

SITE SELECTION APPLICATION

FOR THE SELECTION FOR THE RSU #24
SUMNER MEMORIAL HIGH SCHOOL – SULLIVAN, MAINE



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NOVEMBER 2018



**RSU #24
PROPOSED SUMNER MEMORIAL HIGH SCHOOL & MIDDLE SCHOOL
PROJECT – SULLIVAN, ME
INDEX OF ATTACHMENTS – SITE APPLICATION**

This Site Application contains the technical information for RSU #24's selection of a site for the Sumner Memorial High School & Middle School in Sullivan, Maine.

The application is presented as follows:

Site Application Form

Attachment A	Enrollment Projections Part II
Attachment B	Regional Study Part III
Attachment C	Site Test Fits Concepts
Attachment D	School District and Regional Resource Maps
Attachment E	Public Meeting Minutes
Attachment F	Zoning Information
Attachment G	Phase I ESA Report prepared by S. W. Cole Engineering, Inc.
Attachment H	Geotechnical Reports by S. W. Cole Engineering, Inc.
Attachment I	Vernal Pool and Wetland Delineation Report Prepared by Stantec with DEP and ACOE Review and Approval
Attachment J	Appraisal Summaries
Attachment K	Maine Historic Preservation Correspondence
Attachment L	Correspondence with Utility Companies
Attachment M	LWCF-6F Conversion Letter
Attachment N	Traffic Study prepared by Gorrill-Palmer
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SITE APPLICATION

MUST BE SUBMITTED IN SPIRAL BINDER

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Part I: Applicant Information

A. Applicant Information

School Administrative Unit: Regional School Unit 24
School Name & Address: Sumner Memorial High School and Middle School
2165 U. S. Highway 1, Sullivan, ME 04664

Project Contact Person and title: Michael Eastman, Superintendent

Phone: (207) 422-2017 Fax: (207) 422-2029 Email: meastman@rsu24.org

B. Site Approval Authorization

After careful study of our school site options, the board of directors/school committee / building committee has agreed to proceed with the attached application.

Michael Eastman
Superintendent's Signature

11/13/18
Date



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Part I: Applicant Information

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 Superintendent's Signature Date

NOTE: THIS APPLICATION IS PROJECT SPECIFIC AND THE DIRECTOR WILL INDICATE THOSE SECTIONS THAT MUST BE COMPLETED.

Part II: Enrollment Projections

Submit a summary of your most recent *Enrollment Projections* reflecting student growth or decline over the next 10 years. The 10 year enrollment projections must be completed by a firm that is skilled in enrollment projections. Identify the student population within the projection that you anticipate housing at this site.

See attachment “A” as prepared and previously submitted.

Part III: Regional Study

The State Board of Education mandates that school administrative units research whether a school housing solution exists through the use of existing school facilities in the region.

The school unit should first look to its own facilities and consider consolidation or other techniques if potential solutions exist.

The school unit should then look to neighboring school units to determine whether a regional solution through the use of existing school facilities is possible. The school unit should also consider whether a project could solve the unit’s needs and a neighbor’s needs.

The school unit should address the above in narrative form discussing the existing facilities, possible local and regional solutions, and the existing and future governance structures needed to address proposed solutions. The study should be supported with an information sheet (copy attached) for each educational facility in the region.

Please see attachment “B” letter.

Part IV: New vs. Renovation Analysis

Unless waived by the Director of the Division of School Facilities, all administrative units that propose to improve the educational environment for students must do a *New vs. Renovation Analysis* of the facility that presently houses the affected students to establish the best possible solution. A brief summary shall be included in this document. It is anticipated that a detailed study is available to support this summary.

Please see previously submitted *New vs. Renovation Study* dated November 21, 2017.

The 2017 study looked at educational adequacy, history of the building, site analysis, expandability analysis, facility analysis, comparative cost analysis and a summary.

Sumner Memorial High School was opened in 1952 as a single level 24,000 s.f. wood framed school building. The building is now 65 years old and has exceeded the expected 40-year life cycle for typical school buildings. Additions have been added over the years in 1963, 1971 and 1986. Sumner Memorial High School also has four separate portable structures supporting the main building.

Sumner Memorial High School is almost entirely a wood framed building with an assortment of interior wall surface finishes including gypsum wall board, plywood, Masonite and particle board. The total permanent built space is approximately 51,120 s.f..

Built as a post-war wood framed building, the building has very little wall insulation with differing amounts of fiberglass in the roofs which are predominately low-pitch shingled roofs. In general, the building does not conform to current building codes, life safety codes, energy codes or ADA accessibility codes. Classification of the building is unprotected wood framed construction. There are no visible firewalls nor fire separation partitions or rated wall containment areas. The exterior of the building is predominantly vinyl siding. The building is a mix of flat roofs and low-pitched gable roofs. In general, the building is very poor in ventilation with a mix of unit ventilators, fan coil units, baseboard radiation, and operable windows. The building does have a 1950s mechanical crawlspace trench that goes around the perimeter of the building and can only be accessed by going through the boiler room. Over the years these trenches have become dangerous access points for service personnel which do not meet current OSHA contained space safety requirements. Historically, utility trenches have become humid poorly drained environments susceptible to mold blooms and contributors to poor air quality.

PDT did a financial analysis for the New vs. Renovation Study which resulted in a building that is substantially more expensive to renovate than new construction primarily because this structure does not meet current codes, is wood framed and would need to be completely rebuild to comply with today's mechanical, electrical and structural building codes. In addition renovation would be so extensive as to be impractical and would require students to move off site to other locations.

PDT conclusion of the site is that the site should be considered as a viable option for a new school both because of its acceptable site size, its historical location, and its social acceptance among the nine towns that comprise RSU #24.

Part V: Executive Summary

The *Executive Summary* should provide an overview of the activities undertaken to arrive at a conclusion regarding the best possible site to address the educational needs of the affected students. The *Executive Summary* should be presented in brief objective statements that can be easily reviewed and evaluated. The final section should identify the specific site that has been selected.

PURPOSE OF THE STUDY

The purpose of the Site Selection Study was to evaluate the existing Sumner Memorial High School site to determine if it is able to support a new combined Middle School/High School along with associated access, parking, athletic facilities, and other support infrastructure.

BACKGROUND

RSU #24 is a school district that currently provides public education for students in nine towns situated along the coast of Maine between Ellsworth and Washington County. The nine towns are almost thirty miles west of MSAD #37 in Washington County and twenty miles east of the Ellsworth School Department. The combined RSU #24 Middle School and High School population is presently 455 students which is expected to increase over the next 10 years to over 500 students.

CURRENT HIGH SCHOOL SITE

The existing Summer Memorial High School site is located on Route 1 in Sullivan, Maine. The site has two access drives that connect to Route 1 on the north side of the highway. This site is approximately 200 east of the intersection of Route 1 and Punkinville Road in the town Sullivan, Maine. The existing site size is 30.7 acres. The district has an option to purchase a house and small lot of .41 acres that sits almost directly in front of the existing high school. The purchase of this acreage will relieve congestion into the site, provide better vision and safety out of the roads on to Rout 1 and will create a more complete and cohesive final school site.

The high school site is located centrally within RSU #24's geographic district and is well established historically in the social context of the community because of it's location since the early 1950's. It benefits from good access and is well served by utility and transportation infrastructure. The RSU #24 central offices and the bus garage facility are located one-and-a-half miles west of the existing high school site. Because of its history and central location, the high school is used extensively by residents in the surrounding towns because of its gymnasium, locker rooms, art rooms, stage and ability to accommodate large group meetings.

HIGH SCHOOL BUILDING

PDT Architects has undertaken an evaluation of the existing high school building and the previously submitted New vs. Renovation Study and determined that it is no longer suitable to support the educational programs nor is it able to meet current code requirements and serve as an efficient building for the next 50 to 70 years.

PROCESS AND PUBLIC INVOLVEMENT

Public involvement in site selection was achieved through a number of public meetings. These included a public educational visioning meeting, site straw polls and site test-fits for the existing sites that were shared with the public. The site selection and analysis process has been led by the Building Committee and the RSU #24 School Board. Professionals involved in the evaluations and recommendations are as follows:

- **PDT Architects/**
- **Gorrill-Palmer Civil Engineers**
- **S.W. Cole Geotechnical**
- **Stantec – Wetland delineation, vernal pool surveys and regulatory meetings with DEP and Army Corps of Engineers**
- **Gorrill-Palmer Engineering/Traffic Engineering**
- **ESHA/Mark Coleman – hazardous materials evaluation**

SUMMARY OF SITE INVESTIGATION AND TEST-FITS

Site investigation by PDT its consultant involved Phase 1 EPA Environmental Study, identification of environmental hazards, examination of natural resources, identification of soils and septic leach field locations.

Six test pits were developed over a three-month period using the base information gained from these investigations. The test pits were shared with both the Department of Education and the RSU #24 Building Committee. The proposed site test-fits are included in attachment "C" of this application. The preferred site test-fit, Test-Fit #8 was selected after

extensive discussions with the Building Committee, and an estimated site development cost was developed using this layout.

SUMMARY OF FINDINGS

The environmental analysis did not reveal any issues of concern regarding previous uses of the property. No petroleum contamination or PCBs were discovered at the existing building. Natural resource mapping identified potential freshwater wetlands and one vernal pool in the northwest corner of the site. Representatives from DEP and the Army Corps of Engineers walked the sites with Stantec, Gorrill-Palmer and PDT Architects and confirmed that the vernal pool location was not significant and that there were no other locations on the site which contained vernal pool restrictions. The presence of these resources on the site does not present a significant regulatory obstacle for redevelopment of the property.

The high school site topography is generally gently sloping from the northwest down to the southeast. Approximately 20 acres of the 31 acres site are suitable for development. Soils are generally granular shallowed to bedrock. Both the architects and the civil engineers have prepared preliminary grading that minimizes impact of ledge and allows the development of several outdoor athletic fields. The site is well served by state highways and U.S. Route 1.

The site is also served by 3-phase power, public water, public communications and cable services. The project will have onsite septic with a pretreatment module and one to two leach fields. The enrollment projections do not indicate any large increase in student population over the near future. The enrollment projections and past enrollment have been shared with DOT and it has been found that the public current road system is sufficient to serve the new facility.

As the project proceeds through design there may be minimal upgrades recommended to turning lanes and slip lanes along Route 1. However, Route 1 has been recently been rebuilt as a wide pavement area and wide right-of-way in front of the schools.

The civil engineers prepared an estimated site development cost of \$5,694,000. This estimate contains 20% contingency as an acknowledgement that the final building design and final grading design have not been completed at this time.

Part VI: Site Selection: Process and General Information

The *Site Application* has been developed by the *Department of Education* in conjunction with other State agencies to assist building committees in reviewing and selecting potential sites for new schools. The *State Board of Education* requires this submission for the proposed site for review and approval prior to the project moving forward.

A. Site Selection: Process

1. Indicate how the public was involved in the *Site Selection Process*.

Public involvement in the process was achieved through open public building committee meetings, one public visioning meeting and one site selection meeting. In addition, a staw poll where three of the site test-fits were shared with the community prior voting. Other information that was shared with the community was an option to purchase a small lot and house with .41 acres in front of the existing high school. The public was also informed of the 6F National Park Service Restrictions on open recreation land.

Minutes and the public meetings scheduled to date are included in attachment “E”.

2. **What resources (local planners, landscape architects, engineers, other professionals, local planning boards, comprehensive plan and other committees, etc.) were involved and describe the expertise they provided?**

The site selection analysis process has been led by the RSU #24 Building Committee established by the RSU #24 School Board. Members of the Building Committee come from all nine towns represented in the district and expressed the viewpoints from each of the towns. Building Committee process was guided by the following professionals:

- **PDT Architects/Programming, Architecture, facility and space planning**
- **Gorrill-Palmer Engineering – Civil engineering and regulatory analysis**
- **S.W. Cole – Phase 1 Environmental Site Assessment**
- **Stantec – Wetland deliniation, vernal pool surveys and consulting**
- **Gorrill-Palmer Engineering – traffic engineering**

3. **What were the concerns of the neighbors and were they addressed?**

There have been no significant concerns expressed at any of the public Building Committee Meetings or public forums held to date.

4. **Append a summary of local zoning requirements that affect site design and site programs.**

A copy of the town of Sullivan’s zoning information is in attachment “F”. The town of Sullivan has a relatively inactive planning board, because of the small, rural nature of the town.

PDT will be presenting a copy of the proposed project to the town selectmen and the town Planning Board prior to the public referendum.

5. **Describe how potential sites were identified and indicate how many were seriously considered.**

As a result of the New vs. Renovation Study and public meetings the site selection process for the new high school focused only on the existing Sumner Memorial High School site. The existing site was preferred for numerous reasons including:

- **The central and easily accessible location**
- **Size and suitability of the property**
- **The historical use of the site as a location for the high school to service surrounding towns**

6. **Describe the objective site evaluation system, i.e. decision matrix that was used to select the site.**

A decision matrix was not used since the existing site was preferred as listed above in Item 5.

7. The Department of Education will only participate in the cost of the site to the extent that the acreage meets the State's guidelines for acreage. Any additional acreage purchased beyond the state guidelines will be at the school district's expense.

The existing site is 30.7 acres. The Building Committee has obtained an option to purchase a house and lot which will have .41 acres to be added to the existing site. The new total acreage will be 31.1 acres. This site size is below the recommended site size for combined middle and high schools as per DOE regulations.

Two appraisals were obtained for the .41-acre house lot. The average of the two appraisals was \$110,000. The Building Committee and School Board have voted for the local unit to agree to the seller's price of \$135,000 acknowledging that the local unit will be responsible for the \$25,000 increase above the average of the two appraisals. This information was shared at the site staw poll where 63 were in attendance; 43 voted in favor of the site and one voted against the site.

See appraisal summaries and RSU #24 letter in attachment "P" and attachment "J".

B. Site Selection: General Information

1. In which community is the proposed site located:

The existing site and the site for the new high school is located off U.S. Highway Route 1 in Sullivan, Maine.

2. Indicate whether the site is located in or near a village and/or established neighborhood(s). If it is, describe the distance and relationship of the site to the village and/or established neighborhood(s).

The Sumner Memorial High School is centrally located both within Sullivan, Maine and within the center of RSU #24. Route 1 is the central backbone for both Sullivan and RSU #24 with prominent churches, fire stations, adult education, town halls and small businesses scattered along Route 1 throughout Sullivan. The central offices and bus garage are located approximately a mile and a half to the west of the high school site and the Sullivan town fire department is located approximately three miles to the west of the high school site.

3. Describe the distance of the site from existing schools in the school system.

The distance from the existing schools to the high school is as follows:

- **Cave Hill School, Eastbrook – 16.6 miles**
- **Mountain View School, Sullivan – 4.2 miles**
- **Peninsula School, Gouldsboro – 10.6 miles**
- **Ella Lewis School, Steuben – 12.5 miles**

An aerial photograph showing the nine towns and the location of the elementary schools is located in attachment "D".

4. Where and how far away are transit and other essential services (police, emergency, medical, hospital, fire station, etc.)?

Sumner Memorial High School is located on the main thoroughfare for major services between Ellsworth and Millbridge in Washington County. This makes the existing site ideal for highspeed travel required by emergency responders.

- **The Sullivan fire department is three miles west of the high school along Route 1.**
- **The Ellsworth police department is 14.1 miles west of the high school site.**
- **Hospital helipad, Ellsworth – 14 miles**
- **Maine Coast Memorial High School, Ellsworth – 14.1 miles**
- **State Police Barracks, Ellsworth – 14.3 miles**

There is no rail or bus transit systems for use by students, staff or the public in Hancock County.

5. Is the site located such that it can link or share its facilities with other community services such as libraries, recreation facilities, day care, health clinics, etc.? If any linkages or shared facilities are planned, please describe these plans.

The high school is located approximately 2 and a half miles from the RSU #24 Adult Education Center. It is expected that both the high school and adult education center will be providing services for adults and students throughout the year. Students from Sumner Memorial High School do participate in some programs at the Hancock County Vocational Center in Ellsworth, Maine. It is expected that students interested in that level of CTE vocational experience will continue to be bussed to Ellsworth for those services.

There are community education programs in most of the towns in RSU #24. Those recreation programs do use all of the elementary and high school gymnasiums for their programs. Sumner Memorial High School will continue to be a resource for community adult education programs in addition to the outdoor recreation programs.

6. The Department of Education will only participate in the cost of the site to the extent that the acreage meets the State's guidelines for acreage. Any additional acreage purchased beyond the state guidelines will be at the school district's expense.

See answer in paragraph A.7 above regarding the purchase of .41 acres which still meets the states guidelines for maximum acreage.

Part VII: Environmental Analysis

1. What were prior uses of the site? Is there any indication of a landfill, dump, farm, orchard, mill or other industrial activities on or near the site?

S.W. Cole conducted a thorough EPA Level 1 Environmental Analysis of the site and found no indication of prior uses that would be environmental hazards resulting from landfills, dumps, farms, orchards or other industrial activities.

2. What are the potential environmental issues related to hazardous wastes and/or contaminated groundwater attendant with this site?

The Phase 1 Environmental Assessment was undertaken by S.W. Cole. The investigation was undertaken in accordance with ASTM standards, a copy is included in attachment "G".

In addition, ESHA of Westbrook did site assessments and has developed a report regarding hazardous material on building materials at the existing high school. A copy of their summarize costs is in attached "T".

Testing was done for lead, asbestos, universal waste, and PCBs.

3. Will the site need remediation to address contamination?

There are no unusual remediation requirements at this site.

4. Would any significant wildlife or fisheries be affected by developing a school on the site?

No impacts to significant wildlife or fisheries is anticipated as a result as a redevelopment of the high school site. The area that will be used for developing the new school is the existing baseball field. The location for the existing building will be converted to a competition soccer field.

5. Does the site contain a vernal pool or pools? How was the determination made and by whom?

Stantec Consulting Services Incorporated out of Brunswick, Maine completed both the wetland delineation and the vernal pool assessment of the site in 2017. After preliminary assessments were made by Stantec, they walked the site with representatives from both the DEP and the Army Corps of Engineers to confirm their findings. Final determination was that there was one vernal pool that is not significant that must be respected under state and federal guidelines. Wetland areas were also walked with the Army Corps and DEP who made final determinations as to there value and regulatory set-back requirements. A copy of Stantec's findings is in attachment "I" of this application.

- a. If yes, is the vernal pool or any of the pools defined as "significant vernal pool?"

The one vernal pool on the site is not significant.

- b. If the site has a "significant vernal pool(s)" please describe what standard will have to be met to receive appropriate permitting?

N/A

- c. If there is a "significant vernal pool(s)" on the site, in what way will it affect the proposed project?

N/A

6. Would any significant historic or archeological resources be affected by building a school on the site?

Correspondence regarding the proposed project has been sent to Maine Historic Preservation Commissions (MHPC). No significant historic or archeological resources have been identified on this site. Copies of the correspondence are included in attachment "K".

7. Are there any activities in the area near the site that would create noise, fumes, odors, or other factors that might affect learning? If yes, please explain:

There are no activities in the immediate vicinity that would create fumes, odors or other factors that might affect learning.

Part VIII: Technical Analysis

1. Support the responses below with a detailed site map. Provide additional information as required to include easements, rights of way or other encroachments, topography etc. In addition, provide:
 - a. USGA Topographical map, zoning/land use map, USDA soils map, MGS Aquifer and Geology map.

Maps are provided in attachment "D" accompanying this application. A boundary survey and a survey capturing wetland flagging had been done by Herrick & Salsbury Inc. out of Ellsworth, Maine.

- b. How big is the site in acres and what are its dimensions?

The existing site is 30.7 acres. The parcel is an elongated rectangle that is approximately 1,250 feet wide running east to west and 1,000 wide running south to north. The usable area of the site, deducting mapped natural resources, applicable regulatory setbacks and steep slopes is approximately 20 acres.

2. The State Board of Education has no minimum site size requirements, but school building sites shall have efficient usable land to provide for the following:
 - a. Such structures as are needed for the education program and any necessary adjunct services such as a well or septic system

The test-fits show proposed layouts for a new building housing educational programs that have been reviewed by Department Education that represent approximately 101,000 s.f..

- b. Safe access for vehicles and pedestrians including appropriate separation of private vehicles, school buses and service and delivery vehicles

Each of the layouts and test-fits have been designed to provide effective separation of bus and parent drop off while accommodating the delivery trucks and access to industrial arts areas with a separate side driveway. Pedestrian circulation is provided by onsite sidewalks and trails with an emphasis on providing connectivity and security

while minimizing conflicts with vehicular traffic. It is expected that both entry drives will have speed tables to help control vehicle speed on the campus.

c. Reasonable future additions to the project

Space is provided for modest future additions to the project on each of the proposed layouts. On Option Plan 8 classrooms can be expanded behind the gymnasiums as well as to the southwest of the special education room on the first floor.

d. Appropriate recreation areas and playing fields

Recreation facilities equivalent to those on the high school site have been included on the test-fit layouts. The baseball has been relocated to the front of the site and new competition athletic field will be located where the existing Sumner Memorial High School sits. There is the equivalent of an additional 1-1/2 practice fields located on the site to accommodate the middle school population that will be added to the high school.

e. Sufficient parking for staff, visitors and reasonable continuing community use

Parking facilities are provided for parking for both the high school and the middle school staff. We are expecting the state to support parking for 220 vehicles. The site plan Option 8 presently shows parking for a total of 309 spaces; 220 spaces paved and 89 spaces gravel.

Site requirements may be met by adding together non-contiguous parcels of land when those parcels safely support the educational programs of the school.

3. The maximum state-subsidized site sizes are: Elementary (20 acres plus one usable acre per 100 students); Middle (25 acres plus one usable acre per 100 students); High (30 acres plus one usable acre per 100 students).

The existing high school site will have a total acreage of 31.1 acres. Assuming a high school population of 295 results in a site size of 32.95 acres. If one adds additional acreage for the middle school students using a total school population of 500 the maximum site size would be 35 acres. In either case, the Sumner Memorial school site will be less than the maximum subsidized site size.

4. How many acres of the site are usable for buildings and program related facilities and play-athletic fields? Minimum acreage by State Board rule may be met by locating playing fields, parking, and/or auxiliary uses on land close by. The Board may waive this standard, if warranted. Please discuss any creative opportunities that are proposed.

The usable area of the high school site for consideration for buildings and program related facilities and athletic fields is approximately 20 acres.

5. Describe the site's topography, slope, soils and presence of wetlands, surface waters and ledge: Attach a log of subsurface test pits or a drilling log and site sketches identifying those features.

a. Slope

The existing high school site slopes gently from northwest to southeast across the site. The site has slopes that range from .5% to 5% in the buildable areas. The grades steepen and fall off as the watershed heads down to Smelt Brook. The steeper areas are heavily wooded on the northeastern side of the site and on the northwestern side of the site be Punkinville Road.

b. Soils

S.W. Cole Engineering prepared two reports related to explorations and preliminary geotechnical engineering services. Test-pits were taken in January 18, 2018 results of which are under tab "H". A second report was done on August 30, 2018 with 11 additional test-pit explorations taken on August 2, 2018. Test-pit logs show that, in general, the site is covered with brown silty sand and some gravel and with brown silty clays over bedrock. Bedrock varies from 1.6 feet to 11 feet deep in the first set of test-pits and from 3.7 to 8 feet deep in the second set of test pits.

There is also a medium intensity soils map under tab "D" as part of the regional resource maps.

c. Presence of radon

The building has no history of radon or radon testing. Testing was conducted over the weekend of November 16th to the 18th with results which will be included in this application. Because ledge is relatively shallow along the site all buildings will necessarily employ radon mitigation pits regardless of the results of radon testing in the old Sumner Memorial High School.

d. Presence of wetlands

Freshwater wetlands have been identified on the site by Stantec as a result of three visits to the project site. Full details of the wetland mapping and description of the wetland types and characteristics are included in the reports under tab "I". Site test-pits and the final Option 8 show that we will have relatively small amount of wetland impact during final development.

e. Presence of surface waters

There are no permanent open water bodies in the site. There is one small waterway that crosses the site diagonally in the northeast corner of the site. That small stream is Smelt Brook which is relatively small and ultimately flows to Smelt Cove as part of Flanders Bay and Frenchmen Bay in the North Atlantic.

f. Presence of ledge

As previously stated, S.W. Cole has done two series of test-pits for a total of 19 test-pits across the site. Ledge is known to be relatively shallow across the site varying in depth from 1-1/2 to 11 feet below the surface. Building plans and final grading will take into account the ledge in an attempt to minimize blasting. The civil engineer's estimate presently carries a \$161,000 for rock excavation, although the cost estimate also contains a 20% contingency until final grading plans can be completed and until cross sections can be made through utility trenches to determine final quantities of ledge.

6. Are there any unusual foundation requirements other than normal spread footings?

The soil and subsurface conditions at the site do not indicate the need for any special foundations. Spread footing should suffice for all portions of the new building with foundations probably bearing directly on ledge.

7. Are the site soils suitable for reuse on the site?

The soils of the site are a mix of forest duff, loam, loamy sands and clay. These materials will be suitable for final topsoil and loam use, although all of the sands, gravels and clays will only be re-useable on site as common borrow. Existing soils on site will not be recommended for use under pavement or structures as gravel or structural fill. Imported processed granular materials will need to be used in these areas, however there are abundant sand and gravel extraction pits in the area so that this material should be affordable.

8. What are the quality, organic content, and gradation of the loam on the site?

Visual inspection indicates that the top soil is generally sandy. Testing of onsite topsoil materials will be done by the University of Maine soil testing service. We expect additional organic materials and loam will need to be trucked onsite because our preliminary test-pits show that it is unlikely that there will be enough loam on the site for all of the athletic and seated grass areas.

9. Is three-phase power available at the entrance to the site? If not, what is the anticipated cost to provide three-phase power?

Three-phase power is available at the site directly off Route 1. There will be a new overhead service dropped at Route 1 and going underground to the new building. A request of Ability to Serve Letter is contained in attachment "L".

10. Is fiber optics access available at the site?

Telephone cable and fiber optic services are available to the site because of its location directly off U.S. Highway 1.

11. Are there utility or land use impact or connection fees, infiltration reduction fees, or inspection fees that need to be included in the budget?

We expect no land use or connection fees at this time.

12. What are these fees and what is the basis for determining them?

Further development of the design is necessary to determine the applicability and extent of any fees.

A. On site water and wastewater systems

1. Is on-site wastewater disposal proposed?

Stantec Consulting Services Inc. of Topsham, Maine was responsible for wetland mapping, vernal pool analysis, and onsite existing inspection and future septic system design. Stantec's work found that the existing larger leach field was not receiving waste water as originally designed resulting in a leach field that appeared to be in good condition and which may be able to be reused as part of the new school. Stantec also worked with the State Site Evaluator and has requested a reduction of water usage based on actual data collected at Sumner Memorial High School. The actual historic data shows the usage of 7.44 gallons of water a day in lieu of the 18 gallons per day required by Maine State Plumbing Code. For this part of the future design, Stantec will be requesting a waiver to allow the new system to be designed for 8 gallons per day for disposal field sizing. Gorrill-Palmer has also recommended a pretreatment facility to further reduce the leach field size and to reduce any potential of offsite effluent contamination.

2. Has the impact on groundwater been reviewed?

Please see Stantec's memorandum of November 15, 2017 related to the research and effluent testing that was done with the two existing leach fields. Further work will be done prior to concept approval to determine if any further study needs to be done on the relationship of wastewater disposal and groundwater.

3. Describe the soils and type of onsite disposal system that will be used.

The disposal system will have a pretreatment package that will clean the effluent before it is sent one or two leach fields on the site.

4. Are there local regulations concerning nitrate levels at the property line?
If yes, what are these requirements?

There are no known local Sullivan regulations concerning nitrate levels at the property line.

5. Is there a concern with phosphorus in the water runoff at the site?
If yes, how will it be managed?

Stantec and Gorrill-Palmer do not expect and concerns with phosphorus and water runoff at the site. Further design work will be required to confirm this understanding.

6. Are there any unusual requirements required to meet this or other water quality runoff standards?

No.

7. Is a detention pond required? If so, is it a dry or wet pond? What is the volume and depth?

Gorrill-Palmer does not expect a retention pond will be required on this site because of its adjacency to Smelt Brook. There will be two to three dry detention ponds in the final design.

8. Describe the potential water supply, as well as adjacent land uses and potential threats to the source of the well.

N/A

9. How is fire protection being addressed?

The building will use an NFPA 13 sprinkler system serviced off the local water utility.

10. Is geothermal heating being considered?

Yes, geothermal heating is under consideration along with air-to-air heat pumps and propane gas-fired boilers.

11. Will a booster pump and/or water storage tank be needed?

N/A

B. Public Water and Sewer

1. Is the site served by an existing sewer system? Will public sewer be extended to the site?

No.

2. Is the site served by existing public water?

Yes. The high school is presently served by an existing public water supply stem operated by the Long Pond Water District. It is anticipated that the new school will connect to this existing public water system via a new tap under Punkinville Road to the west of the site. An Ability To Serve Request has been filed with the Long Pond Water District and a fire flow evaluation was done on October 24, 2018.

3. If water is being provided by a public utility, what is the adequacy of the system to provide fire flows in the range of 800 gallons per minute at a residential flow of 35 psi?

Gorrill-Palmer conducted water flow. Their evaluation letter dated November 15, 2018 is included under tab "L". They found that the residual at 500 gallons per minute is 43 and that the calculated residual pressure at 1,000 gallons per minute is 8 psi. Based on the static and residual pressure contained in the memorandum the project is expected to require a booster pump for domestic pressure as well as fire pressure for the project's sprinkler system.

C. Other

1. Will there be demolition on the site? Describe the buildings that will be removed; and indicate any known hazardous materials.

The existing Sumner Memorial High School will be demolished in accordance with ESHA's recommendation concerning hazardous materials. The ESHA report is under tab "T". Onsite investigation has found that there are no PCB materials at the existing

building, that only universal waste and asbestos will be classified as hazardous materials requiring removal prior to demolition.

2. Does the site encroach on productive agricultural areas?

No.

3. Is the site more than 5 feet above the 100-year flood plane?

Yes. The entire site is greater than 5 feet above the nearest mapped base flood elevations.

4. Can areas of the site be retained in their natural form? If yes, how many acres?

There are significant areas of the site that will be retained in their natural form to create a buffer between neighbors, but also to protect Smelt Brook and its associated wetland areas. The Building Committee has requested that as many natural areas as possible are to be preserved to create a site reflects the local coastal beauty. Retention of natural areas to the east, north and west of the new building will serve as a backdrop and provide excellent view corridors out of new classrooms. The existing site will also provide educational opportunities for students to study the ecology of the site adjacent to the coast of Maine. It is anticipated that approximately 10 to 12 acres of land will be retained in the natural form.

Part IX: State Agency and Local Documentation

Submit letters to document the involvement of the following agencies:

1. Department of Transportation

A Maine DOT permit will not be required as determined by the Gorrill-Palmer traffic study under tab "N".

2. Department of Environmental Protection

A DEP representative met with Stantec and Gorrill-Palmer on the site where they did a pre-application site walk to review wetlands and vernal pool status. A copy of that review is under attachment "I".

3. Department of Inland Fisheries and Wildlife

Contact has been made with Department of Inland Fisheries and Wildlife. Please see a copy of their letter under attachment "O" where they identify long-eared bats and Atlantic salmon as two species on the Endangered Species Act in this general area. They also note that there are no critical habitats within the project area under their jurisdiction.

4. Maine Historical Preservation Commission

Maine Historic Preservation Commission was contacted and letters provided under attachment "K".

5. Army Corps of Engineers (if involved)

The meeting was held on the site with the Army Corps of Engineers. A copy of the meeting minutes are included in attachment "I".

6. Local Fire Department

Local Fire Chief and Assistant Fire Chief have attended public meetings as both the site and the preliminary building design have been viewed. In meeting with the Fire Marshall is to be held on Tuesday, November 20th when further meeting notes will be forwarded to the Department of Education.

7. Local Police Department or Sheriff's Office

Chief of Police from Ellsworth made a presentation to the Building Committee concerning best practices for safety and security at school buildings. He also provided his own critique of the site plan and interior building design. A copy of comments can be found in the minutes of the Building Committee meeting in September 2018 included under tab "E".

8. Local Planning Board

Sullivan does not have a local planning board, however discussions have been held with the local Code Enforcement Officer, who will determine what kind of approval process will be required for the new school.

Part X: Land Acquisition and Analysis

A. Cost and Ownership Issues

1. What are the appraised values of the land?

The district owns the existing 30.7-acre site. The RSU #24 has a house and lot option for \$135,000 dollars. The lot is .41 acres. Copies of the two appraisals that have been previously forwarded to the Department of Education and copies of the summaries of the appraisals can be found under attachment "P" and "J".

2. What is the sale amount in the option to purchase?

The house lot option is for \$135,000.

3. Has there been a title search on the property?

A title search has not yet been prepared for the property. This will be submitted with the application at a later date.

4. Can a clear deed be transferred to the school system?

The school district's deed for the existing site is in attachment "Q".

B. Site Development Cost

1. What is the estimated cost of on-site and off-site development? Provide a draft of the site development budget.

The total estimated cost of onsite and offsite development is \$4.7 to \$5.7 million dollars based on test-fit #8. A copy of the full Gorrill-Palmer development budget is included under attachment "R".

2. What is the basic earthwork quantities involved?

- a. Clearing and grubbing: **5.5 acres**
- b. Grub depth: **12 inches**
- c. Excavation associated with grubbing

15,000 cubic yards

- d. Common excavation

Required common borrow: 53,400 yards

- e. Fill required

50,000 cubic yards of common borrow. Rocks excavation allowance 1,000 cubic yards. Aggregate base and crushed stone: 8,400 cubic yards.

- f. Is common excavation suitable for borrow?

Non-organic common excavation will be suitable for onsite borrow.

- g. Is there excess material that must be transported from the site?
If so, how much?

It is anticipated that all suitable excavated materials will be used on the site as common borrow. There may be some excess rock excavation that would not be crushed onsite and would be transported from the site.

- h. Is there a need for offsite borrow? If so, how much?

Offsite borrow will be restricted to controlled granular fill materials associated with pavement and structure subbase materials.

- i. Does the loam require admixtures? Loam thickness playfields: **6 inches**. Loam thickness other areas: **6 inches**.

The existing topsoil at the site will need to be supplemented with additional organic material and additional loam to provide acceptable 6-inch depth for athletic fields.

- j. Does the site need preloading?

There will be no need for preloading on the site.

- 3. List the potential offsite improvement required.

Offsite improvements will be limited to providing slip lanes and turn lanes at the entrance and exit of the site. The final determination on Route 1 improvements will be made over the next several months after site plan approval from DOE and the town of Sullivan.

PART XI: MAINE DEPARTMENT OF TRANSPORTATION INFORMATION

- 1. **M.D.O.T. Traffic Review of Preferred Options.** The Department of Transportation staff will meet with the applicant to discuss the potential traffic impacts to the roadway adjacent to any in the vicinity of the proposed site. The on-site meeting (“scoping meeting”) will result in the Department of Transportation issuing preliminary and non-binding comments concerning the proposed traffic impacts caused by the increased traffic generated by the proposed school development. These comments are meant to provide guidance to the applicant in the site selection process. Based upon the DOT review, a Traffic Movement Permit may be required by the Department of Transportation. It should be noted that the issuance of a Traffic Movement Permit takes between 30 and 150 days depending on the complexity of the project and the workload of the available staff.

The Traffic Impact Study has been developed by Gorrill-Palmer. The report notes that the site development will not result and any increased traffic over the historic or existing conditions. A copy of the Gorrill-Palmer traffic study if available in attachment “N”.

- 2. Describe lines of sight for entrances and exits.

Although the preliminary traffic assessment does not anticipate traffic management it will require a Maine DOT entrance permit because it is on a state route and national highway. The lines of sight for entrances and exits was observed for both automobiles and buses. In both cases the site lines exceed Maine DOT requirements for driveway entrances and exits. Based on the left and right lane warrant analysis completed by Gorrill-Palmer, they are not recommending the use of left or right turn lanes or slip lanes provided that the 15 per mile school zone in front of the site is maintained with the new facility.

- 3. What are the current and planned mode students use to arrive at school in the morning?

Current	Percent	Anticipated	Percent
Buses	70	Buses	70
Drop-off	15	Drop-off	5
Driving	24	Driving	24
Walking	1	Walking	1
Bicycling	0	Bicycling	0

4. What are the current and planned mode students use to leave the school in the afternoon?

Current	Percent	Anticipated	Percent
Walking	70	Walking	70
Drop-off	5	Drop-off	5
Driving	24	Driving	24
Bicycling	1	Bicycling	1
	0		0

5. Describe the existence and condition of sidewalks, trails, or other walkways to the site.

There are no sidewalks or trails along Route 1. Walkers are discouraged because of the character or high-speed traffic on Route 1. There are three or four students who will walk down Punkinville Road and cut through the woods on existing paths to get to the high school.

6. Is public bus service nearby? If yes, how far away is the nearest stop?

There are no known public bus services serving the nine towns or Sumner Memorial High School.

7. Are there railroad tracks nearby? If yes, how far away? Would walkers and bicyclers need to cross the railroad tracks?

There are no railroad tracks in the vicinity of the high school.

8. Is an airport nearby? If yes, how far away? Has the flight pattern been investigated?

There is no airport near the high school. The nearest airport is a small airport 20 miles away on Route 1A from Ellsworth to Bar Harbor.

9. Is the school located on a roadway classified as arterial? If yes, what is the posted speed? What is the condition of the roadway?

The school is located on U.S. Route 1 where the posted speed is 45 miles per hour except during school hours when flashing lights post the speed as 15 miles per hour.

10. List the offsite improvements required.

There are no recommended offsite improvements at this time related to the project.

11. Will the site benefit by a separate site work contract release in advance of the building contract?

There have been no discussions of benefits or preparing a separate early site work contract on this contact.

A. Future Expansion

The Department requires that all new sites have the capacity for future expansion. Please show the area for future expansion when siting your building on the site drawing. The future expansion should consider “core” expansion as well as classrooms. The ability of the site to be extended to support additional parking, athletic fields, and the possibility of an additional facility should also be shown.

Areas for future expansion on the school site would be on the north side of gymnasiums for future classroom development or west of the life skills classroom in the southwest corner of the building site plan.

Part XII: Instructions

A. Application Instructions

The *Site Application*, with other required submissions, must be submitted to the School Facilities Services Team a minimum of two weeks prior to the State Board of Education’s Construction Committee Meeting on the unit’s proposed *Site Approval* meeting.

If you have further questions regarding the application or the application process please contact Scott Brown at (207) 624-6883 or email him at: scott.brown@maine.gov

N/A

B. Public Meeting and Straw Poll

Prior to *Site Approval*, the local unit must hold a public meeting to present to those in attendance the site that is being recommended for approval. Following the presentation and a question and answer period, the local unit must conduct a “straw poll.” The results of the “straw poll” must be submitted along with the *Site Application*.

A straw poll for the site is in attachment “S”. The straw poll was held on Tuesday, May 1, 2018 where 63 adults were in attendance and the vote was 43 in favor and 1 against the proposed site.