

Burlington Development Review Board

149 Church Street, City Hall
Burlington, VT 05401

www.burlingtonvt.gov/pz/DRB

Telephone: (802) 865-7188

Fax (802) 865-7195

Austin Hart
Brad Rabinowitz
Israel Smith
AJ LaRosa
Geoff Hand
Alexandra Zipparo
Wayne Senville
Jim Drummond, (Alternate)
Robert Purvee, (Alternate)



BURLINGTON DEVELOPMENT REVIEW BOARD Tuesday January 24, 2017, 5:00 PM BCA City Arts, Lorraine B. Good Room, 135 Church St, Burlington, VT SPECIAL MEETING AGENDA

- I. Agenda**
- II. Communications**
- III. Minutes**
- IV. Public Hearing**
 - 1. 17-0623CA/MA; 311 North Ave(RM, Ward 4N) and 329-375 North Ave (NAC-CR, Ward 4N) VLTBTV Parkland LLC, BC Community Housing LLC & Eric Farrell**
Continued review of the proposed development consisting of 11 buildings containing 733 residential units, approximately 45,000 sq. ft. of non-residential support/amenity space, approximately 45,000 sq. ft. of neighborhood commercial spaces and 1093 parking spaces. (Project Managers, Scott Gustin and Mary O'Neil)
- V. Other Business**
- VI. Adjournment**

Plans may be viewed in the Planning and Zoning Office, (City Hall, 149 Church Street, Burlington), between the hours of 8:00 a.m. and 4:30 p.m.

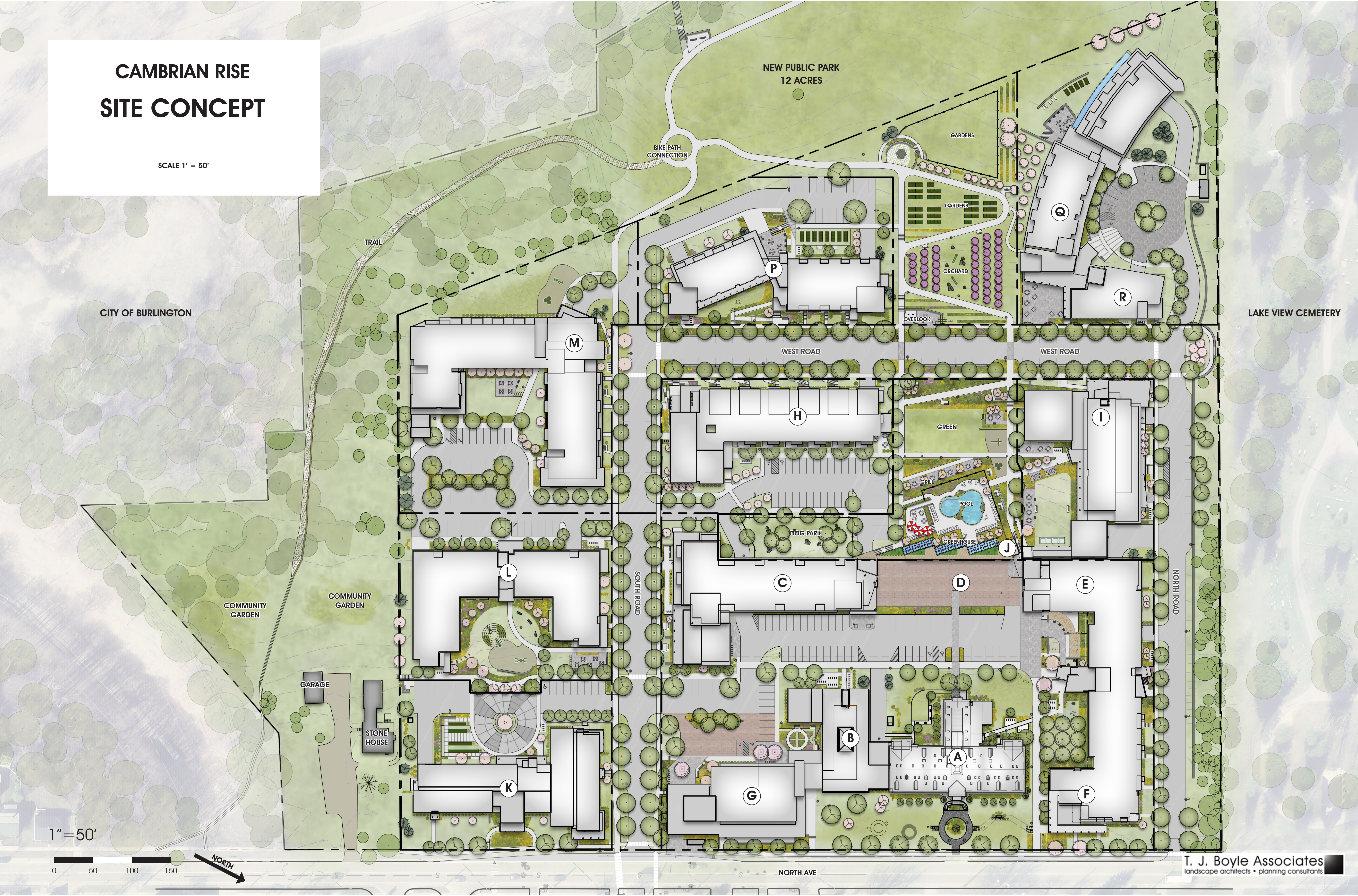
Participation in the DRB proceeding is a prerequisite to the right to take any subsequent appeal. Please note that ANYTHING submitted to the Planning and Zoning office is considered public and cannot be kept confidential.

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Department of Planning & Zoning at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188 (TTY users: 865-7142).
Printed on 100% Recycled Paper

This may not be the final order in which items will be heard. Please view final Agenda, at www.burlingtonvt.gov/pz/drb/agendas or the office notice board, one week before the hearing for the order in which items will be heard.

CAMBRIAN RISE
SITE CONCEPT

SCALE 1" = 50'



USE SUMMARY FOR ALL CAMBRIAN RISE BUILDINGS

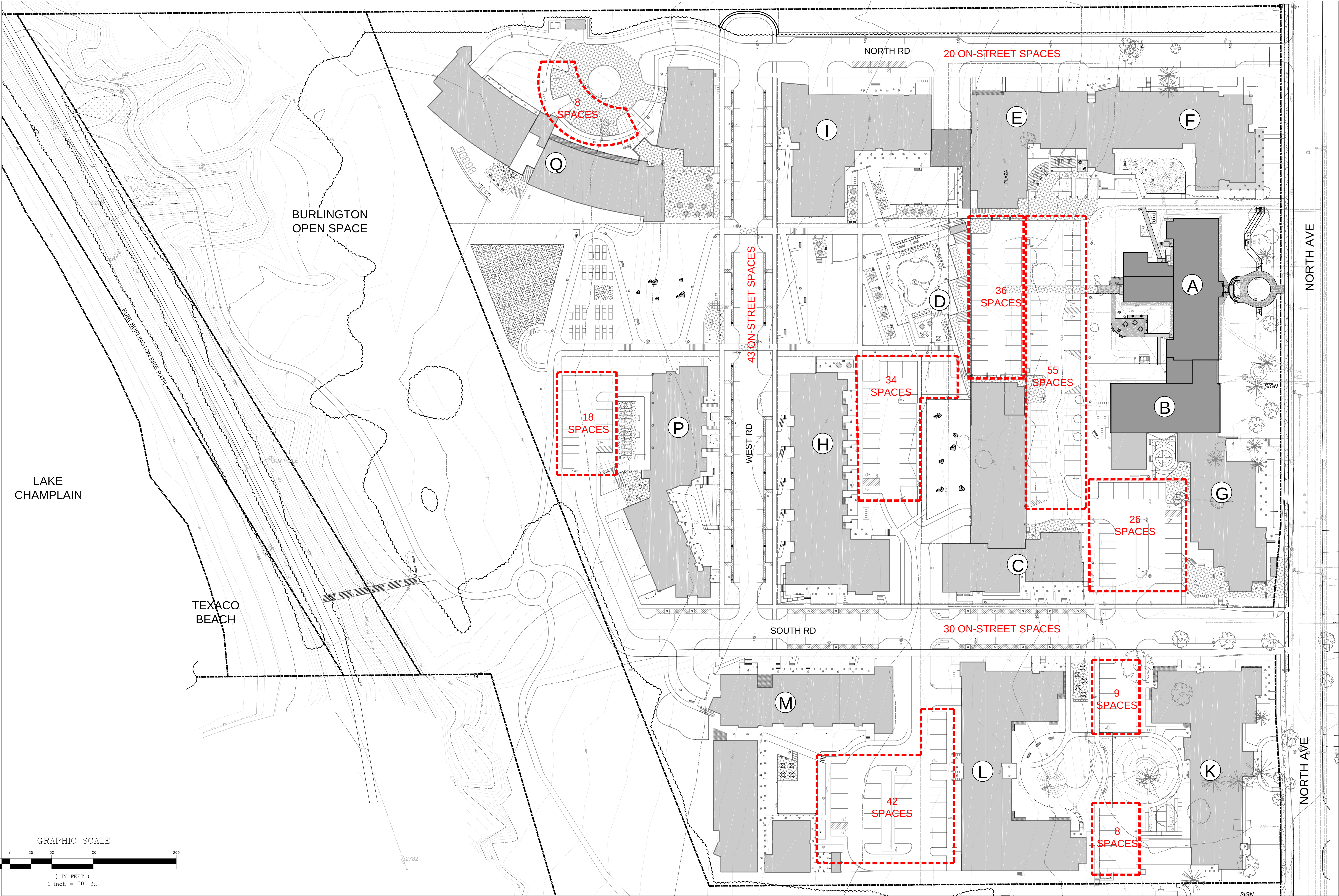
	Residential Uses Apartments # of units	Non-Residential Commercial in Square Ft
Building A	65	
Bldgs B+G (Comm)BAKERY Restaurant General Office College Use	71	600 2,050 3,800 16,550
Building C Comm./Bldg C General Office Retail	81	8,825 1,675
Bldg D Garage*		23,000
Building E Building F Comm/Bldg E+F General Office	122	3,300
Building H Commercial	57	5,700
Building I Building I/Fitness* (residents and adjacent neighbors only) Daycare (75 total kids w approx 14 staff members)**	28	15,000 3,000
Building J/ Grnhse(accessory)*		3,000
Building K/CSC Building L/CHT	70 76	
Building M Office/Service	79	3,000

Building P	52	
Retail		1,300
Building Q	34	
Bldg R - 42 Room Hotel		33,000
TOTAL REQ'D PARKING:		
Total Residential (in Units):		735
Total Non-Residential (in SF):		123,800

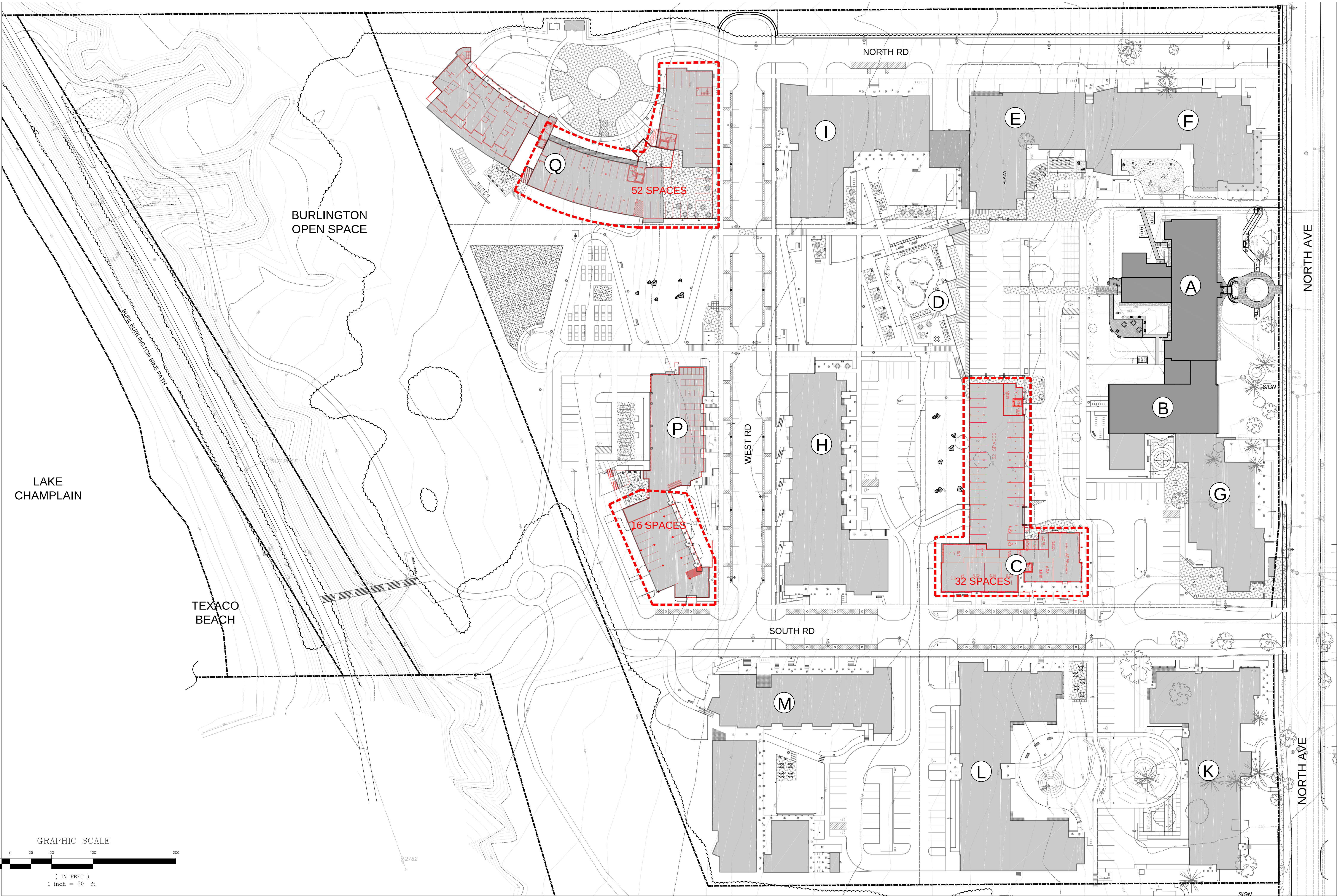
NON-RESIDENTIAL SUMMARY		
	82,800	sf/commercial space
	41,000	*sf/non-residential + support space
	123,800	sf TOTAL NON-RESIDENTIAL

** this is a conservative "guesstimate", based on 40 children at a staff rate of 1:4 and 35 children at a staff rate of 1:10

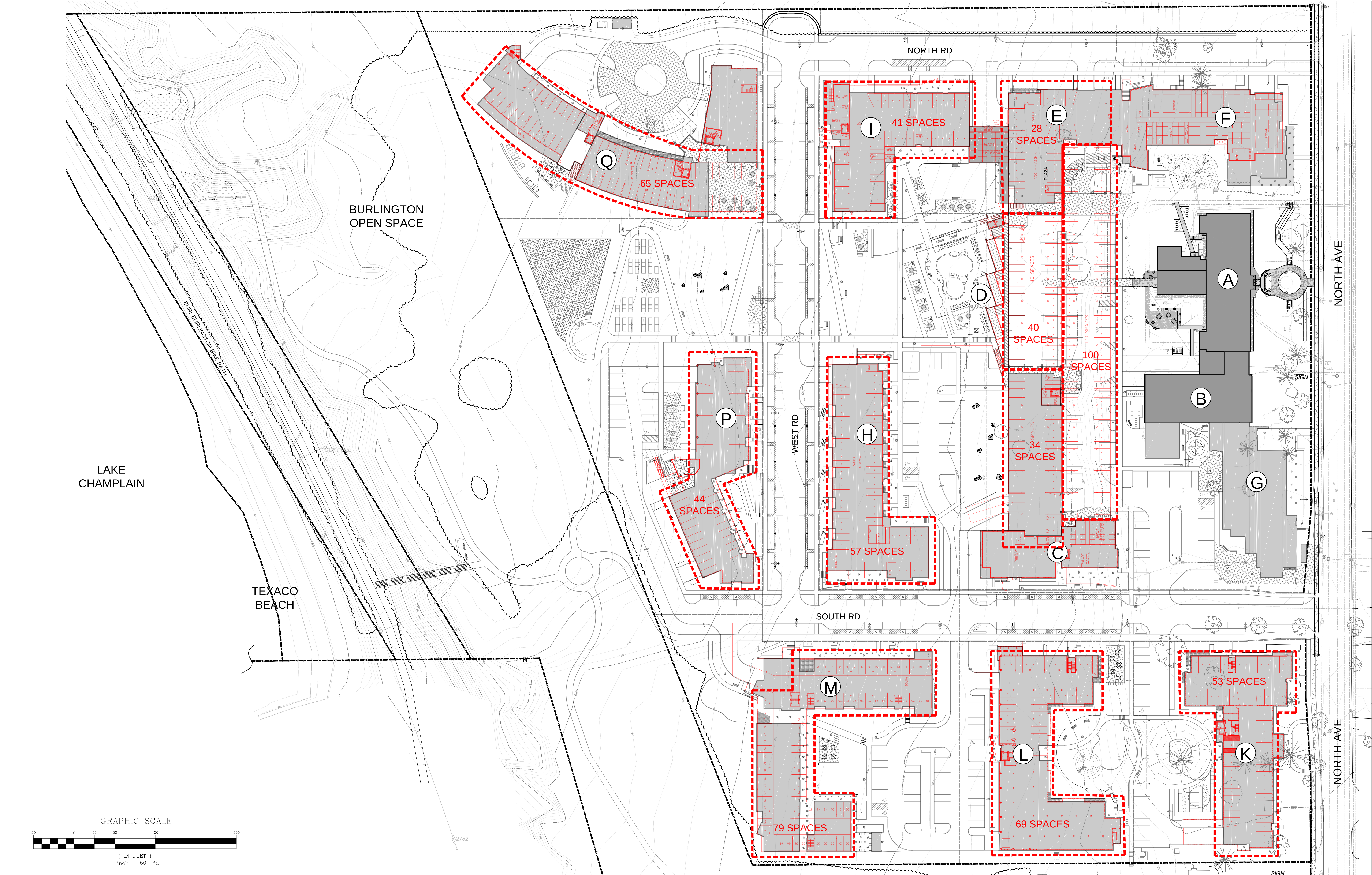
\\SSS\projects\active Projects\Burlington College 1321\Draw-CR-Masterplan\EXHIBITS\CR-EX PARKING.dwg, 1/20/2017 3:54:09 PM



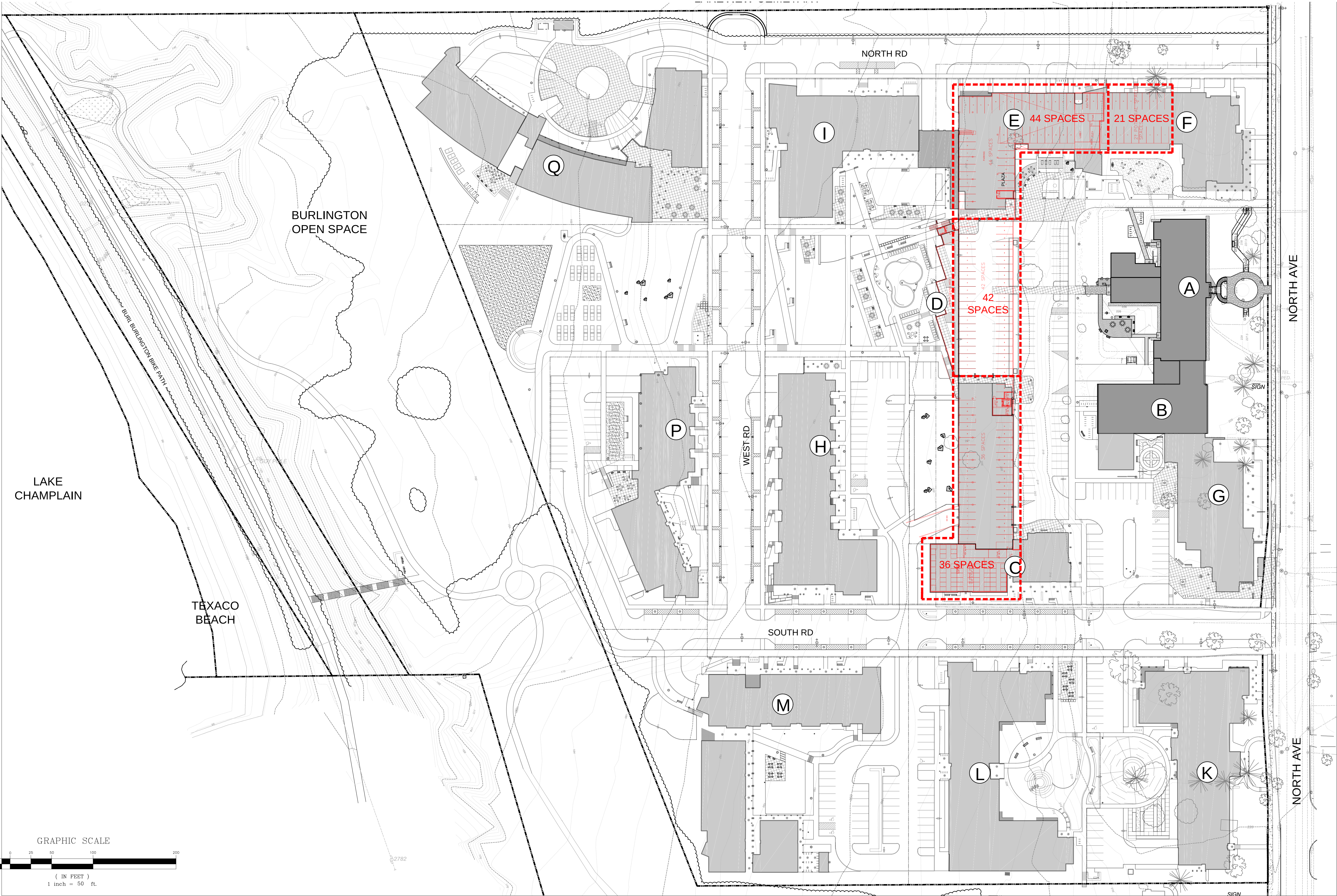
\\SSS\projects\active Projects\Burlington College 1321\Draw-CR-Masterplan\EXHIBITS\CR-EX PARKING.dwg, 1/20/2017 3:34:19 PM

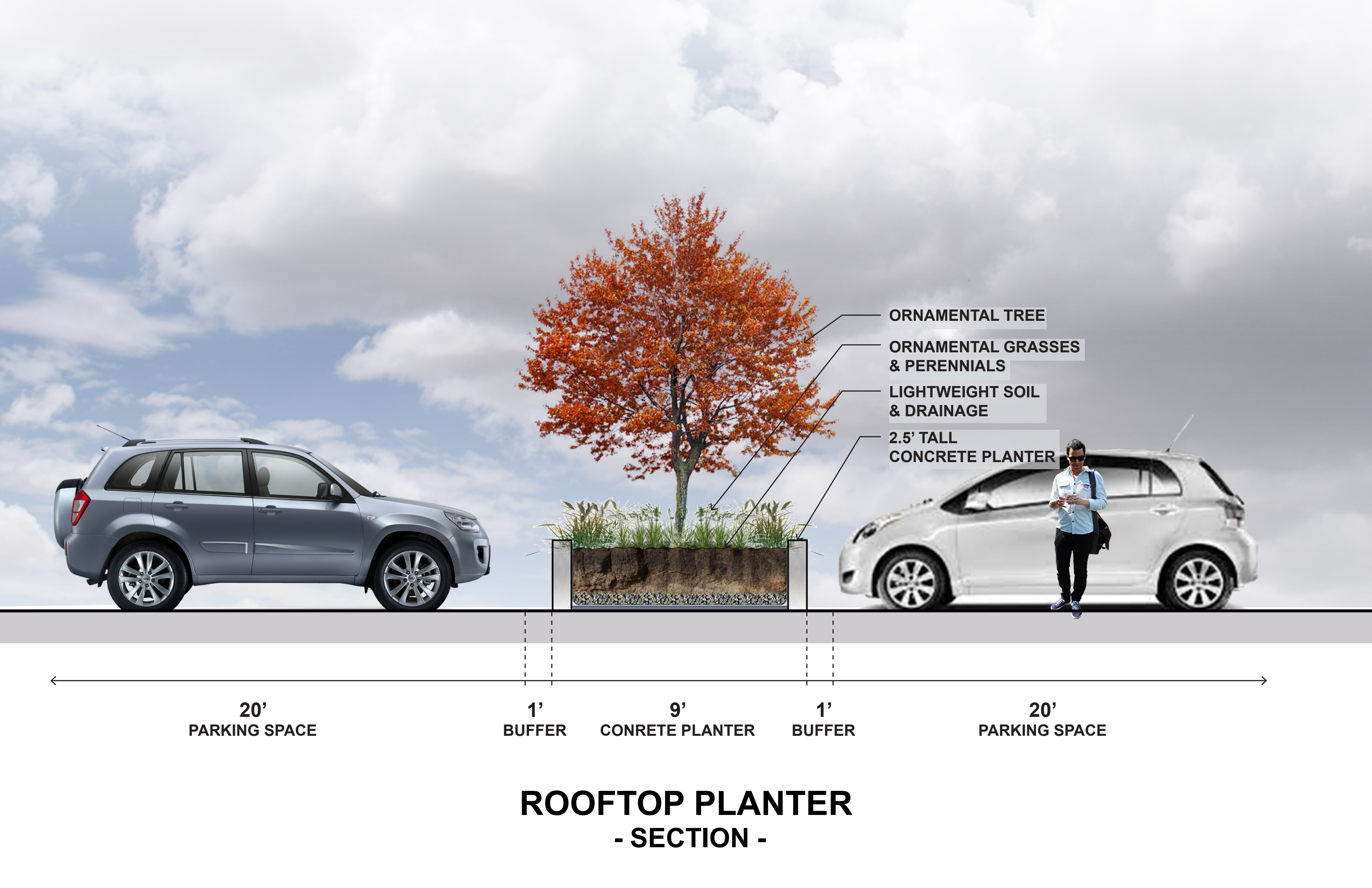


\\SSS\projects\active Projects\Burlington College 1321\Draw-CR-Masterplan\EXHIBITS-CR-E1 PARKING.dwg, 1/20/2017 3:34:29 PM



\\SSS\projects\active Projects\Burlington College 1321\Draw-CR-Masterplan\EXHIBITS\CR-EX PARKING.dwg, 1/20/2017 3:24:39 PM





ORNAMENTAL TREE

ORNAMENTAL GRASSES
& PERENNIALS

LIGHTWEIGHT SOIL
& DRAINAGE

2.5' TALL
CONCRETE PLANTER

20'
PARKING SPACE

1'
BUFFER

9'
CONCRETE PLANTER

1'
BUFFER

20'
PARKING SPACE

ROOFTOP PLANTER - SECTION -

LAKEVIEW CEMETARY

SUN ANGLE CALCULATION DATA FOR PROJECT LOCATION

LONGITUDE: 73° 13' 41.5" WEST
LATITUDE: 44° 29' 26.9" NORTH
CALCULATION DATE: JUNE 21, 2017
ELEVATION: 200'
TIME: SOLAR NOON (12:24 PM EST)

RESULTING SUN ALTITUDE ANGLE: 66.20°

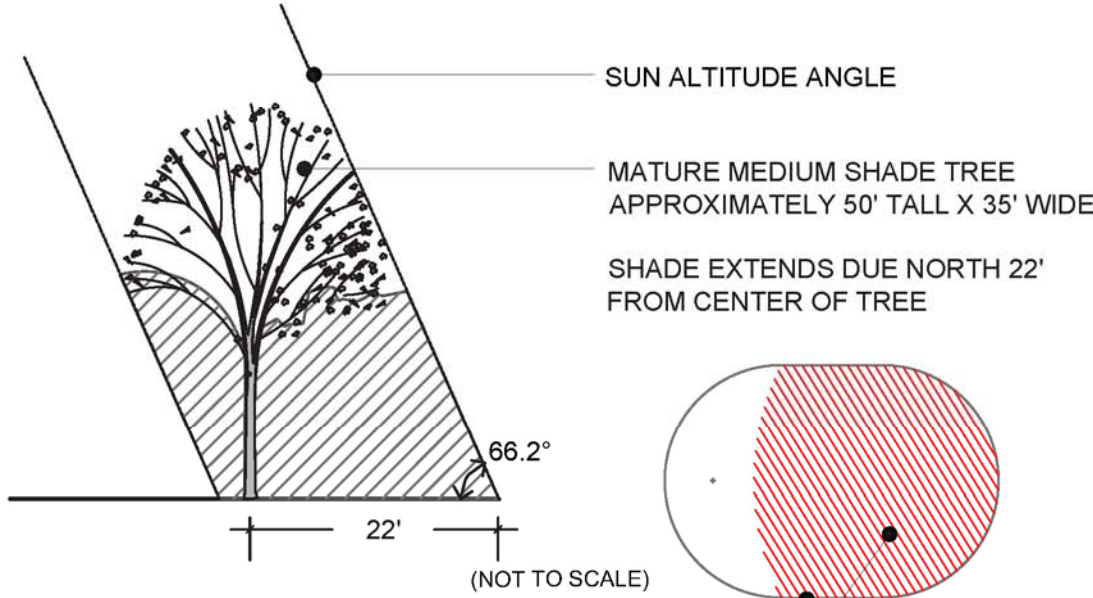
SHADE CALCULATIONS: Plant Sizes and Shadow Offset

Tree Type	Mature Height	Mature Canopy Size	Shadow Offset
Large Deciduous	65'	40'	28.7'
Medium Deciduous	50'	30'	22.0'
Small Deciduous	30'	20'	13.2'
Ornamental Deciduous	15'	10'	7.5'
Large Coniferous	65'	25'	28.7'
Medium Coniferous	40'	15'	17.6'
Small Coniferous	20'	7'	8.8'

All non-conifer tree shadows calculated at a limbed up height of 20'

Building	Height	Bldg Elev.	Shadow Offset
C	65.5'	281'	28.8'
C	71.5'	287'	31.5'
C	54.5'	270'	24.0'

EXAMPLE:

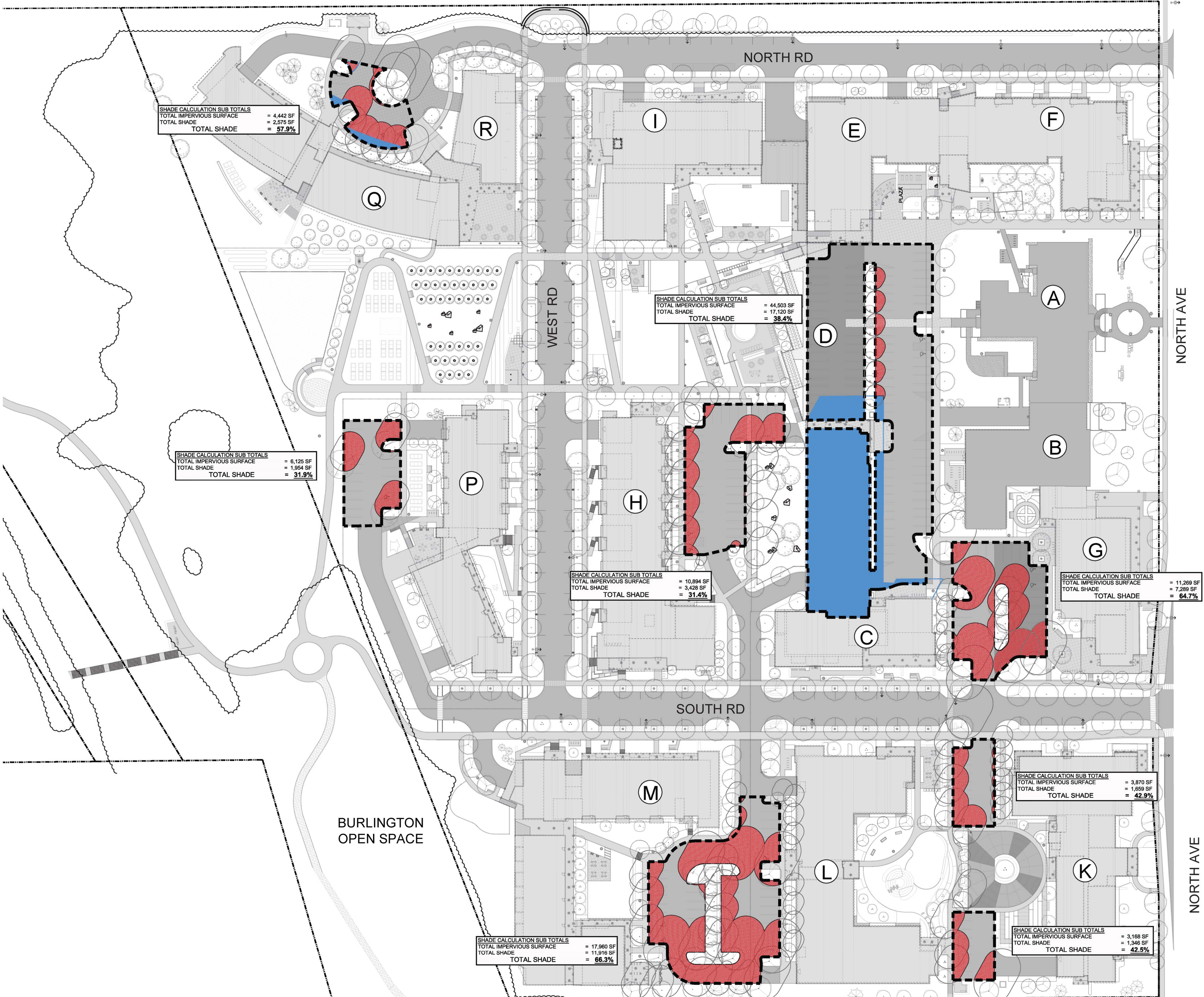
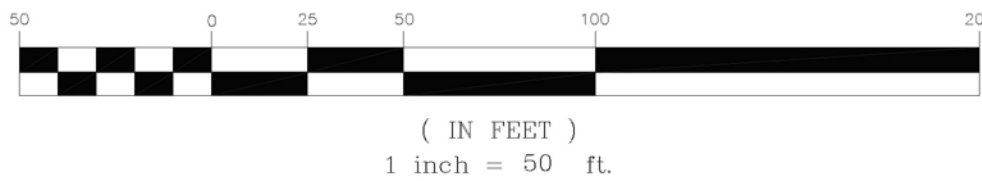


SHADE FROM TREE CANOPY
SHADE FROM BUILDING

OVERALL SHADE CALCULATION TOTALS

TOTAL IMPERVIOUS SURFACE IN PARKING LOT	= 98,759 SF
TOTAL SHADE FROM MATURE TREE HEIGHTS LOT	= 44,130 SF
TOTAL SHADE ON SITE	= 44.7%
TOTAL SHADE REQUIRED	= 30%

GRAPHIC SCALE



**MEMO OUTLINING REVISED DRAWING SUBMISSIONS FOR CAMBRIAN RISE
311-375 NORTH AVENUE
COA LEVEL II/MAJOR IMPACT APPLICATION**

TO: Scott Gustin + Mary O'Neil
Principal Planners, Burlington Planning + Zoning
FROM: VLCBTV Parkland, LLC + BC Community Housing, LLC
DATE: January 24, 2017
RE: COA Level II, Major Impact Application

Please accept the enclosed packet of documents for review of our proposed PUD development consisting of 10 residential and mixed use buildings containing approximately 735 residential units and approximately 83,000sf of commercial space located at 311-375 North Avenue.

Our OneDrive Folders Include:

- I. REVISED Engineering
- II. REVISED Landscape Plans
 - a. Additional Documents Subfolder
- III. REVISED Architecture
- IV. Capacity/Ability to Serve Letters
- V. Traffic Study + Parking
- VI. CR Application Support Documents
- VII. Support Images

THE FOLLOWING KEY CORRESPONDS TO THE ABOVE FOLDERS:

**I. REVISED Engineering Folder
CEA Sheet List**

Sheet Number + Sheet Title		Original Submission Date	Current/ Revision Date
P1	Subdivision Plat	"Aug. 29, 2016"	1/12/2017
C1.0	Existing Conditions Overall Site Plan	"Jan. 2017"	1/4/2017
C1.1	Existing Conditions Partial Site Plan	"Jan. 2017"	1/4/2017
C1.2	Existing Conditions Partial Site Plan	"Jan. 2017"	1/4/2017
C1.3	Existing Conditions Partial Site Plan	"Jan. 2017"	1/4/2017
C1.4	Existing Conditions Test Pit /Infiltration Monitoring Well Location Plan	"Jan. 2017"	1/4/2017
C1.5	Existing Conditions Partial Site Plan	"Jan. 2017"	1/4/2017
C2.0	Proposed Conditions Overall Site Plan	"Jan. 2017"	1/4/2017
C2.1	Proposed Grading + Drainage Plan - NW Quadrant	"Jan. 2017"	1/4/2017
C2.2	Proposed Grading + Drainage Plan - NE Quadrant	"Jan. 2017"	1/4/2017
C2.3	Proposed Grading + Drainage Plan - SE Quadrant	"Jan. 2017"	1/4/2017
C2.4	Proposed Grading + Drainage Plan - SW Quadrant	"Jan. 2017"	1/4/2017
C2.5	Proposed Grading Plan - Building 'K' Access	"Jan. 2017"	1/4/2017
C2.6	Proposed Utility Plan - Overall	"Jan. 2017"	1/4/2017
C2.7	Proposed Utility Plan - Northwest Quadrant	"Jan. 2017"	1/4/2017

C2.8	Proposed Utility Plan - Northeast Quadrant	"Jan. 2017"	1/4/2017
C2.9	Proposed Utility Plan - South Quadrant	"Jan. 2017"	1/4/2017
C3.0	Proposed Road + Utility Profile - North Cambrian Drive	"Jan. 2017"	1/4/2017
C3.1	Proposed Road + Utility Profile - South Cambrian Drive	"Jan. 2017"	1/4/2017
C3.2	Proposed Road + Utility Profile - West Cambrian Drive	"Jan. 2017"	1/4/2017
C3.3	Proposed Road + Utility Profile - Misc.	"Jan., 2017"	1/4/2017
C4.0	Road Section Location Plan	"Jan., 2017"	1/4/2017
C4.1	Road Section - South Cambrian Drive	"Jan., 2017"	1/4/2017
C4.2	Road Section - West Cambrian Drive	"Jan., 2017"	1/4/2017
C4.3	Road Section - North Cambrian Drive	"Jan., 2017"	1/4/2017
C5.0	Signage + Striping Plan	"Jan., 2017"	1/4/2017
C5.1	Signage + Striping Plan	"Jan., 2017"	1/4/2017
C5.2	Signage + Striping Plan	"Jan., 2017"	1/4/2017
C6.0	EPSC - Existing Conditions Overall Site Plan	"Jan., 2017"	1/4/2017
C6.1	EPSC - Northwest Quadrant	"Jan., 2017"	1/4/2017
C6.2	EPSC - Northeast Quadrant	"Jan., 2017"	1/4/2017
C6.3	EPSC - Southeast Quadrant	"Jan., 2017"	1/4/2017
C6.4	EPSC - Southwest Quadrant	"Jan., 2017"	1/4/2017
C6.5	EPSC Narrative	"Jan., 2017"	1/4/2017
C6.6	EPSC Narrative	"Jan., 2017"	1/4/2017
C6.7	EPSC Details & Specifications	"Jan., 2017"	1/4/2017
C6.8	EPSC Details & Specifications	"Jan., 2017"	1/4/2017
C6.9	EPSC Details & Specifications	"Jan., 2017"	1/4/2017
C6.10	Construction Phasing - Overall Plan	"Jan., 2017"	1/4/2017
C6.11	Construction Phase 'A'	"Jan., 2017"	1/4/2017
C6.12	Construction Phase 'B'	"Jan., 2017"	1/4/2017
C6.13	Construction Phase 'C'	"Jan., 2017"	1/4/2017
C6.14	Construction Phase 'D'	"Jan., 2017"	1/4/2017
C6.15	Construction Phase 'E'	"Jan., 2017"	1/4/2017
C6.16	Construction Phase 'F'	"Jan., 2017"	1/4/2017
C7.0	Site Details	"Jan., 2017"	1/4/2017
C7.1	Site Details	"Jan., 2017"	1/4/2017
C7.2	Storm Details	"Jan., 2017"	1/4/2017
C7.2A	Storm Details	"Jan., 2017"	1/4/2017
C7.2B	Phase 1 - Proposed Infiltration Pond	"Jan., 2017"	1/4/2017
C7.3	Sewer Details	"Jan., 2017"	1/4/2017
C7.4	Pump Station Plan & Section	"Jan., 2017"	1/4/2017
C7.5	Pump Station Specifications	"Jan., 2017"	1/4/2017
C7.6	Water Details	"Jan., 2017"	1/4/2017
C7.7	Misc. Details	"Jan., 2017"	1/4/2017
C8.0	Specifications	"Jan., 2017"	1/4/2017
C8.1	Specifications	"Jan., 2017"	1/4/2017
C8.2	Specifications	"Jan., 2017"	1/4/2017
C8.3	Specifications	"Jan., 2017"	1/4/2017
C8.4	Specifications	"Jan., 2017"	1/4/2017
C8.5	Specifications	"Jan., 2017"	1/4/2017

II. REVISED Landscape Plans Folder
T.J. Boyle Associates Sheet List

Sheet Number	Sheet Title	Submission Date	Revision Date
L-001	KEYPLAN	11/23/2016	1/4/2017
L-101	STREET SECTIONS	11/23/2016	1/4/2017
L-201	HARDSCAPE PLAN - ADEFI	11/23/2016	1/4/2017
L-202	HARDSCAPE PLAN - BGCH	11/23/2016	1/4/2017
L-203	HARDSCAPE PLAN - KL	11/23/2016	1/4/2017
L-204	HARDSCAPE PLAN - MN	11/23/2016	1/4/2017
L-205	HARDSCAPE PLAN - OP	11/23/2016	1/4/2017
L-206	HARDSCAPE PLAN - Q	11/23/2016	1/4/2017
L-207	HARDSCAPE PLAN - S & N ROAD	11/23/2016	1/4/2017
L-208	HARDSCAPE PLAN - W ROAD	11/23/2016	1/4/2017
L-401	LIGHTING PLAN - ADEFI	11/23/2016	1/4/2017
L-402	LIGHTING PLAN - BGCH	11/23/2016	1/4/2017
L-403	LIGHTING PLAN - KL	11/23/2016	1/4/2017
L-404	LIGHTING PLAN - MN	11/23/2016	1/4/2017
L-405	LIGHTING PLAN - OP	11/23/2016	1/4/2017
L-406	LIGHTING PLAN - Q	11/23/2016	1/4/2017
L-407	LIGHTING PLAN - S & N ROAD	11/23/2016	1/4/2017
L-408	LIGHTING PLAN - WEST ROAD	11/23/2016	1/4/2017
L-500	PLANTING SCHEDULE	11/23/2016	1/4/2017
L-501	PLANTING PLAN - ADEFI	11/23/2016	1/4/2017
L-502	PLANTING PLAN - BGCH	11/23/2016	1/4/2017
L-503	PLANTING PLAN - KL	11/23/2016	1/4/2017
L-504	PLANTING PLAN - MN	11/23/2016	1/4/2017
L-505	PLANTING PLAN - OP	11/23/2016	1/4/2017
L-506	PLANTING PLAN - Q	11/23/2016	1/4/2017
L-507	PLANTING PLAN - S & N ROAD	11/23/2016	1/4/2017
L-508	PLANTING PLAN - W ROAD	11/23/2016	1/4/2017
L-600	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-601	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-602	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-603	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-604	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-605	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-606	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-607	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-608	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-609	HARDSCAPE DETAILS	11/23/2016	1/4/2017
L-700	PLANTING DETAILS - TYPICAL	11/23/2016	1/4/2017
L-701	PLANTING DETAILS - GREEN STREET	11/23/2016	1/4/2017
L-EX1	EXHIBIT - SHADING CALCULATIONS	11/23/2016	1/4/2017
L-EX2	EXHIBIT - FIRE TRUCK ACCESS	11/23/2016	1/4/2017
L-EX3	EXHIBIT - BUILDING HEIGHTS	11/23/2016	1/4/2017
L-EX4	EXHIBIT - PHASING PLAN	11/23/2016	1/4/2017

Subfolder:

Additional Documents:

- i. 1.03.17 50th Scale Masterplan (depicts Masterplan w grades)
- ii. 1.17.17 Rendered Site Plan
- iii. 1.20.17 Parking Exhibits (also located in V. Traffic Studies + Parking file)
 1. EX5a – Surface Parking
 2. EX5b – Plaza Level Parking
 3. EX5c – P1 Parking (Level 1 below grade)
 4. EX5d – P2 Parking (Level 2 below grade)
- iv. 1.20.17 Rooftop Planting
- v. 1.20.17 Shading Exhibit
- vi. Cemetery Access Plan
- vii. Overall Site Plan + Tree Survey
- viii. Site Exhibits
 1. Play Features
 2. Bike Amenities
 3. Commercial Space
 4. Snow Storage
 5. Wall Types
 6. Wayfinding
 7. North Road – Proposed Section

III. REVISED Architecture Folder

Duncan Wisniewski Architecture Sheet List

Sheet Number	Sheet Title	Submission Date	Revision Date
CD-1	BLDG CD PLANS	11/23/2016	1/4/2017
CD-2	BLDG CD ELEVATIONS	11/23/2016	1/4/2017
CD-3	BLDG CD PERSPECTIVES	11/23/2016	1/4/2017
BG-1	BLDG BG PLANS	11/23/2016	1/4/2017
BG-2	BLDG BG ELEVATIONS	11/23/2016	1/4/2017
BG-3	BLDG BG PERSPECTIVES	11/23/2016	1/4/2017
EF-1	BLDG EF PLANS	11/23/2016	1/4/2017
EF-2	BLDG EF ELEVATIONS	11/23/2016	1/4/2017
EF-3	BLDG EF PERSPECTIVES	11/23/2016	1/4/2017
H-1	BLDG H PLANS	11/23/2016	1/4/2017

H-2	BLDG H ELEVATIONS	11/23/2016	1/4/2017
H-3	BLDG H PERSPECTIVES	11/23/2016	1/4/2017
I-1	BLDG I PLANS	11/23/2016	1/4/2017
I-2	BLDG I ELEVATIONS	11/23/2016	1/4/2017
I-3	BLDG I PERSPECTIVES	11/23/2016	1/4/2017
K-1	BLDG K PLANS	11/23/2016	1/4/2017
K-2	BLDG K ELEVATIONS	11/23/2016	1/4/2017
K-3	BLDG K PERSPECTIVES	11/23/2016	1/4/2017
K-4	BLDG K PERSPECTIVES	11/23/2016	1/4/2017
L-1	BLDG L PLANS	11/23/2016	1/4/2017
L-2	BLDG L ELEVATIONS	11/23/2016	1/4/2017
L-2.1	BLDG L PERSPECTIVES	11/23/2016	1/4/2017
L-3.1	BLDG L PERSPECTIVES	11/23/2016	1/4/2017
L-3.2	BLDG L PERSPECTIVES	11/23/2016	1/4/2017
L-3.3	BLDG L PERSPECTIVES	11/23/2016	1/4/2017
L-3.4	BLDG L PERSPECTIVES	11/23/2016	1/4/2017
M-1	BLDG M PLANS	11/23/2016	1/4/2017
M-2	BLDG M ELEVATIONS	11/23/2016	1/4/2017
M-3	BLDG M PERSPECTIVES	11/23/2016	1/4/2017
P-1	BLDG P PLANS	11/23/2016	1/4/2017
P-2	BLDG P ELEVATIONS	11/23/2016	1/4/2017
P-3	BLDG P PERSPECTIVES	11/23/2016	1/4/2017
QR-1	BLDG Q PLANS	11/23/2016	1/4/2017
QR-2	BLDG Q ELEVATIONS	11/23/2016	1/4/2017
QR-3	BLDG Q PERSPECTIVES	11/23/2016	1/4/2017

IV. Capacity/Ability to Serve Letters

1. Fire Dept. Ability to Serve letter (1.09.17)
2. Parks Ability to Serve letter for Cambrian Rise
3. Police Ability to Serve letter (01.13.17)
4. Water/Sewer Ability to Serve letter (with 1.4.17 attachment)

V. Traffic Study + Parking

1. 12.21.16 Cambrian Traffic Impact Assessment (RSG)
2. 12.28.16 Supplementary Traffic Memo (RSG)
3. Parking Summary with Bike Parking (with the following tabs):
 - a. CR Use Breakdown
 - b. Bike Parking
 - c. CR Car Parking Requirements
 - d. Car Parking Supplied
4. 1.20.17 Parking Exhibits (also located in II. Revised Landscape Plans, Subfolder: Add'l Documents)
 - a. EX5a – Surface Parking
 - b. EX5b – Plaza Level Parking
 - c. EX5c – P1 Parking (Level 1 below grade)
 - d. EX5d – P2 Parking (Level 2 below grade)

VI. CR Application Support Documents:

1. 1.3.17 Lot Coverages
2. 1.4.17 Cambrian Rise Narrative
3. 1.10.17 Inclusionary Housing Statement (replaces 11.23.16 Inclusionary Housing Statement)
4. 1.18.17 Use Summary for Cambrian Rise
5. BCCH Sequencing Plan
6. CR Schoolkids Calculations
7. Development Agreement
8. Historic Preservation Letter from Sue Jamele

VII. Support Images

8. 1.17.17 Animation of Cambrian Rise Buildings
9. 1.20.17 Images 1-42 with Key (locates each view on the Cambrian Rise site plan)
10. Images 1 through 42 as labelled/captioned (individual images of 1.20.17 Images 1-41 with Key)

CAMBRIAN RISE: UNIT COUNTS

+ UNIT BREAKDOWNS

	MICRO >400SF	STUDIO	1BDRM	2BDRM	3BDRM	Commercial Space	TOTAL UNITS
BLDG A		17	48				65
BLDG C		6	61	6	8	10500	81
BLDG D						GARAGE	0
BLDG E+F	21	60	15	25	1	3300	122
BLDG B+G		59	10	2		23000	71
BLDG H		1	18	38		5700	57
BLDG I				20	8	18000	28
BLDG J						GREENHOUSE	0
BLDG K (seniors)			63	7			70
BLDG L			36	33	7		76
BLDG M+N		4	7	42	26	3000	79
BLDG O+P			24	28		1300	52
BLDG Q				24	10		34
BLDG R						33000	
TOTALS:	21	147	282	225	60		735

*there are actually more micros within the studio total

School Enrollment	Projected School Enrollment for Cambrian Rise at Buildout (based on				(Based on Existing Child Headcounts)	
	City's Schools Ratio				Alternate Calculation:	CHT
					OUR/FRE PROJECTED	PROJECTED
	Studios	168	0	0		
	1 bdrm	219	0	0		
	2 bdrm	218	0.185	40	13	21
	3 bdrm	60	0.2	12	8	9
	TOTAL SCHOOLCHILDREN:			52.33	21	30
					TOTAL(Alt):	51

Building	Use	Type	Residential Unit Count	Non-residential Square Footage	Non-residential Primary	Non-residential Secondary	Non-res. Tertiary	No. Levels	Parking Spaces Provided
									Structured + Surface
<u>Burlington College Parcel</u>									
A	Residential	For Rent	65					5 Story	
B & G	Former College	For Rent/Sale	71	23,000	Prof./Trade School	Restaurant	Bakery	3 Story	
C	Multi-Use	For Rent	81	10,500	Office	Retail		5 Story	
D	Parking Garage	For Rent	-	23,000	Garage			3 Story	
E & F	Residential	For Rent	122	3,300	Office			5 Story	
Sub-total - College Parcel			339	59,800					
Relative Percentage (based upon building SF)						College Parcel Parking Total:			477 spaces
<u>BC Community Housing, LLC parcel</u>									
H	Residential	For Rent	57	5,700	Office			4 Story	91
I	Residential	For Rent	28	3,000	Daycare	Office		5 Story	41
I	Fitness	N/A		15,000	Fitness			Ground Fl	
J	Greenhouse	N/A		3,000	Greenhouse			1 Story	
K & L	CSC/CSC Residential	Sell Off	146					4 Story	179
M	Residential	For Sale	79	3,000	Retail	Office		4 Story	106
P	Residential	For Sale	52	1,300	Retail			4 Story	82
Q	Residential	For Sale	34					5 Story	75
R	Commercial		42	33,000	42 room Hotel				42
Sub-total - BCCH Parcel			396	64,000		BCCH + Non-Profit Parcel Parking Total:			616
Grand Totals			735	123,800					1093

PLAY FEATURES

NATURAL PLAYGROUND ELEMENTS



SCULPTURAL PLAYGROUND ELEMENTS

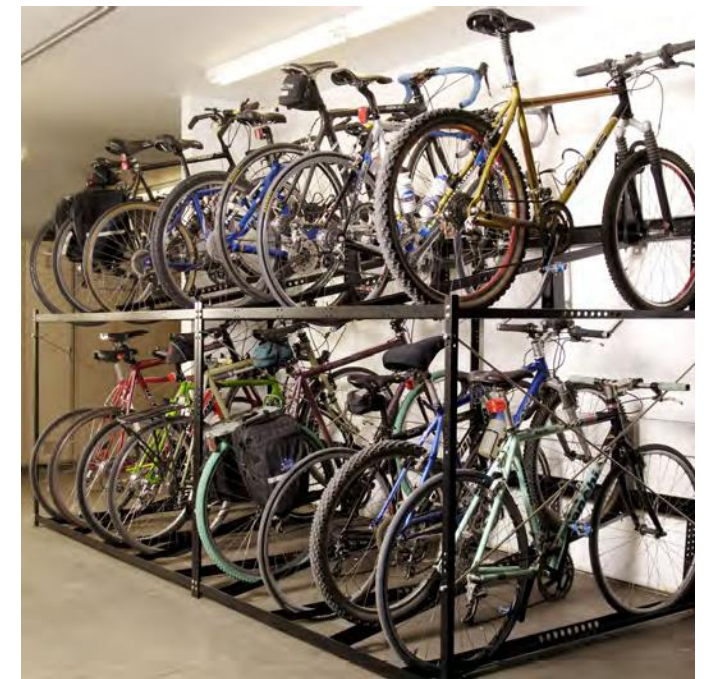


BIKE AMENITIES

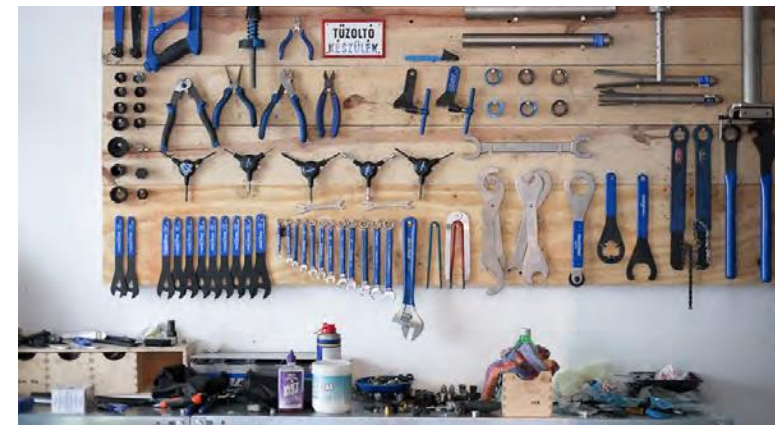
OUTDOOR BIKE PARKING



INDOOR BIKE STORAGE



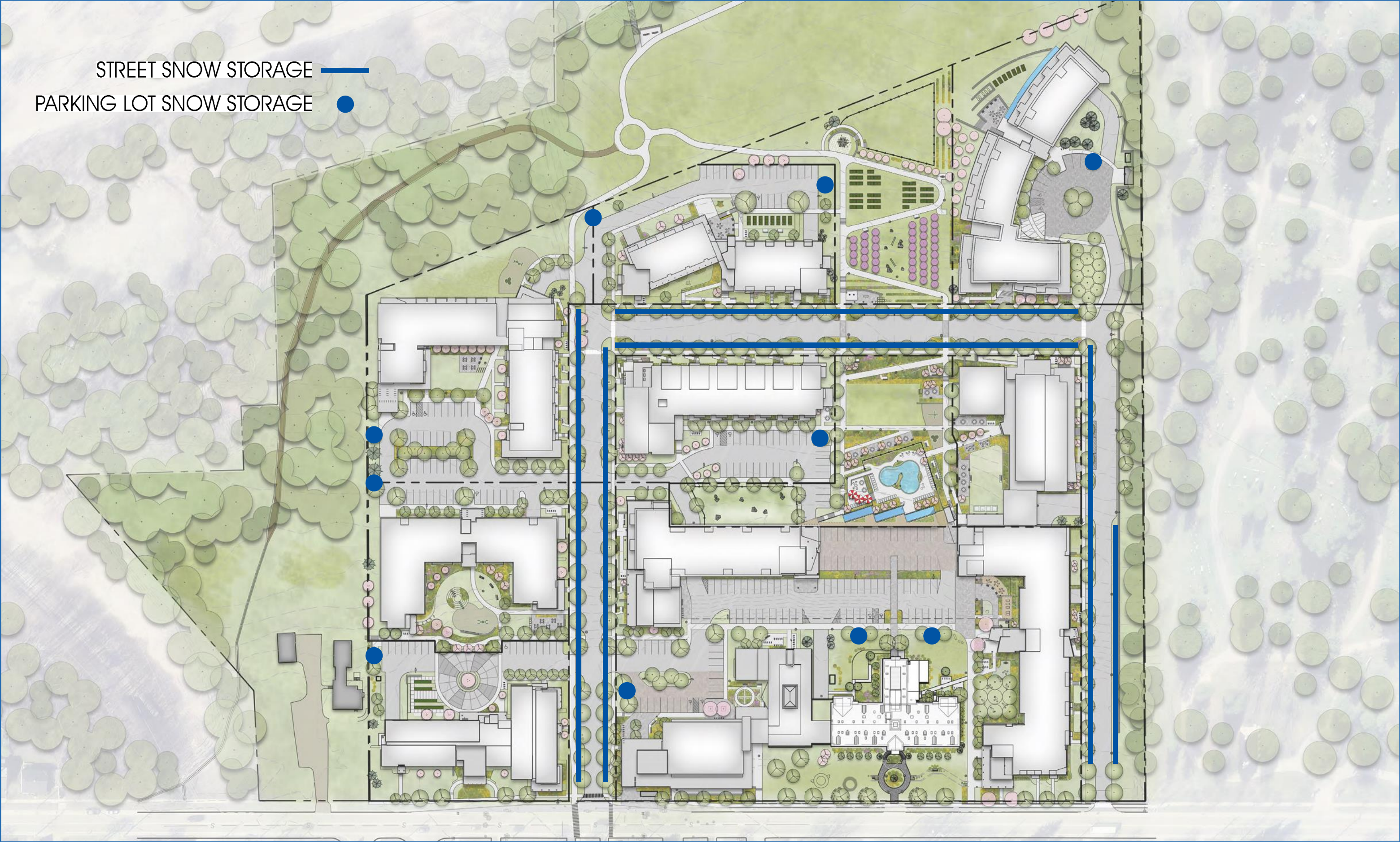
BIKE REPAIR
WORKSHOP
SPACE



COMMERCIAL SPACE



SNOW STORAGE



WALL TYPES

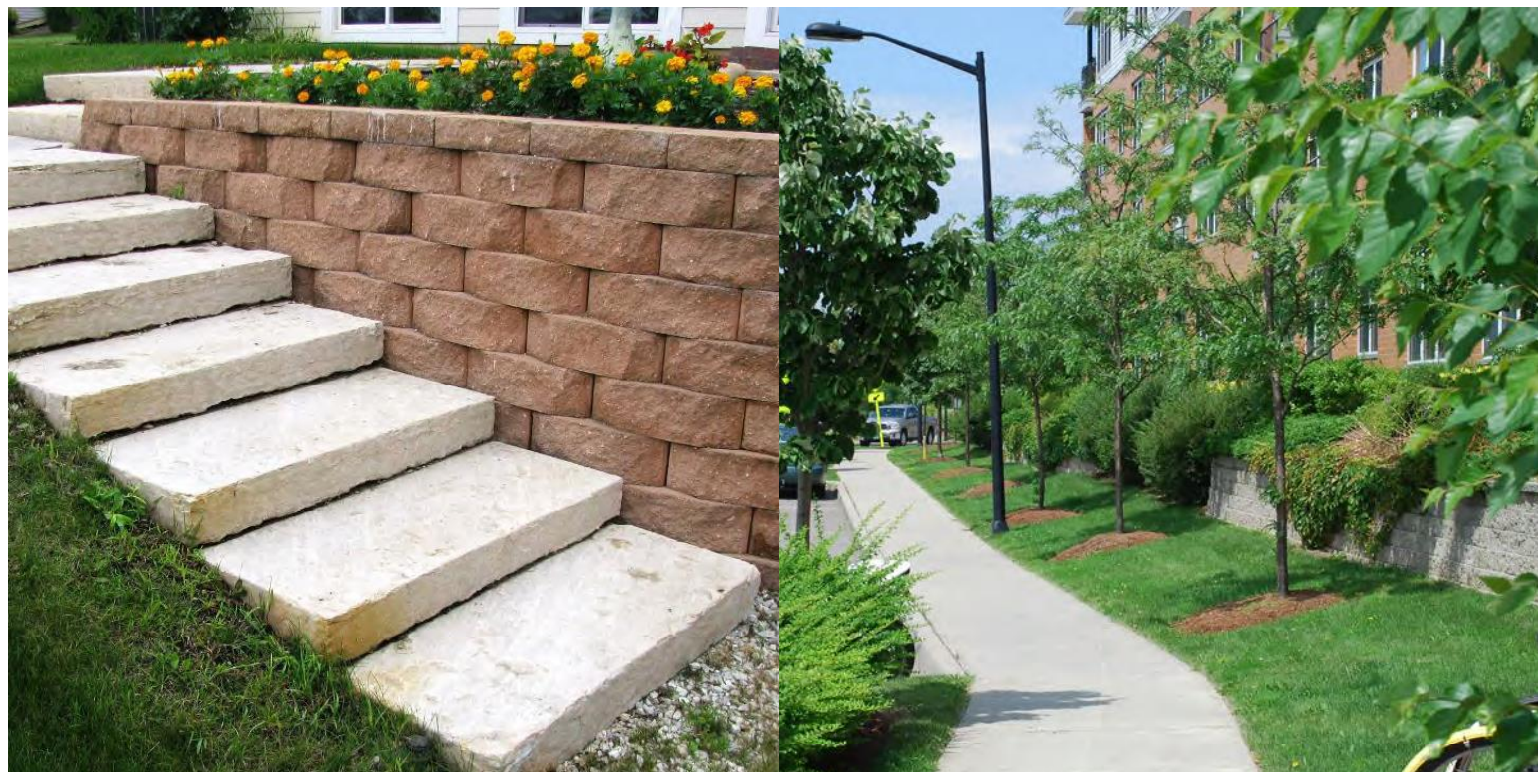
GABION



POURED CONCRETE WALL



CONCRETE BLOCK WALL

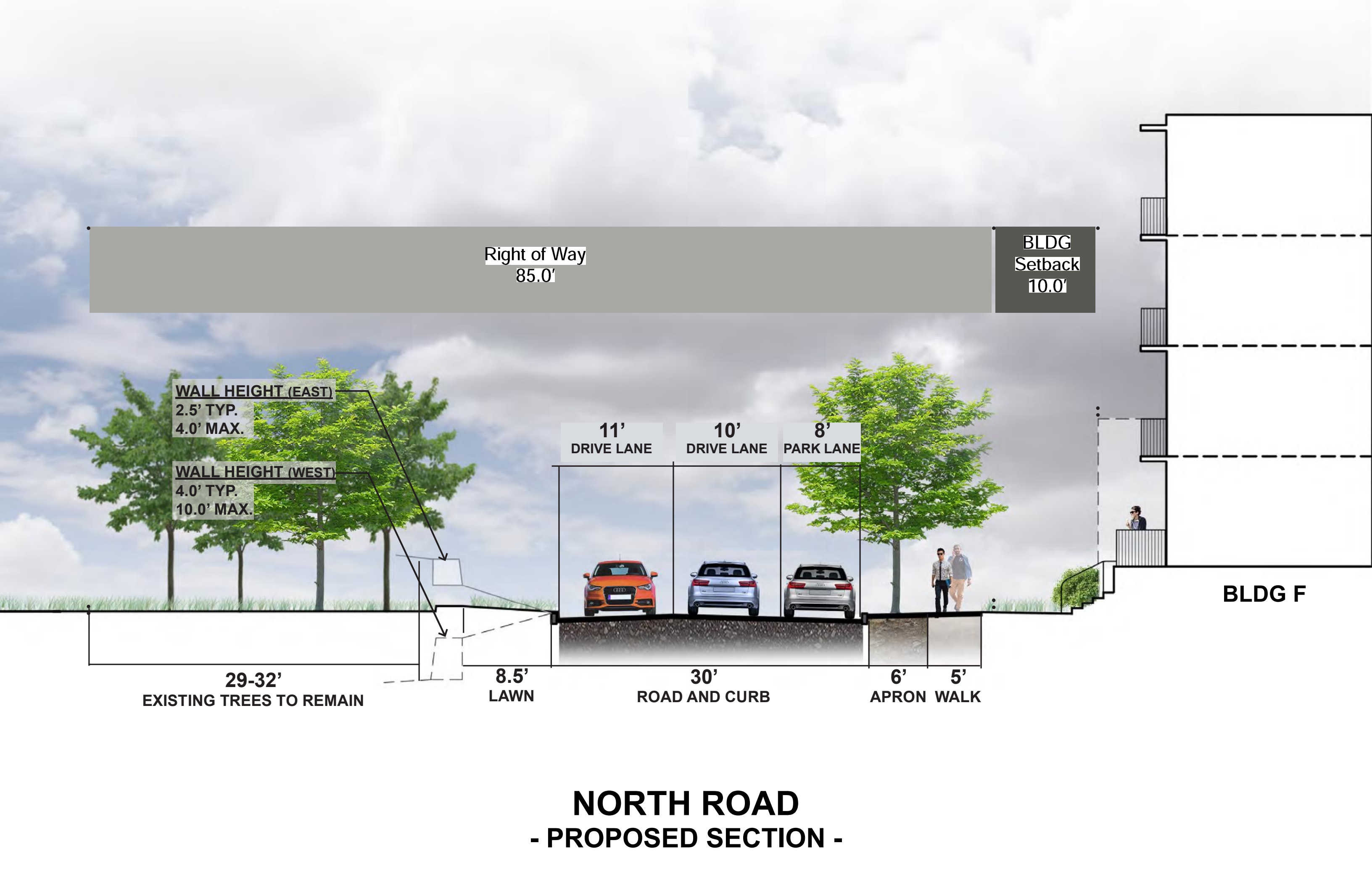


DRY-LAID STONE



WAYFINDING





Right of Way
85.0'

BLDG
Setback
10.0'

WALL HEIGHT (EAST)
2.5' TYP.
4.0' MAX.

WALL HEIGHT (WEST)
4.0' TYP.
10.0' MAX.

11'
DRIVE LANE

10'
DRIVE LANE

8'
PARK LANE

BLDG F

29-32'
EXISTING TREES TO REMAIN

8.5'
LAWN

30'
ROAD AND CURB

6' 5'
APRON WALK

NORTH ROAD
- PROPOSED SECTION -

Department of Planning and Zoning

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7142 (TTY)

David White, AICP, Director
Meagan Tuttle, AICP, Comprehensive Planner
Jay Appleton, GIS Manager
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, CFM, Associate Planner
Anita Wade, Zoning Clerk
vacant, Department Secretary



TO: Development Review Board
FROM: Scott Gustin & Mary O'Neil, Principal Planners
DATE: January 24, 2017
RE: 17-0623CA/MA; 329-375 North Avenue

=====

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: NAC-CR Ward: 4N

Owner/Applicant: BCCH, LLC & 375 North Ave, LLC / Eric Farrell

Request: Proposed development consisting of 11 buildings containing 735 residential units, approximately 45,000 sq. ft. of non-residential support/amenity space, approximately 40,000 sq. ft. of neighborhood commercial spaces and 1,093 parking spaces.

Applicable Regulations:

Article 3 (Applications and Reviews), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines), Article 8 (Parking), Article 9 (Inclusionary and Replacement Housing), Article 10 (Subdivision), and Article 11 (Planned Unit Development)

Background Information:

Known as Cambrian Rise, the application proposes development with mixed commercial and residential uses, related buildings and infrastructure across approximately 21.65 acres (per plan BA1) at 329-375 North Avenue. The total unit count has fluctuated somewhat and is presently at 735 residential units, inclusive of the 65 units already permitted in the former orphanage building.

During the summer and fall of 2016, this project underwent several sketch plan reviews with the Conservation Board, Design Advisory Board, and Development Review Board. Conservation Board comments centered on stormwater management and commended the proposed management of stormwater management onsite, rather than utilization of the city system. The Design Advisory Board reviewed the sketch plans twice. Doing so allowed the DAB an opportunity to get an overview of the proposal; comments were limited to questions about the overall development, and a desire to cut back the hard edges of the buildings along North Avenue as they abutted smaller structures (to the south). The Board acknowledged the large scope of the project, and their limited time or opportunity to discuss any particular building or part of the plan in any depth. They requested additional work sessions during the formal review process. The Development Review Board also reviewed the sketch plans twice. DRB comments discouraged shared pedestrian/bike use of sidewalks, noted concerns about the consistently large massing of the proposed structures, particularly near the orphanage, suggested reduction in surface parking, and encouraged strengthening of the streetscape.

Following the final sketch plan reviews, the project was revised to address comments from the boards and the public. Formal application for this project was made December 1, 2016.

The Conservation Board reviewed this application December 19, 2016. The Board unanimously recommended approval of the project as presented. In their recommendation, the Board noted their appreciation of the stormwater management design and that the applicants joined CATMA as part of their transportation management initiatives.

The Design Advisory Board reviewed this project several times and ultimately recommended approval with a 5-0-0 vote. The DAB recommended the following conditions:

1. Any ground-mounted or roof-mounted mechanical equipment shall be screened from view from the public way,
2. The handicapped accessible path leading to the waterfront bike path shall be constructed earlier than phase 10,
3. At Building C, the visible amount of retaining wall along the south side of the building shall be decreased through the use of earth berming and/or landscaping,
4. At Building C, the screening detail that is utilized at parking structures shall not be also utilized at commercial spaces,
5. At Building H, the entrance to the commercial space at the southwest corner of the building shall be made more prominent and welcoming by the addition of more glazing,
6. At building I, the main residential entrance facing west shall be made more prominent, and the exterior stair at the northwest corner of the building that leads to a secondary entrance shall be made less prominent,
7. At building I, no rooftop mechanical equipment shall be located on the roof of the gymnasium due to the visibility of this roof from neighboring buildings,
8. At building M, the trash enclosure at the southeast corner of the building shall be made less dominant, such as by changing the material or color, and
9. At building Q, the stair tower at the northwest corner of the building shall be treated with similar cladding and screening materials as the main building, to improve the terminus view from North Road.

Revised project plans have been submitted to address, in part, the recommendations of the DAB. Some items remain outstanding as noted in these findings.

The City Council approved the new zoning district (NAC-CR) affecting this project area. Those standards and dimensional requirements apply to this review.

The project plans depict property lines presently under separate subdivision review. Preliminary plat approval was granted October 19, 2016. Final plat approval is required in order to finalize the proposed boundary lines.

The Development Review Board held an initial public hearing to review this application on January 17, 2017. The hearing focused on building design and site layout. The hearing was continued to address other items such as traffic, parking, inclusionary housing, etc.. These findings have been updated to reflect changes and additional information submitted since the January 17 hearing. Changes are redlined.

Previous zoning actions for this property are noted below.

- Zoning Permit 16-022CA; Remove slate roof and install copper. Approved January 2016.
- Zoning Permit 16-1077MP; Tree maintenance plan. Approved November 2015.
- Zoning Permit 16-007CA/MA; Convert orphanage to 63 residential units. Approved September 2015. Amended February 2016 to increase to 65 residential units and minor exterior alterations.
- Zoning Permit 15-0702LL; Lot line adjustment with 329 North Avenue. Approved December 2014. [Plat recorded 1/16/2015; Plat file 509C.]
- Zoning Permit 14-1286CA; Installation of CCTA bus shelter on Burlington College property. Approved June 2014.
- Zoning Permit 12-0706SN; replace existing non-conforming freestanding sign with new freestanding sign for Burlington College – Main Campus. Approved March, 2012.
- Zoning Permit 12-0121CA; Install rooftop air handler, five ac units, bike racks, and remove walls from garage. Approved August 11, 2011.
- Zoning Permit 11-0282CU; convert existing institutional office use and group home use to post-secondary school. No site or exterior building changes proposed. Approved November 2010.
- Zoning Permit 09-526CA; Demolish single car garage. Approved February 2009.
- Non-applicability of zoning permit requirements; continued use of existing group home. June 1998.
- Zoning Permit 92-096 / COA 092-016; Removal of existing wooden cross with installation of fiberglass statuary of St. Mary on top of Diocese building. Overall height to be 104' with exterior illumination to surround statue. Approved September 1991.
- Notice of selective landscape removal on west. No change in grade of site or drainage of runoff water. December 1991.
- Zoning Permit 79-352; install septic tank and seepage bed. July 1979.
- Zoning Permit 77-03; renovation of existing structure “St. Josephs Child Center” into office space and three apartments for Bishop and two priests. Approved January 1977.
- Zoning Permit 77-628; Convert St. Joseph’s Child Center into office building, three apartments and three guests’ rooms. Remove some windows and brick up openings. Install new windows. Erect 28’6” x 30’ addition and 32’ x 66’ addition. December 1976.

Recommendation: Continued review and continuation of public hearing to address the outstanding items noted in the findings below:

I. Findings

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

Section 3.5.6 (a) Conditional Use Review Standards

Approval shall be granted only if the DRB, after public notice and public hearing, determines that the proposed conditional use and associated development shall not result in an undue adverse effect on each of the following general standards:

1. *Existing or planned public utilities, facilities or services are capable of supporting the proposed use in addition to the existing uses in the area;*

New public streets and related infrastructure are included in this development. Even so, it is expected to have impacts on existing public utilities, facilities, and services. Burlington Electric Department and the Department of Public Works have both been extensively involved in the municipal review of this proposal since Technical Review Committee on June 9, 2016. BED has commented specifically for this zoning permit application that the Department is confident about the overall energy performance of the development. DPW has been even more extensively involved due to the array of new public infrastructure. ~~Final comments as to this application have not yet been received.~~ DPW submitted written comment relative to traffic impacts and needed transportation improvements on January 17, 2017. Additionally, DPW provided a water/sewer capacity letter affirming available municipal capacity on October 10, 2016. Municipal services are further addressed under item (b) 7 below. ~~(No finding possible)~~ **Affirmative finding if conditioned**

2. *The character of the area affected as defined by the purpose or purposes of the zoning district(s) within which the project is located, and specifically stated policies and standards of the municipal development plan;*

The subject properties, formerly comprising Burlington College, are located within the newly established Neighborhood Activity Center – Cambrian Rise (NAC-CR) zone. They are bordered on three sides by RCO and/or conserved lands. Across North Avenue, there is a strip of Residential Low Density zone comprised mostly of detached dwellings and a handful of nonresidential uses.

This project is transformative and will establish an entirely new character within the subject properties. As proposed, the intensity and diversity of uses is consistent with the intent of the NAC-CR zone. The zone is intended to create a new center for mixed use development that allows for a range of housing types and tenures and to accommodate a diverse range of complimentary commercial, institutional, and neighborhood-oriented retail and service uses. **(Affirmative finding)**

3. *The proposed use will not have nuisance impacts from noise, odor, dust, heat, and vibrations greater than typically generated by other permitted uses in the same zoning district;*

A variety of uses is included in the proposed development. They include:

- Residential (attached multi-family dwellings)
- Commercial bakery
- Restaurant
- General office
- College (post-secondary school)
- General retail (small < 4,000 sf)
- ~~Health club~~
- Large daycare

- Hotel

The proposed residential uses will not have nuisance impacts from noise, odor, dust, heat, and vibrations greater than that generated by other residential neighborhoods in the area. None of the non-residential uses are expected to generate exceptional nuisance impacts either. The impacts considered under this criterion are most typically associated with industrial uses – none are included in this project. **(Affirmative finding)**

4. *The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street designations and capacity; level of service and other performance measures; access to arterial roadways; connectivity; transit availability; parking and access; impacts on pedestrian, bicycle and transit circulation; safety for all modes; and adequate transportation demand management strategies;*

A comprehensive traffic analysis has been provided and addresses all of the typical key considerations such as traffic generation, intersection LOS, queues, sight lines, and safety. The Department of Public Works ~~is reviewing~~ has reviewed the traffic analysis and has ~~not yet~~ provided comment. ~~That department's comments are needed before anticipated traffic impacts on the city's transportation network can be fully understood.~~

The traffic study is predicated on 667 new residential units (this unit count reflects the net increase from the previously evaluated and permitted 65-unit conversion of the orphanage building, but is still 3 units shy of the actual net increase of 670 units [670+65 = 735]). Similarly, the sizes of the non-residential uses included in the traffic study do not mirror the sizes noted in the parking calculation table. ~~The applicants should be prepared to address this discrepancy and to what degree it is significant (or not).—A memorandum from the applicant's traffic engineer dated December 28, 2016 addresses these discrepancies with corrected numbers.~~

Not surprisingly, this project is expected to generate significant traffic. A daily total of ~~4,500~~ 4,620 vehicle trip ends is projected. AM peak hour is expected to generate ~~369~~ 381 vehicle trip ends, and PM peak hour is expected to generate ~~414~~ 425 vehicle trip ends. These traffic generation estimates assume 10% vehicular trip reduction due to transportation demand management measures. While a reduction may reasonably be expected, there is no apparent explanation of exactly why the reduction is expected to be 10%. Specific basis for this assumption is needed.

Extensive intersection analysis is included in the traffic study. Most intersection LOS remains unchanged by the project, although some worsen or even improve. The LOS figures assume recommended transportation improvements are in place (noted in Sec. 5.2, Congestion Analysis Assumptions). This assumption is significant and is contingent on Department of Public Works approval of public street alterations. Queue length analysis is also included and presumably carries the same assumptions. In most cases, queue lengths increased modestly by 2-3 vehicles.

The safety analysis within the study identified no high crash locations within immediate vicinity of the development.

Sight distance analysis found that sight distances along North Avenue relative to the project's new roads are more than double the standard (600 feet available vs. 280 feet standard). The signal warrant analysis found that a signal at the newly created intersection of North Avenue and the

project's "South Road" is warranted. Signal warrants are not triggered at the intersection with "North Road," but pedestrian crossing improvements are recommended.

In their January 17, 2017 review of the traffic analysis, DPW concurred with the recommendations and, in addition, articulated a number of requirements, suggestions, and general comments. Significant emphasis has been placed on pedestrian and bicycle safety and circulation. Rather than repeat the entirety of DPW's review, their January 17, 2017 letter will be incorporated by reference into these findings.

Traffic impact fees will be due to help fund capital improvements to the city's transportation infrastructure. (~~No finding yet possible~~**Affirmative finding if conditioned**)

and,

5. *The utilization of renewable energy resources;*

Utilization of renewable energy resources is included in this project. As proposed, the development will incorporate solar panels and geothermal heating. Building design and orientation is intended to maximize solar access. (**Affirmative finding**)

and,

6. *Any standards or factors set forth in existing City bylaws and city and state ordinances;*

This project was reviewed by the Technical Review Committee on June 9, 2016. Insofar as comments from that review pertained to zoning standards, they are noted in these findings. Discussions with affected city departments are ongoing. Separate Act 250 review will likely be required.

(b) Major Impact Review Standards

1. *Not result in undue water, air, or noise pollution;*

A comprehensive stormwater management plan has been developed for this project. Minimal water quality impacts on Lake Champlain are anticipated as a result. Details are addressed under Sec. 5.5.3.

Air and noise pollution are expected to be minimal. As noted above, no industrial uses typically associated with air or noise pollution are included in the project plans. (**Affirmative finding**)

2. *Have sufficient water available for its needs;*

See Sec. 3.5.6 (a) 1.

3. *Not unreasonably burden the city's present or future water supply or distribution system;*

See Sec. 3.5.6 (a) 1.

4. *Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;*

See Sec. 5.5.3.

5. *Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;*

See Sec. 3.5.6 (a) 4.

6. Not cause an unreasonable burden on the city's ability to provide educational services;
Single detached residential units are commonly the most significant per-unit dwelling type for families with school age children in Vermont. This project contains no such units; it contains exclusively attached multi-family dwellings of various sizes. With 735 residential units; however, this project can be reasonably expected to contain at least some families with school-age children. The application postulates an estimate of ~~54~52~~ school-age children. This figure is based on estimates for the studio, 1-, 2-, and 3-bedroom units. Additional information has been provided that addresses impacts per unit type and what the anticipated unit-to-school children ratio is based on. There is no indication of what the anticipated per-unit ratios are based on. That information needs to be specifically noted. No final comments from the School Department have yet been received. Discussions with that department have been ongoing. If this project receives final approval, impact fees would be paid to help offset impacts on the school system. ~~(No finding yet possible)~~Affirmative finding if conditioned

7. Not place an unreasonable burden on the city's ability to provide municipal services;
The Fire Department provided technical comments relative to fire safety at Technical Review. These technical requirements will be administered through the offices of the Fire Marshal and the Building Inspector. The Fire Marshal has issued an ability to serve letter regarding the project.

~~No Police Department comment has yet been received but is anticipated~~ The Burlington Police Department has issued an ability to serve letter dated January 13, 2017. The letter anticipates increased demand on police services, but expects that the development will not adversely impact the department in the context of providing police services to the site.

See Sec. 3.5.6 (a) 1 for Electric and Public Works Departments.

See Sec. 3.5.6 (b) 12 for Parks and Recreation Department.

See Sec. 3.5.6 (b) 6 for School Department.

Impact fees will be paid to help fund necessary capital improvements necessitated by this development. ~~(No finding yet possible)~~Affirmative finding if conditioned

8. Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;
See Article 6 for effects on significant natural areas, historic buildings, and archaeological significance.

9. Not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor on the city's investment in public services and facilities;
The project is proposed in an area long targeted in the city's Municipal Development Plan for intensified development. The newly established NAC-CR articulates purpose and standards for this growth center. Insofar as the proposed development is consistent with the intent of the NAC-CR zone, it is consistent with the city's anticipated growth patterns. As noted in these findings,

improvements to public infrastructure, at the cost of the applicants, are required to adequately support the development. **(Affirmative finding)**

10. Be in substantial conformance with the city's municipal development plan;

The application demonstrates substantial conformance with the Municipal Development Plan.

The property is located within an area identified as a center for growth and development (Future Land Use Map – Centers for Growth and Development & Land Use Policies, pg. I-2).

The introduction of a variety of attached multi-family housing unit types and bedroom counts is consistent with the city policy to support the development of additional housing opportunities within identified activity centers (Land Use Plan, pg. I-2 & Housing Plan, pg. IX-1).

The project will handle essentially all of its stormwater onsite utilizing the available green spaces and sandy soils for infiltration (Natural Environment Action Plan, pg. II-12).

The development will provide inclusionary housing units (City Policies, pg. IX-1) as required by the Comprehensive Development Ordinance.

The project incorporates alternative energies (solar and geothermal), thereby reducing utilization of fossil fuels (City Policies, pg. VIII-1).

The project will provide ready access to GMT bus service. Carshare Vermont service is anticipated. The project includes far more than the minimum requirement for bike storage and maintenance facilities and provides easy access to the waterfront bike path (Stressing Other Modes of Travel, pg. V-12). **(Affirmative finding)**

11. Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location;

As noted above, the proposed development is located in an area targeted for higher intensity development. The proposed housing units are all multi-family in nature. There is; however, a variety of bedroom counts and price points (including inclusionary, “work force,” and market rate units). There is also a mix of owner-occupied and rental units. Senior housing units will also be provided. The development addresses city policy to provide a variety of housing types.

(Affirmative finding)

12. Not have an undue adverse impact on the present or projected park and recreation needs of the city.

Residents of the new dwelling units will likely utilize the city's park and recreation facilities. As part of the overall development scheme for these properties, the 12-acre parcel that hugs the development site to the south and west was conveyed to the city for conservation and designation as an “urban wild.” Within the development, a variety of recreational features are included, such as a community pool, fitness center, garden spaces, and paths. Parks impact fees will be paid to help offset any related impact on public park needs. Per the development agreement, a \$300K credit will apply to parks impact fees due. **(Affirmative finding if conditioned)**

(c) Conditions of Approval:

In addition to imposing conditions of approval necessary to satisfy the General Standards specified in (a) or (b) above, the DRB may also impose additional conditions of approval relative to any of the following:

1. Mitigation measures, including but not limited to screening, landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area.

The proposed development is not expected to generate offsite noise or glare substantial enough to require mitigation. **(Affirmative finding)**

2. Time limits for construction.

A “sequencing plan” is included in the application. An initial 10-year timeframe that is automatically renewable thereafter is requested. For a project of this size, a 10-year timeframe is reasonable. Any extension thereto; however, will require approval by the Development Review Board per Sec. 3.2.9, *Zoning Permits*, (d) *Time Limits on Zoning Permits*. There is no provision within the zoning code for automatic extensions.

~~Phasing plans are also provided that indicate distinct phases within the development. The phasing plan depicted on the civil drawings indicates the anticipated year of construction of each phase, but the application requests flexibility as to when each phase is ultimately constructed. Flexibility within the phasing schedule is largely acceptable so long as each phase can stand on its own and the inclusionary units are provided early or on a schedule concurrent with the market rate units. Deletion of the anticipated years of construction is strongly recommended so as to avoid confusion if the schedule changes. The phasing plan depicted in the landscaping plans, L-EX4, accomplishes as much; however, significantly, the phases depicted in this plan do not mirror those in the civil plans. Consistency is needed. Better yet, there should be only 1 phasing plan. Whichever plan is used should utilize the labeling of the landscaping plan. Project phasing has been clarified. The L-EX4 plan is the guiding phasing plan for the development. It clearly defines distinct phases and the anticipated order of development.~~ Note also the DAB’s recommendation that the handicap accessible path leading to the waterfront bike path be constructed before phase 10.

The phasing plans indicate that all of the rental inclusionary housing units will be constructed within the first two years of construction (phases 2 & 3 sheet L-EX4). Doing so is acceptable and consistent with the intent of Sec. 9.1.17, *Review of Proposal for Phasing*. ~~When and where the for sale inclusionary units will be constructed is unclear and must be articulated.~~ At the January 17, 2017 public hearing, the applicant testified that for-sale inclusionary units will be provided in Building M. This building is to be constructed immediately after the rental inclusionary units.

~~Curiously, the sequencing plan requests that the development be allowed to be constructed in a single phase but also notes the critical importance of each building receiving an individual certificate of occupancy upon completion. These two items are mutually exclusive. A single phase would require total project completion prior to issuance of a single unified certificate of occupancy. Project phasing allows each phase to receive a unified certificate of occupancy upon completion. The applicant is strongly advised to pursue the latter: A phasing schedule as depicted in the project plans that allows for issuance of unified certificates of occupancy upon completion of each phase.~~

The sequencing plan also makes note of temporary project features, such as interim parking areas needed to support completed buildings while others are under construction. Given the scope and duration of this project, such temporary facilities are reasonably anticipated. **(No finding yet possibleAffirmative finding if conditioned)**

3. Hours of operation and/or construction to reduce the impacts on surrounding properties.

With the exception of post-secondary school, all of the specific uses articulated in the application are permitted within the NAC-CR zone and are not subject to limitations on days or hours of operation. A typical post-secondary school is operative 24/7 year round with intermittent breaks. At least general parameters around the operation of the anticipated post-secondary school are needed.

~~No days or hours of construction are evident in the sequencing plan or elsewhere in the application. The applicants propose days and hours of construction Monday – Sunday, 7:00 AM-9:00 PM. These extensive hours are acceptable given the isolation of this development site relative to other residential neighborhoods. This information is needed.~~ **(No finding yet possibleAffirmative finding)**

4. That any future enlargement or alteration of the use return for review to the DRB to permit the specifying of new conditions; and,

Any future enlargement or alteration will be reviewed under the zoning regulations in effect at that time.

5. Such additional reasonable performance standards, conditions and safeguards, as it may deem necessary to implement the purposes of this chapter and the zoning regulations.

To be addressed in conditions of approval.

Article 4: Maps & Districts

Sec. 4.4.2, Neighborhood Mixed Use Districts:

(a) Purpose

(4) Neighborhood Activity Center – Cambrian Rise (NAC-CR)

The Neighborhood Activity Center – Cambrian Rise District is intended to create a new center for mixed use development that allows for a range of housing types and tenures, and to accommodate a diverse range of complimentary general office, institutional and neighborhood oriented small-scale retail and service uses. Development should be compact, pedestrian-oriented and enhance the community with creative design, durable materials, and quality construction. Buildings should be oriented towards the streets. Human scale elements should help to define new streets as civic spaces. Parking should be located as to be screened from view from public streets and community spaces.

The diversity of uses included in this proposal reflects the intent of this new zoning district. The compact site design and street layout provide the framework for a new mixed use neighborhood. Sidewalks, shared use paths, hardscaping, and street-level treatments of the proposed buildings establish a pedestrian-friendly environment. With revisions as recommended by the Design Advisory Board, the project design can be found consistent with this criterion. **(Affirmative finding)**

(b) Dimensional Standards & Density

FAR in the NAC-CR zone is limited to 2.0. The subject properties amount to 21.65 acres (943,074 sf). Total above-ground building area could be up to 1,886,148 sf (FAR 2.0 in this case). As proposed, FAR will be 0.98 (921,000 sf above-ground building area).

Maximum permissible lot coverage is 60% in the NAC-CR zone. As proposed, lot coverage will total 64%. This additional coverage is allowable under the provisions of Article 9 for provision of inclusionary housing. Note that this percentage is based on November 28, 2016 calculations. There have been plan revisions since then. Confirmation of current lot coverage is needed.

Within the NAC-CR zone, front yard setbacks of 0' – 20' are permissible, except that along North Avenue front yard setbacks of 20' – 30' are permissible. Within the development, all of the buildings comply with the 0' – 20' front yard setback. Along North Avenue, the southern portion of Building G appears to encroach into the 20' minimum setback – it appears to come as close as 17' to the front property line. Minimum side and rear yard setbacks of 10' and 20', respectively, only apply to the periphery of the NAC-CR zone. The project plans comply with these peripheral side and rear yard setbacks.

Within the NAC-CR zone, buildings must be at least 2 stories and 22' tall up to a maximum of 65'. An additional 10' in height may be afforded for provision of inclusionary housing as noted in Article 9 of these findings. As all of the buildings are set back further than 10' from the public sidewalks, height is measured from the average finished grade around each building. Building heights are noted in elevation drawings and also summarized in sheet L-EX3, Building Heights. All of the buildings are under the 75' (with inclusionary) maximum height. All but two of them are below the standard 65' height limit. Building C reaches 70' and Building I reaches 73.'

(Affirmative finding if conditioned)

(c) Permitted & Conditional Uses

Multifamily residential development is a permitted use in the NAC-CR zone. As noted previously, all of the non-residential uses, except for post-secondary school, included in this application are permitted in the NAC-CR zone. The post-secondary school is a conditional use. ~~As a note of clarification, the proposed uses are most evident through the parking calculations. A specific bullet list of proposed uses within the application narrative would clarify expressly those uses included in this application. A summary table of all proposed uses, their locations and sizes, has been provided. Note that the “fitness center” will be an amenity for exclusive use of project residents and adjacent neighbors. It will not be a commercial health club. This distinction has significance relative to parking as noted under Article 8.~~ **(Affirmative finding if conditioned)**

(d) District Specific Regulations

(1) Ground Floor Residential Uses Restricted

Not applicable in the NAC-CR zone.

(2) Exception to Maximum Lot Coverage in NAC District

Not applicable.

(3) Development Bonuses/Additional Allowances

See Article 9 for height increase relative to inclusionary zoning requirements.

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Article 4 above.

Sec. 5.2.4, Buildable Area Calculation

Not applicable in the NAC-CR zone.

Sec. 5.2.5, Setbacks

See Article 4 above.

Sec. 5.2.6, Building Height Limits

See Article 4 above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Article 4 above.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to constitute a nuisance under this criterion. **(Affirmative finding)**

Sec. 5.5.2, Outdoor Lighting

See Sec. 6.2.2 (o).

Sec. 5.5.3, Stormwater and Erosion Control

A comprehensive stormwater management plan is proposed. While details are many, the system is basically geared towards using the sandy soils onsite to infiltrate stormwater into the ground. Infiltration facilities will be located in a number of places within the development. Green streets, underground infiltration chambers, and swales are some of the design components. 100% of the 1-year storm event will be infiltrated onsite. Post-development runoff rates will match pre-development rates for the 10-year storm event. What overflow there is will discharge into Lake Champlain. No additional runoff will enter the city system. In addition, the stormwater management plan includes provision for capturing and storing stormwater for gardening and possibly some toilet flushing. Given the size of this project and the anticipated duration of its construction, the stormwater management plan also incorporates interim measures for utilization while construction is ongoing.

An erosion prevention and sediment control plan has been provided. It addresses site management per phase for the duration of construction.

The Conservation Board reviewed these proposed measures at their December 19, 2016 meeting and recommended approval. Final review and approval by the city's stormwater program is required. **(Affirmative finding if conditioned)**

Article 6: Development Review Standards:

Part 1: Land Division Design Standards

Subdivision approval is being sought separately.

Part 2: Site Plan Design Standards

Sec. 6.2.2 Review Standards

(a) Protection of Important Natural Features:

At present, the majority of the project area west of the former orphanage is lawn. Extensive examination has been made of the existing site conditions during preparation of a tree management plan for this and the parkland area (2016) and stormwater planning for this development. The precipitous grade change from North Avenue west to the parkland is the most significant natural feature; one which is incorporated within the development plans submitted. A tree survey is included. A fully developed landscaping plan has been provided as part of the submission packet. **(Affirmative finding)**

(b) Topographical Alterations:

One of the most distinctive features of this site is the grade change; nearly a 70' difference between North Avenue and the westerly edge of the project area. The buildings and parking decks are arranged to take advantage of the steep grade change specific to the site. Documents provided outline, where necessary, topographic adjustment to facilitate the development, including construction of sub-grade parking garages, building foundations, pathways, green areas, and roads. Plans C2.1-C2.5 specifically address grading. Reference is made to specific landscaping plans within the submission documents to identify grade elevations at identified areas of the site. Modeled renderings reveal a complicated fabric where openings provide access to differing floor and parking plates; stairs emerge and a variety of retaining walls resolve grade changes. The DAB has recommended modification of site and landscaping to ameliorate the visual impact of some retaining walls. These changes are reflected in revised plans. **(Affirmative finding)**

(c) Protection of Important Public Views:

Views from and through private property are typically not protected. The new public park, west of this development, will provide an opportunity for the public to enjoy westerly views of the lake and mountains. Residents within these new housing units will be afforded a similar vista.

An east-west greenway will extend behind the orphanage, with buildings C and E, P, Q and R as a structural frame. The visual greenway continues west, across west road (trees allowing) to the walkway and orchard. Buildings with favorable orientation have included rooftop terraces and decks, patios, balconies and *galerias* to exploit opportunities for extraordinary views.

Public views can be created by orchestrated terminus vistas via public roadway; east/west on both South and North roads. South Road offers a greater potential as the westerly end is not interrupted by structure. The Design Advisory Board expressed concern that the westward vista on North Road would be of an external stair tower. They have recommended that the stair tower be revised to be expressed in the same material and similar design as on the building to provide an enhanced terminus view.

Revised design has created a more focused terminus view southward on West Road, where the building has been treated with additional attention to attract and define a focal point of interest. Plans include a notation for an additional "focal element" (Plan L204), which has not been defined. Revised plans for a cemetery access point (L-EXa, L208 and *Cemetery Access Plan*) at the northerly terminus of West Road have been submitted; something that was only suggested at Design Advisory Board. Intended to provide that street-end focal point, it intends to allow access across a boundary line onto an adjoining property. Some assurance of acceptability is needed from

that abutting owner before circulation through that property is encouraged by design.
(Affirmative finding if conditioned)

(d) Protection of Important Cultural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Archeological sites likely to yield information important to the city's or the region's pre-history or history shall be evaluated, documented, and avoided whenever feasible. Where the proposed development involves sites listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8(b).

Alterations to the former orphanage have been permitted under earlier review. The former elementary school / priests' quarters attached to the south of the orphanage has been incorporated into this development, now as building "B". Building G has been pulled to the southerly corner providing greater space between the new construction and the former orphanage. Building F has been modified from original plans at the request of the DAB to reduce the height along North Avenue to three stories (articulated in brick) immediately adjacent to the orphanage to increase the opportunity to view the historic orphanage earlier while traveling on North Avenue.

The newly created zoning district (NAC-CR) offers a range of setbacks from North Avenue from 20' (minimum) to 30' (maximum.) From scaled plans, Building G appears to be set back approximately 17' from the front property line. This does not meet the required setback. To better afford view of the orphanage, the maximum setback is recommended.

The UVM Consulting Archaeology Program (CAP) conducted an extensive Phase I site identification survey within previously determined sensitive portions of the development parcel. No pre-contact era Native American archaeological sites were identified. Test pits confirm some re-grading (suggested related to farming activities) and plow zone strata disturbance. The historic period artifacts that were recovered reflected the mixed uses of the parcel over time, such as children's toys likely associated with the orphanage (jacks, marbles), and building materials from structures no longer extant (bricks, cinders, mortar). That study recommended no further archaeological analysis.

The Historic Preservation consultant's report is dated June, 2016, and addresses only the addition of buildings K and L. It does not incorporate the entire neighborhood buildout.

(Affirmative finding if conditioned for building setback; **No Finding Possible** based on limited assessment by preservation consultant)

(e) Supporting the Use of Renewable Energy Resources:

The project proposes limited solar installation; identified in images on Building I and H. No part of the application will preclude the use of other renewable energy resources. **(Affirmative**

finding)



(f) Brownfield Sites:

The Vermont DEC website does not include these addresses. **(Affirmative finding)**

(g) Provide for nature's events:

Special attention shall be accorded to stormwater runoff so that neighboring properties and/or the public stormwater drainage system are not adversely affected. All development and site disturbance shall follow applicable city and state erosion and stormwater management guidelines in accordance with the requirements of Art 5, Sec 5.5.3.

A fully developed Stormwater Management Plan has been prepared and included within the application materials. The material has been forwarded for review to the Stormwater Engineering program.

Design features which address the effects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage from circulation areas shall also be incorporated. Snow storage locations are provided on the same plan as “Bike Amenities” and “Commercial Spaces”. The snow storage area between Building K and L is on the smoking patio; the applicant must assure that the loss of that feature for snow storage will still meet the programmatic requirements of Champlain Housing Trust. That location also presents the likelihood of heavy snow melt to impact the abutting Redstone Cottage, which sits below grade.

Building features that address the effects of inclement weather and the adequacy of resident shelter at entrances can be reviewed on a building-by-building nature. **(Affirmative finding if conditioned)**

(h) Building Location and Orientation:

The overall plan continues to be one of very large buildings encircled with new streets or parking areas. The importance of building orientation toward the street (which will be eventually turned over to the city) becomes essential in reinforcing the streetline. Building G has been relocated south; fronting on both North Avenue and South Road; creating a distinct street anchor on both South Road and the Avenue, replacing a void that had previously been proposed.

Buildings remain substantially set back from the public sidewalk and inner streets. Streets are spatially designed by a wall of buildings that front the sidewalk in an ordered manner. The plan leans toward the maximum front yard setback (0-20' for inner streets, as prescribed by the standards for the new zoning district). (Building P 15' front yard setback; Building I 20'.)

Building Q appears detached from a new building R. Q is setback approximately 66' from West Road, in conflict with the required setbacks on interior streets. If substantially attached to Building B, that concern is moot. R scales at 7' setback. Arrangement that holds the street wall is essential in strengthening the arrangement.

Setbacks from North Avenue are 20' minimum, 30' maximum. Plan L 001 and C2.3 suggest Building G at the southeasterly edge does not meet the minimum setback from North Avenue of 20'. This will need confirmation or correction.

The proposed buildings on either side of the orphanage are in the neighborhood of 25'; Building K south of South Road ranges from 20'-45' as angled.

Front yard setbacks *within* the development may be between 0-20', with structures setback a minimum of 12' from the curb on a public street. Although the streets have not yet been turned over to the city, the arrangement is required be designed to meet that standard.

Side and rear yard setbacks only apply to the periphery of the district and not individual parcels. Building N has been modified to pull a corner out of a required 20' rear yard setback along the westerly boundary of the district, although that new building footprint is different across revised plans. (Identifiable on plan C2.0. Older plans do not show revision.) Required 15' setbacks from the residential zoning district to the south are required; revised plans now show a patio and walkway from the parking lot across property lines. The patio may encroach up to 5' from the property line.

Parking has also been pulled out of the setback on the westerly boundary line. See T.J. Boyle plan dated 1/2/2017.

Principal buildings shall have their main entrance facing and clearly identifiable from the public street. The development of corner lots shall be subject to review by the city engineer regarding the adequacy of sight distances along the approaches to the intersection. To the extent practicable, development of corner lots in non-residential areas should try to place the building mass near the intersection and parallel to the street to help anchor the corner and take advantage of the high visibility location.

Revisions and relocation of Building G have in turn strengthened the corner and eliminated the "void" in the streetscape. There remains the large gap between Building G and C populated largely by surface parking, directly fronting South Road. The illustrated lawn area in the Lincoln Brownell illustrations ameliorates the breadth of pavement.

Analysis of building entrances is complex, given the number of buildings and their orientation toward streets, sidewalks, parking areas, inner walkways, and recreation paths.

Building "C" has a principle (southerly) entrance fronting South Road. The concrete retaining wall and the isolation of the entrance make this a particularly unfriendly portal. As a residential

entrance, greater emphasis toward creating an inviting entry should be exercised here (and with other residential buildings). The Design Advisory Board has recommended that the visible amount of the exposed concrete retaining wall be reduced with berming or landscaping. Plan L502 defines increased landscaping and illustrates the inclusion of 2 park benches in this location.

The DAB also recommended that the screening illustrated at the commercial entry to Building C be eliminated, as the entry should be warmer and welcoming.

Building “G” has easily identifiable entrances along North Avenue; one is labeled “Residential” the other “Commercial” on elevations BG-2. The east elevation provides a partial canopy/porch roof over window glazing, adjacent to the southerly entrance. The southeast corner has a wraparound overhang inviting visitor entrance. Confirmation is needed that Building G meets the required 20’ minimum setback from the Avenue.

There is a clearly articulated entry portal between Buildings E and F. Building E along North Road is primarily dedicated to vehicular entry/parking deck openings. Some correction has been made to imagery where vehicular entry points had seemed unusually steep in grade.

Building F has an entry focus within the brick three story portion on North Avenue, under a porch roof with heavy piers. Other entries are more difficult to identify as they are recessed within the arcade area. There are a series of identifiable entrances along North Road, their location identified by stairs of increasing height.

Building I has a vehicular entry portal on the north and pedestrian doors on the raised porch area. Pedestrian entries exist on the west and south as well. Adjustments have been made to the elevated entries over the sidewalk, making them more identifiable and accessible (via at grade or stair access.) The west entry is more successful for identification under an abbreviated canopy and welcome presentation to West Road. The gym/event space has no identified specific entrance; it is assumed via the general West Road portal which leads also to the apartment building and garage. The DAB recommended the main entrance to residential units on Building I facing west be made more prominent; and the stairs at the northwest corner made less prominent. Those changes are reflected in revised plans.

Building Q has now evolved into 2 buildings; Q and R. (Plans are inconsistent; some show the buildings as connected; The TJ Boyle plan dated 1/2/2017 has them detached.) The applicant has suggested that R is intended to be a 48 room boutique hotel. R has a visible pedestrian entry on the east (fronting West Road), within a narrow 2 bay pavilion with recessed porch entry, resembling a walk-up. Building Q has no easily identifiable entrance from West Road, although a patio and covered porch is present. The plan relies on principal entry from the inner courtyard/parking drop-off. There needs to remain a strong visible entrance from West Road.

If Building R and Building Q are not substantially connected, Q does not meet the required setback from an interior road of 1-20’. The building is located approximately 66’ from West Road, in conflict with setback standards.

Buildings O and P have a centrally identifiable pedestrian entrance (Plan OP-2 & OP-3), two wing entrances and apparent first floor entries from West Road.

Building H has clearly identifiable entrances from raised stoops along West Road, and one along South Road under an extended canopy.

The north elevation of Building M fronts South Road, which has several double entries. Building N does not front any street, but has been described as connected to Building M. If not a detached structure, entrance may be considered with its host, M.

Building K fronts North Avenue and South Road; entrances are visible under extended canopies and highlighted by a change in building material. The applicant has assured the DAB that the central, identified entry along the Avenue connects to a public entry space, not a meeting room. Building L (L-2) has visible entries along South Road under a canopy; and on secondary east and west elevations.

Opportunities to create terminus views have evolved through Design Review. The plan has lacked an identified structural focus at the west end of North Road. The DAB pointed out that the exterior stairs had become the terminus, and recommended they be treated in the same manner as the rest of Building Q. A condition of their approval was to use similar design and materials as the host building.

The north end of West Road now articulates an entrance to the abutting lot (Lakeview Cemetery). Access to that separate parcel will require agreement between City representatives and the Parks and Recreation Department, which is responsible for the grounds. A plan that encourages access and circulation across boundary lines to another parcel will require agreement from that property owner.

The DAB previously acknowledged revisions that created a positive viewscape at the south end of West Road.

The garage entrances and service access on North Road have been set back from the principal structure, becoming secondary and subordinate in scale and design. See Plan I-3 and EF-3. **(Adverse finding** for setbacks if Building Q is detached from R; **No finding possible** for cemetery access plan)

(i) Vehicular Access:

Curb cuts shall be arranged and limited in number to reduce congestion and improve traffic safety. A secondary access point from side roads is encouraged where possible to improve traffic flow and safety along major streets. The width and radius of curb cuts should be kept to the minimum width necessary, and sight triangles and sufficient turnarounds for vehicles shall be provided to reduce the potential for accidents at point of egress.

The number of curb cuts has been diminished along interior roads, although entrances to parking lots punctuate South Road. West and North Road have minimized curb cuts dramatically from earlier plans. The width of these openings will need to meet the approval of the city engineer as these streets are expected to be adopted as public thoroughfares.

Driveways that have a slope of 5% or greater (towards the right of way) shall be made of a solid surface including conventional pavement, pavers or pervious pavement.

Pavement is proposed for vehicular circulation areas. Modeling images of the driveway access at Building E were markedly steep. The applicant shall confirm or correct the accuracy of that image.

DPW typically expects continuous sidewalks at vehicular entrances. The applicant shall consult with the Traffic Engineering staff to assure the plan meets their criteria, as the dedication of streets and street adoption by the city is anticipated.

Driveways for commercial properties may require a traffic study to identify the impacts of the movement of traffic to and from the property, and design for safe access. Access for service and loading areas should be located behind buildings or otherwise screened from streets or public ways with landscaping or other barriers. Whether commercial or residential shared driveways are encouraged where possible and appropriate.

A traffic study has been submitted to DPW; its effectiveness and acceptability to be determined by their transportation engineers.

The service/loading access is from North Road, between buildings E and I. The garage openings now have doors screening the large openings from the public street.

(Affirmative finding if conditioned)

(j) Pedestrian Access:

Pedestrians shall be provided one or more direct and unobstructed paths between a public sidewalk and the primary building entrance. Well defined pedestrian routes shall be provided through parking areas to primary building access points and be designed to provide a physical separation between vehicles and pedestrians in a manner that minimizes conflicts and improves safety. Where sidewalks and driveways meet, the sidewalk shall be clearly marked by differentiated ground materials and/or pavement markings.

Sidewalks line each street, connecting to walkways to each building. The network continues on the interior of the site, with connected access between buildings, parking areas, and green spaces. Sidewalks line parking areas as well, providing a separation between vehicles and pedestrians. See previous note about continuous sidewalks at vehicular entries. **(Affirmative finding if conditioned)**

(k) Accessibility for the Handicapped:

Special attention shall be given to the location and integration of accessible routes, parking spaces, and ramps for the disabled. Special attention shall also be given to identifying accessible access points between buildings and parking areas, public streets and sidewalks. The federal Americans with Disabilities Act Accessibility Guidelines (ADAAG) shall be used as a guide in determining the adequacy of the proposed development in addressing the needs of the disabled. From pre-development meetings to the present, the applicant has remained committed to providing an all-accessible community. Buildings have been projected to be served by (sometimes multiple) elevators; grades are intended to meet accessibility requirements, and h/c parking spaces are illustrated on plans. Full compliance with ADA requirements will be under the jurisdiction of the building inspector.

Some of the handicapped parking spaces identified on surface lots (L503) do not include a loading area but are adjacent to walkways. Conformance with standards for ADAAG parking/loading will be confirmed and implemented by the building inspector. **(Affirmative finding if conditioned)**

(l) Parking and Circulation:

*To the extent possible, parking should be placed at the side or rear of the lot and screened from view from surrounding properties and adjacent public rights of ways. **Any off-street parking occupying street level frontage in a Downtown Mixed Use District shall be setback from the edge of the front property line in order to provide space for active pedestrian-oriented uses.** Where street-level parking is provided within an existing structure, the cars shall be screened from the sidewalk and the area shall be activated with landscaping, public art, or other design amenities. Parking areas of more than 20 spaces should be broken into smaller areas separated by landscaping.*

South Road continues to have great visibility of pavement and parking. Generally, parking areas are located interior to the site and between buildings, less visible from streets. The parking areas east of Building C and on D are greater than 20 spaces (which require breaking into smaller areas with landscaping), although protection of the viewshed to the west is a goal of the plan and multi-level parking precludes the planting of trees. Landscaping plans confirm the intent to plant around the lot as feasible. (See Plans L-501 and 502.)

Attempts to link adjacent parking lots or provide shared parking areas which can serve neighboring properties simultaneously shall be strongly encouraged.

Access to parking and lots is shared across the plan. Ordinance amendment ZA17-01 will facilitate parking across parcel boundaries within the same zoning district.

Parking shall be laid out to provide ease in maneuvering of vehicles and so that vehicles do not have to back out onto city streets. Dimensions of spaces shall at a minimum meet the requirements as provided in Article 8. The perimeter of all parking areas shall be designed with anchored curb stops, landscaping, or other such physical barriers to prevent vehicles from encroaching into adjacent green spaces.

Parking spaces in Building D are 20' x 9', as are parking spaces east of Building H and east and west of Building L. Parking dimensions are not expressly given, meet the requirements of Table 8.1.11-1 as scaled on the project plans. If applicable, the applicant should identify any areas where leniency in parking standards is requested. Backup space is deficient in many of the parking garage plans.

*Surface parking and maneuvering areas should be shaded in an effort to reduce their effect on the local microclimate, air quality, and stormwater runoff with an objective of shading at least 30% of the parking lot. Shading should be distributed throughout the parking area to the greatest extent practical, including within the interior depending on the configuration. New or substantially improved parking areas with 15 or more parking spaces shall include a minimum of **1 shade tree per 5 parking spaces** with a minimum caliper size of 2.5"-3" at planting. Up to a 30% waiver of the tree planting requirement may be granted by the development review board if it is found that the standard requirement would prove impractical given physical site constraints and required compliance with minimum parking requirements. All new shade trees shall be: of a species appropriate for such planting environments, expected to provide a mature canopy of no less than 25-feet in diameter, and selected from an approved list maintained by the city arborist. Existing trees retained within 25-feet of the perimeter of the parking area (including public street trees), and with a minimum caliper size greater than 3-inches, may be counted towards the new tree planting requirement.*

The requirement for 1 shade tree for every 5 parking spaces is met across the development. The parking lot west of P has 18 spaces, requiring 4 new trees (L505.) ~~One proposed tree (an Ivory Silk Tree Lilac) meets the required minimum caliber but as located is not likely to provide any shade for that parking area. Another tree west of the lot would do so.~~ Revised plans depict an additional 2 trees and provide shading for 31.9% of this parking area.

The submission materials include a shading calculation (L-EX1) which now provides a shading calculation on a parking lot by parking lot analysis. The most challenging is “D”, which is a multi story parking facility. Revised plans depict shade trees within the parking deck planter. This effort will generate tree shading in an area wherein none was previously thought possible, where planting trees is not possible. When calculating the entire parking deck that is shaded by the northerly section of Building C and these new shade trees, the total parking lot shading is greater than the 30% prescriptive standard. The standard specifically states: *Surface parking and maneuvering areas should be shaded in an effort to reduce their effect on the local microclimate, air quality, and stormwater runoff with an objective of shading at least 30% of the parking lot.* With this consideration, and anticipating some natural shading from adjacent buildings the required objective will be met.

All parking areas shall provide a physical separation between moving and parked vehicles and pedestrians in a manner that minimizes conflicts and gives pedestrians a safe and unobstructed route to building entrance(s) or a public sidewalk.

See Section 6.2.2. (j), above.

Where bicycle parking is provided, access shall be provided along vehicular driveways or separate paths, with clearly marked signs indicating the location of parking areas. Where bicycle parking is located proximate to a building entrance, all shared walkways shall be of sufficient width to separate bicycles and pedestrians, and be clearly marked to avoid conflicts. All bicycle parking areas shall link directly to a pedestrian route to a building entrance. All bicycle parking shall be in conformance with applicable design & construction details as provided by the dept. of public works.

Bicycle parking is a strong feature of this application. Reference is made to all Hardscape plans (L201-206) for specific locations and L605 for bike racks specs. The applicant must demonstrate by calculation compliance with Table 8.2.5-1 for each building. All bicycle parking shall meet the requirements and guidance of Section 8.2.7. *Location and Design Standards.*

(Affirmative finding if conditioned for backup space in parking garages. See Article 8.)

(m) Landscaping and Fences:

A fully articulated landscaping plan has been submitted. See plans LL501-508 for planting schedule, and associated plans for hardscape, play equipment, street furniture and site amenities. The city arborist has confirmed a meeting date with the applicant team to select species and caliper of street trees. **(Affirmative finding if conditioned)**

(n) Public Plazas and Open Space:

Where public open space is provided as an amenity to the site plan, it should be sited on the parcel to maximize solar exposure, with landscaping and hardscape (including fountains, sitting walls, public art, and street furniture) to encourage its use by the public in all seasons. Public plazas should be visually and physically accessible from public rights-of-ways and building entrances

where appropriate and shall be designed to maximize accessibility for all individuals, including the disabled and encourage social interaction.

A plaza type area has been more finely defined between Buildings K and L, intended for use by Cathedral Square and Champlain Housing Trust residents. Planters, seating, garden areas and a play area are illustrated; all welcome amenities for resident use and enjoyment.

A large uninterrupted viewscape to the west is provided behind the former orphanage. Accessible at differing levels as the grade falls to the west, several public gathering or green areas are included. Plans include a swimming pool, bath house facilities, public gardens, an orchard, and pathways between Liberty House (the orphanage) and the bike path.

Public space should be coordinated with the surrounding buildings without compromising safety and visibility. Public spaces should be surrounded by active uses that generate pedestrian traffic, and connect the space to major activity centers, streets, or corridors.

Public spaces are directly linked via the sidewalk network to other areas within the site and beyond. Appropriate lighting will assure safe circulation throughout and between buildings. Commercial uses are broadly scattered, providing a mix that will promise active uses generating pedestrian traffic.

New structures and additions to existing structures shall be shaped to reduce shadows on public plazas and other publicly accessible spaces. In determining the impact of shadows, the following factors shall be taken into account: the mass of area shaded, the duration of shading, and the importance of sunlight to the utility of the type of open space being shadowed. Proposed development shall be considered for solar impact based the sun angle during the Vernal and Autumnal equinox.

Although the development is the creation of an entire new neighborhood, a shading study will be valuable to the DRB to understand impacts of large buildings across the project area. The shading plan submitted is relative to a calculation of shading provided to meet requirements for parking lot shading. An overall study of site shading (Vernal and Autumnal equinox) is recommended. It is anticipated that the distances between buildings will preclude significant shading impact on adjacent structures. **(Affirmative finding)**

(o) Outdoor Lighting:

Where exterior lighting is proposed the applicant shall meet the lighting performance standards as per Sec 5.5.2.

A lighting plan, with fixtures, illumination levels and a photometric has been submitted. In general, street lighting (which is typically not reviewed by this office, however the project will be “private” until the streets are accepted by the city) is a hybrid of what has been installed at Waterfront North. BED engineers have indicated that districts need to be adopted for decorative fixtures (as are proposed here) before they will agree to adopt the streets and lights. That designation has not as yet occurred.

Streetlight poles are proposed to be 28.5’ mounting height’ (they are 30’ on the waterfront); poles and fixtures will be black rather than Burlington’s preferred grey. Parking lot poles are proposed to be 20’, and “pedestrian lights” at 12.5 mounting height. See details, L-607.

Lighting itself is LED. Assurance has been provided that BED will have the capability to repair and replace these fixtures within the right-of-way when and if they are damaged. As LED, they

are anticipated to have a life expectancy of 20 years. If they fail (or are knocked over), BED officials say they will be replaced with grey as that is the city standard.

Lighting levels will be driven by street classification (collector roads versus residential roads.)

That discussion must find an agreement with the public utility prior to DRB approval.

The photometric shows some ‘hot spots’ in illumination. Areas under building canopies tend to be a little higher, but footcandle measurement up to 5 is acceptable at a building entrance. If not an entrance, light levels should diminish in those areas. Walkways have a specific maximum illumination of 2 fc. Average illumination on walkways must not exceed 0.5 footcandles. Many of the sidewalk readings exceed .5, so an average reading is essential to assurance compliance.

A few patio areas have had elevated lighting on earlier plan; the one west of Building A is now compliant, but one south of Building F no longer includes footcandle measurement. A patio south of E has readings > 2fc; this is acceptable only if this is at a building entrance. See Plan L401.

A walkway west of Building L has light readings >2 fc; a fixture must be modified.

The walkway east of Building C has several light readings > 2 fc as does the west walkway behind Building K. The area between buildings M and N have higher light levels as well. Per the ordinance, walkways shall not exceed 2 fc; parking lots 4 fc, and building entrances 5 fc.

Photometrics do not include average illumination levels (other than for the intended roadway), or min/max uniformity ratios, which are required by Section 5.5.2. Reference to Plan L600 for further information is misdirected, as that provides information on pavers. Staff may exercise the option for secondary review by a lighting consultant to assure overall conformance. **(Affirmative finding if conditioned)**

(p) Integrate infrastructure into the design:

Exterior storage areas, machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory structures shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties to the extent practicable.

Utility and service enclosures and screening shall be coordinated with the design of the principal building, and should be grouped in a service court away from public view. On-site utilities shall be placed underground whenever practicable. Trash and recycling bins and dumpsters shall be located, within preferably, or behind buildings, enclosed on all four (4) sides to prevent blowing trash, and screened from public view.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize, insofar as practicable, any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 4 Performance Standards.

It is challenging to find appropriate locations for service areas, dumpsters, recycling and similar facilities within a project area that has so many public and visible frontages. Collective trash and recycling areas for connected buildings are recommended for efficiency and to minimize visibility. A trash access is identified for building K (Plan AO-0.0) A trash enclosure for Building M was recommended for revision by the DAB to become less prominent with a change in color or materials. Revised plans M3 reflect those suggested changes.

Transformers are recommended to be buried.

The North Road loading area has been somewhat diminished with suggested internalization of activities. Service loading bays are now illustrated with doors.

Mailbox locations will need to be identified for each building. Any HVAC or external machinery must be identified on site plans and/or elevations as appropriate. If roof mounted, roof plans will be required with an assessment of total area utilized to assure compliance with height limitations. The DAB recommended that no rooftop equipment be installed on the gymnasium building “I”, rear, due to its visibility from many of the structures. **(Affirmative finding if conditioned)**

Part 3: Architectural Design Standards

Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:

This is a neighborhood without an easy comparison. From revised summary, there are seven five-story buildings (including the orphanage, and the new Building R), 7 four-story, 2 three story, a three story parking garage, and two one story/ ground level structures for a fitness center and greenhouse. Rather than a typical neighborhood that may have evolved over a period of time, this proposal will create an entire new one out of whole cloth. There is no analogous prototype, short of college dormitories or congregated mill buildings. The structures themselves are all large scale; most with flat roofs. The size of the orphanage, itself one of the largest buildings in Burlington, will be insignificant among this collection of sizable buildings. This is a newly created neighborhood based on a building model of supersized structures; which in itself invents its own context.

Common design elements include breaking up building mass by color block and window arrangement; top floors are on occasion “pedestaled” and set back from the lower block. Some buildings enjoy balconies or *galleries*, particularly those facing the west. There is homogeneity in the treatment of building mass by articulation, despite the rearrangement of windows and manipulation of building plane. This is not a typical neighborhood that conveys evolutionary development over an extended period of time; it is a new model composed entirely of large buildings based on the context of the existing orphanage. In that manner, the milieu is that of large scale. **(Affirmative finding)**

2. Roofs and Rooflines.

Building I, the pavilion tops and the south portion of H have pitched roofs. All others are flat. A few roofs appear to be parapetted, but there is rarely any rooftop elaboration or detailing, further emphasizing the cubist vocabulary (Building F, B, G.) Building M has the suggestion of a corbelled cornice which artfully softens the building’s upper edge. Building H has a sawtooth reference in the jagged rooftop pavilions, but abruptly transitions to flat roofs at the south end. Porch roofs are typically flat projections with hefty piers.

The orphanage building retains its gabled roof, although now oversheathed in copper. Within the context of the neighborhood there is consistency. **(Affirmative finding)**

3. Building Openings

Openings vary by building, elevation, frontage to a public way or by topography. Overall, buildings have similar treatments of organizing windows in columns or reflective of floor plate. Rhythms are established within wall plane; the geometries of the building mass are echoed in the

manipulation of window shapes and sizes. Greater complexity is evident in the buildings fronting the lake (M, N, O, P and Q.) At the DAB's urging (in part because of visibility from the Avenue), more detail and articulation has been afforded buildings K and L. See plans K3 and revised drawings for Building L (L2, L2-1.)

Some window arrangements appear to be without schedule (like south elevation or green pavilions of L); other times a pattern emerges bringing familiarity to the overall design. See building M. As the window refrain is repeated across the façade and around the corner, a rhythmic pattern emerges. Other times the buildings themselves change so dramatically within their own footprint that irregularity emerges, which may be an intentional design distinction between building components. See building H, as it presents on South Road.

The Design Advisory Board recommended that there be no screening at the commercial corner of Building C. (See CD-2 and CD -3, view from southwest.) Similarly, they advised that the commercial space at Building H be improved with more glazing, which would make the space prominent and welcoming. Those revisions are evident on plan H-3. **(Affirmative finding)**

(b) Protection of Important Architectural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Where the proposed development involves buildings listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8. The introduction of new buildings to a historic district listed on a state or national register of historic places shall make every effort to be compatible with nearby historic buildings.

Building G has been distanced from Building B and the former orphanage (A). Pulling that building to the south has created greater visibility of the historic structure when traveling along North Avenue.

Overall, the scale of proposed buildings and their collection reduces the stateliness of the iconic orphanage, which loses its spatial context and becomes less grand among the assemblage.

Similarly, the large buildings placed close to North Avenue minimize the view of both the



orphanage and the former home of Dr. Waldo Upton / Lakeview Sanitarium / John Bosco school, at 311 North Avenue just south of the development area which is also listed on the Vermont State Register of Historic Resources. That building is of a substantially smaller scale than the abutting development. Efforts to transition from the 4 story building K to this more modest structure have been suggested by the DAB to help ease the difference. Revised plans illustrate a line of mature plantings between parcels.

The submitted consultant's report considers the construction of only Buildings K and L. From that document:

These will be prominent buildings at a new corner location set between two distinctive masonry buildings. The site plan, landscaping and design elements all help tie the new buildings to the historic streetscape. The buildings will stand very close to the historic Redstone Cottage but effort will be made to visually tie the cottage into the overall design plan so that it becomes a focal point that contributes to the appreciation of its historic character and architectural elements.

It is not defined what design elements visually tie the cottage into the overall design plan. But the report finds the potential for no adverse effect when conditioned. Staff recommends a revised consultant's report that considers the impact of the entire build-out. **(No finding possible)**

(c) Protection of Important Public Views:

See Section 6.2.2. (c).

(d) Provide an active and inviting street edge:

As noted in Section 6.2.2, there remains a void in the streetscape (South Road, behind Building G), elongated buildings that can strain comfortable pedestrian distances (Buildings F, E, I and G, B, A), and an abundance of visible surface parking that collectively diminish the comfort and attractiveness of the development. Building facades demonstrate variation by building materials, window openings and plane changes. The 340' continuous building wall of Buildings E and F is broken by plane and material changes, the interruption of exterior staircases and building entries. The Design Advisory Board has recommended that the main residential entrance to Building I (facing west) shall be made more prominent. Stairs at the northwest corner should be made less prominent. Plan I-2 reflects those recommendations.

Building design with two, three or four story block finishes over a five story building front are a strategy to differentiate blocks and to create human scale surroundings. Roof overhangs, identifiable and inviting building portals and colonnaded entrance porches help in that manner along ground levels. The newly designed public area between buildings K and L have humanized and warmed that area for collective use. **(Affirmative finding)**

(e) Quality of materials:

All development shall maximize the use of highly durable building materials that extend the life cycle of the building, and reduce maintenance, waste, and environmental impacts. Such materials are particularly important in certain highly trafficked locations such as along major streets, sidewalks, loading areas, and driveways. Efforts to incorporate the use of recycled content materials and building materials and products that are extracted and/or manufactured within the region are highly encouraged.

Owners of historic structures are encouraged to consult with an architectural historian in order to determine the most appropriate repair, restoration or replacement of historic building materials as outlined by the requirements of Art 5, Sec. 5.4.8.

The permit set includes identified sheathing and roofing materials for each building. In general, exterior sheathing draws from a palette of fiber cement panel or lap siding, corrugated metal, board and batten and wood siding. Walls are concrete, brick, stone veneer or gabion. Roofs are typically metal. Trim is composite or aluminum; windows fiberglass or storefront framing. The ribbon-style screening along first floors has not been identified. With that exception, all are considered of reasonable durability. It is not believed that any are extracted or manufactured locally. The screening material at some building openings has not been defined and needs to be.

(Affirmative finding if conditioned)

(f) Reduce energy utilization:

All new structures must meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances. **(Affirmative finding if conditioned)**

(g) Make advertising features complementary to the site:

No advertising features are included within this review. A sign plan for informational, traffic and directional purposes is included, and is subject to DPW review and approval as appropriate within anticipated public rights-of-way.

Any commercial or advertising signage will require separate permitting. **(Affirmative finding if conditioned)**

(h) Integrate infrastructure into the building design:

See Section 6.2.2 (p) above.

(i) Make spaces secure and safe:

All appropriate means of ingress and egress, and code requirements for building and life safety as defined by the building inspector and fire marshal must be observed.

Building entrances must be visible and adequately lit. Intercom systems for multi-family housing is recommended to maximize personal safety. **(Affirmative finding if conditioned)**

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The proposed development is located in the Shared Use Parking District. Within this district, the following minimum parking standards apply:

- Multi-family attached dwellings – 1 space per unit
- Commercial bakery – 2.5 spaces per 1,000 sf
- Restaurant – 3 spaces per 1,000 sf

- General office – 2 spaces per 1,000 sf
- College (post-secondary school) – 2 spaces per 1,000 sf
- General retail (small < 4,000 sf) – 2 spaces per 1,000 sf
- ~~Health club – 2 spaces per 1,000 sf~~
- Large daycare - 1 space per every 2 employees + 1 per every 5 children
- Hotel – 0.75 space per room

Proposed parking is ~~likely adequate; a minimum of 881 parking spaces is required; however, additional details are needed to clearly demonstrate compliance.~~ A total of 1,093 off-street parking spaces is proposed (888 garage + 205 surface parking spaces). The proposed parking exceeds the minimum requirements for the 735 residential units (735 spaces) and non-residential uses:

- Multi-family attached dwellings – 735 provided (735 required)
- Commercial bakery is 600 sf – 2 spaces provided (1.5 required)
- Restaurant is 2,050 sf – 6 spaces provided (6.15 required)
- General office is 23,264 sf – 69 provided (46.5 required)
- College (post-secondary school) – 50 provided (33.1 required)
- General retail (small < 4,000 sf units) – 5 provided (5.35 required)
- ~~Health club – 0 provided (38 required)~~
- Large daycare – 16 provided (22 required ~~unknown required – need staffing info~~)
- Hotel – 32 provided (31.5 required)

~~The revised parking table notes generally how all of the parking is allotted to the mix of buildings and uses onsite. The parking tables provided do not make clear how the surplus 178 parking spaces are to be used. The proposed parking provides 3 spaces per 1,000 sf general office and almost 3 spaces per 1,000 sf post-secondary school space. No parking is provided for the “fitness center.” If this center is for use by onsite residents only, then no additional parking is needed. If it is a health club open to the general public, then a parking allocation of 2 spaces per 1,000 sf is needed. The large daycare is allocated 16 parking spaces. This allotment is not sufficient. A parking space for every 5 children is needed (75 children are anticipated), plus 1 parking space for every 2 staff. The 16 spaces would be sufficient for the 75 children plus only 1 staff person. No staff information is evident for the daycare and must be provided. (No finding yet possibleAffirmative finding)~~

Sec. 8.1.9, Maximum Parking Spaces

This section limits surface parking to 125% of the Neighborhood Parking District minimum parking requirement. Under the residential parking requirements alone (2 spaces per dwelling = 1,470 X 125% = 1,838 spaces), the proposed 1,093 parking spaces proposed comply with this limitation. Of the 1,093 off street parking spaces, 205 are within surface parking lots.

(Affirmative finding)

Sec. 8.1.10, Off-Street Loading Requirements

While the project plans depict some service areas, such as that at between Building I and Building E, no loading areas are expressly noted for the commercial spaces. Per this criterion, loading areas for all of the commercial uses are needed. The project plans must specifically note as much.

(No finding yet possible)

Sec. 8.1.11, Parking Dimensional Requirements

Parking spaces depicted in the project plans, both within garages and in surface parking lots, comply with the dimensional standards of Table 8.1.11-1, *Minimum Parking Dimensions*. In parking lots that contain 90-degree spaces on both sides, back-up length is frequently only 18.’ The standard is 24.’ There is precedent, particularly within garages, for back-up length of only 20’; however, 18’ is even less. Back-up length must be lengthened to 20’ to 24.’ **(Affirmative finding if conditioned)**

Sec. 8.1.12, Limitations, Location, Use of Facilities

(a) Offsite parking facilities

(Not applicable)

(b) Downtown street level setback

(Not applicable)

(c) Front yard parking restricted

(Not applicable)

(d) Shared parking in the Neighborhood Parking Districts

(Not applicable)

(e) Single story structures in Shared Use Districts

(Not applicable)

(f) Joint use of facilities

There is nothing in the application expressly stating that parking facilities will be shared among the various uses. Given the layout of the site and variety of uses, it seems that shared use is likely, albeit not required. **(Affirmative finding)**

(g) Availability of facilities

Nothing in the application indicates that the proposed parking will be used for the storage or display of vehicles or materials by offsite users. Parking will be for residents, customers, employees, students, and visitors only. **(Affirmative finding)**

(h) Compact car parking

There is no indication of “compact” parking spaces within the development. Spot measurements of surface and garage parking spaces yielded acceptable dimensions for standard parking spaces (9’ X 20’). **(Affirmative finding)**

Sec. 8.1.13, Parking for Disabled Persons

The site plans depict a number of handicap parking spaces in close proximity to pathways and building entries. ADA compliance is administered via the city’s building permit process. **(Affirmative finding)**

Sec. 8.1.14, Stacked and Tandem Parking Restrictions

(Not applicable)

Sec. 8.1.15, Waivers from Parking Requirements / Parking Management Plans

(Not applicable)

Sec. 8.2.5, Bicycle Parking Requirements

As with vehicular parking, bicycle parking requirements are tied to use and, in some cases, the size thereof. A total of 898 bike parking spaces are proposed (594 indoor/covered & 304 outdoor/rack spaces). The applicants' bike parking table shows building, use, requirements (long and short term), and total spaces provided. A total of 92 long term bike parking spaces is required. A total of 45 short term bike parking spaces is required. As proposed, 594 long term and 304 short term bike parking spaces will be provided. Long term spaces will be enclosed within the buildings onsite. Short term spaces will be provided at racks throughout the development. **(Affirmative finding)**

Article 9: Inclusionary and Replacement Housing

Sec. 9.1.5, Applicability

As the proposed development includes more than 5 new dwelling units, it is subject to the inclusionary housing provisions of Article 9. Per Table 9.1.8-1, *Inclusionary Zoning Percentages*, 25% of the total unit count must be inclusionary (25% of 735 is 184 dwelling units) in the NAC-CR zone. In partnership with local housing nonprofit organizations, all of the inclusionary housing units are incorporated into this development proposal and will be provided onsite.

The applicants' inclusionary housing proposal amounts to 166 inclusionary housing units. It is 25% of 665 housing units (735 total – 70 senior housing units). The application cites the exemption under Sec. 9.1.6 (c). This exemption; however, is not available to projects in the NAC-CR or NMU zones. The 166 proposed inclusionary units are only 22.6% of 735. The inclusionary housing requirement for this project is 25% of the 735 total, inclusive of the senior housing. The applicants have been made aware of this shortcoming and will make adjustments.

The applicants have submitted a letter in response to DRB concerns about the location and perceived separation of the proposed inclusionary housing units. The letter asserts that the location is the best in the entire site and will enable early construction, immediate access to adjacent park lands, and connection to the rest of the development and its associated amenities. **(No finding yet possible)**

Sec. 9.1.12, Additional Density and Other Development Allowances

Provision of the required inclusionary housing affords the development an additional 0.5 FAR and 10' building height (set back 10' from the street façade). Additional lot coverage of up to 72% is also enabled. In this case, no additional FAR is sought. Lot coverage of 64% is sought and is compliant with this section. Similarly, two of the buildings (C and I) exceed the 65' standard height limit and reach 70' and 73,' respectively. These two heights are below the 75' maximum afforded by this section. In both cases, upper stories are set back. Compliance with the 25% inclusionary requirement as noted above is, of course, required. **(Affirmative finding if conditioned)**

Sec. 9.1.17, Review of Proposal for Phasing

See Sec. 3.5.6 (c) 2.

Article 10: Subdivision

Subdivision of the properties is under separate application (17-0267SD). Preliminary plat approval was granted October 19, 2016. Final plat application has not yet been filed. The proposed lot and street layout is contingent on the would-be subdivision. At the very latest, final plat approval must be sought and granted prior to commencement of construction. **(Affirmative finding if conditioned)**

Article 11: Planned Unit Development

The NAC-CR zoning district essentially functions as a PUD zone. Dimensional requirements are handled across the entire zone, rather than on a lot-by-lot basis. Therefore, pursuit of PUD approval is not required for this project. In instances where multiple lot, tracts, or parcels of land are to be developed as a single entity, PUD approval may be sought. Such is the case with this application.

Sec. 11.1.6, Approval Requirements

(a) The minimum project size requirements of Sec. 11.1.3 shall be met

There is no minimum lot size for PUD in the NAC-CR zone. **(Not applicable)**

(b) The minimum setbacks required for the district have been met at the periphery of the project

Peripheral setbacks have largely been met. A small portion of Building G needs to be pulled out of the North Avenue front yard setback. **(Affirmative finding if conditioned)**

(c) The project shall be subject to design review and site plan review of Article 3, Part 4

See Articles 3 and 6 above.

(d) The project shall meet the requirements of Article 10 for subdivision review where applicable

See Article 10 above.

(e) Density, frontage, and lot coverage requirements of the underlying zoning district have been met as calculated across the entire project

See Article 4 above.

(f) All other requirements of the underlying zoning district have been met as calculated across the entire project

Compliance with this criterion is addressed article-by-article in the findings above.

(g) Open space or common land shall be assured and maintained in accordance with the conditions as prescribed by the DRB

Within the development, there are a number of green space areas and other recreational amenities accessible to residents. Presumably, some sort of HOA will be formed and will be charged with maintenance of these green spaces and recreational amenities; however, no details are included in the application. Perhaps more significantly, 12 acres of the original ~33 acres of former Burlington College lands have been sold to the city for open space preservation. Management of those lands will be handled by the city's Parks & Recreation Department. **(No finding possible)**

(h) The development plan shall specify reasonable periods within which development of each phase of the planned unit development may be started and shall be completed. Deviation from the required amount of usable open space per dwelling unit may be allowed provided such deviation shall be provided for in other sections of the planned unit development.

See Sec. 3.5.6 (a) 11.

(i) The intent as defined in Sec. 11.1.1 is met in a way not detrimental to the city's interests
Sec. 11.1.1, Intent

(a) Promote the most appropriate use of land through flexibility of design and development of land;

This proposal includes a variety of uses, amenities, and new public infrastructure that is based on the public outreach process centered development and conservation of the original ~33 acre property. The PUD process enables plasticity in design to create something other than a traditional residential subdivision with detached dwelling units on individual lots. Peripheral setbacks and project-wide lot coverage calculations enable significant flexibility within the project. **(Affirmative finding)**

(b) Facilitate the adequate and economical provision of streets and utilities;

Multiple residences and businesses will be served by shared streets and utilities within the development. **(Affirmative finding)**

(c) Preserve the natural and scenic qualities of open space;

The most significant open space of the original acreage is the 12-acres of conservation land recently sold to the city. Much of this land remains wooded and preserves views to and from the lake. Within the development, a large center green space will also afford easy access to open space and outdoor activities. **(Affirmative finding)**

(d) Provide for a variety of housing types;

All of the housing will be in the form of multi-family attached units. Within that format, a variety of bedroom counts and price points (including inclusionary, "work force," and market rate units) are included. There is also a mix of owner-occupied and rental units. Senior housing units will also be provided. **(Affirmative finding)**

(e) Provide a method of development for existing parcels which because of physical, topographical, or geological conditions could not otherwise be developed; and,

The subject property does not need to be developed as a PUD; however, it may be. The scale, intensity, and type of development proposed is most appropriately reviewed as a collective PUD. **(Affirmative finding)**

(f) Achieve a high level of design qualities and amenities.

With revisions as recommended by the Design Advisory Board, the project will comply with this criterion. **(Affirmative finding if conditioned)**

(j) The proposed development shall be consistent with the Municipal Development Plan

See Sec. 3.5.6 (b) 10.

(k) Any proposed accessory uses and facilities shall meet the requirements of Sec. 11.1.6 below.

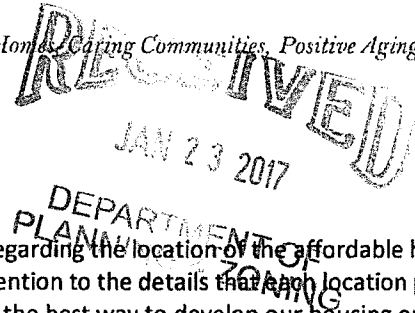
Not applicable to the development as proposed.

II. Conditions of Approval

In light of the outstanding items in the foregoing findings, approval at this time would be premature. No conditions are yet recommended.



Healthy Homes, Caring Communities, Positive Aging



January 20, 2017

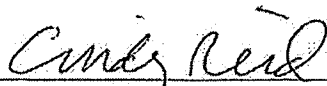
Dear Development Review Board:

We are writing this letter to clarify and provide our point of view regarding the location of the affordable housing being constructed at Cambrian Rise. As seasoned developers, we pay attention to the details that each location provides us. We have chosen the location as submitted because we believe it is the best way to develop our housing on the best part of the site.

- CSC, and CHT to a limited extent, needs to be near the public transportation hub. This was a critical factor in selecting this site for affordable housing - to be close to public transportation. In addition, the topography of the site at the top of the hill will make accessibility easier for seniors.
- CHT and CSC each have complicated and phased funding mechanisms that are not on the same track or the project as a whole. This location allows us to coordinate our funding applications and development schedule with each other and be independent of the market conditions and construction for the rest of Cambrian Rise.
- In fact, our intention is to move quickly. Because our sites are at the first section of public street infrastructure to be constructed, we will be able to start construction. Building L will start in 2017 (in one or two phases) followed by Phase 1 of Building K the year after.
- Although the proposed central green is attractive, we believe fronting on a public park to our south is equally attractive, with southern orientation and fewer views of adjacent buildings as well. Being adjacent to the recreation path and community gardens is also a plus.
- Both buildings will have great views of the Green Mountains to the east and the Lake to the west. Furthermore, CSC's experience is that many seniors prefer views of activity rather than quiet green area. The porches and common rooms allow direct views of North Ave., South Street and the main site entry and views toward commercial space, the transportation hub and a restaurant.
- 'Affordable Housing' is not one monolithic strata of the senior and family rental population. Each building contains a variety of income levels ranging from recently homeless on up to some market rate dwelling units. Each building already embodies the socio-economic elements of an integrated neighborhood. And CHT residents have the opportunity for mobility to homeownership.

During earlier iterations of the site plan there were other options for locating the affordable housing. From the list above we believe you can see that we are on the exact portion of the site we want to be for both logistical and quality of life reasons. We were not pushed to the edges because we offer affordable housing. The richness of the overall site plan is full of pedestrian links and passages that assure we are well integrated into the entire neighborhood. Thank you for your time and consideration.


Michael Monte, COO CFO
Champlain Housing Trust


Cindy Reid, Director of Development
Cathedral Square Corporation

CAMBRIAN RISE

PROJECT PHASING

The Phasing Plan prepared by TJ Boyle Associates (L-EX4) depicts a breakdown of the sequence in which the various building and infrastructure components of the project are projected be constructed. In particular, it depicts which sections of the public improvements (road and utilities) will be constructed concurrent with each building(s). The numbers assigned to each phase represent the current concept, but are not intended to represent the final sequence of construction, which will be determined by market conditions and other factors.

The various phasing plans prepared by Civil Engineering Associates (C6.10, - C6.16) and by VHB (two sheets) depict the sequence in which certain stormwater improvements will be constructed, depending on the final project phasing. The plan necessarily depicts temporary improvements required as the project is constructed in the initial years, ending with the construction/implementation of the final design, when and as the project nears completion. The dates assigned to each phase represent the current concept, but are not intended to represent the final sequence of construction, which will be determined by market conditions and other factors.

It is the desire of the Applicant to secure a Unified Certificates of Occupancy when and as each phase is completed and ready for occupancy, regardless of whether the infrastructure improvements servicing that phase are temporary or permanent. This will be a requirement of the project financing for each phase.

RECEIVED
JAN 17 2017
DEPARTMENT OF
PLANNING & ZONING



RECEIVED
JAN 17 2017

DEPARTMENT OF
PLANNING & ZONING

MEMO

TO: Eric Farrell, Owiso Makuku, Charlie Pughe
Copy: Laura Wheelock, BTV DPW
FROM: Mark Smith, PE.
DATE: December 28, 2016
SUBJECT: Cambrian Rise – Development Changes

Several changes to the mix of land use are proposed since the Transportation Impact Assessment (TIA), dated 12/21/16 for the Cambrian Rise development project on North Avenue in Burlington, Vermont.

This memorandum is provided as a supplement to the TIA, documenting these changes and their effects on the traffic analysis presented in the original Assessment cited above.

1.0 PROPOSED CHANGES

The development has been revised to include the following additional components:

- 2 hotel rooms
- 6 apartment units
- 2,950 s.f. of technical college space
- 250 s.f. of restaurant space

Vehicle trip generation, as determined by the methods used in the TIA, now includes the following:

Primary trips, as determined by the Institute of Transportation Engineers *Trip Generation Manual*, are summarized by land use code (ITE LUC) in Table 1.

TABLE 1. PRIMARY TRIPS

ITE LUC	Description	Units/size		AM Peak		PM Peak	
				enter	exit	enter	exit
223	Mid-Rise Apartment	673	d.u.	90	199	194	140
311	All-Suites Hotel	42	room	9	7	8	9
540	Junior/Community College	16,550	s.f.	37	13	24	18
565	Daycare Center	4,025	s.f.	26	23	23	26
710	General Office Building	22,541	s.f.	31	4	6	28
826	Specialty Retail Center	2,675	s.f.	0	0	3	4
932	High-Turnover (Sit-Down) Restaurant	2,650	s.f.	16	13	9	6
sub-total				208	260	267	231
total				467		498	

Pass-by trips are not expected to change from the original assessment.



Trips that are associated with each land use, but are expected to take advantage of other uses within the development, are shown in Table 2.

TABLE 2. INTERNAL CAPTURE TRIPS

ITE LUC	Description	Units/size		AM Peak		PM Peak	
				enter	exit	enter	exit
223	Mid-Rise Apartment	673	d.u.	1	4	3	5
311	All-Suites Hotel	42	room	0	2	1	0
540	Junior/Community College	16,550	s.f.	0	0	0	0
565	Daycare Center	4,025	s.f.	8	8	8	8
710	General Office Building	22,541	s.f.	6	3	3	1
826	Specialty Retail Center	2,675	s.f.	0	0	2	2
932	High-Turnover (Sit-Down) Restaurant	2,650	s.f.	7	5	2	3
		sub-total		22	22	19	19
		total		44		38	

In summary, including a 10% reduction in trips due to the effects of Transportation Demand Management, the total external vehicle trips due to the project are shown in Table 3.

TABLE 3. TOTAL EXTERNAL VEHICLE TRIPS

ITE LUC	Description	Units/size		AM Peak		PM Peak	
				enter	exit	enter	exit
223	Mid-Rise Apartment	673	d.u.	80	176	172	122
311	All-Suites Hotel	42	room	8	5	6	8
540	Junior/Community College	16,550	s.f.	33	12	22	16
565	Daycare Center	4,025	s.f.	16	13	14	16
710	General Office Building	22,541	s.f.	22	1	2	24
826	Specialty Retail Center	2,675	s.f.	0	0	1	2
932	High-Turnover (Sit-Down) Restaurant	2,650	s.f.	8	7	13	8
		sub-total		167	214	230	196
		total		381		425	

The net effect of the additional land use is an additional 12 trips in the AM peak hour and 11 trips in the PM peak hour. The total daily trip generation is expected to be 4,620 vehicles per day.

2.0 NET EFFECT OF CHANGES ON TRAFFIC

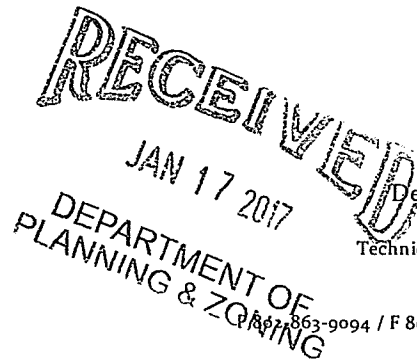
The net effect of these additional land uses is generally negligible throughout the study area (adding 0.1 seconds of average delay or 1% of capacity utilization (v/c)). Minor exceptions include:

- 1 sec. / 2 sec. average delay added to the Berry St. approach to North Avenue (2022 PM / 2027 PM)
- 4 sec. average delay added to the eastbound approach at Maple and Pine St. (without the planned Champlain Parkway improvements)

Maximum vehicle queue increases were generally negligible as well. Small increases (3-7 ft.) are noted from North St/North Ave. to Battery/Pearl St.

END OF MEMO





City of Burlington
Department of Public Works

Technical Services Engineering Division
645 Pine Street, Suite A
Burlington, VT 05402
P 802-863-9094 / F 802-863-0466 / TTY 802-863-0450
www.burlingtonvt.gov/DPW

To: City of Burlington Planning & Zoning
Eric Farrell – Cambrian Rise

From: Norman J. Baldwin P.E. – City Engineer/Ass't Director, DPW
Laura K. Wheelock P.E. - Public Works Engineer, DPW

Subject: Cambrian Rise, BCCH, LLC & 375 North Ave.

The Department of Public Works (DPW) has been working with the Cambrian Rise Development Team to review and discuss details of the project as it relates to the public Right-of-Way (ROW) along North Avenue, the project intersections on North Avenue, as well as the internal streets as the applicant has indicated that they would like to turn over to the City 60-foot public ROW for the three internal streets. DPW has conducted our review on both the progress plans dated 12/23/2016 as well as the Traffic Impact Assessment dated 12/21/16 and corresponding memo dated 12/28/16. Water Resources review to be submitted separately.

Traffic Impact Assessment (TIA):

DPW has been working with the Development Team for over a year to review various iterations of the projects traffic impact within the City's transportation network. The projects impacts are primarily concentrated in the northern areas of the Old North End with some project generated traffic reaching as far south as Main Street; as well as the southern areas of the New North End.

Based on the mix of uses identified in the RSG memo 12/28/2016; the anticipated external project trips will be 381 in the AM Peak, and 425 in the PM Peak. In general the impact to the levels of service, queue lengths, or overall delay at studied intersections is minor.

The only exception is the intersection of North Ave/Berry/Washington. This intersection currently has stop control on the side street approaches, and is slightly offset. It is anticipated that with the project generated traffic the Level of Service (LOS) in the PM Peak will change from a C to an E, and the corresponding delay to vehicles will change from 23 seconds to 46 seconds in the 5 year buildout future year of 2027. DPW has discussed this intersection with the developer, and the change in LOS and delay is significant, it is however within an acceptable change per VTrans Traffic Impact Assessment Guidelines. To mitigate concerns and impacts that are anticipated in future years DPW will continue to monitor and assess this intersection for improvements that can be implemented with impact fees.

DPW has also asked the Development Team to address crosswalks both immediately adjacent to the project and for 1000 feet north and south of their project to ensure the addition of crosswalks at the project's southern drive work with other existing or planned crosswalks along North Ave. The TIA had two findings with regards to crosswalk locations:

1. The existing crosswalk (and bus stop) near Champlain Farms should be removed, as the ultimate spacing of crosswalks and stops will be more uniform with the planned crossings and stops at the Project's southern drive.
2. New crosswalk should be placed proximate to the new Parks & Recreation redeveloped path near Covent Square with that project
3. At the northern project drive, a crosswalk should be considered if/when future activity warrants such a facility.
4. Per the project plan set, crosswalks shown at the project intersection of South Road/North Ave.

Conditions from the Traffic Study:

DPW's agrees with the review of the crosswalk recommendations and requests for the third recommendation that the Applicant be made responsible prior to the close of their permit to conduct pedestrian counts and submit a memo to DPW reviewing the northern project drive on North Ave and the warrant for installation of a crosswalk at that location to be paid by the Applicant should a crosswalk warrant be met.

Progress Plans Dated 12/23/2016:

DPW reviewed the project plans for impacts on North Ave, as well as the three internal project streets in anticipation that the Applicant will seek to have these streets and their ROW accepted by the City in the future. DPW's findings are as follows.

North Ave

The proposed improvements as shown in the submitted plan meet or exceed City Standards as currently specified with the following exceptions, notes, or comments:

1. The Applicant will be required to replace the sidewalk more than 5 years old on the West side of North Ave between the southern property line (Building K) and the northern property line (north of North drive)
2. The signal at North Ave and South Road should be installed during phase one of the project and left in flash, until either trip/pedestrian warrants are met, at which time the signal should become active.
3. A No Parking flashing beacon should be installed at/near the intersection of North Ave and South Road, the cost of the beacon is the responsibility of the Applicant. Due to the unique nature of these beacons DPW will install the beacon and seek reimbursement for the materials and cost of installation.
4. DPW and Applicant to discuss narrowing of the painted median on the north side of the intersection of North Ave and South Road, DPW to review final plan before line work is implemented.
5. Bike lane shall have stop bars marked within the bike lanes, these could be offset from the travel lane stop bars if appropriate.
6. Bike lane markings across intersection at South Road shall be consistent with City typical markings in both size and configuration. This should include skip lines at the intersection and bike size chevron in the lane. Also diagonal line striping in the separated portion of the bike lane should be removed

7. DPW and Applicant to review bicycle left turns at North Ave and South Road. DPW would like to see a pull off ahead of the crosswalk to allow bicycles to utilize the pedestrian push button, an alternative we would consider is a bicycle box in the lane striping. DPW to review and approve final plan before work is implemented.
8. At the Northwest corner of North Ave and South Road the proposed bus stop area shows a significant amount of concrete/hardscape area. This area will need to be revisited/revised with DPW.
9. Applicant will seek to adjust property boundary lines in the future on North Ave to place the sidewalk along North Ave back in the ROW.

Project Streets (South, West, North)

The proposed improvements as shown in the submitted plan meet or exceed City Standards as currently specified with the following exceptions, notes, or comments:

1. A crosswalk needs be placed at the west side of the intersection of South Road and West Road. This will facilitate pedestrian movements given the planned commercial activity in the area, adjacent recreational facilities, and ability for DPW to maintain and clear snow at the intersection.
2. Applicant to review location of stop bars relative to the crosswalks at the intersection of North Road and West Road. Crosswalks should be placed in front of stop bars.
3. Signage and Striping:
 - a. Crosswalk warning signs MUST reflect YIELD to pedestrians, per VT State Law
 - b. Share the lane signage should be independent of the pedestrian crossing signs
 - c. The only on street striping should be for crosswalks, stop bars, and in the immediate vicinity of the proposed signal for center line delineation. No line striping should be placed for individual parking spaces, center line, or fog lines.
 - d. No speed limit signs within the development
4. Sidewalk configuration/alignment and connection to Lakeview Cemetery will need to be reviewed by DPW/Parks prior to construction if Applicant pursues acceptance of project streets by the City.
5. Applicant to review bicycle/pedestrian connection from Building O and P to the bike path to the west to determine whether additional connection will be at back of building or at end of sidewalk.
6. Applicant will be required to submit design drawings for retaining wall along North Road, stamped by a Professional Engineer registered in the State of Vermont.

General Comments

1. Applicant will be required to place monuments at all parcel boundaries.
2. All public infrastructure intended to be part of the dedication must be within the proposed limits of the ROW.
3. Any materials used in the ROW that exceed City Standards will be the responsibility of the Applicant, and the Applicant will be required to enter into a License Agreement with DPW, unless otherwise waived, for the care, maintenance, replacement, removal for the life that material unless otherwise replaced with a Standard material, at which time the Agreement can be dissolved.

4. For the dedication process the Applicant must, at minimum, provide the following:
 - a. As-built drawings of all infrastructure in the ROW
 - b. Certification from the engineer of record that infrastructure constructed was completed per plans and specification
 - c. All documentation by the project resident engineer for all infrastructure in the ROW. This shall include but is not limited to: Notes, photographs, reports, quality control testing, change orders, submittals.
 - d. The City shall be invited to participate at all construction meetings
 - e. The City shall have the right to have oversight during construction, review of resident engineer documentation, submittals.
5. Review the sequence of work to connect South Road sidewalk/path to the proposed Parks Path, a connection to those facilities in advance of 2022.
6. There is a discrepancy between the phasing of the project shown on P1.0 by CEA and sheet 2 of 2 by VHB with regard to when Building H, Q, and R will be constructed. Of concern is the varying stormwater treatments that occur during construction, treatment types shown varies.

Should you have any questions please contact me at LWheelock@burlingtonvt.gov or 540-0397.

RECEIVED
JAN 23 2017

DEPARTMENT OF
PLANNING & ZONING
P.O. Box 849
BURLINGTON, VT
05402
(802) 863-9094 P
(802) 863-0466 F

Chapin Spencer
PUBLIC WORKS DIRECTOR

Norman J. Baldwin, P.E.
CITY ENGINEER



October 10, 2016

David S. Marshall, P.E.
Civil Engineering Associates
10 Mansfield View Lane
South Burlington, VT 05403
60 Westminster Drive
Burlington, VT 05408

Note: The first three pages attached to this document represent the design flows contemplated in October, 2017. The remaining attached pages date 1-4-17 represent the current design flows which are less than that identified in this allocation letter. D. Marshall

Re: Water/Sewer Capacity for 311-329 North Avenue (Cambrian Rise)

Dear Dave,

This letter is to inform you, the State of Vermont Environmental District and other interested parties that the City of Burlington's water and wastewater facilities have sufficient capacity to handle flows associated with a large residential development the above address. Using the State Environmental Protection Rules, you have calculated the water and sewer demands to be 158,457 gpd (gals/day) and 135,050 gpd, respectively. Your calculations are provided with this capacity letter.

Flow from this area is treated at our Main Wastewater Plant on Lavalley Lane. It is important to note that this letter only addresses treatment plant and not distribution or collection system capacities. At this time, we are collectively working on a design and agreement to remove stormwater inputs to our combined sewer system on North Avenue in order to mitigate impacts from increased sewage flow during storm events. This design will need to be constructed before a certificate of occupancy can be provided by the City of Burlington.

This letter is good for one (1) year from the date of writing. If this letter is not filed with the proper offices, or if the proper permits are not obtained within that year, you will need to reapply. Any changes in flow estimates or property usage also requires reapplication. Please feel free to call me at 865-7258 if you have any questions.

Sincerely,

Steve Roy, P.E.
Project Engineer
Burlington Public Works
northave311-329_cap

Cambrian Rise Water Supply Design Flows

311-329 North Avenue

6-Oct-16

<u>No.</u>	<u>Description</u>		<u>GPD</u>		<u>GPD</u>
Building A					
65	1-Bedroom Units	x	135 GPD/Unit	=	8,775
Building B					
35	1-Bedroom Units	x	135 GPD/Unit	=	4,725
13	2-Bedroom Units	x	270 GPD/Unit	=	3,510
Building C					
56	1-Bedroom Units	x	135 GPD/Unit	=	7,560
14	2-Bedroom Units	x	270 GPD/Unit	=	3,780
7	3-Bedroom Units	x	405 GPD/Unit	=	2,835
23	Employees (4.6k Comm.)	x	15 GPD/Empl.	=	341
	10 % Low Flow Reduc. Credit				(34)
Buildings E & F					
96	1-Bedroom Units	x	135 GPD/Unit	=	12,960
22	2-Bedroom Units	x	270 GPD/Unit	=	5,940
Building G					
180	Empl/Students (18k Comm.)	x	15 GPD/Unit	=	2,700
	10 % Low Flow Reduc. Credit				(270)
200	Seat Restaurant	x	30 GPD/Empl.	=	6,000
	10 % Low Flow Reduc. Credit				(600)
Building K					
63	1-Bedroom Units	x	135 GPD/Unit	=	8,505
7	2-Bedroom Units	x	270 GPD/Unit	=	1,890
Building L					
36	1-Bedroom Units	x	135 GPD/Unit	=	4,860
33	2-Bedroom Units	x	270 GPD/Unit	=	8,910
7	3-Bedroom Units	x	405 GPD/Unit	=	2,835
Building H					
27	1-Bedroom Units	x	135 GPD/Unit	=	3,645
33	2-Bedroom Units	x	270 GPD/Unit	=	8,910
Building I					
20	2-Bedroom Units	x	270 GPD/Unit	=	5,400
8	3-Bedroom Units	x	405 GPD/Unit	=	3,240
105	Employees (21k SF)	x	15 GPD/Empl.	=	1,572
	10 % Low Flow Reduc. Credit				(157)
Buildings M & N					
4	1-Bedroom Units	x	135 GPD/Unit	=	540
52	2-Bedroom Units	x	270 GPD/Unit	=	14,040
22	3-Bedroom Units	x	405 GPD/Unit	=	8,910
Building O & P					
25	1-Bedroom Units	x	135 GPD/Unit	=	3,375
24	2-Bedroom Units	x	270 GPD/Unit	=	6,480
1	3-Bedroom Units	x	405 GPD/Unit	=	405
Building Q					
35	1-Bedroom Units	x	135 GPD/Unit	=	4,725
18	2-Bedroom Units	x	270 GPD/Unit	=	4,860
27	2-Bedroom Units (Potential)	x	270 GPD/Unit	=	7,290
Total Sewer Design Flow to Pump Sta.(GPD) =					158,457
Average Daily Design Flow (GPM) =					220.1

Cambrian Rise

Gravity Wastewater Design Flows

311-329 North Avenue

6-Oct-16

Gravity Flow to North Avenue

<u>No.</u>	<u>Description</u>		<u>GPD</u>		<u>GPD</u>
Building A					
65	1-Bedroom Units	x	140 GPD/Unit	=	9,100
Building B					
35	1-Bedroom Units	x	140 GPD/Unit	=	4,900
13	2-Bedroom Units	x	210 GPD/Unit	=	2,730
Building C					
56	1-Bedroom Units	x	140 GPD/Unit	=	7,840
14	2-Bedroom Units	x	210 GPD/Unit	=	2,940
7	3-Bedroom Units	x	210 GPD/Unit	=	1,470
Buildings E & F					
96	1-Bedroom Units	x	140 GPD/Unit	=	13,440
22	2-Bedroom Units	x	210 GPD/Unit	=	4,620
Building G					
180	Empl/Students (18k Comm.)	x	15 GPD/Unit	=	2,700
	20 % Low Flow Reduc. Credit				(540)
200	Seat Restaurant	x	30 GPD/Empl.	=	6,000
	20 % Low Flow Reduc. Credit				(1,200)
Building K					
63	1-Bedroom Units	x	140 GPD/Unit	=	8,820
7	2-Bedroom Units	x	210 GPD/Unit	=	1,470
Building L					
36	1-Bedroom Units	x	140 GPD/Unit	=	5,040
33	2-Bedroom Units	x	210 GPD/Unit	=	6,930
7	3-Bedroom Units	x	210 GPD/Unit	=	1,470
Total Sewer Design Flow via Gravity (GPD) =					77,730
Average Daily Design Flow (GPM) =					81.0
Peaking Factor =					4.0
Peak Flow Rate (GPM) =					324
Peak Flow Rate (CFS) =					0.72

Cambrian Rise

Pumped Wastewater Design Flows

311-329 North Avenue

15-Sep-16

PS Flow to North Avenue

Building C

23 Employees (4.6k Comm.)	x	15 GPD/Empl.	=	341
20 % Low Flow Reduc. Credit				(68)

Building H

27 1-Bedroom Units	x	140 GPD/Unit	=	3,780
33 2-Bedroom Units	x	210 GPD/Unit	=	6,930

Building I

20 2-Bedroom Units	x	210 GPD/Unit	=	4,200
8 3-Bedroom Units	x	210 GPD/Unit	=	1,680
105 Employees (21k SF)	x	15 GPD/Empl.	=	1,572
20 % Low Flow Reduc. Credit				(314)

Buildings M & N

4 1-Bedroom Units	x	140 GPD/Unit	=	560
52 2-Bedroom Units	x	210 GPD/Unit	=	10,920
22 3-Bedroom Units	x	210 GPD/Unit	=	4,620

Building O & P

25 1-Bedroom Units	x	140 GPD/Unit	=	3,500
24 2-Bedroom Units	x	210 GPD/Unit	=	5,040
1 2-Bedroom Units	x	210 GPD/Unit	=	210

Building Q

35 1-Bedroom Units	x	140 GPD/Unit	=	4,900
27 2-Bedroom Units (Potential)	x	210 GPD/Unit	=	5,670
18 2-Bedroom Units	x	210 GPD/Unit	=	3,780

Total Sewer Design Flow to Pump Sta.(GPD) = 57,320

Average Daily Design Flow (GPM) = 59.7

Peaking Factor = 4.0

Peak Flow Rate (GPM) = 239

Peak Flow Rate (CFS) = 0.53

Cambrian Rise Water Supply Design Flows

311-375 North Avenue

4-Jan-17

<u>No.</u>	<u>Description</u>		<u>GPD</u>		<u>GPD</u>
Building A					
65	1-Bedroom Units	x	135 GPD/Unit	=	8,775
	Pre-Existing Allocation and Permit in Place for this Bldg				(8,820)
					WW-4-3619-1
Building B					
69	1-Bedroom Units	x	135 GPD/Unit	=	9,315
2	2-Bedroom Units	x	270 GPD/Unit	=	540
	Pre-Existing Allocation and Permit in Place for this Bldg				(5,304)
					WW-4-3619
Building C					
67	1-Bedroom Units	x	135 GPD/Unit	=	9,045
6	2-Bedroom Units	x	270 GPD/Unit	=	1,620
8	3-Bedroom Units	x	405 GPD/Unit	=	3,240
50	Employees (4.6k Comm.)	x	15 GPD/Empl.	=	750
	10 % Low Flow Reduc. Credit				(75)
Buildings E & F					
85	1-Bedroom Units	x	135 GPD/Unit	=	11,475
24	2-Bedroom Units	x	270 GPD/Unit	=	6,480
1	3-Bedroom Units	x	210 GPD/Unit	=	210
116	Person Assembly Area	x	5 GPD/Empl.	=	579
	10 % Low Flow Reduc. Credit				(58)
Building G					
200	Seat Restaurant	x	30 GPD/Empl.	=	6,000
1	Bakery	x	100 GPD/Unit	=	100
	10 % Low Flow Reduc. Credit				(610)
Building K					
63	1-Bedroom Units	x	135 GPD/Unit	=	8,505
7	2-Bedroom Units	x	270 GPD/Unit	=	1,890
Building L					
36	1-Bedroom Units	x	135 GPD/Unit	=	4,860
33	2-Bedroom Units	x	270 GPD/Unit	=	8,910
7	3-Bedroom Units	x	405 GPD/Unit	=	2,835
Building H					
19	1-Bedroom Units	x	135 GPD/Unit	=	2,565
38	2-Bedroom Units	x	270 GPD/Unit	=	10,260
29	Employees (5.7k Comm.)	x	15 GPD/Empl.	=	428
	10 % Low Flow Reduc. Credit				(43)
Building I					
20	2-Bedroom Units	x	270 GPD/Unit	=	5,400
8	3-Bedroom Units	x	405 GPD/Unit	=	3,240
115	Student Daycare + Employ.	x	15 GPD/Empl.	=	1,725
10	Non Resid. @ Health Club	x	10 GPD/Empl.	=	100
	10 % Low Flow Reduc. Credit				(183)
Buildings M & N					
11	1-Bedroom Units	x	135 GPD/Unit	=	1,485
42	2-Bedroom Units	x	270 GPD/Unit	=	11,340
26	3-Bedroom Units	x	405 GPD/Unit	=	10,530
15	Employees (3.0 SF)	x	15 GPD/Empl.	=	225
	10 % Low Flow Reduc. Credit				(23)
Building O & P					
24	1-Bedroom Units	x	135 GPD/Unit	=	3,240
28	2-Bedroom Units	x	270 GPD/Unit	=	7,560
6	Employees (1.3 SF)	x	15 GPD/Empl.	=	90
	10 % Low Flow Reduc. Credit				(9)
Building Q					
24	2-Bedroom Units	x	270 GPD/Unit	=	6,480
10	3-Bedroom Units	x	405 GPD/Unit	=	4,050
Building R					
42	Hotel Rooms - 2 Pers Occup.	x	100 GPD/Unit	=	4,200
	10 % Low Flow Reduc. Credit				(420)
Total Water Supply Design Flow (GPD) =					142,502
Average Daily Design Flow (GPM) =					197.9

Cambrian Rise

Summary of Wastewater Design Flows

311-375 North Avenue

4-Jan-17

Gravity Flow to North Avenue

<u>Description</u>	<u>GPD</u>
Building A	9,100
Building B	10,080
Building C	12,320
Buildings E & F	17,613
Building G	4,880
Building K	10,290
Building L	13,440
Infiltration	290
Subtotal	78,013
Pre-Existing Allocations & Permits in Place for Exist Bldgs	(14,124)
Increase	63,889

Flow to Pump Station and then to North Ave.

Building C	600
Buildings E & F	1,948
Building H	10,982
Building I	7,340
Buildings M & N	16,000
Building O & P	9,312
Building Q	7,140
Building R	4,200
Infiltration	943
Increase	58,465
Total Increase	122,354

Cambrian Rise Gravity Wastewater Design Flows

311-375 North Avenue

4-Jan-17

Gravity Flow to North Avenue

<u>No.</u>	<u>Description</u>		<u>GPD</u>		<u>GPD</u>
Building A					
65	1-Bedroom Units	x	140 GPD/Unit	=	9,100
	Pre-Existing Allocation and Permit in Place for this Bldg				(8,820)
					WW-4-3619-1
Building B					
69	1-Bedroom Units	x	140 GPD/Unit	=	9,660
2	2-Bedroom Units	x	210 GPD/Unit	=	420
	Pre-Existing Allocation and Permit in Place for this Bldg				(5,304)
					WW-4-3619
Building C					
67	1-Bedroom Units	x	140 GPD/Unit	=	9,380
6	2-Bedroom Units	x	210 GPD/Unit	=	1,260
8	3-Bedroom Units	x	210 GPD/Unit	=	1,680
Buildings E & F					
85	1-Bedroom Units	x	140 GPD/Unit	=	11,900
24	2-Bedroom Units	x	210 GPD/Unit	=	5,040
1	3-Bedroom Units	x	210 GPD/Unit	=	210
116	Person Assembly Area	x	5 GPD/Empl.	=	579
20	% Low Flow Reduc. Credit	x	579	=	(116)
Building G					
200	Seat Restaurant (2.1k SF)	x	30 GPD/Seat	=	6,000
1	Bakery	x	100 GPD/Unit	=	100
20	% Low Flow Reduc. Credit	x	6,100	=	(1,220)
Building K					
63	1-Bedroom Units	x	140 GPD/Unit	=	8,820
7	2-Bedroom Units	x	210 GPD/Unit	=	1,470
Building L					
36	1-Bedroom Units	x	140 GPD/Unit	=	5,040
33	2-Bedroom Units	x	210 GPD/Unit	=	6,930
7	3-Bedroom Units	x	210 GPD/Unit	=	1,470
					<u>63,599</u>
Infiltration					
450	LF 8" Sewer Main	x	0.455 GPD/LF	=	205
250	LF 6" Sewer Service	x	0.341 GPD/LF	=	85
0	LF 8" Sewer Service	x	0.455 GPD/LF	=	-
					<u>290</u>
Total Sewer Design Flow to Pump Sta.(GPD)					= 63,889
Average Daily Design Flow (GPM)					= 66.6
Peaking Factor					= 4.0
Peak Flow Rate (GPM)					= 266
Peak Flow Rate (CFS)					= 0.59

Cambrian Rise Pumped Wastewater Design Flows

311-375 North Avenue

4-Jan-17

Flow to Pump Station and then flow to North Avenue

Building C

50 Employees (10k Comm.)	x	15 GPD/Empl.	=	750
20 % Low Flow Reduc. Credit				(150)

Buildings E & F

11 1-Bedroom Units	x	140 GPD/Unit	=	1,540
1 2-Bedroom Units	x	210 GPD/Unit	=	210
17 Employees (3.3k SF)	x	15 GPD/Empl.	=	248
20 % Low Flow Reduc. Credit				(50)

Building H

19 1-Bedroom Units	x	140 GPD/Unit	=	2,660
38 2-Bedroom Units	x	210 GPD/Unit	=	7,980
29 Employees (5.7k Comm.)	x	15 GPD/Empl.	=	428
20 % Low Flow Reduc. Credit				(86)

Building I

20 2-Bedroom Units	x	210 GPD/Unit	=	4,200
8 3-Bedroom Units	x	210 GPD/Unit	=	1,680
115 Student Daycare + Employ.	x	15 GPD/Empl.	=	1,725
10 Non Resid. @ Health Club	x	10 GPD/Empl.	=	100
20 % Low Flow Reduc. Credit	x	1,825	=	(365)

Buildings M & N

11 1-Bedroom Units	x	140 GPD/Unit	=	1,540
42 2-Bedroom Units	x	210 GPD/Unit	=	8,820
26 3-Bedroom Units	x	210 GPD/Unit	=	5,460
15 Employees (3.0 SF)	x	15 GPD/Empl.	=	225
20 % Low Flow Reduc. Credit				(45)

Building O & P

24 1-Bedroom Units	x	140 GPD/Unit	=	3,360
28 2-Bedroom Units	x	210 GPD/Unit	=	5,880
6 Employees (1.3 SF)	x	15 GPD/Empl.	=	90
20 % Low Flow Reduc. Credit				(18)

Building Q

24 2-Bedroom Units	x	210 GPD/Unit	=	5,040
10 3-Bedroom Units	x	210 GPD/Unit	=	2,100

Building R

42 Hotel Rooms - 2 Pers Occup	x	100 GPD/Unit	=	4,200
				<u>57,522</u>

Infiltration

1450 LF 8" Sewer Main	x	0.455 GPD/LF	=	659
500 LF 6" Sewer Service	x	0.341 GPD/LF	=	170
250 LF 8" Sewer Service	x	0.455 GPD/LF	=	114
				<u>943</u>

Total Sewer Design Flow to Pump Sta.(GPD) = 58,465

Average Daily Design Flow (GPM) = 60.9

Peaking Factor = 4.0

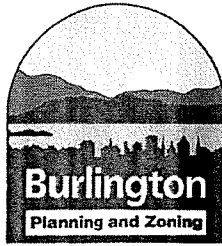
Peak Flow Rate (GPM) = 244

Peak Flow Rate (CFS) = 0.54

Burlington Development Review Board

149 Church Street, City Hall
Burlington, VT 05401
www.burlingtonvt.gov/pz/DRB
Telephone: (802) 865-7188
Fax (802) 865-7195

Austin Hart
Brad Rabinowitz
Israel Smith
AJ LaRosa
Geoff Hand
Alexandra Zipparo
Wayne Senville
Jim Drummond, (Alternate)
Robert Purvee, (Alternate)



BURLINGTON DEVELOPMENT REVIEW BOARD

Tuesday January 24, 2017, 5:00 PM

**BCA City Arts, Lorraine B. Good Room, 135 Church St, Burlington, VT
Minutes**

**Board Members Present: Austin Hart, Brad Rabinowitz, Geoff Hand, Israel Smith,
Alexandara Zipparo, AJ.LaRosa, Jim Drummond (Alt), Robert Purvee (Alt)**

Board Members Absent:

Staff Members Present: Scott Gustin, Mary O'Neil, Anita Wade

I. Agenda

II. Communications

Board accepts updated materials from applicant and will review them.

III.

IV. Minutes

V. Public Hearing

- 1. 17-0623CA/MA; 311 North Ave(RM, Ward 4N) and 329-375 North Ave (NAC-CR, Ward 4N) VLTBTV Parkland LLC, BC Community Housing LLC & Eric Farrell**
Continued review of the proposed development consisting of 11 buildings containing 733 residential units, approximately 45,000 sq. ft. of non-residential support/amenity space, approximately 45,000 sq. ft. of neighborhood commercial spaces and 1093 parking spaces. (Project Managers, Scott Gustin and Mary O'Neil)

A.Hart: asked for continued review to be about the site plan and massing issues.
Applicant and interested parties are sworn in.

E.Farrell: has a list of issues. Gives slide presentation on buildings, specific to building Q and R; building I serves residential and gym. Building G is an addition to college building with adjustments to setbacks from North Ave. Shows screening menu for parking. Goes over the phasing plan with orphanage building first and others being concurrent.

A.Hart: asks about phasing amenities.

E.Farrell: need a whole project approval.

A.Hart: need some understanding how phasing works and define the specifics for the final CO.

E.Farrell: asking for a UCO for each phase completed.

B.Rabinowitz: concerns about missing the amenities when phasing is mixed up.

A.Hart: how will public access be affected during the phases.

E.Farrell: will maintain pedestrian corridor along North property line.

I.Smith: question about phasing and the order of phasing.

E.Farrell: changing the boundaries would return to the Board.

I.Smith: asking for an order of development.

A.Hart: Board needs to reserve right to know about changes to phasing.

S.Gustin: it is precedent for construction schedules to be adjusted.

E.Farrell: the burden is on my part.

A.Hart: may state and limit issues pertaining to phasing.

E.Farrell: rentals are with CHT and Cathedral Sq. 24% of inclusionary units is split between building M and H.

T.Rawlings: housing program manager for CEDO, representing Noelle McKay and housing inclusionary project said this is the largest project in City's history, which is adding to affordable housing. Since 1990, 270 units have been added in the city. Discussed the numbers of inclusionary housing units that the buildings would entail and 25% of the for sale units is how the calculation of inclusionary units are provided.

A.Hart: are efforts being made to provide workforce housing?

E.Farrell: yes, looking at workforce housing also.

A.Zipparo: questions the location of inclusionary units in relation to other amenities.

M.Monte: approved the site for affordable housing, which are integrated within the context of the building. Residents receive a wide range of support, fully integrated in the community.

C.Reid: have some market rate units that support the inclusionary. Seniors rate transportation high for accessibility and want to be close to CHT.

I.Smith: observation that there is a difference between CHT and Cathedral Square buildings and other buildings due to the absence of balconies.

M.Monte: typically don't do balconies for more attention to the interior aspects.

T.Rawlings: the partnership between the developer, CHT and Cathedral Square provides a deeper resource of affordability due to federal funds and for a number of services that can be offered.

Arch Smith/Civil Engineer: mentions the comments received from DPW and the City. Speaks about land uses, trips generated and history, and level of service at various intersections looking at safety, and improvements.

A.Hart: asks DPW staff to address the improvements.

L.Wheelock: looking into various projects about levels of safety at certain intersections and trips reductions. The infrastructure can take the demand. Focusing on whether the local vehicle movements on site are safe. The impact is minimal due to area of the city.

A.Hart: questions level of service analysis.

L.Wheelock: looked at all levels of service with applicant. We will continue to watch this area for any gaps.

A.Hart: questions on the crosswalks

L.Wheelock: threshold will be determined. The infrastructure is taken over by the applicant.

W.Senville: questions threshold especially for people shopping in area.

B.Rabinowitz: question about the shared lane signage on the shared paths and city's regulations if pedestrians will be informed through the signage.

L.Wheelock: signage will be different on shared sidewalk versus shared lane.

A.Hart: opens to public comments on traffic.

Discussion proceeded on TDM and reference to trip generation guidance document.

E.Farrell: discusses plans on parking and number of parking spaces per building.

W.Senville: reductions in car usage are not the same as reduction in parking space. Questions if parking spaces can be placed in reserve.

E.Farrell: mentioned 80% of parking is underground. Project is meeting parking standards.

E.Farrell: can make adjustments later on in the project; don't want to risk of not having enough parking later on.

A.Zipparo: questioned the use of surface parking for farmer's market if the parking is reserved for residents.

E.Farrell: mentioned the severe grade changes and challenges to the site in the creation of parking.

I.Smith: questions the meaning of unbundled parking. Asks staff how the ordinance treats unbundled parking.

S.Gustin: references parking table in the ordinance. Explained the project has a parking management plan and not seeking a waiver.

E.Farrell: handouts given to Board on slides and goes over list of items wanting to cover. Answers Board questions regarding public access and the boundaries of the project.

A.Hart: asks for discussion on landscaping and details about the development of the stone cottage.

E.Farrell: said this is a work in progress and will be working with Park and Rec on landscaping and will meet with Susan Snell regarding the cottage.

A.Hart: mentioned the measures approved by DAB.

B.Rabinowitz: asks about the development agreement and how it works.

E.Farrell: mentioned an easement agreement.

A.Hart: asks about renewable energy and if other opportunities are available in addition to solar panels.

E.Farrell: looking into doing solar on as many buildings as possible

A.Hart: opens to public comments. Asks the person who spoke previously about environmental concerns to come forward. Said the Board does not address environmental management problems.

M.Murray: owns property in Burlington and lives in Montpelier. Concerned that certain aspects of review of this property did not include surrounding properties that do have environmental concerns will affect this property.

A.Hart: asks for evidence of that this project has been affected by surrounding properties.

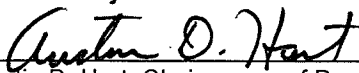
M.Murray: mentions the flow of underground water and lack of sufficient investigation into erosion control and project property's overflow into Lake Champlain.

S.Gustin: discussed other issues the Board needs to address regarding this project.

A.Hart: closed the public hearing.

VI. Other Business

VII. Adjournment


Austin D. Hart, Chairperson of Development Review Board


Date


A.Wade, Planning & Zoning Clerk


Date

Plans may be viewed in the Planning and Zoning Office, (City Hall, 149 Church Street, Burlington), between the hours of 8:00 a.m. and 4:30 p.m.

Participation in the DRB proceeding is a prerequisite to the right to take any subsequent appeal. Please note that ANYTHING submitted to the Planning and Zoning office is considered public and cannot be kept confidential.

This may not be the final order in which items will be heard. Please view final Agenda, at www.burlingtonvt.gov/pz/dr/ agendas or the office notice board, one week before the hearing for the order in which items will be heard.

