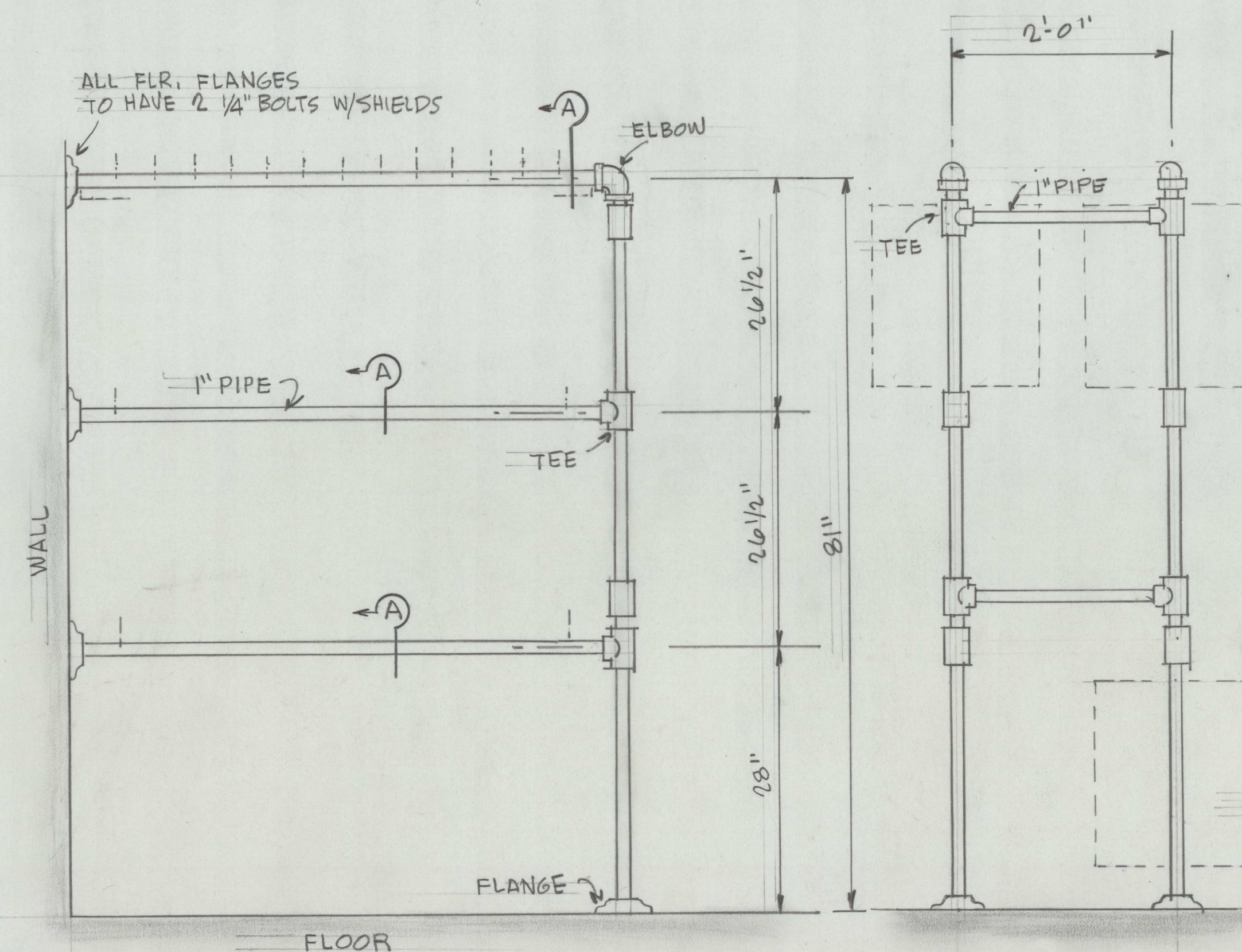


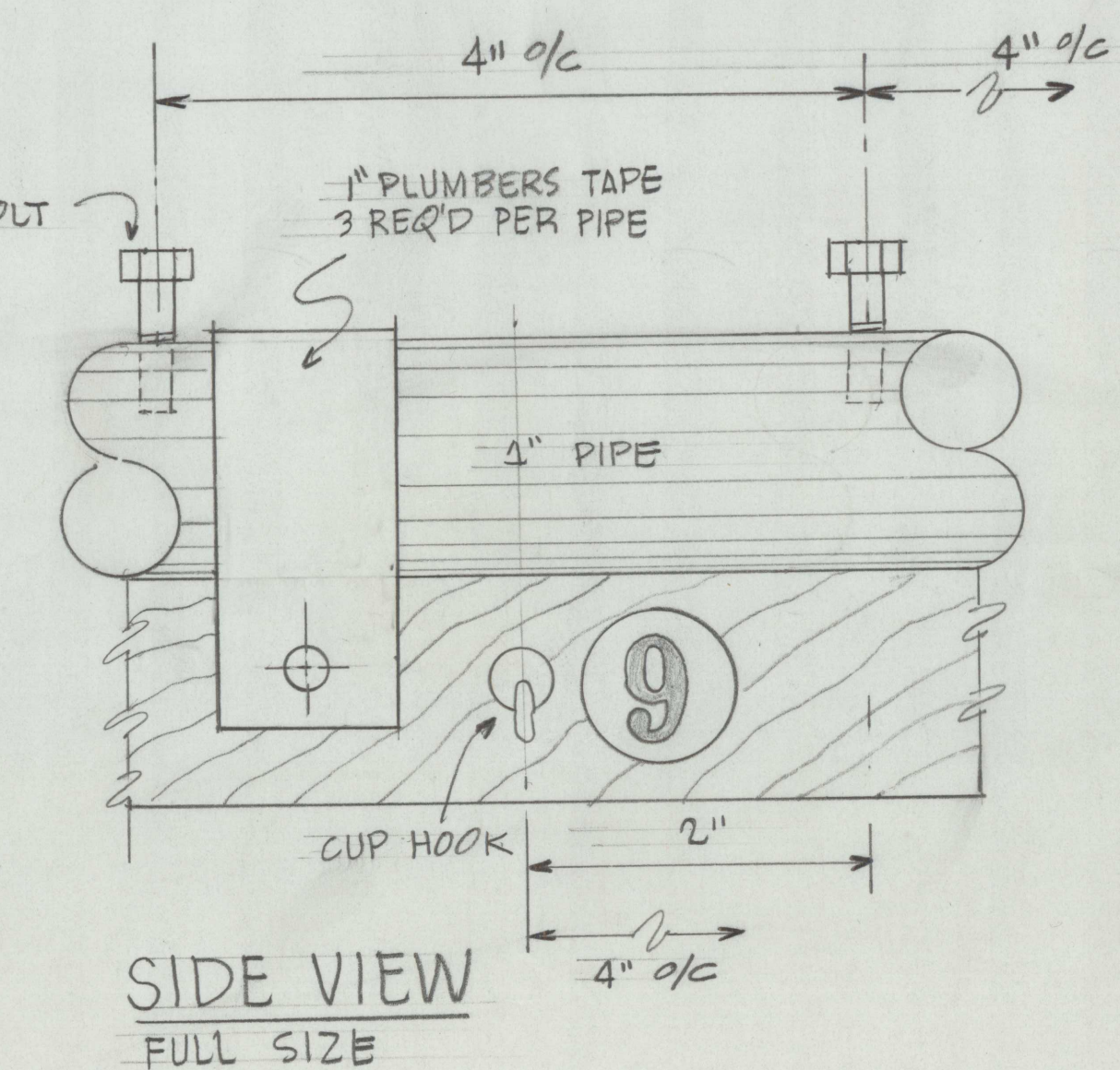
PLAN
SCALE: 1/4" = 1'-0"



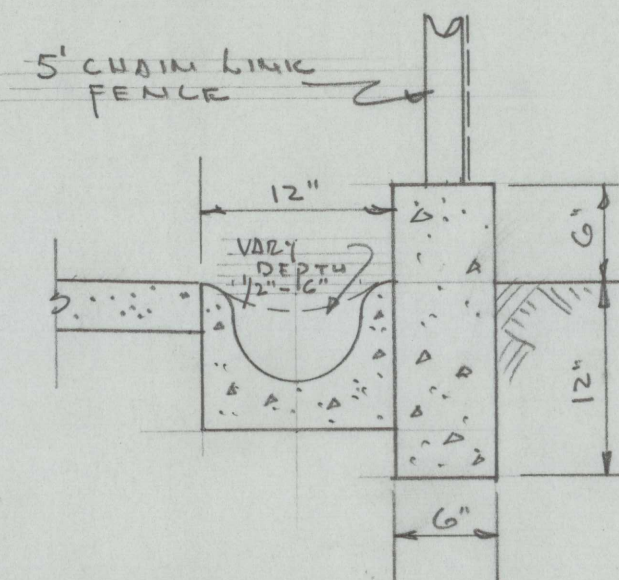
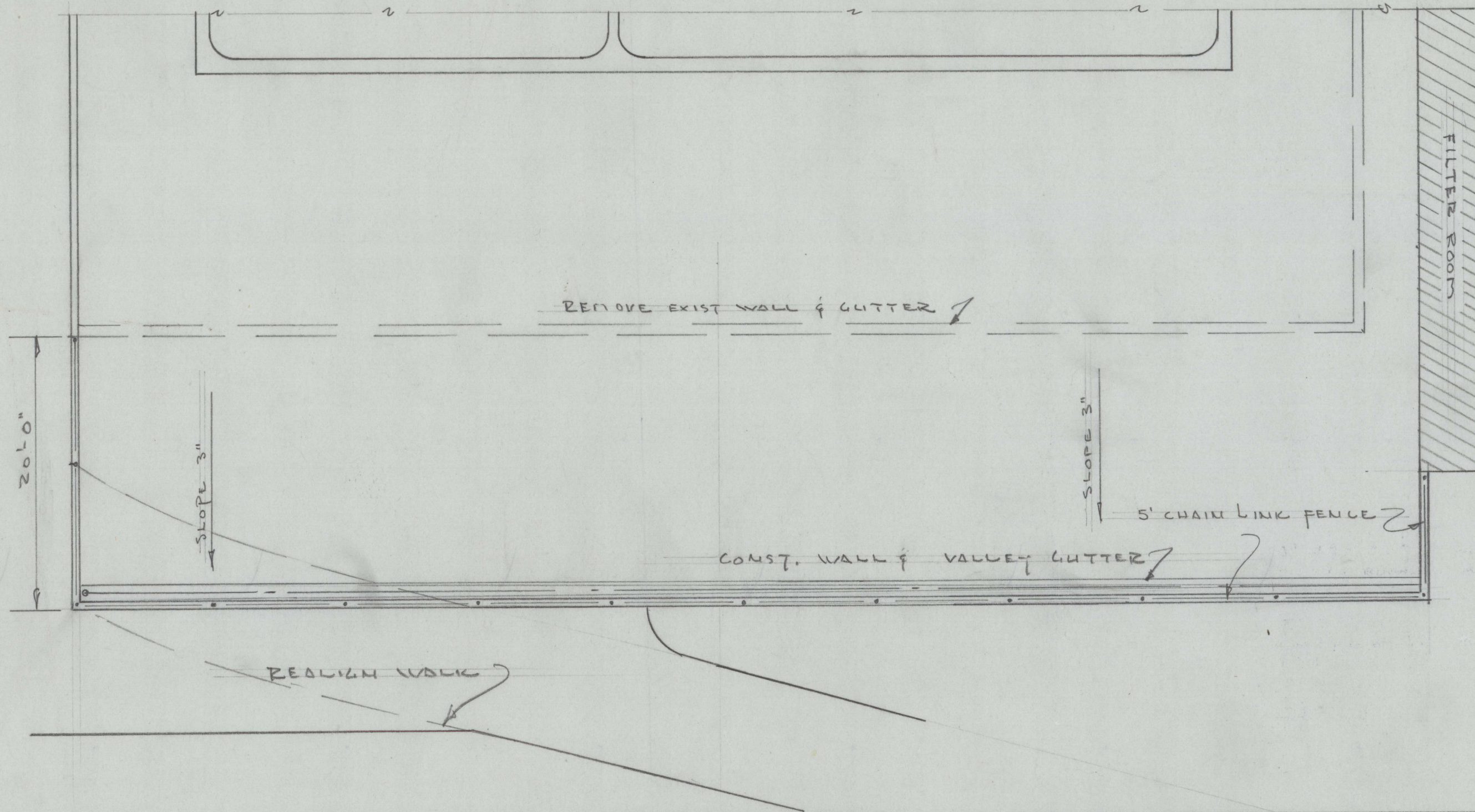
SIDE VIEW
SCALE: 1" = 1'-0"

END ELEV.
SCALE: 1" = 1'-0"

SECTION A
FULL SIZE

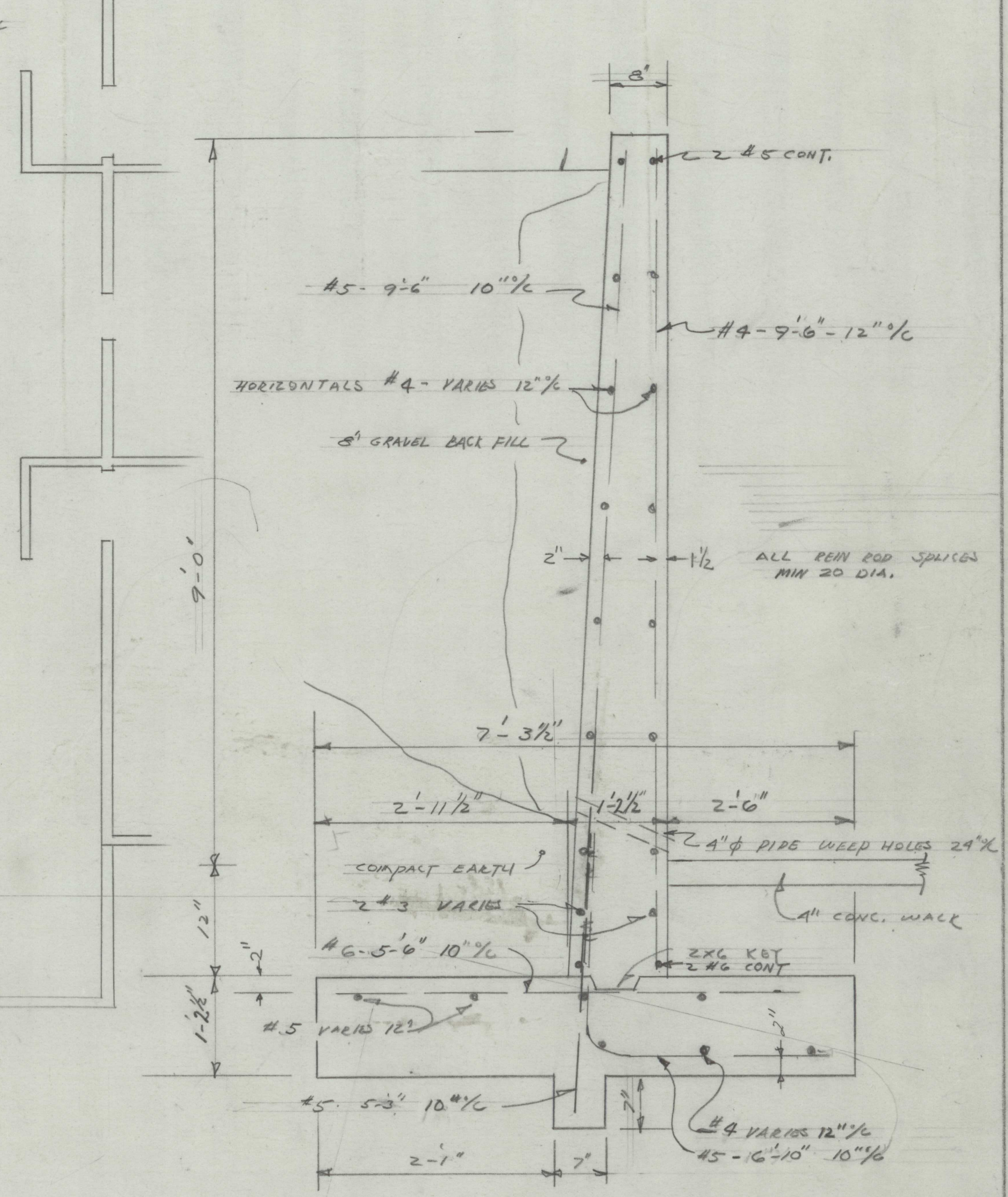
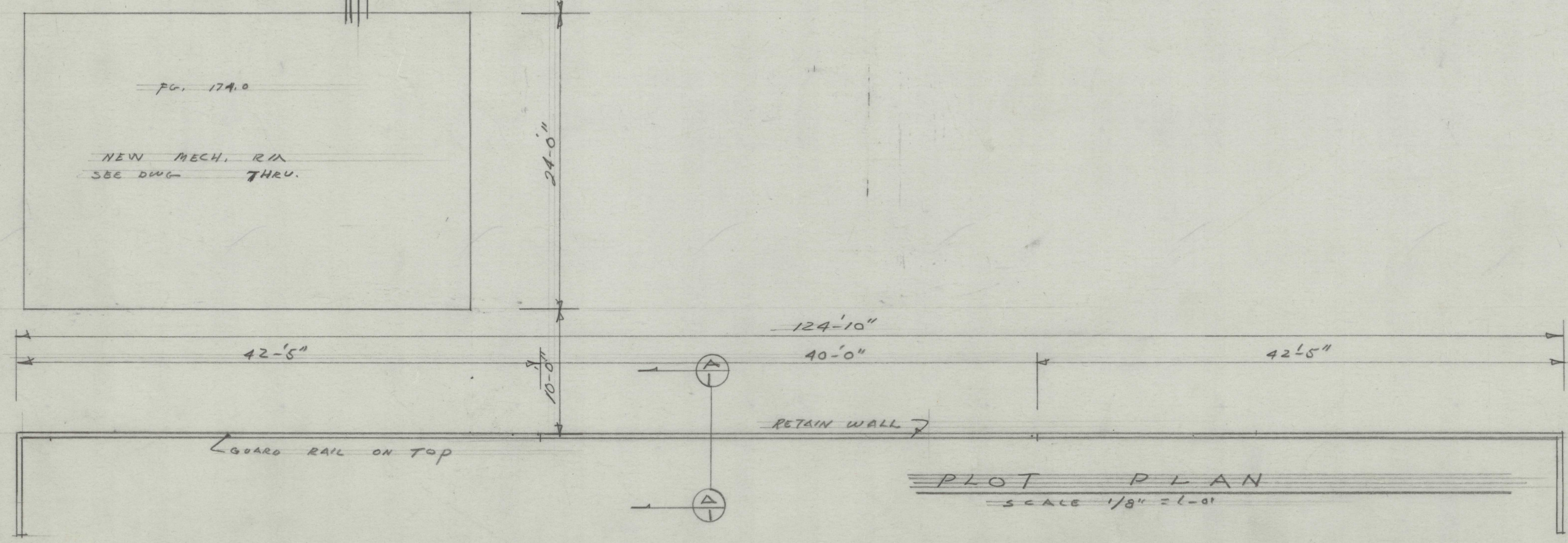
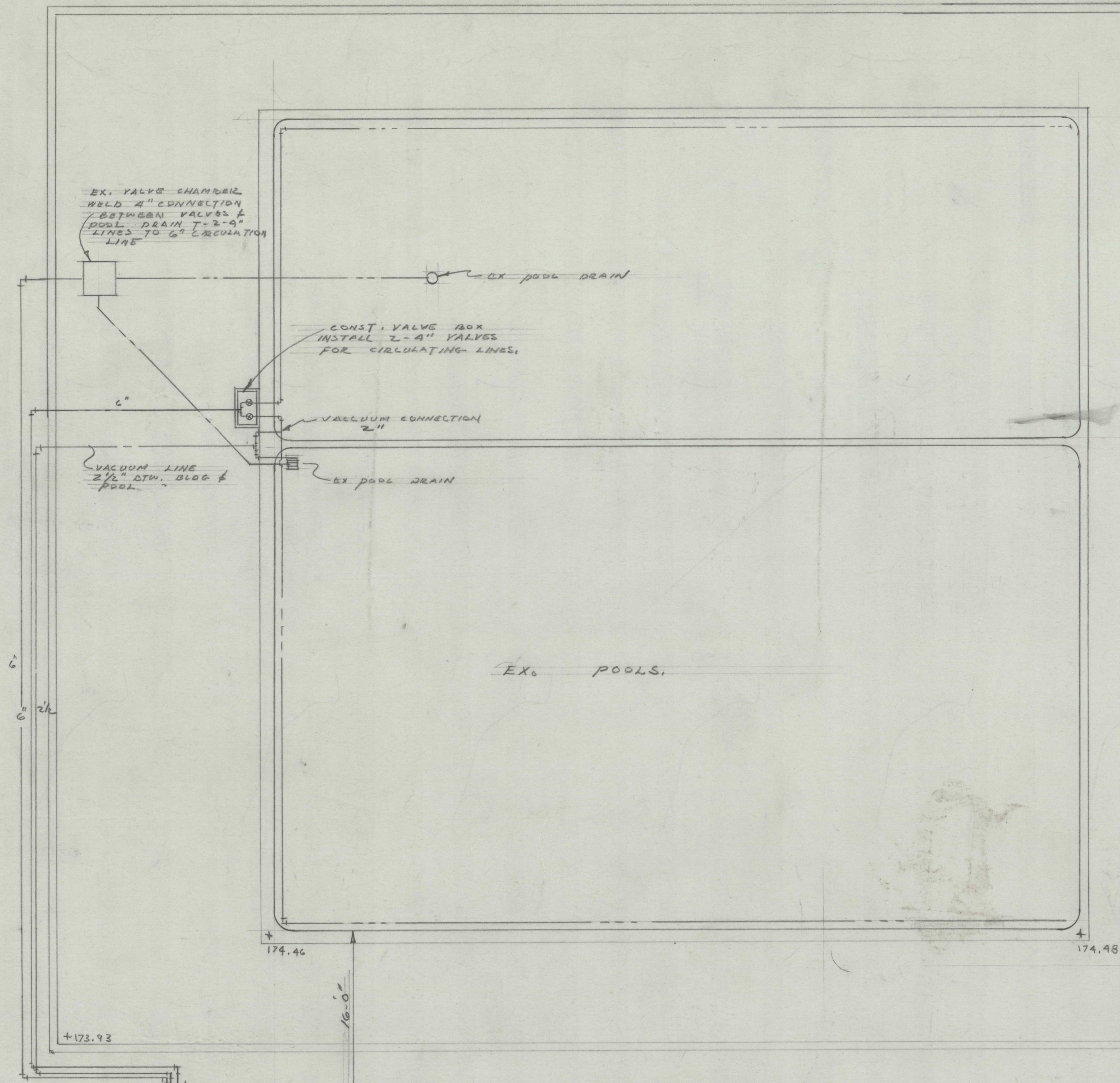


SWIM BAG HANGERS CRESTON BATHHOUSE CHECKROOMS			
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON			
ORMOND R. BEAN HARRY B. BUCKLEY	DESIGNED BY: JACK P. STUHL DRAWN BY: A.D.L.	COMMISSIONER SUPT. OF PARKS	AREA NO. 48
DATE: MAY '65 SCALE: NOTED V. SEC: 3435	APPROVED BY:		



WALL & GUTTER DETAIL

ALTERATIONS TO POOL DECK CRESTON PARK		
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
ORMOND R. BEAN HARRY B. BUCKLEY	COMMISSIONER SUPT. OF PARKS	
DATE: May 11, 1960	DESIGNED BY: Rolando B. Hall	AREA NO.
SCALE: N. SEC.	APPROVED BY:	



CROSS SECTION A-A
SCALE 1" = 12'-0"

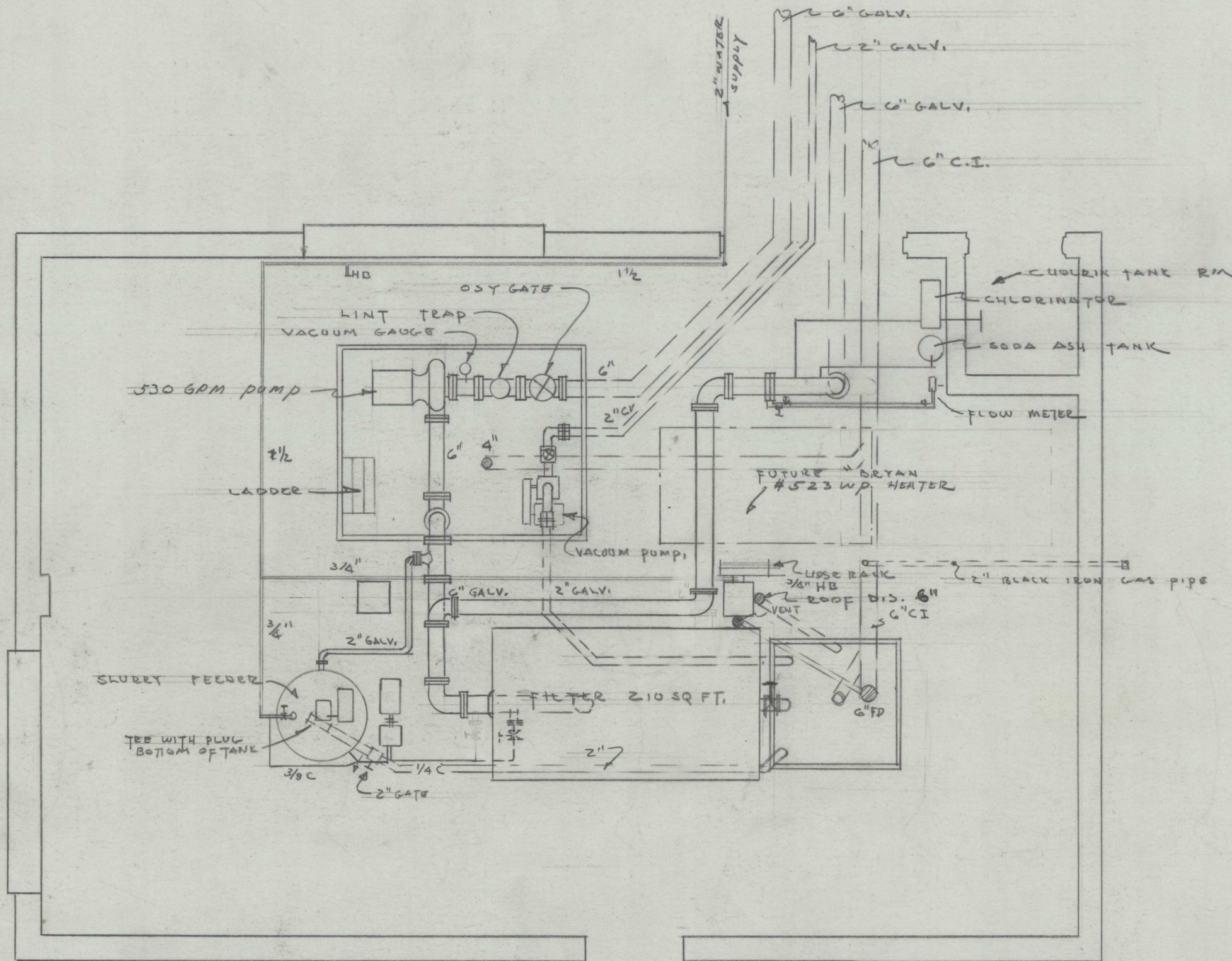
59.001

MECHANICAL ROOM		
CRESTON PARK		
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
ORMOND R. BEAN HARRY B. BUCKLEY	DESIGNED BY: JACK P. STUHL	COMMISSIONER SUPT. OF PARKS
DATE: 3/5/59	SCALE: 1/8" = 1'-0"	AREA NO.
1/2 SEC:	APPROVED BY:	

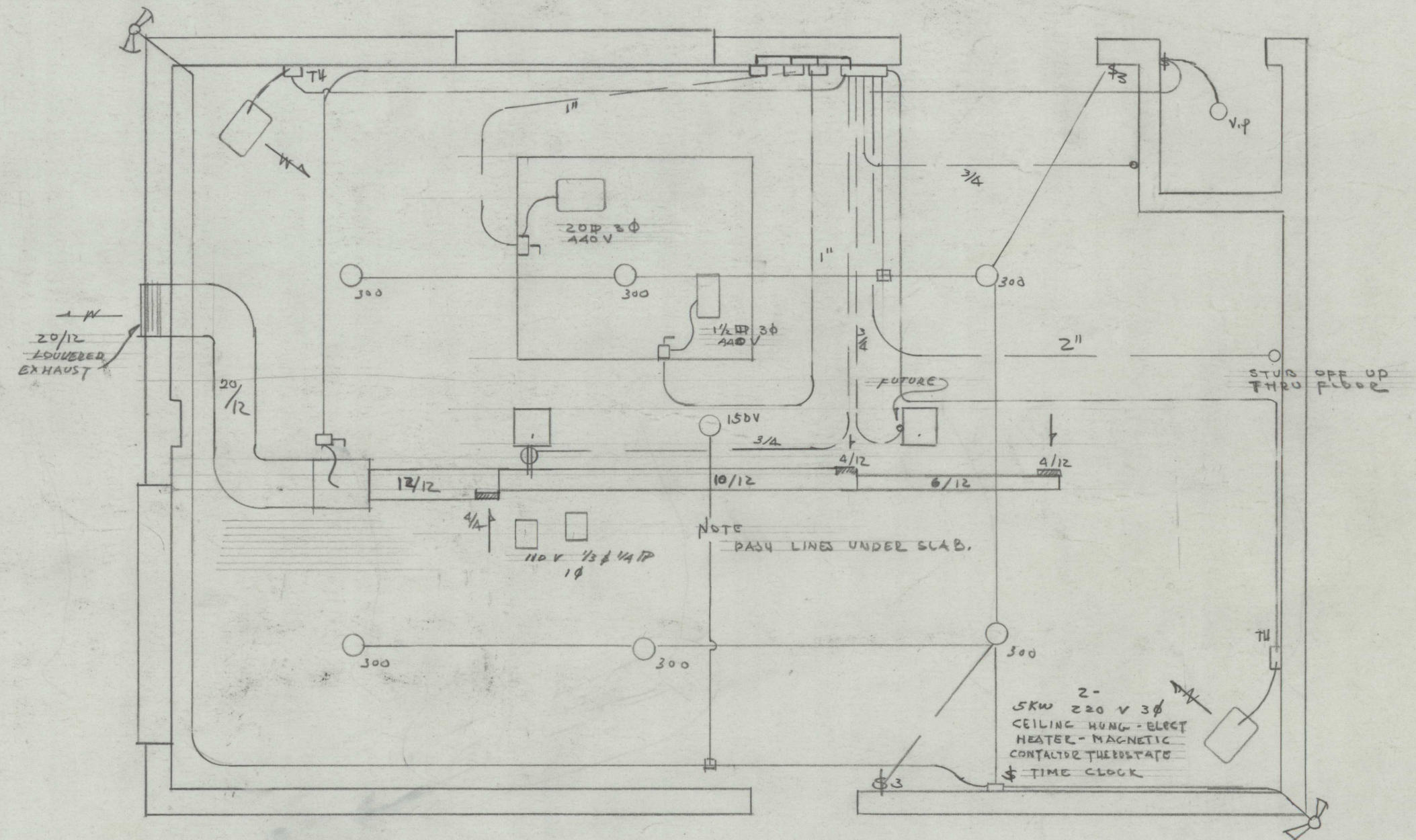
MICROFILMED

59.001

~~POOL (SEE PLOT) DWG #1~~



MECHANICAL PLAN



ELECTRIC PLAN

MICROFILMED

MECHANICAL ZOO/
CRESTON PARK

BUREAU OF PARKS AND PUBLIC RECREATION
PORTLAND, OREGON

ORMOND R. BEAN	COMMISSIONER
HARRY B. BUCKLEY	SUPT. OF PARKS

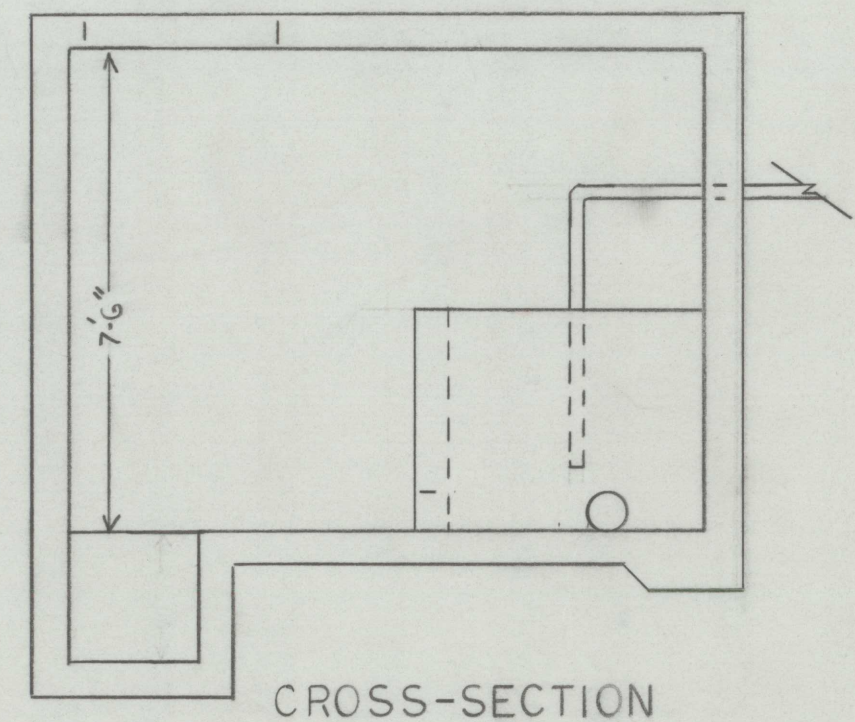
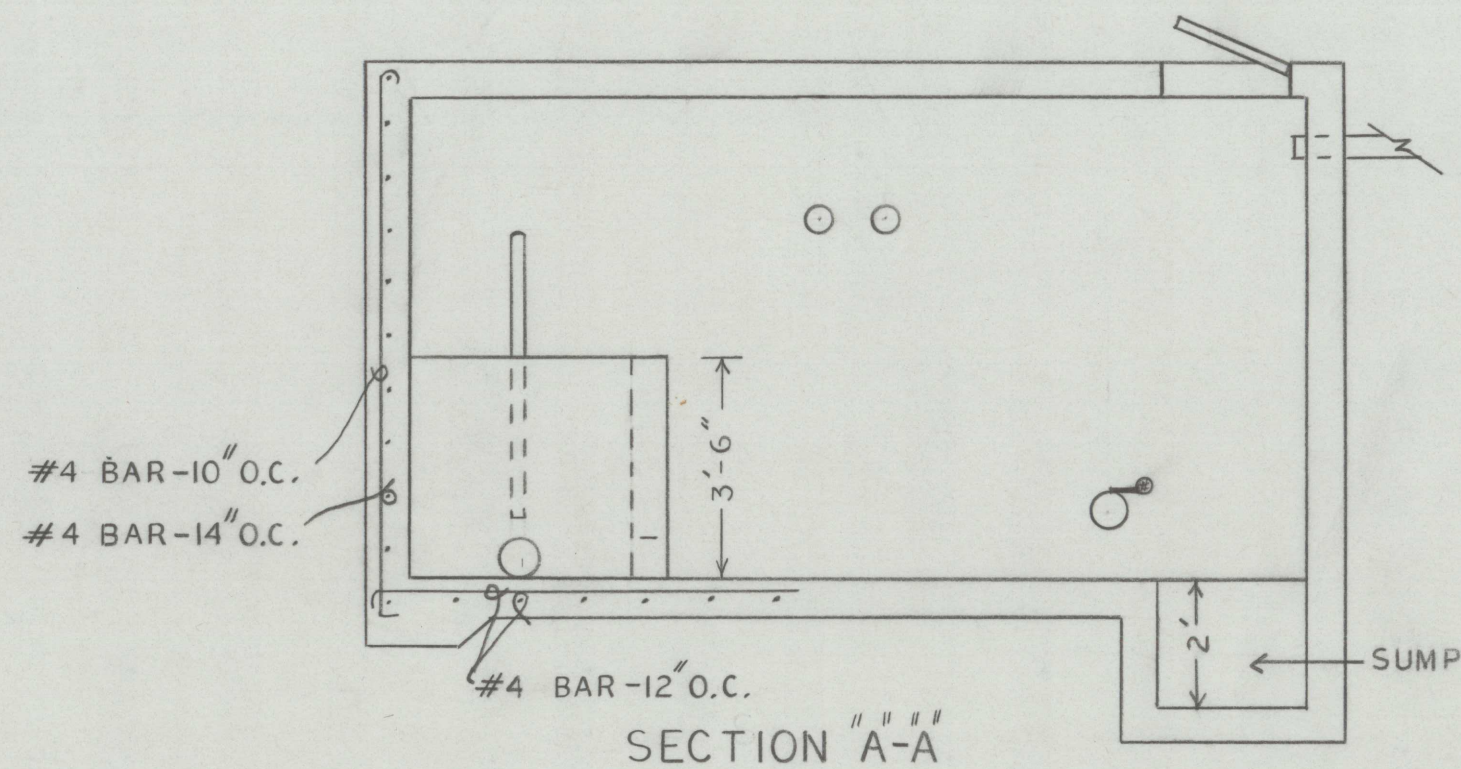
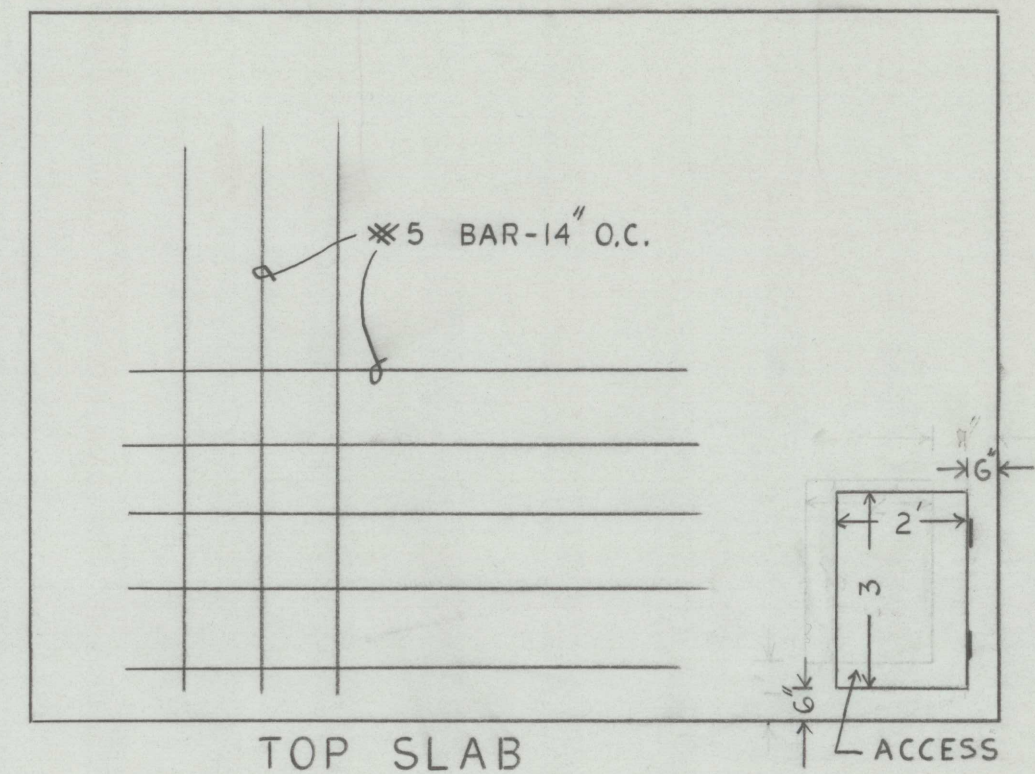
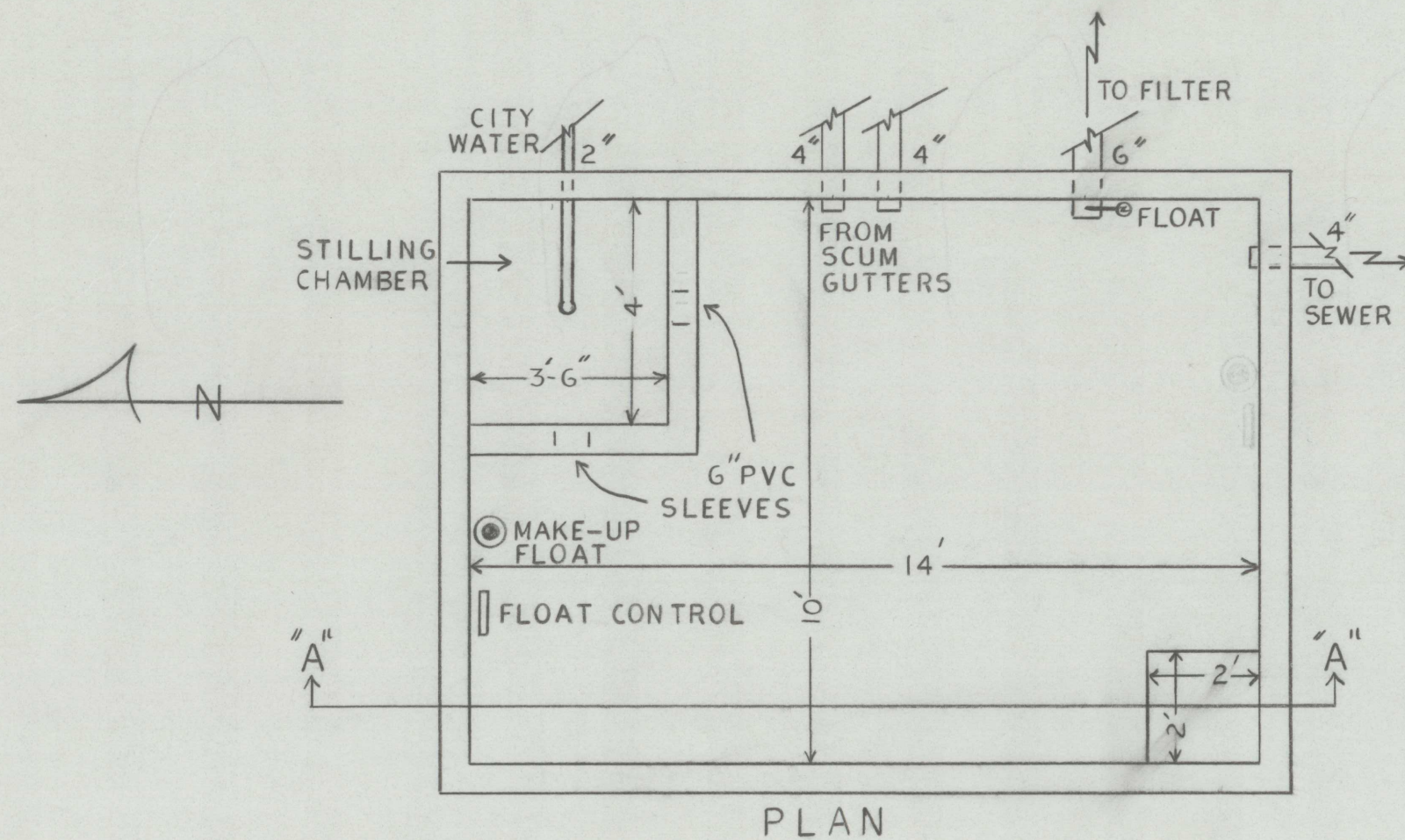
DATE: 3/5/59 DESIGNED BY: JACK P. STUHL AREA NO.

SCALE: _____
 ¼ SEC.: _____ APPROVED BY: _____

9.001

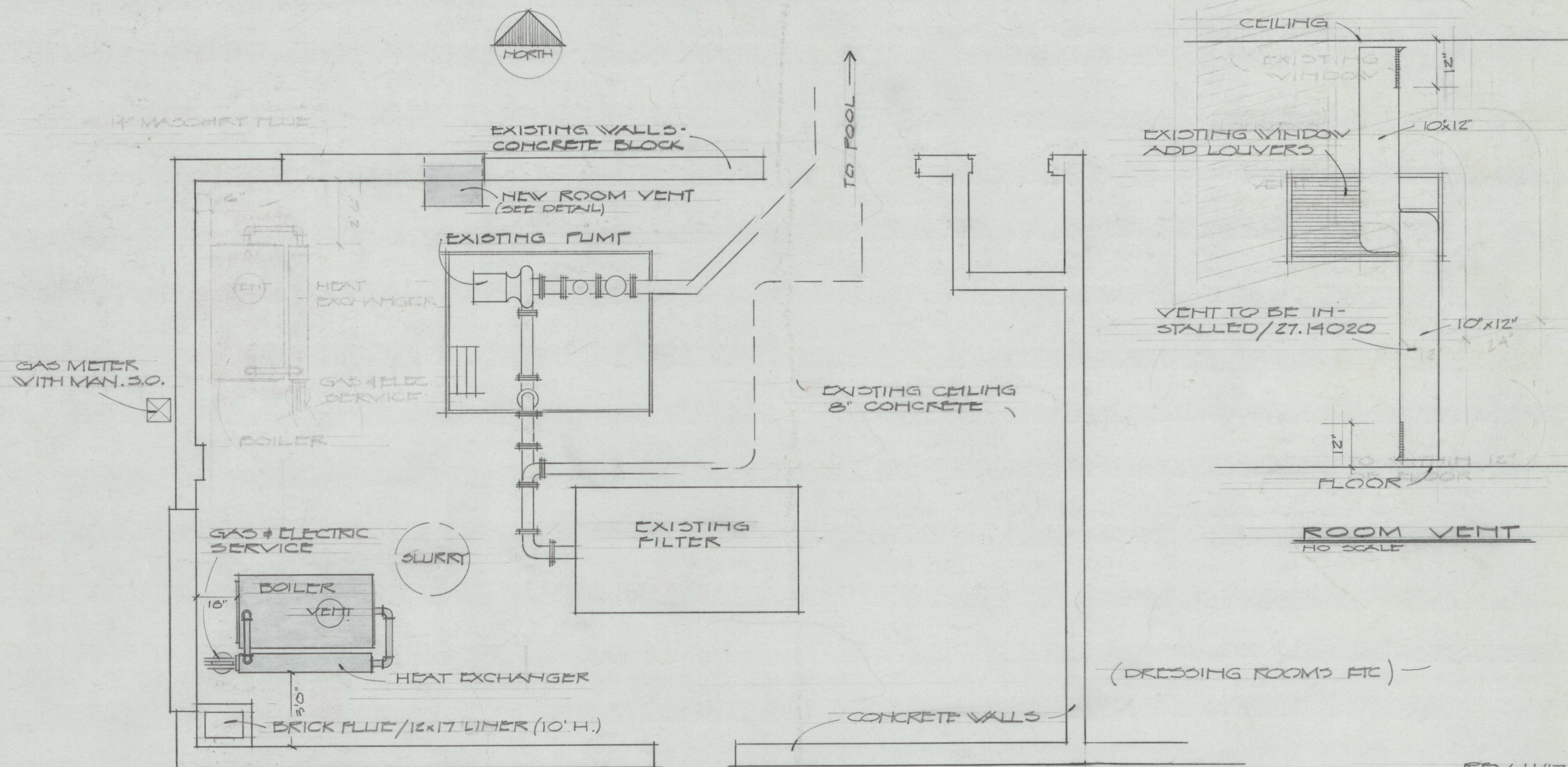
59.001

14



CRESTON POOL SURGE TANK

SCALE: 1" = 3'
APRIL 11, 1983
CWA



PLAN

1/4" = 1' 0"

BOILER: 1,35 MIL. BTU GAS FIRED LOW
PRESSURE - RITE HOT WATER BOILER
HEAT EXCHANGER: 8" DIA. 3/4" TUBING TACO TO 375°
150 PSI
VENT: CLASS B W/AIR PROVING SWITCH
ROOM VENT: GRAVITY FLOW
FLUE: TO BE 14" MASONRY

CRESTON PARK ADDITION OF HEAT EXCHANGER

BUREAU OF PARKS AND PUBLIC RECREATION
PORTLAND, OREGON

FRANCIS J. IVANCIE
DALE R. CHRISTIANSEN

COMMISSIONER
SUPT. OF PARKS

DATE: 10/2/72

DESIGNED BY:

AREA NO.

SCALE: SHOWN

DRAWN BY: R. GEORGE

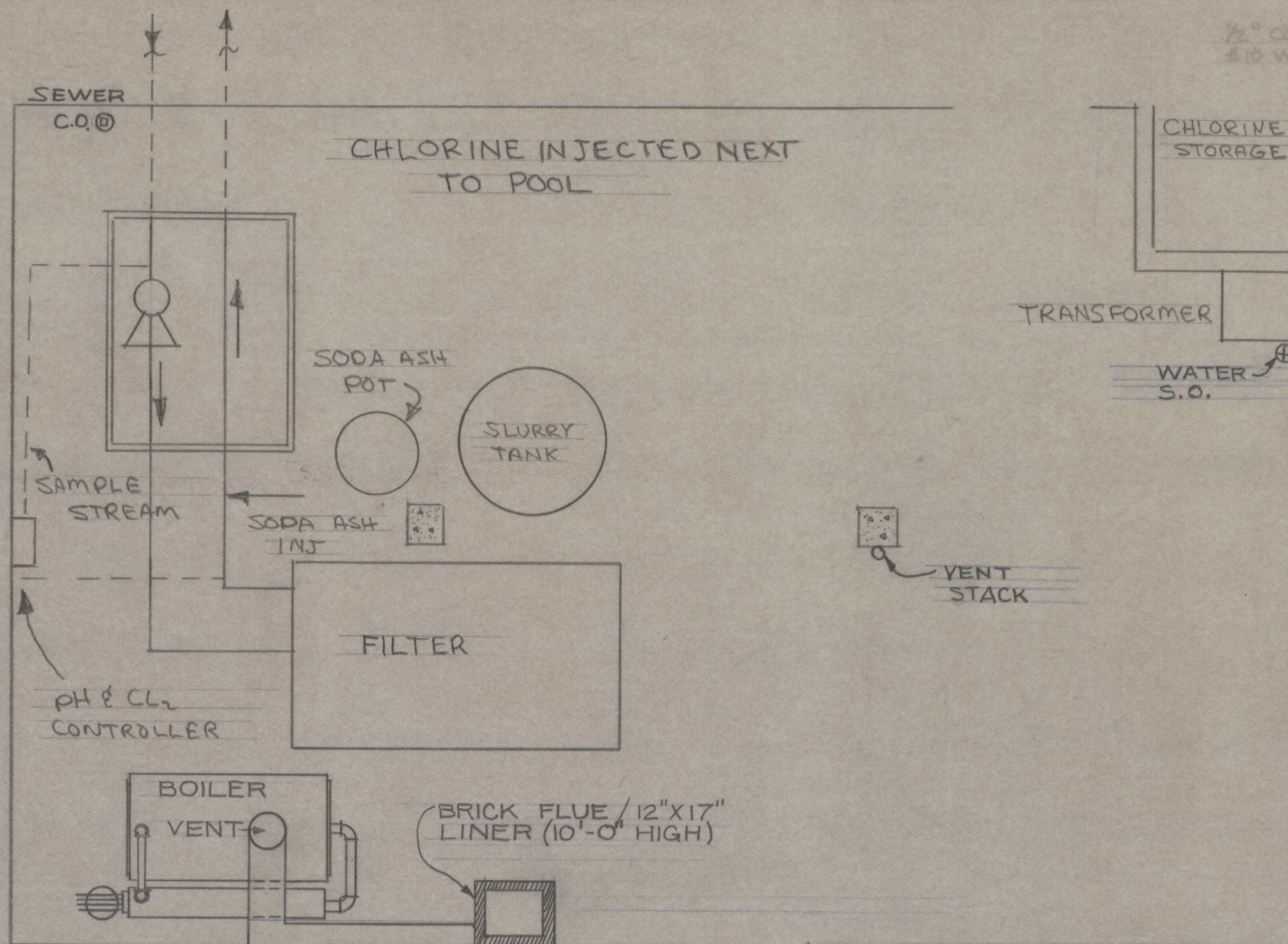
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APPROVED BY:

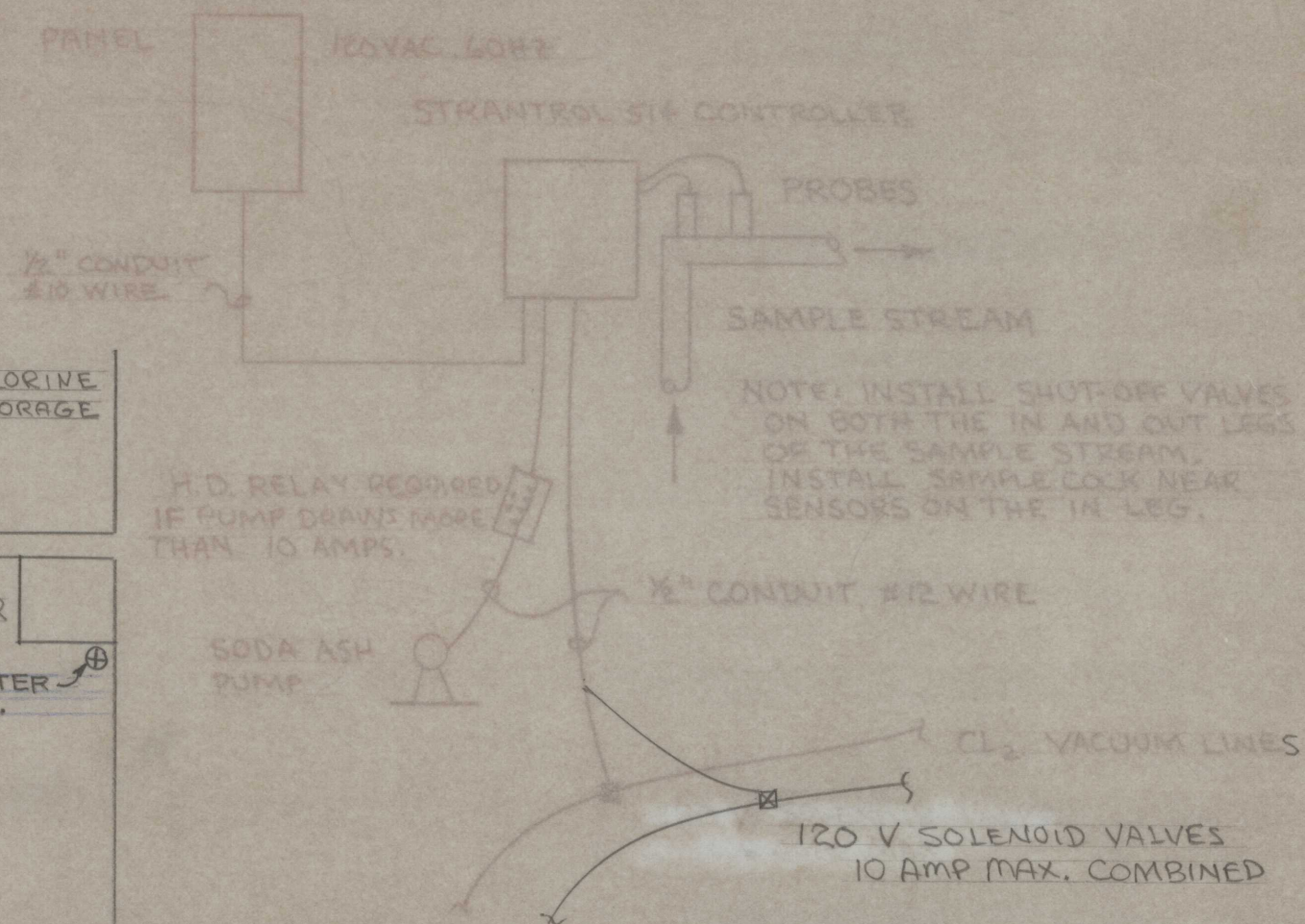
REV. 11/17/72

NOTES

1. INLET OF SAMPLE STREAM MUST BE LOCATED UPSTREAM OF CHEMICAL ADDITIONS, MAKE UP WATER, AND HEATED WATER.
2. 10 AMP MAXIMUM DRAW ON CONTROLLER FROM CHEMICAL FEEDERS.
3. CONTROLLER TO BE MOUNTED VERTICAL AND PLUMB.
4. PROBES MUST BE INSTALLED IN A VERTICAL POSITION.



PLAN - MECHANICAL ROOM
NO SCALE



PLUMBING AND ELECTRICAL DETAILS

CRESTON - AUTOMATIC SWIM
POOL CHEMICAL CONTROL-AS BUILT

BUREAU OF PARKS AND PUBLIC RECREATION
PORTLAND, OREGON

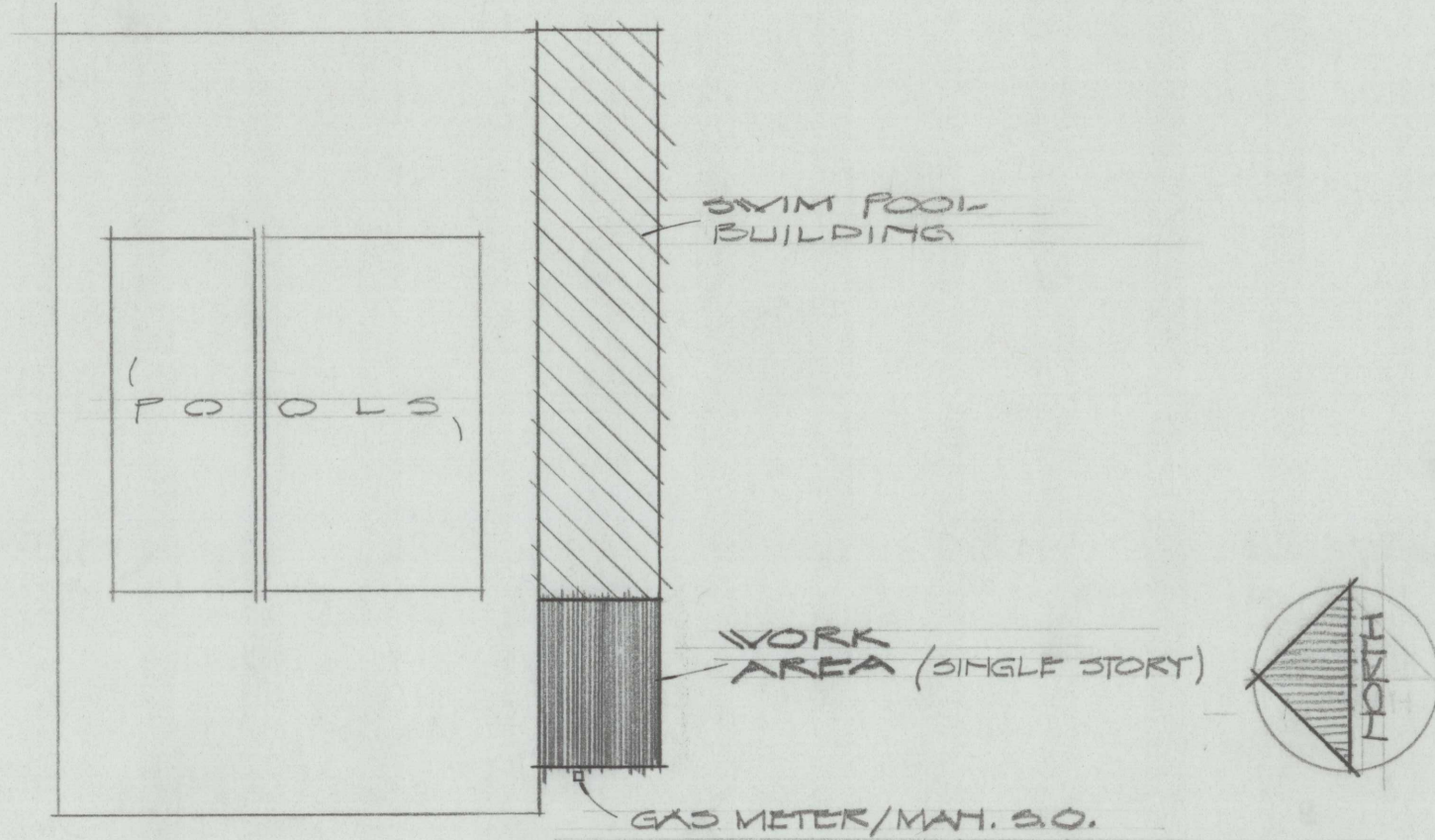
DATE: 4-6-78

REVISED BY N. WELLS 2/27/81

SCALE: NONE

DRAWN BY: M. LUCAS

SE POWELL BLVD.



PLOT PLAN

REV. 11/17/72

CRESTON PK.
ADDITION OF HEAT EXCHANGER

BUREAU OF PARKS AND PUBLIC RECREATION
PORTLAND, OREGON

FRANCIS J. IVANCIE
DALE R. CHRISTIANSEN

COMMISSIONER
SUPT. OF PARKS

DATE: 10/10/72

DESIGNED BY:

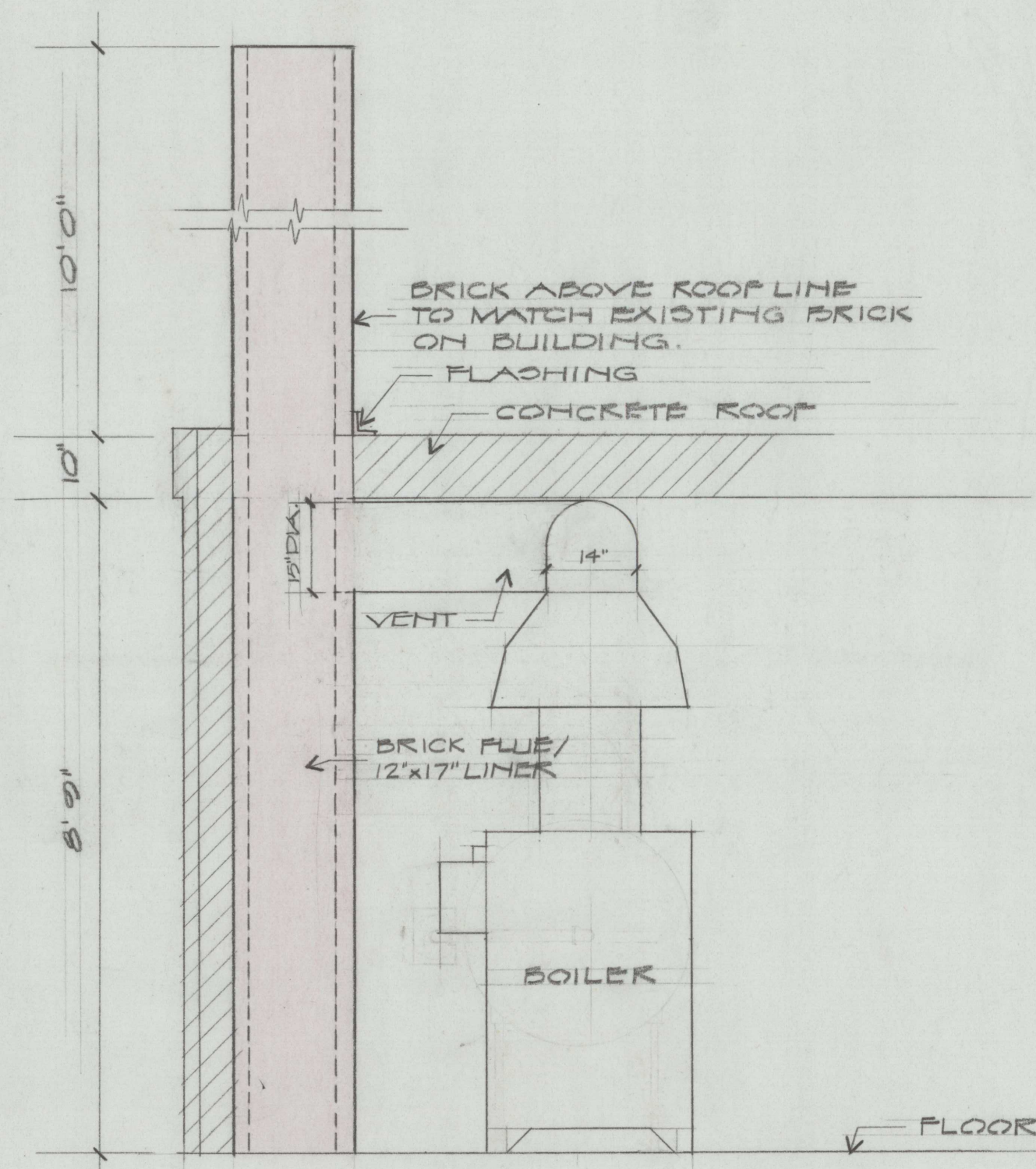
AREA NO.

SCALE: 1"=40'

DRAWN BY: R. GEORGE

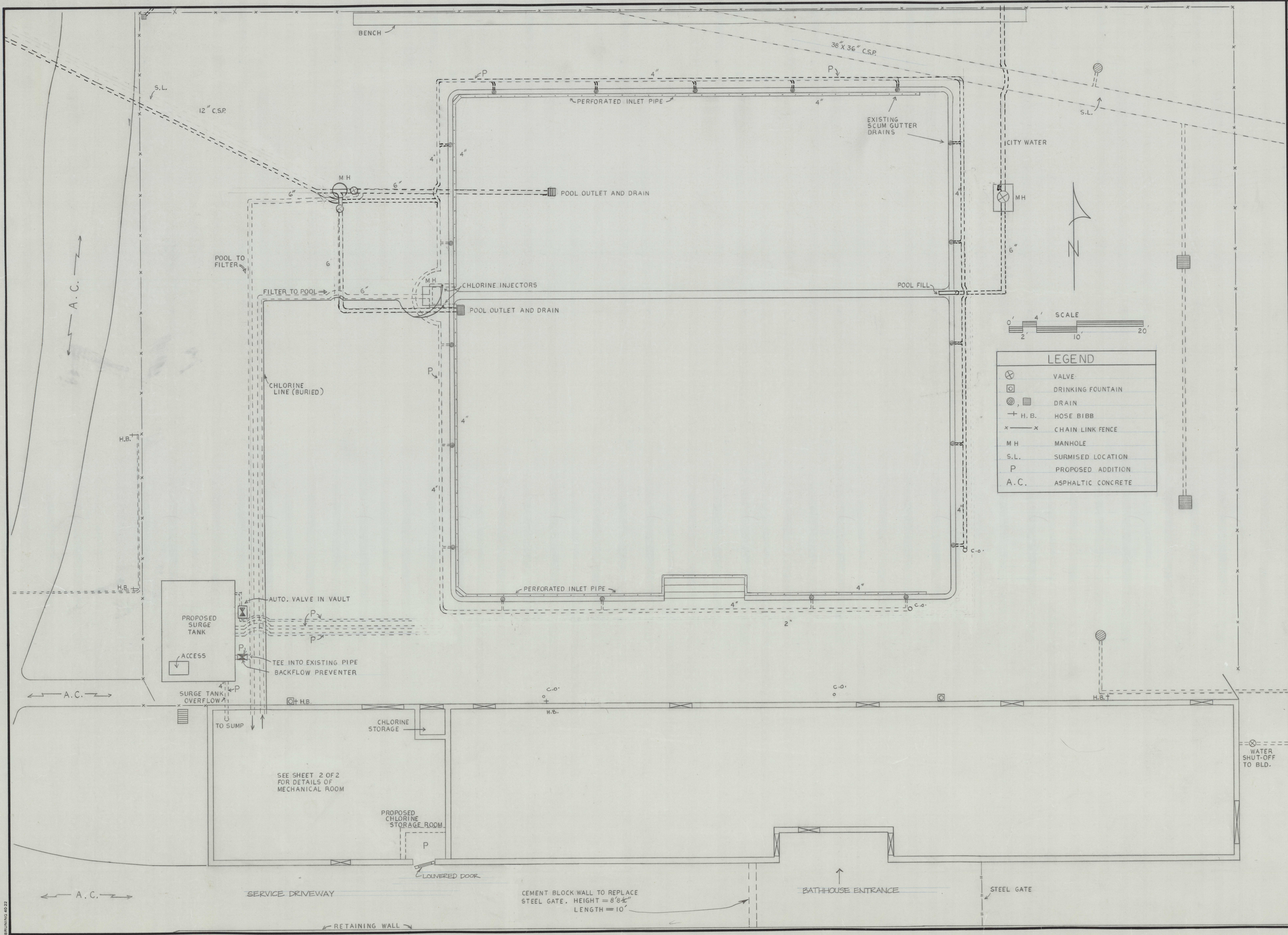
$\frac{1}{8}$ SEC:

APPROVED BY:



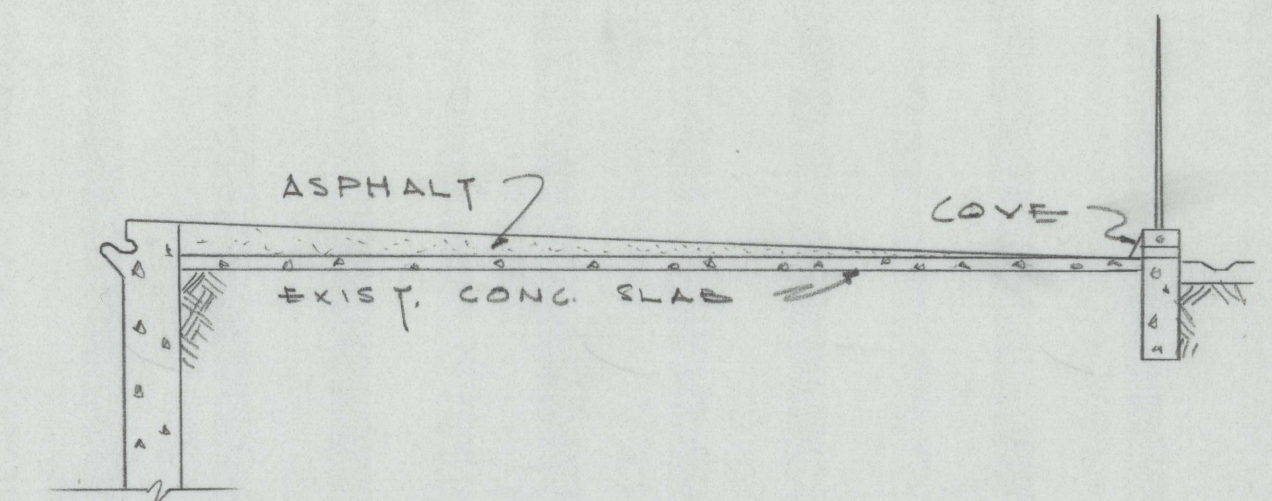
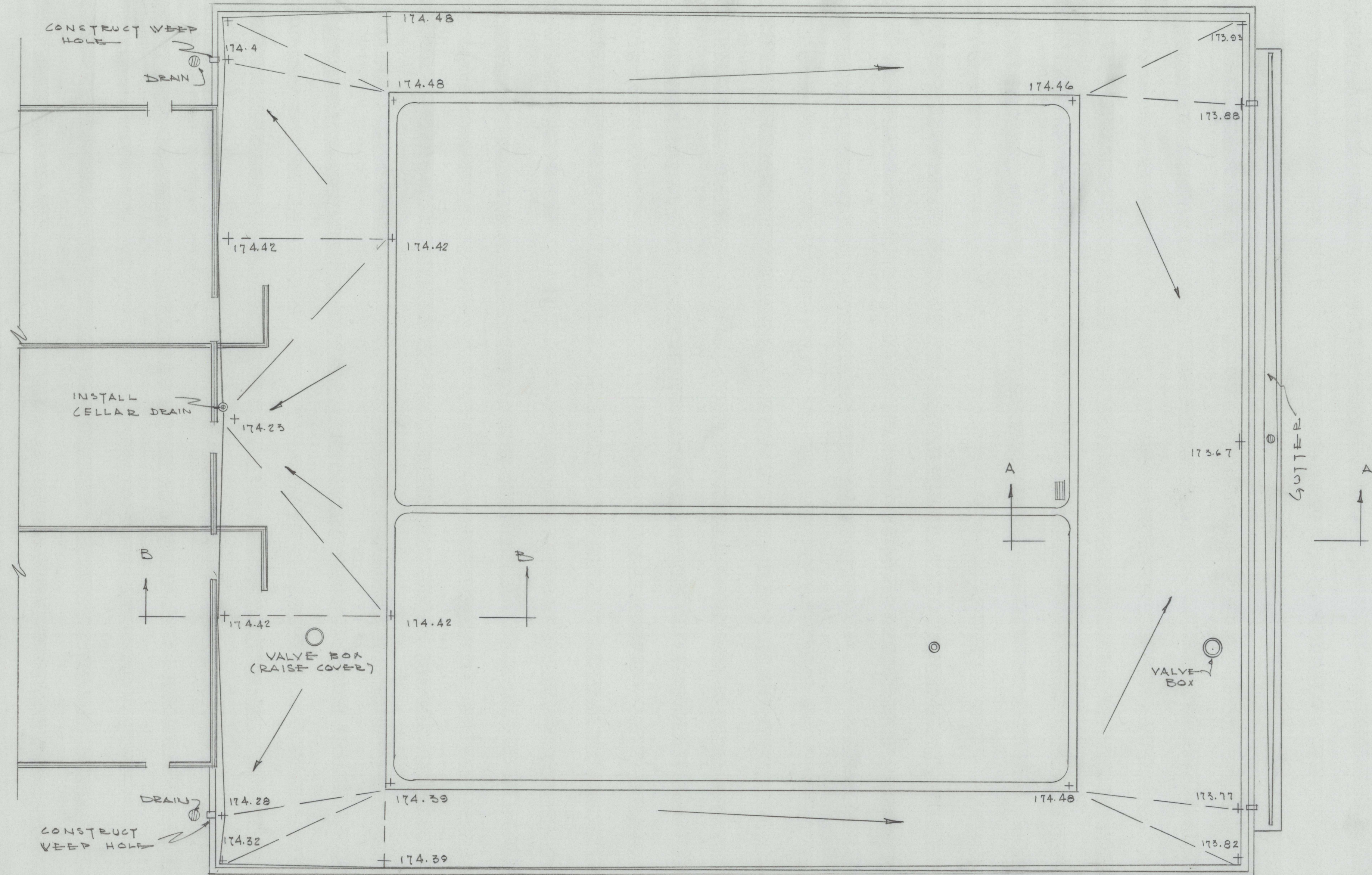
SECTION (LOOKING WEST)
SCALE 1/2" = 1'0"

CRESTON PK. ADDITION OF HEAT EXCHANGER		
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
FRANCIS J. IVANCIE DALE R. CHRISTIANSEN	COMMISSIONER SUPT. OF PARKS	
DATE: 1/9/73 SCALE: SHOWN 1/4" SEC:	DESIGNED BY: DRAWN BY: R. GEORGE APPROVED BY:	AREA NO.

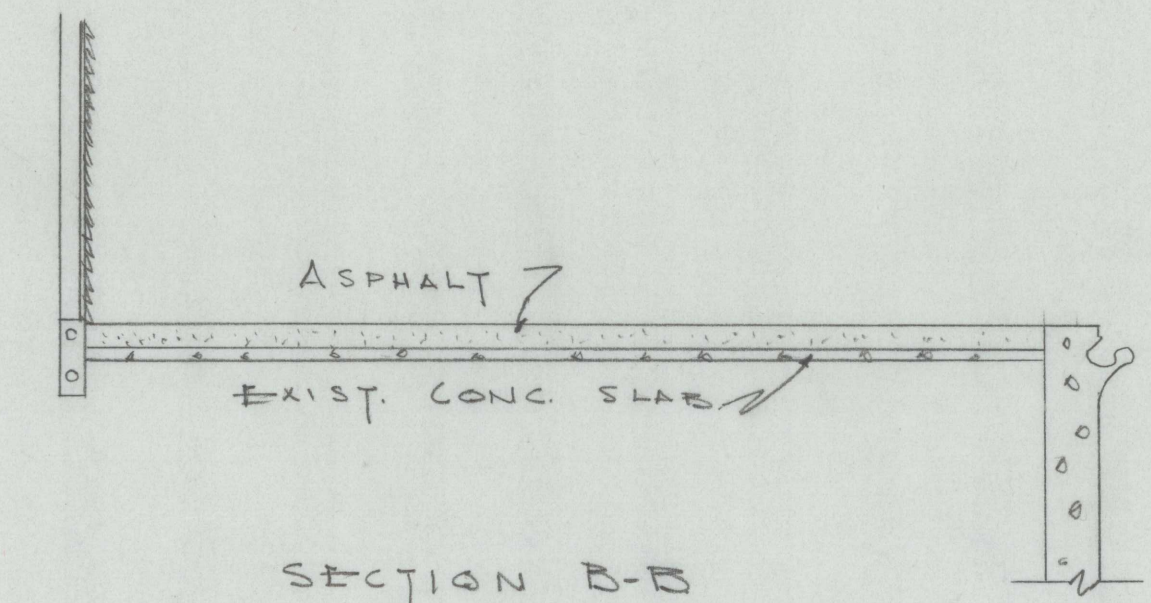


PORTLAND OREGON		BUREAU OF PARKS AND RECREATION CHARLES R. JORDAN, COMMISSIONER OF PUBLIC AFFAIRS		CRESTON PARK POOL	
NO. DATE		DRAWN BY: CWA 1/4 SEC: 3435 DATE: APRIL 11 1933 SCALE: 1"=6'		SHEET 1 OF 2	
REVISIONS		BY			

BRUNING 4022



SECTION A-A



SECTION B-B

North
↓

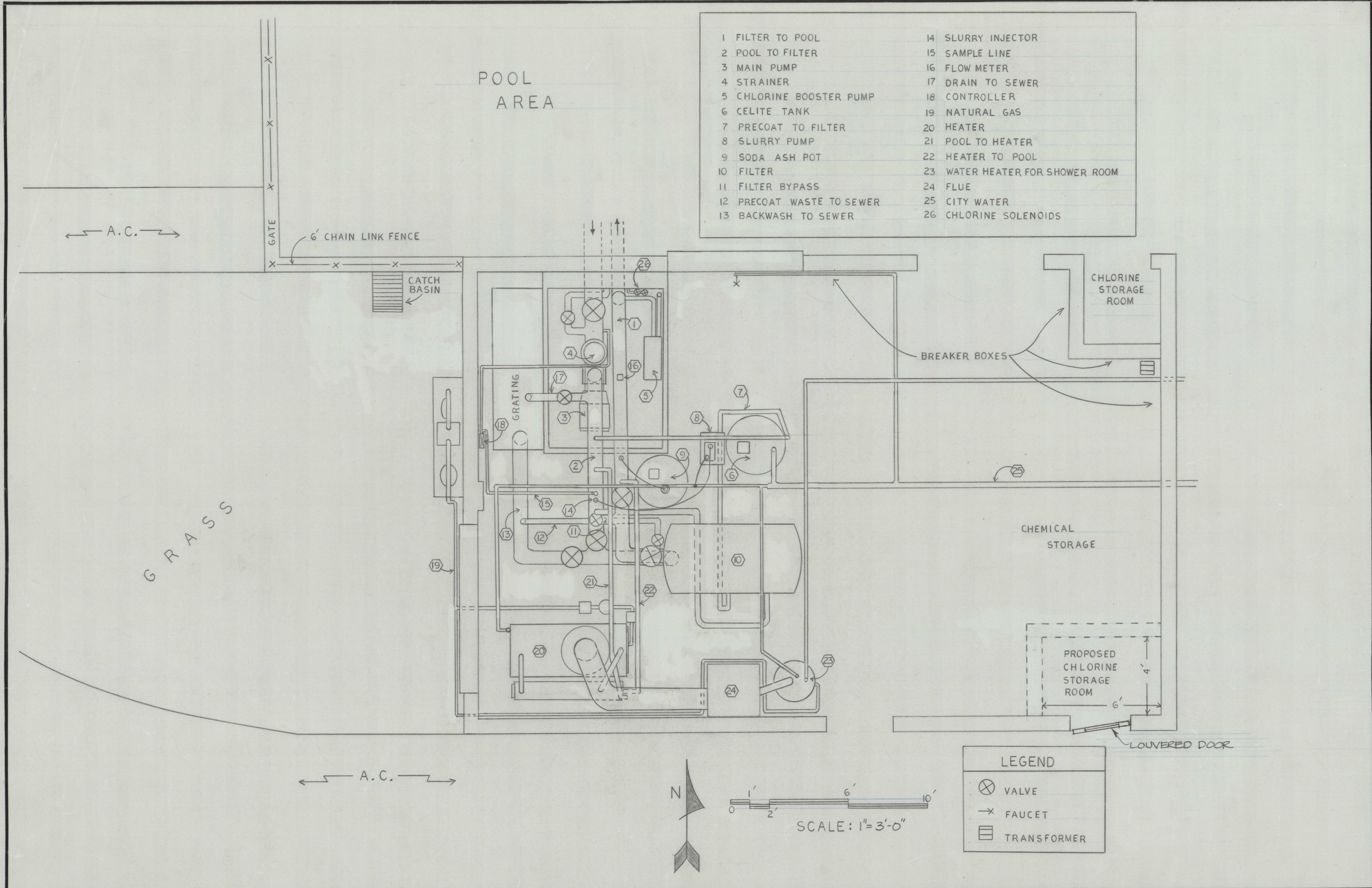
AREA OF POOL DECK 5420 SQ. FT.
603 SQ. YD.

PLAN
1/8" = 1'-0"

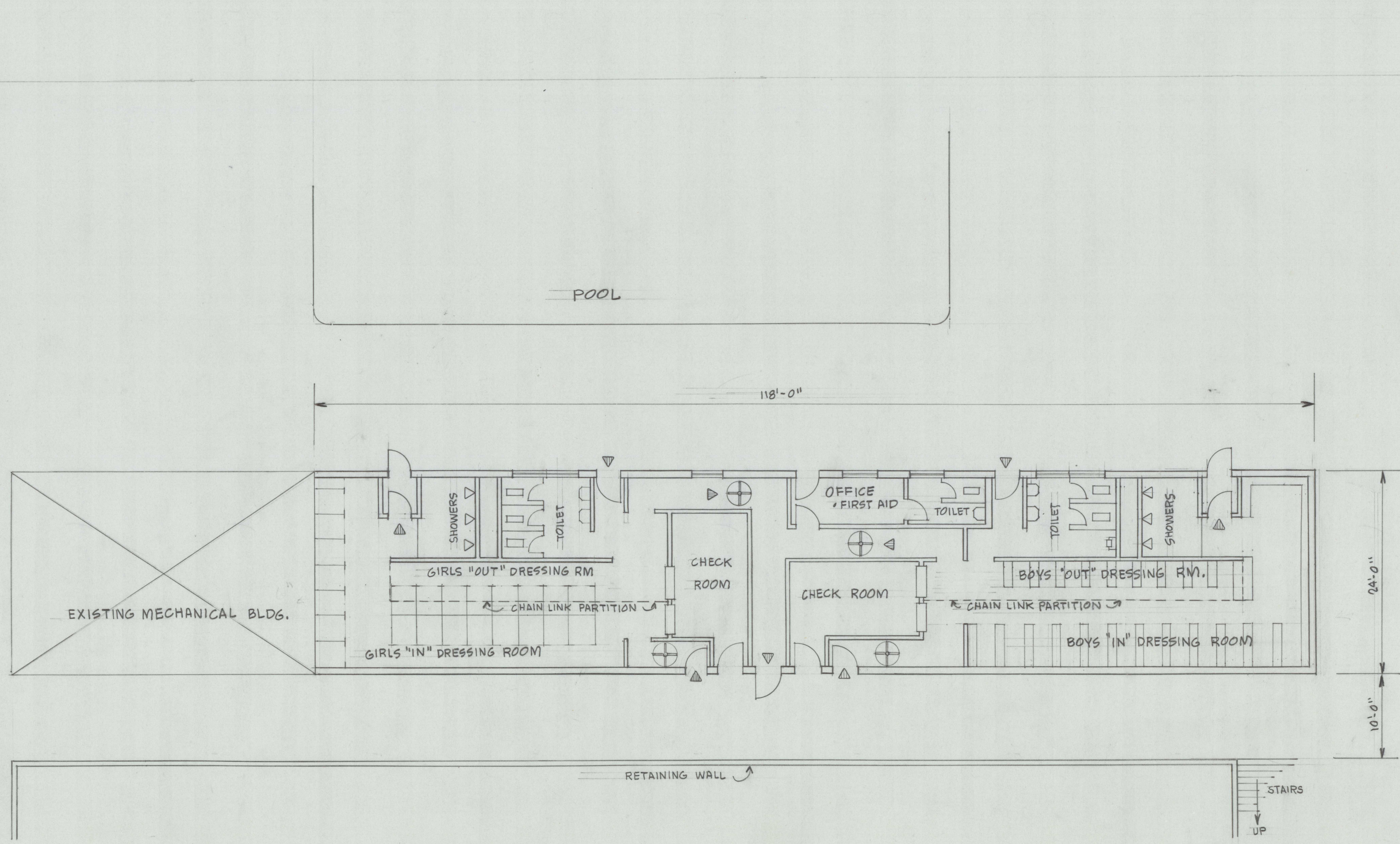
RE-DESKED 1-23-63

CRESTON PARK		
PLAN OF POOL DECK RESURFACING		
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
ORMOND R. BEAN	COMMISSIONER	
HARRY B. BUCKLEY	SUPT. OF PARKS	
DATE: 4-13-52	DESIGNED BY:	AREA NO.
SCALE: AS SHOWN	APPROVED BY:	
1/8" SEC.		

archives



OF 2 SHEET	DRAWN BY: CWA 1/4 SEC: 3435 DATE: APRIL 11, 1983 SCALE: 1" = 3'	BUREAU OF PARKS AND RECREATION CHARLES R. JORDAN, COMMISSIONER OF PUBLIC AFFAIRS	PORTLAND OREGON				
		CRESTON PARK POOL					
		MECHANICAL ROOM					
				NO.	DATE	REVISIONS	BY



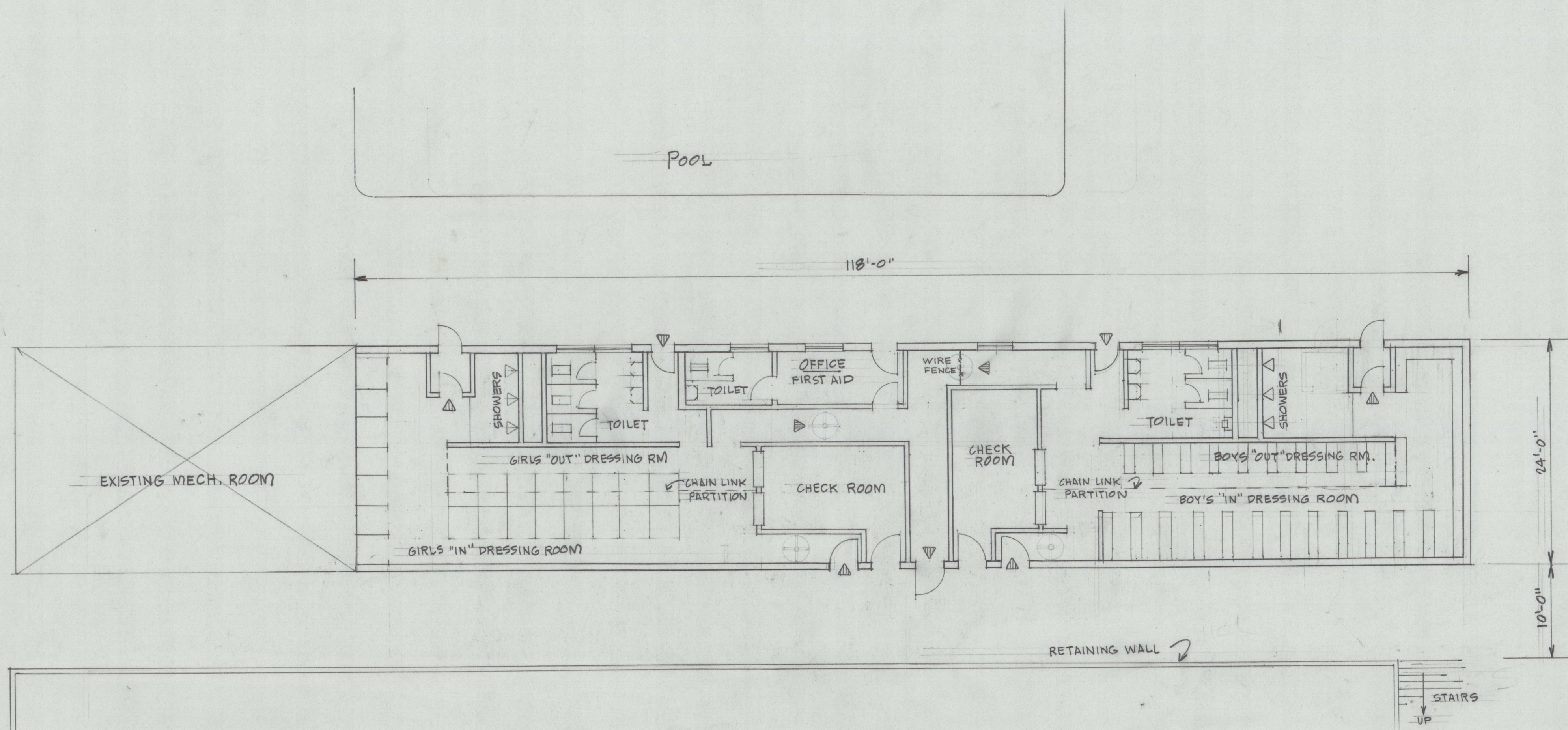
MICROFILMED
FEB 10 1981

TRIM

64.012

CRESTON PARK
NEW LOCKER & DRESSING
BLDG. FOR SWIMMING POOL
SCALE: 1/8" = 1'-0"
3/10/64

②

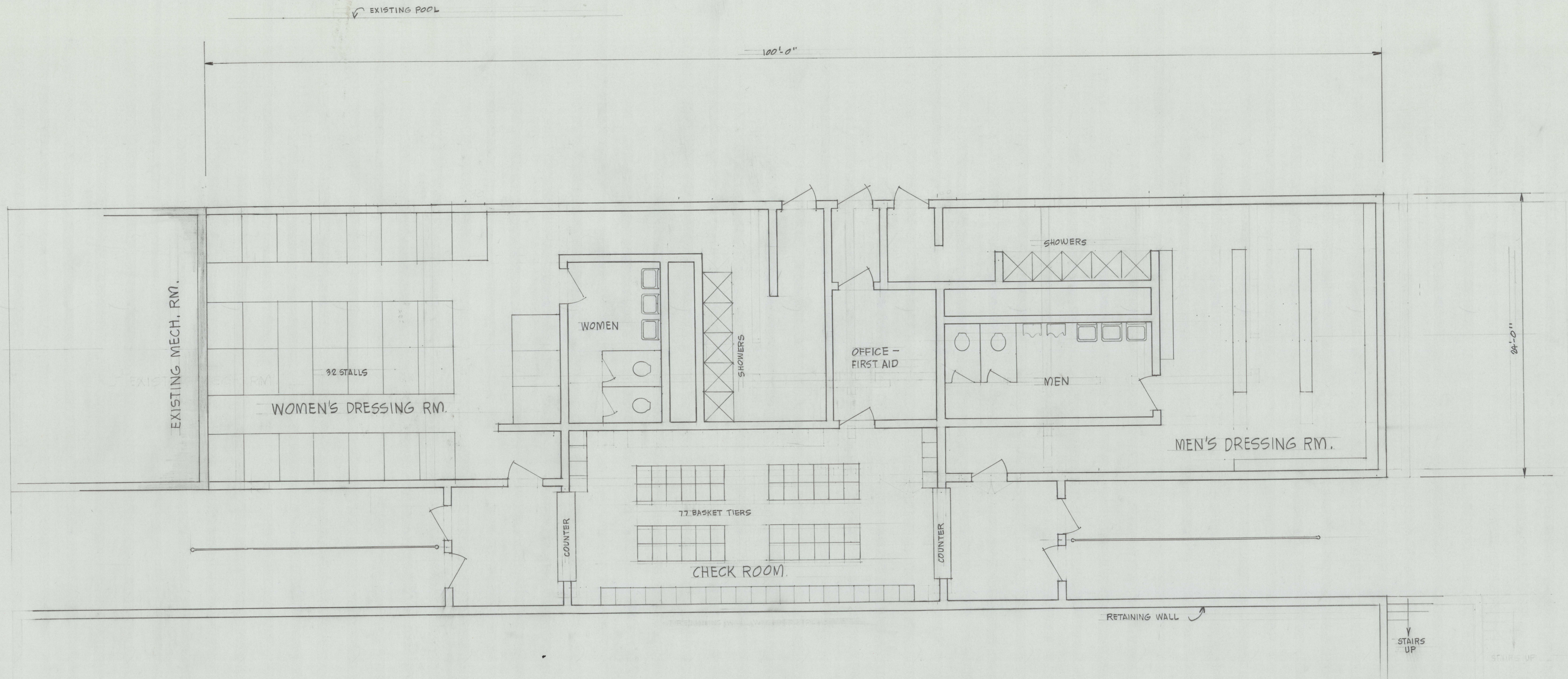


CRESTON PARK
NEW LOCKER & DRESSING BLDG.
FOR SWIMMING POOL
SCALE: 1/8" = 1'-0"

64.012 ①

MICROFILMED
FEB 10 1981

TRIM



MICROFILMED
FEB 10 1981

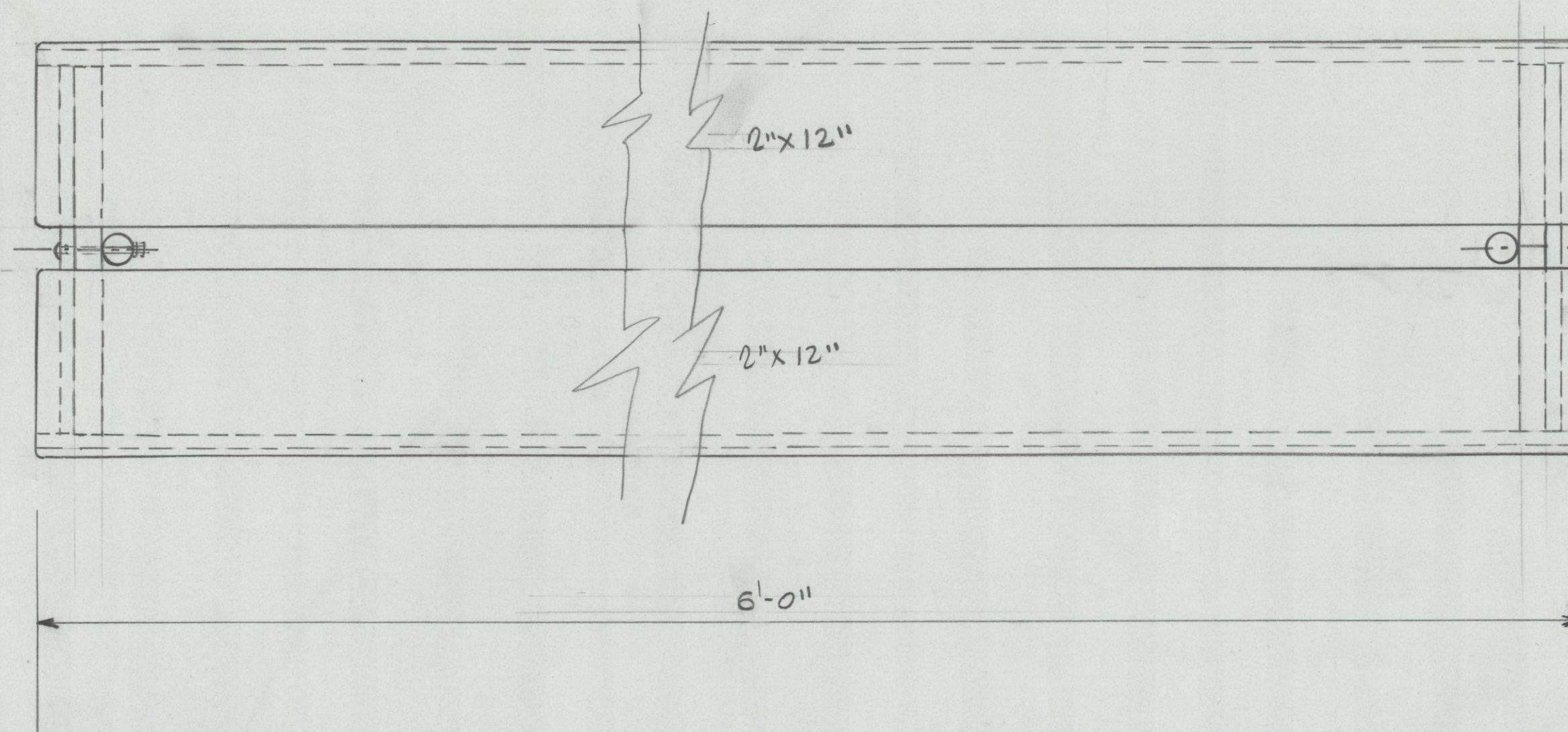
CRESTON PARK
SWIM POOL LOCKER RM.
64.013

①

TOP VIEW

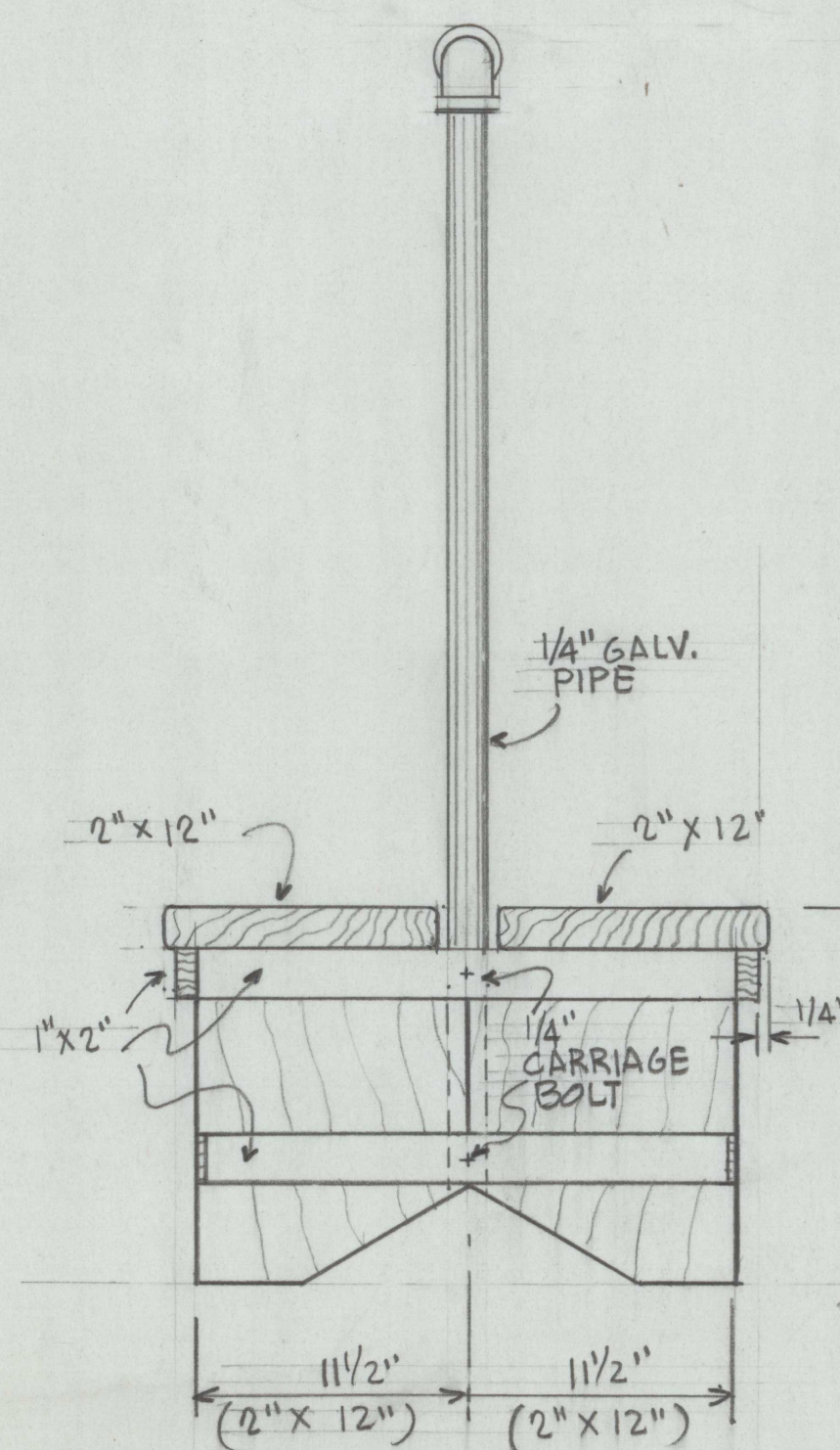
SCALE: 1 1/2" = 1'-0"

NOTE:
GLUE & SCREW
ALL WOOD JOINTS



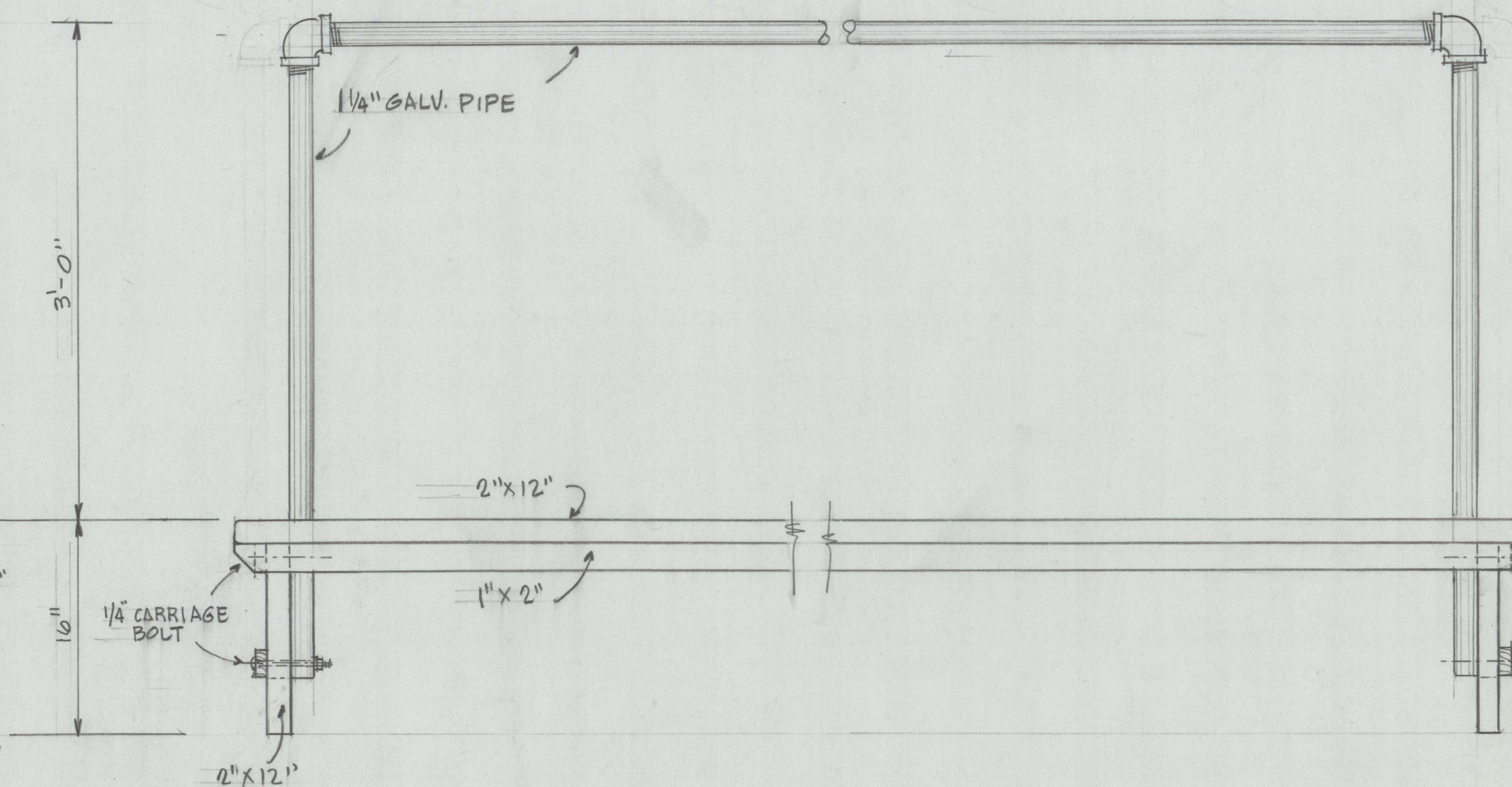
END VIEW

SCALE: 1 1/2" = 1'-0"



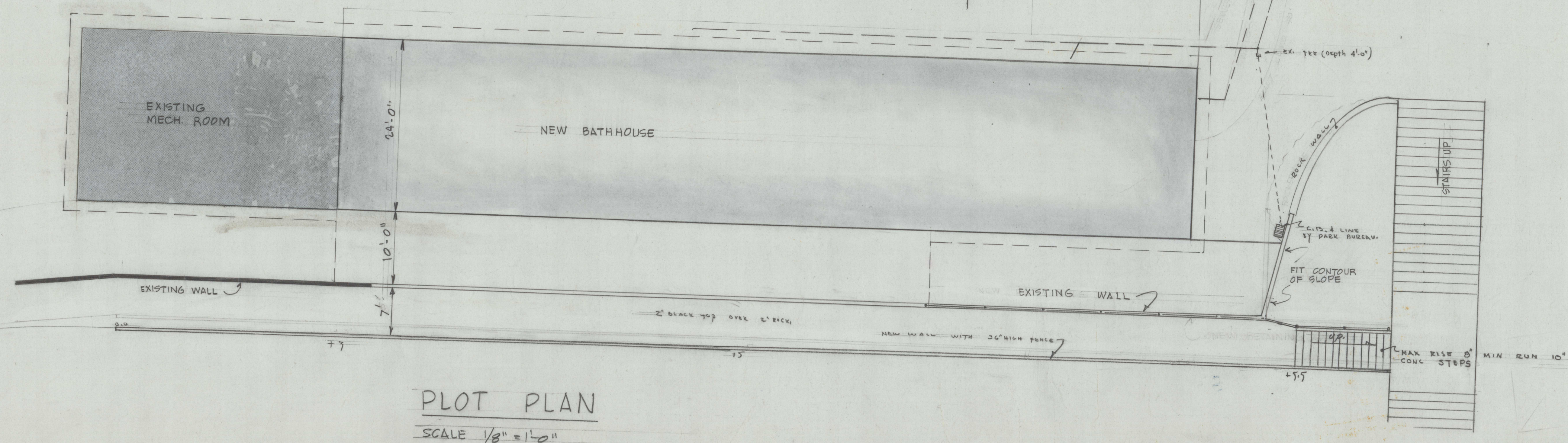
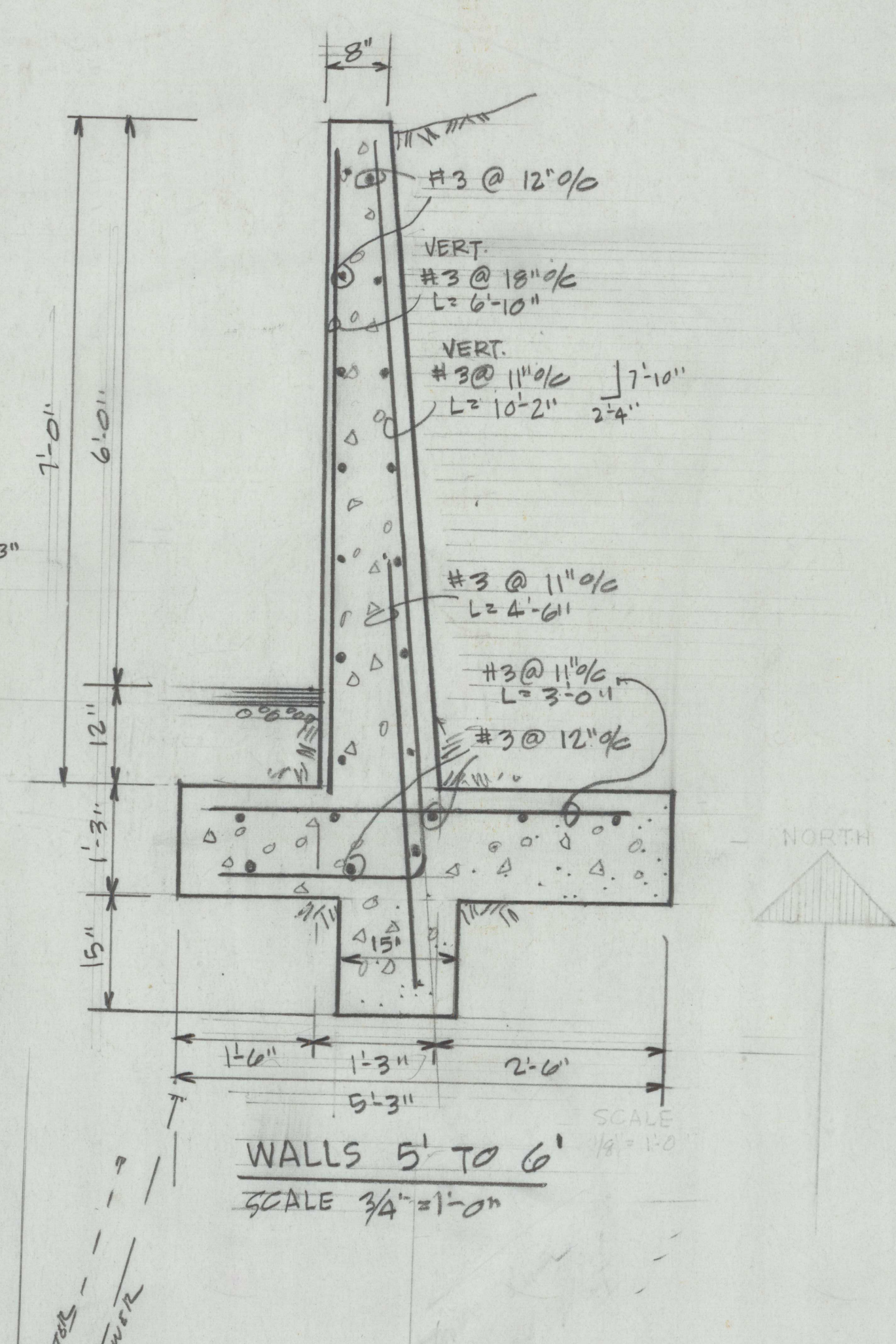
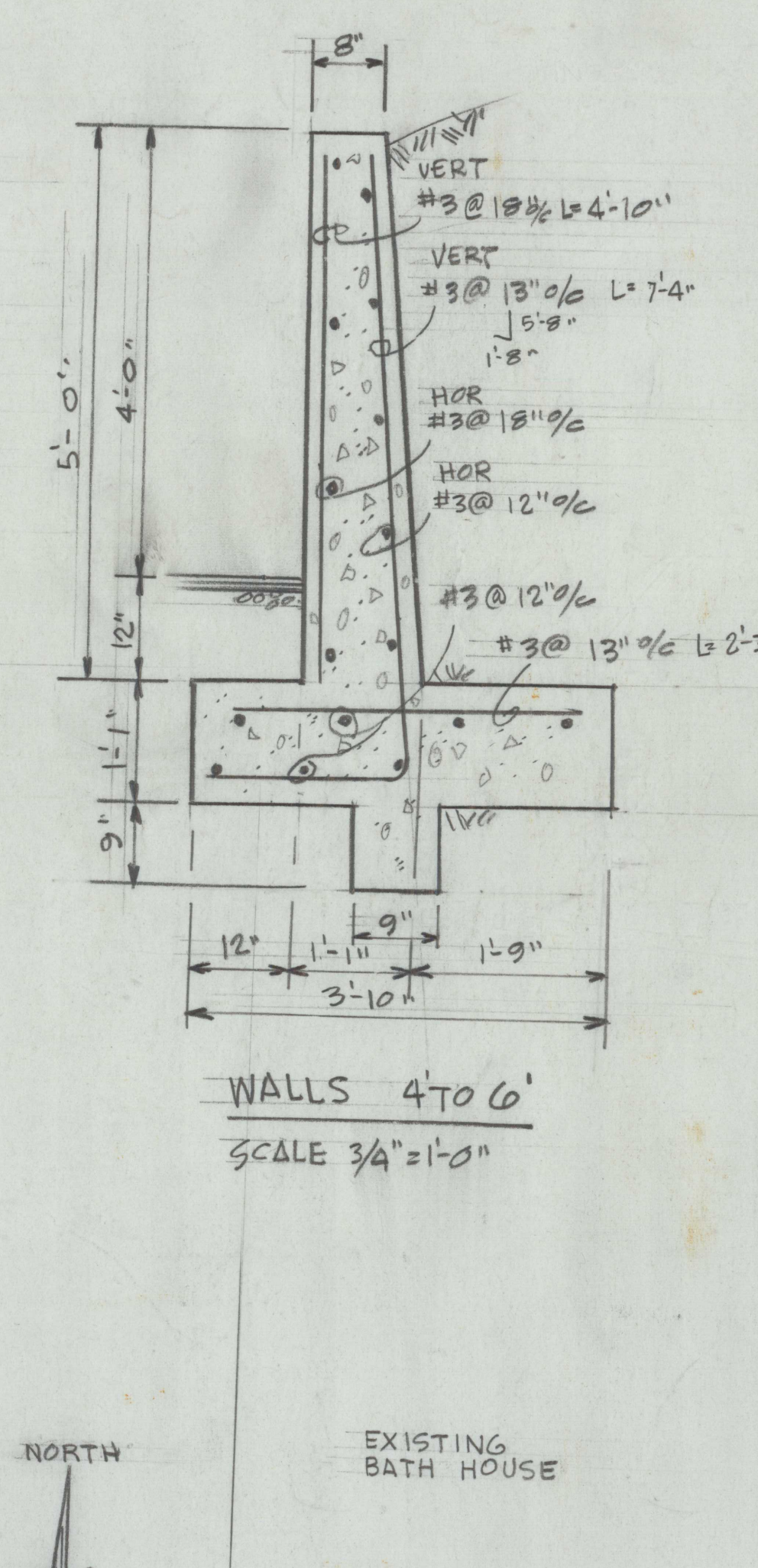
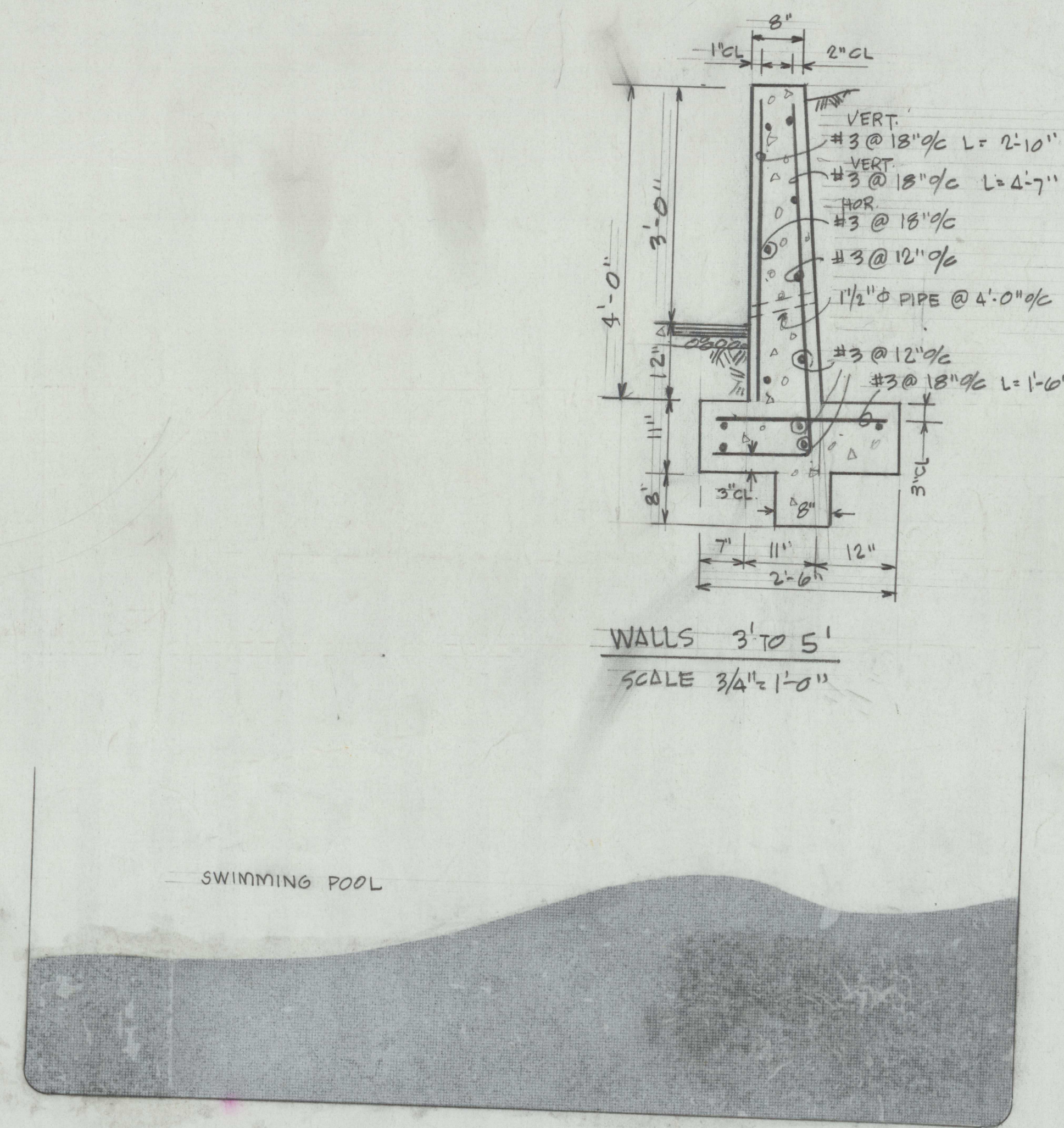
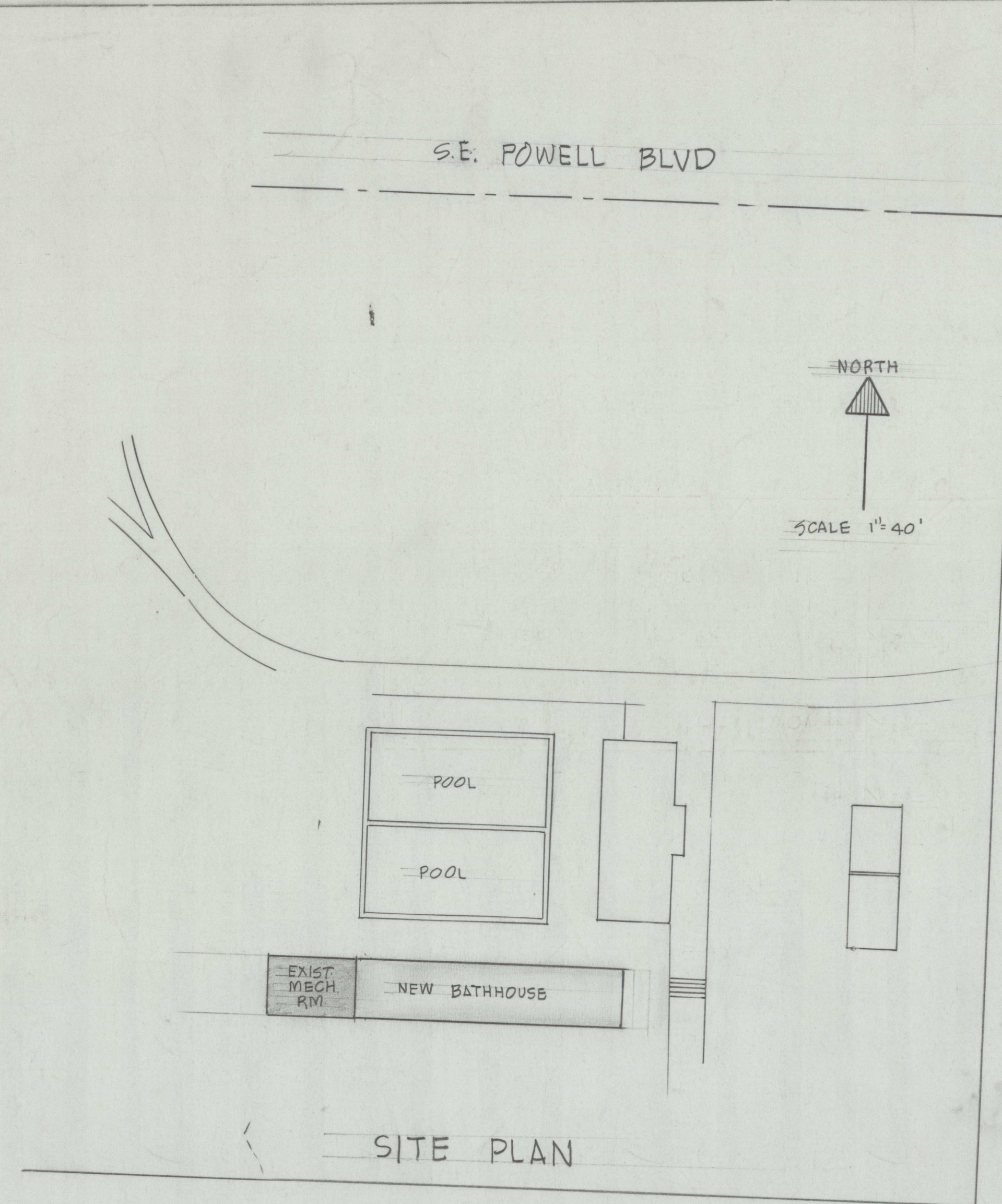
SIDE VIEW

SCALE: 1 1/2" = 1'-0"



BENCH CRESTON PARK BATH HOUSE			
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON			
ORMOND R. BEAN HARRY B. BUCKLEY		COMMISSIONER SUPT. OF PARKS	
DATE: APRIL 65	DESIGNED BY: J.P. STUHL	AREA NO.	
SCALE: 1 1/2" = 1'-0"	DRAWN BY: ADL	48	
IN SEC: 3435	APPROVED BY:		

Archive



1/10	PLOT PLAN CRESTON PARK BATHHOUSE		
	BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
REVISIONS:	DATE: AUG 1964	DESIGNED BY: JACK P. STUHL	AREA NO.
	SCALE: NOTED	DRAWN BY: AD. LEFTHUS	48
	APPROVED BY:		

EXCAVATING & CONCRETE	Scope
This Division includes all the excavating, grading, forms, concrete, reinforcing, back-filling and incidentals.	
<u>Excavating</u>	
All necessary excavations shall be made for the building including footings, foundation walls, piers, curbs, area ways, etc. All sod and vegetation shall be removed from the unexcavated spaces under the building. Footings shall be extended down to firm bearing soil not less than 18" below finish grade. All excavated materials, except enough for the back-filling and grading, shall be disposed of as directed.	
<u>Extra Excavating</u>	
The footings have been designed for a soil bearing power of 3,000 lbs. per square foot. If, when the excavations are being made, it is found that the bearing power in any part is less than 3,000 lbs. per square foot, the excavations for footings shall be increased as directed and the contractor will be paid for the additional excavation, forms, steel and concrete at a price to be agreed upon a set forth in Art. 15 of the A.I.A. General Conditions.	
<u>Forms</u>	
Forms for the concrete shall be built of wood in conformance with Section 7-2610 (a) (b) of the Portland Building Code; sufficiently tight to prevent leakage of the concrete; of ample strength to sustain the weight and pressure of the wet concrete, and any additional construction load which is likely to come upon them, and braced and tied together to maintain position and shape. Wall form ties shall pitch downward toward the outside. Wall forms shall have openings at the bottom for removal of dirt, sawdust and litter. Lumber once used in forms shall have all nails removed and the surfaces to be in contact with concrete thoroughly cleaned before being used again for forms.	
<u>Nailing Pieces, etc.</u>	
Nailing blocks, bucks, ragle strips, flashings, anchors, bolts, etc. shall be placed in the forms before the concrete is poured. The mechanics of each trade involved shall be given opportunity to place their ties, hangers, sleeves, boxes, anchors, piping, etc. in the forms before concrete is poured. Chases for pipes shall be formed as required.	
<u>Reinforcing Steel</u>	
The steel reinforcing bars for the concrete shall conform to U.B.C. Standard No. 25-4, 26-5, 26-6, or 26-7. They shall be deformed in conformance with A.S.T.M. Designation A-305. Wire mesh reinforcement shall conform to the requirements of the Standard Specifications for Welded Steel-Wire Fabric for Concrete Reinforcement, A.S.T.M. Serial Designation A-185-37. Steel shall be placed as shown on the drawings. All supports shall be of noncombustible material. Reinforcement shall be securely wired in position so as to stay in proper place while the concrete is being poured and tamped.	
<u>Concrete Material</u>	
(a) Portland cement shall conform to U.B.C. Standard No. 26-1. (b) Aggregates shall be clean, sharp, well graded river sand, and clean hard gravel, well graded from 1/4" to 1", and shall conform with U.B.C. Standard No. 26-2. (c) Water shall be clean and free from organic matter and other harmful substances. (d) Materials shall be stored in a manner to prevent deterioration and contamination.	
<u>Proportions</u>	
All concrete shall be proportioned so as to produce a compression strength at 28 days of 2,500 lbs. per square inch, using 6-3/4 gallons of water to each 94 lb. sack of cement. Moisture held by the aggregate shall be included in computing the water-cement ratio. The proportion of aggregates to cement shall be such as to produce a concrete that can be puddled readily into the corners of the forms and around the reinforcement without excessive spading and without segregation or undue accumulation of water or laitance on the surface. The amount of gravel or crushed rock in the aggregate shall be the equivalent of not less than 100% or more than 200% of the amount of sand or fine aggregate. For each 50 cubic yards of poured concrete or fraction thereof there shall be 2 test cylinders made at 7 days and 2 test cylinders made at 28 days. The 28 day test shall show a strength of not less than 2,500 lbs. per square inch. Tests shall be made by a qualified laboratory and two copies of each test shall be sent to the architect. In the event that the tests do not show the required strength the contractor shall determine the actual strength of the concrete which has been placed in the structure and shall replace that which does not meet the strength requirements.	
<u>Mixing</u>	
Concrete shall be ready mixed and delivered in accordance with the requirements of U.B.C. Standard No. 26-11.	
<u>Placing</u>	
Forms shall be cleaned out and wetted down before the concrete is placed. Concrete shall be placed as soon as possible after mixing but in any case within 90 minutes. The concrete shall not be dumped from such a height or in such a manner that the aggregates will separate. Concrete shall be carefully worked into all corners and around the reinforcing steel with suitable tools so that honeycombs and gravel pockets will be avoided. The work shall be so conducted that partially set concrete will not be subjected to shock.	
<u>Construction Joints</u>	
Where construction joints are necessary, they shall be keyed as directed. Vertical joints in walls shall be made with a slot formed by bevel-edged 2 x 4. When pouring is resumed, the contacting surface of the previous pour shall be cleaned and then drenched with mortar made of one part cement and one part sand.	
<u>Form Removal</u>	
All forms shall be removed after the concrete has set sufficiently to carry the dead loads and any construction loads likely to occur. Form ties shall be removed.	
<u>Gravel Underfloor</u>	
The space under the concrete slabs laid on the ground shall be filled with clean crushed rock or gravel. This layer shall be at least 6" thick, all settled and compact. The gravel or rock shall be covered with .004 Visqueen lapped 6" in the direction of concrete spread and turned up and sealed at the walls.	
<u>Monolithic Topping</u>	
The concrete slabs, floors, stairs, ramps, etc. shall be finished with monolithic topping. The concrete shall be extended with a straight-edge to bring the surface to the required level, after which the surface shall be floated down thoroughly so as to bring the surplus water and laitance to the surface. The surface water and laitance shall then be floated or darbed off to one side, after which the surface shall be entirely covered with a mixture of one Portland cement to 1 1/2 parts clean sharp sand. This topping mixture shall be thoroughly floated into the slab so as to produce a true and even surface, and on interior surfaces shall be troweled to a smooth hard finish, free from depressions and bumps. The surface of exterior work shall be broomed to a rough finish. All exposed edges shall be finished with an edge having a 3/8" radius. Surfaces adjoining floor drains and urinals shall be sloped so as to drain properly.	
<u>Floor Hardener</u>	
The floors of the toilet rooms and the kitchen shall be surface treated with hardener. The surfaces shall be thoroughly cleaned after which the hardener shall be applied in strict accordance with the manufacturer's directions. The following brands will be acceptable: Armortop; Hornolith; R.I.W. Flintox; Truscon Agatex	
<u>Curing</u>	
In dry weather, after removal of the forms, all vertical concrete surfaces shall be thoroughly sprinkled with water each day until ten days after pouring. All floor slabs, stairs, landings, platforms, walks, steps, ramps and other approximately horizontal surfaces shall be thoroughly sprinkled each day until ten days after the topping has set up.	
<u>Back-Filling</u>	
The spaces outside the foundation walls shall be back-filled using clean earth up to within 8" of the finished grade, and top soil for the upper 8" of depth.	

Excavating & Concrete Continued	Scope
<u>Cleaning</u>	
Just before the building is to be turned over to the Owner, the slabs, floors, steps, ramps, etc. shall be thoroughly cleaned and left in good condition.	
MASONRY	
<u>Scope</u>	
This Division includes all the glazed tile and concrete unit masonry walls, partitions, screens, rails, etc.	
<u>Glazed Tile</u>	
Where indicated on the plans, partitions shall be constructed of glazed structural facing tile, "select" grade, in color selected by Architect. Blocks shall be 6T series with cove base bottom course. Bonding to concrete masonry shall be as indicated in Section 7-2408 (D) of the Portland Building Code. All tolerances shall be within the limits set by Facing Tile Institute specifications. Joints shall be 1/4", made of mortar consisting of 1 part Portland cement, 1/2 part lime putty, and 4 1/2 parts clean, sharp, sand. All joints shall be raked 3/8" and pointed with non-staining mortar per F.T.I. recommendations. On completion, the surface shall be thoroughly cleaned with a fibre brush, clean water, and soap powder. The following makes are acceptable: Robco, Kraftile, Natco.	
<u>Concrete Masonry Units</u>	
Masonry units for block walls, sills, bond beam, screen rail, veneer, and partitions shall be vibrated shale concrete blocks of thickness indicated. Blocks shall comply with Federal Specifications SS-C-621 and shall be steam cured immediately after manufacture and then yard cured or kiln dried. The moisture content when laid in the wall shall not exceed 3% of total moisture absorption. The manufacturer shall submit written certification and be held responsible to the architect and contractor that the units will not contain more than 30% of total absorption when placed on the building site. The contractor shall be held responsible for moisture content of units at site from time of delivery until laid in the wall. Special shapes shall be furnished as required.	
<u>Reinforcement</u>	
Every second course of block masonry shall be reinforced continuously with galvanized steel trussed reinforcement made of No. 9 rods, welded, Dur-O-Wall, K-Wab, or Blok-Mesh. The jams at the sides of all openings shall be reinforced with #5 rods continuous from foundation to bond beam.	
Lintels over door openings in concrete masonry shall be N.C.M.A. Type 1-3 in 8 inch walls and N.C.M.A. Type III-3 in 4 inch walls. Two #5 rods, continuous, shall be placed in the bond beam at the top of all masonry walls and above window openings.	
<u>Mortar</u>	
Mortar for the concrete masonry unit construction shall be composed of materials in the following proportions:	
Portland cement	1 cu. ft.
Lime putty	1/2 cu. ft.
Sand	4- 1/2 cu. ft.
Ammonium Stearate paste	2 quarts
Pulverized lime putty shall stand 24 hours and hydrated lime putty 48 hours before mixing with the sand. Cement shall not be added until just before the mortar is to be used, and no mortar shall be used which has stood more than 30 minutes after the cement has been added. Sand shall be clean, sharp and well graded. All lime shall be made from High Calcium lime rock. Dolomitic lime will not be acceptable. Portland cement shall conform to all requirements of A.S.T.M. Serial Designation C9-26, together with all subsequent revisions. Mortar for inside partitions other than toilet rooms shall be the same as above, except that waterproof paste will not be required.	
<u>Anchors</u>	
Where one block wall or partition terminates against another it shall be anchored thereto once every two feet in height with 1/4" x 1-1/4" galvanized metal straps with ends turned up 2" and extending 8" into the abutting wall and 4" into the cross wall.	
Concrete masonry veneer shall be anchored to the supporting wall with 22 gauge corrugated galvanized ties every second course, spaced 24 inches horizontally.	
<u>Scaffolding</u>	
The contractor for masonry shall supply, erect and remove all the scaffolding required for the masonry construction.	
<u>Laying Concrete Masonry</u>	
Walls and partitions indicated as concrete masonry or blocks shall be laid plumb with the units in courses above breaking joints with the courses below except where stack bond is indicated. Mortar joints shall be 3/8" thick, with full coverage on vertical and horizontal face shells. Mortar joints shall be struck off flush and finished with a carpet float. Exterior vertical joints in stack bond shall be raked out 1/4" and tooled. The masons shall cooperate with other trades in placing bucks, frames, piping, etc.	
<u>Protection</u>	
During construction the tops of all walls shall be covered at night and during bad weather or delays. Masonry shall not be laid in freezing weather.	
<u>Cleaning</u>	
Mortar shall be cleaned off the face of the work as the walls are laid. Just before the painter is to begin work on the concrete masonry, exposed surfaces shall be thoroughly washed and rinsed so as to remove all dirt, stains and efflorescence. At conclusion of the masonry work, the contractor shall remove all scaffolding and equipment used in the work, clean up all his debris and surplus material and remove same from the premises.	

CARPENTRY & GENERAL WORK	Scope
This division includes the carpenter work and miscellaneous items not covered by other divisions.	
Framing lumber shall be old growth Douglas fir, and shall conform to and be grademarked in accordance with WCLTB Rules No. 15, 1956:	
Joists,	Construction Par. 123-b (1500)
Studding & Furring,	Construction Par. 122-b
All framing shall be S4S joists for floor and roof construction shall be kiln-dried to an average moisture content of 19% or less.	
<u>Preservative</u>	
All sills or plates resting on concrete, or on paper on concrete and all nailing pieces in concrete shall be coated all over with preservative. All beams resting in concrete pockets shall be coated on the ends and out the sides approximately one foot with preservative. Posts under the building shall be coated on the lower ends and up the sides 1' o". Preservative shall be Carbacide, Coppermate 250, Chemonite, Woodtox or Wolman Salts.	
Wood strips in concrete slab shall be 2 x 4 Douglas fir, construction grade, pressure treated with salts preservative in accord with standard procedures and retention requirements of the American Preservers Association.	
<u>Nailing Pieces</u>	
Nailing pieces, bucks, etc., shall be placed in the forms before concrete is poured, or in the masonry as required for securing trim, frames, flashings, miscellaneous equipment, etc. All these pieces shall be Wolmanized or creosoted. Nailing pieces, girts, blocking, etc., shall be placed in the stud partitions securing the finished woodwork, hardware, miscellaneous equipment, etc. Supports for lighting fixtures shall be placed between the ceiling joists as required, and openings shall be framed for recessed fixtures.	
<u>Cutting, etc.</u>	
All special cutting of wood framing required in connection with the plumbing, heating and electrical systems shall be done by the carpenters, and any and all headers, etc. required in this connection shall be placed.	
<u>Calking</u>	
Joints between different materials, around outside door frames, windows and glazing frames shall be calked tight. The space provided for the calking shall be thoroughly cleaned. The calking spaces more than 2" deep shall be packed with calking cotton to within not less than 3/4" of the face. The spaces shall then be calked solid with elastic calking compound. The exposed surfaces of the calking shall be finished off smooth and straight, flush with the adjoining frame members. The contractor, at no cost to the owner, shall repair any running, sagging, cracking or loosening, which occurs within one year after final payment. The use of the following makes or brands is approved:	
Carasit;	Kuhls; Miniwax; Vulcatex.
<u>Miscellaneous Steel & Iron Work</u>	
All the necessary steel and iron work shall be installed as shown on the drawings, and as herein described and shall include bearing plates for posts and beams, anchors for joists and beams, pipe columns, door thresholds, pipe railing, area gratings, access door, anchor bolts, etc. All welded connections shall be neatly smoothed off. All items not galvanized shall be given a shop coat of rust-resistive paint. Shop drawings for all the work shall be prepared by the contractor and submitted in duplicate to the architect for approval. Measurements shall be verified at the building. The work shall be installed by the respective trades having jurisdiction.	
<u>Ceramic Tile Base</u>	
Tile base shall be of the glazed interior type, shape No. S-3619 with BN top and cove bottom. Installation shall be by the inorganic bonding coat, thin setting bed method, with enough bonding material applied to insure adhesion and permit straightening. Colors shall be manufacturer's standard as selected by the Architect. Installation shall be in accord with the practices recommended by the Tile Council of America and shall be installed in all rest rooms and shower rooms.	
<u>Removals and Patching</u>	
Removal of curbs, partitions, walls, windows, finish, etc. required to achieve the end results indicated by the drawings and specifications shall be effected by the contractor. Any voids which occur in the structure or finish shall be filled and finished to match adjoining similar work.	
<u>Glass Cleaning</u>	
All the glass shall be washed clean and polished before the building is turned over to the Owner.	
<u>Temporary Heating</u>	
The contractor shall operate the heating units to maintain the proper temperatures for the respective interior finishing operations. The Owner will pay for the power.	
<u>Easing</u>	
During a period of one year from the date of completion of the building, the contractor shall, at his own expense, have the doors, windows, hardware, etc. eased and adjusted as required to insure proper operation.	
<u>Hardware</u>	
The contractor shall supply and place all the rough or "builders" hardware, including nails, screws, bolts, etc. The contractor shall purchase and pay for all the "finished" hardware, as specified in these specifications. The carpenters shall fit, place and adjust all the hardware.	
<u>Windows</u>	
Windows shall be of the aluminum awning type similar in quality, materials, construction, and operation to Vamco Series 55 manufactured by the Tru-Seal Window Division of Valley Metal Products Co. of Plainwell, Michigan.	
Windows shall be installed plumb and square and shall be anchored securely to the building construction according to the installation recommendations of the manufacturer approved by the Architect. Glazing shall be by aluminum snap type glazing beads.	
<u>Metal Partition</u>	
The toilet stall partitions shall be similar to Fiat "Aristo" ceiling hung. The size and arrangement shall be as shown on the drawings, making special allowance for shower cabinets. Doors will be required in the women's toilet room only. The doors shall have self-closing hinges, bumper and coat hook. Stalls without doors shall be equipped with a coat hook. The stalls shall be erected plumb, square and true and securely attached to the building construction. Measurements shall be verified at the building. Shop and erection drawings shall be prepared by the manufacturer or his representative and two copies of same shall be submitted to the Architect for approval.	
<u>Turnstiles</u>	
Turnstiles shall be Full-Stride Roto-Gate type B Impenetrable as manufactured by Perey Turnstile Company, New York, N.Y. The gate shall be installed as per manufacturer's recommendation and layout shall be furnished by the manufacturer before installation.	

MILLWORK	Scope
This Division includes all the exterior and interior wood trim, doors, cabinets, etc. delivered to the building.	
<u>Finish and Trim</u>	
Exterior and interior finish and trim shall be "C" and better vertical grained old growth Douglas fir. All materials shall be surfaced. Average moisture content shall not exceed 10% in 1" stock, or 12% in thicker stock. All the work shall be shaped in exact accordance with the details or with stock patterns of the architect's selection and shall be run clean and smooth. All running trim shall be supplied in suitable lengths.	
<u>Cabinets</u>	
The check counter shall be built at the mill, in units as large as can be conveniently handled and installed. The face frames and all other stile-and-rail units shall be of dovetailed or mortised and tenoned construction, glued. Exposed external corners shall be mitered, reinforced and glued. Internal corners shall be tongued and grooved. Shelf and body members and partitions shall be daded together.	
Top shall be of 3/4" A-D plywood covered with plastic laminate and edged with hardwood strips. Front shall be of AD-Flypanel grade plywood securely nailed at each bearing and to each stationary shelf and partition and V-grooved as shown on the detail.	
<u>Measurements</u>	
The millwork contractor shall take measurements at the building for the built-up work.	
<u>Delivery</u>	
The work shall be delivered to the building as needed. All the work shall be protected from damage and the weather during delivery and shall be stored in a dry and sheltered place at the building site. Where necessary, the members shall be provided with temporary braces and foot-runners.	
<u>GLASS AND GLAZING</u>	
<u>Scope</u>	
This Division covers all the glass and glazing.	
<u>Plate Glass</u>	
The office window only on pool side, glazing shall be 1/4" polished plate glass of glazing quality.	
<u>Obscure Glass</u>	
The lights in toilet room windows shall be 1/8" rolled glass of hammered pattern and all other pool side windows except office.	
<u>Sheet Glass</u>	
All lights not otherwise specified shall be flat sheet glass of American Window Glass Co., Libbey-Owens-Ford or Pittsburgh make. All lights shall be "DSB". Each light shall bear the manufacturer's label showing the quality and strength. The waves in each light shall run horizontally.	
All lights in metal shall be back-puttied, then secured with metal beads, according to manufacturer's recommendations. The glazing shall be guaranteed for a period of one year against leaking or loosening. The guarantee shall be stated in writing and submitted to the architect in duplicate. Lights in hollow steel doors shall be 1/4" rolled flat polished glass with diamond welded wire netting.	
<u>Duct & Suspended Ceiling</u>	
Extent and Location - Provide suspended and plastered ceiling at duct work as per plan. The main channel shall consist of 1 1/2" cold rolled painted channel weighing not less than 5 lbs. per 1,000 lin. ft. Space running channels not more than 3 1/2" on center and 2' parallel to wall. Support runner channels at each end at 4 ft. intervals with hangers of #8 gauge zinc coated steel wire. Loop ends of 2" embedded into concrete. Cross furring channels of 3/4" cold rolled painted channels 12" o/c. Weight to be not less than 300 lbs./1000 lin. ft. Where duct width exceeds 3', use 3" x 2 1/2" x 1/4" steel angle supports at 3' max. spacing.	
Flat rib expanded lath weighing 2.75 lbs. shall be used on horizontal and diamond mesh on vertical surfaces weighing 2.5 lbs. and secure to lath to metal supports with 18 ga. galv. annealed wire. Metal edge bead shall be used on all corners and metal frame at duct openings. Access doors with lock type cover shall be used at all control points.	
Portland cement plaster shall be used for plaster coat. Apply brown coat to true plane, and apply finish coat to make a waterproof finish ready for paint.	

2 10	SPECIFICATIONS CRESTON PARK BATHHOUSE		
	BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
	ORMOND R. BEAN HARRY B. BUCKLEY	COMMISSIONER SUPT. OF PARKS	AREA NO.
	REVISIONS	DATE: AUG 1904 SCALE: 1/4" SEC. 3435	DESIGNED BY: JACK P. STUHL APPROVED BY:

ROOFING AND SHEETMETAL

Scope

This division includes the flashings, roofing, and sheet metal work. The duct work in connection with the mechanical ventilating system is covered in separate division.

Built-up Roofing

Flat roof areas shall be covered with a built-up roof similar to Johns-Manville Aquadam Super - A, smooth surface, spec. BU-15.1. Sloped roof areas shall be covered with a built-up roof similar to Johns-Manville Flexstone Super - A, smooth surface, spec. BU-15. Flashing on all roof areas shall be Johns-Manville Asbestos System. The roofing and flashing shall be applied in strict accordance with the manufacturer's specifications by a roofing contractor approved by the manufacturer.

Cold Process Option

At the option of this contractor, all areas to receive roofing may be covered with a cold process roof similar to Pioneer-Flintkote Specification CP-3-AM. All work including edge treatments, flashing, etc. shall be in strict accordance with the published recommendations of the manufacturer and shall be performed by a roofing contractor approved by the manufacturer.

Metal Flashings

Walls shall be counter-flashed where roofs meet same using metal not less than 6" wide with the top edge let into the mortar joint 1" in masonry and extending up at least 2" behind stucco. All flashings shall be galvanized steel or iron not lighter than No. 26 gauge. All seams shall be locked, riveted and soldered. Exposed nail-heads shall be soldered.

Roof Reinforcement

At all angles in roofing materials a reinforcing layer of fiberglass shall be applied.

Guarantee

Before final payment, provide a written guarantee, agreeing to maintain all component parts of the roofing and sheet metal work watertight against normal wear and usage for a period of five years from date of completion. Guarantee shall be submitted in duplicate to the Architect and shall be signed by both the Sub-Contractor and the General Contractor.

Bond Option

The owner shall have the option of requiring a 20 year bond on this roof within a period of 90 days after completion. If the bond is required, the owner will pay the bonding fee.

PAINTING

Scope

This Division includes all the painting, staining, varnishing, enameling, plastalloy processing, etc. Toilet stalls will be finished at the factory.

Preparation & Workmanship

Before the work is commenced, the painter shall inspect all surfaces to which the finish is to be applied, and if such are not in proper condition for finishing, the Architect should be notified. All nailholes, cracks and defects shall be puttied and smoothed off after the first coat, in colors to match the finish. The materials shall be evenly spread and smoothly flowed on without runs or sags. No exterior finish shall be applied on damp surfaces or while the weather is damp, rainy or below a temperature of 50° F. No interior finish shall be applied on damp surfaces or while the temperature in the room is below 60°. All metal surfaces shall be cleaned of grease, dirt, scale and loose rust or paint. Care must be taken that no dust is in the various rooms to settle on the work as the finish shall be perfectly smooth and uniform in appearance, and it will be expected that the painter will re-do any work not coming up to the requirements of the specifications. In all cases sufficient material shall be applied to produce a uniform color, texture and surface all over.

Materials

All materials used in the work shall be of the qualities or brands specified. All materials shall be delivered to the building in the original containers, with the seals unbroken and labels intact. Satisfactory evidence shall be supplied that the oils, turpentine and dryers are of the standard specified. No materials shall be changed or thinned in any way except as may be specified or indicated by the manufacturer's directions.

Exterior Woodwork

All new exterior woodwork including soffits, cornices, porch ceilings, doors, etc. shall be painted three (3) coats. Existing painted surfaces shall be given two coats eliminating the prime coat. Doors shall be painted on all edges. The priming coat shall be mixed in the proportions of 100 lbs. lead, 2 gallons oil, 2 gallons turpentine and 1 pint dryer. The second coat shall be mixed in the proportions of 75 lbs. lead, 25 lbs. zinc, 14 gallons oil, 14 gallons turpentine and 1 pint dryer. The third coat shall be mixed in the proportions of 75 lbs. lead, 25 lbs. zinc, 4 gallons oil, 1 pint turpentine and 1 pint dryer. Sufficient colors-in-oil shall be added to produce the desired color. In order to produce a paint of proper working consistency, the proportions of pigment to vehicle may be altered slightly, if such change is first approved by the Architect. A ready mixed paint may be used if the ingredients are substantially as specified herein and written approval is first obtained. Materials shall be as follows:

Lead, white	Pioneer Millers	S-W O.D.P. Euston	Dutch Boy Eagle
Zinc oxide	New Jersey		
Oil	Raw linseed, A.S.T.M. Standard test		
Turpentine	A.S.T.M. Standard test		
Dryer	Pure Japan, U.S. Government specification No. 20.		

Exterior Metal Work

The exterior galvanized metal work including pipe railings, wire partitions, flashings, etc., shall be first treated with a solution of six ounces of copper acetate dissolved in a gallon of hot water, brushed on, and then brushed and cleaned off when dry and then shall be painted three (3) coats. The first coat shall be a zinc dust solution. The second coat shall be L & S Portland cement paint. The third coat shall be the same as specified for the last coat on exterior wood work. All exterior ferrous metal work which is not galvanized shall have the bare spots and damaged places in the shop coat touched up, and shall then be painted two (2) coats the same as specified for the last two coats on exterior woodwork.

Interior Enamelled Woodwork

All the new interior woodwork in rooms marked "enamel" in the finish schedule shall be finished with three (3) coats as follows:

The first coat shall be mixed in the proportions of one gallon of undercoater to one pint of boiled linseed oil. The second coat shall be mixed in the proportions of one part undercoater to one part enamel. The third coat shall be of enamel as it comes from the manufacturer. The first coat shall be sanded with No. 0 sandpaper, the second coat with No. 0000 sandpaper. The following brands will be acceptable:

Dutch Boy Satin Eggshell
Millers
General Arolite
Pittsburgh Satinhide

The undercoat shall be the same make as the enamel. The above finish shall also be applied to the narrow trim around the new north windows in the work space.

Painting continued

Interior Metal Work

The pipe columns, metal door frames, etc., shall be finished with one coat of enamel undercoating and one coat of enamel. Priming coats applied at the shop shall be touched up and smoothed off before the undercoating is applied. The undercoating shall be sanded with No. 0000 sandpaper. The following brands of enamel will be acceptable with undercoating by same manufacturer:

Dutch Boy Satin Eggshell
Millers
General Arolite
Pittsburgh Satinhide

Interior Wall Paint

The interior gypsum wallboard walls and ceilings shall be primed with a pigmented type polyvinyl acetate sealer and painted with two (2) coats of flat wall enamel mixed and applied in strict accordance with the instructions of the paint manufacturer. The following brands will be acceptable:

General Non Glare Flat Enamel
Millers

Plastalloy Process

All exterior and interior concrete block surfaces and all stucco surfaces shall be Plastalloy processed, with materials produced by Western States Lacquer Corp. Exterior surfaces shall be Plastalloy pebble tone effect. Interior surfaces shall be enamel-fleck effect.

Plastalloy work shall be done by a trained and authorized applicator. Surface preparation, materials, and application shall be in strict accordance with the manufacturer's recommended specifications for the particular surfaces and conditions involved. The applicator shall obtain approval of the manufacturer's representative before beginning the work. Colors shall be of selections within the standard color range of the material.

Colors

The colors for all the painting, etc. shall be of the owner's selection, and the painter shall make, for approval, all the samples necessary for determining the same. In painted and enameled work, the next to the last coat shall be a slightly different shade from the final coat.

Cleaning

Upon completion of the work, the painter shall clear out all rubbish and surplus materials left by him; clean off all paint spots from walls, floors, glass, chalkboards, tack-boards, equipment, etc., repair any and all damage to his work and leave the premises broom-clean and in perfect repair and order as far as his work is concerned.

HARDWARE

Scope

Hardware for metal windows, toilet stalls, aluminum doors and wire partition door will be furnished by others. This division includes all the additional hardware required for the building, each item complete with screws or other means of attachment and all delivered to the building or other location as the general contractor may designate.

Description

The catalog numbers used in the following specifications designate Lawrence, Schlage, L.C.N., Glynn-Johnson, and Cipro.

Finish

Door closers shall have bronze finish. All other hardware shall have finish, U.S. 26D. All steel hardware for which plated finish is specified, shall be sherardized before plating.

Door Bumpers

Provide WB 60XT or FB 13X as appropriate, for each door.

Design

Design shall be Plymouth, 2-3/4" backset.

Keying

Master key and key alike as per final instructions. Provide three master keys.

Finished Hardware

Door "A" each to have:

- 1 1/2 pr. butts BB 180 CMD 4 1/2" x 4 1/2" N.R.P. U.S. 26 D
- 1 Best cylindrical lock 7K Series 7K6R6A U.S. 26 D
- 1 Closer LCN D Del Alum. finish
- 2 S.S. Kick plates 10" x 1" less than door width, 16 Ga.

Door "B" each to have:

- 1 1/2 pr. butts BB 180 CMD 4 1/2" x 4 1/2" N.R.P. U.S. 26D
- 1 Best cylindrical lock 476N8 night latch U.S. 26 D
- 1 Closer LCN D Del Alum. finish
- 2 S.S. Kick plates 10" x 1" less than door width, 16 Ga.
- 1 push plate 681 A

Door "C" each to have:

- 1 1/2 pr. butts BB 180 CMD 4 1/2" x 4 1/2" NRP, U.S. 26D
- 1 Best cylindral lock 7K6E6A U.S. 26 D
- 1 Closer LCN D Del Alum. finish
- 2 S.S. Kick plates 10" x 1" less than door width, 16Ga.

Door "D" each to have:

- 1 1/2 pr. butts BB 180 CMD 4 1/2" x 4 1/2" NRP U.S. 26D
- 1 closer LCN D del Alum. finish
- 2 S.S. Kick plates 10" x 1" less than door width, 16 Ga.

Door "E" each to have:

- 1 pr. butts BB 180 CMD 4 1/2" x 4 1/2" NRP U.S. 26D
- 1 S.S. Kick plate 10" x 1" less than door width, 16 Ga.
- 1 Best cylindrical lock 7K6D6A U.S. 26D

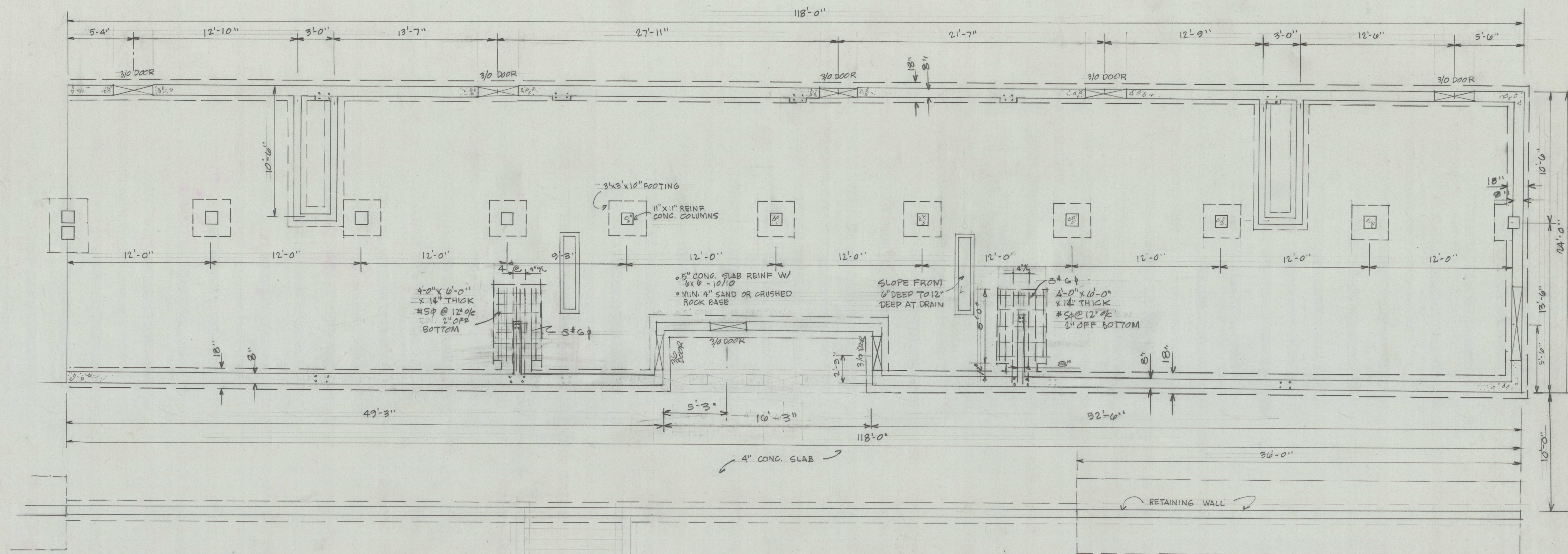
Door "F" each to have:

- 1 1/2 pr. butts BB 180 CMD 4 1/2" x 4 1/2" NRP U.S. 26D
- 1 S.S. kick plate 10" x 1" less than door width, 16 Ga.
- 1 Best cylindrical lock 7K6D6A U.S. 26D

Each Drawer to have:

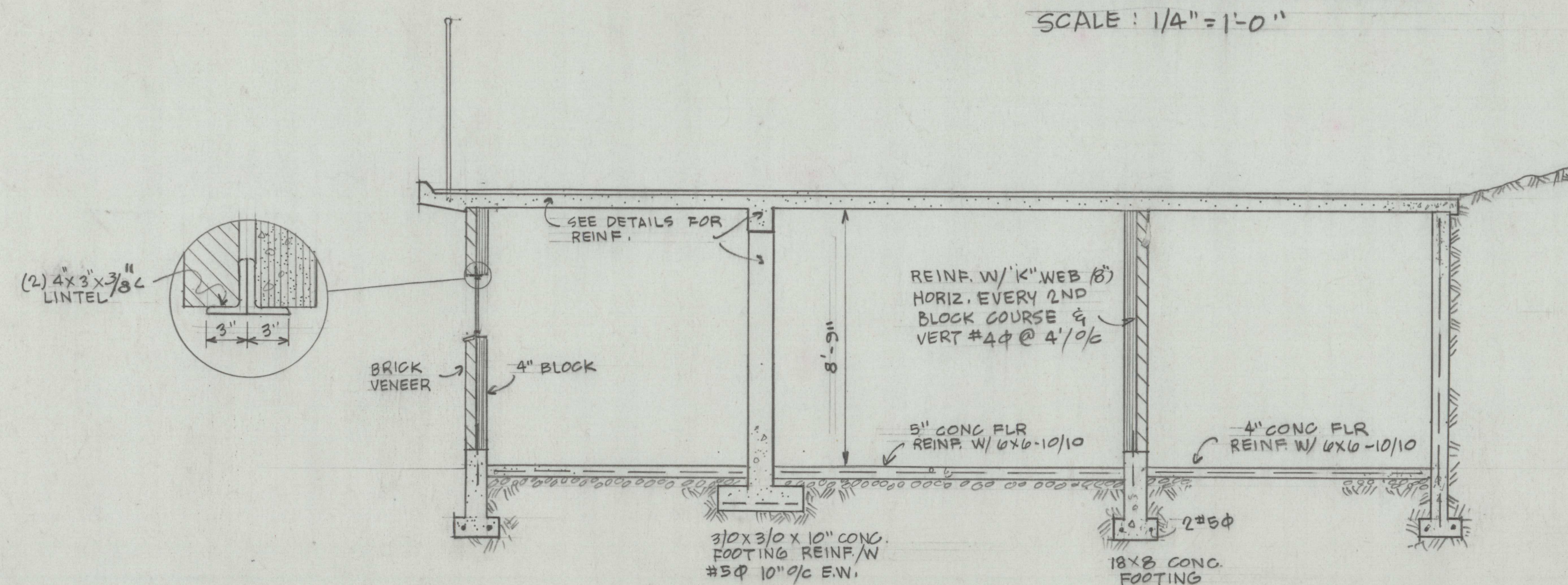
- 1 Pull 179 - 26D
- 1 Lock 517ML2

<div style="font-size: 48pt; text-align: center;">3 10</div>	SPECIFICATIONS CRESTON PARK BATHHOUSE	
	BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON	
	ORMOND R. BEAN HARRY B. HUCKLEY	COMMISSIONER SUPT. OF PARKS
	DATE: AUG 1964 SCALE: NONE W. SEC: 3435	DESIGNED BY: JACK P. STUHL APPROVED BY:
	AREA NO. 48	



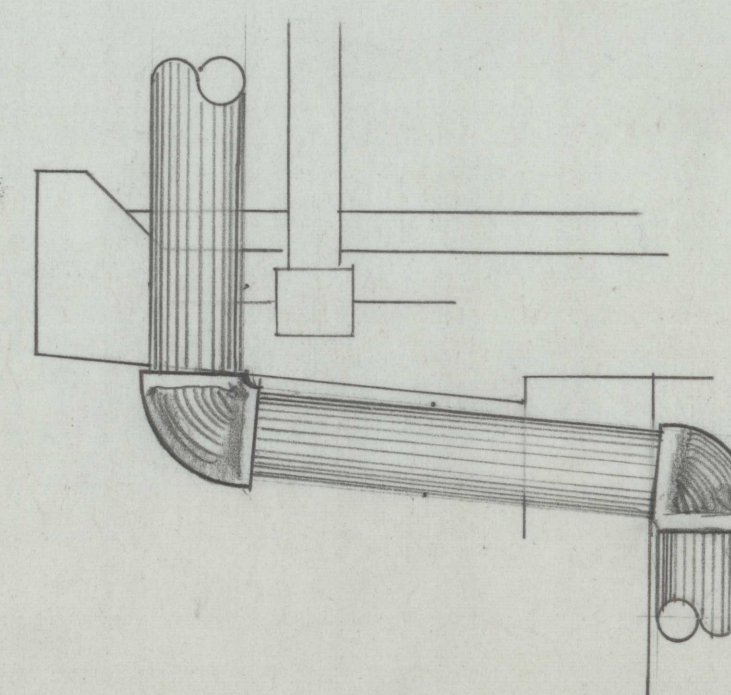
FOUNDATION PLAN

SCALE: 1/4" = 1'-0"



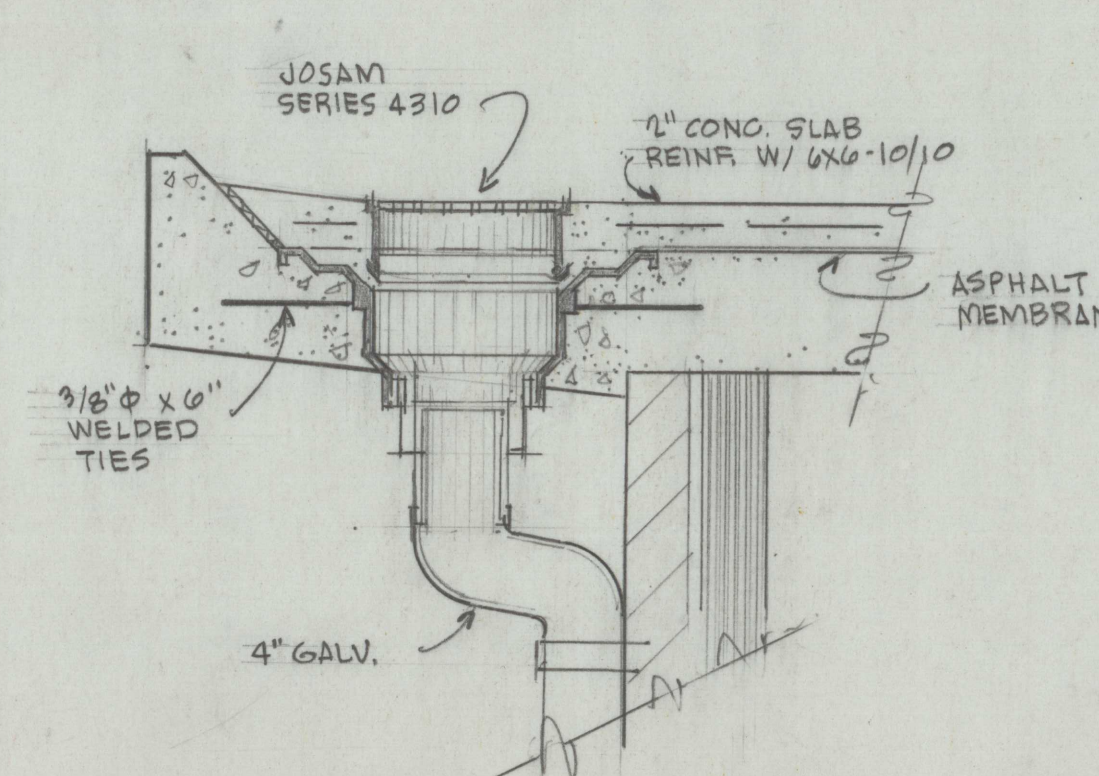
CROSS SECTION

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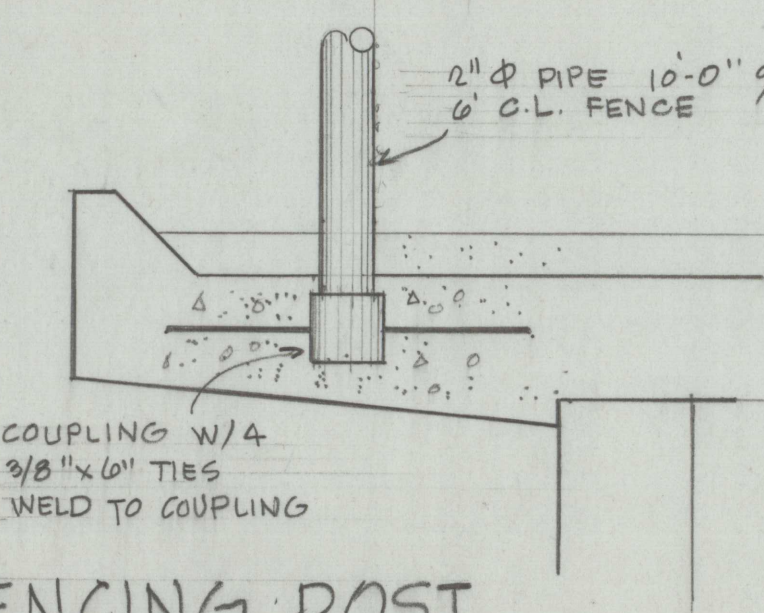
VENT DETAIL

SCALE: 1 1/2" = 1'-0"



ROOF DRAIN

SCALE: 1 1/2" = 1'-0"



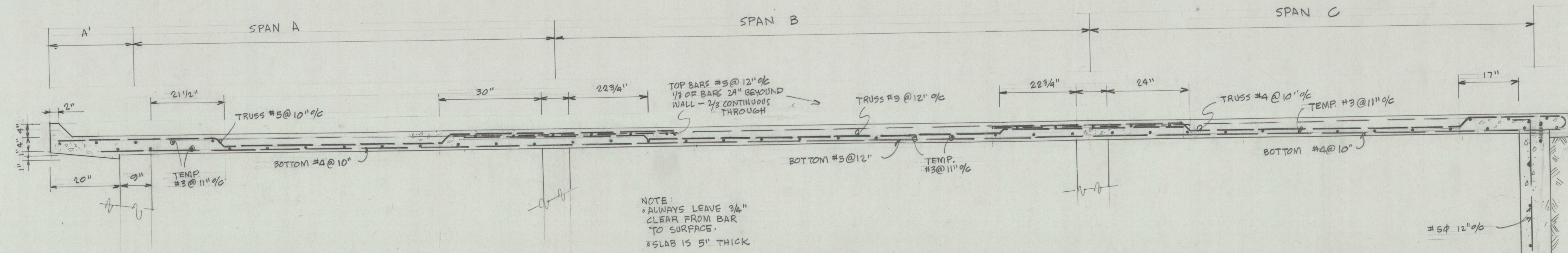
FENCING POST

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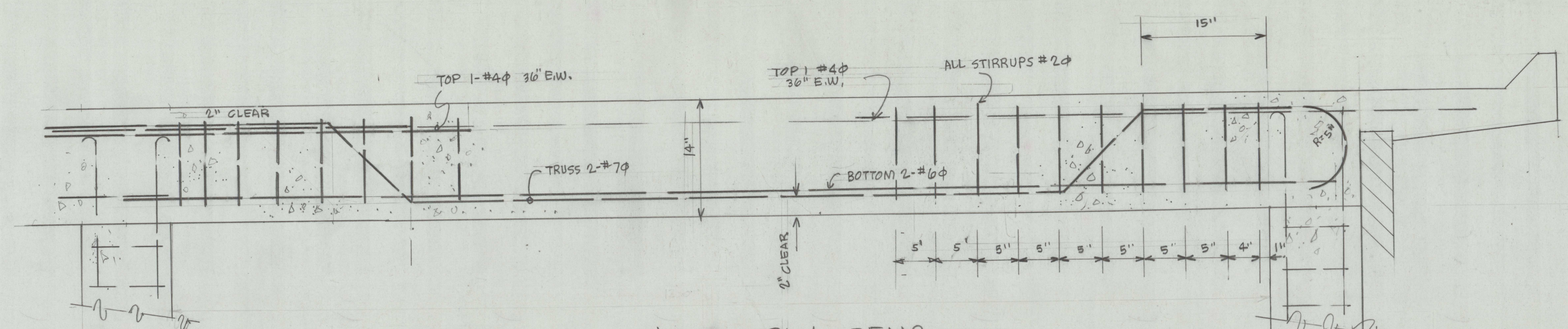
4 10	FOUNDATION PLAN CRESTON PARK BATHHOUSE		
	BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		
	ORMOND R. BEAN HARRY B. BUCKLEY		COMMISSIONER SUPT. OF PARKS
	REVISIONS: 1/5/64	DATE: AUG. 1964 SCALE: NOTED N. SEC. 3435	DESIGNED BY: JACK P. STÜHL DRAWN BY: A.D. LOPTHUS APPROVED BY:

AREA NO.
48

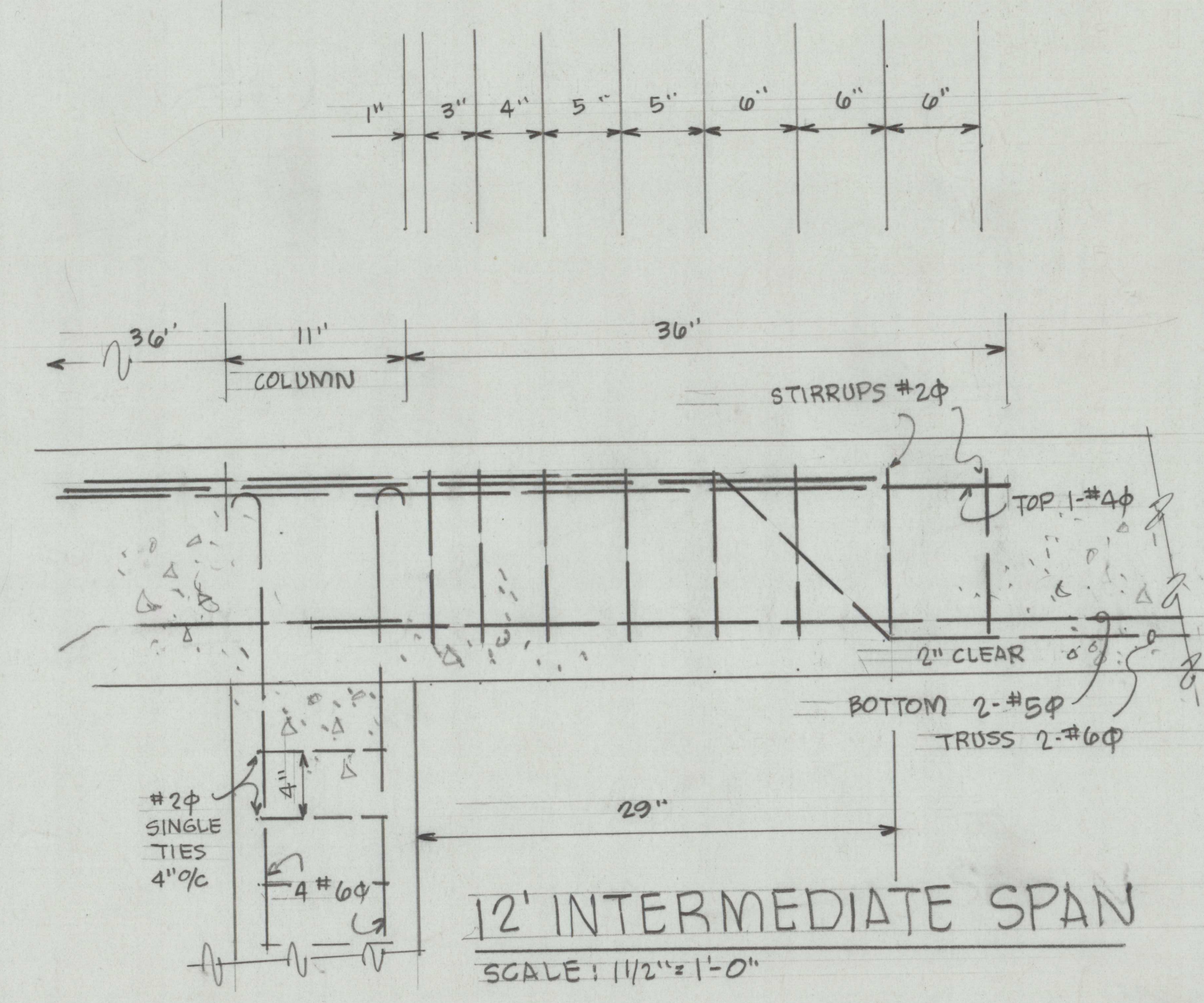
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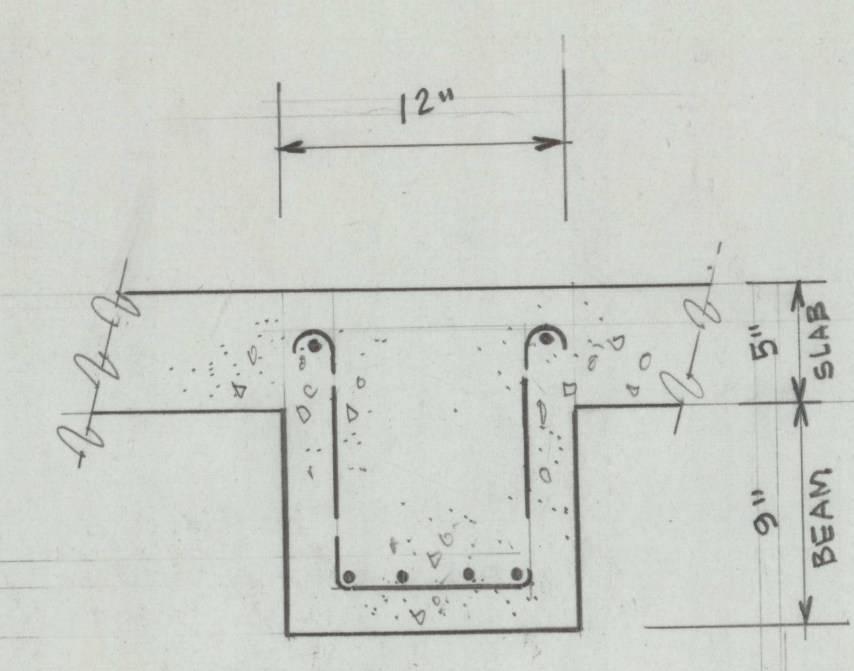
CROSS SEC. ROOF SLAB
SCALE: 3/4" = 1'-0"



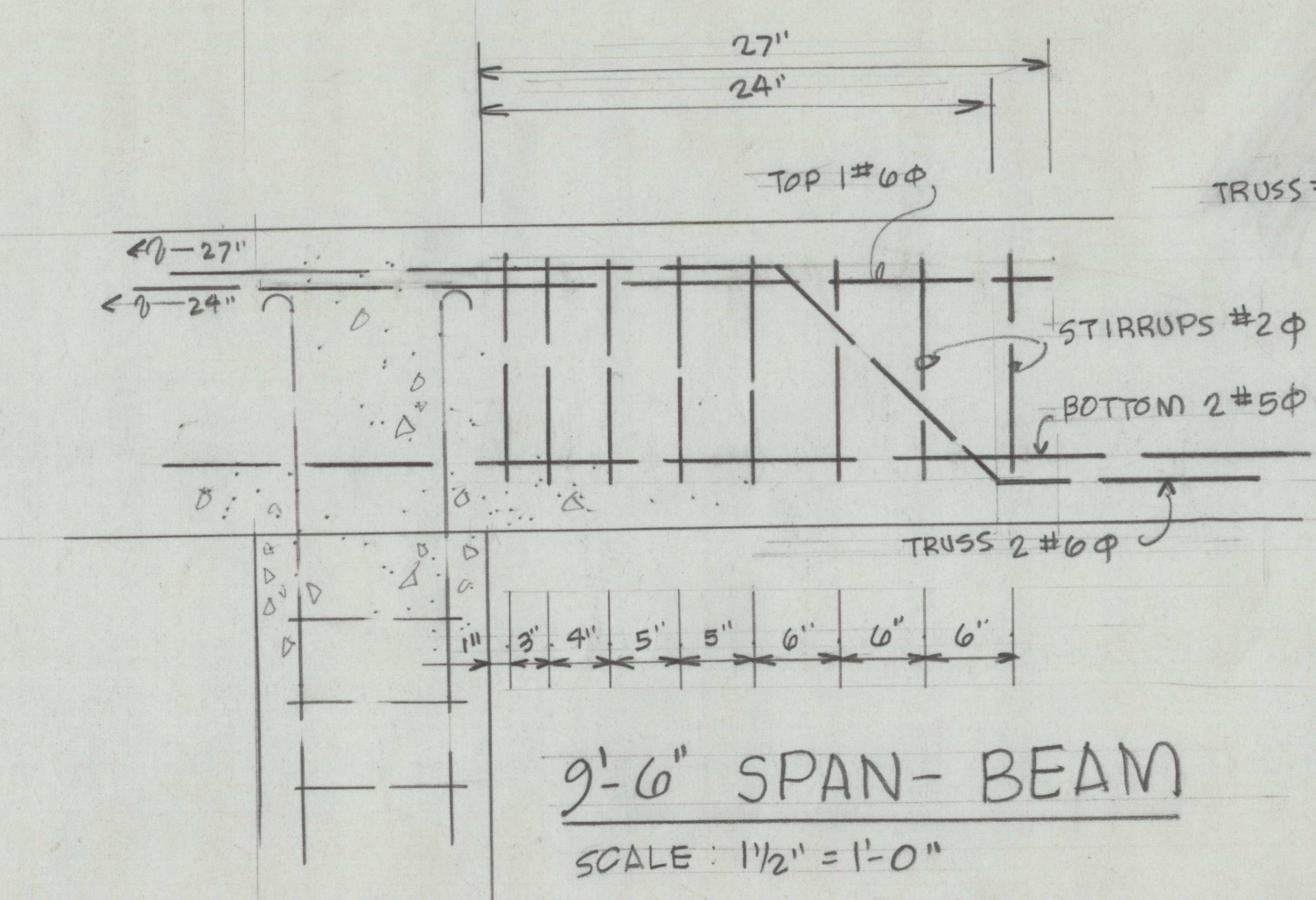
12' END SPAN - BEAM
SCALE: 1 1/2" = 1'-0"



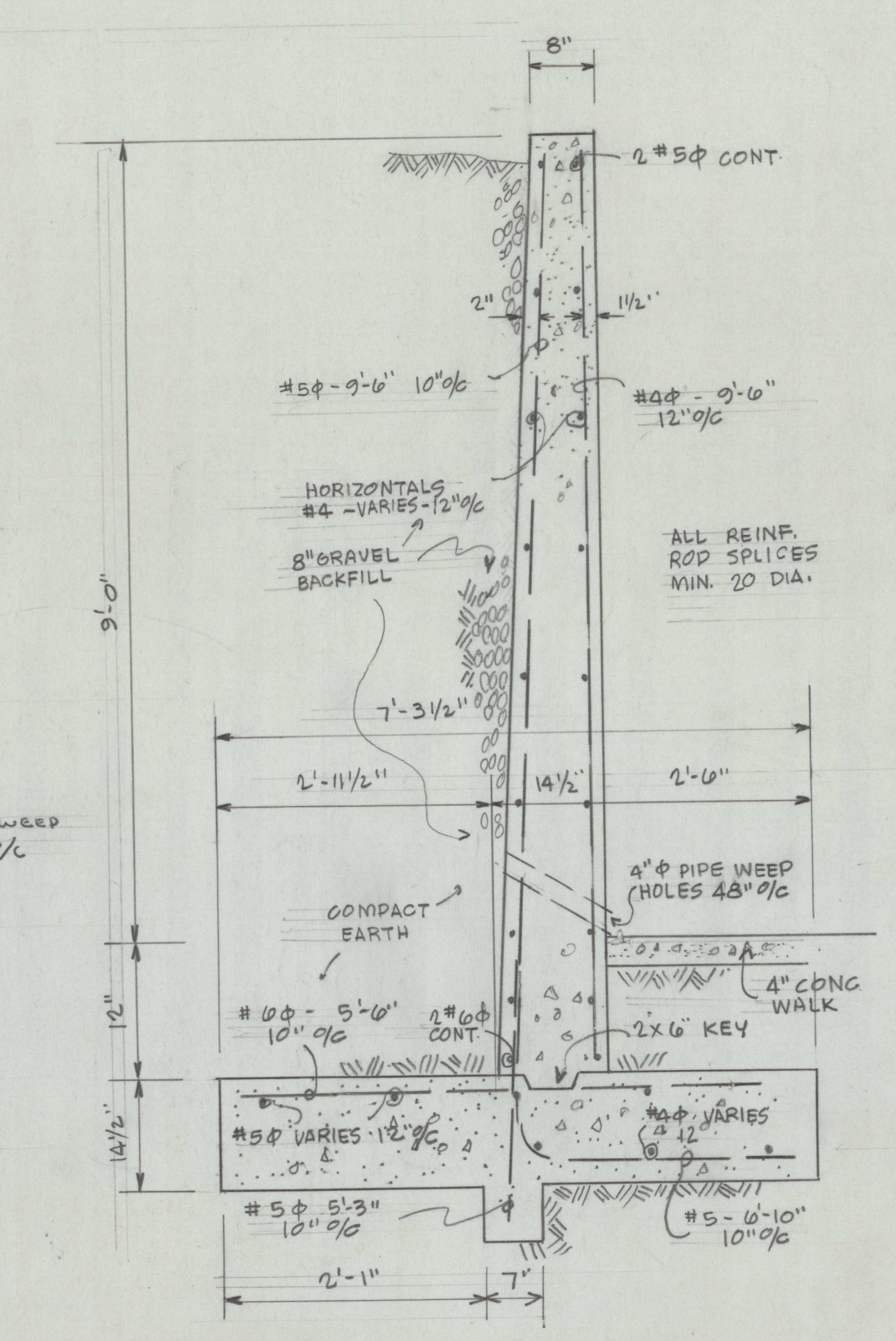
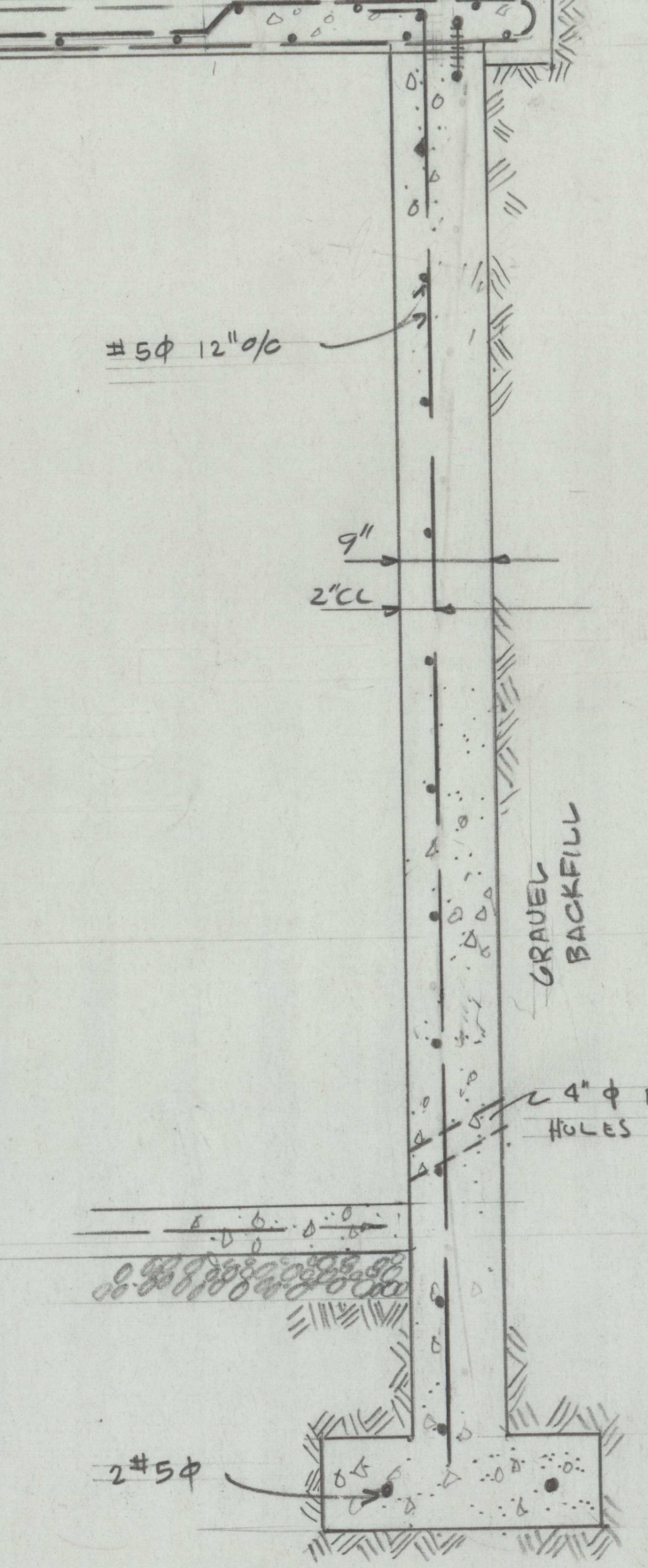
12' INTERMEDIATE SPAN
SCALE: 1 1/2" = 1'-0"



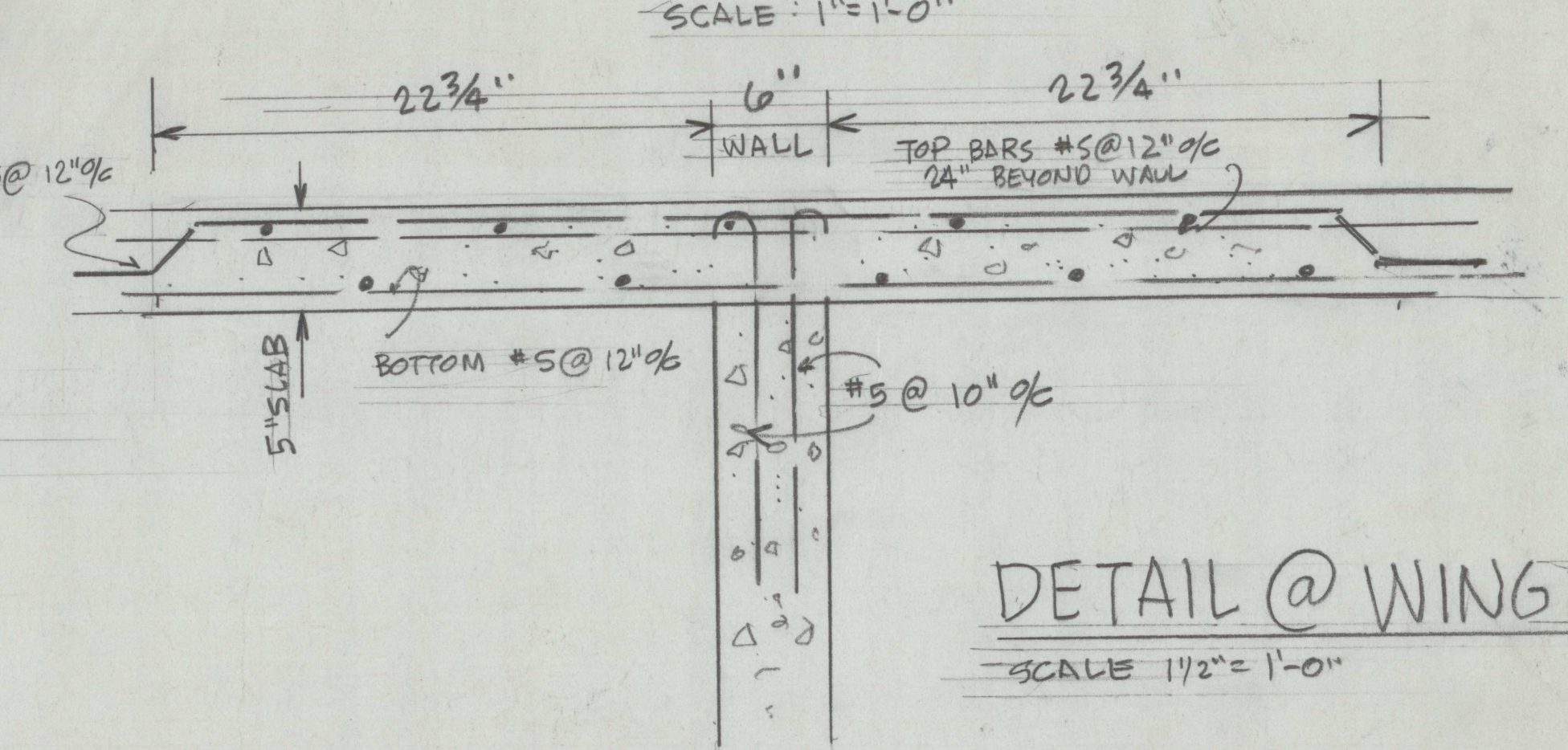
SECTION A-A
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9'-6" SPAN - BEAM
SCALE: 1 1/2" = 1'-0"

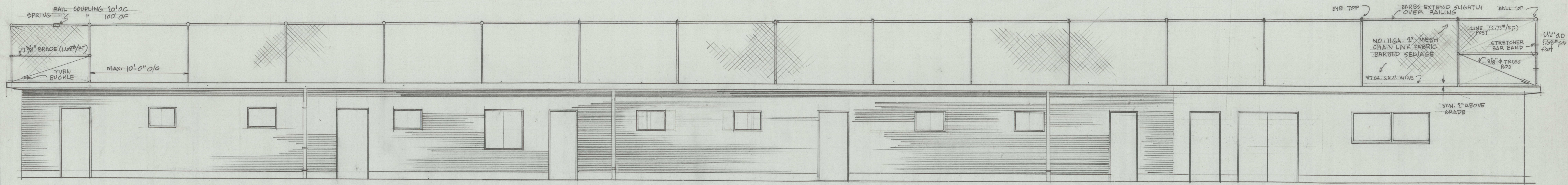


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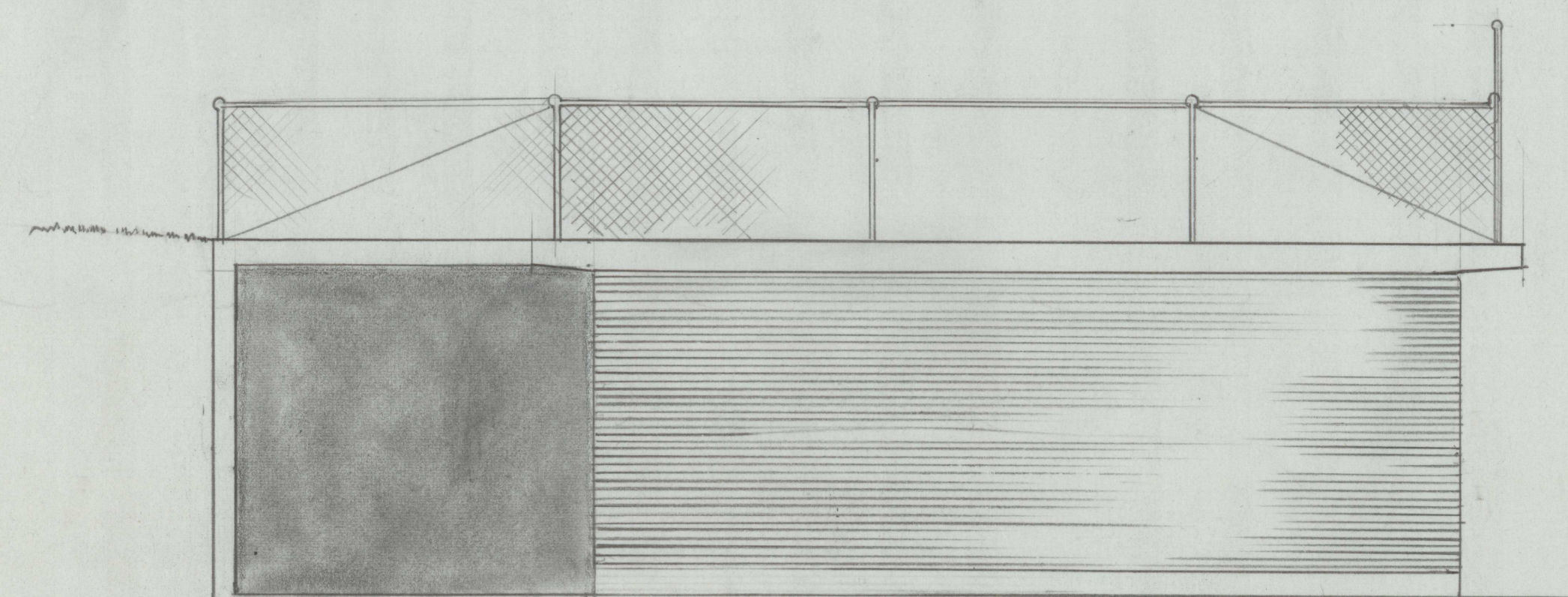


DETAIL @ WING WALL
SCALE: 1 1/2" = 1'-0"

6 10	STRUCTURAL DETAILS		
	CRESTON PARK BATHHOUSE		
	BUREAU OF PARKS AND PUBLIC RECREATION		
	PORTLAND, OREGON		
	ORMOND R. BEAN HARRY B. BUCKLEY		
REVISIONS	DATE: AUG. 1964	DESIGNED BY: JACK PSTUHL	AREA NO.
11/5/64	SCALE: NOTED	DRAWN BY: A.D. LETHUS	48
	SEC: 3435	APPROVED BY:	



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



EAST ELEVATION
SCALE 1/4" = 1'-0"

<div>7/10</div> <div>REVISIONS</div>	<div>ELEVATIONS</div> <div>CRESTON PARK BATHHOUSE</div>		
	<div>BUREAU OF PARKS AND PUBLIC RECREATION</div> <div>PORTLAND, OREGON</div>		
	<div>ORMOND R. BEAN</div> <div>HARRY B. BUCKLEY</div>	<div>COMMISSIONER</div> <div>SUPT. OF PARKS</div>	<div>AREA NO.</div> <div>43</div>
	<div>DATE: AUG 1964</div> <div>SCALE: NOTED</div> <div>1/4 SEC: 3435</div>	<div>DESIGNED BY: JACK P. STUHL</div> <div>DRAWN BY: A.D. LEFTHUS</div> <div>APPROVED BY:</div>	

PLUMBING

Scope

A. No plumbing fixtures, device or connection shall be installed which will provide a cross connection of any sort whatever between a potable water supply intended for drinking and domestic purposes and a drainage system waste pipe or polluted water supply.

B. All work shall be done in strict accordance with applicable state and local Plumbing Codes. Contractor shall obtain and pay for all permits, licenses and final certificate of inspection. The work is generally shown on the drawings and the contractor shall verify all rough-in measurements and indicated elevations before proceeding.

C. The plumbing work shall be performed in harmony with other work in the building. All necessary cutting of structural work required for the plumbing shall be performed in a manner subject to the approval of the Supt. of Parks. The plans show the general arrangement of all piping. Should local conditions necessitate a rearrangement then, before proceeding with the work, a drawing of the proposed arrangement shall be submitted for the approval of the Supt. of Parks. Such drawing, after its approval, shall have the force and effect as though it had been a part of the original plans.

D. Drawings are generally diagrammatic and indicative of the work to be installed. The work of the several trades shall be harmonized so that all may be installed in the most direct and workmanlike manner and so that interference will be avoided. Examine the electrical, structural and architectural drawings.

E. This contractor shall make all required plumbing connections to food service equipment.

Plans and Diagrams

The plans show the general requirements of the plumbing work. This contractor shall, at the direction of the Supt. of Parks and on plans furnished by the Supt. of Parks, provide a complete lay-out of all plumbing piping, showing piping locations and sizes, vents, traps, valves and all other important features as same are actually installed. This plan is to be used for record purposes and must be made with accuracy and at the contractor's own expense.

Openings, Cuttings and Sleeves

A. Before the floors are poured or partition work begun, the risers and such part of branches that are to be enclosed in floors, walls, or partitions, or are to pass through floors, shall be placed in position; otherwise suitable sleeves shall be placed by this contractor whenever necessary before the General Contractor proceeds with his work, it being the intention to reduce all cutting to a minimum. Under no conditions shall any beams, girders, footings or columns be cut, or any pipes in any way run through same, unless so shown on plans or unless written approval is obtained from the Supt. of Parks.

B. Any cutting of walls, floors, etc., or repairing of any work due to the plumber neglecting to direct the location of necessary openings and framing beforehand, shall be paid for by the plumber.

Protection

A. All work, fixtures and materials shall be protected against loss or damage.

B. Work under way or completed shall be properly protected to prevent damage to it. All pipe openings shall be closed with caps or plugs during installation. All fixtures and equipment shall be tightly covered and protected against dirt, or injury caused by water, chemicals or mechanical accident. At the final completion all work shall be thoroughly cleaned and delivered in unblemished condition.

Excavation and Backfill

A. Plumbing contractor shall do all necessary trenching and excavating for the installation of all underground piping, including sanitary waste, rain or area drains and water lines.

B. Use all necessary precautions not to affect the bearing value of the soil under and near the footings.

C. Excavate drainage pipe trenches to exact depth with proper pitch so that drainage piping will rest on undisturbed earth with recesses for bell ends.

D. All trench backfill shall be puddled, tamped and crowned as required by material and location or as otherwise specified.

E. All excavated material in the interior of the building shall be disposed of as specified in Excavation.

Materials

A. Extra heavy cast iron hub and spigot pipe for all waste and rain drain lines beneath the floor and to 5' from building, and standard weight for all rain drain, interior waste and vent piping 2 1/2" and larger above the floor. No waste lines under the floors shall be less than 2" in size.

B. Fittings for hub and spigot cast iron pipe shall be 1/8, 1/16 bends and Y fittings wherever possible. All cast iron pipe and fittings shall be coated inside and out with hot asphalt.

C. Standard weight galvanized steel pipe for hot and cold water piping above and below floors, and waste and vent piping 2" and smaller above floors, except that all piping 1" and smaller in ground and beneath building shall be type K copper tubing.

D. Traps (except C.P. fixture traps) shall be recessed screw jointed or bell and spigot coated cast iron primed as required.

E. Water service shall be galvanized steel.

F. Galvanized malleable iron screw fittings for all galvanized hot and cold water piping. Flare copper adapters iron to copper tube. Silver or approved high temperature soldered fittings on copper joints underground. Black malleable fittings for gas lines not in ground. Welding fittings for gas lines in ground. Durham recessed and beaded fittings for all waste and rain drain waste using galvanized piping.

G. Unions shall be malleable iron ground joint brass to iron seat for 2 1/2" and smaller.

H. Valves shall be gate pattern, unless otherwise noted, all brass wedge disc type with non-rising stem full pipe area opening 2" and smaller. 2 1/2" and larger shall be iron body O.S. & Y type.

I. Priming valve shall be Williams, Fleming, or approved.

J. Hangers shall be solid ring malleable expansion type with rods suspended from inserts or fastened to structural portions of the building. Heavy wrought iron clamps or collars for support of all vertical runs shall be installed.

K. Flashing lead shall not be lighter than 4 lb. per sq. ft. lead sheet.

L. Standard bell and spigot concrete sewer pipe (A.S.T.M. C14-41) or vitreous clay sewer pipe (C13-442) for all waste and rain drain lines more than 5' from the building line.

M. Interior cleanout plates shall be brass C.P. finish with flush frames. Josam series Y-80, Zurn, or equal, for floors. Josam Y-110 shall be used for wall cleanout plates. Locate cleanouts in wall where possible.

N. All piping is to be run in thmost direct manner, parallel to the building lines, straight and graded where necessary, not exposed to view, save where called for or authorized. No tool marks are to show on exposed piping. Horizontal hot and cold water piping shall be supported on hangers as follows:

5'0" for 1/2" and 3/4" pipe
8'0" for 1" and 1-1/4" pipe
10' 0" for 1-1/2" and over

These hangers shall be fastened to the joist, when possible, with angle clips and lag screws, or to masonry with lead shield and lags. They shall be Grenell #101 or #104.

Plumbing (continued)

Materials (continued)

Soil pipe shall be supported on horizontal runs a minimum of 5'-0" 1/c with hangers Grenell #101 or #104

Installation

All cast iron sanitary piping shall be run with a minimum grade of not less than 1/4" except as indicated and all rain drain piping shall be run with maximum possible grade. All joints in cast iron pipe shall be made with picked oakum gasket leaving 1-1/2" lead room which shall be run full at one pouring and caulked solid flush with hub. Cleanouts shall be provided on each downspout and at each change in direction and at intervals of not more than 100'.

A. All cement or vitreous tile sanitary and rain drain piping shall be run with maximum possible grade and with joints made up with caulked oakum and petrolastic or approved compound. Sewer elevations shall be checked with grades determined by the plumber before commencing installation. Variations in these elevations which will interfere with the efficiency or proper operation of the system shall be immediately called to the attention of the Supt. of Parks. If suitable fill is not provided, drainage lines shall be placed on undisturbed ground.

C. All screwed piping shall be rammed to full diameter and screw threads cut with sharp dies so as to make up with not more than three threads exposed, compound applied to male thread only. All piping shall be run parallel to walls and ceilings adequately supported with rod and ring hangers and installed with accessible unions or flanges wherever necessary for removal or servicing of equipment. Location of lights, ducts and other piping shall be carefully checked before installation of piping. Valves shall be installed in each branch supply from the main serving more than one fixture and piping shall be graded and drains provided so that it may be readily drained. Install piping with swing joints, spring places and/or expansion loops as required to make adequate provisions for expansion and pipe movement.

D. All piping extending through roof shall be adequately flashed with sheet lead extending not less than 8" from the vent and not less than 10" up from the roof turning over and down into the hub of hub and spigot pipe and finish with approved malleable iron or bronze cap providing counter flashing for screwed pipe. Roof drain flashing shall extend not less than 8" in all directions.

E. All pipe sleeves shall be carefully located and firmly fastened to the forms before concrete is poured.

F. Vent piping shall be connected to each fixture, revented to waste lines above highest fixture and extended to not less than 14" above roof. Vent piping shall follow waste piping, be installed with proper grade and be joined together to one stack wherever possible before going through roof.

G. Install all necessary fixtures, hangers and supports and direct location of backing as required.

Pipe Covering

A. Material: For all hot water piping, Johns-Manville, or approved equal, 3/4" sectional wool felt covering with canvas jacket. All cold water piping, Johns-Manville, or approved equal, 3/4" anti-sweat sectional wool felt covering with canvas jacket. No insulation is required on underground piping.

B. Installation shall be made by skilled applicators after piping has been tested and approved. Fittings shall be built up to height of adjacent covering with asbestos or magnesia cement and finished with canvas. All canvas jackets shall be pasted neatly and lacquered brass or black metallic bands applied on not more than 18" centers after painting.

Painting

A. All piping run in or through concrete, floor fill or tile floors shall be given a coat of acid resisting paint, having a bifumastic base. All exposed threads on galvanized pipe shall be given one coat of same acid resisting paint.

B. Pipe hangers, supports, uncovered piping and all other iron work in unexposed areas shall be thoroughly cleaned and painted one coat of black asphaltum varnish. All pipe insulation shall be painted two coats lead and oil paint over one coat primer, or approved color or two coats Armstrong Ineul color.

Access Covers

All traps and valves not exposed shall be accessible by the use of such frames and covers as Greenberg Access Frame and cover #2360 equipped with tamperproof screws.

Test for Plumbing and Drainage Systems

The entire system of water, drainage and vent piping in the building shall be tested and proved tight to the satisfaction of the Supt. of Parks before connection is made to sewer, trenches back-filled, piping covered or fixtures connected. All defects disclosed in the work by the following specified test must be corrected. Test shall be as follows:

A. The connection from the building to sewer and the drainage system below floors or ground level shall be filled with water to the top of a vertical section of pipe 10 ft. high and water allowed to stand for at least thirty minutes for inspection, after which, if the lines prove tight, the water may be drawn off and the trenches back-filled.

B. The drainage and vent piping above the floor or ground level shall have the openings plugged where necessary and the piping system above filled with water to the level of the top of vent pipes and allowed to stand for at least thirty minutes for inspection, after which, if the lines prove tight, the water shall be drawn off and the fixtures connected. Each vertical stack above the first floor or ground level with its branch waste and vent pipes may be tested separately.

C. Entire hot and cold water supply and hot water recirculating system shall be tested to a hydrostatic pressure of 100 psi and proved tight. Caulking of leaks will not be permitted. If piping is concealed by structural work before system is completed, it shall be separately tested before concealment.

Cleaning and Adjusting

A. At the completion of the plumbing work, all parts of the installation shall be thoroughly cleaned. All wiring and connected facilities shall be thoroughly cleaned of all grease, metal cuttings and foreign matter of every kind. Any stopping or discoloration or other damage to any part of the building, its furnishings or finish, due to failure to clean the piping system properly shall be thoroughly repaired.

B. All plumbing fixtures, on completion of the work, shall be thoroughly cleaned and scoured with an approved scouring powder and left ready for use. All flush valves and other automatic devices shall be carefully adjusted and made ready for operation.

C. This contractor shall, from time to time, and whenever directed by the Supt. of Parks, clean up and remove from the premises all refuse material and rubbish arising from the work under this contract, and at the final completion of the work, leave the premises in an approved, clean and perfect condition.

Hot Water System

This contractor shall install one 100 gallon fast recovery hot water tank located as per plan. The tank shall be equipped with controlled temperature and pressure relief valves.

Drains

Where floor drains are indicated, install #300 series, size 3" minimum Josam, brass-screwed grille, chrome strainer. Keep 2" below established floor levels. The drains shall be caulked not screwed and properly connected. Where roof drains are indicated install Josam Series #4210 with lead sheeting extending under roofing 8" in all directions. Bevel decking to recess drains.

Valves

All valves two inches and under are to be of brass with removable handles, to be full size with maker's name stamped thereon to be standard, or equal as approved. Valves not marked with maker's name will be rejected.

Recommended Valves:

Globe, 2" and under - brass body #125 - Walworth #4 or equal
Checks, 2" and under - body #125 Swing check with renewable disc
Hose Bibs - standard manufacture

Valves (continued)

All valves shall be provided with lock shield and provided with five keys per size.

Valve Charts

Furnish valve chart of all valves giving valve number, operation and location, on a neat covered board and tag each valve with a brass or plastic disc.

Plumbing Fixtures and Equipment

Furnish and install the necessary plumbing fixtures in quantity as shown on the plans and as hereinafter specified. Standard sanitary or approved equal. Before fixtures are ordered, the contractor shall submit a complete list of plumbing fixtures, giving the catalog number, make and cuts, for approval. Furnish the above list in quadruplicate; fixtures shall not be ordered until this list is approved. Furnish stop valves on all fixtures.

Toilets - A-S, Neolo 1-1/2" back spud, concealed flush valve with vacuum breaker. Sloan Royal 152TV, 9500 white Mol-Tex seat.

Men's Urinal - A-S, china 7-6005-5 18" stall urinal, with Sloan Royal valve 194, through wall with angle stops. Back spud integral flush-spreader, B-2024 Universal Beehive metal strainer for 2" drain connection.

Lavatories - A-S, Hexagon, P-3865-51, 20 x 18, cast iron, square bowl with R-2212 self-closing faucets indexed, hot and cold. Code 1-1/2" drainage P trap behind wall with 1-1/4" C.P. tubing connection through wall to basin waste; C.P. 3/8" iron pipe size supply extending through wall with stop back of wall; all connections to be set high as possible under fixture.

Women's Urinal - A-S, 1 Sanistand vitreous china, F-5800-1 exposed hand operated flush valve with vacuum breaker Sloan Royal 187TV.

Service Sink - 24" x 20" Am. Std. Argon - Service Sink, with P-7705-1 complete, brass base 3/4" x 3/4"

Mixer Valves - Each shower shall be connected to a tempera Mod. T-1 mixer valve with control valves.

Shower Valves and Heads - Shower valves and heads shall be Sloan Model ACV 600 or equal.

Drinking Fountain - Am. Std. Baden freeze-proof - F-8410 - Push Button Control

HEATING

Scope

A. All work shall be accomplished in a manner satisfactory to the Supt. of Parks in accordance with the specifications and the regulations and requirements of the applicable state and local authorities. The contractor shall obtain and pay for all permits, licenses, taxes, etc. The contractor shall verify all measurements and shall inspect and verify all existing conditions as they may affect this work before submitting his bid.

B. The drawings are generally diagrammatic and indicate the performance required. The contractor shall have wide latitude in location and arrangement of equipment and ducts. If substantial changes are proposed, a drawing shall be prepared and submitted to the Supt. of Parks for approval before the work begins. Changes conflicting with the work of other trades will not be approved.

C. The heating work shall be performed in harmony with other work in the building. All necessary cutting of structural work required for the heating shall be performed in a manner subject to the approval of the Supt. of Parks. The work shall be installed in the most direct and workmanlike manner and so that interference will be avoided. Make all necessary provision for expansion and contraction.

Drawings

A. This contractor shall, before starting his work, carefully examine the electrical, architectural and structural drawings so that he may become thoroughly familiar with the conditions as may affect his work.

B. Supplementary details supplied to the contractor as required shall become a part of the contract documents.

C. It shall be the responsibility of this contractor to call to the attention of the Supt. of Parks any errors, conflict or discrepancy in the plans and specifications. This contractor shall not proceed with the questionable items of work until clarification of same has been made.

Catalog Data

The successful contractor, before starting work, shall submit in quadruplicate a complete material list, together with catalog data and rating information, for all the equipment proposed for installation. No material or equipment shall be delivered on the job until this list is checked and approved. Acceptance or approval of the equipment list and catalog data submitted will be based on type, capacity and quality only, and will not relieve the contractor of direct responsibility for quantity or suitability of specific application. If list is not submitted, it is assumed that all equipment will be furnished exactly as specified.

Opening, Cutting & Sleeves

Under no condition shall any beams, girders, footings or columns be cut or any pipes in any way run through same, unless so shown on plans or unless written approval is obtained from the Supt. of Parks.

Any cutting of walls, floors, etc. or repairing of any work due to the Heating Contractor neglecting to direct the location of necessary openings and framing beforehand, shall be paid for by the Heating Contractor.

Protection

A. All work, equipment and materials shall be protected against loss or damage.

B. Work under way or completed shall be properly protected to prevent damage to it. All equipment shall be tightly covered and protected against dirt, or injury caused by water, chemicals or mechanical accident. At the final completion all work shall be thoroughly cleaned and delivered in unblemished condition.

Heating and Cooling Unit

The heating and cooling unit shall be or equal to Wesco electric furnace #30 WE, having two stages of heating, controlled by a two stage mercury switch thermostat with a single stage for cooling. The system shall be fully automatic for cooling-heating operation. Elements shall be 1/2" diameter chrome-sheathed tubular elements with 1 1/2" steel spiral fins with a maximum watt density of 44 watts per square foot. Elements shall be energized in 5KW or less increments, with all elements instantly off on a limit break. Blower shall be of a centrifugal type with a minimum wheel size of 10" x 12" and shall be belt driven, capable of pulley adjustment to provide up to 2,000 cfm at 0.5 inch S.P. Blower motor shall be 2 speed, 1725-1140 RPM and shall be controlled by the plenum oil temperature.

Furnace casing shall be finished with baked enamel and have vinyl coated sound and attic condensate insulation in the blower compartment, shall have a low limit to maintain a lower temperature. The unit shall be equipped with filters for full filter service. All parts, controls, etc. shall work as a fully automatic system, and shall be equipped with a time clock located in the fan room for night and day operation. The unit shall be fully guaranteed for a period of one year, manufacturer. Controls shall be as manufactured by Honeywell Co. or equal approved by the Park Bureau.

Heating continued

Wiring

All wiring for controls in this division shall be furnished by this contractor. Also shall be so furnished to provide interlocking controls for electric heaters in restroom areas so that system operates as a unit. Power wiring to heat pump shall be furnished under electrical contractor as specified under the provisions of the electrical division. A complete as built chart of heating and control system shall be provided.

Guarantee

Equipment furnished under these specifications shall be guaranteed for a period of one year against defective materials and workmanship. In event of failure of any parts during the first year of service due to the above causes, the affected parts or part shall be replaced promptly upon notice by the Supt. of Parks, with new parts by and at the expense of the contractor. These guarantees shall be considered a part of the bid submitted.

Materials

The following are minimum standard materials permissible to be used for the installation. All motor and equipment bearings shall be anti-friction type:

A. Duct Work: Furnish and install all duct work and plenums fabricated of galvanized sheet metal in accordance with recommendations as outlined in 1954 A.S.H.V.E. Guide. The following sheet metal gauges shall be used throughout:

U.S. Std. Gauge	Maximum Side Inches	Type of Joints	Bracing
26	Up to 12	S. Drive, Pocket or Bar Slips, None on 7'10" center	
24	13 to 24	S. Drive, Pocket or Bar Slips, on 7'10" centers	
24	25 to 30	S. Drive, 1" Pocket or 1" Bar Slips, on 7'10" centers	1 x 1 x 1/8" angles 4' from joint
22	31 to 40	Drive, 1" pocket or 1" Bar Slips, on 7'10" centers	1 1/2 x 1 1/2 x 1/8" angles 4' from joint

The flat side of all ducts shall be cross broken. Turning vanes as manufactured by the Tuttle & Bailey Company, or approved equal, shall be installed in all square elbows and where shown on plans.

All other 90° bends shall be made with a center line radius of not less than 1 1/2 times the diameter of the duct. In reducing from one duct size to another, this transition must be gradual, the angle of the slopes shall be less than 30° in all cases. All joints shall be smooth and tight and all duct work firmly hung and rigidly fastened in place. All horizontal ducts are to be supported with angle iron hangers secured to the construction above at intervals not to exceed 8'0". All vertical riser ducts shall be supported at each floor with angle iron rests secured to the ducts. Ductwork shall be fabricated in a manner to eliminate cutting of the seams or joints for the installation of grilles or registers. Aluminum may be used for any of the sheet metal work providing it is furnished and installed not less than two gauges heavier than that given for galvanized iron in the above tabulation. Ducts shall not be exposed in finished areas.

B. Insulation: Furnish and install all sheet metal work, piping and boiler insulation in accordance with the following specifications:

Supply Duct Work shall be insulated with 2" Ularalite applied with miracle or approved adhesive in accordance with manufacturer's recommendations.

Final

This contractor shall conform his work to the building and to fit the work of other trades. All work shall conform to codes of the City and State Building and Heating Codes. Any changes or omissions in plans due to this shall be made to conform and at the expense of contractor. All work shall be guaranteed for a period of one year from time of acceptance of building by the City of Portland.

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REVISIONS

SPECIFICATIONS
CRESTON PARK BATHHOUSE

BUREAU OF PARKS AND PUBLIC RECREATION
PORTLAND, OREGON

ORMOND R. BEAN
HARRY B. BUCKLEY

COMMISSIONER
SUPT. OF PARKS

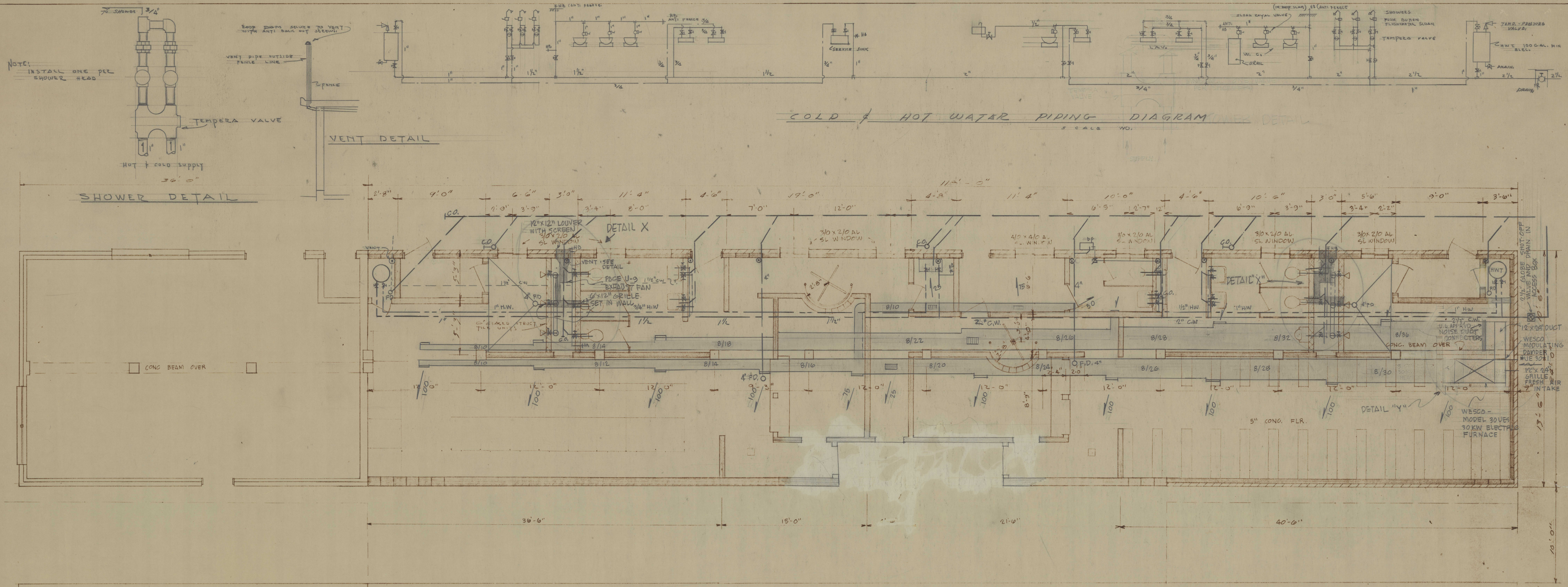
DATE: AUG. 1964
SCALE: NONE
4 SEC. 3435

DESIGNED BY: JACK R. STUHL

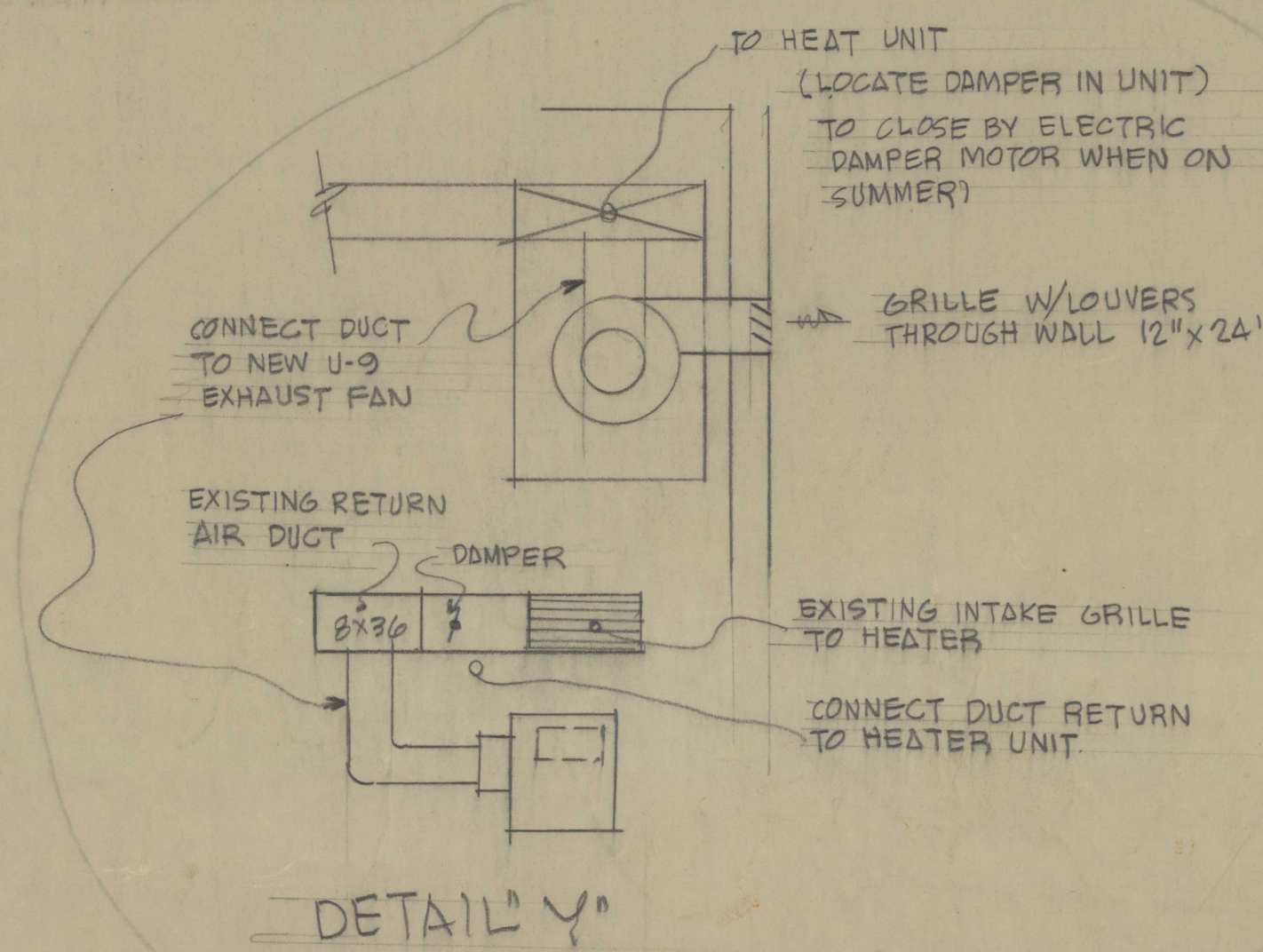
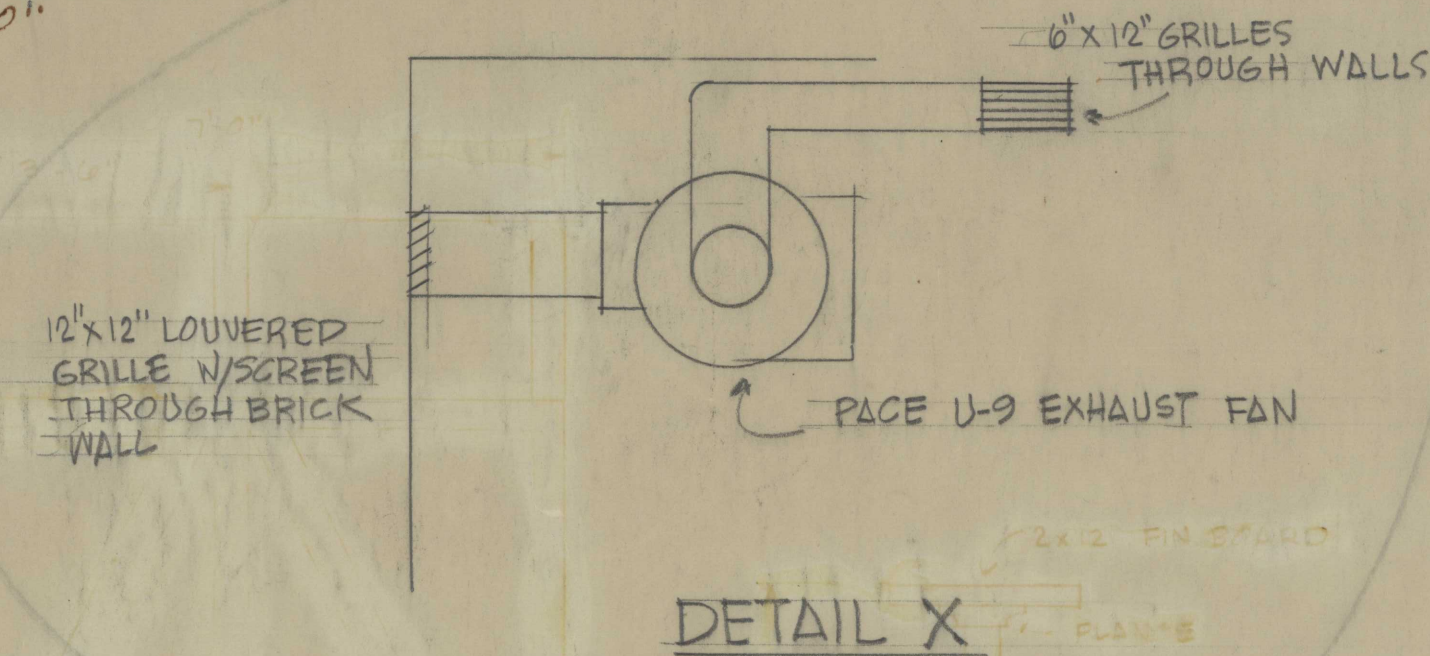
APPROVED BY:

AREA NO.
40

64.014



FLOOR PLAN
SCALE: 1/4" = 1'-0"



NOTE: ETC. TO BE BARBER CULMAN "RGS" 8" SIDE WALL DIFFUSERS OR EQUAL, 100% FRESH AIR WHEN OCCUPIED.

10/10		MECHANICAL PLAN CRESTON PARK BATHHOUSE	
BUREAU OF PARKS AND PUBLIC RECREATION PORTLAND, OREGON		COMMISSIONER BUREAU OF PARKS	
REVISIONS 11/5/64		DATE: AUG. 1964 SCALE: 1/4" = 1'-0" V. SEC. 3478	
DRAWN BY: A.D. LOFTHUS		APPROVED BY:	
AREA NO. 48		64.014	