

RE: LETTER FROM MR. HERRING WHICH APPEARED ON THE AGENDA FOR THE FEBRUARY 08TH MEETING OF COUNCIL (ITEM 2 C)
SHADOW STUDY - PROPOSED REZONING OF AREA BOUNDED BY GRANGE, SUSSEX, HAZEL AND MCKAY - METROTOWN CORE AREA

ACTING MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Planning & Building Inspection be adopted.

* * * * *

TO: MUNICIPAL MANAGER 1988 AUGUST 03

FROM: DIRECTOR PLANNING & BUILDING INSPECTION

SUBJECT: SHADOW STUDY
PROPOSED REZONING OF AREA BOUNDED BY GRANGE, SUSSEX, HAZEL AND MCKAY METROTOWN CORE AREA

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RECOMMENDATION:

1. THAT a copy of this report be sent to Mr. Phil S. Herring, 5637 Booth Avenue and each petitioner.

R E P O R T

1.0 BACKGROUND:

On 1988 February 08, Council heard a delegation from Mr. Phil S. Herring expressing concerns regarding the shadow effects of the proposed high-rise redevelopment of the block bounded by Grange Street, Sussex Avenue, Hazel Street and McKay Avenue within the Metrotown Core Area. This matter was referred to the Housing Committee, which on 1988 February 10, adopted the following motion:

"THAT staff prepare a report to Council addressing the concerns of Mr. Herring and the petitioners with respect to the sunshading effects which would result from future high-rise development in the area described by the delegation".

2.0 PLANNING GUIDELINES AND SHADOW STUDY:

The subject area is located within the Metrotown Core area and designated for high-rise apartment development under the Development Plan review adopted by Council on 1987 September 21, as shown in the composite sketch of development guidelines for Metrotown (Attachment "A"). The topography of the area and optimum building siting (assuming the continued presence of the Post Office) is indicated on Sketch 1. The building heights indicated are based on RM5 densities and relatively slender towers 23 to 24 m (75 to 80 ft.) square, with floor plates of approximately 560 m² (6,000 sq. ft.). This is consistent with preliminary plans submitted by the Architect for the current rezoning application (R.Z. #54/88) on the site adjacent to McKay Avenue.

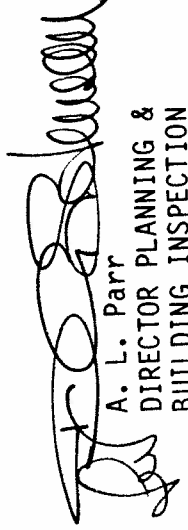
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Significant dates with respect to shadow studies are December 22 (maximum shadow conditions), September 23 and March 21 (mean shadow conditions), and June 22 (minimum shadow conditions). Although the shadows calculated for December 22 are extremes and tend to appear very imposing, they are considerably less significant than the mean shadow conditions during the spring and fall, given the seasonal aspects of the local climate (cloudy vs. sunny skies) and outdoor activity.

The shadow studies prepared for the proposed developments are illustrated on Sketches 2 to 5. Shadows cast at noon on the significant dates are shown on Sketch 2. Shadow conditions for 10:00 a.m. and 2:00 p.m. for December 22, September 23 and March 21, and June 22 are shown on Sketches 3, 4 and 5 respectively.

It is useful to note that the shadows progress from west to east at an average rate of 15 degrees per hour between sunrise and sunset. Given the spacing and slender form of the proposed towers, it is concluded that the passage of these shadows will not cause a significant loss of sunlight for the areas to the north.

This is for the information of Council.


A. L. Parr
DIRECTOR PLANNING &
BUILDING INSPECTION

AP
RR:ap

Attach.

Metrotown

The Corporation of the
District of Burnaby

Composite Sketch of
Development Guidelines

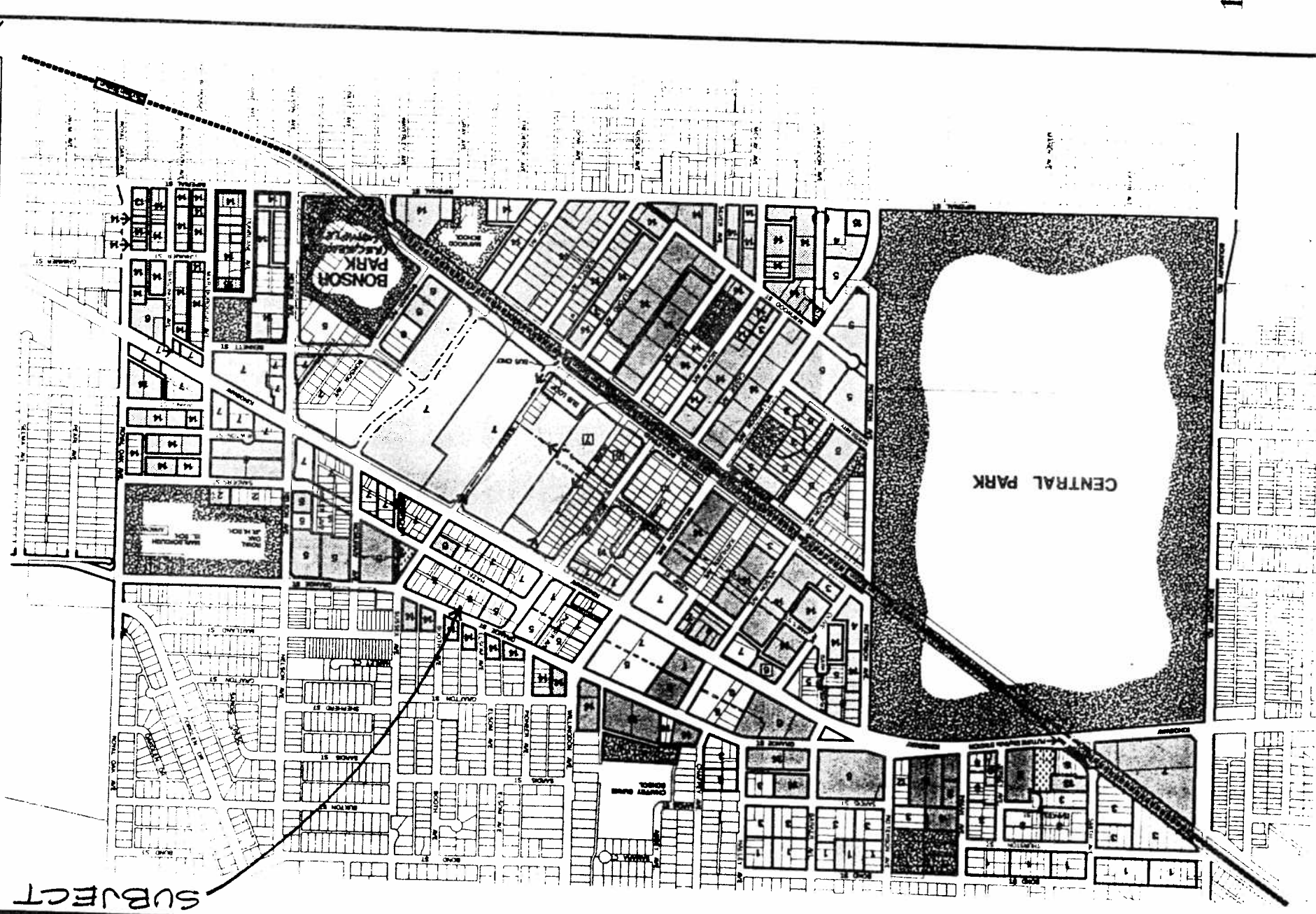
Legend:
 1-CD (RM1)
 2-CD (RM2)
 3-CD (RM3)
 4-CD (RM4)
 5-CD (RM5)
 6-CD (RM5/C3)
 7-CD (C3 use guideline)
 8-CD (RM3/C1)
 9-CD (RM4/C2)
 10-CIVIC FACILITIES
 11-PUBLIC ASSEMBLY
 12-CD (RM3/Inst)
 13-RM2
 14-RM3
 15-RM4
 16-R6
 P3- Succession
 CD (RM5) -
 P1- Succession
 Precinct

● Particular clarification
 guidelines is required
 with Current Planner
 any serious develop
 inquires utilizing the
 designated guideline
 Projects identified by
 are rezoned but as y
 unconstructed.

Planning and Building Inspection Depart
 Updated to 1987 NOVEMBER

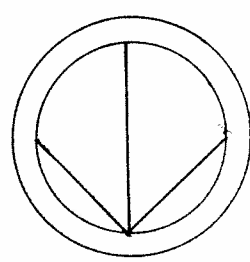
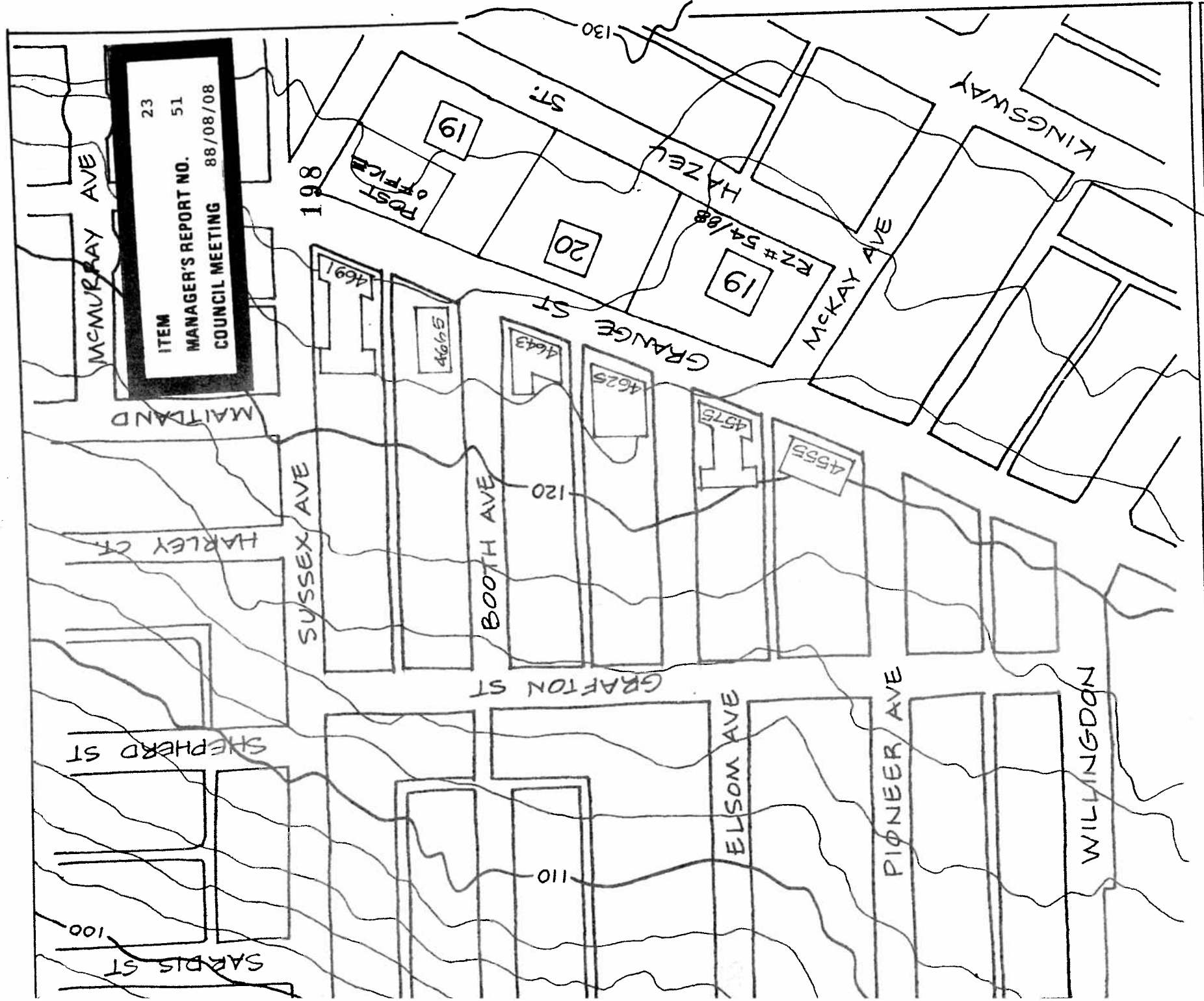
feet
 metres

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SUBJECT AREA

ATTACHMENT 'A'



SITING AND TOPOGRAPHY

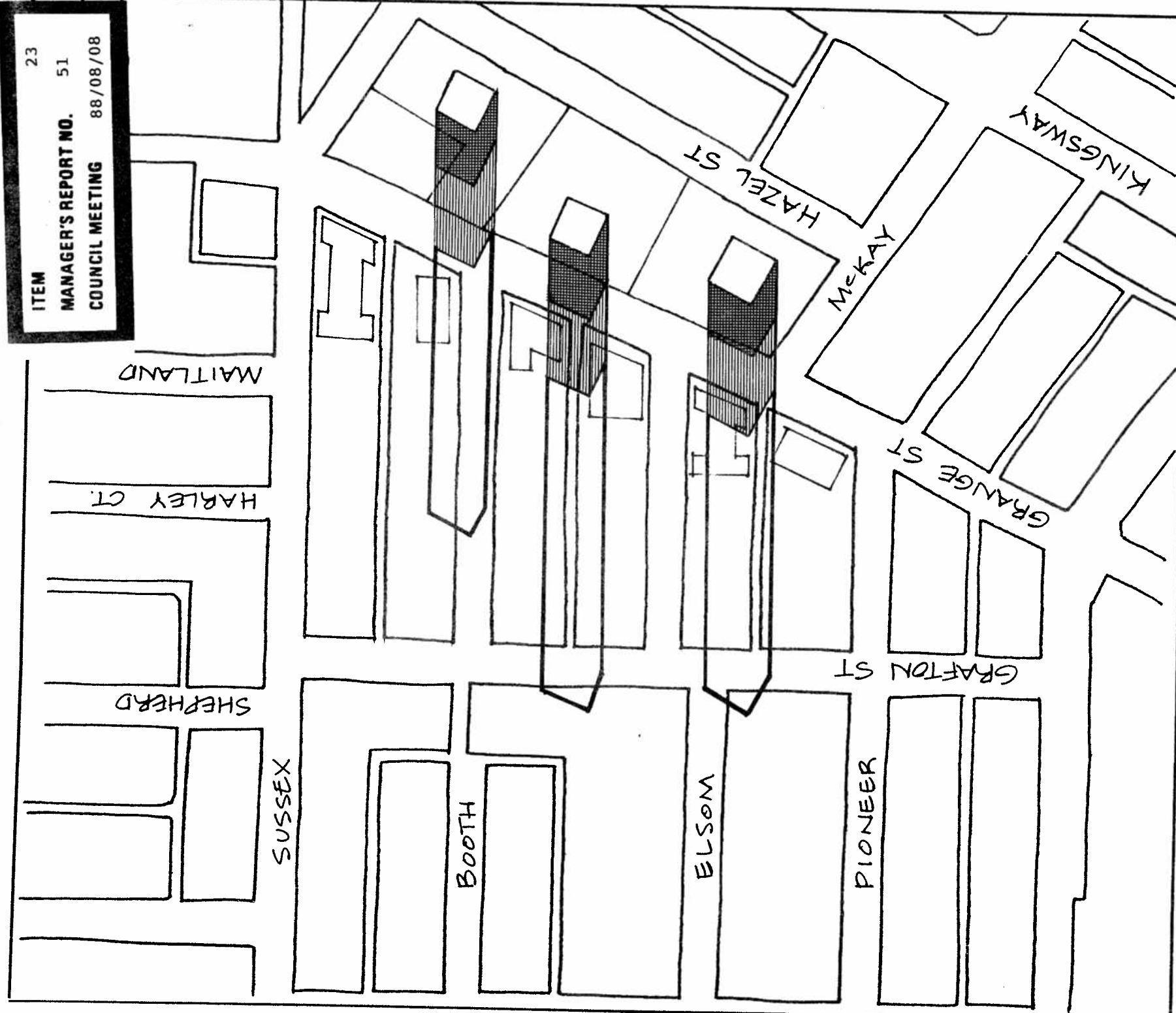
[19] HEIGHT IN STORIES

SCALE:
1:2500




CONTOUR INTERVAL = 2M.

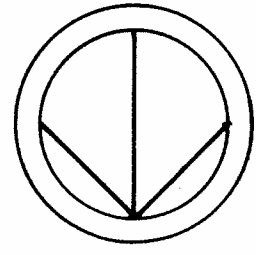
SKETCH 1

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NOON SHADOW CONDITIONS

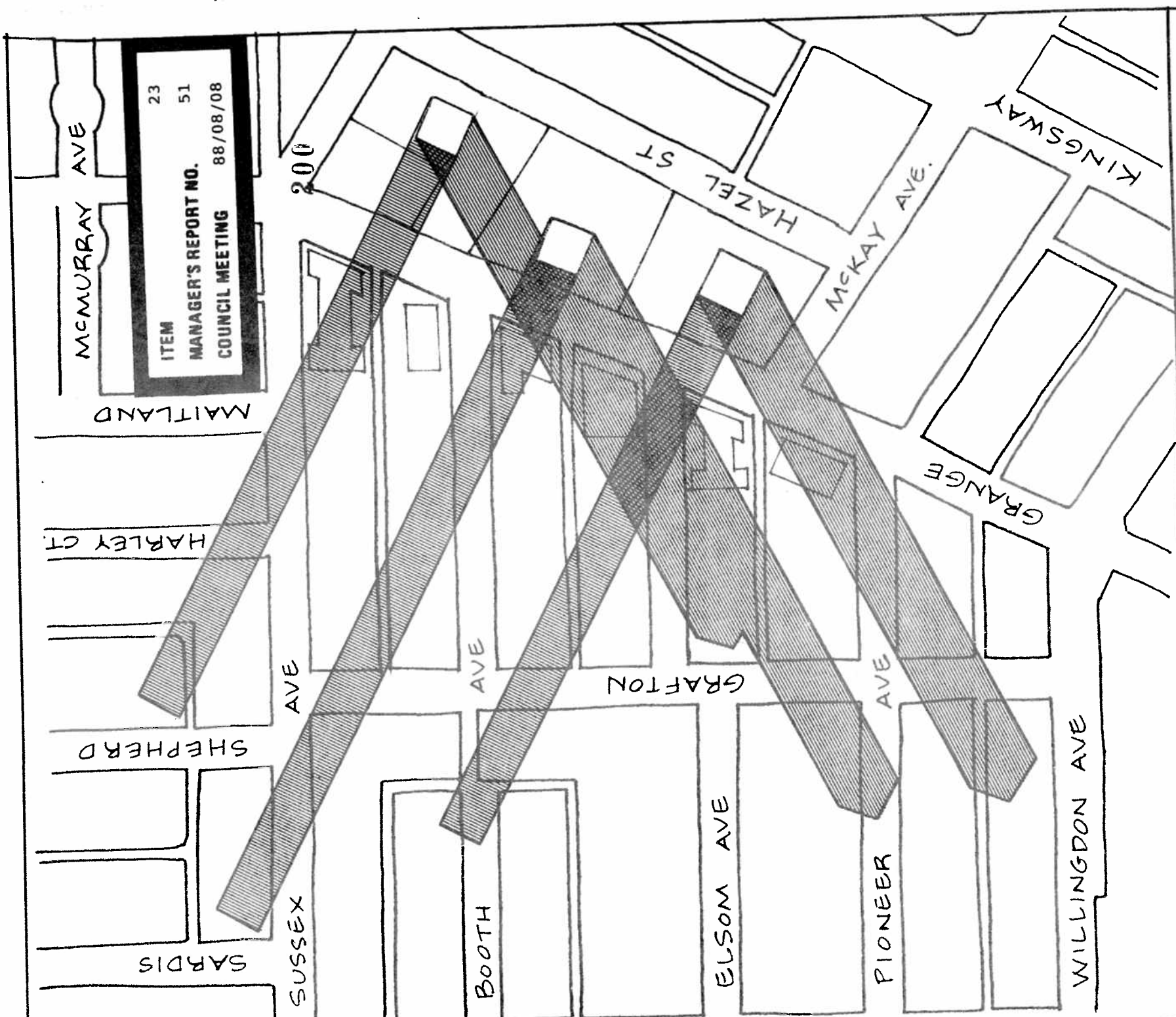
-  MAXIMUM - DEC. 22
-  MEAN - SEPT. 23 / MARCH 21
-  MINIMUM - JUNE 22



SCALE:
1: 2500

199

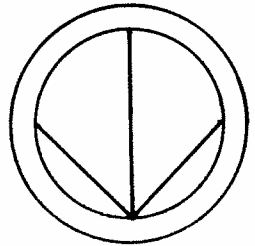
SKETCH 2



MAXIMUM SHADOW CONDITIONS

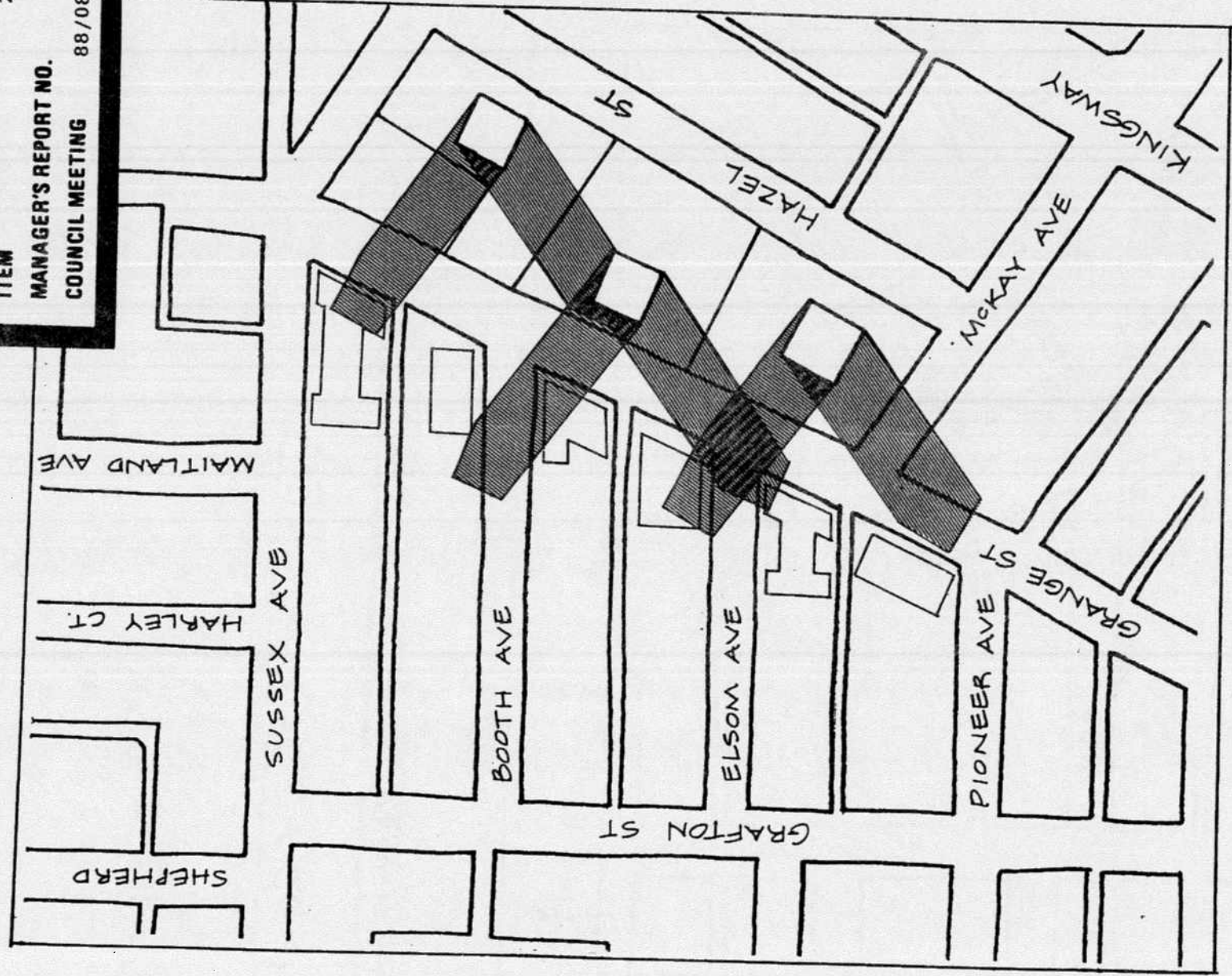
10:00 AM & 2:00 PM

DECEMBER 22



SCALE:
1: 2500

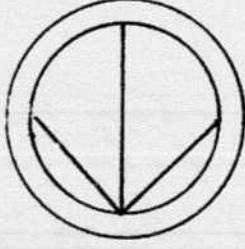
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MEAN SHADOW CONDITIONS

10:00 AM ☽ 2:00 PM

SEPT. 23 / MARCH 21

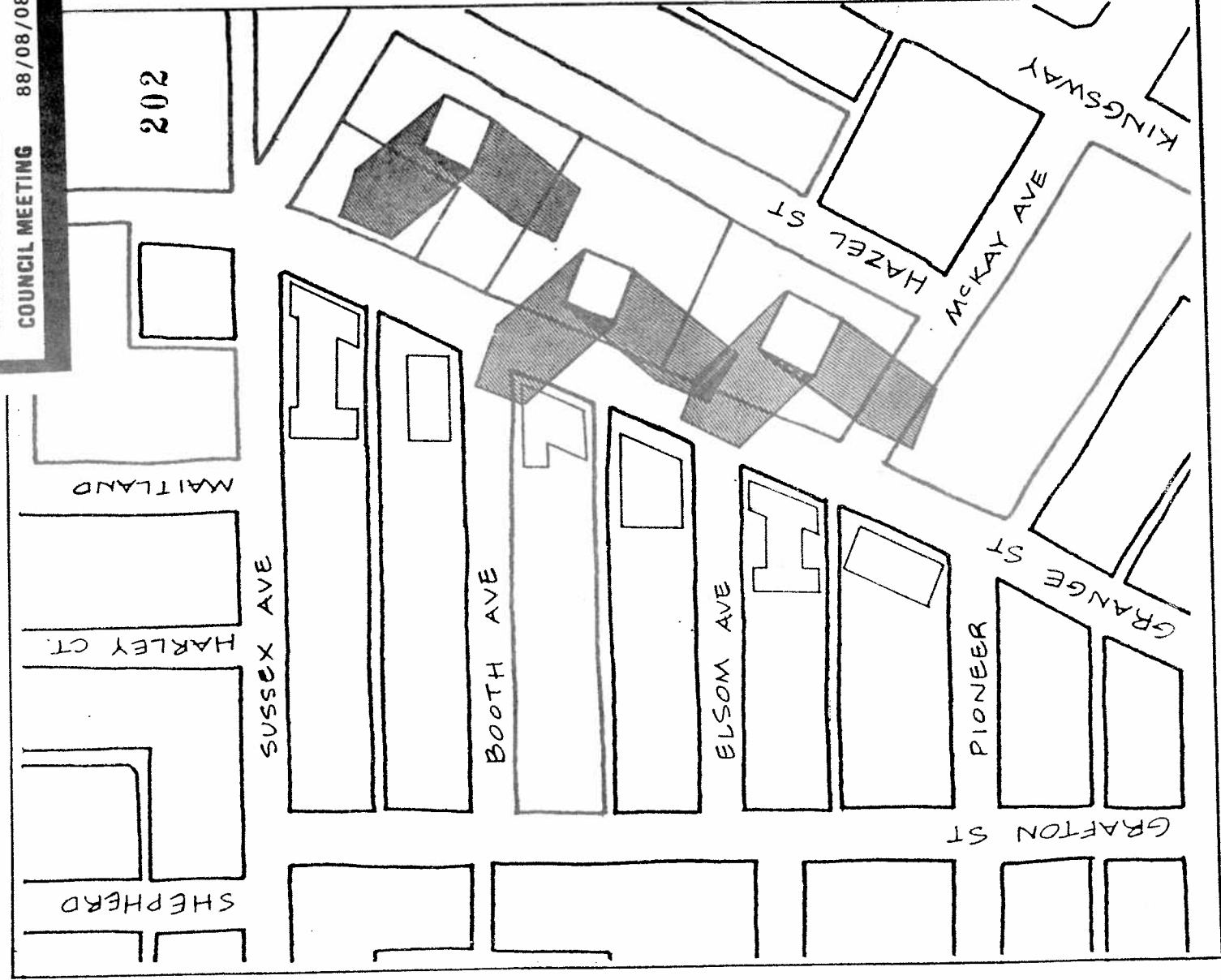


SCALE:
1:2500

201

SKETCH 4

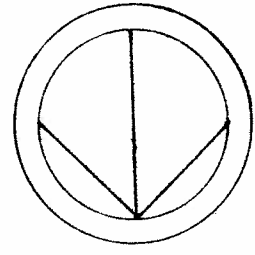
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MINIMUM SHADOW CONDITIONS

10:00 AM & 2:00 PM

JUNE 22



SCALE:
1:2500