



Belmont Traffic Calming

HS Construction Impacts and Mitigation

April 2, 2019



High School Team

Traffic Calming Team



CHANNING RD

BLUE EMERGENCY LIGHT

SHeltered BICYCLE PARKING

BIURETENTION

BIURETENTION ZONE

GENERATOR

TRANSFORMER

DUMPSTERS

STAFF GARDEN

SHeltered BICYCLE PARKING

VISITOR PARKING

BLUE EMERGENCY LIGHT

ACCESSIBLE PARKING (1)

POSSIBLE FIELD LIGHTING

JV SOFTBALL 01
(225' TO FOUL POLE; 225' POCKET;
25' TO BACKSTOP)

SOCCER 01/ FIELD HOCKEY
(330' X 180';
10' OVERRUN)

JV BASEBALL 01
(300' TO FOUL POLE;
300' POCKET;
35' TO BACKSTOP)

SHOT PUT

DISCUS

HARRIS FIELD
EXISTING TO REMAIN
JAVELIN

FOOTBALL/ RUGBY
(360' X 144'; 10' OVERRUN)

LOADING

ENTRY

LACROSSE 02/
SOCCER
(330' X 210'; 10' OVERRUN)

VARSITY SOFTBALL 01
(225' TO FOUL POLE;
225' POCKET;
25' TO BACKSTOP)

SOCCER 02/
FIELD HOCKEY
(300' X 180';
10' OVERRUN)

VARSITY BASEBALL 02
(330' TO FOUL POLE;
390' POCKET;
30' TO BACKSTOP)

BELMONT LIBRARY

UNDERWOOD POOL

BIKE PATH

TICKETING BOOTH

WALKWAY

ACCESSIBLE PARKING (1)

MONUMENTAL SIGNAGE

SNOW STORAGE

ACCESSIBLE PARKING

ORNAMENTAL GRASS

BIURETENTION

BLUE EMERGENCY LIGHT

SNOW STORAGE

OUTDOOR CLASSROOMS

OUTDOOR DINING

STEPPED SEATING

SHeltered BICYCLE PARKING

MONUMENTAL SIGNAGE

HITTINGER ST

UNDERWOOD ST

MYRTLE ST

GODEN ST

OAK ST

ORCHARD ST

CONCORD AVE

LOUISE RD

EMERSON ST

EDGEWOOD RD

BECKET RD

TROWBRIDGE ST

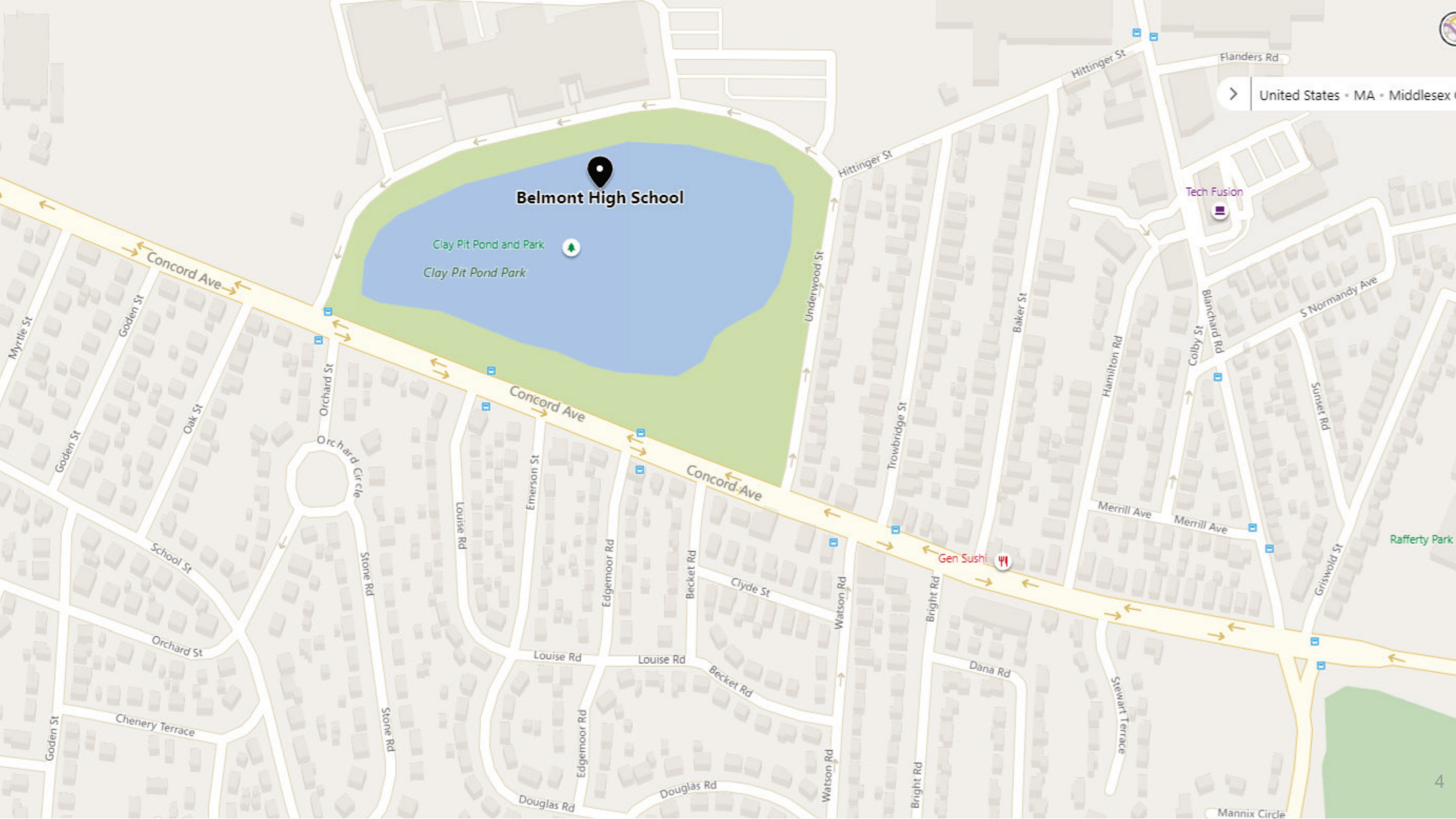
INTERGENERATIONAL WALKING PATH

WELLINGTON ELEMENTARY



Belmont High School

Clay Pit Pond and Park
Clay Pit Pond Park



AGENDA

01 | High School Construction

02 | Interim Improvements

03 | Underwood Street

04 | Hittinger Street

05 | Future Tasks

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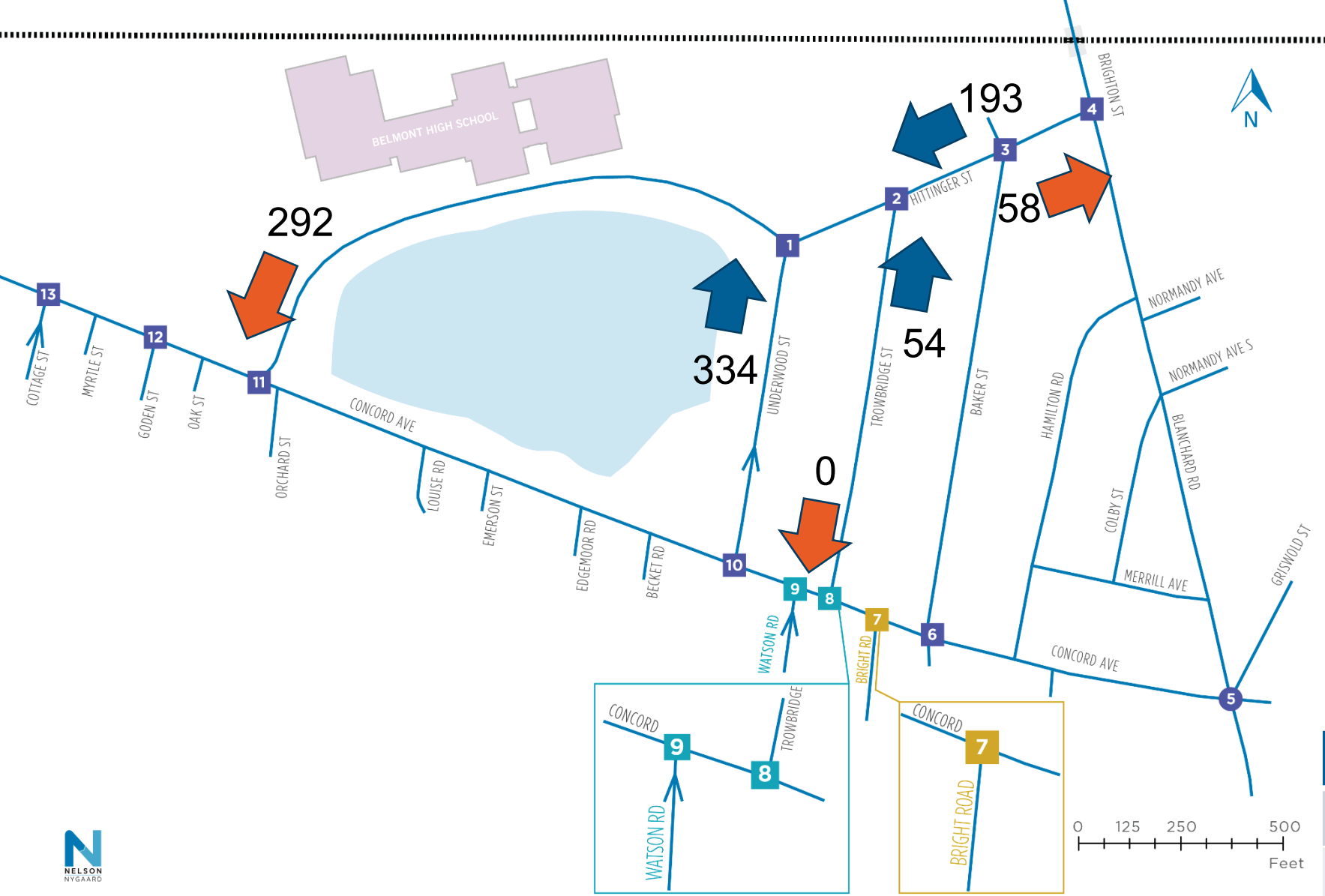
05 | Future Tasks

CONSTRUCTION-PERIOD ASSUMPTIONS

- New school driveway opposite Trowbridge to be constructed soon
- Underwood remains one-way northbound
- Entering traffic will operate as it does today
- Exiting traffic currently using one-way H.S. driveway will take Hittinger to Blanchard or take Trowbridge to Concord
 - Use of Trowbridge for AM exiting HS traffic represents regulatory change

TRAFFIC MANAGEMENT

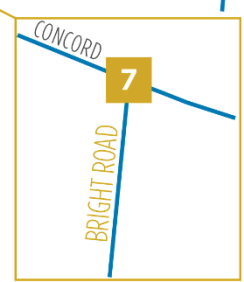
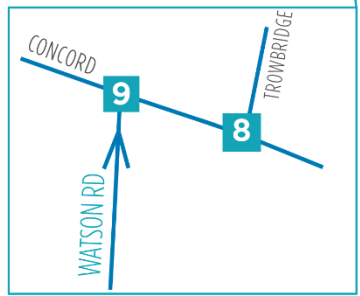
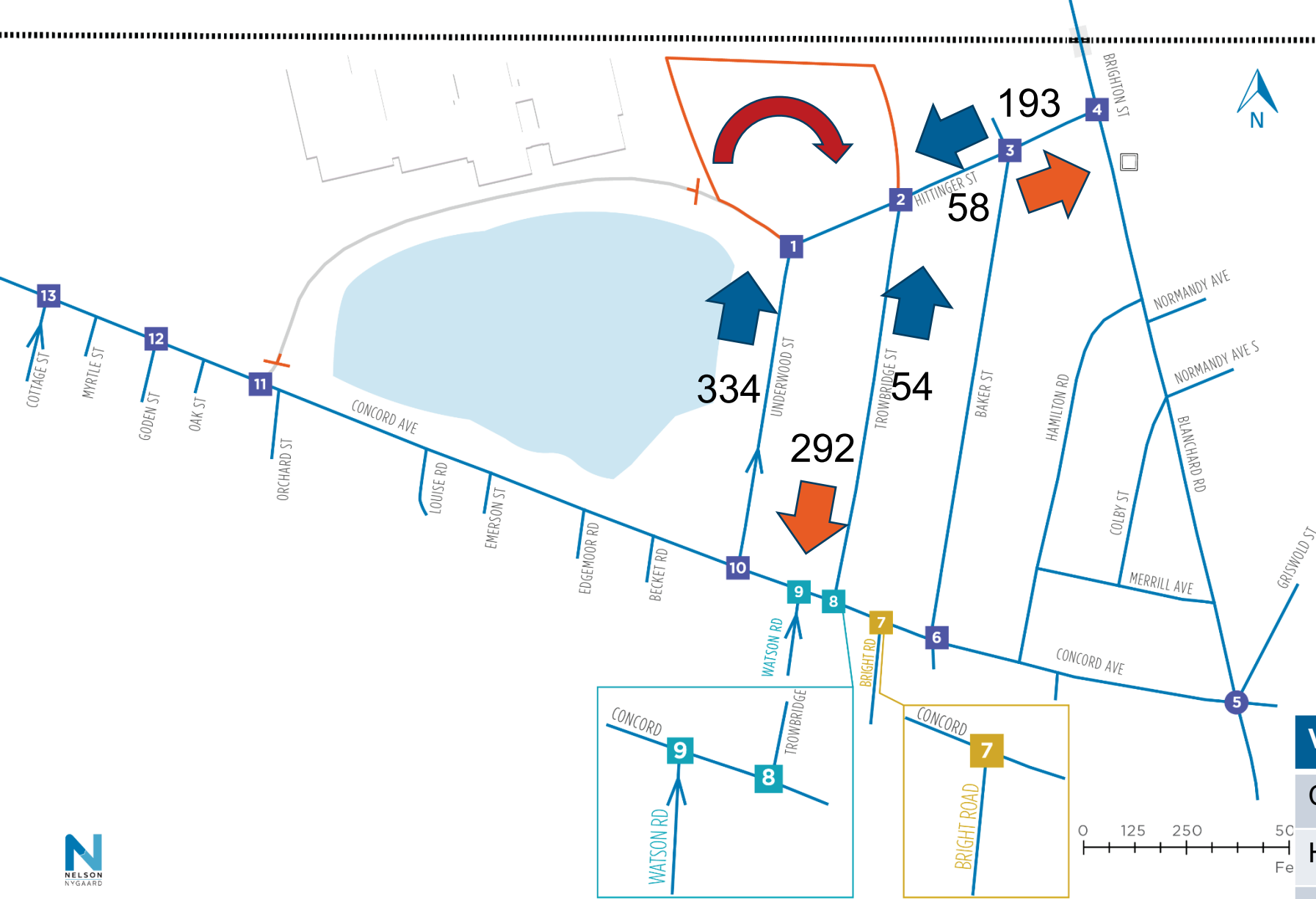
- Trowbridge
 - Option 1 – change to one-way southbound to accommodate volumes
 - Option 2 – remove parking on west side to permit two-way flow
- Discussion item: concern about use of Baker to access Bright
- Add signs for no left-turns from Hittinger onto Baker or Trowbridge
- Add signs on Brighton/Blanchard (both sides of Hittinger) to alert drivers of 7-9 AM restriction
- Other improvements discussed later



Volumes	In	Out	Total
Concord Ave	-	292	292
Hittinger St	193	58	251
Underwood St	334	-	334
Trowbridge St	54	0	54
Total	581	350	931



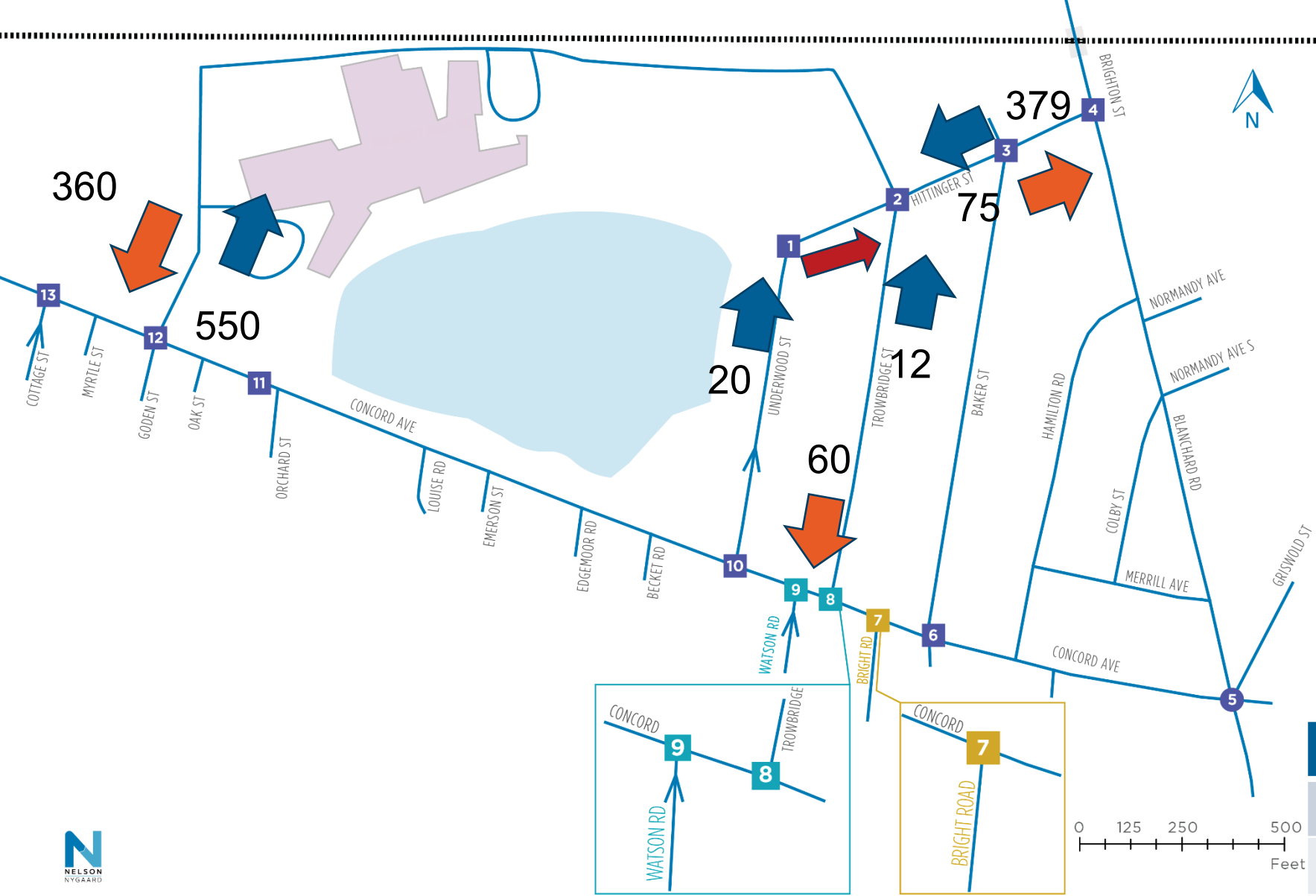
Existing AM Arrival Traffic Pattern (school traffic only)



Volumes	In	Out	Total
Concord Ave	-	-	-
Hittinger St	193	58	251
Underwood St	334	-	334
Trowbridge St	54	292	346
Total	581	350	931

Construction-Period AM Arrival Traffic Pattern (school traffic only)





Volumes	In	Out	Total
Concord Ave	550	360	910
Hittinger St	379	75	464
Underwood St	20	-	20
Trowbridge St	12	60	72
Total	961	495	1,456

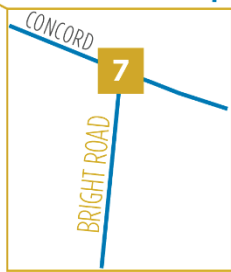
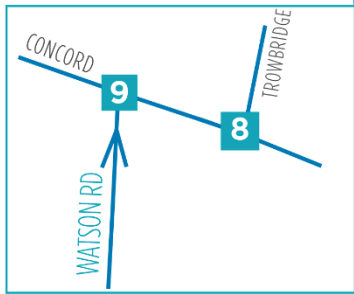
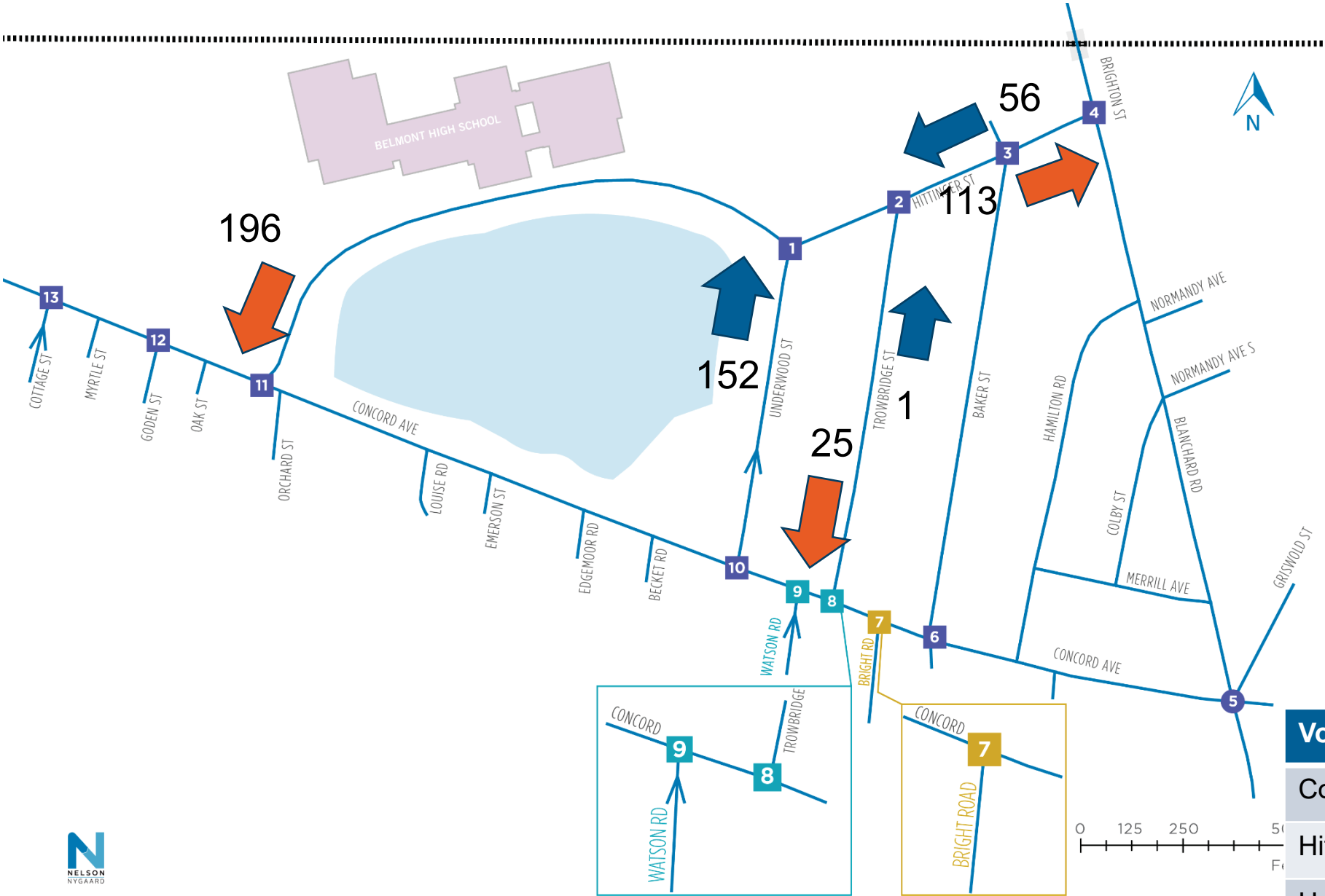
Future (Build) AM Arrival Traffic Pattern (school traffic only)



MORNING ARRIVAL PERIOD VOLUMES (TOTAL)

Street	Today	Construction	Change	Build	Change From Today
Concord Driveway	292	-	(291)	910	618
Hittinger	251	251	-	464	215
Underwood	334	334*	0	20	(314)
Trowbridge	54	346	292*	72	20

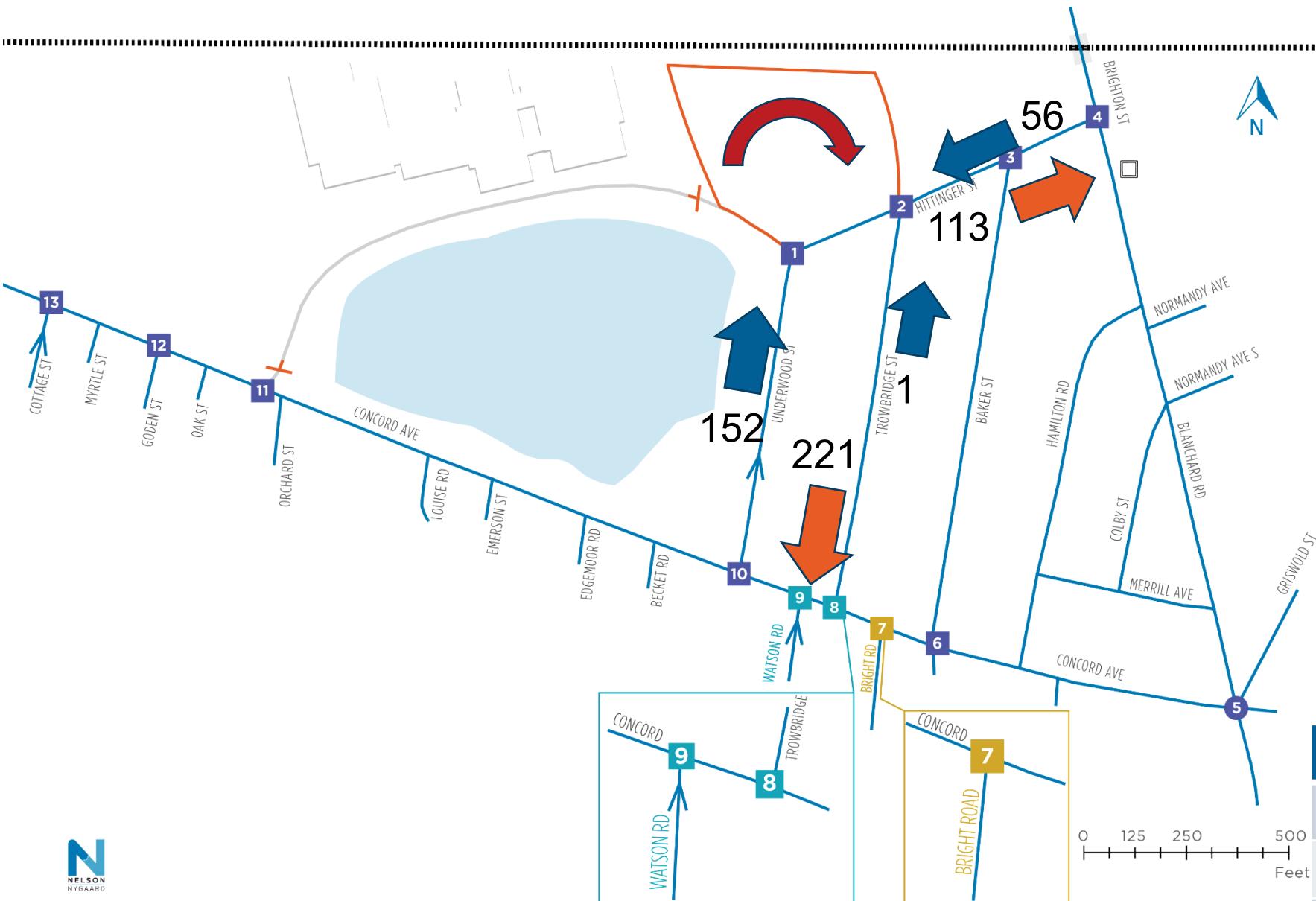
* Assumes 2-way Trowbridge and parking removal on one side
Source: Belmont HS traffic study, excludes existing volumes



Volumes	In	Out	Total
Concord Ave	-	196	196
Hittinger St	56	113	169
Underwood St	152	-	152
Trowbridge St	1	25	26
Total	209	334	543



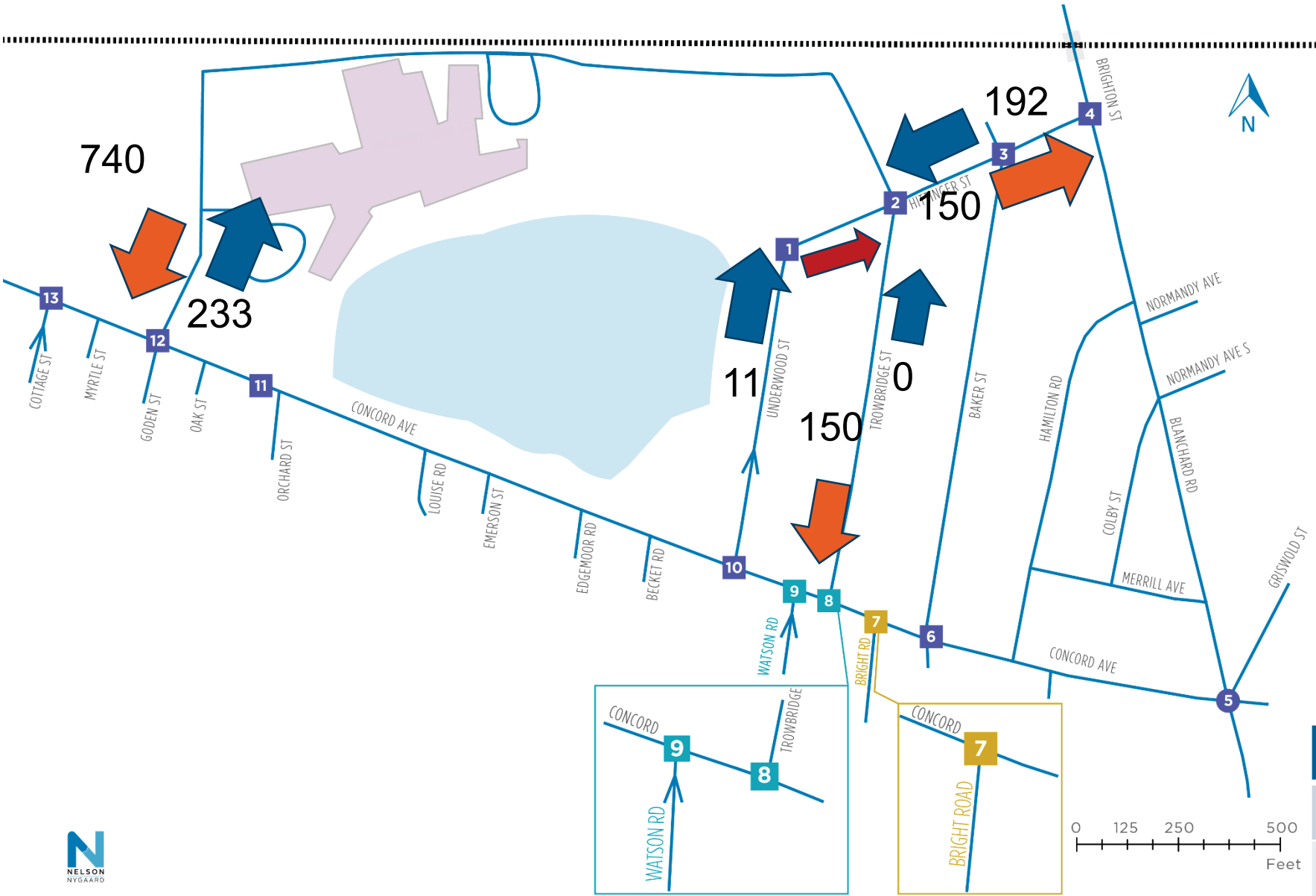
Existing PM Dismissal Traffic Pattern (school traffic only)



Volumes	In	Out	Total
Concord Ave	-	-	-
Hittinger St	56	113	169
Underwood St	153	-	153
Trowbridge St	-	221	221
Total	209	334	543



Construction-Period PM Dismissal Traffic Pattern (school traffic only)



Volumes	In	Out	Total
Concord Ave	233	740	973
Hittinger St	192	150	342
Underwood St	11	-	11
Trowbridge St	0	150	150
Total	436	1,040	1,476

Future (Build) PM Dismissal Traffic Pattern (school traffic only)



AFTERNOON DEPARTURE PERIOD VOLUMES (TOTAL)

Street	Today	Construction	Change	Build	Change From Today
Concord Driveway	196	-	(196)	963	767
Hittinger	169	169	-	342	173
Underwood	152	152	-	11	(141)
Trowbridge	26	222	196	150	124

Source: Belmont HS traffic study, excludes existing volumes

CONCORD AVE

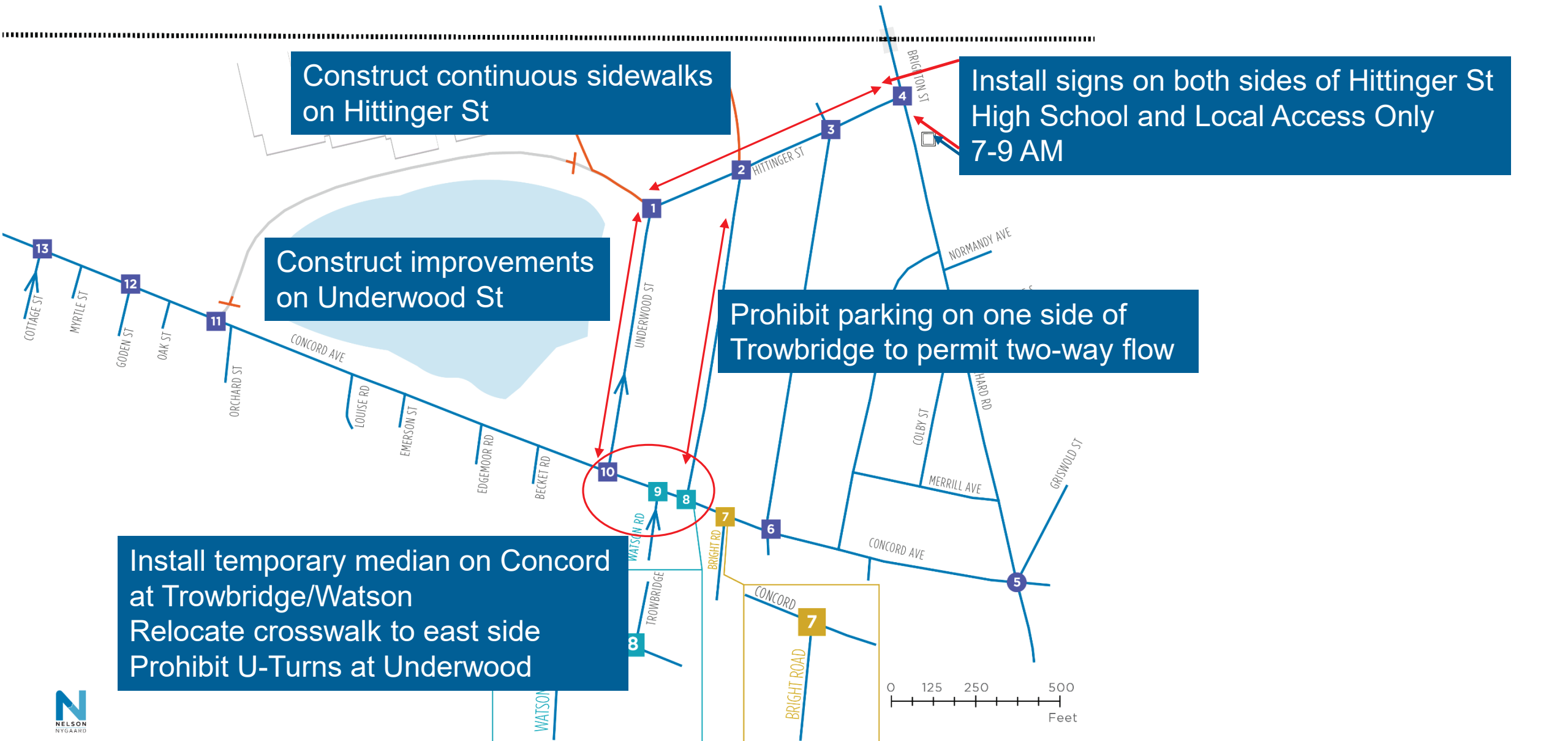
01 | High School Construction

02 | Interim Improvements

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05 | Future Tasks



Construct continuous sidewalks on Hittinger St

Install signs on both sides of Hittinger St High School and Local Access Only 7-9 AM

Construct improvements on Underwood St

Prohibit parking on one side of Trowbridge to permit two-way flow

Install temporary median on Concord at Trowbridge/Watson
Relocate crosswalk to east side
Prohibit U-Turns at Underwood





**Construction-Period Access Plan for Concord Avenue
Belmont, Massachusetts**

CONCEPTUAL
NOT FOR CONSTRUCTION

CONCORD AVE

01 | High School Construction

02 | Interim Improvements

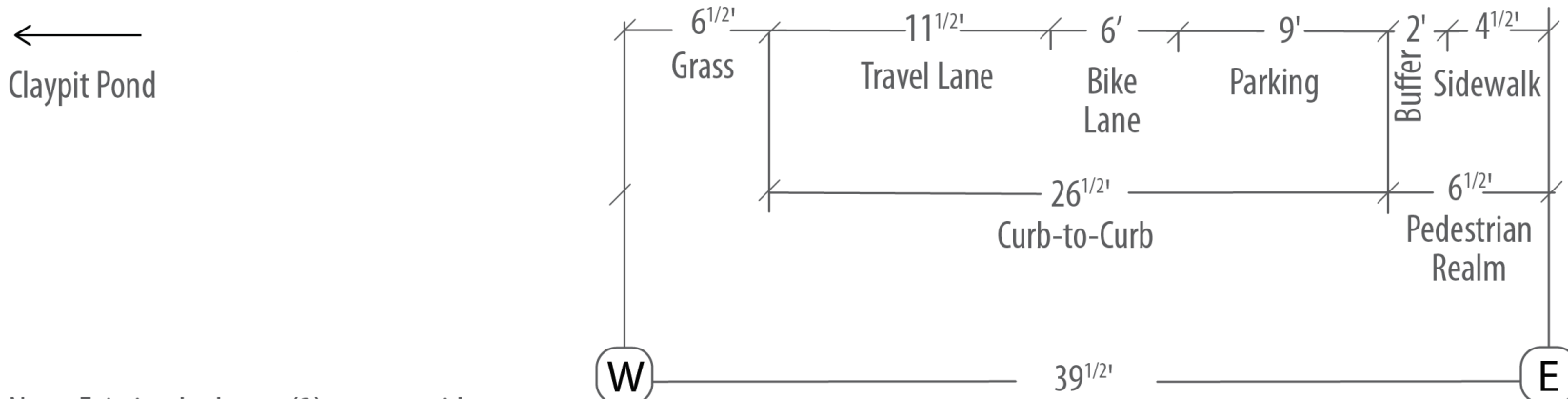
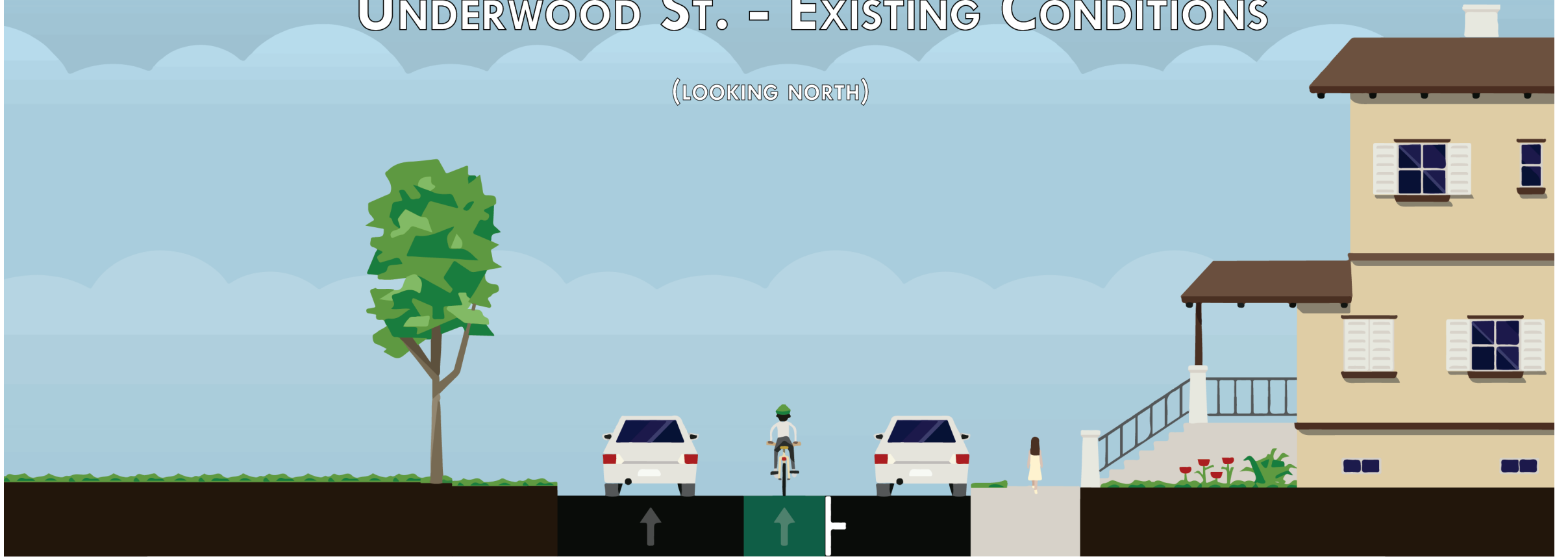
03 | Underwood Street

04 | Hittinger Street

05 | Future Tasks

UNDERWOOD ST. - EXISTING CONDITIONS

(LOOKING NORTH)

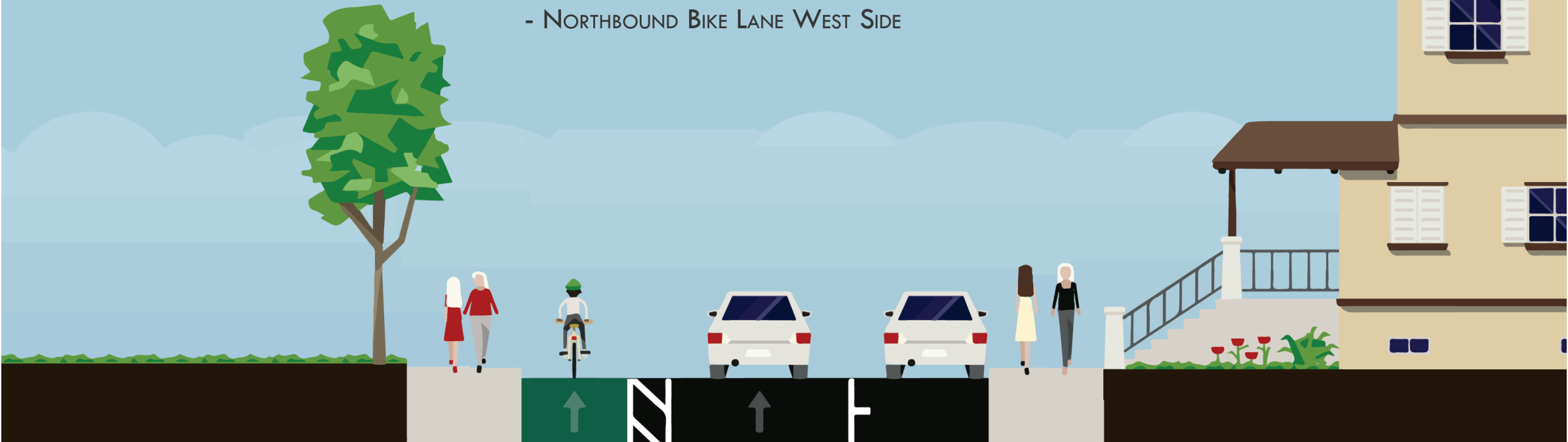


Note: Existing hydrants (3) on west side

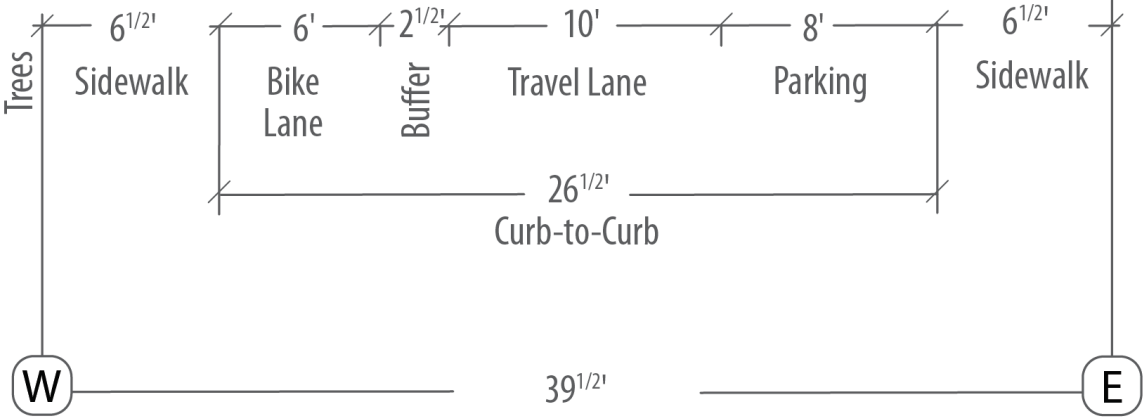
UNDERWOOD ST. - OPTION 1

(LOOKING NORTH)

- SIDEWALKS ON BOTH SIDES OF STREET
- NORTHBOUND BIKE LANE WEST SIDE



←
To Claypit Pond

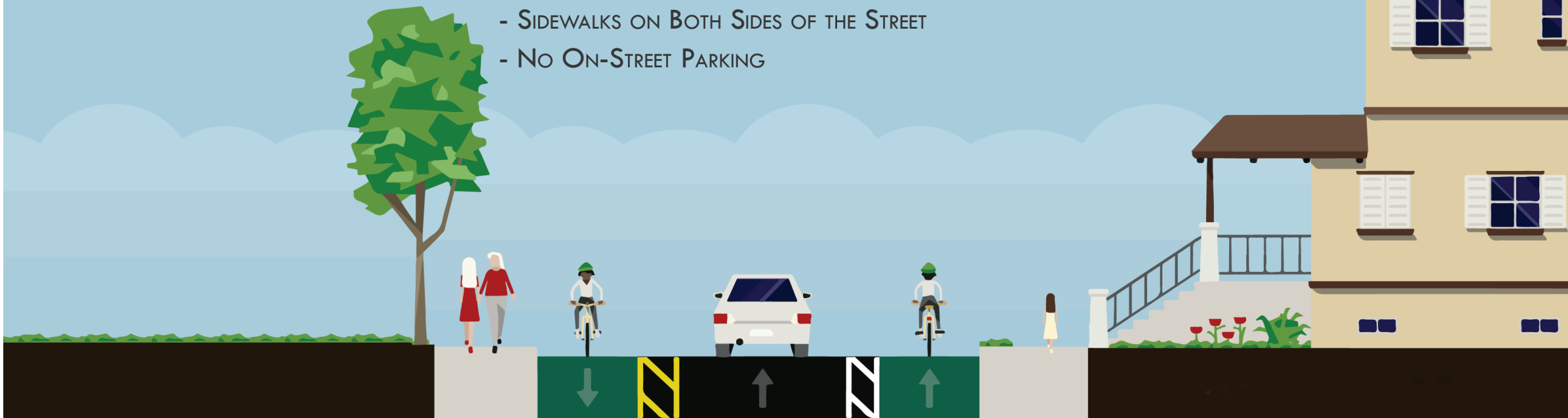


Note: Existing hydrants (3) on west side

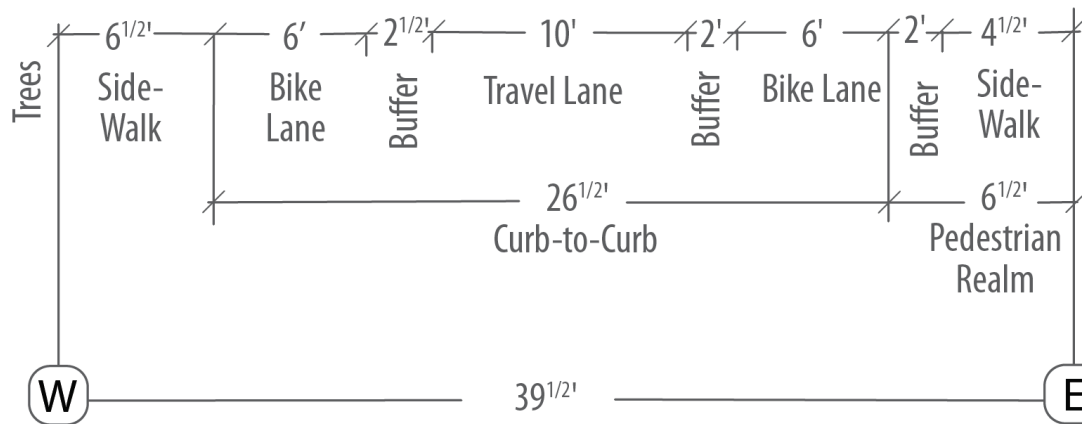
UNDERWOOD ST. - OPTION 2

(LOOKING NORTH)

- PROTECTED SOUTHBOUND BIKE LANE ON WEST SIDE
- PROTECTED NORTHBOUND BIKE LANE ON EAST SIDE
- SIDEWALKS ON BOTH SIDES OF THE STREET
- NO ON-STREET PARKING



←
To Claypit Pond



Note: Existing hydrants (3) on west side

CONCORD AVE

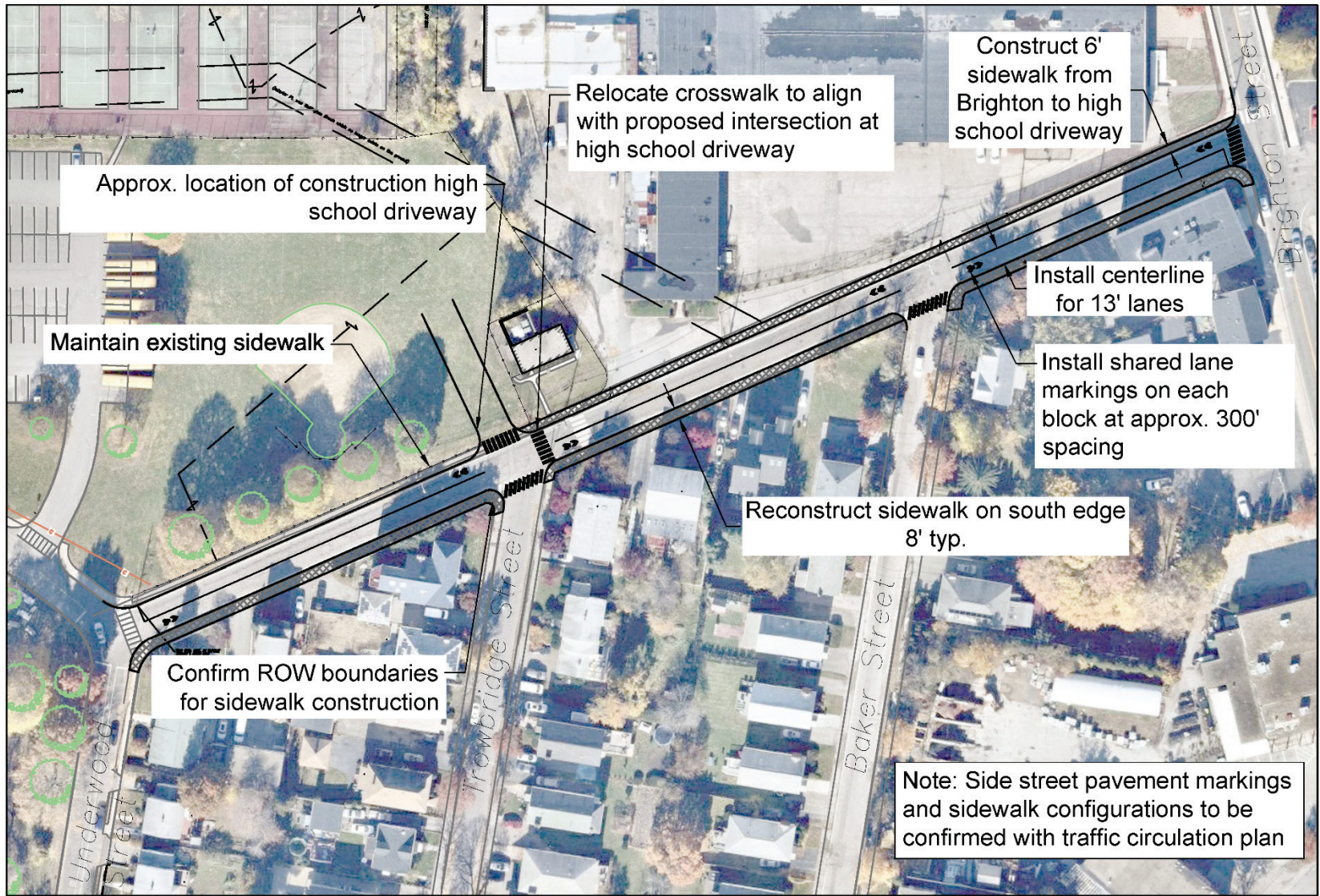
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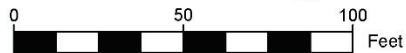
04 | Hittinger Street

05 | Future Tasks



Belmont Traffic Calming.dwg

**Pavement Marking and Sidewalk Plan for Hittinger Street
Belmont, Massachusetts**



CONCEPTUAL
NOT FOR CONSTRUCTION

CONCORD AVE

01 | High School Construction

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FUTURE TASKS

- Present options at 4/10 community meeting
- Develop improvement plans for Trowbridge St
- Develop plans for south side of Concord Ave

THANK YOU!

