

120-5-2

TURNER CONSTRUCTION CO

120-5-2

# TURNER CONSTRUCTION COMPANY

GRAYBAR BUILDING

420 LEXINGTON AVENUE

NEW YORK 17, N. Y.

FOUNDED

1902

BOSTON

PHILADELPHIA

March 3, 1947.

United Nations Headquarters Planning Office,  
1270 Sixth Avenue,  
New York, N. Y.

Gentlemen:- Attention: Mr. George A. Dudley.

Herein we attempt to answer the questions outlined in your memorandum handed to us on February 27th concerning your "Proposed Construction Schedule".

1. "Assuming certain conditions of labor and producers' cooperation, is attached schedule providing for occupancy by September 15, 1948 practical?"

As stated to you over the telephone on the afternoon of February 28th, we had by that time reached the conclusion that your schedule was "possible but not probable in our judgment". This would seem to answer negatively your question as to whether the schedule is practical. Your charted schedule divides into two components:

1. In general the time you have allowed for design, namely March 15th to August 1st, 1947, and the balance for procurement and construction. It is not our function to go into detail on the first part. Our negative answer to this Question #1 of yours indicates some doubt as to the possibility of maintaining this design schedule.
2. With respect to the second component, the procurement and construction schedule, we have the following comment:

We note that your schedule assumes that structural steel deliveries will begin four months after the order is placed. If this is possible we would expect that we could complete by October 15, 1948. In the light of any knowledge we have, we would expect that six months at a minimum would be required between placing the order and starting deliveries of steel at the site. If this is correct and steel orders can be placed July 1, 1947 we believe, in accordance with the statements following hereinafter in this

March 3, 1947.

questionnaire, that the building should be completed December 15, 1948.

Obviously any strikes in the building trades or in any industries affecting building materials or deliveries thereof would affect these delivery dates adversely.

You asked what elements should be given more time or could be further reduced. The speed schedule just referred to which we prepared, in general, does not reduce the time for any of the items allowed in your schedule. It does push certain items further back as indicated in the overall completion date.

2. "What are the conditions which must be met in order to achieve this schedule?"

Labor - If present agreements between most of the unions in the Building Trades Employers Association continue in force for the life of the job and no extraordinary volume of buildings come on the market for construction early in 1948 it is our judgment that there should be a sufficiency of skilled mechanics and laborers for this job. If these conditions change, the changed conditions will have to be met at the time.

Steel Producers - It would require special consideration from the steel industry to even approximate the four months that your schedule allows between the placing of the steel order and the starting of erection of steel.

#### Critical Items:

Elevators - In order to have elevators in operation by the first of September 1948 full design information must be in the elevator manufacturer's hands by May 15, 1947.

Plumbing Supplies - Currently we would not anticipate any particular difficulties on this item.

Electrical Equipment - With the exception of motors, fans and transformers, where there would have to be special arrangements made to meet your schedule, we would not anticipate other difficulties.

Limestone - Indications are, that to make the schedule, special arrangements would have to be made with labor in New York to permit the stone to be fabricated at the quarries and shipped into New York ready for erection.

Others - None, unless in trying to meet this schedule substitutions are made necessary which in themselves would create problems.

March 3, 1947.

Legal Impediments - If there were any they would not concern the general contractor directly. It may be proper to suggest that in making the early, or design part of your schedule, it might be desirable to get a ruling that this site was without the boundaries and zoning acts of the Building Code and that any Federal restrictions on availability of materials would be removed at once.

Forms of contracts and limitations on bidding - It would be our judgment that the only chance of meeting this schedule was to select an able general contractor very promptly to do the work under a cost plus a fee form of contract. The contractor should be selected on merit and not as a result of any competition as to the amount of fee.

Others - Should the alternate decision be to adopt a schedule giving a later completion date with resulting more time to "build the job on paper" before work was started in the field it would still be most desirable in our experience and judgment to select a contractor at once so as to have the benefit of his experience and counsel in association with the architects in preparing a sound budget as to the cost of this job and a speed schedule that could be maintained.

3.  
(a) "What are the amounts of money that will have to be committed up to November 1, 1947?"

Thirteen Million Two Hundred Thousand (\$13,200,000.) Dollars.

- (b) "In the event of cancellation of the program at that time (November 1, 1947) what part of this would be retrievable and returnable to the United Nations?"

Nine Million (\$9,000,000.) Dollars.

4.  
(a) "If the funds for the steel and foundations only were committed by November 1, 1947 what would be the earliest occupancy date?"

In the absence of information as to when the balance of commitments will be made, no date can be given.

- (b) "What are the amounts of money which will have to be committed by that date?" (November 1, 1947)

Three Million (\$3,000,000.) Dollars.

- (c) "What amounts will be returnable in event of cancellation?"

Six Hundred Thousand (\$600,000.) Dollars.

4 TO United Nations Headquarters  
Planning Office.

March 3, 1947.

5. "When should demolition begin on each of the above alternatives?"

If you attempt to maintain your schedule, demolition would have to be started as shown, namely June 1st. If by committing foundations and structural steel only by November 1st and you plan to adhere as near to your schedule as you can by letting other contracts as promptly thereafter as possible, it would seem that your demolition ought still be June 1st. On the other hand, should you not award foundations and steel contracts until November 1st why then your demolition wouldn't have to be started until October 1st.

6. "What would be the estimated cost of moving the building now in construction for the N.Y.C. Housing Authority on 42nd Street between First Avenue and the East River Drive to another site?"

Three Hundred Eighteen Thousand Five Hundred (\$318,500.) Dollars. This on your verbal statement that the building in question would only be moved a distance of about 250' and that when it was moved only its reinforced concrete frame and exterior limestone walls were completed, i.e. no interior work or no mechanical subcontract work would have been done. We have included in this figure the providing of new foundations and basement floor and connections to street mains and utilities.

It has been a pleasure to prepare this information for you.

Very truly yours,

J. P. H. Perry,  
Vice-President.

JPHP/V.

COPY

March 3, 1947.

United Nations Headquarters Planning Office,  
1270 Sixth Avenue,  
New York, N. Y.

Gentlemen:- Attention: Mr. George A. Dudley.

Herein we attempt to answer the questions outlined in your memorandum handed to us on February 27th concerning your "Proposed Construction Schedule".

1. "Assuming certain conditions of labor and producers' cooperation, is attached schedule providing for occupancy by September 15, 1948 practical?"

As stated to you over the telephone on the afternoon of February 28th, we had by that time reached the conclusion that your schedule was "possible but not probable in our judgment". This would seem to answer negatively your question as to whether the schedule is practical. Your charted schedule divides into two components:

1. In general the time you have allowed for design, namely March 15th to August 1st, 1947, and the balance for procurement and construction. It is not our function to go into detail on the first part. Our negative answer to this Question #1 of yours indicates some doubt as to the possibility of maintaining this design schedule.
2. With respect to the second component, the procurement and construction schedule, we have the following comment:

We note that your schedule assumes that structural steel deliveries will begin four months after the order is placed. If this is possible we would expect that we could complete by October 15, 1948. In the light of any knowledge we have, we would expect that six months at a minimum would be required between placing the order and starting deliveries of steel at the site. If this is correct and steel orders can be placed July 1, 1947 we believe, in accordance with the statements following hereinafter in this



March 3, 1947.

questionnaire, that the building should be completed December 15, 1948.

Obviously any strikes in the building trades or in any industries affecting building materials or deliveries thereof would affect these delivery dates adversely.

You asked what elements should be given more time or could be further reduced. The speed schedule just referred to which we prepared, in general, does not reduce the time for any of the items allowed in your schedule. It does push certain items further back as indicated in the overall completion date.

2. "What are the conditions which must be met in order to achieve this schedule?"

Labor - If present agreements between most of the unions in the Building Trades Employers Association continue in force for the life of the job and no extraordinary volume of buildings come on the market for construction early in 1948 it is our judgment that there should be a sufficiency of skilled mechanics and laborers for this job. If these conditions change, the changed conditions will have to be met at the time.

Steel Producers - It would require special consideration from the steel industry to even approximate the four months that your schedule allows between the placing of the steel order and the starting of erection of steel.

#### Critical Items:

Elevators - In order to have elevators in operation by the first of September 1948 full design information must be in the elevator manufacturer's hands by May 15, 1947.

Plumbing Supplies - Currently we would not anticipate any particular difficulties on this item.

Electrical Equipment - With the exception of motors, fans and transformers, where there would have to be special arrangements made to meet your schedule, we would not anticipate other difficulties.

Limestone - Indications are that to make the schedule special arrangements would have to be made with labor in New York to permit the stone to be fabricated at the quarries and shipped into New York ready for erection.

Others - None, unless in trying to meet this schedule substitutions are made necessary which in themselves would create problems.

March 3, 1947.

Legal Impediments - If there were any they would not concern the general contractor directly. It may be proper to suggest that in making the early, or design part of your schedule, it might be desirable to get a ruling that this site was without the boundaries and zoning acts of the Building Code and that any Federal restrictions on availability of materials would be removed at once.

Forms of contracts and limitations on bidding - It would be our judgment that the only chance of meeting this schedule was to select an able general contractor very promptly to do the work under a cost plus a fee form of contract. The contractor should be selected on merit and not as a result of any competition as to the amount of fee.

Others - Should the alternate decision be to adopt a schedule giving a later completion date with resulting more time to "build the job on paper" before work was started in the field it would still be most desirable in our experience and judgment to select a contractor at once so as to have the benefit of his experience and counsel in association with the architects in preparing a sound budget as to the cost of this job and a speed schedule that could be maintained.

3.

- (a) "What are the amounts of money that will have to be committed up to November 1, 1947?"

Thirteen Million Two Hundred Thousand (\$13,200,000.) Dollars.

- (b) "In the event of cancellation of the program at that time (November 1, 1947) what part of this would be retrievable and returnable to the United Nations?"

Nine Million (\$9,000,000.) Dollars.

4.

- (a) "If the funds for the steel and foundations only were committed by November 1, 1947 what would be the earliest occupancy date?"

In the absence of information as to when the balance of commitments will be made, no date can be given.

- (b) "What are the amounts of money which will have to be committed by that date?" (November 1, 1947)

Three Million (\$3,000,000.) Dollars.

- (c) "What amounts will be returnable in event of cancellation?"

Six Hundred Thousand (\$600,000.) Dollars.



March 3, 1947.

5. "When should demolition begin on each of the above alternatives?"

If you attempt to maintain your schedule, demolition would have to be started as shown, namely June 1st. If by committing foundations and structural steel only by November 1st and you plan to adhere as near to your schedule as you can by letting other contracts as promptly thereafter as possible, it would seem that your demolition ought still be June 1st. On the other hand, should you not award foundations and steel contracts until November 1st why then your demolition wouldn't have to be started until October 1st.

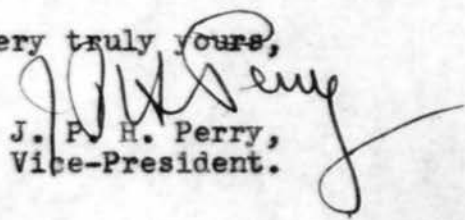
6. "What would be the estimated cost of moving the building now in construction for the N.Y.C. Housing Authority on 42nd Street between First Avenue and the East River Drive to another site?"

Three Hundred Eighteen Thousand Five Hundred (\$318,500.) Dollars. This on your verbal statement that the building in question would only be moved a distance of about 250' and that when it was moved only its reinforced concrete frame and exterior limestone walls were completed, i.e. no interior work or no mechanical subcontract work would have been done. We have included in this figure the providing of new foundations and basement floor and connections to street mains and utilities.

It has been a pleasure to prepare this information for you.

JPHP/V.

Very truly yours,

  
J. P. H. Perry,  
Vice-President.

Jan 2/27  
GPB  
WU  
St. Louis  
Packer  
W. H. H.

RC 6 mos after steel





order = 0; Schedule A • Schedule B •

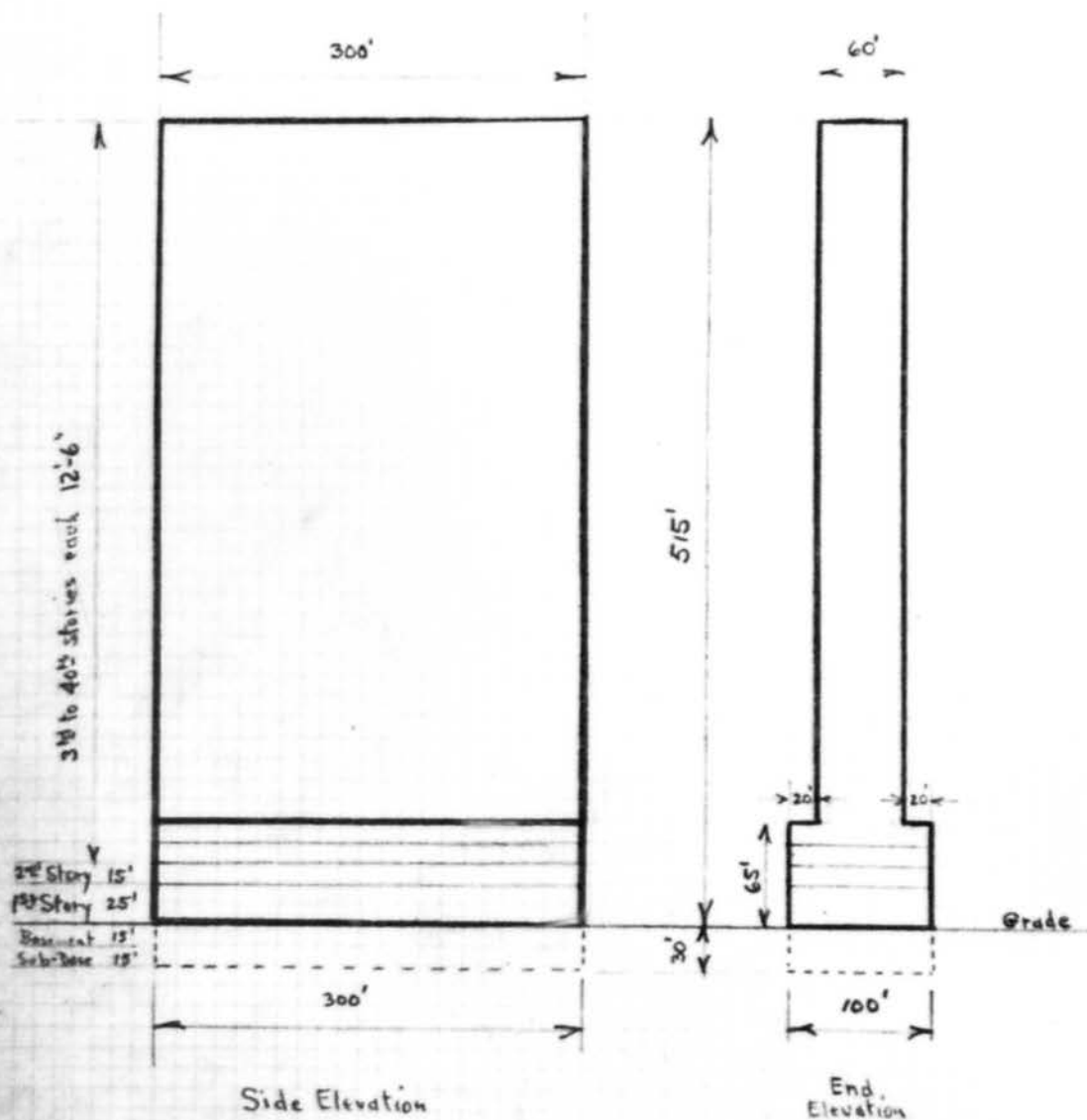
United Nations Office Bldg.

March 3/47.

[illegible]

Assumed Dimensions which  
satisfy two given conditions:

1. Typical tower floor 60' x 300'
2. Total Volume 11,000,000 cu.ft.





## Quantities & Time Elements

1. Demolition: Present site occupied by 2, 3 and 4 story brick buildings.  
Assume wrecking starts north from 44<sup>th</sup> Street and South from 44<sup>th</sup> Street over building area 100' x 300'.  
Allow for clearing not building area only so as to permit excavation to start:

Four (4) weeks on best possible schedule. (A)

Six (6) weeks on most economical schedule. (B)

Complete demolition over entire two block area in eight (8) weeks - schedule A.  
in twelve (12) " " " " B.

2. Foundations: Excavation. 10' rubble and dirt, 20' of solid rock

$$\frac{30000 \text{ cu yds}}{27} = 11,000 \text{ cu yds} + 22,000 \text{ cu yds} = 33,000 \text{ cu yds Total}$$

$$11,000 \text{ cu yds. rubble @ } 1000 \text{ cu yds./day with 2 shovels} = 11 \text{ days - Schedule A}$$

$$\text{@ } 500 \text{ cu yds./day " " 1 " " } = 22 \text{ days - " B}$$

$$22,000 \text{ cu yds. rock @ } 900 \text{ cu yds./day with 3 shovels} = 25 \text{ days - " A}$$

$$\text{@ } 600 \text{ cu yds./day " 2 " " } = 37 \text{ days - " B}$$

Concrete Footings and Walls: 800' perimeter x 30' width x 2' thick = 1500 cu yds.  
160 footings @ 6 yds each = 960  
Pits, steps, etc. = 200

3000 yds concrete

Average 100 yds per working day on schedule A = 30 days.

" 60 yds " " " B = 50 days

Notes: Considerable overlap of concrete work over rock excavation on schedule B, but not possible with 3 shovels working on schedule A.

3. Structural Steel: 8000 tons ÷ 42 stories = 190 tons per story; average.

Use 2 derricks = 95 tons " " per derrick.

Average a story every 2 days = 47 1/2 " " derrick per day. O.K. for A or B schedules.

54 working days = 4 months for erection.

Notes: Steel mills are currently quoting 7 to 8 months from order to start of erection.

It is assumed that this job would obtain a priority on the rolling schedule due to its international importance, and that erection could start 6 months after order.

4. Concrete Floors: - This operation must meet the str. steel erection schedule, i.e. 2 1/2 stories/week.

Assume usual suspended "goulash" type of form. Six (6) sets required.

300 cu yds cinder concrete in average floor = daily pours of 150 yds.

5. Exterior Masonry: - 720' x 515' minus 35% for windows = 243,000 cubic feet total.

Per average story: 5750 sq ft of 4" limestone + 80,000 back-up brick.

In general, schedule A would be 2 1/2 stories per week, requiring 45 stone setters + 65 bricklayers  
(80 sq ft./man/day) (500 sq ft./man/day)

, schedule B would be about 75% of A and would be nearer to the normal hoisting capacities figured on straight time.

6. Interior Partitions: Follow 4 stories behind exterior masonry. Hollow metal door frames.

1500 sq ft x 12' = 18,000 sq ft per story. @ 200 sq ft./man-day = 90 man-days/floor ÷ 2 days = 45 bricklayers,  
÷ 2 1/2 " = 35 " "

# Quantities & Time Elements

on: Present site occupied by 2, 3 and 4 story brick buildings.  
Assume wrecking starts north from 44<sup>th</sup> Street and South from 44<sup>th</sup> Street over building area 100' x 300'.  
Allow for clearing net building area only so as to permit excavation to start!

Four (4) weeks on best possible schedule. (A)

Six (6) weeks on most economical schedule. (B)

Complete demolition over entire two block area in eight (8) weeks - schedule A.  
in twelve (12) " " " B.

Excavation: 10' rubble and dirt, 20' of solid rock

$$\frac{30000 \times 10}{27} = 11,000 \text{ cu yd} + 22,000 \text{ cu yd} = 33,000 \text{ cu yds Total}$$

$$11,000 \text{ cu yd rubble @ } 1000 \text{ cu yd/day with 2 shovels} = 11 \text{ days - Schedule A}$$

$$@ 500 \text{ cu yd/day " " 1 " = 22 \text{ days - " B}$$

$$22,000 \text{ cu yd rock @ } 900 \text{ cu yd/day with 3 shovels} = 25 \text{ days - " A}$$

$$@ 600 \text{ cu yd/day " 2 " = 37 \text{ days - " B}$$

Concrete Footings and Walls: 600' perimeter x 30' walls x 2' thick = 1500 cu yds.  
100 footings @ 6 yds each = 1000  
Pits, step downs, etc. = 200

3000 yds concrete

Average 100 yds per working day on schedule A = 30 days.

" 60 yds " " " B = 50 days

Note: Considerable overlap of concrete work over rock excavation on schedule B, but not possible with 3 shovels working on schedule A.

Steel: 8000 tons ÷ 42 stories = 190 tons per story; average.  
Use 2 derricks = 95 tons " " per derrick.

Average a story every 2 days = 47 1/2 " " derrick per day. O.K. for A or B schedules.  
84 working days = 4 months for erection.

Steel mills are currently quoting 7 to 8 months from order to start of erection.

It is assumed that this job would obtain a priority on the rolling schedule due to its international importance, and that erection could start 6 months after order.

Floors: - This operation must meet the str. steel erection schedule, i.e. 2 1/2 stories/week.

Assume usual suspended "goultash" type of form. Six (6) sets required.

300 cu yds circular concrete in average floor = daily pours of 150 yds.

Masonry: - 720' x 515' minus 35% for windows = 243,000 cubic feet total.

Per average story: 5750 sq ft. of 4" limestone + 80,000 back-up brick.

In general, schedule A would be 2 1/2 stories per week, requiring 45 stone setters + 65 bricklayers  
(80 sq ft./man/day) (500 sq ft./man/day)

, schedule B would be about 75% of A and would be nearer to the normal hoisting capacities figured on straight time.

Partitions: Follow 4 stories behind exterior masonry. Hollow metal door frames.

1500 sq ft x 12' = 18,000 sq ft per story. @ 200 /man-day = 90 man-days/floor ÷ 2 days = 45 bricklayers,  
÷ 2 1/2 " = 35 " "

9-2 ✓  
130-6-2 ✓  
**TURNER CONSTRUCTION COMPANY**

FOUNDED  
1902

GRAYBAR BUILDING  
420 LEXINGTON AVENUE  
NEW YORK 17, N. Y.

BOSTON  
PHILADELPHIA

August 1, 1946

Mr. Glenn Bennett, Secretary  
Headquarters Commission  
United Nations  
51 Madison Avenue  
New York, New York

Dear Sir:

Re: Construction of Permanent Headquarters

In accordance with your request we here make formal application for your consideration of our services as General Contractors for the construction of the permanent headquarters of United Nations. We will be glad to furnish credentials when and if you will care to have them.

We look forward to the possibility of an interview with you soon after October 1st.

Yours very truly,

GCB:mh

*G. C. Burrows*  
G. C. Burrows  
Contract Manager

RECEIVED BY	<i>GPB.</i>
SECRETARY	
ASST. SECRETARY	
ACTION BY	✓

98

May 9, 1947

Mr. J.P.H. Perry  
Turner Construction Company  
220 Lexington Avenue  
New York, N.Y.

Dear Mr. Perry:

Thank you for your letter of April 29 as well as for your cooperation in submitting speed schedules for the proposed United Nations project.

We, of course, understood that you were interested in the general contract work and, when the proper time comes we plan to get in touch with you. Since we are still working on the preliminary report, serious consideration is not yet being given to actual construction problems.

Sincerely,

Wallace K. Harrison  
Director of Planning

bmot  
File to G.A.Dudley

140-5-2 ✓  
B

# TURNER CONSTRUCTION COMPANY

GRAYBAR BUILDING

420 LEXINGTON AVENUE

NEW YORK 17, N. Y.

FOUNDED  
1902

BOSTON  
PHILADELPHIA

April 29, 1947.

Mr. Wallace K. Harrison,  
United Nations Headquarters Planning Office,  
1270 - 6th Avenue,  
New York, N. Y.

Dear Mr. Harrison:-

The suggestion has been made that it would be appropriate for our Company to go on written record with you and your organization that we would like to be considered by the United Nations as contractors for one or more of the buildings which you are designing for U.N.

It was our privilege to submit speed schedules to you under date of March 3rd. Subsequently we filed with your Mr. Dudley copies of a book we published some years ago "Buildings by Turner". This latter book tells our story about as completely as it can be told. The qualifications set forth therein we believe would merit your serious consideration of us as contractors for some of the work under discussion.

At the proper time we would like to hope that we might have an opportunity to discuss in greater detail what we think we have to offer you.

Very truly yours,

*JPH*  
J. P. H. Perry,  
Vice-President.

JPHP/V.  
*on report to*