



City of Burlington
Department of Public Works

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TO: Mary O'Neil, Principal Planner, Dept. of Permitting & Inspections

FROM: Laura Wheelock, P.E., Senior Public Works Engineer
Nicole Losch PTP, Senior Transportation Planner

CC: Chapin Spencer, Director
Norm Baldwin, P.E., Assistant Director/City Engineer

DATE: January 29, 2021

SUBJECT: 52 Institute Road – Burlington High School Application to DRB

The Department of Public Works (DPW), has reviewed the application materials submitted by the applicant for the above referenced property and offer the following comments or suggestions related to work planned both within the public Right-of-Way (ROW) as well as within the parcel. Additionally there are comments around the bike parking waiver.

DPW respectfully requests that in their review of the application the comments and conditions mentioned in this communication be added onto the staff recommendations to become conditions of the applicant's permit.

Public Right-of-Way

1. There are proposed on street parking changes shown within the plans that will require the approval of the DPW Commission prior to the ability to implement those changes and new/adjusted crosswalks. **The applicant shall work with DPW staff to understand what is needed to facilitate this request to the DPW Commission. This approval is needed prior to obtaining and excavation permit.**
2. **The street lighting that is being adjusted along Institute Rd will need to be reviewed and approved by the Burlington Electric Department.** DPW's specific concern is ensuring that lighting design along this corridor meets pedestrian standards for the new sidewalk sections and crosswalks. We will also require that the lighting be installed and operational prior to use of the pedestrian facility.
3. DPW has concerns with the conflict of bicycles at the exit road and use of the bi-directional bike lane. Bicycles with origins or destinations south of Institute Road are being led to conflict with existing vehicles in the current layout of the site plan. **DPW request the applicant provide accommodations for these bicycle trips with widening the existing sidewalk on the parcel to allow bicycle trips to cross at North Ave and continue on a widened multiuse path to the path that exists within the bus loop to facilitate safer movement of these users.**

4. **DPW requests that the applicant provide an on ramp accommodation for bicycles with an origin/destination north of Institute Road at the corner where the bus loop and pedestrian facility meet at North Ave to allow these users to have a way to reach the location of the short and long term bike parking more directly.**

Parcel:

DPW offers the following comments for consideration of the Development Review Board (DRB) in their review of the application.

5. Within the site there are multiple locations where detectible warning strips are not shown in locations where a protected pedestrian facility interfaces with the road/vehicle ways. Americans with Disability Act (ADA) regulations require these devices at all these points even absent of a crosswalk. This occurs in several locations within the main parking area, as well as the improvements proposed at the student parking.
6. There are multiple locations where sidewalks dead-end at lawn, in our experience it can be difficult to remove snow with abrupt termination of walkways.
7. At the termination of the bike lane along the exit road the opening in the sidewalk should be widened to make navigating this transition safer for those on a bicycle.
8. Bike lane with the catch basins is a concern.
9. Bike lane unprotected from vehicle is a concern.

Bike Parking Waiver

The Department of Public Works was asked to comment on the BHS ReEnvisioning's parking waiver request related to bike parking.

BHS provided:

- A summary of the requirements based on the Zoning Ordinance – 474 total,
- An example of requirements suggested by the Collaborative for High Performance Schools (CHPS) – 191 total,
- A proposal to install 20 bike parking spaces initially and increase to 120 over time.

DPW requests the DRB require 243 bike parking spaces, including 77 long-term spaces and 166 short-term spaces; and that 100% of the bike parking be installed during the first phase of construction since student capacity is not increasing in future construction phases.

At a minimum, BHS should be required to follow the CHPS reference to install a minimum of 191 bike parking spaces during the first phase of construction; with 30% long-term parking as recommended in the Zoning Ordinance.

This was the first school review for bicycle parking requirements since the Zoning Ordinance's Bike Parking section was updated, and this was a good opportunity to review the applicability of the Zoning Ordinance requirements themselves. As a result, DPW also has suggestions for Zoning Ordinance revisions to align with real-world applications; and DPW's request to the DRB for BHS ReEnvisioning is based on this consideration.

- The Zoning Ordinance calculates bike parking based on the number of students, number of classrooms, and square footage. It equates to approximately 30% of the required bike parking for schools be long-term bike parking.
- The CHPS recommendations are based on student population. BHS estimates that future student capacity could be 1,276 and 190 staff (1,466 total). Although the CHPS recommendations are based on student population, bike parking should be considered as a need by both students and staff.
 - Applying the CHPS recommendations to total capacity equates to 220 total bike parking required; applying Zoning guidance, 66 should be long-term and 154 should be short-term spaces.
- To more closely align with the CPHS recommendations, the Zoning Ordinance could be amended to calculate:
 - Long-term bike parking as 1 space per 20 students and 1 space per 20,000 s.f. (a reduction from 1 space per 10 students), and
 - Short-term bike parking as 2 spaces per classroom (a reduction from 4 spaces per classroom)

Applying this hypothetical new threshold for bike parking relative to the Zoning Ordinance, BHS would require 77 long-term bike parking spaces, 166 short-term bike parking spaces, and 243 total bike parking spaces.

Please contact us if you have any questions or require additional information related to this review.