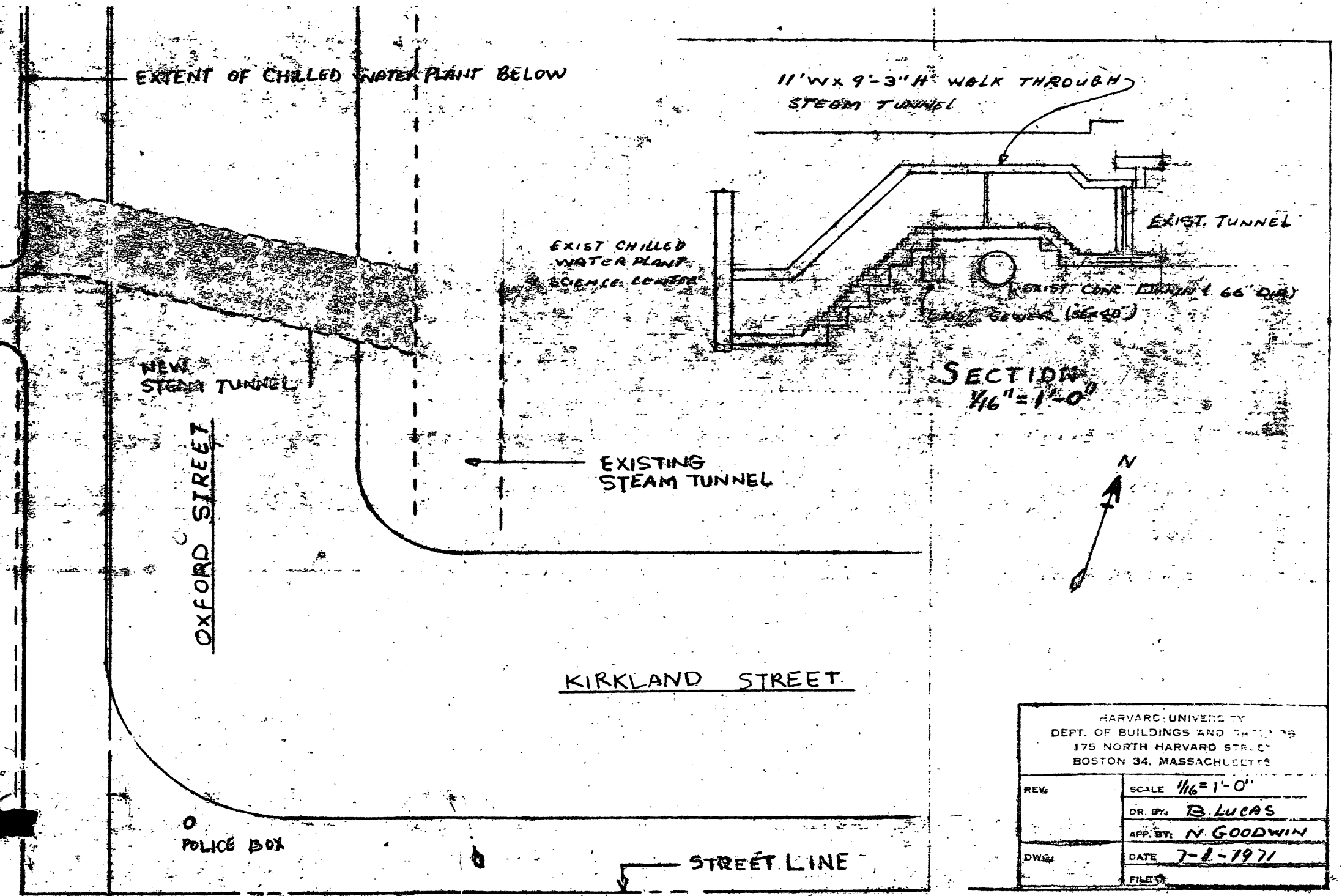


HARVARD UNIVERSITY
DEPT. OF BUILDINGS AND GROUNDS
175 NORTH HARVARD STREET
BOSTON 34, MASSACHUSETTS

REVS.	SCALE 1/16" = 1'-0"
	DR. BY: B. LUCAS
	APP. BY: N. GOODWIN
DWG.	DATE 7-1-1971
	FILE:

106

City of Cambridge

In City Council,
August 16, 1971.

ORDERED:-

On the petition of President and Fellows of Harvard College that the Commissioner of Public Works be authorized under the provisions of the City Ordinances to grant a permit or license to said President and Fellows of Harvard College to construct, maintain and use a walk-through tunnel from the east side of Oxford Street at west face of existing steam tunnel approximately 34' north of the intersection with Kirkland Street to the west side of Oxford Street at the east face of the new Central Chilled Water Plant at a point approximately 46' north of the intersection of Kirkland Street; the depth of said tunnel to be 18' at east end, 13' in the center and 29' at the west end; the length to be approximately 50' and the width 11'; the basic height to be 9'3",the east end 11½' high and the west end 10½' high; the walls, floor and roof to be 1'6" thick, to be constructed of reinforced concrete, in accordance with Section B & C, a copy of which is on file in the City Clerk's Office, City Hall, Cambridge, Mass. The purpose of the underground tunnel is to connect the University's Science Center and Chilled Water Plant, now under construction, to an existing steam tunnel which now services most of the Harvard buildings. The tunnel design is by Sert, Jackson & Associates,Architects, Cambridge, Mass.

First:- The work in streets not to be unnecessarily delayed nor the public travel unnecessarily interfered with during the construction of the tunnel. The amount of space, time, manner, etc. of occupation of the streets to be arranged with the Commissioner of Public Works of Cambridge.

Second:- All work of relaying, reconstructing and repairing any sewer, sewer construction, appurtenance or fixture, to be done as directed by the Commissioner of Public Works of Cambridge and to his entire satisfaction and acceptance.

Third:- The relaying and reconstructing of water pipes and service connections, if any, to be done in a manner satisfactory to the Cambridge Water Board.

Fourth:- In relaying, supporting or repairing gas pipes, electric conduits or other structures not belonging to the City of Cambridge, the President and Fellows of Harvard College are to make adequate and satisfactory arrangements with the several companies whose structures may be affected by the construction of the tunnel.

Fifth:- The refilling and replacing of the material around and over the tunnel to be done so as to prevent, as far as possible, all settlement of the surface. The surface of the public streets which have been disturbed or injured by the construction of the tunnel are to be repaired and repaved, in a first-class manner, with the same class of pavement that existed on the street before the work was begun. All such work of repairing and repaving to be done by the Public Works Department of the City of Cambridge at the expense of the President and Fellows of Harvard College.

C. C. 106

City of Cambridge

Sixth:- During the progress of the construction of the tunnel, all sewer, water, gas and electric services must be maintained by the contractor to supply the wants of the abutters upon the streets if they so request.

Seventh:- If at any time the City Council shall decide that in its opinion public necessity and convenience require that the tunnel be altered or otherwise changed in its location, the said President and Fellows of Harvard College on receiving due and proper notice from the City Council defining and requiring such alterations as it desires, shall at once and at its own expense, cause such alterations to be made.

Provided that before proceeding to excavate for the purpose of constructing said tunnel as hereby authorized, the licensee shall file with the City Clerk a satisfactory bond in the sum of ten thousand dollars ($10,000.00) conditioned to save harmless the City of Cambridge from all claims for damages arising from the construction, maintenanee and use of said tunnel as authorized under this order. Said bond to be satisfactory in form to the City Solicitor and approved by the City Manager.

Provided, further, that the permit or license hereby granted shall be subject to revocation at any time at the pleasure of the City Council for the time being.

Provided, further, that the President and Fellows of Harvard College shall insert in the contract for the excavation of the streets a clause that Cambridge laborers be given first preference.

City Council August 16, 1971

Adopted by the affirmative vote

of 7 members

Paul E. Healy

City Clerk

HARVARD UNIVERSITY

DEPARTMENT OF BUILDINGS AND GROUNDS

MEMO TO: Mr. Ernest Reid

FROM: Mr. Norman Goodwin, Jr. NGJ

DATE: August 10, 1971

SUBJECT: Oxford Street Steam Tunnel.

The permit for the above tunnel requires additional information for approval as follows: -

1. The point of origin: - East side of Oxford Street at West face of existing steam tunnel approximately 34' North of the intersection with Kirkland Street.

2. The point of destination: - West side of Oxford Street at the East face of the new Central Chilled Water Plant at a point approximately 46' North of the intersection of Kirkland Street.

3. The depth below surface: - Varies, (a) 18' at East end, (b) 13' in the center and (c) 29' at the West end.

4. The length and width: - Length, approximately 50' and width, 11'.

5. The height: - Varies - basic height 9'3". All connection points are as follows: - East, end 11½' high and West end, 10½' high.

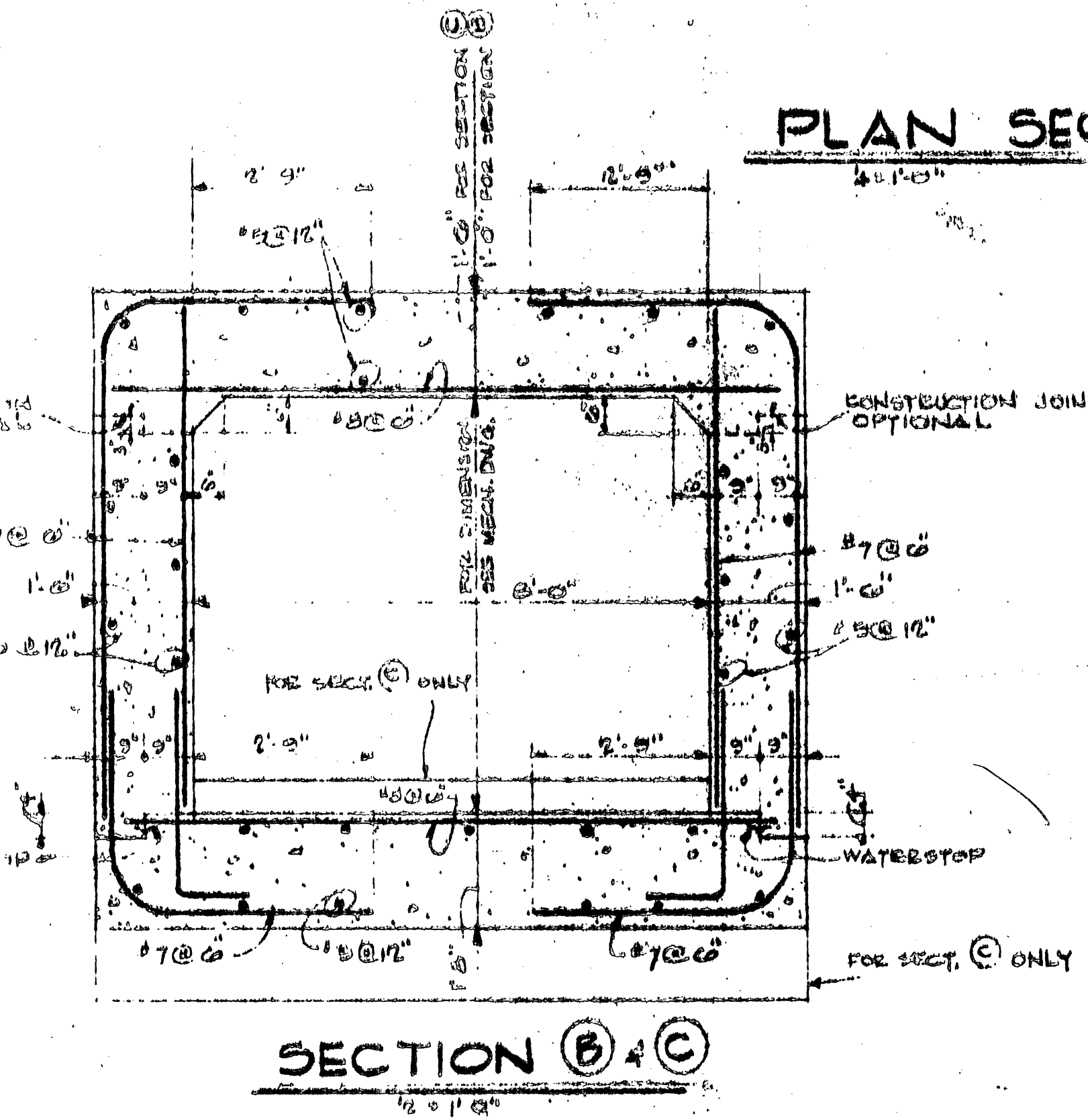
6. Wall Thickness: - Walls, floor and roof are 1'6" thick.

7. Type of construction: - Reinforced concrete, in accordance with attached section B & C.

NGjr:gf

Attachment:

495-5581
Ernest Reid
Norman Goodwin


PLAN SE
1'-0"
(B) (C)
1'-0" FOR SECTION
1'-0" FOR SECTION
2'-9"
12"-9"
#5@12"
#5@6"
CONSTRUCTION JOIN
OPTIONAL
FOR SIMILARITY SEE MECH. DWG.
#7@6"
1'-6"
3'-0"
#5@12"
FOR SECT. (C) ONLY
2'-9"
2'-9"
9"
9"
#5@6"
WATERSTOP
#7@6"
#5@12"
#7@6"
FOR SECT. (C) ONLY
SECTION (B) & (C)
1/2 = 1'-0"

HARVARD UNIVERSITY
DEPARTMENT OF BUILDINGS AND GROUNDS

MEMO TO: Mr. Ernest Reid

FROM: Mr. Norman Goodwin, Jr.

DATE: August 10, 1971

SUBJECT: Oxford Street Steam Tunnel.

The permit for the above tunnel requires additional information for approval as follows: -

1. The point of origin: - East side of Oxford Street at West face of existing steam tunnel approximately 34' North of the intersection with Kirkland Street.

2. The point of destination: - West side of Oxford Street at the East face of the new Central Chilled Water Plant at a point approximately 46' North of the intersection of Kirkland Street.

3. The depth below surface: - Varies, (a) 18' at East end, (b) 13' in the center and (c) 29' at the West end.

4. The length and width: - Length, approximately 50' and width, 11'.

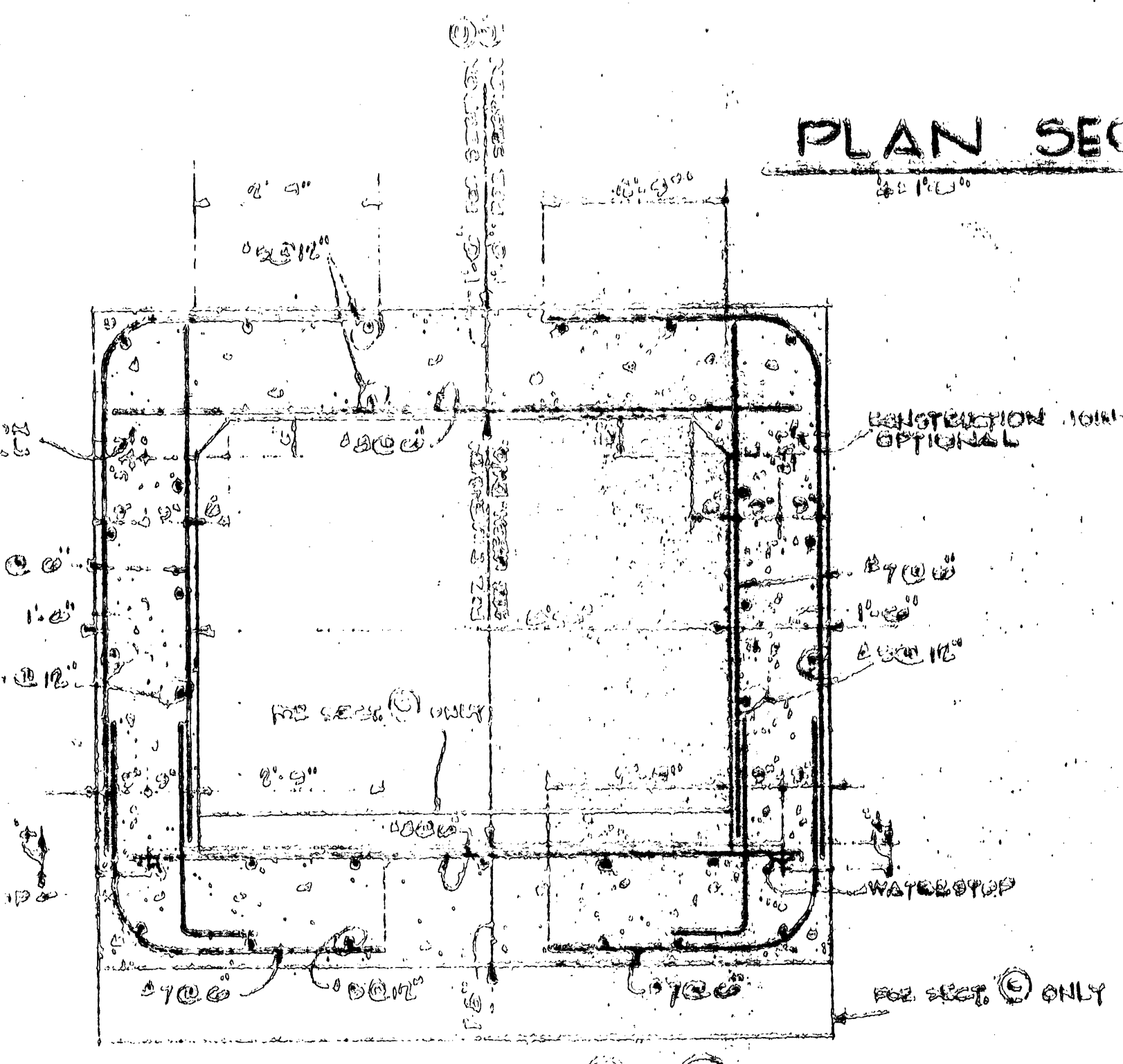
5. The height: - Varies - basic height 9'3". All connection points are as follows: - East end 11½' high and West end, 10½' high.

6. Wall Thickness: - Walls, floor and roof are 1'6" thick.

7. Type of construction: - Reinforced concrete, in accordance with attached section B & C.

NGjr:gf

Attachment:


PLAN SE
CONSTRUCTION JOINT OPTIONAL
WATERSTOP
FOR SECT. © ONLY

SECTION (B) & (C)

HARVARD UNIVERSITY
DEPARTMENT OF BUILDINGS AND GROUNDS

MEMO TO: Mr. Ernest Reid

FROM: Mr. Norman Goodwin, Jr. NGJr

DATE: August 10, 1971

SUBJECT: Oxford Street Steam Tunnel.

The permit for the above tunnel requires additional information for approval as follows: -

1. The point of origin: - East side of Oxford Street at West face of existing steam tunnel approximately 3h' North of the intersection with Kirkland Street.

2. The point of destination: - West side of Oxford Street at the East face of the new Central Chilled Water Plant at a point approximately h6' North of the intersection of Kirkland Street.

3. The depth below surface: - Varies, (a) 18' at East end, (b) 13' in the center and (c) 29' at the West end.

4. The length and width: - Length, approximately 50' and width, 11'.

5. The height: - Varies - basic height 9'3". All connection points are as follows: - East end 11½' high and West end, 10½' high.

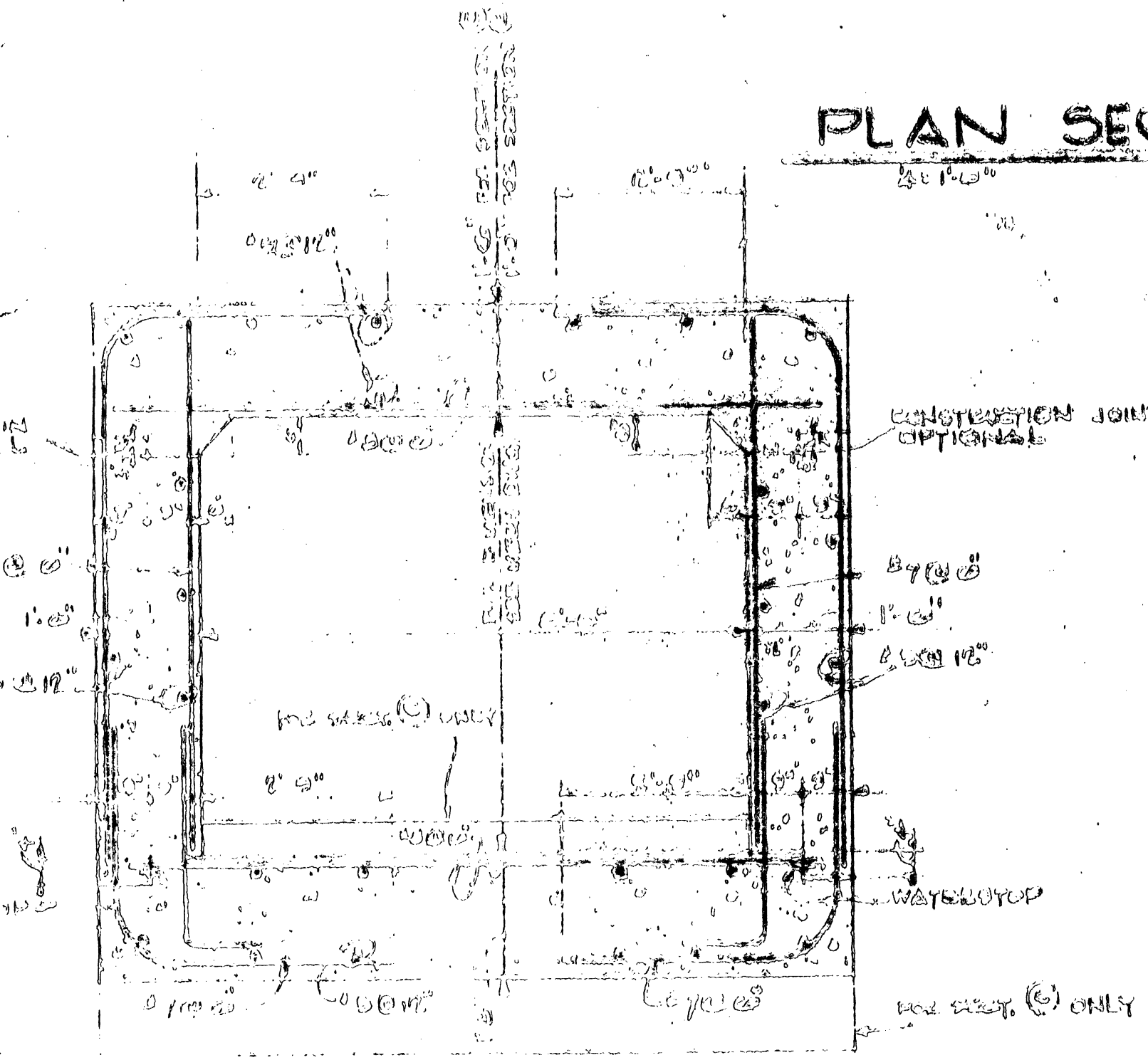
6. Wall Thickness: - Walls, floor and roof are 1'6" thick.

7. Type of construction: - Reinforced concrete, in accordance with attached section B & C.

NGjr:gf

Attachment:

PLAN SEC



SECTION

HARVARD UNIVERSITY
DEPARTMENT OF BUILDINGS AND GROUNDS
175 NORTH HARVARD STREET
BOSTON, MASSACHUSETTS 02134

WILLIAM MURPHY
Director

ARTHUR W. STOMBERG
Deputy Director

July 1, 1971

To the Honorable, the City Council of the
City of Cambridge

The undersigned respectfully pray that they be granted a permit to place an 11'W x 9'3"H overall walk-through tunnel in Oxford Street, at a point approximately 40'N of the intersection of Kirkland and Oxford Streets, all in accordance with the attached plot plan.

The purpose of the underground tunnel will be to connect the University's Science Center and Chilled Water Plant, now under construction, to an existing steam tunnel which now services most of the Harvard buildings. The tunnel will be used primarily for routing steam mains from the existing University's Central Steam Distribution System to the new buildings. Harvard University owns the land on both sides of Oxford Street at the above location.

The tunnel design is by Sert, Jackson & Associates, Architects, Cambridge, Mass.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE

By Norman Goodwin Jr.
Norman Goodwin, Jr., Senior Engineer

NGjr:gf

Attachments:

cc: Mr. A. W. Stomberg
Mr. G. L. Homsy

43 190

Communication from President and Fellows of Harvard College for permit to place an overall walk-through tunnel in Oxford St.