

MEMORANDUM

TO: JAMES L. SULLIVAN
CITY MANAGER

FROM: DANIEL J. WUENSCHER
EXECUTIVE DIRECTOR
CAMBRIDGE HOUSING AUTHORITY

DATE: DECEMBER 8, 1978

RE: PRELIMINARY FEASIBILITY STUDY -- RUSSELL SCHOOL SITE

In response to the Council vote of December 4, 1978, we have undertaken a preliminary feasibility study of the Russell School site to determine whether or not the site and existing building are appropriate for elderly housing. As you know, the CHA was allocated funding for eighty (80) units of elderly housing under the State's Chapter 667 program. We have directed our consulting architect, Monacelli Associates, of Cambridge, to examine the site and building on an extremely rushed basis to assure that the report could be produced in time for the Council meeting.

The attached report is a result of this examination. A few general observations from the report are as follows:

- The Russell School site is highly desirable for elderly housing.
- While a good deal of elderly housing has been built since 1970, there remains a great demand for additional elderly units. The CHA currently has 493 elderly applicants, who are awaiting apartments. This represents an average two (2) year wait for placement.
- The existing building is structurally sound and could be converted to roughly thirty-five (35) elderly apartments.
- The 1.9 acre site can comfortably accommodate an additional mix of parking, leisure or recreation space, and a modest number of newly constructed apartments.

In summary, the attached report leads the Authority to propose the utilization of the Russell School site for its Chapter 667 program for elderly housing. Construction costs are extremely difficult to pinpoint at this time. Our eventual design and construction cost limits which will affect final feasibility will, of course, have to be approved by the Commonwealth's Department of Community Affairs.

Monacelli Associates


MEMORANDUM

To: Mr. Daniel Wuenschel, Executive Director
Cambridge Housing Authority
270 Green Street
Cambridge, MA 02139

From: Monacelli Associates

Re: Russell School Site

Date: December 07, 1978



Monacelli Associates was requested by the Cambridge Housing Authority to undertake a preliminary feasibility study of the Russell School to determine whether or not the building should be considered as a potential site for elderly housing under the Chapter 667 Elderly Housing Program. On December 01, 1978, we undertook an investigatory tour of the school with our structural engineer (Le Messurier Associates). The attached report supports our conclusions as follows:

1. The site is excellent.
2. The building appears to be structurally sound based on the preliminary examination.
3. The existing building (after removing the auditorium) can accommodate approximately 35 units of elderly housing.
4. The cost of renovation is estimated at approximately \$1.3 million.
5. The financial limitations imposed by the Department of Community Affairs are tight. (approximately \$30,000/unit for rehabilitation and \$29,000/unit for new construction)
6. Financial projections appear to indicate that a combination of rehabilitation and new construction may be necessary to make the project financially feasible.
7. Demolition of the building and all new construction could represent another alternative approach to the reuse of the site.

Mr. Daniel Wuenschel
December 07, 1978
page two

8. In addition to the existing building the 1.9 acre site can accomodate the following uses:

- parking
- leisure and recreation space
- up to 24 additional units

We have included three alternative programs and site plans for discussion. This brief report represents our intial findings and is submitted for your preliminary considerations.

I. THE LOCATION

- a. The Russell School, as a location for elderly housing, appears to satisfy major site feasibility criteria of the Department of Community Affairs.
 1. Proximity to Services: The Fresh Pond Market, a laundromat and other shops and restaurants along Huron Street are within a 5 - 15 minute walk from the site. Mt. Auburn Hospital is also within a short walking distance.
 2. Transportation: Bus Service along Huron and Mt. Auburn Streets is close and convenient, serving Harvard Square (and all connections), Belmont Center and Watertown Square.
 3. Neighborhood Land Use: The site is located in an area developed as residential use. There do not appear to be psychological barriers which would discourage the free movement of the elderly.

II. THE EXISTING BUILDING

- a. The Russell School, while heavily vandalized, appears to be structurally sound based upon a preliminary examination by our structural engineer. (see attached letter)
- b. Consideration should be given to the removal of the school's auditorium for the following reasons:
 1. The bulk of the auditorium is inappropriate for the existing scale of the residential neighborhood.
 2. Water leakage has caused severe damage to walls and floors not elsewhere so readily apparent in the other parts of the building.

3. The auditorium appears to be structurally independent of the school building and its removal is likely to uncover the original east exterior wall, largely intact.

4. The windows of the auditorium are on the north and south facades, therefore, one half of living units which might be adaptively fitted to its two story space would receive no direct sunlight.

5. The auditorium appears to be on unexcavated land, therefore backfilling would be minimal.

c. The remainder of the building can be effectively adapted to elderly housing units:

1. The original classroom sizes approximate the average size of elderly housing units (700 square feet \pm).

2. Few structural changes to existing bearing walls are likely to be necessary to accommodate units.

3. The single loaded corridor portion of the building aligns a north-south axis so that each unit can receive mid to late afternoon sunlight.

4. The window sizes and spacing appear to be very good for the layout of living rooms and bedrooms.

d. The building (as shown in the attached plans) should be able to take approximately 35 units \pm , 90% of which can be generously sunlit.

e. All mechanical, electrical and plumbing systems will require complete replacement.

f. Congregate housing unit types have not yet been investigated for this building.

III. ALTERNATIVE PLANS AND PROGRAMS

We have prepared three Alternative Site Plans as a preliminary test for physical and financial feasibility.

- a. Alternative A: Assumes renovation of Russell School to 35 elderly apartments and 22 - 24 units of new duplex town-houses along Grozier Road. The auditorium has been removed. The basement space could be cleaned and reserved as community space.
- b. Alternative B: Assumes a program similar to Alternative A with the exception that the new units are back to back apartment types.
- c. Alternative C: Assumes demolition of the school and all new construction of 54 elderly apartments.

IV. COSTS

We have applied rough construction cost estimates for both the new and adaptive reuse components of each alternative to gauge financial feasibility. These estimates have been prepared for comparative purposes only using rule-of-thumb unit costs based on rehabilitation and construction of similar building types. Further study is necessary to establish fully accurate costs for these particular buildings on this site.

Alternative A

35 units rehab.	=	\$30 psf x 43,500 gsf	=	\$1,305,000
<u>22 units new</u>	=	\$28 psf x 17,160 gsf	=	<u>480,480</u>
<u>57 units</u>				<u>\$1,785,480</u>
	=	<u>\$31,324/unit</u>		

Alternative B

Similar to Alternative A

Alternative C

54 units new	=	\$30 psf x 45,000 gsf	=	\$1,350,000
Demolition Russell School	=			<u>55,000</u>
	=	<u>\$26,020/unit</u>		<u>\$1,405,000</u>

V. NEIGHBORHOOD AMENITIES

- a. A pedestrian connection from Larch to Grozier Roads appears most conveniently handled along the north or south boundaries of the site. The connector should not cross elderly outdoor activity areas.
- b. It is possible to consider a small children's playground (approximately 4500 square feet) at the southwest corner of the site, given the configuration shown in Alternative A. For Alternatives B and C a 15,000 to 18,000 linear community open space could connect Larch and Grozier Roads. We would be interested to hear of the neighbor's desire in this regard. Activities should be planned and located to avoid interference with the elderly domain.

VI. ZONING

The site is in an A-2 (single family residential neighborhood) for which a variance would be required. There are no special provisions in the Cambridge Zoning Ordinance for elderly housing.

VII. CONCLUSION

At our first glance the three project alternatives appear to be both physically and financially feasible, although the adaptive reuse scheme may be marginal in terms of costs. Given the apparent suitability of the site and building for the housing of elderly citizens we recommend that the Authority authorize continued investigation for the next two weeks, in order that costs, neighborhood impact and rehabilitation feasibility may be further verified.

LeMessurier Associates / SCI

1033 Massachusetts Avenue, Cambridge, Massachusetts 02138
617/868-1200

5 December 1978

RECEIVED

DEC 04 1978

MONACELLI ASSOC.

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Kenneth B. Wiesner
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Roger H. McCoy
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Salvatore G. Mazzotta
John A. Coote
Andrew Lewis
M.V. Ravindra
Lee C. Lim

Monacelli Associates
12 Arrow Street
Cambridge, Massachusetts 02138

Attention: Mr. Ted Monacelli

Reference: Russell School, Larch Road,
Cambridge, Massachusetts
LeM Job No. 9638

Gentlemen:

At your request we performed a very limited inspection of the abandoned Russell School to view its general structural condition.

For reference we enclose a small scale plan identifying four areas of the building by number. Area 1 is the original portion of the building reported to have been built in 1892. Wing areas nos. 2 and 3, and auditorium area no. 4 are reported to have been built in 1924 along with some modification to Area 1.

Areas 1, 2 and 3 have three framed floors and a pitched roof. These areas appear to be framed with brick masonry exterior bearing walls, timber floor joists, and interior timber bearing walls. Some structural steel columns and girders were noted framing the first floor, apparently to carry concentrated loads or bearing partitions from the upper floors.

Area 4 is an auditorium with a relatively long span roof (probably structural steel trusses or girders), a reinforced concrete slab and beam floor with a crawl space under.

The basic structure of all the areas appears to be quite sound with no obvious signs of structural distress being noted. Some floor joists were exposed by previous inspections and those seen are in good condition. The pitched roof rafters and sheathing were seen and are in good shape. Floors seem generally level with no signs of sagging. The masonry walls were also noted as being in good condition with no signs of settlement or cracking.



Sippican Consultants
International, Inc.
LeMessurier Associates
Francis Associates
Tighe & Bond

5 December 1978
Attn: Mr. Ted Monacelli
Re: Russell School, #9638
Page 2

If the building is to be renovated for reuse, it is recommended that the reuse be of similar design loading as that of the school, and housing certainly qualifies for this. It is noted that the classrooms in some areas are framed with wood joists spanning approximately 24 feet. If new interior partitions are to be added within these spaces, they must be constructed of lightweight materials so as not to overload the floor joists.

If new room layouts are contemplated, the structural bearing walls and columns should be identified so as to know which walls are essential.

It is concluded that the structure of the Russell School is quite sound, and could be used readily for housing needs as long as a new proposed layout can work with the constraints imposed by the existing structural layout.

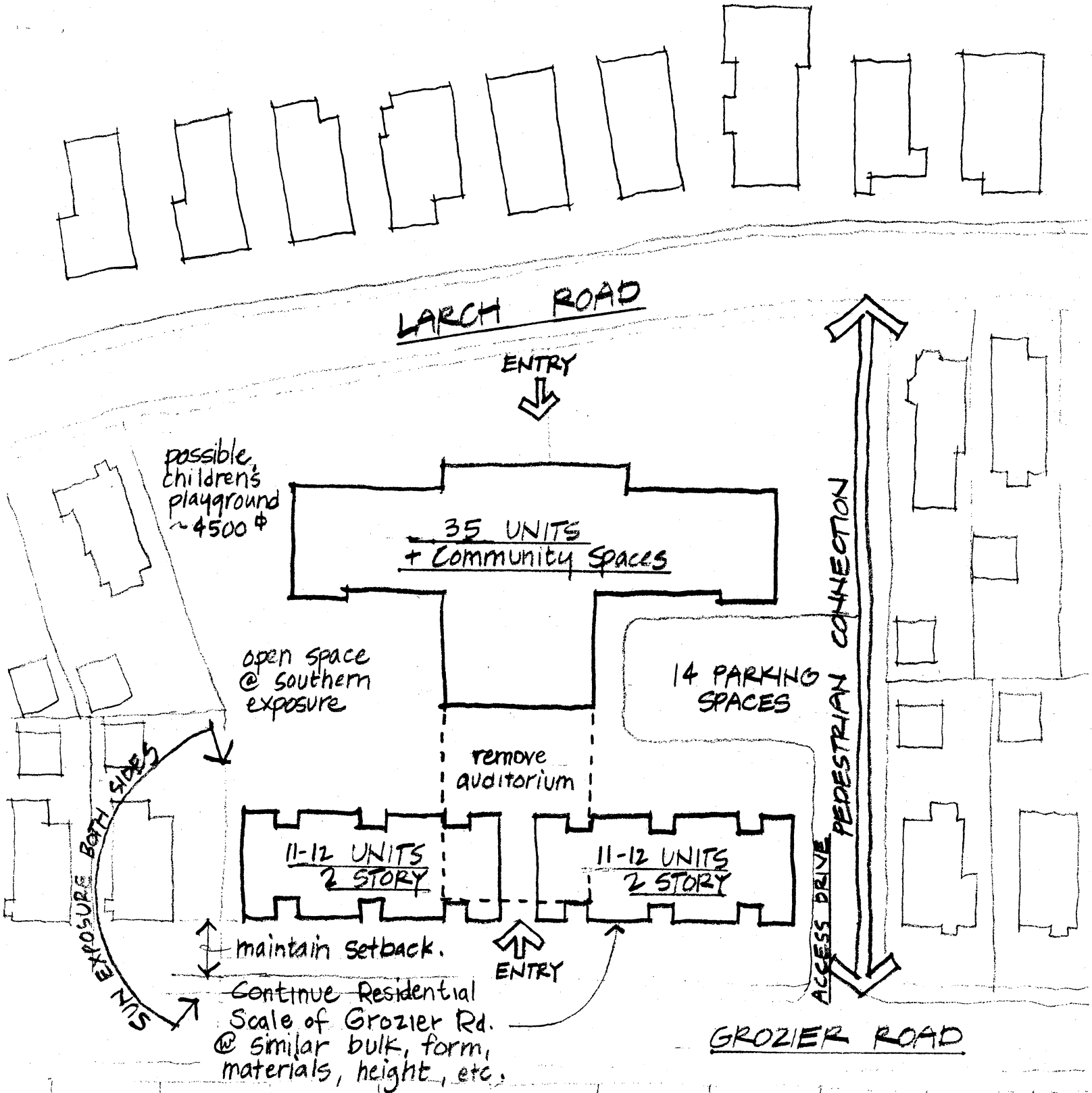
Very truly yours,

LeMESSURIER ASSOCIATES/SCI



Alden Webster

AW:mt



RUSSELL SCHOOL : ALTERNATIVE A

1"=60'-0"

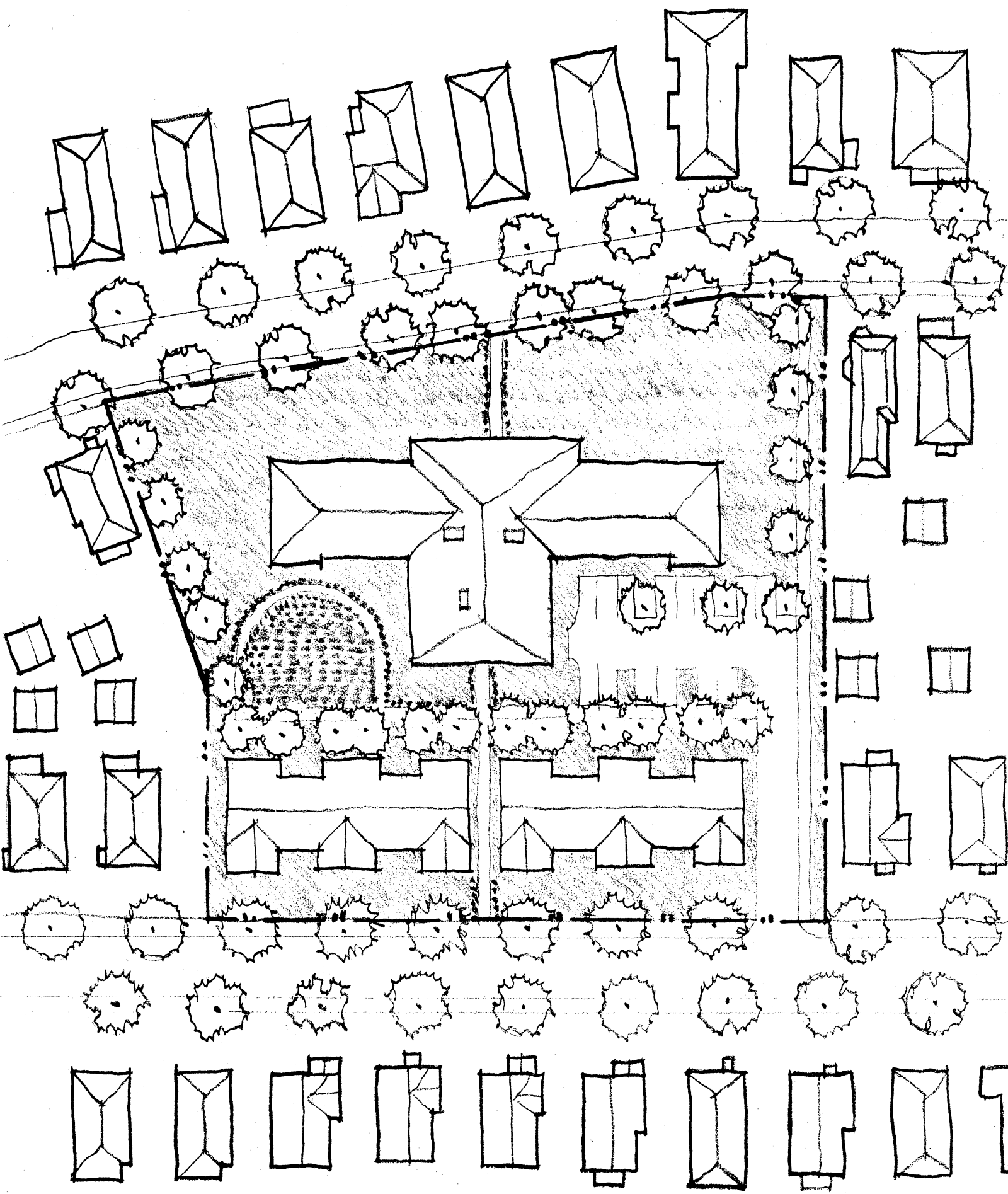
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MONACELLI ASSOCIATES

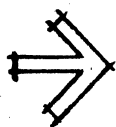
12 ARROW ST. CAMBRIDGE, MASS. 02138



RUSSELL SCHOOL: ALTERNATIVE A

1" = 60'-0"

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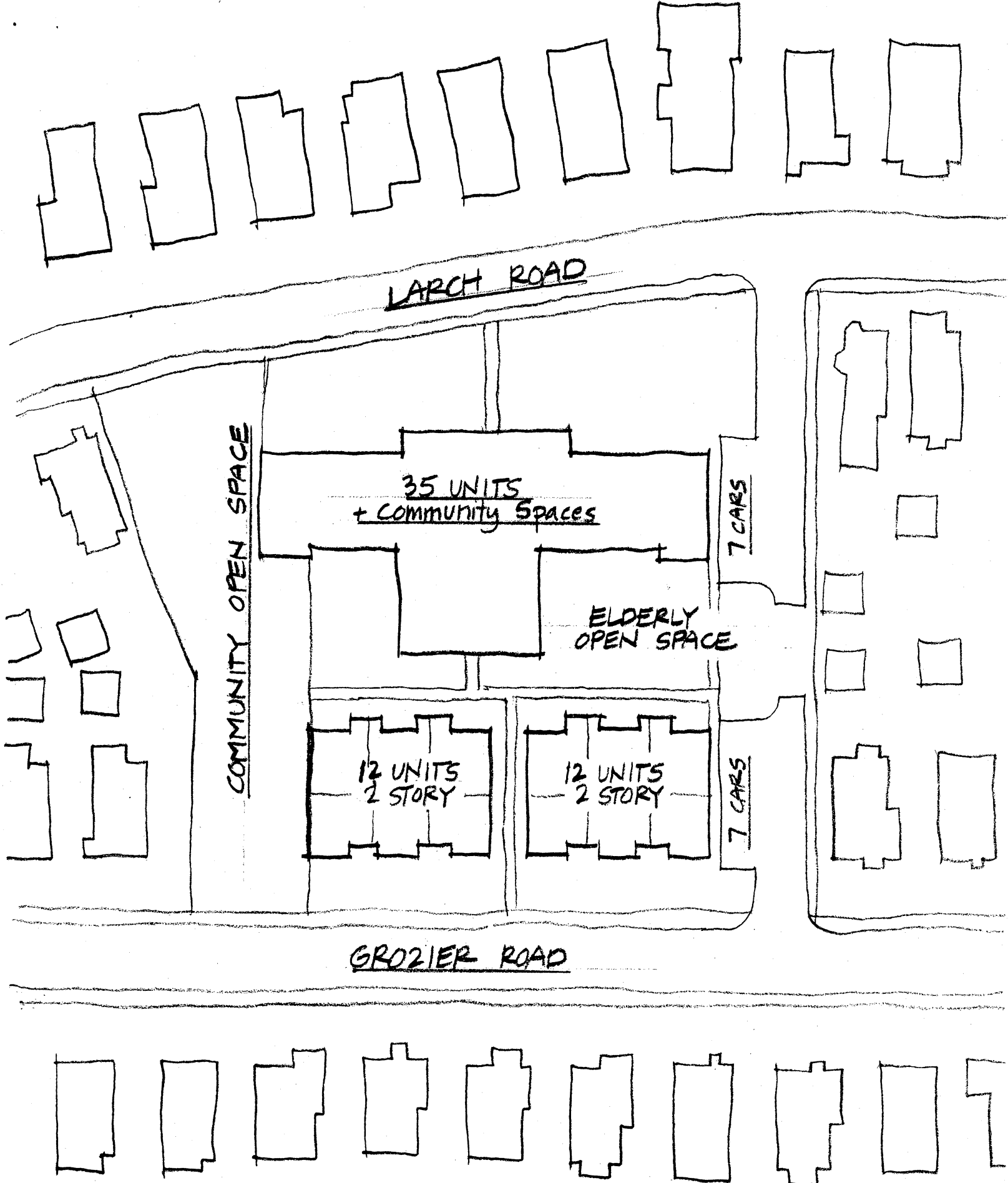


ARCHITECTS/PLANNERS

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12 ARROW ST.

CAMBRIDGE, MASS. 02138



LARCH ROAD

COMMUNITY OPEN SPACE

35 UNITS
+ COMMUNITY SPACES

7 CARS

ELDERLY
OPEN SPACE

12 UNITS
2 STORY

12 UNITS
2 STORY

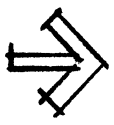
7 CARS

GROZIER ROAD

RUSSELL SCHOOL : ALTERNATIVE B

1" = 60'-0"

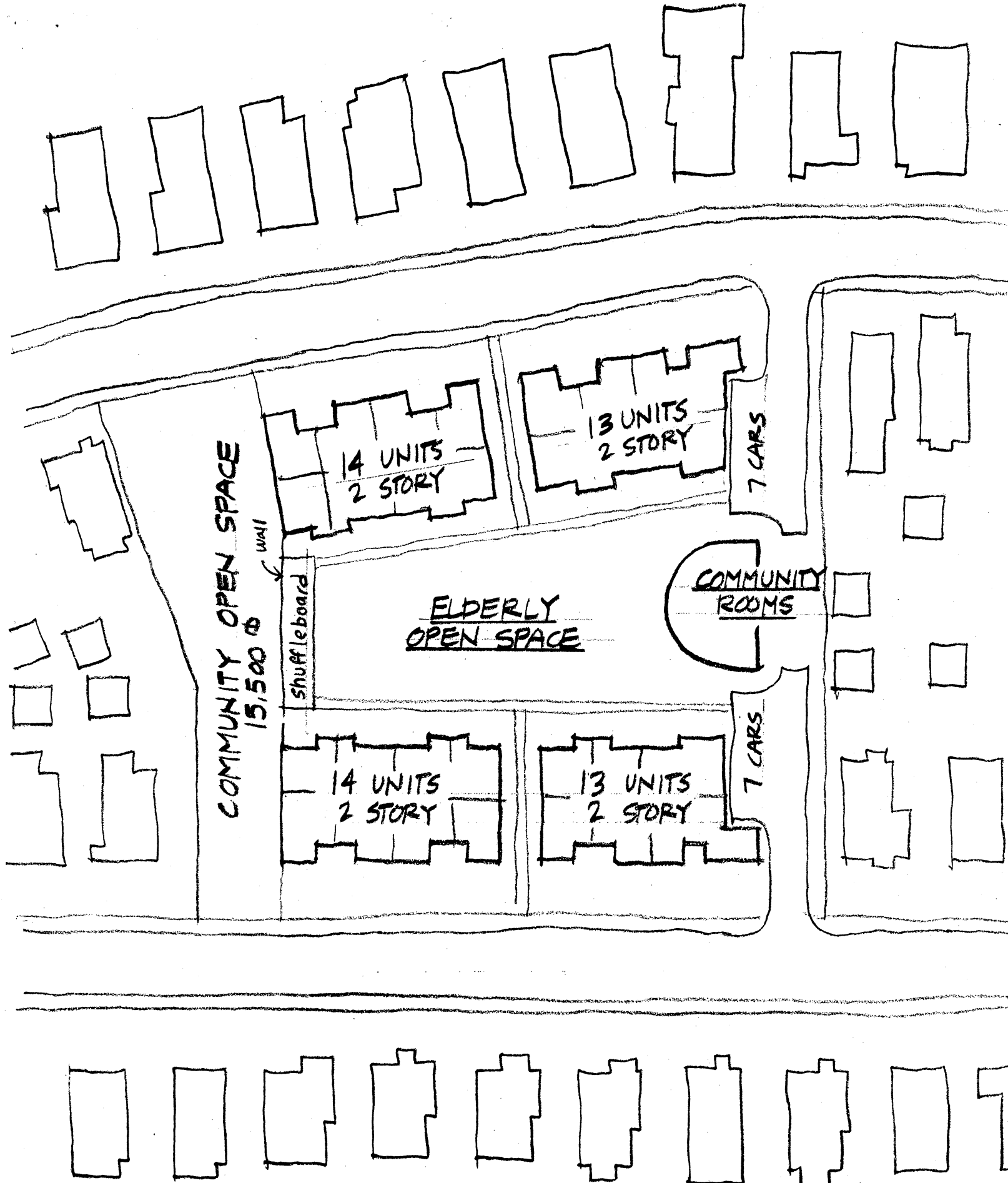
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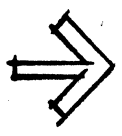
12 AVENUE 66 - CAMBRIDGE, MASS. 02142



RUSSELL SCHOOL ALTERNATIVE C

1" = 60'-0"

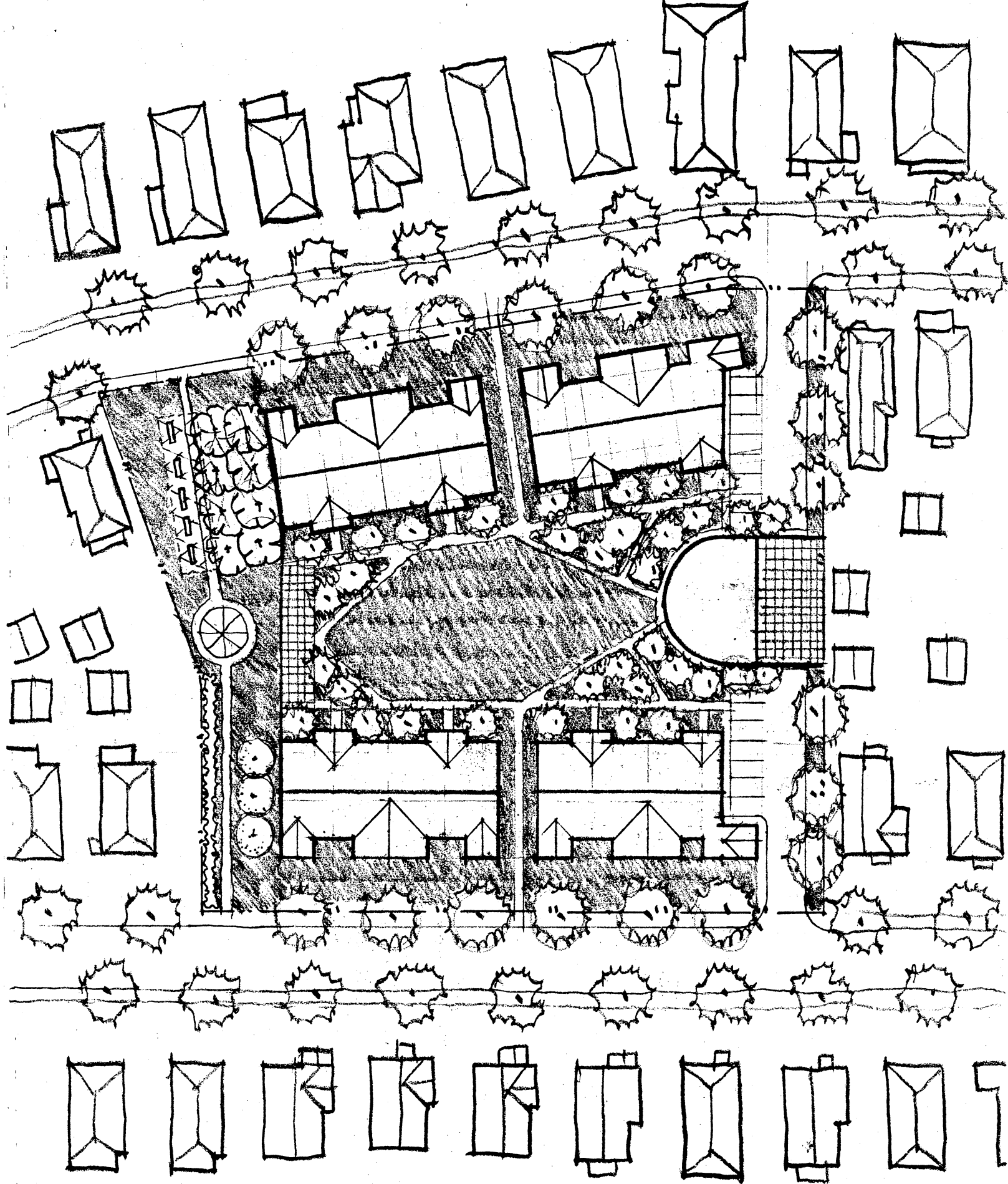
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RUSSELL SCHOOL: ALTERNATIVE C

1" = 60'-0"

12-8-78

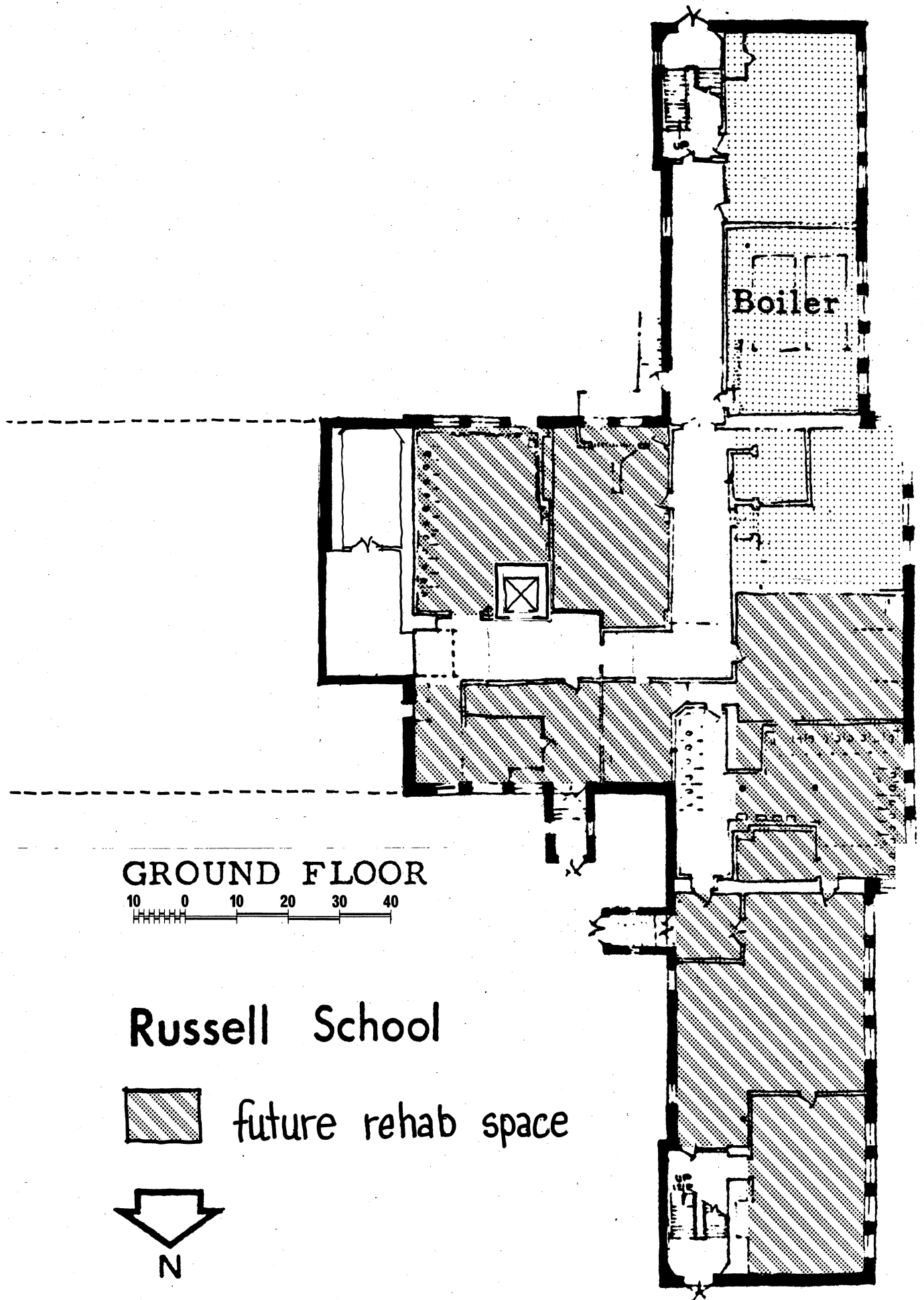


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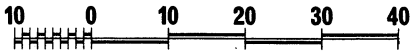
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12 ARROW ST.

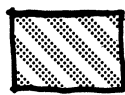
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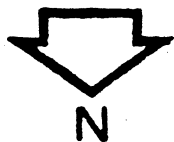


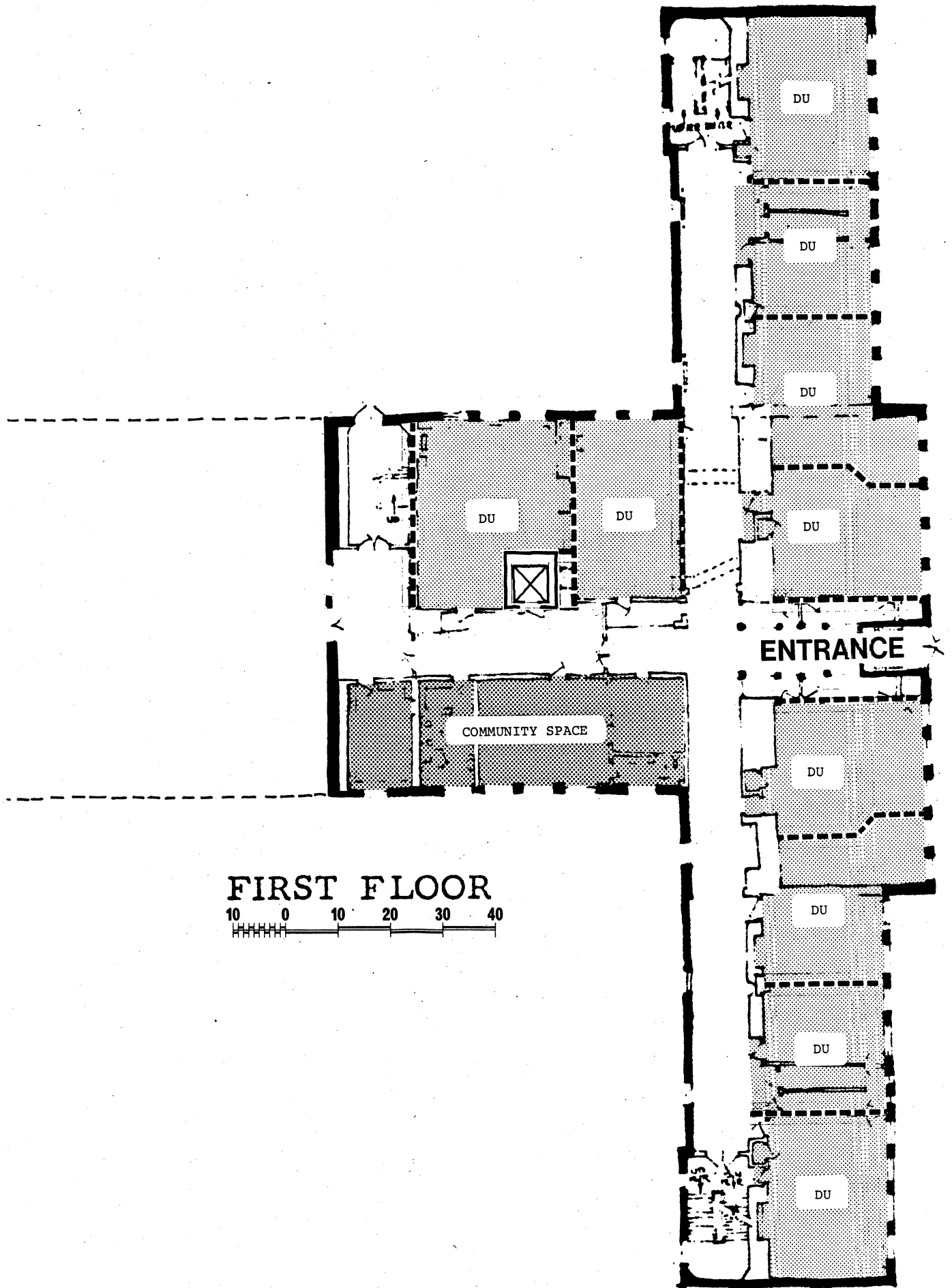
GROUND FLOOR



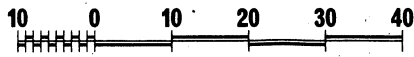
Russell School

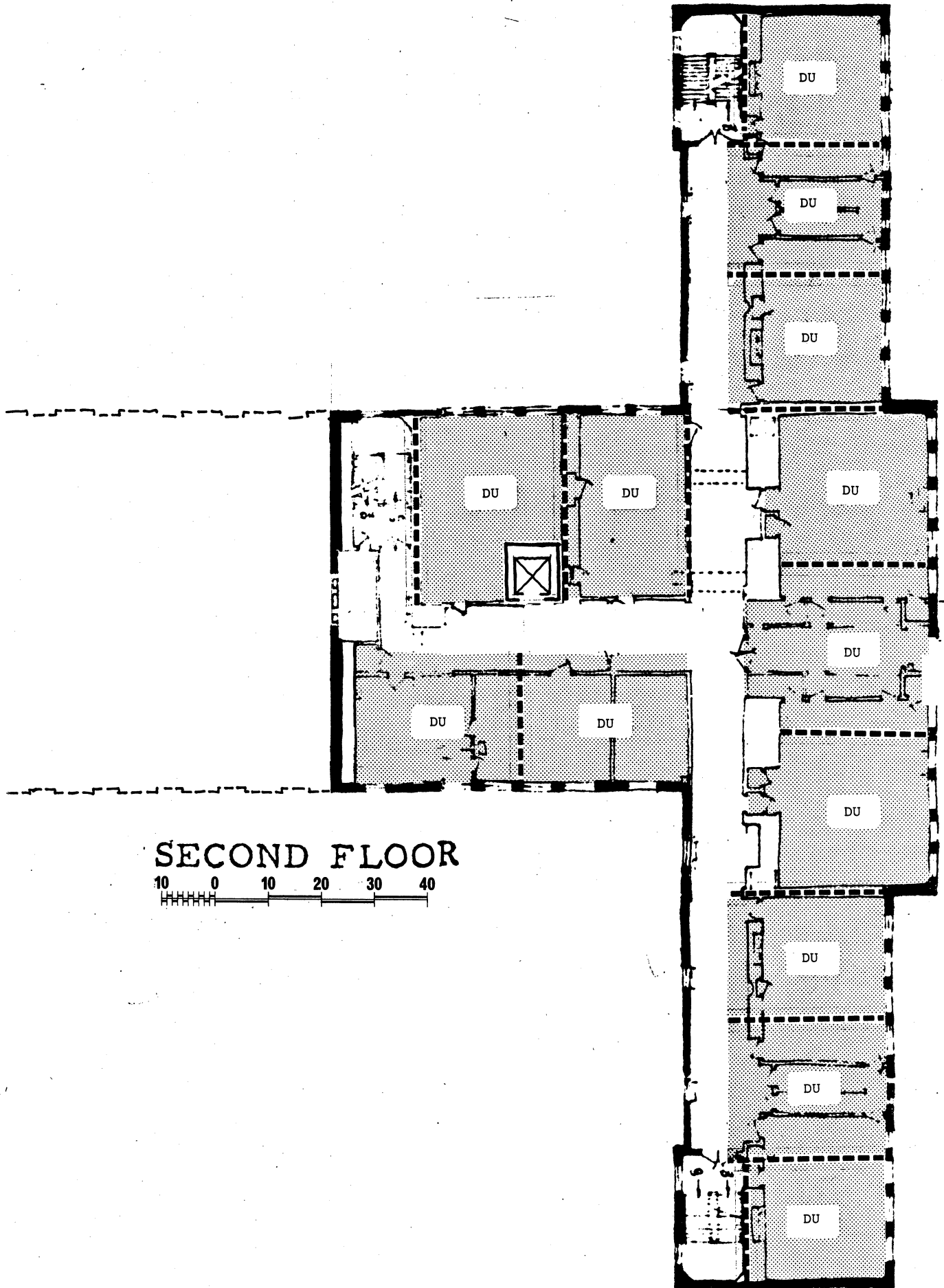
 future rehab space





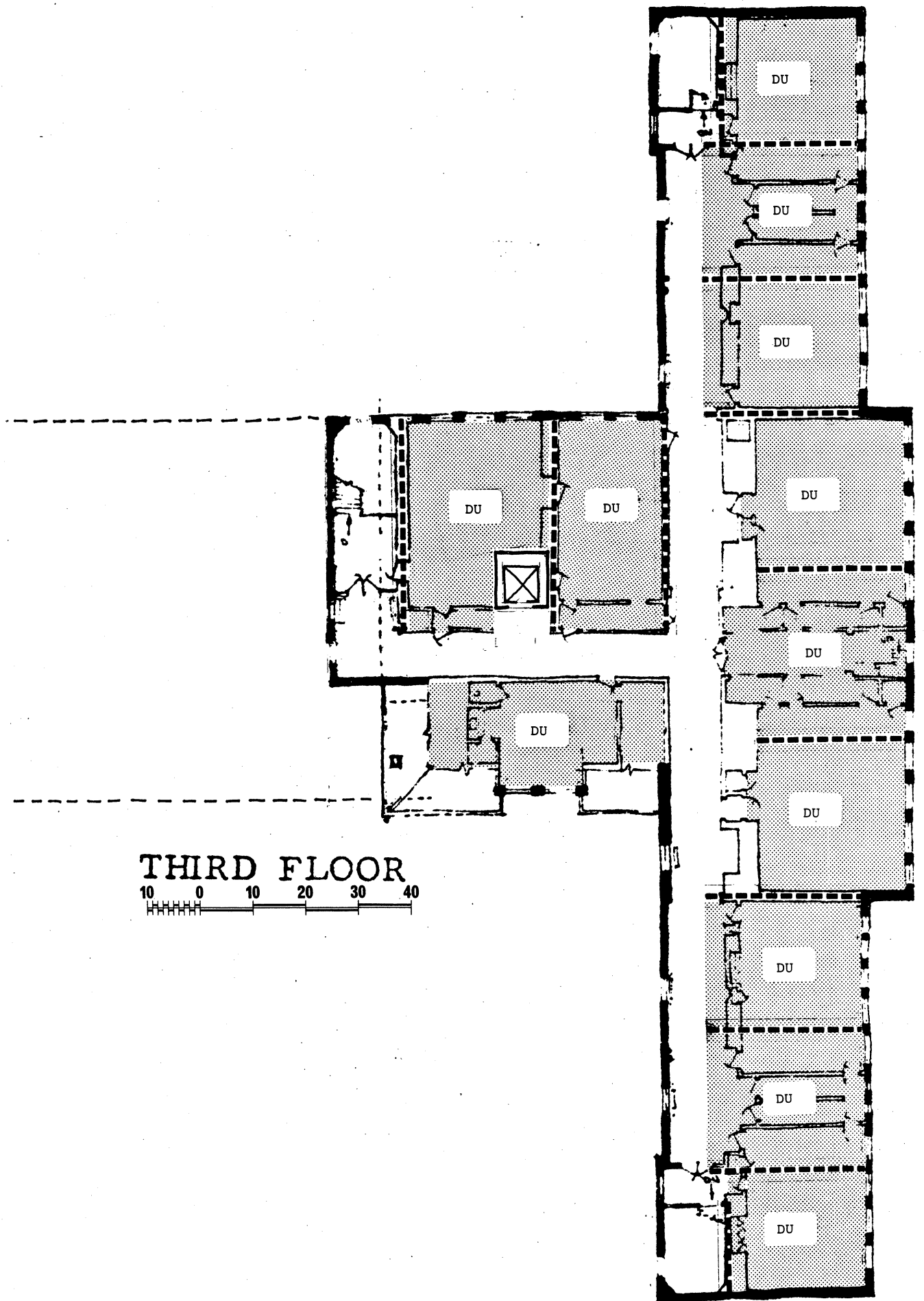
FIRST FLOOR



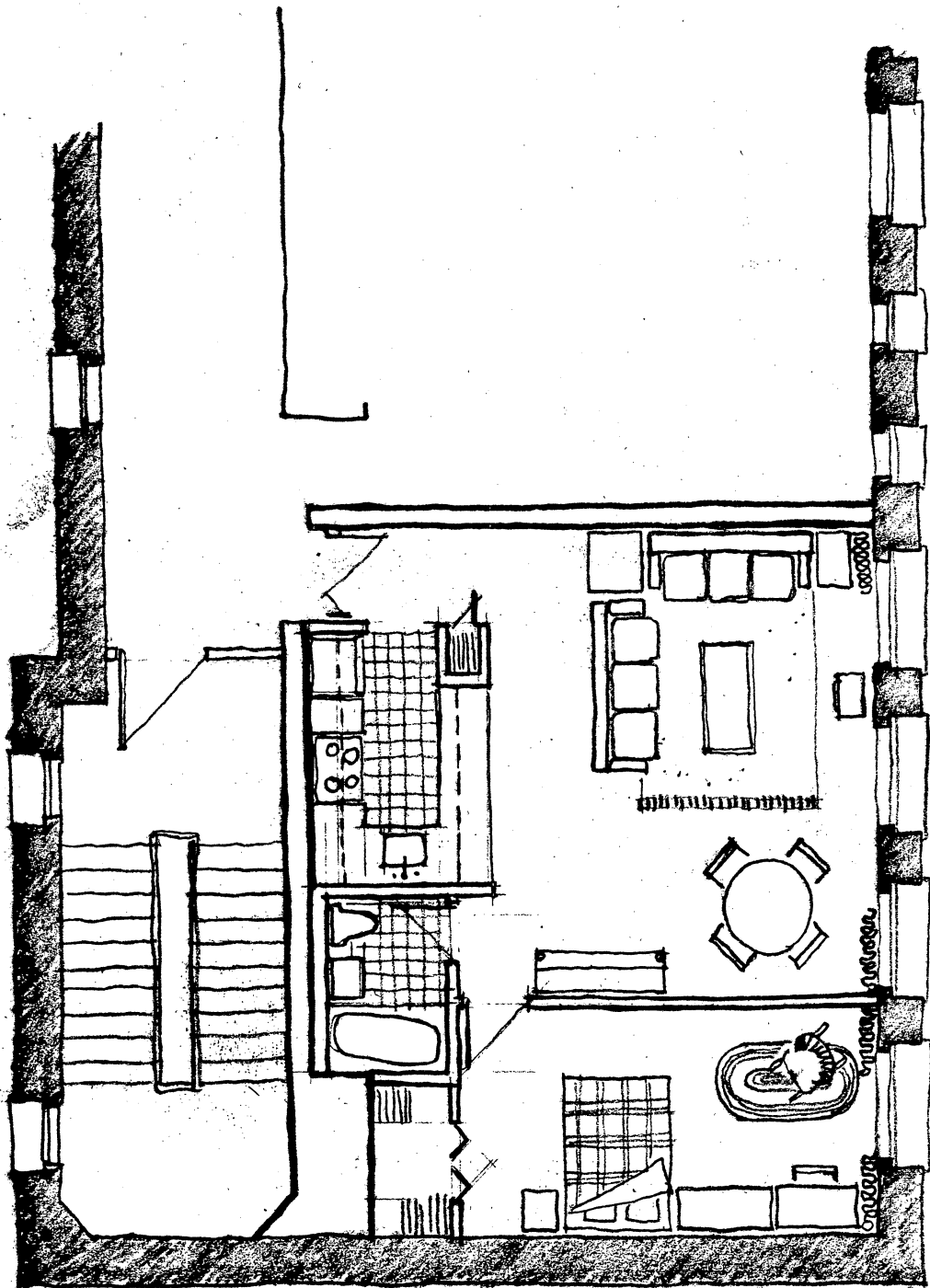


SECOND FLOOR





THIRD FLOOR
10 0 10 20 30 40



RUSSELL SCHOOL; TYPICAL UNIT PLAN

1/8" = 1'-0"

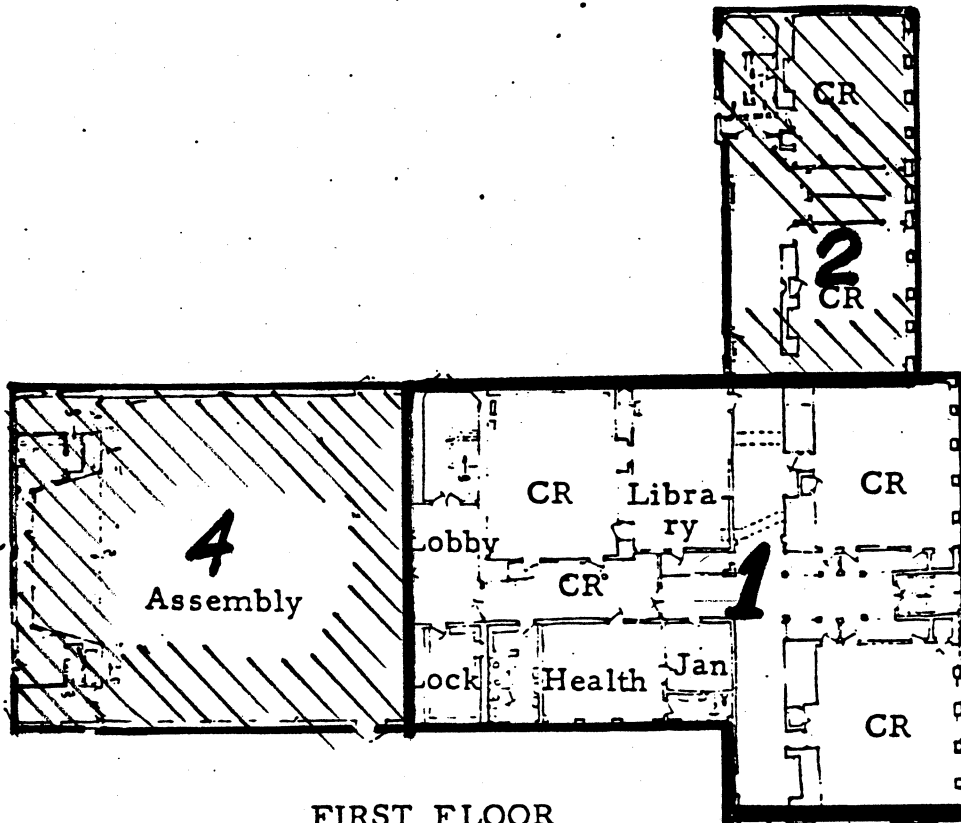
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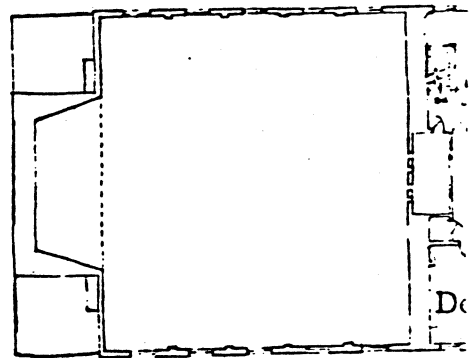
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12 ARROW ST. CAMBRIDGE, MASS. 02138

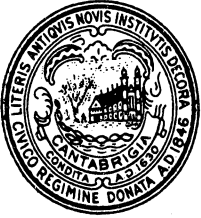


FIRST FLOOR



SECOND FLOOR

RUSSELL SCHOOL



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139

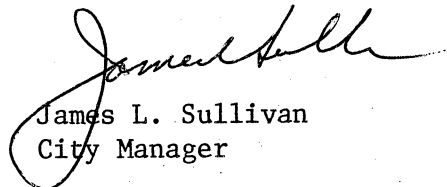
EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

December 11, 1978

To the Honorable, the City Council:

With respect to Awaiting Report No. 16 relative to the use of the Russell School site for elderly housing, enclosed is a copy of a status report from the Cambridge Housing Authority.

Very truly yours,



James L. Sullivan
City Manager

JLS/mbf
Enc.

S 534

Response to Awaiting Report No. 16 re: use of
the Russell School site for elderly housing.

In City Council,
December 11, 1978

12/11/78

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