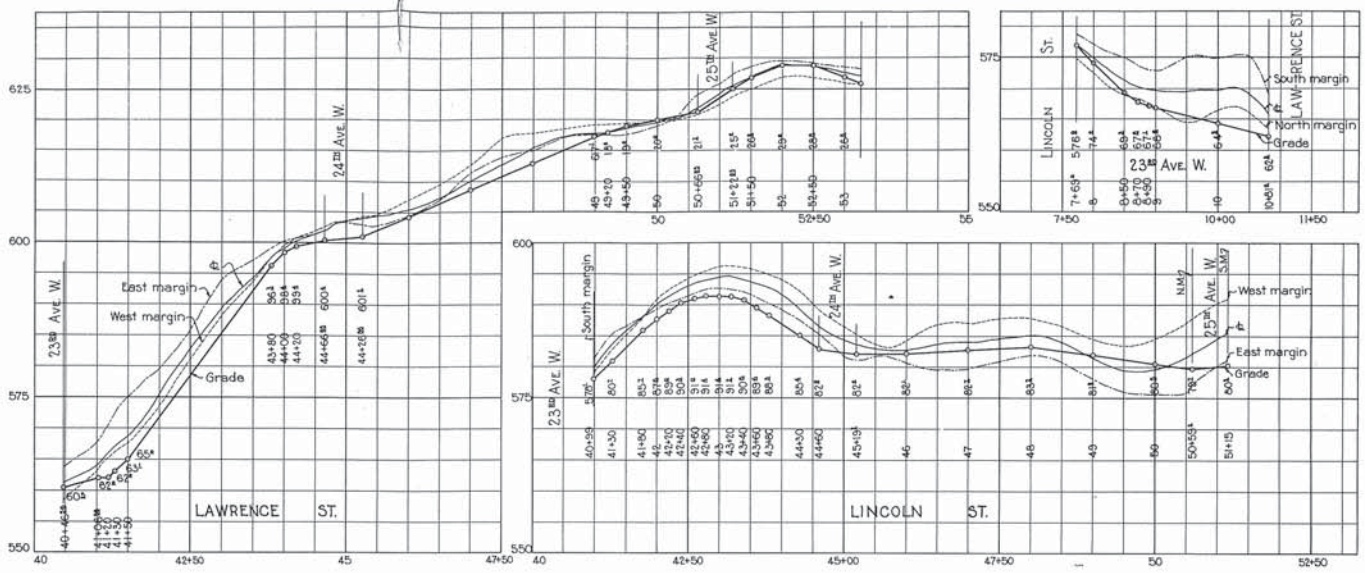
14



GENERAL TOPOGRAPHY FOR FINISH GRADING

Scale: 1" = 60'-0"

Solid contours indicate original surface
Dotted lines indicate finished grades - all of which are subject to modification and revision by the engineer.



PROFILES FOR STREET GRADING

Scales: 1" = 100'-0" horizontal
1" = 10'-0" vertical

P.W.A. DOCKET: ORE. 1330-F

COLLEGE HILL RESERVOIR No. 2
EUGENE - OREGON
DETAILS OF GRADING
Scales: as shown

Dr: J.C.G. | Tr: G.M.M. | Ch: F.T.K.

Registered Professional Engineer R. E. KOON

Approved by Eugene Water Board
General Supt.-Secretary

STEVENS & KOON
CONSULTING ENGINEERS, PORTLAND, OREGON
Date: 12-30-38 | Set: 15 of 15 | File: 699-1128

15

Appendix C: Selected Historic Photographs

1501
1501

No.
COLLEGE HILL
RESERVOIR #2

Looking N.E. across
site of Reservoir

12-13-38

1502
1502

No.
COLLEGE HILL
RESERVOIR #2

View of Eugene from
old Reservoir

12-13-38

1503
1503

No.
COLLEGE HILL
RESERVOIR #2

View from top of
hill showing a
portion of reservoir
site. Looking N.E.

12-13-38

1504
1504

No.
COLLEGE HILL
RESERVOIR #2

Starting work at
N.E. Corner

12-13-38

1505
1505

No.
COLLEGE HILL
RESERVOIR #2

View looking S.W.
from 24th and Olive
showing where fill
is to be placed.

12-13-38

1506
1506

No.
COLLEGE HILL
RESERVOIR #2

Brand new 12yd
Carry-all starting
work.

12-13-38

1507
1507

No.
COLLEGE HILL
RESERVOIR #2
Trucks and Carry-all
starting fill
12-13-38

1508
1508

No.
COLLEGE HILL
RESERVOIR #2
Two shovels and
trucks at N.E.
Corner
12-13-38

1509
1509

No.
COLLEGE HILL
RESERVOIR #2
Across N.E.
Corner. Carry-all
and trucks
12-13-38

COLLEGE HILL RESERVOIR #2 12-13-38

No. 1510 Looking S.E. across Reservoir Site

No. 1511 Excavating along north line near N.E. Cor.

No. 1512 Carry-all, trucks and shovel at N.E. Cor.

No. 1513 Working along North Line.

COLLEGE HILL RESERVOIR #2 - 12-16-38

1514

No. 1514 Looking north across site from hill top

1515

No. 1515 Looking S.E. across N.E. Cor. of job

1516

No. 1516 Looking North across Site

1517

No. 1517 Looking East across North half.

COLLEGE HILL RESERVOIR #2 12-17-38

1518

No. 1518 Looking N.E. across Site from Hill top

1519

No. 1519 Looking North across site from Hill top.

1520

No. 1520 Looking N.E. across North half

1521

No. 1521 Looking at fill from 24th and Olive.

1522
1522

No. 1522
College Hill
Reservoir #2
Looking north
across North
half
12-24-38

1523

No. 1523
College Hill
Reservoir #2
Looking North
across site
12-24-38

1524

No. 1524
College Hill
Reservoir #2
Looking North
across site.
12-24-38

1525

No. 1525
College Hill
Reservoir #2
Looking South
across site
12-24-38

1526

No. 1526
College Hill
Reservoir #2
Looking S.W.
at Fill.
12-24-38


1527

No. 1527
College Hill
Reservoir #2
Looking north
from S.W. Cor.
12-29-38


1528

No. 1528
College Hill
Reservoir #2
Looking North-
west from S.E.
corner
12-29-38


1529

No. 1529
College Hill
Reservoir #2
Looking S.W.
from N.E. Cor.
12-29-38

No. 1530
College Hill
Reservoir #2
Looking S.W.
across North
Half
12-29-38

No. 1531
College Hill
Reservoir #2
Looking S.W. across North
Half.
12-29-38

No. 1532
College Hill
Reservoir #2
Looking south
along 12" drain
about 21st &
Washington
12-29-38

1

1533

2

1534

3

1535

4

1536

5

1537

6

1538

7

1539

8

1540

No. 1 - Looking north across job from hill top.
No. 2 - Looking north from S.W. cor.
No. 3 - 12" drain at 23rd and Washington
No. 4 - Looking at North end from West Side
No. 5 - Looking West into N.W. Cor.
No. 6 - Steel tank column footing excavation
No. 7 - Looking west from N.E. Cor.
No. 8 - East end of fill

COLLEGE HILL RESERVOIR #2

1-5-39

1

2

3

4

5

6

7

8

No. 1 - Looking North across job from hill top.
No. 2 - Looking South from S.W. Cor.
No. 3 - Looking North at Steel tower footings
No. 4 - Looking North from South End.
No. 5 - Looking north at end of fill
No. 6 - Looking N.W. from S.E. cor.
No. 7 - Looking S.W. from N.E. Cor.
No. 8 - Looking S.W. from N.E. Cor.

COLLEGE HILL RESERVOIR #2

1-12-39

1 1549

2 1550

3 1551

4 1552

5 1553

6 1554

7 1555

No. 1 - Looking N.E. down across fill
No. 2 - Looking South from old Reservoir.
No. 3 - Looking East and North from Hill Top
No. 4 - Looking S.W. from N.E. Cor.
No. 5 - End of Fill from 24th and Olive.
No. 6 - Excavation in N.W. Cor. of South Basin
No. 7 - Looking North from South Center.

COLLEGE HILL RESERVOIR #2

1-19-39

1

2

3

4

5

6

7

8

No. 1 - Looking N.E. across excavation
No. 2 - Looking East along Division Wall
No. 3 - Looking S.W. from N.E. Cor.
No. 4 - Looking South from N.W. Cor.
No. 5 - Looking North from S.W. Cor.
No. 6 - Looking South at Shot in South End.
No. 7 - Working in S.W. Cor.
No. 8 - End of fill.

COLLEGE HILL RESERVOIR #2

1-26-39

1 1564

2 1565

3 1566

4 1567

5 1568

6 1569

7 1570

8 1571

No. 1 - Looking N.E. from S.W. Cor.
No. 2 - Looking East along Division Wall
No. 3 - Looking N.E. from S.W. Cor.
No. 4 - Looking at North End from West Side.
No. 5 - Looking S.W. at End of Fill
No. 6 - Looking West into S. W. Cor.
No. 7 - Looking N.W. from N.E. Cor.
No. 8 - Fine grading along north end.

COLLEGE HILL RESERVOIR #2

2-2-39

1572

1

1573

2

1574

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1575

4

1576

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1577

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1578

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1579

8

No. 1 - Looking North from South Center
No. 2 - Looking North from S.W. Cor.
No. 3 - Looking N.E. across fill.
No. 4 - Looking S.W. at end of fill
No. 5 - Looking South from N.W. Cor.
No. 6 - Looking S.W. from N.E. Cor
No. 7 - Looking South along 10" steel tank feeder main
No. 8 - Looking West near S.W. Cor.

COLLEGE HILL
RESERVOIR #2
2- 9-39 &
2-10-39

1

2

3

4

5

6

7

8

No. 1 - Looking North from S.W. Cor.
No. 2 - Looking N.E. from South Center
No. 3 - Looking N.W. from East Center
No. 4 - Looking N.W. from S.E. Cor.
No. 5 - Looking South from old Reservoir
No. 6 - Trench at 23rd and Lincoln 24" main connection & 12" drain
No. 7 - Looking into S.W. Cor.
No. 8 - Looking North along 10" Steel Tank feeder

COLLEGE HILL
RESERVOIR #2
2-16-39

1588

1

1589

2

1590

3

1591

4

1592

5

1593

6

1594

7

No. 1 - Looking west across center of South Basin
No. 2 - Looking at S.W. Cor. from center of East Side
No. 3 - Looking north from S.W. cor.
No. 4 - From old Reservoir looking at S.W. cor.
No. 5 - From South End looking at N.E. Cor.
No. 6 - Laying 24" main and 12" drain South from 23rd and Lincoln
No. 7 - Looking north along East line showing pipe storage.

COLLEGE HILL RES. #2

2-23-39

1595

1

1596

2

1597

3

1598

4

1599

5

1600

6

1601

7

1602

8

No. 1 - From North side looking south
No. 2 - From North side looking south
No. 3 - Looking W. of South at fill
No. 4 - From North side looking south near East Wall
No. 5 - From East side looking at S.W. Cor.
No. 6 - Looking S.W. at fill from 24th & Olive
No. 7 - Looking North at trench between 23rd & 24th for 24" main and 12" drain.
No. 8 - Looking South 24" main and 12" drain in trench between 23rd & 24th.

COLLEGE HILL
RESERVOIR #2

3-2-39

1603

1

1604

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1605

3

1606

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1607

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1608

6

1609

7

1610

8

No. 1 - Looking N.E. from S.W. Corner South Basin
No. 2 - Looking N.E. from S.W. Cor. North basin
No. 3 - Looking North from S.W. Cor. job
No. 4 - Looking N.E. from S.W. Cor.
No. 5 - Looking East near Center Wall
No. 6 - Looking North along East wall
No. 7 - Looking East at north 24" valve and main
No. 8 - Looking East at South 24" valve and main

COLLEGE HILL
RESERVOIR #2

3-9-39

1611

1

1612

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1613

3

1614

4

1615

5

1616

6

1617

7

1618

8

No. 1 - Looking south from north end along east side.
No. 2 - Looking at N.W. corner of south basin.
No. 3 - Looking north from west end division wall.
No. 4 - Looking north at completed laying of 24" main and 12" drain.
No. 5 - From N.W. corner looking south.
No. 6 - Looking south east from north side.
No. 7 - Showing cracked 24" pipe at tee for north inlet.
No. 8 - Looking south along east side showing 12" drain.

COLLEGE HILL
RESERVOIR #2

3-16-39

1619

1

1620

2

1621

3

1622

4

1623

5

1624

6

1625

7

1626

8

No. 1 - Looking at N.W. Corner - Finish grading
No. 2 - Finish grading - N.E. Corner
No. 3 - Screeds for filling over excavation - S.W. Cor. North Basin
No. 4 - Filling in over excavation - N.W. Cor. South Basin
No. 5 - Screeds for filling in over excavation - South Basin
No. 6 - Looking into S.W. corner of excavation
No. 7 - 24" Main into North Basin
No. 8 - Looking North at N.E. Cor. East Wall grading.

COLLEGE HILL
RESERVOIR # 2
3-23-39

1627

1

1628

2

1629

3

1630

4

1631

5

1632

6

1633

7

No. 1 - Looking North from South Side
No. 2 - Looking North from S.W. Cor.
No. 3 - Looking S.W. from N.E. Cor.
No. 4 - 24" Main into North Basin.
No. 5 - Along east side near N.E. Cor.
No. 6 - 24" Main into South Basin.
No. 7 - Looking North along Olive St. end of dump.

COLLEGE HILL RESERVOIR #2

3-30-39

1634

1

1635

2

1636

3

1637

4

1638

5

1639

6

1640

7

1641

8

No. 1 - Looking North from S.W. Cor.
No. 2 - Looking North from S.E. Cor.
No. 3 - Looking South from N.E. Cor.
No. 4 - Looking South from old Reservoir.
No. 5 - Looking N.E. from center of West side.
No. 6 - Looking N.E. from S.W. Cor.
No. 7 - Showing fill from Olive St. Looking S.W.
No. 8 - Showing end of fill from Olive St. Looking South

COLLEGE HILL
RESERVOIR #2
UNIT #1 COMPLETE
4-6-39

1642

1

1643

2

1644

3

1645

4

1646

5

1647

6

1648

7

8

1649

No. 1 - Looking East from N.W. Corner
No. 2 - Looking South from old Reservoir Raising gin pole.
No. 3 - Raising gin pole for steel tank
No. 4 - Column footings and wedges
No. 5 - Steel tank columns and gin pole
No. 6 - Steel tank columns and gin pole
No. 7 - Steel tank tower
No. 8 - Steel tank tower

COLLEGE CREST RESERVOIR #2

4-20-39

1650

1

1651

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1652

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1653

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1654

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1655

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1656

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1657

8

No. 1 - From Steel tank - general view.
No. 2 - Looking north from fill at S. end.
No. 3 - From steel tank - general view.
No. 4 - 24" valve and 12" drain, and support wall footings at north basin intake
No. 5 - 12" drain valve to N. basin and east support wall footing
No. 6 - Support wall footings near S.E. Cor.
No. 7 - Looking north along east wall footing.
No. 8 - Steel tank looking N.E.

COLLEGE HILL RESERVOIR #2

5-4-39

1658

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1659

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1662

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1664

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1665

No. 1 - General view from steel tank.
No. 2 - East end of Division wall.
No. 3 - Intake sump South basin
No. 4 - Drain sump South basin
No. 5 - Grouting in column footings for steel tank.
No. 6 - Grouting in steel columns for steel tank.
No. 7 - Steel tank Looking S.E.
No. 8 - East wall footing trench

COLLEGE HILL RESERVOIR #2

5-11-39

8

1666

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1667

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1672

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No. 1 - General view from steel tank
No. 2 - Looking North along East wall from S.E. Corner
No. 3 - Pouring support wall footings for east wall
No. 4 - Looking south from N.E. Corner
No. 5 - Showing East end of Division wall.
No. 6 - Showing method of building up East end of division wall.
No. 7 - Footings for East wall.

COLLEGE HILL RESERVOIR #2

5-18-39

1673

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1674

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1679

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1680

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COLLEGE HILL
RESERVOIR #2

5-25-39

No. 1 - Preparing North Basin to pour floor. Looking S.W. from N.E. corner.
No. 2 - Looking West from N.E. Corner
No. 3 - Pouring floor slab in North Basin.
No. 4 - General View from Steel tank.
No. 5 - Pouring floor slab N.W. Corner
No. 6 - Looking East from N.W. Corner
No. 7 - Looking S.E. at steel tank.
No. 8 - H. J. Adler equipment and shop.

1

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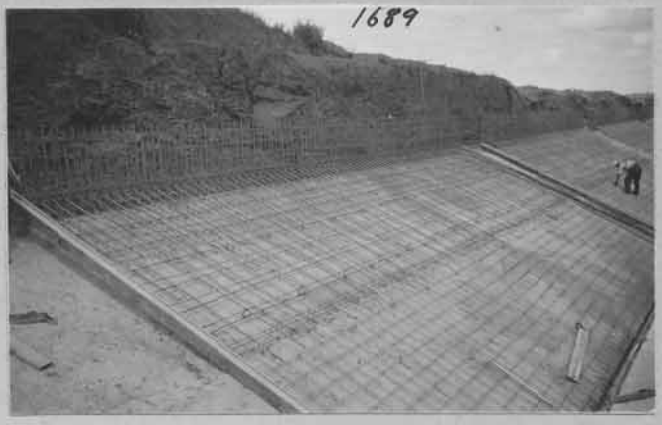
No. 1 - N.E. Corner Starting support wall forms.
No. 2 - From N.W. Corner Looking East Starting support walls.
No. 3 - Curing floor North Basin Looking N.E.
No. 4 - South Basin Looking at West side.
No. 5 - From steel tank - general view.
No. 6 - North Basin Looking North.
No. 7 - From Steel tank - general view.

COLLEGE HILL RESERVOIR #2

6-2-39

1

2



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No. 1 - Looking North along East side at N.E. Cor.
No. 2 - Reinforcing steel west side North basin
No. 3 - Curving floor North Basin - Looking toward N.E. Corner
No. 4 - Pouring floor South Basin.
No. 5 - Finishing floor South Basin.
No. 6 - Looking South from Division wall at S.W. Corner.
No. 7 - From steel tank - general view.

COLLEGE HILL RESERVOIR #2

6-9-39

1

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7

No. 1 - Looking S.E. from center of West Side.
No. 2 - Looking N.E. from center West Side.
No. 3 - Pouring slopes west side North basin.
No. 4 - Pouring slopes west side North basin.
No. 5 - Pouring slopes west side North Basin.
No. 6 - Pouring slopes west side North basin.
No. 7 - Looking East along division wall North Basin.

COLLEGE HILL RESERVOIR #2

6-15-39

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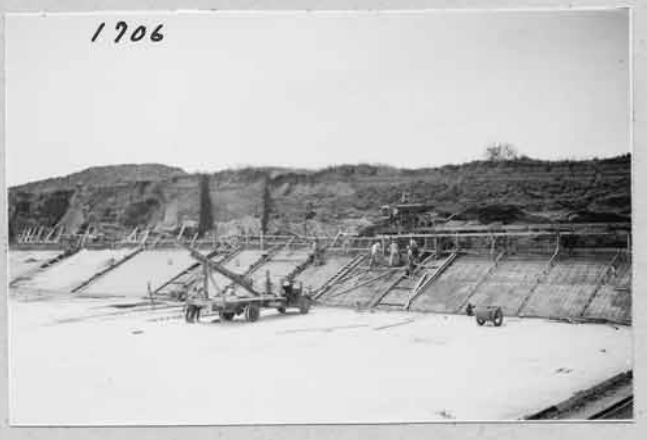

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No. 1 - General view from Steel Tank. - 6-20-39
No. 2 - Looking N.E. from Division Wall. 6-22-39
No. 3 - Pouring slopes North end. 6-20-39
No. 4 - Pouring Slopes North end. 6-20-39
No. 5 - Pouring west slope South Basin. 6-22-39
No. 6 - Pouring slopes West side South Basin. 6-22-39
No. 7 - Pouring slopes S.W. Cor. 6-21-39
No. 8 - Looking south from Division Wall. 6-22-39

COLLEGE HILL RESERVOIR #2

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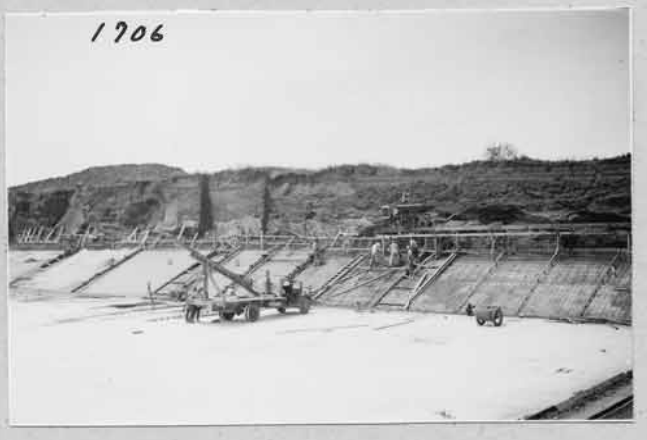

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No. 1 - General view from Steel Tank. - 6-20-39
No. 2 - Looking N.E. from Division Wall. 6-22-39
No. 3 - Pouring slopes North end. 6-20-39
No. 4 - Pouring Slopes North end. 6-20-39
No. 5 - Pouring west slope South Basin. 6-22-39
No. 6 - Pouring slopes West side South Basin. 6-22-39
No. 7 - Pouring slopes S.W. Cor. 6-21-39
No. 8 - Looking south from Division Wall. 6-22-39

COLLEGE HILL RESERVOIR #2

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No. 1 - General view from Steel Tank
No. 2 - Division wall looking East
No. 3 - N.W. Cor. - Slopes and steel
No. 4 - Patch near N.E. Cor.
No. 5 - East Wall form and steel, N.E. Cor.
No. 6 - East Wall form and steel, N.E.Cor.
No. 7 - N. E. Corner Reservoir.
No. 8 - N. E. Corner Reservoir.

COLLEGE HILL RESERVOIR #2

6-29-39

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No. 1 - Pouring slopes at N.E. Corner - July 1, 1939
No. 2 - Preliminary finish of East wall at N.W. Cor. - July 6, 1939
No. 3 - Support wall forms - East side South Basin - July 6, 1939
No. 4 - East side support walls at Center Line - 7/6/39
No. 5 - From steel tank - General view - 7/6/39
No. 6 - From old Reservoir looking south - 7/10/39
No. 7 - Closing section west side North half. 7/6/39

COLLEGE HILL RESERVOIR #2

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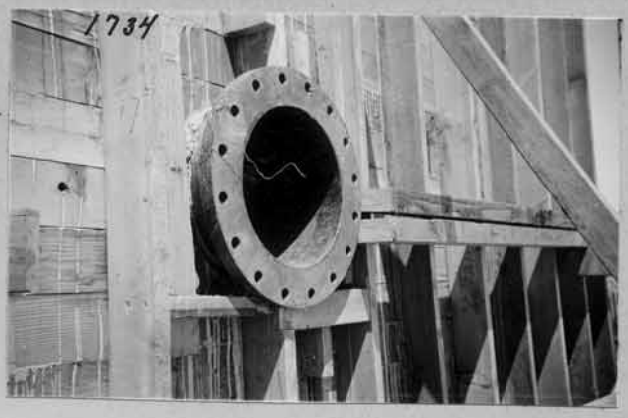
No. 1 - From Steel Tank
General view - 7/13/39
No. 2 - From west center
Looking S.E. - 7/13/39
No. 3 - Pouring East slope
in North half
No. 4 - Pouring concrete
No. 5 - Not so good - East
cantilever support wall
No. 6 - Near N.E. Cor. East
wall prelim. finish
No. 7 - Removing forms from
east wall.
No. 8 - Drain sump under
east wall.

COLLEGE HILL RESERVOIR #2

7/13/39

1

2



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No. 1 - Wash water and sprinkling manifold - at N.W. Cor. 7-19-39

No. 2 - 16" Wall nipple through north wall. - 7-20-39

No. 3 - From steel tank - General view - 7/20/39

No. 4 - From N.W. Cor. looking S.E. - 7-21-39

No. 5 - From S.E. Cor. North Basin looking N.W.

No. 6 - From S.W. Cor. looking N.E. - 7-21-39

No. 7 - Elevator used for East wall pouring 7-21-39

No. 8 - North wall looking West - 7-21-39

COLLEGE HILL RESERVOIR #2

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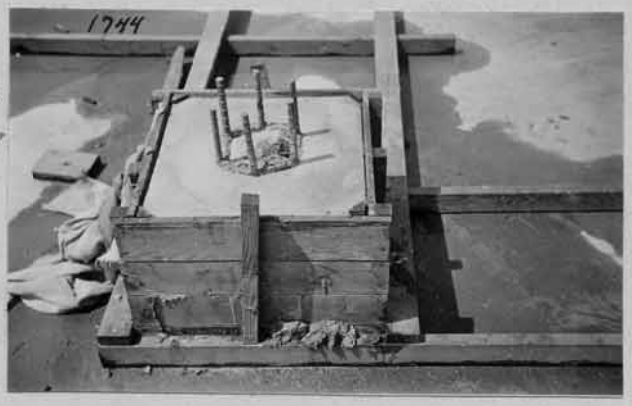

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8

No. 1 - From old reservoir looking S.W.
No. 2 - Looking N.E. in North Basin
No. 3 - Sample slope column footing
No. 4 - Sample column footing
No. 5 - From north wall looking South.
No. 6 - South end WD5 N. Basin at base of Cantilever Wall
No. 7 - WD5 N. Basin at base of Cantilever wall. Looking South.
No. 8 - Looking east at division wall.

COLLEGE HILL RESERVOIR #2
7-27-39

1749

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1751

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1752

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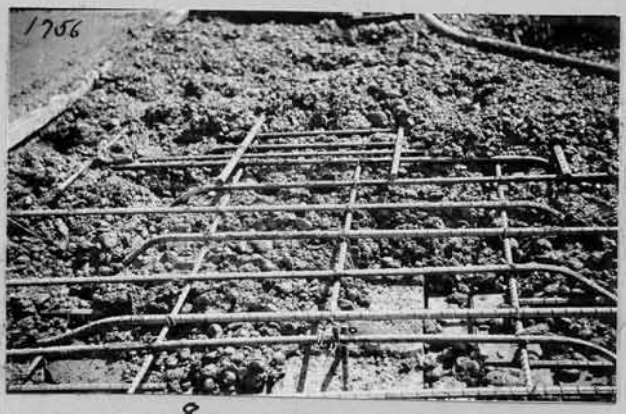
1756



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COLLEGE HILL
RESERVOIR #2

8-3-39

No. 1 - Pouring support walls East side near Center.
No. 2 - Pouring concrete into forms from 1 c.y. gas buggy
No. 3 - From steel tank - general view.
No. 4 - Pouring slopes East Side South Basin.
No. 5 - Pouring slopes East Side South Basin.
No. 6 - Pouring slopes on East side South Basin.
No. 7 - Concrete curing N.W. Cor.
No. 8 - Concrete and steel on East slope.

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No. 1 - General view from Steel tank.
No. 2 - General view from Steel tank.
No. 3 - Looking north at support wall forms for S. End of Division wall.
No. 4 - Looking into N.W. Cor.
No. 5 - Wall form braces.
No. 6 - Concrete on closing section.
No. 7 - Pouring division wall and closing section from 1 c.y. buggy.
No. 8 - Portion of N.W. with form removed.

COLLEGE HILL RESERVOIR

8-10-39

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No. 1 - Showing braces on inside of East wall.
No. 2 - Erecting column steel in N.E. Cor.
No. 3 - From Steel Tank - General view.
No. 4 - Starting roof slab in N.W. Cor.
No. 5 - Pouring on East wall East side south basin.
No. 6 - Applying Hunt Process for curing East wall.
No. 7 - Smoothing up East wall surface near top.
No. 8 - Pouring column bases in South basin.

COLLEGE HILL RESERVOIR #2

8-17-39

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8

No. 8 - Outside cement storage.

COLLEGE HILL
RESERVOIR #2

8-24-39

No. 1 - Reservoir from Steel tank
No. 2 - Roof deck from N.W. Cor.
No. 3 - Slope slab decking and slope slab support walls at East end of center ridge.
No. 4 - Floor deck, deck shoring, and column steel of North Basin.
No. 5 - Oiling capital forms.
No. 6 - Assembling column forms.
No. 7 - Passage way through slope slab support walls at East end center wall.

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No. 8 - Outside cement storage.

COLLEGE HILL
RESERVOIR #2

8-24-39

No. 1 - Reservoir from Steel tank
No. 2 - Roof deck from N.W. Cor.
No. 3 - Slope slab decking and slope slab support walls at East end of center ridge.
No. 4 - Floor deck, deck shoring, and column steel of North Basin.
No. 5 - Oiling capital forms.
No. 6 - Assembling column forms.
No. 7 - Passage way through slope slab support walls at East end center wall.

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No.1-Improved method of oiling capitol forms.
No.2-Dist. method for roof concrete pour.
No.3-General view and runway system on roof concrete pour.
No.4-Rodding a section of roof slab.
No.5-Closeup showing consistancy of concrete.
No.6-Application of Broom Finish.
No.7-Straightening and rebending wrongly bent reinforcing steel.
No.8- Reservoir #2 from elevated steel tank.

COLLEGE HILL
RESERVOIR #2

9-2-39

1789

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2

1791

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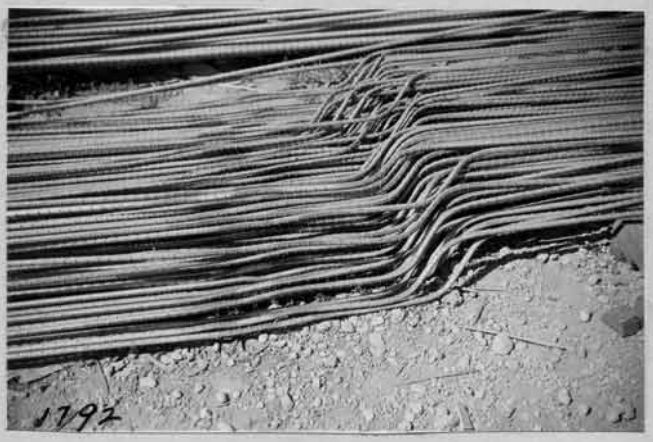
4



1793

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1794

1795

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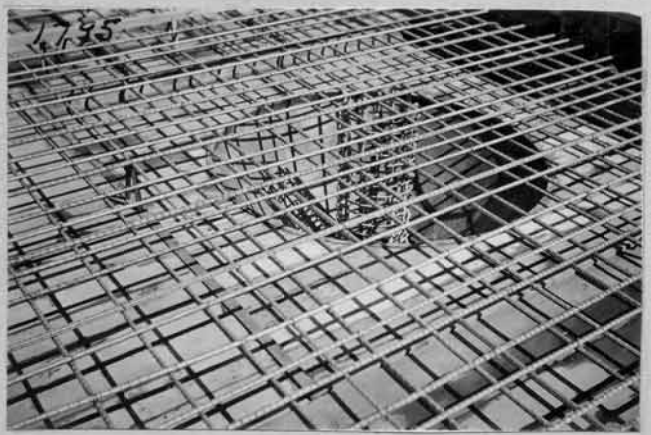

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1796

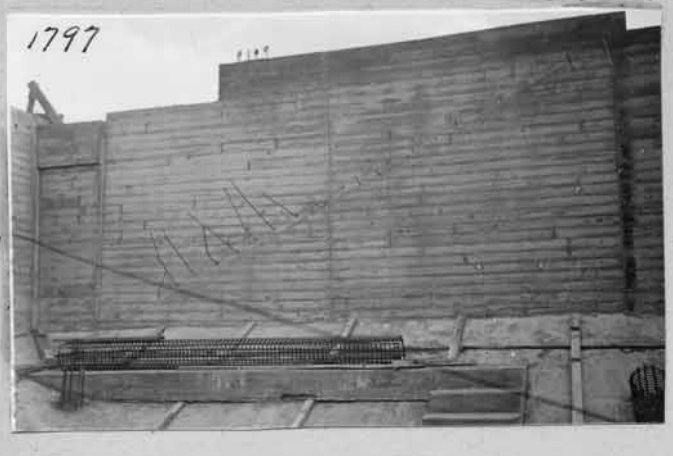
No.7- Building dyke on edge of roof slab.
No.6- Roof slab four panels.
No.1- Checking slab surface with straight edge.
No.8- Stairway to entrance chamber on slope.
No.3- Steel placement over column.
No.2- General view of concrete pour.
No.5- Reservoir from steel tank

No.4- Reinforcing steel after being rebent.

COLLEGE HILL
RESERVOIR #2

9-7-39

1797



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1798

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1799

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1800

1801

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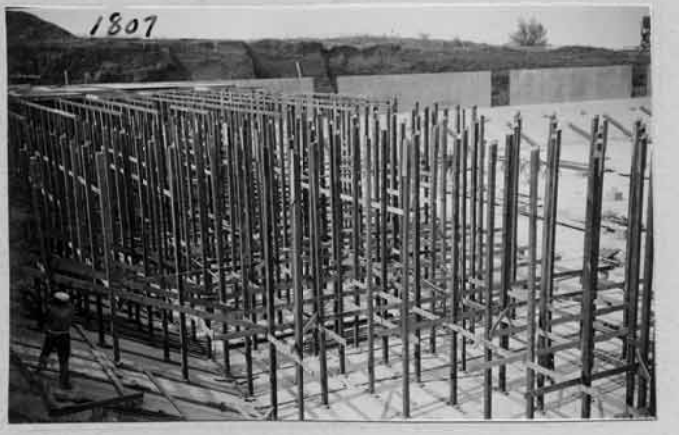
1802

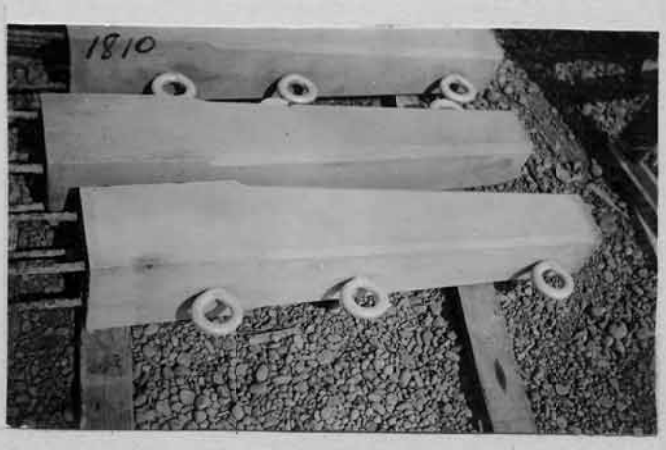
6

No. 1- Division wall east end.
No. 2- General view of concrete pour on roof from N. E.
No. 3- Moving track by man power.
No. 4- Emergency overflow.
No. 5- Pipe hangers on roof deck. Prior to pouring concrete.
No. 6- Brazing copper expansion joint material.

COLLEGE HILL
RESERVOIR #2.

9-14-39

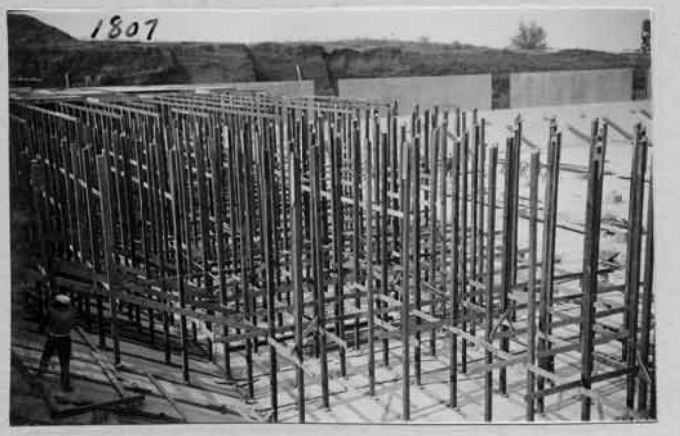




No.1- Reservoir from steel tank.
No.2- Sprinkling roof panel for curing.
No.3- Buggy of concrete-showing consistancy.
No.4- Moving in full panel for roof deck.
South Basin.
No.5- Sharing rising for roof deck in S. basin.
No.6- Finishing posts.
No.7- Posts before finishing.
No.8- Posts after finishing.

COLLEGE HILL
Reservoir #2

9-23-39



No.1- Reservoir from steel tank.
No.2- Sprinkling roof panel for curing.
No.3- Buggy of concrete-showing consistancy.
No.4- Moving in full panel for roof deck.
South Basin.
No.5- Sharing rising for roof deck in S. basin.
No.6- Finishing posts.
No.7- Posts before finishing.
No.8- Posts after finishing.

COLLEGE HILL
Reservoir #2

9-23-39

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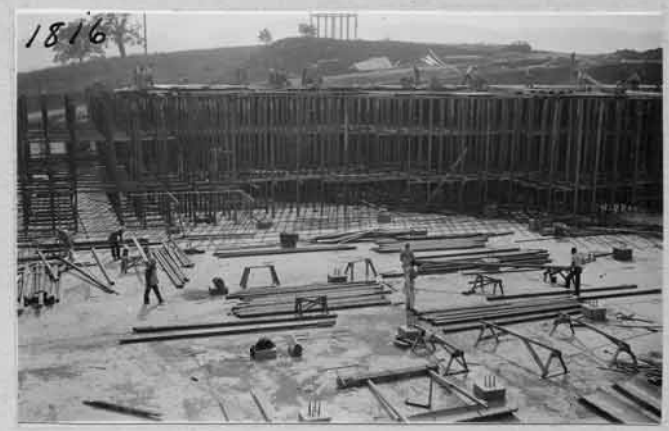

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8

No.1- Excess water in concrete.
No.2- Bearing plate for pipe expansion.
No.3- Vibration of concrete.
No.4- Reservoir from steel tank.
No.5- Concrete distribution setup.
No.6- False work progressing in south basin.
No.7- Showing proper roof drainage.
No.8- Roof posts in forms.

COLLEGE HILL
RESERVOIR #2.

9-27-39

1819

1

1820

3

1821

4

1822

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1823

6

1824

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1825

8

No.1- Progression of shores in south basin. Lifting and forcing form panel into
No.3- At roof deck level. Showing pitch of roof. place by manpower.
No.5- Reservoir from steel tank.
No.6- Reservoir from steel tank.
No.7- Aggregate for columns.
No.8- Steel roof panel #1 south basin.

COLLEGE HILL
RESERVOIR #2
10-5-& 10-12-39

1

2

3

4

7

8

No.1- Bringing roof deck to grade.
No.2- 8" concrete drain tile at cantilever toe.
No.3- Backfilling around 8" drain tile.
No.4- Reservoir from steel tank.
No.7- Grinding esterior surface. N.E.Cor.
No.8- Setting concrete railing posts.S.W. Cor.

COLLEGE HILL
RESERVOIR "2

Oct-14 to 26, 1939

1

2

3

4

7

8

No.1- Bringing roof deck to grade.
No.2- 8" concrete drain tile at cantilever toe.
No.3- Backfilling around 8" drain tile.
No.4- Reservoir from steel tank.
No.7- Grinding esterior surface. N.E.Cor.
No.8- Setting concrete railing posts.S.W. Cor.

COLLEGE HILL
RESERVOIR "2

Oct-14 to 28, 1939

1832

1

1833

2

1834

3

1835

4

1836

5

1837

6

1838

7

1839

8

No.1- Drying moisture from expansion joints with gasoline torch.
No.2- Application of plastic filler to expansion joints in roof.
No.3- Welds on entrance chamber roof.
No.4- Cleaning expansion joints.
No.5- Steel roof for entrance chamber.
No.6- Reservoir from steel tank.
No.7- Pouring entrance chamber.
No.8- Looking west from Lincoln street.

COLLEGE HILL
RESERVOIR #2

Oct.27 to Nov.6-1939

1832

1

2

1833

1834

3

4

1835

1836

5

6

1837

1838

7

8

1839

No.1- Drying moisture from expansion joints with gasoline torch.
No.2- Application of plastic filler to expansion joints in roof.
No.3- Welds on entrance chamber roof.
No.4- Cleaning expansion joints.
No.5- Steel roof for entrance chamber.
No.6- Reservoir from steel tank.

No.7- Pouring entrance chamber.
No.8- Looking west from Lincoln street.

COLLEGE HILL
RESERVOIR #2

Oct.27 to Nov.6-1939

1840

1

1841

2

1842

3

1843

4

1844

5

1845

6

No.1- Crack in cross of expansion joint(roof)
No.2- Brazing crack at cross of expansion joint.
No.3- Rock pockets in column.
No.4- Expansion loop in pipe railing.
No.5- Assembling pipe railing.
No.6- From N.W.corner Reservoir #1 towards pump house prior to grading.

COLLEGE HILL
RESERVOIR #2

Oct-30 to Nov 4-1939

1840

1

1841

2

1842

3

1843

4

1844

5

1845

6

No.1- Crack in cross of expansion joint(roof)
No.2- Brazing crack at cross of expansion joint.
No.3- Rock pockets in column.
No.4- Expansion loop in pipe railing.
No.5- Assembling pipe railing.
No.6- From N.W.corner Reservoir #1 towards pump house prior to grading.

COLLEGE HILL
RESERVOIR #2

Oct-30 to Nov 4-1939

1846

7

1847

8

1848

9

1849

10

11

1850

12

1851

No.7- From Lawrence St. to 23rd. St. prior to grading.
No.8- Entrance chamber during construction.
No.9- Stripping roof forms.(South Basin)
No.10- Chipping and plastering end of closing sections.
No.11-Chipping and patching wall(North Basin) (In this particular instance a 2x2" form spreader was left in the wall.
No.12-Pouring tar in slope slab expansion joints.

COLLEGE HILL
RESERVOIR #2

#7-#8- Oct.30 to Nov.4-1939
Bal.-Nov.6th to Nov.11-1939

1852

1

1853

2

1854

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1855

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1856

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1857

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1858

7

1

8

1859

No.1- Riprap slope near pump house looking N.
No.2- Riprap slope near pump house looking S.
No.3- 23rd St. grading from Lincoln Street.
No.4- Lawrence St. grading looking South.
No.5- Backfilling west side of Reservoir.
No.6- Grinding west wall.
No.7- Grinding roof of entrance chamber.
No.8- Grinding post tops.

COLLEGE HILL
RESERVOIR #2

Nov-17-1939

1852

1

1853

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1854

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1855

4

1856

5

1857

6

1858

7

1

8

1854

No.1- Riprap slope near pump house looking N.
No.2- Riprap slope near pump house looking S.
No.3- 23rd St. grading from Lincoln Street.
No.4- Lawrence St. grading looking South.
No.5- Backfilling west side of Reservoir.
No.6- Grinding west wall.
No.7- Grinding roof of entrance chamber.
No.8- Grinding post tops.

COLLEGE HILL
RESERVOIR #2

Nov-17-1939

1

2

3

4

5

6

7

8

Nos.1 to 8 Inclusive .
All pictures of hand placed rock by pump house.

COLLEGE HILL
RESERVOIR #2

Nov-20to 26-1939

1

2

3

4

5

6

7

8

Nos.1 to 8 Inclusive .
All pictures of hand placed rock by pump house.

COLLEGE HILL
RESERVOIR #2

Nov-20to 26-1939

1

2

3

No.1- Patching crack in slope slab.
No.2- Finning vertical ealls.
No.3- Water being admitted to north chamber for test.

COLLEGE HILL
RESERVOIR #2

Dec.-4th & 6th-1939

1871

1

2

1872

1873

3

4

1874

1875

5

6

1876

1877

7

8

1878

No.1- Blading subgrade of Lincoln.
No.2- Grading with bulldozer east of Resivoir.
No.3- Rolling Lincoln Street.
No.4- Relaying rock by pump house.
No.5- Placing mortor in rock wall.
No.6- Reservoir from steel tank.
No.7- Parking area and street east of Reservoir.
No.8- Earth fill south Lincoln St.

COLLEGE HILL
RESERVOIR #2

Dec-6-1939

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6.

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8

No.1- Looking N.W. Working rockfill at N.W. corner College Hill Reservoir #1.

No.2- Looking N.-Leveling rock surface approach from Lincoln to College Hill Res. #1.

No.3- Looking N.E. from steel tank showing Lincoln Street Imp.

No.4- From steel tank showing Lawrence St. Imp.

No.5- Gravel backfill along W side looking south.

No.6- Looking N. on Lawrence St. from top of hill.

No.7- Looking N. from steel tank.

No.8- Attempt to level up mud between Law.St. surfacing and Res.

Dec.-29-1939

No.1- C.H.Res.complete looking across S.E. corner.
No.2- Looking east across C.H.Res. Showing railing expansion joint and entrance house.
No.3- College Hill elevator steel tank.
No.4- Stairway and railing at N.W. corner C.H.Res.
No.5- C.H.Res. east wall panels and entrance house.
No.6- College hill reservoir looking north.
No.7- College Hill Res. looking S.W.
No.8- C.H.Res. looking North at entrance house.

COLLEGE HILL
RESERVOIR #2
February-11-1940

1887

1

1888

2

1889

3

1890

4

1891

5

1892

6

1893

7

1894

8

No.1- Northeast corner of reservoir.
No.2- Looking north across reservoir.
No.3- East side of reservoir.
No.4- East side of reservoir.
No.5- Northeast corner of reservoir.
No.6- View of east side of reservoir.
No.7- East side of reservoir.
No.8- East side of reservoir.

COLLEGE HILL
RESERVOIR #2

Jan. 8th to 15th, 1940

No.1- Looking N. from 1st. bent of steel tower tank.
No.2- Looking N. from 2nd. bent of steel tower tank.
No.3- Looking N. W.
No.4- Steel tower tank looking Northwest.
No.5-Complete. Looking S.W.
No.6- Complete. Looking S.W.
No.7- Complete. Bronze tablets.
No.8- Complete. Bronze tablets.

COLLEGE HILL
RESERVOIR #2.

Jan. 29th, 1940.

No.1- C.H.Res.complete looking across S.E. corner.
No.2- Looking east across C.H.Res. Showing railing expansion joint and entrance house.
No.3- College Hill elevator steel tank.
No.4- Stairway and railing at N.W. corner C.H.Res.
No.5- C.H.Res. east wall panels and entrance house.
No.6- College hill reservoir looking north.
No.7- College Hill Res. looking S.W.
No.8- C.H.Res. looking North at entrance house.

COLLEGE HILL
RESERVOIR #2
February-11-1940

1910 C

PERCY BROWN J W McARTHUR W J MOORE CADERETTE
COLLEGE HILL RESERVOIR Febuary 1940

1910 D

H.J. Adler
Yakima Wash.

1910 E

H. J. Adler, Yakima Washington
Contractors - Unit #2 - College Hill Reservoir #2, Eugene, Ore. Started April 12, 1939 - Finished Jan. 26, 1940
Bonus on leakage $8625. out of possible $9000.00

College Hill Reservoir
February 1940

1910 A

COLLEGE HILL RESERVOIR
February 1940

1910 B.

Kodachrome Film taken by R. B. Boals
January 24, 1940

No. 1956 2/8/53 By R. B. Boals

No. 1957 2/8/53 By R. B. Boals

No. 1958 2/8/53 By R. B. Boals

No. 1959 2/8/53 By R. B. Boals

No. 1960 2/8/53 By R. B. Boals