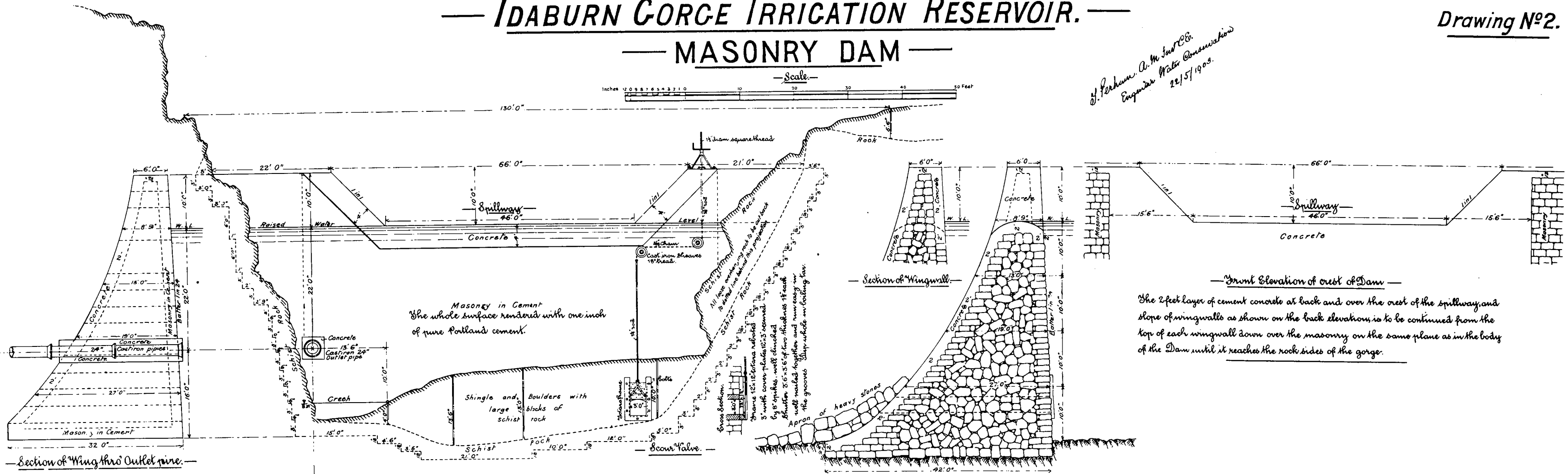
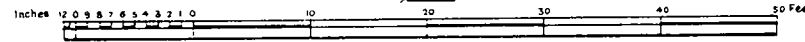


— PROPOSED —
— IDABURN GORGE IRRIGATION RESERVOIR. —
— MASONRY DAM —

Drawing N^o 2.

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 Engineer, Water Conservation
 22/5/1903.*

— Scale —



— Section of Wing thro' Outlet pipe. —

The outlet pipes to be laid on a bed of strong cement concrete, one foot thick, and enveloped in same throughout as here shown

Masonry in Cement
 The whole surface rendered with one inch of pure Portland cement.

— Section of Wingwall. —

— Front Elevation of crest of Dam. —

The 2 feet layer of cement concrete at back and over the crest of the spillway, and slope of wingwalls as shown on the back elevations, is to be continued from the top of each wingwall down over the masonry on the same plane as in the body of the Dam until it reaches the rock sides of the gorge.

— Section thro' centre of Dam. —

— Method of construction of Dam. —

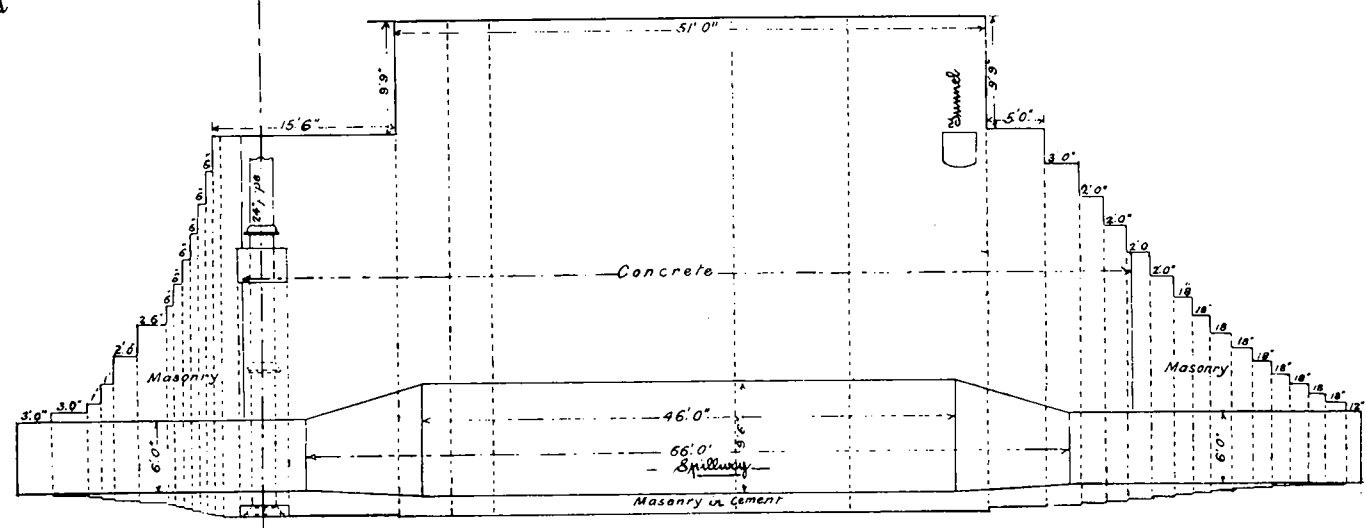
The site to be prepared for foundations by excavating and removing from the sides and bed of the Gorge all surface material and loose overhanging rock down to the bed schist rock. Then the area to be occupied by the Dam to be excavated and stepped to the dimensions shown (or as shall be directed) great care being taken to stop all fissures by grouting with liquid cement.

The Dam to be built of soundest blocks obtainable of schist rock, quarried from the cliffs in the Gorge immediately above the site, and the stones used of the largest description consistent with handling. The back and front of the Dam to be laid carefully with Portland cement mortar, beds and joints bonded.

In the core of the Dam large rough stones to be laid together in courses, and all spaces filled in with smaller stones and packed with spalls, so as to form as near as possible a solid mass of rock without mortar. After building up this material together with the outer walls for 2 to 3 feet, grouting boxes to be placed upon the wall, and the spaces between and around the spalls and stones to be carefully grouted with liquid cement, thereby insuring all horizontal and vertical joints being entirely filled, and cementing the entire Dam into one solid mass.

The face stones not to be dressed to form the bath on the down stream or front of the Dam, but left in the rough. A layer of strong Portland cement concrete, averaging 2 feet in thickness, to extend from the upper side or back of the Dam, and over the crest of the spillway in a curved surface, and down to the foot of the Dam on down stream side. The concrete forms for this to be held in place by iron rods built into the masonry courses as the work progresses. The bottom of the down stream face of the stonework under the concrete to be formed by stepping back the stones as the wall is built up, and left rough for the better adhesion of the concrete. The form and dimensions of the Dam, extent of masonry and concrete, and all details of through outlet pipe, &c., are here shown in elevations, cross sections, and plan upon this drawing. An apron of heavy stones to be placed along toe of down stream slope.

— Back Elevation of Dam. —



— Plan of Dam. —