

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street Bristol, RI 02809 www.bristolri.gov 401-253-7000

TECHNICAL REVIEW COMMITTEE MEETING

The meeting was held on **Wednesday, October 2nd, 2024** at 11:00 am at 235 High Street, 1st Floor Conference Room, Department of Community Development The Technical Review Committee (TRC) held a meeting for the purpose of review of the application for **Master Plan Review Phase / Major Land Development for the Bristol-Warren Regional School District construction of a new Mt. Hope High School**

Present for the Town of Bristol:

Diane Williamson, Director of Community Development & TRC member Edward M. Tanner, Zoning Officer/Principal Planner & TRC member Charles Millard, Planning Board Chairman & TRC member Brian Clark, Planning Board member & TRC member Jessalyn Jarest, Alternate Planning Board member & TRC member Nicole Iannuzzi, BETA Engineering Amy Goins, Assistant Town Solicitor

Present for the Applicant:

Lisa Pecora, Perkins Eastman
Joe Drown, Perkins Eastman
Walter Hartley, PMA Consultants
Chad Crittenden, PMA Consultants
Chris Loeffler, PMA Consultants
Annelise Boylan, Pare Corporation
David Potter, Pare Corporation
Ana C. Riley, Bristol-Warren Regional School District
Danielle Carey, Bristol-Warren Regional School District
Christina Houghton-Belise, Bristol-Warren Regional School District
Nicky Piper, Bristol-Warren Regional School Committee member
Mike Igo, Aqueous
Justin Robertshaw, Traverse
Kris Bradner, Traverse

Agenda: Master Plan Phase review for Major Land Development proposal to construct a new Mt. Hope High School, including new tennis courts and athletic fields, at **199 Chestnut Street** and to demolish the existing

high school building. Owner: Town of Bristol / Applicant: Bristol Warren Regional School District/Lisa Pecora, Perkins Eastman, applicant representative. Zoned: Public Institutional. Assessor's Plat 117 Lots 3-7.

Introductions by Diane Williamson. This is the second TRC meeting for Master Plan review. The Planning Board requested additional information at their 9/12/2024 meeting. The applicant submitted follow up information and revised plans to address the board's questions and concerns. The applicant will review each topic separately with the TRC.

Review of On-Site Parking

Currently there are 281 spaces that exist as off-street parking on the high school property. 240 spaces were initially proposed by the applicant, now 248 spaces are being proposed with the new high school. That total does not include Chestnut Street on-street parking. The maximum required by the Zoning ordinance is 248, 10% more than the minimum required in Zoning. Applicant feels this is sufficient based upon their evaluation of existing parking usage and needs for the property.

The TRC members are concerned about parking for special events - sporting events and community events.

Applicant's engineers discussed access and flow of traffic at the new high school. Access and flow will be improved from existing conditions. Discussed proposed layout of school parking.

Entrance to sports stadium will be moved to interior of site near larger parking lot & bleachers. This will avoid Chestnut Street parking as an ease of access. Overall circulation (pedestrians & autos) is improved in proposed conditions. TRC feels parking issue has been addressed.

Review of Flooding Concerns

Concerns have been expressed from the planning board and members of the public about the floodplain on the site. FEMA maps were reviewed. The applicants reviewed additional information: FEMA maps, BETA study for Silver Creek watershed. This study was not conducted to amend FEMA maps. Recent work by FEMA and USACOE on a study of Silver Creek, but it is early in the process and nothing new at this point in time. So the flood plain information from FEMA is the latest, dated 2014. Other localized flooding in the area may be related to drainage infrastructure or other issued that will not be shown on flood maps.

The proposed school will be located outside of the mapped floodplain. The existing school is located partially within the floodplain. The new school will not fill in the flood zone. Any fill will need to be compensated for on-site. This will be shown on later plans. The only are of potential fill in floodplain is near the proposed baseball field (if needed). Detailed grading will be shown at Preliminary Plan phase. Discussed concerns about wetlands and Dartmouth Street neighborhood and potential impact to neighbor's properties. No impacts to off-site flooding are anticipated.

Review of Stormwater Management

Applicant's consultants reviewed all comments from the Planning Board meetings and responded with updated information. Benefits of proposed system for water quality volume and runoff rates were discussed. The existing site has very limited stormwater management; almost nothing around the school building and parking lots. The new design has many areas for stormwater management. Small dispersed

systems – 15 separate systems – are shown on the plans. Final design may change with further calculations and design at Preliminary Plan phase. Water quality benefits will be significant with proposed design. Low impact development (LID) and best management practices (BMP) for stormwater will be used. All designs will be reviewed by RIDEM and will utilize DEM design guidelines. Designs will include disconnecting impervious areas, combinations of BMP's, sand filters, bio-retention, and infiltration practices. Maintenance requirements were discussed. TRC members concerned about future maintenance. Applicant discussed maintenance needs.

Peak flow management – detention ponds will be used to hold back flow of runoff to manage rate of runoff from the site. 72-hour detention is maximum allowed per RIDEM. Slow release with sub-drains after infiltration. Flow is delayed to control peak flow.

Runoff volume - goal is to reduce increase in volume of runoff per town ordinance. Systems designed to reduce the volume leaving site. The applicant has reduced the amount of impervious surfaces in design. Synthetic athletic field will result in an increase of impervious as precipitation will be collected below the field. Management of runoff from the field is required to mitigate the increase in impervious on the site.

Discussed staff and maintenance needs for stormwater management. Operations and maintenance (O&M) manual will be submitted to the town for review and approval. Maintenance agreement with applicant and Town will be prepared.

Water quality treatment and runoff volume reduction are addressed in many of the same areas. Underground system at athletic fields to collect and infiltrate runoff. Applicants engineer is confident they can manage runoff properly from the athletic field impervious surface. Soils at this property are difficult but designs are still being finalized. Potential benefits of using pervious surfaces such as pervious pavement parking lots and walks (pervious asphalt & pavers) will not be great due to underlying soils. Sidewalks and paths have been reduced to 6' wide and increase in width at more high traffic areas such as bus drop off areas.

Review of Irrigation

Discussed irrigation for athletic fields and the potential for using a well rather than using public potable water. Reviewed permit requirements with RIDEM for well water withdrawal. Applicant will need to evaluate water withdrawal. Will also need to evaluate volume of water that the ground will yield. There will need to be a high volume of water at specific times. A study will need to be conducted to determine the potential impacts on nearby streams and wetlands. Once the data is gathered they will need to design an irrigation system. Timing for design and permitting of an irrigation system was discussed. Construction documents for bidding need to include this information. Accumulation tank is an item needed to collect and store water if the rate is not large enough to pump overnight. May be able to collect runoff from synthetic turf field to use in accumulation tank for irrigation. Design will be for 50,000 gallons a day.

A hydrogeologist will be needed to determine the best location for drilling a well (or wells). To be determined if multiple wells are needed, depends on yield of well. Potentially could be several smaller irrigation systems to work different locations and fields. There will need to be more data (drilling & fracture analysis) collected to determine what is needed. The size of the accumulation tank will be determined by how much volume demand is needed. The flow rate of the ground is the biggest concern and question.

Geotech engineers will be on-site this week to drill test wells for design of a geo-thermal system for the high school building, so there will be more data after that is conducted. Rainwater may be able to be harvested from the field to assist with irrigation. Multiple opportunities with use of turf field.

Discussed programmatic needs of school athletic fields. There are different uses and teams that could use the field throughout the year. A synthetic field would also allow rental of the field to many other uses; school and community sporting activities. Maintenance of fields has a cost and that cost could be made up by rentals. \$80,000 a year will be budgeted by the school department to maintain the field.

The TRC raised concerns about potential runoff and pollutants from synthetic turf field. There are multiple ways to limit contamination of the water from the field. Field consists of carpet, pad beneath, and binder materials for infill of the carpet. They will not be using a crumb-rubber infill. It will be organic wood-chip material so no contaminants from carpet or infill (not a petroleum based product). State legislation requires elimination of PFAS. There are new carpets that are PFAS-free. Applicant proposed a PFAS-free system for entire synthetic turf field.

TRC also raised concerns for health and safety from the synthetic turf field. Bacteria contamination from staff, MRSA, and other bacteria due to abrasions from sliding on carpet. Heat & UV light from the sun eliminate this risk. Safety was discussed from falls and use of the synthetic turf. Sports regulating bodies have standards for design of synthetic turf fields. Reviewed industry standards for design of synthetic turf fields. Review industry testing protocols and standard relative to natural grass fields. Project specifications will include all safety considerations. It was noted that existing high school sports teams play on synthetic turf, approximately 80% of the time in other communities, and many of those fields are not as high standard as what is proposed.

Next Steps

TRC discussed the timing of Planning Board review going forward. Applicant will be asking for a checklist—item waiver to submit the Preliminary Plan application without RIDEM permit in hand. There will be a review by the Town and RIDEM concurrently. TRC supports this waiver request.

Steps:

- Master Plan review by Planning Board at October meeting with approval of a waiver for the applicant to submit Preliminary Plan application without RIDEM permits.
- Stormwater management report will be submitted with Preliminary Plan application
- Public Hearing for Master Plan review is still open.

A **motion** (1st Chuck Millard, 2nd by Jessalyn Jarest) was made to send this Master Plan application to the Planning Board with recommendations to support the Master Plan and also to support a checklist waiver request for the applicant to apply for Preliminary Plan without first obtaining RIDEM permit. All were in favor.

Meeting adjourned at 1:15pm. Notes by Ed Tanner