

TOWN PLANNER'S REPORT

250 Old Bedford Rd.
Concord Children Center Site Plan

REVISED Report Date: July 13, 2021
Prepared by: Elizabeth Hughes, Town Planner

GENERAL INFORMATION

Owner/ Applicant:	Concord Children's Center 1300 Main Street Concord, MA 02493
Requested Action:	Site Plan Review under Section 11.8.7 of the Zoning Bylaw to convert the existing single-family dwelling to a childcare center with reduced parking, construct a 7,063 s.f. addition and make related site improvements (parking lot, subsurface stormwater drainage and landscaping).
Location/ Lot Size/Utilities:	The property is located on the southeast corner of the intersection of Old Bedford Road and Virginia Road and addressed as 250 Old Bedford Road, Parcel 4220. The property is approximately 35,450 s.f. with wetlands along the southern property boundary. The lot has frontage on a public way with gas and Town water, sewer, and electric service.
Existing Land Use (Zoning)/ Surrounding Land Uses (Zoning):	The property is located in the Residence A Zoning District and developed with a single-family dwelling. To the north, west and east is developed residential properties (Res. A and Res. B) and to the south is Town owned conservation land (Res. A).

I. Proposed Project

The Applicant is proposing to convert the existing single-family dwelling into a childcare center and construct a 7,063 s.f., two-story addition. The projected number of children is 72 for regular day and 15 children after school from 3:00 p.m. to 6:00 p.m., with 18 teachers and 2 administrative staff.

The project includes the construction of a one-way driveway into the site from Virginia Road, a parking lot with 20 spaces, a drop-off isle and a one-way exit onto Old Bedford Road. The Applicant is requesting relief from parking to allow 20 spaces instead of the required 33 spaces.

Stormwater drainage will be provided by a series of catch basins, area drains, and trench drains that will discharge into a subsurface infiltration bed to infiltrate and recharge groundwater. This infiltration bed has an overflow pipe which drains towards the adjacent wetland. Pre-treatment units have been proposed in the drain manholes to pre-treat any runoff before discharging into the subsurface structure. Roof runoff will be captured with downspouts and gutters that eventually discharge into a subsurface infiltration bed. The project will require the removal of approximately of 954 c.y. of soil from the site.

The project includes the construction of a 6,670 s.f. playground, walkways, site landscaping and restoration of a wetland meadow. Exterior lighting of the site will consist of 3 parking lot pole fixtures, recessed lighting in the canopy overhang and low building mounted pedestrian lights.

The Applicant has revised the plans to address issues and concerns raised by Town staff and the Board at the June 8th meeting. The Applicant has also provided additional information regarding the traffic management plan for dropping off and picking up children, along with illustrated parking and queuing plans. Based on schedules, families will have a specific drop off time at the school. Parents arriving in the morning will park in the lot and bring their children into the school. Parents will not need to use the queue for morning drop offs given the staggered family and teacher schedules. Between 12:30 and 3:00 PM, families picking up children will pick up at the building entrance to the school. During that time teachers will bring children to the designated pick up area outside of the school. Parents will park or queue to receive their children. For pick ups after 3 PM parents will be able to park and enter the school to pick up their children. The Applicant will inform parents that no parking is allowed on Philip Farm, Meriam Road, or Kenny Lane and will reinforce this message through our communication channels if necessary.

III. Zoning Bylaw Review

General Laws of Massachusetts – Chapter 40A “the Zoning Act”

Section 3 states, “No zoning ordinance or bylaw in any city or town shall prohibit, or require a special permit for the use of land or structures, or the expansion of existing structures, for the primary, accessory or incidental purpose of operating a child care facility; provided, however, that such land or structures may be subject to reasonable regulations concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements.”

Zoning Bylaw Section 4.3.2 Child care facility: An establishment licensed by the Commonwealth of Massachusetts for the purpose of operating either 1) a day care center, which provides daily care for children under the age of seven (7) years, or sixteen (16) years if such children have special needs; or 2) a school age child care program, which provides supervised group care for children enrolled in kindergarten or older children who are not more than fourteen (14) years of age, or sixteen (16) years of age if such children have special needs, provided that:

4.3.2.1 In the residential districts, such activities shall be permitted only on (a) a lot which, with all its structures, conforms to the requirements of the Bylaw, or (b) a lawfully nonconforming lot or structure as to which the area of the lot is not less than ten thousand (10,000) square feet;

The lot is in the Residence A Zoning District, which requires 40,000 s.f. The lot is 35,450 s.f. and is a legal nonconforming lot that is over 10,000 s.f.

4.3.2.2 In the residential districts or on lots which are not in a residential district but are adjacent to a residential district, no outdoor play area (an area designed or set aside for children in a child care facility for recreation or play) shall be located closer to a lot line than the minimum yard setback requirements for a principal use in the district in which it is located;

The property is a corner lot with a front yard and two side yards. The play areas are located along the side and rear of the building and meet the minimum yard side yard (15 ft.) for the Residence A Zoning District.

4.3.2.3 In all districts, the open space between the defined outdoor play area or structure

and the property line(s) adjacent to residential districts or residential uses shall be screened with such fence, wall, hedge, or landscaping to provide a dense year-round screen as the Planning Board shall designate.

Along the eastern property line, adjacent to a residential use, the Applicant is proposing a 6-foot solid fence along a portion of the property line but is open to installing an 8-foot fence if requested by the Board or abutter. The remaining eastern property line is dense evergreen and deciduous landscaping within the 15-foot setback area. The Applicant has developed a Fencing Plan that shows the use of other types of fencing for the children play areas and for screening of the vehicles along the front property line. The Applicant is proposing to restore the area along the southern property line, adjacent to Town-owned conservation land and within the 25-foot No Disturb wetland boundary, into a wetland meadow with naturalized plantings and is presenting this to the Natural Resources Commission on May 5, 2021.

At the June 8th meeting, the abutter requested an 8-foot fence along the property line, which the applicant agreed to install. This should be a condition of approval if the Board moves forward with approving the project.

Section 7.7.2.1 Required Parking Spaces - Child Care Facility: One (1) space for every teacher and employee, one (1) space for visitors plus one (1) space for every six children based on the largest enrollment on site at any given time; the Board or the Planning Board, whichever is responsible for site plan approval, may allow a reduction in the number of required parking spaces for the purposes of improving site utilization but not to increase permitted enrollment if the number of spaces provided is adequate to provide one space for every teacher and employee and to support, without detriment to the neighborhood, drop-off and pick-up areas for the maximum number of children arriving and departing the facility at any one time in accordance with a parking and traffic management plan approved by the Planning Board. In the case of a parking and traffic management plan, the Planning Board shall have the authority to monitor compliance and to amend the plan as necessary to achieve compliance with the standards set forth in the plan.

The required parking for the proposed facility is 12 spaces for 72 children, 20 spaces for teachers and staff and one visitor space for a total of 33 spaces. The Applicant is proposing 20 spaces. Additionally, the Superintendent of Schools has provided a letter stating that the Applicant will be provided two parking spaces during the school day at the Ripley School, which is .3 miles down Old Bedford Rd, and access to the parking lot for evening events as needed. In a March 30, 2021 memo, the Applicant has identified a parking and traffic management plan for teachers and students to arrive on a staggered schedule throughout the day to allow for the reduction in the number of parking spaces. The parking and traffic management plan is currently being reviewed by the Town's Outside Consultant.

The Applicant has provided additional information regarding the traffic management plan for dropping off and picking up children, along with illustrated parking and queuing plans. The Town's traffic consultant has reviewed the information provided and based on the description provided by the Applicant for drop-off and pick-up, it seems that the number of parking spaces provided will be adequate.

The Board needs to determine if the reduction in the number of required parking spaces provided is adequate to provide one space for every teacher and employee and to support, without detriment to the neighborhood, drop-off and pick-up areas for the maximum number of

children arriving and departing the facility at any one time and does not allow an increase in enrollment.

Section 11.8.7 Site Plan Review for religious uses, educational uses and child care facilities:

The purpose of this section is to ensure that all religious and education uses, and all child care facilities are reasonably regulated in regards to bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements. The Planning Board has the authority to place reasonable conditions on the aforementioned issues but are not permitted to withhold approval of Site Plan Review.

11.8.7.1 In reviewing the site plan submittal for religious uses, educational uses and child care facilities, the following issues shall be considered:

- (a) Relationship of the bulk and height of structures and adequacy of open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of this Bylaw, which includes, but is not limited to, building coverage requirements, yard sizes, lot areas and setbacks;*

The height of the proposed structure is 31.9 feet and in compliance with the maximum 35-foot height limit. The property is a corner lot and has a front yard and two side yards. The existing and proposed addition meets the required front yard setback (40 ft.) and side yard setback (15 ft.). The 35,450 s.f. lot meets the lot area requirements because it is legal nonconforming and greater than 10,000 s.f. Non-residential principal uses in the Residence A Zoning District is exempt from the Maximum Floor Area Ratio in Table III. ***The Board should evaluate the relationship of the bulk of the structure and adequacy of the open spaces to the natural landscape, existing buildings and other community assets.***

At the July 7th Natural Resource Commission meeting, the Commission required corrections to the plans regarding the summary of impacts within the 50-foot No Build Zone and area of inner buffer mitigation, inclusion of a note and signage that snow storage is not permitted within the 50-foot No Build Zone, an increase in the outer buffer mitigation area from 2,690 SF to 3,898 SF to achieve 1:1 compensation and a reduction in the mowing of the meadow to only once a year.

- (b) Physical layout of the plan as it relates to convenience and safety of vehicular and pedestrian movement within the site, the location of driveway openings in relation to traffic or to adjacent streets and, when necessary, compliance with other regulations for the handicapped, minors and the elderly;*

In an April 26, 2021, memo, the Engineering Division raises issues and concerns with the safety of vehicular and pedestrian movement within the site, the location of driveway openings in relation to traffic and adjacent streets that need to be addressed by the Applicant.

The Applicant has provided revised plans to addresses issues and concerns raised by the Engineering Division. In a July 7, 2021 memo, the Engineering Division notes that the issues with the exit driveway location have been addressed. However, it is noted that the Pick-up & Drop-Off Queue Analysis shows the bypassing vehicle entering the handicap parking access isle and the drive aisle width does not meet the 24-foot drive aisle width specified in Zoning Bylaw Section 7.7.3.1. The Building Commissioner has reviewed the plans and determined that the required 24-foot drive

aisle width is required for the parking and maneuvering of vehicles. The portion of the drive aisle that is 14.9 feet is located behind to the striped handicapped parking loading area and not used for vehicle maneuvering. Section 7.7.3.1 requires this area to be a minimum of 12 feet wide.

The Engineering Division also notes that measures should be taken to ensure that vehicles in the queuing line do not park in the handicapped crosswalk and drivers in the queuing line are aware of merging bypass vehicles. This could be addressed with appropriate signage. This would also alleviate the issue with vehicles bypassing the queuing line and driving over the handicapped isle since additional space will be provided in this location. The Town Planner also recommends that a painted queuing lane in the parking lot, which has been done at the Nashoba Brooks School, would help ensure that there is sufficient room for the vehicle bypass lane.

The Applicant's traffic study has been reviewed by the Town's outside consultant. The Applicant responded to questions and comments raised in the consultant's May 25th review letter and provide additional information. In the consultant's second review letter dated July 6th, the consultant notes the following:

- The delay per vehicle along Old Bedford Road NB at Bedford Street increases from approximately 20.7 seconds (LOS C) to 31.8 seconds (LOS D) during the weekday morning peak hour. Overall, the LOS on Old Bedford Road NB, a stop-controlled approach intersecting a mainline roadway, is not substantial and does not warrant specific mitigation.*
- The delay per vehicle along Old Bedford Road NB at Bedford Street increases from approximately 66.8 seconds (LOS F) to 108.0 seconds (LOS F) during the weekday evening peak hour. The V/C ratio increases to above 1.00 and the queue on this approach grows an additional 4 vehicles. However, the large LOS F is likely to not be fully experienced, or for only a short period of a typical weekday. Therefore, any major mitigation to the intersection, such as signalization (which is most likely not warranted) or other reconstructed treatments, may be excessive. The Old Bedford Road NB approach does provide a wide mouth at its intersection with Bedford Street and sufficient space within the Right-of-Way seems to exist where a possible mitigation alternative would be to box-widen (if necessary) and restripe the NB approach to consist of an exclusive left-turn lane and an exclusive right turn lane. Although the delay for NB left-turn vehicles may be unchanged, right-turning vehicle in the queue will have their delay significantly decreased.*
- The vehicle queue at the entrance driveway as reported are less than one vehicle on average and will not substantially affect operations along Virginia Road. The queue along Virginia Road at Old Before Road is not substantially changed by the introduction of site generated traffic.*
- The crash rate reported for each intersection (0.29 and 0.44 crashes per MEV) are each well below the statewide and Districtwide averages for unsignalized intersections.*

The Town's consultant does not raise any significant issues and provides various

recommended conditions should the Planning Board move forward with approval.

- (c) *Adequacy of the arrangement of parking and loading spaces in relation to the proposed uses of the premises;*

The Applicant proposes 20 parking spaces and a drive-up drop-off and pick-up lane that has the ability to queue 6 vehicles. With the staggered drop-off times, it is the Applicant's experience that the morning drop-off will have about 3 cars queuing at any one time, 4 to 6 cars utilizing the queuing at the midday pick-up and 3 to 5 cars utilizing the queuing starting at 3 p.m. for the afternoon pick-up. The parking spaces adjacent to the building will be designated for staff, who will park in this location before children are dropped off in the morning and rotate throughout the day as morning teachers leave. Designated staff will escort children from the drop off lane into the building.

In an April 6, 2021 memo from the Police Department and an April 26, 2021 memo from the Engineering Division, issues and concerns have been raised with the layout of the parking spaces in relation to the proposed use of the premises that need to be addressed by the Applicant.

In a July 7, 2021 memo, the Engineering Division notes that there is an issue with the first parking space adjacent to the driveway entrance and the garbage truck have to back out into the Virginia Rd. public right-of-way and over the public sidewalk to maneuver out of the site. This is a significant safety concern that the Engineering Division and the Town Planner think can be addressed by relocating the existing utility pole and shifting the driveway entrance further east towards the side property line. The three parking spaces will have to be relocated, but this configuration will allow the dumpster to be move to the east so the truck will have sufficient maneuvering room. The Applicant has stated that locating the entrance driveway in the location of the existing utility pole was explored initially, however, due to the work, permits, and time required to move the pole, the Applicant decided to explore alternative layouts to avoid having to relocate the existing utility pole. CMLP has informed the Town Planner that there are no Town utilities on the pole an only Verizon is located on the pole with no overhead connections, which would require the Applicant to work with Verizon on relocating it. However, with no additional utilities or overhead connections, the Applicant should provide documentation on why the pole should not be moved to address this significant safety concern.

- (d) *Physical lighting of the site, especially the adequacy of the method of exterior lighting for convenience, safety and security within the site and for protection of neighboring properties, roadways and the night sky;*

The Applicant has selected all dark sky compliant light fixtures. The lighting photometrics plan shows that light does not extend off the property along the side property lines. Light from two of the three parking lot lights does extend slightly off the property towards the intersection of Virginia Road and Old Bedford Road. The Town Planner believes this will likely be undetectable given the surrounding existing ambient light levels at the intersection. However, the photometrics plan appears to have some discrepancies between the light levels for the same fixtures around the building. Additionally, the light level for the three fixtures in the front porch of the existing structure is too bright for its intended use as only a secondary means of exit.

The Applicant has stated that all interior electrical lighting will be dimmable LED (typically set to 80%) and have enhanced lighting controls so that lights are automatically turned off when not being occupied. All site lighting will be dark-sky compliant LED fixtures that minimize light spill beyond areas needed for safety and egress. The driveway exit reconfiguration to meet town staff concerns required adding an additional pole-mounted light along the street side of the parking/driveway area. Pole height/mounting height was lowered from 15' to 12' to reduce visual impact of the lights from off-property. The porch downlights have been reduced from 3 to 2 in response to the Town Planner comment about overly intense light levels.

- (e) *Protection of adjoining premises against seriously detrimental uses by provision for surface water drainage;*

In an April 26, 2021 memo, the Engineering Division raises issues and concerns with various aspects of the stormwater drainage plan that need to be addressed by the Applicant.

The Applicant has revised the plans and stormwater report to address the Engineering Division's concerns. In a July 7, 2021 revised comment letter from the Engineering Division, all issues and concerns raised regarding the stormwater drainage have been addressed except for minor changes and notes to the plans are required.

At the June 8th meeting, the Board asked the Applicant to investigate the use of Low Impact Design for the stormwater drainage. The Applicant should provide information on why LID measures have not been incorporated into the design.

- (f) *Adequacy of the methods of disposal of refuse and other wastes resulting from the uses permitted on the site;*

In an April 29, 2021 memo, the Water/Sewer Division states that the property has frontage to a municipal sewer main, and a sewer service connection was installed to the property line in 2006, therefore, the property is eligible for a sewer service connection. The Applicant is required to submit to the Concord Board of Health a Request for Title 5 Building Review (Form S) to identify any potential increase in wastewater flow and associated Sewer Improvement Fee. Based on existing wastewater capacity constraints, flow increases over 1,000 gallons per day will be administratively denied by the Water/Sewer Superintendent. An appeal may be made to the Public Works Commission seeking relief for an increase in flow over 1,000 gallons per day. The Public Health Director has commented that the Applicant is required to work with Health Division to design the kitchen that will be used for preparing children's snacks so that it can be licensed as a food establishment. The Engineering Division questions whether there is a conflict between the location of the dumpster and two parking spaces.

In a July 7, 2021 memo, the Engineering Division notes that the issue with the dumpster location and the two parking spaces has been addressed, however, as noted in Item (c) above, there is an issue with the garbage truck having to back out into the Virginia Rd. public right-of-way and over the public sidewalk to maneuver out of the site.

- (g) *Adequacy of fire protection measures, and;*

In an April 5, 2021 memo, the Fire Department did not raise any issues or concerns with

the proposed project.

- (h) *Incorporation of sustainability and resiliency principles into the site design that result in a plan that is responsive to the environment and actively contributes to the development of a more sustainable community.*

As part of the application, the Applicant has provided a letter from D.W. Architects that outlines the incorporation of various sustainability measures into the project design, such as higher insulation values in the building construction, LED lighting with automatic non-occupant shut-off, environmentally friendly materials for the interior finishes, removal of invasive species and planting of native species that minimize water usage. Garden beds, recycling and composting will be part of the educational tools for the children.

In an April 23, 2021 memo, the Sustainability Director recommends the installation of all-electric HVAC systems and not add any new fossil fuel equipment and an energy audit/assessment to evaluate opportunities to enhance the energy efficiency of the building, such as insulation, air sealing, LED lighting, and energy-saving appliances and potential energy efficiency improvements to the existing structure.

In response to the Sustainability Director's comments, the Architects have provided additional information regarding the incorporation of sustainability measure into the project, which includes:

- *Walls = R20 minimum required, anticipated design of 4" insulation= R26*
- *Roof = R 23 continuous insulation, anticipated R value of 39*
- *Below Grade walls = R 7.5, prescriptive. Anticipated R10*
- *Slab on Grade = R 5 full extent of slab & R 15 for 36" at the exterior perimeter of slab.*
- *All windows and doors will be double glazed with low solar heat gain.*

The Mechanical systems (Heating and Cooling) will re-use existing systems as much as is feasible and all new systems will meet energy consumptions requirements. The Applicant is currently working to obtain cost estimates to provide all-electric systems, including electrical water heaters and electrical boiler for the entire HVAC systems, should the budget permit. Should the budget allow, the Applicant will also be investigating the possible inclusion of onsite renewable energy such as solar power. The Applicant will work with the Sustainability Director on potential energy efficiencies improvements to the existing structure.

The interior finishes will also focus on sourcing materials that are environmentally friendly, and have a high recycled content utilizing such certifying agencies as the Healthier Hospitals Initiative (HHI), Green Score and LEED. The interior finishes and interior partitions will also focus on acoustic performance to ensure a healthy and nurturing environment. The Applicant will be using recycling as an educational tool.

11.8.7.3 *Where a special permit or a variance is not required or requested, site plan approval for religious uses, educational uses and child care facilities shall be by the Planning Board. The Planning Board shall file its decision with the Town Clerk within ninety (90) days of receipt of an application, unless such time is extended in writing by agreement with the applicant and*

notice of such extension is filed with the Town Clerk. The Planning Board may impose such appropriate conditions, limitations, and safeguards as will insure compliance with the terms of approval.

The application was filed on April 1, 2021. *The Applicant has provided the Planning Board a time extension until July 30, 2021 to file a decision with the Town Clerk.*

IV. Town Planner Recommendation

The Board should discuss any remaining outstanding issues or concerns raised in this report and then direct the Town Planner on the drafting of a decision for review by the Board at the July 27th meeting.