

Hillside Elementary School – Feasibility Study

Frequently Asked Questions (FAQ)

10/19/2015

1. What is a Feasibility Study and why is it important?

The Feasibility Study is the first step in the design process for a new school in partnership with the Massachusetts School Building Authority (MSBA). The Feasibility Study includes three stages ending with the Schematic Design and Project Funding Agreement, which becomes the basis for the override vote and the MSBA reimbursement for the project.

2. Where can I find out more information about the Hillside Feasibility Study?

The School Department web site has a page with the most current information:

<http://www.needham.k12.ma.us/>

3. What is the schedule for the project?

A detailed schedule is found on the web site noted above. Key milestones include:

8/25/2014 – Hillside Elementary School Feasibility Study agreement signed by MSBA

11/24/2014 – Owner’s Project Manager (OPM) Approved – MSBA agreed to appoint Steven Popper, Director of Design and Construction in the Public Facilities Department – Construction Division (PFD-C) and members of the department as the Hillside Project OPM.

3/10/2015 – Dore & Whittier Architects, Inc. – appointed as the Designers for the Hillside Project.

9/3/2015 – Preliminary Design Program (PDP) the first step in the Feasibility Study -submitted to the MSBA Preferred Schematic Report (PSR) Defined the educational program, analyzed over 20 alternatives and reduced the list to six Options.

12/1/2015 – Preferred Schematic Report (PSR) to be submitted to the MSBA – Will describe the preferred site location for the new school, why it was selected,

1/27/2015 – MSBA Board to review and approve the PSR, authorizing the town to proceed into Schematic Design.

6/10/2016 – Schematic Design Submission to the MSBA – Will include full schematic design drawings of the proposed building, and a reconciled cost estimate. This Cost estimate will then become the basis for the project Funding Agreement with the MSBA, and define the override amount and the MSBA anticipated reimbursement amount.

7/27/2016 – MSBA Board Meeting to review and approve Schematic Design and Project Funding Agreement

November 2016 – Special Town Meeting and Town Election

September 2020 or 2021 – Opening of new school depending upon option selected.

4. What is the preferred site and Why?

After joint meetings on 9/21/15 and 9/28/15 with the PPBC and SC there are two remaining alternatives – Option E1a (a K-5 school at DeFazio) and Option J3 (a K-5 school at Central Ave). A preferred site recommendation will be voted on at the PPBC meeting on 10/19/15, the SC meeting on 10/20/15, with these recommendations discussed at the FinCom meeting on 10/21/15 and the BOS meeting on 10/27/15 to finalize the related warrant articles associated with the project.

5. Did you study a “Green field site” as a base case?

Yes, Dore & Whittier Architects studied over 20 alternatives during the Preliminary Design Program (PDP) stage of the project. Details of each option and the analysis can be found in the PDP document posted on the School Department web-site, noted above. The DeFazio West site was considered by the PPBC to be the closest to a “greenfield” site that could be found within Needham. This site is under the jurisdiction of the School Department in the western corner of DeFazio Park and bounded by the RR tracks, Dedham Ave, and the running track. The estimated total cost to construct a new elementary school at this site is between

\$59.7 and \$59.9 million depending upon the orientation of the school. As noted in the PDP this did not include the replacement of the two existing fields that would be displaced by the school, but could be considered a baseline cost for the new elementary school.

6. Is there a Traffic Study regarding the Central Avenue site?

Yes and the results were presented and discussed at the School Committee meeting on 10/6/15. The Draft Report is posted on the School Department web site.

7. Is the street too busy to add another school?

According to the Draft Traffic Report the site is not too busy to consider locating a school at the site. The consultant recommends several additional improvements to the school design including:

- Designate the area as a School Zone under State and Local statute, and install the appropriate School Zone signs, which will also act as traffic calming devices.
- Improve pedestrian experience along Central Ave, including improving the sidewalks on both sides of the roadway to accommodate safe walk to school; and providing advanced warning signing of school entering and exiting traffic.
- Install ADA accessible crosswalks.
- Reach out to parents via social media to increase safety awareness.

There was discussion about the option of a new traffic light at the intersection of West Street and Central Ave or a flashing light at the new entry drive to the school but this requires further study as in may not be warranted.

8. Is there sufficient sight line distance at the new entrance drive?

Yes the sightlines at the new entry drive meet or exceed the policy standards (see Table 7 on page 28 of the Draft Traffic Report).

9. How will students safely cross Central Ave to get to school?

The improvements noted above will be installed as a part of the project. A traffic crossing guard would direct crossing at the beginning and the end of the day, similar to the Newman School (where about 80% of the students walking to school cross Central Ave or Great Plain Ave at the beginning or end of the school day). Students will cross at one location, with the assistance of a crossing guard to a sidewalk that leads to the front door of the new school.

10. Will the traffic noise level affect learning in the school?

Background traffic noise will have minimal impact to the classroom and other interior spaces of the school. The School will be designed to meet contemporary energy codes. It will have double pane windows and heavily insulated exterior walls. This also acts to minimize the sound entering the school from the exterior. Fresh air will be circulated by the HVAC system, which will be a great improvement over the existing conditions, minimizing the need to open classroom windows, similar to all of the renovated Needham School buildings. The Central Ave School design continues to evolve and the latest plans indicate approximately 150-160 foot distance from the nearest classroom to Central Ave

11. Will the traffic along Central Ave affect the air quality within the school?

No, as noted above the new school will have an HVAC system that will filter, and dehumidify the fresh air supplied to the classrooms. It will not require the under-slab depressurization system that is currently installed in the existing Hillside School.

12. Parking at Hillside today is very limited; does this option have sufficient parking to serve the school?

The current design shows 100 designated car parking spaces in the Central Ave parking lot. This is double the number of available parking spaces within the existing Hillside school lot. The minimum target parking capacity was 90 spaces; precedent zoning for elementary schools in town would seek a capacity of 118 spaces or 1.5 spaces per each full time equivalent (FTE) staff at the school. When there are major evening events the lot could accommodate another 25 or so cars parked parallel to the curb in the pickup lane. The bus loop will also serve as overflow parking for major events but will be accessed from the Central Ave entrance to the site.

13. How would the Central Avenue site accommodate pick-up and drop-off car traffic?

The parking lot layout also allows for a pick-up and drop-off lane that will accommodate about 57 cars. In inclement weather conditions, with double loading of a portion of the pick-up lane 80 cars could be accommodated on site. During the peak pickup period observed in the report only 47 cars were stacked up within the Hillside school lot, and the adjacent streets of Castle Place, McCullough St, and some cars backed up onto West Street. The Central Ave site could be managed so that cars do not back-up onto Central Ave.

14. Can school busses access the Central Ave site down Sunset Road? Is the road big enough?

The road is wide enough to accommodate bus traffic and the new bus turning area on the southern end of the new school site will accommodate all the parked busses during pick-up time. On street parking may need to be limited to one side of the street, or during key times of the day. The geometry is similar to the bus drop off area at the back of Broadmeadow School.

15. How many buses will arrive at Hillside School?

Five Needham buses are used to transport Hillside students each morning and afternoon school day. In addition, 2 day care buses from private after school programs arrive in the afternoon on certain days. These buses could be directed to arrive at off-peak hours and use the Central Ave entrance to the site. The student van drop-off and pick-up area is accessed from Central Ave. The design allows for an added lane designated for vans, so that cars could exit while the vans are parked at the curbside discharging or picking up students.

16. Does the Central Ave School design have enough outdoor play space?

Yes. The outdoor play space at the Central Ave site is about equal to that at the new Hillside School site, Option C3 and exceeds the play space that would be available if the additional properties cannot be purchased at the Hillside School site. The play space is more spread out around the Central Ave School, with play structure and hardscape play area located closest to the cafeteria for mid-day recess and playfields located closer to the gym. The play area meets the physical educational program, and recess requirements for a K-5 school. The upper level hardscape play space will be designed to provide basketball, hop-scotch, four-square, chess and other hard surface play. The space functions as the bus drop-off and pick-up area at the beginning and end of the school day, but would be gated during the school day and after school hours to serve as a safe play space. The lower play space is accessed from the gymnasium level, and would include a kindergarten playground, hardscape play area and green field. While not large enough to accommodate a regulation soccer field or baseball diamond, the field would be about 25 yards x 50 yards plus additional play space around the school. The field is larger than U6 and U8 regulation soccer fields but slightly smaller than U10 youth soccer field size.

17. How does the outdoor play space at Central Ave compare to the Hillside option?

The outdoor play space at the Central Ave site in total area is about equal to that at the new Hillside School site, Option C3. It would have separate Kindergarten and upper grade playgrounds as noted above.

18. What is the status of land acquisition for the Central Ave site?

The negotiations are positive, and the Town Manager anticipates having details of the Purchase and Sale agreement available prior to the November Special Town Meeting.

19. Will the new school at Central Ave be built above the flood plain?

Yes, the Central Ave School would be built approximately five feet above the flood plain. .

20. Will the Town of Needham be able to get flood insurance for the new school?

Yes, but the town would not be required to purchase flood insurance because the new building would be constructed outside the FEMA flood plain.

21. Will a new school at this site cause flooding to the neighbors?

No, any new construction would balance any filled land with an equal volume of cut area, so that it would not have any change regarding flooding within this zone.

22. Will the Central Ave site be a walkable school? How does it compare to the current Hillside school?

The projection is that 25% of the students will be within the ¼ mile walking distance to the new Central Ave School. The Existing Hillside site has about 30% of the students within this walking zone.

23. Is the Central Ave site affected by the MDL contamination found at the Hillside School?

No, the reactive barrier that was installed by the state at the Central Ave Rosemary Brook Bridge has been effective in stopping the contamination from reaching this area. The reactive barrier was installed to protect the Wellesley Water supply. Those fresh water wells and pump station are on the far side of the wetlands, and the DEP has ground water monitoring wells with years of acceptable test results in the area.

24. Are there other contamination issues with this site?

There are no contamination issues to our knowledge, according to desk-top research. A Phase 1 Environmental Study has been undertaken as a component of the consultant's work, as required by the MSBA. In the Geotechnical and Geoenvironmental Suitability Assessment report that was included in Appendix X.10 of the PDP the consultant indicated that "No evidence of a release of oil or hazardous material to soil such as stained or discolored soil or chemical odors was observe(d) in the test borings samples. During a site walk we did not observe any drums or pails at the ground surface or any stained or discolored surface soils." They concluded that "There are no known Geoenvironmental concerns at 585 Central Ave." Further testing of soils and ground water will be done during the next phase of study if this is selected as a preferred site.

Hillside School –Option C3 – Questions:

25. The existing Hillside School is being monitored for contamination from an industrial spill that happened twenty years ago. Does this affect the design of a new school on the site?

Yes if a new school were built on the Hillside site, the excavated soils would need to be tested for contamination and then treated and/or removed from the site. Dewatering during construction would require monitoring and treatment of the groundwater. The ground floor of the new building would require a waterproof membrane below the floor with a sub-slab depressurization system with fans to vent any contaminated air before it entered the building. This would affect the cost and schedule for construction as well as the on-going operational cost of continued monitoring and maintenance of the systems.

26. The program for the new Hillside school is about twice as big as the existing school. Can the new school fit on the existing site?

The site has many constraints, and Option C demonstrated that the full program of school and parking can not fit on the existing site without extending into the riverfront and wetland buffer zones and large (very high) retaining walls which would allow the building and parking to push into the hillside area. The parking area is required to double in size to meet the current needs and the zoning requirements of the new school. As a result of the Option C study the Town proposed the acquisition of portions of three adjacent parcels of land, as was shown in Option C3. Multiple alternative geometries were explored, as shown in the PDP document. A new building on the existing site would require compromises in the site amenities such as limited parking or reduced play space, or consideration of a four story elementary school. Additionally the tall retaining walls may limit daylight to some of the educational spaces and outdoor play areas. Option C3 has been removed from consideration due to one of the three abutting property owners unwillingness to sell a portion of their property to the town. While it might be possible to take the land by eminent domain, this would likely add at least another year to the project schedule making the C3 option a seven year or more project. With the addition of the project schedule there would be additional cost due to escalation as well as potential legal fees

27. Has the Town of Needham been successful in negotiations to acquire key portions of the three abutting parcels F, G & H?

No, not all of the properties are available for purchase. There is no guarantee on the timing or cost of these parcels that could be presented to November 2015 Special Town Meeting. This would likely delay the project for at least another year, and add legal and other costs to the project.

28. Is the use of Eminent Domain an option to acquire these parcels?

Yes, but this would require Town Meeting vote, and would likely delay the project beyond the current projected 2021 school opening date by a minimum of a year

29. Are these parcels also affected by the groundwater contamination from the MDL spill?

Yes.

30. Does this Option require swing space?

Yes, the Hillside site is too small to accommodate temporary modular classrooms on the site during the construction period. Swing space would need to be constructed at the DeFazio site and the Hillside students would need to be bussed to DeFazio during the two year construction period.

31. Could this swing space be used for other future projects?

Yes, the modular classrooms could be used for the future Mitchell Elementary School and Pollard Middle School renovation projects, but there is no guarantee that these projects would follow in rapid succession after the Hillside project.

32. The Hillside School site is boarded by wetlands; does this affect the new building design?

Yes, in addition to the wetland buffers there is also a riverfront setback. These buffer zones and setback areas affect the placement and design of the parking lot, playing fields and the building on the site.

33. If one of the other options is selected for the new Elementary School, what will happen to the existing school?

The 2014 Facilities Master Plan anticipates that the building will be used for swing space for future town and school projects.

DeFazio Elementary School – Questions:

34. Would a new School at DeFazio Park require redistricting?

Yes, those redistricting maps are included in the 9/21/15 presentation that is posted on the School Department web site.

35. What other districts are affected if this is the preferred option?

All Districts would be affected but mainly the Hillside and Newman districts.

36. Is this a “neighborhood” walkable school?

No, the DeFazio site is the least walk-able location of those considered. Because it is located on the periphery of the current Broadmeadow School district and surrounded to the east by open space, the neighborhoods that are within the ¼-mile walking distance represent only 20% of the students that would be attending the school.

37. Would this school impact the use of the DeFazio Park fields?

There are both positive and negative impacts on the DeFazio fields. The positive impacts include:

- A newly paved parking lot to serve the school and the fields.
- A relocated tot-lot and playground would be constructed near the school
- The school gym, cafeteria and other spaces could be used by summer programs in conjunction with the playing fields

The negative impacts include:

- The JV baseball field would be taken out of action for two years and used for construction staging, and it would take a third year to rebuild the baseball field and regrow the grass. The cost of replacing the ball field has not been included in the project cost.
- The school does not have a designated playfield for PE
- The new parking lot would be larger than the new school requires in order to serve both functions. The extra site development costs would not be reimbursable by the MSBA.
- The parking area would include approximately 160 parking spaces however 90 – 100 spaces will be designated for school use only during school hours
- The limited walking district would likely increase car traffic and bussing to the school
- High School sports and other field use will need to stagger their start times to avoid on site traffic circulation concerns as well as traffic congestion on Dedham Ave and to assure that walkers have exited the property.
- The school would displace some DPW functions that would need to be relocated to an alternate site as was studied in the 2014 Facilities Master Plan. The cost of this relocation has not been factored into the project cost

38. What are the benefits for having a school at this site?

The new school would be surrounded by open space and playing fields and as with the Central Ave or High Rock sites there is an opportunity to include the wetlands in the educational program. A school on this site does not require swing space to be constructed.

39. Would a school at DeFazio impact the ongoing DPW operations?

Yes the materials handling area, and outdoor storage spaces would need to be relocated to another site that has not yet been determined. The old salt shed would need to be demolished to make way for the new school and associated parking. DPW parking area would be reduced, and a large vehicle turn around area would need to be located on the south side of the site

40. Could the DPW expand on the current site if a school were constructed at the DeFazio parking lot area?

No the DPW expansion would need to go to an alternate site as studied in the 2014 Facilities Master Plan.

High Rock School – Questions

41. Does the Hillside Elementary School Program fit into the High Rock School?

The MSBA design enrollment of 430 elementary school students including full day kindergarten will not fit into the existing High Rock School without major renovations including expanding existing classrooms to accommodate the kindergarten program, and providing a multi classroom addition. Despite these additions and renovations the existing cafeteria and gymnasium would remain undersized for the population (based on MSBA guidelines) and would be difficult to expand.

42. What is missing from the Elementary School program if Option H3 is constructed?

A full description of the High Rock deficiencies is outlined in the PDP which can be found on the school website. In general the existing classrooms are under sized per MSBA guidelines, the ability to provide well dispersed and inclusionary special educations classrooms and spaces is limited by the existing conditions, the existing gym is approximately 50% smaller than the MSBA guidelines, and the existing cafeteria is too small to provide the suggested two lunch periods outlined in the MSBA guidelines.

43. Is this a walkable neighborhood school location?

The school is a neighborhood school and provides the opportunity for approximately 40% of the students to walk to school (based on the GIS mapping provided by the Town).

44. Would the existing fields be impacted by the new school?

No, the current design does not impact the existing fields.

45. Would the number of Buses increase or decrease if the school were turned into an Elementary School?

The number of busses would decrease by about half if the High Rock School were converted to an elementary school.

46. Would any of the High Rock Elementary School renovation costs be reimbursed by the MSBA?

It is not likely that the MSBA would participate in both the construction of a new Grade 6 school and the renovations of the existing High Rock School. In the MSBA response to the PDP they indicated that "...the MSBA will likely limit reimbursement to the school identified as the proposed project."

47. Can we easily expand the school in the future, to accommodate additional enrollment growth?

There is flexibility for enrollment growth incorporated into the current Educational Program. The Certified enrollment agreed with the MSBA for the new elementary school is 430 students. The space program for the school uses the low end of the classrooms size recommended by the district to determine that four classrooms are required for each grade level. The district policy allows for up to an additional 4 students per class. This means that the new school could accommodate additional enrollment growth of up to 96 students and still remain within the district policy for class size. Future additions to the building may be possible at the DeFazio and Central Ave sites, but more difficult at Hillside or High Rock. The complexity of this equation relates to the increase in area for core facilities, like the cafeteria and kitchen as well as classrooms.

Enrollment will be reevaluated when the Mitchell Elementary School project moves forward and future growth must be considered at that time. Also, the Hillside Site could be held as a reserve location for a future school, after it has functioned as swing space.

48. What are the projections for enrollment growth?

The Future School Needs enrollment study is updated each year and is available on the School Department web site.

49. What about swing space?

a. Does this project require swing space?

Any project on the existing site (all Options starting with A, B or C) will require swing space. The remaining options do not require temporary swing space.

b. What will happen to the existing Hillside school?

The Hillside School could be used as swing space for future town projects as noted in the 2014 Facilities Master Plan.

c. How long can the existing Hillside school be utilized, as swing space or as a school, given its present condition?

The existing school will continue to receive Capital Improvements to assure that it can be utilized.

d. Will the Hillside continue to be maintained, during the construction period?

Yes

e. Does it make sense to build swing space as part of the project now, to facilitate projects down the road?

The costs of the swing space will not be reimbursed by the MSBA. While the swing space will have residual value there is no guarantee that the Mitchell School and Pollard School projects will follow immediately after the Hillside School project. Therefore they could sit unused waiting for MSBA and Town approval of the next project.

50. What are the relative project costs?

These are outlined in the PDP as well in the Public Presentations. Details can be found on the School Department web site noted above.

51. What is the MSBA's general process and timeline for building a school?

Time lines and project target dates are outlined in the PDP Project Schedule for the Hillside School. The MSBA also provides information on their web site under the topic of "Building with Us" which can be found using the following link: <http://www.massschoolbuildings.org/building>