

TOWN PLANNER REPORT

Concord Academy Centennial Arts Center
166 Main Street

REVISED Report Date: November 2, 2022
Prepared by: Elizabeth Hughes, Town Planner

GENERAL INFORMATION

- Owner/Applicant: Concord Academy
166 Main Street
Concord, MA 01742
- Requested Action: A Special Permit with Site Plan Review under Sections 6.2.11 (Height), 7.2 (Floodplain Conservancy District), 7.7.2.8 (Reserved parking spaces), **7.7.2.12 (Relief from Parking)**, 11.6 (Special Permit), and 11.8.7 (Educational Site Plan) to construct a Centennial Arts Center, relocate and rehabilitate two existing dwellings (220 Main St. and Ides Cottage), convert existing attached garage at 238 Main St into a dwelling unit, and other associated site improvements at 166 Main Street (Parcel# 1706).
- Location/Size/Zoning/
Land Use: The campus is on the north side of Main Street from approximately the intersection of Sudbury Road to Belknap Street. The total campus is approximately 26 acres and located in the Residence B Zoning District. The Site is developed with academic, athletic, faculty and dormitory buildings comprising the main campus. Portions of the Site abut Sudbury River and are within the Main Street Historic District, Wetland Conservancy District, Flood Plain Conservancy District, and NHESP estimated and priority habitat areas.
- Surrounding
Land
Uses/Zoning: The property is adjacent to primarily residential development in the Residence B Zoning District. To the east is commercial development in the Limited Business District.
- Utilities: The site is served by Town water, sewer and electric.

I. Proposed Project

The existing Performing Arts Center (PAC) was built in 1968 and was not designed for the current use as a main stage theatrical production area and music performing space. **The Applicant notes that** there is limited fly space with almost no wing or backstage space, and the site lines and acoustics are far from ideal. The current 400-seat theater will be reduced to a theater with a capacity of 215-seat capable of supporting smaller-scale mainstage performances. The existing PAC will be retained to accommodate weekly all school meetings.

The proposed Centennial Arts Center (CAC) will house the School's Performing Arts Dept functions to include music practice rooms and a music hall, a playhouse for theater (along with support functions), and a Visual Arts interdisciplinary space along with faculty offices. The theater has permanent seats for 175 audience members and will be used as both a teaching and performance space. **The Applicant states that** the music hall will be a teaching/performance space that is acoustically designed for an intimate audience of 125, as the playhouse is not acoustically designed for music performances.

The project also includes the creation of a residential village on the west side called Academy Village. Academy Village will house school adults in three buildings. 220 Main Street and Ides

Cottage are existing adult apartments on campus that will be relocated to Academy Village in order to make way for the Centennial Arts Center. 238 Main Street is an existing adult residence where the oversized garage and storage space within the original building envelope will be renovated for an additional facility unit. Academy Village will have an outdoor common area for use by families located in these buildings. **The project also includes** removing large areas of paved tennis courts and parking. New parking areas will be created to accommodate the program located in the West Campus. Additional changes to the site include restoration of a former athletic field to a pollinator meadow on the North side of the Centennial Arts Center near the Sudbury River. The Academy Garden, adjacent to the Chapel, will also be renovated to restore it to a more formal garden area for outdoor gathering. A new West Lawn will be created in front of the Centennial Arts Center. Today this area is an asphalt parking area.

Concord Academy currently has 204 spaces on campus to accommodate faculty, staff, students, and guests. The proposed parking layout provides 147 parking spaces on campus and relies on shared use of Main Street parking to accommodate the remaining 57 parking spaces that currently exist on campus. The proposed plan assumes shared use of 57 of the **current** 111 spaces along Main Street and Academy Lane from the intersection of Sudbury Road to Thoreau Street as available. **The improvements to the West Campus driveway may require the removal of two on-street parking spaces or modification of the parking space striping so there is no net loss of spaces.** The Applicant has also developed a reserve parking strategy that accommodates the current 204 spaces entirely on-campus.

The Applicant will continue to collaborate and coordinate with Emerson Umbrella and the Concord Public Library around the scheduling of large events to limit any impact any of them may have on the surrounding neighborhood.

The proposed project requires 351 c.y. of fill in the 100-yr floodplain. The Applicant is proposing 535 c.y. of compensatory flood storage.

II. Zoning Bylaw Review

Section 6.2.11 Height

The Board may grant relief from the above definition for the height of a building in the Residence AA, Residence A, Residence C and Residence B Districts provided the Board finds that a literal application of this requirement would be unreasonable because there are no reasonable alternatives available and that the desired relief may be granted without substantial detriment to the neighborhood and without derogating from the intent and purpose of this Bylaw.

The height limit in the Residence B Zoning District is 35 ft. to the ridge and excludes chimneys, spires, towers, and other projections not used for human occupancy or storage. The Applicant is requesting relief from the height limit to allow the construction of the Centennial Arts Center with a maximum height of 51 ft., excluding the cupola, on the north side (facing the Sudbury River) of the building where the two lowest grade points are located. The roof peak on the east, west and south side range from 43 ft. to 44 ft. 11 ½ inches in height. The Applicant states that the requested relief is required to accommodate the necessary theater catwalk and mechanical spaces and non-occupied gable roof forms, and the literal application of the 35 ft. height limit would be unreasonable because there are no reasonable alternatives for the construction of a theater.

The Applicant has provided a Campus Site Section plan that show the height of the proposed CAC is inline with the height of the existing Haines Hobson House that fronts on Main St. due to the drop in topography from Main Street to the Sudbury River. A second cross section plan shows the height of the CAC is in line with the existing Science Building.

The Town Planner believes given that the proposed CAC is located centrally within the campus and the information shown on the height cross section plans, the height of the structure will not be a substantial detriment to the neighborhood and the granting of a waiver does not derogate from the intent and purpose of the Zoning Bylaw and the educational use.

Section 7.2 Floodplain Conservancy District

7.2.6.2 The Planning Board and Natural Resources Commission shall submit to the Board written recommendations including at least:

(a) An evaluation of the proposed use, including its probable effect or impact upon the Town's water supply, the quality of water in the area, the natural flow pattern of watercourses, nearby or pertinent floodwater storage areas or other areas subject to seasonal or periodic flooding and the general health, safety and welfare of the inhabitants of the Town; and

(b) A recommendation as to whether the special permit should be granted and whether any restrictions should be imposed upon the proposed use as a condition of such permit.

The Natural Resources Commission reviewed the proposed project to construct a Centennial Arts Center building; reconfigure parking areas, walkways, and driveways; relocate two faculty residences; make improvements to existing faculty housing #238; and convert playing fields to a native meadow within the 100-year floodplain, the 200-foot Riverfront Area to the Sudbury River and the 100-foot Buffer Zone to Bank and Bordering Vegetated Wetlands on August 17, 2022, September 29, 2022, and November 2, 2022 and intends to issue an Order of Conditions approving the project pending the Planning Board's recommendation to the Board on the location of proposed building and relocated structures. The NRC waits to issue the Order of Conditions until after the Planning Board review so that there is less likelihood that the site plans will substantially change and require the Applicant to seek an amendment form the NRC.

The Town Planner and the Natural Resources Director believe the project represents a benefit to pertinent floodwater storage areas and other areas subject to seasonal or periodic flooding due to the increase in compensatory flood storage and the restoration of the existing lawn area to a more natural meadow. The project will not impact the Town's water supply, the quality of water in the area, the natural flow pattern of watercourses and the general health, safety, and welfare of the inhabitants of the Town.

7.2.6.3 Compensatory storage shall be provided as specified in Section 7.2.6.1(c) for all flood storage volume that will be displaced by the proposed project within the 100-year floodplain. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.

Work within the 100-year floodplain, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

The Board may allow a decrease in the required compensatory flood storage to a ratio of 1:1 based upon a recommendation of the Natural Resources Commission and a finding that the

reduction in the compensatory flood storage allows for an overall improvement to the site, such as reducing the volume of structure in the floodplain, improving stormwater management, or improving the natural environment.

If a special permit is granted, the Board shall impose such conditions and safeguards as public safety, welfare and convenience may require. The Board shall give due consideration to the reports of the Planning Board and Natural Resources Commission and, where the decision of the Board differs from the recommendations of either, the reasons therefor shall be stated in writing.

The proposed project requires 351 c.y. of fill in the 100-yr floodplain. The Applicant is proposing 535 c.y. of compensatory flood storage.

In a November 21, 2022 memo, the CPW Engineering Division has reviewed the floodplain calculations and the compensatory flood storage and confirms that the proposed project meets the required 1.5 to 1 ratio, has an unrestricted hydraulic connection to the Sudbury River and does not restrict flows so as to cause an increase in flood stage or velocity.

7.7.2.8 Reserved parking spaces: The Planning Board may, based upon documentation of the special nature of the use, or building, authorize a phased development of required off-street parking with the following provisions:

(a) The total number of spaces required to be shown on the site plan shall be determined in accordance with the standards set forth in subsection 7.7.2.1, Table IV.

The Zoning Bylaw requires one parking space per staff member and one space per 5 students for a high school, plus two parking spaces for each residential unit on campus.

Faculty/Staff Full-time Academic year	84
Faculty/Staff Part-time Academic year	43
Faculty/Staff Year Round	61

Total Faculty/Staff Academic Year	188	=	188 parking spaces
Total Student Population	400	=	80 parking spaces
Residential Dwelling Units	43	=	86 parking spaces

Total Required Parking per Zoning Bylaw 354 spaces

The Applicant has received previous Special Permits from the Board of Appeals (1990 & 1998) granting relief from the parking requirement for boarding students, who are not permitted to have vehicles, and for any staff that lives on campus since parking is provided with the dwelling unit. This allows for the removal from the parking calculation a total of 117 parking spaces for the 155 boarding students and 47 staff that live on the campus in the 43 dwelling units.

Total Faculty/Staff Academic Year	188	=	188 parking spaces
Total Day Student Population	245	=	49 parking spaces

Total Required Parking per Zoning Bylaw w/ Granted Relief 237 spaces

Additionally, the 43 part-time staff members (i.e. coaches, music instructors) are not all at the school at the same time, with some of the part-time staff there only in the evenings (coverage nurse

and security). The Applicant states the number of staff on the campus during the largest shift is 155 and has utilized this figure to calculate the amount of parking they would like to provide.

Total Faculty/Staff Largest Shift	155	=	155 parking spaces
Total Day Student Population	245	=	49 parking spaces
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Total Calculated Parking with Relief & Largest Shift	204 parking spaces		

There currently is 204 parking spaces on the Campus. The Building Commissioner has determined that the required parking under the Zoning Bylaw is 354 spaces and that based on the total number of staff of 188 and the previous Special Permits granting relief, a total of 237 parking spaces is required pursuant to the Zoning Bylaw.

The Building Commissioner notes that there are many other uses in the Zoning Bylaw that base the required parking on the number of employees on the largest shift so the request by the Applicant is reasonable. However, he believes that it is important for this request and the two previously granted relief from parking special permits to be incorporated and acknowledged in this application under Section 7.7.2.12 as a way to formalize how parking for the school is calculated and alleviate any ambiguity in the future.

Historically, faculty and staff have utilized the public parking spaces along Main Street in front of the campus. In front of property owned by the Applicant, there are 101 parking spaces on Main St. and 10 spaces on Academy Ln. The Applicant conducted a parking count analysis during the week of April 25th, 2022 throughout the day (9AM, 12PM, and 3PM) to capture a range of parking demand use-cases across the academic day and throughout a typical week. Along Main Street and Academy Lane an average of 49 of the 111 parking spaces were available. Peak utilization was noon on Tuesday and Thursday with 26 of the 111 parking spaces available. The maximum availability of parking spaces was Thursday morning at 9AM with 85 of the 111 parking spaces available.

On campus availability was also reviewed over the same period and at the same times of day to provide a sense of on-campus parking utilization. The average availability of parking spaces on campus was 49 of the 204 spaces. The peak demand for on-campus parking was noon on Wednesday and Friday with 33 of the 204 spaces available. The maximum availability of parking was Thursday morning with 90 of the 204 on-campus parking spaces available.

The Applicant has clarified the parking analysis chart.

Concord Academy Parking Observation - 4/25/2022 - 4/29/2022

A	B	C	D	E	F
Observation Period	Observed On Campus Utilized (204)	Proposed On Campus Parking	Delta (Column C - B)	Observed Available Main St/Academy Ln Parking (111)	Projected Available Main St/Academy Ln (Column D + E)
4/25 - 9:00:00 AM	148	147	-1	56	55
4/25 - 12:00:00 PM	158	147	-11	44	33
4/25 - 3:00:00 PM	140	147	0	60	60
4/26 - 9:00:00 AM	167	147	-20	33	13

4/26 - 12:00:00 PM	167	147	-20	26	6
4/26 - 3:00:00 PM	151	147	-4	54	50
4/27 - 9:00:00 AM	160	147	-13	54	41
4/27 - 12:00:00 PM	171	147	-24	37	13
4/27 - 3:00:00 PM	141	147	0	56	56
4/28 - 9:00:00 AM	114	147	0	86	86
4/28 - 12:00:00 PM	166	147	-19	26	7
4/28 - 3:00:00 PM	160	147	-13	43	30
4/29 - 9:00:00 AM	154	147	-7	54	47
4/29 - 12:00:00 PM	171	147	-24	45	21
4/29 - 3:00:00 PM	144	147	0	52	52

Campus Demand: Column B summarizes the number of occupied on-campus spaces during the observation period, Column C identifies the proposed number of on-campus spaces at the completion of the West Campus Project. Column D illustrates the delta between occupied and proposed (Column C – Column B) negative numbers illustrate a need to utilize Main Street/Academy Lane parking to accommodate the delta; where a zero is shown there is projected to be sufficient on-campus capacity to accommodate parking demand.

Main Street/Academy Lane Demand: Column E identifies the number of observed available spaces along Main Street from Thoreau to Sudbury Road and Academy Lane along Concord Academy’s property. Column F identifies the projected number of available spaces within this zone upon completion of the West Campus project (Column D + Column E). There are sufficient spaces identified within the immediate vicinity to accommodate the observed on campus demand.

(b) The spaces that are not intended for construction immediately shall be labeled “Reserve Parking” on the site plan and shall be properly designed as an integral part of the overall parking layout, located on land suitable for parking development and in no case located within area counted as buffer, setback, or open space under other provisions of this Bylaw.

The Applicant has provided a site plan for the proposed project that shows a total of 147 parking spaces and a schematic plan (“Concord Academy Campus Parking – Reserve” May 11, 2022) showing the location of an additional 57 reserved parking spaces for a total of 204. These spaces are located on land suitable for parking development and are not located in buffer, setback, or open space areas required under other provisions of the Zoning Bylaw. The Applicant notes that the construction of these additional 57 spaces has drawbacks – most significant is the required removal of an additional 36 trees as well as a limited impact on the reduction of impervious surface from the proposed approach (-17,100 SF vs. -4,600 SF).

If it is found that construction of the Reserved Parking is required, it is recommended that the Applicant submit to the Planning Board for Site Plan Review a civil plan with appropriate stormwater drainage for approval.

(c) No more than fifty (50) percent of the total number of required spaces may be reserved for later construction.

The Applicant is proposing 57 of the required 204 parking spaces be designated as Reserved Parking, which is 28%.

(d) If, at any time after the certificate of occupancy is issued for the building or use, the Building Inspector determines that additional spaces may be needed, he shall notify the Planning Board concerning his finding and that Board may require that all or any portion of the spaces shown on the approved site plan as “Reserved Parking” shall be constructed.

This shall be a condition of any decision to approve the project. Additionally, if at any time in the future the Town modifies the configuration of Main St. and the number of spaces is significantly reduced, the Planning Board may require that all or any portion of the spaces shown on the Reserved Parking plan be constructed.

7.7.2.12 Relief from parking requirements: *The Board may, upon advice of the Planning Board, grant relief from the parking and loading requirements in Section 7.7.2 provided the Board finds that a literal application of such requirements would be unreasonable and that the desired relief may be granted without substantial detriment to the neighborhood and without derogating from the intent and purpose of this Bylaw.*

The Board may require the applicant to submit a written report, prepared by a qualified parking consultant, defining and evaluating the nature and impact of the requested relief. In addition to any other specific factors that may be set forth in this Bylaw, the determination shall include consideration of each of the following:

- (a) Documentation from parking studies and/or transportation industry publications that show the parking ratios required in the Zoning Bylaw for the proposed use is not aligned with current industry standards, if applicable;*
- (b) How the proposed use is beneficial and/or contributes to the other nearby businesses, village center and neighborhood, as applicable;*
- (c) The distance and availability of on-street parking, public parking facilities and alternative transportation;*
- (d) The intensity of the use and the number of employees;*
- (e) Alternative provisions for off-site parking for employees, and;*
- (f) The availability of convenient bicycle parking.*

The Applicant would like the required parking to be based on the number of staff on the largest shift, not the total number of staff employed by the School so that parking spaces do not have to be constructed for staff that is not on the campus. As noted above under Section 7.7.2.6, the Building Commissioner commented that while there are many other uses in the Zoning Bylaw that base the required parking on the number of employees on the largest shift, there is no mechanism in the Zoning Bylaw to allow this modification to the parking calculation other than through Section 7.7.2.12. He is recommending that this request and the two previously granted relief from parking special permits be incorporated and acknowledged in this application under Section 7.7.2.12 as a way to formalize how parking for the school is calculated and alleviate any ambiguity in the future.

The Applicant has received previous Special Permits from the Board of Appeals (1990 & 1998) granting relief from the parking requirement for boarding students, who are not permitted to have vehicles, and for any staff that lives on campus since two parking spaces are required for each dwelling unit. Additionally, the 43 part-time staff members (e.g. coaches, music instructors) are not all at the school at the same time, with some of the part-time staff there only in the evenings

(e.g. coverage nurse and security). The Applicant states the number of staff on the campus during the largest shift is 155 and has utilized this figure in their parking calculation.

Total Faculty/Staff Largest Shift	155	=	155 parking spaces
Total Day Student Population	245	=	49 parking spaces
Total Calculated Parking with Relief & Largest Shift			204 parking spaces

The Building Commissioner agrees with this calculation.

Pursuant to Item (a), the Applicant is not requesting relief from providing parking, but is requesting relief on how the parking is calculated so that it is based on the number of staff on the largest shift and not the number of staff employed by the School. This is consistent with other uses identified in the Zoning Bylaw that have many employees, but due to full-time and part-time staff, as well as work schedules, they are not on the site at the same time, such as hotel, hospital, assisted living facility, restaurant, repair shop, auto service station, and veterinary.

Pursuant to Item (b), the Town Planner believes that Concord Academy has a history of being beneficial community partner and contributing to the other nearby businesses, the village center, and the community as a whole.

Pursuant to Item (c), the Applicant is requesting the required parking calculation be based on the number of employees on the largest shift. There is on-street parking and public parking facilities adjacent to the Site. There have been other uses in Concord Center that have been granted relief from parking because there are only a few spaces available or more likely no spaces available on the property and the basis for that relief was due to the availability of public parking. These uses include the expansion of the Umbrella Arts Center, the Main Library and Café Nero. The Town Planner has provided a memo to the Planning Board dated November 28, 2022 giving a summary of the parking study and findings for these three previous projects.

Pursuant to Item (d), the proposed project does not increase the number of faculty or staff and ultimately reduces the intensity of use through the construction of the Centennial Arts Center that will have a 175-seat theater and 125 seat music hall and will replace programming from the existing 400 seat Performing Arts Center.

Pursuant to Item (e), there is no available off-site parking given the location of the Campus and adjacent residential uses.

Pursuant to Item (f), there are a significant number of bicycle parking places on the Campus.

In a November 21, 2022 memo, the CPW Engineering Division raises concerns with when the number of visitors is the highest and how public streets are impacted, noting that traffic and parking in the vicinity of the Town Center continues to be concern for the CPW Engineering Division, and the proposed project will reduce the amount of parking currently on campus, which will increase the use of Main Street and its on-street parking.

Additionally, they have concerns with the summer camp operation and the queuing of vehicles on Main Street, the adequacy for safe pedestrian and bicycle use on Main St in front of the campus, and the need for the Applicant's traffic consultant to inform the Board whether there are any concerns about the number of on-campus parking spaces being reduced from 204 to 147 and any changes since the 2019 parking study of public parking available in Concord Center on patterns related to traffic, commuting, and parking needs.

The CPW Engineering Division has recommended the following conditions if the Board moves forward with granting the application:

1. When special events at the CAC are expected to have an excessive attendance, they will be limited to evenings and weekends.
2. A post construction review of the traffic and parking after 6 months of issuing occupancy.
3. The applicant demonstrate that the proposed driveway improvements have the adequate intersection sight distance and an unimpeded sight triangle that correlates with the roadway speed.
4. The Applicant review the adequacy for safe pedestrian and bicycle use on Main St in front of the campus because it is a corridor on which the School continues to increase its dependence.

It is the Town Planner's opinion that while the issues and concerns raised by CPW Engineering may be valid in some respects, they are not the sole responsibility of the Applicant to address. Traffic and parking in the vicinity of the Town Center and the adequacy for safe pedestrian and bicycle use on Main St. is a Town-wide concern and although the Applicant is proposing to reduce the amount of parking currently on campus, they have not asked for relief from parking for the 57 spaces, but Reserved Parking.

To require the Applicant's traffic consultant to evaluate changes since 2019 on patterns related to traffic, commuting and parking needs in the Town Center seems to go beyond the scope of the proposed project. **The Applicant is not adding any students or faculty because of the project and is proposing Reserved Parking that takes into consideration the historical use of available public parking in front of the campus so as to reduce the amount of impervious coverage and tree removal.** The Applicant has conducted a parking analysis in the immediate vicinity along Main St. and Academy Ln. to documents that not all of the on-campus parking or the public parking spaces are utilized and provided an opinion from a traffic consultant that states *"Given that the Project will not result in an increase in the number of faculty, staff or students, and that the new performance space will be smaller than the existing auditorium (which will be repurposed for all-school meetings and assemblies), the Project will not result in a material increase in traffic or parking demands over that associated with current campus activities."*

The Town Planner believes that the Applicant is trying to find a balance between providing sufficient parking for the School's operation in a sustainable manner that does not require any unnecessary paving of green space and acknowledges the use of available public parking along Main Street. It seems excessive and impractical to have the required number of parking spaces be based on the total number of staff employed by the School and not the total number of staff on the campus during the largest shift.

Even though the summer camp operation is a School activity that is not part of this application, the Applicant has provided information to document that the use of the driveway and parking lot associated with the CAC provides additional capacity for summer camp drop-off and pick-up thereby reducing the number of vehicles that would have to queue up on Main Street.

Over the years, the Applicant has made significant pedestrian improvements along Main St. with the reconstruction of the public sidewalk, installation of new and additional street lighting and the construction of a crosswalk bump-out at the intersection of Main St. and Academy Ln.

The educational use is a protected use and it may be beyond the scope of this application to condition the use of the CAC to evenings and weekend when special events are expected to have an excessive attendance. The Applicant has already been working with the Concord Free Public Library and the Umbrella on a coordinated scheduling calendar to ensure large events are not happening at the same time. This condition should be incorporated into any decision granting the application.

Following the issuance of a Certificate of Occupancy, a parking analysis like the one provided with the application should be conducted in April. This will help inform the Building Commissioner on whether there is a need for the construction of the Reserved Parking.

The Applicant's traffic consultant has noted that the Sight Stopping Distance at the western Campus driveway, which will be the access to the CAC, is approximately 250 ft. with the removal of one parking space on either side of the driveway or the restriction of parking within 20 ft. This is the required minimum distance. To meet a requirement for an unimpeded sight triangle that correlates with the roadway speed would require the removal of parking spaces for a distance of 335 ft. to the east and 390 ft. to the west because the roadway speed in this location is based on a 35-mph approach speed and that is the desirable Intersection Stopping Distance. The Town Planner believes that the Applicant's traffic consultant has established a recommendation that provides a balance between providing adequate sight distance and the need for the removal of parking spaces along Main Street and does not support the CPW Engineering Division's recommended condition.

The Planning Board should discuss the use of the number of staff on the largest shift as the basis for determining the required parking, the concerns raised by the CPW Engineering Division and the Town Planner's comments in making a recommendation to the Board of Appeals.

11.6 Special Permit: Special permits shall be granted by the Board or the Planning Board, unless other criteria are otherwise specified herein, only upon the written determination of either board, as applicable, that the adverse effects of the proposed use will not outweigh its beneficial impacts to the public interest, the town and the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site. In addition to any other specific factors that may be set forth in this Bylaw, the determination shall include consideration of each of the following:

The application for a Special Permit and evaluation criteria is for the relief from parking and the height waiver. It is not for the educational use or the site plan.

11.6.1 Impacts on economic or community needs;

The relief from parking is to allow a modification in how the required parking for the School is calculated so that it is based on the number of staff on the Campus on the largest shift and not solely on the number of staff employed by the School. The Applicant has documented that there is sufficient parking on campus and on Main St. to accommodate the number of staff on the largest shift but has also provided additional Reserved Parking spaces on the Campus should the use of the public parking spaces on Main Street become an issue. The Town Planner believes that the relief from parking and the height waiver do not represent a significant impact on economic or community needs.

11.6.2 Traffic flow and safety concerns, including parking and loading;

The project incorporates improvements to the driveway entrance off Main Street, a new parking area and walkway connections for safe pedestrian movement from the new Academy Village faculty housing and Centennial Arts Center to the rest of the Campus.

As noted above under Section 7.7.2.12, the Planning Board should discuss the CPW Engineering Division's recommended condition that the Applicant demonstrate "an unimpeded sight triangle that correlates with the roadway speed." and the Town Planner's opinion that meeting this requirement does not strike a balance between the need for adequate sight distance and removal of parking spaces along Main St.

11.6.3 Adequacy of utilities and other public services;

Town Staff has not raised any issues or concerns with the adequacy of utilities or other public services with the incorporation of recommended conditions.

11.6.4 Impacts on neighborhood character;

The Applicant believes that the proposed building is architecturally consistent with the existing structures and appropriately sited within the existing campus in a manner that complements the open spaces and existing buildings. The size, bulk and height of the proposed building is consistent with the surrounding existing buildings on the campus. The Historic Districts Commission has reviewed the proposed project and issued a Certificate of Appropriateness for the proposed project.

11.6.5 Impacts on the natural environment; and

The Natural Resources Commission has reviewed the proposed project and intends to issue an Order of Conditions approving the project pending the Planning Board's recommendation to the Board on the location of proposed building and relocated structures.

11.6.6 Fiscal impacts, including impacts on town services, the tax base and employment.

The Town Planner does not believe there is a fiscal impact, including impacts on town services, the tax base and employment, with the granting of relief from parking to allow the required parking to be based on the number of staff on the largest shift or the height waiver.

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

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 is not permitted to withhold Site Plan approval.

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 Applicant believes that the proposed building is architecturally consistent with the existing structures and appropriately sited within the existing campus in a manner that complements the open spaces and existing buildings. The size, bulk and height of the proposed building is consistent with the surrounding existing buildings on the campus. The Historic Districts Commission has reviewed the proposed project and issued a Certificate of Appropriateness for the proposed project.

The proposed project is located on approximately 25 acres; well above the Residence B Zoning District minimum lot size of 20,000 s.f. There are no building coverage requirements or yard sizes for an educational use. The proposed Centennial Arts Center and the relocated dwellings meet all the required setbacks.

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;

The project incorporates improvements to the driveway entrance off Main Street, which may require the removal of one or two on-street parking spaces or modification of the parking space striping so there is no net loss of spaces., a new parking area and walkway connections for safe pedestrian movement from the new Academy Village faculty housing and Centennial Arts Center to the rest of the Campus.

The Planning Board should discuss the CPW Engineering Division's recommended condition that the Applicant demonstrates "an unimpeded sight triangle that correlates with the roadway speed." and the Town Planner's opinion that meeting this requirement does not strike a balance between the need for adequate sight distance and removal of more than one or two parking spaces along Main St. at the west entrance driveway.

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

The Planning Board should discuss the information presented in this report under Section 7.7.2.8 Reserved Parking and 7.7.2.12 Relief from Parking to determine whether they agree that adequate parking is provided for the proposed project.

The Applicant is proposing to utilize 32 temporary parking spaces across Main Street to accommodate construction workers. Construction worker vehicles shall be required to park in this location or on the Main campus, and not on Main Street.

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 landscape plan shows new pedestrian light poles in key locations along the pathway to the Academy Village faculty housing and in the parking lot for the CAC, which is adequate for convenience, safety, and security. The light fixtures will be the same dark sky compliant fixtures used elsewhere on the campus. Given the height of the proposed CAC, the Town Planner recommends as a condition that automatic timed window shades be installed to provide for the protection of neighboring properties, the Sudbury River and the night sky.

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

The proposed project incorporates stormwater drainage measures to protect adjoining premises. The CPW Engineering Division does not have any issues or concerns with the proposed site drainage plan and has recommended standard conditions.

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

The Campus utilizes a central dumpster and recycling area, which has been adequate for all of the School functions. The Applicant will be 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.

The Public Health Director has raised issues with the area within the CAC identified as “Tix, Café or Lounge” and the requirements under the Massachusetts Food Code if food is prepared, plated or staged. The Applicant states that the primary use of this space is for student collaboration and lounge space. When events/performances are happening in the building this space will become a ticketing and coat area before the start of the performance. At intermission or other non-ticketed events this space will be set up to serve light snacks and beverages. These provisions will be prepared off site and transported to the space. A small pantry area is located near this space for staging of provisions.

The Public Health Director recommends a condition stating all preparation, plating and/or staging of food in this area shall be done completely off-site and no food shall be permitted to be prepared, plated or staged unless the Applicant designs the area in compliance with the MA Food Code and receive approval from the Health Division prior to the issuance of a Building Permit.

g) Adequacy of fire protection measures, and;

The proposed project allows for emergency vehicle access to three sides of the CAC and a portion of the new Academy Village faculty housing. The Applicant has removed from the proposed project the proposed battery storage system in the building for the PV solar panel system. The Assistant Fire Chief stated that the Fire Department does not have any issues or concerns with the proposed project and recommends standard conditions.

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.

The Applicant notes that the proposed project will utilize ultra-high efficiency, low flow plumbing fixtures as a primary means to conserve water. Permanent water meters will be installed at the connections to the irrigation and domestic hot water systems to track water consumption and identify additional water savings. The project includes the restoration of a former athletic field to a pollinator meadow on the North side of the Centennial Arts Center near the Sudbury River. In a November 28, 2022 memo, the Applicant provides an expanded list of sustainability initiatives for the proposed project, such as:

- a. Target Energy Use Index (EUI) = 35 (Passive Design. i.e. through high building envelope and system performance). Min 25% reduction from baseline
- b. Renewable Energy Credits or Power Purchase Agreement
- c. Fossil Fuel Free (including Academy Village houses)
- d. On-site Renewables – Photovoltaic system of 50kW

- e. LED lighting and occupant sensors
- a. New pollinator meadow at existing athletic field
- b. Reuse of existing buildings; 220 and Ides (detached houses)
- c. Native/adaptive plantings to restore ecology and promote biodiversity
- e. Resilient Design – Mitigation plan for floodplain impact
- f. Electrical Vehicle (EV) charging station.
- g. Permeable pavers
- h. Bioretention rain gardens
- i. Underground stormwater retention system for stormwater control
- f. Construction waste recycle (including Academy Village Houses)

V. Town Planner's Recommendation

The Town Planner recommends that the Planning Board discuss the issues or concerns raised in this report and deliberate on a recommendation to the Board of Appeals.

Should the Planning Board move forward with recommending approval, it is recommended that the following conditions be incorporated:

1. If, at any time after the Final Certificate of Occupancy is issued for the Centennial Arts Center, the Building Commissioner determines that additional spaces are needed **for the daily on-going parking needs for the School**, he/she shall notify the Planning Board concerning his/her finding and the Planning Board may require that all or any portion of the spaces shown on the approved *Concord Academy Campus Parking – Reserve Plan* dated May 11, 2022 shall be constructed following the review and approval by the Planning Board for Site Plan Review of a civil plan with appropriate stormwater drainage. **Additionally, if at any time in the future the Town modifies the configuration of Main St. and the number of spaces is significantly reduced, the Planning Board may require that all or any portion of the spaces shown on the Reserved Parking plan be constructed.**
2. Any time during site work or construction, the Applicant shall coordinate with the Police Department on the use of police details for construction vehicle activity on Main Street if it has been determined necessary by the Police Department.
3. **At all times**, the Applicant shall require all construction worker vehicles to park in the temporary parking lot across Main Street or on the Main campus. Parking of construction worker vehicles on Main Street **or any other public street** is not permitted.
4. **Prior to the commencement of any site work**, the Applicant shall submit to the Town Planner for distribution to Town Departments for review and approval a Construction Safety and Sequencing Plan for the site. The plan shall include the location of construction trailers, dumpsters and porta-potties, construction material delivery and laydown areas, location of construction employee parking areas, locations where construction vehicles will enter and exit the site, soil stockpile areas and safety protection measures and fencing employed to protect the movement of pedestrians and vehicles within the site and along the adjacent roadways. The plan shall be developed for all phases required during construction.

5. **Prior to the commencement of any site work**, the Applicant shall install the erosion and sedimentation controls and coordinate through the Town Planner a pre-construction meeting with Town staff to review proposed work and safety fencing and protocols shown on the Construction Safety and Sequencing Plan. Following the meeting, the Applicant shall install all required safety fencing and protocols to the satisfaction of the Fire Department.
6. **Prior to the commencement of any site work**, the Applicant shall provide a copy of the EPA's Notice of Intent General Permit (NPDES) and executed Stormwater Pollution Prevention Plan (SWPP), and the Erosion Control Plan (ECP), to the CPW Engineering Division for review and approval. Both a hard copy and electronic (pdf) copy shall be provided to CPW Engineering Division.
7. **Prior to the commencement of any site work**, the Applicant shall retain a qualified independent environmental monitor (EM) to ensure proper operations of all sediment and erosion control measures throughout the duration of the project. The EM shall also be responsible for overseeing invasive species removal and replanting efforts. The name and resume of the qualified independent environmental monitor shall be provided to the CPW Engineering and Natural Resources Divisions for review and approval at least two weeks in advance of any site work. At a minimum, the independent environmental monitor shall be a "qualified person" with a minimum of 3 years professional environmental experience in construction monitoring and invasive species control efforts and shall meet the qualifications outlined in sec. 4.4.1 of the EPA Construction General Permit. The environmental monitor shall provide the Engineering and Natural Resources Divisions site evaluation/inspection reports at the frequency detailed in the SWPPP (i.e., weekly, after storms).
8. **Prior to the commencement of any site work**, the Applicant shall meet with Water/Sewer Division to review the proposed scope of water utility work and sufficiently demonstrate that:
 - a. Water service infrastructure can be designed and constructed in accordance with the Water/Sewer Division's design and construction standards.
 - b. Water demands can be minimized via demand management tools that may be codified in a Water Use Impact Report (conservation plan) and Water Customer Data Sheet.
9. **Prior to the commencement of any site work**, the Applicant shall 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 Sewer Improvement Fee associated with a wastewater flow increase. Based on existing wastewater capacity constraints, any proposed flow increases over 1,000 gallons per day will be administratively denied by the Water/Sewer Superintendent. An appeal on the denial may be made to the Public Works Commission seeking relief for an increase in flow of more than 1,000 gallons per day.
10. **Prior to the commencement of any site work**, the Applicant shall receive an Order of Conditions, or Superseding Order of Conditions, issued under the Wetlands Protection Act and the Concord Wetlands Bylaw and shall comply with all conditions placed on the project and provide a copy of a recorded Order of Conditions, or Superseding Order of Conditions, to the Natural Resources Division and the Building Inspections Division.
11. **Prior to the commencement of any site work or issuance of a Building Permit**, the Applicant shall record with the Middlesex South Registry of Deeds the Special Permit Decision

and provide a copy of the recorded decision to the Building Inspections Division and Town Planner.

12. **Prior to the commencement of any site work or issuance of a Building Permit**, the Applicant's contractor shall file a Right-of-Way (ROW) permit with the CPW Engineering Division for the proposed work within Main Street ROW. All work within ROW shall conform to the Concord Public Works Design & Construction Standards & Details.
13. **Prior to the issuance of a Building Permit**, the Applicant shall submit a Food Plan Review (Form J) to the Health Division for review and approval for a food service kitchen in the CAC in the area designated "Tix, Café or Lounge" in conformance with the requirements of the Massachusetts Food Code. If the Applicant does not wish to have a food service kitchen in the "Tix, Café or Lounge" area, then all preparation, plating and/or staging of food shall be done at a different licensed location and no food shall be permitted to be prepared, plated, or staged in this area.
14. **Prior to the issuance of a Building Permit**, the Applicant shall submit to the Fire Department for review and approval a 241 Construction Fire Safety Plan.
15. **Prior to the issuance of a Building Permit**, the Applicant shall provide CMLP with a detailed electrical load letter. The letter shall include calculations, voltage requirements, and the proposed service size in order to properly size the transformer and subsequent equipment.
16. **Prior to the issuance of a Building Permit**, the Applicant shall provide CMLP a digital copy of the utility plans in AutoCAD format. Plans shall include applicable site, utility, and electrical riser/line diagrams. This will allow CMLP to issue an underground electrical primary, secondary, and Town fiber communication design and issue an estimate for CMLP's construction costs. The estimated cost for CMLP's portion of the job will be paid for in advance by either the contractor, developer, and/or property owner as per CMLP's terms and conditions. It is the responsibility of the Applicant to coordinate with Comcast and/or Verizon if additional communication facilities are to be installed.
17. **Prior to the issuance of a Building Permit**, all metering shall be approved by the CMLP Meter Supervisor.
18. **Prior to the issuance of a Building Permit**, the Applicant shall submit to the Water/Sewer Division, for review and approval, an application for the proposed water service installation. The application shall include the following:
 - a. Identification of a Water/Sewer Division licensed "Drain Layer" who will be responsible for water installation activities.
 - b. Two full-size copies of the approved water utility plan. (Note: separate applications must be provided for the common water and sewer service as well as for each individual building proposed to be served by Town water/sewer.)
 - c. For each separate building proposed to be served by Town water, a plumbing plan shall be provided including:
 - i. Meter bypass detail (with allowance for Water/Sewer Division issued security lock).

- ii. Design Data Sheets for all required cross-connection control devices. The devices shall not be installed without approval from the Water/Sewer Division.
 - d. An approved Water Use Impact Report (conservation plan) and Water Customer Data Sheet which will determine sizing of the water meter and water system connection fee.
 - e. The approved Title 5 Building Review (Form S) and associated Finding - demonstrating right to connect to the municipal sewer system, and payment of any associated Sewer Improvement Fee.
19. **Prior to back-filling infiltration areas and basins**, the applicant shall request and have CPW-Engineering conduct an inspection with the designer of record to verify that the installation of all infiltration units was conducted in a manner consistent with the approved plans including scarifying the areas. Per CPW Design and Construction Standard 2.2.3.E.5 and Standard 3 of the Massachusetts Stormwater Handbook, soils information from test pits within the footprint of all proposed Stormwater management facilities shall be documented. Soils information shall include but not be limited to soil descriptions, depth to seasonal high groundwater, depth to bedrock, and percolation rates. Soils information shall be based on deep holes and percolation tests logged by a Massachusetts Registered Soil Evaluator and witnessed by CPW Engineering. If unfavorable soil conditions are found, the drainage system will need to be redesigned and potentially brought back before a Town Board or Commission.
20. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall install to the satisfaction of the Fire Department an approved NFPA fire alarm system and sprinkler system and in addition install carbon monoxide detectors on each floor, and smoke detectors.
21. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall install to the satisfaction of the Fire Department a lock down control system at the main entrance Knox box and the proper amount of Knox boxes in other locations.
22. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall mark to the satisfaction of the Fire Department each window with the room number on the outside of the building.
23. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall meet with the Tree Warden to determine if the required sight distance clearing for the driveways requires the removal of any Public Shade Trees.
- ~~24. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall submit to the Health Division for review and approval a Health and Safety Plan that includes a pest control contract and pest mitigation plan.~~
- ~~25. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall submit to the Health Division for review and issuance of a Certificate of Compliance all necessary as-built plans for the on-site sewage disposal system, including a maintenance plan and information on the designated trained wastewater treatment plant operator.~~
26. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall submit to the Health Division for review and approval a Food Permit and coordinate with the Health Division a food pre-operational inspection unless the Applicant determines not to have a food service kitchen in the “Tix, Café or Lounge” area, then all preparation, plating and/or staging of food

shall be done at a different licensed location and no food shall be permitted to be prepared, plated, or staged in this building.

27. **Prior to issuance of a Certificate of Occupancy**, the Applicant shall submit an as-built plan to CPW Engineering, the Town Planner, the Natural Resources Director and the Building Inspections Division of the site including grading, elevations of all drainage infrastructure (e.g., inverts, rims), driveway/parking grades, pavement, pavement marking, signage, utilities, structures, building elevations, and other pertinent information. The plan must be stamped by a Professional Engineer. A certification letter signed by a Professional Engineer shall outline any deviations from the design plans and certify that there will be no negative impacts as a Main result of those deviations. This submittal shall be provided a minimum of two weeks prior to applying for occupancy to ensure adequate review time. One hard copy and one electronic copy, in the form of both AutoCAD and PDF Files, shall be provided to CPW-Engineering. Additionally, to ease review, the as-built items shall be bold while all other plan items shall be screened down.
28. **Prior to the issuance of a Certificate of Occupancy**, the Town Planner shall verify that all plantings shown on the approved Landscape Plan have been installed. Any proposed minor modification or substitutions shall be reviewed and approved by the Town Planner prior to installation. If the Applicant provides documentation to the Town Planner that it would be detrimental to complete weather-dependent aspects of the landscaping, the Town Planner may require a performance guarantee to ensure compliance. In such case, the Applicant shall submit to the Town Planner for review and approval a performance guarantee covering the cost of the landscaping and installation and a temporary certificate of occupancy shall be issued until all landscaping work is completed.
29. **Prior to the issuance of a Certificate of Occupancy**, the Building Commissioner shall confirm that all exterior lighting complies with the Zoning Bylaw.
30. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall submit to CMLP for review and approval an As-Built Plan showing all electric and broadband facilities. To ease review, a written narrative certified by a Professional Engineer shall be submitted with the As-Built Plan outlining all variations between the permitted plan and as-built conditions. One hard copy and one electronic copy, in the form of both CAD and PDF Files, shall be provided.
31. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall provide to CPW-Engineering for review and approval the Long-Term Operations and Maintenance Plan (LTOMP) of the stormwater system in both a hard copy and electronic (pdf) copy. At the time the LTOMP is submitted for review, the Applicant shall also provide draft deed documents which outline permanent maintenance responsibilities of all elements of the on-site Stormwater drainage system, including all catch basins, infiltration chambers, trench drains, drainage manholes, pipes, sediment forebays, bioretention areas, level spreaders and all appurtenances thereto in perpetuity. Any inspection or monitoring reports required in all of the LTOMP shall be submitted to the CPW-Engineering and the Natural Resources Director annually.
32. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall submit to the Water/Sewer Division a full-size record drawing (Arch D), created in accordance with Division standards, for review prior to finalizing the drawing. Once the draft is approved, the Applicant shall submit to the Water/Sewer Division the final record drawings as electronic copies in the form of CAD and pdf files.

33. **Prior to the issuance of a Certificate of Occupancy**, the Applicant shall furnish to the Water/Sewer Division Water Demand Minimization Affidavit(s) to demonstrate work was performed in accordance with the approved demand mitigation measures.
34. **Prior to the issuance of the Certificate of Occupancy**, the Applicant shall install in the Centennial Arts Center to the satisfaction of the Building Commission automatic timed window shades to close in the evening at sunset when the building is in use and the lights are on **and remain closed until dawn**.
35. **Prior to the issuance of the Certificate of Occupancy**, the Applicant shall provide documentation to the Town Planner regarding an agreement between the School, the Concord Free Public Library and the Umbrella Arts Center on the coordination and methods used to ensure large events for **any two of** the three locations are not scheduled at the same time.
36. **Following the issuance of a Certificate of Occupancy**, the Applicant shall submit to the Building Commissioner for review a parking analysis conducted in **April and October of 2024 or 2025, depending on the date of the issuance of the Certificate of Occupancy**, in the same manner as documented in “*Concord Academy-West Campus Parking Overview*” dated July 28, 2022.