

CITY OF CAMBRIDGE

TOBIN MONTESSORI AND VASSAL LANE UPPER SCHOOLS PROJECT

02/12/2020

**PERKINS —
EASTMAN**

Human by Design

COMMUNITY MEETING



AGENDA

COMMUNITY MEETING – FEBRUARY 12, 2020

- Process and schedule review
- Program update
 - Population on site
 - Traffic impacts
- Option review
- Option analysis
- Preferred option
- Final thoughts

DRAFT



DESIGN PROCESS

10 MONTHS

Feasibility Study

- Establish Program
- Establish Building Organization & Form

6 MONTHS

Schematic Design

- Begin Building & Site Design
- Choose Structure & Mechanical Systems
- Traffic Studies

6 MONTHS

Design Development

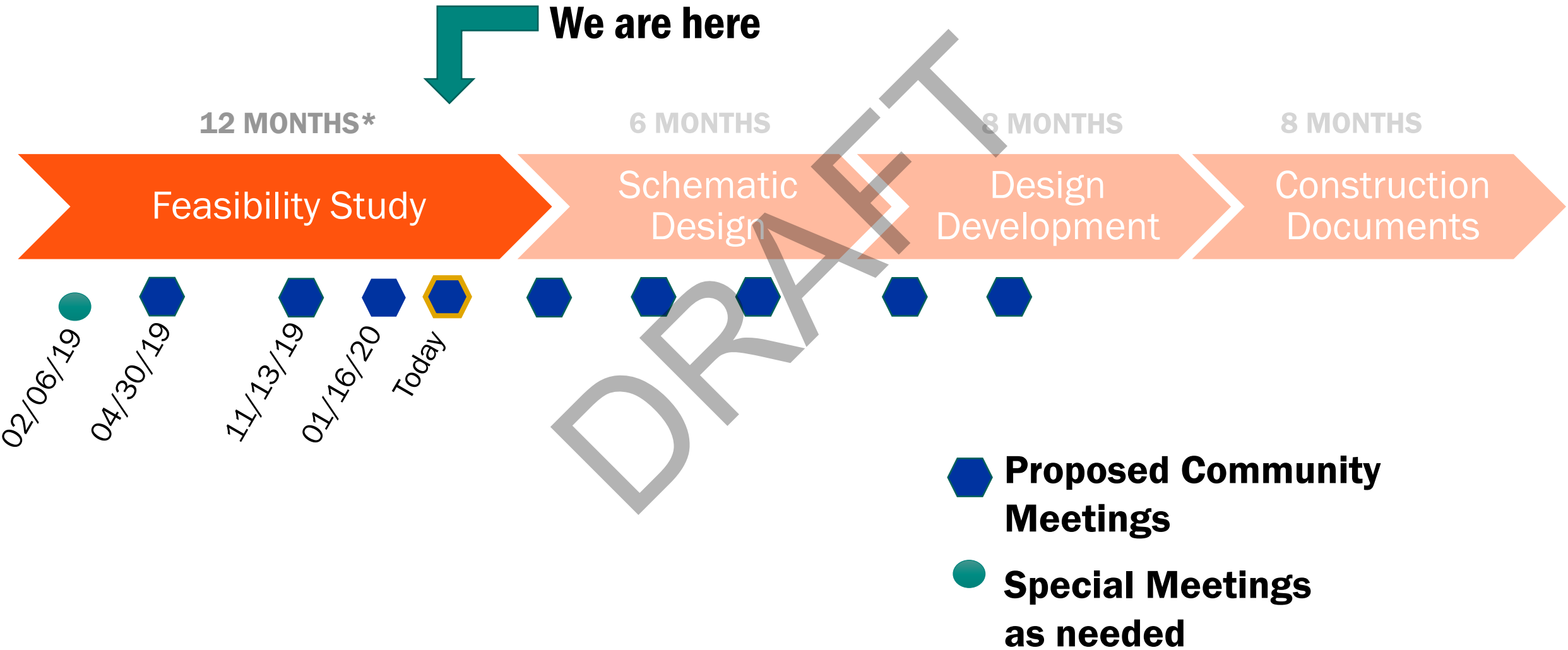
- Refine Design
- Choose Products
- Begin Details

10 MONTHS

Construction Documents

- Document Design
- Create Construction Details

CURRENT SCHEDULE



* Schedule extended to allow for additional community input

PREFERRED OPTION

PROCESS

- What it is
 - Selection of building location
 - Selection of building scale
 - General configuration
- What it is Not
 - Actual building design
 - Final choice of site elements
 - Final choice of traffic and parking solution

DRAFT

MAJOR ELEMENTS

- Open area and park area
- Program size
- Building scale for neighborhood
- Site circulation and traffic

DRAFT

PROGRAM UPDATE



SCHOOL POPULATION, ADJUSTED

110 FEWER STUDENTS 19 FEWER STAFF

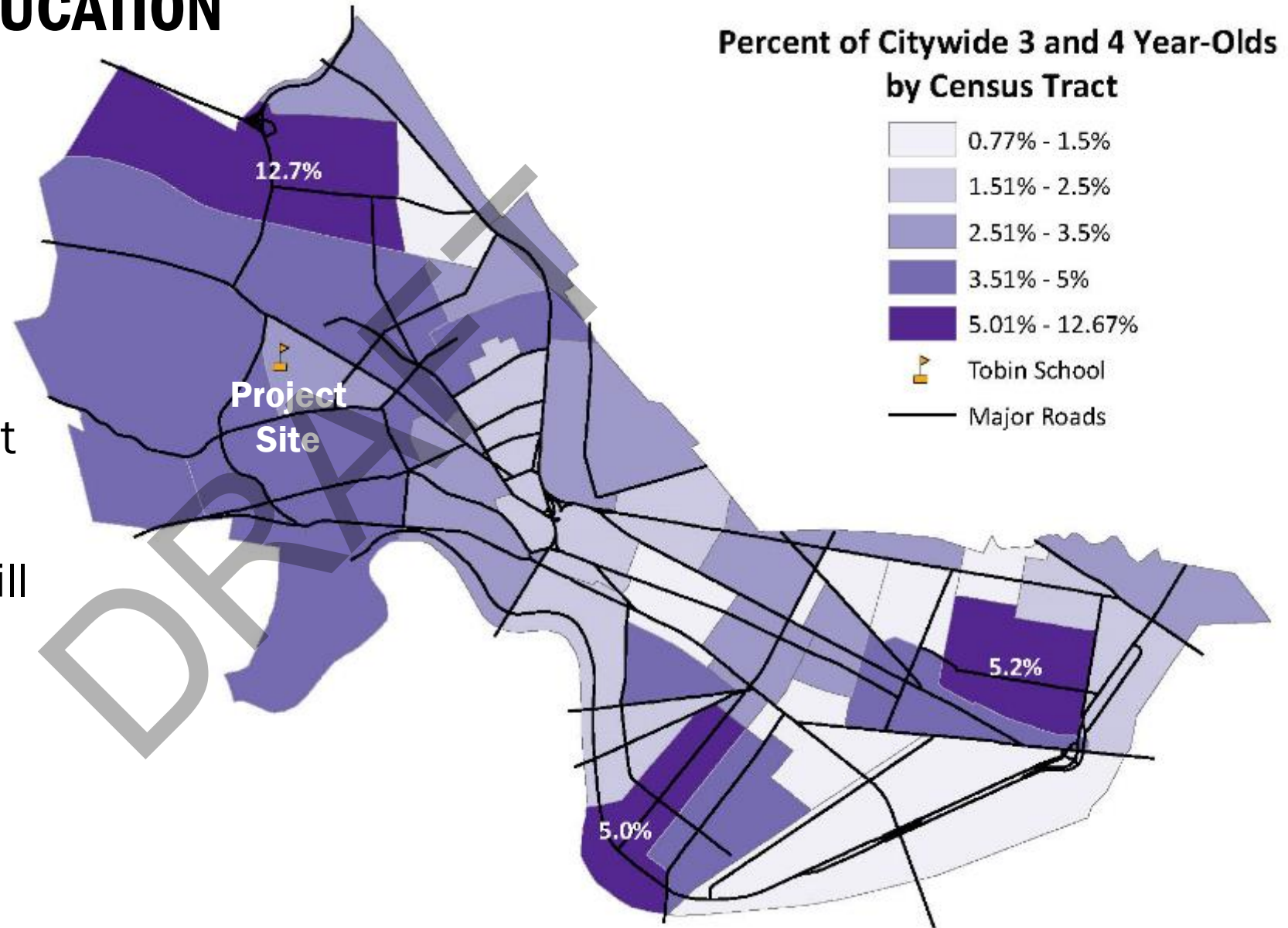
- Preschool classrooms at this location
 - November program: 8 classes
 - Current program: 4 classes
 - 50% fewer
- Special Start classrooms at this location
 - November program: 5 classes
 - Current program: 3 classes
 - 40% reduction
- All other program needs met



EARLY CHILDHOOD EDUCATION

3 AND 4 YEAR-OLD DISTRIBUTION

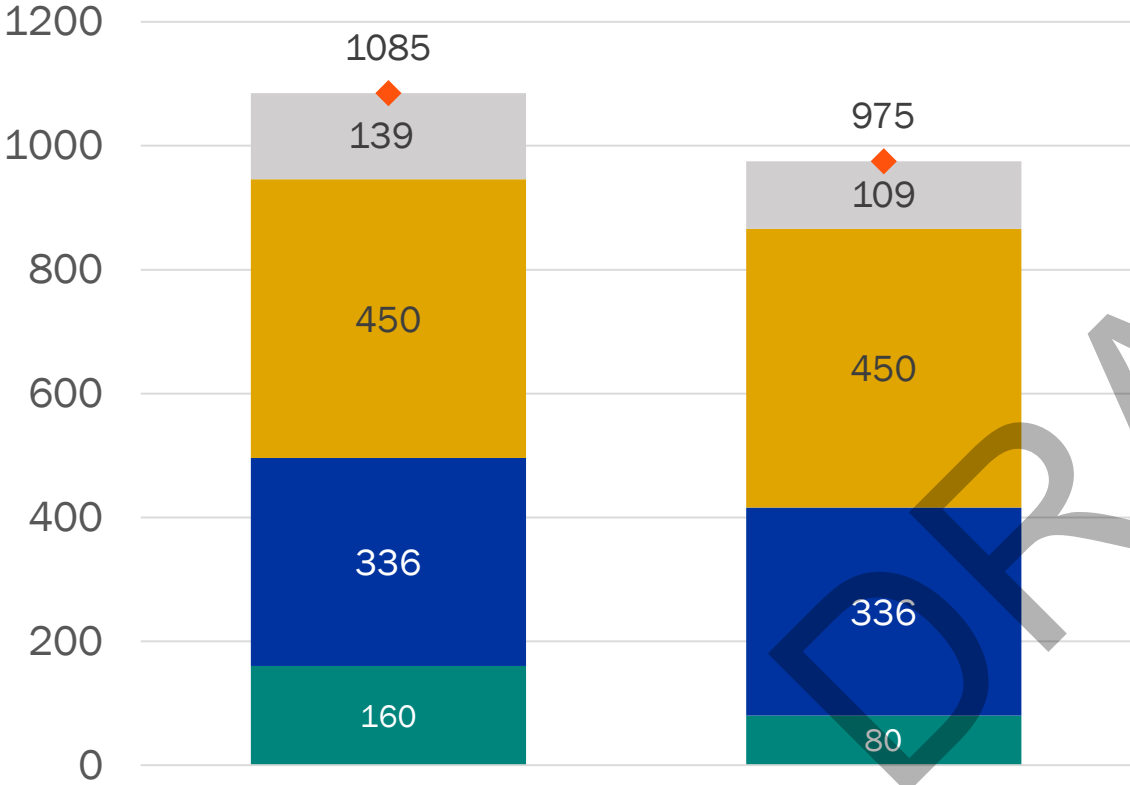
- City is committed to providing preschool access
- North and West Cambridge have greatest need
- Preschool classrooms will be added at other sites
- Adjustment to school



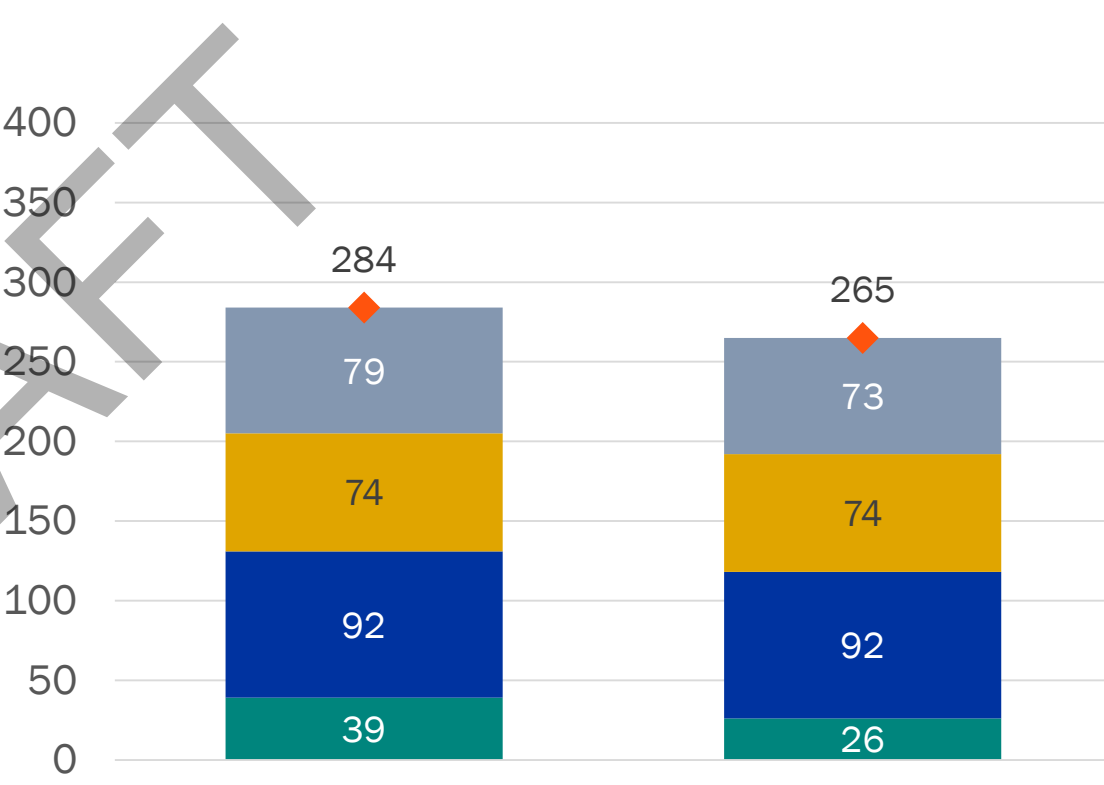
SCHOOL POPULATION: STUDENTS AND STAFF

110 FEWER STUDENTS 19 FEWER STAFF

STUDENTS



STAFF



■ Preschool
 ■ Tobin
 ■ Vassal
 ■ Special Programs
 ■ Shared

Original: 8 preschool classrooms, 5 Special Start classrooms
 Reduced: 4 preschool classrooms, 3 Special Start classrooms

TRAFFIC AND PARKING

WHAT NEEDS TO BE STUDIED

- Traffic Impact Study (TIS) Certification
 - Required comprehensive analysis
 - Looks at existing infrastructure and anticipated impacts
 - Traffic, Parking, & Transportation Department reviews
 - Includes vehicle, pedestrian, and bicycle access and circulation
 - Opportunity for community input

TRAFFIC AND PARKING

WHAT NEEDS TO BE STUDIED

- Parking & Transportation Demand Management (PTDM) Plan
 - National model, required when adding non-residential parking
 - Looks to improve access, reduce congestion, and reduce air pollution
 - Goal to increase safety by promoting walking bicycling, and public transit
- Key elements of PTDM include
 - Single-occupancy vehicle mode-share commitment
 - Comprehensive Transportation Demand Management (TDM) measures
 - Annual Single Occupancy Vehicle surveys
 - Biennial car and bicycle counts
 - Status of TDM measures

DESIGNS IN NOVEMBER



RENOVATION / ADDITION

- Re-uses existing building
- Buses on Vassal Lane
- Cars on Concord Ave
- Service and parking at site interior
- Playing fields on east side



WINGS

- All new building
- On-site drive aisle for buses and cars
- Service and parking at site interior
- Playing fields on south side



PAVILIONS

- All new building
- On-site drive aisle for buses and cars
- Service and parking at site interior
- Playing fields on west side

DESIGNS IN JANUARY



REPLACEMENT

- All new building
- Bus loop off Vassal Lane
- Parking below building
- Playing fields on north side



WINGS

- All new building
- Bus loop off Concord Ave
- Parking below building
- Playing fields on south side



PAVILIONS

- All new building
- On-site drive aisle for buses
- Parking below building
- Playing fields on west side

EVOLUTION OF AN IDEA

November 2019:
RENOVATION-
ADDITION



EVOLUTION OF AN IDEA

January 2020:
REPLACEMENT v1



EVOLUTION OF AN IDEA

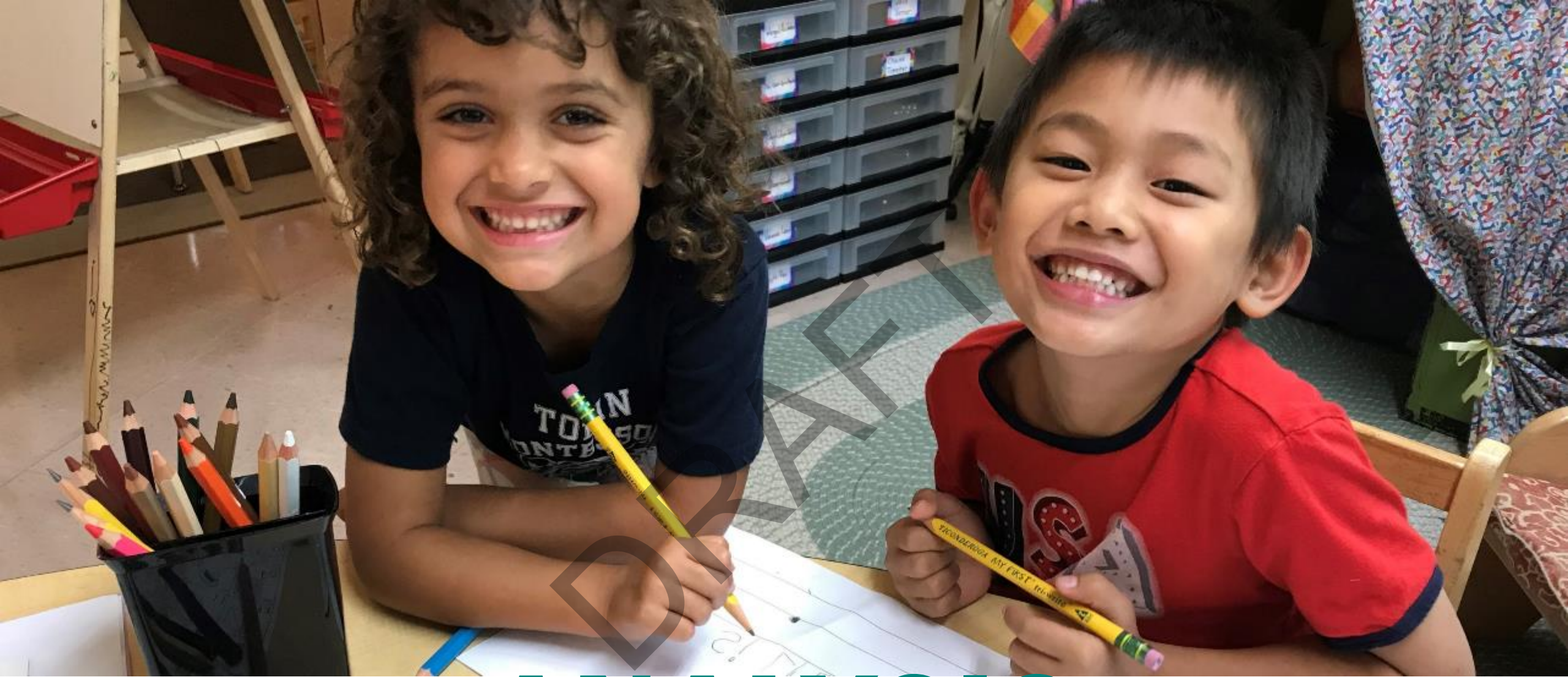
January 2020:
REPLACEMENT v2



EVOLUTION OF AN IDEA

February 2020:
REPLACEMENT v3
CROSSROADS

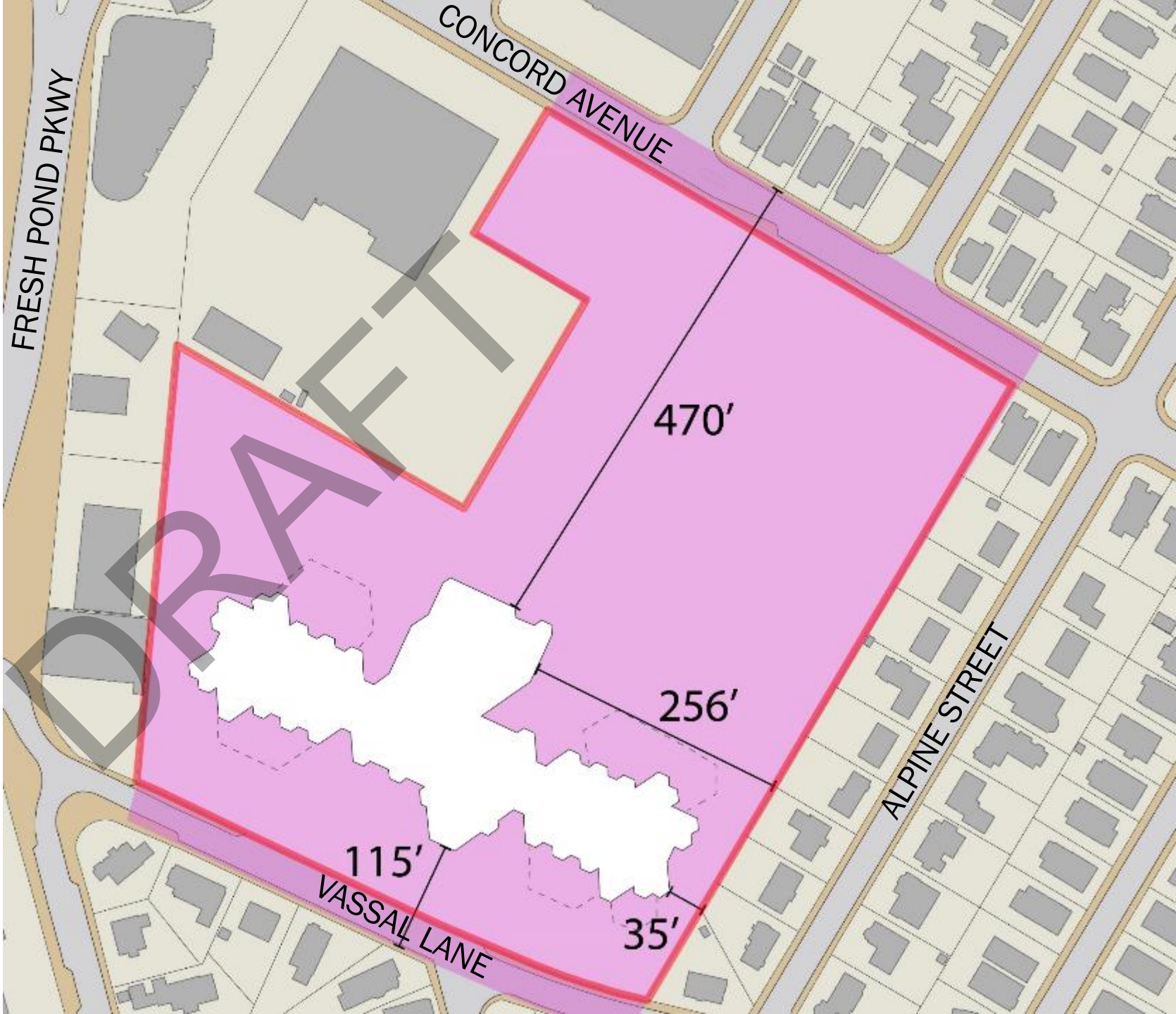




ANALYSIS

SETBACK

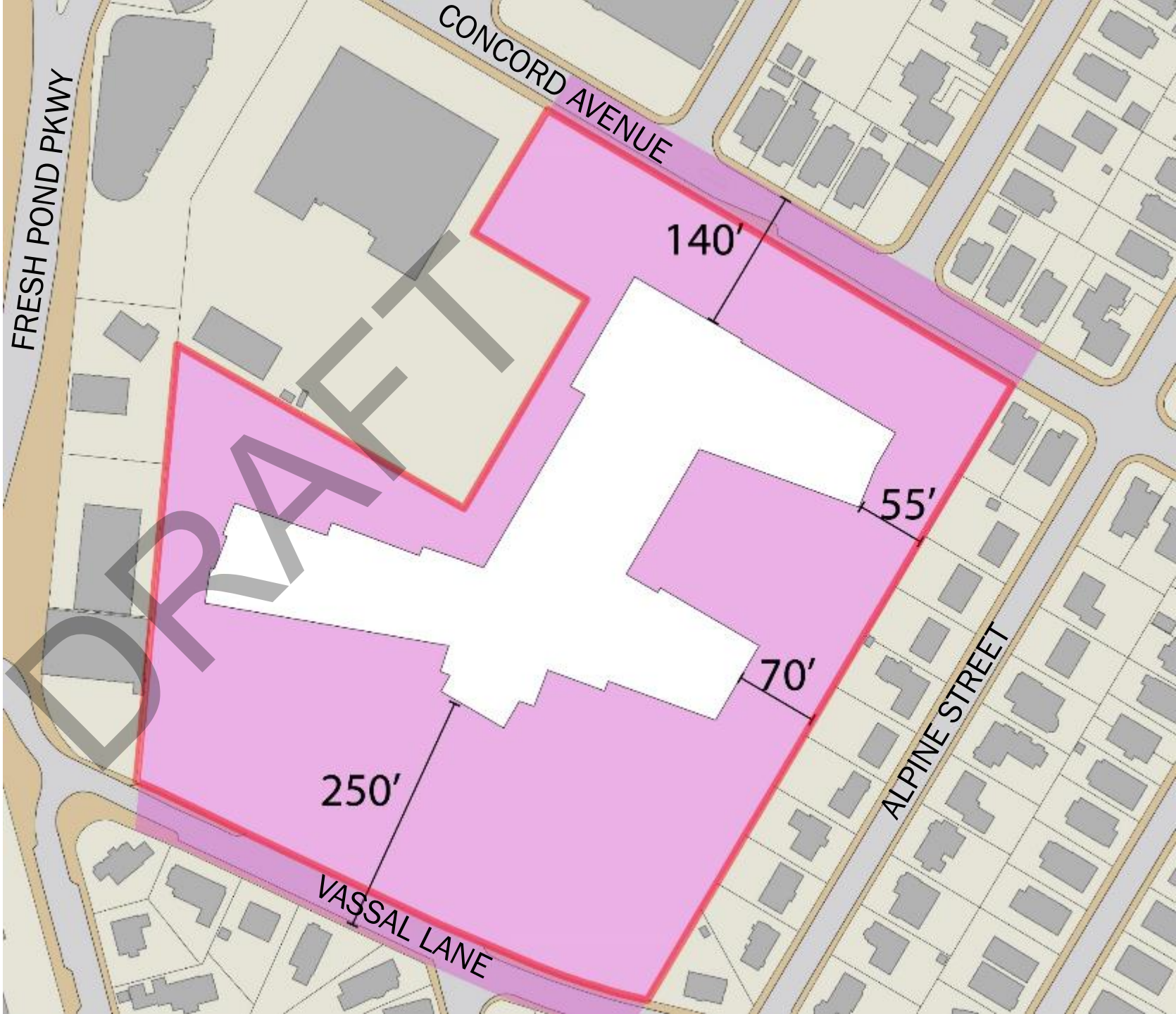
EXISTING



SETBACK

WINGS

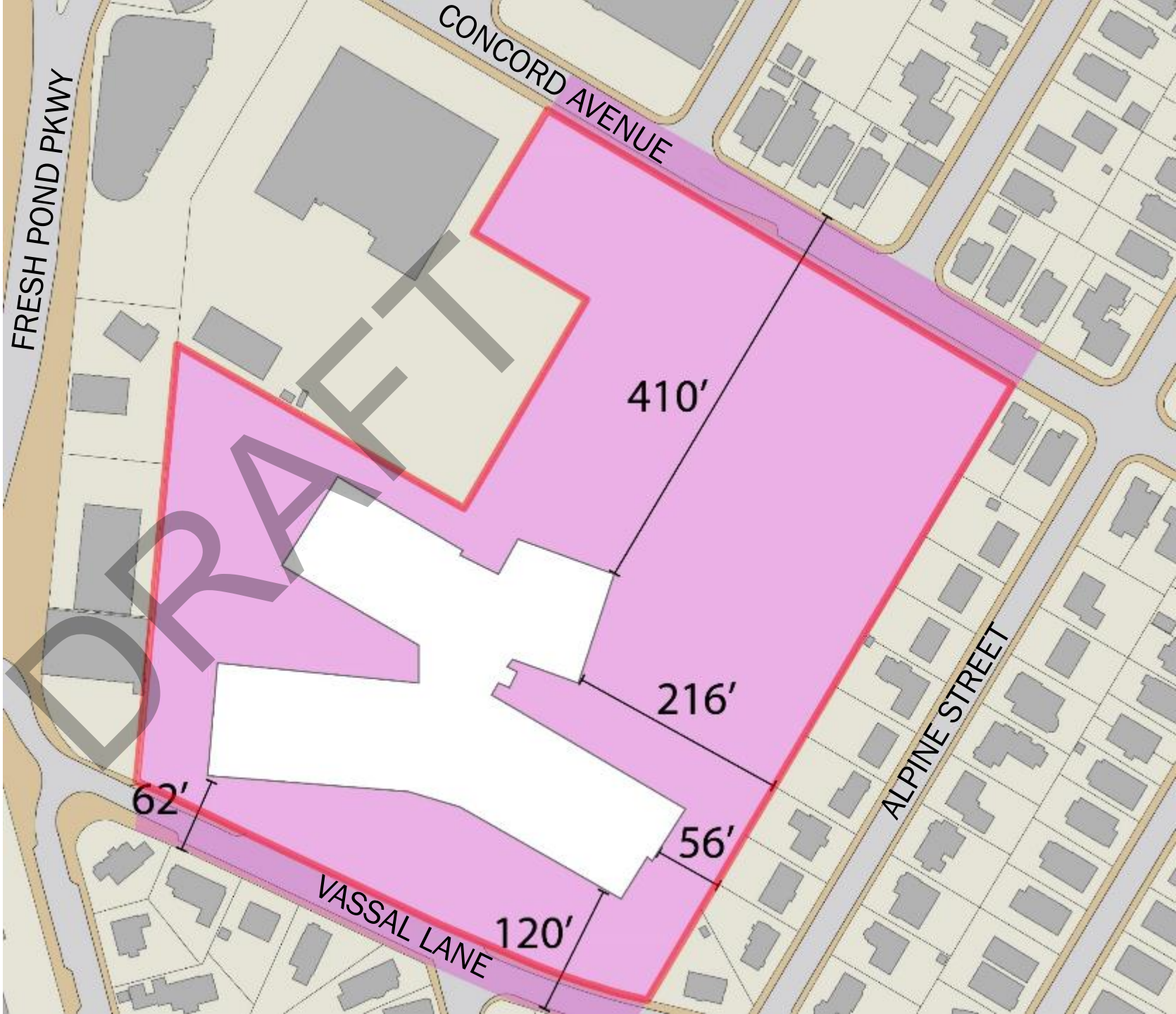
November 2019



SETBACK

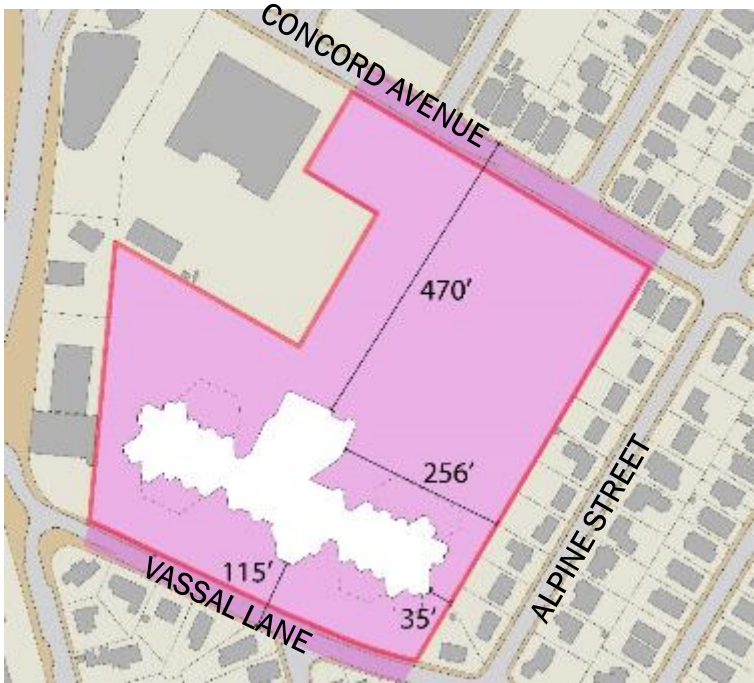
CROSSROADS

February 2020

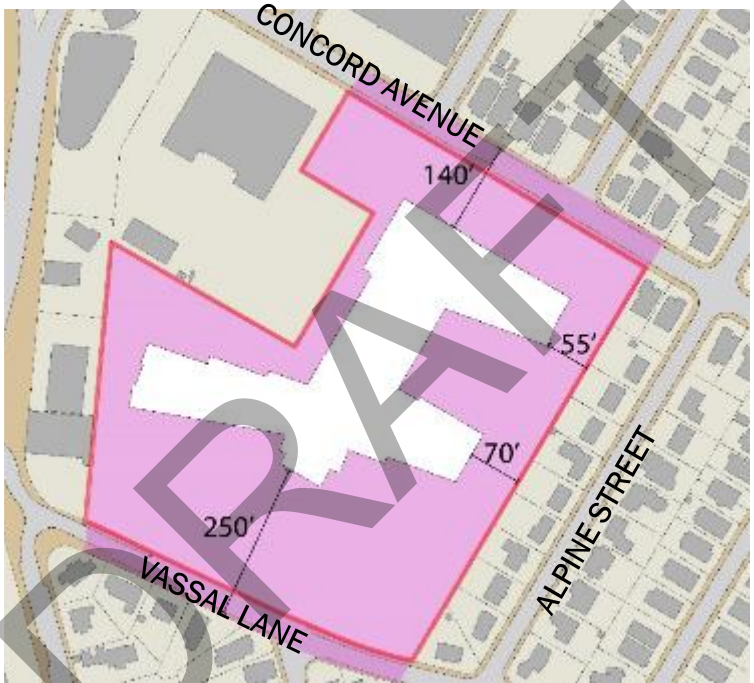


SETBACK FROM PROPERTY LINE

EXISTING COMPARED TO PROPOSED

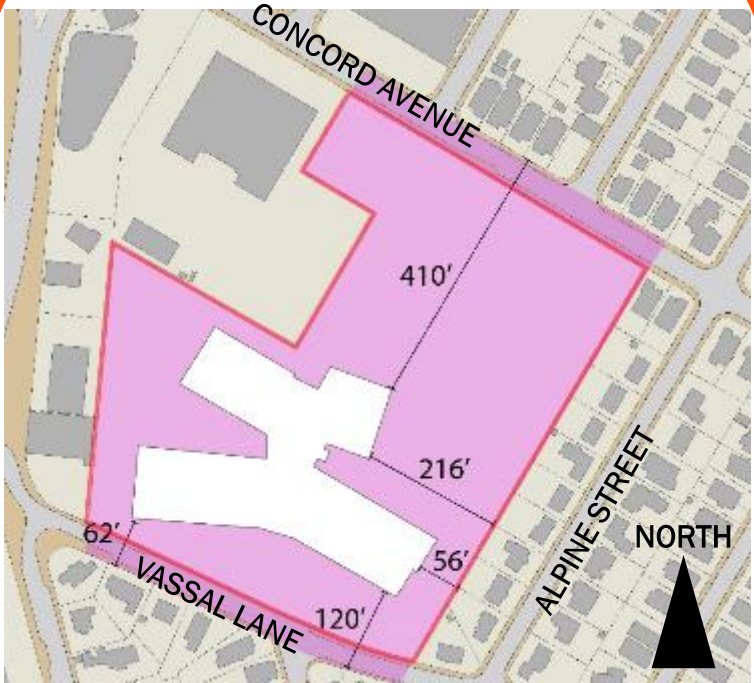


EXISTING



WINGS

November 2019



CROSSROADS

OPEN AREA

EXISTING

6.6 acres

Building: 1.4 acres

Roads: 1.1 acres



OPEN AREA

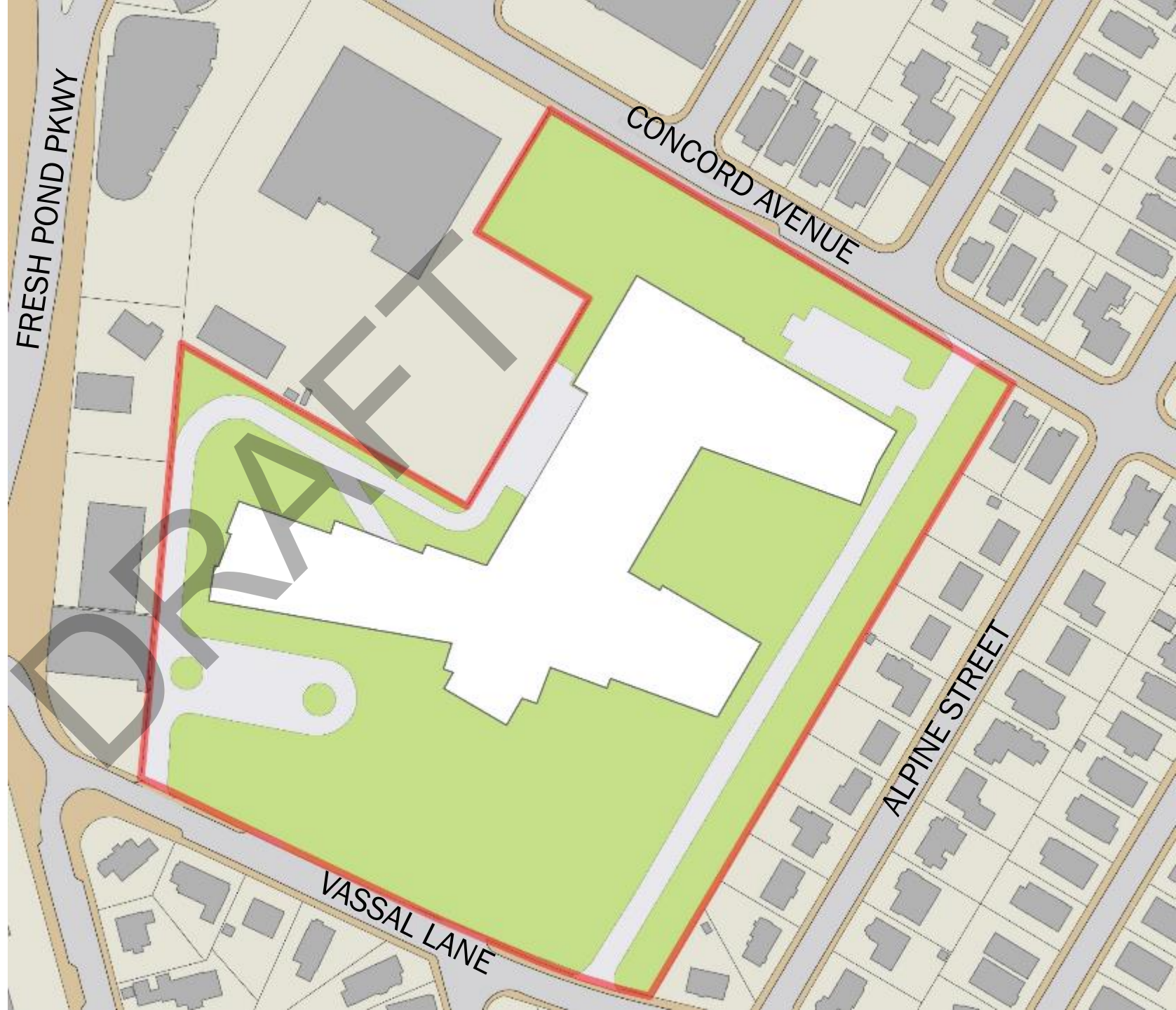
WINGS

November 2019

5.4 acres

Building: 2.4 acres

Roads: 1.3 acres



OPEN AREA

CROSSROADS OPTION

February 2020

6.5 acres

Building: 2.0 acres

Roads: 0.6 acres

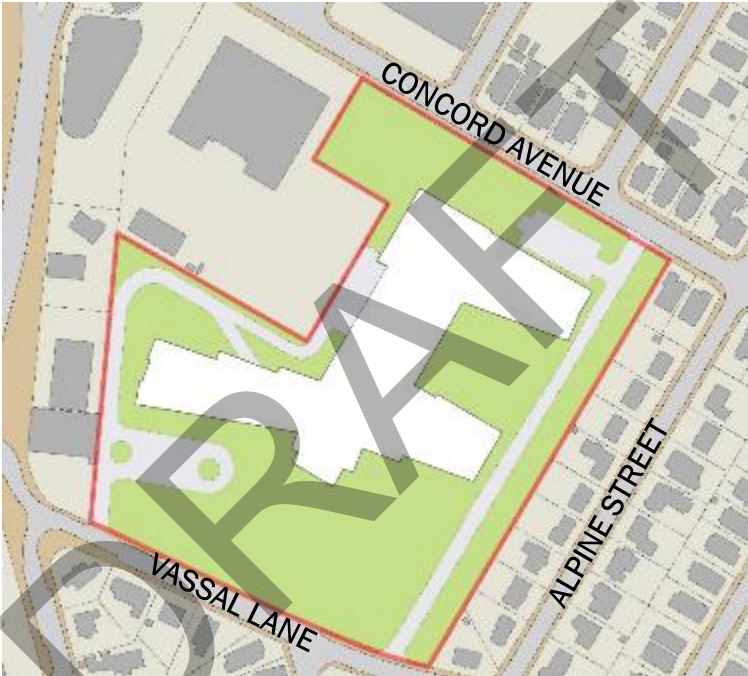


OPEN AREA

COMPARISONS



EXISTING



WINGS

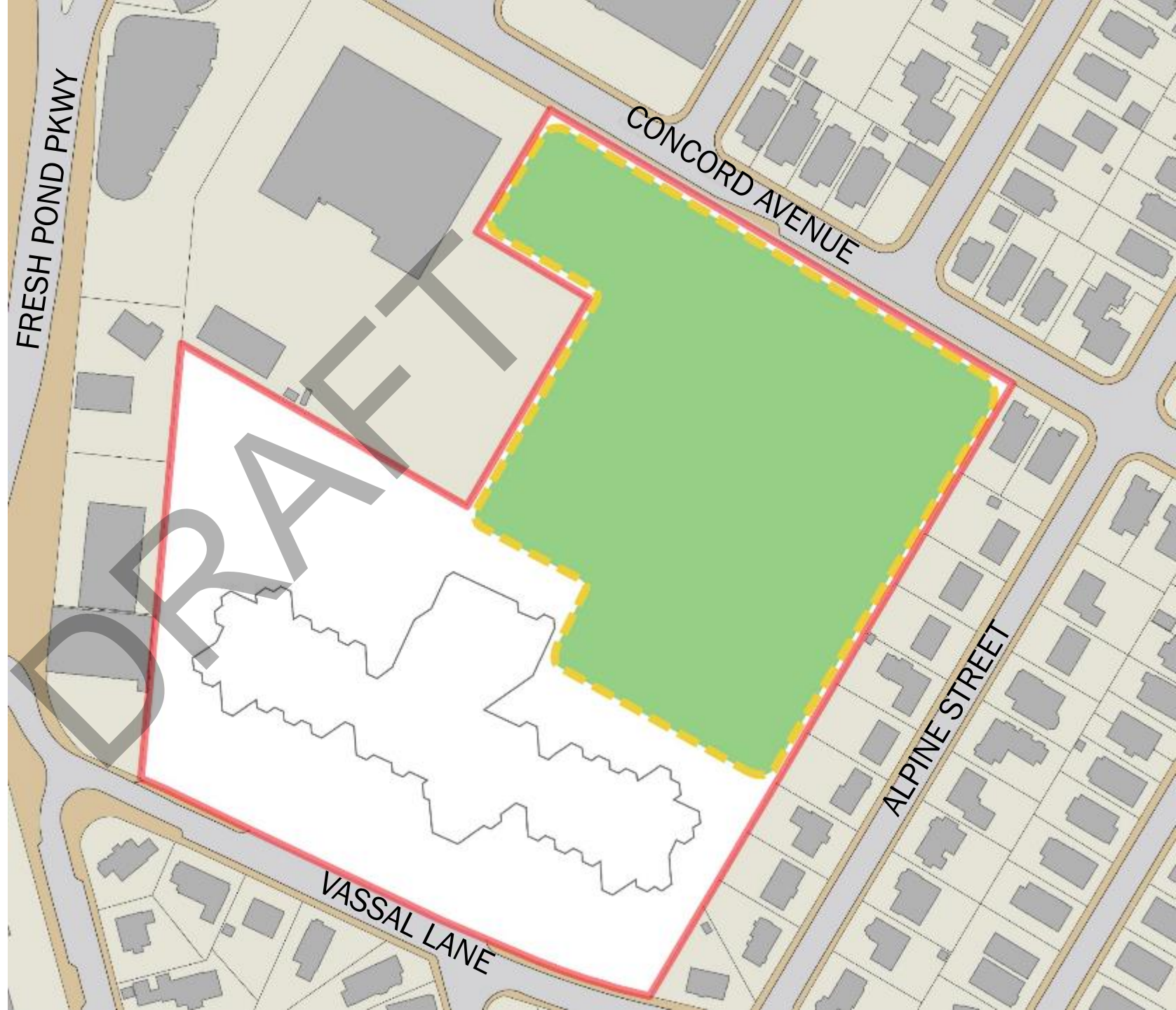
November 2019



CROSSROADS

FATHER CALLANAN PARK

EXISTING
4.5 acres



FATHER CALLANAN PARK

EXISTING
4.5 acres

WINGS
November 2019
2.45 acres

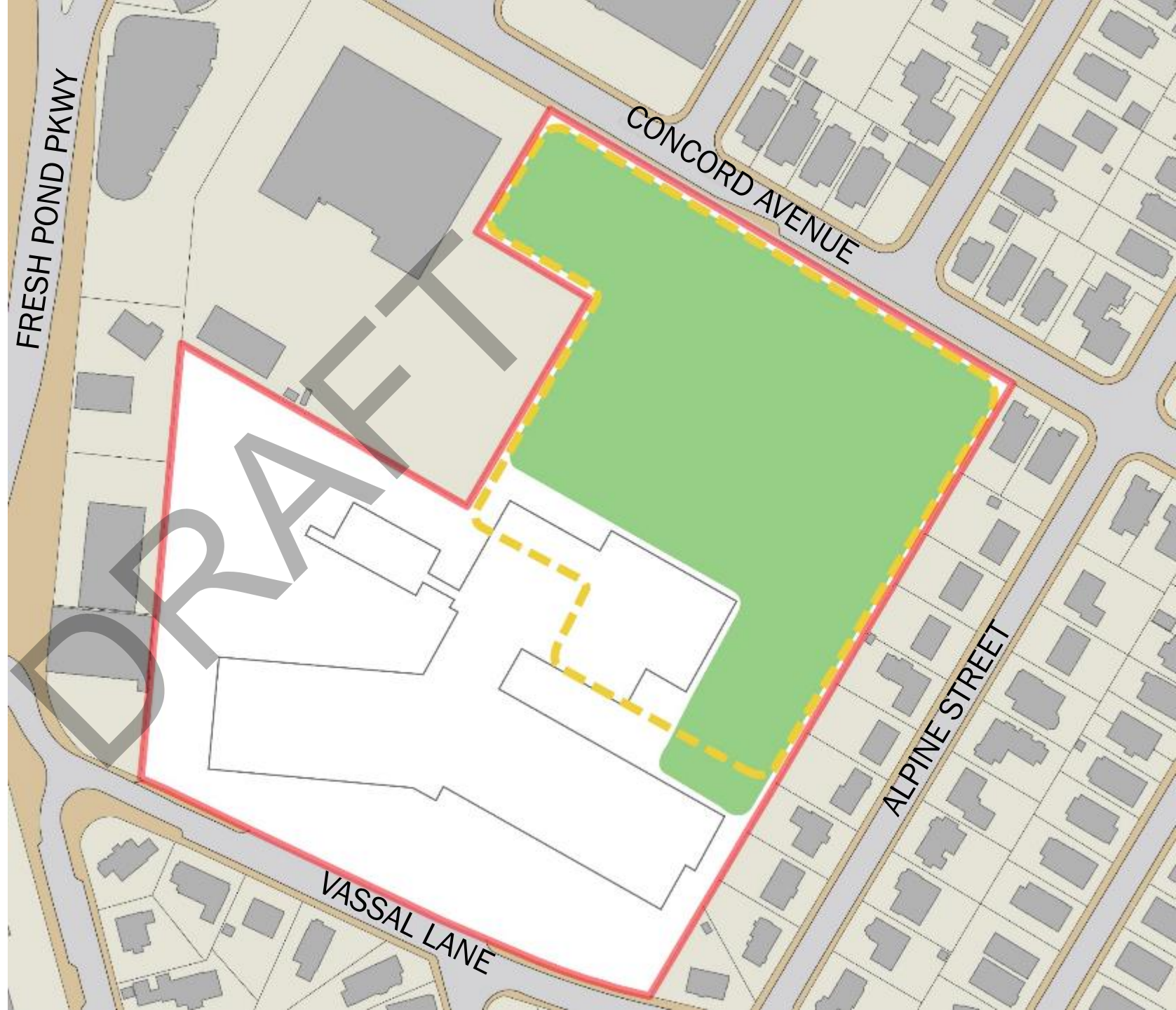


FATHER CALLANAN PARK

EXISTING
4.5 acres

WINGS November 2019
2.45 acres

REPLACEMENT
January 2020
3.9 acres



FATHER CALLANAN PARK

EXISTING
4.5 acres

WINGS
2.45 acres

REPLACEMENT
3.9 acres

CROSSROADS
4.55 acres



FATHER CALLANAN PARK

EXISTING COMPARED TO PROPOSED

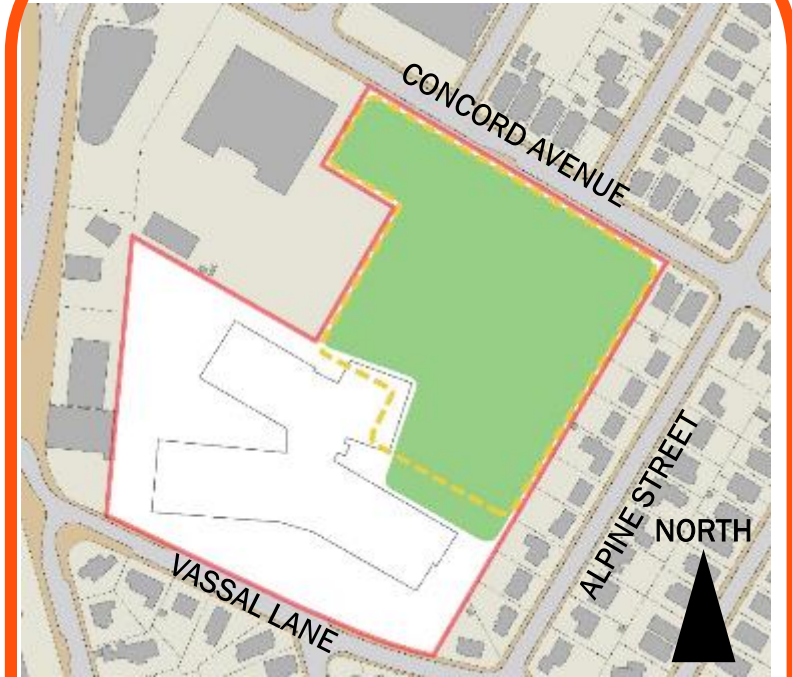


EXISTING



WINGS

November 2019



CROSSROADS

December 2020

SITE AREAS

DESIGN EVOLUTION

DESIGN	EXISTING	WINGS (NOV 2019)	CROSSROADS (FEB 2020)
Building Footprint	62,162 sq.ft.	106,500 sq.ft.	86,918 sq.ft.
Open Area	6.6 acres	5.4 acres	6.5 acres
Park	4.5 acres	3.9 acres	4.55 acres

PREFERRED OPTION



PREFERRED OPTION: REPLACEMENT v2

AS PRESENTED IN JANUARY

- More compact shape
- Playing fields on north
- Community path on both sides
- Cars enter and exit on Vassal in SW corner of site
- Bus loop on Vassal
- Service entry on Vassal



PREFERRED OPTION REPLACEMENT v3: CROSSROADS

- Organized for smaller footprint
- Taller portions are away from neighbors
- Maximized contiguous park area
- Maximized open area



CROSSROADS

RELATIONSHIP BETWEEN THE PARTS

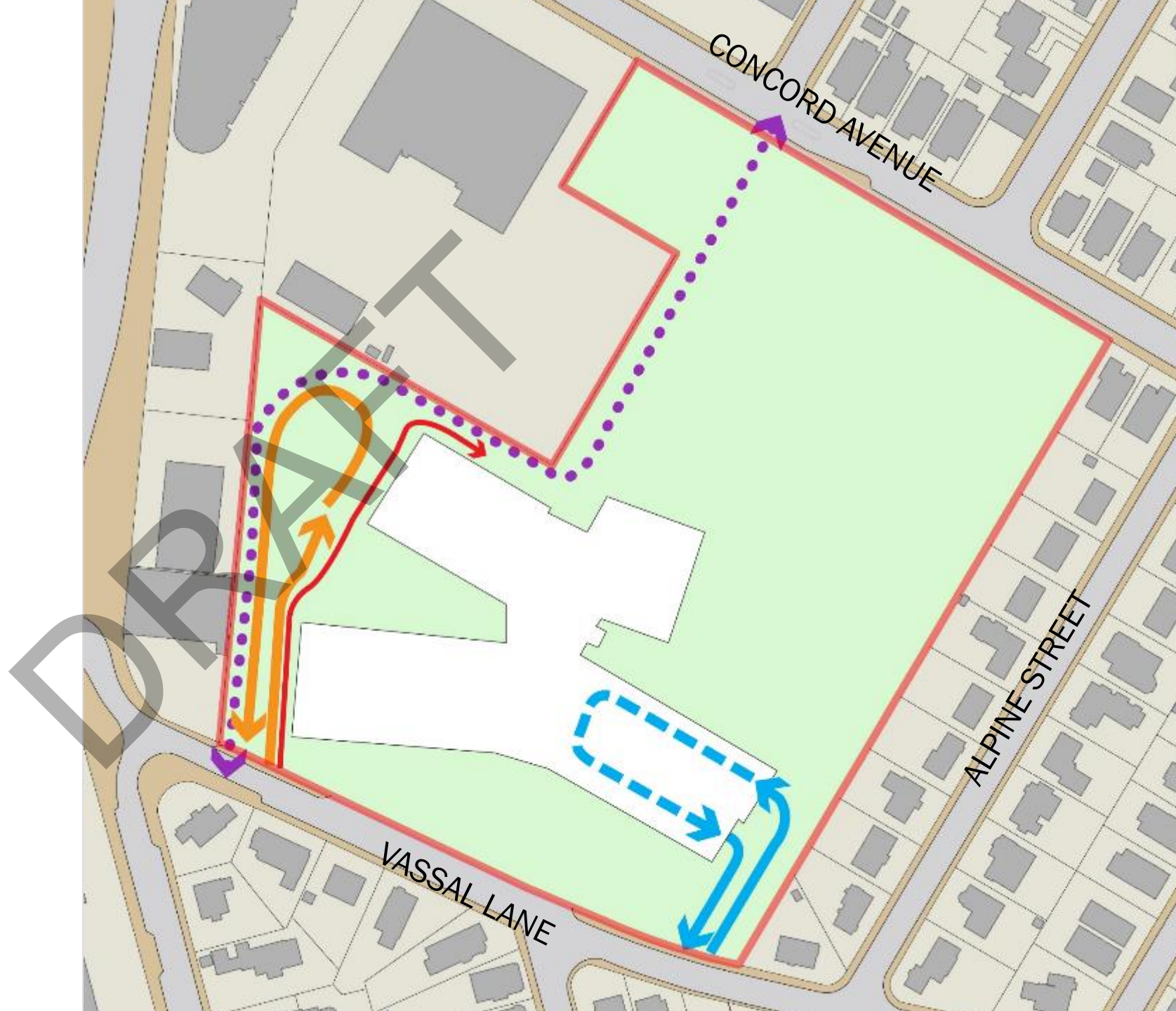
- All entries organized around “Heart of School”
 - Pedestrian entrances facing Vassal Lane and Concord Ave
 - Car arrival below grade
 - Bus arrival from west
- Short travel distances
- Easy to separate wings
 - Increased security
 - Weekend/evening use can be segregated



CROSSROADS

SITE CIRCULATION

-  COMMUNITY PATH
-  SERVICE
-  CARS
-  BUSES



CROSSROADS

SOME POTENTIAL CIRCULATION PATHS



Scenario A



Scenario B



Scenario C

As with the previous options, these scenarios are only a few of the possible solutions. Further study will be done during the Schematic Design phase.



ALPINE STREET

VASSAL LANE

FRESH POND PARKWAY

TOBIN

VASSAL

PRESCHOOL

GYM

AUDITORIUM

DINING

CALLANAN PARK

SERVICE

COMMUNITY PATH

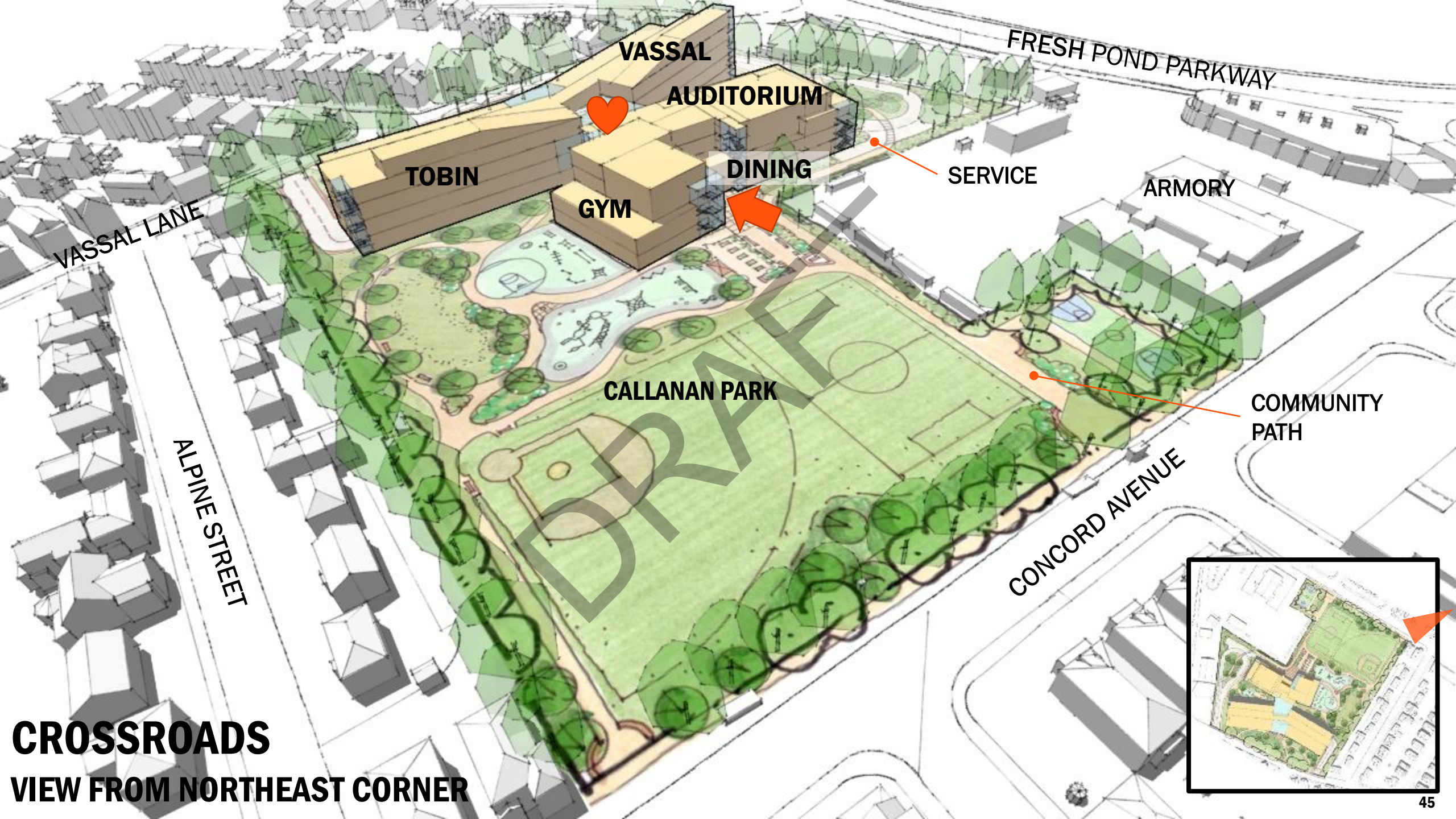
BUS DROP OFF

ARMORY

CONCORD AVENUE

CROSSROADS
VIEW FROM NORTHWEST CORNER





VASSAL

AUDITORIUM

TOBIN

GYM

DINING

SERVICE

ARMORY

CALLANAN PARK

COMMUNITY
PATH

VASSAL LANE

ALPINE STREET

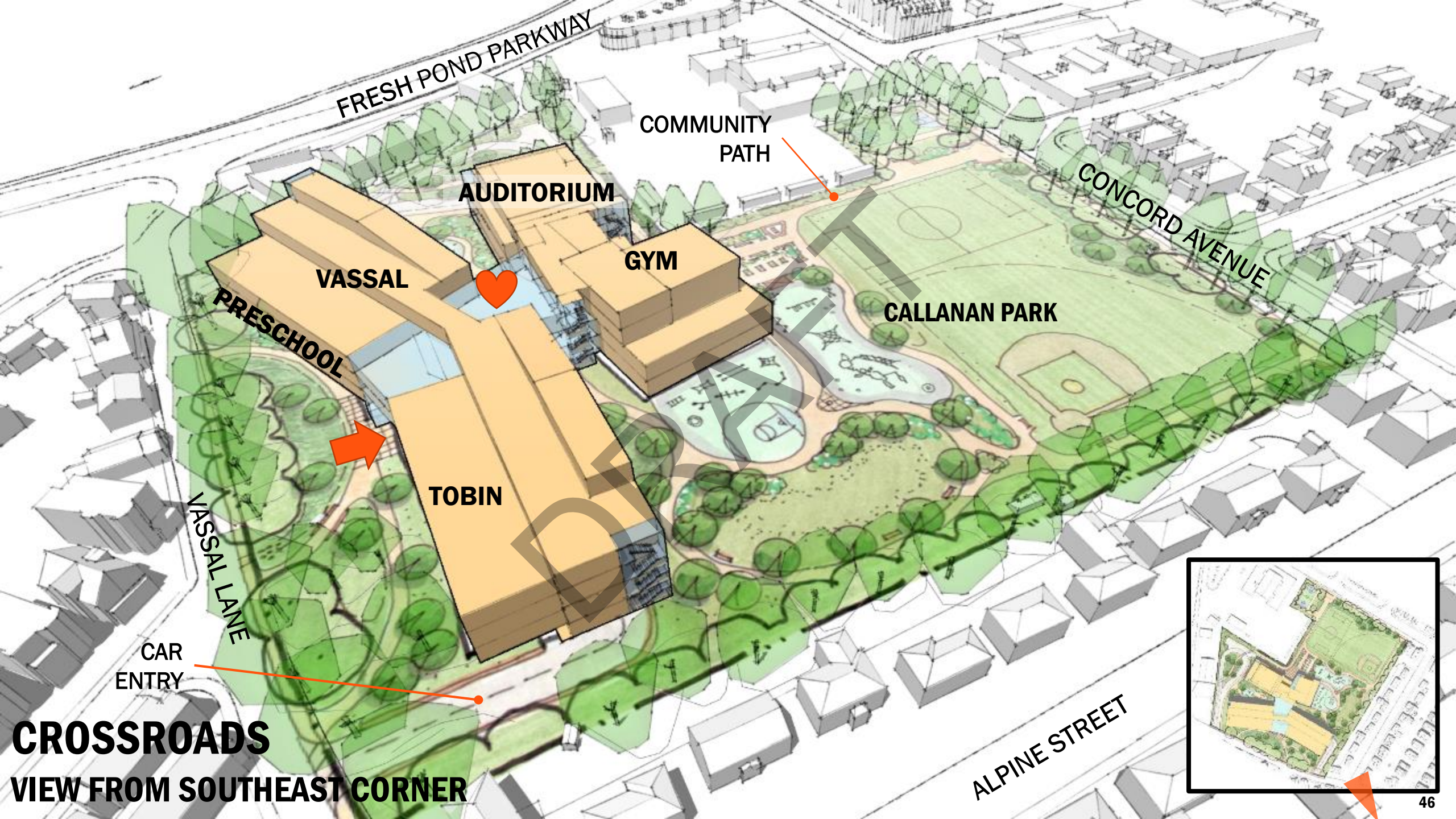
CONCORD AVENUE

FRESH POND PARKWAY

CROSSROADS

VIEW FROM NORTHEAST CORNER





FRESH POND PARKWAY

COMMUNITY PATH

AUDITORIUM

GYM

VASSAL

PRESCHOOL

CALLANAN PARK

CONCORD AVENUE

TOBIN

VASSAL LANE

CAR ENTRY

ALPINE STREET



CROSSROADS
VIEW FROM SOUTHEAST CORNER



CONCORD AVENUE

ALPINE STREET

CALLANAN PARK

GYM

TOBIN

COMMUNITY PATH

AUDITORIUM

ARMORY

SERVICE

VASSAL

BUS LANE

PLAYGROUND

VASSAL LANE

PRESCHOOL & COMMUNITY SCHOOL

CROSSROADS
VIEW FROM WEST



FINAL THOUGHTS



YOUR VOICE MADE A DIFFERENCE

From November to Now:

- **18% smaller** building footprint
19,582 square foot reduction
- **17% larger** park area
0.65 acre increase
- **20% more** open area
1.1 acre increase
- **~150 fewer** vehicles per day
- Play fields **do not overlap**
- **No bus** lane along Alpine St properties
- **No parking** on the surface



LOOK AHEAD

Feasibility Study completion

- Continue revisions

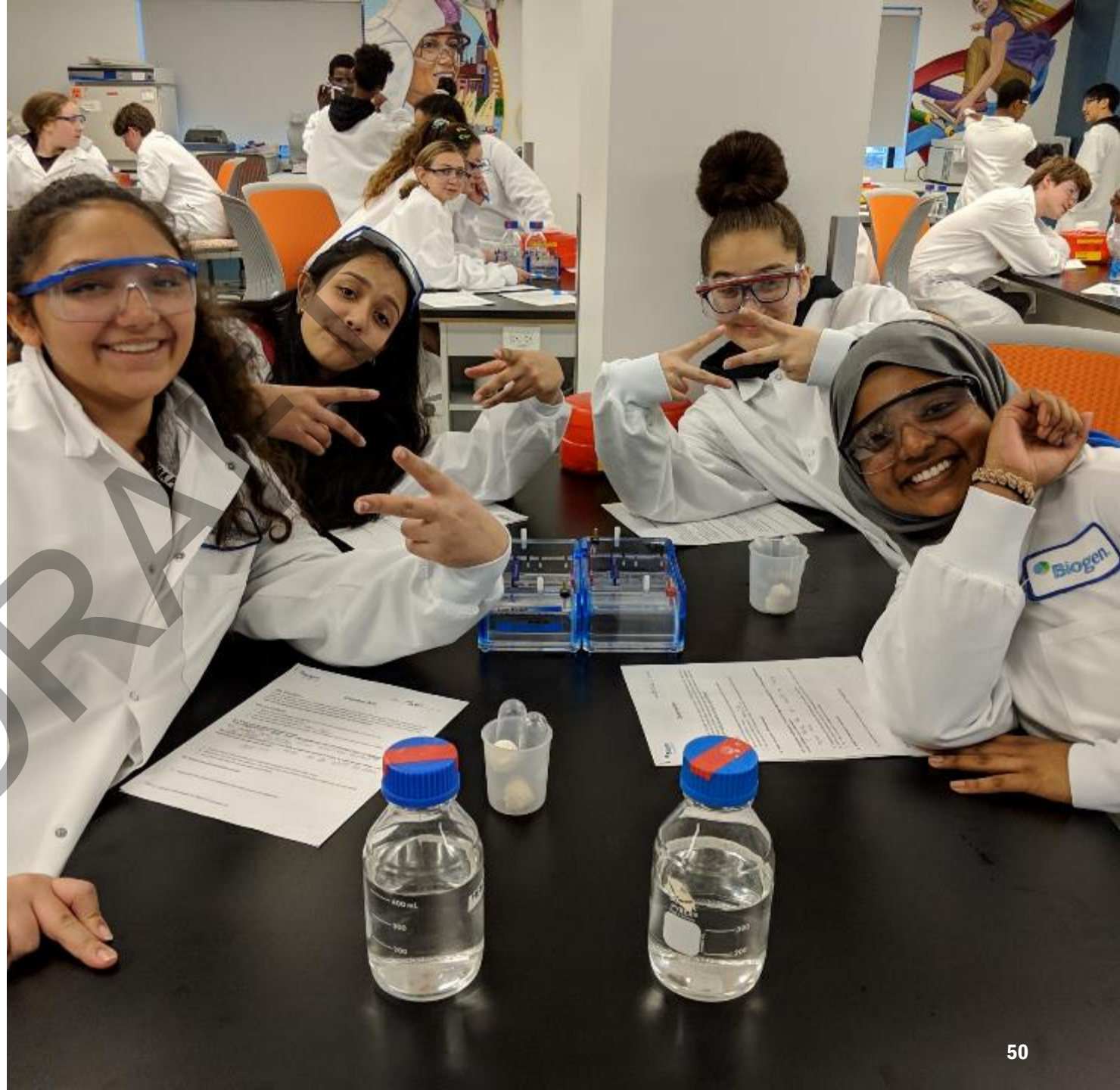
- Report mid-March

Design begins Spring 2020

- In-depth studies, including traffic

- Building expression developed

Site work begins Summer 2020



COMMENTS

- Callanan park **larger** than today
- **Compact** building
- **Fewer** students
- **No parking** on the surface
- **On-site traffic** reduced by $>10\%$



PASSIONATE ABOUT WHAT WE DO...HERE'S WHY

Human by Design

