



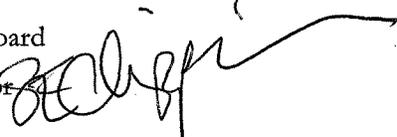
CITY OF CAMBRIDGE
Traffic, Parking and Transportation
344 Broadway
Cambridge, Massachusetts 02139

www.cambridgema.gov/traffic

Susan E. Clippinger, Director
Brad Gerratt, Deputy Director

Phone: (617) 349-4700
Fax: (617) 349-4747

MEMORANDUM

To: Cambridge Planning Board
From: Sue Clippinger, Director 
Date: December 20, 2011
Re: 40 Norris Street

The Cambridge Traffic, Parking and Transportation Department has reviewed the Planning Board application for 40 Norris Street. The project is an adaptive reuse of the former 45,654 sf North Cambridge Catholic High School into 27 dwelling units, 28 parking space, and 27 indoor and 8 short-term bicycle parking spaces near the building entrance. We have the following comments on this project:

1. The project did not require a Traffic Impact study.
2. The project meets zoning minimum parking requirement. Because the project is a conversion from non-residential use to a residential use it also requires parking analysis pursuant to 5.28.2. A parking analysis was completed by Vanasse Hangen Brustlin Inc. and found that the average auto ownership from 5 comparable projects in the area was approximately 0.87 automobiles per unit, with a range from 0.6 to 1.1 automobiles per unit. The study found that night-time on-street parking occupancy for Norris Street was 86% (about 50 on-street spaces and 43 cars parked at 10:30-10:45 pm).
3. We believe the project's parking layout will be functional and we recommend the 28 parking spaces be managed the most efficient and flexible way to accommodate the building's parking needs, including residents and two commercial units.
4. We support the transportation demand management (TDM) measures the proponent proposes to implement to reduce parking demand, including:
 - a. To encourage new residents to establish a pattern of using available public transportation services, a coupon for a MBTA Charlie Card (valid for local bus and subway travel) for the first month of occupancy will be provided, free of charge, for each rental.
 - b. At the time of move-in, a map of available transportation alternatives will be provided to each new rental.

The Vanasse Hangen Brustlin, Inc. parking analysis memo dated November 23, 2011 is attached.

CC: Adam Shulman, TPT; Susanne Rasmussen, Stephanie Groll, Cara Seiderman, CDD; Mouhab Z. Rizkallah, David Black, VHB Inc.; Sean Hope.



Vanasse Hangen Brustlin, Inc.

99 High Street
Boston, Massachusetts 02110
Telephone 617 728-7777
FAX 617 728-7782
www.vhb.com

Memorandum

To: Sue Clippinger, Director
Traffic, Parking and Transportation Dept
City of Cambridge

Date: November 23, 2011

cc: Adam Schulman

Project No.: 11831.00

From: David Black

Re: Proposed Residential Development
40 Norris Street, Cambridge
Parking Analysis

VHB has performed a parking analysis for the above project in response to the Traffic, Parking, and Transportation (TP&T) Department's memorandum dated November 4, 2011. The proposed development includes 27 residential units and 2 commercial units, along with supporting automobile and bicycle parking. The existing and proposed site plans are shown on the attached Plans S-1 and P-1, respectively. The analysis findings are summarized below, organized in the order of the information as requested in the TP&T memorandum.

1. *Describe the project in detail, including number of units and type of housing (rental or condo), market rate or below market rate, number of vehicle and bicycle parking spaces, size and proposed use of commercial units, site plan of vehicle and bicycle parking layout.*
 - a) 27 market rate residential rental units
 - b) 2 commercial rental units (Total 1,800 SF, lower level), to be occupied as studio/work space by building resident(s)
 - c) 28 surface vehicle parking spaces (14 full size, 14 compact)
 - d) 16 bicycle parking spaces immediately adjacent building entrance
 - e) 27 bicycle parking spaces in lower level bike room
 - f) See Plan P-1 for external vehicle and bicycle parking layout
 - g) See Plan A100 for internal bike room layout

2. *Estimate the projects parking demand for peak time (we presume nighttime) by finding two or more comparable project (i.e. similar number of units) and determine auto ownership rates and peak parking occupancy rates. We will work with you, and obtain residential parking permits and auto registration, if available, at those facilities.*

The following projects were identified as potential comparables with similar numbers of residential units and transit characteristics:

- a) 69 Harvey Street (17 units)
- b) 2440 Massachusetts Avenue (42 units)
- c) Tyler Court, 2456-2560 Massachusetts Avenue (28 units)
- d) 113 Richdale Avenue (20 units)
- e) 25-31 Wheeler Street (72 units)

These projects vary in size, but have very similar locations in relation to transit. As is the case for 40 Norris Street, projects (a), (b) and (c) are served primarily by MBTA bus service on Massachusetts Avenue, and, like 40 Norris Street, they are within half-a-mile from Davis MBTA station, and therefore accessible by Red Line. Projects (d) and (e), 113 Richdale Avenue and 25-31 Wheeler Street, also are served by MBTA bus service, although they are located somewhat closer to Red Line stations at Porter and Alewife, respectively.

Parking supply, resident permit data, and numbers of registered vehicles (where known) for each project are summarized in Table 1. In addition, parking occupancy was surveyed between 10:30 and 11:00 PM on Thursday November 17 at two locations, (69 Harvey Street and 25-31 Wheeler Street). It was not possible to access the below-grade garages at the remaining three projects to determine parking occupancy at those locations.

As shown in Table 1, the parking ratio is 1 space per unit at most of these projects, although it is slightly higher at 1.15 for the Richdale Avenue project. By comparison, information from the Registry of Motor Vehicles (RMV) indicates an average of 0.8 vehicles registered per unit in 2011. If the Wheeler Street project is not included in the calculation (because only 2010 RMV data are available for that project), the average is 0.87 vehicles registered per unit.

It is useful to note that the 2006-2008 American Community Survey indicates a Cambridge city-wide average of 0.92 vehicles per household, down slightly from the 2000 Census average for Cambridge of 0.98 vehicles per household. In addition, data indicate that car-ownership is slightly higher for condominiums compared to rental units, and since all of the comparable projects analyzed are condominiums it would be expected that the car ownership for rental units at 40 Norris Street might be slightly lower by comparison.

The number of City of Cambridge 2011 resident parking permits obtained by residents of the projects varies from 0.7 to 1.1 per unit, with an average of 0.87 resident permits per unit. This shows some consistency with the number of registered vehicles.

Finally, the night-time parking occupancy counts performed at 69 Harvey Street and 25-31 Wheeler Street showed that parking occupancy at those locations was 59% and 81%, respectively (average 70%). In both cases, there could of course be some residents parking on street, so the occupancy does not necessarily reflect the total parking demand per unit. At the Wheeler Street project, 4 vehicles were observed to be parked on-street, most likely associated with those residential units given the absence of other abutting land uses. Taking those vehicles into consideration yields a parking demand of approximately 0.86 vehicles per unit.

For the 40 Norris Street project, the parking supply ratio is 1 space per unit, plus 1 space shared between the 2 commercial units. Based on the preceding analysis, it is likely that the peak (night time) parking demand for the residential units will be in the order of 24 spaces, based on 86% occupancy. Any additional demand associated with the work spaces would be for daytime visitors, when parking availability is not an issue.

3. Provide maps showing distance to alternative transportation options in the area (including MBTA transit and bus, bike facilities, car-sharing services).

The location of the project site in relation to alternative transportation is shown in the attached Plan 1, including the following:

- a) MBTA Bus routes and stops
- b) MBTA Red Line stations
- c) Car-sharing locations (Zipcar)
- d) Bicycle facilities

As shown, the 40 Norris Street project is well served by the MBTA 77 bus route on Massachusetts Avenue, and the 83 bus route on Rindge Avenue. Both bus routes connect with the Red Line and Commuter Rail at Porter Square, although the Red Line is also accessible at Davis Square, less than a 10-minute walk.

There is a total of 10 Zipcars available within a 15-minute walk of 40 Norris Street.

4. Describe any proposed parking management (i.e. fees, parking allocation, etc.)

The following parking management strategies are proposed as part of the project:

- a) Parking spaces will be rented separately from the residential units
- b) Market rates will be charged for all parking spaces

5. Describe measures, if applicable, that will be implemented to reduce parking demand for private automobile use.

The following parking and transportation demand management measures will be implemented as part of the project:

- a) To encourage new residents to establish a pattern of using available public transportation services, a coupon for a MBTA Charlie Card (valid for local bus and subway travel) for the first month of occupancy will be provided, free-of-charge, for each rental.
- b) At the time of move-in, a map of available transportation alternatives (similar to Plan 1) will be provided to each new rental.

6. On-street parking availability study on Norris Street

An on-street parking survey was performed between 10:30 – 10:45 PM on Thursday November 17, 2011. There are approximately 45 Resident permit spaces plus 5 un-restricted parking spaces, totaling approximately 50 on-street spaces over the full length of Norris Street. The following parked vehicles were observed:

34 cars displaying resident stickers in Resident Permit spaces
2 cars displaying resident stickers in un-restricted spaces
1 car displaying resident sticker blocking a driveway
1 car with visitor card in Resident Permit space
4 cars without resident stickers in Resident Permit spaces
1 car without resident sticker in unrestricted spaces
7 vacant parking spaces (5 resident permit, 2 un-restricted)
TOTAL 43 cars parked

The survey yields an on-street parking occupancy of 86%, indicating some availability of on-street parking, both resident permit and unrestricted. In addition, it was observed that there were 7 cars parked in off-street driveways.

TABLE 1

**40 Norris Street Residential Project
Parking Supply & Demand Comparison
November, 2011**

Project Address	Residential Units	Parking Spaces		Registered Vehicles		Resident Permits		Night-time Occupancy *	
		#	Ratio	#	Per Unit	#	Per Unit	#	Ratio
69 Harvey Street	17	17	1	18	1.1	18	1.1	10	0.59
2440 Mass Ave.	42	42	1	26	0.6	28	0.7	N/A	N/A
2456/2460 Mass Ave.(Tyler Ct.)	28	28	1	26	0.9	23	0.8	N/A	N/A
113 Richdale Avenue	20	23	1.15	N/A	N/A	20	1.0	N/A	N/A
25-31 Wheeler Street	72	72	1	43	0.6	58	0.8	58	0.81
Average	35.8	36.4	1.03	28.25	0.80	29.4	0.87	34.0	0.70

**Ave. excluding
Wheeler St. 0.87**

** November 17, 2011
10:30 - 11:00 PM*

Note: Registered vehicles for 25-31 Wheeler Street are for 2010

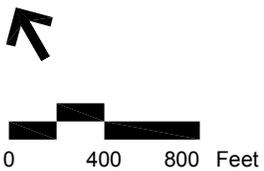


-  Zipcar Location Number of Cars
-  MBTA Bus Stop
-  Bike/Multi-Use Path
-  MBTA Bus Route #77
-  MBTA Bus Route #83

Vanasse Hangen Brustlin, Inc.

Plan 1 November 2011

Proposed Residential Project
 40 Norris Street
 Cambridge, MA



I CERTIFY THAT THIS PLAN WAS MADE FROM AN INSTRUMENT SURVEY ON THE GROUND BETWEEN THE DATES OF JANUARY 10 AND JANUARY 11, 2011 AND ALL STRUCTURES ARE LOCATED AS SHOWN HEREON.

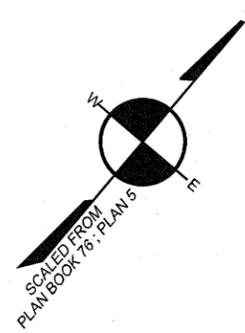
I HEREBY CERTIFY THAT THE PROPERTY LINES SHOWN ARE LINES DIVIDING EXISTING OWNERSHIP AND THE LINES OF STREETS AND WAYS ALREADY ESTABLISHED AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

REGISTRY OF DEEDS USE ONLY

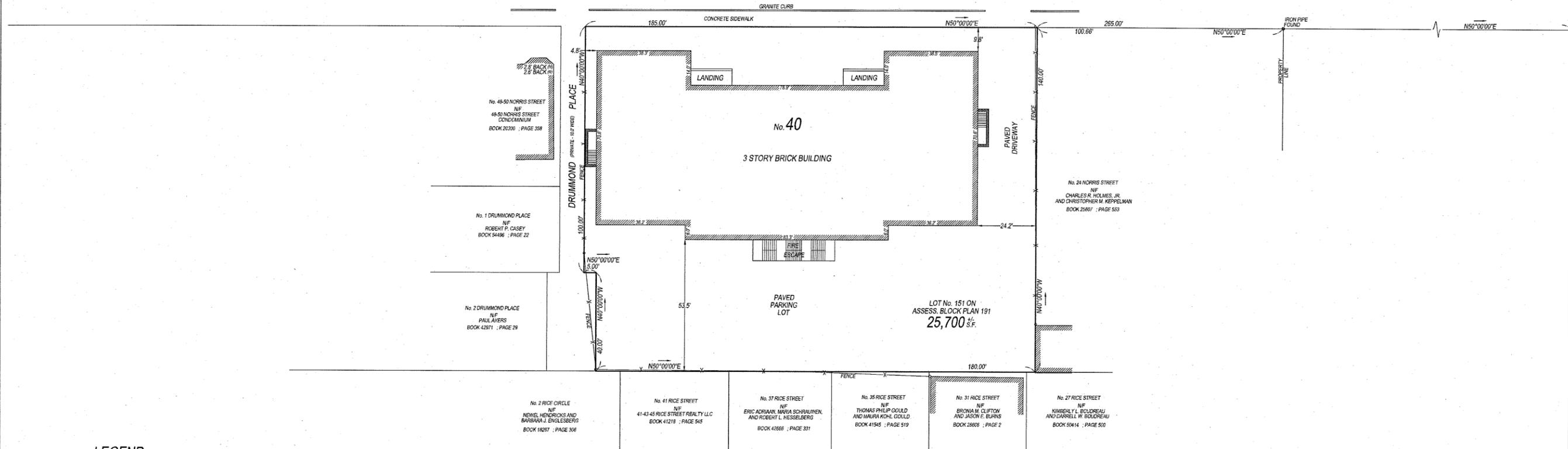
GEORGE C. COLLINS P.L.S.

DATE



NORRIS (PUBLIC - 40.0' WIDE) STREET

MASSACHUSETTS AVENUE



LEGEND
(M) MEASURED DISTANCE
(R) RECORD DISTANCE

DATE: JANUARY 13, 2011

REVISION	DATE



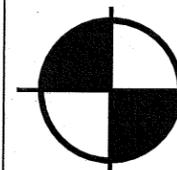
REFERENCES:

DEED: BOOK 55397 ; PAGE 563
PLAN: PLAN BOOK 76 ; PLAN 5 (A OF 2)
PLAN IN BOOK 20300 ; PAGE 356

**SITE PLAN OF LAND
LOCATED AT
40 NORRIS STREET
CAMBRIDGE, MA**

PREPARED FOR:

DR. RIZKALLAH
40 NORRIS STREET
CAMBRIDGE, MA



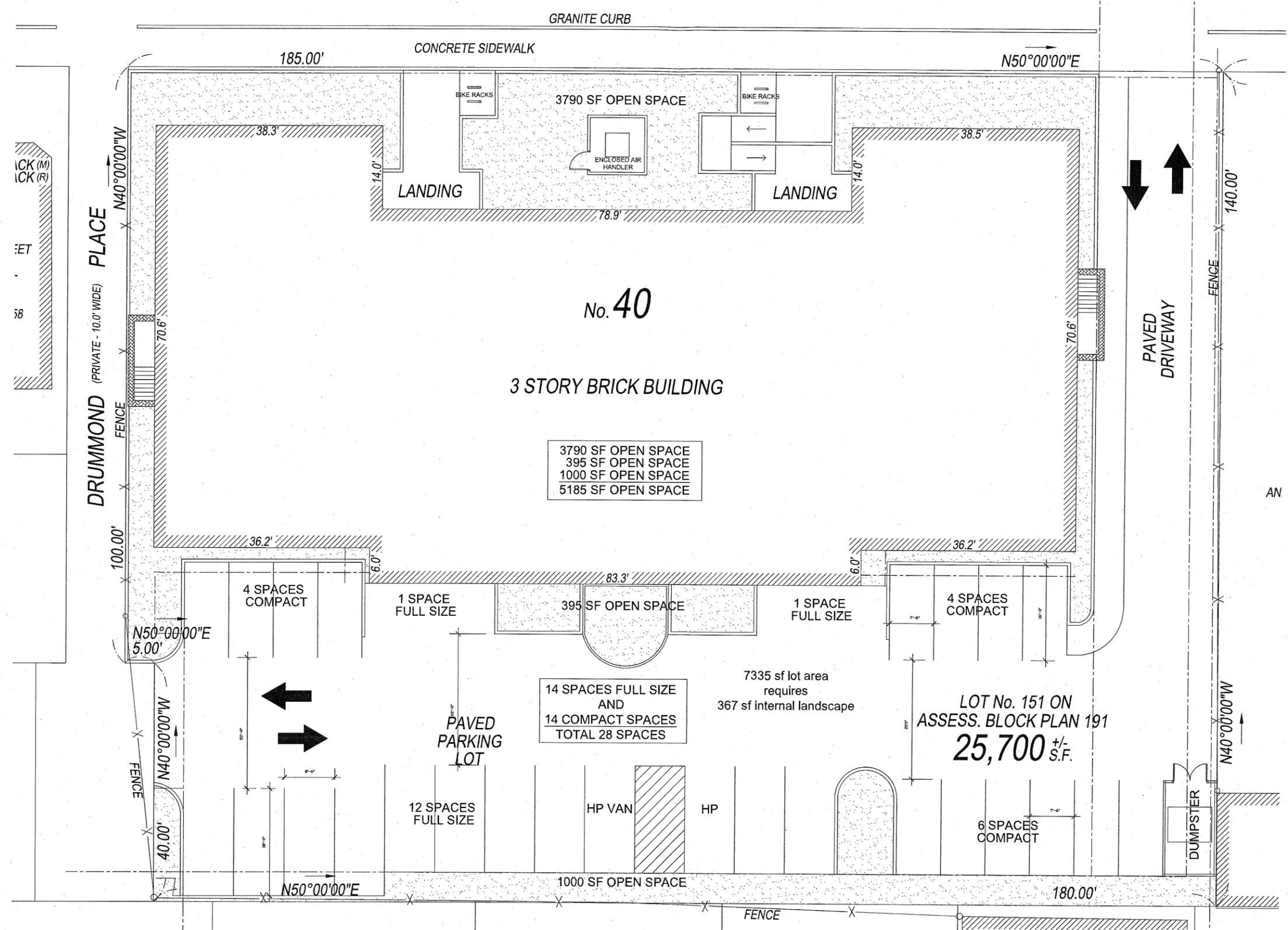
**BOSTON
SURVEY, INC.**
UNIT C-4 SHIPWAYS PLACE
CHARLESTOWN, MA. 02129
(617) 242-1313
www.bostonsurveyinc.com

S-1

JOB # 10-00669

JOB # 10-00669-1/13/11

NORRIS (PUBLIC - 40.0' WIDE) STREET



PROJECT NAME
40 NORRIS STREET

PROJECT ADDRESS
40 NORRIS STREET
CAMBRIDGE, MA

CLIENT
Mouhab Z. Rizkallah

ARCHITECT
KHALSA DESIGN INC.



17 IVALOO STREET, SUITE 400
SOMERVILLE, MA 02143
TELEPHONE 617-591-8682 FAX: 617-591-2866

CONSULTANTS:

LANDSCAPE ARCHITECT
Name xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

CIVIL ENGINEER
Name xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

STRUCTURAL ENGINEER
Name xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

MEP ENGINEER
Name xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

REGISTRATION

Project number 10051
Date 11-17-11
Drawn by wc
Checked by JSK
Scale

REVISIONS

No.	Description	Date

PARKING LAYOUT
P-1
10051_40 NORRIS ST.

PROJECT NAME
40 NORRIS STREET

PROJECT ADDRESS
40 NORRIS STREET
CAMBRIDGE, MA

CLIENT
Mouhab Z. Rizkallah

ARCHITECT
KHALSA DESIGN INC.



17 IVALOO STREET, SUITE 400
SOMERVILLE, MA 02143
TELEPHONE 617-591-5582 FAX: 617-591-2086

CONSULTANTS:

LANDSCAPE ARCHITECT

Name
xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

CIVIL ENGINEER

Name
xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

STRUCTURAL ENGINEER

Name
xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

MEP ENGINEER

Name
xxx
T: 000-000-0000
F: 000-000-0000
W: www.xxx.com

REGISTRATION

Project number 10051
Date 11-17-11
Drawn by J.W.
Checked by JSK
Scale 3/16" = 1'-0"

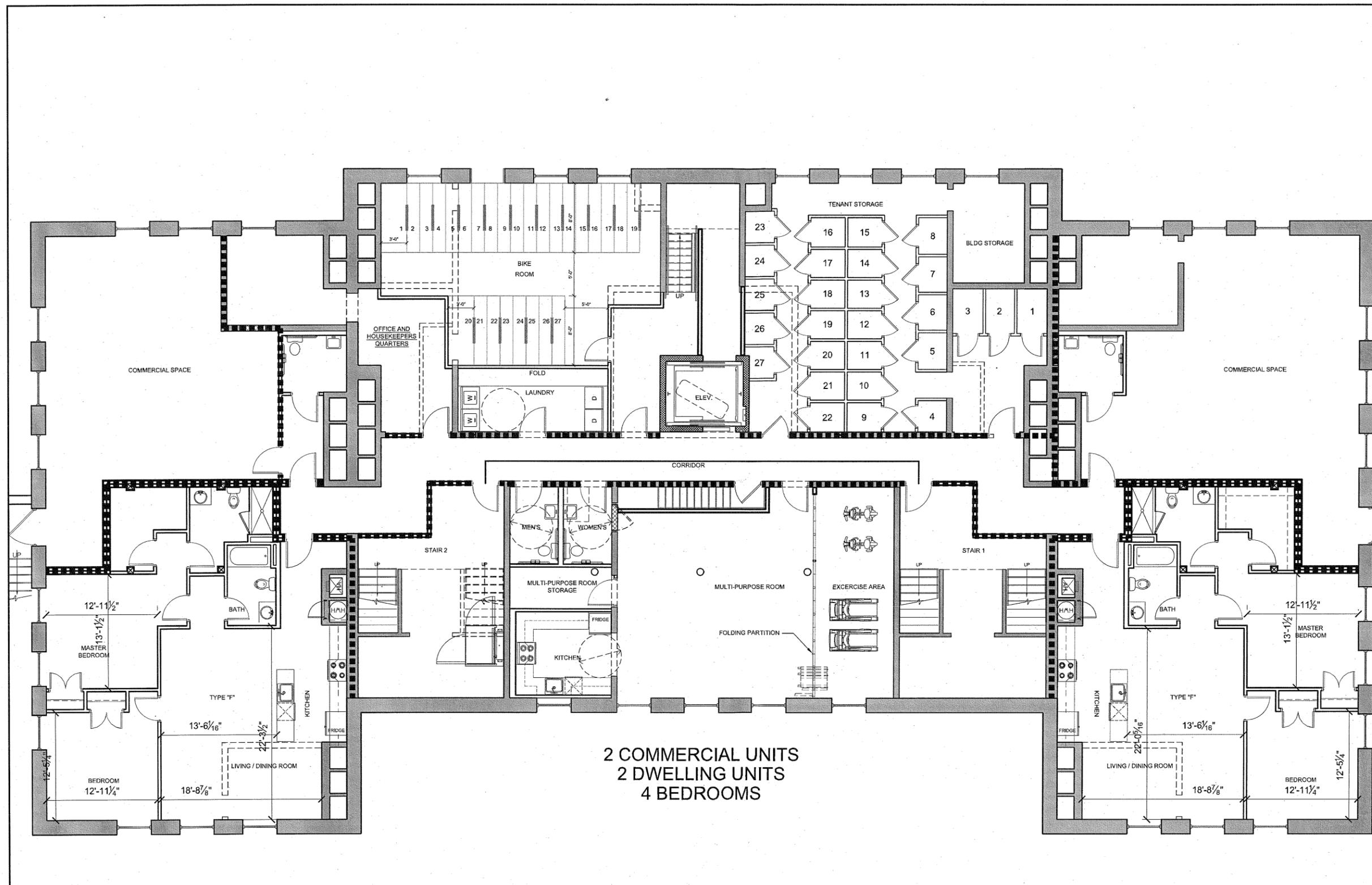
REVISIONS

No.	Description	Date

LOWER LEVEL
FLOOR PLAN

A100

10051_40 NORRIS ST.



2 COMMERCIAL UNITS
2 DWELLING UNITS
4 BEDROOMS

1 LOWER LEVEL FLOOR PLAN
3/16" = 1'-0"