

FILE NO. **51010**

Communication

OF

*J. H. Johnston
Lyre subway under
Lake Washington Canal*

~~FEB 17 1913~~ FEB 11 1913

FILED

BY

ADDRESS

H. W. CARROLL
CITY COMPTROLLER AND EX-OFFICIO CITY CLERK

BY

H. W. Carroll

DEPUTY

ACTION OF THE COUNCIL

REFERRED

FEB 11 1913

REFERRED

REPORTED

REPORTED

REF. FOR ORD.

FEB 28 1917

TO

COMMITTEE OF WHOLE

TO

REPORT ADOPTED

REPORT ADOPTED

C. B.

ORD.

DISPOSITION

ON FILE

REPORT OF COMMITTEE

Mr. President :

Your

COMMITTEE OF WHOLE

Committee

to which was referred the within

would respectfully report that we have considered the same and respectfully recommend that **PLACED ON FILE**

CHAIRMAN

Mr. Chairman - Gentlemen: -

You have under consideration the voting of a Bond issue for \$1,600,000 for Bridges at this coming election. Before voting these bonds it is only right to present to the people a more permanent construction than Bridges. The public which is demanding the construction of these bridges seeks a quick and direct route to the business center; the Merchant Marine seeks a short unobstructed channel to fresh water; the interests of both are one and the same, - the discharge of their individual business with the greatest possible dispatch.

Why then advocate a system which will be a benefit to the one and a detriment to the other? Should individual cases be considered, we would be building bridges at any point fancy suggested. The project of Lake Washington Canal belongs strictly to Seattle, since no other city could afford such an opportunity. Its commerce is awaited with open arms. Seattle is destined to be a world city, as a port it will clear the largest tonnage. It is safer and saner to consider a plan whereby we will secure both commerce and quick transportation.

Quick transportation to the public must be unobstructed transportation. Will an open bridge give you quick transportation? Or one out of repair? Or one stalled?

A bridge may be a means of crossing, but it is a slow one, and to the taxpayer it is a burden and damages abutting property owners. The operating expenses alone are appalling; you must consider the tenders - 3 shifts; current - oil - paint, etc. These with the repair bills would soon amount to \$8000 ⁰⁰ per year approximately for a single bridge, you are contemplating 6 or more. You will place upon the people a burden of \$50,000 per year which must be raised by taxation, and then you have but a passing construction. Were we building a town we might consider bridge construction but we are striving daily to make our city a port of the world and rightly hail it as Seattle The port of Success. We are awaiting the opening of the Panama Canal with eagerness. It will bring to us hundreds of thousands of new settlers, for whom homes and employment must be found, whether temporary or permanent. We will have on our streets greatly increased traffic which will result in congestion. This is already evident

in our down town district. We must provide quick transportation and safe thoroughfares. We cannot build for the present Seattle; we must build for the future.

The life of the bridge is possibly 15 years, then an entire new structure must be built. It is a common occurrence in large cities to have bridges badly damaged by collision either through bridge tenders' or captains' carelessness, then the disasters occurring from the open draw are too numerous to mention.

Shipping interests must have navigable streams. Would you consider a stream navigable when you have placed within a distance of three miles, bridges at 6 different points? You are hindering the commerce for which we are waiting. Attempt gentlemen to construct a bridge across East waterway at North end of Harbor Island. The shipping interests would kill such a project forever. The same fact applies to Lake Washington Canal. The factories and other industries which should dot the shores of Lake Union and Lake Washington will not materialize for shipping masters will refuse to ~~send~~ their large ocean lines through this channel obstructed by 6 bridges. Take for instance Tacoma. The charges are 25 cents per ton additional if they go above 11th Street bridge. One wharf owner above 11th Street claims that the Pacific Coast Steamship Co. refuses to send their boats to his wharf.

Why block this stream every 1500 feet? The territory to be served is very large; the benefit of commerce very great; we must hit upon some plan to please the public and hold the commerce.

Then why this talk on bridges when they will not serve our purpose? The time has arrived in my judgment when it is absolutely necessary to lay aside all argument and build for Seattle a method of transportation which other cities have demonstrated to be of greatest value to the present people and future generation. That is -

Subway - Tunnels. Of course you will say the expense will be much greater, but we cannot expect to become a world port unless we offer every facility to the world.

The cost of erection and maintenance of a bridge for a given period will equal the first cost of a Subway or Tunnel. A Subway requires no operating expense and if properly constructed is everlasting. If the city were a private corporation it would at once invest the required amount and

save the renewal and repair bills. The work as a whole would not be more serious than other works contemplated here or elsewhere.

The Water Department - your Sanitation Department cannot be excelled and are everlasting; your pavements are heralded the world over - we lack only quick transportation to help us to our ultimate needs.

Of all the difficult problems that have arisen as a result of the great and continuous concentration of population in cities the most difficult to be satisfactorily solved is the furnishing of suitable and economical means of local travel. With the enormous wagon traffic that congests the streets the surface cannot be used except for street car line whose speed being limited by ordinary street conditions is too slow except for short distance journeys. In some American cities and in a few exceptional cases in Europe elevated railroads have been constructed to furnish means of travel, on which traffic freed from surface conditions could move more rapidly. Such railroads although successful in themselves are unsightly and objectionable to the abutting houses. They are not likely to be duplicated.

With the surface impossible for use for rapid transit purposes, and with the super-surface undesirable for such use, we recourse to the sub-surface, and it is in the development of sub-surface lines there is the greatest activity. To this class of railroad, regardless of the method of construction, the term subway has come to be applied. The name is now used to describe a road beneath the surface with stations at comparatively short distances apart and primarily intended to serve the needs of local transit.

Tunnels are commonly employed for railroad purposes - for the passage of foot and wagon traffic under rivers as in the City of Chicago.

The problem that confronts us at the present is the tunnel rather than the subway system.

I stand for Subway-Tunnels at points where bridges are contemplated. These subways or tunnels to be 50-0 wide - 18-0 high to accommodate 2 tracks, 2 roadways, walk, cables, watermains, etc. The construction to be of concrete - well waterproofed, the pavements to be of brick, the interior walls to be of glazed tile.

~~(We are not in need of a subway with its attendant stations at this time.)~~

The cost of such a subway assuming the tunnel under channel to be 1000 feet long, the two approaches 750 each - making a total of 2500 feet for a single project - This construction would cost \$200 ⁰⁰ per foot or a total cost of \$500,000 per project.

The plans herewith attached will convey to you my construction, and I am prepared to submit a proposition along these lines.

My experience in Tunnel - Subaqueous and underground work in the East has extended over a period of 10 years, and I represent large local interests who have only Seattle's greatest development at heart.

Respectfully submitted,

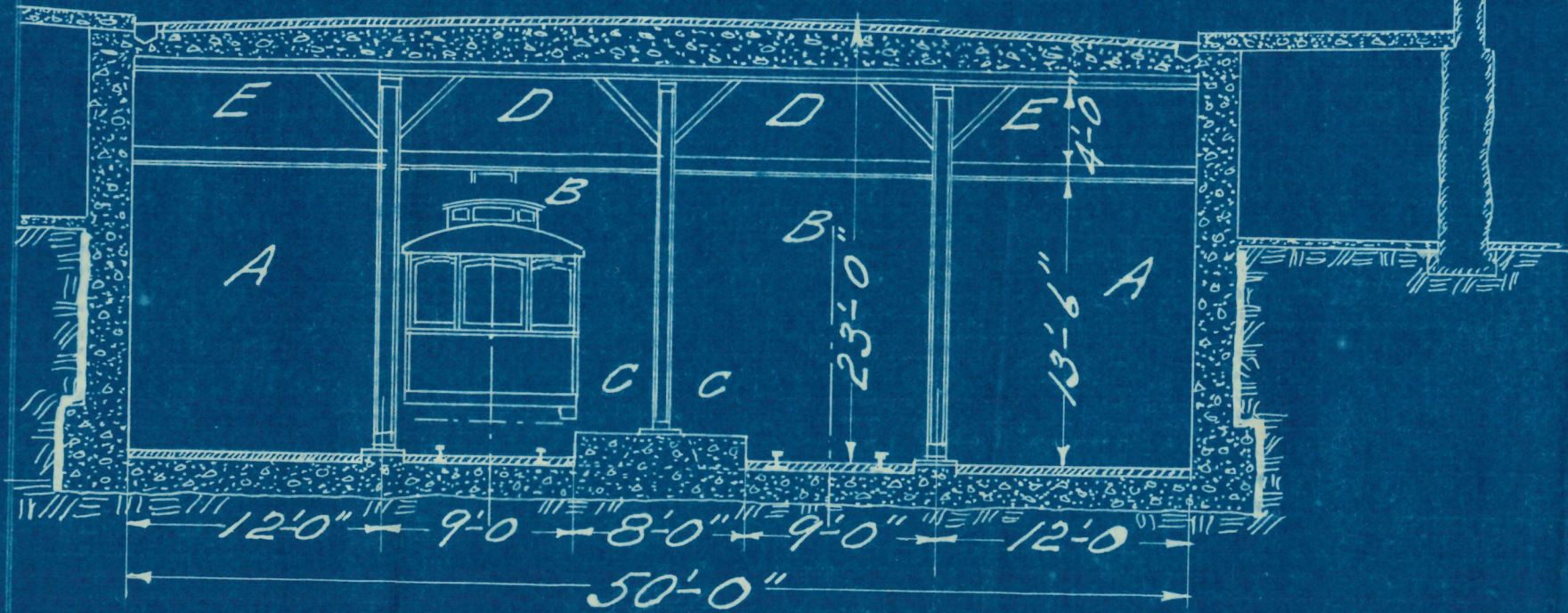
A handwritten signature in cursive script, reading "J. M. Johnson". The signature is written in dark ink and is positioned below the typed name. It features a prominent, sweeping underline that extends to the right.

A- Driveways,
 B-Traction Cars,
 C-Foot walks,
 D-Public Utilities,
 E Sewers-Water-Gas.

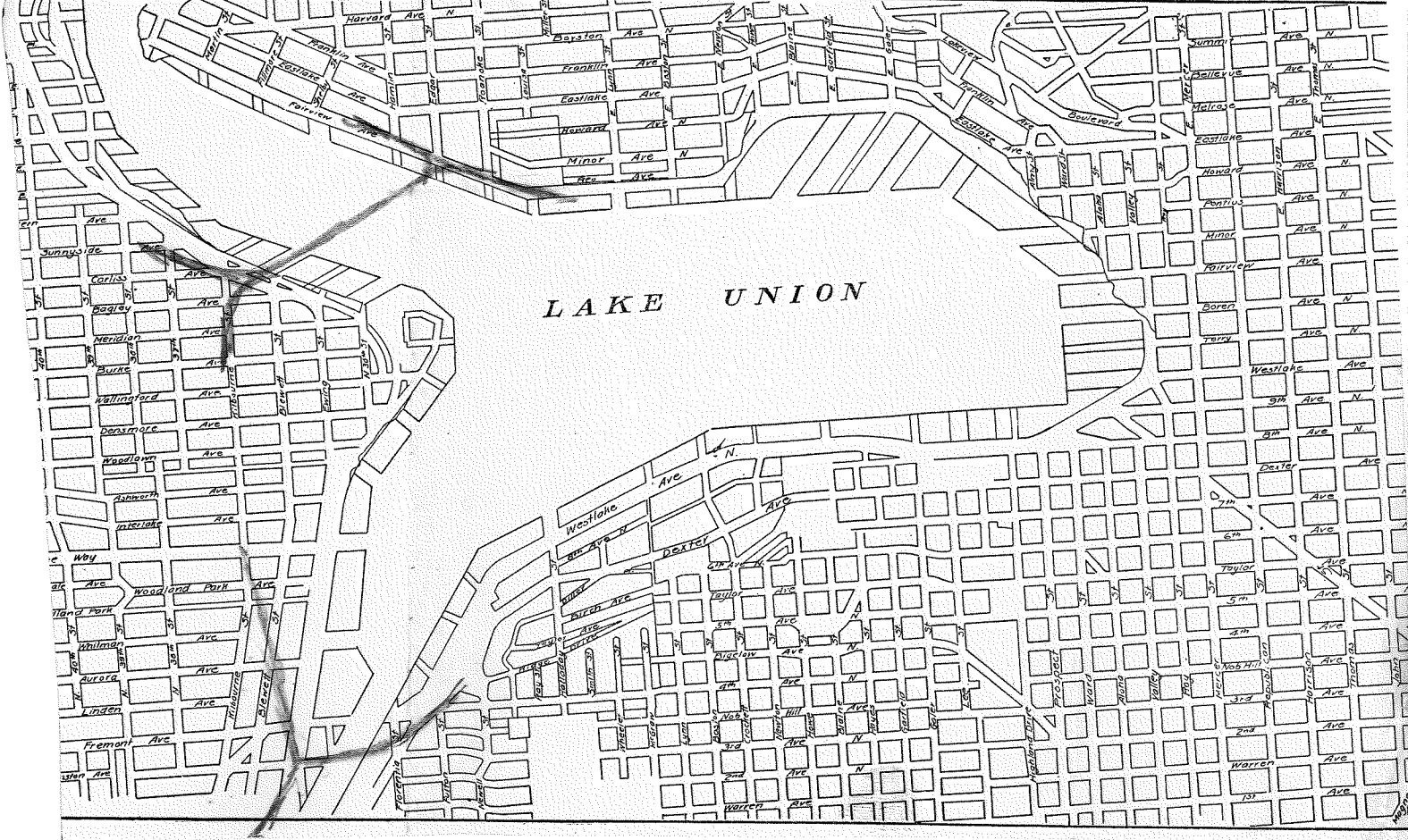
Subway Construction.
 Lake Washington
 Canal Project.

J. W. Johnson,
 Engineer.

Hoge Bldg.
 Seattle. Feb. 1913.



CONTRACT NO.
 Made by
 Checked by
 Date
 Date
 BILL NO.

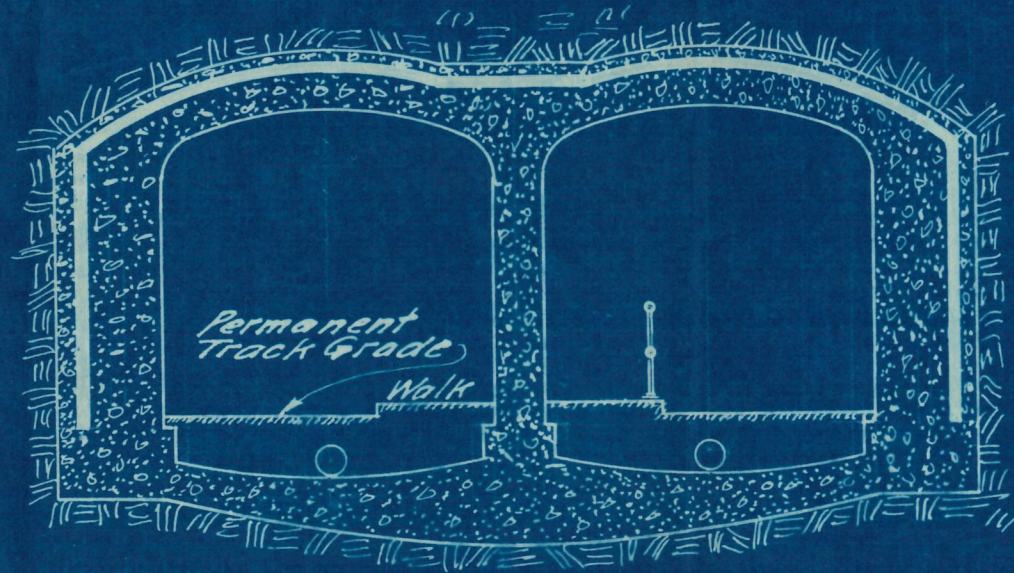


*Twin Tunnel Construction
Adaptable to Traction or
Wagon Traffic.*

*Lake Washington
Canal Project.*

*Hoge Bld'g.
Seattle. Feb. 1913.*

*J.W. Johnson
Engineer.*



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