



Parking Study

Project: Leicester Middle School
Prepared by: Emily Hunt
Date: November 8, 2019

Regarding: Parking Study for Variance

Leicester Planning Board, Parking Regulations (adopted July 9th, 2013). Pursuant to Section 5.1.02 of the Leicester Zoning Bylaws:

Parking Space Requirements:

Use: Schools and Colleges

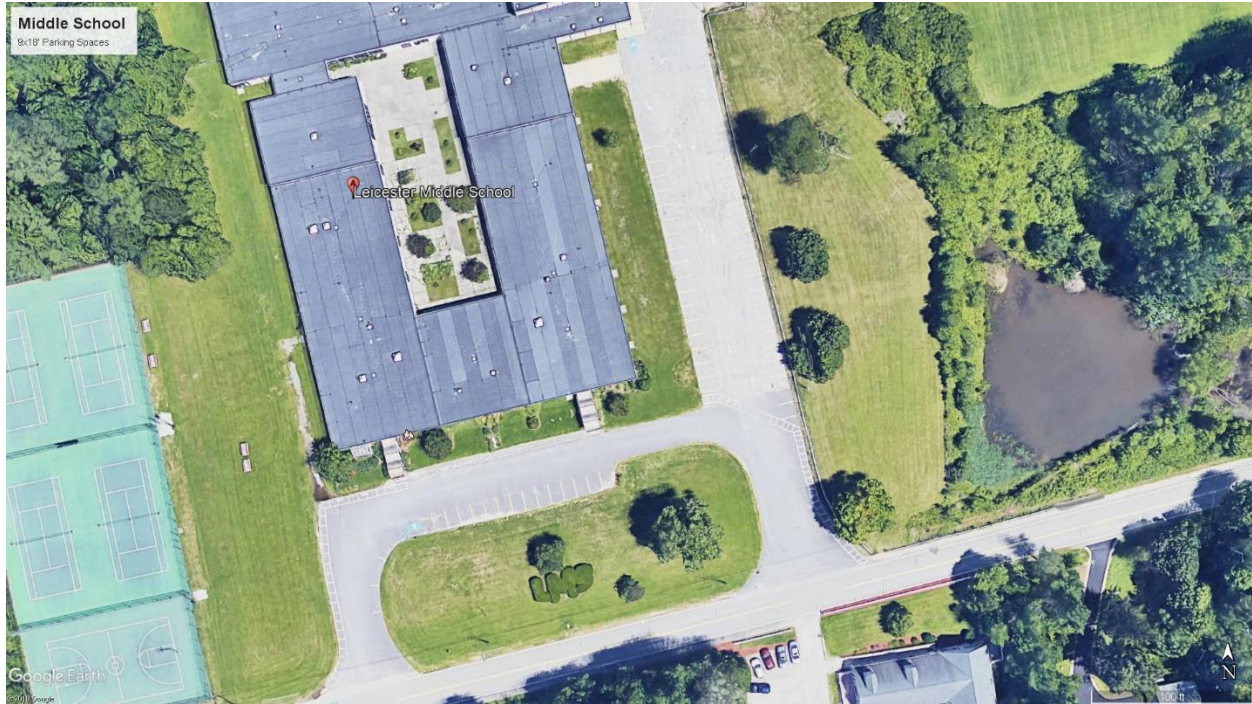
Required Parking: 2 spaces per classroom for elementary and intermediate; 4 spaces per classroom for secondary, and 1 space per 2 students beyond secondary, none to be fewer than 1 space per teacher and staff, plus one space for every five seats of total seating capacity in auditorium or gymnasium, whichever has the larger capacity.

Parking Facility Design:

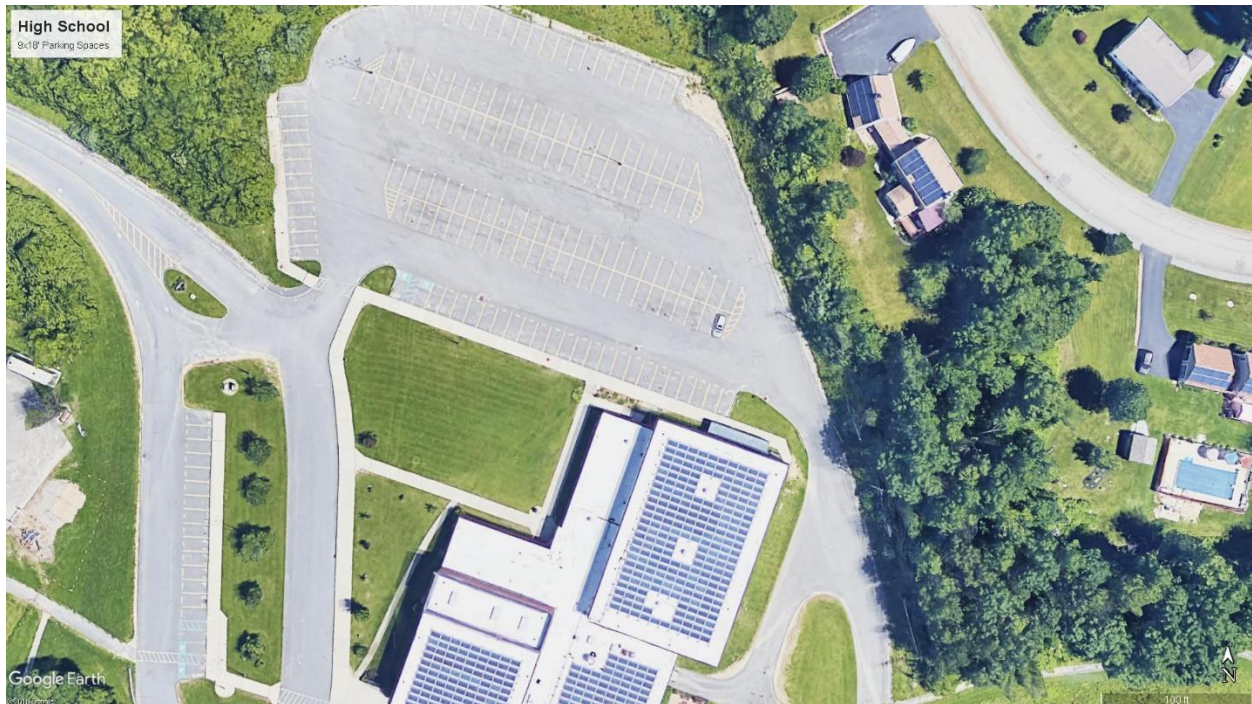
Parking Space Size – For the purposes of these regulations, a parking space shall be 10 feet x 20 feet [Note: this is a specific Zoning Bylaw requirement in the HB-1, HB-2, B & CB zoning districts.]

Parking Space Study:

- Leicester Middle School: 9x18'
- Leicester High School: 9x18'
- Elementary School: 9x18'
- Memorial School: 9x18'
- Becker College: 9x18'
- Senior Center: 10x20'
- Town Hall: 10x20'
- Dunkin' Donuts: 10x20'



Leicester Middle School: 9x18'



Leicester High School: 9x18'



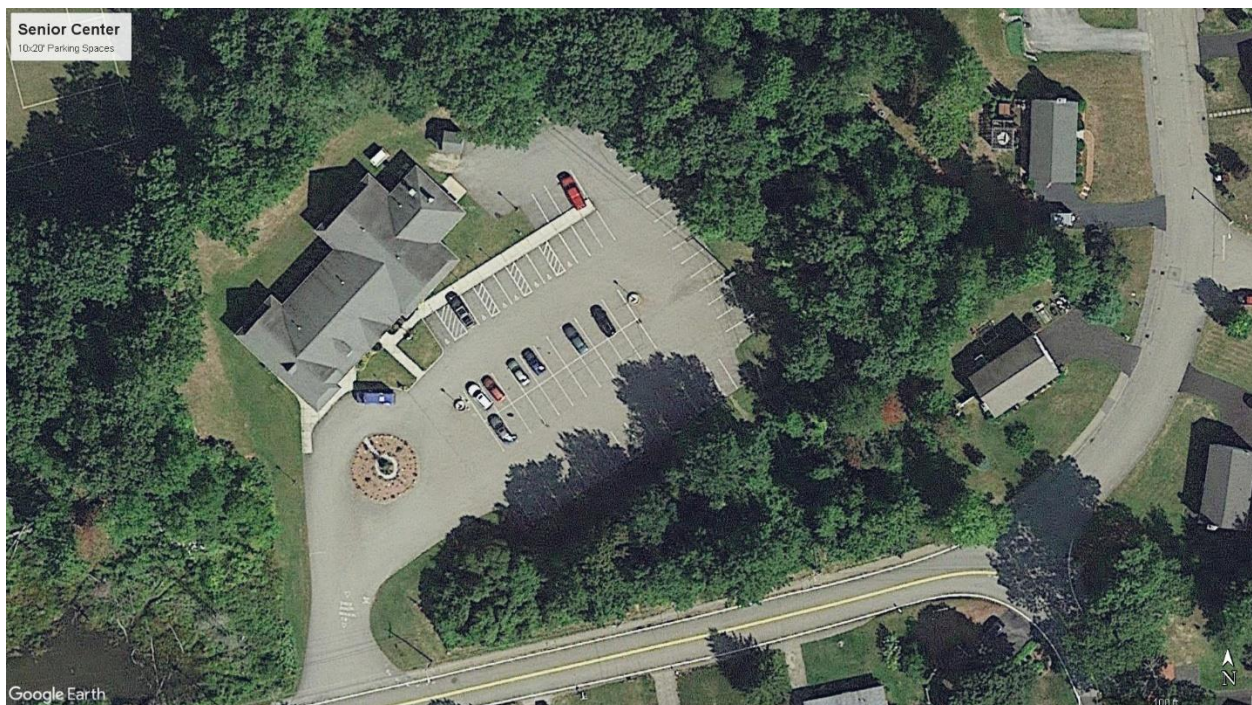
Leicester Elementary School: 9x18'



Memorial School: 9x18'



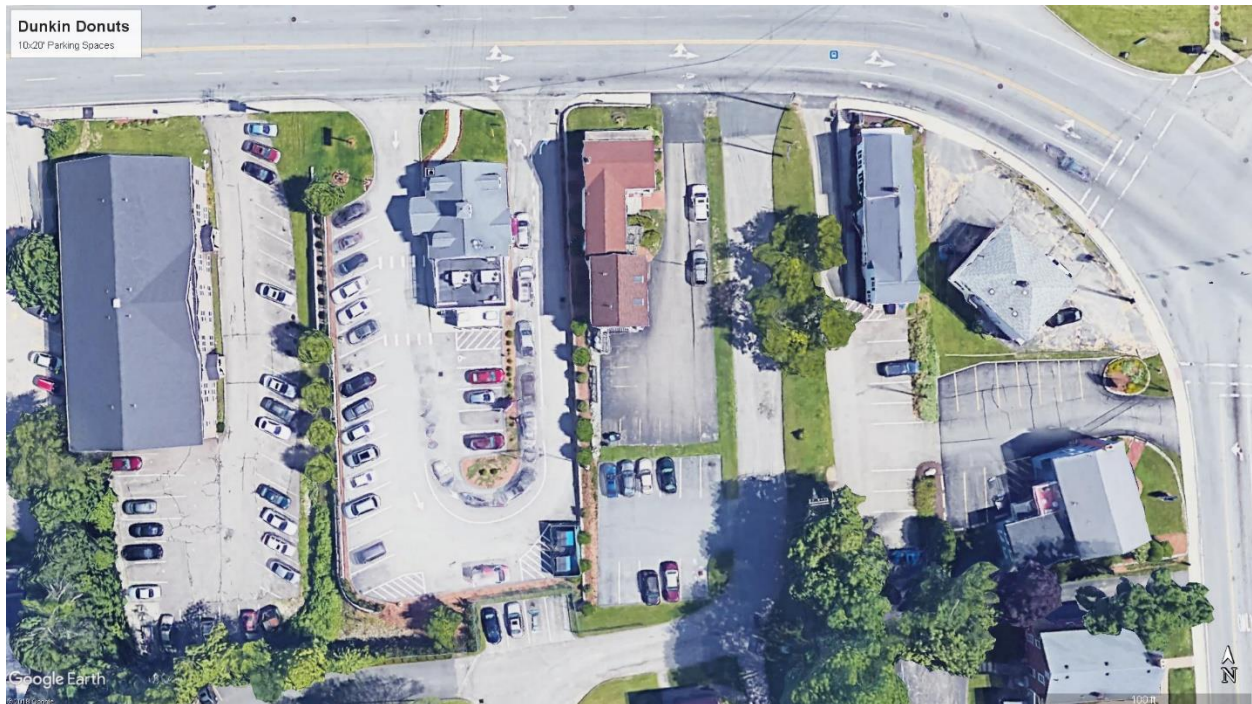
Becker College: 9x18'



Senior Center: 10x20'



Town Hall: 10x20'



Dunkin' Donuts: 10x20'



December 11, 2019

Ms. Michelle R. Buck, AICP
Leicester Town Planner
3 Washburn Square
Leicester, MA 01524

Re: New Leicester School Design – Parking Waiver Request

Dear Ms. Buck:

The following narrative provides supporting detail for this parking waiver request for relief from the Leicester Planning Board Parking Regulations, adopted July 9th, 2013. Pursuant to the regulations, the required number of parking spaces for the new school would be 270 and parking spaces sized at 10'x20'. Based on these requirements, the total area of impervious surfaces for parking spaces (not including turning and maneuvering space) would equal 54,000 square feet. The proposed parking space size is 9'x18' and parking space number is 190. By requesting a waiver for a reduction in the quantity of parking spaces and parking spaces size, the impervious area would be reduced by more than 23,000 square feet, while still providing a safe and accessible campus with the quantity of parking spaces needed. This reduction in pavement area reduces construction, maintenance and replacement costs as well as stormwater mitigation requirements. We are requesting this waiver at this point in the Schematic Design process to confirm the site plan design requirements.

The proposed site plan for the new Pre-K to grade 8 school, provided to you under separate cover, has been developed in close coordination with the School Building Committee to provide safe access and program functions that meet the needs of the school and serve the Town of Leicester residents. The existing site has some unique constraints including significant elevational change, dense soil types, high groundwater and wetland resources that along with economic realities require sensible design solutions that maximize the usefulness of the developable area. These proposed solutions include:

- Constructing the quantity of parking required for the new school's daily operation close and convenient to the school and continuing the practice of using other parking spaces on the overall school campus, along Winslow Ave and at the Senior Center for large events.
- Minimizing the area required for the new parking areas by using a typical parking space size of 9'x18' which is used throughout Leicester at all educational facilities. This in turn allows more space for athletic fields and courts within the site's developable area.

Existing Conditions: The site is located in Residential 2 District (R2) and Suburban-Agricultural (SA), and the entire site is covered by the Water Resources Protection Overlay. Educational uses are permitted in both R2 and SA districts. The new PreK-8 school will be located on the site of the existing middle school, and will combine students from the Middle School, Memorial School and Primary (Elementary) School sites. The Middle School has 56 parking spaces, and the Memorial School and Primary School have 51 and 71 spaces, respectively, for a total of 179 spaces. Since Memorial School students have moved into the Primary (Elementary) School, the parking need for that school has exceeded the 71 spaces available

by about 10 vehicles. The parking need for the new school adds the existing parking from all 3 school sites together plus 10 spaces for a total of 189. The traffic engineer for the new school project counted the peak parking demand for the existing Elementary and Middle Schools to be 160 spaces. The proposed parking design for the new school plans to designate spaces reserved for parents for Pre-K children to park and go inside the school when dropping off and picking up their children. The existing spaces are all dimensioned at 9'x18'.

Reuse of Existing Site: The new school will be positioned in a prominent location with access from Winslow Avenue, maintaining the necessary buffer from the existing wetlands and continuing to use Winslow Avenue as the main access for both the vehicular and pedestrian primary access. The design provides two entrances off Winslow Avenue: the western entrance is designed for car drop-off and parking, providing access for the PreK building entrance. The eastern entrance is located at the existing curb cut along Winslow Avenue and is the primary entrance for the bus queue and assigned staff parking. Both parking areas will provide accessible parking, electric vehicle charging station capabilities, green vehicle parking and visitor parking. An emergency access is also provided between the High School and new school, along with an emergency access loop around the new school. The emergency lane at its narrowest is 12' wide paved asphalt with an 8' wide stabilized lawn shoulder.

Parking space size: Leicester Planning Board Parking Regulations also require 10'x20' parking spaces with 24' wide aisles. The existing parking spaces at schools in Leicester measure 9'x18'. The 10'x20' size is larger than many communities we work in and will require substantially more pavement to accommodate the same amount of parking. The parking use at the school will have little turnover during the school day, since faculty and staff will be parked all day. An area of high turnover, like a restaurant establishment, will more frequently adopt a 10'x20' parking space size. ***We are hereby seeking a waiver to match the existing parking space dimensions (9'x18').***

Parking Quantity: Leicester Planning Board's Parking Regulations require public educational institutions to provide two parking spaces per classroom plus one space for every five seats of total seating capacity in auditorium or gymnasium, whichever has the larger capacity. The school will have 60 classrooms and the potential to accommodate about 750 non-fixed seats in the cafeteria. This would translate to about 270 parking spaces (120 for the classrooms and 150 for the cafeteria). A parking study completed in Fall 2019 observed a peak parking count of approximately 160 vehicles between the Middle School and Elementary School. The site plan for the new school includes 190 parking spaces, approximately 30 of which will be designated as reserved for specific uses (Pre-K drop off and pick up, electric charging, etc.). Classrooms are typically not used concurrently with areas of assembly in schools as the assembly areas serve the same population during the day and the classrooms are not in full use outside normal school hours. ***We are hereby requesting a waiver to reduce the proposed parking to that which meets the school's operational needs.***

Shared Campus Parking: Given the campus nature of the new school site, which includes the existing High School and Primary School building, relief from the parking space quantity required by zoning should be considered. During event parking, overflow can occur on the adjacent High School parking lot (154 spaces) and Primary School parking lot (71 spaces). The new school will be located closer to both parking lots and will have an accessible walking route to the High School parking lot. The adjacent Senior Center parking lot also provides additional parking. It is unlikely the new school will have events

concurrent with the High School, allowing the event parking to use the campus-wide parking. The on-site parking, along with campus-wide parking and the off-site parking on the adjacent town Senior Center, will meet the event parking needs of the school.

Reduction in Impervious Areas: By virtue of the location within the Water Resource Protection overlay, it is important to limit the amount of impervious surfaces on the site. To meet the requirements of 270 spaces at 10'x20', the required impervious surface for parking spaces would be 54,000 square feet. Limiting the number to 190 and reducing the parking space size to 9'x18' would decrease the impervious surface to 30780 square feet, a reduction of 23,220 square feet or 43% of the total impervious surface required for 10'x20' spaces. As mentioned previously, the reduction in paved area reduces the installation, maintenance and replacement costs for paving and stormwater management systems while enabling more of the developable area to be used for other needs such as athletic facilities and play space.

Thank you for your consideration in this request. A decision on these two waiver requests at this time will confirm the parking size and quantity requirements and avoid the need for difficult changes when the project is submitted for permitting next year.

Sincerely,

WARNER LARSON, INC.

A handwritten signature in blue ink, appearing to read "David J. Warner".

David Warner, ASLA
Principal