

BUILDING HEIGHT VARIANCE REQUEST
SUMMARY MEMO

FOR
GLADSTONE ELEMENTARY SCHOOL
CRANSTON, RI

PREPARED FOR:

*CRANSTON PUBLIC SCHOOL DISTRICT
845 PARK AVENUE
CRANSTON, RI 02910*

PREPARED BY:



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CEC PROJECT NO. 21052.00

I - INTRODUCTION

The following Building Height Variance Request summary memo has been prepared on behalf of the Cranston Public School District (CPS) by Commonwealth Engineers & Consultants, Inc. (CE&C) as a supplement to the Master Plan and Zoning Variance submissions for the Gladstone Elementary School. The memo discusses the existing and proposed building height of the school, and provides justification for the requested waiver from the maximum building height of the City of Cranston Zoning Ordinance.

II – EXISTING CONDITIONS/BUILDING HEIGHT

Gladstone Elementary School is a multi-story brick masonry structure constructed in the early 1950's. It is situated on A.P. 7-4 Lot 2357 at 50 Gladstone Street, in a B1 zoning district. Per Section 17.20.120 – SCHEDULE OF INTENSITY REGULATIONS, the maximum building height in a B1 zoning district is thirty-five (35) feet. The school currently serves ≈530 students.

The site can be characterized as having steep to very steep topography (particularly on the east side of the parcel), with an overall grade differential of approximately sixty (60) feet, from a high elevation in the northwest corner of ≈162 and a low elevation in the southeast corner of ≈102. This significant grade differential informed the design of the existing school, such that the front (western) exposure is two stories high with a steep peaked roof, while the rear (eastern) exposure ranges from three (3) to five (5) stories high. There are a number of existing site elements within the school parcel that are of importance to the school and the broader community, which have been prioritized to be preserved. These include the playground and associated parking lot along Lawrence Street and the existing driveway along the east side of the site, between Asia Street and Gladstone Street.

The existing building height (as measured from the lowest surface grade within six feet of the building to the top of the cupola) is approximately 82 feet (top of cupola elev. ≈193, lowest surface grade along the southeast corner of the building ≈110.8). Therefore, the height of the existing building is forty-seven (47) feet over the current maximum allowable building height of thirty-five (35) feet. As the school was initially constructed in 1953, it pre-dates the current zoning and associated building height requirements, and so is considered "Nonconforming by Dimension" as defined in Section 17.04. However, the proposed replacement/enlargement of the school requires that the current maximum building height of thirty-five (35) feet be applied, or relief from same be granted.

III – PROPOSED CONDITIONS/BUILDING HEIGHT

The proposed demolition and replacement of the Gladstone Elementary School will increase the student capacity to ≈800 students, with a corresponding increase in regular staffing to one-hundred thirteen (113).

Proposed exterior improvements consist of multiple play areas suitable for elementary school students, adequate on-site parking for the increased number of teachers and support staff, and associated access driveways, including a dedicated bus unloading/loading loop and non-bussed student unloading/loading zone. Note that these proposed improvements must be located outside of the existing site features to remain (described previously).

The proposed new school building has been designed to provide interior and exterior spaces that conform to current educational standards, which are appreciably different than those that were in effect at the time of the construction of the existing school. It has also been designed to meet current architectural and energy/environmental standards. Finally, the school has been designed to be as cost-effective as possible, from the standpoints of both initial construction cost as well as long-term operational costs.

To these ends, the building design proposes to provide three (3) upper levels consisting predominantly of learning areas, and one (1) double-height lower level providing a dedicated gymnasium and other support areas (storage & utility rooms). Exterior access to the upper levels will be from the front (west) and north & south sides of the building, while access to the lower level will be from the rear (east) side of the building.

Because the measurement of the zoning building height is taken from the lowest portion of the site to the highest element of the building, the effective building height is equivalent to a five (5) story building. The total building height from the lower level floor (elevation 126) to the top of rooftop access stairway (elevation 212) will be 86 feet; the total zoning height (as measured from the proposed minimum average elevation of 123.66 along the lower level of the building to the top of rooftop access stairway elevation 212) will be 88.44 feet (rounded to 89 feet). This results in a not-to-exceed variance request of fifty-four (54) feet (89 feet proposed minus 35 feet allowed).

It should also be noted that the proposed location of the new school will be appreciably further away from the nearest dwellings (on the side of greatest exposure) than the existing school is (i.e. the houses at the west end of Asia Street and the east end of Oxford Street). More particularly, the distance between the existing school and #44 Asia Street is approximately eighty-eight (88) feet, while the distance to the new school will be \approx 200 feet. The distance between the existing school and 70/72 Oxford Street is approximately ninety-three (93) feet, while the distance to the new school will be \approx 144 feet. Therefore, the visual impact of the new school, particularly on the south side, will be moderated by its more centralized location on the site.

IV – ZONING VARIANCE REQUEST

Per Zoning Ordinance Section 17.92.010 – Variances, the CPS seeks relief from the maximum building height requirements, in the not-to-exceed amount of fifty-four (54) feet (see above). The following are offered as justifications for granting this relief:

- In order to satisfy the needs of the CPS's educational programming and overall district planning, the design of the new school requires the expansion to \approx 800 students and 113 staff.
- The applicable property line setbacks, existing site features to be preserved, and the various proposed exterior site improvements necessary for the school all have a significant impact of the siting of the new school building.
- The proposed size of the new school is only slightly above the minimum required to accommodate that number of students while meeting the applicable learning space and support requirements.
- The proposed school design utilizes stacking of multiple levels, which will provide reduced up-front construction costs and appreciably greater long-term overall energy efficiency in comparison to a broader overall footprint with fewer floors.
- Stacking the levels instead of constructing a broader & lower building preserves more of the site for necessary exterior uses, including outdoor play areas and surface stormwater management features.
- The widely variable existing site topography is practicably unalterable, and the optimal location of the new school relative to the previously-mentioned existing and proposed site features and constraints places it within an area of appreciable grade change from front to back.
- There are no alternative locations within the school parcel where the school could be practicably located that would 1) conform to the various physical and zoning restrictions, and 2) provide the necessary building footprint and exterior improvements, while also eliminating or reducing the necessary building height relief.

- The requested relief satisfies each of the four (4) standards of Section 17.92.010.B:
 - The hardship from which the CPS seeks relief is due to the unique characteristics of the subject land and the proposed school, and not to the general characteristics of the surrounding area, and is not due to a physical or economic disability of the applicant;
 - The hardship is not the result of any prior action of the applicant, and does not result from the desire of the applicant to realize greater financial gain;
 - The granting of the requested variance will not alter the general character of the surrounding area or impair the intent or purpose of the zoning ordinance codified in this title or the comprehensive plan upon which the ordinance is based;
 - The relief to be granted is the least relief necessary.

- Per Section 17.92.010 C.2, evidence must be entered into the record that:

"In granting a dimensional variance, that the hardship that will be suffered by the owner of the subject property if the dimensional variance is not granted shall amount to more than a mere inconvenience, which shall mean that there is no other reasonable alternative to enjoy a legally permitted beneficial use of one's property. The fact that a use may be more valuable after the relief is granted shall not be grounds for relief."

Note that other prospective design iterations for a broader and lower school were developed and evaluated before the current proposed building design was developed. Based on those other design iterations, we can definitively state that if the requested height variance is not granted, then due to the various existing and unalterable site constraints, it will not be practicably possible to construct a new school with the capacity to accommodate the proposed number of students, along with the associated and necessary site improvements, on the subject parcel. This would represent a hardship on the applicant that would be more than a mere inconvenience. Additionally, the proposed use will be neither more nor less valuable after the relief is granted, should it be granted.



Photo 1 – View to west of center of existing school building; cupola visible above roof peak (top elev. ≈193)



Photo 2 – View to south along existing cross-site driveway; maximum exposure (SE corner) of existing school to right of driveway (elev. 110.8)